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TECHNICAL REPORT – POTENTIAL DISCHARGES TO LAND, SOUTH BELRIDGE OIL FIELD

Aera Energy LLC

Kern County, California

Prepared for:

Aera Energy LLC
10000 Ming Avenue
Bakersfield, California

Prepared by:

Amec Foster Wheeler Environment & Infrastructure, Inc.
1281 East Alluvial Avenue, Suite 101
Fresno, California 93720
(559) 264-2535

June 11, 2015

Project FR15160780

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June 11, 2015

Ronald Holcomb
Central Valley Region
Water Quality Control Board
1685 East E Street
Fresno, CA 93706

SUBJECT: INFORMATION REQUESTED BY SECTION 13267 ORDER
SOUTH BELRIDGE OIL FIELD

Dear Mr. Holcomb:

In a letter dated April 1, 2015, the Regional Water Quality Control Board (RWQCB) requested laboratory analyses of locations previously identified by RWQCB staff and an inventory of other potential discharge locations not previously identified. The attached report prepared by Amec Foster Wheeler Environment & Infrastructure, Inc. includes the requested information covering Aera Energy LLC's (Aera) operations within the South Belridge Oil Field.

Aera has provided as much information as possible within the short timeframe specified by the RWQCB. Existing equipment databases were queried and experienced personnel were engaged to prepare the inventory. Even taking into account these measures, it is possible that some minor discharge locations were overlooked.

In addition, Aera continues to install new or modify existing equipment that could be classified as a potential discharge point. Pressure relief valves are needed to protect personnel and equipment from catastrophic failures or a new steam injection well, approved by the Division of Oil, Gas and Geothermal Resources, may be drilled to support existing operations. Aera understands that the RWQCB is re-evaluating the regulatory framework that encompasses this type of equipment. When the evaluation is complete, the attached report may need to be supplemented to include added discharge locations or delete locations that have been abandoned.

The sampling of the fluids has been proceeding expeditiously. However, many of the locations do not contain fluids or sufficient fluids to collect the required samples. Where fluids are available, extensive safety planning must be implemented in order to ensure

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the well-being of the personnel performing the work. Further, some of the laboratory methods requested by the RQWCB take several weeks to complete. Accordingly, laboratory analytical results will be submitted as they are received by Aera.

If you have any questions or require additional information, please contact Ron Chambers at (661) 665-5641 or John Haley at (661) 665-5279.

CERTIFICATION:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

W. D. Anderson
Vice President
Belridge Asset

cc: Ron Chambers, Aera
John Haley, Aera
William Pipes, Amec
Alex Olsen, Amec

June 11, 2015

Project FR15160780

Mr. John Haley
Aera Energy LLC
10000 Ming Avenue
Bakersfield, California 93311

Subject: **Technical Report – Potential Discharges to Land, South Belridge Oil Field**
Aera Energy LLC, Kern County, California

Dear Mr. Haley:

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), is pleased to provide this technical report to Aera Energy LLC (Aera), presenting the sampling and analytical results for the recent review of potential discharges to land conducted at the South Belridge Oil Field in Kern County, California. The sampling was conducted to comply with the Central Valley Regional Water Quality Control Board's (RWQCB) Section 13267 Order (Order) dated April 1, 2015 (Appendix A). The order requested that potential discharges of wastewater to land be identified and where possible analytical results of wastewater samples collected be submitted in a technical report to the RWQCB by June 15, 2015.

DISCHARGE LOCATIONS

The RWQCB Order identified 23 surface impoundments located at the South Belridge Oil Field that are operated by Aera. In addition to the impoundments listed in the Order, Aera has identified an additional 2,713 potential discharge points. An inventory list, provided by Aera, of potential discharge points with their intended use is included in Appendix B. The locations of each discharge point are shown on Figures 1 through 17 included in Appendix B.

WASTEWATER SAMPLING

Of the 2,736 potential discharge point's identified, Aera was able to collect samples from 25. Samples could not be collected from the majority of the discharge points due to the locations being dry, the locations are only used during an emergency (i.e pressure relief valve), the discharge point was not in operation, or samples could not be collected safely (e.g. high temperatures associated with steam). Aera is in the process of collecting samples as conditions allow and evaluating the potential for collecting representative samples from the remaining locations with Amec Foster Wheeler.

The following paragraphs describe the sampling method and analysis.

Sampling Method

Wastewater samples were collected by BC Laboratories Inc. (BC Labs), of Bakersfield, California, under direct contract with Aera from May 18 to June 1, 2015. Wastewater samples were collected by slowly lowering a new clean disposable bailer or new clean dipping cup into the liquid and then decanting the sample into the appropriate containers.

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Sample Analysis

The wastewater samples were delivered to BC Labs for chemical analysis. Wastewater samples were labeled with pertinent information including sample identification, the date and time the samples were collected, and the name of the individual collecting the sample. The samples collected for laboratory analysis were transported in ice-cooled chests under chain-of-custody procedures.

Samples were analyzed for the analytes listed in Attachment B of the Order. The analytes and analytical methods are summarized in Table 1.

ANALYTICAL RESULTS

Analytical results for the samples collected are summarized in Tables 2 through 5. The analytical reports and chain-of-custody documentation are provided in Appendix C. Analytical results for sample BL2731 are pending at the time of this report and will be submitted in an addendum to this technical report upon receipt of the results.

General Chemistry

General chemistry results are summarized in Table 2.

Total Metals

Total metals results are summarized in Table 3.

Radionuclides

Radionuclide analytical results are summarized in Table 4.

Volatile Organic Compounds, Polynuclear Aromatic Hydrocarbons, and Total Petroleum Hydrocarbons

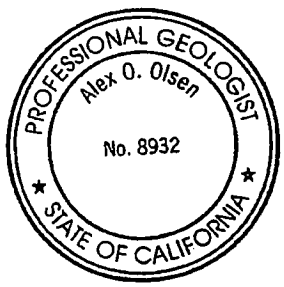
The volatile organic compounds (VOCs), polynuclear aromatic hydrocardons (PAH), and total petroleum hydrocarbons results are summarized in Table 5. Only the detected VOCs and PAHs are summarized in this table.

CERTIFICATION

This letter was prepared by Amec Foster Wheeler staff under the supervision of the Professional Geologist whose seal and signature appear hereon. The findings, recommendations, specifications, or professional opinions presented in this letter were prepared in accordance with generally accepted professional geologic practices and within the scope of this project. No other warranty, express or implied, is provided.

Amec Foster Wheeler is pleased to be of service to Aera. Please call if you have any questions or require additional information.

Sincerely yours,
Amec Foster Wheeler Environment & Infrastructure, Inc.



Alex O. Olsen Jr., PG
Senior Geologist

Attachments:

Table 1 – Summary of Chemical Analysis
Table 2 – Analytical Results – General Chemistry
Table 3 – Analytical Results – Total Metals
Table 4 – Analytical Results – Radionuclides
Table 5 – Analytical Results – Volatile Organic Compounds, Polynuclear Aromatic Hydrocarbons, and Total Petroleum Hydrocarbons
Appendix A – April 1, 2015, California Water Code Directive Pursuant to Section 13267
Appendix B – Inventory List and South Belridge Potential Discharge Location Points
Appendix C – Analytical Reports and Chain-of-Custody Documentation

cc: Ron Chambers, Aera Energy LLC

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TABLE 1

SUMMARY OF CHEMICAL ANALYSIS

Aera South Belridge Discharge Sampling
South Belridge Oil Field, Kern County, California

Constituents	Analytical Method[1]
Volatile Organic Compounds	
Benzene	EPA-8260B
Ethylbenzene	EPA-8260B
Toluene	EPA-8260B
Total Xylenes	EPA-8260B
Polynuclear Aromatic Hydrocarbons	
Acenaphthene	EPA-8270C-SIM
Acenaphthylene	EPA-8270C-SIM
Anthracene	EPA-8270C-SIM
Benzo[a]anthracene	EPA-8270C-SIM
Benzo[b]fluoranthene	EPA-8270C-SIM
Benzo[k]fluoranthene	EPA-8270C-SIM
Benzo[a]pyrene	EPA-8270C-SIM
Benzo[g,h,i]perylene	EPA-8270C-SIM
Chrysene	EPA-8270C-SIM
Dibenzo[a,h]anthracene	EPA-8270C-SIM
Fluoranthene	EPA-8270C-SIM
Fluorene	EPA-8270C-SIM
Indeno[1,2,3-cd]pyrene	EPA-8270C-SIM
Naphthalene	EPA-8270C-SIM
Phenanthrene	EPA-8270C-SIM
Pyrene	EPA-8270C-SIM
Metals	
Total Antimony	EPA-6010B
Total Arsenic	EPA-6010B
Total Barium	EPA-6010B
Total Beryllium	EPA-6010B
Total Cadmium	EPA-6010B
Total Chromium	EPA-6010B
Total Cobalt	EPA-6010B
Total Copper	EPA-6010B
Total Lead	EPA-6010B
Total Mercury	EPA-7470A

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TABLE 1

SUMMARY OF CHEMICAL ANALYSIS

Constituents	Analytical Method[1]
Metals (continued)	
Total Molybdenum	EPA-6010B
Total Nickel	EPA-6010B
Total Selenium	EPA-6010B
Total Silver	EPA-6010B
Total Thallium	EPA-6010B
Total Vanadium	EPA-6010B
Total Zinc	EPA-6010B
Hexavalent Chromium	EPA-7196
Total Boron	EPA-6010B
Total Iron	EPA-6010B
Total Lithium	EPA-6010B
Total Strontium	EPA-6010B
Total Calcium	EPA-6010B
Total Magnesium	EPA-6010B
Total Manganese	EPA-6010B
Total Sodium	EPA-6010B
Total Potassium	EPA-6010B
Radionuclides	
Gross Alpha	EPA 00-02
Radium 226	EPA 903.1
Radium 228	EPA 904.0
Total Recoverable Uranium	EPA-200.8
General Chemistry	
Bromide	EPA-300.0
Chloride	EPA-300.0
Nitrate as NO3	EPA-300.0
Sulfate	EPA-300.0
Alkalinity	SM 2320B
Total Dissolved Solids	SM 2540C
Other	
Total Petroleum Hydrocarbons, Crude Oil	EPA-8015M

1. "--" = not applicable, EPA = Environmental Protection Agency, and SM = Standard Method.

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TABLE 2

ANALYTICAL RESULTS - GENERAL CHEMISTRY

Aera South Belridge Discharge Sampling
South Belridge Oil Field, Kern County, California

Sample ID[2]	Discharge Location	Sample Date	Analyte and Result[1]								
			Bicarbonate Alkalinity as $CaCO_3$	Carbonate Alkalinity as $CaCO_3$	Hydroxide Alkalinity as $CaCO_3$	Total Alkalinity as $CaCO_3$	Bromide	Chloride	Nitrate as NO_3	Sulfate	Total Dissolved Solids @ 180 °C
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BL1	Dehy 2 emer. Holding pit	05/21/15	420	ND	ND	420	62	7,300	ND	490	14,000
BL3	Dehy 2 Sand Basin PIT North cell 4602	06/03/15	850	ND	ND	850	55	6,300	ND	190	12,000
BL13	Dehy 20 LPS 4 Holding Pond West	05/18/15	2,900	ND	ND	2,900	130	17,000	ND	27 J	29,000
BL14	Dehy 20 LPS 3 Holding Pond East	05/18/15	2,900	ND	ND	2,900	170	19,000	ND	38 J	35,000
BL15	Dehy 20 LPS 2 Inlet Cell North	05/20/15	2,900	ND	ND	2,900	120	14,000	ND	27 J	24,000
BL16	Dehy 20 LPS 1 Inlet Cell South	05/20/15	2,900	ND	ND	2,900	120	14,000	ND	26 J	25,000
BL17	Dehy 20 EHP Overflow S-100C East	05/20/15	410	ND	ND	410	15	2,100	ND	140	5,200
BL18	Dehy 20 EHP Overflow S-100B West	05/20/15	280	ND	ND	280	24	3,000	ND	340	6,700
BL22	2868 Generator blow down pit	05/19/15	ND	2,000	19	2,000	140	18,000	ND	440	23,000
BL23	Pump Station 27/Aquafier Plt Pond	05/18/15	2,700	440	ND	3,100	230	30,000	ND	170 J	47,000
BL24	LPS North	05/18/15	810	ND	ND	810	52	6,800	ND	210	12,000
BL25	Inlet LPS- North	05/20/15	840	ND	ND	840	47	6,300	7.7 J	160	11,000
BL26	Inlet LPS- South	05/20/15	850	ND	ND	850	52	6,200	ND	150	11,000
BL27	800 Overflow	05/20/15	810	ND	ND	810	59	12,000	ND	260	20,000
BL28	MPP Relief Pit Southeast	05/18/15	810	ND	ND	810	62	7,500	ND	89	13,000
BL29	MPP Relief Pit Southwest	05/18/15	840	ND	ND	840	51	7,300	ND	63	13,000
BL30	MPP Relief Pit North	05/18/15	650	ND	ND	650	57	8,600	ND	120	15,000
BL31	LPS South	05/18/15	810	ND	ND	810	53	6,700	ND	200	12,000
BL1847	Containment for old P-242 and old P-243 pump skid	05/21/15	500	260	ND	750	1.2	350	18	360	4,500

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TABLE 2

ANALYTICAL RESULTS - GENERAL CHEMISTRY

Sample ID[2]	Discharge Location	Sample Date	Analyte and Result[1]								
			Bicarbonate Alkalinity as $CaCO_3$	Carbonate Alkalinity as $CaCO_3$	Hydroxide Alkalinity as $CaCO_3$	Total Alkalinity as $CaCO_3$	Bromide	Chloride	Nitrate as NO_3	Sulfate	Total Dissolved Solids @ 180 °C
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BL1910	Drain sump associated w/settler vessels	05/26/15	420	ND	ND	420	11	2,200	ND	190	5,000
BL3212	LOPS 2817 pump pad/drain pit	05/28/15	110	63	ND	180	0.24	46	ND	34	470
BL3275	L3364 eductor	05/28/15	2,100	ND	ND	2,100	72	9,600	ND	ND	19,000
BL3515	SGS 3363 Facility Drain Vault	05/28/15	890	72	ND	960	51	7,000	ND	180	13,000
BL3613	SGS 2972 facility Drain Vault	05/28/15	950	ND	ND	950	49	6,800	ND	190	12,000

1. $CaCO_3$ = calcium carbonate, mg/L = milligrams per liter, NO_3 = Nitrogen, s.u. = standard pH units, °C = degrees Celsius, µmhos/cm = micromhos per centimeter, ND = not detected, J = trace or estimated concentration with a value greater than the method detection limit but less than the practical quantitation limit.
2. Sample locations are shown on Figures 2, 4, 5, 6, 7, 8, and 13 in Appendix B.

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TABLE 3

ANALYTICAL RESULTS
TOTAL METALS

Aera South Belridge Discharge Sampling
South Belridge Oil Field, Kern County, California

Sample ID[2]	Discharge Location	Sample Date	Analyte and Result[1]																										
			Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Hexavalent Chromium	Cobalt	Copper	Iron	Lead	Lithium	Manganese	Magnesium	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Vanadium	Zinc
			ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	mg/L	mg/L	ug/L	ug/L	ug/L
BL1	Dehy 2 emer. Holding pit	05/21/15	ND	ND	720	ND	52	ND	350	48 J	ND	ND	84 J	37	ND	2.2	2.7	110	0.15 J	45 J	66 J	78	ND	ND	3,700	5.9	ND	55 J	1,200
BL3	Dehy 2 Sand Basin PIT North cell 4602	06/03/15	ND	ND	810	ND	54	ND	64	ND	ND	ND	ND	ND	ND	2.5	ND	30	0.038 J	85 J	ND	70	ND	ND	3,400	2.4	ND	ND	180 J
BL13	Dehy 20 LPS 4 Holding Pond West	05/18/15	ND	ND	7,400	ND	100	ND	140	ND	ND	ND	25 J	0.74 J	ND	7.7	ND	160	0.075 J	ND	ND	260	ND	ND	9,500	9.6	ND	ND	61 J
BL14	Dehy 20 LPS 3 Holding Pond East	05/18/15	ND	ND	8,500	ND	120	ND	84	ND	ND	ND	ND	ND	ND	9.2	ND	190	0.075 J	ND	ND	300	ND	ND	12,000	11	ND	ND	56 J
BL15	Dehy 20 LPS 2 Inlet Cell North	05/20/15	ND	ND	8,800	ND	100	ND	200	ND	ND	ND	49 J	3.6	ND	7.4	0.17 J	150	ND	ND	ND	250	ND	ND	9,500	11	ND	ND	82 J
BL16	Dehy 20 LPS 1 Inlet Cell South	05/20/15	ND	ND	8,500	ND	96	ND	190	ND	ND	ND	ND	3.3	ND	7.1	0.15 J	140	ND	ND	ND	240	ND	ND	8,900	10	ND	ND	ND
BL17	Dehy 20 EHP Overflow S-100C East	05/20/15	ND	ND	510	ND	15	ND	180	ND	ND	ND	40 J	2.2	ND	0.69	0.61	24	ND	25 J	55 J	35	ND	ND	1,300	1.8	ND	ND	ND
BL18	Dehy 20 EHP Overflow S-100B West	05/20/15	ND	ND	470	ND	17	ND	220	ND	ND	ND	ND	1.2	ND	0.96	0.29	27	ND	49 J	49 J	43	ND	ND	1,800	2.3	ND	ND	ND
BL22	2868 Generator blow down pit	05/19/15	ND	ND	170 J	ND	180	ND	9.1	ND	ND	ND	ND	5.5	ND	8.0	0.095 J	4.6	0.04 J	46 J	ND	210	ND	ND	12,000	0.12 J	ND	ND	65 J
BL23	Pump Station 27/Aquafier Pit Pond	05/18/15	ND	ND	6,100	ND	<180	ND	60	ND	ND	ND	42 J	0.95 J	ND	13	ND	250	0.12 J	ND	ND	450	ND	ND	17,000	10	ND	ND	50 J
BL24	LPS North	05/18/15	ND	ND	2,000	ND	57	ND	140	ND	ND	ND	ND	0.4 J	ND	2.7	0.16	55	ND	58 J	ND	73	ND	ND	3,700	4.7	ND	ND	ND
BL25	Inlet LPS- North	05/20/15	ND	ND	2,000	ND	56	ND	140	ND	ND	ND	36	3.7	ND	2.5	0.21	53	ND	100 J	ND	75	ND	ND	3,600	4.6	ND	ND	ND
BL26	Inlet LPS- South	05/20/15	ND	ND	1,800	ND	55	ND	130	ND	ND	ND	ND	0.78 J	ND	2.5	0.15 J	50	ND	79 J	ND	71	ND	ND	3,500	4.5	ND	ND	ND
BL27	800 Overflow	05/20/15	ND	ND	3,000	ND	71	ND	260	ND	ND	ND	51 J	ND	ND	3.0	0.3	100	ND	96 J	ND	98	ND	ND	6,200	9.0	ND	ND	ND
BL28	MPP Relief Pit Southeast	05/18/15	ND	ND	3,100	5.3 J	58.0	ND	220	ND	ND	ND	ND	ND	ND	3.6	0.3	82	0.042 J	ND	ND	83	ND	ND	4,200	7.4	ND	ND	ND
BL29	MPP Relief Pit Southwest	05/18/15	86 J	ND	3,000	5.6 J	59	ND	210	ND	ND	ND	ND	ND	ND	3.5	0.36	80	0.038 J	ND	ND	78	ND	ND	4,200	7.2	ND	ND	ND
BL30	MPP Relief Pit North	05/18/15	ND	ND	3,300	ND	70	ND	180	ND	ND	ND	ND	0.89	ND	4.1	0.085 J	97	0.058 J	95 J	ND	93	ND	ND	5,000	7.8	ND	ND	ND
BL31	LPS South	05/18/15	90 J	ND	2,100	6.1 J	64	ND	150	ND	ND	ND	ND	ND	ND	2.9	0.17	58	0.048 J	40 J	ND	79	ND	ND	4,200	5.3	ND	ND	ND
BL1847	Containment for old P-242 and old P-243 pump skid	05/21/15	ND	ND	35	ND	1.3	ND	41	33	ND	ND	ND	0.83	ND	0.017 J	0.099	1.1	0.88	ND	ND	9.0	ND	ND	1,200	0.2	ND	63	170
BL1910	Drain sump associated w/settler vessels	05/26/15	ND	ND	150	ND	12	ND	220	12 J	ND	ND	22	0.61	ND	0.54	0.61	13	ND	77 J	31	43	43 J	ND	1,300	1.2	ND	25	59 J
BL3212	LOPS 2817 pump pad/drain pit	05/28/15	ND	ND	260	ND	0.2	ND	10	4.5 J	2.1	ND	4.6 J	1.5	ND	0.034 J	0.029	1.2	ND	13 J	4.2 J	120	ND	ND	59	0.15	ND	34	340
BL3275	L3364 eductor	05/28/15	ND	ND	2,700	ND	82	ND	170	98 J	ND	ND	ND	2.4	ND	4.3	0.3	85	0.068 J	ND	ND	150	ND	ND	6,200	6.1	ND	ND	240 J
BL3515	SGS 3363 Facility Drain Vault	05/28/15	ND	ND	58 J	ND	62	ND	4.4	ND	8	ND	22 J	2.2	ND	3	ND	1.6	0.038 J	19 J	24 J	77	ND	ND	4,400	0.045 J	ND	ND	ND
BL3613	SGS 2972 facility Drain Vault	05/28/15	ND	ND	100	ND	60	ND	2	ND	8	ND	ND	ND	ND	2.8	ND	ND	ND	12 J	37 J	75	ND	ND	4,500	0.022 J	ND	ND	64 J

1. µg/L = micrograms per liter, mg/L = milligrams per liter, ND = not detected, J = trace or estimated concentration with a value greater than the method detection limit but less than the practical quantitation limit.
2. Sample locations are shown on Figures 2, 4, 5, 6, 7, 8, and 13 in Appendix B.

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TABLE 4

ANALYTICAL RESULTS - RADIONUCLIDES

Aera South Belridge Discharge Sampling
South Belridge Oil Field, Kern County, California

Sample ID[2]	Discharge Location	Sample Date	Analyte and Result[1]			
			Gross Alpha	Radium 226	Radium 228	Total Recoverable Uranium
			pCi/L	pCi/L	pCi/L	pCi/L
BL1	Dehy 2 emer. Holding pit	05/21/15	ND	9.42	3.14	26
BL3	Dehy 2 Sand Basin PIT North cell 4602	06/03/15	ND	14.5	2.08	ND
BL13	Dehy 20 LPS 4 Holding Pond West	05/18/15	ND	31.6	9.19	ND
BL14	Dehy 20 LPS 3 Holding Pond East	05/18/15	ND	44.3	10.0	ND
BL15	Dehy 20 LPS 2 Inlet Cell North	05/20/15	ND	24.4	14.1	ND
BL16	Dehy 20 LPS 1 Inlet Cell South	05/20/15	ND	35.0	10.8	ND
BL17	Dehy 20 EHP Overflow S-100C East	05/20/15	ND	5.04	1.99	1.1 J
BL18	Dehy 20 EHP Overflow S-100B West	05/20/15	ND	4.54	5.43	3.2 J
BL22	2868 Generator blow down pit	05/19/15	ND	0.484	6.91	ND
BL23	Pump Station 27/Aquafier Plt Pond	05/18/15	ND	38.3	23.2	ND
BL24	LPS North	05/18/15	ND	11.8	1.49	ND
BL25	Inlet LPS- North	05/20/15	ND	12.9	3.64	ND
BL26	Inlet LPS- South	05/20/15	ND	13.5	1.32	ND
BL27	800 Overflow	05/20/15	ND	17.5	11.4	1.1 J
BL28	MPP Relief Pit Southeast	05/18/15	ND	22.3	4.38	ND
BL29	MPP Relief Pit Southwest	05/18/15	ND	16.5	15.1	ND
BL30	MPP Relief Pit North	05/18/15	ND	21.6	3.44	ND
BL31	LPS South	05/18/15	ND	7.06	6.22	ND
BL1847	Containment for old P-242 and old P-243 pump skid	05/21/15	ND	2.14	1.17	ND
BL1910	Drain sump associated w/settler vessels .	05/26/15	ND	-3.148	1.54	0.97 J
BL3212	LOPS 2817 pump pad/drain pit	05/28/15	ND	3.28	0.0294	1.0 J

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TABLE 4

ANALYTICAL RESULTS - RADIONUCLIDES

Sample ID[2]	Discharge Location	Sample Date	Analyte and Result[1]			
			Gross Alpha	Radium 226	Radium 228	Total Recoverable Uranium
			pCi/L	pCi/L	pCi/L	pCi/L
BL3275	L3364 eductor	05/28/15	ND	24.40	9.15	0.89 J
BL3515	SGS 3363 Facility Drain Vault	05/28/15	ND	3.35	0.978	ND
BL3613	SGS 2972 facility Drain Vault	05/28/15	ND	8.05	11.50	ND

1. pCi/L = picocuries per liter, ND = not detected, J = trace or estimated concentration with a value greater than the **method detection limit** but less than the practical quantitation limit.
2. Sample locations are shown on Figures 2, 4, 5, 6, 7, 8, and 13 in Appendix B.

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TABLE 5

ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS, POLYNUCLEAR AROMATIC HYDROCARBONS, AND TOTAL PETROLEUM HYDROCARBONS

Aera South Belridge Discharge Sampling
South Belridge Oil Field, Kern County, California

			Analyte and Result[1]																	
			Volatile Organic Compounds				Polynuclear Aromatic Hydrocarbons													
Sample ID[2]	Discharge Location	Sample Date	Benzene	Ethylbenzene	Toluene	Xylenes, Total	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Chrysene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Total Petroleum Hydrocarbons - Crude Oil
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
BL1	Dehy 2 emer. Holding pit	05/21/15	<0.083	<0.098	2.4	1.2	0.39	<0.094	<0.034	<0.052	<0.08	<0.086	<0.044	<0.024	<0.06	<0.15	<0.044	<0.04	16,000
BL3	Dehy 2 Sand Basin PIT North cell 4602	06/03/15	28	6.5	29	25	1.3	<0.46	<0.17	0.29 J	0.79 J	<0.42	1.9	1.1 J	0.87	5.7	2.1	2.2	93,000
BL13	Dehy 20 LPS 4 Holding Pond West	05/18/15	530	11	920	120	0.77 J	0.47 J	<0.16	<0.25	<0.39	<0.42	<0.21	<0.12	2.4	16	3.0	<0.21	64,000
BL14	Dehy 20 LPS 3 Holding Pond East	05/18/15	0.17 J	0.43 J	<0.093	<0.36	2.5	0.97 J	<0.17	<0.26	0.64 J	<0.43	1.6	0.67 J	7.8	2.2	15	1.7	40,000
BL15	Dehy 20 LPS 2 Inlet Cell North	05/20/15	2,600	97	4,200	2,200	2.2	1.3	<0.16	<0.25	<0.39	<0.42	0.69 J	0.96 J	6.0	120	9.2	0.62 J	78,000
BL16	Dehy 20 LPS 1 Inlet Cell South	05/20/15	1,100	140	1,900	1,100	0.81	7.3	<0.16	<0.19	<0.19	<0.19	0.19	<0.023	3.7	80	3.4	0.28	76,000
BL17	Dehy 20 EHP Overflow S-100C East	05/20/15	<0.42	<0.49	<0.46	<1.8	<0.1	0.76	<0.032	<0.049	<0.076	<0.082	<0.042	<0.023	0.16 J	<0.15	<0.042	<0.042	24,000
BL18	Dehy 20 EHP Overflow S-100B West	05/20/15	<0.083	1.2	<0.093	13.0	0.38	1.4	<0.033	<0.051	<0.078	<0.084	0.24	<0.024	1.3	1.1	1.5	0.25	35,000
BL22	2868 Generator blow down pit	05/19/15	<4.2	<4.9	<4.6	<18	0.42	0.25	<0.033	<0.05	<0.078	<0.083	<0.043	<0.023	0.21	0.16 J	0.2	<0.043	23,000
BL23	Pump Station 27/Aquafier Pit Pond	05/18/15	<0.083	0.43 J	<0.093	<0.36	<0.11	7.7	<0.034	<0.052	<0.08	<0.086	<0.044	<0.024	1.9	<0.15	0.41	<0.044	29,000
BL24	LPS North	05/18/15	4.6	2.5	10	13	0.35	<0.27	<0.034	<0.052	<0.08	<0.086	0.23	0.074 J	0.42	<0.15	0.58	0.46	21,000
BL25	Inlet LPS- North	05/20/15	26	4.6	21	16	0.28	0.74	<0.033	0.077	<0.078	<0.083	0.37	0.20	0.47	3.1	0.72	0.56	68,000
BL26	Inlet LPS- South	05/20/15	36	8.9	32	22	0.87	1.4	<0.033	0.058 J	<0.077	<0.083	0.51	0.23	0.75	6.0	1.2	0.94	48,000
BL27	800 Overflow	05/20/15	<0.083	0.52	0.92	1.0	<0.11	0.21	<0.033	<0.051	<0.078	<0.084	<0.043	<0.024	0.17 J	0.36	0.18 J	<0.043	24,000
BL28	MPP Relief Pit Southeast	05/18/15	16	2.6	3.8	11	0.17 J	0.24	<0.033	0.057 J	<0.077	<0.083	0.34	<0.023	0.54	1.4	0.69	0.59	43,000
BL29	MPP Relief Pit Southwest	05/18/15	18	4.6	2.6	15	<0.55	<0.47	<0.17	<0.26	<0.40	<0.43	0.66 J	0.24 J	0.47 J	3.3	1.2	0.55 J	54,000
BL30	MPP Relief Pit North	05/18/15	<0.083	<0.098	0.72	<0.36	<0.54	<0.46	<0.17	<0.25	<0.39	<0042	0.65 J	0.24 J	<0.29	1.9	0.38 J	0.6 J	36,000
BL31	LPS South	05/18/15	2.8	2.5	8.1	11	0.37	0.24	<0.033	<0.05	<0.078	<0.083	0.17 J	<0.023	0.083 J	0.48	0.48	0.42	28,000
BL1847	Containment for old P-242 and old P-243 pump skid	05/21/15	<0.083	<0.098	<0.093	<0.36	<0.11	<0.093	0.035 J	<0.051	<0.079	<0.085	<0.044	0.26	<0.059	0.16 J	0.29	<0.044	40,000
BL1910	Drain sump associated w/settler vessels	05/26/15	<0.083	<0.098	0.18 J	<0.36	<0.28	<0.24	<0.085	<0.13	<0.20	<0.22	<0.11	<0.059	<0.15	<0.38	<0.11	<0.11	19,000
BL3212	LOPS 2817 pump pad/drain pit	05/28/15	<0.083	<0.098	<0.093	<0.28	<0.27	<0.23	<0.083	<0.13	<0.20	<0.21	<0.11	<0.059	<0.15	<0.38	<0.11	<0.11	<700
BL3275	L3364 eductor	05/28/15	8.8	4.7	20	28	4	2.0 J	<0.42	<0.64	2.2 J	<1.1	2.0 J	0.95 J	10	22	17	1.4 J	260,000
BL3515	SGS 3363 Facility Drain Vault	05/28/15	1.5 J	1.7 J	4.0	12	1.3	0.7	<0.085	<0.13	<0.20	<0.22	0.32 J	0.16 J	1.8	10	4.2	2.10	470,000
BL3613	SGS 2972 facility Drain Vault	05/28/15	1.4	<0.20	0.83 J	<0.72	<0.27	<0.23	<0.082	<0.13	<0.19	<0.21	<0.11	<0.058	0.44 J	<0.37	0.22 J	0.33 J	66,000

1. µg/L = micrograms per liter, mg/L = milligrams per liter, < = less than the method detection limit (MDL), J = trace or estimated concentration with a value greater than the MDL but less than the practical quantitation limit.
2. Sample locations are shown on Figures 2, 4, 5, 6, 7, 8, and 13 in Appendix B.

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APPENDIX A

April 1, 2015, California Water Code Directive Pursuant to Section 13267

1 April 2015

Megan Graves
Aera Energy LLC
10000 Ming Avenue
Bakersfield, CA 93389

CERTIFIED MAIL
7014 3490 0001 7023 0025

CALIFORNIA WATER CODE DIRECTIVE PURSUANT TO SECTION 13267. You are legally obligated to respond to this Order. Please read this Order carefully.

Aera Energy LLC (hereafter Discharger) has been identified as the owner or operator of petroleum production wastewater disposal ponds (ponds). A list of the ponds (and the leases and oil fields where they are located) that the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) identifies as under your control is presented in Attachment A. Ponds for the disposal of wastewater generated during the course of petroleum production have the potential to affect the quality of groundwater (a water of the State). Groundwater underlying the areas where your ponds are located have beneficial uses as identified in the Water Quality Control Plan for the Tulare Lake Basin (Basin Plan).

This order requires the collection and analysis of wastewater samples collected from each of the ponds listed in Attachment A to characterize the discharge. Each sample is to be analyzed for each of the constituents listed in Attachment B. These data are needed to comprehensively characterize wastewater in each pond and provide data needed to evaluate the threat to the quality of waters of the State. If more than one pond is connected in series (i.e., one pond drains directly to the next with no other source of inflow) then only the upstream pond must be sampled. This order is not intended to require the collection of duplicative data. If during the 12 months (one year) prior to the date of this order, samples required by this order have been analyzed from one or more of the ponds for the required constituents, that data can be submitted for the appropriate order requirements.

This order also requires Discharger to identify any discharge(s) of oil field wastewater to land that is not identified in Attachment A. Discharger must also collect and analyze wastewater samples in accordance with Attachment B from any additionally identified discharge to characterize the discharge.

The Central Valley Water Board's authority to require technical reports derives from Section 13267 of the California Water Code, which specifies, in part, that:

(b) A regional Board ... in connection with any action relating to any plan or requirement authorized by this division, may investigate the quality of any waters of the State within its region.

(b)(1) In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefit to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

The Central Valley Water Board is concerned about the potential impacts to water quality posed by the discharge of oil field produced waters in surface ponds. The technical information and reports required by this order are necessary to assess the potential threat to water quality. The need to understand the potential impacts to water quality justify the need for the information and reports required by this order. Based on the nature and possible consequences of the discharges of waste, the burden of providing the required information, including the reporting costs, bears a reasonable relationship to the need for the report, and the benefits to be obtained. Discharger is required to submit this information and reports because it is the operator of the ponds listed in Attachment A of this order.

The unauthorized discharge of waste containing oil field waste constituents to land, including unlined ponds, may result in the degradation of water quality and creates or threatens to create, a condition of pollution in groundwater. Significant concentrations of salinity (measured as TDS and EC), significant contributors to salinity such as chloride and sulfate, and boron are present in oil field wastewater. Other potential constituents such as, but not limited to, metals, radionuclides, and organic compounds pose a threat to water quality. The concentrations of these waste constituents in wastewater being discharged needs to be known to evaluate the threat. In addition, all locations where these discharges are occurring needs to be known.

Underlying groundwater can be degraded if mixed with oil field wastewater. Elevated concentrations of oil field waste constituents could impair the groundwater for municipal and domestic supply and agricultural supply uses.

Under the prescribed authority of California Water Code section 13267, the Central Valley Water Board directs Discharger to:

1. **By 15 June 2015**, submit a technical report containing the following information:

   A. Identification of any discharges of oil field produced waters to land, including but not limited to ponds, since April of 2014 that are not listed in Attachment A;

   B. Collect representative samples of wastewater within each of the ponds. Samples must be analyzed in accordance with the water quality analysis and reporting requirements contained in Attachment B to this Order;[1]

      If a representative sample cannot feasibly be collected from one or more of the sources discharging to a surface impoundment(s), then a comment will need to be added to the technical report required by this Order demonstrating that collection of a representative sample from a specific source is not feasible within the required timeframe, and propose an alternative sampling procedure and expeditious time schedule for obtaining a representative sample for each source. Alternative sampling procedures and time schedules are subject to approval by the Assistant Executive Officer of the Central Valley Regional Water Quality Control Board.

   C. All available information for each of the surface impoundment(s), including dimensions (i.e., length, width, and depth), latitude and longitude, Assessor's Parcel Numbers of the lease, duration of the discharge (in months), and the volume of wastewater discharged per year.

   D. A location map that includes the following information:

      i. All surface impoundment(s) at the Facility,
      ii. Include the boundary lines for all leases at the Facility, and
      iii. Legend with the name of the surface impoundment(s).

2. **By 15 April 2015**, Discharger needs to contact Dane S. Johnson of this office at (559) 445-5525 if you have received this Order and cannot collect the required samples.

[1] All previously obtained analytical data for oil field produced wastewater samples collected at the Facility, if any, with a description of the source and location for each analysis may be submitted in the alternative for re-running tests if the sample(s) was collected and analyzed within 12 months (one year) of the date of this order.

The technical report required by this Order must be submitted to the attention of:

Ronald Holcomb
Central Valley Water Board
1685 E Street
Fresno, CA 93706

Based on the information submitted in the technical report, additional information or action may be required.

With the report required by this Order, Discharger shall provide under penalty of perjury under the laws of California a "Certification" statement to the Central Valley Water Board. The "Certification" shall include the following signed statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

The Central Valley Water Board reserves the right to issue a Notice of Violation or pursue enforcement for Discharger's activities after reviewing the documentation provided in response to this Order.

The Technical Report is to be signed and stamped by a California Professional Engineer (Registered as a Civil Engineer) or a registered California Professional Geologist. Any laboratory analyses shall be performed by an analytical laboratory certified by the State of California for the analyses performed. Submissions pursuant to this Order shall include a statement by Discharger, or an authorized representative of Discharger, certifying (as described above) that the information submitted is true, complete, and accurate.

The failure to furnish the required report, or the submission of a substantially incomplete report or false information, is a misdemeanor, and may result in additional enforcement actions being taken against Discharger, including issuance of an Administrative Civil Liability Complaint pursuant to California Water Code section 13268. Liability may be imposed pursuant to California Water Code section 13268 in an amount not to exceed one thousand dollars ($1,000) for each day in which the violation occurs. All discharges to unpermitted ponds should cease pending review and submission of the technical information sought by this order.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with

California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., within 30 days after the date of this directive, except that if the thirtieth day following the date of this directive falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

If you have any questions regarding this matter, please contact Doug Patteson of this office at (559) 445-5577 or at doug.patteson@waterboards.ca.gov.

Clay L. Rodgers

Clay L. Rodgers
Assistant Executive Officer

cc: Julie Macedo, Office of Enforcement, State Water Resources Control Board, Sacramento
Mike Toland, California Division of Oil, Gas, and Geothermal Resources, Bakersfield

ATTACHMENT A

The following table contains the names of oil fields and lease(s) and the corresponding number of ponds that the Central Valley Water Board has identified as active and under your control:

OPERATOR	OIL FIELD	LEASE	NO. OF PONDS
Aera Energy LLC	Belridge, North		1
	Belridge, North	Belridge A	1
	Belridge, South	Aera Energy	20
		Belridge V	3
	Coalinga	CMS-Aztec	2
		Penn-Zier	7
		Sec26	9
	Lost Hills	Lost Hills One	1
		Lost Hills Two	2
	Midway-Sunset	Fulton	1
		Lockwood	1
		Moco 35	3
		National USL	2
		Section 8	1
		Shale 14	1
		Vedder	1
		W & S	1
		Wier	2

ATTACHMENT B

Water Quality Analysis

Wastewater samples collected from the ponds shall be analyzed by a laboratory certified by the Environmental Laboratory Accreditation Program using currently applicable United States Environmental Protection Agency-approved analytical methods for water for the following:

A. Total dissolved solids;

B. Metals listed in California Code of Regulations, title 22, section 66261.24. subdivision (a)(2)(A);

C. Benzene, toluene, ethylbenzene, and xylenes;

D. Total petroleum hydrocarbons as crude oil;

E. Polynuclear aromatic hydrocarbons (including acenaphthene, acenaphthylene, anthracene, benzo[a]anthracene, benzo[b]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorine, indeno[1,2,3-cd]pyrene, naphthalene, phenanthrene, and pyrene);

F. Radionuclides listed under California Code of Regulations, title 22, Table 64442;

G. Major and minor cations (including sodium, potassium, magnesium, and calcium);

H. Major and minor anions (including nitrate, chloride, sulfate, carbonate, bicarbonate, and bromide);

I. Trace elements (including lithium, strontium, boron, iron, and manganese).

Reporting Requirements

Water Quality information shall be submitted in a technical report that includes at a minimum:

A. Site plan(s) with the location(s) of where the samples were collected;

B. A description of how the samples, representative of the pond contents, were collected;

Table(s) of analytical results organized by pond number with the data also submitted electronically as an Excel spreadsheet.

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APPENDIX B

Inventory List and South Belridge Potential Discharge Location Points

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL1	13	South Belridge	Belridge V	Dehy 2 emer. Holding pit	Dehy 2	Belridge V, Pond 3	2	29S	22E	MD	35.42802	-119.68803	098-112-01	Oil & Water	290	200	15	HDPE	Active	1		Intermittent discharges of oil and water from Dehy 2/Water Plant 2	3,700,000	Emer. Basin
BL2	13	South Belridge	Belridge V	Dehy 2 Sand Basin M-4601	Dehy 2	Belridge V, Pond 1	2	29S	22E	MD	35.42854	-119.68960	098-112-01	Oil & Water	30	45	7	Concrete	Active	1		Sand basin to separate solids from produced fluids	100,000	Sand pit/basin
BL3A	13	South Belridge	Belridge V	Dehy 2 Sand Basin PIT North cell 4602 A (A) (read Comment in column H)	Dehy 2	Belridge V, Pond 2	2	29S	22E	MD	35.42817	-119.68907	098-112-01	Oil & Water	125	45	7	Concrete	Active	1		Sand basin to separate solids from produced fluids	2,925,000 bbls/yr	Sand pit/basin
BL3B	13	South Belridge	Belridge V	Dehy 2 Sand Basin PIT North cell 4602 B (B) (read column H comment)	Dehy 2	Belridge V, Pond 2	2	29S	22E	MD	35.42817	-119.68907	098-112-01	Oil & Water	125	45	7	Concrete	Active	1		Sand basin to separate solids from produced fluids	2,925,000 bbls/yr	Sand pit/basin
BL3C	13	South Belridge	Belridge V	Dehy 2 Sand Basin PIT South cell 4603 A (c)(read column H comment)	Dehy 2	Belridge V, Pond 2	2	29S	22E	MD	35.42817	-119.68907	098-112-01	Oil & Water	125	45	7	Concrete	Active	1		Sand basin to separate solids from produced fluids	2,925,000 bbls/yr	Sand pit/basin
BL3D	13	South Belridge	Belridge V	Dehy 2 Sand Basin PIT South cell 4603 B (D) (read column H comment)	Dehy 2	Belridge V, Pond 2	2	29S	22E	MD	35.42817	-119.68907	098-112-01	Oil & Water	125	45	7	Concrete	Active	1		Sand basin to separate solids from produced fluids	2,925,000 bbls/yr	Sand pit/basin
BL4	13	South Belridge	Belridge V	Overflow Basin for Abandoned Water Tank	Cogen 11	Belridge V, Pond 4	11	29S	22E	MD	35.42702	-119.68764	098-112-01	Soft Water	70	70	10	Earthen	Inactive	1		Out of Service	0	Emer. Basin
BL13	2	South Belridge	South Belridge	Dehy 20 LPS 4 Holding Pond West	Dehy 20	Bel South, Pond 1	20	28S	21E	MD	35.48195	-119.73484	085-210-18	Oil & Water	315	290	10	HDPE	Active	1		Dehy 20 LPS 4 Holding Pond West	600,000 bbls/yr	Pond
BL14	2	South Belridge	South Belridge	Dehy 20 LPS 3 Holding Pond East	Dehy 20	Bel South, Pond 2	20	28S	21E	MD	35.48192	-119.73381	085-210-18	Oil & Water	315	290	10	HDPE	Active	1		Dehy 20 LPS 3 Holding Pond East	600,000 bbls/yr	Pond
BL15	2	South Belridge	South Belridge	Dehy 20 LPS 2 Inlet Cell North	Dehy 20	Bel South, Pond 3	20	28S	21E	MD	35.48055	-119.73602	085-210-18	Oil & Water	333	70	10	HDPE	Active	1		Dehy 20 LPS 2 Inlet Cell North	600000 bbls/yr	Pond
BL16	2	South Belridge	South Belridge	Dehy 20 LPS 1 Inlet Cell South	Dehy 20	Bel South, Pond 4	20	28S	21E	MD	35.48038	-119.73577	085-210-18	Oil & Water	355	60	10	HDPE	Active	1		Dehy 20 LPS 1 Inlet Cell South	600000 bbls/yr	Pond
BL17	2	South Belridge	South Belridge	Dehy 20 EHP Overflow S-100C East	Dehy 20	Bel South, Pond 5	20	28S	21E	MD	35.48030	-119.73529	085-210-18	Oil & Water	150	60	10	HDPE	Active	1		Dehy 20 EHP Overflow S-100C East	1000 bbls/yr	Emer. Basin
BL18	2	South Belridge	South Belridge	Dehy 20 EHP Overflow S-100B West	Dehy 20	Bel South, Pond 6	20	28S	21E	MD	35.47999	-119.73579	085-210-18	Oil & Water	200	60	10	HDPE	Active	1		Dehy 20 EHP Overflow S-100B West	1000 bbls/yr	Emer. Basin
BL19	2	South Belridge	South Belridge	Old Wemco Ponds (Abandoned)	abandon	Bel South, Pond 7	20	28S	21E	MD	35.47503	-119.73247	085-210-18	Dry	180	90	2	Earthen	Abandoned			Pit for old abandon 2 Wemco Tanks has been abandoned	0	Emer. Basin
BL20	5	South Belridge	South Belridge	Needs to be removed	out of service	Bel South, Pond 8	28	28S	21E	MD	35.46254	-119.72357	085-230-26	Steam	30	30	6	HDPE	Inactive			Need to be removed (no Fluid)	0	Blowdown pit
BL21	5	South Belridge	South Belridge	Sec 28 Shipping facility Sump 4	out of service	Bel South, Pond 9	28	28S	21E	MD	35.45673	-119.71785	085-230-26	Oil & Water	65	60	10	HDPE	Inactive	1		Sec 28 Shipping Facility Sump 4	<100	Emer. Basin
BL22	5	South Belridge	South Belridge	2868 Generator blow down pit	SGS 2868	Bel South, Pond 10	28	28S	21E	MD	35.45687	-119.71256	085-230-26	Steam	60	110	5	Gunite	Active	1		Steam blow down	<500	Blowdown pit
BL23	6	South Belridge	South Belridge	Pump Station 27/Aquifer Pit Pond	WP27	Bel South, Pond 11	27	28S	21E	MD	35.46181	-119.70646	085-220-36	Aquifer Water	130	275	10	HDPE	Active	1		Pump Station 27/Aquifer Pond	96,000 bbls/yr	Pond
BL24	6	South Belridge	South Belridge	LPS North	WP27	Bel South, Pond 12	27	28S	21E	MD	35.45963	-119.70517	085-220-36	Oil & Water	478	190	10	HDPE	Active	1	This flow from inlet North	LPS North	1,050,000 bbls/yr	Pond
BL25	6	South Belridge	South Belridge	Inlet LPS- North	WP27	Bel South, Pond 13	27	28S	21E	MD	35.45923	-119.70442	085-220-36	Oil & Water	260	65	10	HDPE	Active	1		Inlet LPS- North	1,050,000 bbls/yr	Pond
BL26	6	South Belridge	South Belridge	Inlet LPS- South	WP27	Bel South, Pond 14	27	28S	21E	MD	35.46022	-119.70473	085-220-36	Oil & Water	260	65	10	HDPE	Active	1		Inlet LPS- South	1,050,000 bbls/yr	Pond
BL27	6	South Belridge	South Belridge	800 Overflow	WP27	Bel South, Pond 15	27	28S	21E	MD	35.46052	-119.70242	085-220-36	Oil & Water	210	50	10	HDPE	Active	1		800 Overflow		Emer. Basin
BL28	6	South Belridge	South Belridge	MPP Relief Pit Southeast	WP27	Bel South, Pond 16	27	28S	21E	MD	35.46028	-119.70269	085-220-36	Oil & Water	50	40	8	Concrete	Active	1		MPP Relief Pit Southeast		Emer. Basin
BL29	6	South Belridge	South Belridge	MPP Relief Pit Southwest	WP27	Bel South, Pond 17	27	28S	21E	MD	35.46014	-119.70280	085-220-36	Oil & Water	50	40	8	Concrete	Active	1		MPP Relief Pit Southwest		Emer. Basin
BL30	6	South Belridge	South Belridge	MPP Relief Pit North	WP27	Bel South, Pond 18	27	28S	21E	MD	35.46026	-119.70289	085-220-36	Oil & Water	110	35	8	Concrete	Active	1		MPP Relief Pit North		Emer. Basin
BL31	6	South Belridge	South Belridge	LPS South	WP27	Bel South, Pond 19	27	28S	21E	MD	35.45996	-119.70400	085-220-36	Oil & Water	478	190	10	HDPE	Active	1	This flow from inlet South	LPS South	1,050,000 bbls/yr	Pond
BL32	6	South Belridge	South Belridge	Old air compressor identified by RWQCB	Gen setting 2718	Bel South, Pond 20	27	28S	21E	MD	35.45600	-119.70604	085-220-19	Dry					Inactive			Supply air		
BL33	6	South Belridge	South Belridge	Caustic Pit	Gen setting 2718	Bel South, Pond 21	27	28S	21E	MD	35.45566	-119.70464	085-220-19	Steam	30	30	8	HDPE	Inactive			Needs to be abandoned		Blowdown pit
BL34	4	South Belridge	South Belridge	Road mix North	Central Waste facility Picture	N/A	29	28S	20E	MD	35.45898	-119.73959	085-230-05	Oil & Water	1393	360	1	Earthen	Active			Road Mix North	900 loads of emulsion	Other
BL35	4	South Belridge	South Belridge	Road mix South	Central Waste facility Picture	N/A	29	28S	20E	MD	35.45749	-119.73950	085-230-05	Other	904	604	1	Earthen	Active			Road Mix South	900 loads of emulsion	Other
BL36	4	South Belridge	South Belridge	Wash Out pit 1	Central Waste facility	N/A	30	28S	20E	MD	35.45790	-119.73640	085-230-05	Other	273	86	15	Gunite	Active			Wash out Pit 1	Not measured	Other
BL37	4	South Belridge	South Belridge	Mud Cell 3	Central Waste facility	N/A	31	28S	20E	MD	35.45781	-119.73568	085-230-05	Other	609	86	15	Earthen	Active			Mud Cell 3	900,000	Other
BL38	4	South Belridge	South Belridge	Mud Cell 4	Central Waste facility	N/A	32	28S	20E	MD	35.45772	-119.73497	085-230-05	Other	844	102	15	Earthen	Active			Mud Cell 4	Decanted from mud cell 3	Other
BL39	4	South Belridge	South Belridge	Mud Cell 5	Central Waste facility	N/A	33	28S	20E	MD	35.45785	-119.73454	085-230-05	Other	1048	95	15	Earthen	Active			Mud Cell 5	Decanted from mud cell 4	Other
BL40	4	South Belridge	South Belridge	Mud Cell 6	Central Waste facility	N/A	34	28S	20E	MD	35.45801	-119.73426	085-230-05	Other	1200	108	15	Earthen	Active			Mud Cell 6	Decanted from mud cell 5	Other
BL41	4	South Belridge	South Belridge	Clarifer Pit 7	Central Waste facility	N/A	35	28S	20E	MD	35.45867	-119.73416	085-230-05	Other	1109	136	15	Earthen	Active			Clarifer Pit 7	202,800	Other
BL42	4	South Belridge	South Belridge	Clarifer Pit 8	Central Waste facility	N/A	36	28S	20E	MD	35.45903	-119.73399	085-230-05	Other	954	130	15	Earthen	Active			Clarifer Pit 8	202,800	Other
BL43	4	South Belridge	South Belridge	Clarifer Pit 9 Vacuum Truck Wash Out	Central Waste facility	N/A	37	28S	20E	MD	35.45935	-119.73381	085-230-05	Other	30	30	1	Concrete	Active			Clarifer Pit 9 Wash Out	Not measured	Other
BL44	4	South Belridge	South Belridge	Drilling Mud pit West	Central Waste facility	N/A	38	28S	20E	MD	35.45652	-119.73546	085-230-05	Other	501	270	30	Earthen	Active			Drilling Mud pit West	Not measured	Other
BL45	4	South Belridge	South Belridge	Drilling Mud pit East	Central Waste facility	N/A	39	28S	20E	MD	35.45651	-119.73435	085-230-05	Other	477	288	30	Earthen	Active			Drilling Mud pit East	Not measured	Other
BL46	4	South Belridge	South Belridge	Wash Rack	Central Waste facility	N/A	40	28S	20E	MD	35.45616	-119.74043	085-230-05	Oil & Water	130	130	1	Earthen	Active			Wash Rack	Vac Truck wash out pit	Other
BL47	4	South Belridge	South Belridge	Wash Rack Pit	Central Waste facility	N/A	41	28S	20E	MD	35.45626	-119.74031	085-230-05	Oil & Water	83	21	15	Earthen	Active			wash Rack Pit	Not measured	Other
BL48	4	South Belridge	South Belridge	IRT Holding Cell 1	Central Waste facility	N/A	42	28S	20E	MD	35.45628	-119.73895	085-230-05	Oil & Water	68	12	8	Earthen	Active			IRT Holding Cell 1	Not measured	Other
BL49	4	South Belridge	South Belridge	IRT Holding Cell 2	Central Waste facility	N/A	43	28S	20E	MD	35.45636	-119.73895	085-230-05	Oil & Water	62	13	8	Earthen	Active			IRT Holding Cell 2	Not measured	Other
BL50	4	South Belridge	South Belridge	IRT Holding Cell 3	Central Waste facility	N/A	44	28S	20E	MD	35.45630	-119.73872	085-230-05	Oil & Water	66	14	8	Earthen	Active			IRT Holding Cell 3	Not measured	Other

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL51	4	South Belridge	South Belridge	DE Disposal Cell 1	Central Waste facility	N/A	45	28S	20E	MD	35.45581	-119.73804	085-230-05	Other	463	218	20	Earthen	Active			DE Waste from Ventura	600 roll off bin/year	Other
BL52	4	South Belridge	South Belridge	Mud Farm Wash Rack	Central Waste facility	N/A	44	28S	20E	MD	35.45750	-119.73539	085-230-05	Other	30	30	1	Concrete	Active					Other
BL53	4	South Belridge	South Belridge	Clarifer Pit 9	Central Waste facility	N/A	37	28S	20E	MD	35.45935	-119.73381	085-230-05	Other	809	76	15	Earthen	Active			Clarifer Pit 9		Other
BL101	14	South Belridge	Belridge 1	SG 1-1 - Blow Down Pit	1-1 Generators	N/A	1	29S	21E	MD	35.42771	-119.67591	098-113-09	Steam	20	20	4	Concrete	Active	4		Steam Blowdown		Blowdown pit
BL108	13	South Belridge	Belridge 3	Dehy 2 Secondary Containment	Sec Cont	N/A	2	29S	21E	MD	35.42846	-119.69054	098-112-01	Other	1140	1140		Earthen	Active			Facility Secondary Containment		Secondary Containment
BL109	13	South Belridge	Belridge 3	Del Sur Compressor Station Secondary Containment	Sec Cont	N/A	2	29S	21E	MD	35.43387	-119.69567	098-112-01	Other	119	55		Gunite	Active			Secondary Containment		Secondary Containment
BL110	13	South Belridge	Belridge 3	SGS 2-3 Blowdown Pit	2-3 Generators	N/A	2	29S	21E	MD	35.43139	-119.68245	098-112-02	Steam	155	35		Earthen	Active			Steam Blowdown		Blowdown pit
BL112	12	South Belridge	Belridge 3	Chemical Drain Tank Secondary Containment	Sec Cont	N/A	3	29S	21E	MD	35.43489	-119.70471	098-111-01	Other	20	15		Earthen	Active			Chemical Drain Tank Secondary Containment		Secondary Containment
BL119	2	South Belridge	Emily Hopkins	D20 T-211 Overflow Catch Basin	Dehy 20	N/A	20	28S	21E	MD	35.47964	-119.74078	085-210-18	Oil & Water	180	36	10	HDPE	Active	1		Oil and water sludge		Emer. Basin
BL120	2	South Belridge	Emily Hopkins	D20 T-211 Secondary Containment	Sec Cont	N/A	20	28S	21E	MD	35.47932	-119.74049	085-210-18	Oil & Water	236	172		Earthen	Active			Oil and water sludge		Secondary Containment
BL128	2	South Belridge	Emily Hopkins	SGS 2038 Blowdown Pit	2038 Generators	N/A	20	28S	21E	MD	35.47067	-119.73605	085-210-18	Steam	24	22		HDPE	Active	1		Steam Blowdown		Blowdown pit
BL132	5	South Belridge	Emily Hopkins	Hill Storage Secondary Containment	Sec Cont	N/A	28	28S	21E	MD	35.45624	-119.71892	085-230-26	Other	465	148		Earthen	Active			Secondary Containment		Secondary Containment
BL133	4	South Belridge	Emily Hopkins	LOTS 2944 Pit	2944 Pit	N/A	29	28S	21E	MD	35.46473	-119.73632	085-230-05	Oil & Water	26	24	6	Earthen	Active			Secondary Containment		Emer. Basin
BL134	7	South Belridge	Emily Hopkins	Compressor Station 50 Secondary Containment	Comp 50 Secondary Containment	N/A	32	28S	21E	MD	35.45384	-119.72527	085-230-09	Other	250	203		Earthen	Active			Secondary Containment		Secondary Containment
BL135	7	South Belridge	Emily Hopkins	Gas Plant 32 Secondary Containment	Sec Cont	N/A	32	28S	21E	MD	35.44997	-119.73427	085-230-09	Other	1669	1237		Earthen	Active			Secondary Containment		Secondary Containment
BL136	7	South Belridge	Emily Hopkins	Yard A Pumping Units 1 to 157	Yard A	N/A	32	28S	21E	MD	35.44373	-119.73150	085-230-09	Other	2127	134		Earthen	Active			Secondary Containment		Secondary Containment
BL137	7	South Belridge	Emily Hopkins	Yard B Pumping Units 158 TO 367	Yard B	N/A	32	28S	21E	MD	35.44488	-119.73069	085-230-09	Other	517	812		Earthen	Active			Secondary Containment		Secondary Containment
BL138	7	South Belridge	Emily Hopkins	Yard C Pumping Units 368 to 532	Yard C	N/A	32	28S	21E	MD	35.44375	-119.72989	085-230-09	Other	1429	522		Earthen	Active			Secondary Containment		Secondary Containment
BL139	7	South Belridge	Emily Hopkins	Yard D Pumping Units 533 to 917	Yard D	N/A	32	28S	21E	MD	35.44272	-119.72740	085-230-09	Other	929	497		Earthen	Active			Secondary Containment		Secondary Containment
BL140	7	South Belridge	Emily Hopkins	Yard E Pumping Units 918 to 1048	Yard E	N/A	32	28S	21E	MD	35.44138	-119.72704	085-230-09	Other	760	209		Earthen	Active			Secondary Containment		Secondary Containment
BL141	7	South Belridge	Emily Hopkins	Yard F Pumping Units 1200 ti 1458	Yard F	N/A	32	28S	21E	MD	35.44231	-119.73176	085-230-09	Other	1133	285		Earthen	Active			Secondary Containment		Secondary Containment
BL200	13	South Belridge	Belridge	CVR Trap 2-4	SOSS	N/A	2	29S	21E	MD	35.44096	-119.68024	098-112-03	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 3"	0	PRV
BL201	13	South Belridge	Belridge	CVR Trap 2-1	SOSS	N/A	2	29S	21E	MD	35.44055	-119.67812	098-112-03	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL202	14	South Belridge	Belridge	CVR Trap 1-1	SOSS	N/A	1	29S	21E	MD	35.43395	-119.67328	098-113-06	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL203	13	South Belridge	Belridge	CVR Trap 2-3	SOSS	N/A	2	29S	21E	MD	35.43306	-119.67841	098-112-02	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL204	13	South Belridge	Belridge	CVR TRAP 2-6	SOSS	N/A	2	29S	21E	MD	35.43172	-119.67881	098-112-02	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL205	14	South Belridge	Belridge	CVR TRAP 1-2	SOSS	N/A	12	29S	21E	MD	35.43197	-119.67156	098-113-11	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL206	14	South Belridge	Belridge	CVR TRAP 12-2	SOSS	N/A	12	29S	21E	MD	35.42732	-119.66715	098-113-04	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL207	17	South Belridge	Belridge	CVR TRAP 12-1	SOSS	N/A	12	29S	21E	MD	35.42318	-119.66482	098-113-13	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL208	17	South Belridge	Belridge	CVR-12 COMP.DISCHARGE	SOSS	N/A	12	29S	21E	MD	35.42391	-119.67407	098-113-13	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL209	17	South Belridge	Belridge	CVR-12 SUCTION VESSEL	SOSS	N/A	12	29S	21E	MD	35.42389	-119.67403	098-113-13	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 3"	0	PRV
BL210	17	South Belridge	Belridge	CVR-12 SLUG CATCHER	SOSS	N/A	12	29S	21E	MD	35.42401	-119.67403	098-113-13	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 6"	0	PRV
BL211	17	South Belridge	Belridge	CVR TRAP 11-6	SOSS	N/A	11	29S	21E	MD	35.41817	-119.67810	098-113-15	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL212	16	South Belridge	Belridge	CVR TRAP 11-4	SOSS	N/A	11	29S	21E	MD	35.42249	-119.68076	098-112-15	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL213	16	South Belridge	Belridge	CVR TRAP 11-5	SOSS	N/A	11	29S	21E	MD	35.41707	-119.68723	098-112-22	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL214	13	South Belridge	Belridge	11-1 SLUG CATCHER	SOSS	N/A	11	29S	21E	MD	35.42726	-119.69099	098-112-01	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 6"	0	PRV
BL215	13	South Belridge	Belridge	11-1 SEPERATOR	SOSS	N/A	11	29S	21E	MD	35.42707	-119.69087	098-112-01	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 6"	0	PRV
BL216	13	South Belridge	Belridge	CVR TRAP 3-19	SOSS	N/A	3	29S	21E	MD	35.42711	-119.69523	098-112-01	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL217	13	South Belridge	Belridge	CVR TRAP 2-5 LEG	SOSS	N/A	2	29S	21E	MD	35.43370	-119.69112	098-112-01	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL218	13	South Belridge	Belridge	2-5 FIN FAN VESSEL	SOSS	N/A	2	29S	21E	MD	35.43393	-119.69215	098-112-01	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 6"	0	PRV
BL219	12	South Belridge	Belridge	MARINA 3 SLUG CATCHER	SOSS	N/A	3	29S	21E	MD	35.43351	-119.70149	098-111-03	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL220	12	South Belridge	Belridge	MARINA 3 FIN FAN VESSEL	SOSS	N/A	3	29S	21E	MD	35.43367	-119.70136	098-111-03	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL221	12	South Belridge	Belridge	3-2 SLUG CATCHER	SOSS	N/A	3	29S	21E	MD	35.43529	-119.70440	098-111-01	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 4"	0	PRV
BL222	12	South Belridge	Belridge	3-2 PIT-VESSSEL-SMALL	SOSS	N/A	3	29S	21E	MD	35.43529	-119.70440	098-111-01	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 1"	0	PRV
BL223	12	South Belridge	Belridge	3-2 FIN FAN VESSSEL	SOSS	N/A	3	29S	21E	MD	35.43518	-119.70473	098-111-01	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 3"	0	PRV

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL224	12	South Belridge	Belridge	3-2 SLAGLE VESSSEL	SOSS	N/A	3	29S	21E	MD	35.43530	-119.70453	098-111-01	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 4"	0	PRV
BL225	12	South Belridge	Belridge	3-1 COMPRESSOR INLET VESSEL	SOSS	N/A	3	29S	21E	MD	35.43850	-119.70740	098-111-01	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL226	12	South Belridge	Belridge	3-1 COMPRESSOR DISCHARGE	SOSS	N/A	3	29S	21E	MD	35.43853	-119.70738	098-111-01	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 3"	0	PRV
BL227	12	South Belridge	Belridge	3-1 SLUG CATCHER	SOSS	N/A	3	29S	21E	MD	35.43853	-119.70737	098-111-01	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 3"	0	PRV
BL229	13	South Belridge	Belridge	CVR TRAP 2-17 TRAP	SOSS	N/A	2	29S	21E	MD	35.43071	-119.68909	098-112-01	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL230	13	South Belridge	Belridge	CVR TRAP 2-2	SOSS	N/A	2	29S	21E	MD	35.43498	-119.68730	098-112-02	Condensate CVR				Earthen	Active	2	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL231	13	South Belridge	Belridge	CVR TRAP 2-5 TL	SOSS	N/A	2	29S	21E	MD	35.43452	-119.68682	098-112-02	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 3"	0	PRV
BL232	13	South Belridge	Belridge	2-3 FIN FAN VESSEL	SOSS	N/A	2	29S	21E	MD	35.43272	-119.68443	098-112-02	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 6"	0	PRV
BL233	13	South Belridge	Belridge	2-3 SLAGEL EXCHANGER A	SOSS	N/A	2	29S	21E	MD	35.43270	-119.68425	098-112-02	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 3"	0	PRV
BL234	13	South Belridge	Belridge	2-3 SLAGEL EXCHANGER B	SOSS	N/A	2	29S	21E	MD	35.43264	-119.68439	098-112-02	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 3"	0	PRV
BL235	13	South Belridge	Belridge	2-3 SLAGLE VESSEL	SOSS	N/A	2	29S	21E	MD	35.43280	-119.68414	098-112-02	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 4"	0	PRV
BL236	13	South Belridge	Belridge	2-3 SLUG CATCHER	SOSS	N/A	2	29S	21E	MD	35.43273	-119.68423	098-112-02	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL237	13	South Belridge	Belridge	CVR TRAP 2-14	SOSS	N/A	2	29S	21E	MD	35.42874	-119.68436	098-112-01	Condensate CVR				Concrete	Active	1		DRAIN FLUIDS FROM COMPRESSOR	1	Drain Pit
BL238	17	South Belridge	Belridge	CVR-12 DRAIN PIT	SOSS	N/A	12	29S	21E	MD	35.42410	-119.67412	098-113-13	Condensate CVR	3'	3'	3'	Concrete	Active	1		Relief System 2"	0	PRV
BL239	13	South Belridge	Belridge	CVR TRAP 2-19	SOSS	N/A	2	29S	21E	MD	35.42909	-119.69127	098-112-01	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 2"	0	PRV
BL240	2	South Belridge	King Ellis	KING ELLIS COMPRESSOR DISCHARGE VESSEL	NOSS	N/A	19	28S	21E	MD	35.47686	-119.74274	085-210-18	Condensate CVR				Concrete	Active	1	PRV pointed to sky or ground	Relief System 4"	0	PRV
BL241	1	South Belridge	King Ellis	KING ELLIS SLUG CATCHER	NOSS	N/A	19	28S	21E	MD	35.47671	-119.74326	085-210-09	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 4"	0	PRV
BL242	1	South Belridge	King Ellis	KING ELLIS FIN FAN VESSEL	NOSS	N/A	19	28S	21E	MD	35.47666	-119.74316	085-210-09	Condensate CVR				Earthen	Active	1	PRV pointed to sky or ground	Relief System 4"	0	PRV
BL700	13	South Belridge	Belridge IV	L0203T1 Drain pit	L0203T1	N/A	2	29S	21E	MD	35.43295	-119.69248	098-112-01	Oil & Water	5'	5'	4'	Metal	Active	6		(2) PRV relief in emergency conditions & (8) pump drains (4	<5	Drain Pit
BL701	13	South Belridge	Belridge I	L0244T1 Catch basin	L0244T1	N/A	2	29S	21E	MD	35.43377	-119.68899	098-112-01	Oil & Water	12'	11'	6'	HDPE	Active	2		PRV relief & sump over flow in emergency conditions.	<1	Emer. Basin
BL702	13	South Belridge	Belridge I	L0244T1 Drain pit	L0244T1	N/A	2	29S	21E	MD	35.43381	-119.68900	098-112-01	Oil & Water	5'	5'	4'	Metal	Active	6		(5) pump drain & test vessel drain.	<5	Drain Pit
BL703	12	South Belridge	Belridge III	L0306T1 Catch basin	L0306T1	N/A	3	29S	21E	MD	35.43617	-119.69678	098-111-01	Oil & Water	17'	23'	2'	Gunite	Active	1		PRV relief in emergency conditions.	<1	PRV
BL704	13	South Belridge	Belridge III	L0213T1 Catch basin	L0213T1	N/A	2	29S	21E	MD	35.43718	-119.69537	098-112-01	Oil & Water	17'	18'	2'	Gunite	Active	1		PRV relief in emergency conditions.	<1	PRV
BL705	13	South Belridge	Belridge I	L0223T1 Catch basin	L0223T1	N/A	2	29S	21E	MD	35.43604	-119.69325	098-112-01	Oil & Water	13'	12'	2'	Earthen	Active	1		PRV relief in emergency conditions.	<1	PRV
BL706	13	South Belridge	Belridge I	L0201T1 Catch basin	L0201T1	N/A	2	29S	21E	MD	35.43947	-119.69494	098-112-01	Oil & Water	22'	20'	2'	Gunite	Active	1		PRV relief in emergency conditions.	<1	PRV
BL707	13	South Belridge	Belridge I	L0201T1 Drain pit	L0201T1	N/A	2	29S	21E	MD	35.43980	-119.69482	098-112-01	Oil & Water	5'	5'	4'	Metal	Active	13		PRV relief in emergency conditions & (13) pump drains (5 from	<5	Drain Pit
BL708	12	South Belridge	Belridge III	L0310T1 Catch basin	L0310T1	N/A	3	29S	21E	MD	35.43927	-119.70076	098-111-01	Oil & Water	41'	21'	2'	Gunite	Active	1		PRV relief in emergency conditions.	<1	PRV
BL709	13	South Belridge	Belridge I	L0233T1 Drain pit	L0233T1	N/A	2	29S	21E	MD	35.43721	-119.69136	098-112-01	Oil & Water	5'	5'	4'	Metal	Active	7		(2) PRV relief in emergency conditions, test vessel drain, & (4)	<5	PRV
BL710	13	South Belridge	Belridge V	L0204T1 Drain pit	L0204T1	N/A	2	29S	21E	MD	35.43370	-119.68497	098-112-02	Oil & Water	5'	5'	4'	Metal	Active	8		PRV relief in emergency conditions, test vessel drain, & (6) pump	<5	PRV
BL711	13	South Belridge	Belridge V	L0204T1 Catch basin	L0204T1	N/A	2	29S	21E	MD	35.43396	-119.68509	098-112-02	Oil & Water	24'	24'	2'	Gunite	Active	1		PRV relief in emergency conditions.	<1	PRV
BL712	14	South Belridge	SEBU T	L0116T1 Catch basin	L0116T1	N/A	1	29S	21E	MD	35.43120	-119.67677	098-113-09	Oil & Water	22'	22'	6'	HDPE	Active	2		PRV relief & sump over flow in emergency conditions.	<1	Emer. Basin
BL713	14	South Belridge	SEBU T	L0116T1 Drain pit	L0116T1	N/A	1	29S	21E	MD	35.43123	-119.67658	098-113-09	Oil & Water	5'	5'	4'	Metal	Active	3		Test vessel drain & (2) pump drain.	<5	Drain Pit
BL714	13	South Belridge	Belridge V	L0219T1 Catch basin	L0219T1	N/A	2	29S	21E	MD	35.42926	-119.68179	098-112-02	Oil & Water	10'	6'	2'	Earthen	Active	1		PRV relief in emergency conditions.	<1	PRV
BL715	13	South Belridge	Belridge V	L0219T1 Drain system	L0219T1	N/A	2	29S	21E	MD	35.42956	-119.68175	098-112-02	Oil & Water	30'	40'	2'	Concrete	Active	9		(9) pump drain (2 from L0103T1 & 1 from L1231T1).	<5	Drain Pit
BL716	14	South Belridge	SEBU T	L0103T1 Catch basin	L0103T1	N/A	1	29S	21E	MD	35.42714	-119.67485	098-113-09	Oil & Water	6'	16'	2'	Earthen	Active	1		PRV relief in emergency conditions.	<1	PRV
BL717	17	South Belridge	SEBU T	L1231T1 Catch basin	L1231T1	N/A	1	29S	21E	MD	35.42498	-119.67139	098-113-13	Oil & Water	6'	6'	1.5'	Earthen	Active	1		PRV relief in emergency conditions.	<1	PRV
BL718	8	South Belridge	–	L3324T1 Catch basin	L3324T1	N/A	33	28S	21E	MD	35.44980	-119.72105	085-230-07	Oil & Water	30'	40'	6'	HDPE	Active	6		(2) PRV relief in emergency conditions, test vessel drain, & (3)	<5	Emer. Basin
BL1001	14	South Belridge	SEBU T	Well# 9S20-1	9S20-1	N/A	1	29S	21E	MD	35.42913	-119.67445	098-113-11	Oil & Water	6'	6'	6'	Metal	Inactive	1		Production capture during stuffing box failure.	<1	Well Cellar
BL1002	1	South Belridge	King	Well# 78DR-19	78DR-19	N/A	19	28S	21E	MD	35.47105	-119.74731	085-210-09	Oil & Water	6'	6'	6'	Metal	Active	1		Production capture during stuffing box failure.	<1	Well Cellar
BL1408	1	South Belridge	King Ellis	6-8ZR2-19	NOSS	N/A	19	28S	21E	MD	35.47355	-119.74560	085-210-09	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1409	2	South Belridge	Emily Hopkins	625C-20	NOSS	N/A	20	28S	21E	MD	35.47646	-119.73964	085-210-18	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1410	2	South Belridge	Emily Hopkins	625FG-20	NOSS	N/A	20	28S	21E	MD	35.47722	-119.73976	085-210-18	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1411	2	South Belridge	Emily Hopkins	626G-20	NOSS	N/A	20	28S	21E	MD	35.47519	-119.73892	085-210-18	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1412	2	South Belridge	Emily Hopkins	635M-20	NOSS	N/A	20	28S	21E	MD	35.47616	-119.73780	085-210-18	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1413	2	South Belridge	Emily Hopkins	636N-20	NOSS	N/A	20	28S	21E	MD	35.47472	-119.73736	085-210-18	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL1414	2	South Belridge	Emily Hopkins	657E-20	NOSS	N/A	20	28S	21E	MD	35.47352	-119.73443	085-210-18	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1415	2	South Belridge	Emily Hopkins	658N-20	NOSS	N/A	20	28S	21E	MD	35.47096	-119.73293	085-210-18	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1417	10	South Belridge	Emily Hopkins	5569A-35	NOSS	N/A	35	28S	21E	MD	35.44240	-119.68458	085-220-38	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1418	10	South Belridge	Emily Hopkins	5590-35	NOSS	N/A	35	28S	21E	MD	35.44185	-119.68172	085-220-38	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1419	10	South Belridge	Emily Hopkins	5617-35	NOSS	N/A	35	28S	21E	MD	35.44152	-119.68346	085-220-38	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1420	10	South Belridge	Emily Hopkins	5617A-35	NOSS	N/A	35	28S	21E	MD	35.44151	-119.68333	085-220-38	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1422	10	South Belridge	Emily Hopkins	627F-35	NOSS	N/A	35	28S	21E	MD	35.44479	-119.68628	085-220-38	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1437	14	South Belridge	SEBU T	5124A-1	SOSS	N/A	1	29S	21E	MD	35.43880	-119.67689	098-113-07	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1438	14	South Belridge	SEBU T	5124B-1	SOSS	N/A	1	29S	21E	MD	35.43912	-119.67690	098-113-07	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1440	14	South Belridge	SEBU T	5173A-1	SOSS	N/A	1	29S	21E	MD	35.43779	-119.67594	098-113-07	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1441	14	South Belridge	SEBU T	5173B-1	SOSS	N/A	1	29S	21E	MD	35.43781	-119.67577	098-113-07	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1442	14	South Belridge	SEBU T	5196A-1	SOSS	N/A	1	29S	21E	MD	35.43687	-119.67477	098-113-07	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1443	14	South Belridge	SEBU T	5196B-1	SOSS	N/A	1	29S	21E	MD	35.43684	-119.67469	098-113-06	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1444	14	South Belridge	SEBU T	5199A-1	SOSS	N/A	1	29S	21E	MD	35.43691	-119.67671	098-113-07	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1445	14	South Belridge	SEBU T	5199B-1	SOSS	N/A	1	29S	21E	MD	35.43709	-119.67679	098-113-07	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1447	14	South Belridge	SEBU T	5244A-1	SOSS	N/A	1	29S	21E	MD	35.43591	-119.67342	098-113-06	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1448	14	South Belridge	SEBU T	5247A-1	SOSS	N/A	1	29S	21E	MD	35.43598	-119.67556	098-113-07	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1451	14	South Belridge	SEBU T	5268-1	SOSS	N/A	1	29S	21E	MD	35.43479	-119.67318	098-113-06	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1452	14	South Belridge	SEBU T	5271-1	SOSS	N/A	1	29S	21E	MD	35.43513	-119.67448	098-113-06	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1453	14	South Belridge	SEBU T	5271A-1	SOSS	N/A	1	29S	21E	MD	35.43521	-119.67436	098-113-06	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1454	14	South Belridge	SEBU T	5274A-1	SOSS	N/A	1	29S	21E	MD	35.43504	-119.67685	098-113-07	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1457	14	South Belridge	SEBU T	5319A-1	SOSS	N/A	1	29S	21E	MD	35.43424	-119.67332	098-113-06	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1458	14	South Belridge	SEBU T	5319B-1	SOSS	N/A	1	29S	21E	MD	35.43417	-119.67333	098-113-06	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1459	14	South Belridge	SEBU T	5322A-1	SOSS	N/A	1	29S	21E	MD	35.43418	-119.67574	098-113-07	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1460	14	South Belridge	SEBU T	5322C-1	SOSS	N/A	1	29S	21E	MD	35.43416	-119.67537	098-113-07	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1461	14	South Belridge	SEBU T	5325A-1	SOSS	N/A	1	29S	21E	MD	35.43468	-119.67791	098-113-07	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1462	14	South Belridge	SEBU T	5346A-1	SOSS	N/A	1	29S	21E	MD	35.43335	-119.67448	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1463	14	South Belridge	SEBU T	5346B-1	SOSS	N/A	1	29S	21E	MD	35.43338	-119.67435	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1464	14	South Belridge	SEBU T	5367-1	SOSS	N/A	1	29S	21E	MD	35.43281	-119.67261	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1465	14	South Belridge	SEBU T	5367A-1	SOSS	N/A	1	29S	21E	MD	35.43278	-119.67246	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1467	14	South Belridge	SEBU T	5416-1	SOSS	N/A	1	29S	21E	MD	35.43159	-119.67176	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1468	14	South Belridge	SEBU T	5416B-1	SOSS	N/A	1	29S	21E	MD	35.43156	-119.67184	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1469	14	South Belridge	SEBU T	5419A-1	SOSS	N/A	1	29S	21E	MD	35.43162	-119.67320	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1470	14	South Belridge	SEBU T	5419B-1	SOSS	N/A	1	29S	21E	MD	35.43172	-119.67327	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1472	14	South Belridge	SEBU T	5421A-1	SOSS	N/A	1	29S	21E	MD	35.43164	-119.67469	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1473	14	South Belridge	SEBU T	5463-1	SOSS	N/A	1	29S	21E	MD	35.43050	-119.66930	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1474	14	South Belridge	SEBU T	5463A-1	SOSS	N/A	1	29S	21E	MD	35.43037	-119.66926	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1475	14	South Belridge	SEBU T	5465-1	SOSS	N/A	1	29S	21E	MD	35.43040	-119.67111	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1476	14	South Belridge	SEBU T	5465A-1	SOSS	N/A	1	29S	21E	MD	35.43053	-119.67109	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1477	14	South Belridge	SEBU T	5467-1	SOSS	N/A	1	29S	21E	MD	35.43039	-119.67263	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1479	14	South Belridge	SEBU T	5469A-1	SOSS	N/A	1	29S	21E	MD	35.43047	-119.67413	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1481	14	South Belridge	SEBU T	5512-1	SOSS	N/A	1	29S	21E	MD	35.42930	-119.66847	098-113-04	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1482	14	South Belridge	SEBU T	5514A-1	SOSS	N/A	1	29S	21E	MD	35.42921	-119.67009	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1483	14	South Belridge	SEBU T	5514B-1	SOSS	N/A	1	29S	21E	MD	35.42928	-119.67002	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1484	14	South Belridge	SEBU T	5516-1	SOSS	N/A	1	29S	21E	MD	35.42928	-119.67170	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL1485	14	South Belridge	SEBU T	5516A-1	SOSS	N/A	1	29S	21E	MD	35.42928	-119.67160	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1486	14	South Belridge	SEBU T	5519-1	SOSS	N/A	1	29S	21E	MD	35.42945	-119.67317	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1487	14	South Belridge	SEBU T	5519A-1	SOSS	N/A	1	29S	21E	MD	35.42952	-119.67323	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1488	14	South Belridge	SEBU T	5521A-1	SOSS	N/A	1	29S	21E	MD	35.42931	-119.67537	098-113-09	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1489	14	South Belridge	SEBU T	5521B-1	SOSS	N/A	1	29S	21E	MD	35.42936	-119.67466	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1492	14	South Belridge	SEBU T	5561-1	SOSS	N/A	1	29S	21E	MD	35.42819	-119.66777	098-113-04	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1493	14	South Belridge	SEBU T	5561A-1	SOSS	N/A	1	29S	21E	MD	35.42823	-119.66763	098-113-04	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1494	14	South Belridge	SEBU T	5563-1	SOSS	N/A	1	29S	21E	MD	35.42804	-119.66928	098-113-04	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1495	14	South Belridge	SEBU T	5563B-1	SOSS	N/A	1	29S	21E	MD	35.42810	-119.66927	098-113-04	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1496	14	South Belridge	SEBU T	5565-1	SOSS	N/A	1	29S	21E	MD	35.42801	-119.67085	098-113-04	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1497	14	South Belridge	SEBU T	5565A-1	SOSS	N/A	1	29S	21E	MD	35.42814	-119.67078	098-113-04	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1498	14	South Belridge	SEBU T	5567-1	SOSS	N/A	1	29S	21E	MD	35.42809	-119.67250	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1499	14	South Belridge	SEBU T	5567A-1	SOSS	N/A	1	29S	21E	MD	35.42804	-119.67240	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1500	14	South Belridge	SEBU T	5569-1	SOSS	N/A	1	29S	21E	MD	35.42812	-119.67458	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1501	14	South Belridge	SEBU T	5569B-1	SOSS	N/A	1	29S	21E	MD	35.42768	-119.67377	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1502	14	South Belridge	SEBU T	5571-1	SOSS	N/A	1	29S	21E	MD	35.42842	-119.67577	098-113-09	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1503	14	South Belridge	SEBU T	5571B-1	SOSS	N/A	1	29S	21E	MD	35.42846	-119.67574	098-113-09	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1504	14	South Belridge	SEBU T	5571C-1	SOSS	N/A	1	29S	21E	MD	35.42802	-119.67519	098-113-09	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1505	14	South Belridge	SEBU T	5575-1	SOSS	N/A	1	29S	21E	MD	35.42832	-119.67798	098-113-09	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1506	14	South Belridge	SEBU T	5610-1	SOSS	N/A	1	29S	21E	MD	35.42704	-119.66683	098-113-04	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1507	14	South Belridge	SEBU T	5612-1	SOSS	N/A	1	29S	21E	MD	35.42702	-119.66842	098-113-04	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1508	14	South Belridge	SEBU T	5612B-1	SOSS	N/A	1	29S	21E	MD	35.42721	-119.66818	098-113-04	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1509	14	South Belridge	SEBU T	5614A-1	SOSS	N/A	1	29S	21E	MD	35.42708	-119.66998	098-113-04	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1510	14	South Belridge	SEBU T	5616-1	SOSS	N/A	1	29S	21E	MD	35.42691	-119.67183	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1511	14	South Belridge	SEBU T	5617-1	SOSS	N/A	1	29S	21E	MD	35.42692	-119.67191	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1512	14	South Belridge	SEBU T	5619B-1	SOSS	N/A	1	29S	21E	MD	35.42709	-119.67317	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1513	14	South Belridge	SEBU T	5621A-1	SOSS	N/A	1	29S	21E	MD	35.42680	-119.67476	098-113-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1514	14	South Belridge	SEBU T	5623A-1	SOSS	N/A	1	29S	21E	MD	35.42712	-119.67700	098-113-09	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1517	13	South Belridge	St. Clair	4521-2	SOSS	N/A	2	29S	21E	MD	35.42941	-119.69257	098-112-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1518	13	South Belridge	St. Clair	4524-2	SOSS	N/A	2	29S	21E	MD	35.42939	-119.69478	098-112-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1520	13	South Belridge	St. Clair	5004-2	SOSS	N/A	2	29S	21E	MD	35.44072	-119.68043	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1521	13	South Belridge	St. Clair	5004A-2	SOSS	N/A	2	29S	21E	MD	35.44077	-119.68092	098-112-02	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1522	13	South Belridge	St. Clair	5012B-2	SOSS	N/A	2	29S	21E	MD	35.44038	-119.68589	098-112-02	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1523	13	South Belridge	St. Clair	5027A-2	SOSS	N/A	2	29S	21E	MD	35.44057	-119.67911	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1524	13	South Belridge	St. Clair	5027B-2	SOSS	N/A	2	29S	21E	MD	35.44008	-119.67939	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1525	13	South Belridge	St. Clair	5030-2	SOSS	N/A	2	29S	21E	MD	35.44030	-119.68159	098-112-02	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1526	13	South Belridge	St. Clair	5030A-2	SOSS	N/A	2	29S	21E	MD	35.44071	-119.68175	098-112-02	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1527	13	South Belridge	St. Clair	5051A-2	SOSS	N/A	2	29S	21E	MD	35.43965	-119.67831	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1528	13	South Belridge	St. Clair	5051B-2	SOSS	N/A	2	29S	21E	MD	35.43957	-119.67842	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1529	13	South Belridge	St. Clair	5054C-2	SOSS	N/A	2	29S	21E	MD	35.44011	-119.68034	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1530	13	South Belridge	St. Clair	5102B-2	SOSS	N/A	2	29S	21E	MD	35.43865	-119.67943	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1531	13	South Belridge	St. Clair	5102C-2	SOSS	N/A	2	29S	21E	MD	35.43855	-119.67916	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1532	13	South Belridge	St. Clair	5102D-2	SOSS	N/A	2	29S	21E	MD	35.43871	-119.67945	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1533	13	South Belridge	St. Clair	5105-2	SOSS	N/A	2	29S	21E	MD	35.43846	-119.68165	098-112-02	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1535	13	South Belridge	St. Clair	5129-2	SOSS	N/A	2	29S	21E	MD	35.43780	-119.68016	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL1536	13	South Belridge	St. Clair	5129B-2	SOSS	N/A	2	29S	21E	MD	35.43770	-119.68011	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1537	13	South Belridge	St. Clair	5129C-2	SOSS	N/A	2	29S	21E	MD	35.43836	-119.68022	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1540	13	South Belridge	St. Clair	5151C-2	SOSS	N/A	2	29S	21E	MD	35.43735	-119.67835	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1541	13	South Belridge	St. Clair	5177-2	SOSS	N/A	2	29S	21E	MD	35.43693	-119.67920	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1542	13	South Belridge	St. Clair	5177B-2	SOSS	N/A	2	29S	21E	MD	35.43712	-119.67929	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1544	13	South Belridge	St. Clair	5203A-2	SOSS	N/A	2	29S	21E	MD	35.43617	-119.67992	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1546	13	South Belridge	St. Clair	5251A-2	SOSS	N/A	2	29S	21E	MD	35.43517	-119.67917	098-112-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1547	13	South Belridge	St. Clair	5405A-2	SOSS	N/A	2	29S	21E	MD	35.43141	-119.68148	098-112-02	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1548	13	South Belridge	St. Clair	5424A-2	SOSS	N/A	2	29S	21E	MD	35.43122	-119.69472	098-112-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1551	13	South Belridge	St. Clair	5477A-2	SOSS	N/A	2	29S	21E	MD	35.42967	-119.67926	098-112-02	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1554	13	South Belridge	St. Clair	5528B-2	SOSS	N/A	2	29S	21E	MD	35.42844	-119.68025	098-112-02	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1555	13	South Belridge	St. Clair	5532A-2	SOSS	N/A	2	29S	21E	MD	35.42855	-119.68261	098-112-02	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1556	13	South Belridge	St. Clair	5544E-2	SOSS	N/A	2	29S	21E	MD	35.42854	-119.69145	098-112-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1560	13	South Belridge	St. Clair	5580A-2	SOSS	N/A	2	29S	21E	MD	35.42765	-119.68172	098-112-02	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1562	13	South Belridge	St. Clair	5592-2	SOSS	N/A	2	29S	21E	MD	35.42759	-119.69002	098-112-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1563	13	South Belridge	St. Clair	5601-2	SOSS	N/A	2	29S	21E	MD	35.42701	-119.67825	098-112-02	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1564	13	South Belridge	St. Clair	5619-2	SOSS	N/A	2	29S	21E	MD	35.42680	-119.69148	098-112-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1565	13	South Belridge	St. Clair	5622-2	SOSS	N/A	2	29S	21E	MD	35.42679	-119.69364	098-112-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1567	13	South Belridge	St. Clair	6587-2	SOSS	N/A	2	29S	21E	MD	35.42765	-119.68607	098-112-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1568	12	South Belridge	Belridge III	4200-3	SOSS	N/A	3	29S	21E	MD	35.43676	-119.71335	098-111-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1569	12	South Belridge	Belridge III	4248B-3	SOSS	N/A	3	29S	21E	MD	35.43571	-119.71142	098-111-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1570	12	South Belridge	Belridge III	4300-3	SOSS	N/A	3	29S	21E	MD	35.43467	-119.71323	098-111-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1571	12	South Belridge	Belridge III	4394A-3	SOSS	N/A	3	29S	21E	MD	35.43202	-119.70932	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1572	12	South Belridge	Belridge III	4398-3	SOSS	N/A	3	29S	21E	MD	35.43204	-119.71153	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1573	12	South Belridge	Belridge III	4398A-3	SOSS	N/A	3	29S	21E	MD	35.43214	-119.71135	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1574	12	South Belridge	Belridge III	4439A-3	SOSS	N/A	3	29S	21E	MD	35.43147	-119.70603	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1576	12	South Belridge	Belridge III	4463-3	SOSS	N/A	3	29S	21E	MD	35.43019	-119.70461	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1577	12	South Belridge	Belridge III	4466A-3	SOSS	N/A	3	29S	21E	MD	35.43008	-119.70685	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1579	12	South Belridge	Belridge III	4493-3	SOSS	N/A	3	29S	21E	MD	35.42953	-119.70831	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1580	12	South Belridge	Belridge III	4495-3	SOSS	N/A	3	29S	21E	MD	35.42979	-119.71032	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1581	12	South Belridge	Belridge III	4499-3	SOSS	N/A	3	29S	21E	MD	35.42936	-119.71253	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1582	12	South Belridge	Belridge III	4505-3	SOSS	N/A	3	29S	21E	MD	35.42939	-119.69914	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1583	12	South Belridge	Belridge III	4548-3	SOSS	N/A	3	29S	21E	MD	35.42826	-119.71150	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1584	12	South Belridge	Belridge III	4577-3	SOSS	N/A	3	29S	21E	MD	35.42763	-119.69713	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1585	12	South Belridge	Belridge III	4586A-3	SOSS	N/A	3	29S	21E	MD	35.42752	-119.70347	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1588	12	South Belridge	Belridge III	4595-3	SOSS	N/A	3	29S	21E	MD	35.42786	-119.70973	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1589	12	South Belridge	Belridge III	4596-3	SOSS	N/A	3	29S	21E	MD	35.42760	-119.71028	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1590	12	South Belridge	Belridge III	5069A-3	SOSS	N/A	3	29S	21E	MD	35.43936	-119.70860	098-111-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1591	12	South Belridge	Belridge III	5271-3	SOSS	N/A	3	29S	21E	MD	35.43474	-119.71029	098-111-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1592	12	South Belridge	Belridge III	5300-3	SOSS	N/A	3	29S	21E	MD	35.43467	-119.71312	098-111-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1594	12	South Belridge	Belridge III	5343A-3	SOSS	N/A	3	29S	21E	MD	35.43298	-119.70828	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1595	12	South Belridge	Belridge III	5349-3	SOSS	N/A	3	29S	21E	MD	35.43321	-119.71248	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1596	12	South Belridge	Belridge III	5371-3	SOSS	N/A	3	29S	21E	MD	35.43307	-119.71067	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1597	12	South Belridge	Belridge III	5423-3	SOSS	N/A	3	29S	21E	MD	35.43172	-119.71212	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1598	12	South Belridge	Belridge III	5443-3	SOSS	N/A	3	29S	21E	MD	35.43110	-119.70817	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL1599	12	South Belridge	Belridge III	5445-3	SOSS	N/A	3	29S	21E	MD	35.43115	-119.70998	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1600	12	South Belridge	Belridge III	5460A-3	SOSS	N/A	3	29S	21E	MD	35.43015	-119.70251	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1601	12	South Belridge	Belridge III	5463-3	SOSS	N/A	3	29S	21E	MD	35.43019	-119.70471	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1602	12	South Belridge	Belridge III	5472-3	SOSS	N/A	3	29S	21E	MD	35.43051	-119.71113	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1603	12	South Belridge	Belridge III	5494-3	SOSS	N/A	3	29S	21E	MD	35.43006	-119.70984	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1604	12	South Belridge	Belridge III	5505E-3	SOSS	N/A	3	29S	21E	MD	35.42939	-119.69920	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1605	12	South Belridge	Belridge III	5511A-3	SOSS	N/A	3	29S	21E	MD	35.42925	-119.70339	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1606	12	South Belridge	Belridge III	5514A-3	SOSS	N/A	3	29S	21E	MD	35.42956	-119.70566	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1607	12	South Belridge	Belridge III	5518-3	SOSS	N/A	3	29S	21E	MD	35.42938	-119.70822	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1608	12	South Belridge	Belridge III	5535-3	SOSS	N/A	3	29S	21E	MD	35.42847	-119.70247	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1609	12	South Belridge	Belridge III	5535A-3	SOSS	N/A	3	29S	21E	MD	35.42861	-119.70256	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1610	12	South Belridge	Belridge III	5538A-3	SOSS	N/A	3	29S	21E	MD	35.42861	-119.70503	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1612	12	South Belridge	Belridge III	5563-3	SOSS	N/A	3	29S	21E	MD	35.42810	-119.70463	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1613	12	South Belridge	Belridge III	5565-3	SOSS	N/A	3	29S	21E	MD	35.42784	-119.70651	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1614	12	South Belridge	Belridge III	5567-3	SOSS	N/A	3	29S	21E	MD	35.42812	-119.70796	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1615	12	South Belridge	Belridge III	5590-3	SOSS	N/A	3	29S	21E	MD	35.42754	-119.70634	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1616	15	South Belridge	Belridge III	5601-3	SOSS	N/A	3	29S	21E	MD	35.42661	-119.69600	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1617	12	South Belridge	Belridge III	5604-3	SOSS	N/A	3	29S	21E	MD	35.42662	-119.69810	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1618	12	South Belridge	Belridge III	5617A-3	SOSS	N/A	3	29S	21E	MD	35.42683	-119.70792	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1619	12	South Belridge	Belridge III	6319-3	SOSS	N/A	3	29S	21E	MD	35.43381	-119.70919	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1620	12	South Belridge	Belridge III	6348A-3	SOSS	N/A	3	29S	21E	MD	35.43382	-119.71152	098-111-01	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1621	12	South Belridge	Belridge III	6391-3	SOSS	N/A	3	29S	21E	MD	35.43211	-119.70712	098-111-03	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1622	11	South Belridge	Hopkins Marathon	4057B-4	SOSS	N/A	4	29S	21E	MD	35.43963	-119.71837	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1623	11	South Belridge	Hopkins Marathon	4078-4	SOSS	N/A	4	29S	21E	MD	35.43889	-119.71504	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1624	11	South Belridge	Hopkins Marathon	4132A-4	SOSS	N/A	4	29S	21E	MD	35.43758	-119.71825	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1625	11	South Belridge	Hopkins Marathon	4135-4	SOSS	N/A	4	29S	21E	MD	35.43770	-119.72035	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1626	11	South Belridge	Hopkins Marathon	4159-4	SOSS	N/A	4	29S	21E	MD	35.43682	-119.71930	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1627	11	South Belridge	Hopkins Marathon	4178A-4	SOSS	N/A	4	29S	21E	MD	35.43688	-119.71505	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1628	11	South Belridge	Hopkins Marathon	4181A-4	SOSS	N/A	4	29S	21E	MD	35.43681	-119.71714	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1629	11	South Belridge	Hopkins Marathon	4204A-4	SOSS	N/A	4	29S	21E	MD	35.43570	-119.71584	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1630	11	South Belridge	Hopkins Marathon	4207A-4	SOSS	N/A	4	29S	21E	MD	35.43599	-119.71815	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1631	11	South Belridge	Hopkins Marathon	4207B-4	SOSS	N/A	4	29S	21E	MD	35.43557	-119.71831	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1632	11	South Belridge	Hopkins Marathon	4255-4	SOSS	N/A	4	29S	21E	MD	35.43503	-119.71684	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1633	11	South Belridge	Hopkins Marathon	4279-4	SOSS	N/A	4	29S	21E	MD	35.43424	-119.71587	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1634	11	South Belridge	Hopkins Marathon	5051-4	SOSS	N/A	4	29S	21E	MD	35.43962	-119.71394	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1635	11	South Belridge	Hopkins Marathon	5060B-4	SOSS	N/A	4	29S	21E	MD	35.43979	-119.72036	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1636	11	South Belridge	Hopkins Marathon	5126-4	SOSS	N/A	4	29S	21E	MD	35.43777	-119.71394	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1637	11	South Belridge	Hopkins Marathon	6201-4	SOSS	N/A	4	29S	21E	MD	35.43590	-119.71405	098-120-10	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1641	15	South Belridge	Marina	4031A-10	SOSS	N/A	10	29S	21E	MD	35.42569	-119.69925	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1642	15	South Belridge	Marina	4036-10	SOSS	N/A	10	29S	21E	MD	35.42581	-119.70341	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1643	15	South Belridge	Marina	4062-10	SOSS	N/A	10	29S	21E	MD	35.42514	-119.70388	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1644	15	South Belridge	Marina	4082-10	SOSS	N/A	10	29S	21E	MD	35.42483	-119.70009	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1645	15	South Belridge	Marina	4082A-10	SOSS	N/A	10	29S	21E	MD	35.42490	-119.70016	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1647	15	South Belridge	Marina	4111-10	SOSS	N/A	10	29S	21E	MD	35.42430	-119.70347	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1648	15	South Belridge	Marina	4184-10	SOSS	N/A	10	29S	21E	MD	35.42216	-119.70209	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL1649	15	South Belridge	Marina	4259-10	SOSS	N/A	10	29S	21E	MD	35.42084	-119.70143	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1650	15	South Belridge	Marina	5010-10	SOSS	N/A	10	29S	21E	MD	35.42653	-119.70239	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1651	15	South Belridge	Marina	5010A-10	SOSS	N/A	10	29S	21E	MD	35.42643	-119.70251	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1652	15	South Belridge	Marina	5013-10	SOSS	N/A	10	29S	21E	MD	35.42630	-119.70448	098-111-08	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1653	15	South Belridge	Marina	5027-10	SOSS	N/A	10	29S	21E	MD	35.42572	-119.69715	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1654	15	South Belridge	Marina	5033A-10	SOSS	N/A	10	29S	21E	MD	35.42564	-119.70154	098-111-09	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1655	15	South Belridge	Marina	5033B-10	SOSS	N/A	10	29S	21E	MD	35.42572	-119.70170	098-111-09	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1656	15	South Belridge	Marina	5079A-10	SOSS	N/A	10	29S	21E	MD	35.42495	-119.69804	098-111-11	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1657	15	South Belridge	Marina	5102A-10	SOSS	N/A	10	29S	21E	MD	35.42390	-119.69712	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1658	15	South Belridge	Marina	5105A-10	SOSS	N/A	10	29S	21E	MD	35.42395	-119.69935	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1659	15	South Belridge	Marina	5108B-10	SOSS	N/A	10	29S	21E	MD	35.42399	-119.70139	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1660	15	South Belridge	Marina	5154-10	SOSS	N/A	10	29S	21E	MD	35.42295	-119.69817	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1661	15	South Belridge	Marina	5157-10	SOSS	N/A	10	29S	21E	MD	35.42291	-119.70034	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1663	15	South Belridge	Marina	5177-10	SOSS	N/A	10	29S	21E	MD	35.42208	-119.69693	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1664	15	South Belridge	Marina	5177A-10	SOSS	N/A	10	29S	21E	MD	35.42206	-119.69699	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1666	15	South Belridge	Marina	5228-10	SOSS	N/A	10	29S	21E	MD	35.42094	-119.69807	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1667	15	South Belridge	Marina	5232-10	SOSS	N/A	10	29S	21E	MD	35.42106	-119.70032	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1670	15	South Belridge	Marina	5237-10	SOSS	N/A	10	29S	21E	MD	35.42101	-119.70400	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1671	15	South Belridge	Marina	5252-10	SOSS	N/A	10	29S	21E	MD	35.42041	-119.69698	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1672	15	South Belridge	Marina	5255-10	SOSS	N/A	10	29S	21E	MD	35.42014	-119.69915	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1673	15	South Belridge	Marina	5256-10	SOSS	N/A	10	29S	21E	MD	35.42023	-119.70017	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1674	15	South Belridge	Marina	5279-10	SOSS	N/A	10	29S	21E	MD	35.42016	-119.69802	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1675	15	South Belridge	Marina	5283-10	SOSS	N/A	10	29S	21E	MD	35.42014	-119.70144	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1676	15	South Belridge	Marina	5285-10	SOSS	N/A	10	29S	21E	MD	35.41987	-119.70286	098-111-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1678	16	South Belridge	Belridge	4040-11	SOSS	N/A	11	29S	21E	MD	35.42591	-119.68836	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1679	16	South Belridge	Belridge	4046B-11	SOSS	N/A	11	29S	21E	MD	35.42569	-119.69269	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1681	16	South Belridge	Belridge	4091-11	SOSS	N/A	11	29S	21E	MD	35.42484	-119.68937	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1682	16	South Belridge	Belridge	4124A-11	SOSS	N/A	11	29S	21E	MD	35.42405	-119.69509	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1683	16	South Belridge	Belridge	4190-11	SOSS	N/A	11	29S	21E	MD	35.42208	-119.68823	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1685	16	South Belridge	Belridge	5007-11	SOSS	N/A	11	29S	21E	MD	35.42658	-119.68204	098-112-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1686	16	South Belridge	Belridge	5010-11	SOSS	N/A	11	29S	21E	MD	35.42656	-119.68487	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1687	16	South Belridge	Belridge	5016A-11	SOSS	N/A	11	29S	21E	MD	35.42642	-119.68877	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1688	16	South Belridge	Belridge	5022-11	SOSS	N/A	11	29S	21E	MD	35.42648	-119.69303	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1689	16	South Belridge	Belridge	5028-11	SOSS	N/A	11	29S	21E	MD	35.42574	-119.67916	098-112-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1690	16	South Belridge	Belridge	5030A-11	SOSS	N/A	11	29S	21E	MD	35.42574	-119.68156	098-112-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1691	16	South Belridge	Belridge	5033B-11	SOSS	N/A	11	29S	21E	MD	35.42583	-119.68380	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1692	16	South Belridge	Belridge	5040A-11	SOSS	N/A	11	29S	21E	MD	35.42593	-119.68861	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1693	16	South Belridge	Belridge	5043-11	SOSS	N/A	11	29S	21E	MD	35.42576	-119.69062	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1694	16	South Belridge	Belridge	5049A-11	SOSS	N/A	11	29S	21E	MD	35.42566	-119.69485	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1695	16	South Belridge	Belridge	5078-11	SOSS	N/A	11	29S	21E	MD	35.42469	-119.68008	098-112-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1697	16	South Belridge	Belridge	5085A-11	SOSS	N/A	11	29S	21E	MD	35.42478	-119.68482	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1698	16	South Belridge	Belridge	5088-11	SOSS	N/A	11	29S	21E	MD	35.42484	-119.68664	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1699	16	South Belridge	Belridge	5091-11	SOSS	N/A	11	29S	21E	MD	35.42485	-119.68942	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL1813	2	South Belridge	King Ellis	Containment for Lt oil and Heavy oil shipping pumps	King Ellis	N/A	20	28S	21E	MD	35.47697	-119.74255	085-210-18	Oil & Water	63'	25'	6"	Concrete	Active			Capture Oil & Water		Drain Pad
BL1814	2	South Belridge	King Ellis	Containment King Ellis North LACT proving loop	King Ellis	N/A	20	28S	21E	MD	35.47646	-119.74262	085-210-18	Oil & Water	3'	2'	6'	Metal	Active	2		Capture Oil & Water		Drain Pit

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL1815	2	South Belridge	King Ellis	Containment King Ellis South LACT proving loop (Use picture BL1814)	King Ellis	N/A	20	28S	21E	MD	35.47646	-119.74262	085-210-18	Oil & Water	3'	2'	6'	Metal	Active	2		Capture Oil & Water		Drain Pit
BL1816	1	South Belridge	King Ellis	Containment for FWKO V-300 & V-400	King Ellis	N/A	20	28S	21E	MD	35.47644	-119.74299	085-210-09	Oil & Water	80'	80'	2'	Earthen	Active			Capture Oil & Water		Secondary Containment
BL1818	2	South Belridge	King Ellis	Drain Pit West of FWKO V-400	King Ellis	N/A	20	28S	21E	MD	35.47651	-119.74282	085-210-18	Oil & Water	5' Dia		15'	Concrete	Active	2		Capture Oil & Water		Drain Pit
BL1819	2	South Belridge	King Ellis	FWKO Emergency basin serving V-300 and V-400	King Ellis	N/A	20	28S	21E	MD	35.47621	-119.74286	085-210-18	Oil & Water	80'	45'	3'	Earthen	Active	1		Capture Oil & Water		Emer. Basin
BL1820	2	South Belridge	Dehy 20	Containment for Plains LACT 250 with 8 pots.	King Ellis	N/A	20	28S	21E	MD	35.47823	-119.73856	085-210-18	Oil & Water	25'	2	6"	Metal	Active	2		Capture Oil & Water		Drain Pad
BL1821	2	South Belridge	Dehy 20	LACT 350 PIG Launcher	Dehy 20	N/A	20	28S	21E	MD	35.47835	-119.73876	085-210-18	Oil & Water	3"	2"	6"	Metal	Active	2		Capture Oil & Water		Drain Pad
BL1823	2	South Belridge	Dehy 20	Containment for Pumps P-250 A-D	Dehy 20	N/A	20	28S	21E	MD	35.47836	-119.73892	085-210-18	Oil & Water	5'	3'	4"	Metal	Active	4		Capture Oil & Water		Drain Pad
BL1824	2	South Belridge	Dehy 20	4 Drain pits associated with Pumps P-250 A-D	Dehy 20	N/A	20	28S	21E	MD	35.47835	-119.73871	085-210-18	Oil & Water	6" dia			Concrete	Active	4		Capture Oil & Water		Drain Pad
BL1825	2	South Belridge	Dehy 20	Containment for Dehy 20 TVR Compressors C-230 A&B	Dehy 20	N/A	20	28S	21E	MD	35.47817	-119.73836	085-210-18	Produced Water	6" dia			Metal	Active	2		Capture Produced Water		Drain Pad
BL1826	2	South Belridge	Dehy 20	Containment for Pumps P-231 A-E	Dehy 20	N/A	20	28S	21E	MD	35.47847	-119.73786	085-210-18	Produced Water	25'	16'	6"	Concrete	Active	5		Capture Produced Water		Drain Pad
BL1827	2	South Belridge	Dehy 20	Drain box of produced water line	Dehy 20 WP	N/A	20	28S	21E	MD	35.47871	-119.73792	085-210-18	Produced Water	2'	2'	3"	Concrete	Active	2		Capture Produced Water		Drain Pit
BL1828	2	South Belridge	Dehy 20	Secondary containment for Pumps P-231 L & M	Dehy 20 WP	N/A	20	28S	21E	MD	35.47872	-119.73775	085-210-18	Produced Water	45'	16'	6"	Concrete	Active			Capture Produced Water		Drain Pad
BL1829	2	South Belridge	Dehy 20	T-231B Pump 235B containment & drain pit	Dehy 20 WP	N/A	20	28S	21E	MD	35.47916	-119.73776	085-210-18	Produced Water	3'	2'	3"	Metal	Active	1		Capture Produced Water		Drain Pad
BL1830	2	South Belridge	Dehy 20	T-231B Manway collection vault	Dehy 20 WP	N/A	20	28S	21E	MD	35.47937	-119.73778	085-210-18	Produced Water	6'	4'	4'	Concrete	Active	1		Capture Produced Water		Drain Pit
BL1831	2	South Belridge	Dehy 20	Containment for Filter F-220F	Dehy 20 WP	N/A	20	28S	21E	MD	35.47919	-119.73830	085-210-18	Produced Water	50'	25'	2"	Concrete	Active	5		Capture Produced Water		Drain Pad
BL1832	2	South Belridge	Dehy 20	Containment for T-231A pump and drain pit	Dehy 20 WP	N/A	20	28S	21E	MD	35.47903	-119.73826	085-210-18	Produced Water	3'	2'	3"	Metal	Active	1		Capture Produced Water		Drain Pad
BL1833	2	South Belridge	Dehy 20	T-231A Manway collection vault	Dehy 20 WP	N/A	20	28S	21E	MD	35.47868	-119.73810	085-210-18	Produced Water	8'	4'	4'	Concrete	Active	1		Capture Produced Water		Drain Pit
BL1834	2	South Belridge	Dehy 20	Containment V-245 Flare Scrubber Vaults	Dehy 20	N/A	20	28S	21E	MD	35.47894	-119.73835	085-210-18	Oil & Water	50'	20'	15'	Concrete	Active			Capture Oil & Water		Secondary Containment
BL1835	2	South Belridge	Dehy 20	Containment for 5 ISF's and 5 Filters	Dehy 20 WP	N/A	20	28S	21E	MD	35.47894	-119.73843	085-210-18	Produced Water	200'	50'	3"	Concrete	Active			Capture Produced Water		Secondary Containment
BL1836	2	South Belridge	Dehy 20	Containment for Pumps P-260 A-E	Dehy 20 WP	N/A	20	28S	21E	MD	35.47931	-119.73854	085-210-18	Produced Water	60'	35'	3'	Concrete	Active			Capture Produced Water		Drain Pad
BL1837	2	South Belridge	Dehy 20	Containment for Pumps P-270 A-C and Pumps P-220 A-E	Dehy 20 WP	N/A	20	28S	21E	MD	35.47959	-119.73819	085-210-18	Produced Water	100'	35'	3"	Concrete	Active			Capture Produced Water		Drain Pad
BL1838	2	South Belridge	Dehy 20	Containment for T-220A Manway vault	Dehy 20 WP	N/A	20	28S	21E	MD	35.47966	-119.73829	085-210-18	Produced Water	6'	6'	6'	Concrete	Active	1		Capture Produced Water		Drain Pit
BL1839	2	South Belridge	Dehy 20	Containment for Apron Vault	Dehy 20 WP	N/A	20	28S	21E	MD	35.47981	-119.73770	085-210-18	Produced Water	6	6	6	Concrete	Active	1		Capture Produced Water		Drain Pit
BL1840	2	South Belridge	Dehy 20	Containment for Pumps P-225 A&B and drain pits	Dehy 20 WP	N/A	20	28S	21E	MD	35.47956	-119.73815	085-210-18	Produced Water	3'	2'	3"	Metal	Active	2		Capture Produced Water		Drain Pad
BL1841	2	South Belridge	Dehy 20	Containment for T-220B apron vault	Dehy 20 WP	N/A	20	28S	21E	MD	35.47963	-119.73801	085-210-18	Produced Water	6'	6'	6	Concrete	Active	1		Capture Produced Water		Drain Pit
BL1842	2	South Belridge	Dehy 20	Containment for T-220B manway vault	Dehy 20 WP	N/A	20	28S	21E	MD	35.47936	-119.73798	085-210-18	Produced Water	6'	6'	6'	Concrete	Active	1		Capture Produced Water		Drain Pit
BL1843	2	South Belridge	Dehy 20	Containment for F-920 A&B	Dehy 20 WP	N/A	20	28S	21E	MD	35.47938	-119.73673	085-210-18	Produced Water	15'	10'	6	Concrete	Active	2		Capture Produced Water		Drain Pad
BL1844	2	South Belridge	Dehy 20	Containment for pumps P-244 A&B	Dehy 20 WP	N/A	20	28S	21E	MD	35.47955	-119.73734	085-210-18	Oil & Water	12'	9'	6"	Concrete	Active			Capture Oil & Water		Drain Pad
BL1845	2	South Belridge	Dehy 20	Containment Vault for V-244 process drain tank	Dehy 20	N/A	20	28S	21E	MD	35.47951	-119.73721	085-210-18	Oil & Water	25'	15'	20'	Concrete Block	Active			Capture Oil & Water		Secondary Containment
BL1846	2	South Belridge	Dehy 20	Containment for Pumps P-242-A-C and Pumps P243- a&B	Dehy 20	N/A	20	28S	21E	MD	35.47981	-119.73778	085-210-18	Oil & Water	40'	20'	6"	Concrete	Active			Capture Oil & Water		Drain Pad
BL1847	2	South Belridge	Dehy 20	Containment for old P-242 and old P-243 pump skid	Dehy 20	N/A	20	28S	21E	MD	35.47980	-119.73772	085-210-18	Oil & Water	20'	8'	4"	Concrete	Active	4		Capture Oil & Water		Drain Pad
BL1848	2	South Belridge	Dehy 20	Containment P-240 A&B pump skid containment	Dehy 20	N/A	20	28S	21E	MD	35.48031	-119.73794	085-210-18	Oil & Water	16'	8'	3"	Concrete	Active	2		Capture Oil & Water		Drain Pad
BL1850	2	South Belridge	Dehy 20	V-201D Collection Vault	Dehy 20	N/A	20	28S	21E	MD	35.47866	-119.73922	085-210-18	Oil & Water	9'	4'	4'	Concrete	Active	1		Capture Oil & Water		Drain Pit
BL1851	2	South Belridge	Dehy 20	Open drain line from V-201D sample box	Dehy 20	N/A	20	28S	21E	MD	35.47876	-119.73902	085-210-18	Oil & Water	3" dia			Metal	Active	1		Capture Oil & Water		Drain Pit
BL1852	2	South Belridge	Dehy 20	Containment for Filter F-201D	Dehy 20	N/A	20	28S	21E	MD	35.47890	-119.73895	085-210-18	Oil & Water	7'	7'	9"	Concrete	Inactive	1		Capture Oil & Water		Drain Pad
BL1853	2	South Belridge	Dehy 20	Containment for Filter F-201F	Dehy 20	N/A	20	28S	21E	MD	35.47876	-119.73879	085-210-18	Oil & Water	7'	7'	9"	Concrete	Inactive	1		Capture Oil & Water		Drain Pad
BL1854	2	South Belridge	Dehy 20	Containment for Filter F-201C	Dehy 20	N/A	20	28S	21E	MD	35.47908	-119.73918	085-210-18	Oil & Water	7'	7'	9"	Concrete	Inactive	1		Capture Oil & Water		Drain Pad
BL1856	2	South Belridge	Dehy 20	V-201C Collection Vault	Dehy 20	N/A	20	28S	21E	MD	35.47908	-119.73923	085-210-18	Oil & Water	9'	4'	4'	Concrete	Active	1		Capture Oil & Water		Drain Pit
BL1857	2	South Belridge	Dehy 20	V-201C Collection Vault	Dehy 20	N/A	20	28S	21E	MD	35.47900	-119.73964	085-210-18	Oil & Water	9'	4'	4'	Concrete	Active	1		Capture Oil & Water		Drain Pit
BL1858	2	South Belridge	Dehy 20	Containment for Filter F-201B	Dehy 20	N/A	20	28S	21E	MD	35.47933	-119.73940	085-210-18	Oil & Water	7'	7'	9"	Concrete	Inactive	1		Capture Oil & Water		Drain Pad
BL1860	2	South Belridge	Dehy 20	V-201A Collection Vault	Dehy 20	N/A	20	28S	21E	MD	35.47934	-119.73998	085-210-18	Oil & Water	9'	4'	4'	Concrete	Active	1		Capture Oil & Water		Drain Pit
BL1861	2	South Belridge	Dehy 20	Containment for Filter F-201A	Dehy 20	N/A	20	28S	21E	MD	35.47975	-119.73936	085-210-18	Oil & Water	7'	7'	9"	Concrete	Inactive	1		Capture Oil & Water		Drain Pad
BL1863	2	South Belridge	Dehy 20	Containment for Filter F-201E	Dehy 20	N/A	20	28S	21E	MD	35.47955	-119.73966	085-210-18	Oil & Water	7'	7'	9"	Concrete	Inactive	1		Capture Oil & Water		Drain Pad
BL1864	2	South Belridge	Dehy 20	Containment for Filter F-201G	Dehy 20	N/A	20	28S	21E	MD	35.47988	-119.73991	085-210-18	Oil & Water	7'	7'	9"	Concrete	Inactive	1		Capture Oil & Water		Drain Pad
BL1866	2	South Belridge	Dehy 20	Containment for Filter F-201G	Dehy 20	N/A	20	28S	21E	MD	35.47977	-119.73984	085-210-18	Oil & Water	7'	7'	9"	Concrete	Inactive	1		Capture Oil & Water		Drain Pad

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL1867	2	South Belridge	Dehy 20	Containment for Filter F-201H	Dehy 20	N/A	20	28S	21E	MD	35.48008	-119.73989	085-210-18	Oil & Water	7'	7'	9"	Concrete	Inactive	1		Capture Oil & Water		Drain Pad
BL1869	2	South Belridge	Dehy 20	Containment for Pumps P-211 A&B	Dehy 20	N/A	20	28S	21E	MD	35.47908	-119.74003	085-210-18	Oil & Water	18'	15'	4"	Concrete	Active	4		Capture Oil & Water		Drain Pad
BL1870	2	South Belridge	Dehy 20	Containment for Pumps P-212 A-C	Dehy 20	N/A	20	28S	21E	MD	35.47903	-119.73997	085-210-18	Oil & Water	34'	15'	4'	Concrete	Active	9		Capture Oil & Water		Drain Pad
BL1871	2	South Belridge	Dehy 20	Secondary containment for Tank T-211	Dehy 20	N/A	20	28S	21E	MD	35.47879	-119.74048	085-210-18	Oil & Water	225'	175'	4'	Earthen	Active			Capture Oil & Water		Secondary Containment
BL1872	2	South Belridge	Dehy 20	Containment underneath Tank T-211. In addition to the containment there is a 2' x 30' drain troth	Dehy 20	N/A	20	28S	21E	MD	35.47946	-119.74057	085-210-18	Oil & Water	15'	12'	6"	Concrete	Active	1		Capture Oil & Water		Other
BL1873	2	South Belridge	Dehy 20	T-211 Drain pit located on east side of tank	Dehy 20	N/A	20	28S	21E	MD	35.47911	-119.73998	085-210-18	Oil & Water	2' dia			Concrete	Active	1		Capture Oil & Water		Drain Pit
BL1875	2	South Belridge	Dehy 20	Containment of two pumps located in the tunnel of tank T-200A.	Dehy 20	N/A	20	28S	21E	MD	35.48011	-119.73948	085-210-18	Oil & Water	12'	2'	2"	Metal	Active	1		Capture Oil & Water		Drain Pad
BL1876	2	South Belridge	Dehy 20	Two drains located in the tunnel fo tank T-200A	Dehy 20	N/A	20	28S	21E	MD	35.48011	-119.73948	085-210-18	Oil & Water	2	2		Concrete	Active	1		Capture Oil & Water		Drain Pad
BL1877	2	South Belridge	Dehy 20	Containment of of Vessel V-300A and Pumps.	Dehy 20	N/A	20	28S	21E	MD	35.48034	-119.73957	085-210-18	Oil & Water	36'	27'	2"	Concrete	Active	4		Capture Oil & Water		Drain Pad
BL1878	2	South Belridge	Dehy 20	Containment of Pumps V-320 A&B and V-310 A&B	Dehy 20	N/A	20	28S	21E	MD	35.48064	-119.73948	085-210-18	Oil & Water	30'	15'	4"	Concrete	Active	8		Capture Oil & Water		Drain Pad
BL1879	2	South Belridge	Dehy 20	Manway Vault for tank T-310 located on NW side of Tank	Dehy 20	N/A	20	28S	21E	MD	35.48064	-119.73969	085-210-18	Oil & Water	6'	4'	6	Concrete	Active	1		Capture Oil & Water		Drain Pit
BL1880	2	South Belridge	Dehy 20	Drain Vault for tank T-310 located on south side of Tank	Dehy 20	N/A	20	28S	21E	MD	35.48051	-119.73949	085-210-18	Oil & Water	9'	3'	18"	Concrete	Active	1		Capture Oil & Water		Drain Pit
BL1881	2	South Belridge	Dehy 20	T-320 collection vault	T-320	N/A	20	28S	21E	MD	35.48106	-119.73776	085-210-18	Oil & Water	6'	3'	3'	Concrete	Active	1		Capture Oil & Water		Drain Pit
BL1882	2	South Belridge	Dehy 20	T-320 manway collection vault	T-320	N/A	20	28S	21E	MD	35.48137	-119.73811	085-210-18	Oil & Water	6'	4'	6'	Concrete	Active	1		Capture Oil & Water		Drain Pit
BL1883	7	South Belridge	Dehy 20	Secondary containment	Dehy 20	N/A	20	28S	21E	MD	35.44873	-119.73055	085-230-09	Oil & Water	7'	33'	4"	Concrete	Inactive			Capture Oil & Water		Drain Pad
BL1884	2	South Belridge	Dehy 20	T-410 & Centrifuge containment	T-410	N/A	20	28S	21E	MD	35.48180	-119.73783	085-210-18	Oil & Water	57'	51'	6"	Concrete	Active	4		Capture Oil & Water		Drain Pad
BL1885	2	South Belridge	Dehy 20	P-410 A&B Containment	P-410 A&B	N/A	20	28S	21E	MD	35.48179	-119.73782	085-210-18	Oil & Water	6'	2'	3"	Metal	Active	2		Capture Oil & Water		Drain Pad
BL1887	2	South Belridge	Dehy 20	F-405 A&B secondary cont/vault	F-405	N/A	20	28S	21E	MD	35.48159	-119.73737	085-210-18	Oil & Water	7'	2'	2'	Concrete	Active	6		Capture Oil & Water		Drain Pad
BL1888	2	South Belridge	Dehy 20	T-330 Apron collection vault	T-330	N/A	20	28S	21E	MD	35.48081	-119.73972	085-210-18	Oil & Water	6'	3'	2'	Concrete	Active	1		Capture Oil & Water		Drain Pit
BL1889	2	South Belridge	Dehy 20	T-330 manway collection vault	T-330	N/A	20	28S	21E	MD	35.48089	-119.73964	085-210-18	Oil & Water	6'	4'	6'	Concrete	Active	1		Capture Oil & Water		Drain Pit
BL1890	2	South Belridge	Dehy 20	P-330 A&B secondary containment	P-330 A&B	N/A	20	28S	21E	MD	35.48078	-119.73982	085-210-18	Oil & Water	12'	10'	4"	Concrete	Active	4		Capture Oil & Water		Drain Pad
BL1891	2	South Belridge	Dehy 20	P-300 A&B secondary containment	P-300 A&B	N/A	20	28S	21E	MD	35.48045	-119.73937	085-210-18	Oil & Water	10'	10'	4"	Concrete	Active	4		Capture Oil & Water		Drain Pad
BL1892	2	South Belridge	Dehy 20	T-300A manway collection vault	T-300A	N/A	20	28S	21E	MD	35.48070	-119.73934	085-210-18	Oil & Water	6'	4'	5'	Concrete	Active	1		Capture Oil & Water		Drain Pit
BL1893	2	South Belridge	Dehy 20	T-300A apron collection vault	T-300A	N/A	20	28S	21E	MD	35.48005	-119.73908	085-210-18	Oil & Water	6'	3'	1'	Concrete	Active	1		Capture Oil & Water		Drain Pit
BL1895	2	South Belridge	Dehy 20	T-200B secondary contatinment for 2 pumps	T-200B	N/A	20	28S	21E	MD	35.48072	-119.73908	085-210-18	Oil & Water	12'	2'	2"	Metal	Active	1		Capture Oil & Water		Drain Pad
BL1896	2	South Belridge	Dehy 20	T-200B catch bucket	T-200B	N/A	20	28S	21E	MD	35.48043	-119.73450	085-210-18	Oil & Water	1' dia			HDPE	Active	2		Capture Oil & Water		Drain Pad
BL1897	2	South Belridge	Dehy 20	T-200B 2- drains inside tank tunnel	T-200B	N/A	20	28S	21E	MD	35.48045	-119.73505	085-210-18	Oil & Water	2'	2'	?	Concrete	Active	2		Capture Oil & Water		Drain Pad
BL1898	2	South Belridge	Dehy 20	P-205 A&B secondary containment	P-205 A&B	N/A	20	28S	21E	MD	35.48010	-119.73908	085-210-18	Oil & Water	16'	8'	6"	Concrete	Active	6		Capture Oil & Water		Drain Pad
BL1899	7	South Belridge	South Belridge	Compressor skids secondary cont.	CS50-3,4,5	N/A	32	28S	21E	MD	35.45381	-119.72545	085-230-09	Oil & Water	45'	15'	6"	Concrete	Active	9		Capture Oil & Water	1	Drain Pad
BL1900	7	South Belridge	South Belridge	PRV for Cogen 32 wate water	N. of CS50	N/A	32	28S	21E	MD	35.45435	-119.72543	085-230-09	Produced Water	6" dia			Metal	Active	1		PRV vents to atmosphere		PRV
BL1901	13	South Belridge	South Belridge	Waste oil/water slop tank secondary containment	CS Del Sur	N/A	2	29S	21E	MD	35.43398	-119.69582	098-112-01	Oil & Water	8'	4'	2'	Metal	Active	1		Capture Oil & Water	1	Drain Pit
BL1902	13	South Belridge	South Belridge	Compressor skids secondary cont.	CS Del Sur 1,2,3	N/A	2	29S	21E	MD	35.43389	-119.69591	098-112-01	Oil & Water	30'	22'	6'	Concrete	Active	9		Capture Oil & Water	1	Drain Pad
BL1903	7	South Belridge	South Belridge	50-1 Lube oil drain	CS50	N/A	32	28S	21E	MD	35.45396	-119.72531	085-230-09	Oil & Water	5'	3'	4'	Concrete	Active	1		Capture Oil & Water	1	Drain Pad
BL1904	8	South Belridge	South Belridge	Compressor skid secondary cont.	CS50-1	N/A	32	28S	21E	MD	35.45418	-119.72502	085-230-07	Oil & Water	12'	8'	4"	Concrete	Inactive	1		Capture Oil & Water	0	Drain Pad
BL1905	7	South Belridge	South Belridge	Drain pit for 50-1	CS50	N/A	32	28S	21E	MD	35.45396	-119.72524	085-230-09	Oil & Water	4'	4'	10'	Concrete	Active	1		Capture Oil & Water	1	Drain Pit
BL1906	7	South Belridge	Cogen 32	Steam blowdown valve near SOX 32	SOX 32	N/A	32	28S	21E	MD	35.44900	-119.73163	085-230-09	Produced Water					Active	2		Blowdown steam line to atmosphere		Blowdown
BL1907	7	South Belridge	SOX 32	V-114 Filtrate containment/filter press drains to sump	V-114	N/A	32	28S	21E	MD	35.44892	-119.73151	085-230-09	Produced Water	25'	25'	9"	Concrete	Active	1		Capture produced water		Drain Pad
BL1908	7	South Belridge	SOX 32	Drain sump to slop tank	SOX 32	N/A	32	28S	21E	MD	35.44889	-119.73161	085-230-09	Produced Water	4' dia		8'	Concrete	Active	1		Capture produced water		Drain Pit
BL1909	7	South Belridge	SOX 32	TK-910 slop tank	TK-910	N/A	32	28S	21E	MD	35.44895	-119.73142	085-230-09	Produced Water	40'	20'	18"	Concrete	Active	1		Capture produced water		Secondary Containment
BL1910	7	South Belridge	SOX 32	Drain sump associated w/settler vessels	SOX 32	N/A	32	28S	21E	MD	35.44902	-119.73171	085-230-09	Produced Water	4" dia		6'	Concrete	Active	3		Capture produced water		Drain Pit
BL1911	7	South Belridge	SOX 32	Secondary containment for settler vessels	SOX 32	N/A	32	28S	21E	MD	35.44888	-119.73190	085-230-09	Produced Water	70'	45'	6"	Concrete	Active			Capture produced water		Secondary Containment
BL1912	7	South Belridge	SOX 32	V-122 L.P. Flare KO drum secondary containment	V-122	N/A	32	28S	21E	MD	35.44919	-119.73173	085-230-09	Produced Water	9'	9'	6"	Concrete	Active	10		Capture produced water		Drain Pad
BL1913	7	South Belridge	SOX 32	Secondary containment for sparge towers	sparge towers	N/A	32	28S	21E	MD	35.44926	-119.73144	085-230-09	Produced Water	70'	40'	6"	Concrete	Active			Capture produced water		Secondary Containment
BL1914	7	South Belridge	SOX 32	PRV off SOX steam system	sparge towers	N/A	32	28S	21E	MD	35.44957	-119.73182	085-230-09	Produced Water					Active	1		PRV vents to atmosphere		PRV

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL1915	7	South Belridge	SOX 32	SOX water wash tower secondary containment	SOX 32	N/A	32	28S	21E	MD	35.44935	-119.73171	085-230-09	Produced Water	45'	45'	6"	Concrete	Active			Capture produced water		Drain Pad
BL1916	7	South Belridge	GP32	Secondary containment for MS-702	MS-702	N/A	32	28S	21E	MD	35.44957	-119.73018	085-230-09	Produced Water	30'	14'	20'	Concrete	Active	1		Capture produced water		Secondary Containment
BL1917	7	South Belridge	GP32	P-702 A&B HP flare KO pumps	MS-702	N/A	32	28S	21E	MD	35.44977	-119.73013	085-230-09	Produced Water					Active	8	No Containment	Capture produced water		Drain Pad
BL1918	7	South Belridge	GP32	MS-710 secondary containment	MS-710	N/A	32	28S	21E	MD	35.45060	-119.73312	085-230-09	Produced Water	30'	18'	30'	Concrete	Active	1		Capture produced water		Secondary Containment
BL1919	7	South Belridge	GP32	MS-711 secondary containment	MS-711	N/A	32	28S	21E	MD	35.45071	-119.73302	085-230-09	Produced Water	15'	12'	6"	Concrete	Active	2		Capture produced water		Secondary Containment
BL1920	7	South Belridge	GP32	Overflow ditch- 5 total within GP,CG,SOX	GP32	N/A	32	28S	21E	MD	35.45035	-119.73335	085-230-09	Produced Water				Earthen	Active		5 ditches throughout GP, CG, SOX	Capture produced water from overflows		Secondary Containment
BL1921	7	South Belridge	GP32	Hot Oil steam heater system bleed points	Steam Heater	N/A	32	28S	21E	MD	35.44994	-119.73331	085-230-09	Produced Water					Active	20		Bleed steam system to atmosphere		Blowdown
BL1922	7	South Belridge	GP32	Steam Heater PRV	Steam Heater	N/A	32	28S	21E	MD	35.45003	-119.73305	085-230-09	Produced Water					Active	1		PRV vents to atmosphere		PRV
BL1923	7	South Belridge	GP32	Glycol Skid	GP32	N/A	32	28S	21E	MD	35.44981	-119.73399	085-230-09	Produced Water	42'	18'	4"	Concrete	Active			Capture produced water		Drain Pad
BL1924	7	South Belridge	GP32	PC-101C secondary containment	PC-101C	N/A	32	28S	21E	MD	35.44987	-119.73341	085-230-09	Oil & Water	15'	12'	6"	Concrete	Active	2		Capture produced water/oil		Drain Pad
BL1925	7	South Belridge	GP32	Steam blowdown	GP32	N/A	32	28S	21E	MD	35.44983	-119.73302	085-230-09	Produced Water					Active	2		Bleed steam system to atmosphere		Blowdown
BL1926	7	South Belridge	GP32	GP32 skid drains	GP32	N/A	32	28S	21E	MD	35.45037	-119.73330	085-230-09	Produced Water	15'	8'	?	Concrete	Active	1		Capture produced water/oil		Drain Pit
BL1927	7	South Belridge	Cogen 32	North steam blowdown pit	CG32	N/A	32	28S	21E	MD	35.44887	-119.73325	085-230-09	Steam	27'	8"	?	Concrete	Active	2		Capture steam during blowdowns		Blowdown pit
BL1928	7	South Belridge	Cogen 32	CG32-1 PRV's and bleed points	32-1	N/A	32	28S	21E	MD	35.44880	-119.73335	085-230-09	Produced Water					Active	20		PRV/bleeds vent to atmosphere		PRV
BL1929	7	South Belridge	Cogen 32	BFW charge pumps 00-P-01,02 secondary containment	BFW charge pumps	N/A	32	28S	21E	MD	35.44882	-119.73330	085-230-09	Soft Water	5'	3'	1"	Concrete	Active	2		Capture produced water		Drain Pad
BL1930	7	South Belridge	Cogen 32	BFW pumps 8,9	BFW pumps	N/A	32	28S	21E	MD	35.44865	-119.73331	085-230-09	Produced Water	12'	3'	1"	Metal	Active	2		Capture produced water		Drain Pad
BL1931	7	South Belridge	Cogen 32	Central sump and pumps	Central sump	N/A	32	28S	21E	MD	35.44855	-119.73313	085-230-09	Produced Water	10'	10'	15'	Concrete	Active	3		Drain for all water/oil frm CG and SOX		Drain Pit
BL1932	7	South Belridge	Cogen 32	CG32-2 PRV's and bleed points	32-2	N/A	32	28S	21E	MD	35.44857	-119.73322	085-230-09	Produced Water					Active	20		PRV/bleeds vent to atmosphere		PRV
BL1933	7	South Belridge	Cogen 32	CG32 steam system bleed points-all 3 units	CG32	N/A	32	28S	21E	MD	35.44830	-119.73331	085-230-09	Produced Water					Active	20		Bleed steam system to atmosphere		Blowdown
BL1934	7	South Belridge	Cogen 32	CG32-3 PRV's and bleed points	32-3	N/A	32	28S	21E	MD	35.44829	-119.73332	085-230-09	Produced Water					Active	20		PRV/bleeds vent to atmosphere		PRV
BL1935	7	South Belridge	Cogen 32	South steam blowdown pit	CG32	N/A	32	28S	21E	MD	35.44819	-119.73344	085-230-09	Steam	27'	8'	?	Concrete	Active	2		Capture steam during blowdowns		Blowdown pit
BL1936	7	South Belridge	Cogen 32	CG32 BFW blowdown valves	CG32	N/A	32	28S	21E	MD	35.44858	-119.73297	085-230-09	Produced Water					Active	10		Blowdown BFW piping		Blowdown
BL1937	6	South Belridge	BSWP	Containment for P-2300 A/B	P-2300 A/B	N/A	27	28S	21E	MD	35.45862	-119.69877	085-220-36	Produced Water	21'	21'	9"	Concrete		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1938	6	South Belridge	BSWP	Containment for M-2200 A/B Roll off bins	M-2200 A/B	N/A	27	28S	21E	MD	35.45848	-119.69852	085-220-36	Produced Water	4'	4'	?	Concrete		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1939	6	South Belridge	BSWP	Containment for V-2100, P-2100A-C & P-2110 A/B	V-2100	N/A	27	28S	21E	MD	35.45794	-119.69833	085-220-36	Produced Water	90'	35'	6"	Concrete		30	Plant is not online yet	Capture produced water	Plant not online yet	Secondary Containment
BL1940	6	South Belridge	BSWP	Containment for T-2000A-C & Pumps	T-2000	N/A	27	28S	21E	MD	35.45746	-119.69810	085-220-36	Produced Water	36'	30'	6"	Concrete		8	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1941	6	South Belridge	BSWP	Containment for P-1100A-C & P-1150A-C	P-1100	N/A	27	28S	21E	MD	35.45677	-119.69940	085-220-36	Produced Water	150'	42'	6"	Concrete		54	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1942	6	South Belridge	BSWP	Containment that drains into drain system	P-1150A-C	N/A	27	28S	21E	MD	35.45683	-119.69912	085-220-36	Produced Water	9'	3'	1"	Concrete		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1943	6	South Belridge	BSWP	Containment for T-100B drain	T-1100B	N/A	27	28S	21E	MD	35.45649	-119.69895	085-220-36	Produced Water	6'	5'	3"	Concrete		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pit
BL1944	6	South Belridge	BSWP	Containment for manway hatch	T-11008	N/A	27	28S	21E	MD	35.45643	-119.69904	085-220-36	Produced Water	6'	5'	3'	Concrete		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pit
BL1945	6	South Belridge	BSWP	Containment for F-1000A-D & P-1000A/B	F-1000A	N/A	27	28S	21E	MD	35.45624	-119.69889	085-220-36	Produced Water	110'	90'	6"	Concrete		90	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1946	6	South Belridge	BSWP	Pump containment for P-1000A/B	P-1000A/B	N/A	27	28S	21E	MD	35.45615	-119.69852	085-220-36	Produced Water	8'	3'	1"	Metal		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1947	6	South Belridge	BSWP	P-3000A/B bleed points	P-3000A/B	N/A	27	28S	21E	MD	35.45615	-119.69829	085-220-36	Produced Water						25	No Containment	No containment to capture produced water	Plant not online yet	Other
BL1948	6	South Belridge	BSWP	Containment for manway on T-1100A	T-1100A	N/A	27	28S	21E	MD	35.45626	-119.69877	085-220-36	Produced Water	6'	5'	3'	Concrete		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pit
BL1949	6	South Belridge	BSWP	Contatinment for apron on T-1100A	T-1100A	N/A	27	28S	21E	MD	35.45654	-119.69830	085-220-36	Produced Water	6'	5'	3'	Concrete		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pit
BL1950	6	South Belridge	BSWP	Containment for manway on T-1400A	T-1400A	N/A	27	28S	21E	MD	35.45597	-119.69814	085-220-36	Produced Water	6'	5'	3'	Concrete		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pit
BL1951	6	South Belridge	BSWP	Contatinment for apron on T-1400A	T-1400A	N/A	27	28S	21E	MD	35.45662	-119.69816	085-220-36	Produced Water	6'	5'	3'	Concrete		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pit
BL1952	6	South Belridge	BSWP	Containment for manway on T-1400B	T-14008	N/A	27	28S	21E	MD	35.45641	-119.69800	085-220-36	Produced Water	6'	5'	3'	Concrete		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pit
BL1953	6	South Belridge	BSWP	Containment for apron on T-1400B	T-1400B	N/A	27	28S	21E	MD	35.45657	-119.69767	085-220-36	Produced Water	6'	5'	3'	Concrete		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pit
BL1954	6	South Belridge	BSWP	LPS for produced water	BSWP	N/A	27	28S	21E	MD	35.45644	-119.69705	085-220-36	Produced Water	240'	60'	3'	HDPE		4	Plant is not online yet	Capture produced water	Plant not online yet	Emer. Basin
BL1955	6	South Belridge	BSWP	LPS for rain water and overflow of emergency basin	BSWP	N/A	27	28S	21E	MD	35.45634	-119.69697	085-220-36	Produced Water	200'	195'	20'	HDPE		4	Plant is not online yet	Capture rain/ overflow produced water	Plant not online yet	Emer. Basin
BL1956	6	South Belridge	BSWP	Containment for P-1400A-C & P-1480 A/B	P-1400A-C	N/A	27	28S	21E	MD	35.45699	-119.69719	085-220-36	Produced Water	200'	40'	20'	Concrete		36	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1957	6	South Belridge	BSWP	Containment for pumps P-1400A-C, drains into drain system	P-1400A-C	N/A	27	28S	21E	MD	35.45719	-119.69756	085-220-36	Produced Water	15'	6'	2"	Metal		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1958	6	South Belridge	BSWP	Containment for pumps P-1480A/B, drains into drain system	P-1480A/B	N/A	27	28S	21E	MD	35.45688	-119.69775	085-220-36	Produced Water	9'	3'	2"	Metal		20	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1959	6	South Belridge	BSWP	Containment for pumps P-1440A/B, drains into drain system	P-1440A/B	N/A	27	28S	21E	MD	35.45678	-119.69791	085-220-36	Produced Water	7'	18"	2"	Metal		22	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL1960	6	South Belridge	BSWP	Containment for pumps P-1460A-C, drains into drain system	P-1460A-C	N/A	27	28S	21E	MD	35.45669	-119.69799	085-220-36	Produced Water	7'	3'	1"	Metal		33	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1961	6	South Belridge	BSWP	Bleed points for V-1300A-G	V-1300A-G	N/A	27	28S	21E	MD	35.45660	-119.69817	085-220-36	Produced Water						70	No Containment	No containment to capture produced water	Plant not online yet	Other
BL1962	6	South Belridge	BSWP	Containment for S-1320A/B, T-1900A/B	S-1320A/B	N/A	27	28S	21E	MD	35.45805	-119.69788	085-220-36	Produced Water	150'	40'	4"	Concrete		N/A	Plant is not online yet	Capture produced water	Plant not online yet	Secondary Containment
BL1963	6	South Belridge	BSWP	Containment for T-1700A-E	T-1700A-E	N/A	27	28S	21E	MD	35.45776	-119.69811	085-220-36	Produced Water	195'	27'	6"	Concrete		8	Plant is not online yet	Capture produced water	Plant not online yet	Secondary Containment
BL1964	6	South Belridge	BSWP	Containment for V-1350, T-1600, P-1600, P-1350A/B	V-1350	N/A	27	28S	21E	MD	35.45798	-119.69756	085-220-36	Produced Water	40'	30'	3'	Concrete			Plant is not online yet	Capture produced water	Plant not online yet	Secondary Containment
BL1965	6	South Belridge	BSWP	Containment for T-1500, P-1500A/B, P-1560A/B	T-1500	N/A	27	28S	21E	MD	35.45788	-119.69756	085-220-36	Produced Water	40'	30'	3'	Concrete			Plant is not online yet	Capture produced water	Plant not online yet	Secondary Containment
BL1966	6	South Belridge	BSWP	Containment for V-4000	V-4000	N/A	27	28S	21E	MD	35.45697	-119.69724	085-220-36	Produced Water	32'	28'	20'	Concrete		25	Plant is not online yet	Capture produced water	Plant not online yet	Secondary Containment
BL1967	6	South Belridge	BSWP	Containment for P-1800A-C	P-1800A-C	N/A	27	28S	21E	MD	35.45778	-119.69803	085-220-36	Produced Water	45'	24'	18"	Concrete		50	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1968	6	South Belridge	BSWP	Containment for P-2200A/B	P-2200A/B	N/A	27	28S	21E	MD	35.45877	-119.69837	085-220-36	Produced Water	18'	18'	4"	Concrete		1	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1969	6	South Belridge	BSWP	Primary Containment for P-2200A/B	P-2200A/B	N/A	27	28S	21E	MD	35.45855	-119.69835	085-220-36	Produced Water	6'	18"	1"	Metal		2	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
BL1970	6	South Belridge	BSWP	Primary Containment for P-2300A/B (Use picture BL1937)	P-2300 A/B	N/A	27	28S	21E	MD	35.45862	-119.69877	085-220-36	Produced Water	6'	18"	1"	Metal		2	Plant is not online yet	Capture produced water	Plant not online yet	Drain Pad
8L1971	6	South Belridge		White Mountain - Calcium Carbonate material from WP 2		N/A	1	29S	21E	MD	35.45855	-119.69835	085-220-36	Produced Water	750'	300'		Earthen			This material is truck to this location. When drop of at his location the material is a slurry.			Other
BL1972	2	South Belridge	Dehy 20	Emergency Holding Pit - S-100A	Dehy 20	N/A	20	28S	21E	MD	35.47938	-119.73694	085-210-18	Oil & Water	60	140	10	Gunite	Active	1		Emergency containment of fluids	Emergency/Non Routine	Emer. Basin
BL2206	11	South Belridge	Belridge	2" Relief Valve	HOTS 4-2	N/A	4	29S	21E	MD	35.43867	-119.71652	098-120-10	Oil & Water	12 ft	9 1/2 ft	5"	Concrete	Active	1		Relief line diffuser pit		PRV
BL2207	12	South Belridge	Belridge	2" Relief Valve	HOTS 3-14	N/A	3	29S	21E	MD	35.43229	-119.70715	098-111-03	Oil & Water	12 ft	20 ft	18"	Earthen	Active	1		Relief line diffuser pit		PRV
BL2209	12	South Belridge	Belridge	2" Relief Valve	HOTS 3-18	N/A	3	29S	21E	MD	35.42944	-119.70351	098-111-03	Oil & Water	12 ft	91/2 ft	6"	Concrete	Active	1		Relief line diffuser pit		PRV
BL2210	12	South Belridge	Belridge	2" Relief Valve	HOTS 3-13	N/A	3	29S	21E	MD	35.43167	-119.70393	098-111-03	Oil & Water	12 ft	14 ft	4"	Concrete	Active	1		Relief line diffuser pit		PRV
8L2211	12	South Belridge	Belridge	2" Relief Valve	HOTS 3-19	N/A	3	29S	21E	MD	35.42685	-119.69824	098-111-03	Oil & Water	12 ft	91/2 ft	6"	Concrete	Active	1		Relief line diffuser pit		PRV
8L2212	12	South Belridge	Belridge	2" Relief Valve	HOTS 3-15	N/A	3	29S	21E	MD	35.42944	-119.69855	098-111-03	Oil & Water	12 ft	91/2 ft	6"	Concrete	Active	1		Relief line diffuser pit		PRV
BL2213	15	South Belridge	Belridge	2" Relief Valve	HOTS 10-1	N/A	10	29S	21E	MD	35.42437	-119.69620	098-111-12	Oil & Water	12 ft	10 ft	5"	Concrete	Active	1		Relief line diffuser pit		PRV
BL2214	15	South Belridge	Belridge	1" Relife Valve	HOTS 10-2	N/A	10	29S	21E	MD	35.41968	-119.69641	098-111-12	Oil & Water	12 ft	10 ft	6"	Concrete	Active	1		Relief line diffuser pit		PRV
BL2300	17	South Belridge	South Belridge	1" Test relief valve/ 1" Group Drain	12-1 HOTS	N/A	12	26S	21E	MD	35.42367	-119.66712	098-113-13	Produced Water	10FT	12FT	6in	Concrete	Active	2		Releif Containment	0	PRV
BL2301	13	South Belridge	South Belridge	2" Test relief valve	2-12 HOTS	N/A	2	26S	21E	MD	35.42777	-119.67857	098-112-02	Produced Water	10FT	12FT	6in	Concrete	Active	1		Releif Containment	0	PRV
BL2302	16	South Belridge	South Belridge	1.5" Test relief valve	11-5 HOTS	N/A	11	26S	21E	MD	35.41547	-119.68958	098-112-28	Produced Water	10FT	12FT	6in	Concrete	Active	1		Releif Containment	0	PRV
BL2303	16	South Belridge	South Belridge	2" Test relief valve	11-1 HOTS	N/A	11	26S	21E	MD	35.42451	-119.69033	098-112-15	Produced Water	10FT	12FT	6in	Concrete	Active	1		Releif Containment	0	PRV
BL2304	13	South Belridge	South Belridge	3" 7-way relief valve	2-17 HOTS	N/A	2	26S	21E	MD	35.42973	-119.69222	098-112-01	Produced Water	10FT	12FT	6in	Concrete	Active	1		Manifold by-pass releif line	0	PRV
BL2305	13	South Belridge	South Belridge	2" Test relief valve	2-11 HOTS	N/A	2	26S	21E	MD	35.42963	-119.69421	098-112-01	Produced Water	10FT	12FT	6in	Concrete	Active	1		Releif Containment	0	PRV
BL2706	2	South Belridge	Belridge	dwi norht belridge pig reciever	North Belridge	N/A	1	28S	20E	MD	35.47649	-119.73333	085-210-18	Produced Water	45	15	6"	Gunite	Active	4		Pig reciever	< 10 barrels	Drain Pad
BL2730	1	South Belridge	Belridge	NB king and Ellis Supply inlet	North Belridge	N/A	19	28S	21E	MD	35.47052	-119.74294	085-210-09	Produced Water					Active	1		Supply water	< 1 barrel	Other
BL2731	4	South Belridge	Belridge	north grande pig reciever 18"	North Belridge	N/A	29	28S	21E	MD	35.45969	-119.72751	085-230-05	Produced Water	45'	15'	6"	Gunite	Active	4		Pig reciever	< 5 barrels	Drain Pad
BL2732	13	South Belridge	Belridge	Del Sur Pig reciever 18"	Del Sur	N/A	2	29S	21E	MD	35.43396	-119.68773	098-112-01	Produced Water	36"	36.6"	36"	Gunite	Active	4		Pig reciever	< 5 barrels	Drain Pad
BL2733	13	South Belridge	Belridge	Del Sur Pig Launcher 8"	Del Sur	N/A	2	29S	21E	MD	35.43280	-119.68577	098-112-02	Produced Water	36"	36.6"	36"	Gunite	Active	4		Pig Launcher	< 5 barrels	Drain Pad
BL2734	13	South Belridge	Belridge	Del Sur Pig Launcher 6"	Del Sur	N/A	2	29S	21E	MD	35.43289	-119.68563	098-112-02	Produced Water	36"	36.6"	36"	Gunite	Active	4		Pig Launcher	< 5 barrels	Drain Pad
BL2735	13	South Belridge	Belridge	del sur pig reciever 6"	Del Sur	N/A	2	29S	21E	MD	35.43248	-119.68189	098-112-02	Produced Water	36"	36.6"	36"	Gunite	Active	4		Pig reciever	< 5 barrels	Drain Pad
BL2736	13	South Belridge	Belridge	del sur pig reciever 8"	Del Sur	N/A	2	29S	21E	MD	35.42923	-119.68024	098-112-02	Produced Water	36"	36.6"	36"	Gunite	Active	4		Pig reciever	< 5 barrels	Drain Pad
BL2737	1	South Belridge	Belridge	K&E Supply line	Belridge	N/A	19	28S	21E	MD	35.47127	-119.74426	085-210-09	Produced Water					Active	1		Supply water	< 5 barrels	Other
BL2738	1	South Belridge	Belridge	K&E Supply line	Belridge	N/A	19	28S	21E	MD	35.47089	-119.74600	085-210-09	Produced Water					Active	1		Supply water	< 5 barrels	Other
BL2739	8	South Belridge	Belridge	WIMS-3334	Belridge	N/A	34	28S	21E	MD	35.44971	-119.72027	085-230-07	Produced Water					Active	21		Well - Water Injection	< 5 barrels	Other
BL2740	4	South Belridge	Belridge	Wims-2956	Belridge	N/A	29	28S	21E	MD	35.46087	-119.73191	085-230-05	Produced Water					Active	13		Well - Water Injection	< 5 barrels	Other
BL2867	8	South Belridge	Belridge	516AHZL-33	Belridge	N/A	33	28S	21E	MD	35.44474	-119.72483	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2868	7	South Belridge	Belridge	586KHZL-32	Belridge	N/A	32	28S	21E	MD	35.44576	-119.72524	085-230-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2869	8	South Belridge	Belridge	517KHZL-33	Belridge	N/A	33	28S	21E	MD	35.44379	-119.72354	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2870	5	South Belridge	Belridge	616FAA-28	Belridge	N/A	28	28S	21E	MD	35.46092	-119.72437	085-230-26	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2873	8	South Belridge	Belridge	S34ER-33	Belridge	N/A	33	28S	21E	MD	35.45032	-119.72038	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2874	8	South Belridge	Belridge	517CHZL-33	Belridge	N/A	33	28S	21E	MD	35.44395	-119.72406	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL2876	13	South Belridge	Belridge	8173-2	Del Sur	N/A	2	29S	21E	MD	35.43754	-119.69462	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2877	13	South Belridge	Belridge	8241C-2	Del Sur	N/A	2	29S	21E	MD	35.43575	-119.68945	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2880	11	South Belridge	Belridge	7077AHZL-4	Del Sur	N/A	4	29S	21E	MD	35.43972	-119.71451	098-120-10	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2881	8	South Belridge	Belridge	524-33	Belridge	N/A	33	28S	21E	MD	35.44985	-119.72034	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2883	8	South Belridge	Belridge	548ZHZL-33	Belridge	N/A	33	28S	21E	MD	35.44118	-119.71770	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2886	13	South Belridge	Belridge	8354A-2	Del Sur	N/A	2	29S	21E	MD	35.43242	-119.68098	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2888	1	South Belridge	Belridge	88WCR-19	Belridge	N/A	19	28S	21E	MD	35.47026	-119.74462	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2902	4	South Belridge	Belridge	513NR-29	Belridge	N/A	29	28S	21E	MD	35.46546	-119.74174	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2903	8	South Belridge	Belridge	544LR2-33	Belridge	N/A	33	28S	21E	MD	35.44892	-119.71835	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2906	1	South Belridge	Belridge	56WB-19	Belridge	N/A	19	28S	21E	MD	35.47508	-119.74986	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2907	13	South Belridge	Belridge	8275-2	Del Sur	N/A	2	29S	21E	MD	35.43521	-119.69591	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2908	13	South Belridge	Belridge	8220B-2	Del Sur	N/A	2	29S	21E	MD	35.43607	-119.69215	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2910	8	South Belridge	Belridge	538PHZL-33	Belridge	N/A	33	28S	21E	MD	35.44162	-119.71863	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2916	13	South Belridge	Belridge	8289A-2	Del Sur	N/A	2	29S	21E	MD	35.43392	-119.68789	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2917	13	South Belridge	Belridge	8190-2	Del Sur	N/A	2	29S	21E	MD	35.43702	-119.68863	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2919	13	South Belridge	Belridge	8368A-2	Del Sur	N/A	2	29S	21E	MD	35.43261	-119.69054	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2920	3	South Belridge	Belridge	71EXR-30	Belridge	N/A	30	28S	21E	MD	35.46845	-119.74536	085-230-12	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2928	13	South Belridge	Belridge	8274B-2	Del Sur	N/A	2	29S	21E	MD	35.43486	-119.69503	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2932	1	South Belridge	Belridge	55WC-19	Belridge	N/A	19	28S	21E	MD	35.47635	-119.75098	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2934	13	South Belridge	Belridge	8436B-2	Del Sur	N/A	2	29S	21E	MD	35.43122	-119.68594	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2935	1	South Belridge	Belridge	86WBR2-19	Belridge	N/A	19	28S	21E	MD	35.47469	-119.74363	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2936	13	South Belridge	Belridge	8528B-2	Del Sur	N/A	2	29S	21E	MD	35.42847	-119.67967	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2937	13	South Belridge	Belridge	8272C-2	Del Sur	N/A	2	29S	21E	MD	35.43502	-119.69361	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2939	12	South Belridge	Belridge	8008D-3	Del Sur	N/A	3	29S	21E	MD	35.44059	-119.70168	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2940	7	South Belridge	Belridge	684P-32	Belridge	N/A	32	28S	21E	MD	35.44943	-119.72534	085-230-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2943	13	South Belridge	Belridge	8290B-2	Del Sur	N/A	2	29S	21E	MD	35.43481	-119.68848	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2945	13	South Belridge	Belridge	8368B-2	Del Sur	N/A	2	29S	21E	MD	35.43256	-119.69080	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2947	12	South Belridge	Belridge	8028B-3	Del Sur	N/A	3	29S	21E	MD	35.44026	-119.69777	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2948	12	South Belridge	Belridge	7098AHZL-3	Del Sur	N/A	3	29S	21E	MD	35.43912	-119.71119	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2953	4	South Belridge	Belridge	545NR3-29	Belridge	N/A	29	28S	21E	MD	35.46167	-119.73496	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2956	1	South Belridge	Belridge	86WAR3-19	Belridge	N/A	19	28S	21E	MD	35.47540	-119.74446	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2957	1	South Belridge	Belridge	88WHR-19	Belridge	N/A	19	28S	21E	MD	35.47086	-119.74345	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2962	9	South Belridge	Belridge	528ZR3-34	Belridge	N/A	34	28S	21E	MD	35.44234	-119.70303	085-220-22	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2966	4	South Belridge	Belridge	523AR3-29	Belridge	N/A	29	28S	21E	MD	35.46509	-119.74009	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2968	13	South Belridge	Belridge	8317B-2	Del Sur	N/A	2	29S	21E	MD	35.43399	-119.69026	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2969	13	South Belridge	Belridge	8462C-2	Del Sur	N/A	2	29S	21E	MD	35.43048	-119.68602	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2974	4	South Belridge	Belridge	534AR3-29	Belridge	N/A	29	28S	21E	MD	35.46347	-119.73757	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2979	5	South Belridge	Belridge	518LR-28	Belridge	N/A	28	28S	21E	MD	35.45640	-119.72499	085-230-26	Produced Water					Inactive	4		Well - Water Injection	< 1 barrel	Water Injector
BL2981	12	South Belridge	Belridge	8029D-3	Del Sur	N/A	3	29S	21E	MD	35.44047	-119.69851	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2984	4	South Belridge	Belridge	567GR-29	Belridge	N/A	29	28S	21E	MD	35.45902	-119.73043	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2985	13	South Belridge	Belridge	8341B-2	Del Sur	N/A	2	29S	21E	MD	35.43319	-119.68927	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2989	13	South Belridge	Belridge	8098B-2	Del Sur	N/A	2	29S	21E	MD	35.43931	-119.69381	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2994	13	South Belridge	Belridge	8320A-2	Del Sur	N/A	2	29S	21E	MD	35.43422	-119.69267	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2998	3	South Belridge	Belridge	61G-30	Belridge	N/A	30	28S	21E	MD	35.46954	-119.74892	085-230-12	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL2999	4	South Belridge	Belridge	71JR2-29	Belridge	N/A	29	28S	21E	MD	35.46967	-119.72953	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3005	1	South Belridge	Belridge	66WF-19	Belridge	N/A	19	28S	21E	MD	35.47386	-119.74761	085-210-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3006	13	South Belridge	Belridge	8145A-2	Del Sur	N/A	2	29S	21E	MD	35.43793	-119.69236	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3009	13	South Belridge	Belridge	8414C-2	Del Sur	N/A	2	29S	21E	MD	35.43212	-119.68794	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3010	13	South Belridge	Belridge	8363A-2	Del Sur	N/A	2	29S	21E	MD	35.43255	-119.68770	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3021	1	South Belridge	Belridge	77WH-19	Belridge	N/A	19	28S	21E	MD	35.47210	-119.74518	085-210-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3029	8	South Belridge	Belridge	522DR-33	Belridge	N/A	33	28S	21E	MD	35.45226	-119.72097	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3030	8	South Belridge	Belridge	554AR2-33	Belridge	N/A	33	28S	21E	MD	35.44867	-119.71550	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3039	12	South Belridge	Belridge	8202B-3	Del Sur	N/A	3	29S	21E	MD	35.43600	-119.69729	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3047	1	South Belridge	Belridge	86WCR2-19	Belridge	N/A	19	28S	21E	MD	35.47398	-119.74480	085-210-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3051	4	South Belridge	Belridge	513GR2-29	Belridge	N/A	29	28S	21E	MD	35.46636	-119.74164	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3057	9	South Belridge	Belridge	559GR-34	Belridge	N/A	34	28S	21E	MD	35.44127	-119.69712	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3058	13	South Belridge	Belridge	8099C-2	Del Sur	N/A	2	29S	21E	MD	35.43890	-119.69502	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3060	13	South Belridge	Belridge	8486A-2	Del Sur	N/A	2	29S	21E	MD	35.43000	-119.68544	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3063	2	South Belridge	Belridge	516CR3-20	Belridge	N/A	20	28S	21E	MD	35.47502	-119.74228	085-210-18	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3066	12	South Belridge	Belridge	8059C-3	Del Sur	N/A	3	29S	21E	MD	35.43982	-119.70201	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3067	13	South Belridge	Belridge	8502-2	Del Sur	N/A	2	29S	21E	MD	35.42957	-119.67933	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3068	13	South Belridge	Belridge	8269C-2	Del Sur	N/A	2	29S	21E	MD	35.43506	-119.69138	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3070	4	South Belridge	Belridge	524ER2-29	Belridge	N/A	29	28S	21E	MD	35.46452	-119.74077	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3079	13	South Belridge	Belridge	8531A-2	Del Sur	N/A	2	29S	21E	MD	35.42854	-119.68176	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3080	13	South Belridge	Belridge	8554A-2	Del Sur	N/A	2	29S	21E	MD	35.42829	-119.68085	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3082	14	South Belridge	Belridge	8622-1	Del Sur	N/A	1	28S	20E	MD	35.42722	-119.67568	098-113-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3090	11	South Belridge	Belridge	7076AHZL-4	Del Sur	N/A	4	29S	21E	MD	35.43929	-119.71378	098-120-10	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3096	1	South Belridge	Belridge	75WER-19	Belridge	N/A	19	28S	21E	MD	35.47546	-119.74557	085-210-09	Produced Water					Inactive	4		Well - Water Injection	< 1 barrel	Water Injector
BL3098	4	South Belridge	Belridge	513CR2-29	Belridge	N/A	29	28S	21E	MD	35.46605	-119.74219	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3099	4	South Belridge	Belridge	556GR-29	Belridge	N/A	29	28S	21E	MD	35.46087	-119.73278	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3102	8	South Belridge	Belridge	555AR-33	Belridge	N/A	33	28S	21E	MD	35.44697	-119.71536	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3105	4	South Belridge	Belridge	588CR-29	Belridge	N/A	29	28S	21E	MD	35.45696	-119.72664	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3108	1	South Belridge	Belridge	65WF-19	Belridge	N/A	19	28S	21E	MD	35.47591	-119.74862	085-210-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3110	4	South Belridge	Belridge	686HAA-29	Belridge	N/A	29	28S	21E	MD	35.46094	-119.72536	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3111	13	South Belridge	Belridge	8095B-2	Del Sur	N/A	2	29S	21E	MD	35.43889	-119.69198	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3112	8	South Belridge	Belridge	923P-33	Belridge	N/A	33	28S	21E	MD	35.45095	-119.72090	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3113	11	South Belridge	Belridge	7051HZL-4	Del Sur	N/A	4	29S	21E	MD	35.43969	-119.71395	098-120-10	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3114	11	South Belridge	Belridge	7053BHZL-4	Del Sur	N/A	4	29S	21E	MD	35.44035	-119.71517	098-120-10	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3119	13	South Belridge	Belridge	8484A-2	Del Sur	N/A	2	29S	21E	MD	35.43006	-119.68429	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3120	13	South Belridge	Belridge	8144A-2	Del Sur	N/A	2	29S	21E	MD	35.43805	-119.69108	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3121	13	South Belridge	Belridge	8071A-2	Del Sur	N/A	2	29S	21E	MD	35.43969	-119.69275	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3125	4	South Belridge	Belridge	675DAA-29	Belridge	N/A	29	28S	21E	MD	35.46148	-119.72751	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3128	8	South Belridge	Belridge	517UHZL-33	Belridge	N/A	33	28S	21E	MD	35.44356	-119.72311	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3129	9	South Belridge	Belridge	528ER4-34	Belridge	N/A	34	28S	21E	MD	35.44282	-119.70482	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3131	13	South Belridge	Belridge	8310A-2	Del Sur	N/A	2	29S	21E	MD	35.43404	-119.68456	098-112-26	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3134	13	South Belridge	Belridge	8100D-2	Del Sur	N/A	2	29S	21E	MD	35.43935	-119.69579	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3135	4	South Belridge	Belridge	534CR2-29	Belridge	N/A	29	28S	21E	MD	35.46411	-119.73782	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3142	13	South Belridge	Belridge	8075C-2	Del Sur	N/A	2	29S	21E	MD	35.43967	-119.69559	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3145	8	South Belridge	Belridge	614F-33	Belridge	N/A	33	28S	21E	MD	35.45034	-119.72423	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3146	5	South Belridge	Belridge	616LAA-28	Belridge	N/A	28	28S	21E	MD	35.46007	-119.72495	085-230-26	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3150	12	South Belridge	Belridge	8129D-3	Del Sur	N/A	3	29S	21E	MD	35.43771	-119.69894	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3152	9	South Belridge	Belridge	558NR-34	Belridge	N/A	34	28S	21E	MD	35.44193	-119.69707	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3153	13	South Belridge	Belridge	8248B-2	Del Sur	N/A	2	29S	21E	MD	35.43585	-119.69467	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3160	12	South Belridge	Belridge	7099HZL-3	Del Sur	N/A	3	29S	21E	MD	35.43882	-119.71242	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3163	8	South Belridge	Belridge	548AHZL-33	Belridge	N/A	33	28S	21E	MD	35.44113	-119.71716	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3164	8	South Belridge	Belridge	538JHZL-33	Belridge	N/A	33	28S	21E	MD	35.44224	-119.72007	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3165	1	South Belridge	Belridge	55WB-19	Belridge	N/A	19	28S	21E	MD	35.47709	-119.75123	085-210-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3167	1	South Belridge	Belridge	68WA-19	Belridge	N/A	19	28S	21E	MD	35.47015	-119.74854	085-210-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3174	13	South Belridge	Belridge	8360C-2	Del Sur	N/A	2	29S	21E	MD	35.43276	-119.68517	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3175	13	South Belridge	Belridge	8150B-2	Del Sur	N/A	2	29S	21E	MD	35.43796	-119.69495	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3176	12	South Belridge	Belridge	8177C-3	Del Sur	N/A	3	29S	21E	MD	35.43672	-119.69710	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3181	8	South Belridge	Belridge	533CR2-33	Belridge	N/A	33	28S	21E	MD	35.45149	-119.72004	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3184	12	South Belridge	Belridge	8034D-3	Del Sur	N/A	3	29S	21E	MD	35.44015	-119.70184	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3185	13	South Belridge	Belridge	8192A-2	Del Sur	N/A	2	29S	21E	MD	35.43698	-119.68958	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3186	13	South Belridge	Belridge	8197B-2	Del Sur	N/A	2	29S	21E	MD	35.43667	-119.69377	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3187	13	South Belridge	Belridge	8242D-2	Del Sur	N/A	2	29S	21E	MD	35.43533	-119.69000	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3188	13	South Belridge	Belridge	8272D-2	Del Sur	N/A	2	29S	21E	MD	35.43528	-119.69341	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3189	13	South Belridge	Belridge	8311D-2	Del Sur	N/A	2	29S	21E	MD	35.43406	-119.68590	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3190	13	South Belridge	Belridge	8335B-2	Del Sur	N/A	2	29S	21E	MD	35.43328	-119.68461	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3191	13	South Belridge	Belridge	8408C-2	Del Sur	N/A	2	29S	21E	MD	35.43140	-119.68423	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3194	8	South Belridge	Belridge	548DHZL-33	Belridge	N/A	33	28S	21E	MD	35.44152	-119.71655	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3196	7	South Belridge	Belridge	586WHZL-32	Belridge	N/A	32	28S	21E	MD	35.44540	-119.72522	085-230-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL3200	2	South Belridge	Belridge	L2018 group PVR	L2018	N/A	20	28S	21E	MD	35.47155	-119.74103	085-210-18	Produced Water					Active	1		group PVR to atmosphere	<1 bbls	PRV
BL3201	4	South Belridge	Belridge	L2932 group PRV	L2922	N/A	29	28S	21E	MD	35.46797	-119.73806	085-230-05	Produced Water					Active	1		group PRV release to atmosphere	<1 bbls	PRV
BL3202	4	South Belridge	Belridge	L2922 test PRV	L2922	N/A	29	28S	21E	MD	35.46701	-119.73861	085-230-05	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3203	4	South Belridge	Belridge	L2944T2 fin fan PRV	L2944T2	N/A	29	28S	21E	MD	35.46447	-119.73641	085-230-05	Produced Water					Active	1		fin fan PRV release to pit	<1 bbls	PRV
BL3204	4	South Belridge	Belridge	L2944 group PRV	L2944	N/A	29	28S	21E	MD	35.46428	-119.73648	085-230-05	Produced Water					Active	1		group PRV release to atmosphere	<1 bbls	PRV
BL3206	4	South Belridge	Belridge	L2963 diffuser	L2963	N/A	29	28S	21E	MD	35.46508	-119.73019	085-230-05	Produced Water					Active			5 PRV's to diffuser pit	<1 bbls	PRV
BL3207	4	South Belridge	Belridge	L2951 diffuser	L2951	N/A	29	28S	21E	MD	35.46872	-119.73172	085-230-05	Produced Water	20'	14'	6"	Concrete				test, group & fin fan PRV release to diffuser pit	<1 bbls	PRV
BL3208	5	South Belridge	Belridge	L2816 group PVR	L2B16	N/A	28	28S	21E	MD	35.46045	-119.72283	085-230-26	Produced Water					Active	1		group PVR to atmosphere	<1 bbls	PRV
BL3209	5	South Belridge	Belridge	L2816B test PRV	L2816B	N/A	28	28S	21E	MD	35.45978	-119.72484	085-230-26	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3210	5	South Belridge	Belridge	L2816B fin fan PRV	L2816B	N/A	28	28S	21E	MD	35.45994	-119.72454	085-230-26	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3211	5	South Belridge	Belridge	L2816A test PRV	L2816A	N/A	28	28S	21E	MD	35.45906	-119.72363	085-230-26	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3212	5	South Belridge	Belridge	LOPS 2817 pump pad/drain pit	Lops 2817	N/A	28	28S	21E	MD	35.45861	-119.72378	085-230-26	Produced Water	100'	15'	6 "	Concrete	Active	1		pad drain	50 bbls	Drain Pad
BL3213	5	South Belridge	Belridge	LOPS 2817 diffuser pit	Lops 2817	N/A	28	28S	21E	MD	35.45818	-119.72347	085-230-26	Produced Water	20'	16'	6'	Gunite	Active	1		group PRV to diffuser pit	50 bbls	Emer. Basin
BL3214	5	South Belridge	Belridge	L2817 test PRV	L2817	N/A	28	28S	21E	MD	35.45758	-119.72319	085-230-26	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3215	5	South Belridge	Belridge	L2817 fin fan PRV	L2817	N/A	28	28S	21E	MD	35.45754	-119.72300	085-230-26	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3216	5	South Belridge	Belridge	L2816A fin fan PRV	L2816AT1	N/A	28	28S	21E	MD	35.45909	-119.72372	085-230-26	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3217	5	South Belridge	Belridge	L2828 test PRV	L2828	N/A	28	28S	21E	MD	35.45664	-119.72299	085-230-26	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3218	5	South Belridge	Belridge	L2828 fin fan PRV	L2828	N/A	28	28S	21E	MD	35.45658	-119.72229	085-230-26	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3219	4	South Belridge	Belridge	L2987 group PRV	L2987	N/A	29	28S	21E	MD	35.45810	-119.72604	085-230-05	Produced Water					Active	1		group PRV release to atmosphere	<1 bbls	PRV
BL3220	4	South Belridge	Belridge	L2987A tester PRV	L2987A	N/A	33	28S	21E	MD	35.45816	-119.72731	085-230-05	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3221	4	South Belridge	Belridge	L2987A fin fan PRV	L2987A	N/A	33	28S	21E	MD	35.45813	-119.72726	085-230-05	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3222	4	South Belridge	Belridge	L2955 group PRV	L2955	N/A	29	28S	21E	MD	35.46267	-119.73190	085-230-05	Produced Water					Active	1		group PRV release to atmosphere	<1 bbls	PRV
BL3223	4	South Belridge	Belridge	L2955 drain pit	L2955	N/A	29	28S	21E	MD	35.46275	-119.73203	085-230-05	Produced Water	30"	30'	5'	Metal	Active	1		pumps to drain pit	<1 bbls	Drain Pit

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged (bbl/yr)	Category
BL3224	4	South Belridge	Belridge	L2955 pump pad	L2955	N/A	29	28S	21E	MD	35.46585	-119.73192	085-230-05	Produced Water	30'	18'	6"	Concrete	Active	4		drain pump fluids to drain pit	<1 bbls	Drain Pad
BL3225	8	South Belridge	Belridge	L3331 eductor	L3331	N/A	33	28S	21E	MD	35.45519	-119.71943	085-230-07	Produced Water	30"	30"	5"	Metal	Active	5		4 pumps, pump pad & chemical pad, test drain	50 bbls	Drain Pad
BL3226	8	South Belridge	Belridge	L3331 pump pad	L3331	N/A	33	28S	21E	MD	35.45519	-119.71946	085-230-07	Produced Water	30'	18'	2"	Concrete	Active	4		drain pump fluids to eductor	<1 bbls	Drain Pad
BL3227	8	South Belridge	Belridge	L3331T1 test pad drain to eductor	L3331T1	N/A	33	28S	21E	MD	35.45515	-119.71944	085-230-07	Produced Water	15'	8'	10"	Concrete	Active	1		use as needed for maintanence	<1 bbls	Drain Pad
BL3228	8	South Belridge	Belridge	L3331 chemical pad drain to eductor	L3331	N/A	33	28S	21E	MD	35.45509	-119.71944	085-230-07	Produced Water	12'	8'	18"	Concrete	Active	1		no chemical, drain tied to eductor	<1 bbls	Drain Pad
BL3229	8	South Belridge	Belridge	L3331 3 PRV's to diffuser pit	L3331	N/A	33	28S	21E	MD	35.45521	-119.71886	085-230-07	Produced Water	10'	10'	6"	Earthen	Active	3		3 PRV's to diffuser pit	<1 bbls	PRV
BL3230	8	South Belridge	Belridge	L3331AT1 test PRV	L3331AT1	N/A	33	28S	21E	MD	35.45350	-119.71963	085-230-07	Produced Water					Active	1		tester PRV release to atmosphere	<1 bbls	PRV
BL3231	8	South Belridge	Belridge	L3331AT1 fin fan PRV	L3331AT1	N/A	33	28S	21E	MD	35.45353	-119.71965	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3232	8	South Belridge	Belridge	L3341AT1 tester PRV	L3341A	N/A	33	28S	21E	MD	35.45445	-119.71770	085-230-07	Produced Water					Active	1		tester PRV release to atmosphere	<1 bbls	PRV
BL3233	8	South Belridge	Belridge	L3341AT1 fin fan PRV	L3341A	N/A	33	28S	21E	MD	35.45443	-119.71770	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3234	8	South Belridge	Belridge	L3341BT1 tester PRV	L3341B	N/A	33	28S	21E	MD	35.45400	-119.71810	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3235	8	South Belridge	Belridge	L3341BT1 fin fan PRV	L3341B	N/A	33	28S	21E	MD	35.45397	-119.71809	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3236	8	South Belridge	Belridge	L3332AT1 tester PRV	L3332AT1	N/A	33	28S	21E	MD	35.45221	-119.71916	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3237	8	South Belridge	Belridge	L3332AT1 fin fan PRV	L3332AT1	N/A	33	28S	21E	MD	35.45249	-119.71874	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3238	8	South Belridge	Belridge	LOP5 3342 diffuser pit	Lops 3342	N/A	33	28S	21E	MD	35.45232	-119.71787	085-230-07	Produced Water	72'	40'	4'	Gunite	Active	1		group PRV	<1 bbls	Emer. Basin
BL3239	8	South Belridge	Belridge	LOP5 3342 pump pad	Lops 3342	N/A	33	28S	21E	MD	35.45232	-119.71825	085-230-07	Produced Water	100'	15'	6"	Concrete	Active	1		pad drain	50 bbls	Drain Pad
BL3240	8	South Belridge	Belridge	L3333T1 tester PRV	L3333	N/A	33	28S	21E	MD	35.45150	-119.71899	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3241	8	South Belridge	Belridge	L3333T1 fin fan PRV	L3333	N/A	33	28S	21E	MD	35.45133	-119.71911	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3242	8	South Belridge	Belridge	L3342AT1 tester PRV	L3342A	N/A	33	28S	21E	MD	35.45206	-119.71603	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3243	8	South Belridge	Belridge	L3342AT1 fin fan PRV	L3342A	N/A	33	28S	21E	MD	35.45203	-119.71589	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3244	8	South Belridge	Belridge	L3352T1 tester PRV	L3352	N/A	33	28S	21E	MD	35.45298	-119.71588	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3245	8	South Belridge	Belridge	L3352T1 fin fan PRV	L3352	N/A	33	28S	21E	MD	35.45292	-119.71588	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3246	8	South Belridge	Belridge	L3351AT1 tester PRV	L3351A	N/A	33	28S	21E	MD	35.45421	-119.71513	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3247	8	South Belridge	Belridge	L3351AT1 fin fan PRV	L3351A	N/A	33	28S	21E	MD	35.45422	-119.71513	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3248	5	South Belridge	Belridge	L2858 diffuser drain pit	L2858	N/A	28	28S	21E	MD	35.45771	-119.71571	085-230-26	Produced Water	12'	4'	6'	Metal	Active	1		11 drains & 2 PRV's to drain pit	<1 bbls	Drain Pit
BL3249	8	South Belridge	Belridge	L3361T1 tester PRV	L3361	N/A	33	28S	21E	MD	35.45396	-119.71291	085-230-07	Produced Water					Active	1		tester PRV release to atmosphere	<1 bbls	PRV
BL3250	8	South Belridge	Belridge	L3361T1 fin fan PRV	L3361	N/A	33	28S	21E	MD	35.45389	-119.71296	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3251	8	South Belridge	Belridge	L3372T1 test PRV	L3372	N/A	33	28S	21E	MD	35.45223	-119.71154	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3252	8	South Belridge	Belridge	L3372T1 fin fan PRV	L3372	N/A	33	28S	21E	MD	35.45216	-119.71155	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3253	8	South Belridge	Belridge	LOPS 3362 diffuser pit	Lops 3362	N/A	33	28S	21E	MD	35.45230	-119.71278	085-230-07	Produced Water	30'	30'	2.5'	Gunite	Active	1		group PRV	<1 bbls	Emer. Basin
BL3254	8	South Belridge	Belridge	LOPS 3362 pump pad	Lops 3362	N/A	33	28S	21E	MD	35.45295	-119.71398	085-230-07	Produced Water	30'	18'	2"	Concrete	Active	1		pad drain	50 bbls	Drain Pad
BL3255	8	South Belridge	Belridge	L3362 eductor	L3362	N/A	33	28S	21E	MD	35.45305	-119.71367	085-230-07	Produced Water	30"	30"	6'	Metal	Active	9		4 pumps, pump pad & chemical pad	50 bbls	Drain Pad
BL3256	8	South Belridge	Belridge	L3362 pump pad to eductor	L3362	N/A	33	28S	21E	MD	35.45335	-119.71362	085-230-07	Produced Water	30'	18'	2"	Concrete	Active	4		drain pump fluids to eductor	<1 bbls	Drain Pad
BL3257	8	South Belridge	Belridge	Lots 3362T1 test drain to eductor	L3362T1	N/A	33	28S	21E	MD	35.45343	-119.71349	085-230-07	Produced Water	15'	8'	10"	Concrete	Active	1		use as needed for maintanence	<1 bbls	Drain Pad
BL3258	8	South Belridge	Belridge	L3362 chemical pad drain to eductor	L3362	N/A	33	28S	21E	MD	35.45339	-119.71354	085-230-07	Produced Water	12'	8'	18"	Concrete	Active	9		no chemical, drain tied to eductor	<1 bbls	Drain Pad
BL3259	8	South Belridge	Belridge	L3362 3 PRV's to diffuser pit	L3362	N/A	33	28S	21E	MD	35.45329	-119.71322	085-230-07	Produced Water					Active	3		PRV release to diffuser pit	<1 bbls	PRV
BL3260	8	South Belridge	Belridge	L3353 test PRV	L3353	N/A	33	28S	21E	MD	35.45125	-119.71452	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3261	8	South Belridge	Belridge	L3353 fin fan PRV	L3353	N/A	33	28S	21E	MD	35.45129	-119.71458	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3262	8	South Belridge	Belridge	L3344 eductor	L3344	N/A	33	28S	21E	MD	35.44991	-119.71790	085-230-07	Produced Water	2'	2'	6'	Metal	Active	6		4 pumps, pump pad & chemical pad	50 bbls	Drain Pad
BL3263	8	South Belridge	Belridge	L3344 pump pad to eductor	L3344	N/A	33	28S	21E	MD	35.44974	-119.71800	085-230-07	Produced Water	36'	18'	2"	Concrete	Active	4		drain pump fluids to eductor	<1 bbls	Drain Pad
BL3264	8	South Belridge	Belridge	L3344T1 test skid drain to eductor	L3344T1	N/A	33	28S	21E	MD	35.44982	-119.71828	085-230-07	Produced Water	15'	10'	10"	Concrete		1		use as needed for maintanence	<1 bbls	Drain Pad
BL3265	8	South Belridge	Belridge	L3344 chemical skid drain to eductor	L3344	N/A	33	28S	21E	MD	35.44968	-119.71802	085-230-07	Produced Water	15'	8'	18"	Concrete		1		no chemical, drain tied to eductor	<1 bbls	Drain Pad
BL3266	8	South Belridge	Belridge	L3344 3 PRV's to diffuser pit	L3344	N/A	33	28S	21E	MD	35.44962	-119.71816	085-230-07	Produced Water	15'	12'	12"	Earthen	Active	3		PRV from 2 testers, fin fan & group vessel	<1 bbls	PRV
BL3267	8	South Belridge	Belridge	L3344AT1 test PRV	L3344A	N/A	33	28S	21E	MD	35.44972	-119.71702	085-230-07	Produced Water					Active	1		tester PRV release to atmosphere	<1 bbls	PRV
BL3268	8	South Belridge	Belridge	L3344AT1 fin fan PRV	L3344A	N/A	33	28S	21E	MD	35.44976	-119.71705	085-230-07	Produced Water					Active	1		Fin fan PRV release to atmosphere	<1 bbls	PRV

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3269	8	South Belridge	Belridge	L3354T1 tester PRV	L3354	N/A	33	28S	21E	MD	35.44958	-119.71469	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3270	8	South Belridge	Belridge	L3354T1 fin fan PRV	L3354	N/A	33	28S	21E	MD	35.44952	-119.71475	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3271	8	South Belridge	Belridge	L3355T1 test PRV	L3355	N/A	33	28S	21E	MD	35.44801	-119.71452	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3272	8	South Belridge	Belridge	L3355T1 fin fan PRV	L3355	N/A	33	28S	21E	MD	35.44788	-119.71452	085-230-07	Produced Water					Active	1		Fin fan PRV release to atmosphere	<1 bbls	PRV
BL3273	8	South Belridge	Belridge	L3365T1 fin fan PRV	L3365	N/A	33	28S	21E	MD	35.44794	-119.71361	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3274	8	South Belridge	Belridge	L3364 pump pad buckets	L3364	N/A	33	28S	21E	MD	35.44860	-119.71341	085-230-07	Produced Water	2'	2'	2'	Metal	Active	4		drain pump fluids to bucket	<1 bbls	Drain Pad
BL3275	8	South Belridge	Belridge	L3364 eductor	L3364	N/A	33	28S	21E	MD	35.44888	-119.71365	085-230-07	Produced Water	6'	6'	6'	Metal	Active	2		test & group PRV	<1 bbls	Drain Pit
BL3276	8	South Belridge	Belridge	L3364 diffuser pit	L3364	N/A	33	28S	21E	MD	35.44888	-119.71360	085-230-07	Produced Water	40'	40'	4'	Gunite	Active	2		test & group PRV	<1 bbls	Emer. Basin
BL3277	8	South Belridge	Belridge	L3363T1 tester PRV	L3363	N/A	33	28S	21E	MD	35.45015	-119.71259	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3278	8	South Belridge	Belridge	L3363T1 fin fan PRV	L3363	N/A	33	28S	21E	MD	35.45021	-119.71266	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3279	8	South Belridge	Belridge	L3373AT1 tester PRV	L3373A	N/A	33	28S	21E	MD	35.45034	-119.71087	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3280	8	South Belridge	Belridge	L3373AT1 fin fan PRV	L3373A	N/A	33	28S	21E	MD	35.45036	-119.71087	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3281	8	South Belridge	Belridge	L3385AT1 test PRV	L3385A	N/A	33	28S	21E	MD	35.44859	-119.70847	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3282	8	South Belridge	Belridge	L3385AT1 fin fan PRV	L385A	N/A	33	28S	21E	MD	35.44852	-119.70858	085-230-07	Produced Water					Active	1		Fin fan PRV release to atmosphere	<1 bbls	PRV
BL3283	9	South Belridge	Belridge	LOPS 3384 diffuser pit	Lops 3384	N/A	33	28S	21E	MD	35.44835	-119.70679	085-220-22	Produced Water	37'	37'	3'	Gunite	Active	1		group PRV	<1 bbls	Emer. Basin
BL3284	8	South Belridge	Belridge	LOPS 3384 pump pad	Lops 3384	N/A	33	28S	21E	MD	35.44897	-119.70776	085-230-07	Produced Water	100'	15'	6"	Concrete	Active	1		pad drain	50 bbls	Drain Pad
BL3285	8	South Belridge	Belridge	L3375 eductor	L3375	N/A	33	28S	21E	MD	35.44774	-119.70995	085-230-07	Produced Water	2'	2'	6'	Metal	Active	3		test skid, pump & chemical pads	50 bbls	Drain Pad
BL3286	8	South Belridge	Belridge	L3375 pump pad to eductor	L3375	N/A	33	28S	21E	MD	35.44762	-119.70996	085-230-07	Produced Water						4		drain pump fluids to eductor	<1 bbls	Drain Pad
BL3287	8	South Belridge	Belridge	L3375T1 test skid drain to eductor	L3375T1	N/A	33	28S	21E	MD	35.44756	-119.71001	085-230-07	Produced Water						1		use as needed for maintanence	<1 bbls	Drain Pad
BL3288	8	South Belridge	Belridge	L3375 chemical skid drain to eductor	L3375	N/A	33	28S	21E	MD	35.44767	-119.70986	085-230-07	Produced Water	15'	8'	18"	Concrete		1		no chemical, drain tied to eductor	<1 bbls	Drain Pad
BL3289	8	South Belridge	Belridge	L3375 2 PRV's to diffuser pit	L3375	N/A	33	28S	21E	MD	35.44752	-119.71068	085-230-07	Produced Water	15'	12'	12"	Earthen	Active	3		PRV from tester, fin fan & group vessel	<1 bbls	PRV
BL3290	8	South Belridge	Belridge	L3376 fin fan PRV	L3376	N/A	33	28S	21E	MD	35.44675	-119.70946	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3291	8	South Belridge	Belridge	L3376AT1 tester PRV	L3376A	N/A	33	28S	21E	MD	35.44516	-119.71053	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3292	8	South Belridge	Belridge	L3376AT1 fin fan PRV	L3376A	N/A	33	28S	21E	MD	35.44520	-119.71052	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3293	8	South Belridge	Belridge	L3387T1 tester PRV	L3387	N/A	33	28S	21E	MD	35.44272	-119.70773	085-230-07	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3294	8	South Belridge	Belridge	L3387T1 fin fan PRV	L3387	N/A	33	28S	21E	MD	35.44278	-119.70763	085-230-07	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3295	9	South Belridge	Belridge	L3417 eductor	L3417	N/A	33	28S	21E	MD	35.44346	-119.70634	085-220-22	Produced Water	2'	2'	6'	Metal	Active	3		pump pad & chemical pad	50 bbls	Drain Pad
BL3296	9	South Belridge	Belridge	L3417 pump pad to eductor	L3417	N/A	33	28S	21E	MD	35.44352	-119.70639	085-220-22	Produced Water						4		drain pump fluids to eductor	<1 bbls	Drain Pad
BL3297	9	South Belridge	Belridge	L3417T1 test skid drain to eductor	L3417T1	N/A	33	28S	21E	MD	35.44350	-119.70628	085-220-22	Produced Water						1		use as needed for maintanence	<1 bbls	Drain Pad
BL3298	9	South Belridge	Belridge	L3417 chemical skid drain to eductor	L3417	N/A	33	28S	21E	MD	35.44351	-119.70629	085-220-22	Produced Water	15'	8'	18"	Concrete		1		no chemical, drain tied to eductor	<1 bbls	Drain Pad
BL3299	9	South Belridge	Belridge	L3417 old diffuser pit	L3417	N/A	33	28S	21E	MD	35.44342	-119.70569	085-220-22	Produced Water	15'	12'	12"	Earthen	Active	7		PRV from 1 tester, fin fan & 2 group vessels	<1 bbls	PRV
BL3300	9	South Belridge	Belridge	L3417 new diffuser pit	L3417	N/A	33	28S	21E	MD	35.44351	-119.70570	085-220-22	Produced Water	94'	31'	3'	Gunite	Active	7		Diffuser pit	<1 bbls	Emer. Basin
BL3301	9	South Belridge	Belridge	L3427T1 tester PRV	L3427	N/A	33	28S	21E	MD	35.44350	-119.70385	085-220-22	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV
BL3302	9	South Belridge	Belridge	L3427T1 fin fan PRV	L3427	N/A	33	28S	21E	MD	35.44350	-119.70378	085-220-22	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3303	9	South Belridge	Belridge	L3447 eductor	L3447	N/A	33	28S	21E	MD	35.44344	-119.69943	085-220-22	Produced Water	2'	2'	6'	Metal	Active	3		T1 test skid, pump & chemical pads	50 bbls	Drain Pad
BL3304	9	South Belridge	Belridge	L3447 pump pad to eductor	L3447	N/A	33	28S	21E	MD	35.44355	-119.69930	085-220-22	Produced Water	36'	18'	2"	Concrete	Active	4		drain pump fluids to eductor	<1 bbls	Drain Pad
BL3305	9	South Belridge	Belridge	L3447T1 test skid drain to eductor	L3447T1	N/A	33	28S	21E	MD	35.44346	-119.69923	085-220-22	Produced Water					Active	1		use as needed for maintanence	<1 bbls	Drain Pad
BL3306	9	South Belridge	Belridge	L3447 chemical skid drain to eductor	L3447	N/A	33	28S	21E	MD	35.44355	-119.69926	085-220-22	Produced Water	15'	8'	18"	Concrete	Inactive	1		no chemical, drain tied to eductor	<1 bbls	Drain Pad
BL3307	9	South Belridge	Belridge	L3447 3 PRV's to diffuser pit	L3447	N/A	33	28S	21E	MD	35.44400	-119.69981	085-220-22	Produced Water	15'	12'	12"	Earthen	Active	3		PRV from 1 tester & group vessel	<1 bbls	Drain Pad
BL3308	9	South Belridge	Belridge	L3435 eductor	L3435	N/A	34	28S	21E	MD	35.44712	-119.70264	085-220-22	Produced Water	2'	2'	6'	Metal	Active	3		T1 test skid, pump & chemical pads	50 bbls	Drain Pit
BL3309	9	South Belridge	Belridge	L3435 pump pad to eductor	L3435	N/A	33	28S	21E	MD	35.44711	-119.70238	085-220-22	Produced Water	55'	12'	3"	Concrete		4		drain pump fluids to eductor	<1 bbls	Drain Pad
BL3310	9	South Belridge	Belridge	L3435T1 test skid drain to eductor	L3435	N/A	33	28S	21E	MD	35.44707	-119.70242	085-220-22	Produced Water	15'	10'	10"	Concrete		1		use as needed for maintanence	<1 bbls	Drain Pad
BL3311	9	South Belridge	Belridge	L3435 chemical skid drain to eductor	L3435	N/A	33	28S	21E	MD	35.44307	-119.70242	085-220-22	Produced Water	15'	8'	18"	Concrete		1		no chemical, drain tied to eductor	<1 bbls	Drain Pad
BL3312	9	South Belridge	Belridge	L3435 2 PRV's to diffuser pit	L3435	N/A	33	28S	21E	MD	35.44703	-119.70290	085-220-22	Produced Water	15'	12'	12"	Earthen	Active	2		PRV from tester & group vessel	<1 bbls	PRV
BL3313	9	South Belridge	Belridge	L3415T1 tester PRV	L3415	N/A	33	28S	21E	MD	35.44647	-119.70612	085-220-22	Produced Water					Active	1		test PRV release to atmosphere	<1 bbls	PRV

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3314	9	South Belridge	Belridge	L3415T1 fin fan PRV	L3415	N/A	33	28S	21E	MD	35.44650	-119.70612	085-220-22	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3315	5	South Belridge	Belridge	L2858 steam blowdown	L2858	N/A	20	28S	21E	MD	35.45781	-119.71614	085-230-26	Steam	15'	15'	4'	Gunite	Active	1		blowdown steam line	<1 bbls	Blowdown pit
BL3316	4	South Belridge	Belridge	L2963 steam blowdown	L2963	N/A	20	28S	21E	MD	35.46542	-119.73025	085-230-05	Produced Water					Active	1		blowdown steam line	<1 bbls	Blowdown
BL3317	4	South Belridge	Belridge	L2951 steam blowdown	L2951	N/A	20	28S	21E	MD	35.46763	-119.73052	085-230-05	Steam	15'	4'	5'	Concrete	Active	1		blowdown steam line	<1 bbls	Blowdown pit
BL3318	5	South Belridge	Belridge	L2816A fin fan PRV	L2816A	N/A	28	28S	21E	MD	35.45906	-119.72363	085-230-26	Produced Water					Active	1		fin fan PRV release to atmosphere	<1 bbls	PRV
BL3439	4	South Belridge	Belridge	SGS 2972 Tulare steam to SGS 2038 line Blowdown	SGS 2972	N/A	29	28S	21E	MD	35.46655	-119.72829	085-230-05	Steam				Metal	Active	1		Tulare Steam Vessel blowdown to atmosphere	40	Blowdown
BL3440	5	South Belridge	Belridge	947J-28 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2858	N/A	28	28S	21E	MD	35.45860	-119.71817	085-230-26	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3441	5	South Belridge	Belridge	947K-28 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2858	N/A	28	28S	21E	MD	35.45875	-119.71694	085-230-26	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3442	5	South Belridge	Belridge	947M-28 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2858	N/A	28	28S	21E	MD	35.45775	-119.71782	085-230-26	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3443	5	South Belridge	Belridge	947P-28 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2858	N/A	28	28S	21E	MD	35.45822	-119.71641	085-230-26	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3444	5	South Belridge	Belridge	947S-28Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2858	N/A	28	28S	21E	MD	35.45738	-119.71679	085-230-26	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3445	5	South Belridge	Belridge	948H-28 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2858	N/A	28	28S	21E	MD	35.45725	-119.71670	085-230-26	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3446	5	South Belridge	Belridge	957R-28 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2858	N/A	28	28S	21E	MD	35.45758	-119.71596	085-230-26	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3447	5	South Belridge	Belridge	574K1-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2963	N/A	29	28S	21E	MD	35.45753	-119.71552	085-230-26	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3448	5	South Belridge	Belridge	547Z1-28Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2858	N/A	28	28S	21E	MD	35.45753	-119.71552	085-230-26	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3449	5	South Belridge	Belridge	557L1-28 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2858	N/A	28	28S	21E	MD	35.45748	-119.71544	085-230-26	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3450	4	South Belridge	Belridge	573S1-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2963	N/A	29	28S	21E	MD	35.46464	-119.72767	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3451	4	South Belridge	Belridge	951N-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2951	N/A	29	28S	21E	MD	35.46840	-119.73146	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3452	4	South Belridge	Belridge	563P1-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2963	N/A	29	28S	21E	MD	35.46530	-119.72974	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3453	4	South Belridge	Belridge	973E-27 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2963	N/A	29	28S	21E	MD	35.46604	-119.72960	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3454	4	South Belridge	Belridge	962A-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2951	N/A	29	28S	21E	MD	35.46821	-119.73122	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3455	4	South Belridge	Belridge	974F-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2963	N/A	29	28S	21E	MD	35.46441	-119.72828	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3456	4	South Belridge	Belridge	952A-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2951	N/A	29	28S	21E	MD	35.46822	-119.73169	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3457	4	South Belridge	Belridge	973C-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2963	N/A	29	28S	21E	MD	35.46538	-119.72873	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3458	4	South Belridge	Belridge	962C-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2951	N/A	29	28S	21E	MD	35.46793	-119.73133	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3459	4	South Belridge	Belridge	962Z-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2951	N/A	29	28S	21E	MD	35.46801	-119.73098	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3460	4	South Belridge	Belridge	962G-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2951	N/A	29	28S	21E	MD	35.46811	-119.73110	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3461	4	South Belridge	Belridge	563K1-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2963	N/A	29	28S	21E	MD	35.46583	-119.73046	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3462	4	South Belridge	Belridge	574H1-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2963	N/A	29	28S	21E	MD	35.46414	-119.72721	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3463	4	South Belridge	Belridge	952D-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2951	N/A	29	28S	21E	MD	35.46831	-119.73134	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3464	4	South Belridge	Belridge	962E-27 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2951	N/A	29	28S	21E	MD	35.46802	-119.73145	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3465	4	South Belridge	Belridge	962D-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2963	N/A	29	28S	21E	MD	35.46608	-119.72965	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3466	4	South Belridge	Belridge	962N-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2951	N/A	29	28S	21E	MD	35.46783	-119.73121	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3467	4	South Belridge	Belridge	952G-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2951	N/A	29	28S	21E	MD	35.46812	-119.73157	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3468	4	South Belridge	Belridge	573R2-29 Cyclic skid steam latteral blowdown(Picture BL3449)	Lots 2963	N/A	29	28S	21E	MD	35.46460	-119.72934	085-230-05	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3469	5	South Belridge	Belridge	947J-28 Cyclic Producer skid(Picture BL3473)	Lots 2858	N/A	28	28S	21E	MD	35.45860	-119.71817	085-230-26	Steam				Metal	Active	1		Cyclic skid steam supply line blowdown	<10	Blowdown
BL3470	5	South Belridge	Belridge	947K-28 Cyclic Producer skid(Picture BL3473)	Lots 2858	N/A	28	28S	21E	MD	35.45875	-119.71694	085-230-26	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3471	5	South Belridge	Belridge	947M-28 Cyclic Producer skid(Picture BL3473)	Lots 2858	N/A	28	28S	21E	MD	35.45775	-119.71782	085-230-26	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3472	5	South Belridge	Belridge	947P-28 Cyclic Producer skid(Picture BL3473)	Lots 2858	N/A	28	28S	21E	MD	35.45822	-119.71641	085-230-26	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3473	5	South Belridge	Belridge	947S-28 Cyclic Producer skid(Picture BL3473)	Lots 2858	N/A	28	28S	21E	MD	35.45738	-119.71679	085-230-26	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3474	5	South Belridge	Belridge	948H-28 Cyclic Producer skid(Picture BL3473)	Lots 2858	N/A	28	28S	21E	MD	35.45725	-119.71670	085-230-26	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3475	5	South Belridge	Belridge	957R-28 Cyclic Producer skid(Picture BL3473)	Lots 2858	N/A	28	28S	21E	MD	35.45758	-119.71596	085-230-26	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3476	5	South Belridge	Belridge	574K1-29 Cyclic Producer skid(Picture BL3473)	Lots 2963	N/A	29	28S	21E	MD	35.45758	-119.71596	085-230-26	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3477	5	South Belridge	Belridge	547Z1-28 Cyclic Producer skid(Picture BL3473)	Lots 2858	N/A	28	28S	21E	MD	35.45753	-119.71552	085-230-26	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3478	5	South Belridge	Belridge	557L1-28 Cyclic Producer skid(Picture BL3473)	Lots 2858	N/A	28	28S	21E	MD	35.45748	-119.71544	085-230-26	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3479	4	South Belridge	Belridge	S73S1-29 Cyclic Producer skid(Picture BL3473)	Lots 2963	N/A	29	28S	21E	MD	35.46464	-119.72767	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3480	4	South Belridge	Belridge	951N-29 Cyclic Producer skid(Picture BL3473)	Lots 2951	N/A	29	28S	21E	MD	35.46840	-119.73146	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3481	4	South Belridge	Belridge	563P1-29 Cyclic Producer skid(Picture BL3473)	Lots 2963	N/A	29	28S	21E	MD	35.46530	-119.72974	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3482	4	South Belridge	Belridge	973E-27 Cyclic Producer skid(Picture BL3473)	Lots 2963	N/A	29	28S	21E	MD	35.46604	-119.72960	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3483	4	South Belridge	Belridge	962A-29 Cyclic Producer skid(Picture BL3473)	Lots 2951	N/A	29	28S	21E	MD	35.46821	-119.73122	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3484	4	South Belridge	Belridge	974F-29 Cyclic Producer skid(Picture BL3473)	Lots 2963	N/A	29	28S	21E	MD	35.46441	-119.72828	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3485	4	South Belridge	Belridge	952A-29 Cyclic Producer skid(Picture BL3473)	Lots 2951	N/A	29	28S	21E	MD	35.46822	-119.73169	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3486	4	South Belridge	Belridge	973C-29 Cyclic Producer skid(Picture BL3473)	Lots 2963	N/A	29	28S	21E	MD	35.46538	-119.72873	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3487	4	South Belridge	Belridge	962C-29 Cyclic Producer skid(Picture BL3473)	Lots 2951	N/A	29	28S	21E	MD	35.46793	-119.73133	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3488	4	South Belridge	Belridge	962Z-29 Cyclic Producer skid(Picture BL3473)	Lots 2951	N/A	29	28S	21E	MD	35.46801	-119.73098	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3489	4	South Belridge	Belridge	962G-29 Cyclic Producer skid(Picture BL3473)	Lots 2951	N/A	29	28S	21E	MD	35.46811	-119.73110	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3490	4	South Belridge	Belridge	563K1-29 Cyclic Producer skid(Picture BL3473)	Lots 2963	N/A	29	28S	21E	MD	35.46583	-119.73046	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3491	4	South Belridge	Belridge	574H1-29 Cyclic Producer skid(Picture BL3473)	Lots 2963	N/A	29	28S	21E	MD	35.46414	-119.72721	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3492	4	South Belridge	Belridge	952D-29 Cyclic Producer skid(Picture BL3473)	Lots 2951	N/A	29	28S	21E	MD	35.46831	-119.73134	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3493	4	South Belridge	Belridge	962E-27 Cyclic Producer skid(Picture BL3473)	Lots 2951	N/A	29	28S	21E	MD	35.46802	-119.73145	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3494	4	South Belridge	Belridge	962D-29 Cyclic Producer skid(Picture BL3473)	Lots 2963	N/A	29	28S	21E	MD	35.46608	-119.72965	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3495	4	South Belridge	Belridge	962N-29 Cyclic Producer skid(Picture BL3473)	Lots 2951	N/A	29	28S	21E	MD	35.46783	-119.73121	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3496	4	South Belridge	Belridge	952G-29 Cyclic Producer skid(Picture BL3473)	Lots 2951	N/A	29	28S	21E	MD	35.46812	-119.73157	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3497	4	South Belridge	Belridge	S73R2-29 Cyclic Producer skid(Picture BL3473)	Lots 2963	N/A	29	28S	21E	MD	35.46460	-119.72934	085-230-05	Steam				Metal	Active	3		Steam cyclic producing well skid	<10	Blowdown
BL3498	5	South Belridge	Belridge	SG 100K steam discharge line blowdown(picture BL3624)	SGS 2868	N/A	28	28S	21E	MD	35.45706	-119.71310	085-230-26	Steam				Metal	Active	1		5G 100K Steam discharge bleed	20 BBLS	Blowdown
BL3499	5	South Belridge	Belridge	SG 100K soft water inlet drain(picture BL3664)	SGS 2868	N/A	28	28S	21E	MD	35.45706	-119.71310	085-230-26	Soft Water				Metal	Active	1		SG 100K soft water inlet drain	20 BBLS	Blowdown
BL3500	8	South Belridge	Belridge	SG 158 Steam PSV #1(Picture BL3500)	SGS 3363	N/A	33	28S	21E	MD	35.45312	-119.70909	085-230-34	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3501	8	South Belridge	Belridge	SG 158 Steam PSV #2(Picture BL3500)	SGS 3363	N/A	33	28S	21E	MD	35.45312	-119.70909	085-230-34	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3502	8	South Belridge	Belridge	SG 121 Steam PSV #1(Picture BL3500)	SGS 3363	N/A	33	28S	21E	MD	35.45323	-119.70909	085-230-34	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3503	8	South Belridge	Belridge	SG 121 Steam PSV #2(Picture BL3500)	SGS 3363	N/A	33	28S	21E	MD	35.45323	-119.70909	085-230-34	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3504	8	South Belridge	Belridge	SG 107 Steam PSV #1(Picture BL3500)	SGS 3363	N/A	33	28S	21E	MD	35.45302	-119.70909	085-230-34	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3505	8	South Belridge	Belridge	SG 107 Steam PSV #2(Picture BL3500)	SGS 3363	N/A	33	28S	21E	MD	35.45302	-119.70909	085-230-34	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3506	8	South Belridge	Belridge	SG 105 Steam PSV #1(Picture BL3500)	SGS 3363	N/A	33	28S	21E	MD	35.45291	-119.70909	085-230-34	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3507	8	South Belridge	Belridge	SG 158 Heat exchanger Steam liquids in PSV (Picture BL3507)	SGS 3363	N/A	33	28S	21E	MD	35.45291	-119.70909	085-230-34	Steam				Metal	Active	1		Gen HX Steam liquids PSV	0	PRV
BL3508	8	South Belridge	Belridge	SG 121 Heat exchanger Steam liquids inlet PSV (Picture BL3507)	SGS 3363	N/A	33	28S	21E	MD	35.45291	-119.70909	085-230-34	Steam				Metal	Active	1		Gen HX Steam liquids PSV	0	PRV
BL3509	8	South Belridge	Belridge	SG 107 Heat exchanger Steam liquids inlet PSV (Picture BL3507)	SGS 3363	N/A	33	28S	21E	MD	35.45291	-119.70909	085-230-34	Steam				Metal	Active	1		Gen HX Steam liquids PSV	0	PRV
BL3510	8	South Belridge	Belridge	SG 105 Heat exchanger Steam liquids inlet PSV (Picture BL3507)	SGS 3363	N/A	33	28S	21E	MD	35.45291	-119.70909	085-230-34	Steam				Metal	Active	1		Gen HX Steam liquids PSV	0	PRV
BL3511	8	South Belridge	Belridge	SGS 3363 main generator steam discharge header PSV-200A	SGS 3363	N/A	33	28S	21E	MD	35.45330	-119.70927	085-230-07	Steam				Metal	Active	1		Main Header Steam PSV to atmosphere	0	PRV
BL3512	8	South Belridge	Belridge	SGS 3363 Cyclic V101 PSV	SGS 3363	N/A	33	28S	21E	MD	35.45266	-119.70941	085-230-34	Steam				Metal	Active	1		Cyclic Steam Vessel PSV to atmosphere	0	PRV
BL3513	8	South Belridge	Belridge	SGS 3363 DSD V102 PSV	SGS 3363	N/A	33	28S	21E	MD	35.45249	-119.70972	085-230-34	Steam				Metal	Active	1		DSD Steam Vessel PSV to atmosphere	0	PRV
BL3514	8	South Belridge	Belridge	SGS 3363 DSD S101 steam out to field PSV	SGS 3363	N/A	33	28S	21E	MD	35.45264	-119.70989	085-230-34	Steam				Metal	Active	1		DSD Steam discharge line to field PSV to atmosphere	0	PRV
BL3515	8	South Belridge	Belridge	SGS 3363 Facility Drain Vault	SGS 3363	N/A	33	28S	21E	MD	35.45258	-119.70951	085-230-34	Steam				Concrete	Active			Collect drains from the generator facility-4 Wheatly pump sand facility drains	0	Drain Pit
BL3516	8	South Belridge	Belridge	SG 105 Steam PSV #2(Picture BL3500)	SGS 3363	N/A	33	28S	21E	MD	35.45291	-119.70909	085-230-34	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3517	8	South Belridge	Belridge	SG 106 Steam PSV #1(Picture BL3500)	SGS 3363	N/A	33	28S	21E	MD	35.45281	-119.70908	085-230-34	Steam				Metal	Inactive	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3518	8	South Belridge	Belridge	SG 106 Steam PSV #2(Picture BL3500)	SGS 3363	N/A	33	28S	21E	MD	35.45281	-119.70908	085-230-34	Steam				Metal	Inactive	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3519	8	South Belridge	Belridge	SG 106 Heat exchanger Steam liquids inlet PSV (Picture BL3507)	SGS 3363	N/A	33	28S	21E	MD	35.45281	-119.70908	085-230-34	Steam				Metal	Inactive	1		Gen HX Steam liquids PSV	0	PRV
BL3520	8	South Belridge	Belridge	HE E-100 Soft water out to gen inlet PSV	Old SGS 3363	N/A	33	28S	21E	MD	35.45201	-119.71454	085-230-07	Soft Water				Metal	Inactive	1		Gen HX Soft water PSV to atmospher	0	PRV
BL3521	8	South Belridge	Belridge	HE E-100 Steam Liquid out to field PSV	Old SGS 3363	N/A	33	28S	21E	MD	35.45182	-119.71458	085-230-07	Produced Water				Metal	Inactive	1		Gen HX Steam liquids PSV to atmospher	0	PRV
BL3522	8	South Belridge	Belridge	Tulare Low Pressure steam to field PSV	Old SGS 3363	N/A	33	28S	21E	MD	35.45240	-119.71451	085-230-07	Steam				Metal	Active	1		PSV-4" Low pressure steam to Tulare	0	PRV

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3523	8	South Belridge	Belridge	8" DSD Steam manifold to field blowdown	Old SGS 3363	N/A	33	28S	21E	MD	35.45168	-119.7148S	08S-230-07	Steam				Metal	Active	1		8" DSD steam manifold blowdown	50 bbls	Blowdown
BL3524	8	South Belridge	Belridge	8" DSD Steam field blowdown	Sec.33 field	N/A	33	28S	21E	MD	35.45176	-119.7131S	08S-230-07	Steam				Metal	Active	1		8" DSD steam blowdown	50 bbls	Blowdown
BL3525	6	South Belridge	Belridge	SGS 3363 8" main soft water bleed valve	Sec.33 field	N/A	33	28S	21E	MD	35.45599	-119.7015Z	08S-220-36	Soft Water				Metal	Active	1		Drain 8" soft twater line	50 bbls	Blowdown
BL3526	5	South Belridge	Belridge	3363 3" Liquids disposal line to 8" 2868 liquids disposal line	SE of SGS 2868	N/A	28	28S	21E	MD	35.45599	-119.7109S	08S-230-26	Produced Water				Metal	Active	1		Drain 3" Liquids disposal line	40 bbls	Blowdown
BL3527	5	South Belridge	Belridge	blowdown for 6" disposal line to well 3S7M-28	E of SGS 2868	N/A	28	28S	21E	MD	35.4615Z	-119.71082	08S-230-26	Produced Water				Metal	Active	1		Blow down 6" Liquids disposal line	40 bbls	Blowdown
BL3528	5	South Belridge	Belridge	3" Liquids disposal from 6" to disposal well 357M-28	E of SGS 2868	N/A	28	28S	21E	MD	35.46189	-119.71069	08S-230-26	Produced Water				Metal	Active	1		Drain 3" Liquids disposal line	40 bbls	Blowdown
BL3529	5	South Belridge	Belridge	3" Liquids disposal from 8" to disposal well 365G-28	NE of SGS 2868	N/A	28	28S	21E	MD	35.46240	-119.71212	08S-230-26	Produced Water				Metal	Active	1		Drain 3" Liquids disposal line	40 bbls	Blowdown
BL3530	5	South Belridge	Belridge	Disposal well 365G-28 Blowdown	NE of 5GS 2868	N/A	28	28S	21E	MD	35.4625Z	-119.71203	08S-230-26	Produced Water				Metal	Active	1		Blow down wellhead	20 bbls	Blowdown
BL3531	5	South Belridge	Belridge	6" disposal line blowdown to well 365G-2B	NE of SGS 2B68	N/A	28	28S	21E	MD	35.46167	-119.71159	08S-230-26	Produced Water				Metal	Active	1		Blow down 6" Liquids disposal line	40 bbls	Blowdown
BL3532	5	South Belridge	Belridge	Disposal well 375M-28 Blowdown	NE of SGS 2868	N/A	28	28S	21E	MD	35.46195	-119.71075	08S-230-26	Produced Water				Metal	Active	1		Blow down wellhead	20 bbls	Blowdown
BL3533	5	South Belridge	Belridge	SGS 2868 8" Southside disposal tie in.	NE of SGS 2868	N/A	28	28S	21E	MD	35.4615Z	-119.71171	08S-230-26	Produced Water				Metal	Active	1		Blow down Disposal line	50 bbls	Blowdown
BL3534	5	South Belridge	Belridge	SGS 2868 8" Northside disposal tie in.	N of SGS 2868	N/A	28	28S	21E	MD	35.46193	-119.71480	08S-230-26	Produced Water				Metal	Active	1		Blow down Disposal line	50 bbls	Blowdown
BL3535	5	South Belridge	Belridge	16" Main soft water trunk line bleeders	N of SGS 2868	N/A	28	28S	21E	MD	35.46190	-119.71811	08S-230-26	Soft Water				Metal	Active	5		Blow down soft water line	50 bbls	Blowdown
BL3536	5	South Belridge	Belridge	16" Main soft water trunk line ISO valve to SGS 2972	N of SGS 2868	N/A	28	28S	21E	MD	35.46209	-119.72017	08S-230-26	Soft Water				Metal	Active	1		Blow down soft water line	50 bbls	Blowdown
BL3537	5	South Belridge	Belridge	8" main ISO valve off soft water 16" to SGS 2868	N of SGS 2868	N/A	28	28S	21E	MD	35.46190	-119.72014	08S-230-26	Soft Water				Metal	Active	1		Blow down soft water line	50 bbls	Blowdown
BL3538	5	South Belridge	Belridge	3" drain valve for 16" soft water trunk line	N of SGS 2868	N/A	28	28S	21E	MD	35.46226	-119.72054	08S-230-26	Soft Water				Metal	Active	1		Blow down soft water line	50 bbls	Blowdown
BL3539	4	South Belridge	Belridge	Main 16" shut off valves for soft water at SGS 2972	E of SGS 2972	N/A	29	28S	21E	MD	35.46770	-119.72686	08S-230-05	Soft Water				Metal	Active	1		Blow down soft water line	40 bbls	Blowdown
BL3540	4	South Belridge	Belridge	Soft water Isolation to SG 200L water pump inlet	SGS 2972	N/A	29	28S	21E	MD	35.46644	-119.72754	08S-230-05	Soft Water				Metal	Active	1		Bleed soft water line to gen water pump	20 BBLS	Blowdown
BL3541	4	South Belridge	Belridge	Soft water Isolation to SG 200A water pump inlet(picture BL3540)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72842	08S-230-05	Soft Water				Metal	Active	1		Bleed soft water line to gen water pump	20 BBLS	Blowdown
BL3542	4	South Belridge	Belridge	Soft water Isolation to SG 200B water pump inlet(picture BL3540)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72826	08S-230-05	Soft Water				Metal	Active	1		Bleed soft water line to gen water pump	20 BBLS	Blowdown
BL3543	4	South Belridge	Belridge	Soft water Isolation to SG 200C water pump inlet(picture BL3540)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72809	08S-230-05	Soft Water				Metal	Active	1		Bleed soft water line to gen water pump	20 BBLS	Blowdown
BL3544	4	South Belridge	Belridge	Soft water Isolation to SG 200D water pump inlet(picture BL3540)	SGS 2972	N/A	29	28S	21E	MD	35.46665	-119.72792	08S-230-05	Soft Water				Metal	Active	1		Bleed soft water line to gen water pump	20 BBLS	Blowdown
BL3545	4	South Belridge	Belridge	Soft water Isolation to SG 200E water pump inlet(picture BL3540)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72773	08S-230-05	Soft Water				Metal	Active	1		Bleed soft water line to gen water pump	20 BBLS	Blowdown
BL3546	4	South Belridge	Belridge	Soft water Isolation to SG 200F water pump inlet(picture BL3540)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72840	08S-230-05	Soft Water				Metal	Active	1		Bleed soft water line to gen water pump	20 BBLS	Blowdown
BL3547	4	South Belridge	Belridge	Soft water Isolation to SG 200G water pump inlet(picture BL3540)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72823	08S-230-05	Soft Water				Metal	Active	1		Bleed soft water line to gen water pump	20 BBLS	Blowdown
BL3548	4	South Belridge	Belridge	Soft water Isolation to SG 200H water pump inlet(picture BL3540)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72851	08S-230-05	Soft Water				Metal	Active	1		Bleed soft water line to gen water pump	20 BBLS	Blowdown
BL3549	4	South Belridge	Belridge	Soft water Isolation to SG 200J water pump inlet(picture BL3540)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72789	08S-230-05	Soft Water				Metal	Active	1		Bleed soft water line to gen water pump	20 BBLS	Blowdown
BL3550	4	South Belridge	Belridge	Soft water Isolation to SG 200K water pump inlet(picture BL3540)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72771	08S-230-05	Soft Water				Metal	Active	1		Bleed soft water line to gen water pump	20 BBLS	Blowdown
BL3551	4	South Belridge	Belridge	SG 200L steam out isolation and blowdown	SGS 2972	N/A	29	28S	21E	MD	35.46670	-119.72762	08S-230-05	Steam				Metal	Active	1		Bleed down generator steam out line	20 BBLS	Blowdown
BL3552	4	South Belridge	Belridge	SG 200A steam out isolation and blowdown(picture 3551)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72842	08S-230-05	Steam				Metal	Active	1		Bleed down generator steam out line	20 BBLS	Blowdown
BL3553	4	South Belridge	Belridge	SG 200Bsteam out isolation and blowdown(picture 3551)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72826	08S-230-05	Steam				Metal	Active	1		Bleed down generator steam out line	20 BBLS	Blowdown
BL3554	4	South Belridge	Belridge	SG 200C steam out isolation and blowdown(picture 3551)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72809	08S-230-05	Steam				Metal	Active	1		Bleed down generator steam out line	20 BBLS	Blowdown
BL3555	4	South Belridge	Belridge	SG 200D steam out isolation and blowdown(picture 3551)	SGS 2972	N/A	29	28S	21E	MD	35.46665	-119.72792	08S-230-05	Steam				Metal	Active	1		Bleed down generator steam out line	20 BBLS	Blowdown
BL3556	4	South Belridge	Belridge	SG 200E steam out isolation and blowdown(picture 3551)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72773	08S-230-05	Steam				Metal	Active	1		Bleed down generator steam out line	20 BBLS	Blowdown
BL3557	4	South Belridge	Belridge	SG 200F steam out isolation and blowdown(picture 3551)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72840	08S-230-05	Steam				Metal	Active	1		Bleed down generator steam out line	20 BBLS	Blowdown
BL3558	4	South Belridge	Belridge	SG 200G steam out isolation and blowdown(picture 3551)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72823	08S-230-05	Steam				Metal	Active	1		Bleed down generator steam out line	20 BBLS	Blowdown
BL3559	4	South Belridge	Belridge	SG 200H steam out isolation and blowdown(picture 3551)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72851	08S-230-05	Steam				Metal	Active	1		Bleed down generator steam out line	20 BBLS	Blowdown
BL3560	4	South Belridge	Belridge	SG 200J steam out isolation and blowdown(picture 3551)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72789	08S-230-05	Steam				Metal	Active	1		Bleed down generator steam out line	20 BBLS	Blowdown
BL3561	4	South Belridge	Belridge	SG 200K steam out isolation and blowdown(picture 3551)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72771	08S-230-05	Steam				Metal	Active	1		Bleed down generator steam out line	20 BBLS	Blowdown
BL3562	4	South Belridge	Belridge	SG 200L steam out PSV #1	SGS 2972	N/A	29	28S	21E	MD	35.46670	-119.72762	08S-230-05	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3563	4	South Belridge	Belridge	SG 200L steam out PSV #2 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46670	-119.72762	08S-230-05	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3564	4	South Belridge	Belridge	SG 200A steam out PSV #1 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72842	08S-230-05	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3565	4	South Belridge	Belridge	SG 200A steam out PSV #2 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72842	08S-230-05	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3566	4	South Belridge	Belridge	SG 200B steam out PSV #1 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72826	08S-230-05	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3567	4	South Belridge	Belridge	SG 200B steam out PSV #2 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72826	08S-230-05	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3568	4	South Belridge	Belridge	SG 200C steam out PSV #1 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72809	085-230-05	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3569	4	South Belridge	Belridge	SG 200C steam out PSV #2 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72809	085-230-05	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3570	4	South Belridge	Belridge	SG 200D steam out PSV #1 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46665	-119.72792	085-230-05	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3571	4	South Belridge	Belridge	SG 200D steam out PSV #2 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46665	-119.72792	085-230-05	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3572	4	South Belridge	Belridge	SG 200E steam out PSV #1 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72773	085-230-05	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3573	4	South Belridge	Belridge	SG 200E steam out PSV #2 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72773	085-230-05	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3574	4	South Belridge	Belridge	SG 200F steam out PSV #1 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72840	085-230-05	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3575	4	South Belridge	Belridge	SG 200F steam out PSV #2 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72840	085-230-05	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3576	4	South Belridge	Belridge	SG 200G steam out PSV #1 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72823	085-230-05	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3577	4	South Belridge	Belridge	SG 200G steam out PSV #2 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72823	085-230-05	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3578	4	South Belridge	Belridge	SG 200H steam out PSV #1 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72851	085-230-05	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3579	4	South Belridge	Belridge	SG 200H steam out PSV #2 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72851	085-230-05	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3580	4	South Belridge	Belridge	SG 200J steam out PSV #1 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72789	085-230-05	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3581	4	South Belridge	Belridge	SG 200J steam out PSV #2 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72789	085-230-05	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3582	4	South Belridge	Belridge	SG 200K steam out PSV #1 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72771	085-230-05	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3583	4	South Belridge	Belridge	SG 200K steam out PSV #2 (picture BL3562)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72771	085-230-05	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3584	4	South Belridge	Belridge	SG 200L soft water pump discharge PSV	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72771	085-230-05	Soft Water				Metal	Active	1		SG 200L Water pump high discharge PSV	0	PRV
BL3585	4	South Belridge	Belridge	SG 200A Water pump high discharge PSV(picture 3584)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72842	085-230-05	Soft Water				Metal	Active	1		SG 200A Water pump high discharge PSV	0	PRV
BL3586	4	South Belridge	Belridge	SG 200B Water pump high discharge PSV(picture 3584)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72826	085-230-05	Soft Water				Metal	Active	1		SG 200B Water pump high discharge PSV	0	PRV
BL3587	4	South Belridge	Belridge	SG 200C Water pump high discharge PSV(picture 3584)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72809	085-230-05	Soft Water				Metal	Active	1		SG 200C Water pump high discharge PSV	0	PRV
BL3588	4	South Belridge	Belridge	SG 200D Water pump high discharge PSV(picture 3584)	SGS 2972	N/A	29	28S	21E	MD	35.46665	-119.72792	085-230-05	Soft Water				Metal	Active	1		SG 200D Water pump high discharge PSV	0	PRV
BL3589	4	South Belridge	Belridge	SG 200E Water pump high discharge PSV(picture 3584)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72773	085-230-05	Soft Water				Metal	Active	1		SG 200EWater pump high discharge PSV	0	PRV
BL3590	4	South Belridge	Belridge	SG 200F Water pump high discharge PSV(picture 3584)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72840	085-230-05	Soft Water				Metal	Active	1		SG 200F Water pump high discharge PSV	0	PRV
BL3591	4	South Belridge	Belridge	SG 200G Water pump high discharge PSV(picture 3584)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72823	085-230-05	Soft Water				Metal	Active	1		SG 200G Water pump high discharge PSV	0	PRV
BL3592	4	South Belridge	Belridge	SG 200H Water pump high discharge PSV(picture 3584)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72851	085-230-05	Soft Water				Metal	Active	1		SG 200H Water pump high discharge PSV	0	PRV
BL3593	4	South Belridge	Belridge	SG 200J Water pump high discharge PSV(picture 3584)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72789	085-230-05	Soft Water				Metal	Active	1		SG 200J Water pump high discharge PSV	0	PRV
BL3594	4	South Belridge	Belridge	SG 200K Water pump high discharge PSV(picture 3584)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72771	085-230-05	Soft Water				Metal	Active	1		SG 200K Water pump high discharge PSV	0	PRV
BL3595	4	South Belridge	Belridge	SG 200L HEX steam liquids inlet high discharge PSV	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72771	085-230-05	Produced Water				Metal	Active	1		SG 200L HEX steam liquids high discharge PSV	0	PRV
BL3596	4	South Belridge	Belridge	SG 200A HEX steam liquids inlet high discharge PSV(picture 3595)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72842	085-230-05	Produced Water				Metal	Active	1		SG 200A HEX steam liquids high discharge PSV	0	PRV
BL3597	4	South Belridge	Belridge	SG 200B HEX steam liquids inlet high discharge PSV(picture 3595)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72826	085-230-05	Produced Water				Metal	Active	1		SG 200B HEX steam liquids high discharge PSV	0	PRV
BL3598	4	South Belridge	Belridge	SG 200C HEX steam liquids inlet high discharge PSV(picture 3595)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72809	085-230-05	Produced Water				Metal	Active	1		SG 200C HEX steam liquids high discharge PSV	0	PRV
BL3599	4	South Belridge	Belridge	SG 200D HEX steam liquids inlet high discharge PSV(picture 3595)	SGS 2972	N/A	29	28S	21E	MD	35.46665	-119.72792	085-230-05	Produced Water				Metal	Active	1		SG 200D HEX steam liquids high discharge PSV	0	PRV
BL3600	4	South Belridge	Belridge	SG 200E HEX steam liquids inlet high discharge PSV(picture 3595)	SGS 2972	N/A	29	28S	21E	MD	35.46648	-119.72773	085-230-05	Produced Water				Metal	Active	1		SG 200E HEX steam liquids high discharge PSV	0	PRV
BL3601	4	South Belridge	Belridge	SG 200F HEX steam liquids inlet high discharge PSV(picture 3595)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72840	085-230-05	Produced Water				Metal	Active	1		SG 200F HEX steam liquids high discharge PSV	0	PRV
BL3602	4	South Belridge	Belridge	SG 200GHEX steam liquids inlet high discharge PSV(picture 3595)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72823	085-230-05	Produced Water				Metal	Active	1		SG 200G HEX steam liquids high discharge PSV	0	PRV
BL3603	4	South Belridge	Belridge	SG 200H HEX steam liquids inlet high discharge PSV(picture 3595)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72851	085-230-05	Produced Water				Metal	Active	1		SG 200H HEX steam liquids high discharge PSV	0	PRV
BL3604	4	South Belridge	Belridge	SG 200J HEX steam liquids inlet high discharge PSV(picture 3595)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72789	085-230-05	Produced Water				Metal	Active	1		SG 200J HEX steam liquids high discharge PSV	0	PRV
BL3605	4	South Belridge	Belridge	SG 200K HEX steam liquids inlet high discharge PSV(picture 3595)	SGS 2972	N/A	29	28S	21E	MD	35.46705	-119.72771	085-230-05	Produced Water				Metal	Active	1		SG 200K HEX steam liquids high discharge PSV	0	PRV
BL3606	4	South Belridge	Belridge	SGS 2972 South steam header PSV	SGS 2972	N/A	29	28S	21E	MD	35.46668	-119.72833	085-230-05	Steam				Metal	Active	1		South Header Steam PSV to atmosphere	0	PRV
BL3607	4	South Belridge	Belridge	SGS 2972 S-101 Cyclic steam liquids PSV	SGS 2972	N/A	29	28S	21E	MD	35.46659	-119.72871	085-230-05	Produced Water				Metal	Active	1		Cyclic Steam Vessel PSV to atmosphere	0	PRV
BL3608	4	South Belridge	Belridge	SGS 2972 SL-228 Cyclic steam liquids PSV	SGS 2972	N/A	29	28S	21E	MD	35.46684	-119.72849	085-230-05	Produced Water				Metal	Active	1		Cyclic Steam Piping PSV to atmosphere	0	PRV
BL3609	4	South Belridge	Belridge	SGS 2972 North steam header PSV	SGS 2972	N/A	29	28S	21E	MD	35.46684	-119.72852	085-230-05	Steam				Metal	Active	1		North Header Steam PSV to atmosphere	0	PRV
BL3610	4	South Belridge	Belridge	SGS 2972 Main steam header Blowdown	SGS 2972	N/A	29	28S	21E	MD	35.46640	-119.72925	085-230-05	Steam				Metal	Active	1		Blowdown Main Steam Header	0	Blowdown
BL3611	4	South Belridge	Belridge	SGS 2972 S-102 DSD steam liquids PSV	SGS 2972	N/A	29	28S	21E	MD	35.46656	-119.72883	085-230-05	Produced Water				Metal	Active	1		DSD Steam Vessel PSV to atmosphere	0	PRV
BL3612	4	South Belridge	Belridge	SGS 2972 S-103 Tulare Low steam PSV	SGS 2972	N/A	29	28S	21E	MD	35.46656	-119.72883	085-230-05	Steam				Metal	Active	1		Tulare Steam Vessel PSV to atmosphere	0	PRV

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3613	4	South Belridge	Belridge	SGS 2972 facility Drain Vault	SGS 2972	N/A	29	28S	21E	MD	35.46646	-119.72858	085-230-05	Produced Water	15'	12'	8'	Concrete	Active	20		Collect drains from the generator facility-11 Wheatly pumps/psv,s and facility drains	100 bbls	Drain Pit
BL3614	4	South Belridge	Belridge	SGS 2972 Soft water main header drain	SGS 2972	N/A	29	28S	21E	MD	35.46675	-119.72832	085-230-05	Soft Water				Metal	Active	1		Drain main soft water line inside plant	50 bbls	Blowdown
BL3615	4	South Belridge	Belridge	SGS 2972 Steam liquids to disposal line blowdown	SGS 2972	N/A	29	28S	21E	MD	35.46710	-119.72714	085-230-05	Produced Water				Metal	Active	1		Blow down steam liquids to disposal line inside plant	10 bbls	Blowdown
BL3616	4	South Belridge	Belridge	SGS 2972 Steam liquids to HEX 501 PSV	SGS 2972	N/A	29	28S	21E	MD	35.46702	-119.72731	085-230-05	Produced Water				Metal	Active	1		HEX 501 Steam Liquids PSV to atmosphere	0	PRV
BL3617	5	South Belridge	Belridge	SGS 2868 DSD main steam discharge line blowdown	SGS 2868	N/A	28	28S	21E	MD	35.45691	-119.71552	085-230-26	Steam				Metal	Active	1		main steam discharge line inside plant blowdown	20 bbls	Blowdown
BL3618	5	South Belridge	Belridge	PSV-SGS 2868 hot liquids inlet to HEX 200A/B	SGS 2868	N/A	28	28S	21E	MD	35.45718	-119.71481	085-230-26	Produced Water				Metal	Active	1		PSV to atmosphere-SGS 2868 hot liquids inlet to HEX 200A/B	0	Blowdown
BL3619	5	South Belridge	Belridge	SGS 2868 hot liquids out HEX 200A/B -line blowdown	SGS 2868	N/A	28	28S	21E	MD	35.45710	-119.71474	085-230-26	Produced Water				Metal	Active	1		blowdown hot liquids from HEX 100A/B line	10 bbls	Blowdown
BL3620	5	South Belridge	Belridge	SGS 2868 DSD steam line blowdown from V-201	SGS 2868	N/A	28	28S	21E	MD	35.45701	-119.71445	085-230-26	Steam				Metal	Active	1		main steam discharge line inside plant blowdown	20 bbls	Blowdown
BL3621	5	South Belridge	Belridge	PSV-SGS 2868 DSD steam line inlet to V-201	SGS 2868	N/A	28	28S	21E	MD	35.45706	-119.71443	085-230-26	Steam				Metal	Active	1		PSV to atmosphere-SGS 2868 Hi presure steam V-201	0	PRV
BL3622	5	South Belridge	Belridge	SGS 2868 softwater strainer drain	SGS 2868	N/A	28	28S	21E	MD	35.45694	-119.71438	085-230-26	Soft Water				Metal	Active	1		Cartridge filter drain pad	5 bbls	Drain Pad
BL3623	5	South Belridge	Belridge	SG 100A steam out-PSV #1	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3624	5	South Belridge	Belridge	SG 100A steam discharge line blowdown	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71430	085-230-26	Steam				Metal	Active	1		SG 100A Steam discharge bleed	0	Blowdown
BL3625	5	South Belridge	Belridge	LV-301 bleed	SGS 2868	N/A	28	28S	21E	MD	35.45678	-119.71465	085-230-26	Produced Water				Metal	Active	1		LV 301 line bleed	0	Blowdown
BL3626	5	South Belridge	Belridge	SGS 2868 Soft water drain pad	SGS 2868	N/A	28	28S	21E	MD	35.45661	-119.71436	085-230-26	Soft Water	50'	20'	4"	Metal	Active	6		P100 A/B/C line bleeds	0	Blowdown
BL3627	5	South Belridge	Belridge	SGS 2868 Soft water inlet PSV to HEX 100A	SGS 2868	N/A	28	28S	21E	MD	35.45658	-119.71438	085-230-26	Soft Water				Metal	Active	1		Soft water inlet PSV to HEX 100A	0	PRV
BL3628	5	South Belridge	Belridge	SGS 2868 Soft water inlet PSV to HEX 100B (picture BL3627)	SGS 2868	N/A	28	28S	21E	MD	35.45658	-119.71438	085-230-26	Soft Water				Metal	Active	1		Soft water inlet PSV to HEX 100B	0	PRV
BL3629	5	South Belridge	Belridge	SGS 2868 Soft water inlet PSV to HEX 100C (picture BL3627)	SGS 2868	N/A	28	28S	21E	MD	35.45658	-119.71438	085-230-26	Soft Water				Metal	Active	1		Soft water inlet PSV to HEX 100C	0	PRV
BL3630	5	South Belridge	Belridge	SGS 2868 Soft water inlet PSV to HEX 100D (picture BL3627)	SGS 2868	N/A	28	28S	21E	MD	35.45658	-119.71438	085-230-26	Soft Water				Metal	Active	1		Soft water inlet PSV to HEX 100D	0	PRV
BL3631	5	South Belridge	Belridge	SGS 2868 Soft water out from HEX 100A (picture BL3631)	SGS 2868	N/A	28	28S	21E	MD	35.45670	-119.71417	085-230-26	Soft Water				Metal	Active	1		Soft water drain HEX 100A	30 bbls	Blowdown
BL3632	5	South Belridge	Belridge	SGS 2868 Soft water out from HEX 100B (picture BL3631)	SGS 2868	N/A	28	28S	21E	MD	35.45670	-119.71417	085-230-26	Soft Water				Metal	Active	1		Soft water drain HEX 100B	30 bbls	Blowdown
BL3633	5	South Belridge	Belridge	SGS 2868 Soft water out from HEX 100C(picture BL3631)	SGS 2868	N/A	28	28S	21E	MD	35.45670	-119.71417	085-230-26	Soft Water				Metal	Active	1		Soft water drain HEX 100C	30 bbls	Blowdown
BL3634	5	South Belridge	Belridge	SGS 2868 Soft water out from HEX 100D (picture BL3631)	SGS 2868	N/A	28	28S	21E	MD	35.45670	-119.71417	085-230-26	Soft Water				Metal	Active	1		Soft water drain HEX 100D	30 bbls	Blowdown
BL3635	5	South Belridge	Belridge	PSV-SGS 2868 hot liquids from V-301 to HEX 100A (picture BL3635)	SGS 2868	N/A	28	28S	21E	MD	35.45676	-119.71429	085-230-26	Produced Water				Metal	Active	1		HEX 100A Hot liquids inlet PSV	0	PRV
BL3636	5	South Belridge	Belridge	PSV-SGS 2868 hot liquids from V-301 to HEX 100B (picture BL3635)	SGS 2868	N/A	28	28S	21E	MD	35.45676	-119.71429	085-230-26	Produced Water				Metal	Active	1		HEX 100B Hot liquids inlet PSV	0	PRV
BL3637	5	South Belridge	Belridge	PSV-SGS 2868 hot liquids from V-301 to HEX 100C(picture BL3635)	SGS 2868	N/A	28	28S	21E	MD	35.45676	-119.71429	085-230-26	Produced Water				Metal	Active	1		HEX 100C Hot liquids inlet PSV	0	PRV
BL3638	5	South Belridge	Belridge	PSV-SGS 2868 hot liquids from V-301 to HEX 100D(picture BL3635)	SGS 2868	N/A	28	28S	21E	MD	35.45676	-119.71429	085-230-26	Produced Water				Metal	Active	1		HEX 100D Hot liquids inlet PSV	0	PRV
BL3639	5	South Belridge	Belridge	SGS 2868 hot liquids from V-301 to HEX 100A blowdown (picture BL3639)	SGS 2868	N/A	28	28S	21E	MD	35.45670	-119.71427	085-230-26	Produced Water				Metal	Active	1		HEX 100A Hot liquids inlet drain	20 bbls	Blowdown
BL3640	5	South Belridge	Belridge	SGS 2868 hot liquids from V-301 to HEX 100B blowdown (picture BL3639)	SGS 2868	N/A	28	28S	21E	MD	35.45670	-119.71427	085-230-26	Produced Water				Metal	Active	1		HEX 100B Hot liquids inlet drain	20 bbls	Blowdown
BL3641	5	South Belridge	Belridge	SGS 2868 hot liquids from V-301 to HEX 100C blowdown (picture BL3639)	SGS 2868	N/A	28	28S	21E	MD	35.45670	-119.71427	085-230-26	Produced Water				Metal	Active	1		HEX 100C Hot liquids inlet drain	20 bbls	Blowdown
BL3642	5	South Belridge	Belridge	SGS 2868 hot liquids from V-301 to HEX 100D blowdown (picture BL3639)	SGS 2868	N/A	28	28S	21E	MD	35.45670	-119.71427	085-230-26	Produced Water				Metal	Active	1		HEX 100D Hot liquids inlet drain	20 bbls	Blowdown
BL3643	5	South Belridge	Belridge	SGS 2868 hot liquids from HEX 100A line bleed (picture BL3643)	SGS 2868	N/A	28	28S	21E	MD	35.45662	-119.71449	085-230-26	Produced Water				Metal	Active	1		HEX 100A Hot liquids out drain	20 bbls	Blowdown
BL3644	5	South Belridge	Belridge	SGS 2868 hot liquids from HEX 100B line bleed (picture BL3643)	SGS 2868	N/A	28	28S	21E	MD	35.45662	-119.71449	085-230-26	Produced Water				Metal	Active	1		HEX 100B Hot liquids out drain	20 bbls	Blowdown
BL3645	5	South Belridge	Belridge	SGS 2868 hot liquids from HEX 100C line bleed (picture BL3643)	SGS 2868	N/A	28	28S	21E	MD	35.45662	-119.71449	085-230-26	Produced Water				Metal	Active	1		HEX 100C Hot liquids out drain	20 bbls	Blowdown
BL3646	5	South Belridge	Belridge	SGS 2868 hot liquids from HEX 100D line bleed (picture BL3643)	SGS 2868	N/A	28	28S	21E	MD	35.45662	-119.71449	085-230-26	Produced Water				Metal	Active	1		HEX 100D Hot liquids out drain	20 bbls	Blowdown
BL3647	5	South Belridge	Belridge	PSV-SGS 2868-Steam from gens to V-101A inlet	SGS 2868	N/A	28	28S	21E	MD	35.45686	-119.71400	085-230-26	Steam				Metal	Active	1		V-101A steam inlet PSV to atmosphere	0	PRV
BL3648	5	South Belridge	Belridge	SGS 2868-Steam from gens to V-101A inlet bleeder	SGS 2868	N/A	28	28S	21E	MD	35.45689	-119.71404	085-230-26	Steam				Metal	Active	1		V-101A steam inlet line bleed	20 bbls	Blowdown
BL3649	5	South Belridge	Belridge	SGS 2868-Steam from gens to V-101A out bleeder	SGS 2868	N/A	28	28S	21E	MD	35.45696	-119.71419	085-230-26	Steam				Metal	Active	1		V-101A steam inlet line bleed	20 bbls	Blowdown
BL3650	5	South Belridge	Belridge	SGS 2868 V-101A Liquids out strainer blowdown	SGS 2868	N/A	28	28S	21E	MD	35.45683	-119.71406	085-230-26	Produced Water				Metal	Active	1		V-101A liquids out strainer line bleed	20 bbls	Blowdown
BL3651	5	South Belridge	Belridge	SGS 2868 V-301 Steam liquids inlet PSV	SGS 2868	N/A	28	28S	21E	MD	35.45667	-119.71383	085-230-26	Produced Water				Metal	Active	1		SGS 2868 V-301 Steam liquids inlet PSV to atmosphere	0	PRV
BL3652	5	South Belridge	Belridge	SGS 2868 V-301 Steam liquids inlet bleed	SGS 2868	N/A	28	28S	21E	MD	35.45675	-119.71393	085-230-26	Produced Water				Metal	Active	1		SGS 2868 V-301 Steam liquids inlet piping bleed	20 bbls	Blowdown
BL3653	5	South Belridge	Belridge	SGS 2868 V-301 Steam liquids out bleed	SGS 2868	N/A	28	28S	21E	MD	35.45674	-119.71384	085-230-26	Produced Water				Metal	Active	1		SGS 2868 V-301 Steam liquids outlet piping bleed	20 bbls	Blowdown
BL3654	5	South Belridge	Belridge	SGS 2868 V-301 Liquids out strainer blowdown	SGS 2868	N/A	28	28S	21E	MD	35.45687	-119.71375	085-230-26	Produced Water				Metal	Active	1		V-301 liquids out strainer line bleed	20 bbls	Blowdown
BL3655	5	South Belridge	Belridge	SGS 2868 V-301 Liquid level K-tek blowdown	SGS 2868	N/A	28	28S	21E	MD	35.45687	-119.71375	085-230-26	Produced Water				Metal	Active	1		V-301 liquid level boot bleed	20 bbls	Blowdown
BL3656	5	South Belridge	Belridge	PSV-SGS 2868-Steam from gens to V-101B inlet(picture BL3647)	SGS 2868	N/A	28	28S	21E	MD	35.45686	-119.71400	085-230-26	Steam				Metal	Active	1		V-101B steam inlet PSV	0	PRV

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3657	5	South Belridge	Belridge	SGS 2868-Steam from gens to V-101B inlet bleeder (picture BL3648)	SGS 2868	N/A	28	28S	21E	MD	35.45689	-119.71404	085-230-26	Steam				Metal	Active	1		V-1018 steam inlet line bleed	20 bbls	Blowdown
BL3658	5	South Belridge	Belridge	SGS 2868-Steam from gens to V-101B out bleeder(picture BL3649)	SGS 2868	N/A	28	28S	21E	MD	35.45696	-119.71419	085-230-26	Steam				Metal	Active	1		V-1018 steam inlet line bleed	20 bbls	Blowdown
BL3659	5	South Belridge	Belridge	SGS 2868 V-101B Liquids out strainer blowdown (picture BL3650)	SGS 2868	N/A	28	28S	21E	MD	35.45696	-119.71419	085-230-26	Produced Water				Metal	Active	1		V-101B liquids out strainer line bleed	20 bbls	Blowdown
BL3660	5	South Belridge	Belridge	PSV-SGS 2868-Steam from gens to V-101C inlet(picture BL3647)	SGS 2868	N/A	28	28S	21E	MD	35.45686	-119.71400	085-230-26	Steam				Metal	Active	1		V-101C steam inlet PSV	0	PRV
BL3661	5	South Belridge	Belridge	SGS 2868-Steam from gens to V-101C inlet bleeder (picture BL3648)	SGS 2868	N/A	28	28S	21E	MD	35.45689	-119.71404	085-230-26	Steam				Metal	Active	1		V-101C steam inlet line bleed	20 bbls	Blowdown
BL3662	5	South Belridge	Belridge	SGS 2868-Steam from gens to V-101C out bleeder(picture BL3649)	SGS 2868	N/A	28	28S	21E	MD	35.45696	-119.71419	085-230-26	Steam				Metal	Active	1		V-101C steam inlet line bleed	20 bbls	Blowdown
BL3663	5	South Belridge	Belridge	SGS 2868 V-101C Liquids out strainer blowdown(picture BL3650)	SGS 2868	N/A	28	28S	21E	MD	35.45696	-119.71419	085-230-26	Produced Water				Metal	Active	1		V-101C liquids out strainer line bleed	20 bbls	Blowdown
BL3664	5	South Belridge	Belridge	SG 100A soft water inlet drain(picture BL3664)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71430	085-230-26	Soft Water				Metal	Active	1		SG 100A soft water inlet drain	20 BBLS	Blowdown
BL3665	5	South Belridge	Belridge	SG 100A steam out PSV #2 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3666	5	South Belridge	Belridge	SG 100B steam out PSV #1 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3667	5	South Belridge	Belridge	SG 100B steam out PSV #2 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3668	5	South Belridge	Belridge	SG 100B steam discharge line blowdown(picture BL3624)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71417	085-230-26	Steam				Metal	Active	1		SG 100B Steam discharge bleed	20 BBLS	Blowdown
BL3669	5	South Belridge	Belridge	SG 100B soft water inlet drain(picture BL3664)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71417	085-230-26	Soft Water				Metal	Active	1		SG 100B soft water inlet drain	20 BBLS	Blowdown
BL3670	5	South Belridge	Belridge	SG 100C steam out PSV #1 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3671	5	South Belridge	Belridge	SG 100C steam out PSV #2 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3672	5	South Belridge	Belridge	SG 100C steam discharge line blowdown(picture BL3624)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71402	085-230-26	Steam				Metal	Active	1		5G 100C Steam discharge bleed	20 BBLS	Blowdown
BL3673	5	South Belridge	Belridge	SG 100C soft water inlet drain(picture BL3664)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71402	085-230-26	Soft Water				Metal	Active	1		SG 100C soft water inlet drain	20 BBLS	Blowdown
BL3674	5	South Belridge	Belridge	SG 100D steam out PSV #1 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3675	5	South Belridge	Belridge	SG 100D steam out PSV #2 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3676	5	South Belridge	Belridge	SG 100D steam discharge line blowdown(picture BL3624)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71389	085-230-26	Steam				Metal	Active	1		5G 100D Steam discharge bleed	20 BBLS	Blowdown
BL3677	5	South Belridge	Belridge	SG 100D soft water inlet drain(picture BL3664)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71389	085-230-26	Soft Water				Metal	Active	1		5G 100D soft water inlet drain	20 BBLS	Blowdown
BL3678	5	South Belridge	Belridge	SG 100E steam out PSV #1 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3679	5	South Belridge	Belridge	SG 100E steam out PSV #2 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3680	5	South Belridge	Belridge	SG 100E steam discharge line blowdown(picture BL3624)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71375	085-230-26	Steam				Metal	Active	1		5G 100E Steam discharge bleed	20 BBLS	Blowdown
BL3681	5	South Belridge	Belridge	SG 100E soft water inlet drain(picture BL3664)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71375	085-230-26	Soft Water				Metal	Active	1		SG 100E soft water inlet drain	20 BBLS	Blowdown
BL3682	5	South Belridge	Belridge	SG 100F steam out PSV #1 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3683	5	South Belridge	Belridge	SG 100F steam out PSV #2 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3684	5	South Belridge	Belridge	SG 100F steam discharge line blowdown(picture BL3624)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71362	085-230-26	Steam				Metal	Active	1		5G 100F Steam discharge bleed	20 BBLS	Blowdown
BL3685	5	South Belridge	Belridge	SG 100F soft water inlet drain(picture BL3664)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71362	085-230-26	Soft Water				Metal	Active	1		5G 100F soft water inlet drain	20 BBLS	Blowdown
BL3686	5	South Belridge	Belridge	SG 100G steam out PSV #1 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3687	5	South Belridge	Belridge	SG 100G steam out PSV #2 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3688	5	South Belridge	Belridge	SG 100G steam discharge line blowdown(picture BL3624)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71348	085-230-26	Steam				Metal	Active	1		5G 100G Steam discharge bleed	20 BBLS	Blowdown
BL3689	5	South Belridge	Belridge	SG 100G soft water inlet drain(picture BL3664)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71348	085-230-26	Soft Water				Metal	Active	1		5G 100G soft water inlet drain	20 BBLS	Blowdown
BL3690	5	South Belridge	Belridge	SG 100H steam out PSV #1 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3691	5	South Belridge	Belridge	SG 100H steam out PSV #2 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3692	5	South Belridge	Belridge	SG 100H steam discharge line blowdown(picture BL3624)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71335	085-230-26	Steam				Metal	Active	1		5G 100H Steam discharge bleed	20 BBLS	Blowdown
BL3693	5	South Belridge	Belridge	SG 100H soft water inlet drain(picture BL3664)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71335	085-230-26	Soft Water				Metal	Active	1		SG 100H soft water inlet drain	20 BBLS	Blowdown
BL3694	5	South Belridge	Belridge	SG 100J steam out PSV #1 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3695	5	South Belridge	Belridge	SG 100J steam out PSV #2 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3696	5	South Belridge	Belridge	SG 100J steam discharge line blowdown(picture BL3624)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71321	085-230-26	Steam				Metal	Active	1		5G 100J Steam discharge bleed	20 BBLS	Blowdown
BL3697	5	South Belridge	Belridge	SG 100J soft water inlet drain(picture BL3664)	SGS 2868	N/A	28	28S	21E	MD	35.45704	-119.71321	085-230-26	Soft Water				Metal	Active	1		5G 100J soft water inlet drain	20 BBLS	Blowdown
BL3698	5	South Belridge	Belridge	SG 100K steam out PSV #1 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		1st generator Steam out PSV to atmosphere	0	PRV
BL3699	5	South Belridge	Belridge	SG 100K steam out PSV #2 (picture BL3623)	SGS 2868	N/A	28	28S	21E	MD	35.45700	-119.71439	085-230-26	Steam				Metal	Active	1		2nd Generator Steam out PSV to atmosphere	0	PRV
BL3700	8	South Belridge	Belridge	733Z-33	733Z-33	N/A	33	28S	21E	MD	35.45179	-119.71889	085-230-07	Steam					Active	13		Steam Injection Skid with 4) 2", 3) 1", 6) 1/2"	< 1 BBL/YR	Steam Injector
BL3701	8	South Belridge	Belridge	774L-33	774L-33	N/A	33	28S	21E	MD	35.44937	-119.71160	085-230-07	Steam					Active	13		Steam Injection Skid with 4) 2", 3) 1", 6) 1/2"	< 1 BBL/YR	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3702	9	South Belridge	Belridge	715A-34	715A-34	N/A	34	28S	21E	MD	35.44702	-119.70628	085-220-22	Steam					Active	18		Steam Injection Skid with 4) 2", 4) 1", 10) 1/2"	< 1 BBL/YR	Steam Injector
BL3703	9	South Belridge	Belridge	715L-34	715L-34	N/A	34	28S	21E	MD	35.44733	-119.70706	085-220-22	Steam					Active	18		Steam Injection Skid with 4) 2", 4) 1", 10) 1/2"	< 1 BBL/YR	Steam Injector
BL3704	8	South Belridge	Belridge	721D-33	721D-33	N/A	33	28S	21E	MD	35.45423	-119.72115	085-230-07	Steam					Active	18		Steam Injection Skid with 4) 2", 4) 1", 10) 1/2"	< 1 BBL/YR	Steam Injector
BL3705	8	South Belridge	Belridge	743A-33	743A-33	N/A	33	28S	21E	MD	35.45053	-119.71762	085-230-07	Steam					Active	18		Steam Injection Skid with 4) 2", 4) 1", 10) 1/2"	< 1 BBL/YR	Steam Injector
BL3706	8	South Belridge	Belridge	743L-33	743L-33	N/A	33	28S	21E	MD	35.45098	-119.71838	085-230-07	Steam					Active	18		Steam Injection Skid with 4) 2", 4) 1", 10) 1/2"	< 1 BBL/YR	Steam Injector
BL3707	8	South Belridge	Belridge	765C-33	765C-33	N/A	33	28S	21E	MD	35.44751	-119.71381	085-230-07	Steam					Active	18		Steam Injection Skid with 4) 2", 4) 1", 10) 1/2"	< 1 BBL/YR	Steam Injector
BL3708	8	South Belridge	Belridge	772E-33	772E-33	N/A	33	28S	21E	MD	35.45370	-119.71172	085-230-07	Steam					Active	18		Steam Injection Skid with 4) 2", 4) 1", 10) 1/2"	< 1 BBL/YR	Steam Injector
BL3709	4	South Belridge	Belridge	775EU-29	775EU-29	N/A	29	28S	21E	MD	35.46260	-119.72925	085-230-05	Steam					Active	18		Steam Injection Skid with 4) 2", 4) 1", 10) 1/2"	< 1 BBL/YR	Steam Injector
BL3711	4	South Belridge	Belridge	711AL-29	711AL-29	N/A	29	28S	21E	MD	35.46883	-119.74216	085-230-05	Steam					Active	18		Steam Injection Skid with 4) 2", 4) 1", 10) 1/2"	< 1 BBL/YR	Steam Injector
BL3712	4	South Belridge	Belridge	712GL-29	712GL-29	N/A	29	28S	21E	MD	35.46812	-119.74166	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3713	9	South Belridge	Belridge	716CL-34	716CL-34	N/A	34	28S	21E	MD	35.44618	-119.70661	085-220-22	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3714	9	South Belridge	Belridge	716DL-34	716DL-34	N/A	34	28S	21E	MD	35.44531	-119.70532	085-220-22	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3715	9	South Belridge	Belridge	716NL-34	716NL-34	N/A	34	28S	21E	MD	35.44584	-119.70599	085-220-22	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3716	5	South Belridge	Belridge	717AL-28	717AL-28	N/A	28	28S	21E	MD	35.45794	-119.72447	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3717	5	South Belridge	Belridge	717DL-28	717DL-28	N/A	28	28S	21E	MD	35.45785	-119.72335	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3718	5	South Belridge	Belridge	718CL-28	718CL-28	N/A	28	28S	21E	MD	35.45694	-119.72453	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3719	5	South Belridge	Belridge	718DL-28	718DL-28	N/A	28	28S	21E	MD	35.45600	-119.72327	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3720	5	South Belridge	Belridge	718GL-28	718GL-28	N/A	28	28S	21E	MD	35.45733	-119.72390	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3721	5	South Belridge	Belridge	718NL-28	718NL-28	N/A	28	28S	21E	MD	35.45653	-119.72390	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3722	5	South Belridge	Belridge	718ZL-28	718ZL-28	N/A	28	28S	21E	MD	35.45694	-119.72331	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3723	8	South Belridge	Belridge	721CL-33	721CL-33	N/A	33	28S	21E	MD	35.45524	-119.72226	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3724	8	South Belridge	Belridge	721NL-33	721NL-33	N/A	33	28S	21E	MD	35.45438	-119.72176	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3725	8	South Belridge	Belridge	721ZL-33	721ZL-33	N/A	33	28S	21E	MD	35.45522	-119.72106	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3726	4	South Belridge	Belridge	722AL-29	722AL-29	N/A	29	28S	21E	MD	35.46696	-119.74001	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3727	4	South Belridge	Belridge	722LL-29	722LL-29	N/A	29	28S	21E	MD	35.46725	-119.74044	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3728	4	South Belridge	Belridge	723GL-29	723GL-29	N/A	29	28S	21E	MD	35.46631	-119.73929	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3729	5	South Belridge	Belridge	727AL-28	727AL-28	N/A	28	28S	21E	MD	35.45796	-119.72229	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3730	9	South Belridge	Belridge	727CL-34	727CL-34	N/A	34	28S	21E	MD	35.44427	-119.70446	085-220-22	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3731	9	South Belridge	Belridge	727EL-34	727EL-34	N/A	34	28S	21E	MD	35.44459	-119.70479	085-220-22	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3732	5	South Belridge	Belridge	728AL-28	728AL-28	N/A	28	28S	21E	MD	35.45599	-119.72237	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3733	5	South Belridge	Belridge	728CL-28	728CL-28	N/A	28	28S	21E	MD	35.45688	-119.72228	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3734	5	South Belridge	Belridge	728DL-28	728DL-28	N/A	28	28S	21E	MD	35.45621	-119.72097	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3735	5	South Belridge	Belridge	728EL-28	728EL-28	N/A	28	28S	21E	MD	35.45735	-119.72274	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3736	5	South Belridge	Belridge	728GL-28	728GL-28	N/A	28	28S	21E	MD	35.45737	-119.72168	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3737	5	South Belridge	Belridge	728LL-28	728LL-28	N/A	28	28S	21E	MD	35.45625	-119.72279	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3738	5	South Belridge	Belridge	728NL-28	728NL-28	N/A	28	28S	21E	MD	35.45610	-119.72159	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3739	5	South Belridge	Belridge	728ZL-28	728ZL-28	N/A	28	28S	21E	MD	35.45699	-119.72111	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3740	5	South Belridge	Belridge	729EL-28	729EL-28	N/A	28	28S	21E	MD	35.45575	-119.72274	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3741	2	South Belridge	Belridge	729GL-20	729GL-20	N/A	20	28S	21E	MD	35.47046	-119.73955	085-210-18	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3742	5	South Belridge	Belridge	729GL-28	729GL-28	N/A	28	28S	21E	MD	35.45570	-119.72176	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3743	8	South Belridge	Belridge	731AL-33	731AL-33	N/A	33	28S	21E	MD	35.45420	-119.71997	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3744	8	South Belridge	Belridge	731CL-33	731CL-33	N/A	33	28S	21E	MD	35.45515	-119.72025	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3745	8	South Belridge	Belridge	731DL-33	731DL-33	N/A	33	28S	21E	MD	35.45419	-119.71877	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3746	8	South Belridge	Belridge	731EL-33	731EL-33	N/A	33	28S	21E	MD	35.45526	-119.72041	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3747	8	South Belridge	Belridge	731LL-33	731LL-33	N/A	33	28S	21E	MD	35.45450	-119.72058	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3748	8	South Belridge	Belridge	731NU-33	731NU-33	N/A	33	28S	21E	MD	35.45448	-119.71962	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3749	8	South Belridge	Belridge	731ZL-33	731ZL-33	N/A	33	28S	21E	MD	35.45513	-119.71813	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3750	8	South Belridge	Belridge	732CL-33	732CL-33	N/A	33	28S	21E	MD	35.45335	-119.71996	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3751	8	South Belridge	Belridge	732DL-33	732DL-33	N/A	33	28S	21E	MD	35.45239	-119.71882	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3752	8	South Belridge	Belridge	732EL-33	732EL-33	N/A	33	28S	21E	MD	35.45373	-119.72056	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3753	8	South Belridge	Belridge	732GL-33	732GL-33	N/A	33	28S	21E	MD	35.45380	-119.71946	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3754	8	South Belridge	Belridge	732NL-33	732NL-33	N/A	33	28S	21E	MD	35.45289	-119.71915	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3755	8	South Belridge	Belridge	732ZRL-33	732ZRL-33	N/A	33	28S	21E	MD	35.45298	-119.71897	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3756	4	South Belridge	Belridge	733ALR-29	733ALR-29	N/A	29	28S	21E	MD	35.46510	-119.73759	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3757	4	South Belridge	Belridge	733LL-29	733LL-29	N/A	29	28S	21E	MD	35.46540	-119.73833	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3758	4	South Belridge	Belridge	734GL-29	734GL-29	N/A	29	28S	21E	MD	35.46454	-119.73714	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3759	9	South Belridge	Belridge	737ZL-34	737ZL-34	N/A	34	28S	21E	MD	35.44432	-119.70114	085-220-22	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3760	5	South Belridge	Belridge	738AL-28	738AL-28	N/A	28	28S	21E	MD	35.45589	-119.71994	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3761	5	South Belridge	Belridge	738CL-28	738CL-28	N/A	28	28S	21E	MD	35.45705	-119.72020	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3762	5	South Belridge	Belridge	738LL-28	738LL-28	N/A	28	28S	21E	MD	35.45636	-119.72059	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3763	5	South Belridge	Belridge	738NL-28	738NL-28	N/A	28	28S	21E	MD	35.45656	-119.71954	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3764	5	South Belridge	Belridge	739GL-28	739GL-28	N/A	28	28S	21E	MD	35.45566	-119.71948	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3765	8	South Belridge	Belridge	741AL-33	741AL-33	N/A	33	28S	21E	MD	35.45424	-119.71779	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3766	8	South Belridge	Belridge	741CL-33	741CL-33	N/A	33	28S	21E	MD	35.45545	-119.71787	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3767	8	South Belridge	Belridge	741DL-33	741DL-33	N/A	33	28S	21E	MD	35.45423	-119.71669	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3768	8	South Belridge	Belridge	741LL-33	741LL-33	N/A	33	28S	21E	MD	35.45451	-119.71810	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3769	8	South Belridge	Belridge	741NL-33	741NL-33	N/A	33	28S	21E	MD	35.45495	-119.71693	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3770	8	South Belridge	Belridge	741ZL-33	741ZL-33	N/A	33	28S	21E	MD	35.45499	-119.71668	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3771	8	South Belridge	Belridge	742AL-33	742AL-33	N/A	33	28S	21E	MD	35.45232	-119.71731	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3772	8	South Belridge	Belridge	742CL-33	742CL-33	N/A	33	28S	21E	MD	35.45315	-119.71823	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3773	8	South Belridge	Belridge	742EL-33	742EL-33	N/A	33	28S	21E	MD	35.45368	-119.71861	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3774	8	South Belridge	Belridge	742GL-33	742GL-33	N/A	33	28S	21E	MD	35.45362	-119.71728	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3775	8	South Belridge	Belridge	742LL-33	742LL-33	N/A	33	28S	21E	MD	35.45289	-119.71822	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3776	8	South Belridge	Belridge	742NL-33	742NL-33	N/A	33	28S	21E	MD	35.45292	-119.71718	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3777	8	South Belridge	Belridge	742ZL-33	742ZL-33	N/A	33	28S	21E	MD	35.45325	-119.71665	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3778	8	South Belridge	Belridge	743CL-33	743CL-33	N/A	33	28S	21E	MD	35.45140	-119.71780	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3779	8	South Belridge	Belridge	743DRL-33	743DRL-33	N/A	33	28S	21E	MD	35.45052	-119.71665	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3780	8	South Belridge	Belridge	743EL-33	743EL-33	N/A	33	28S	21E	MD	35.45187	-119.71853	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3781	4	South Belridge	Belridge	743ZU-29	743ZU-29	N/A	29	28S	21E	MD	35.46608	-119.73433	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3782	4	South Belridge	Belridge	744DL-29	744DL-29	N/A	29	28S	21E	MD	35.46308	-119.73432	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3783	8	South Belridge	Belridge	744GL-33	744GL-33	N/A	33	28S	21E	MD	35.45035	-119.71742	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3784	4	South Belridge	Belridge	744NL-29	744NL-29	N/A	29	28S	21E	MD	35.46400	-119.73492	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3785	9	South Belridge	Belridge	747LL-34	747LL-34	N/A	34	28S	21E	MD	35.44419	-119.70050	085-220-22	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3786	5	South Belridge	Belridge	749EL-28	749EL-28	N/A	28	28S	21E	MD	35.45564	-119.71810	085-230-26	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3787	8	South Belridge	Belridge	751AL-33	751AL-33	N/A	33	28S	21E	MD	35.45423	-119.71574	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3788	8	South Belridge	Belridge	751CL-33	751CL-33	N/A	33	28S	21E	MD	35.45502	-119.71561	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3789	8	South Belridge	Belridge	751LL-33	751LL-33	N/A	33	28S	21E	MD	35.45445	-119.71603	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3790	8	South Belridge	Belridge	751NL-33	751NL-33	N/A	33	28S	21E	MD	35.45477	-119.71455	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3791	8	South Belridge	Belridge	751ZL-33	751ZL-33	N/A	33	28S	21E	MD	35.45507	-119.71457	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3792	8	South Belridge	Belridge	753GU-33	753GU-33	N/A	33	28S	21E	MD	35.45186	-119.71529	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3793	4	South Belridge	Belridge	755CL-29	755CL-29	N/A	29	28S	21E	MD	35.46231	-119.73327	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3794	4	South Belridge	Belridge	755EL-29	755EL-29	N/A	29	28S	21E	MD	35.46263	-119.73399	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3795	4	South Belridge	Belridge	755ZL-29	755ZL-29	N/A	29	28S	21E	MD	35.46227	-119.73224	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3796	8	South Belridge	Belridge	761AL-33	761AL-33	N/A	33	28S	21E	MD	35.45419	-119.71330	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3797	8	South Belridge	Belridge	761DL-33	761DL-33	N/A	33	28S	21E	MD	35.45440	-119.71231	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3798	8	South Belridge	Belridge	761LL-33	761LL-33	N/A	33	28S	21E	MD	35.45449	-119.71406	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3799	8	South Belridge	Belridge	761NL-33	761NL-33	N/A	33	28S	21E	MD	35.45444	-119.71287	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3800	8	South Belridge	Belridge	765D-33	765D-33	N/A	33	28S	21E	MD	35.44710	-119.71203	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3801	8	South Belridge	Belridge	765ERL-33	765ERL-33	N/A	33	28S	21E	MD	35.44825	-119.71404	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3802	8	South Belridge	Belridge	765N-33	765N-33	N/A	33	28S	21E	MD	35.44724	-119.71277	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3803	8	South Belridge	Belridge	773DL-33	773DL-33	N/A	33	28S	21E	MD	35.45037	-119.70999	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3804	8	South Belridge	Belridge	774LL-33	774LL-33	N/A	33	28S	21E	MD	35.44946	-119.71149	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3805	4	South Belridge	Belridge	775CL-29	775CL-29	N/A	29	28S	21E	MD	35.46252	-119.72880	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3806	8	South Belridge	Belridge	775CL-33	775CL-33	N/A	33	28S	21E	MD	35.44788	-119.71080	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3807	8	South Belridge	Belridge	776CL-33	776CL-33	N/A	33	28S	21E	MD	35.44667	-119.71064	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3808	8	South Belridge	Belridge	776EL-33	776EL-33	N/A	33	28S	21E	MD	35.44676	-119.71136	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3809	8	South Belridge	Belridge	776ZL-33	776ZL-33	N/A	33	28S	21E	MD	35.44607	-119.70989	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3810	8	South Belridge	Belridge	785GL-33	785GL-33	N/A	33	28S	21E	MD	35.44853	-119.70816	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3811	8	South Belridge	Belridge	785ZL-33	785ZL-33	N/A	33	28S	21E	MD	35.44775	-119.70764	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3812	8	South Belridge	Belridge	786AL-33	786AL-33	N/A	33	28S	21E	MD	35.44507	-119.70879	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3813	4	South Belridge	Belridge	786DL-29	786DL-29	N/A	29	28S	21E	MD	35.45972	-119.72556	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3814	8	South Belridge	Belridge	786DL-33	786DL-33	N/A	33	28S	21E	MD	35.44507	-119.70753	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3815	8	South Belridge	Belridge	786LL-33	786LL-33	N/A	33	28S	21E	MD	35.44517	-119.70930	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3816	4	South Belridge	Belridge	786NL-29	786NL-29	N/A	29	28S	21E	MD	35.45985	-119.72605	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3817	4	South Belridge	Belridge	787CL-29	787CL-29	N/A	29	28S	21E	MD	35.45873	-119.72668	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3818	4	South Belridge	Belridge	787DL-29	787DL-29	N/A	29	28S	21E	MD	35.45781	-119.72548	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3819	4	South Belridge	Belridge	787EL-29	787EL-29	N/A	29	28S	21E	MD	35.45916	-119.72707	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3820	8	South Belridge	Belridge	787GL-33	787GL-33	N/A	33	28S	21E	MD	35.44467	-119.70840	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3821	4	South Belridge	Belridge	787NL-29	787NL-29	N/A	29	28S	21E	MD	35.45862	-119.72646	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3822	8	South Belridge	Belridge	787ZL-33	787ZL-33	N/A	33	28S	21E	MD	35.44442	-119.70764	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3823	4	South Belridge	Belridge	789EL-29	789EL-29	N/A	29	28S	21E	MD	35.45728	-119.72505	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3824	4	South Belridge	Belridge	797EL-29	797EL-29	N/A	29	28S	21E	MD	35.45909	-119.72507	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3825	8	South Belridge	Belridge	797LL-33	797LL-33	N/A	33	28S	21E	MD	35.44360	-119.70722	085-230-07	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3826	4	South Belridge	Belridge	711BL-29	711BL-29	N/A	29	28S	21E	MD	35.46999	-119.74215	085-230-05	Steam					Active	26		Steam Injection Skid with 7) 2", 5) 1", 14) 1/2"	< 1 BBL/YR	Steam Injector
BL3827	4	South Belridge	Belridge	711CL-29	711CL-29	N/A	29	28S	21E	MD	35.46948	-119.74219	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3828	4	South Belridge	Belridge	711DL-29	711DL-29	N/A	29	28S	21E	MD	35.46852	-119.74107	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3829	4	South Belridge	Belridge	711GL-29	711GL-29	N/A	29	28S	21E	MD	35.46992	-119.74160	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3830	4	South Belridge	Belridge	711NL-29	711NL-29	N/A	29	28S	21E	MD	35.46904	-119.74157	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3831	4	South Belridge	Belridge	711ZL-29	711ZL-29	N/A	29	28S	21E	MD	35.46947	-119.74113	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3832	4	South Belridge	Belridge	712ZL-29	712ZL-29	N/A	29	28S	21E	MD	35.46799	-119.74119	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3833	5	South Belridge	Belridge	716AL-28	716AL-28	N/A	28	28S	21E	MD	35.45967	-119.72449	085-230-26	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3834	9	South Belridge	Belridge	716AL-34	716AL-34	N/A	34	28S	21E	MD	35.44537	-119.70652	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3835	9	South Belridge	Belridge	716LL-34	716LL-34	N/A	34	28S	21E	MD	35.44543	-119.70710	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3836	2	South Belridge	Belridge	717AL-20	717AL-20	N/A	20	28S	21E	MD	35.47238	-119.74174	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3837	2	South Belridge	Belridge	717CL-20	717CL-20	N/A	20	28S	21E	MD	35.47302	-119.74143	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3838	5	South Belridge	Belridge	717CL-28	717CL-28	N/A	28	28S	21E	MD	35.45868	-119.72446	085-230-26	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3839	9	South Belridge	Belridge	717CL-34	717CL-34	N/A	34	28S	21E	MD	35.44410	-119.70639	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3840	2	South Belridge	Belridge	717DL-20	717DL-20	N/A	20	28S	21E	MD	35.47258	-119.74088	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3841	9	South Belridge	Belridge	717DL-34	717DL-34	N/A	34	28S	21E	MD	35.44356	-119.70494	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3842	9	South Belridge	Belridge	717EL-34	717EL-34	N/A	34	28S	21E	MD	35.44462	-119.70708	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3843	2	South Belridge	Belridge	717GL-20	717GL-20	N/A	20	28S	21E	MD	35.47338	-119.74164	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3844	5	South Belridge	Belridge	717GL-28	717GL-28	N/A	28	28S	21E	MD	35.45894	-119.72417	085-230-26	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3845	9	South Belridge	Belridge	717GL-34	717GL-34	N/A	34	28S	21E	MD	35.44460	-119.70603	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3846	5	South Belridge	Belridge	717LL-28	717LL-28	N/A	28	28S	21E	MD	35.45825	-119.72489	085-230-26	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3847	2	South Belridge	Belridge	717NL-20	717NL-20	N/A	20	28S	21E	MD	35.47265	-119.74173	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3848	5	South Belridge	Belridge	717NL-28	717NL-28	N/A	28	28S	21E	MD	35.45816	-119.72375	085-230-26	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3849	9	South Belridge	Belridge	717NL-34	717NL-34	N/A	34	28S	21E	MD	35.44375	-119.70560	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3850	2	South Belridge	Belridge	717ZL-20	717ZL-20	N/A	20	28S	21E	MD	35.47300	-119.74126	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3851	9	South Belridge	Belridge	717ZL-34	717ZL-34	N/A	34	28S	21E	MD	35.44438	-119.70550	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3852	2	South Belridge	Belridge	718CL-20	718CL-20	N/A	20	28S	21E	MD	35.47141	-119.74220	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3853	2	South Belridge	Belridge	718DL-20	718DL-20	N/A	20	28S	21E	MD	35.47056	-119.74112	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3854	2	South Belridge	Belridge	718GL-20	718GL-20	N/A	20	28S	21E	MD	35.47196	-119.74171	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3855	2	South Belridge	Belridge	718NL-20	718NL-20	N/A	20	28S	21E	MD	35.47098	-119.74152	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3856	2	South Belridge	Belridge	718ZL-20	718ZL-20	N/A	20	28S	21E	MD	35.47126	-119.74115	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3857	4	South Belridge	Belridge	721AL-29	721AL-29	N/A	29	28S	21E	MD	35.46859	-119.74007	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3858	4	South Belridge	Belridge	721CL-29	721CL-29	N/A	29	28S	21E	MD	35.46968	-119.73992	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3860	4	South Belridge	Belridge	721EL-29	721EL-29	N/A	29	28S	21E	MD	35.47000	-119.74043	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3861	4	South Belridge	Belridge	721LL-29	721LL-29	N/A	29	28S	21E	MD	35.46905	-119.74069	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3862	4	South Belridge	Belridge	721NL-29	721NL-29	N/A	29	28S	21E	MD	35.46914	-119.73938	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3863	4	South Belridge	Belridge	721ZL-29	721ZL-29	N/A	29	28S	21E	MD	35.46948	-119.73885	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3864	4	South Belridge	Belridge	722CL-29	722CL-29	N/A	29	28S	21E	MD	35.46787	-119.73985	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3865	4	South Belridge	Belridge	722DL-29	722DL-29	N/A	29	28S	21E	MD	35.46684	-119.73911	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3866	4	South Belridge	Belridge	722EL-29	722EL-29	N/A	29	28S	21E	MD	35.46816	-119.74074	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3867	4	South Belridge	Belridge	722GL-29	722GL-29	N/A	29	28S	21E	MD	35.46813	-119.73948	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3868	4	South Belridge	Belridge	722NL-29	722NL-29	N/A	29	28S	21E	MD	35.46709	-119.73938	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3869	4	South Belridge	Belridge	722ZL-29	722ZL-29	N/A	29	28S	21E	MD	35.46767	-119.73883	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3870	4	South Belridge	Belridge	723ZL-29	723ZL-29	N/A	29	28S	21E	MD	35.46600	-119.73879	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3871	2	South Belridge	Belridge	727AL-20	727AL-20	N/A	20	28S	21E	MD	35.47209	-119.73994	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3872	9	South Belridge	Belridge	727AL-34	727AL-34	N/A	34	28S	21E	MD	35.44337	-119.70437	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3873	5	South Belridge	Belridge	727DL-28	727DL-28	N/A	28	28S	21E	MD	35.45782	-119.72111	085-230-26	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3874	9	South Belridge	Belridge	727DL-34	727DL-34	N/A	34	28S	21E	MD	35.44340	-119.70326	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3875	9	South Belridge	Belridge	727GL-34	727GL-34	N/A	34	28S	21E	MD	35.44453	-119.70379	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3876	2	South Belridge	Belridge	727LL-20	727LL-20	N/A	20	28S	21E	MD	35.47297	-119.74042	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3877	5	South Belridge	Belridge	727LL-28	727LL-28	N/A	28	28S	21E	MD	35.45818	-119.72269	085-230-26	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3878	9	South Belridge	Belridge	727LL-34	727LL-34	N/A	34	28S	21E	MD	35.44376	-119.70467	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3879	5	South Belridge	Belridge	727NL-28	727NL-28	N/A	28	28S	21E	MD	35.45816	-119.72174	085-230-26	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3880	9	South Belridge	Belridge	727NL-34	727NL-34	N/A	34	28S	21E	MD	35.44410	-119.70384	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3881	5	South Belridge	Belridge	727NU-28	727NU-28	N/A	28	28S	21E	MD	35.45819	-119.72178	085-230-26	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3882	9	South Belridge	Belridge	727ZL-34	727ZL-34	N/A	34	28S	21E	MD	35.44425	-119.70326	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3883	2	South Belridge	Belridge	728AL-20	728AL-20	N/A	20	28S	21E	MD	35.47046	-119.74013	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3884	2	South Belridge	Belridge	728CL-20	728CL-20	N/A	20	28S	21E	MD	35.47125	-119.73985	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3885	9	South Belridge	Belridge	728CL-34	728CL-34	N/A	34	28S	21E	MD	35.44248	-119.70429	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3886	2	South Belridge	Belridge	728DL-20	728DL-20	N/A	20	28S	21E	MD	35.47055	-119.73943	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3887	2	South Belridge	Belridge	728EL-20	728EL-20	N/A	20	28S	21E	MD	35.47190	-119.74008	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3888	9	South Belridge	Belridge	728EL-34	728EL-34	N/A	34	28S	21E	MD	35.44274	-119.70479	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3889	2	South Belridge	Belridge	728GL-20	728GL-20	N/A	20	28S	21E	MD	35.47202	-119.73974	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3890	9	South Belridge	Belridge	728GL-34	728GL-34	N/A	34	28S	21E	MD	35.44272	-119.70386	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3891	2	South Belridge	Belridge	728LL-20	728LL-20	N/A	20	28S	21E	MD	35.47103	-119.74007	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3892	2	South Belridge	Belridge	728NL-20	728NL-20	N/A	20	28S	21E	MD	35.47071	-119.73948	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3893	9	South Belridge	Belridge	728NL-34	728NL-34	N/A	34	28S	21E	MD	35.44182	-119.70379	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3894	2	South Belridge	Belridge	728ZL-20	728ZL-20	N/A	20	28S	21E	MD	35.47131	-119.73888	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3895	9	South Belridge	Belridge	728ZL-34	728ZL-34	N/A	34	28S	21E	MD	35.44239	-119.70303	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3896	4	South Belridge	Belridge	731AL-29	731AL-29	N/A	29	28S	21E	MD	35.46870	-119.73787	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3897	4	South Belridge	Belridge	731CL-29	731CL-29	N/A	29	28S	21E	MD	35.46966	-119.73793	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3898	4	South Belridge	Belridge	731DL-29	731DL-29	N/A	29	28S	21E	MD	35.46860	-119.73665	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3899	4	South Belridge	Belridge	731EL-29	731EL-29	N/A	29	28S	21E	MD	35.46995	-119.73826	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3900	4	South Belridge	Belridge	731GL-29	731GL-29	N/A	29	28S	21E	MD	35.46994	-119.73736	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3901	4	South Belridge	Belridge	731LL-29	731LL-29	N/A	29	28S	21E	MD	35.46903	-119.73824	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3902	4	South Belridge	Belridge	731NL-29	731NL-29	N/A	29	28S	21E	MD	35.46932	-119.73756	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3903	4	South Belridge	Belridge	732AL-29	732AL-29	N/A	29	28S	21E	MD	35.46682	-119.73778	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3904	4	South Belridge	Belridge	732CL-29	732CL-29	N/A	29	28S	21E	MD	35.46764	-119.73760	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3905	4	South Belridge	Belridge	732DL-29	732DL-29	N/A	29	28S	21E	MD	35.46679	-119.73646	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3906	4	South Belridge	Belridge	732EL-29	732EL-29	N/A	29	28S	21E	MD	35.46854	-119.73857	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3907	4	South Belridge	Belridge	732GL-29	732GL-29	N/A	29	28S	21E	MD	35.46819	-119.73706	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3908	4	South Belridge	Belridge	732LL-29	732LL-29	N/A	29	28S	21E	MD	35.46742	-119.73862	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3909	4	South Belridge	Belridge	732NL-29	732NL-29	N/A	29	28S	21E	MD	35.46725	-119.73719	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3910	4	South Belridge	Belridge	732ZL-29	732ZL-29	N/A	29	28S	21E	MD	35.46786	-119.73667	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3911	4	South Belridge	Belridge	733CL-29	733CL-29	N/A	29	28S	21E	MD	35.46596	-119.73771	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3912	4	South Belridge	Belridge	733DL-29	733DL-29	N/A	29	28S	21E	MD	35.46494	-119.73669	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3913	4	South Belridge	Belridge	733EL-29	733EL-29	N/A	29	28S	21E	MD	35.46672	-119.73803	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3914	4	South Belridge	Belridge	733GL-29	733GL-29	N/A	29	28S	21E	MD	35.46621	-119.73726	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3915	4	South Belridge	Belridge	733NL-29	733NL-29	N/A	29	28S	21E	MD	35.46539	-119.73716	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3916	4	South Belridge	Belridge	733ZL-29	733ZL-29	N/A	29	28S	21E	MD	35.46604	-119.73686	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3917	9	South Belridge	Belridge	737AL-34	737AL-34	N/A	34	28S	21E	MD	35.44340	-119.70210	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3918	9	South Belridge	Belridge	737CL-34	737CL-34	N/A	34	28S	21E	MD	35.44421	-119.70220	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3919	9	South Belridge	Belridge	737DL-34	737DL-34	N/A	34	28S	21E	MD	35.44346	-119.70107	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3920	9	South Belridge	Belridge	737LL-34	737LL-34	N/A	34	28S	21E	MD	35.44369	-119.70266	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3921	9	South Belridge	Belridge	737NL-34	737NL-34	N/A	34	28S	21E	MD	35.44369	-119.70161	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3922	2	South Belridge	Belridge	738AL-20	738AL-20	N/A	20	28S	21E	MD	35.47060	-119.73782	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3923	9	South Belridge	Belridge	738CL-34	738CL-34	N/A	34	28S	21E	MD	35.44236	-119.70208	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3924	5	South Belridge	Belridge	738EL-28	738EL-28	N/A	28	28S	21E	MD	35.45728	-119.72057	085-230-26	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3925	9	South Belridge	Belridge	738EL-34	738EL-34	N/A	34	28S	21E	MD	35.44274	-119.70270	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3926	9	South Belridge	Belridge	738GL-34	738GL-34	N/A	34	28S	21E	MD	35.44291	-119.70159	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3927	2	South Belridge	Belridge	738LL-20	738LL-20	N/A	20	28S	21E	MD	35.47084	-119.73848	085-210-18	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3928	9	South Belridge	Belridge	738LL-34	738LL-34	N/A	34	28S	21E	MD	35.44188	-119.70276	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged (bbl/yr)	Category
BL3929	9	South Belridge	Belridge	738NL-34	738NL-34	N/A	34	28S	21E	MD	35.44187	-119.70156	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3930	9	South Belridge	Belridge	738ZL-34	738ZL-34	N/A	34	28S	21E	MD	35.44237	-119.70117	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3931	4	South Belridge	Belridge	742AL-29	742AL-29	N/A	29	28S	21E	MD	35.46696	-119.73556	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3932	4	South Belridge	Belridge	742CRL-29	742CRL-29	N/A	29	28S	21E	MD	35.46788	-119.73576	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3933	4	South Belridge	Belridge	742DL-29	742DL-29	N/A	29	28S	21E	MD	35.46698	-119.73462	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3934	8	South Belridge	Belridge	742DL-33	742DL-33	N/A	33	28S	21E	MD	35.45232	-119.71669	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3935	4	South Belridge	Belridge	742EL-29	742EL-29	N/A	29	28S	21E	MD	35.46853	-119.73597	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3936	4	South Belridge	Belridge	742LL-29	742LL-29	N/A	29	28S	21E	MD	35.46731	-119.73612	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3937	4	South Belridge	Belridge	742NL-29	742NL-29	N/A	29	28S	21E	MD	35.46739	-119.73520	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3938	4	South Belridge	Belridge	743AL-29	743AL-29	N/A	29	28S	21E	MD	35.46509	-119.73570	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3939	4	South Belridge	Belridge	743C2L-29	743C2L-29	N/A	29	28S	21E	MD	35.46580	-119.73543	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3940	4	South Belridge	Belridge	743DL-29	743DL-29	N/A	29	28S	21E	MD	35.46513	-119.73449	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3941	4	South Belridge	Belridge	743EL-29	743EL-29	N/A	29	28S	21E	MD	35.46669	-119.73629	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3942	4	South Belridge	Belridge	743GL-29	743GL-29	N/A	29	28S	21E	MD	35.46628	-119.73486	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3943	8	South Belridge	Belridge	743GL-33	743GL-33	N/A	33	28S	21E	MD	35.45203	-119.71725	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3944	4	South Belridge	Belridge	743LL-29	743LL-29	N/A	29	28S	21E	MD	35.46557	-119.73622	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3945	4	South Belridge	Belridge	743NL-29	743NL-29	N/A	29	28S	21E	MD	35.46543	-119.73496	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3946	8	South Belridge	Belridge	743NL-33	743NL-33	N/A	33	28S	21E	MD	35.45119	-119.71752	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3947	8	South Belridge	Belridge	743ZL-33	743ZL-33	N/A	33	28S	21E	MD	35.45145	-119.71667	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3948	4	South Belridge	Belridge	744C2L-29	744C2L-29	N/A	29	28S	21E	MD	35.46438	-119.73514	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3949	4	South Belridge	Belridge	744EL-29	744EL-29	N/A	29	28S	21E	MD	35.46418	-119.73592	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3950	4	South Belridge	Belridge	744GRL-29	744GRL-29	N/A	29	28S	21E	MD	35.46445	-119.73484	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3951	4	South Belridge	Belridge	744Z2L-29	744Z2L-29	N/A	29	28S	21E	MD	35.46415	-119.73456	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3952	9	South Belridge	Belridge	747AL-34	747AL-34	N/A	34	28S	21E	MD	35.44343	-119.69995	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3953	9	South Belridge	Belridge	748CL-34	748CL-34	N/A	34	28S	21E	MD	35.44239	-119.70031	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3954	9	South Belridge	Belridge	748EL-34	748EL-34	N/A	34	28S	21E	MD	35.44320	-119.70030	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3955	9	South Belridge	Belridge	748GL-34	748GL-34	N/A	34	28S	21E	MD	35.44281	-119.69923	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3956	9	South Belridge	Belridge	748LL-34	748LL-34	N/A	34	28S	21E	MD	35.44183	-119.70043	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3957	9	South Belridge	Belridge	748NL-34	748NL-34	N/A	34	28S	21E	MD	35.44236	-119.69911	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3958	9	South Belridge	Belridge	748ZL-34	748ZL-34	N/A	34	28S	21E	MD	35.44245	-119.69885	085-220-22	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3959	8	South Belridge	Belridge	751DL-33	751DL-33	N/A	33	28S	21E	MD	35.45438	-119.71455	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3960	8	South Belridge	Belridge	752AL-33	752AL-33	N/A	33	28S	21E	MD	35.45239	-119.71553	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3961	8	South Belridge	Belridge	752CL-33	752CL-33	N/A	33	28S	21E	MD	35.45337	-119.71554	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3962	8	South Belridge	Belridge	752DL-33	752DL-33	N/A	33	28S	21E	MD	35.45297	-119.71445	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3963	8	South Belridge	Belridge	752EL-33	752EL-33	N/A	33	28S	21E	MD	35.45376	-119.71601	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3964	8	South Belridge	Belridge	752GL-33	752GL-33	N/A	33	28S	21E	MD	35.45360	-119.71504	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3965	8	South Belridge	Belridge	752LL-33	752LL-33	N/A	33	28S	21E	MD	35.45298	-119.71605	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3966	8	South Belridge	Belridge	752NL-33	752NL-33	N/A	33	28S	21E	MD	35.45288	-119.71494	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3967	8	South Belridge	Belridge	752ZL-33	752ZL-33	N/A	33	28S	21E	MD	35.45331	-119.71444	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3968	4	South Belridge	Belridge	753AL-29	753AL-29	N/A	29	28S	21E	MD	35.46510	-119.73322	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3969	8	South Belridge	Belridge	753AL-33	753AL-33	N/A	33	28S	21E	MD	35.45046	-119.71573	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3970	4	South Belridge	Belridge	753CL-29	753CL-29	N/A	29	28S	21E	MD	35.46585	-119.73339	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3971	8	South Belridge	Belridge	753CL-33	753CL-33	N/A	33	28S	21E	MD	35.45142	-119.71556	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3972	4	South Belridge	Belridge	753DL-29	753DL-29	N/A	29	28S	21E	MD	35.46511	-119.73250	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3973	8	South Belridge	Belridge	753DL-33	753DL-33	N/A	33	28S	21E	MD	35.45051	-119.71437	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL3974	4	South Belridge	Belridge	753EL-29	753EL-29	N/A	29	28S	21E	MD	35.46621	-119.73379	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3975	8	South Belridge	Belridge	753EL-33	753EL-33	N/A	33	28S	21E	MD	35.45217	-119.71571	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3976	8	South Belridge	Belridge	753LL-33	753LL-33	N/A	33	28S	21E	MD	35.45080	-119.71580	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3977	4	South Belridge	Belridge	753NL-29	753NL-29	N/A	29	28S	21E	MD	35.46548	-119.73278	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3979	8	South Belridge	Belridge	753ZL-33	753ZL-33	N/A	33	28S	21E	MD	35.45146	-119.71430	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3980	4	South Belridge	Belridge	754AL-29	754AL-29	N/A	29	28S	21E	MD	35.46345	-119.73304	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3981	4	South Belridge	Belridge	754CL-29	754CL-29	N/A	29	28S	21E	MD	35.46424	-119.73330	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3982	8	South Belridge	Belridge	754CL-33	754CL-33	N/A	33	28S	21E	MD	35.44963	-119.71553	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3983	4	South Belridge	Belridge	754DL-29	754DL-29	N/A	29	28S	21E	MD	35.46328	-119.73213	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3984	8	South Belridge	Belridge	754DL-33	754DL-33	N/A	33	28S	21E	MD	35.44873	-119.71441	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3985	4	South Belridge	Belridge	754EL-29	754EL-29	N/A	29	28S	21E	MD	35.46447	-119.73380	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3986	4	South Belridge	Belridge	754GL-29	754GL-29	N/A	29	28S	21E	MD	35.46489	-119.73301	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3987	8	South Belridge	Belridge	754GL-33	754GL-33	N/A	33	28S	21E	MD	35.44988	-119.71503	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3988	4	South Belridge	Belridge	754LL-29	754LL-29	N/A	29	28S	21E	MD	35.46349	-119.73381	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3989	4	South Belridge	Belridge	754NL-29	754NL-29	N/A	29	28S	21E	MD	35.46391	-119.73283	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3990	8	South Belridge	Belridge	754NL-33	754NL-33	N/A	33	28S	21E	MD	35.44929	-119.71511	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3991	4	South Belridge	Belridge	754ZL-29	754ZL-29	N/A	29	28S	21E	MD	35.46416	-119.73213	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3992	8	South Belridge	Belridge	754ZL-33	754ZL-33	N/A	33	28S	21E	MD	35.44972	-119.71438	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3993	4	South Belridge	Belridge	755GL-29	755GL-29	N/A	29	28S	21E	MD	35.46267	-119.73272	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3994	8	South Belridge	Belridge	762AL-33	762AL-33	N/A	33	28S	21E	MD	35.45233	-119.71316	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3995	8	South Belridge	Belridge	762CL-33	762CL-33	N/A	33	28S	21E	MD	35.45327	-119.71295	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3996	8	South Belridge	Belridge	762DL-33	762DL-33	N/A	33	28S	21E	MD	35.45266	-119.71205	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3997	8	South Belridge	Belridge	762EL-33	762EL-33	N/A	33	28S	21E	MD	35.45399	-119.71400	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3998	8	South Belridge	Belridge	762GL-33	762GL-33	N/A	33	28S	21E	MD	35.45376	-119.71287	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL3999	8	South Belridge	Belridge	762LL-33	762LL-33	N/A	33	28S	21E	MD	35.45292	-119.71405	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4000	8	South Belridge	Belridge	762NL-33	762NL-33	N/A	33	28S	21E	MD	35.45290	-119.71272	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4001	8	South Belridge	Belridge	762ZL-33	762ZL-33	N/A	33	28S	21E	MD	35.45332	-119.71198	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4002	8	South Belridge	Belridge	763AL-33	763AL-33	N/A	33	28S	21E	MD	35.45044	-119.71339	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4003	8	South Belridge	Belridge	763CL-33	763CL-33	N/A	33	28S	21E	MD	35.45145	-119.71332	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4004	8	South Belridge	Belridge	763DL-33	763DL-33	N/A	33	28S	21E	MD	35.45038	-119.71220	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4005	8	South Belridge	Belridge	763EL-33	763EL-33	N/A	33	28S	21E	MD	35.45157	-119.71386	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4006	8	South Belridge	Belridge	763GL-33	763GL-33	N/A	33	28S	21E	MD	35.45182	-119.71280	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4007	8	South Belridge	Belridge	763LL-33	763LL-33	N/A	33	28S	21E	MD	35.45121	-119.71391	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4008	8	South Belridge	Belridge	763NL-33	763NL-33	N/A	33	28S	21E	MD	35.45110	-119.71244	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4009	8	South Belridge	Belridge	763ZL-33	763ZL-33	N/A	33	28S	21E	MD	35.45129	-119.71220	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4010	4	South Belridge	Belridge	764AL-29	764AL-29	N/A	29	28S	21E	MD	35.46328	-119.73117	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4011	8	South Belridge	Belridge	764AL-33	764AL-33	N/A	33	28S	21E	MD	35.44863	-119.71319	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4012	4	South Belridge	Belridge	764CL-29	764CL-29	N/A	29	28S	21E	MD	35.46414	-119.73115	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4013	8	South Belridge	Belridge	764CL-33	764CL-33	N/A	33	28S	21E	MD	35.44963	-119.71323	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4014	4	South Belridge	Belridge	764DL-29	764DL-29	N/A	29	28S	21E	MD	35.46328	-119.73008	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4015	8	South Belridge	Belridge	764DL-33	764DL-33	N/A	33	28S	21E	MD	35.44926	-119.71199	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4016	4	South Belridge	Belridge	764EL-29	764EL-29	N/A	29	28S	21E	MD	35.46447	-119.73162	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4017	8	South Belridge	Belridge	764EL-33	764EL-33	N/A	33	28S	21E	MD	35.45030	-119.71366	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4018	8	South Belridge	Belridge	764GL-33	764GL-33	N/A	33	28S	21E	MD	35.44994	-119.71261	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4019	4	South Belridge	Belridge	764LL-29	764LL-29	N/A	29	28S	21E	MD	35.46391	-119.73169	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL4020	8	South Belridge	Belridge	764LL-33	764LL-33	N/A	33	28S	21E	MD	35.44926	-119.71385	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4021	4	South Belridge	Belridge	764NL-29	764NL-29	N/A	29	28S	21E	MD	35.46364	-119.73063	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4022	8	South Belridge	Belridge	764NL-33	764NL-33	N/A	33	28S	21E	MD	35.44925	-119.71272	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4023	8	South Belridge	Belridge	764ZL-33	764ZL-33	N/A	33	28S	21E	MD	35.44979	-119.71256	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4024	4	South Belridge	Belridge	765DL-29	765DL-29	N/A	29	28S	21E	MD	35.46143	-119.72986	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4025	4	South Belridge	Belridge	765EL-29	765EL-29	N/A	29	28S	21E	MD	35.46275	-119.73160	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4026	8	South Belridge	Belridge	765G2L-33	765G2L-33	N/A	33	28S	21E	MD	35.44851	-119.71271	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4027	4	South Belridge	Belridge	765GL-29	765GL-29	N/A	29	28S	21E	MD	35.46333	-119.73083	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4028	4	South Belridge	Belridge	765LL-29	765LL-29	N/A	29	28S	21E	MD	35.46150	-119.73154	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4029	4	South Belridge	Belridge	765NL-29	765NL-29	N/A	29	28S	21E	MD	35.46187	-119.73039	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4030	4	South Belridge	Belridge	765ZL-29	765ZL-29	N/A	29	28S	21E	MD	35.46262	-119.73005	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4031	8	South Belridge	Belridge	765ZL-33	765ZL-33	N/A	33	28S	21E	MD	35.44754	-119.71215	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4032	8	South Belridge	Belridge	772AL-33	772AL-33	N/A	33	28S	21E	MD	35.45297	-119.71056	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4033	8	South Belridge	Belridge	772LL-33	772LL-33	N/A	33	28S	21E	MD	35.45284	-119.71181	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4034	8	South Belridge	Belridge	773AL-33	773AL-33	N/A	33	28S	21E	MD	35.45092	-119.71090	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4035	8	South Belridge	Belridge	773CL-33	773CL-33	N/A	33	28S	21E	MD	35.45156	-119.71097	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4036	8	South Belridge	Belridge	773EL-33	773EL-33	N/A	33	28S	21E	MD	35.45193	-119.71156	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4037	8	South Belridge	Belridge	773GL-33	773GL-33	N/A	33	28S	21E	MD	35.45182	-119.71040	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4038	8	South Belridge	Belridge	773LL-33	773LL-33	N/A	33	28S	21E	MD	35.45103	-119.71165	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4039	8	South Belridge	Belridge	773NL-33	773NL-33	N/A	33	28S	21E	MD	35.45106	-119.71045	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4040	8	South Belridge	Belridge	773ZL-33	773ZL-33	N/A	33	28S	21E	MD	35.45156	-119.71001	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4041	8	South Belridge	Belridge	774AL-33	774AL-33	N/A	33	28S	21E	MD	35.44927	-119.71148	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4042	8	South Belridge	Belridge	774EL-33	774EL-33	N/A	33	28S	21E	MD	35.44996	-119.71160	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4043	8	South Belridge	Belridge	774GL-33	774GL-33	N/A	33	28S	21E	MD	35.45032	-119.71048	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4044	8	South Belridge	Belridge	774NL-33	774NL-33	N/A	33	28S	21E	MD	35.44966	-119.71032	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4045	8	South Belridge	Belridge	774ZL-33	774ZL-33	N/A	33	28S	21E	MD	35.44970	-119.71008	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4046	4	South Belridge	Belridge	775AL-29	775AL-29	N/A	29	28S	21E	MD	35.46141	-119.72888	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4047	8	South Belridge	Belridge	775AL-33	775AL-33	N/A	33	28S	21E	MD	35.44714	-119.71059	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4048	4	South Belridge	Belridge	775DL-29	775DL-29	N/A	29	28S	21E	MD	35.46151	-119.72776	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4049	8	South Belridge	Belridge	775DL-33	775DL-33	N/A	33	28S	21E	MD	35.44706	-119.70977	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4050	8	South Belridge	Belridge	775EL-33	775EL-33	N/A	33	28S	21E	MD	35.44859	-119.71153	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4051	8	South Belridge	Belridge	775GL-33	775GL-33	N/A	33	28S	21E	MD	35.44862	-119.71027	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4052	4	South Belridge	Belridge	775LL-29	775LL-29	N/A	29	28S	21E	MD	35.46218	-119.72935	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4053	8	South Belridge	Belridge	775LL-33	775LL-33	N/A	33	28S	21E	MD	35.44773	-119.71147	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4054	4	South Belridge	Belridge	775NL-29	775NL-29	N/A	29	28S	21E	MD	35.46179	-119.72842	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4055	8	South Belridge	Belridge	775NL-33	775NL-33	N/A	33	28S	21E	MD	35.44783	-119.71063	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4056	8	South Belridge	Belridge	775ZL-33	775ZL-33	N/A	33	28S	21E	MD	35.44803	-119.70994	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4057	4	South Belridge	Belridge	776CL-29	776CL-29	N/A	29	28S	21E	MD	35.46060	-119.72894	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4058	4	South Belridge	Belridge	776DL-29	776DL-29	N/A	29	28S	21E	MD	35.45958	-119.72760	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4059	4	South Belridge	Belridge	776EL-29	776EL-29	N/A	29	28S	21E	MD	35.46097	-119.72932	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4060	4	South Belridge	Belridge	776GL-29	776GL-29	N/A	29	28S	21E	MD	35.46131	-119.72846	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4061	8	South Belridge	Belridge	776GL-33	776GL-33	N/A	33	28S	21E	MD	35.44677	-119.71031	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4062	4	South Belridge	Belridge	776NL-29	776NL-29	N/A	29	28S	21E	MD	35.45957	-119.72887	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4063	4	South Belridge	Belridge	776ZL-29	776ZL-29	N/A	29	28S	21E	MD	35.46059	-119.72781	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4064	8	South Belridge	Belridge	783LL-33	783LL-33	N/A	33	28S	21E	MD	35.45120	-119.70936	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector

Aera Energy LLC - South Belridge Oil Field
Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL4065	8	South Belridge	Belridge	784AL-33	784AL-33	N/A	33	28S	21E	MD	35.44874	-119.70885	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4066	8	South Belridge	Belridge	784EL-33	784EL-33	N/A	33	28S	21E	MD	35.45010	-119.70981	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4067	8	South Belridge	Belridge	784LL-33	784LL-33	N/A	33	28S	21E	MD	35.44926	-119.70903	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4068	8	South Belridge	Belridge	785AL-33	785AL-33	N/A	33	28S	21E	MD	35.44692	-119.70882	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4069	8	South Belridge	Belridge	785CL-33	785CL-33	N/A	33	28S	21E	MD	35.44772	-119.70886	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4070	8	South Belridge	Belridge	785DL-33	785DL-33	N/A	33	28S	21E	MD	35.44701	-119.70759	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4071	8	South Belridge	Belridge	785EL-33	785EL-33	N/A	33	28S	21E	MD	35.44851	-119.70908	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4072	8	South Belridge	Belridge	785NL-33	785NL-33	N/A	33	28S	21E	MD	35.44789	-119.70866	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4073	4	South Belridge	Belridge	786AL-29	786AL-29	N/A	29	28S	21E	MD	35.45957	-119.72660	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4074	8	South Belridge	Belridge	786BL-33	786BL-33	N/A	33	28S	21E	MD	35.44620	-119.70743	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4075	4	South Belridge	Belridge	786CL-29	786CL-29	N/A	29	28S	21E	MD	35.46057	-119.72671	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4076	8	South Belridge	Belridge	786CL-33	786CL-33	N/A	33	28S	21E	MD	35.44620	-119.70868	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4077	4	South Belridge	Belridge	786EL-29	786EL-29	N/A	29	28S	21E	MD	35.46088	-119.72721	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4078	8	South Belridge	Belridge	786EL-33	786EL-33	N/A	33	28S	21E	MD	35.44608	-119.70913	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4079	8	South Belridge	Belridge	786GR-33	786GR-33	N/A	33	28S	21E	MD	35.44590	-119.70800	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4080	4	South Belridge	Belridge	786LL-29	786LL-29	N/A	29	28S	21E	MD	35.45992	-119.72702	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4081	8	South Belridge	Belridge	786NL-33	786NL-33	N/A	33	28S	21E	MD	35.44541	-119.70812	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4082	4	South Belridge	Belridge	786ZL-29	786ZL-29	N/A	29	28S	21E	MD	35.46060	-119.72555	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4083	8	South Belridge	Belridge	786ZL-33	786ZL-33	N/A	33	28S	21E	MD	35.44585	-119.70753	085-230-07	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4084	4	South Belridge	Belridge	787GL-29	787GL-29	N/A	29	28S	21E	MD	35.45906	-119.72596	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4085	4	South Belridge	Belridge	787ZL-29	787ZL-29	N/A	29	28S	21E	MD	35.45874	-119.72547	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4086	4	South Belridge	Belridge	796LL-29	796LL-29	N/A	29	28S	21E	MD	35.45986	-119.72507	085-230-05	Steam					Active	31		Steam Injection Skid with 8) 2", 6) 1", 17) 1/2"	< 1 BBL/YR	Steam Injector
BL4090	5	South Belridge	Belridge	6678F-28	6678F-28	N/A	28	28S	21E	MD	35.45721	-119.71120	085-230-26	Steam					Active	5		Steam Injection Skid with 4) 1", 1) 2"	< 1 BBL/YR	Steam Injector
BL4091	5	South Belridge	Belridge	678HAAR-28	678HAAR-28	N/A	28	28S	21E	MD	35.45746	-119.71001	085-230-26	Steam					Active	5		Steam Injection Skid with 4) 1", 1) 2"	< 1 BBL/YR	Steam Injector
BL4092	5	South Belridge	Belridge	678MAAR-28	678MAAR-28	N/A	28	28S	21E	MD	35.45626	-119.71074	085-230-26	Steam					Active	5		Steam Injection Skid with 4) 1", 1) 2"	< 1 BBL/YR	Steam Injector
BL4093	5	South Belridge	Belridge	678PAAR-28	678PAAR-28	N/A	28	28S	21E	MD	35.45632	-119.70980	085-230-26	Steam					Active	5		Steam Injection Skid with 4) 1", 1) 2"	< 1 BBL/YR	Steam Injector
BL4094	5	South Belridge	Belridge	688MAAR-28	688MAAR-28	N/A	28	28S	21E	MD	35.45694	-119.70889	085-230-26	Steam					Active	5		Steam Injection Skid with 4) 1", 1) 2"	< 1 BBL/YR	Steam Injector
BL4095	8	South Belridge	Belridge	671HAA-33	671HAA-33	N/A	33	28S	21E	MD	35.45545	-119.70984	085-230-07	Steam					Active	5		Steam Injection Skid with 4) 1", 1) 2"	< 1 BBL/YR	Steam Injector
BL4096	5	South Belridge	Belridge	6688P-28	6688P-28	N/A	28	28S	21E	MD	35.45628	-119.70777	085-230-26	Steam					Active	5		Steam Injection Skid with 4) 1", 1) 2"	< 1 BBL/YR	Steam Injector
BL4097	5	South Belridge	Belridge	668PAA-28	668PAA-28	N/A	28	28S	21E	MD	35.45652	-119.71227	085-230-26	Steam					Active	5		Steam Injection Skid with 4) 1", 1) 2"	< 1 BBL/YR	Steam Injector
BL4098	8	South Belridge	Belridge	681HAA-33	681HAA-33	N/A	33	28S	21E	MD	35.45542	-119.70771	085-230-07	Steam					Active	5		Steam Injection Skid with 4) 1", 1) 2"	< 1 BBL/YR	Steam Injector
BL4099	8	South Belridge	Belridge	681FAAR-33	681FAAR-33	N/A	33	28S	21E	MD	35.45538	-119.70900	085-230-07	Steam					Active	5		Steam Injection Skid with 4) 1", 1) 2"	< 1 BBL/YR	Steam Injector
BL4100	5	South Belridge	Belridge	4" Blowdown Valve	PAA field blowdown	N/A	28	28S	21E	MD	35.45598	-119.70869	085-230-26	Steam					Active	1		Used for energy control when maintenance is being performed.	< 1 BBL/YR	Blowdown
BL4101	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 1 DBB	N/A	33	28S	21E	MD	35.45486	-119.71636	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4102	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 2 DBB	N/A	33	28S	21E	MD	35.45486	-119.71640	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4103	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 3 DBB	N/A	33	28S	21E	MD	35.45410	-119.71627	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4104	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 4 DBB	N/A	33	28S	21E	MD	35.45331	-119.71643	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4105	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 5 DBB	N/A	33	28S	21E	MD	35.45273	-119.71629	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4106	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 6 DBB	N/A	33	28S	21E	MD	35.45202	-119.71633	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4107	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 7 DBB	N/A	33	28S	21E	MD	35.45107	-119.71478	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4108	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 7-8 14" DBB	N/A	33	28S	21E	MD	35.45093	-119.71607	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown

Aera Energy LLC - South Belridge Oil Field
Potential Discharge Locations

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BL4109	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 8 DBB	N/A	33	28S	21E	MD	35.45007	-119.71605	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4110	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 9 DBB	N/A	33	28S	21E	MD	35.44897	-119.71283	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4111	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 10 DBB	N/A	33	28S	21E	MD	35.44895	-119.71095	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4112	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 11A DBB	N/A	33	28S	21E	MD	35.44881	-119.70960	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4113	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 11B DBB	N/A	33	28S	21E	MD	35.44731	-119.70833	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4114	8	South Belridge	Belridge	1" Blowdown Valve	Lateral 11C DBB	N/A	33	28S	21E	MD	35.44731	-119.70753	085-230-07	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4115	9	South Belridge	Belridge	1" Blowdown Valve	Lateral 12 DBB	N/A	33	28S	21E	MD	35.44634	-119.70709	085-220-22	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4116	9	South Belridge	Belridge	1" Blowdown Valve	Lateral 13A DBB	N/A	33	28S	21E	MD	35.44460	-119.70680	085-220-22	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4117	9	South Belridge	Belridge	1" Blowdown Valve	Lateral 13B DBB	N/A	33	28S	21E	MD	35.44374	-119.70686	085-220-22	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4118	9	South Belridge	Belridge	1" Blowdown Valve	Lateral 14 DBB	N/A	33	28S	21E	MD	35.44296	-119.70653	085-220-22	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4119	9	South Belridge	Belridge	1" Blowdown Valve	Lateral 15 DBB	N/A	34	28S	21E	MD	35.44218	-119.70353	085-220-22	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4120	5	South Belridge	Belridge	1" Blowdown Valve	Lateral A West DBB	N/A	28	28S	21E	MD	35.45556	-119.71630	085-230-26	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4121	5	South Belridge	Belridge	1" Blowdown Valve	Lateral A East DBB	N/A	28	28S	21E	MD	35.45556	-119.71619	085-230-26	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4122	5	South Belridge	Belridge	1" Blowdown Valve	Lateral A North DBB	N/A	28	28S	21E	MD	35.45835	-119.72130	085-230-26	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4123	5	South Belridge	Belridge	1" Blowdown Valve	Lateral A 6" DBB	N/A	28	28S	21E	MD	35.45676	-119.72277	085-230-26	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4124	5	South Belridge	Belridge	1" Blowdown Valve	Lateral A 8" DBB	N/A	28	28S	21E	MD	35.45676	-119.72274	085-230-26	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4125	5	South Belridge	Belridge	1" Blowdown Valve	Lateral A-B 12" DBB	N/A	28	28S	21E	MD	35.45835	-119.72130	085-230-26	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4126	5	South Belridge	Belridge	1" Blowdown Valve	Lateral B DBB	N/A	28	28S	21E	MD	35.45898	-119.72261	085-230-26	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4127	4	South Belridge	Belridge	1" Blowdown Valve	Lateral C DBB	N/A	29	28S	21E	MD	35.46017	-119.72748	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4128	4	South Belridge	Belridge	1" Blowdown Valve	Lateral D DBB	N/A	29	28S	21E	MD	35.46048	-119.72826	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4129	4	South Belridge	Belridge	1" Blowdown Valve	Lateral E DBB	N/A	29	28S	21E	MD	35.46298	-119.73136	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4130	4	South Belridge	Belridge	1" Blowdown Valve	Lateral E-F 12" DBB	N/A	29	28S	21E	MD	35.46307	-119.73147	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4131	4	South Belridge	Belridge	1" Blowdown Valve	Lateral F DBB	N/A	29	28S	21E	MD	35.46311	-119.73152	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4132	4	South Belridge	Belridge	1" Blowdown Valve	Lateral G DBB	N/A	29	28S	21E	MD	35.46324	-119.73168	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4133	4	South Belridge	Belridge	1" Blowdown Valve	Lateral H DBB	N/A	29	28S	21E	MD	35.46333	-119.73195	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4134	4	South Belridge	Belridge	1" Blowdown Valve	Lateral J DBB	N/A	29	28S	21E	MD	35.46628	-119.73545	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4135	4	South Belridge	Belridge	1" Blowdown Valve	Lateral K DBB	N/A	29	28S	21E	MD	35.46654	-119.73417	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4136	4	South Belridge	Belridge	1" Blowdown Valve	Lateral L DBB	N/A	29	28S	21E	MD	35.46654	-119.73417	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4137	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral L-N 14" DBB	N/A	29	28S	21E	MD	35.46650	-119.73562	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4138	4	South Belridge	Belridge	1" Blowdown Valve	Lateral N DBB	N/A	29	28S	21E	MD	35.46700	-119.73626	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown

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Potential Discharge Locations

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BL4139	4	South Belridge	Belridge	1" Blowdown Valve	Lateral P DBB	N/A	29	28S	21E	MD	35.46804	-119.73727	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4140	4	South Belridge	Belridge	1" Blowdown Valve	Lateral Q DBB	N/A	29	28S	21E	MD	35.46810	-119.73760	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4141	4	South Belridge	Belridge	1" Blowdown Valve	Lateral R DBB	N/A	29	28S	21E	MD	35.46905	-119.73875	085-230-05	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4142	2	South Belridge	Belridge	1" Blowdown Valve	Lateral S DBB	N/A	29	28S	21E	MD	35.47032	-119.73918	085-210-18	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4143	2	South Belridge	Belridge	1" Blowdown Valve	Lateral T DBB	N/A	29	28S	21E	MD	35.47034	-119.73920	085-210-18	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4144	2	South Belridge	Belridge	1" Blowdown Valve	Lateral U DBB	N/A	20	28S	21E	MD	35.47042	-119.73908	085-210-18	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4145	2	South Belridge	Belridge	1" Blowdown Valve	Lateral V DBB	N/A	20	28S	21E	MD	35.47155	-119.73908	085-210-18	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4146	2	South Belridge	Belridge	1" Blowdown Valve	Lateral W DBB	N/A	20	28S	21E	MD	35.47265	-119.73925	085-210-18	Steam					Active	1		Used for energy control when maintenance is done on the lateral	< 1 BBL/YR	Blowdown
BL4147	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 1 Blowdown	N/A	33	28S	21E	MD	35.45444	-119.71266	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4148	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 2 Blowdown	N/A	33	28S	21E	MD	35.45543	-119.72073	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4149	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 3 Blowdown	N/A	33	28S	21E	MD	35.45360	-119.71210	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4150	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 4 Blowdown	N/A	33	28S	21E	MD	35.45482	-119.72251	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4151	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 5 Blowdown	N/A	33	28S	21E	MD	35.45157	-119.71342	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4152	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 6 Blowdown	N/A	33	28S	21E	MD	35.45106	-119.71811	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4153	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 7 Blowdown	N/A	33	28S	21E	MD	35.44904	-119.71416	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4154	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 8 Blowdown West	N/A	33	28S	21E	MD	35.45004	-119.71742	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4155	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 8 Blowdown East	N/A	33	28S	21E	MD	35.44922	-119.71608	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4156	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 9 Blowdown	N/A	33	28S	21E	MD	35.44840	-119.71440	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4157	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 10 Blowdown	N/A	33	28S	21E	MD	35.45196	-119.71076	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4158	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 11A Blowdown	N/A	33	28S	21E	MD	35.44900	-119.70901	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4159	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 11B Blowdown	N/A	33	28S	21E	MD	35.44730	-119.70821	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4160	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 11C Blowdown	N/A	33	28S	21E	MD	35.44955	-119.70800	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4161	9	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 12 Blowdown South	N/A	33	28S	21E	MD	35.44423	-119.70683	085-220-22	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4162	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 12 Blowdown West1	N/A	33	28S	21E	MD	35.44638	-119.70922	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4163	8	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 12 Blowdown West2	N/A	33	28S	21E	MD	35.44536	-119.70836	085-230-07	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4164	9	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 13A Blowdown	N/A	34	28S	21E	MD	35.44486	-119.70385	085-220-22	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4165	9	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 13B Blowdown	N/A	34	28S	21E	MD	35.44380	-119.70048	085-220-22	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4166	9	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 14 Blowdown	N/A	34	28S	21E	MD	35.44292	-119.69943	085-220-22	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4167	9	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral 15 Blowdown	N/A	34	28S	21E	MD	35.44251	-119.69931	085-220-22	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4168	9	South Belridge	Belridge	2" Blowdown Valve	Lateral 15 14" Blowdown	N/A	34	28S	21E	MD	35.44218	-119.70353	085-220-22	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4169	5	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral A West Blowdown	N/A	28	28S	21E	MD	35.45557	-119.71751	085-230-26	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4170	5	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral A Extension Blowdown	N/A	28	28S	21E	MD	35.45641	-119.72012	085-230-26	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4171	5	South Belridge	Belridge	2 1/2" Blowdown Valve	Lateral A Ext. Blowdown	N/A	28	28S	21E	MD	35.45641	-119.72012	085-230-26	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4172	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral A 6" Blowdown	N/A	28	28S	21E	MD	35.45972	-119.72592	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4173	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral A 8" Blowdown	N/A	29	28S	21E	MD	35.45905	-119.72652	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4174	5	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral B Blowdown	N/A	28	28S	21E	MD	35.46015	-119.72489	085-230-26	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4175	5	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral B 2" Tie Line Blowdown	N/A	28	28S	21E	MD	35.45898	-119.72261	085-230-26	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4176	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral C Blowdown	N/A	29	28S	21E	MD	35.46045	-119.72566	085-230-05	Steam					Active	5		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4177	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral D Blowdown	N/A	29	28S	21E	MD	35.46209	-119.73165	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4178	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral E Blowdown	N/A	29	28S	21E	MD	35.46143	-119.72812	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4179	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral F Blowdown	N/A	29	28S	21E	MD	35.46298	-119.73406	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown

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BL4180	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral G Blowdown	N/A	29	28S	21E	MD	35.46420	-119.73098	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4181	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral H Blowdown	N/A	29	28S	21E	MD	35.46467	-119.73596	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4182	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral J Blowdown	N/A	29	28S	21E	MD	35.46611	-119.73636	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4183	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral K Blowdown	N/A	29	28S	21E	MD	35.46617	-119.73459	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4184	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral L East Blowdown	N/A	29	28S	21E	MD	35.46843	-119.73620	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4185	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral L West Blowdown	N/A	29	28S	21E	MD	35.46763	-119.73686	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4186	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral N Blowdown	N/A	29	28S	21E	MD	35.46574	-119.73827	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4187	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral P Blowdown	N/A	29	28S	21E	MD	35.46901	-119.73693	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4188	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral Q Blowdown	N/A	29	28S	21E	MD	35.46750	-119.74028	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4189	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral R Blowdown	N/A	29	28S	21E	MD	35.46830	-119.74135	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4190	4	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral S Blowdown	N/A	29	28S	21E	MD	35.46932	-119.74195	085-230-05	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4191	2	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral T Blowdown	N/A	20	28S	21E	MD	35.47021	-119.73706	085-210-18	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4192	2	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral U Blowdown	N/A	20	28S	21E	MD	35.47155	-119.74177	085-210-18	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4193	2	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral V Blowdown	N/A	20	28S	21E	MD	35.47105	-119.73819	085-210-18	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4194	2	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral W Blowdown	N/A	20	28S	21E	MD	35.47354	-119.74143	085-210-18	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4195	2	South Belridge	Belridge	1 1/2" Blowdown Valve	Lateral W 14" Blowdown	N/A	20	28S	21E	MD	35.47271	-119.73923	085-210-18	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4196	5	South Belridge	Belridge	3" Blowdown Valve	Lateral A-B Blowdown	N/A	28	28S	21E	MD	35.45876	-119.72151	085-230-26	Steam					Active	1		Used on startup to purge construction debris form the line	< 1 BBL/YR	Blowdown
BL4200	4	South Belridge	Belridge	511AR2-29		N/A	29	28S	21E	MD	35.46830	-119.74263	085-230-05	Produced Water					Active	6	511AR2-29 Single Water Injector	Water injected into ground	< 1 Barrel	Water Injector
BL4201	4	South Belridge	Belridge	511CR2-29		N/A	29	28S	21E	MD	35.46961	-119.74220	085-230-05	Produced Water					Active	6	511CR2-29 Single Water Injector(picture BL4200)	Water injected into ground	< 1 Barrel	Water Injector
BL4202	4	South Belridge	Belridge	511DR2-29		N/A	29	28S	21E	MD	35.46866	-119.74121	085-230-05	Produced Water					Active	6	511DR2-29 Single Water Injector(picture BL4200)	Water injected into ground	< 1 Barrel	Water Injector
BL4203	4	South Belridge	Belridge	511ER2-29		N/A	29	28S	21E	MD	35.46995	-119.74218	085-230-05	Produced Water					Active	10	511ER2-29 Dual Water Injector (picture 4203)	Water injected into ground	< 1 Barrel	Water Injector
BL4203	4	South Belridge	Belridge	511GR2-29		N/A	20	28S	21E	MD	35.46990	-119.74178	085-230-05	Produced Water					Active	6	511GR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4203	4	South Belridge	Belridge	511LR3-29		N/A	28	28S	21E	MD	35.46896	-119.74262	085-230-05	Produced Water					Active	10	511LR3-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4204	4	South Belridge	Belridge	511NR3-29		N/A	28	28S	21E	MD	35.46892	-119.74172	085-230-05	Produced Water					Active	10	511NR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4205	4	South Belridge	Belridge	511ZR2-29		N/A	29	28S	21E	MD	35.46960	-119.74126	085-230-05	Produced Water					Active	6	511ZR2-29 Single Water Injector(picture BL4200)	Water injected into ground	< 1 Barrel	Water Injector
BL4206	4	South Belridge	Belridge	512CR2-29		N/A	29	28S	21E	MD	35.46787	-119.74217	085-230-05	Produced Water					Active	10	512CR2-29 Dual Water Injector (picture 4203)	Water injected into ground	< 1 Barrel	Water Injector
BL4207	4	South Belridge	Belridge	512DR2-29		N/A	29	28S	21E	MD	35.46686	-119.74110	085-230-05	Produced Water					Active	6	512DR2-29 Dual Water Injector (picture 4203)	Water injected into ground	< 1 Barrel	Water Injector
BL4208	4	South Belridge	Belridge	512GR3-29		N/A	29	28S	21E	MD	35.46848	-119.74158	085-230-05	Produced Water					Active	6	512GR3-29 Single Water Injector(picture BL4200)	Water injected into ground	< 1 Barrel	Water Injector
BL4209	4	South Belridge	Belridge	512NR3-29		N/A	29	28S	21E	MD	35.46728	-119.74157	085-230-05	Produced Water					Active	10	512NR3-29 Dual Water Injector (picture 4203)	Water injected into ground	< 1 Barrel	Water Injector
BL4210	4	South Belridge	Belridge	512ZR-29		N/A	29	28S	21E	MD	35.46767	-119.74109	085-230-05	Produced Water					Active	10	512ZR-29 Single Water Injector(picture BL4200)	Water injected into ground	< 1 Barrel	Water Injector
BL4211	9	South Belridge	Belridge	513ER-29		N/A	29	28S	21E	MD	35.46655	-119.74220	085-230-05	Produced Water					Active	6	513ER-29 Dual Water Injector (picture 4203)	Water injected into ground	< 1 Barrel	Water Injector
BL4212	9	South Belridge	Belridge	515AR-34		N/A	29	28S	21E	MD	35.44692	-119.70679	085-220-22	Produced Water					Active	10	515AR-34 Single Water Injector(picture BL4200)	Water injected into ground	< 1 Barrel	Water Injector
BL4213	9	South Belridge	Belridge	515CR4-34		N/A	29	28S	21E	MD	35.44775	-119.70658	085-220-22	Produced Water					Active	6	515CR4-34 Dual Water Injector (picture 4203)	Water injected into ground	< 1 Barrel	Water Injector
BL4214	9	South Belridge	Belridge	515ER2-34		N/A	29	28S	21E	MD	35.44832	-119.70715	085-220-22	Produced Water					Active	10	515ER2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4215	9	South Belridge	Belridge	515LR3-34		N/A	34	28S	21E	MD	35.44722	-119.70695	085-220-22	Produced Water					Active	6	515LR3-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4216	9	South Belridge	Belridge	516AR-34		N/A	34	28S	21E	MD	35.44512	-119.70657	085-220-22	Produced Water					Active	10	516AR-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4217	2	South Belridge	Belridge	516CR2-34		N/A	34	28S	21E	MD	35.44594	-119.70635	085-220-22	Produced Water					Active	10	516CR2-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4218	9	South Belridge	Belridge	516DR2-20		N/A	34	28S	21E	MD	35.47414	-119.74117	085-210-18	Produced Water					Active	6	516DR2-20 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4219	5	South Belridge	Belridge	516ER2-34		N/A	34	28S	21E	MD	35.44657	-119.70671	085-220-22	Produced Water					Active	6	516ER2-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4220	9	South Belridge	Belridge	516LR-28		N/A	34	28S	21E	MD	35.45991	-119.72502	085-230-26	Produced Water					Active	6	516LR-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4221	2	South Belridge	Belridge	516NR2-34		N/A	20	28S	21E	MD	35.44544	-119.70618	085-220-22	Produced Water					Active	10	516NR2-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4222	5	South Belridge	Belridge	517AR2-20		N/A	34	28S	21E	MD	35.47231	-119.74224	085-210-18	Produced Water					Active	6	517AR2-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4223	9	South Belridge	Belridge	517AR-28		N/A	28	28S	21E	MD	35.45776	-119.72445	085-230-26	Produced Water					Inactive	10	517AR-28 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4224	2	South Belridge	Belridge	517CR2-34		N/A	34	28S	21E	MD	35.44443	-119.70639	085-220-22	Produced Water					Active	6	517CR2-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
				517CR4-20		N/A	20	28S	21E	MD	35.47314	-119.74222	085-210-18	Produced Water					Active	6	517CR4-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/Yr]	Category
BL4225	2	South Belridge	Belridge	517DR2-20		N/A	28	28S	21E	MD	35.47247	-119.74086	085-210-18	Produced Water					Active	6	517DR2-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4226	5	South Belridge	Belridge	517DR-28		N/A	34	28S	21E	MD	35.45771	-119.72335	085-230-26	Produced Water					Active	6	517DR-28 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4227	9	South Belridge	Belridge	517DR3-34		N/A	20	28S	21E	MD	35.44321	-119.70558	085-220-22	Produced Water					Active	6	517DR3-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4228	5	South Belridge	Belridge	517ER2-28		N/A	20	28S	21E	MD	35.45899	-119.72459	085-230-26	Produced Water					Active	6	517ER2-28 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4229	2	South Belridge	Belridge	517ER3-20		N/A	28	28S	21E	MD	35.47360	-119.74266	085-210-18	Produced Water					Active	6	517ER3-20 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4230	5	South Belridge	Belridge	517GR-28		N/A	34	28S	21E	MD	35.45915	-119.72395	085-230-26	Produced Water					Active	6	517GR-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4231	2	South Belridge	Belridge	517GR3-20		N/A	28	28S	21E	MD	35.47344	-119.74150	085-210-18	Produced Water					Active	6	517GR3-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4234	9	South Belridge	Belridge	517NR3-34		N/A	20	28S	21E	MD	35.44410	-119.70606	085-220-22	Produced Water					Active	6	517NR3-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4235	5	South Belridge	Belridge	517ZR-28		N/A	34	28S	21E	MD	35.45893	-119.72327	085-230-26	Produced Water					Active	6	517ZR-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4237	2	South Belridge	Belridge	517ZR3-20		N/A	20	28S	21E	MD	35.47306	-119.74111	085-210-18	Produced Water					Active	6	517ZR3-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4238	9	South Belridge	Belridge	517ZR-34		N/A	34	28S	21E	MD	35.44446	-119.70573	085-220-22	Produced Water					Active	6	517ZR-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4239	2	South Belridge	Belridge	518AR2-20		N/A	20	28S	21E	MD	35.47010	-119.74219	085-210-18	Produced Water					Active	6	518AR2-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4240	2	South Belridge	Belridge	518DR3-20		N/A	20	28S	21E	MD	35.47046	-119.74107	085-210-18	Produced Water					Active	6	518DR3-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4241	2	South Belridge	Belridge	518ER2-20		N/A	20	28S	21E	MD	35.47184	-119.74264	085-210-18	Produced Water					Active	10	518ER2-20 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4242	2	South Belridge	Belridge	518GR4-20		N/A	20	28S	21E	MD	35.47182	-119.74167	085-210-18	Produced Water					Active	6	518GR4-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4243	2	South Belridge	Belridge	518NR3-20		N/A	20	28S	21E	MD	35.47091	-119.74167	085-210-18	Produced Water					Active	6	518NR3-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4244	2	South Belridge	Belridge	518ZR2-20		N/A	20	28S	21E	MD	35.47125	-119.74109	085-210-18	Produced Water					Active	6	518ZR2-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4245	4	South Belridge	Belridge	521DR3-29		N/A	29	28S	21E	MD	35.46861	-119.73869	085-230-05	Produced Water					Active	6	521DR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4246	4	South Belridge	Belridge	521ER4-29		N/A	29	28S	21E	MD	35.46980	-119.74033	085-230-05	Produced Water					Active	6	521ER4-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4247	4	South Belridge	Belridge	521GR4-29		N/A	29	28S	21E	MD	35.46983	-119.73947	085-230-05	Produced Water					Active	6	521GR4-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4248	4	South Belridge	Belridge	521NR4-29		N/A	29	28S	21E	MD	35.46927	-119.73939	085-230-05	Produced Water					Active	6	521NR4-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4249	4	South Belridge	Belridge	521ZR2-29		N/A	29	28S	21E	MD	35.46946	-119.73878	085-230-05	Produced Water					Active	6	521ZR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4250	8	South Belridge	Belridge	521ZR2-33		N/A	33	28S	21E	MD	35.45528	-119.72137	085-230-07	Produced Water					Active	6	521ZR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4251	4	South Belridge	Belridge	522AR3-29		N/A	29	28S	21E	MD	35.46681	-119.73990	085-230-05	Produced Water					Active	6	522AR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4252	4	South Belridge	Belridge	522CR2-29		N/A	29	28S	21E	MD	35.46762	-119.74031	085-230-05	Produced Water					Active	6	522CR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4253	4	South Belridge	Belridge	522DR2-29		N/A	29	28S	21E	MD	35.46688	-119.73918	085-230-05	Produced Water					Active	6	522DR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4254	4	South Belridge	Belridge	522ER2-29		N/A	29	28S	21E	MD	35.46810	-119.74062	085-230-05	Produced Water					Active	6	522ER2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4255	4	South Belridge	Belridge	522GR3-29		N/A	29	28S	21E	MD	35.46800	-119.73957	085-230-05	Produced Water					Active	6	522GR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4256	4	South Belridge	Belridge	522LR3-29		N/A	29	28S	21E	MD	35.46713	-119.74045	085-230-05	Produced Water					Active	6	522LR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4257	4	South Belridge	Belridge	522NR3-29		N/A	29	28S	21E	MD	35.46722	-119.73956	085-230-05	Produced Water					Active	6	522NR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4258	4	South Belridge	Belridge	522ZR2-29		N/A	29	28S	21E	MD	35.46795	-119.73862	085-230-05	Produced Water					Active	6	522ZR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4259	4	South Belridge	Belridge	523CR2-29		N/A	29	28S	21E	MD	35.46592	-119.73992	085-230-05	Produced Water					Active	6	523CR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4260	4	South Belridge	Belridge	523DR2-29		N/A	29	28S	21E	MD	35.46513	-119.73887	085-230-05	Produced Water					Active	10	523DR2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4261	4	South Belridge	Belridge	523ER3-29		N/A	29	28S	21E	MD	35.46630	-119.74064	085-230-05	Produced Water					Active	6	523ER3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4262	4	South Belridge	Belridge	523GR3-29		N/A	29	28S	21E	MD	35.46640	-119.73952	085-230-05	Produced Water					Active	6	523GR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4263	4	South Belridge	Belridge	523NR3-29		N/A	29	28S	21E	MD	35.46548	-119.73928	085-230-05	Produced Water					Active	10	523NR3-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4264	4	South Belridge	Belridge	523ZR2-29		N/A	29	28S	21E	MD	35.46604	-119.73905	085-230-05	Produced Water					Active	6	523ZR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4265	2	South Belridge	Belridge	527AR2-20		N/A	20	28S	21E	MD	35.47235	-119.74037	085-210-18	Produced Water					Active	6	527AR2-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4266	9	South Belridge	Belridge	527AR2-34		N/A	34	28S	21E	MD	35.44330	-119.70448	085-220-22	Produced Water					Active	6	527AR2-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4267	5	South Belridge	Belridge	527AR-28		N/A	28	28S	21E	MD	35.45800	-119.72213	085-230-26	Produced Water					Active	6	527AR-28 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4268	2	South Belridge	Belridge	527CR2-20		N/A	20	28S	21E	MD	35.47328	-119.73994	085-210-18	Produced Water					Active	10	527CR2-20 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4269	9	South Belridge	Belridge	527CR-34		N/A	34	28S	21E	MD	35.44424	-119.70438	085-220-22	Produced Water					Active	6	527CR-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4270	5	South Belridge	Belridge	527DR2-28		N/A	28	28S	21E	MD	35.45788	-119.72112	085-230-26	Produced Water					Active	10	527DR2-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4271	2	South Belridge	Belridge	527ER4-20		N/A	20	28S	21E	MD	35.47349	-119.74063	085-210-18	Produced Water					Active	10	527ER4-20 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4272	9	South Belridge	Belridge	527ER4-34		N/A	34	28S	21E	MD	35.44442	-119.70487	085-220-22	Produced Water					Active	6	527ER4-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL4272	5	South Belridge	Belridge	527LR-28		N/A	33	28S	21E	MD	35.45825	-119.72263	085-230-26	Produced Water					Active	6	527LR-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4273	2	South Belridge	Belridge	527LR3-20		N/A	28	28S	21E	MD	35.47269	-119.74044	085-210-18	Produced Water					Active	10	527LR3-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4274	9	South Belridge	Belridge	527LR3-34		N/A	20	28S	21E	MD	35.44364	-119.70464	085-220-22	Produced Water					Active	6	527LR3-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4275	2	South Belridge	Belridge	527NR3-20		N/A	34	28S	21E	MD	35.47299	-119.73956	085-210-18	Produced Water					Active	6	527NR3-20 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4276	5	South Belridge	Belridge	527NR3-28		N/A	20	28S	21E	MD	35.45812	-119.72167	085-230-26	Produced Water					Active	10	527NR3-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4277	2	South Belridge	Belridge	528AR2-20		N/A	28	28S	21E	MD	35.47050	-119.74021	085-210-18	Produced Water					Active	10	528AR2-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4278	5	South Belridge	Belridge	528CR2-28		N/A	20	28S	21E	MD	35.45694	-119.72204	085-230-26	Produced Water					Active	6	528CR2-28 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4279	2	South Belridge	Belridge	528CR3-20		N/A	28	28S	21E	MD	35.47120	-119.73985	085-210-18	Produced Water					Active	6	528CR3-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4280	2	South Belridge	Belridge	528DR-20		N/A	20	28S	21E	MD	35.47076	-119.73870	085-210-18	Produced Water					Active	6	528DR-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4281	5	South Belridge	Belridge	528ER2-28		N/A	20	28S	21E	MD	35.45724	-119.72260	085-230-26	Produced Water					Active	6	528ER2-28 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4282	2	South Belridge	Belridge	528ER3-20		N/A	28	28S	21E	MD	35.47224	-119.74041	085-210-18	Produced Water					Active	6	528ER3-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4283	5	South Belridge	Belridge	528GR2-28		N/A	20	28S	21E	MD	35.45744	-119.72183	085-230-26	Produced Water					Active	6	528GR2-28 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4284	5	South Belridge	Belridge	528LR2-28		N/A	28	28S	21E	MD	35.45614	-119.72283	085-230-26	Produced Water					Active	6	528LR2-28 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4285	2	South Belridge	Belridge	528LR3-20		N/A	28	28S	21E	MD	35.47114	-119.74029	085-210-18	Produced Water					Active	6	528LR3-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4286	9	South Belridge	Belridge	528LR3-34		N/A	20	28S	21E	MD	35.44195	-119.70485	085-220-22	Produced Water					Active	6	528LR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4287	2	South Belridge	Belridge	528NR3-20		N/A	34	28S	21E	MD	35.47104	-119.73974	085-210-18	Produced Water					Active	10	528NR3-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4288	5	South Belridge	Belridge	528ZR2-28		N/A	20	28S	21E	MD	35.45695	-119.72093	085-230-26	Produced Water					Active	6	528ZR2-28 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4289	4	South Belridge	Belridge	531AR3-29		N/A	28	28S	21E	MD	35.46891	-119.73736	085-230-05	Produced Water					Active	6	531AR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4290	4	South Belridge	Belridge	531CR-29		N/A	29	28S	21E	MD	35.46952	-119.73784	085-230-05	Produced Water					Active	6	531CR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4291	4	South Belridge	Belridge	531DR-29		N/A	29	28S	21E	MD	35.46857	-119.73674	085-230-05	Produced Water					Active	6	531DR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4292	4	South Belridge	Belridge	531NR5-29		N/A	29	28S	21E	MD	35.46905	-119.73734	085-230-05	Produced Water					Active	6	531NR5-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4293	4	South Belridge	Belridge	531QR-29		N/A	29	28S	21E	MD	35.46989	-119.73713	085-230-05	Produced Water					Active	6	531QR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4294	4	South Belridge	Belridge	531ZR-29		N/A	29	28S	21E	MD	35.46964	-119.73671	085-230-05	Produced Water					Active	10	531ZR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4295	8	South Belridge	Belridge	531ZR-33		N/A	29	28S	21E	MD	35.45448	-119.71901	085-230-07	Produced Water					Active	10	531ZR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4295	4	South Belridge	Belridge	532DR-29		N/A	29	28S	21E	MD	35.46705	-119.73681	085-230-05	Produced Water					Active	10	532DR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4296	4	South Belridge	Belridge	533CR2-29		N/A	33	28S	21E	MD	35.46584	-119.73767	085-230-05	Produced Water					Active	6	533CR2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4297	4	South Belridge	Belridge	533ER4-29		N/A	29	28S	21E	MD	35.46622	-119.73813	085-230-05	Produced Water					Active	6	533ER4-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4298	4	South Belridge	Belridge	533LR3-29		N/A	29	28S	21E	MD	35.46556	-119.73843	085-230-05	Produced Water					Active	10	533LR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4299	8	South Belridge	Belridge	533ZR2-33		N/A	29	28S	21E	MD	35.45107	-119.71896	085-230-07	Produced Water					Active	6	533ZR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4300	4	South Belridge	Belridge	533ZR3-29		N/A	29	28S	21E	MD	35.46558	-119.73656	085-230-05	Produced Water					Active	6	533ZR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4301	4	South Belridge	Belridge	534DR3-29		N/A	33	28S	21E	MD	35.46326	-119.73673	085-230-05	Produced Water					Active	6	534DR3-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4302	4	South Belridge	Belridge	534ER3-29		N/A	29	28S	21E	MD	35.46449	-119.73848	085-230-05	Produced Water					Active	6	534ER3-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4303	4	South Belridge	Belridge	534GR4-29		N/A	29	28S	21E	MD	35.46435	-119.73755	085-230-05	Produced Water					Active	10	534GR4-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4304	4	South Belridge	Belridge	534LR4-29		N/A	29	28S	21E	MD	35.46366	-119.73846	085-230-05	Produced Water					Active	10	534LR4-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4305	4	South Belridge	Belridge	534NR4-29		N/A	29	28S	21E	MD	35.46377	-119.73731	085-230-05	Produced Water					Active	6	534NR4-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4306	4	South Belridge	Belridge	534ZR2-29		N/A	29	28S	21E	MD	35.46418	-119.73687	085-230-05	Produced Water					Active	10	534ZR2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4307	4	South Belridge	Belridge	535ER-29		N/A	29	28S	21E	MD	35.46277	-119.73828	085-230-05	Produced Water					Active	10	535ER-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4308	9	South Belridge	Belridge	537AR5-34		N/A	29	28S	21E	MD	35.44329	-119.70224	085-220-22	Produced Water					Active	10	537AR5-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4309	9	South Belridge	Belridge	537CR3-34		N/A	29	28S	21E	MD	35.44432	-119.70217	085-220-22	Produced Water					Active	10	537CR3-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4310	2	South Belridge	Belridge	538CR3-20		N/A	34	28S	21E	MD	35.47142	-119.73774	085-210-18	Produced Water					Active	6	538CR3-20 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4311	5	South Belridge	Belridge	538D-28		N/A	34	28S	21E	MD	35.45629	-119.71975	085-230-26	Produced Water					Active	6	538D-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4312	5	South Belridge	Belridge	538ER-28		N/A	20	28S	21E	MD	35.45740	-119.72056	085-230-26	Produced Water					Active	10	538ER-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4313	2	South Belridge	Belridge	538ER4-20		N/A	28	28S	21E	MD	35.47171	-119.73839	085-210-18	Produced Water					Active	10	538ER4-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4314	5	South Belridge	Belridge	538L-28		N/A	28	28S	21E	MD	35.45623	-119.72051	085-230-26	Produced Water					Active	10	538L-28 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4315	2	South Belridge	Belridge	538LR-20		N/A	20	28S	21E	MD	35.47116	-119.73848	085-210-18	Produced Water					Active	6	538LR-20 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL4316	9	South Belridge	Belridge	538LR7-34		N/A	28	28S	21E	MD	35.44193	-119.70283	085-220-22	Produced Water					Active	6	538LR7-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4317	2	South Belridge	Belridge	538NR3-20		N/A	20	28S	21E	MD	35.47131	-119.73709	085-210-18	Produced Water					Active	6	538NR3-20 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4318	9	South Belridge	Belridge	538NR4-34		N/A	34	28S	21E	MD	35.44190	-119.70152	085-220-22	Produced Water					Active	6	538NR4-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4319	4	South Belridge	Belridge	541AR-29		N/A	20	28S	21E	MD	35.46861	-119.73558	085-230-05	Produced Water					Active	10	541AR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4320	8	South Belridge	Belridge	541CR2-33		N/A	34	28S	21E	MD	35.45530	-119.71786	085-230-07	Produced Water					Active	6	541CR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4321	4	South Belridge	Belridge	541CR-29		N/A	29	28S	21E	MD	35.46964	-119.73556	085-230-05	Produced Water					Active	10	541CR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4322	8	South Belridge	Belridge	541DR2-33		N/A	33	28S	21E	MD	35.45427	-119.71664	085-230-07	Produced Water					Active	6	541DR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4324	4	South Belridge	Belridge	541ER2-29		N/A	33	28S	21E	MD	35.46998	-119.73606	085-230-05	Produced Water					Active	6	541ER2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4325	4	South Belridge	Belridge	541LR3-29		N/A	29	28S	21E	MD	35.46922	-119.73609	085-230-05	Produced Water					Active	10	541LR3-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4326	8	South Belridge	Belridge	541NR2-33		N/A	29	28S	21E	MD	35.45444	-119.71736	085-230-07	Produced Water					Active	10	541NR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4327	8	South Belridge	Belridge	541ZR-33		N/A	33	28S	21E	MD	35.45524	-119.71674	085-230-07	Produced Water					Active	6	541ZR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4328	8	South Belridge	Belridge	542AR2-33		N/A	33	28S	21E	MD	35.45211	-119.71727	085-230-07	Produced Water					Active	6	542AR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4329	4	South Belridge	Belridge	542CR2-29		N/A	33	28S	21E	MD	35.46784	-119.73569	085-230-05	Produced Water					Active	6	542CR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4330	8	South Belridge	Belridge	542CR3-33		N/A	29	28S	21E	MD	35.45336	-119.71779	085-230-07	Produced Water					Active	6	542CR3-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4331	4	South Belridge	Belridge	542DR-29		N/A	33	28S	21E	MD	35.46697	-119.73455	085-230-05	Produced Water					Active	6	542DR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4332	4	South Belridge	Belridge	542ER3-29		N/A	29	28S	21E	MD	35.46841	-119.73575	085-230-05	Produced Water					Active	6	542ER3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4333	4	South Belridge	Belridge	542GR-29		N/A	29	28S	21E	MD	35.46832	-119.73502	085-230-05	Produced Water					Active	6	542GR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4334	8	South Belridge	Belridge	542GR4-33		N/A	29	28S	21E	MD	35.45381	-119.71737	085-230-07	Produced Water					Active	10	542GR4-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4335	8	South Belridge	Belridge	542LR2-33		N/A	33	28S	21E	MD	35.45293	-119.71841	085-230-07	Produced Water					Active	6	542LR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4336	4	South Belridge	Belridge	542NR2-29		N/A	33	28S	21E	MD	35.46724	-119.73508	085-230-05	Produced Water					Active	6	542NR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4337	8	South Belridge	Belridge	542NR3-33		N/A	29	28S	21E	MD	35.45289	-119.71721	085-230-07	Produced Water					Active	6	542NR3-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4338	4	South Belridge	Belridge	542ZR-29		N/A	33	28S	21E	MD	35.46770	-119.73451	085-230-05	Produced Water					Active	6	542ZR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4339	8	South Belridge	Belridge	543AR3-33		N/A	29	28S	21E	MD	35.45053	-119.71783	085-230-07	Produced Water					Active	10	543AR3-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4340	8	South Belridge	Belridge	543CR3-33		N/A	33	28S	21E	MD	35.45131	-119.71769	085-230-07	Produced Water					Active	6	543CR3-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4341	8	South Belridge	Belridge	543DR-33		N/A	33	28S	21E	MD	35.45053	-119.71675	085-230-07	Produced Water					Active	6	543DR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4342	8	South Belridge	Belridge	543LR2-33		N/A	33	28S	21E	MD	35.45084	-119.71844	085-230-07	Produced Water					Active	6	543LR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4343	8	South Belridge	Belridge	544-33		N/A	33	28S	21E	MD	35.44971	-119.71643	085-230-07	Produced Water					Active	6	544-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4344	4	South Belridge	Belridge	544AR-29		N/A	33	28S	21E	MD	35.46339	-119.73554	085-230-05	Produced Water					Active	6	544AR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4345	4	South Belridge	Belridge	544CR2-29		N/A	29	28S	21E	MD	35.46411	-119.73568	085-230-05	Produced Water					Active	10	544CR2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4346	4	South Belridge	Belridge	544DR3-29		N/A	29	28S	21E	MD	35.46289	-119.73443	085-230-05	Produced Water					Active	10	544DR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4347	4	South Belridge	Belridge	544ER3-29		N/A	29	28S	21E	MD	35.46492	-119.73588	085-230-05	Produced Water					Active	6	544ER3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4348	8	South Belridge	Belridge	544GR-33		N/A	29	28S	21E	MD	35.45030	-119.71698	085-230-07	Produced Water					Active	6	544GR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4349	4	South Belridge	Belridge	544LR3-29		N/A	33	28S	21E	MD	35.46364	-119.73591	085-230-05	Produced Water					Active	6	544LR3-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4350	8	South Belridge	Belridge	544NR2-33		N/A	29	28S	21E	MD	35.44937	-119.71703	085-230-07	Produced Water					Active	10	544NR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4351	4	South Belridge	Belridge	544NR5-29		N/A	33	28S	21E	MD	35.46352	-119.73505	085-230-05	Produced Water					Active	6	544NR5-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4352	4	South Belridge	Belridge	544ZR3-29		N/A	29	28S	21E	MD	35.46403	-119.73455	085-230-05	Produced Water					Active	6	544ZR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4353	4	South Belridge	Belridge	545CR-29		N/A	29	28S	21E	MD	35.46240	-119.73553	085-230-05	Produced Water					Active	6	545CR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4354	4	South Belridge	Belridge	545ER3-29		N/A	29	28S	21E	MD	35.46282	-119.73611	085-230-05	Produced Water					Active	6	545ER3-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4355	4	South Belridge	Belridge	545GR4-29		N/A	29	28S	21E	MD	35.46265	-119.73513	085-230-05	Produced Water					Active	10	545GR4-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4356	4	South Belridge	Belridge	545ZR3-29		N/A	29	28S	21E	MD	35.46222	-119.73440	085-230-05	Produced Water					Active	10	545ZR3-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4357	8	South Belridge	Belridge	551AR2-33		N/A	29	28S	21E	MD	35.45432	-119.71564	085-230-07	Produced Water					Active	10	551AR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4358	8	South Belridge	Belridge	551CR2-33		N/A	33	28S	21E	MD	35.45519	-119.71560	085-230-07	Produced Water					Active	6	551CR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4359	8	South Belridge	Belridge	551LR2-33		N/A	33	28S	21E	MD	35.45485	-119.71591	085-230-07	Produced Water					Active	6	551LR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4360	8	South Belridge	Belridge	551NR2-33		N/A	33	28S	21E	MD	35.45459	-119.71459	085-230-07	Produced Water					Active	6	551NR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4361	8	South Belridge	Belridge	551Z-33		N/A	33	28S	21E	MD	35.45492	-119.71456	085-230-07	Produced Water					Active	6	551Z-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged (bbl/yr)	Category
BL4362	8	South Belridge	Belridge	552AR2-33		N/A	33	28S	21E	MD	35.45245	-119.71574	085-230-07	Produced Water					Active	6	552AR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4363	4	South Belridge	Belridge	552AR3-29		N/A	33	28S	21E	MD	35.46695	-119.73333	085-230-05	Produced Water					Active	6	552AR3-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4364	8	South Belridge	Belridge	552C-33		N/A	29	28S	21E	MD	35.45326	-119.71559	085-230-07	Produced Water					Active	10	552C-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4365	8	South Belridge	Belridge	552E3-33		N/A	33	28S	21E	MD	35.45350	-119.71601	085-230-07	Produced Water					Active	6	552E3-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4366	8	South Belridge	Belridge	552GR2-33		N/A	33	28S	21E	MD	35.45394	-119.71505	085-230-07	Produced Water					Active	6	552GR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4367	4	South Belridge	Belridge	552LR2-29		N/A	33	28S	21E	MD	35.46732	-119.73391	085-230-05	Produced Water					Active	6	552LR2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4368	8	South Belridge	Belridge	552LR3-33		N/A	29	28S	21E	MD	35.45306	-119.71598	085-230-07	Produced Water					Active	10	552LR3-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4369	8	South Belridge	Belridge	552ZR2-33		N/A	33	28S	21E	MD	35.45326	-119.71447	085-230-07	Produced Water					Active	6	552ZR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4370	8	South Belridge	Belridge	553A6-33		N/A	33	28S	21E	MD	35.45035	-119.71557	085-230-07	Produced Water					Active	6	553A6-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4371	8	South Belridge	Belridge	553C4-33		N/A	33	28S	21E	MD	35.45139	-119.71542	085-230-07	Produced Water					Active	6	553C4-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4373	8	South Belridge	Belridge	553ER2-33		N/A	33	28S	21E	MD	35.45192	-119.71573	085-230-07	Produced Water					Active	6	553ER2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4374	4	South Belridge	Belridge	553GR2-29		N/A	29	28S	21E	MD	35.46629	-119.73280	085-230-05	Produced Water					Active	10	553GR2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4375	8	South Belridge	Belridge	553GR2-33		N/A	33	28S	21E	MD	35.45152	-119.71510	085-230-07	Produced Water					Active	6	553GR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4376	4	South Belridge	Belridge	553NR3-29		N/A	29	28S	21E	MD	35.46530	-119.73273	085-230-05	Produced Water					Active	6	553NR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4377	4	South Belridge	Belridge	554AR3-29		N/A	29	28S	21E	MD	35.46319	-119.73341	085-230-05	Produced Water					Active	6	554AR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4378	8	South Belridge	Belridge	554CR2-33		N/A	33	28S	21E	MD	35.44968	-119.71553	085-230-07	Produced Water					Active	6	554CR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4379	8	South Belridge	Belridge	554D-33		N/A	33	28S	21E	MD	35.44881	-119.71439	085-230-07	Produced Water					Active	6	554D-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4380	4	South Belridge	Belridge	554DR3-29		N/A	29	28S	21E	MD	35.46329	-119.73234	085-230-05	Produced Water					Active	6	554DR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4381	4	South Belridge	Belridge	554GR2-29		N/A	29	28S	21E	MD	35.46439	-119.73266	085-230-05	Produced Water					Active	6	554GR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4382	4	South Belridge	Belridge	554LR4-29		N/A	29	28S	21E	MD	35.46350	-119.73367	085-230-05	Produced Water					Active	6	554LR4-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4383	8	South Belridge	Belridge	554NR2-33		N/A	33	28S	21E	MD	35.44937	-119.71498	085-230-07	Produced Water					Active	6	554NR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4384	4	South Belridge	Belridge	554NR3-29		N/A	29	28S	21E	MD	35.46369	-119.73280	085-230-05	Produced Water					Active	6	554NR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4385	8	South Belridge	Belridge	554Z-33		N/A	33	28S	21E	MD	35.44965	-119.71421	085-230-07	Produced Water					Active	6	554Z-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4386	4	South Belridge	Belridge	554ZR-29		N/A	29	28S	21E	MD	35.46400	-119.73209	085-230-05	Produced Water					Active	6	554ZR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4387	4	South Belridge	Belridge	555AR3-29		N/A	29	28S	21E	MD	35.46153	-119.73299	085-230-05	Produced Water					Active	10	555AR3-29 Dual Water Injector(picture BL4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4388	4	South Belridge	Belridge	555CR4-29		N/A	29	28S	21E	MD	35.46246	-119.73326	085-230-05	Produced Water					Active	6	555CR4-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4389	4	South Belridge	Belridge	555D-29		N/A	29	28S	21E	MD	35.46140	-119.73215	085-230-05	Produced Water					Active	6	555D-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4390	8	South Belridge	Belridge	555D-33		N/A	33	28S	21E	MD	35.44688	-119.71432	085-230-07	Produced Water					Active	6	555D-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4391	4	South Belridge	Belridge	555DR2-29		N/A	29	28S	21E	MD	35.46151	-119.73224	085-230-05	Produced Water					Active	10	555DR2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4392	4	South Belridge	Belridge	555ER2-29		N/A	29	28S	21E	MD	35.46274	-119.73411	085-230-05	Produced Water					Active	6	555ER2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4393	4	South Belridge	Belridge	555GR3-29		N/A	29	28S	21E	MD	35.46275	-119.73290	085-230-05	Produced Water					Active	6	555GR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4394	4	South Belridge	Belridge	555NR3-29		N/A	29	28S	21E	MD	35.46189	-119.73269	085-230-05	Produced Water					Active	10	555NR3-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4395	4	South Belridge	Belridge	555ZR2-29		N/A	29	28S	21E	MD	35.46241	-119.73235	085-230-05	Produced Water					Active	6	555ZR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4396	4	South Belridge	Belridge	556CR-29		N/A	29	28S	21E	MD	35.46057	-119.73108	085-230-05	Produced Water					Active	10	556CR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4397	8	South Belridge	Belridge	561CR-33		N/A	33	28S	21E	MD	35.45501	-119.71320	085-230-07	Produced Water					Active	10	561CR-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4398	8	South Belridge	Belridge	561DR2-33		N/A	33	28S	21E	MD	35.45422	-119.71233	085-230-07	Produced Water					Active	6	561DR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4399	8	South Belridge	Belridge	562C-33		N/A	33	28S	21E	MD	35.45322	-119.71306	085-230-07	Produced Water					Active	6	562C-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4400	8	South Belridge	Belridge	562DR3-33		N/A	33	28S	21E	MD	35.45217	-119.71273	085-230-07	Produced Water					Active	6	562DR3-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4401	8	South Belridge	Belridge	562LR2-33		N/A	33	28S	21E	MD	35.45295	-119.71329	085-230-07	Produced Water					Active	6	562LR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4402	8	South Belridge	Belridge	562NR2-33		N/A	33	28S	21E	MD	35.45301	-119.71279	085-230-07	Produced Water					Active	6	562NR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4403	8	South Belridge	Belridge	562Z-33		N/A	33	28S	21E	MD	35.45318	-119.71198	085-230-07	Produced Water					Active	6	562Z-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4404	4	South Belridge	Belridge	563AR2-29		N/A	29	28S	21E	MD	35.46499	-119.73129	085-230-05	Produced Water					Active	10	563AR2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4405	4	South Belridge	Belridge	563CR-29		N/A	29	28S	21E	MD	35.46602	-119.73076	085-230-05	Produced Water					Active	10	563CR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4406	8	South Belridge	Belridge	563DR3-33		N/A	33	28S	21E	MD	35.45047	-119.71212	085-230-07	Produced Water					Active	6	563DR3-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4407	4	South Belridge	Belridge	563ER2-29		N/A	29	28S	21E	MD	35.46677	-119.73148	085-230-05	Produced Water					Active	10	563ER2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged (bbl/yr)	Category
BL4408	8	South Belridge	Belridge	563ER4-33		N/A	33	28S	21E	MD	35.45149	-119.71398	085-230-07	Produced Water					Active	6	563ER4-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4409	4	South Belridge	Belridge	563LR2-29		N/A	29	28S	21E	MD	35.46551	-119.73198	085-230-05	Produced Water					Active	10	563LR2-29 Dual Water injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4410	8	South Belridge	Belridge	563NR3-33		N/A	33	28S	21E	MD	35.45050	-119.71254	085-230-07	Produced Water					Active	6	563NR3-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4411	8	South Belridge	Belridge	563Z-33		N/A	33	28S	21E	MD	35.45133	-119.71215	085-230-07	Produced Water					Active	6	563Z-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4412	8	South Belridge	Belridge	564A-33		N/A	33	28S	21E	MD	35.44881	-119.71327	085-230-07	Produced Water					Active	6	564A-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4413	4	South Belridge	Belridge	564AR3-29		N/A	29	28S	21E	MD	35.46322	-119.73091	085-230-05	Produced Water					Active	6	564AR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4414	8	South Belridge	Belridge	564C-33		N/A	33	28S	21E	MD	35.44979	-119.71301	085-230-07	Produced Water					Active	6	564C-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4415	4	South Belridge	Belridge	564CR2-29		N/A	29	28S	21E	MD	35.46404	-119.73114	085-230-05	Produced Water					Active	6	564CR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4416	4	South Belridge	Belridge	564DR-29		N/A	29	28S	21E	MD	35.46332	-119.73020	085-230-05	Produced Water					Active	6	564DR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4417	4	South Belridge	Belridge	564ER2-29		N/A	29	28S	21E	MD	35.46443	-119.73174	085-230-05	Produced Water					Active	6	564ER2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4419	8	South Belridge	Belridge	564GR2-33		N/A	33	28S	21E	MD	35.45044	-119.71262	085-230-07	Produced Water					Active	6	564GR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4420	4	South Belridge	Belridge	564GR3-29		N/A	29	28S	21E	MD	35.46453	-119.73062	085-230-05	Produced Water					Active	10	564GR3-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4421	4	South Belridge	Belridge	564LR4-29		N/A	29	28S	21E	MD	35.46359	-119.73150	085-230-05	Produced Water					Active	6	564LR4-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4422	8	South Belridge	Belridge	564NR2-33		N/A	33	28S	21E	MD	35.44941	-119.71282	085-230-07	Produced Water					Active	6	564NR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4423	4	South Belridge	Belridge	564NR3-29		N/A	29	28S	21E	MD	35.46369	-119.73064	085-230-05	Produced Water					Active	6	564NR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4424	4	South Belridge	Belridge	564ZR-29		N/A	29	28S	21E	MD	35.46426	-119.73001	085-230-05	Produced Water					Active	10	564ZR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4425	8	South Belridge	Belridge	564ZR-33		N/A	33	28S	21E	MD	35.44966	-119.71215	085-230-07	Produced Water					Active	6	564ZR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4426	4	South Belridge	Belridge	565A-29		N/A	29	28S	21E	MD	35.46131	-119.73087	085-230-05	Produced Water					Active	6	565A-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4427	8	South Belridge	Belridge	565C-33		N/A	33	28S	21E	MD	35.44748	-119.71348	085-230-07	Produced Water					Active	6	565C-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4428	4	South Belridge	Belridge	565CR3-29		N/A	29	28S	21E	MD	35.46221	-119.73105	085-230-05	Produced Water					Active	6	565CR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4429	4	South Belridge	Belridge	565DR2-29		N/A	29	28S	21E	MD	35.46151	-119.73002	085-230-05	Produced Water					Active	6	565DR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4430	8	South Belridge	Belridge	565DR3-33		N/A	33	28S	21E	MD	35.44703	-119.71216	085-230-07	Produced Water					Active	6	565DR3-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4431	4	South Belridge	Belridge	565ER2-29		N/A	29	28S	21E	MD	35.46280	-119.73160	085-230-05	Produced Water					Active	6	565ER2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4432	8	South Belridge	Belridge	565ER2-33		N/A	33	28S	21E	MD	35.44828	-119.71396	085-230-07	Produced Water					Active	6	565ER2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4433	4	South Belridge	Belridge	565GR3-29		N/A	29	28S	21E	MD	35.46274	-119.73031	085-230-05	Produced Water					Active	6	565GR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4434	8	South Belridge	Belridge	565GR-33		N/A	33	28S	21E	MD	35.44834	-119.71225	085-230-07	Produced Water					Active	6	565GR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4435	4	South Belridge	Belridge	565LR3-29		N/A	29	28S	21E	MD	35.46162	-119.73124	085-230-05	Produced Water					Active	6	565LR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4436	8	South Belridge	Belridge	565NR3-33		N/A	33	28S	21E	MD	35.44731	-119.71262	085-230-07	Produced Water					Active	6	565NR3-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4437	8	South Belridge	Belridge	565Y2-33		N/A	33	28S	21E	MD	35.44840	-119.71201	085-230-07	Produced Water					Active	6	565Y2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4438	4	South Belridge	Belridge	565ZR2-29		N/A	29	28S	21E	MD	35.46217	-119.72964	085-230-05	Produced Water					Active	6	565ZR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4439	4	South Belridge	Belridge	566DR-29		N/A	29	28S	21E	MD	35.45967	-119.73006	085-230-05	Produced Water					Active	10	566DR-29 Dual Water injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4440	4	South Belridge	Belridge	566ER4-29		N/A	29	28S	21E	MD	35.46092	-119.73173	085-230-05	Produced Water					Active	10	566ER4-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4441	4	South Belridge	Belridge	566GR-29		N/A	29	28S	21E	MD	35.46087	-119.73046	085-230-05	Produced Water					Active	10	566GR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4442	4	South Belridge	Belridge	566NR-29		N/A	29	28S	21E	MD	35.46001	-119.73056	085-230-05	Produced Water					Active	10	566NR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4443	4	South Belridge	Belridge	566Z-29		N/A	29	28S	21E	MD	35.46046	-119.73012	085-230-05	Produced Water					Active	10	566Z-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4444	8	South Belridge	Belridge	572AR2-33		N/A	33	28S	21E	MD	35.45215	-119.71092	085-230-07	Produced Water					Active	10	572AR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4445	8	South Belridge	Belridge	572ER2-33		N/A	33	28S	21E	MD	35.45378	-119.71166	085-230-07	Produced Water					Active	6	572ER2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4446	8	South Belridge	Belridge	572LR3-33		N/A	33	28S	21E	MD	35.45296	-119.71170	085-230-07	Produced Water					Active	6	572LR3-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4447	8	South Belridge	Belridge	573DR2-33		N/A	33	28S	21E	MD	35.45087	-119.71025	085-230-07	Produced Water					Active	6	573DR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4448	8	South Belridge	Belridge	573GR2-33		N/A	33	28S	21E	MD	35.45190	-119.71092	085-230-07	Produced Water					Active	10	573GR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4449	8	South Belridge	Belridge	573NR2-33		N/A	33	28S	21E	MD	35.45095	-119.71035	085-230-07	Produced Water					Active	6	573NR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4450	8	South Belridge	Belridge	574A-33		N/A	33	28S	21E	MD	35.44889	-119.71094	085-230-07	Produced Water					Active	6	574A-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4451	8	South Belridge	Belridge	574CR-33		N/A	33	28S	21E	MD	35.44996	-119.71089	085-230-07	Produced Water					Active	6	574CR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4452	8	South Belridge	Belridge	574DR-33		N/A	33	28S	21E	MD	35.44881	-119.70989	085-230-07	Produced Water					Active	6	574DR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4453	4	South Belridge	Belridge	574LR-29		N/A	29	28S	21E	MD	35.46371	-119.72947	085-230-05	Produced Water					Active	10	574LR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL4454	4	South Belridge	Belridge	S75AR-29		N/A	29	28S	21E	MD	35.46150	-119.72867	085-230-05	Produced Water					Active	6	S75AR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4455	4	South Belridge	Belridge	S75CR-29		N/A	29	28S	21E	MD	35.46235	-119.72891	085-230-05	Produced Water					Active	6	S75CR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4456	8	South Belridge	Belridge	S75D-33		N/A	33	28S	21E	MD	35.44715	-119.70986	085-230-07	Produced Water					Active	6	S75D-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4457	4	South Belridge	Belridge	S75DR3-29		N/A	29	28S	21E	MD	35.46141	-119.72790	085-230-05	Produced Water					Active	6	S75DR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4458	8	South Belridge	Belridge	S75ER2-33		N/A	33	28S	21E	MD	35.44845	-119.71179	085-230-07	Produced Water					Active	6	S75ER2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4459	4	South Belridge	Belridge	S75ER3-29		N/A	29	28S	21E	MD	35.46268	-119.72941	085-230-05	Produced Water					Active	6	S75ER3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4460	4	South Belridge	Belridge	S75GR-29		N/A	29	28S	21E	MD	35.46274	-119.72826	085-230-05	Produced Water					Active	10	S75GR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4461	8	South Belridge	Belridge	S75LR2-33		N/A	33	28S	21E	MD	35.44764	-119.71166	085-230-07	Produced Water					Active	6	S75LR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4462	4	South Belridge	Belridge	S75NR2-29		N/A	29	28S	21E	MD	35.46180	-119.72850	085-230-05	Produced Water					Active	6	S75NR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4463	8	South Belridge	Belridge	S75NR2-33		N/A	33	28S	21E	MD	35.44792	-119.71036	085-230-07	Produced Water					Active	6	S75NR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4464	8	South Belridge	Belridge	S75ZR-33		N/A	33	28S	21E	MD	35.44789	-119.70986	085-230-07	Produced Water					Active	6	S75ZR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4465	4	South Belridge	Belridge	S76CR2-29		N/A	29	28S	21E	MD	35.46053	-119.72884	085-230-05	Produced Water					Active	6	S76CR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4466	8	South Belridge	Belridge	S76CR-33		N/A	33	28S	21E	MD	35.44614	-119.71070	085-230-07	Produced Water					Active	6	S76CR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4467	4	South Belridge	Belridge	S76ER2-29		N/A	29	28S	21E	MD	35.46088	-119.72930	085-230-05	Produced Water					Active	6	S76ER2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4468	8	South Belridge	Belridge	S76ER2-33		N/A	33	28S	21E	MD	35.44661	-119.71162	085-230-07	Produced Water					Active	6	S76ER2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4469	4	South Belridge	Belridge	S76GR2-29		N/A	29	28S	21E	MD	35.46081	-119.72787	085-230-05	Produced Water					Active	6	S76GR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4470	8	South Belridge	Belridge	S76GR-33		N/A	33	28S	21E	MD	35.44688	-119.71027	085-230-07	Produced Water					Active	6	S76GR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4471	4	South Belridge	Belridge	S76LR2-29		N/A	29	28S	21E	MD	35.45994	-119.72952	085-230-05	Produced Water					Active	10	S76LR2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4472	4	South Belridge	Belridge	S76NR2-29		N/A	29	28S	21E	MD	35.46005	-119.72830	085-230-05	Produced Water					Active	6	S76NR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4473	4	South Belridge	Belridge	S76ZR-29		N/A	29	28S	21E	MD	35.46055	-119.72768	085-230-05	Produced Water					Active	6	S76ZR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4474	8	South Belridge	Belridge	S76ZR-33		N/A	33	28S	21E	MD	35.44600	-119.70987	085-230-07	Produced Water					Active	6	S76ZR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4475	4	South Belridge	Belridge	S77CR-29		N/A	29	28S	21E	MD	35.45875	-119.72890	085-230-05	Produced Water					Active	10	S77CR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4476	4	South Belridge	Belridge	S77GR-29		N/A	29	28S	21E	MD	35.45906	-119.72838	085-230-05	Produced Water					Active	10	S77GR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4477	4	South Belridge	Belridge	S77NR-29		N/A	29	28S	21E	MD	35.45820	-119.72836	085-230-05	Produced Water					Active	10	S77NR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4478	4	South Belridge	Belridge	S77ZR-29		N/A	29	28S	21E	MD	35.45876	-119.72794	085-230-05	Produced Water					Active	10	S77ZR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4479	8	South Belridge	Belridge	S83LR2-33		N/A	33	28S	21E	MD	35.45111	-119.70952	085-230-07	Produced Water					Active	10	S83LR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4480	8	South Belridge	Belridge	S84CR3-33		N/A	33	28S	21E	MD	35.44965	-119.70871	085-230-07	Produced Water					Active	10	S84CR3-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4481	8	South Belridge	Belridge	S84DR2-33		N/A	33	28S	21E	MD	35.44882	-119.70759	085-230-07	Produced Water					Active	10	S84DR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4482	8	South Belridge	Belridge	S84ER2-33		N/A	33	28S	21E	MD	35.45026	-119.70970	085-230-07	Produced Water					Active	10	S84ER2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4483	8	South Belridge	Belridge	S84NR2-33		N/A	33	28S	21E	MD	35.44930	-119.70829	085-230-07	Produced Water					Active	10	S84NR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4484	8	South Belridge	Belridge	S85DR-33		N/A	33	28S	21E	MD	35.44698	-119.70756	085-230-07	Produced Water					Active	6	S85DR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4485	8	South Belridge	Belridge	S85GR2-33		N/A	33	28S	21E	MD	35.44858	-119.70828	085-230-07	Produced Water					Active	6	S85GR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4486	4	South Belridge	Belridge	S85LR2-29		N/A	29	28S	21E	MD	35.46179	-119.72732	085-230-05	Produced Water					Active	10	S85LR2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4487	8	South Belridge	Belridge	S85X-33		N/A	33	28S	21E	MD	35.44706	-119.70866	085-230-07	Produced Water					Active	6	S85X-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4488	8	South Belridge	Belridge	S86AR2-33		N/A	33	28S	21E	MD	35.44522	-119.70883	085-230-07	Produced Water					Active	6	S86AR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4489	4	South Belridge	Belridge	S86AR-29		N/A	29	28S	21E	MD	35.45962	-119.72670	085-230-05	Produced Water					Active	6	S86AR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4490	4	South Belridge	Belridge	S86B-29		N/A	29	28S	21E	MD	35.46093	-119.72512	085-230-05	Produced Water					Active	10	S86B-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4491	8	South Belridge	Belridge	S86B-33		N/A	33	28S	21E	MD	35.44551	-119.70732	085-230-07	Produced Water					Active	6	S86B-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4492	4	South Belridge	Belridge	S86CR2-29		N/A	29	28S	21E	MD	35.46062	-119.72674	085-230-05	Produced Water					Active	6	S86CR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4493	8	South Belridge	Belridge	S86CR-33		N/A	33	28S	21E	MD	35.44600	-119.70895	085-230-07	Produced Water					Active	6	S86CR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4494	4	South Belridge	Belridge	S86DR-29		N/A	29	28S	21E	MD	35.45962	-119.72539	085-230-05	Produced Water					Active	6	S86DR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4495	8	South Belridge	Belridge	S86DR-33		N/A	33	28S	21E	MD	35.44506	-119.70776	085-230-07	Produced Water					Inactive	6	S86DR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4497	4	South Belridge	Belridge	S86ER2-29		N/A	29	28S	21E	MD	35.46095	-119.72708	085-230-05	Produced Water					Active	6	S86ER2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4498	4	South Belridge	Belridge	S86GR2-29		N/A	29	28S	21E	MD	35.46093	-119.72616	085-230-05	Produced Water					Active	10	S86GR2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4499	8	South Belridge	Belridge	S86LR2-33		N/A	33	28S	21E	MD	35.44585	-119.70928	085-230-07	Produced Water					Active	6	S86LR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL4500	4	South Belridge	Belridge	586LR-29		N/A	29	28S	21E	MD	35.45991	-119.72719	085-230-05	Produced Water					Active	6	586LR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4501	8	South Belridge	Belridge	586NR2-33		N/A	33	28S	21E	MD	35.44551	-119.70791	085-230-07	Produced Water					Active	6	586NR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4502	4	South Belridge	Belridge	586NR-29		N/A	29	28S	21E	MD	35.45999	-119.72623	085-230-05	Produced Water					Active	6	586NR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4503	4	South Belridge	Belridge	587AR-29		N/A	29	28S	21E	MD	35.45768	-119.72683	085-230-05	Produced Water					Active	10	587AR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4504	4	South Belridge	Belridge	587CR2-29		N/A	29	28S	21E	MD	35.45869	-119.72686	085-230-05	Produced Water					Active	6	587CR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4505	4	South Belridge	Belridge	587DR-29		N/A	29	28S	21E	MD	35.45768	-119.72547	085-230-05	Produced Water					Active	6	587DR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4506	4	South Belridge	Belridge	587ER-29		N/A	29	28S	21E	MD	35.45893	-119.72716	085-230-05	Produced Water					Active	6	587ER-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4507	4	South Belridge	Belridge	587GR2-29		N/A	29	28S	21E	MD	35.45947	-119.72618	085-230-05	Produced Water					Active	6	587GR2-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4508	8	South Belridge	Belridge	587GR-33		N/A	33	28S	21E	MD	35.44472	-119.70797	085-230-07	Produced Water					Active	6	587GR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4509	4	South Belridge	Belridge	587LR-29		N/A	29	28S	21E	MD	35.45821	-119.72736	085-230-05	Produced Water					Active	10	587LR-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4510	4	South Belridge	Belridge	587NR-29		N/A	29	28S	21E	MD	35.45818	-119.72559	085-230-05	Produced Water					Active	6	587NR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4511	8	South Belridge	Belridge	587V1-33		N/A	33	28S	21E	MD	35.44457	-119.70725	085-230-07	Produced Water					Active	6	587V1-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4512	4	South Belridge	Belridge	587ZR-29		N/A	29	28S	21E	MD	35.45874	-119.72523	085-230-05	Produced Water					Active	6	587ZR-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4513	8	South Belridge	Belridge	587ZR-33		N/A	33	28S	21E	MD	35.44443	-119.70756	085-230-07	Produced Water					Active	6	587ZR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4514	4	South Belridge	Belridge	588ER-29		N/A	29	28S	21E	MD	35.45720	-119.72709	085-230-05	Produced Water					Active	10	588ER-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4515	4	South Belridge	Belridge	588ZR2-29		N/A	29	28S	21E	MD	35.45695	-119.72566	085-230-05	Produced Water					Active	10	588ZR2-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4516	4	South Belridge	Belridge	743I2L-29		N/A	29	28S	21E	MD	35.46525	-119.73460	085-230-05	Produced Water					Active	6	743I2L-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4517	8	South Belridge	Belridge	764L-33		N/A	33	28S	21E	MD	35.44942	-119.71390	085-230-07	Produced Water					Active	6	764L-33 Single Water Injector (picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4518	8	South Belridge	Belridge	975M-33		N/A	33	28S	21E	MD	35.44721	-119.71085	085-230-07	Produced Water					Active	6	975M-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4519	8	South Belridge	Belridge	511CR-33		N/A	33	28S	21E	MD	35.45527	-119.72425	085-230-07	Produced Water					Active	10	511CR-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4520	8	South Belridge	Belridge	511ZR2-33		N/A	33	28S	21E	MD	35.45520	-119.72340	085-230-07	Produced Water					Active	10	511ZR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4521	9	South Belridge	Belridge	514AR2-34		N/A	34	28S	21E	MD	35.44870	-119.70664	085-220-22	Produced Water					Active	10	514AR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4522	9	South Belridge	Belridge	514CR-34		N/A	34	28S	21E	MD	35.44963	-119.70680	085-220-22	Produced Water					Active	10	514CR-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4523	9	South Belridge	Belridge	514DR2-34		N/A	34	28S	21E	MD	35.44880	-119.70552	085-220-22	Produced Water					Active	10	514DR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4524	9	South Belridge	Belridge	514LR4-34		N/A	34	28S	21E	MD	35.44932	-119.70707	085-220-22	Produced Water					Active	10	514LR4-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4525	9	South Belridge	Belridge	514NR2-34		N/A	34	28S	21E	MD	35.44915	-119.70609	085-220-22	Produced Water					Active	10	514NR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4526	9	South Belridge	Belridge	515DR3-34		N/A	34	28S	21E	MD	35.44698	-119.70544	085-220-22	Produced Water					Active	10	515DR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4527	9	South Belridge	Belridge	515GR3-34		N/A	34	28S	21E	MD	35.44832	-119.70589	085-220-22	Produced Water					Active	10	515GR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4528	9	South Belridge	Belridge	515NR3-34		N/A	34	28S	21E	MD	35.44726	-119.70582	085-220-22	Produced Water					Active	10	515NR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4529	9	South Belridge	Belridge	515ZR-34		N/A	34	28S	21E	MD	35.44791	-119.70537	085-220-22	Produced Water					Active	10	515ZR-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4530	5	South Belridge	Belridge	516CR2-28		N/A	28	28S	21E	MD	35.46067	-119.72439	085-230-26	Produced Water					Active	10	516CR2-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4531	9	South Belridge	Belridge	516DR2-34		N/A	34	28S	21E	MD	35.44514	-119.70562	085-220-22	Produced Water					Active	6	516DR2-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4532	9	South Belridge	Belridge	516GR2-34		N/A	34	28S	21E	MD	35.44636	-119.70613	085-220-22	Produced Water					Active	10	516GR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4533	5	South Belridge	Belridge	516GR-28		N/A	28	28S	21E	MD	35.46093	-119.72389	085-230-26	Produced Water					Active	10	516GR-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4534	5	South Belridge	Belridge	516NR-28		N/A	28	28S	21E	MD	35.45979	-119.72387	085-230-26	Produced Water					Active	10	516NR-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4535	9	South Belridge	Belridge	516ZR-34		N/A	34	28S	21E	MD	35.44601	-119.70555	085-220-22	Produced Water					Active	10	516ZR-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4536	9	South Belridge	Belridge	517AR3-34		N/A	34	28S	21E	MD	35.44320	-119.70643	085-220-22	Produced Water					Active	10	517AR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4537	5	South Belridge	Belridge	518AR2-28		N/A	28	28S	21E	MD	35.45587	-119.72425	085-230-26	Produced Water					Active	10	518AR2-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4538	9	South Belridge	Belridge	518CR2-34		N/A	34	28S	21E	MD	35.44259	-119.70669	085-220-22	Produced Water					Active	10	518CR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4539	9	South Belridge	Belridge	518GR2-34		N/A	34	28S	21E	MD	35.44273	-119.70598	085-220-22	Produced Water					Active	10	518GR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4540	9	South Belridge	Belridge	518NR-34		N/A	34	28S	21E	MD	35.44188	-119.70602	085-220-22	Produced Water					Active	10	518NR-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4541	9	South Belridge	Belridge	518ZR3-34		N/A	34	28S	21E	MD	35.44274	-119.70562	085-220-22	Produced Water					Active	10	518ZR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4542	5	South Belridge	Belridge	519G-28		N/A	28	28S	21E	MD	35.45563	-119.72422	085-230-26	Produced Water					Active	10	519G-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4543	8	South Belridge	Belridge	521AR2-33		N/A	33	28S	21E	MD	35.45414	-119.72190	085-230-07	Produced Water					Active	10	521AR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4544	8	South Belridge	Belridge	521LR-33		N/A	33	28S	21E	MD	35.45419	-119.72249	085-230-07	Produced Water					Active	10	521LR-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL4545	8	South Belridge	Belridge	522CR-33		N/A	33	28S	21E	MD	35.45322	-119.72214	085-230-07	Produced Water					Active	6	522CR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4546	8	South Belridge	Belridge	522GR2-33		N/A	33	28S	21E	MD	35.45366	-119.72176	085-230-07	Produced Water					Active	10	522GR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4547	8	South Belridge	Belridge	522ZR2-33		N/A	33	28S	21E	MD	35.45341	-119.72117	085-230-07	Produced Water					Active	10	522ZR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4548	8	South Belridge	Belridge	523ZR-33		N/A	33	28S	21E	MD	35.45149	-119.72115	085-230-07	Produced Water					Active	10	523ZR-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4549	9	South Belridge	Belridge	525AR3-34		N/A	34	28S	21E	MD	35.44704	-119.70430	085-220-22	Produced Water					Active	10	525AR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4550	9	South Belridge	Belridge	525LR3-34		N/A	34	28S	21E	MD	35.44736	-119.70505	085-220-22	Produced Water					Active	10	525LR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4551	9.	South Belridge	Belridge	526AR3-34		N/A	34	28S	21E	MD	35.44535	-119.70449	085-220-22	Produced Water					Active	10	526AR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4552	9	South Belridge	Belridge	526CR3-34		N/A	34	28S	21E	MD	35.44596	-119.70448	085-220-22	Produced Water					Active	10	526CR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4553	9	South Belridge	Belridge	526DR4-34		N/A	34	28S	21E	MD	35.44510	-119.70318	085-220-22	Produced Water					Active	10	526DR4-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4554	9	South Belridge	Belridge	526ER3-34		N/A	34	28S	21E	MD	35.44635	-119.70511	085-220-22	Produced Water					Active	10	526ER3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4555	9	South Belridge	Belridge	526GR2-34		N/A	34	28S	21E	MD	35.44635	-119.70397	085-220-22	Produced Water					Active	10	526GR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4556	9	South Belridge	Belridge	526LR2-34		N/A	34	28S	21E	MD	35.44549	-119.70480	085-220-22	Produced Water					Active	10	526LR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4557	9	South Belridge	Belridge	526NR3-34		N/A	34	28S	21E	MD	35.44546	-119.70383	085-220-22	Produced Water					Active	10	526NR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4558	9	South Belridge	Belridge	526ZR2-34		N/A	34	28S	21E	MD	35.44613	-119.70328	085-220-22	Produced Water					Active	10	526ZR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4559	5	South Belridge	Belridge	527CR2-28		N/A	28	28S	21E	MD	35.45861	-119.72227	085-230-26	Produced Water					Active	10	527CR2-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4560	5	South Belridge	Belridge	527ER2-28		N/A	28	28S	21E	MD	35.45896	-119.72330	085-230-26	Produced Water					Active	10	527ER2-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4561	9	South Belridge	Belridge	528AR2-34		N/A	34	28S	21E	MD	35.44153	-119.70435	085-220-22	Produced Water					Active	10	528AR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4562	9	South Belridge	Belridge	528DR3-34		N/A	34	28S	21E	MD	35.44164	-119.70325	085-220-22	Produced Water					Active	10	528DR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4563	9	South Belridge	Belridge	529GR2-34		N/A	34	28S	21E	MD	35.44121	-119.70363	085-220-22	Produced Water					Active	10	529GR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4564	8	South Belridge	Belridge	532AR2-33		N/A	33	28S	21E	MD	35.45247	-119.71991	085-230-07	Produced Water					Active	10	532AR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4565	8	South Belridge	Belridge	533A2-33		N/A	33	28S	21E	MD	35.45043	-119.71994	085-230-07	Produced Water					Active	6	533A2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4566	8	South Belridge	Belridge	533DR3-33		N/A	33	28S	21E	MD	35.45057	-119.71893	085-230-07	Produced Water					Active	10	533DR3-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4567	8	South Belridge	Belridge	533ER2-33		N/A	33	28S	21E	MD	35.45196	-119.72064	085-230-07	Produced Water					Active	10	533ER2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4568	8	South Belridge	Belridge	533GR3-33		N/A	33	28S	21E	MD	35.45195	-119.71949	085-230-07	Produced Water					Active	10	533GR3-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4569	8	South Belridge	Belridge	533LR2-33		N/A	33	28S	21E	MD	35.45112	-119.72058	085-230-07	Produced Water					Active	10	533LR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4570	8	South Belridge	Belridge	533NR2-33		N/A	33	28S	21E	MD	35.45105	-119.71944	085-230-07	Produced Water					Active	10	533NR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4571	8	South Belridge	Belridge	534GR2-33		N/A	33	28S	21E	MD	35.45024	-119.71972	085-230-07	Produced Water					Active	10	534GR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4572	8	South Belridge	Belridge	534ZR2-33		N/A	33	28S	21E	MD	35.44963	-119.71882	085-230-07	Produced Water					Active	10	534ZR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4573	8	South Belridge	Belridge	535-33		N/A	33	28S	21E	MD	35.44805	-119.71879	085-230-07	Produced Water					Active	6	535-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4574	9	South Belridge	Belridge	536AR3-34		N/A	34	28S	21E	MD	35.44513	-119.70221	085-220-22	Produced Water					Active	10	536AR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4575	9	South Belridge	Belridge	536DR3-34		N/A	34	28S	21E	MD	35.44521	-119.70109	085-220-22	Produced Water					Active	10	536DR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4576	9	South Belridge	Belridge	536LR4-34		N/A	34	28S	21E	MD	35.44547	-119.70276	085-220-22	Produced Water					Active	10	536LR4-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4577	5	South Belridge	Belridge	537AR2-28		N/A	28	28S	21E	MD	35.45778	-119.72013	085-230-26	Produced Water					Active	10	537AR2-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4578	9	South Belridge	Belridge	537ER3-34		N/A	34	28S	21E	MD	35.44461	-119.70269	085-220-22	Produced Water					Active	10	537ER3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4579	9	South Belridge	Belridge	537GR3-34		N/A	34	28S	21E	MD	35.44466	-119.70154	085-220-22	Produced Water					Active	10	537GR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4580	9	South Belridge	Belridge	538AR4-34		N/A	34	28S	21E	MD	35.44159	-119.70213	085-220-22	Produced Water					Active	10	538AR4-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4582	9	South Belridge	Belridge	538DR3-34		N/A	34	28S	21E	MD	35.44152	-119.70120	085-220-22	Produced Water					Active	10	538DR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4583	5	South Belridge	Belridge	538GR2-28		N/A	28	28S	21E	MD	35.45727	-119.71952	085-230-26	Produced Water					Active	10	538GR2-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4584	5	South Belridge	Belridge	538ZR-28		N/A	28	28S	21E	MD	35.45709	-119.71885	085-230-26	Produced Water					Active	10	538ZR-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4585	9	South Belridge	Belridge	539ER2-34		N/A	34	28S	21E	MD	35.44124	-119.70272	085-220-22	Produced Water					Active	10	539ER2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4586	8	South Belridge	Belridge	541GR3-33		N/A	33	28S	21E	MD	35.45537	-119.71698	085-230-07	Produced Water					Active	10	541GR3-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4588	4	South Belridge	Belridge	542LR3-29		N/A	29	28S	21E	MD	35.46731	-119.73593	085-230-05	Produced Water					Active	6	542LR3-29 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4589	8	South Belridge	Belridge	544AR-33		N/A	33	28S	21E	MD	35.44872	-119.71765	085-230-07	Produced Water					Active	6	544AR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4591	8	South Belridge	Belridge	544CR2-33		N/A	33	28S	21E	MD	35.44959	-119.71748	085-230-07	Produced Water					Active	10	544CR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4592	8	South Belridge	Belridge	544DR2-33		N/A	33	28S	21E	MD	35.44872	-119.71667	085-230-07	Produced Water					Active	10	544DR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL4593	8	South Belridge	Belridge	544ER3-33		N/A	33	28S	21E	MD	35.45023	-119.71828	085-230-07	Produced Water					Active	10	544ER3-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4594	8	South Belridge	Belridge	545ER-33		N/A	33	28S	21E	MD	35.44852	-119.71831	085-230-07	Produced Water					Active	6	545ER-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4595	8	South Belridge	Belridge	545Z-33		N/A	33	28S	21E	MD	35.44782	-119.71642	085-230-07	Produced Water					Active	6	545Z-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4596	9	South Belridge	Belridge	546LR-34		N/A	34	28S	21E	MD	35.44545	-119.70046	085-220-22	Produced Water					Active	10	546LR-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4597	9	South Belridge	Belridge	547CR3-34		N/A	34	28S	21E	MD	35.44419	-119.69993	085-220-22	Produced Water					Active	10	547CR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4598	9	South Belridge	Belridge	547DR3-34		N/A	34	28S	21E	MD	35.44317	-119.69890	085-220-22	Produced Water					Active	10	547DR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4599	9	South Belridge	Belridge	547ER2-34		N/A	34	28S	21E	MD	35.44455	-119.70024	085-220-22	Produced Water					Active	10	547ER2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4600	9	South Belridge	Belridge	547GR2-34		N/A	34	28S	21E	MD	35.44455	-119.69941	085-220-22	Produced Water					Active	10	547GR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4601	9	South Belridge	Belridge	547NR3-34		N/A	34	28S	21E	MD	35.44420	-119.69932	085-220-22	Produced Water					Active	10	547NR3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4602	9	South Belridge	Belridge	547ZR-34		N/A	34	28S	21E	MD	35.44420	-119.69878	085-220-22	Produced Water					Active	10	547ZR-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4603	5	South Belridge	Belridge	548AR-28		N/A	28	28S	21E	MD	35.45601	-119.71787	085-230-26	Produced Water					Active	10	548AR-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4604	5	South Belridge	Belridge	548CR-28		N/A	28	28S	21E	MD	35.45697	-119.71778	085-230-26	Produced Water					Active	10	548CR-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4605	9	South Belridge	Belridge	548D-34		N/A	34	28S	21E	MD	35.44161	-119.69879	085-220-22	Produced Water					Active	10	548D-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4606	5	South Belridge	Belridge	548DR-28		N/A	28	28S	21E	MD	35.45578	-119.71684	085-230-26	Produced Water					Active	10	548DR-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4607	5	South Belridge	Belridge	548NR2-28		N/A	28	28S	21E	MD	35.45650	-119.71726	085-230-26	Produced Water					Active	10	548NR2-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4609	8	South Belridge	Belridge	551ER3-33		N/A	33	28S	21E	MD	35.45543	-119.71589	085-230-07	Produced Water					Active	10	551ER3-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4610	8	South Belridge	Belridge	551GR2-33		N/A	33	28S	21E	MD	35.45546	-119.71498	085-230-07	Produced Water					Active	10	551GR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4611	8	South Belridge	Belridge	554LR2-33		N/A	33	28S	21E	MD	35.44878	-119.71588	085-230-07	Produced Water					Active	10	554LR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4612	8	South Belridge	Belridge	555CR2-33		N/A	33	28S	21E	MD	35.44799	-119.71538	085-230-07	Produced Water					Active	10	555CR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4613	8	South Belridge	Belridge	555ER-33		N/A	33	28S	21E	MD	35.44849	-119.71580	085-230-07	Produced Water					Active	10	555ER-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4614	8	South Belridge	Belridge	555GR-33		N/A	33	28S	21E	MD	35.44815	-119.71509	085-230-07	Produced Water					Active	10	555GR-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4615	8	South Belridge	Belridge	555NR2-33		N/A	33	28S	21E	MD	35.44760	-119.71499	085-230-07	Produced Water					Active	10	555NR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4616	9	South Belridge	Belridge	557AR2-34		N/A	34	28S	21E	MD	35.44361	-119.69764	085-220-22	Produced Water					Active	10	557AR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4617	9	South Belridge	Belridge	557CR-34		N/A	34	28S	21E	MD	35.44430	-119.69779	085-220-22	Produced Water					Active	10	557CR-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4618	9	South Belridge	Belridge	557LR2-34		N/A	34	28S	21E	MD	35.44368	-119.69824	085-220-22	Produced Water					Active	10	557LR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4619	5	South Belridge	Belridge	558AR2-28		N/A	28	28S	21E	MD	35.45605	-119.71574	085-230-26	Produced Water					Active	10	558AR2-28 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4620	9	South Belridge	Belridge	558CR2-34		N/A	3	28S	21E	MD	35.44250	-119.69778	085-220-22	Produced Water					Active	10	558CR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4621	9	South Belridge	Belridge	558ER3-34		N/A	34	28S	21E	MD	35.44315	-119.69825	085-220-22	Produced Water					Active	10	558ER3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4622	9	South Belridge	Belridge	558GR2-34		N/A	34	28S	21E	MD	35.44317	-119.69713	085-220-22	Produced Water					Active	10	558GR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4623	9	South Belridge	Belridge	558LR2-34		N/A	34	28S	21E	MD	35.44195	-119.69821	085-220-22	Produced Water					Active	10	558LR2-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4624	9	South Belridge	Belridge	559ER3-34		N/A	34	28S	21E	MD	35.44153	-119.69832	085-220-22	Produced Water					Active	10	559ER3-34 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4625	8	South Belridge	Belridge	565A-33		N/A	33	28S	21E	MD	35.44676	-119.71360	085-230-07	Produced Water					Active	10	565A-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4626	8	South Belridge	Belridge	565LR2-33		N/A	33	28S	21E	MD	35.44728	-119.71385	085-230-07	Produced Water					Active	10	565LR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4627	8	South Belridge	Belridge	566NR-33		N/A	33	28S	21E	MD	35.44611	-119.71270	085-230-07	Produced Water					Active	6	566NR-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4628	8	South Belridge	Belridge	566Y2-33		N/A	33	28S	21E	MD	35.44618	-119.71312	085-230-07	Produced Water					Active	10	566Y2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4629	8	South Belridge	Belridge	566ZR2-33		N/A	33	28S	21E	MD	35.44587	-119.71227	085-230-07	Produced Water					Active	6	566ZR2-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4630	9	South Belridge	Belridge	568SR-34		N/A	34	28S	21E	MD	35.44164	-119.69470	085-220-22	Produced Water					Active	6	568SR-34 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4631	8	South Belridge	Belridge	572CR2-33		N/A	33	28S	21E	MD	35.45325	-119.71080	085-230-07	Produced Water					Active	10	572CR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4632	8	South Belridge	Belridge	572DR2-33		N/A	33	28S	21E	MD	35.45245	-119.70966	085-230-34	Produced Water					Active	10	572DR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4633	8	South Belridge	Belridge	572NR-33		N/A	33	28S	21E	MD	35.45286	-119.71053	085-230-07	Produced Water					Active	10	572NR-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4634	8	South Belridge	Belridge	576AR2-33		N/A	33	28S	21E	MD	35.44515	-119.71152	085-230-07	Produced Water					Active	10	576AR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4635	8	South Belridge	Belridge	576DR2-33		N/A	33	28S	21E	MD	35.44529	-119.70983	085-230-07	Produced Water					Active	10	576DR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4636	8	South Belridge	Belridge	576LR2-33		N/A	33	28S	21E	MD	35.44580	-119.71164	085-230-07	Produced Water					Active	10	576LR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4637	8	South Belridge	Belridge	576NR3-33		N/A	33	28S	21E	MD	35.44599	-119.71071	085-230-07	Produced Water					Active	10	576NR3-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4638	8	South Belridge	Belridge	583AR2-33		N/A	33	28S	21E	MD	35.45049	-119.70883	085-230-07	Produced Water					Active	10	583AR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL4639	8	South Belridge	Belridge	583CR2-33		N/A	33	28S	21E	MD	35.45148	-119.70882	085-230-07	Produced Water					Active	10	583CR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4640	8	South Belridge	Belridge	583ER2-33		N/A	33	28S	21E	MD	35.45186	-119.70956	085-230-34	Produced Water					Active	10	583ER2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4642	8	South Belridge	Belridge	583NR2-33		N/A	33	28S	21E	MD	35.45097	-119.70846	085-230-07	Produced Water					Active	10	583NR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4646	8	South Belridge	Belridge	584GR2-33		N/A	33	28S	21E	MD	35.45002	-119.70833	085-230-07	Produced Water					Active	10	584GR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4648	8	South Belridge	Belridge	584ZR-33		N/A	33	28S	21E	MD	35.44960	-119.70764	085-230-07	Produced Water					Active	10	584ZR-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4649	8	South Belridge	Belridge	587D-33		N/A	33	28S	21E	MD	35.44351	-119.70753	085-230-07	Produced Water					Active	6	587D-33 Single Water Injector(picture BL4200)	Well - Water injection	< 1 Barrel	Water Injector
BL4650	8	South Belridge	Belridge	587ER2-33		N/A	33	28S	21E	MD	35.44469	-119.70926	085-230-07	Produced Water					Active	10	587ER2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4651	8	South Belridge	Belridge	587NR2-33		N/A	33	28S	21E	MD	35.44378	-119.70817	085-230-07	Produced Water					Active	10	587NR2-33 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4652	4	South Belridge	Belridge	588GR3-29		N/A	29	28S	21E	MD	35.45717	-119.72596	085-230-05	Produced Water					Active	10	588GR3-29 Dual Water Injector (picture 4203)	Well - Water injection	< 1 Barrel	Water Injector
BL4668	8	South Belridge	Belridge	Low Quality Steam trunkline 4" to 6" connection and bleed point(picture BL4668)		N/A	33	28S	21E	MD	35.45333	-119.71622	085-230-07	Soft Water				Metal	Active	1		Well - Water injection	< 1 Barrel	Other
BL4669	8	South Belridge	Belridge	Low Quality Steam trunkline 4" to CoGen line connection(picture BL4669)		N/A	33	28S	21E	MD	35.44646	-119.72288	085-230-07	Soft Water				Metal	Active	3		Well - Water injection	< 1 Barrel	Other
BL4670	8	South Belridge	Belridge	Low Quality Steam trunkline to 616F-33 tail end bleed point(picture BL4670)		N/A	33	28S	21E	MD	35.44687	-119.72425	085-230-07	Soft Water				Metal	Active	1		Well - Water injection	< 1 Barrel	Other
BL4671	4	South Belridge	Belridge	Wims 2954 (picture BL4671)		N/A	29	28S	21E	MD	35.46421	-119.73215	085-230-05	Produced Water				Metal	Active	11		Distribute water to injectors	< 1 Barrel	Other
BL4672	4	South Belridge	Belridge	Wims 2956 (picture BL4671)		N/A	29	28S	21E	MD	35.46085	-119.73214	085-230-05	Produced Water				Metal	Active	21		Distribute water to injectors	< 1 Barrel	Other
BL4673	4	South Belridge	Belridge	Wims 2976 (picture BL4671)		N/A	29	28S	21E	MD	35.46079	-119.72754	085-230-05	Produced Water				Metal	Active	12		Distribute water to injectors	< 1 Barrel	Other
BL4674	4	South Belridge	Belridge	Wims 2987 (picture BL4671)		N/A	29	28S	21E	MD	35.45802	-119.72547	085-230-05	Produced Water				Metal	Active	27		Distribute water to injectors	< 1 Barrel	Other
BL4675	4	South Belridge	Belridge	Wims 2921 A&B(picture BL4675)		N/A	29	28S	21E	MD	35.46852	-119.73824	085-230-05	Produced Water				Metal	Active	27		Distribute water to injectors	< 1 Barrel	Other
BL4676	8	South Belridge	Belridge	Wims 3387 (picture BL4671)		N/A	33	28S	21E	MD	35.44465	-119.70818	085-230-07	Produced Water				Metal	Active	26		Distribute water to injectors	< 1 Barrel	Other
BL4677	8	South Belridge	Belridge	Wims 3415 (picture BL4671)		N/A	34	28S	21E	MD	35.44783	-119.70746	085-230-07	Produced Water				Metal	Active	24		Distribute water to injectors	< 1 Barrel	Other
BL4678	9	South Belridge	Belridge	Wims 3435 (picture BL4671)		N/A	34	28S	21E	MD	35.44713	-119.70160	085-220-22	Produced Water				Metal	Active	23		Distribute water to injectors	< 1 Barrel	Other
BL4679	9	South Belridge	Belridge	Wims 3447 A&B (picture BL4675)		N/A	34	28S	21E	MD	35.44349	-119.70038	085-220-22	Produced Water				Metal	Active	43		Distribute water to injectors	< 1 Barrel	Other
BL4680	8	South Belridge	Belridge	Wims Manifold 3344 (picture BL4680)		N/A	33	28S	21E	MD	35.44916	-119.71640	085-230-07	Produced Water				Metal	Active	1		Distribute water to injectors	< 1 Barrel	Other
BL4681	8	South Belridge	Belridge	Wims Manifold 3352 (picture BL4680)		N/A	33	28S	21E	MD	35.45367	-119.71454	085-230-07	Produced Water				Metal	Active	14		Distribute water to injectors	< 1 Barrel	Other
BL4682	8	South Belridge	Belridge	Wims Manifold 3363 (picture BL4680)		N/A	33	28S	21E	MD	35.45059	-119.71400	085-230-07	Produced Water				Metal	Active	1		Distribute water to injectors	< 1 Barrel	Other
BL4683	8	South Belridge	Belridge	Wims Manifold 3364 (picture BL4680)		N/A	33	28S	21E	MD	35.44970	-119.71165	085-230-07	Produced Water				Metal	Active	15		Distribute water to injectors	< 1 Barrel	Other
BL4684	8	South Belridge	Belridge	Wims Manifold 3374 (picture BL4680)		N/A	33	28S	21E	MD	35.44923	-119.71089	085-230-07	Produced Water				Metal	Active	11		Distribute water to injectors	< 1 Barrel	Other
BL4685	8	South Belridge	Belridge	Wims Manifold 3374E (picture BL4680)		N/A	33	28S	21E	MD	35.45042	-119.71119	085-230-07	Produced Water				Metal	Active	10		Distribute water to injectors	< 1 Barrel	Other
BL4686	8	South Belridge	Belridge	Wims Manifold 3375 (picture BL4680)		N/A	33	28S	21E	MD	35.44735	-119.71144	085-230-07	Produced Water				Metal	Active	2		Distribute water to injectors	< 1 Barrel	Other
BL4687	8	South Belridge	Belridge	Wims Manifold 3376E (picture BL4680)		N/A	33	28S	21E	MD	35.44700	-119.71143	085-230-07	Produced Water				Metal	Active	10		Distribute water to injectors	< 1 Barrel	Other
BL4688	5	South Belridge	Belridge	Wims 2838 A&B (picture BL4675)		N/A	28	28S	21E	MD	35.45573	-119.72031	085-230-26	Produced Water				Metal	Active	52		Distribute water to injectors	< 1 Barrel	Other
BL4689	2	South Belridge	Belridge	Wims 2017 (picture BL4671)		N/A	20	28S	21E	MD	35.47198	-119.74138	085-210-18	Produced Water				Metal	Active	7		Distribute water to injectors	< 1 Barrel	Other
BL4690	8	South Belridge	Belridge	Low Quality 6" trunkline gate valve bleeds(picture BL4690)		N/A	33	28S	21E	MD	35.45273	-119.71704	085-230-07	Soft Water				Metal	Active	2		Distribute water to injectors	< 1 Barrel	Other
BL4700	5	South Belridge	Belridge	North Belridge Pig launcher 20"	Belridge	N/A	27	28S	22E	MD	35.46131	-119.70772	085-230-25	Produced Water	45'	18'	6"	Gunite	active	4		Pig Launcher	< 10 barrels	Drain Pad
BL4701	9	South Belridge	Belridge	Del Sur Pig launcher 20"	Belridge	N/A	27	28S	22E	MD	35.45479	-119.70367	085-220-22	Produced Water	36"	42"	36"	Gunite	active	4		Pig Launcher	< 10 barrels	Drain Pad
BL4702	5	South Belridge	Belridge	North grande to south grande Jumper	Belridge	N/A	27	28S	22E	MD	35.45584	-119.71120	085-230-26	Produced Water					active	2		Supply water	< 5 barrels	Other
BL4703	5	South Belridge	Belridge	North grande to south grande Jumper	Belridge	N/A	27	28S	22E	MD	35.45842	-119.71102	085-230-26	Produced Water					active	1		Supply water	< 1 barrel	Other
BL4705	2	South Belridge	Belridge	DWI Wims 2017	Belridge	N/A	20	28S	21E	MD	35.47211	-119.74132	085-210-18	Produced Water					active	4		suppply water	< 1 barrel	Other
BL4706	4	South Belridge	Belridge	dwi Wims 2954	Belridge	N/A	29	28S	21E	MD	35.46470	-119.73232	085-230-05	Produced Water					active	5		suppply water	< 1 barrel	Other
BL4707	4	South Belridge	Belridge	dwi wims 2987	Belridge	N/A	29	28S	21E	MD	35.45815	-119.72537	085-230-05	Produced Water					active	7		suppply water	< 1 barrel	Other
BL4709	13	South Belridge	Belridge	8265A-2	Del Sur	N/A	2	29S	21E	MD	35.43491	-119.68853	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4711	13	South Belridge	Belridge	8049C-2	Del Sur	N/A	2	29S	21E	MD	35.44025	-119.69472	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4714	13	South Belridge	Belridge	8411A-2	Del Sur	N/A	2	29S	21E	MD	35.43179	-119.68513	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4715	13	South Belridge	Belridge	8195B-2	Del Sur	N/A	2	29S	21E	MD	35.43664	-119.69195	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4717	9	South Belridge	Belridge	527NR3-34	Belridge	N/A	34	28S	21E	MD	35.44375	-119.70385	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL4718	13	South Belridge	Belridge	8403A-2	Del Sur	N/A	2	29S	21E	MD	35.43192	-119.68017	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4721	12	South Belridge	Belridge	8080D-3	Del Sur	N/A	3	29S	21E	MD	35.43890	-119.69923	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4722	13	South Belridge	Belridge	8507B-2	Del Sur	N/A	2	29S	21E	MD	35.42962	-119.68240	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4732	8	South Belridge	Belridge	527MHZL-33	Belridge	N/A	33	28S	21E	MD	35.44302	-119.72248	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4733	8	South Belridge	Belridge	527YHZL-33	Belridge	N/A	33	28S	21E	MD	35.44283	-119.72140	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4734	13	South Belridge	Belridge	8365B-2	Del Sur	N/A	2	29S	21E	MD	35.43239	-119.68813	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4735	9	South Belridge	Belridge	528GR3-34	Belridge	N/A	34	28S	21E	MD	35.44333	-119.70415	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4737	4	South Belridge	Belridge	545AR-29	Belridge	N/A	29	28S	21E	MD	35.46138	-119.73565	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4738	8	South Belridge	Belridge	545CR2-33	Belridge	N/A	33	28S	21E	MD	35.44775	-119.71764	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4739	4	South Belridge	Belridge	545DR3-29	Belridge	N/A	29	28S	21E	MD	35.46156	-119.73437	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4740	8	South Belridge	Belridge	545GR2-33	Belridge	N/A	33	28S	21E	MD	35.44803	-119.71732	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4741	4	South Belridge	Belridge	545LR2-29	Belridge	N/A	29	28S	21E	MD	35.46181	-119.73621	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4743	4	South Belridge	Belridge	556CR2-29	Belridge	N/A	29	28S	21E	MD	35.46051	-119.73319	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4753	12	South Belridge	Belridge	8129B-3	Del Sur	N/A	3	29S	21E	MD	35.43836	-119.69833	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4755	13	South Belridge	Belridge	8312-2	Del Sur	N/A	2	29S	21E	MD	35.43381	-119.68642	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4765	13	South Belridge	Belridge	8074C-2	Del Sur	N/A	2	29S	21E	MD	35.43942	-119.69461	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4766	12	South Belridge	Belridge	8007C-3	Del Sur	N/A	3	29S	21E	MD	35.44058	-119.70070	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4773	4	South Belridge	Belridge	586ZR-29	Belridge	N/A	29	28S	21E	MD	35.46059	-119.72549	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4774	1	South Belridge	Belridge	66WCR2-19	Belridge	N/A	19	28S	21E	MD	35.47401	-119.74755	085-210-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4775	1	South Belridge	Belridge	77WDR-19	Belridge	N/A	19	28S	21E	MD	35.47278	-119.74629	085-210-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4777	1	South Belridge	Belridge	77WFR-19	Belridge	N/A	19	28S	21E	MD	35.47237	-119.74644	085-210-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4779	8	South Belridge	Belridge	532LR3-33	Belridge	N/A	33	28S	21E	MD	35.45269	-119.72066	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4781	13	South Belridge	Belridge	8320B-2	Del Sur	N/A	2	29S	21E	MD	35.43382	-119.69267	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4782	13	South Belridge	Belridge	8245C-2	Del Sur	N/A	2	29S	21E	MD	35.43577	-119.69252	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4791	12	South Belridge	Belridge	81518-3	Del Sur	N/A	3	29S	21E	MD	35.43741	-119.69610	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4792	13	South Belridge	Belridge	8274C-2	Del Sur	N/A	2	29S	21E	MD	35.43531	-119.69477	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4797	12	South Belridge	Belridge	8152C-3	Del Sur	N/A	3	29S	21E	MD	35.43706	-119.69708	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4801	12	South Belridge	Belridge	7121CHZL-3	Del Sur	N/A	3	29S	21E	MD	35.43828	-119.71100	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4802	9	South Belridge	Belridge	558DR2-34	Belridge	N/A	34	28S	21E	MD	35.44154	-119.69647	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4803	13	South Belridge	Belridge	8071C-2	Del Sur	N/A	2	29S	21E	MD	35.43945	-119.69299	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4804	9	South Belridge	Belridge	538ZR2-34	Belridge	N/A	34	28S	21E	MD	35.44234	-119.70113	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4805	9	South Belridge	Belridge	538CR4-34	Belridge	N/A	34	28S	21E	MD	35.44238	-119.70221	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4806	13	South Belridge	Belridge	8407A-2	Del Sur	N/A	2	29S	21E	MD	35.43118	-119.68229	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4810	13	South Belridge	Belridge	8433-2	Del Sur	N/A	2	29S	21E	MD	35.43107	-119.68403	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4811	12	South Belridge	Belridge	8056B-3	Del Sur	N/A	3	29S	21E	MD	35.43983	-119.69988	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4813	13	South Belridge	Belridge	8266A-2	Del Sur	N/A	2	29S	21E	MD	35.43525	-119.68984	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4815	4	South Belridge	Belridge	565AR-29	Belridge	N/A	29	28S	21E	MD	35.46144	-119.73116	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4816	12	South Belridge	Belridge	8058A-3	Del Sur	N/A	3	29S	21E	MD	35.43960	-119.70074	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4817	13	South Belridge	Belridge	8338B-2	Del Sur	N/A	2	29S	21E	MD	35.43332	-119.68760	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4819	1	South Belridge	Belridge	78WF-19	Belridge	N/A	19	28S	21E	MD	35.47083	-119.74655	085-210-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4823	13	South Belridge	Belridge	8392B-2	Del Sur	N/A	2	29S	21E	MD	35.43215	-119.69029	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4830	4	South Belridge	Belridge	524CR2-29	Belridge	N/A	29	28S	21E	MD	35.46413	-119.74001	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4837	12	South Belridge	Belridge	8102C-3	Del Sur	N/A	3	29S	21E	MD	35.43849	-119.69725	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4842	13	South Belridge	Belridge	8322A-2	Del Sur	N/A	2	29S	21E	MD	35.43413	-119.69297	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4844	13	South Belridge	Belridge	8193B-2	Del Sur	N/A	2	29S	21E	MD	35.43667	-119.69067	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged (bbl/yr)	Category
BL4849	9	South Belridge	Belridge	558AR4-34	Belridge	N/A	34	28S	21E	MD	35.44160	-119.69755	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4856	2	South Belridge	Belridge	518LR2-20	Belridge	N/A	20	28S	21E	MD	35.47094	-119.74264	085-210-18	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4857	13	South Belridge	Belridge	8380B-2	Del Sur	N/A	2	29S	21E	MD	35.43209	-119.68121	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4861	8	South Belridge	Belridge	613P-33	Belridge	N/A	33	28S	21E	MD	35.45117	-119.72312	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4862	13	South Belridge	Belridge	8315A-2	Del Sur	N/A	2	29S	21E	MD	35.43426	-119.68821	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4867	12	South Belridge	Belridge	7122HZL-3	Del Sur	N/A	3	29S	21E	MD	35.43826	-119.71126	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4869	4	South Belridge	Belridge	665KAA-29	Belridge	N/A	29	28S	21E	MD	35.46252	-119.73084	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4873	4	South Belridge	Belridge	588DR-29	Belridge	N/A	29	28S	21E	MD	35.45611	-119.72580	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4874	12	South Belridge	Belridge	8155B-3	Del Sur	N/A	3	29S	21E	MD	35.43732	-119.69903	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4875	13	South Belridge	Belridge	8048B-2	Del Sur	N/A	2	29S	21E	MD	35.44046	-119.69455	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4876	8	South Belridge	Belridge	522ER-33	Belridge	N/A	33	28S	21E	MD	35.45369	-119.72285	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4878	9	South Belridge	Belridge	527ZR2-34	Belridge	N/A	34	28S	21E	MD	35.44417	-119.70330	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4879	13	South Belridge	Belridge	8405A-2	Del Sur	N/A	2	29S	21E	MD	35.43134	-119.68160	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4880	13	South Belridge	Belridge	8416A-2	Del Sur	N/A	2	29S	21E	MD	35.43195	-119.68900	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4887	4	South Belridge	Belridge	524NR2-29	Belridge	N/A	29	28S	21E	MD	35.46373	-119.73948	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4888	8	South Belridge	Belridge	548LHZL-33	Belridge	N/A	33	28S	21E	MD	35.44155	-119.71836	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4892	1	South Belridge	Belridge	67WC-19	Belridge	N/A	19	28S	21E	MD	35.47250	-119.74756	085-210-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4894	1	South Belridge	Belridge	76WCR-19	Belridge	N/A	19	28S	21E	MD	35.47519	-119.74720	085-210-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4895	1	South Belridge	Belridge	76WBR-19	Belridge	N/A	19	28S	21E	MD	35.47473	-119.74712	085-210-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4898	13	South Belridge	Belridge	8551A-2	Del Sur	N/A	2	29S	21E	MD	35.42807	-119.67836	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4900	13	South Belridge	Belridge	8222B-2	Del Sur	N/A	2	29S	21E	MD	35.43619	-119.69316	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4902	13	South Belridge	Belridge	8389A-2	Del Sur	N/A	2	29S	21E	MD	35.43244	-119.68768	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4903	9	South Belridge	Belridge	548LR4-34	Belridge	N/A	34	28S	21E	MD	35.44198	-119.70038	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4904	9	South Belridge	Belridge	528CR3-34	Belridge	N/A	34	28S	21E	MD	35.44244	-119.70438	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4907	13	South Belridge	Belridge	8072B-2	Del Sur	N/A	2	29S	21E	MD	35.43965	-119.69390	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4908	9	South Belridge	Belridge	537LR3-34	Belridge	N/A	34	28S	21E	MD	35.44366	-119.70270	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4913	12	South Belridge	Belridge	8153C-3	Del Sur	N/A	3	29S	21E	MD	35.43710	-119.69795	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4914	13	South Belridge	Belridge	8378A-2	Del Sur	N/A	2	29S	21E	MD	35.43228	-119.68009	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4915	14	South Belridge	Belridge	8600A-1	del sur	N/A	1	28S	20E	MD	35.42782	-119.67769	098-113-09	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4918	13	South Belridge	Belridge	8532A-2	Del Sur	N/A	2	29S	21E	MD	35.42890	-119.68268	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4920	12	South Belridge	Belridge	8010B-3	Del Sur	N/A	3	29S	21E	MD	35.44054	-119.70265	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4921	13	South Belridge	Belridge	8319C-2	Del Sur	N/A	2	29S	21E	MD	35.43393	-119.69096	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4922	4	South Belridge	Belridge	555LR2-29	Belridge	N/A	29	28S	21E	MD	35.46183	-119.73396	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4927	9	South Belridge	Belridge	558ZR3-34	Belridge	N/A	34	28S	21E	MD	35.44242	-119.69643	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4933	12	South Belridge	Belridge	7100AHZL-3	Del Sur	N/A	3	29S	21E	MD	35.43900	-119.71325	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4935	8	South Belridge	Belridge	517FHZL-33	Belridge	N/A	33	28S	21E	MD	35.44446	-119.72420	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4942	13	South Belridge	Belridge	8342A-2	Del Sur	N/A	2	29S	21E	MD	35.43338	-119.69030	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4943	13	South Belridge	Belridge	8478-2	Del Sur	N/A	2	29S	21E	MD	35.42971	-119.68025	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4944	9	South Belridge	Belridge	569ER-34	Belridge	N/A	34	28S	21E	MD	35.44126	-119.69594	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4945	13	South Belridge	Belridge	8316-2	Del Sur	N/A	2	29S	21E	MD	35.43347	-119.68898	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4946	13	South Belridge	Belridge	8504B-2	Del Sur	N/A	2	29S	21E	MD	35.42923	-119.67999	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4947	13	South Belridge	Belridge	8194-2	Del Sur	N/A	2	29S	21E	MD	35.43677	-119.69142	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4948	8	South Belridge	Belridge	538CHZL-33	Belridge	N/A	33	28S	21E	MD	35.44216	-119.71942	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4949	8	South Belridge	Belridge	527DHZL-33	Belridge	N/A	33	28S	21E	MD	35.44283	-119.72086	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4950	13	South Belridge	Belridge	8148C-2	Del Sur	N/A	2	29S	21E	MD	35.43792	-119.69463	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL4951	9	South Belridge	Belridge	538ER4-34	Belridge	N/A	34	28S	21E	MD	35.44283	-119.70271	085-220-22	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4952	12	South Belridge	Belridge	8005A-3	Del Sur	N/A	3	29S	21E	MD	35.44067	-119.69947	098-111-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4954	3	South Belridge	Belridge	72CX-30	Belridge	N/A	30	28S	21E	MD	35.46797	-119.74696	085-230-12	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4958	13	South Belridge	Belridge	8238-2	Del Sur	N/A	2	28S	20E	MD	35.43590	-119.68705	098-112-02	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4963	11	South Belridge	Belridge	7003HZL-4	Del Sur	N/A	4	29S	21E	MD	35.44050	-119.71581	098-120-10	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4966	8	South Belridge	Belridge	534Q1-33	Belridge	N/A	33	28S	21E	MD	35.44984	-119.72011	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4969	8	South Belridge	Belridge	614P-33	Belridge	N/A	33	28S	21E	MD	35.44943	-119.72312	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4970	11	South Belridge	Belridge	7053AHZL-4	Del Sur	N/A	4	29S	21E	MD	35.43991	-119.71489	098-120-10	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4973	5	South Belridge	Belridge	518CR2-28	Belridge	N/A	28	28S	21E	MD	35.45690	-119.72487	085-230-26	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4975	4	South Belridge	Belridge	576DR2-29	Belridge	N/A	29	28S	21E	MD	35.45946	-119.72799	085-230-05	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4976	3	South Belridge	Belridge	81WBR-30	Belridge	N/A	30	28S	21E	MD	35.46931	-119.74480	085-230-12	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4988	13	South Belridge	Belridge	8223A-2	Del Sur	N/A	2	29S	21E	MD	35.43620	-119.69368	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4995	8	South Belridge	Belridge	538QHZL-33	Belridge	N/A	33	28S	21E	MD	35.44219	-119.72099	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4996	8	South Belridge	Belridge	527AHZL-33	Belridge	N/A	33	28S	21E	MD	35.44348	-119.72135	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4997	8	South Belridge	Belridge	622J-33	Belridge	N/A	33	28S	21E	MD	35.45352	-119.72203	085-230-07	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BL4998	13	South Belridge	Belridge	829SA-2	Del Sur	N/A	2	29S	21E	MD	35.43493	-119.69196	098-112-01	Produced Water					active	4		Well - Water Injection	< 1 barrel	Water Injector
BLS000	16	South Belridge	Belridge	5094-11	SOSS	N/A	11	29S	21E	MD	35.42483	-119.69155	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS001	16	South Belridge	Belridge	5094A-11	SOSS	N/A	11	29S	21E	MD	35.42487	-119.69173	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS002	16	South Belridge	Belridge	5097A-11	SOSS	N/A	11	29S	21E	MD	35.42481	-119.69351	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS003	16	South Belridge	Belridge	5100-11	SOSS	N/A	11	29S	21E	MD	35.42480	-119.69581	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS004	16	South Belridge	Belridge	5101-11	SOSS	N/A	11	29S	21E	MD	35.42451	-119.67830	098-112-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS005	16	South Belridge	Belridge	5105-11	SOSS	N/A	11	29S	21E	MD	35.42390	-119.68163	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS006	16	South Belridge	Belridge	5105A-11	SOSS	N/A	11	29S	21E	MD	35.42380	-119.68154	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS007	16	South Belridge	Belridge	5108-11	SOSS	N/A	11	29S	21E	MD	35.42391	-119.68374	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS008	16	South Belridge	Belridge	5115A-11	SOSS	N/A	11	29S	21E	MD	35.42389	-119.68836	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS009	16	South Belridge	Belridge	5118A-11	SOSS	N/A	11	29S	21E	MD	35.42394	-119.69058	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS010	16	South Belridge	Belridge	5151-11	SOSS	N/A	11	29S	21E	MD	35.42339	-119.67884	098-112-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS011	16	South Belridge	Belridge	5153A-11	SOSS	N/A	11	29S	21E	MD	35.42301	-119.68013	098-112-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS012	16	South Belridge	Belridge	5157A-11	SOSS	N/A	11	29S	21E	MD	35.42298	-119.68277	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS013	16	South Belridge	Belridge	5157B-11	SOSS	N/A	11	29S	21E	MD	35.42296	-119.68261	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS014	16	South Belridge	Belridge	5160C-11	SOSS	N/A	11	29S	21E	MD	35.42299	-119.68477	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS015	16	South Belridge	Belridge	5163A-11	SOSS	N/A	11	29S	21E	MD	35.42301	-119.68658	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS016	16	South Belridge	Belridge	5166A-11	SOSS	N/A	11	29S	21E	MD	35.42305	-119.68927	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS017	16	South Belridge	Belridge	5169-11	SOSS	N/A	11	29S	21E	MD	35.42302	-119.69148	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS018	16	South Belridge	Belridge	5172-11	SOSS	N/A	11	29S	21E	MD	35.42298	-119.69369	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BLS019	16	South Belridge	Belridge	5175-11	SOSS	N/A	11	29S	21E	MD	35.42296	-119.69582	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS020	16	South Belridge	Belridge	5177-11	SOSS	N/A	11	29S	21E	MD	35.42206	-119.67924	098-112-12	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS021	16	South Belridge	Belridge	5184B-11	SOSS	N/A	11	29S	21E	MD	35.42201	-119.68376	098-112-1S	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS022	16	South Belridge	Belridge	5186B-11	SOSS	N/A	11	29S	21E	MD	35.42211	-119.68595	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS023	16	South Belridge	Belridge	5190-11	SOSS	N/A	11	29S	21E	MD	35.42219	-119.68809	098-112-1S	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS024	16	South Belridge	Belridge	5193-11	SOSS	N/A	11	29S	21E	MD	35.42218	-119.69034	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS025	16	South Belridge	Belridge	5196A-11	SOSS	N/A	11	29S	21E	MD	35.42215	-119.69237	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS026	16	South Belridge	Belridge	5199-11	SOSS	N/A	11	29S	21E	MD	35.42208	-119.69483	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS027	16	South Belridge	Belridge	5205C-11	SOSS	N/A	11	29S	21E	MD	35.42210	-119.68156	098-112-1S	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS028	16	South Belridge	Belridge	5228B-11	SOSS	N/A	11	29S	21E	MD	35.42109	-119.68032	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS029	16	South Belridge	Belridge	5232-11	SOSS	N/A	11	29S	21E	MD	35.42119	-119.68269	098-112-1S	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS030	16	South Belridge	Belridge	5235A-11	SOSS	N/A	11	29S	21E	MD	35.42125	-119.68476	098-112-1S	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS031	16	South Belridge	Belridge	5238A-11	SOSS	N/A	11	29S	21E	MD	35.42113	-119.68743	098-112-1S	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS032	16	South Belridge	Belridge	5238B-11	SOSS	N/A	11	29S	21E	MD	35.42101	-119.68747	098-112-1S	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS033	16	South Belridge	Belridge	5241-11	SOSS	N/A	11	29S	21E	MD	35.42111	-119.68930	098-112-1S	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS035	16	South Belridge	Belridge	5245-11	SOSS	N/A	11	29S	21E	MD	35.42136	-119.69236	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS036	16	South Belridge	Belridge	5247-11	SOSS	N/A	11	29S	21E	MD	35.42117	-119.69371	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS037	16	South Belridge	Belridge	5265-11	SOSS	N/A	11	29S	21E	MD	35.42025	-119.68821	098-112-22	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS038	16	South Belridge	Belridge	5265A-11	SOSS	N/A	11	29S	21E	MD	35.42024	-119.68812	098-112-22	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS039	16	South Belridge	Belridge	5268-11	SOSS	N/A	11	29S	21E	MD	35.42029	-119.69044	098-112-1S	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS040	16	South Belridge	Belridge	5271-11	SOSS	N/A	11	29S	21E	MD	35.42025	-119.69263	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS041	16	South Belridge	Belridge	5271B-11	SOSS	N/A	11	29S	21E	MD	35.41991	-119.69264	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS043	16	South Belridge	Belridge	5274A-11	SOSS	N/A	11	29S	21E	MD	35.42029	-119.69506	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS044	16	South Belridge	Belridge	5277-11	SOSS	N/A	11	29S	21E	MD	35.42016	-119.67932	098-112-1S	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS045	16	South Belridge	Belridge	5280-11	SOSS	N/A	11	29S	21E	MD	35.42026	-119.68154	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS046	16	South Belridge	Belridge	5283-11	SOSS	N/A	11	29S	21E	MD	35.42025	-119.68366	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS047	16	South Belridge	Belridge	5283A-11	SOSS	N/A	11	29S	21E	MD	35.42014	-119.68369	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS048	16	South Belridge	Belridge	5287A-11	SOSS	N/A	11	29S	21E	MD	35.42014	-119.68603	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS049	16	South Belridge	Belridge	5304A-11	SOSS	N/A	11	29S	21E	MD	35.41932	-119.68025	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BLS050	16	South Belridge	Belridge	5307B-11	SOSS	N/A	11	29S	21E	MD	35.41936	-119.68252	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL5051	16	South Belridge	Belridge	5310-11	SOSS	N/A	11	29S	21E	MD	35.41931	-119.68488	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5052	16	South Belridge	Belridge	5313A-11	SOSS	N/A	11	29S	21E	MD	35.41915	-119.68745	098-112-22	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5053	16	South Belridge	Belridge	5313C-11	SOSS	N/A	11	29S	21E	MD	35.41941	-119.68751	098-112-22	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5054	16	South Belridge	Belridge	5316A-11	SOSS	N/A	11	29S	21E	MD	35.41931	-119.68926	098-112-22	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5055	16	South Belridge	Belridge	5319A-11	SOSS	N/A	11	29S	21E	MD	35.41937	-119.69138	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5056	16	South Belridge	Belridge	5322-11	SOSS	N/A	11	29S	21E	MD	35.41898	-119.69365	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5057	16	South Belridge	Belridge	5322A-11	SOSS	N/A	11	29S	21E	MD	35.41958	-119.69386	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5058	16	South Belridge	Belridge	5325-11	SOSS	N/A	11	29S	21E	MD	35.41940	-119.69524	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5059	16	South Belridge	Belridge	5352A-11	SOSS	N/A	11	29S	21E	MD	35.41839	-119.67921	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5060	16	South Belridge	Belridge	5355-11	SOSS	N/A	11	29S	21E	MD	35.41839	-119.68144	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5061	16	South Belridge	Belridge	5355A-11	SOSS	N/A	11	29S	21E	MD	35.41839	-119.68168	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5062	16	South Belridge	Belridge	5358B-11	SOSS	N/A	11	29S	21E	MD	35.41833	-119.68367	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5063	16	South Belridge	Belridge	5362A-11	SOSS	N/A	11	29S	21E	MD	35.41834	-119.68608	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5064	16	South Belridge	Belridge	5362B-11	SOSS	N/A	11	29S	21E	MD	35.41840	-119.68586	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5065	16	South Belridge	Belridge	5365-11	SOSS	N/A	11	29S	21E	MD	35.41844	-119.68820	098-112-22	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5066	16	South Belridge	Belridge	5368-11	SOSS	N/A	11	29S	21E	MD	35.41843	-119.69043	098-112-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5067	16	South Belridge	Belridge	5371A-11	SOSS	N/A	11	29S	21E	MD	35.41835	-119.69253	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5068	16	South Belridge	Belridge	5374-11	SOSS	N/A	11	29S	21E	MD	35.41840	-119.69477	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5069	16	South Belridge	Belridge	5378-11	SOSS	N/A	11	29S	21E	MD	35.41752	-119.68035	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5070	16	South Belridge	Belridge	5378A-11	SOSS	N/A	11	29S	21E	MD	35.41744	-119.68030	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5071	16	South Belridge	Belridge	5382A-11	SOSS	N/A	11	29S	21E	MD	35.41747	-119.68247	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5072	16	South Belridge	Belridge	5382B-11	SOSS	N/A	11	29S	21E	MD	35.41735	-119.68253	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5073	16	South Belridge	Belridge	5385-11	SOSS	N/A	11	29S	21E	MD	35.41751	-119.68482	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5074	16	South Belridge	Belridge	5385A-11	SOSS	N/A	11	29S	21E	MD	35.41748	-119.68475	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5075	16	South Belridge	Belridge	5388-11	SOSS	N/A	11	29S	21E	MD	35.41768	-119.68740	098-112-22	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5076	16	South Belridge	Belridge	5388A-11	SOSS	N/A	11	29S	21E	MD	35.41771	-119.68736	098-112-22	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5077	16	South Belridge	Belridge	5391-11	SOSS	N/A	11	29S	21E	MD	35.41747	-119.68935	098-112-22	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5078	16	South Belridge	Belridge	5397-11	SOSS	N/A	11	29S	21E	MD	35.41746	-119.69373	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5079	16	South Belridge	Belridge	5400A-11	SOSS	N/A	11	29S	21E	MD	35.41737	-119.69564	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5080	16	South Belridge	Belridge	5403-11	SOSS	N/A	11	29S	21E	MD	35.41704	-119.67960	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL5082	16	South Belridge	Belridge	5430-11	SOSS	N/A	11	29S	21E	MD	35.41656	-119.68145	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5083	16	South Belridge	Belridge	5430A-11	SOSS	N/A	11	29S	21E	MD	35.41653	-119.68138	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5084	16	South Belridge	Belridge	5433-11	SOSS	N/A	11	29S	21E	MD	35.41656	-119.68367	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5085	16	South Belridge	Belridge	5433A-11	SOSS	N/A	11	29S	21E	MD	35.41658	-119.68372	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5086	16	South Belridge	Belridge	5436-11	SOSS	N/A	11	29S	21E	MD	35.41657	-119.68589	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5087	16	South Belridge	Belridge	5443-11	SOSS	N/A	11	29S	21E	MD	35.41657	-119.69044	098-112-22	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5088	16	South Belridge	Belridge	5443A-11	SOSS	N/A	11	29S	21E	MD	35.41654	-119.69041	098-112-22	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5089	16	South Belridge	Belridge	5446-11	SOSS	N/A	11	29S	21E	MD	35.41657	-119.69260	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5090	16	South Belridge	Belridge	5446A-11	SOSS	N/A	11	29S	21E	MD	35.41652	-119.69256	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5091	16	South Belridge	Belridge	5449B-11	SOSS	N/A	11	29S	21E	MD	35.41677	-119.69500	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5092	16	South Belridge	Belridge	5469-11	SOSS	N/A	11	29S	21E	MD	35.41560	-119.69149	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5093	16	South Belridge	Belridge	5472-11	SOSS	N/A	11	29S	21E	MD	35.41565	-119.69376	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5094	16	South Belridge	Belridge	5475-11	SOSS	N/A	11	29S	21E	MD	35.41558	-119.69546	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5095	16	South Belridge	Belridge	5482-11	SOSS	N/A	11	29S	21E	MD	35.41564	-119.68251	098-112-23	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5096	16	South Belridge	Belridge	5521-11	SOSS	N/A	11	29S	21E	MD	35.41472	-119.69261	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5098	16	South Belridge	Belridge	5524A-11	SOSS	N/A	11	29S	21E	MD	35.41481	-119.69496	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5100	16	South Belridge	Belridge	5572A-11	SOSS	N/A	11	29S	21E	MD	35.41385	-119.69372	098-112-28	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5102	17	South Belridge	SEBU T	5034-12	SOSS	N/A	12	29S	21E	MD	35.42591	-119.66595	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5103	17	South Belridge	SEBU T	5034A-12	SOSS	N/A	12	29S	21E	MD	35.42592	-119.66600	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5104	17	South Belridge	SEBU T	5036-12	SOSS	N/A	12	29S	21E	MD	35.42588	-119.66760	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5105	17	South Belridge	SEBU T	5036A-12	SOSS	N/A	12	29S	21E	MD	35.42591	-119.66753	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5106	17	South Belridge	SEBU T	5038A-12	SOSS	N/A	12	29S	21E	MD	35.42617	-119.66913	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5108	17	South Belridge	SEBU T	5040B-12	SOSS	N/A	12	29S	21E	MD	35.42575	-119.67092	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5109	17	South Belridge	SEBU T	5042-12	SOSS	N/A	12	29S	21E	MD	35.42578	-119.67243	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5110	17	South Belridge	SEBU T	5042A-12	SOSS	N/A	12	29S	21E	MD	35.42574	-119.67238	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5111	17	South Belridge	SEBU T	5045-12	SOSS	N/A	12	29S	21E	MD	35.42574	-119.67322	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5112	17	South Belridge	SEBU T	5045A-12	SOSS	N/A	12	29S	21E	MD	35.42566	-119.67312	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5113	17	South Belridge	SEBU T	5047-12	SOSS	N/A	12	29S	21E	MD	35.42543	-119.67581	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5114	17	South Belridge	SEBU T	5049-12	SOSS	N/A	12	29S	21E	MD	35.42577	-119.67742	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5115	17	South Belridge	SEBU T	5082-12	SOSS	N/A	12	29S	21E	MD	35.42470	-119.66507	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL5116	17	South Belridge	SEBU T	5082B-12	SOSS	N/A	12	29S	21E	MD	35.42482	-119.66507	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5117	17	South Belridge	SEBU T	5085A-12	SOSS	N/A	12	29S	21E	MD	35.42472	-119.66667	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5118	17	South Belridge	SEBU T	5085B-12	SOSS	N/A	12	29S	21E	MD	35.42472	-119.66672	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5119	17	South Belridge	SEBU T	5087-12	SOSS	N/A	12	29S	21E	MD	35.42479	-119.66836	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5120	17	South Belridge	SEBU T	5089-12	SOSS	N/A	12	29S	21E	MD	35.42489	-119.66991	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5121	17	South Belridge	SEBU T	5091-12	SOSS	N/A	12	29S	21E	MD	35.42416	-119.67183	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5122	17	South Belridge	SEBU T	5091A-12	SOSS	N/A	12	29S	21E	MD	35.42463	-119.67115	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5124	17	South Belridge	SEBU T	5094A-12	SOSS	N/A	12	29S	21E	MD	35.42469	-119.67323	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5125	17	South Belridge	SEBU T	5096-12	SOSS	N/A	12	29S	21E	MD	35.42458	-119.67535	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5126	17	South Belridge	SEBU T	5098-12	SOSS	N/A	12	29S	21E	MD	35.42446	-119.67662	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5127	17	South Belridge	SEBU T	5133-12	SOSS	N/A	12	29S	21E	MD	35.42356	-119.66590	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5128	17	South Belridge	SEBU T	5133A-12	SOSS	N/A	12	29S	21E	MD	35.42362	-119.66574	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5129	17	South Belridge	SEBU T	5136-12	SOSS	N/A	12	29S	21E	MD	35.42340	-119.66756	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5130	17	South Belridge	SEBU T	5136A-12	SOSS	N/A	12	29S	21E	MD	35.42337	-119.66740	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5131	17	South Belridge	SEBU T	5138-12	SOSS	N/A	12	29S	21E	MD	35.42350	-119.66910	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5132	17	South Belridge	SEBU T	5140-12	SOSS	N/A	12	29S	21E	MD	35.42330	-119.67078	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5133	17	South Belridge	SEBU T	5142-12	SOSS	N/A	12	29S	21E	MD	35.42333	-119.67237	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5134	17	South Belridge	SEBU T	5142A-12	SOSS	N/A	12	29S	21E	MD	35.42337	-119.67250	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5135	17	South Belridge	SEBU T	5145-12	SOSS	N/A	12	29S	21E	MD	35.42328	-119.67383	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5136	17	South Belridge	SEBU T	5147-12	SOSS	N/A	12	29S	21E	MD	35.42330	-119.67580	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5137	17	South Belridge	SEBU T	5182B-12	SOSS	N/A	12	29S	21E	MD	35.42239	-119.66469	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5138	17	South Belridge	SEBU T	5185-12	SOSS	N/A	12	29S	21E	MD	35.42223	-119.66664	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5139	17	South Belridge	SEBU T	5187A-12	SOSS	N/A	12	29S	21E	MD	35.42236	-119.66841	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5140	17	South Belridge	SEBU T	5189-12	SOSS	N/A	12	29S	21E	MD	35.42249	-119.66964	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5141	17	South Belridge	SEBU T	5191-12	SOSS	N/A	12	29S	21E	MD	35.42243	-119.67160	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5142	17	South Belridge	SEBU T	5191B-12	SOSS	N/A	12	29S	21E	MD	35.42180	-119.67149	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5143	17	South Belridge	SEBU T	5193-12	SOSS	N/A	12	29S	21E	MD	35.42210	-119.67307	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5144	17	South Belridge	SEBU T	5193A-12	SOSS	N/A	12	29S	21E	MD	35.42201	-119.67302	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5145	17	South Belridge	SEBU T	5196-12	SOSS	N/A	12	29S	21E	MD	35.42197	-119.67490	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5146	17	South Belridge	SEBU T	5231A-12	SOSS	N/A	12	29S	21E	MD	35.42100	-119.66420	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector

Aera Energy LLC - South Belridge Oil Field
Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL5147	17	South Belridge	SEBU T	5233B-12	SOSS	N/A	12	29S	21E	MD	35.42118	-119.66557	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5148	17	South Belridge	SEBU T	5236-12	SOSS	N/A	12	29S	21E	MD	35.42101	-119.66744	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5149	17	South Belridge	SEBU T	5236A-12	SOSS	N/A	12	29S	21E	MD	35.42104	-119.66733	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5150	17	South Belridge	SEBU T	5244-12	SOSS	N/A	12	29S	21E	MD	35.42094	-119.67373	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5151	17	South Belridge	SEBU T	5250A-12	SOSS	N/A	12	29S	21E	MD	35.42120	-119.67811	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5152	17	South Belridge	SEBU T	5263A-12	SOSS	N/A	12	29S	21E	MD	35.42102	-119.66896	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5153	17	South Belridge	SEBU T	5265A-12	SOSS	N/A	12	29S	21E	MD	35.42089	-119.67076	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5154	17	South Belridge	SEBU T	5265B-12	SOSS	N/A	12	29S	21E	MD	35.42095	-119.67064	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5155	17	South Belridge	SEBU T	5267A-12	SOSS	N/A	12	29S	21E	MD	35.42078	-119.67233	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5156	17	South Belridge	SEBU T	5270A-12	SOSS	N/A	12	29S	21E	MD	35.42080	-119.67402	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5157	17	South Belridge	SEBU T	5272-12	SOSS	N/A	12	29S	21E	MD	35.42081	-119.67573	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5158	17	South Belridge	SEBU T	5275-12	SOSS	N/A	12	29S	21E	MD	35.42069	-119.67748	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5159	17	South Belridge	SEBU T	5280-12	SOSS	N/A	12	29S	21E	MD	35.41994	-119.66339	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5160	17	South Belridge	SEBU T	5280A-12	SOSS	N/A	12	29S	21E	MD	35.41974	-119.66325	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5161	17	South Belridge	SEBU T	5282A-12	SOSS	N/A	12	29S	21E	MD	35.41989	-119.66472	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5162	17	South Belridge	SEBU T	5284-12	SOSS	N/A	12	29S	21E	MD	35.41984	-119.66650	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5163	17	South Belridge	SEBU T	5284A-12	SOSS	N/A	12	29S	21E	MD	35.41980	-119.66659	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5164	17	South Belridge	SEBU T	5287-12	SOSS	N/A	12	29S	21E	MD	35.41999	-119.66817	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5165	17	South Belridge	SEBU T	5287A-12	SOSS	N/A	12	29S	21E	MD	35.42014	-119.66810	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5166	17	South Belridge	SEBU T	5316A-12	SOSS	N/A	12	29S	21E	MD	35.41962	-119.67136	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5168	17	South Belridge	SEBU T	5319A-12	SOSS	N/A	12	29S	21E	MD	35.41955	-119.67331	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5169	17	South Belridge	SEBU T	53198-12	SOSS	N/A	12	29S	21E	MD	35.41960	-119.67338	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5170	17	South Belridge	SEBU T	5321-12	SOSS	N/A	12	29S	21E	MD	35.41964	-119.67484	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5171	17	South Belridge	SEBU T	5321A-12	SOSS	N/A	12	29S	21E	MD	35.41961	-119.67473	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5172	17	South Belridge	SEBU T	5321B-12	SOSS	N/A	12	29S	21E	MD	35.41960	-119.67483	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5173	17	South Belridge	SEBU T	5323A-12	SOSS	N/A	12	29S	21E	MD	35.41961	-119.67644	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5174	17	South Belridge	SEBU T	5325-12	SOSS	N/A	12	29S	21E	MD	35.41955	-119.67799		Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5175	17	South Belridge	SEBU T	5325A-12	SOSS	N/A	12	29S	21E	MD	35.41949	-119.67793	098-113-13	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5176	17	South Belridge	SEBU T	5331-12	SOSS	N/A	12	29S	21E	MD	35.41869	-119.66421	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5177	17	South Belridge	SEBU T	5331A-12	SOSS	N/A	12	29S	21E	MD	35.41881	-119.66354	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL5178	17	South Belridge	SEBU T	5331B-12	SOSS	N/A	12	29S	21E	MD	35.41854	-119.66379	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5179	17	South Belridge	SEBU T	5331C-12	SOSS	N/A	12	29S	21E	MD	35.41875	-119.66381	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5180	17	South Belridge	SEBU T	5333-12	SOSS	N/A	12	29S	21E	MD	35.41864	-119.66562	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5181	17	South Belridge	SEBU T	5333A-12	SOSS	N/A	12	29S	21E	MD	35.41845	-119.66541	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5182	17	South Belridge	SEBU T	5335A-12	SOSS	N/A	12	29S	21E	MD	35.41869	-119.66726	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5183	17	South Belridge	SEBU T	5335B-12	SOSS	N/A	12	29S	21E	MD	35.41873	-119.66736	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5184	17	South Belridge	SEBU T	5363A-12	SOSS	N/A	12	29S	21E	MD	35.41857	-119.66889	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5185	17	South Belridge	SEBU T	5365-12	SOSS	N/A	12	29S	21E	MD	35.41852	-119.67059	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5186	17	South Belridge	SEBU T	5367-12	SOSS	N/A	12	29S	21E	MD	35.41848	-119.67236	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5187	17	South Belridge	SEBU T	5367A-12	SOSS	N/A	12	29S	21E	MD	35.41848	-119.67221	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5188	17	South Belridge	SEBU T	5367B-12	SOSS	N/A	12	29S	21E	MD	35.41857	-119.67227	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5189	17	South Belridge	SEBU T	5370A-12	SOSS	N/A	12	29S	21E	MD	35.41851	-119.67393	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5190	17	South Belridge	SEBU T	5372A-12	SOSS	N/A	12	29S	21E	MD	35.41852	-119.67573	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5191	17	South Belridge	SEBU T	5374A-12	SOSS	N/A	12	29S	21E	MD	35.41850	-119.67736	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5192	17	South Belridge	SEBU T	5374B-12	SOSS	N/A	12	29S	21E	MD	35.41835	-119.67726	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5193	17	South Belridge	SEBU T	5382-12	SOSS	N/A	12	29S	21E	MD	35.41750	-119.66463	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5194	17	South Belridge	SEBU T	5382A-12	SOSS	N/A	12	29S	21E	MD	35.41753	-119.66469	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5196	17	South Belridge	SEBU T	5384A-12	SOSS	N/A	12	29S	21E	MD	35.41753	-119.66627	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5197	17	South Belridge	SEBU T	5387-12	SOSS	N/A	12	29S	21E	MD	35.41743	-119.66802	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5198	17	South Belridge	SEBU T	5387A-12	SOSS	N/A	12	29S	21E	MD	35.41748	-119.66810	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5199	17	South Belridge	SEBU T	5414-12	SOSS	N/A	12	29S	21E	MD	35.41736	-119.66980	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5200	17	South Belridge	SEBU T	5414A-12	SOSS	N/A	12	29S	21E	MD	35.41737	-119.66965	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5201	17	South Belridge	SEBU T	5416-12	SOSS	N/A	12	29S	21E	MD	35.41731	-119.67149	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5202	17	South Belridge	SEBU T	5416A-12	SOSS	N/A	12	29S	21E	MD	35.41732	-119.67131	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5203	17	South Belridge	SEBU T	5418A-12	SOSS	N/A	12	29S	21E	MD	35.41709	-119.67311	098-113-15	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5204	17	South Belridge	SEBU T	5421-12	SOSS	N/A	12	29S	21E	MD	35.41724	-119.67475	098-113-17	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5205	17	South Belridge	SEBU T	5423-12	SOSS	N/A	12	29S	21E	MD	35.41721	-119.67644	098-113-17	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5206	17	South Belridge	SEBU T	5423A-12	SOSS	N/A	12	29S	21E	MD	35.41717	-119.67641	098-113-17	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5207	17	South Belridge	SEBU T	5425-12	SOSS	N/A	12	29S	21E	MD	35.41718	-119.67812	098-113-18	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector
BL5208	17	South Belridge	SEBU T	5425A-12	SOSS	N/A	12	29S	21E	MD	35.41718	-119.67805	098-113-18	Steam					Active	6		2" Energy Control Bleed point x3 and 3/4" Energy Control Bleed point x3	< 1	Steam Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL5347	16	South Belridge		Trunkline Blowdown	3191A-11	N/A	11	29S	21E	MD	35.42228	-119.68935	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5350	16	South Belridge		Trunkline Blowdown	5317-11	N/A	11	29S	21E	MD	35.41957	-119.69016	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5351	16	South Belridge	Belridge	Trunkline Blowdown	Gate 7	N/A	3	29S	21E	MD	35.42019	-119.67969	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5352	16	South Belridge	Belridge	Trunkline Blowdown	3094A-11	N/A	11	29S	21E	MD	35.42427	-119.69097	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5353	16	South Belridge	Belridge	Trunkline Blowdown	9098-11	N/A	11	29S	21E	MD	35.42422	-119.69392	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5354	15	South Belridge	Belridge	Trunkline Blowdown	3176A-10	N/A	10	29S	21E	MD	35.42254	-119.69632	098-111-12	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5355	16	South Belridge	Belridge	Trunkline Blowdown	5175-11	N/A	11	29S	21E	MD	35.42296	-119.69582	098-112-28	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5356	15	South Belridge	Belridge	Trunkline Blowdown	3011-10	N/A	10	29S	21E	MD	35.42653	-119.70342	098-111-12	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5357	15	South Belridge	Belridge	Trunkline Blowdown	3037-10	N/A	10	29S	21E	MD	35.42566	-119.70428	098-111-08	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5358	12	South Belridge	Belridge	Trunkline Blowdown	4577-3	N/A	3	29S	21E	MD	35.42763	-119.69713	098-111-03	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5359	12	South Belridge	Belridge	Trunkline Blowdown	3576-3	N/A	3	29S	21E	MD	35.42714	-119.69647	098-111-03	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5360	13	South Belridge	Belridge	Trunkline Blowdown	3624-2	N/A	2	29S	21E	MD	35.42679	-119.69486	098-112-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5361	13	South Belridge	Belridge	Trunkline Blowdown	4622-2	N/A	2	29S	21E	MD	35.42679	-119.69370	098-112-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5362	13	South Belridge	Belridge	Trunkline Blowdown	5619-2	N/A	2	29S	21E	MD	35.42685	-119.69150	098-112-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5363	13	South Belridge	Belridge	Trunkline Blowdown	5619-2	N/A	2	29S	21E	MD	35.42685	-119.69145	098-112-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5364	16	South Belridge	Belridge	Trunkline Blowdown	3018B-11	N/A	11	29S	21E	MD	35.42640	-119.69048	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5365	13	South Belridge	Belridge	Trunkline Blowdown	3588-2	N/A	2	29S	21E	MD	35.42765	-119.68681	098-112-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5366	13	South Belridge	Belridge	Trunkline Blowdown	3586A-2	N/A	2	29S	21E	MD	35.42719	-119.68523	098-112-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5367	16	South Belridge	Belridge	Trunkline Blowdown	3211B-11	N/A	11	29S	21E	MD	35.42177	-119.68533	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5368	16	South Belridge	Belridge	Trunkline Blowdown	3162A-11	N/A	11	29S	21E	MD	35.42296	-119.68601	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5369	16	South Belridge	Belridge	Trunkline Blowdown	3086D-11	N/A	11	29S	21E	MD	35.42449	-119.68528	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5370	16	South Belridge	Belridge	Trunkline Blowdown	3086D-11	N/A	11	29S	21E	MD	35.42449	-119.68528	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5371	16	South Belridge	Belridge	Trunkline Blowdown	3086D-11	N/A	11	29S	21E	MD	35.42449	-119.68528	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5372	16	South Belridge	Belridge	Trunkline Blowdown	3284A-11	N/A	11	29S	21E	MD	35.41982	-119.68430	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5373	13	South Belridge	Belridge	Trunkline Blowdown	3606A-2	N/A	2	29S	21E	MD	35.42718	-119.68210	098-112-02	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5374	17	South Belridge	Belridge	Trunkline Blowdown	3146-12	N/A	12	29S	21E	MD	35.42363	-119.67501	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5375	17	South Belridge	Belridge	Trunkline Blowdown	3381A-12	N/A	12	29S	21E	MD	35.41791	-119.66406	098-113-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5376	17	South Belridge	Belridge	Trunkline Blowdown	3112A-12	N/A	12	29S	21E	MD	35.42377	-119.66834	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5377	14	South Belridge	Belridge	Trunkline Blowdown	5514-1	N/A	1	29S	21E	MD	35.42927	-119.67009	098-113-11	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5378	16	South Belridge	Belridge	Trunkline Blowdown	5153A-11	N/A	11	29S	21E	MD	35.42302	-119.68013	098-112-12	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5379	11	South Belridge	Belridge	Trunkline Blowdown	4-3	N/A	3	29S	21E	MD	35.43608	-119.71734	098-120-10	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5380	12	South Belridge	Belridge	Trunkline Blowdown	5199-3	N/A	3	29S	21E	MD	35.43639	-119.71270	098-111-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5381	12	South Belridge	Belridge	Trunkline Blowdown	3225-3	N/A	3	29S	21E	MD	35.43623	-119.71331	098-111-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5382	12	South Belridge	Belridge	Trunkline Blowdown	4300-3	N/A	3	29S	21E	MD	35.43467	-119.71323	098-111-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5383	12	South Belridge	Belridge	Trunkline Blowdown	SOX 3-2	N/A	3	29S	21E	MD	35.43474	-119.70483	098-111-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5384	12	South Belridge	Belridge	Trunkline Blowdown	3471-3	N/A	3	29S	21E	MD	35.43057	-119.71028	098-111-03	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5385	12	South Belridge	Belridge	Trunkline Blowdown	5580-3	N/A	3	29S	21E	MD	35.42763	-119.69924	098-111-03	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5386	13	South Belridge	Belridge	Trunkline Blowdown	4583-2	N/A	2	29S	21E	MD	35.42759	-119.68379	098-112-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5387	12	South Belridge	Belridge	Trunkline Blowdown	4482-3	N/A	3	29S	21E	MD	35.42939	-119.70129	098-111-03	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5388	12	South Belridge	Belridge	Trunkline Blowdown	3513-3	N/A	3	29S	21E	MD	35.42932	-119.70460	098-111-03	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5389	12	South Belridge	Belridge	Trunkline Blowdown	4463-3	N/A	3	29S	21E	MD	35.43019	-119.70461	098-111-03	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5390	12	South Belridge	Belridge	Trunkline Blowdown	3353-3	N/A	3	29S	21E	MD	35.42850	-119.70241	098-111-03	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5391	12	South Belridge	Belridge	Trunkline Blowdown	3485-3	N/A	3	29S	21E	MD	35.42978	-119.70300	09B-111-03	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5392	11	South Belridge	Belridge	Trunkline Blowdown	3103-4	N/A	4	29S	21E	MD	35.43815	-119.71572	098-120-10	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5393	17	South Belridge	Belridge	Trunkline Blowdown	12-2M	N/A	2	29S	21E	MD	35.42590	-119.67482	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL5394	17	South Belridge	Belridge	Trunkline Blowdown	12-2A	N/A	2	29S	21E	MD	35.42579	-119.67482	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5395	17	South Belridge	Belridge	Trunkline Blowdown	12-2B	N/A	2	29S	21E	MD	35.42568	-119.67482	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5396	17	South Belridge	Belridge	Trunkline Blowdown	12-2C	N/A	2	29S	21E	MD	35.42556	-119.67482	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5397	17	South Belridge	Belridge	Trunkline Blowdown	12-2D	N/A	2	29S	21E	MD	35.42546	-119.67482	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5398	17	South Belridge	Belridge	Trunkline Blowdown	12-2E #2	N/A	2	29S	21E	MD	35.42535	-119.67482	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5399	17	South Belridge	Belridge	Trunkline Blowdown	12-2E	N/A	2	29S	21E	MD	35.42535	-119.67482	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5400	17	South Belridge	Belridge	Trunkline Blowdown	S of 12-2E	N/A	2	29S	21E	MD	35.42509	-119.67460	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5401	17	South Belridge	Belridge	Trunkline Blowdown	12-2F	N/A	2	29S	21E	MD	35.42536	-119.67379	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5402	17	South Belridge	Belridge	Trunkline Blowdown	Between 12-2G & 12-2F	N/A	2	29S	21E	MD	35.42542	-119.67379	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5403	17	South Belridge	Belridge	Trunkline Blowdown	12-2G	N/A	2	29S	21E	MD	35.42550	-119.67379	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5404	17	South Belridge	Belridge	Trunkline Blowdown	12-2H	N/A	2	29S	21E	MD	35.42560	-119.67379	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5405	17	South Belridge	Belridge	Trunkline Blowdown	12-2J	N/A	2	29S	21E	MD	35.42572	-119.67379	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5406	17	South Belridge	Belridge	Trunkline Blowdown	12-2K	N/A	2	29S	21E	MD	35.42580	-119.67379	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5407	17	South Belridge	Belridge	Trunkline Blowdown	12-2L	N/A	2	29S	21E	MD	35.42594	-119.67379	098-113-13	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5408	13	South Belridge	Belridge	Trunkline Blowdown	SOX 2-3 East	N/A	2	29S	21E	MD	35.43188	-119.68393	098-112-02	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5409	13	South Belridge	Belridge	Trunkline Blowdown	SOX 2-3 SE	N/A	2	29S	21E	MD	35.43188	-119.68393	098-112-02	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5410	16	South Belridge	Belridge	Trunkline Blowdown	11-1 East	N/A	3	29S	21E	MD	35.42451	-119.69043	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5411	16	South Belridge	Belridge	Trunkline Blowdown	11-1 West	N/A	3	29S	21E	MD	35.42450	-119.69067	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5412	13	South Belridge	Belridge	Trunkline Blowdown	2-5	N/A	2	29S	21E	MD	35.43193	-119.69453	098-112-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5413	13	South Belridge	Belridge	Trunkline Blowdown	WP 2	N/A	2	29S	21E	MD	35.42751	-119.68697	098-112-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5414	13	South Belridge	Belridge	Trunkline Blowdown	8098	N/A	2	29S	21E	MD	35.43932	-119.69436	098-112-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5415	12	South Belridge	Belridge	Trunkline Blowdown	7th Standard	N/A	3	29S	21E	MD	35.44086	-119.70486	098-111-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5416	12	South Belridge	Belridge	Trunkline Blowdown	7th Standard	N/A	3	29S	21E	MD	35.44086	-119.70486	098-111-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5417	12	South Belridge	Belridge	Trunkline Blowdown	7th Standard	N/A	3	29S	21E	MD	35.44086	-119.70486	098-111-01	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5418	2	South Belridge	Belridge	Trunkline Blowdown	518A	N/A	3	29S	21E	MD	35.47012	-119.74223	085-210-18	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5419	2	South Belridge	Belridge	Trunkline Blowdown	518A	N/A	3	29S	21E	MD	35.47012	-119.74223	085-210-18	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5420	2	South Belridge	Belridge	Trunkline Blowdown	3097-11 / 3113A-11	N/A	2	29S	21E	MD	35.47012	-119.74223	085-210-18	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5442	16	South Belridge	Belridge	Generator Bank 11-1A-11-1J	11-1 east&west	N/A	11	29S	21E	MD	35.42604	-119.69464	098-112-15	Steam					Active	1		Blow Down Stack to Atmoshere	< 1	Blowdown
BL5443	16	South Belridge	Belridge	Generator Bank 11-1A-11-1J blow down pit	11-1 Generators	N/A	11	29S	21E	MD	35.42641	-119.69314	098-112-15	Steam	26	12	4	Concrete	Active	100		3 Pressure Relief Valves, 6 1" ball valves for energy control. Each Gen	< 1	Blowdown
BL5444	16	South Belridge	Belridge	Generator Bank 2-5 A-G (Inactive)	Belridge	N/A	2	29S	21E	MD	35.42263	-119.69491	098-112-28	Steam				Earthen	Active	10		Blow down pit	< 1	Blowdown pit
BL5445	16	South Belridge	Belridge	Generator bank 2-5 H-J	Belridge	N/A	3	29S	21E	MD	35.42263	-119.69491	098-112-28	Steam				Earthen	Inactive	70		3 Pressure Relief Valves, 6 1" ball valves for energy control. 7 Blow down lines Each Gen	< 1	PRV
BL5446	13	South Belridge	Belridge	Generator Bank 2-3 A-J	Belridge	N/A	2	29S	21E	MD	35.43123	-119.68331	098-112-02	Steam				Earthen	Active	30		4 Pressure Relief Valves, 6 1" ball valves for energy control. 7 Blow down lines Each Gen	< 1	PRV
BL5448	14	South Belridge	Belridge	Generator Bank 1-1 A-E	Belridge	N/A	2	29S	21E	MD	35.42737	-119.67677	098-113-09	Steam				Earthen	Active	100		3 Pressure Relief Valves, 6 1" ball valves for energy control.	< 1	PRV
BL5450	17	South Belridge	Belridge	Generator Bank 12-2 A-M	Belridge	N/A	2	29S	21E	MD	35.42526	-119.67409	098-113-13	Steam				Earthen	Active	50		3 Pressure Relief Valves, 6 1" ball valves for energy control.	< 1	PRV
BL5451	17	South Belridge	Belridge	Generator Bank 12-2 Blow down	12-2 Generators	N/A	2	29S	21E	MD	35.42511	-119.67341	098-113-13	Steam	30	12	4	Concrete	Active	120		3 Pressure Relief Valves, 6 1" ball valves for energy control.	< 1	PRV
BL5452	12	South Belridge	Belridge	Generator Bank 3-2 D,E,F,G,H,I,M,O	Belridge	N/A	3	29S	21E	MD	35.43379	-119.70442	098-111-03	Steam				Earthen	Active	12		Blow down pit	< 1	Blowdown pit
BL5453	12	South Belridge	Belridge	Generator Bank Blow Down Pit	2-3 Generators	N/A	3	29S	21E	MD	35.43379	-119.70442	098-111-03	Steam	20	20	4	Concrete	Active	80		3 Pressure Relief Valves, 6 1" ball valves for energy control.	< 1	PRV
BL5454	2	South Belridge	Belridge	Generator Bank 133,72,73	Belridge	N/A	29	28S	21E	MD	35.47056	-119.73653	085-210-18	Steam				Earthen	Active	15		Blow down pit	< 1	Blowdown pit
BL5455	2	South Belridge	Belridge	Generator Bank 2038 blow down pit	2038 Generators	N/A	29	28S	21E	MD	35.47056	-119.73653	085-210-18	Steam	65	28	3	Earthen	Active	30		3 Pressure Relief Valves, 6 1" ball valves for energy control.	< 1	PRV
BL5456	2	South Belridge	Belridge	Generator Bank 2038 Wheatley pump sump	Belridge	N/A	29	28S	21E	MD	35.47056	-119.73653	085-210-18	Steam	4	4		Other	Active	4		Blow down pit	< 1	Blowdown pit
BL5458	2	South Belridge	Belridge	Generator bank 2038 tank Secondary Containment	Belridge	N/A	29	28S	21E	MD	35.47056	-119.73653	085-210-18	Steam	90	28	1	Concrete	Active	2		Wheatley drain tank. Water from the catch pans on pump	< 1	Drain Pad
BL5494	2	South Belridge	Belridge NOSS	Steam Splitter S2025	NOSS	N/A	20	28S	21E	MD	35.47550	-119.72774	085-210-18	Steam					Active	12		Water tank water pumped from the sump to tank.	< 1	Secondary Containment
BL5495	13	South Belridge	Belridge NOSS	Steam Splitter S3537	NOSS	N/A	35	29S	21E	MD	35.44047	-119.68110	098-112-02	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
																			Active	12		12 blow down points used for energy control	< 1	Blowdown

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL5496	15	South Belridge	Belridge SOSS	Steam Splitter H102	SOSS	N/A	10	29S	21E	MD	35.41965	-119.69656	098-111-12	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5497	16	South Belridge	Belridge SOSS	Steam Splitter G111A	SOSS	N/A	11	29S	21E	MD	35.42652	-119.69444	098-112-15	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5498	16	South Belridge	Belridge SOSS	Steam Splitter H113	SOSS	N/A	12	29S	21E	MD	35.42171	-119.68956	098-112-15	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5499	16	South Belridge	Belridge SOSS	Steam Splitter N502A	SOSS	N/A	1	29S	21E	MD	35.41874	-119.68245	098-112-23	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5500	16	South Belridge	Belridge SOSS	Steam Splitter H115	SOSS	N/A	11	29S	21E	MD	35.41574	-119.68949	098-112-28	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5501	12	South Belridge	Belridge SOSS	Steam Splitter S06A	SOSS	N/A	4	29S	21E	MD	35.43884	-119.71135	098-111-01	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5502	16	South Belridge	Belridge SOSS	Steam Splitter H114	SOSS	N/A	11	29S	21E	MD	35.42064	-119.68397	098-112-15	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5503	11	South Belridge	Belridge SOSS	Steam Splitter NS10	SOSS	N/A	10	29S	21E	MD	35.43548	-119.71732	098-120-10	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5504	12	South Belridge	Belridge SOSS	Steam Splitter 513A	SOSS	N/A	3	29S	21E	MD	35.43634	-119.70815	098-111-01	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5505		South Belridge	Belridge SOSS	Steam Splitter 116	SOSS	N/A	12	29S	21E	MD				Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5506	16	South Belridge	Belridge SOSS	Steam Splitter H1200	SOSS	N/A	12	29S	21E	MD	35.42418	-119.67851	098-112-12	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5507	17	South Belridge	Belridge SOSS	Steam Splitter H121	SOSS	N/A	12	29S	21E	MD	35.42370	-119.66731	098-113-13	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5508	17	South Belridge	Belridge SOSS	Steam Splitter 122	SOSS	N/A	12	29S	21E	MD	35.41927	-119.66601	098-113-15	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5509	17	South Belridge	Belridge SOSS	Steam Splitter 123	SOSS	N/A	12	29S	21E	MD	35.41844	-119.67358	098-113-15	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5510	14	South Belridge	Belridge SOSS	Steam Splitter H148	SOSS	N/A	1	29S	21E	MD	35.42815	-119.67031	098-113-04	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5511	14	South Belridge	Belridge SOSS	Steam Splitter H16	SOSS	N/A	1	29S	21E	MD	35.43039	-119.67321	098-113-11	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5512	16	South Belridge	Belridge SOSS	Steam Splitter 51S	SOSS	N/A	3	29S	21E	MD	35.42636	-119.67890	098-112-12	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5513	11	South Belridge	Belridge SOSS	Steam Splitter 519A	SOSS	N/A	4	29S	21E	MD	35.43548	-119.71732	098-120-10	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5514	14	South Belridge	Belridge SOSS	Steam Splitter 520	SOSS	N/A	1	29S	21E	MD	35.43611	-119.67505	098-113-07	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5515	13	South Belridge	Belridge SOSS	Steam Splitter 521	SOSS	N/A	2	29S	21E	MD	35.43910	-119.67919	098-112-03	Steam					Active	12		12 blow down points used for energy control	< 1	Blowdown
BL5516	16	South Belridge	Belridge SOSS	Strainer H114-02	SOSS	N/A	11	29S	21E	MD	35.41882	-119.68250	098-112-23	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5517	16	South Belridge	Belridge SOSS	Strainer H114-05	SOSS	N/A	11	29S	21E	MD	35.41814	-119.68610	098-112-23	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5518	16	South Belridge	Belridge SOSS	Strainer H114-06	SOSS	N/A	11	29S	21E	MD	35.41657	-119.68590	098-112-23	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5519	16	South Belridge	Belridge SOSS	Strainer H115-02	SOSS	N/A	11	29S	21E	MD	35.41658	-119.69143	098-112-28	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5520	16	South Belridge	Belridge SOSS	Strainer H115-05	SOSS	N/A	11	29S	21E	MD	35.41844	-119.68821	098-112-22	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5521	16	South Belridge	Belridge SOSS	Strainer 11-6-01	SOSS	N/A	11	29S	21E	MD	35.41843	-119.68821	098-112-22	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5522	16	South Belridge	Belridge SOSS	Strainer 11-6-03	SOSS	N/A	11	29S	21E	MD	35.41843	-119.68821	098-112-22	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5523	16	South Belridge	Belridge SOSS	Strainer 520-01	SOSS	N/A	1	29S	21E	MD	35.41426	-119.68542	098-112-23	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5524	14	South Belridge	Belridge SOSS	Strainer 520-02	SOSS	N/A	1	29S	21E	MD	35.43590	-119.67363	098-113-06	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5525	14	South Belridge	Belridge SOSS	Strainer 520-03	SOSS	N/A	1	29S	21E	MD	35.43600	-119.67510	098-113-07	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5526	14	South Belridge	Belridge SOSS	Strainer 520-04	SOSS	N/A	1	29S	21E	MD	35.43776	-119.67604	098-113-07	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5527		South Belridge	Belridge SOSS	Strainer 521-01	SOSS	N/A	1	29S	21E	MD				Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5528	13	South Belridge	Belridge SOSS	Strainer 521-02	SOSS	N/A	2	29S	21E	MD	35.43863	-119.67927	098-112-03	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5529	13	South Belridge	Belridge SOSS	Strainer 521-03	SOSS	N/A	2	29S	21E	MD	35.43966	-119.67829	098-112-03	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5530	13	South Belridge	Belridge SOSS	Strainer 521-04	SOSS	N/A	2	29S	21E	MD	35.44073	-119.68045	098-112-03	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5531	13	South Belridge	Belridge SOSS	Strainer Section 2-3	SOSS	N/A	2	29S	21E	MD	35.43080	-119.68271	098-112-02	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5532	14	South Belridge	Belridge SOSS	Strainer H148-01	SOSS	N/A	1	29S	21E	MD	35.42804	-119.66929	098-113-04	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5533	17	South Belridge	Belridge SOSS	Strainer H1200-01	SOSS	N/A	12	29S	21E	MD	35.42340	-119.67538	098-113-13	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5534	14	South Belridge	Belridge SOSS	Strainer S518A-01	SOSS	N/A	12	29S	21E	MD	35.42679	-119.67493	098-113-09	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5535	14	South Belridge	Belridge SOSS	Strainer S518A-02	SOSS	N/A	1	29S	21E	MD	35.42679	-119.67493	098-113-09	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5536	17	South Belridge	Belridge SOSS	Strainer S518A-03	SOSS	N/A	12	29S	21E	MD	35.42458	-119.67536	098-113-13	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5537	17	South Belridge	Belridge SOSS	Strainer H121-01	SOSS	N/A	12	29S	21E	MD	35.42465	-119.67327	098-113-13	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5538	17	South Belridge	Belridge SOSS	Strainer H121-02	SOSS	N/A	12	29S	21E	MD	35.42416	-119.67184	098-113-13	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5539	17	South Belridge	Belridge SOSS	Strainer H16-01	SOSS	N/A	1	29S	21E	MD	35.42416	-119.67184	098-113-13	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5540	14	South Belridge	Belridge SOSS	Strainer H16-02	SOSS	N/A	1	29S	21E	MD	35.42928	-119.67173	098-113-11	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL5541	14	South Belridge	Belridge SOSS	Strainer H16-03	SOSS	N/A	1	29S	21E	MD	35.42928	-119.67174	098-113-11	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5542	14	South Belridge	Belridge SOSS	Strainer H16-04	SOSS	N/A	1	29S	21E	MD	35.43160	-119.67342	098-113-11	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5543	14	South Belridge	Belridge SOSS	Strainer H16-05	SOSS	N/A	1	29S	21E	MD	35.43159	-119.67174	098-113-11	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5544	14	South Belridge	Belridge SOSS	Strainer H148-09	SOSS	N/A	1	29S	21E	MD	35.42928	-119.67170	098-113-11	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5545	14	South Belridge	Belridge SOSS	Strainer H148-10	SOSS	N/A	1	29S	21E	MD	35.42930	-119.66848	098-113-04	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5546	2	South Belridge	Belridge SOSS	Strainer S-s2025-01	SOSS	N/A	20	28S	21E	MD	35.47646	-119.73965	085-210-18	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5547	2	South Belridge	Belridge SOSS	Strainer S-s2025-02	SOSS	N/A	20	28S	21E	MD	35.47644	-119.73965	085-210-18	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5548	2	South Belridge	Belridge SOSS	Strainer S-s2025-03	SOSS	N/A	20	28S	21E	MD	35.47474	-119.73736	085-210-18	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5549	2	South Belridge	Belridge SOSS	Strainer S-s2025-04	NOSS	N/A	20	28S	21E	MD	35.47652	-119.73655	085-210-18	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5550	12	South Belridge	Belridge SOSS	Strainer S517A-01	SOSS	N/A	3	29S	21E	MD	35.42811	-119.70797	098-111-03	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5551	10	South Belridge	Belridge NOSS	Strainer NOSS S-S3537-01	NOSS	N/A	35	28S	21E	MD	35.44448	-119.68726	085-220-38	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5552	10	South Belridge	Belridge SOSS	Strainer NOSS S-S3537-02	NOSS	N/A	35	28S	21E	MD	35.44433	-119.68559	085-220-38	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5553	10	South Belridge	Belridge SOSS	Strainer NOSS S-S3537-03	NOSS	N/A	35	28S	21E	MD	35.44459	-119.68658	085-220-38	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5554	10	South Belridge	Belridge SOSS	Strainer NOSS S-S3537-04	NOSS	N/A	35	28S	21E	MD	35.44289	-119.68400	085-220-38	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5555	10	South Belridge	Belridge SOSS	Strainer NOSS S-S3537-05	NOSS	N/A	35	29S	21E	MD	35.44205	-119.68282	085-220-38	Steam					Active	5		5 blow down points used for energy control	< 1	Blowdown
BL5715	13	South Belridge	Dehy 2	D5209 secondary containment	Dehy 2	N/A	2	29S	21E	MD	35.42940	-119.68804	098-112-01	Produced Water	28'	20'	3"	Concrete	Active	0		Emergencey collection		Secondary Containment
BL5716	13	South Belridge	Dehy 2	F5706 secondary containment	Dehy 2	N/A	2	29S	21E	MD	35.42938	-119.68793	098-112-01	Produced Water	50'	25'	25'	Concrete	Active	0		Scrubber		Secondary Containment
BL5717	13	South Belridge	Dehy 2	Below grade drain	Dehy 2	N/A	2	29S	21E	MD	35.42950	-119.68771	098-112-01	Produced Water		4'	6'	Concrete	Active	8		Filter drainage		Other
BL5718	13	South Belridge	Dehy 2	D5206 secondary containment	Dehy 2	N/A	2	29S	21E	MD	35.42953	-119.68786	098-112-01	Produced Water	110'	12'	5"	Concrete	Active	12		Filter return		Secondary Containment
BL5719	13	South Belridge	Dehy 2	D5207 secnodary containment	Dehy 2	N/A	2	29S	21E	MD	35.42959	-119.68783	098-112-01	Produced Water	45	12'	8"	Concrete	Active	4		Filter return		Secondary Containment
BL5720	13	South Belridge	Dehy 2	Centrate tank skid	Dehy 2	N/A	2	29S	21E	MD	35.42971	-119.68829	098-112-01	Produced Water	5'	5'	6"	Concrete	Active	1		Overflow		Secondary Containment
BL5721	13	South Belridge	Dehy 2	Centrate pump skid	Dehy 2	N/A	2	29S	21E	MD	35.42971	-119.68829	098-112-01	Produced Water	8'	10'	6"	Concrete	Active	1		Overflow		Drain Pad
BL5724	13	South Belridge	Dehy 2	D5305 soft water containment	Dehy 2	N/A	2	29S	21E	MD	35.42968	-119.68746	098-112-01	Produced Water	60'	30'	6"	Concrete	Active	11		Overflow		Secondary Containment
BL5725	13	South Belridge	Dehy 2	G5900 pump skid	Dehy 2	N/A	2	29S	21E	MD	35.43010	-119.68820	098-112-01	Produced Water	10'	6'	1'5"	Concrete	Active	1		Overflow		Drain Pad
BL5726	13	South Belridge	Dehy 2	Raised tank skid	Dehy 2	N/A	2	29S	21E	MD	35.43024	-119.68835	098-112-01	Produced Water	36'	30'	1'	Concrete	Active	3		Overflow		Drain Pad
BL5727	13	South Belridge	Dehy 2	G5102 pump skid	Dehy 2	N/A	2	29S	21E	MD	35.43012	-119.68815	098-112-01	Produced Water	20'	15'	8"	Concrete	Active	1		Capture produced water		Drain Pad
BL5728	13	South Belridge	Dehy 2	Raised tank skid	Dehy 2	N/A	2	29S	21E	MD	35.42981	-119.68832	098-112-01	Produced Water	35'	35'	6"	Concrete	Inactive	2		Capture produced water		Drain Pad
BL5729	13	South Belridge	Dehy 2	F5001 secondary containment	Dehy 2	N/A	2	29S	21E	MD	35.43000	-119.68851	098-112-01	Produced Water	55'	65'	6"	Concrete	Active	18		Capture produced water		Secondary Containment
BL5730	13	South Belridge	Dehy 2	F5002 secondary containment	Dehy 2	N/A	2	29S	21E	MD	35.42994	-119.68844	098-112-01	Produced Water	80'	80'	6"	Concrete	Active	15		Capture produced water		Secondary Containment
BL5731	13	South Belridge	Dehy 2	Chemical tank secondary containment	Dehy 2	N/A	2	29S	21E	MD	35.42899	-119.68866	098-112-01	Other	45'	30'	3'	Concrete	Active	0		Capture chemicals		Secondary Containment
BL5732	13	South Belridge	Dehy 2	pump skid	Dehy 2	N/A	2	29S	21E	MD	35.42926	-119.68853	098-112-01	Produced Water	45'	20'	4'	Concrete	Active	1		Capture produced water		Drain Pad
BL5733	13	South Belridge	Dehy 2	D21601 containment'	Dehy 2	N/A	2	29S	21E	MD	35.42893	-119.68823	098-112-01	Produced Water	100'	30'	25'	Concrete	Active	0		Capture produced water		Secondary Containment
BL5734	13	South Belridge	Dehy 2	Dehy 2 Inlet to South Ditch - Out of Service	Dehy 2	N/A	2	29S	21E	MD	35.42873	-119.68811	098-112-01	Produced Water	290'	220'	20'	Earthen	Active	3		Capture produced water		Other
BL5735	13	South Belridge	Dehy 2	pump skid	Dehy 2	N/A	2	29S	21E	MD	35.42920	-119.68923	098-112-01	Produced Water	25'	6'	10"	Concrete	Inactive	0		Capture produced water		Drain Pad
BL5738	13	South Belridge	Dehy 2	Lakos containment	Dehy 2	N/A	2	29S	21E	MD	35.42927	-119.69010	098-112-01	Produced Water		40'	4"	Concrete	Active	0		Capture produced water		Drain Pad
BL5739	13	South Belridge	Dehy 2	LACT pump skid	Dehy 2	N/A	2	29S	21E	MD	35.42908	-119.69029	098-112-01	Oil & Water			1"	Concrete	Active	10		Capture oil and water		Drain Pad
BL5742	13	South Belridge	Dehy 2	abandoned pump skid	Dehy 2	N/A	2	29S	21E	MD	35.42851	-119.68949	098-112-01	Produced Water	20'	20'	6"	Concrete	Inactive	1		Capture produced water		Drain Pad
BL5743	13	South Belridge	Dehy 2	P430 A-C pump skid	Dehy 2	N/A	2	29S	21E	MD	35.42880	-119.69025	098-112-01	Oil & Water	25'	100'	6"	Concrete	Active	2		Capture oil and water		Drain Pad
BL5744	13	South Belridge	Dehy 2	F4301 drain	Dehy 2	N/A	2	29S	21E	MD	35.42883	-119.69052	098-112-01	Oil & Water	4'	4'	3'	Concrete	Active	1		Capture oil and water		Drain Pit
BL5745	13	South Belridge	Dehy 2	F4302 drain	Dehy 2	N/A	2	29S	21E	MD	35.42864	-119.69059	098-112-01	Oil & Water	4'	4'	3'	Concrete	Active	1		Capture oil and water		Drain Pit
BL5746	13	South Belridge	Dehy 2	F4303 drain	Dehy 2	N/A	2	29S	21E	MD	35.42873	-119.69074	098-112-01	Oil & Water	4'	4'	3'	Concrete	Active	1		Capture oil and water		Drain Pit
BL5747	13	South Belridge	Dehy 2	tank farm catwalk skid	Dehy 2	N/A	2	29S	21E	MD	35.42889	-119.69042	098-112-01	Oil & Water		5'	3'	Concrete	Active	0		Capture oil and water		Other
BL5748	13	South Belridge	Dehy 2	OOS pump skid	Dehy 2	N/A	2	29S	21E	MD	35.42869	-119.69057	098-112-01	Other	8'	9'	6"	Concrete	Inactive	1		Capture oil and water		Drain Pad
BL5749	13	South Belridge	Dehy 2	D4701 pumps	Dehy 2	N/A	2	29S	21E	MD	35.42832	-119.69050	098-112-01	Oil & Water	6'	6'	6"	Concrete	Active	1		Capture oil and water		Drain Pad
BL5750	13	South Belridge	Dehy 2	FWKO pipe cellar	Dehy 2	N/A	2	29S	21E	MD	35.42833	-119.69048	098-112-01	Oil & Water	12'	3'	5'	Concrete	Active	0		Capture oil and water		Other

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL5751	13	South Belridge	Dehy 2	Old LACT skid? Near FWKOs	Dehy 2	N/A	2	29S	21E	MD	35.42847	-119.69064	098-112-01	Oil & Water	15'	6'	6"	Concrete	Inactive	1		Capture oil and water		Drain Pad
BL5753	13	South Belridge	Dehy 2	G4307, G4308	Dehy 2	N/A	2	29S	21E	MD	35.42856	-119.69083	098-112-01	Oil & Water	15'	6'	6"	Concrete	Active	1		Capture oil and water		Drain Pad
BL5754	13	South Belridge	Dehy 2	F4305 drain	Dehy 2	N/A	2	29S	21E	MD	35.42850	-119.69122	098-112-01	Produced Water	4'	4'	3'	Concrete	Active	1		Capture produced water		Drain Pit
BL5755	13	South Belridge	Dehy 2	F4304 drain	Dehy 2	N/A	2	29S	21E	MD	35.42866	-119.69075	098-112-01	Produced Water	4'	4'	3'	Concrete	Active	1		Capture produced water		Drain Pit
BL5756	13	South Belridge	Dehy 2	F4306 drain	Dehy 2	N/A	2	29S	21E	MD	35.42874	-119.69084	098-112-01	Produced Water	4'	4'	3'	Concrete	Active	1		Capture produced water		Drain Pit
BL5757	13	South Belridge	Dehy 2	F4307 drain	Dehy 2	N/A	2	29S	21E	MD	35.42861	-119.69124	098-112-01	Produced Water	4'	4'	3'	Concrete	Active	1		Capture produced water		Drain Pit
BL5758	13	South Belridge	Dehy 2	Prover loop drain	Dehy 2	N/A	2	29S	21E	MD	35.42891	-119.69065	098-112-01	Oil & Water	3'	4'	5"	Metal	Active	1		Capture oil and water		Drain Pit
BL5759	13	South Belridge	Dehy 2	Abandoned pump skid by FWKO 4007	Dehy 2	N/A	2	29S	21E	MD	35.42947	-119.69106	098-112-01	Other	10'	10'	6"	Concrete	Inactive	1		Capture oil and water		Drain Pad
BL5760	13	South Belridge	Dehy 2	P906A andB, P905A and 8	Dehy 2	N/A	2	29S	21E	MD	35.43021	-119.69080	098-112-01	Oil & Water	40'	20'	6"	Concrete	Active	2		Capture oil and water		Drain Pad
BL5761	13	South Belridge	Dehy 2	HSE911A compressor skid	Dehy 2	N/A	2	29S	21E	MD	35.43030	-119.69048	098-112-01	Oil & Water	25'	75'	6"	Concrete	Active	2		Capture oil and water		Drain Pad
BL5763	6	South Belridge	WP 27	Pipe containment	WP27	N/A	27	28S	21E	MD	35.45857	-119.70149	085-220-36	Oil & Water	120'	1'6"	1'	Concrete	Active	1		Capture oil and water		Other
BL5764	6	South Belridge	WP 27	Chemical waste sump 19.16	WP27	N/A	27	28S	21E	MD	35.45845	-119.70153	085-220-36	Oil & Water	30'	18'	10'	Concrete	Active	13		Capture oil and water		Drain Pit
BL5765	6	South Belridge	WP 27	Chemical waste sump 119.6	WP27	N/A	27	28S	21E	MD	35.45884	-119.70148	085-220-36	Oil & Water	35'	18'	10'	Concrete	Active	13		Capture oil and water		Drain Pit
BL5766	6	South Belridge	WP 27	Brine tank secondary containment	WP27	N/A	27	28S	21E	MD	35.45884	-119.70194	085-220-36	Other	10'	10'	6"	Concrete	Active	1		Capture brine water		Secondary Containment
BL5767	6	South Belridge	WP 27	Pipe containment	WP27	N/A	27	28S	21E	MD	35.45888	-119.70181	085-220-36	Oil & Water	120'	1'6"	1'	Concrete	Active	1		Capture oil and water		Other
BL5777	6	South Belridge	WP 27	Drain pit	WP27	N/A	27	28S	21E	MD	35.45996	-119.70279	085-220-36	Produced Water	20'	20'	3'	Concrete	Active	1		Capture produced water		Drain Pad
BL5778	12	South Belridge	WP 27	Pump secondary containment	WP27	N/A	27	28S	21E	MD	35.43999	-119.70285	098-111-01	Produced Water	30'	6'	6'	Concrete	Active	1		Capture produced water		Drain Pad
BL5781	5	South Belridge	WP 27	PS 27 Pigging Lancher Drain pit	WP27	N/A	27	28S	21E	MD	35.46113	-119.70776	085-230-25	Oil & Water	40'	10'	6"	Concrete	Active	1		Capture oil and water		Drain Pad
BL5782	5	South Belridge	WP 27	Hydrogen peroxide tank containment	WP27	N/A	27	28S	21E	MD	35.46155	-119.70785	085-230-25	Other	30'	10'	2"	Earthen	Active	1		Capture hydrogen peroxide		Secondary Containment
BL5783	5	South Belridge	P527	Pump skid	P527	N/A	27	28S	21E	MD	35.46209	-119.70868	085-230-25	Oil & Water	100'	60'	1'	Concrete	Active	0		Capture oil and water		Drain Pad
BL5785	6	South Belridge	WP 27	Filter tank secondary containment	WP27	N/A	27	28S	21E	MD	35.45818	-119.70415	085-220-36	Produced Water	100'	30'	1'	Concrete	Active	0		Capture produced water		Drain Pad
BL5786	6	South Belridge	WP 27	P300A secondary containment	WP27	N/A	27	28S	21E	MD	35.45805	-119.70381	085-220-36	Produced Water	70'	20'	6"	Concrete	Active	3		Capture produced water		Drain Pad
BL5787	6	South Belridge	WP 27	P350A-G	WP27	N/A	27	28S	21E	MD	35.45807	-119.70377	085-220-36	Produced Water	40'	15'	6"	Concrete	Active	1		Capture produced water		Drain Pad
BL5788	6	South Belridge	WP 27	Bubbler well	WP27	N/A	27	28S	21E	MD	35.45812	-119.70406	085-220-36	Produced Water	4'	4'	10'	Concrete	Active	1		Capture produced water		Drain Pad
BL5789	6	South Belridge	WP 27	P500A-C	WP27	N/A	27	28S	21E	MD	35.45851	-119.70453	085-220-36	Produced Water	70'	30'	4"	Concrete	Active	1		Capture produced water		Drain Pit
BL5790	6	South Belridge	WP 27	200B tank cellar	WP27	N/A	27	28S	21E	MD	35.45799	-119.70452	085-220-36	Produced Water	5'	6'	6'	Concrete	Active	1		Capture produced water		Drain Pad
BL5791	6	South Belridge	WP 27	T200A tank cellar.	WP27	N/A	27	28S	21E	MD	35.45784	-119.70421	085-220-36	Produced Water	5'	6'	6'	Concrete	Active	1		Capture produced water		Drain Pit
BL6201	13	South Belridge	Belridge	8480-2	Del Sur	N/A	2	29S	21E	MD	35.42963	-119.68094	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6202	13	South Belridge	Belridge	8438A-2	Del Sur	N/A	2	29S	21E	MD	35.43087	-119.68675	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6203	13	South Belridge	Belridge	8435A-2	Del Sur	N/A	2	29S	21E	MD	35.43112	-119.68479	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6204	12	South Belridge	Belridge	8032A-3	Del Sur	N/A	3	29S	21E	MD	35.43980	-119.70063	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6206	9	South Belridge	Belridge	548CR3-34	Belridge	N/A	34	28S	21E	MD	35.44273	-119.69997	085-220-22	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6208	13	South Belridge	Belridge	8527-2	Del Sur	N/A	2	29S	21E	MD	35.42901	-119.67974	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6210	13	South Belridge	Belridge	8199D-2	Del Sur	N/A	2	29S	21E	MD	35.43651	-119.69493	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6214	12	South Belridge	Belridge	8052C-3	Del Sur	N/A	3	29S	21E	MD	35.43953	-119.69696	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6215	13	South Belridge	Belridge	8218B-2	Del Sur	N/A	2	29S	21E	MD	35.43615	-119.69098	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6216	13	South Belridge	Belridge	8271B-2	Del Sur	N/A	2	29S	21E	MD	35.43503	-119.69260	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6217	1	South Belridge	Belridge	67WA-19	Belridge	N/A	19	28S	21E	MD	35.47331	-119.74776	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6218	13	South Belridge	Belridge	8406A-2	Del Sur	N/A	2	29S	21E	MD	35.43185	-119.68237	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6219	13	South Belridge	Belridge	8454B-2	Del Sur	N/A	2	29S	21E	MD	35.43029	-119.68093	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6226	1	South Belridge	Belridge	86WFR-19	Belridge	N/A	19	28S	21E	MD	35.47533	-119.74347	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6227	13	South Belridge	Belridge	8120B-2	Del Sur	N/A	2	29S	21E	MD	35.43852	-119.69222	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6228	1	South Belridge	Belridge	77WER-19	Belridge	N/A	19	28S	21E	MD	35.47363	-119.74689	08S-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6231	1	South Belridge	Belridge	86WIR2-19	Belridge	N/A	19	28S	21E	MD	35.47431	-119.74480	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6235	12	South Belridge	Belridge	8104B-3	Del Sur	N/A	3	29S	21E	MD	35.43871	-119.69830	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL6236	12	South Belridge	Belridge	8108-3	Del Sur	N/A	3	29S	21E	MD	35.43848	-119.70154	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6237	12	South Belridge	Belridge	8131C-3	Del Sur	N/A	3	29S	21E	MD	35.43790	-119.69974	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6241	8	South Belridge	Belridge	533D3-33	Belridge	N/A	33	28S	21E	MD	35.45088	-119.71882	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6246	13	South Belridge	Belridge	8147D-2	Del Sur	N/A	2	28S	20E	MD	35.43778	-119.69343	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6247	1	South Belridge	Belridge	76WER-19	Belridge	N/A	19	28S	21E	MD	35.47406	-119.74675	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6248	12	South Belridge	Belridge	8053D-3	Del Sur	N/A	3	29S	21E	MD	35.43982	-119.69786	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6252	5	South Belridge	Belridge	616NAA-28	Belridge	N/A	28	28S	21E	MD	35.46008	-119.72396	085-230-26	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6253	13	South Belridge	Belridge	8292B-2	Del Sur	N/A	2	29S	21E	MD	35.43421	-119.68939	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6255	9	South Belridge	Belridge	548ER-34	Belridge	N/A	34	28S	21E	MD	35.44279	-119.70031	085-220-22	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6264	4	South Belridge	Belridge	556Z-29	Belridge	N/A	29	28S	21E	MD	35.46052	-119.73229	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6265	8	South Belridge	Belridge	523GR-33	Belridge	N/A	33	28S	21E	MD	35.45199	-119.72175	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6269	13	South Belridge	Belridge	8508A-2	Del Sur	N/A	2	29S	21E	MD	35.42912	-119.68363	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6270	4	South Belridge	Belridge	513DR2-29	Belridge	N/A	29	28S	21E	MD	35.46495	-119.74114	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6277	1	South Belridge	Belridge	75WBR-19	Belridge	N/A	19	28S	21E	MD	35.47640	-119.74690	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6282	1	South Belridge	Belridge	87WER-19	Belridge	N/A	19	28S	21E	MD	35.47350	-119.74511	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6283	1	South Belridge	Belridge	87WJR-19	Belridge	N/A	19	28S	21E	MD	35.47246	-119.74343	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6284	1	South Belridge	Belridge	87WM-19	Belridge	N/A	19	28S	21E	MD	35.47195	-119.74421	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6290	13	South Belridge	Belridge	8410A-2	Del Sur	N/A	2	29S	21E	MD	35.43156	-119.68478	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6291	13	South Belridge	Belridge	8390B-2	Del Sur	N/A	2	29S	21E	MD	35.43215	-119.68898	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6294	5	South Belridge	Belridge	517CR2-28	Belridge	N/A	28	28S	21E	MD	35.45880	-119.72437	085-230-26	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6301	4	South Belridge	Belridge	535ZR2-29	Belridge	N/A	29	28S	21E	MD	35.46221	-119.73667	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6302	4	South Belridge	Belridge	534LR3-29	Belridge	N/A	29	28S	21E	MD	35.46371	-119.73841	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6303	8	South Belridge	Belridge	511NR2-33	Belridge	N/A	33	28S	21E	MD	35.45458	-119.72412	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6306	1	South Belridge	Belridge	88WBR-19	Belridge	N/A	19	28S	21E	MD	35.47051	-119.74459	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6307	1	South Belridge	Belridge	87WG-19	Belridge	N/A	19	28S	21E	MD	35.47276	-119.74395	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6314	13	South Belridge	Belridge	8387B-2	Del Sur	N/A	2	29S	21E	MD	35.43209	-119.68659	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6317	13	South Belridge	Belridge	8196F-2	Del Sur	N/A	2	29S	21E	MD	35.43656	-119.69307	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6320	11	South Belridge	Belridge	7029HZL-4	Del Sur	N/A	4	29S	21E	MD	35.44042	-119.71649	098-120-10	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6324	13	South Belridge	Belridge	8336B-2	Del Sur	N/A	2	29S	21E	MD	35.43310	-119.68595	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6331	9	South Belridge	Belridge	538GR4-34	Belridge	N/A	34	28S	21E	MD	35.44285	-119.70162	085-220-22	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6333	2	South Belridge	Belridge	516AR2-20	Belridge	N/A	20	28S	21E	MD	35.47412	-119.74223	085-210-18	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6334	1	South Belridge	Belridge	66WH-19	Belridge	N/A	19	28S	21E	MD	35.47436	-119.74855	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6335	13	South Belridge	Belridge	8510A-2	Del Sur	N/A	2	29S	21E	MD	35.42960	-119.68501	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6340	4	South Belridge	Belridge	588NR-29	Belridge	N/A	29	28S	21E	MD	35.45643	-119.72608	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6355	13	South Belridge	Belridge	8453A-2	Del Sur	N/A	2	29S	21E	MD	35.43048	-119.67968	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6356	14	South Belridge	Belridge	8550-1	del sur	N/A	1	28S	20E	MD	35.42842	-119.67804	098-113-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6360	13	South Belridge	Belridge	8171B-2	Del Sur	N/A	2	29S	21E	MD	35.43749	-119.69257	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6362	13	South Belridge	Belridge	8359B-2	Del Sur	N/A	2	29S	21E	MD	35.43286	-119.68362	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6363	9	South Belridge	Belridge	547AR3-34	Belridge	N/A	34	28S	21E	MD	35.44331	-119.70008	085-220-22	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6364	13	South Belridge	Belridge	8217D-2	Del Sur	N/A	2	29S	21E	MD	35.43591	-119.69014	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6365	9	South Belridge	Belridge	548NR3-34	Belridge	N/A	34	28S	21E	MD	35.44191	-119.69926	085-220-22	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6368	13	South Belridge	Belridge	8268A-2	Del Sur	N/A	2	29S	21E	MD	35.43490	-119.69065	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6370	13	South Belridge	Belridge	8356A-2	Del Sur	N/A	2	29S	21E	MD	35.43303	-119.68178	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6372	13	South Belridge	Belridge	8454A-2	Del Sur	N/A	2	29S	21E	MD	35.43064	-119.68067	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6375	1	South Belridge	Belridge	88WG-19	Belridge	N/A	19	28S	21E	MD	35.47167	-119.74348	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQC8 Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL6376	13	South Belridge	Belridge	8070-2	Del Sur	N/A	2	29S	21E	MD	35.43950	-119.69195	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6377	1	South Belridge	Belridge	87WF-19	Belridge	N/A	19	28S	21E	MD	35.47327	-119.74386	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6378	12	South Belridge	Belridge	7100BHZL-3	Del Sur	N/A	3	29S	21E	MD	35.43888	-119.71291	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6379	8	South Belridge	Belridge	622S-33	Belridge	N/A	33	28S	21E	MD	35.45256	-119.72086	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6381	13	South Belridge	Belridge	8024A-2	Del Sur	N/A	2	29S	21E	MD	35.44059	-119.69515	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6383	13	South Belridge	Belridge	8168A-2	Del Sur	N/A	2	29S	21E	MD	35.43733	-119.69047	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6385	13	South Belridge	Belridge	8432A-2	Del Sur	N/A	2	29S	21E	MD	35.43041	-119.68245	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6389	13	South Belridge	Belridge	8577A-2	Del Sur	N/A	2	29S	21E	MD	35.42768	-119.67838	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6394	13	South Belridge	Belridge	8049D-2	Del Sur	N/A	2	29S	21E	MD	35.44026	-119.69542	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6395	12	South Belridge	Belridge	8059D-3	Del Sur	N/A	3	29S	21E	MD	35.43949	-119.70218	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6399	4	South Belridge	Belridge	578G-29	Belridge	N/A	29	28S	21E	MD	35.45754	-119.72837	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6400	5	South Belridge	Belridge	527ER-28	Belridge	N/A	28	28S	21E	MD	35.45913	-119.72285	085-230-26	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6404	13	South Belridge	Belridge	8383B-2	Del Sur	N/A	2	29S	21E	MD	35.43225	-119.68301	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6408	8	South Belridge	Belridge	533U1-33	Belridge	N/A	33	28S	21E	MD	35.45139	-119.71882	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6413	1	South Belridge	Belridge	65WCR-19	Belridge	N/A	19	28S	21E	MD	35.47528	-119.74841	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6414	4	South Belridge	Belridge	535GR3-29	Belridge	N/A	29	28S	21E	MD	35.46274	-119.73719	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6416	12	South Belridge	Belridge	8226C-3	Del Sur	N/A	3	29S	21E	MD	35.43597	-119.69660	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6422	4	South Belridge	Belridge	577L-29	Belridge	N/A	29	28S	21E	MD	35.45822	-119.72940	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6425	1	South Belridge	Belridge	86WGR-19	Belridge	N/A	19	28S	21E	MD	35.47462	-119.74475	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6427	8	South Belridge	Belridge	516LHZL-33	Belridge	N/A	33	28S	21E	MD	35.44514	-119.72481	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6428	3	South Belridge	Belridge	71WB-30	Belridge	N/A	30	28S	21E	MD	35.46964	-119.74551	085-230-12	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6431	8	South Belridge	Belridge	641S-33	Belridge	N/A	33	28S	21E	MD	35.45443	-119.71648	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6434	4	South Belridge	Belridge	686PAR-29	Belridge	N/A	29	28S	21E	MD	35.46002	-119.72590	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6435	8	South Belridge	Belridge	538NHZL-33	Belridge	N/A	33	28S	21E	MD	35.44209	-119.71917	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6438	13	South Belridge	Belridge	8189-2	Del Sur	N/A	2	29S	21E	MD	35.43677	-119.68747	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6444	13	South Belridge	Belridge	8122C-2	Del Sur	N/A	2	29S	21E	MD	35.43850	-119.69345	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6447	4	South Belridge	Belridge	514GR-29	Belridge	N/A	29	28S	21E	MD	35.46454	-119.74171	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6452	13	South Belridge	Belridge	8263A-2	Del Sur	N/A	2	29S	21E	MD	35.43508	-119.68686	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6453	3	South Belridge	Belridge	61B-30	Belridge	N/A	30	28S	21E	MD	35.46864	-119.74781	085-230-12	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6454	13	South Belridge	Belridge	8296B-2	Del Sur	N/A	2	29S	21E	MD	35.43489	-119.69312	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6455	13	South Belridge	Belridge	8216A-2	Del Sur	N/A	2	29S	21E	MD	35.43601	-119.68899	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6456	4	South Belridge	Belridge	512AR3-29	Belridge	N/A	29	28S	21E	MD	35.46687	-119.74222	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6457	13	South Belridge	Belridge	8413B-2	Del Sur	N/A	2	29S	21E	MD	35.43148	-119.68658	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6459	4	South Belridge	Belridge	523LR3-29	Belridge	N/A	29	28S	21E	MD	35.46545	-119.74052	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6460	3	South Belridge	Belridge	81WER-30	Belridge	N/A	30	28S	21E	MD	35.46994	-119.74330	085-230-12	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6463	1	South Belridge	Belridge	78WBR-19	Belridge	N/A	19	28S	21E	MD	35.47161	-119.74538	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6468	8	South Belridge	Belridge	512L-33	Belridge	N/A	33	28S	21E	MD	35.45255	-119.72459	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6470	13	South Belridge	Belridge	8124B-2	Del Sur	N/A	2	29S	21E	MD	35.43858	-119.69559	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6473	12	South Belridge	Belridge	8151C-3	Del Sur	N/A	3	29S	21E	MD	35.43763	-119.69651	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6479	13	South Belridge	Belridge	8244C-2	Del Sur	N/A	2	29S	21E	MD	35.43585	-119.69118	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6480	9	South Belridge	Belridge	548ZR2-34	Belridge	N/A	34	28S	21E	MD	35.44240	-119.69878	085-220-22	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6484	4	South Belridge	Belridge	513ZR-29	Belridge	N/A	29	28S	21E	MD	35.46604	-119.74107	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6485	12	South Belridge	Belridge	8026D-3	Del Sur	N/A	3	29S	21E	MD	35.44046	-119.69635	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6486	13	South Belridge	Belridge	8481B-2	Del Sur	N/A	2	29S	21E	MD	35.42979	-119.68211	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6487	13	South Belridge	Belridge	8459A-2	Del Sur	N/A	2	29S	21E	MD	35.43036	-119.68401	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL6488	12	South Belridge	Belridge	8026C-3	Del Sur	N/A	3	29S	21E	MD	35.44022	-119.69666	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6489	13	South Belridge	Belridge	8287-2	Del Sur	N/A	2	29S	21E	MD	35.43440	-119.68619	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6490	13	South Belridge	Belridge	8381B-2	Del Sur	N/A	2	29S	21E	MD	35.43235	-119.68224	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6491	13	South Belridge	Belridge	8429B-2	Del Sur	N/A	2	29S	21E	MD	35.43119	-119.68042	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6492	13	South Belridge	Belridge	8357A-2	Del Sur	N/A	2	29S	21E	MD	35.43280	-119.68308	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6497	1	South Belridge	Belridge	65WE-19	Belridge	N/A	19	28S	21E	MD	35.47660	-119.74813	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6498	12	South Belridge	Belridge	8035A-3	Del Sur	N/A	3	29S	21E	MD	35.44014	-119.70293	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6499	9	South Belridge	Belridge	527DR3-34	Belridge	N/A	34	28S	21E	MD	35.44327	-119.70317	085-220-22	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6500	4	South Belridge	Belridge	524GR3-29	Belridge	N/A	29	28S	21E	MD	35.46449	-119.73949	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6507	9	South Belridge	Belridge	527GR3-34	Belridge	N/A	34	28S	21E	MD	35.44465	-119.70380	085-220-22	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6510	8	South Belridge	Belridge	534DR-33	Belridge	N/A	33	28S	21E	MD	35.44872	-119.71889	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6516	13	South Belridge	Belridge	8125-2	Del Sur	N/A	2	29S	21E	MD	35.43860	-119.69591	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6517	13	South Belridge	Belridge	8460-2	Del Sur	N/A	2	29S	21E	MD	35.43004	-119.68538	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6518	13	South Belridge	Belridge	8212-2	Del Sur	N/A	2	29S	21E	MD	35.43618	-119.68671	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6522	13	South Belridge	Belridge	8386B-2	Del Sur	N/A	2	29S	21E	MD	35.43249	-119.68557	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6529	3	South Belridge	Belridge	81WG-30	Belridge	N/A	30	28S	21E	MD	35.46908	-119.74370	085-230-12	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6530	1	South Belridge	Belridge	87WHR-19	Belridge	N/A	19	28S	21E	MD	35.47252	-119.74420	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6532	12	South Belridge	Belridge	8085-3	Del Sur	N/A	3	29S	21E	MD	35.43867	-119.70249	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6535	13	South Belridge	Belridge	8298B-2	Del Sur	N/A	2	29S	21E	MD	35.43405	-119.69375	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6536	12	South Belridge	Belridge	8178A-3	Del Sur	N/A	3	29S	21E	MD	35.43689	-119.69812	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6548	13	South Belridge	Belridge	8225B-2	Del Sur	N/A	2	29S	21E	MD	35.43623	-119.69595	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6549	13	South Belridge	Belridge	8336A-2	Del Sur	N/A	2	29S	21E	MD	35.43344	-119.68557	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6550	8	South Belridge	Belridge	522NR3-33	Belridge	N/A	33	28S	21E	MD	35.45268	-119.72182	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6553	12	South Belridge	Belridge	8055D-3	Del Sur	N/A	3	29S	21E	MD	35.43943	-119.69898	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6561	13	South Belridge	Belridge	8250B-2	Del Sur	N/A	2	29S	21E	MD	35.43594	-119.69531	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6562	12	South Belridge	Belridge	8107A-3	Del Sur	N/A	3	29S	21E	MD	35.43839	-119.70067	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6563	13	South Belridge	Belridge	8553B-2	Del Sur	N/A	2	29S	21E	MD	35.42770	-119.67983	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6566	2	South Belridge	Belridge	516NR4-20	Belridge	N/A	20	28S	21E	MD	35.47484	-119.74149	085-210-18	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6568	4	South Belridge	Belridge	556ER2-29	Belridge	N/A	29	28S	21E	MD	35.46089	-119.73398	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6569	13	South Belridge	Belridge	8047B-2	Del Sur	N/A	2	29S	21E	MD	35.44041	-119.69367	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6570	13	South Belridge	Belridge	8462D-2	Del Sur	N/A	2	29S	21E	MD	35.42975	-119.68664	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6574	12	South Belridge	Belridge	8077-3	Del Sur	N/A	3	29S	21E	MD	35.43883	-119.69710	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6575	13	South Belridge	Belridge	8366A-2	Del Sur	N/A	2	29S	21E	MD	35.43257	-119.68950	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6576	13	South Belridge	Belridge	8224A-2	Del Sur	N/A	2	29S	21E	MD	35.43605	-119.69535	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6585	4	South Belridge	Belridge	566LR-29	Belridge	N/A	29	28S	21E	MD	35.46003	-119.73164	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6595	2	South Belridge	Belridge	516ER-20	Belridge	N/A	20	28S	21E	MD	35.47547	-119.74266	085-210-18	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6600	4	South Belridge	Belridge	524DR2-29	Belridge	N/A	29	28S	21E	MD	35.46325	-119.73894	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6601	4	South Belridge	Belridge	524ZR2-29	Belridge	N/A	29	28S	21E	MD	35.46419	-119.73891	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6602	8	South Belridge	Belridge	527LHZL-33	Belridge	N/A	33	28S	21E	MD	35.44345	-119.72274	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6603	3	South Belridge	Belridge	81B-30	Belridge	N/A	30	28S	21E	MD	35.46865	-119.74299	085-230-12	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6604	8	South Belridge	Belridge	543M1-33	Belridge	N/A	33	28S	21E	MD	35.45089	-119.71787	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6608	1	South Belridge	Belridge	65WD-19	Belridge	N/A	19	28S	21E	MD	35.47633	-119.74961	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6615	1	South Belridge	Belridge	65WBR-19	Belridge	N/A	19	28S	21E	MD	35.47648	-119.74965	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6618	13	South Belridge	Belridge	8431A-2	Del Sur	N/A	2	29S	21E	MD	35.43097	-119.68147	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6620	1	South Belridge	Belridge	86WDR2-19	Belridge	N/A	19	28S	21E	MD	35.47403	-119.74362	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

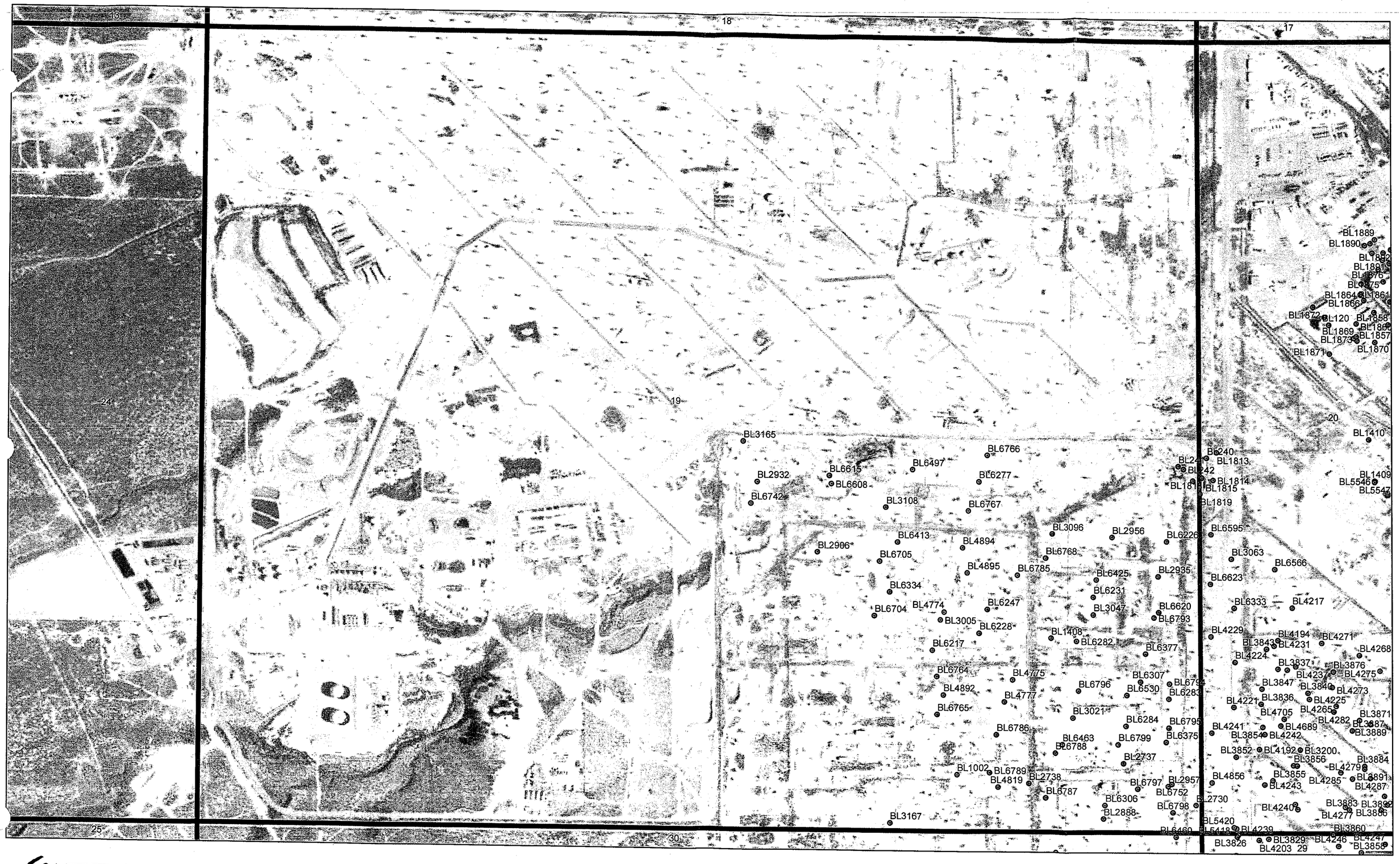
Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL6622	12	South Belridge	Belridge	8082B-3	Del Sur	N/A	3	29S	21E	MD	35.43867	-119.70029	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6623	2	South Belridge	Belridge	516LR-20	Belridge	N/A	20	28S	21E	MD	35.47456	-119.74267	085-210-18	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6624	9	South Belridge	Belridge	537ZR3-34	Belridge	N/A	34	28S	21E	MD	35.44424	-119.70110	085-220-22	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6628	9	South Belridge	Belridge	549GR2-34	Belridge	N/A	34	28S	21E	MD	35.44126	-119.69929	085-220-22	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6632	8	South Belridge	Belridge	555-33	Belridge	N/A	33	28S	21E	MD	35.44765	-119.71442	085-230-07	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6633	13	South Belridge	Belridge	8427A-2	Del Sur	N/A	2	29S	21E	MD	35.43092	-119.67951	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6634	13	South Belridge	Belridge	8529B-2	Del Sur	N/A	2	29S	21E	MD	35.42856	-119.68081	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6635	13	South Belridge	Belridge	8505D-2	Del Sur	N/A	2	29S	21E	MD	35.42910	-119.68159	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6636	13	South Belridge	Belridge	8414D-2	Del Sur	N/A	2	29S	21E	MD	35.43141	-119.68787	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6637	13	South Belridge	Belridge	8169B-2	Del Sur	N/A	2	29S	21E	MD	35.43784	-119.69134	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6639	13	South Belridge	Belridge	8237-2	Del Sur	N/A	2	29S	21E	MD	35.43573	-119.68596	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6640	3	South Belridge	Belridge	82WH-30	Belridge	N/A	30	28S	21E	MD	35.46724	-119.74493	085-230-12	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6682	13	South Belridge	Belridge	8314A-2	Del Sur	N/A	2	29S	21E	MD	35.43392	-119.68804	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6684	13	South Belridge	Belridge	8344B-2	Del Sur	N/A	2	29S	21E	MD	35.43320	-119.69145	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6685	13	South Belridge	Belridge	8359C-2	Del Sur	N/A	2	29S	21E	MD	35.43332	-119.68376	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6686	13	South Belridge	Belridge	8457B-2	Del Sur	N/A	2	29S	21E	MD	35.42990	-119.68335	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6687	13	South Belridge	Belridge	8483B-2	Del Sur	N/A	2	29S	21E	MD	35.42962	-119.68337	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6689	5	South Belridge	Belridge	518CR-28	Belridge	N/A	28	28S	21E	MD	35.45727	-119.72479	085-230-26	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6694	5	South Belridge	Belridge	516DR2-28	Belridge	N/A	28	28S	21E	MD	35.45967	-119.72340	085-230-26	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6698	12	South Belridge	Belridge	8031D-3	Del Sur	N/A	3	29S	21E	MD	35.44053	-119.69956	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6699	13	South Belridge	Belridge	8096B-2	Del Sur	N/A	2	29S	21E	MD	35.43887	-119.69303	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6700	13	South Belridge	Belridge	8123C-2	Del Sur	N/A	2	29S	21E	MD	35.43870	-119.69390	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6701	13	South Belridge	Belridge	8293B-2	Del Sur	N/A	2	29S	21E	MD	35.43422	-119.69080	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6702	13	South Belridge	Belridge	8339B-2	Del Sur	N/A	2	29S	21E	MD	35.43323	-119.68818	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6704	1	South Belridge	Belridge	66WBR-19	Belridge	N/A	19	28S	21E	MD	35.47393	-119.74882	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6705	1	South Belridge	Belridge	66WGR-19	Belridge	N/A	19	28S	21E	MD	35.47493	-119.74873	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6742	1	South Belridge	Belridge	55WD-19	Belridge	N/A	19	28S	21E	MD	35.47595	-119.75109	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6752	1	South Belridge	Belridge	88WGR-19	Belridge	N/A	19	28S	21E	MD	35.47090	-119.74338	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6753	4	South Belridge	Belridge	523CR3-29	Belridge	N/A	29	28S	21E	MD	35.46590	-119.74002	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6754	4	South Belridge	Belridge	524NR3-29	Belridge	N/A	29	28S	21E	MD	35.46375	-119.73942	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6755	4	South Belridge	Belridge	524ZR3-29	Belridge	N/A	29	28S	21E	MD	35.46224	-119.73658	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6757	4	South Belridge	Belridge	534CR3-29	Belridge	N/A	29	28S	21E	MD	35.46413	-119.73785	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6758	4	South Belridge	Belridge	535CR2-29	Belridge	N/A	29	28S	21E	MD	35.46240	-119.73758	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6759	4	South Belridge	Belridge	545ZR4-29	Belridge	N/A	29	28S	21E	MD	35.46300	-119.73451	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6760	4	South Belridge	Belridge	553ZR3-29	Belridge	N/A	29	28S	21E	MD	35.46562	-119.73220	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6761	12	South Belridge	Belridge	8081C-3	Del Sur	N/A	3	29S	21E	MD	35.43930	-119.70006	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6762	12	South Belridge	Belridge	8105C-3	Del Sur	N/A	3	29S	21E	MD	35.43840	-119.69935	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6763	12	South Belridge	Belridge	81288-3	Del Sur	N/A	3	29S	21E	MD	35.43781	-119.69800	098-111-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6764	1	South Belridge	Belridge	67WAR-19	Belridge	N/A	19	28S	21E	MD	35.47283	-119.74768	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6765	1	South Belridge	Belridge	67WD-19	Belridge	N/A	19	28S	21E	MD	35.47214	-119.74767	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6766	1	South Belridge	Belridge	75WDR-19	Belridge	N/A	19	28S	21E	MD	35.47688	-119.74675	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6767	1	South Belridge	Belridge	75WFR-19	Belridge	N/A	19	28S	21E	MD	35.47586	-119.74709	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6768	1	South Belridge	Belridge	76WAR2-19	Belridge	N/A	19	28S	21E	MD	35.47501	-119.74569	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6769	4	South Belridge	Belridge	555LR3-29	Belridge	N/A	29	28S	21E	MD	35.46186	-119.73400	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6770	9	South Belridge	Belridge	557AR3-34	Belridge	N/A	34	28S	21E	MD	35.44328	-119.69726	085-220-22	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector

Aera Energy LLC - South Belridge Oil Field

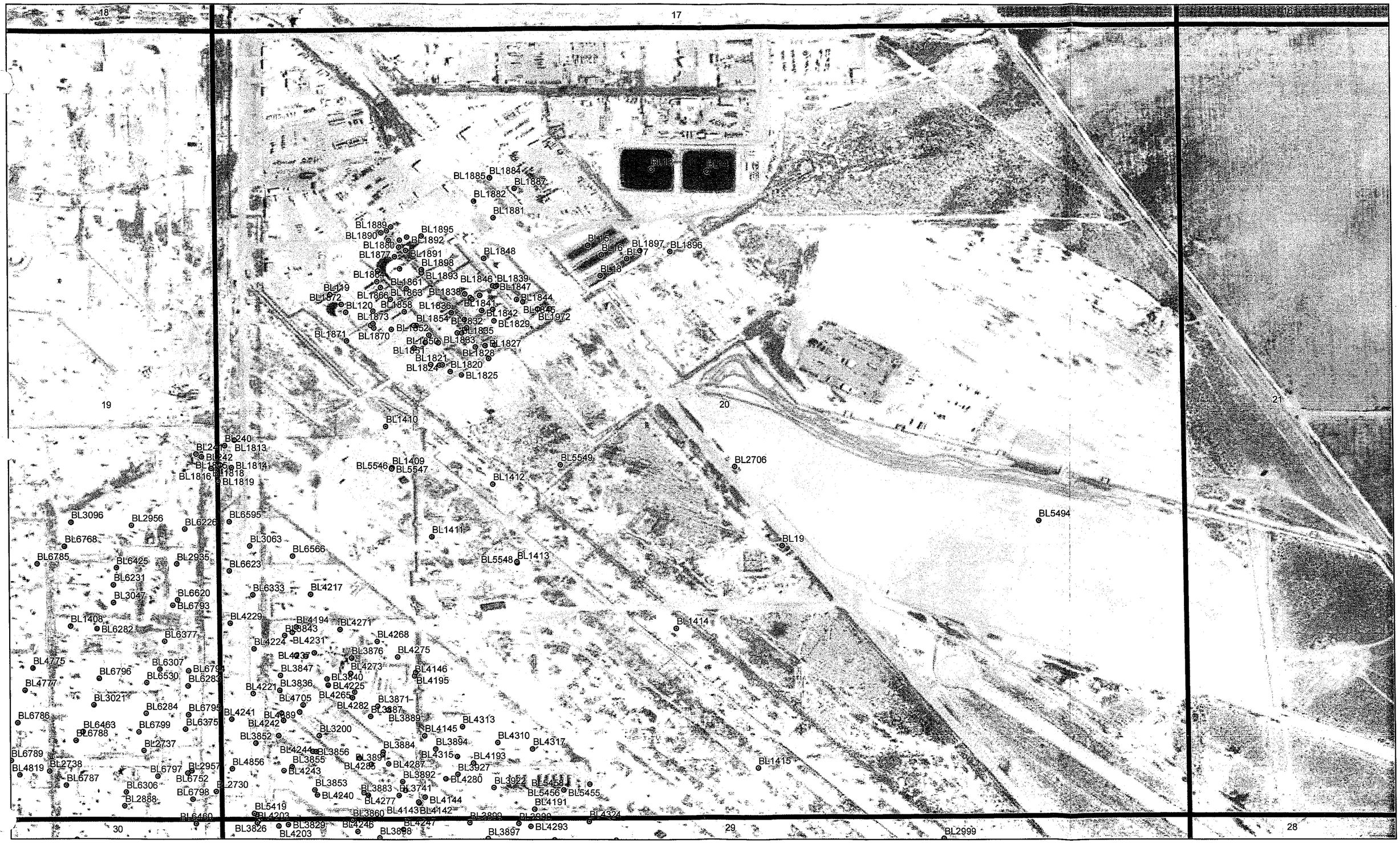
Potential Discharge Locations

Short Identifier	Map Page Number	Field	Lease	Description/Name	Location	RWQCB Name	Sec.	T	R	BM	Latitude	Longitude	APN	Potential Fluid	L	W	D	Construction	Status	Number of Discharge Points	Additional Comments	Intended Use	Volume Discharged [bbl/yr]	Category
BL6771	4	South Belridge	Belridge	577ER2-29	Belridge	N/A	29	28S	21E	MD	35.45907	-119.72909	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6773	13	South Belridge	Belridge	8172D-2	Del Sur	N/A	2	29S	21E	MD	35.43736	-119.69374	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6774	13	South Belridge	Belridge	8289B-2	Del Sur	N/A	2	29S	21E	MD	35.43411	-119.68800	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6775	13	South Belridge	Belridge	8383C-2	Del Sur	N/A	2	29S	21E	MD	35.43208	-119.68255	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6776	13	South Belridge	Belridge	8174D-2	Del Sur	N/A	2	29S	21E	MD	35.43689	-119.69483	098-112-01	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6778	13	South Belridge	Belridge	8332A-2	Del Sur	N/A	2	29S	21E	MD	35.43335	-119.68262	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6779	13	South Belridge	Belridge	8362B-2	Del Sur	N/A	2	29S	21E	MD	35.43282	-119.68592	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6780	13	South Belridge	Belridge	8402A-2	Del Sur	N/A	2	29S	21E	MD	35.43130	-119.67926	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6781	13	South Belridge	Belridge	8456A-2	Del Sur	N/A	2	29S	21E	MD	35.43036	-119.68222	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6782	13	South Belridge	Belridge	8384A-2	Del Sur	N/A	2	29S	21E	MD	35.43157	-119.68484	098-112-02	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6783	5	South Belridge	Belridge	938P2-28	Belridge	N/A	28	28S	21E	MD	35.45611	-119.71800	085-230-26	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6784	4	South Belridge	Belridge	565AR2-29	Belridge	N/A	29	28S	21E	MD	35.46138	-119.73116	085-230-05	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6785	1	South Belridge	Belridge	76WDR-19	Belridge	N/A	19	28S	21E	MD	35.47469	-119.74620	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6786	1	South Belridge	Belridge	77WGR-19	Belridge	N/A	19	28S	21E	MD	35.47178	-119.74658	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6787	1	South Belridge	Belridge	78WCR-19	Belridge	N/A	19	28S	21E	MD	35.47064	-119.74569	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
8L6788	1	South Belridge	Belridge	78WDR-19	Belridge	N/A	19	28S	21E	MD	35.47145	-119.74551	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6789	1	South Belridge	Belridge	78WE-19	Belridge	N/A	19	28S	21E	MD	35.47109	-119.74671	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6790	3	South Belridge	Belridge	81WDR-30	Belridge	N/A	30	28S	21E	MD	35.46872	-119.74430	085-230-12	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6791	3	South Belridge	Belridge	81WFR-30	Belridge	N/A	30	28S	21E	MD	35.46920	-119.74353	085-230-12	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6793	1	South Belridge	Belridge	87WFR-19	Belridge	N/A	19	28S	21E	MD	35.47393	-119.74370	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6794	1	South Belridge	Belridge	87WIR-19	Belridge	N/A	19	28S	21E	MD	35.47273	-119.74342	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6795	1	South Belridge	Belridge	87WKR-19	Belridge	N/A	19	28S	21E	MD	35.47193	-119.74343	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6796	1	South Belridge	Belridge	87WLR-19	Belridge	N/A	19	28S	21E	MD	35.47259	-119.74508	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
8L6797	1	South Belridge	Belridge	88WBR2-19	Belridge	N/A	19	28S	21E	MD	35.47081	-119.74400	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6798	1	South Belridge	Belridge	88WER-19	Belridge	N/A	19	28S	21E	MD	35.47038	-119.74336	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL6799	1	South Belridge	Belridge	88WFR-19	Belridge	N/A	19	28S	21E	MD	35.47162	-119.74435	085-210-09	Produced Water					Active	4		Well - Water Injection	< 1 barrel	Water Injector
BL5559	12	South Belridge	Belridge SOSS	Blowdown pit 1	3-2 Generators	N/A	3	29S	21E	MD	35.43509	-119.70504	098-111-01	Steam	20	20	4	Concrete	Active	10		Generator blow down collection		Blowdown pit
BL5560	12	South Belridge	Belridge SOSS	Blowdown pit 2	3-2 Generators	N/A	3	29S	21E	MD	35.43459	-119.70506	098-111-01	Steam	20	20	4	Concrete	Active	10		Generator blow down collection		Blowdown pit
BL5561	12	South Belridge	Belridge SOSS	Blowdown pit 4	3-2 Generators	N/A	3	29S	21E	MD	35.43351	-119.70504	098-111-03	Steam	20	20	4	Concrete	Active	10		Generator blow down collection		Blowdown pit
BL5562	12	South Belridge	Belridge SOSS	Blowdown and facility pit	3-2 Generators	N/A	3	29S	21E	MD	35.43512	-119.70385	098-111-01	Steam	40	20	6	Concrete	Active	1		Generator blow down and facility drains collection		Blowdown pit



South Belridge Potential Discharge Location Points 19, T28S, R21E

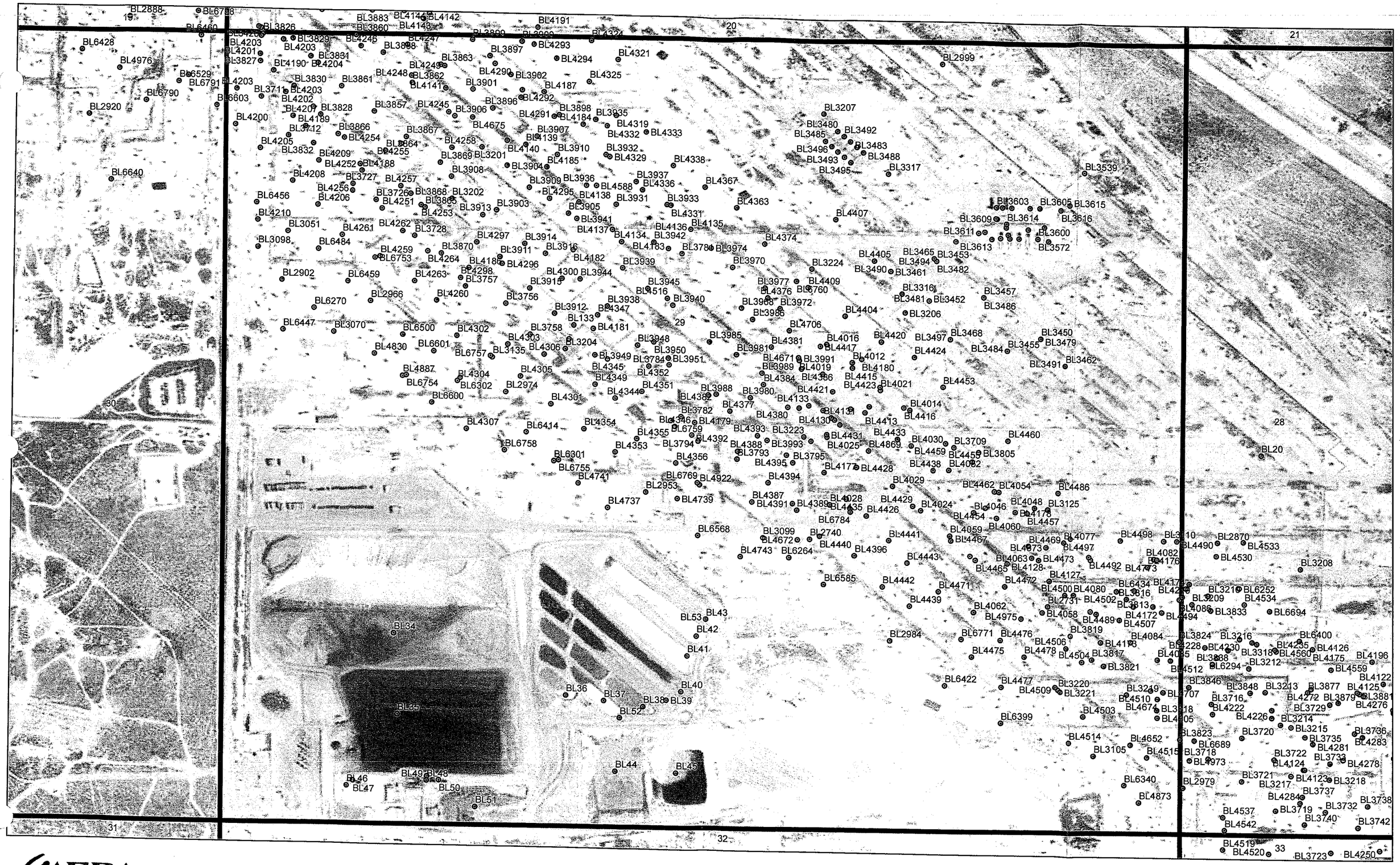
MAP PAGE 1



South Belridge Potential Discharge Location Points 20, T28S, R21E

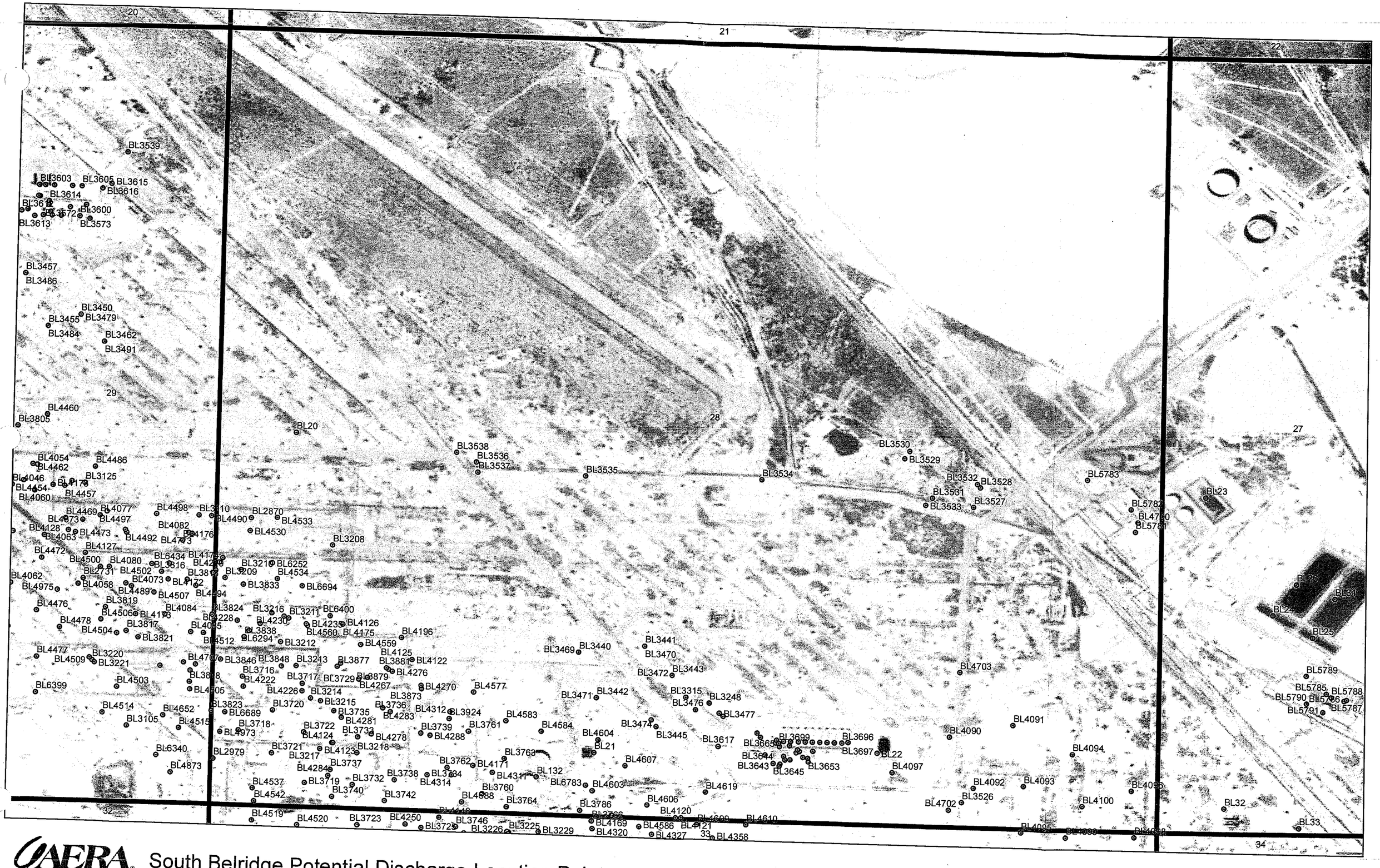
MAP PAGE 2

South Belridge Potential Discharge Location Points 30, T28S, R21E

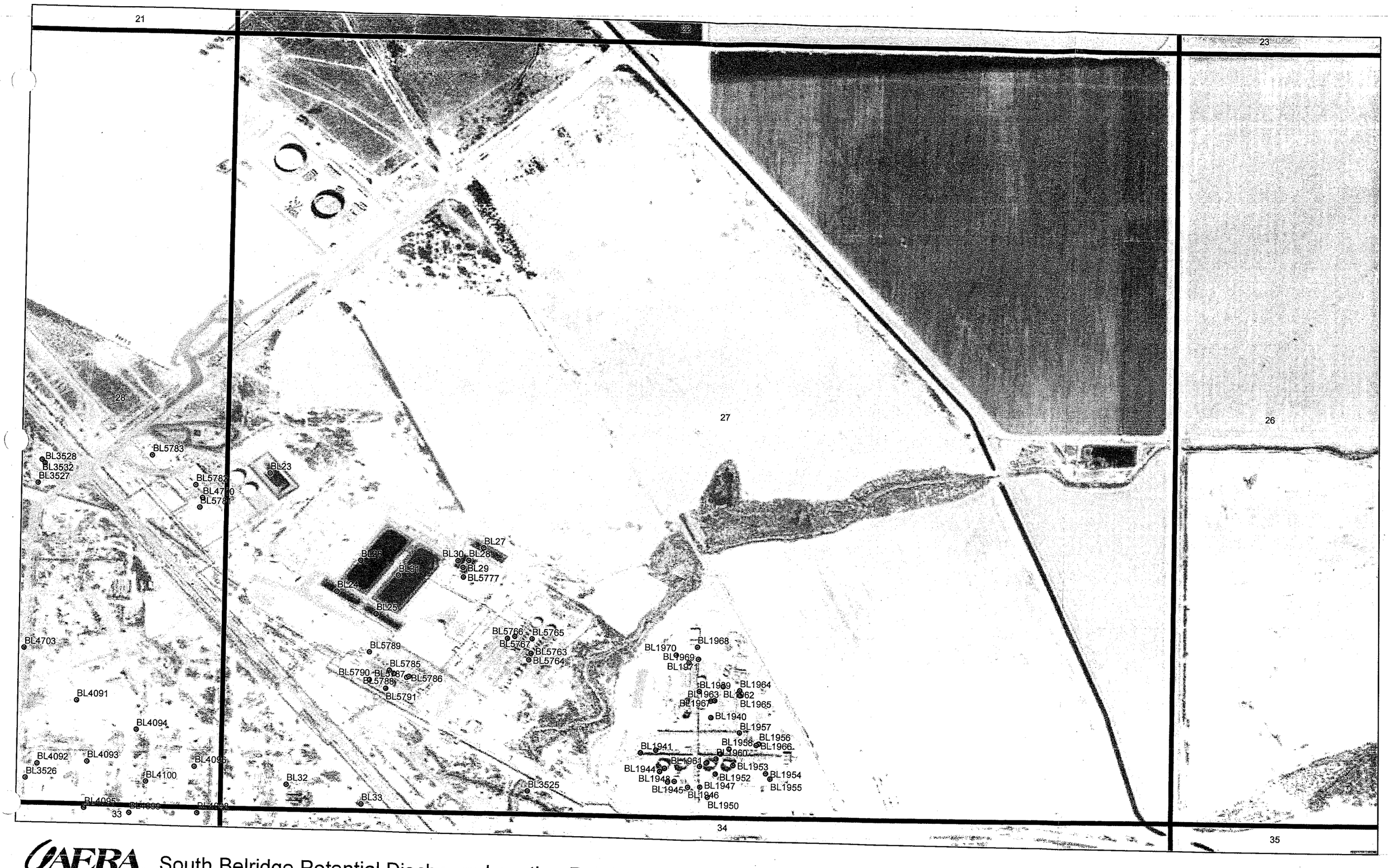


AERA South Belridge Potential Discharge Location Points 29, T28S, R21E

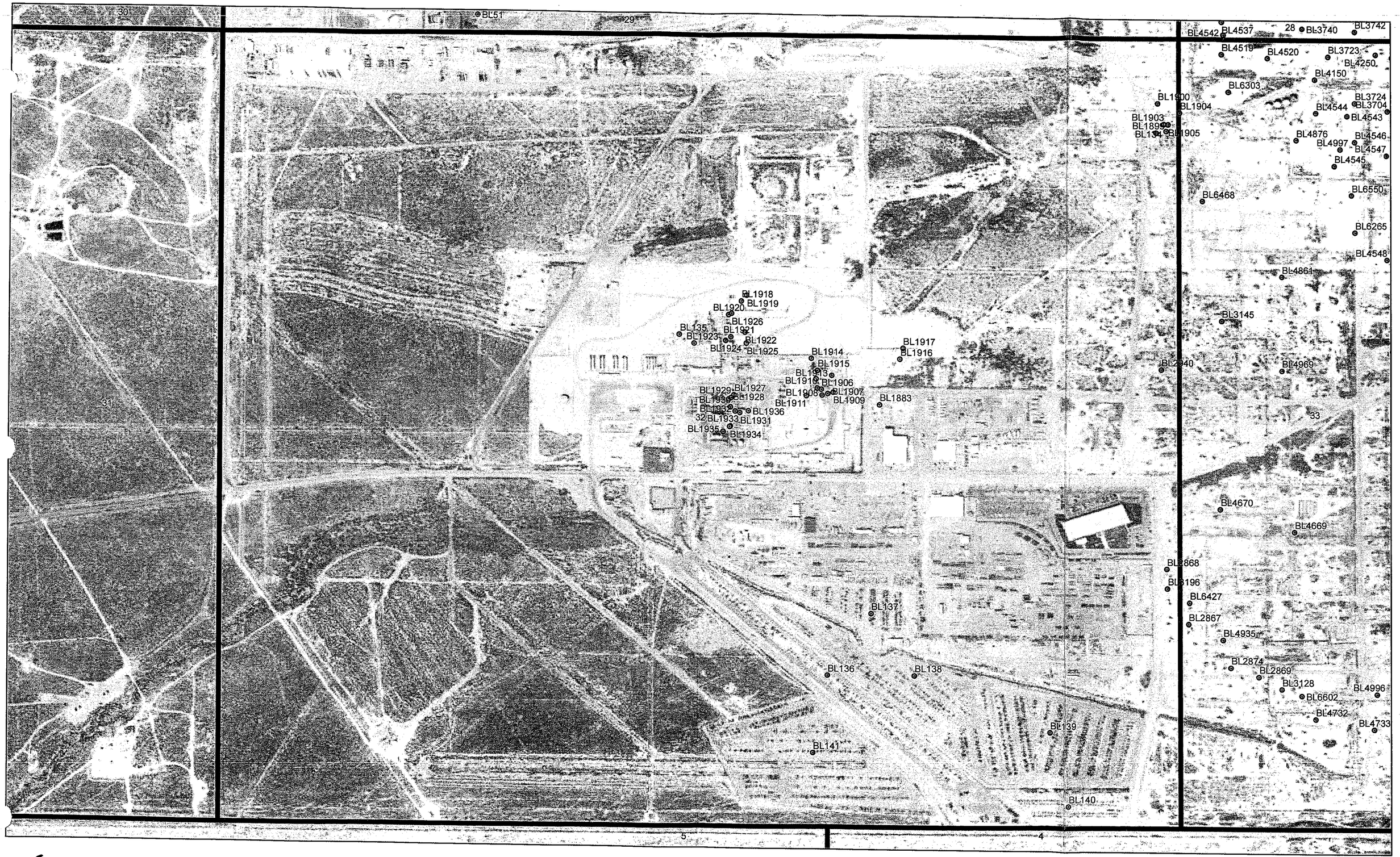
MAP PAGE 4



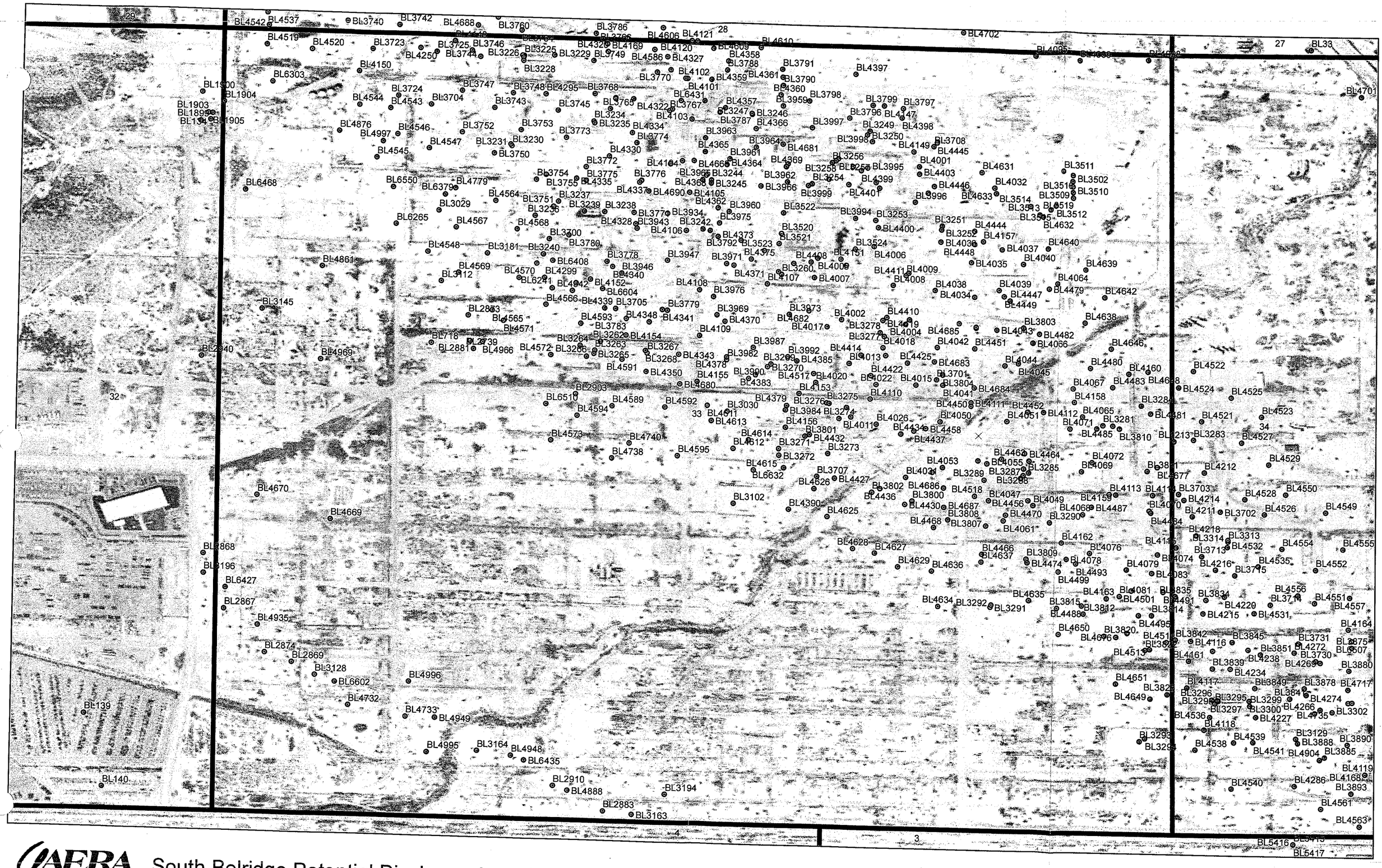
South Belridge Potential Discharge Location Points 28, T28S, R21E



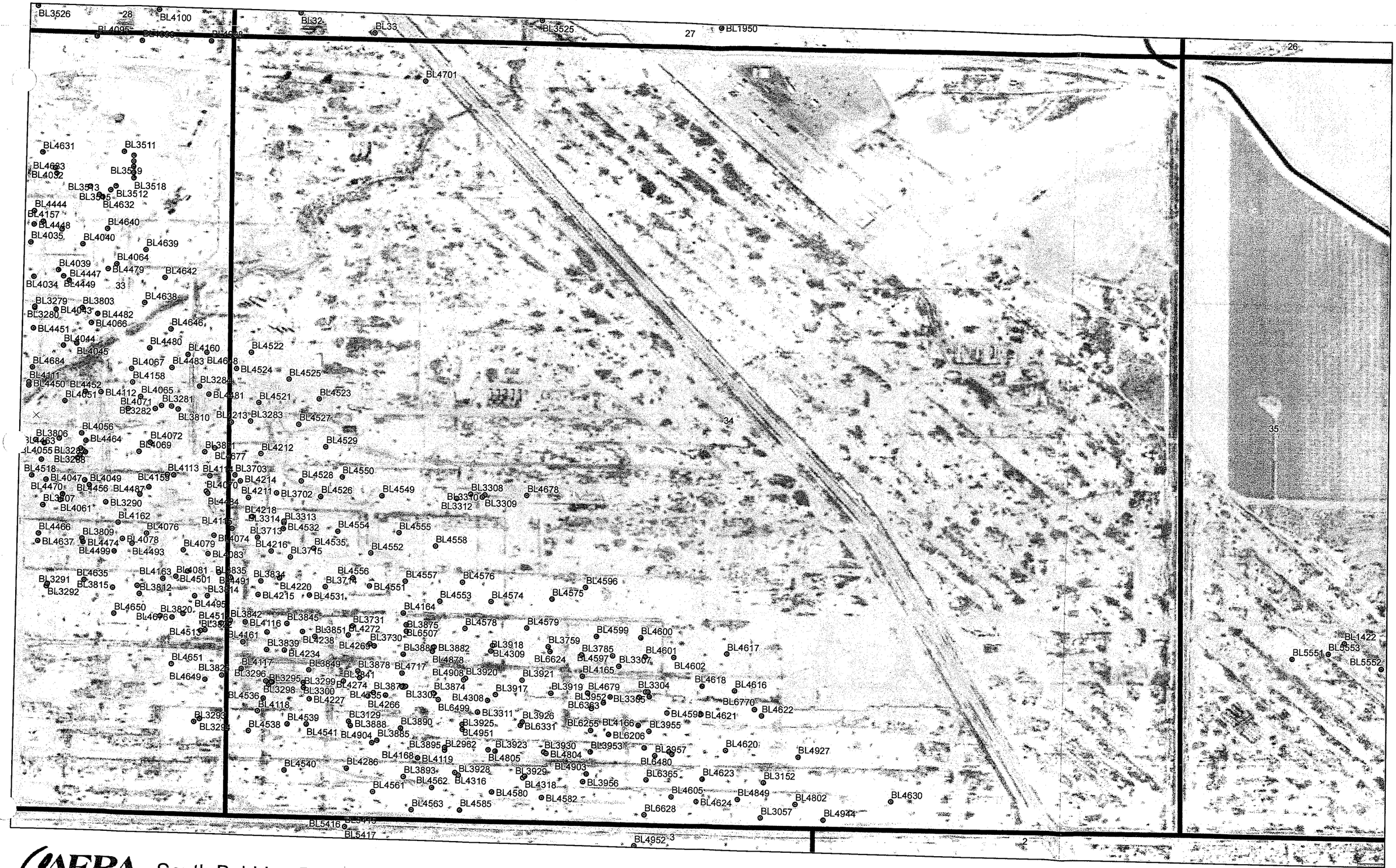
South Belridge Potential Discharge Location Points 27, T28S, R21E



South Belridge Potential Discharge Location Points 32, T28S, R21E

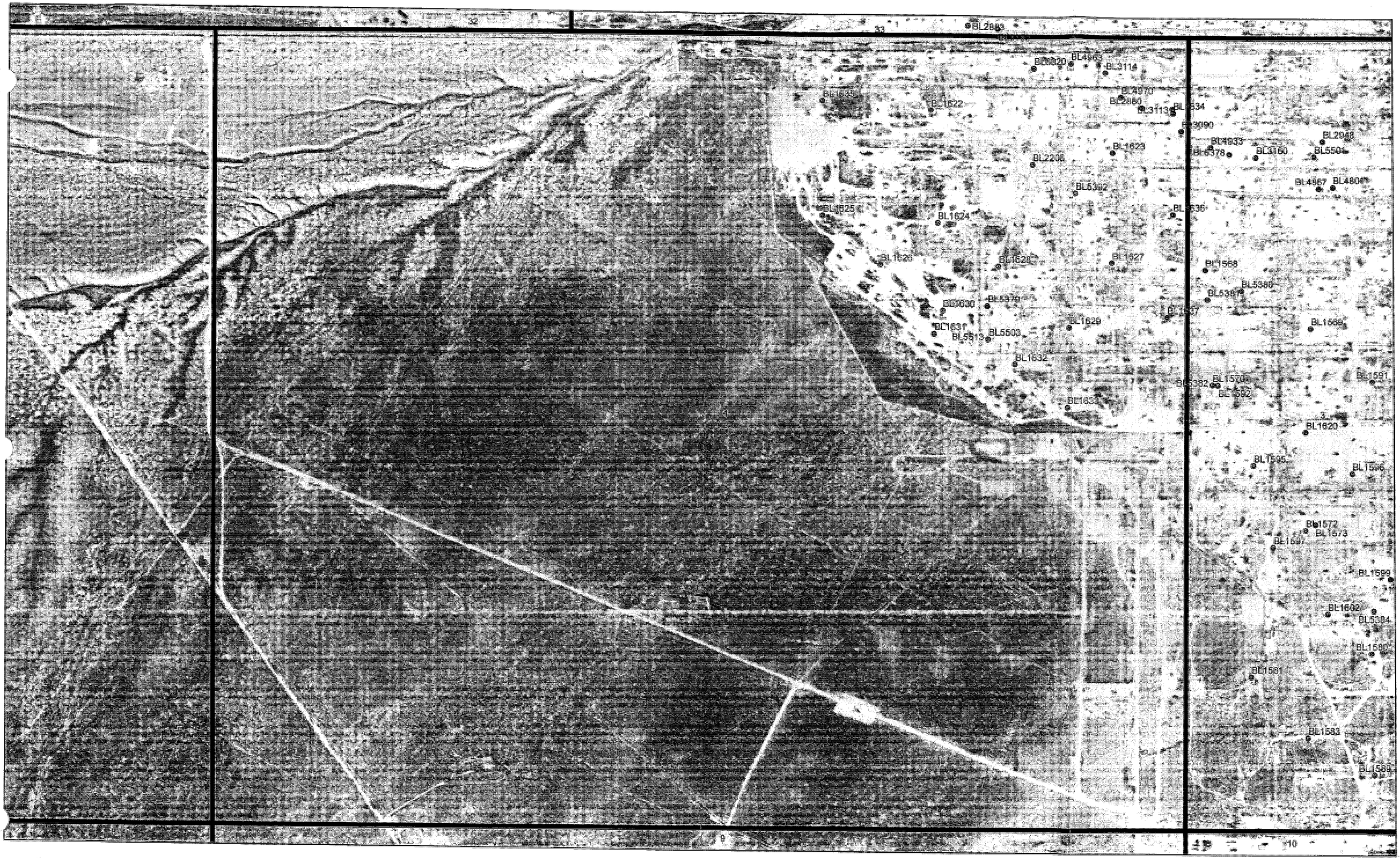


South Belridge Potential Discharge Location Points 33, T28S, R21E

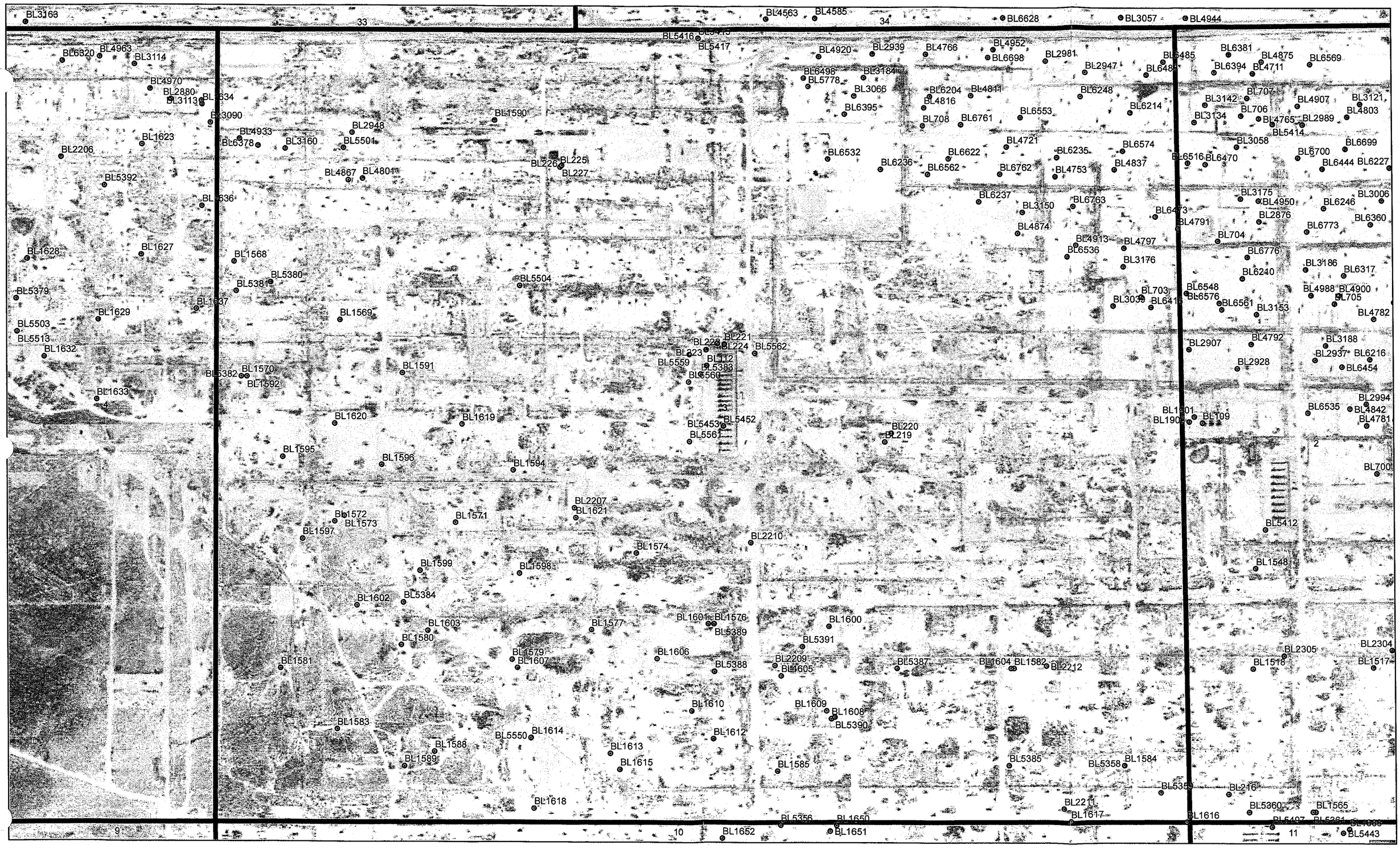


AERA South Belridge Potential Discharge Location Points 34, T28S, R21E

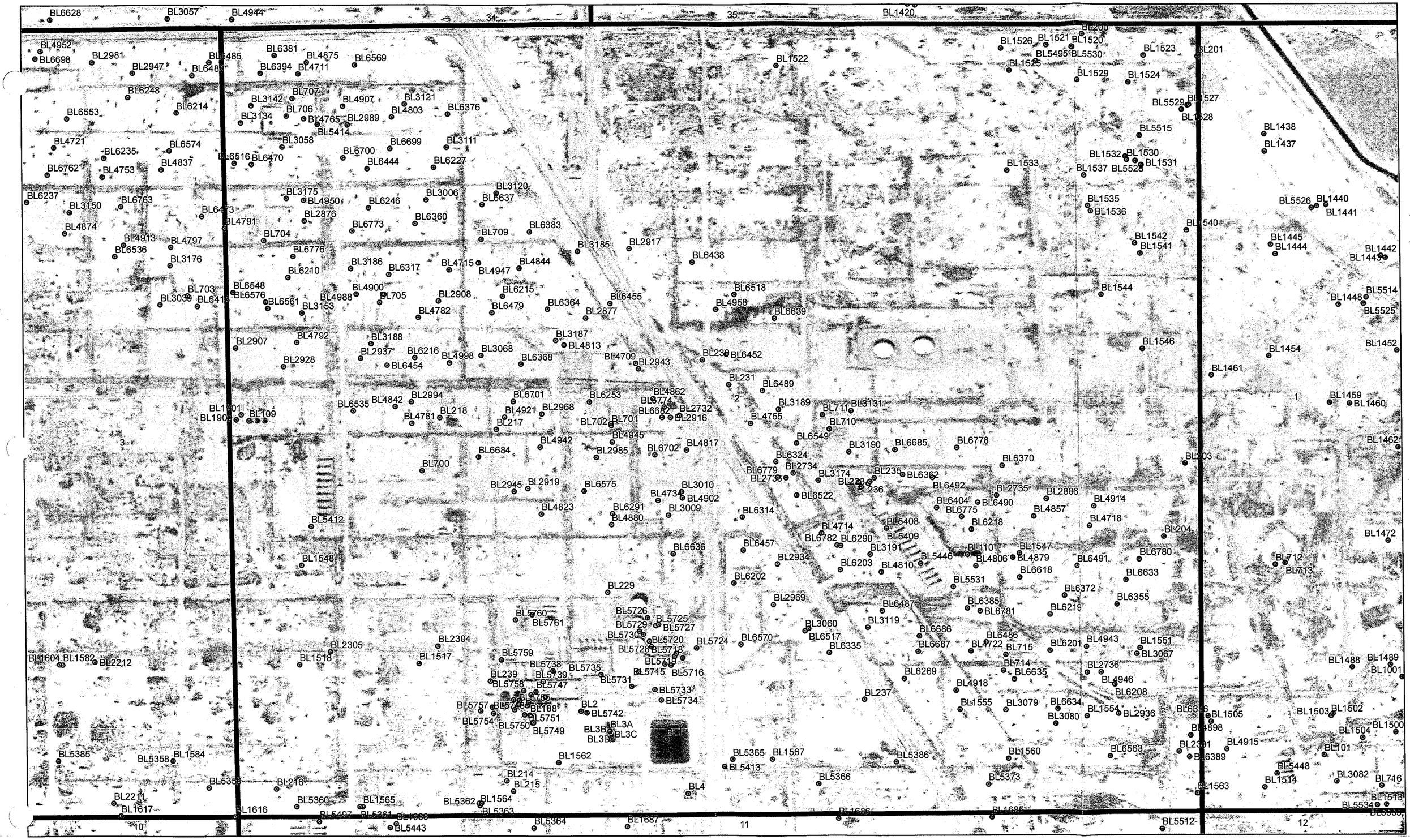
AERA South Belridge Potential Discharge Location Points 35, T28S, R21E



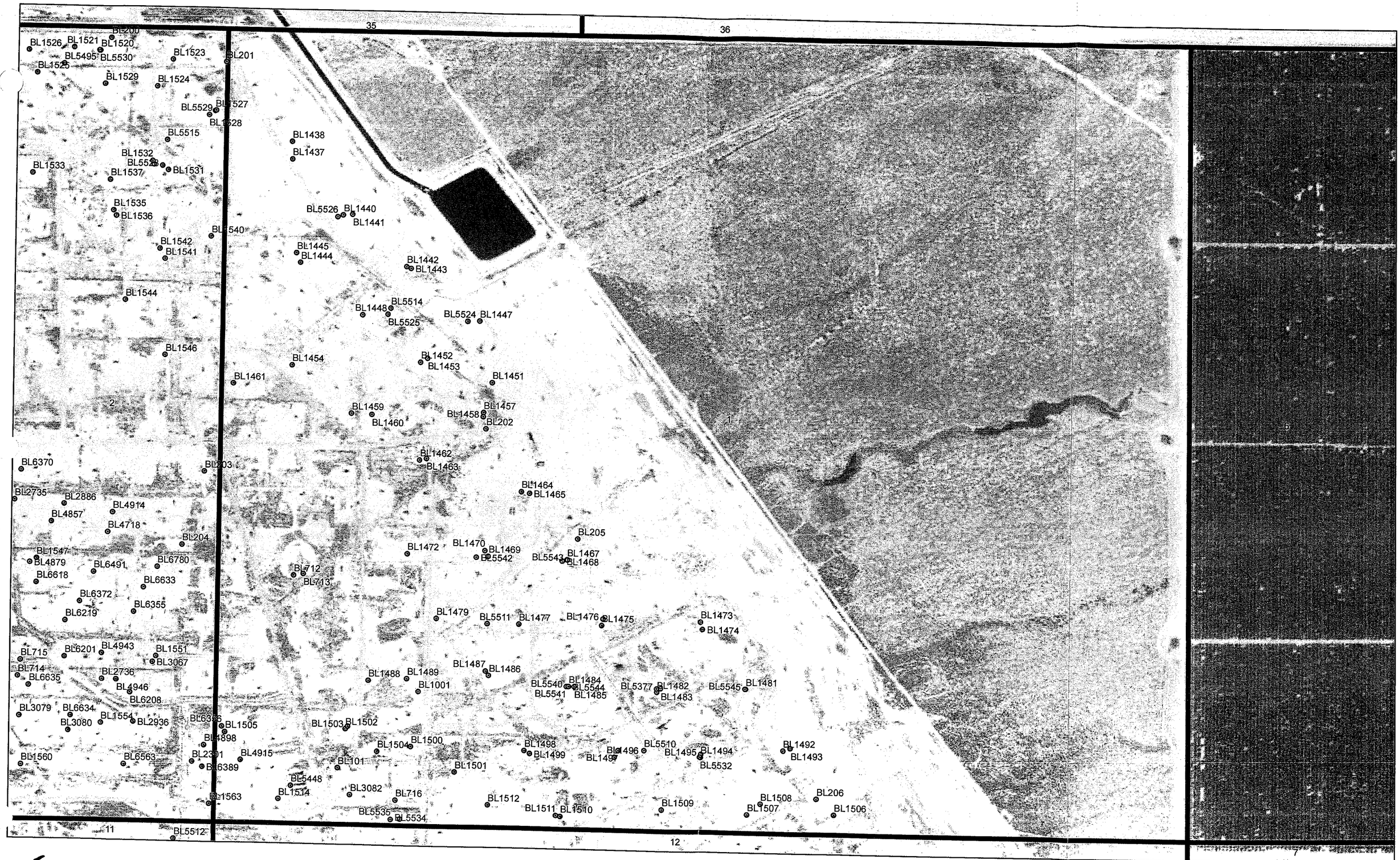
CAERA South Belridge Potential Discharge Location Points 4, T29S, R21E



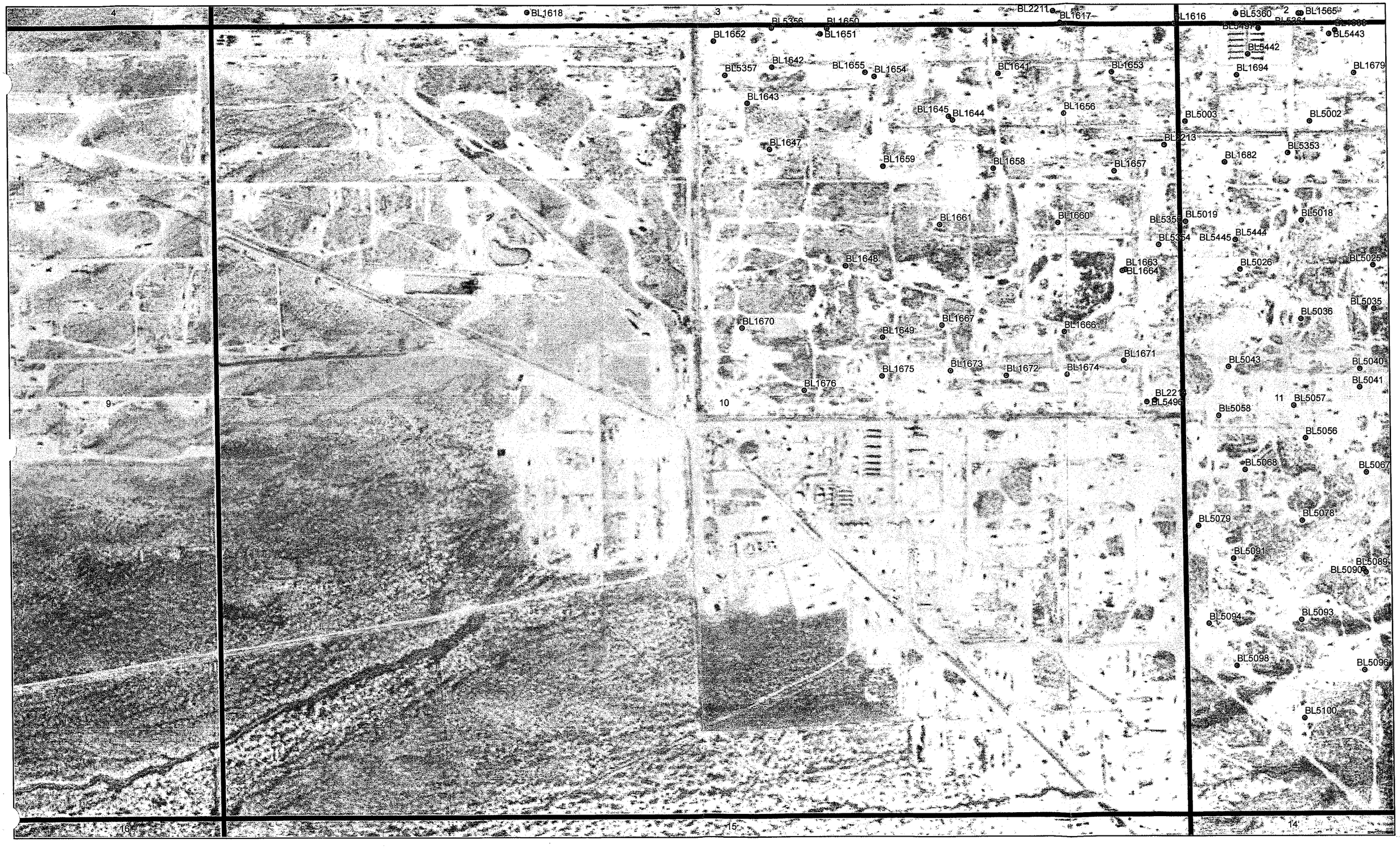
South Belridge Potential Discharge Location Points 3, T29S, R21E



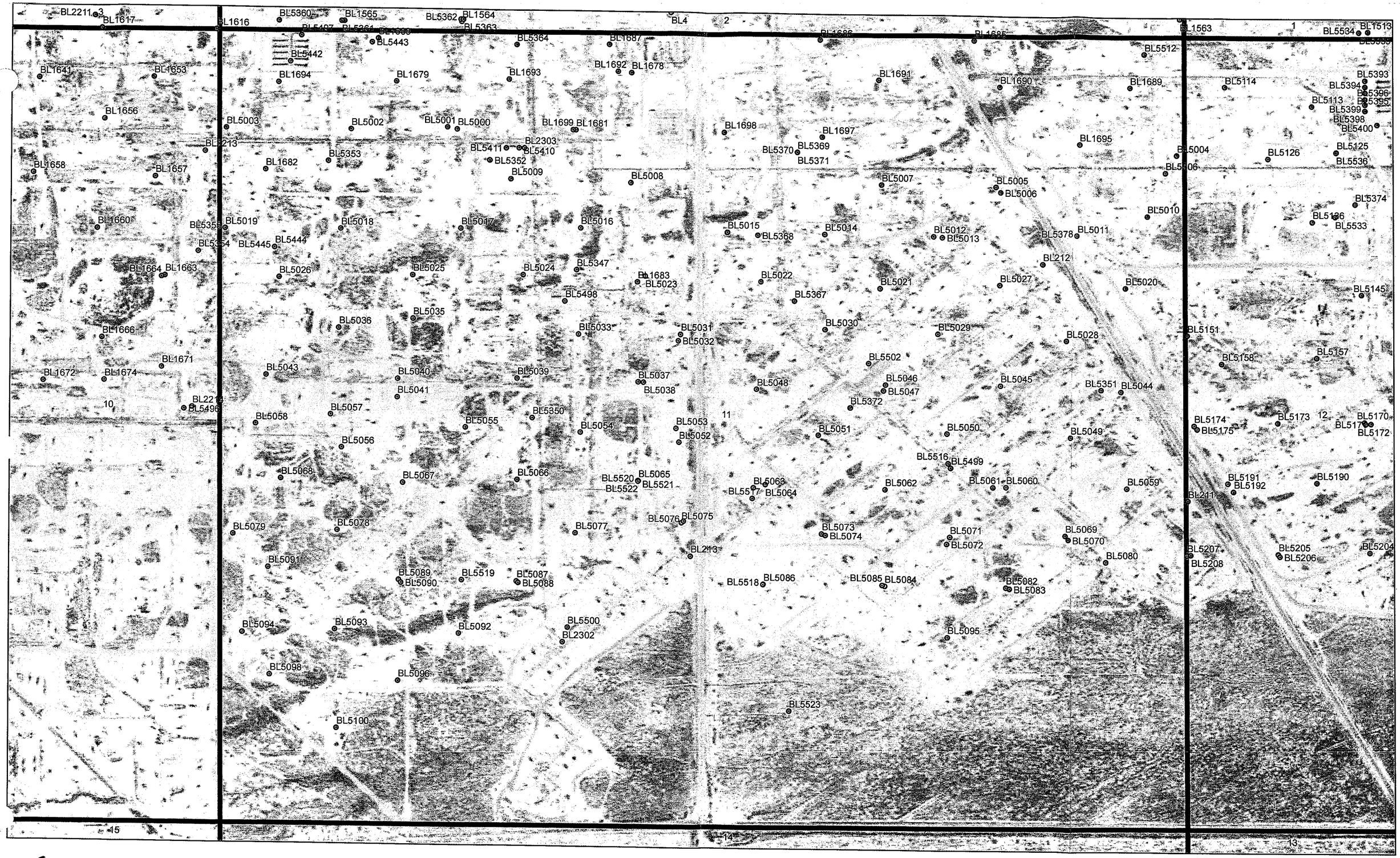
AERA South Belridge Potential Discharge Location Points 2, T29S, R21E



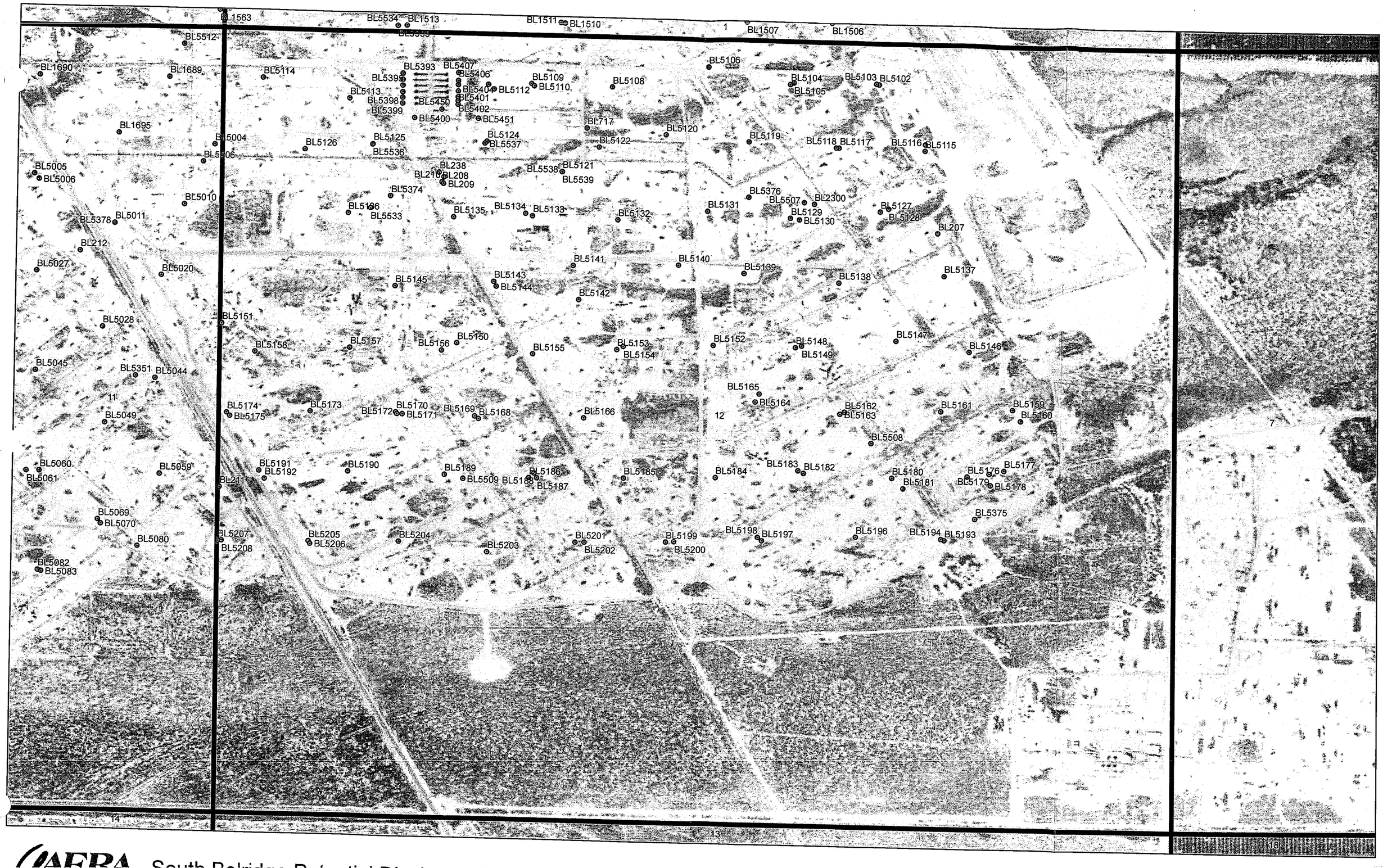
South Belridge Potential Discharge Location Points 1, T29S, R21E



South Belridge Potential Discharge Location Points 10, T29S, R21E



South Belridge Potential Discharge Location Points 11, T29S, R21E



South Belridge Potential Discharge Location Points 12, T29S, R21E

amec
foster
wheeler

APPENDIX C

Analytical Reports and Chain-of-Custody Documentation

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 06/10/2015

Rod Bowyer

Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Client Project:	TOW
BCL Project:	Oilfield Produced Water Pond Testing
BCL Work Order:	1512124
Invoice ID:	B204797

Enclosed are the results of analyses for samples received by the laboratory on 5/18/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kerrie S. Vaughan

Contact Person: Kerrie Vaughan
Client Services

Authorized Signature

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Metals Analysis 14

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Volatile Organic Analysis (EPA Method 8260B) 15
Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM) 16
Total Petroleum Hydrocarbons 17
Water Analysis (General Chemistry) 18
Metals Analysis 19

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Volatile Organic Analysis (EPA Method 8260B) 20
Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM) 21
Total Petroleum Hydrocarbons 22
Water Analysis (General Chemistry) 23
Metals Analysis 24

1512124-04 - BL30 Tow Pond 18

Volatile Organic Analysis (EPA Method 8260B) 25
Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM) 26
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Metals Analysis 29

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Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM) 31
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Laboratory Control Sample 43
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Water Analysis (General Chemistry)

Method Blank Analysis 45
Laboratory Control Sample 46
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Metals Analysis

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BC Laboratories, Inc.

Chain of Custody Form

Bill.pipes@Amecfw.com
Alex.olsen@amecfw.com

Page ___ of ___

Report To:
Client: AERA ENERGY LLC
Attn: Rod Bowyer
Street Address:
City, State, Zip:
Phone: Fax:
Email Address:
Work Order #: 15-12124

Project #: 990020283 (TOW) TULARE
Project Name:
Sampler(s): JUAN ENRIQUEZ, BC LABS
ROBERT CORTEZ, BC LABS

Analysis Requested: RWQCB Production Ponds (See Attached analyses)

Please refer to the back of this page for completion instructions and method legend.

Comments:
AERA POND SAMPLING
EDF REQUESTED
COPY: BILL PIPES/ALEX OLSEN
AMEC FOSTER WHEELER, 1281 E. ALLUVIAL AVE
STE 101, FRESNO, CA 92720

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No
* Standard Turnaround = 10 work days

Sample #	Description		Date Sampled	Time Sampled	RWQCB Production Ponds (See Attached analyses)	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
-1	BL24 TOW POND 12	3	5/18/15	~~10~~ 11:34 am	X					X			OILY WATER
-2	BL28 TOW POND 16	7	5/18/15	2:40p	X					X			OILY WATER
-3	BL29 TOW POND 17	8	5/18/15	2:52p	X					X			OILY WATER
-4	BL30 TOW POND 18	6	5/18/15	2:19p	X					X			OILY WATER
-5	BL31 TOW POND 19	4	5/18/15	12:00p	X					X			OILY WATER

ANALYZE WATER FRACTION ONLY! PQL

Field time 5 hrs
field personnel x 2

All samples collected with dipping poles
CRUDE OIL Present with all samples collected.

CHK BY
DISTRIBUTION
SUB OUT

SHORT HOLDING TIME
Cr^{+6} NO_2 NO_3 OP SS
DO Cl_2 BOD MBAS COT

Billing ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#: 990020283 - Tulare

EDF Required? Geotracker ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)
System # (Needed for EDT)

	Date	Time		Date	Time
1. Relinquished By			1. Received By: Kathleen Bu[illegible]	5/18/15	1835
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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15-12124

BC LABORATORIES, INC
4100 Atlas Ct. Bakersfield, Ca. 93308 Tel: (800) 878 - 4911 Website: www.bclabs.com

Aera - OIL FIELD PRODUCED WATER POND TESTING

CALIFORNIA WATER CODE DIRECTIVE PURSUANT TO SECTION 13267
CHARACTERIZATION OF WASTEWATER FOR DISCHARGE

Collect representative samples of wastewater within each of the ponds. Samples must be analyzed in accordance with the water quality analysis and reporting requirements contained in Attachment B to this Order;[1]

List of Analyses as per Attachment B

A. Total Dissolved Solids

B. Metals, CCR title 22, section 66261.24. subdivision (a)(2)(A) (antimony, arsenic, barium, beryllium, cadmium, chromium, chromium (VI), cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc)

C. benzene, toluene, ethylbenzene, xylenes

D. Total Petroleum Hydrocarbons as Crude Oil

E. Polynuclear Aromatic Hydrocarbons (PAH)

F. Radionuclides (Radium226, Radium 228, Gross Alpha, Uranium)

G. Major and Minor Cations (sodium, potassium, magnesium, calcium)

H. Major and Minor Anions (nitrate, chloride, sulfate, carbonate, bicarbonate, bromide)

I. Trace Elements (lithium, strontium, boron, iron, manganese)

Total Price $624

Electronic results available as an Excel spreadsheet upon request.

Field Service	
Sampling	$50 per hour
Vehicle	$0.60 per mile

[1] All previously obtained analytical data for oil field produced wastewater samples collected at the Facility, if any, with a description of the source and location for each analysis may be submitted in the alternative for re-running tests if the sample(s) was collected and analyzed within 12 months (one year) of the date of this order.

4100 Atlas Ct. Bakersfield, CA 93308 (800) 878-4911 www.bclabs.com

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Chain of Custody and Cooler Receipt Form for 1512124 Page 3 of 5

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 Of 3

Submission #: 15-1214

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☐ BC Lab Field Service ☒ Other ☐ (Specify)_____	Ice Chest ☒ None ☐ Box ☐ Other ☐ (Specify)_____	YES ☐ NO ☐

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ (Intact? Yes ☐ No ☐) Containers ☐ (Intact? Yes ☐ No ☐) None ☑ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Amber Thermometer ID: 208 Date/Time 5/18/15

Temperature: (A) 2.4 °C / (C) 2.5 °C Analyst Init KIB 1835

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AB	AB	AB	AB	AB					
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER	GH	GH	GH	GH	GH					
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:

Sample Numbering Completed By: KIB Date/Time: 5/18/15 1835 (S:\WPDocs\WordPerfect\LAB_DOCS\FORMS\SAMREC)

A = Actual / C = Corrected

Chain of Custody and Cooler Receipt Form for 1512124 Page 4 of 5

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 2 of 3

Submission #: 15-12124

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☐ BC Lab Field Service ☒ Other ☐ (Specify)_____	Ice Chest ☒ None ☐ Box ☐ Other ☐ (Specify)_____	YES ☐ NO ☐

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: PE Thermometer ID: 208 Date/Time 5/18/15

Temperature: (A) 1.9 °C / (C) 20 °C Analyst Init KHB 1835

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	C	C	C	C	C					
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	D	D	D	D	D					
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:

Sample Numbering Completed By: KHB Date/Time: 5/18/15 1857 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1512124 Page 5 of 5

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 3 Of 3

Submission #: 15-12124

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☐ BC Lab Field Service ☒ Other ☐ (Specify)_____	Ice Chest ☐ None ☐ Box ☒ Other ☐ (Specify)_____	YES ☐ NO ☐

Refrigerant: Ice ☐ Blue Ice ☐ None ☒ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: PE Thermometer ID: 208 Date/Time 5/18/15 1840

Temperature: (A) 26.0 °C / (C) 26.1 °C Analyst Init KMB

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	EF	EF	EF	EF	EF					
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:

Sample Numbering Completed By: KMB Date/Time: 5/18/15 1858 (S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC)

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1512124-01	**COC Number:**	—	**Receive Date:**	05/18/2015 18:35
	Project Number:	—	**Sampling Date:**	05/18/2015 11:34
	Sampling Location:	—	**Sample Depth:**	—
	Sampling Point:	BL24 Tow Pond 12	**Lab Matrix:**	Water
	Sampled By:	R.Cortez/J.Enriquez	**Sample Type:**	Wastewater
1512124-02	**COC Number:**	—	**Receive Date:**	05/18/2015 18:35
	Project Number:	—	**Sampling Date:**	05/18/2015 14:40
	Sampling Location:	—	**Sample Depth:**	—
	Sampling Point:	BL28 Tow Pond 16	**Lab Matrix:**	Water
	Sampled By:	R.Cortez/J.Enriquez	**Sample Type:**	Wastewater
1512124-03	**COC Number:**	—	**Receive Date:**	05/18/2015 18:35
	Project Number:	—	**Sampling Date:**	05/18/2015 14:52
	Sampling Location:	—	**Sample Depth:**	—
	Sampling Point:	BL29 Tow Pond 17	**Lab Matrix:**	Water
	Sampled By:	R.Cortez/J.Enriquez	**Sample Type:**	Wastewater
1512124-04	**COC Number:**	—	**Receive Date:**	05/18/2015 18:35
	Project Number:	—	**Sampling Date:**	05/18/2015 14:19
	Sampling Location:	—	**Sample Depth:**	—
	Sampling Point:	BL30 Tow Pond 18	**Lab Matrix:**	Water
	Sampled By:	R.Cortez/J.Enriquez	**Sample Type:**	Wastewater
1512124-05	**COC Number:**	—	**Receive Date:**	05/18/2015 18:35
	Project Number:	—	**Sampling Date:**	05/18/2015 12:00
	Sampling Location:	—	**Sample Depth:**	—
	Sampling Point:	BL31 Tow Pond 19	**Lab Matrix:**	Water
	Sampled By:	R.Cortez/J.Enriquez	**Sample Type:**	Wastewater

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512124-01 | **Client Sample Name:** BL24 Tow Pond 12, 5/18/2015 11:34:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**4.6**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND	**Z1**	1
Ethylbenzene	**2.5**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	**Z1**	1
Toluene	**10**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	**Z1**	1
Total Xylenes	**13**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND	**Z1**	1
p- & m-Xylenes	**9.3**	**ug/L**	**0.50**	**0.28**	**EPA-8260B**	ND	**Z1**	1
o-Xylene	**3.4**	**ug/L**	**0.50**	**0.082**	**EPA-8260B**	ND	**Z1**	1
1,2-Dichloroethane-d4 (Surrogate)	95.0	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 02:28	SE1	MS-V12	1	BYE1981

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512124-01 | **Client Sample Name:** BL24 Tow Pond 12, 5/18/2015 11:34:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**0.35**	**ug/L**	**0.20**	**0.11**	**EPA-8270C-SIM**	ND		1
Acenaphthylene	**0.17**	**ug/L**	**0.20**	**0.094**	**EPA-8270C-SIM**	ND	J	1
Anthracene	ND	ug/L	0.20	0.034	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	ND	ug/L	0.20	0.052	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.20	0.080	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.20	0.10	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.20	0.052	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.20	0.086	EPA-8270C-SIM	ND		1
Chrysene	**0.23**	**ug/L**	**0.20**	**0.044**	**EPA-8270C-SIM**	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.20	0.088	EPA-8270C-SIM	ND		1
Fluoranthene	**0.074**	**ug/L**	**0.20**	**0.024**	**EPA-8270C-SIM**	ND	J	1
Fluorene	**0.42**	**ug/L**	**0.20**	**0.060**	**EPA-8270C-SIM**	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.20	0.088	EPA-8270C-SIM	ND		1
Naphthalene	ND	ug/L	0.20	0.15	EPA-8270C-SIM	ND		1
Phenanthrene	**0.58**	**ug/L**	**0.20**	**0.044**	**EPA-8270C-SIM**	ND		1
Pyrene	**0.46**	**ug/L**	**0.20**	**0.044**	**EPA-8270C-SIM**	ND		1
Nitrobenzene-d5 (Surrogate)	144	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1
2-Fluorobiphenyl (Surrogate)	63.8	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	115	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/20/15	05/21/15 17:43	MK1	MS-B4	2	BYE1944

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512124-01 | **Client Sample Name:** BL24 Tow Pond 12, 5/18/2015 11:34:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**21000**	**ug/L**	**5000**	**1400**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	63.6	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/20/15	05/21/15 15:10	MWB	GC-13	10	BYE1946

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512124-01 | **Client Sample Name:** BL24 Tow Pond 12, 5/18/2015 11:34:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**140**	**mg/L**	**1.0**	**0.15**	**EPA-6010B**	0.20	**A07**	1
Total Magnesium	**55**	**mg/L**	**0.50**	**0.19**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**3700**	**mg/L**	**5.0**	**0.51**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**73**	**mg/L**	**10**	**1.3**	**EPA-6010B**	ND	**A07**	1
Bicarbonate Alkalinity as CaCO3	**810**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**810**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**52**	**mg/L**	**5.0**	**1.8**	**EPA-300.0**	ND	**A07**	3
Chloride	**6800**	**mg/L**	**25**	**3.0**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	22	3.9	EPA-300.0	ND	A07	3
Sulfate	**210**	**mg/L**	**50**	**5.0**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**12000**	**mg/L**	**500**	**500**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/20/15	05/20/15 13:52	ARD	PE-OP3	10	BYE1803
2	EPA-310.1	05/20/15	05/20/15 09:54	RML	MET-1	2	BYE1633
3	EPA-300.0	05/19/15	05/19/15 04:17	OLH	IC2	50	BYE1611
4	EPA-160.1	05/22/15	05/22/15 10:30	CAD	MANUAL	50	BYE1987

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512124-01 | **Client Sample Name:** BL24 Tow Pond 12, 5/18/2015 11:34:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	1000	85	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	500	78	EPA-6010B	500000	A07	2
Total Barium	**2000**	**ug/L**	**100**	**35**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	100	5.0	EPA-6010B	75000	A07	2
Total Boron	**57**	**mg/L**	**1.0**	**0.13**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	100	11	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	500	13	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Iron	**0.40**	**mg/L**	**0.50**	**0.30**	**EPA-6010B**		**J,A07**	2
Total Lead	ND	ug/L	500	40	EPA-6010B	1000000	A07	2
Total Lithium	**2.7**	**mg/L**	**0.20**	**0.062**	**EPA-6010B**		**A07**	2
Total Manganese	**0.16**	**mg/L**	**0.10**	**0.040**	**EPA-6010B**		**A07**	2
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	20000		3
Total Molybdenum	**58**	**ug/L**	**500**	**12**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	ND	ug/L	100	20	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	1000	150	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	100	19	EPA-6010B	500000	A07	2
Total Strontium	**4.7**	**mg/L**	**0.10**	**0.010**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	1000	240	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	100	22	EPA-6010B	2400000	A07	2
Total Zinc	ND	ug/L	500	23	EPA-6010B	5000000	A07	2
Total Recoverable Uranium	ND	pCi/L	6.7	0.67	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/19/15	05/19/15 08:08	TDC	KONE-1	5	BYE1774
2	EPA-6010B	05/20/15	05/20/15 13:52	ARD	PE-OP3	10	BYE1803
3	EPA-7470A	05/20/15	05/22/15 10:08	MEV	CETAC1	1	BYE1792
4	EPA-200.8	05/21/15	05/21/15 21:06	SRM	PE-EL2	10	BYE1920

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512124-02 | **Client Sample Name:** BL28 Tow Pond 16, 5/18/2015 2:40:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**16**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND	Z1	1
Ethylbenzene	**2.6**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	Z1	1
Toluene	**3.8**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	Z1	1
Total Xylenes	**11**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND	Z1	1
p- & m-Xylenes	**8.9**	**ug/L**	**0.50**	**0.28**	**EPA-8260B**	ND	Z1	1
o-Xylene	**2.4**	**ug/L**	**0.50**	**0.082**	**EPA-8260B**	ND	Z1	1
1,2-Dichloroethane-d4 (Surrogate)	96.3	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 02:46	SE1	MS-V12	1	BYE1981

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512124-02 | **Client Sample Name:** BL28 Tow Pond 16, 5/18/2015 2:40:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**0.17**	**ug/L**	**0.19**	**0.11**	**EPA-8270C-SIM**	ND	J	1
Acenaphthylene	**0.24**	**ug/L**	**0.19**	**0.090**	**EPA-8270C-SIM**	ND		1
Anthracene	ND	ug/L	0.19	0.033	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	**0.057**	**ug/L**	**0.19**	**0.050**	**EPA-8270C-SIM**	ND	J	1
Benzo[b]fluoranthene	ND	ug/L	0.19	0.077	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.19	0.098	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.19	0.050	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.19	0.083	EPA-8270C-SIM	ND		1
Chrysene	**0.34**	**ug/L**	**0.19**	**0.042**	**EPA-8270C-SIM**	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.19	0.084	EPA-8270C-SIM	ND		1
Fluoranthene	ND	ug/L	0.19	0.023	EPA-8270C-SIM	ND		1
Fluorene	**0.54**	**ug/L**	**0.19**	**0.058**	**EPA-8270C-SIM**	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.19	0.084	EPA-8270C-SIM	ND		1
Naphthalene	**1.4**	**ug/L**	**0.19**	**0.15**	**EPA-8270C-SIM**	ND		1
Phenanthrene	**0.69**	**ug/L**	**0.19**	**0.042**	**EPA-8270C-SIM**	ND		1
Pyrene	**0.59**	**ug/L**	**0.19**	**0.042**	**EPA-8270C-SIM**	ND		1
Nitrobenzene-d5 (Surrogate)	198	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1
2-Fluorobiphenyl (Surrogate)	86.7	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	186	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/20/15	05/21/15 18:10	MK1	MS-B4	1.920	BYE1944

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512124-02 | **Client Sample Name:** BL28 Tow Pond 16, 5/18/2015 2:40:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**43000**	**ug/L**	**5000**	**1400**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	71.0	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/20/15	05/21/15 15:33	MWB	GC-13	10	BYE1946

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512124-02 | **Client Sample Name:** BL28 Tow Pond 16, 5/18/2015 2:40:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**220**	**mg/L**	**1.0**	**0.15**	**EPA-6010B**	0.20	**A07**	1
Total Magnesium	**82**	**mg/L**	**0.50**	**0.19**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**4200**	**mg/L**	**5.0**	**0.51**	**EPA-6010B**	0.59	**A07**	1
Total Potassium	**83**	**mg/L**	**10**	**1.3**	**EPA-6010B**	ND	**A07**	1
Bicarbonate Alkalinity as CaCO3	**810**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**810**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**62**	**mg/L**	**5.0**	**1.8**	**EPA-300.0**	ND	**A07**	3
Chloride	**7500**	**mg/L**	**25**	**3.0**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	22	3.9	EPA-300.0	ND	A07	3
Sulfate	**89**	**mg/L**	**50**	**5.0**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**13000**	**mg/L**	**1000**	**1000**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/28/15	05/29/15 13:32	ARD	PE-OP3	10	BYE2470
2	EPA-310.1	05/20/15	05/20/15 10:04	RML	MET-1	2	BYE1633
3	EPA-300.0	05/19/15	05/19/15 04:35	OLH	IC2	50	BYE1611
4	EPA-160.1	05/22/15	05/22/15 10:30	CAD	MANUAL	100	BYE1987

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512124-02 | **Client Sample Name:** BL28 Tow Pond 16, 5/18/2015 2:40:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	20	7.0	EPA-7196		A07	1
Total Antimony	ND	ug/L	1000	85	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	500	78	EPA-6010B	500000	A07	2
Total Barium	**3100**	**ug/L**	**100**	**35**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	**5.3**	**ug/L**	**100**	**5.0**	**EPA-6010B**	75000	**J,A07**	2
Total Boron	**58**	**mg/L**	**1.0**	**0.13**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	100	11	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	500	13	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Iron	ND	mg/L	0.50	0.30	EPA-6010B		A07	2
Total Lead	ND	ug/L	500	40	EPA-6010B	1000000	A07	2
Total Lithium	**3.6**	**mg/L**	**0.20**	**0.062**	**EPA-6010B**		**A07**	2
Total Manganese	**0.30**	**mg/L**	**0.10**	**0.040**	**EPA-6010B**		**A07**	2
Total Mercury	**0.042**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000	**J**	3
Total Molybdenum	ND	ug/L	500	12	EPA-6010B	3500000	A07	2
Total Nickel	ND	ug/L	100	20	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	1000	150	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	100	19	EPA-6010B	500000	A07	2
Total Strontium	**7.4**	**mg/L**	**0.10**	**0.010**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	1000	240	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	100	22	EPA-6010B	2400000	A07	2
Total Zinc	ND	ug/L	500	23	EPA-6010B	5000000	A07	2
Total Recoverable Uranium	ND	pCi/L	6.7	0.67	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/19/15	05/19/15 09:05	TDC	KONE-1	10	BYE1774
2	EPA-6010B	05/28/15	05/29/15 13:32	ARD	PE-OP3	10	BYE2470
3	EPA-7470A	05/20/15	05/22/15 10:10	MEV	CETAC1	1	BYE1792
4	EPA-200.8	05/21/15	05/21/15 21:09	SRM	PE-EL2	10	BYE1920

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512124-03 | **Client Sample Name:** BL29 Tow Pond 17, 5/18/2015 2:52:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**18**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND	**Z1**	1
Ethylbenzene	**4.6**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	**Z1**	1
Toluene	**2.6**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	**Z1**	1
Total Xylenes	**15**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND	**Z1**	1
p- & m-Xylenes	**11**	**ug/L**	**0.50**	**0.28**	**EPA-8260B**	ND	**Z1**	1
o-Xylene	**3.6**	**ug/L**	**0.50**	**0.082**	**EPA-8260B**	ND	**Z1**	1
1,2-Dichloroethane-d4 (Surrogate)	98.0	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	106	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 03:03	SE1	MS-V12	1	BYE1981

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512124-03 | **Client Sample Name:** BL29 Tow Pond 17, 5/18/2015 2:52:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	ug/L	1.0	0.55	EPA-8270C-SIM	ND	A01	1
Acenaphthylene	ND	ug/L	1.0	0.47	EPA-8270C-SIM	ND	A01	1
Anthracene	ND	ug/L	1.0	0.17	EPA-8270C-SIM	ND	A01	1
Benzo[a]anthracene	ND	ug/L	1.0	0.26	EPA-8270C-SIM	ND	A01	1
Benzo[b]fluoranthene	ND	ug/L	1.0	0.40	EPA-8270C-SIM	ND	A01	1
Benzo[k]fluoranthene	ND	ug/L	1.0	0.51	EPA-8270C-SIM	ND	A01	1
Benzo[a]pyrene	ND	ug/L	1.0	0.26	EPA-8270C-SIM	ND	A01	1
Benzo[g,h,i]perylene	ND	ug/L	1.0	0.43	EPA-8270C-SIM	ND	A01	1
Chrysene	**0.66**	**ug/L**	**1.0**	**0.22**	**EPA-8270C-SIM**	ND	**J,A01**	1
Dibenzo[a,h]anthracene	ND	ug/L	1.0	0.44	EPA-8270C-SIM	ND	A01	1
Fluoranthene	**0.24**	**ug/L**	**1.0**	**0.12**	**EPA-8270C-SIM**	ND	**J,A01**	1
Fluorene	**0.47**	**ug/L**	**1.0**	**0.30**	**EPA-8270C-SIM**	ND	**J,A01**	1
Indeno[1,2,3-cd]pyrene	ND	ug/L	1.0	0.44	EPA-8270C-SIM	ND	A01	1
Naphthalene	**3.3**	**ug/L**	**1.0**	**0.77**	**EPA-8270C-SIM**	ND	**A01**	1
Phenanthrene	**1.2**	**ug/L**	**1.0**	**0.22**	**EPA-8270C-SIM**	ND	**A01**	1
Pyrene	**0.55**	**ug/L**	**1.0**	**0.22**	**EPA-8270C-SIM**	ND	**J,A01**	1
Nitrobenzene-d5 (Surrogate)	107	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1
2-Fluorobiphenyl (Surrogate)	76.7	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM		A01	1
p-Terphenyl-d14 (Surrogate)	111	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/20/15	05/21/15 21:15	MK1	MS-B4	10	BYE1944

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Aera Energy
10000 Ming Ave
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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512124-03 | **Client Sample Name:** BL29 Tow Pond 17, 5/18/2015 2:52:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**54000**	**ug/L**	**5000**	**1400**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	72.4	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/20/15	05/21/15 15:56	MWB	GC-13	10	BYE1946

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512124-03 | **Client Sample Name:** BL29 Tow Pond 17, 5/18/2015 2:52:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**210**	**mg/L**	**1.0**	**0.15**	**EPA-6010B**	0.20	**A07**	1
Total Magnesium	**80**	**mg/L**	**0.50**	**0.19**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**4200**	**mg/L**	**5.0**	**0.51**	**EPA-6010B**	0.59	**A07**	1
Total Potassium	**78**	**mg/L**	**10**	**1.3**	**EPA-6010B**	ND	**A07**	1
Bicarbonate Alkalinity as CaCO3	**840**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**840**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**51**	**mg/L**	**5.0**	**1.8**	**EPA-300.0**	ND	**A07**	3
Chloride	**7300**	**mg/L**	**25**	**3.0**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	22	3.9	EPA-300.0	ND	A07	3
Sulfate	**63**	**mg/L**	**50**	**5.0**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**13000**	**mg/L**	**500**	**500**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/28/15	05/29/15 13:33	ARD	PE-OP3	10	BYE2470
2	EPA-310.1	05/20/15	05/20/15 10:14	RML	MET-1	2	BYE1633
3	EPA-300.0	05/19/15	05/19/15 04:53	OLH	IC2	50	BYE1611
4	EPA-160.1	05/22/15	05/22/15 10:30	CAD	MANUAL	50	BYE1987

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512124-03 | **Client Sample Name:** BL29 Tow Pond 17, 5/18/2015 2:52:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	40	14	EPA-7196			1
Total Antimony	**86**	**ug/L**	**1000**	**85**	**EPA-6010B**	500000	**J,A07**	2
Total Arsenic	ND	ug/L	500	78	EPA-6010B	500000	A07	2
Total Barium	**3000**	**ug/L**	**100**	**35**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	**5.6**	**ug/L**	**100**	**5.0**	**EPA-6010B**	75000	**J,A07**	2
Total Boron	**59**	**mg/L**	**1.0**	**0.13**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	100	11	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	500	13	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Iron	ND	mg/L	0.50	0.30	EPA-6010B		A07	2
Total Lead	ND	ug/L	500	40	EPA-6010B	1000000	A07	2
Total Lithium	**3.5**	**mg/L**	**0.20**	**0.062**	**EPA-6010B**		**A07**	2
Total Manganese	**0.36**	**mg/L**	**0.10**	**0.040**	**EPA-6010B**		**A07**	2
Total Mercury	**0.038**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000	**J**	3
Total Molybdenum	ND	ug/L	500	12	EPA-6010B	3500000	A07	2
Total Nickel	ND	ug/L	100	20	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	1000	150	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	100	19	EPA-6010B	500000	A07	2
Total Strontium	**7.2**	**mg/L**	**0.10**	**0.010**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	1000	240	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	100	22	EPA-6010B	2400000	A07	2
Total Zinc	ND	ug/L	500	23	EPA-6010B	5000000	A07	2
Total Recoverable Uranium	ND	pCi/L	6.7	0.67	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/19/15	05/19/15 09:26	TDC	KONE-1	20	BYE1774
2	EPA-6010B	05/28/15	05/29/15 13:33	ARD	PE-OP3	10	BYE2470
3	EPA-7470A	05/20/15	05/22/15 10:12	MEV	CETAC1	1	BYE1792
4	EPA-200.8	05/21/15	05/21/15 21:13	SRM	PE-EL2	10	BYE1920

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512124-04 | **Client Sample Name:** BL30 Tow Pond 18, 5/18/2015 2:19:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND	Z1	1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND	Z1	1
Toluene	**0.72**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	**Z1**	1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND	Z1	1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260B	ND	Z1	1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260B	ND	Z1	1
1,2-Dichloroethane-d4 (Surrogate)	91.1	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 03:21	SE1	MS-V12	1	BYE1981

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512124-04 | **Client Sample Name:** BL30 Tow Pond 18, 5/18/2015 2:19:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	ug/L	0.98	0.54	EPA-8270C-SIM	ND	A01	1
Acenaphthylene	ND	ug/L	0.98	0.46	EPA-8270C-SIM	ND	A01	1
Anthracene	ND	ug/L	0.98	0.17	EPA-8270C-SIM	ND	A01	1
Benzo[a]anthracene	ND	ug/L	0.98	0.25	EPA-8270C-SIM	ND	A01	1
Benzo[b]fluoranthene	ND	ug/L	0.98	0.39	EPA-8270C-SIM	ND	A01	1
Benzo[k]fluoranthene	ND	ug/L	0.98	0.50	EPA-8270C-SIM	ND	A01	1
Benzo[a]pyrene	ND	ug/L	0.98	0.25	EPA-8270C-SIM	ND	A01	1
Benzo[g,h,i]perylene	ND	ug/L	0.98	0.42	EPA-8270C-SIM	ND	A01	1
Chrysene	**0.65**	**ug/L**	**0.98**	**0.22**	**EPA-8270C-SIM**	ND	**J,A01**	1
Dibenzo[a,h]anthracene	ND	ug/L	0.98	0.43	EPA-8270C-SIM	ND	A01	1
Fluoranthene	**0.24**	**ug/L**	**0.98**	**0.12**	**EPA-8270C-SIM**	ND	**J,A01**	1
Fluorene	ND	ug/L	0.98	0.29	EPA-8270C-SIM	ND	A01	1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.98	0.43	EPA-8270C-SIM	ND	A01	1
Naphthalene	**1.9**	**ug/L**	**0.98**	**0.75**	**EPA-8270C-SIM**	ND	**A01**	1
Phenanthrene	**0.38**	**ug/L**	**0.98**	**0.22**	**EPA-8270C-SIM**	ND	**J,A01**	1
Pyrene	**0.60**	**ug/L**	**0.98**	**0.22**	**EPA-8270C-SIM**	ND	**J,A01**	1
Nitrobenzene-d5 (Surrogate)	116	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1
2-Fluorobiphenyl (Surrogate)	76.0	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM		A01	1
p-Terphenyl-d14 (Surrogate)	82.7	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/20/15	05/21/15 21:42	MK1	MS-B4	9.800	BYE1944

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512124-04 | **Client Sample Name:** BL30 Tow Pond 18, 5/18/2015 2:19:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**36000**	**ug/L**	**5000**	**1400**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	67.4	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/20/15	05/21/15 16:18	MWB	GC-13	10	BYE1946

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512124-04 | **Client Sample Name:** BL30 Tow Pond 18, 5/18/2015 2:19:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**180**	**mg/L**	**1.0**	**0.15**	**EPA-6010B**	0.20	**A07**	1
Total Magnesium	**97**	**mg/L**	**0.50**	**0.19**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**5000**	**mg/L**	**5.0**	**0.51**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**93**	**mg/L**	**10**	**1.3**	**EPA-6010B**	ND	**A07**	1
Bicarbonate Alkalinity as CaCO3	**650**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**650**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**57**	**mg/L**	**5.0**	**1.8**	**EPA-300.0**	ND	**A07**	3
Chloride	**8600**	**mg/L**	**25**	**3.0**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	22	3.9	EPA-300.0	ND	A07	3
Sulfate	**120**	**mg/L**	**50**	**5.0**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**15000**	**mg/L**	**1000**	**1000**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/20/15	05/20/15 13:57	ARD	PE-OP3	10	BYE1803
2	EPA-310.1	05/20/15	05/20/15 10:23	RML	MET-1	2	BYE1633
3	EPA-300.0	05/19/15	05/19/15 05:11	OLH	IC2	50	BYE1611
4	EPA-160.1	05/22/15	05/22/15 10:30	CAD	MANUAL	100	BYE1987

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512124-04 | **Client Sample Name:** BL30 Tow Pond 18, 5/18/2015 2:19:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	1000	85	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	500	78	EPA-6010B	500000	A07	2
Total Barium	**3300**	**ug/L**	**100**	**35**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	100	5.0	EPA-6010B	75000	A07	2
Total Boron	**70**	**mg/L**	**1.0**	**0.13**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	100	11	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	500	13	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Iron	**0.89**	**mg/L**	**0.50**	**0.30**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	500	40	EPA-6010B	1000000	A07	2
Total Lithium	**4.1**	**mg/L**	**0.20**	**0.062**	**EPA-6010B**		**A07**	2
Total Manganese	**0.085**	**mg/L**	**0.10**	**0.040**	**EPA-6010B**		**J,A07**	2
Total Mercury	**0.058**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000	**J**	3
Total Molybdenum	**95**	**ug/L**	**500**	**12**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	ND	ug/L	100	20	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	1000	150	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	100	19	EPA-6010B	500000	A07	2
Total Strontium	**7.8**	**mg/L**	**0.10**	**0.010**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	1000	240	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	100	22	EPA-6010B	2400000	A07	2
Total Zinc	ND	ug/L	500	23	EPA-6010B	5000000	A07	2
Total Recoverable Uranium	ND	pCi/L	6.7	0.67	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/19/15	05/19/15 08:37	TDC	KONE-1	5	BYE1774
2	EPA-6010B	05/20/15	05/20/15 13:57	ARD	PE-OP3	10	BYE1803
3	EPA-7470A	05/20/15	05/22/15 10:19	MEV	CETAC1	1	BYE1792
4	EPA-200.8	05/21/15	05/21/15 21:16	SRM	PE-EL2	10	BYE1920

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512124-05 | **Client Sample Name:** BL31 Tow Pond 19, 5/18/2015 12:00:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**2.8**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND	**Z1**	1
Ethylbenzene	**2.5**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	**Z1**	1
Toluene	**8.1**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	**Z1**	1
Total Xylenes	**11**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND	**Z1**	1
p- & m-Xylenes	**8.7**	**ug/L**	**0.50**	**0.28**	**EPA-8260B**	ND	**Z1**	1
o-Xylene	**2.5**	**ug/L**	**0.50**	**0.082**	**EPA-8260B**	ND	**Z1**	1
1,2-Dichloroethane-d4 (Surrogate)	95.3	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	95.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 03:39	SE1	MS-V12	1	BYE1981

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512124-05 | **Client Sample Name:** BL31 Tow Pond 19, 5/18/2015 12:00:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**0.37**	**ug/L**	**0.19**	**0.11**	**EPA-8270C-SIM**	ND		1
Acenaphthylene	**0.24**	**ug/L**	**0.19**	**0.091**	**EPA-8270C-SIM**	ND		1
Anthracene	ND	ug/L	0.19	0.033	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	ND	ug/L	0.19	0.050	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.19	0.078	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.19	0.099	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.19	0.050	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.19	0.083	EPA-8270C-SIM	ND		1
Chrysene	**0.17**	**ug/L**	**0.19**	**0.043**	**EPA-8270C-SIM**	ND	J	1
Dibenzo[a,h]anthracene	ND	ug/L	0.19	0.085	EPA-8270C-SIM	ND		1
Fluoranthene	ND	ug/L	0.19	0.023	EPA-8270C-SIM	ND		1
Fluorene	**0.083**	**ug/L**	**0.19**	**0.058**	**EPA-8270C-SIM**	ND	J	1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.19	0.085	EPA-8270C-SIM	ND		1
Naphthalene	**0.48**	**ug/L**	**0.19**	**0.15**	**EPA-8270C-SIM**	ND		1
Phenanthrene	**0.48**	**ug/L**	**0.19**	**0.043**	**EPA-8270C-SIM**	ND		1
Pyrene	**0.42**	**ug/L**	**0.19**	**0.043**	**EPA-8270C-SIM**	ND		1
Nitrobenzene-d5 (Surrogate)	192	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1
2-Fluorobiphenyl (Surrogate)	85.1	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	168	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/20/15	05/21/15 18:36	MK1	MS-B4	1.940	BYE1944

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Aera Energy
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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512124-05 | **Client Sample Name:** BL31 Tow Pond 19, 5/18/2015 12:00:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**28000**	**ug/L**	**5000**	**1400**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	76.7	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/20/15	05/21/15 16:41	MWB	GC-13	10	BYE1946

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Aera Energy
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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512124-05 | **Client Sample Name:** BL31 Tow Pond 19, 5/18/2015 12:00:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**150**	**mg/L**	**1.0**	**0.15**	**EPA-6010B**	0.20	**A07**	1
Total Magnesium	**58**	**mg/L**	**0.50**	**0.19**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**4200**	**mg/L**	**5.0**	**0.51**	**EPA-6010B**	0.59	**A07**	1
Total Potassium	**79**	**mg/L**	**10**	**1.3**	**EPA-6010B**	ND	**A07**	1
Bicarbonate Alkalinity as CaCO3	**810**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**810**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**53**	**mg/L**	**5.0**	**1.8**	**EPA-300.0**	ND	**A07**	3
Chloride	**6700**	**mg/L**	**25**	**3.0**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	22	3.9	EPA-300.0	ND	A07	3
Sulfate	**200**	**mg/L**	**50**	**5.0**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**12000**	**mg/L**	**500**	**500**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/28/15	05/29/15 13:35	ARD	PE-OP3	10	BYE2470
2	EPA-310.1	05/20/15	05/20/15 10:32	RML	MET-1	2	BYE1633
3	EPA-300.0	05/19/15	05/19/15 06:06	OLH	IC2	50	BYE1611
4	EPA-160.1	05/22/15	05/22/15 10:30	CAD	MANUAL	50	BYE1987

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512124-05 | **Client Sample Name:** BL31 Tow Pond 19, 5/18/2015 12:00:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	**90**	**ug/L**	**1000**	**85**	**EPA-6010B**	500000	**J,A07**	2
Total Arsenic	ND	ug/L	500	78	EPA-6010B	500000	A07	2
Total Barium	**2100**	**ug/L**	**100**	**35**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	**6.1**	**ug/L**	**100**	**5.0**	**EPA-6010B**	75000	**J,A07**	2
Total Boron	**64**	**mg/L**	**1.0**	**0.13**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	100	11	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	500	13	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Iron	ND	mg/L	0.50	0.30	EPA-6010B		A07	2
Total Lead	ND	ug/L	500	40	EPA-6010B	1000000	A07	2
Total Lithium	**2.9**	**mg/L**	**0.20**	**0.062**	**EPA-6010B**		**A07**	2
Total Manganese	**0.17**	**mg/L**	**0.10**	**0.040**	**EPA-6010B**		**A07**	2
Total Mercury	**0.048**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000	**J**	3
Total Molybdenum	**40**	**ug/L**	**500**	**12**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	ND	ug/L	100	20	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	1000	150	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	100	19	EPA-6010B	500000	A07	2
Total Strontium	**5.3**	**mg/L**	**0.10**	**0.010**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	1000	240	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	100	22	EPA-6010B	2400000	A07	2
Total Zinc	ND	ug/L	500	23	EPA-6010B	5000000	A07	2
Total Recoverable Uranium	ND	pCi/L	6.7	0.67	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/19/15	05/19/15 08:37	TDC	KONE-1	5	BYE1774
2	EPA-6010B	05/28/15	05/29/15 13:35	ARD	PE-OP3	10	BYE2470
3	EPA-7470A	05/20/15	05/22/15 10:21	MEV	CETAC1	1	BYE1792
4	EPA-200.8	05/21/15	05/21/15 21:19	SRM	PE-EL2	10	BYE1920

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1981						
Benzene	BYE1981-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BYE1981-BLK1	ND	ug/L	0.50	0.098	
Toluene	BYE1981-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BYE1981-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BYE1981-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BYE1981-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	**BYE1981-BLK1**	**99.6**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BYE1981-BLK1**	**96.8**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BYE1981-BLK1**	**95.8**	%	**80 - 120 (LCL - UCL)**		

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10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1981										
Benzene	BYE1981-BS1	LCS	27.440	25.000	ug/L	110		70 - 130		
Toluene	BYE1981-BS1	LCS	26.070	25.000	ug/L	104		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYE1981-BS1	LCS	10.550	10.000	ug/L	106		75 - 125		
Toluene-d8 (Surrogate)	BYE1981-BS1	LCS	9.7800	10.000	ug/L	97.8		80 - 120		
4-Bromofluorobenzene (Surrogate)	BYE1981-BS1	LCS	9.8000	10.000	ug/L	98.0		80 - 120		

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Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1981	Used client sample: N										
Benzene	MS	1511777-08	ND	29.310	25.000	ug/L		117		70 - 130	
	MSD	1511777-08	ND	28.580	25.000	ug/L	2.5	114	20	70 - 130	
Toluene	MS	1511777-08	ND	28.870	25.000	ug/L		115		70 - 130	
	MSD	1511777-08	ND	27.160	25.000	ug/L	6.1	109	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1511777-08	ND	9.9700	10.000	ug/L		99.7		75 - 125	
	MSD	1511777-08	ND	10.080	10.000	ug/L	1.1	101		75 - 125	
Toluene-d8 (Surrogate)	MS	1511777-08	ND	9.8400	10.000	ug/L		98.4		80 - 120	
	MSD	1511777-08	ND	9.8300	10.000	ug/L	0.1	98.3		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1511777-08	ND	9.6000	10.000	ug/L		96.0		80 - 120	
	MSD	1511777-08	ND	9.8800	10.000	ug/L	2.9	98.8		80 - 120	

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10000 Ming Ave
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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1944						
Acenaphthene	BYE1944-BLK1	ND	ug/L	0.10	0.055	
Acenaphthylene	BYE1944-BLK1	ND	ug/L	0.10	0.047	
Anthracene	BYE1944-BLK1	ND	ug/L	0.10	0.017	
Benzo[a]anthracene	BYE1944-BLK1	ND	ug/L	0.10	0.026	
Benzo[b]fluoranthene	BYE1944-BLK1	ND	ug/L	0.10	0.040	
Benzo[k]fluoranthene	BYE1944-BLK1	ND	ug/L	0.10	0.051	
Benzo[a]pyrene	BYE1944-BLK1	ND	ug/L	0.10	0.026	
Benzo[g,h,i]perylene	BYE1944-BLK1	ND	ug/L	0.10	0.043	
Chrysene	BYE1944-BLK1	ND	ug/L	0.10	0.022	
Dibenzo[a,h]anthracene	BYE1944-BLK1	ND	ug/L	0.10	0.044	
Fluoranthene	BYE1944-BLK1	ND	ug/L	0.10	0.012	
Fluorene	BYE1944-BLK1	ND	ug/L	0.10	0.030	
Indeno[1,2,3-cd]pyrene	BYE1944-BLK1	ND	ug/L	0.10	0.044	
Naphthalene	BYE1944-BLK1	ND	ug/L	0.10	0.077	
Phenanthrene	BYE1944-BLK1	ND	ug/L	0.10	0.022	
Pyrene	BYE1944-BLK1	ND	ug/L	0.10	0.022	
Nitrobenzene-d5 (Surrogate)	**BYE1944-BLK1**	**96.0**	%	**40 - 130 (LCL - UCL)**		
2-Fluorobiphenyl (Surrogate)	**BYE1944-BLK1**	**83.5**	%	**50 - 120 (LCL - UCL)**		
p-Terphenyl-d14 (Surrogate)	**BYE1944-BLK1**	**108**	%	**40 - 130 (LCL - UCL)**		

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1944										
Acenaphthene	BYE1944-BS1	LCS	1.0417	1.0000	ug/L	104		60 - 110		
Acenaphthylene	BYE1944-BS1	LCS	1.1540	1.0000	ug/L	115		60 - 120		
Anthracene	BYE1944-BS1	LCS	1.2999	1.0000	ug/L	130		60 - 130		
Benzo[a]anthracene	BYE1944-BS1	LCS	1.1787	1.0000	ug/L	118		60 - 130		
Benzo[b]fluoranthene	BYE1944-BS1	LCS	0.96386	1.0000	ug/L	96.4		50 - 130		
Benzo[k]fluoranthene	BYE1944-BS1	LCS	0.96044	1.0000	ug/L	96.0		60 - 120		
Benzo[a]pyrene	BYE1944-BS1	LCS	1.1279	1.0000	ug/L	113		60 - 120		
Benzo[g,h,i]perylene	BYE1944-BS1	LCS	0.64662	1.0000	ug/L	64.7		40 - 120		
Chrysene	BYE1944-BS1	LCS	1.0778	1.0000	ug/L	108		60 - 110		
Dibenzo[a,h]anthracene	BYE1944-BS1	LCS	0.52252	1.0000	ug/L	52.3		40 - 120		
Fluoranthene	BYE1944-BS1	LCS	1.1163	1.0000	ug/L	112		60 - 120		
luorene	BYE1944-BS1	LCS	1.0753	1.0000	ug/L	108		60 - 120		
Indeno[1,2,3-cd]pyrene	BYE1944-BS1	LCS	0.95810	1.0000	ug/L	95.8		40 - 130		
Naphthalene	BYE1944-BS1	LCS	0.98243	1.0000	ug/L	98.2		60 - 110		
Phenanthrene	BYE1944-BS1	LCS	1.0560	1.0000	ug/L	106		60 - 120		
Pyrene	BYE1944-BS1	LCS	1.2831	1.0000	ug/L	128		50 - 125		L01
Nitrobenzene-d5 (Surrogate)	BYE1944-BS1	LCS	4.1563	4.0000	ug/L	104		40 - 130		
2-Fluorobiphenyl (Surrogate)	BYE1944-BS1	LCS	3.6475	4.0000	ug/L	91.2		50 - 120		
p-Terphenyl-d14 (Surrogate)	BYE1944-BS1	LCS	4.2355	4.0000	ug/L	106		40 - 130		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1944	Used client sample: N										
Acenaphthene	MS	1511019-04	ND	1.0385	1.0000	ug/L		104		60 - 110	
	MSD	1511019-04	ND	0.97170	1.0000	ug/L	6.6	97.2	30	60 - 110	
Acenaphthylene	MS	1511019-04	ND	1.1479	1.0000	ug/L		115		60 - 120	
	MSD	1511019-04	ND	1.0806	1.0000	ug/L	6.0	108	30	60 - 120	
Anthracene	MS	1511019-04	ND	1.2398	1.0000	ug/L		124		60 - 130	
	MSD	1511019-04	ND	1.2273	1.0000	ug/L	1.0	123	30	60 - 130	
Benzo[a]anthracene	MS	1511019-04	ND	1.1837	1.0000	ug/L		118		60 - 120	
	MSD	1511019-04	ND	1.1536	1.0000	ug/L	2.6	115	30	60 - 120	
Benzo[b]fluoranthene	MS	1511019-04	ND	1.0543	1.0000	ug/L		105		50 - 130	
	MSD	1511019-04	ND	0.93643	1.0000	ug/L	11.8	93.6	30	50 - 130	
Benzo[k]fluoranthene	MS	1511019-04	ND	1.0370	1.0000	ug/L		104		60 - 120	
	MSD	1511019-04	ND	0.93481	1.0000	ug/L	10.4	93.5	30	60 - 120	
Benzo[a]pyrene	MS	1511019-04	ND	1.1659	1.0000	ug/L		117		60 - 120	
	MSD	1511019-04	ND	1.1092	1.0000	ug/L	5.0	111	30	60 - 120	
Benzo[g,h,i]perylene	MS	**1511019-04**	**ND**	**0.52410**	**1.0000**	**ug/L**		**52.4**		**40 - 120**	
	MSD	**1511019-04**	**ND**	**0.87621**	**1.0000**	**ug/L**	**50.3**	**87.6**	**30**	**40 - 120**	**Q02**
Chrysene	MS	1511019-04	ND	1.0717	1.0000	ug/L		107		60 - 110	
	MSD	1511019-04	ND	1.0134	1.0000	ug/L	5.6	101	30	60 - 110	
Dibenzo[a,h]anthracene	MS	**1511019-04**	**ND**	**0.41273**	**1.0000**	**ug/L**		**41.3**		**40 - 120**	
	MSD	**1511019-04**	**ND**	**0.77014**	**1.0000**	**ug/L**	**60.4**	**77.0**	**30**	**40 - 120**	**Q02**
Fluoranthene	MS	1511019-04	ND	1.1687	1.0000	ug/L		117		60 - 120	
	MSD	1511019-04	ND	1.1159	1.0000	ug/L	4.6	112	30	60 - 120	
Fluorene	MS	1511019-04	ND	1.0853	1.0000	ug/L		109		60 - 120	
	MSD	1511019-04	ND	1.0078	1.0000	ug/L	7.4	101	30	60 - 120	
Indeno[1,2,3-cd]pyrene	MS	1511019-04	ND	0.76369	1.0000	ug/L		76.4		40 - 130	
	MSD	1511019-04	ND	1.0074	1.0000	ug/L	27.5	101	30	40 - 130	
Naphthalene	MS	1511019-04	ND	0.98426	1.0000	ug/L		98.4		60 - 110	
	MSD	1511019-04	ND	0.90821	1.0000	ug/L	8.0	90.8	30	60 - 110	
Phenanthrene	MS	1511019-04	ND	1.0468	1.0000	ug/L		105		60 - 120	
	MSD	1511019-04	ND	0.99549	1.0000	ug/L	5.0	99.5	30	60 - 120	
Pyrene	MS	**1511019-04**	**ND**	**1.2769**	**1.0000**	**ug/L**		**128**		**50 - 125**	**Q03**
	MSD	**1511019-04**	**ND**	**1.2026**	**1.0000**	**ug/L**	**6.0**	**120**	**30**	**50 - 125**	
Nitrobenzene-d5 (Surrogate)	MS	1511019-04	ND	3.9599	4.0000	ug/L		99.0		40 - 130	
	MSD	1511019-04	ND	3.7437	4.0000	ug/L	5.6	93.6		40 - 130	
2-Fluorobiphenyl (Surrogate)	MS	1511019-04	ND	3.5087	4.0000	ug/L		87.7		50 - 120	
	MSD	1511019-04	ND	3.4307	4.0000	ug/L	2.2	85.8		50 - 120	

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10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1944	Used client sample: N										
p-Terphenyl-d14 (Surrogate)	MS	1511019-04	ND	4.2147	4.0000	ug/L		105		40 - 130	
	MSD	1511019-04	ND	4.0269	4.0000	ug/L	4.6	101		40 - 130	

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1946						
TPH - Diesel (FFP)	BYE1946-BLK1	ND	ug/L	200	34	
TPH - Crude Oil	BYE1946-BLK1	ND	ug/L	500	140	
Tetracosane (Surrogate)	**BYE1946-BLK1**	**89.3**	%	**37 - 134 (LCL - UCL)**		

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1946										
TPH - Diesel (FFP)	BYE1946-BS1	LCS	2018.1	2500.0	ug/L	80.7		52 - 128		
Tetracosane (Surrogate)	BYE1946-BS1	LCS	90.930	100.00	ug/L	90.9		37 - 134		

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Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1946	Used client sample: N										
TPH - Diesel (FFP)	MS	1511019-34	ND	2212.5	2500.0	ug/L		88.5		50 - 127	
	MSD	1511019-34	ND	1906.9	2500.0	ug/L	14.8	76.3	24	50 - 127	
Tetracosane (Surrogate)	MS	1511019-34	ND	100.46	100.00	ug/L		100		37 - 134	
	MSD	1511019-34	ND	90.270	100.00	ug/L	10.7	90.3		37 - 134	

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Aera Energy
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Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1611						
Bromide	BYE1611-BLK1	ND	mg/L	0.10	0.035	
Chloride	BYE1611-BLK1	ND	mg/L	0.50	0.061	
Nitrate as NO3	BYE1611-BLK1	ND	mg/L	0.44	0.078	
Sulfate	BYE1611-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BYE1633						
Bicarbonate Alkalinity as CaCO3	BYE1633-BLK1	ND	mg/L	4.1	4.1	
Carbonate Alkalinity as CaCO3	BYE1633-BLK1	ND	mg/L	4.1	4.1	
Hydroxide Alkalinity as CaCO3	BYE1633-BLK1	ND	mg/L	4.1	4.1	
Total Alkalinity as CaCO3	BYE1633-BLK1	ND	mg/L	4.1	4.1	
QC Batch ID: BYE1803						
Total Calcium	**BYE1803-BLK1**	**0.020358**	**mg/L**	**0.10**	**0.015**	**J**
Total Magnesium	BYE1803-BLK1	ND	mg/L	0.050	0.019	
Total Sodium	BYE1803-BLK1	ND	mg/L	0.50	0.051	
Total Potassium	BYE1803-BLK1	ND	mg/L	1.0	0.13	
QC Batch ID: BYE1987						
Total Dissolved Solids @ 180 C	BYE1987-BLK1	ND	mg/L	6.7	6.7	
QC Batch ID: BYE2470						
Total Calcium	**BYE2470-BLK1**	**0.019621**	**mg/L**	**0.10**	**0.015**	**J**
Total Magnesium	BYE2470-BLK1	ND	mg/L	0.050	0.019	
Total Sodium	**BYE2470-BLK1**	**0.058882**	**mg/L**	**0.50**	**0.051**	**J**
Total Potassium	BYE2470-BLK1	ND	mg/L	1.0	0.13	

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1611										
Bromide	BYE1611-BS1	LCS	2.0890	2.0000	mg/L	104		90 - 110		
Chloride	BYE1611-BS1	LCS	50.930	50.000	mg/L	102		90 - 110		
Nitrate as NO3	BYE1611-BS1	LCS	22.767	22.134	mg/L	103		90 - 110		
Sulfate	BYE1611-BS1	LCS	99.037	100.00	mg/L	99.0		90 - 110		
QC Batch ID: BYE1633										
Total Alkalinity as CaCO3	BYE1633-BS3	LCS	99.950	100.00	mg/L	100		90 - 110		
QC Batch ID: BYE1803										
Total Calcium	BYE1803-BS1	LCS	9.3644	10.000	mg/L	93.6		85 - 115		
Total Magnesium	BYE1803-BS1	LCS	9.6441	10.000	mg/L	96.4		85 - 115		
Total Sodium	BYE1803-BS1	LCS	9.4730	10.000	mg/L	94.7		85 - 115		
Total Potassium	BYE1803-BS1	LCS	9.2780	10.000	mg/L	92.8		85 - 115		
QC Batch ID: BYE1987										
Total Dissolved Solids @ 180 C	BYE1987-BS1	LCS	555.00	586.00	mg/L	94.7		90 - 110		
QC Batch ID: BYE2470										
Total Calcium	BYE2470-BS1	LCS	11.232	10.000	mg/L	112		85 - 115		
Total Magnesium	BYE2470-BS1	LCS	10.887	10.000	mg/L	109		85 - 115		
Total Sodium	BYE2470-BS1	LCS	11.054	10.000	mg/L	111		85 - 115		
Total Potassium	BYE2470-BS1	LCS	11.087	10.000	mg/L	111		85 - 115		

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1611	Used client sample: N										
Bromide	DUP	1512101-01	0.16100	0.16300		mg/L	1.2		10		
	MS	1512101-01	0.16100	2.0828	2.0202	mg/L		95.1		80 - 120	
	MSD	1512101-01	0.16100	2.0970	2.0202	mg/L	0.7	95.8	10	80 - 120	
Chloride	DUP	1512101-01	26.902	26.855		mg/L	0.2		10		
	MS	1512101-01	26.902	78.272	50.505	mg/L		102		80 - 120	
	MSD	1512101-01	26.902	78.426	50.505	mg/L	0.2	102	10	80 - 120	
Nitrate as NO3	DUP	1512101-01	14.356	14.197		mg/L	1.1		10		
	MS	1512101-01	14.356	35.553	22.358	mg/L		94.8		80 - 120	
	MSD	1512101-01	14.356	35.651	22.358	mg/L	0.3	95.2	10	80 - 120	
Sulfate	DUP	1512101-01	90.864	90.965		mg/L	0.1		10		
	MS	1512101-01	90.864	187.90	101.01	mg/L		96.1		80 - 120	
	MSD	1512101-01	90.864	187.98	101.01	mg/L	0.0	96.1	10	80 - 120	
QC Batch ID: BYE1633	Used client sample: N										
Bicarbonate Alkalinity as CaCO3	DUP	1512164-01	429.93	402.24		mg/L	6.7		10		
Carbonate Alkalinity as CaCO3	DUP	1512164-01	ND	ND		mg/L			10		
Hydroxide Alkalinity as CaCO3	DUP	1512164-01	ND	ND		mg/L			10		
Total Alkalinity as CaCO3	DUP	1512164-01	429.93	402.24		mg/L	6.7		10		
QC Batch ID: BYE1803	Used client sample: N										
Total Calcium	DUP	**1512248-01**	**183.72**	**194.11**		**mg/L**	**5.5**		**20**		
	MS	**1512248-01**	**183.72**	**201.31**	**10.000**	**mg/L**		**176**		**75 - 125**	**A03**
	MSD	**1512248-01**	**183.72**	**200.14**	**10.000**	**mg/L**	**0.6**	**164**	**20**	**75 - 125**	**A03**
Total Magnesium	DUP	**1512248-01**	**52.800**	**56.086**		**mg/L**	**6.0**		**20**		
	MS	**1512248-01**	**52.800**	**68.086**	**10.000**	**mg/L**		**153**		**75 - 125**	**A03**
	MSD	**1512248-01**	**52.800**	**67.331**	**10.000**	**mg/L**	**1.1**	**145**	**20**	**75 - 125**	**A03**
Total Sodium	DUP	**1512248-01**	**121.20**	**126.49**		**mg/L**	**4.3**		**20**		
	MS	**1512248-01**	**121.20**	**135.16**	**10.000**	**mg/L**		**140**		**75 - 125**	**A03**
	MSD	**1512248-01**	**121.20**	**135.32**	**10.000**	**mg/L**	**0.1**	**141**	**20**	**75 - 125**	**A03**
Total Potassium	DUP	1512248-01	4.0920	4.2522		mg/L	3.8		20		
	MS	1512248-01	4.0920	14.290	10.000	mg/L		102		75 - 125	
	MSD	1512248-01	4.0920	13.840	10.000	mg/L	3.2	97.5	20	75 - 125	
QC Batch ID: BYE1987	Used client sample: N										
Total Dissolved Solids @ 180 C	DUP	1512080-01	2630.0	2660.0		mg/L	1.1		10		
QC Batch ID: BYE2470	Used client sample: N										
Total Calcium	DUP	**1512200-02**	**252.01**	**249.90**		**mg/L**	**0.8**		**20**		
	MS	**1512200-02**	**252.01**	**240.62**	**10.000**	**mg/L**		**-114**		**75 - 125**	**A03**
	MSD	**1512200-02**	**252.01**	**245.84**	**10.000**	**mg/L**	**2.1**	**-61.7**	**20**	**75 - 125**	**A03**

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2470	Used client sample: N										
Total Magnesium	DUP	**1512200-02**	**194.94**	**195.62**		**mg/L**	**0.3**		**20**		
	MS	**1512200-02**	**194.94**	**191.87**	**10.000**	**mg/L**		**-30.7**		**75 - 125**	**A03**
	MSD	**1512200-02**	**194.94**	**198.15**	**10.000**	**mg/L**	**3.2**	**32.0**	**20**	**75 - 125**	**A03**
Total Sodium	DUP	**1512200-02**	**2067.1**	**2150.2**		**mg/L**	**3.9**		**20**		
	MS	**1512200-02**	**2067.1**	**2028.8**	**10.000**	**mg/L**		**-382**		**75 - 125**	**A03**
	MSD	**1512200-02**	**2067.1**	**2062.2**	**10.000**	**mg/L**	**1.6**	**-48.7**	**20**	**75 - 125**	**A03**
Total Potassium	DUP	1512200-02	32.699	32.836		mg/L	0.4		20		
	MS	1512200-02	32.699	41.267	10.000	mg/L		85.7		75 - 125	
	MSD	1512200-02	32.699	44.215	10.000	mg/L	6.9	115	20	75 - 125	

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Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1774						
Hexavalent Chromium	BYE1774-BLK1	ND	ug/L	2.0	0.70	
QC Batch ID: BYE1792						
Total Mercury	BYE1792-BLK1	ND	ug/L	0.20	0.033	
QC Batch ID: BYE1803						
Total Antimony	BYE1803-BLK1	ND	ug/L	100	8.5	
Total Arsenic	BYE1803-BLK1	ND	ug/L	50	7.8	
Total Barium	**BYE1803-BLK1**	**4.9435**	**ug/L**	**10**	**3.5**	**J**
Total Beryllium	BYE1803-BLK1	ND	ug/L	10	0.50	
Total Boron	**BYE1803-BLK1**	**0.026242**	**mg/L**	**0.10**	**0.013**	**J**
Total Cadmium	BYE1803-BLK1	ND	ug/L	10	1.1	
Total Chromium	BYE1803-BLK1	ND	ug/L	10	1.1	
Total Cobalt	BYE1803-BLK1	ND	ug/L	50	1.3	
Total Copper	BYE1803-BLK1	ND	ug/L	10	1.1	
Total Iron	BYE1803-BLK1	ND	mg/L	0.050	0.030	
Total Lead	BYE1803-BLK1	ND	ug/L	50	4.0	
Total Lithium	BYE1803-BLK1	ND	mg/L	0.020	0.0062	
Total Manganese	BYE1803-BLK1	ND	mg/L	0.010	0.0040	
Total Molybdenum	BYE1803-BLK1	ND	ug/L	50	1.2	
Total Nickel	BYE1803-BLK1	ND	ug/L	10	2.0	
Total Selenium	BYE1803-BLK1	ND	ug/L	100	15	
Total Silver	BYE1803-BLK1	ND	ug/L	10	1.9	
Total Strontium	BYE1803-BLK1	ND	mg/L	0.010	0.0010	
Total Thallium	BYE1803-BLK1	ND	ug/L	100	24	
Total Vanadium	BYE1803-BLK1	ND	ug/L	10	2.2	
Total Zinc	**BYE1803-BLK1**	**2.9763**	**ug/L**	**50**	**2.3**	**J**
QC Batch ID: BYE1920						
Total Recoverable Uranium	BYE1920-BLK1	ND	pCi/L	0.67	0.067	
QC Batch ID: BYE2470						
Total Antimony	BYE2470-BLK1	ND	ug/L	100	8.5	
Total Arsenic	BYE2470-BLK1	ND	ug/L	50	7.8	
Total Barium	BYE2470-BLK1	ND	ug/L	10	3.5	
Total Beryllium	BYE2470-BLK1	ND	ug/L	10	0.50	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2470						
Total Boron	**BYE2470-BLK1**	**0.027780**	**mg/L**	**0.10**	**0.013**	**J**
Total Cadmium	BYE2470-BLK1	ND	ug/L	10	1.1	
Total Chromium	BYE2470-BLK1	ND	ug/L	10	1.1	
Total Cobalt	BYE2470-BLK1	ND	ug/L	50	1.3	
Total Copper	BYE2470-BLK1	ND	ug/L	10	1.1	
Total Iron	BYE2470-BLK1	ND	mg/L	0.050	0.030	
Total Lead	BYE2470-BLK1	ND	ug/L	50	4.0	
Total Lithium	BYE2470-BLK1	ND	mg/L	0.020	0.0062	
Total Manganese	BYE2470-BLK1	ND	mg/L	0.010	0.0040	
Total Molybdenum	BYE2470-BLK1	ND	ug/L	50	1.2	
Total Nickel	BYE2470-BLK1	ND	ug/L	10	2.0	
Total Selenium	BYE2470-BLK1	ND	ug/L	100	15	
Total Silver	BYE2470-BLK1	ND	ug/L	10	1.9	
Total Strontium	BYE2470-BLK1	ND	mg/L	0.010	0.0010	
Total Thallium	BYE2470-BLK1	ND	ug/L	100	24	
Total Vanadium	BYE2470-BLK1	ND	ug/L	10	2.2	
Total Zinc	**BYE2470-BLK1**	**4.4761**	**ug/L**	**50**	**2.3**	**J**

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Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1774										
Hexavalent Chromium	BYE1774-BS1	LCS	49.989	50.000	ug/L	100		85 - 115		
QC Batch ID: BYE1792										
Total Mercury	BYE1792-BS1	LCS	0.99250	1.0000	ug/L	99.2		85 - 115		
QC Batch ID: BYE1803										
Total Antimony	BYE1803-BS1	LCS	358.71	400.00	ug/L	89.7		85 - 115		
Total Arsenic	BYE1803-BS1	LCS	180.97	200.00	ug/L	90.5		85 - 115		
Total Barium	BYE1803-BS1	LCS	394.18	400.00	ug/L	98.5		85 - 115		
Total Beryllium	BYE1803-BS1	LCS	181.91	200.00	ug/L	91.0		85 - 115		
Total Boron	BYE1803-BS1	LCS	0.94084	1.0000	mg/L	94.1		85 - 115		
Total Cadmium	BYE1803-BS1	LCS	182.75	200.00	ug/L	91.4		85 - 115		
Total Chromium	BYE1803-BS1	LCS	181.31	200.00	ug/L	90.7		85 - 115		
otal Cobalt	BYE1803-BS1	LCS	182.63	200.00	ug/L	91.3		85 - 115		
Total Copper	BYE1803-BS1	LCS	347.51	400.00	ug/L	86.9		85 - 115		
Total Iron	BYE1803-BS1	LCS	0.97770	1.0000	mg/L	97.8		85 - 115		
Total Lead	BYE1803-BS1	LCS	376.37	400.00	ug/L	94.1		85 - 115		
Total Lithium	BYE1803-BS1	LCS	0.19003	0.20000	mg/L	95.0		85 - 115		
Total Manganese	BYE1803-BS1	LCS	0.46109	0.50000	mg/L	92.2		85 - 115		
Total Molybdenum	BYE1803-BS1	LCS	186.99	200.00	ug/L	93.5		85 - 115		
Total Nickel	BYE1803-BS1	LCS	369.23	400.00	ug/L	92.3		85 - 115		
Total Selenium	BYE1803-BS1	LCS	180.49	200.00	ug/L	90.2		85 - 115		
Total Silver	BYE1803-BS1	LCS	86.156	100.00	ug/L	86.2		85 - 115		
Total Strontium	BYE1803-BS1	LCS	0.47025	0.50000	mg/L	94.1		85 - 115		
Total Thallium	BYE1803-BS1	LCS	401.51	400.00	ug/L	100		85 - 115		
Total Vanadium	BYE1803-BS1	LCS	182.59	200.00	ug/L	91.3		85 - 115		
Total Zinc	BYE1803-BS1	LCS	478.21	500.00	ug/L	95.6		85 - 115		
QC Batch ID: BYE1920										
Total Recoverable Uranium	BYE1920-BS1	LCS	25.486	26.800	pCi/L	95.1		85 - 115		
QC Batch ID: BYE2470										
Total Antimony	BYE2470-BS1	LCS	421.15	400.00	ug/L	105		85 - 115		
Total Arsenic	BYE2470-BS1	LCS	207.33	200.00	ug/L	104		85 - 115		
Total Barium	BYE2470-BS1	LCS	444.14	400.00	ug/L	111		85 - 115		
Total Beryllium	BYE2470-BS1	LCS	207.74	200.00	ug/L	104		85 - 115		
Total Boron	BYE2470-BS1	LCS	1.0689	1.0000	mg/L	107		85 - 115		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2470										
Total Cadmium	BYE2470-BS1	LCS	210.61	200.00	ug/L	105		85 - 115		
Total Chromium	BYE2470-BS1	LCS	213.10	200.00	ug/L	107		85 - 115		
Total Cobalt	BYE2470-BS1	LCS	210.08	200.00	ug/L	105		85 - 115		
Total Copper	BYE2470-BS1	LCS	393.79	400.00	ug/L	98.4		85 - 115		
Total Iron	BYE2470-BS1	LCS	1.1038	1.0000	mg/L	110		85 - 115		
Total Lead	BYE2470-BS1	LCS	432.85	400.00	ug/L	108		85 - 115		
Total Lithium	BYE2470-BS1	LCS	0.22332	0.20000	mg/L	112		85 - 115		
Total Manganese	BYE2470-BS1	LCS	0.52366	0.50000	mg/L	105		85 - 115		
Total Molybdenum	BYE2470-BS1	LCS	214.31	200.00	ug/L	107		85 - 115		
Total Nickel	BYE2470-BS1	LCS	425.94	400.00	ug/L	106		85 - 115		
Total Selenium	BYE2470-BS1	LCS	206.21	200.00	ug/L	103		85 - 115		
Total Silver	BYE2470-BS1	LCS	99.650	100.00	ug/L	99.6		85 - 115		
Total Strontium	BYE2470-BS1	LCS	0.54127	0.50000	mg/L	108		85 - 115		
Total Thallium	BYE2470-BS1	LCS	459.84	400.00	ug/L	115		85 - 115		
Total Vanadium	BYE2470-BS1	LCS	212.10	200.00	ug/L	106		85 - 115		
Total Zinc	BYE2470-BS1	LCS	513.78	500.00	ug/L	103		85 - 115		

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10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1774	Used client sample: Y - Description: BL24 Tow Pond 12, 05/18/2015 11:34										
Hexavalent Chromium	DUP	1512124-01	ND	ND		ug/L			10		
	MS	1512124-01	ND	247.96	263.16	ug/L		94.2		85 - 115	
	MSD	1512124-01	ND	246.48	263.16	ug/L	0.6	93.7	10	85 - 115	
QC Batch ID: BYE1792	Used client sample: N										
Total Mercury	DUP	1512245-01	0.12250	0.10250		ug/L	17.8		20		J
	MS	1512245-01	0.12250	1.0500	1.0000	ug/L		92.8		70 - 130	
	MSD	1512245-01	0.12250	1.0550	1.0000	ug/L	0.5	93.2	20	70 - 130	
QC Batch ID: BYE1803	Used client sample: N										
Total Antimony	DUP	1512248-01	ND	ND		ug/L			20		
	MS	1512248-01	ND	397.79	400.00	ug/L		99.4		75 - 125	
	MSD	1512248-01	ND	387.52	400.00	ug/L	2.6	96.9	20	75 - 125	
Total Arsenic	DUP	1512248-01	ND	ND		ug/L			20		
	MS	1512248-01	ND	205.43	200.00	ug/L		103		75 - 125	
	MSD	1512248-01	ND	190.17	200.00	ug/L	7.7	95.1	20	75 - 125	
Total Barium	DUP	1512248-01	111.62	113.25		ug/L	1.5		20		
	MS	1512248-01	111.62	531.03	400.00	ug/L		105		75 - 125	
	MSD	1512248-01	111.62	512.63	400.00	ug/L	3.5	100	20	75 - 125	
Total Beryllium	DUP	1512248-01	ND	ND		ug/L			20		
	MS	1512248-01	ND	195.41	200.00	ug/L		97.7		75 - 125	
	MSD	1512248-01	ND	187.96	200.00	ug/L	3.9	94.0	20	75 - 125	
Total Boron	DUP	1512248-01	0.37240	0.36040		mg/L	3.3		20		
	MS	1512248-01	0.37240	1.4036	1.0000	mg/L		103		75 - 125	
	MSD	1512248-01	0.37240	1.3767	1.0000	mg/L	1.9	100	20	75 - 125	
Total Cadmium	DUP	1512248-01	ND	ND		ug/L			20		
	MS	1512248-01	ND	201.77	200.00	ug/L		101		75 - 125	
	MSD	1512248-01	ND	190.84	200.00	ug/L	5.6	95.4	20	75 - 125	
Total Chromium	DUP	1512248-01	4.9219	4.1382		ug/L	17.3		20		J
	MS	1512248-01	4.9219	201.21	200.00	ug/L		98.1		75 - 125	
	MSD	1512248-01	4.9219	189.06	200.00	ug/L	6.2	92.1	20	75 - 125	
Total Cobalt	DUP	1512248-01	5.5443	4.8365		ug/L	13.6		20		J
	MS	1512248-01	5.5443	196.75	200.00	ug/L		95.6		75 - 125	
	MSD	1512248-01	5.5443	185.23	200.00	ug/L	6.0	89.8	20	75 - 125	
Total Copper	DUP	**1512248-01**	**11.125**	**8.5361**		**ug/L**	**26.3**		**20**		**J,A02**
	MS	**1512248-01**	**11.125**	**385.47**	**400.00**	**ug/L**		**93.6**		**75 - 125**	
	MSD	**1512248-01**	**11.125**	**361.21**	**400.00**	**ug/L**	**6.5**	**87.5**	**20**	**75 - 125**	
Total Iron	DUP	**1512248-01**	**5.1319**	**5.4342**		**mg/L**	**5.7**		**20**		
	MS	**1512248-01**	**5.1319**	**7.0738**	**1.0000**	**mg/L**		**194**		**75 - 125**	**A03**
	MSD	**1512248-01**	**5.1319**	**7.0192**	**1.0000**	**mg/L**	**0.8**	**189**	**20**	**75 - 125**	**A03**

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10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1803	Used client sample: N										
Total Lead	DUP	1512248-01	5.8444	4.9915		ug/L	15.7		20		J
	MS	1512248-01	5.8444	411.74	400.00	ug/L		101		75 - 125	
	MSD	1512248-01	5.8444	389.30	400.00	ug/L	5.6	95.9	20	75 - 125	
Total Lithium	DUP	**1512248-01**	**0.010443**	**0.0068876**		**mg/L**	**41.0**		**20**		**J,A02**
	MS	**1512248-01**	**0.010443**	**0.21127**	**0.20000**	**mg/L**		**100**		**75 - 125**	
	MSD	**1512248-01**	**0.010443**	**0.20751**	**0.20000**	**mg/L**	**1.8**	**98.5**	**20**	**75 - 125**	
Total Manganese	DUP	1512248-01	5.1690	5.1267		mg/L	0.8		20		
	MS	1512248-01	5.1690	5.7950	0.50000	mg/L		125		75 - 125	
	MSD	1512248-01	5.1690	5.7831	0.50000	mg/L	0.2	123	20	75 - 125	
Total Molybdenum	DUP	1512248-01	6.4807	5.6280		ug/L	14.1		20		J
	MS	1512248-01	6.4807	210.14	200.00	ug/L		102		75 - 125	
	MSD	1512248-01	6.4807	199.91	200.00	ug/L	5.0	96.7	20	75 - 125	
Total Nickel	DUP	1512248-01	6.1527	6.1794		ug/L	0.4		20		J
	MS	1512248-01	6.1527	391.37	400.00	ug/L		96.3		75 - 125	
	MSD	1512248-01	6.1527	364.14	400.00	ug/L	7.2	89.5	20	75 - 125	
Total Selenium	DUP	1512248-01	23.235	ND		ug/L			20		
	MS	1512248-01	23.235	229.47	200.00	ug/L		103		75 - 125	
	MSD	1512248-01	23.235	210.13	200.00	ug/L	8.8	93.4	20	75 - 125	
Total Silver	DUP	1512248-01	ND	ND		ug/L			20		
	MS	1512248-01	ND	98.316	100.00	ug/L		98.3		75 - 125	
	MSD	1512248-01	ND	91.271	100.00	ug/L	7.4	91.3	20	75 - 125	
Total Strontium	DUP	1512248-01	1.4166	1.4409		mg/L	1.7		20		
	MS	1512248-01	1.4166	1.8612	0.50000	mg/L		88.9		75 - 125	
	MSD	1512248-01	1.4166	1.8842	0.50000	mg/L	1.2	93.5	20	75 - 125	
Total Thallium	DUP	1512248-01	ND	ND		ug/L			20		
	MS	1512248-01	ND	401.01	400.00	ug/L		100		75 - 125	
	MSD	1512248-01	ND	375.34	400.00	ug/L	6.6	93.8	20	75 - 125	
Total Vanadium	DUP	1512248-01	11.377	11.752		ug/L	3.2		20		
	MS	1512248-01	11.377	216.11	200.00	ug/L		102		75 - 125	
	MSD	1512248-01	11.377	205.62	200.00	ug/L	5.0	97.1	20	75 - 125	
Total Zinc	DUP	1512248-01	19.671	18.420		ug/L	6.6		20		J
	MS	1512248-01	19.671	491.95	500.00	ug/L		94.5		75 - 125	
	MSD	1512248-01	19.671	465.42	500.00	ug/L	5.5	89.1	20	75 - 125	
QC Batch ID: BYE1920	Used client sample: N										
Total Recoverable Uranium	DUP	1511579-01	0.12864	0.12328		pCi/L	4.3		20		J
	MS	1511579-01	0.12864	30.287	26.800	pCi/L		113		70 - 130	
	MSD	1511579-01	0.12864	28.442	26.800	pCi/L	6.3	106	20	70 - 130	
QC Batch ID: BYE2470	Used client sample: N										

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Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2470	Used client sample: N										
Total Antimony	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	397.10	400.00	ug/L		99.3		75 - 125	J
	MSD	1512200-02	ND	445.00	400.00	ug/L	11.4	111	20	75 - 125	J
Total Arsenic	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	199.64	200.00	ug/L		99.8		75 - 125	J
	MSD	1512200-02	ND	204.51	200.00	ug/L	2.4	102	20	75 - 125	J
Total Barium	DUP	1512200-02	686.45	703.05		ug/L	2.4		20		
	MS	1512200-02	686.45	1041.5	400.00	ug/L		88.8		75 - 125	
	MSD	1512200-02	686.45	1091.1	400.00	ug/L	4.6	101	20	75 - 125	
Total Beryllium	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	188.13	200.00	ug/L		94.1		75 - 125	
	MSD	1512200-02	ND	202.40	200.00	ug/L	7.3	101	20	75 - 125	
Total Boron	DUP	**1512200-02**	**9.1669**	**9.2682**		**mg/L**	**1.1**		**20**		
	MS	**1512200-02**	**9.1669**	**9.6250**	**1.0000**	**mg/L**		**45.8**		**75 - 125**	**A03**
	MSD	**1512200-02**	**9.1669**	**9.9582**	**1.0000**	**mg/L**	**3.4**	**79.1**	**20**	**75 - 125**	
Total Cadmium	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	189.23	200.00	ug/L		94.6		75 - 125	
	MSD	1512200-02	ND	202.43	200.00	ug/L	6.7	101	20	75 - 125	
Total Chromium	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	204.41	200.00	ug/L		102		75 - 125	
	MSD	1512200-02	ND	220.26	200.00	ug/L	7.5	110	20	75 - 125	
Total Cobalt	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	181.26	200.00	ug/L		90.6		75 - 125	J
	MSD	1512200-02	ND	193.26	200.00	ug/L	6.4	96.6	20	75 - 125	J
Total Copper	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	376.77	400.00	ug/L		94.2		75 - 125	
	MSD	1512200-02	ND	397.82	400.00	ug/L	5.4	99.5	20	75 - 125	
Total Iron	DUP	1512200-02	0.94359	0.95043		mg/L	0.7		20		
	MS	1512200-02	0.94359	1.8416	1.0000	mg/L		89.8		75 - 125	
	MSD	1512200-02	0.94359	1.9259	1.0000	mg/L	4.5	98.2	20	75 - 125	
Total Lead	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	391.91	400.00	ug/L		98.0		75 - 125	
	MSD	1512200-02	ND	422.69	400.00	ug/L	7.6	106	20	75 - 125	
Total Lithium	DUP	**1512200-02**	**1.2476**	**1.2270**		**mg/L**	**1.7**		**20**		
	MS	**1512200-02**	**1.2476**	**1.3838**	**0.20000**	**mg/L**		**68.1**		**75 - 125**	**A03**
	MSD	**1512200-02**	**1.2476**	**1.4296**	**0.20000**	**mg/L**	**3.3**	**91.0**	**20**	**75 - 125**	
Total Manganese	DUP	1512200-02	0.17592	0.17415		mg/L	1.0		20		
	MS	1512200-02	0.17592	0.62386	0.50000	mg/L		89.6		75 - 125	
	MSD	1512200-02	0.17592	0.66404	0.50000	mg/L	6.2	97.6	20	75 - 125	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2470	Used client sample: N										
Total Molybdenum	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	190.45	200.00	ug/L		95.2		75 - 125	J
	MSD	1512200-02	ND	203.58	200.00	ug/L	6.7	102	20	75 - 125	J
Total Nickel	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	393.05	400.00	ug/L		98.3		75 - 125	
	MSD	1512200-02	ND	426.45	400.00	ug/L	8.2	107	20	75 - 125	
Total Selenium	DUP	**1512200-02**	**ND**	**ND**		**ug/L**			**20**		
	MS	**1512200-02**	**ND**	**237.38**	**200.00**	**ug/L**		**119**		**75 - 125**	**J**
	MSD	**1512200-02**	**ND**	**288.58**	**200.00**	**ug/L**	**19.5**	**144**	**20**	**75 - 125**	**J,Q03**
Total Silver	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	97.745	100.00	ug/L		97.7		75 - 125	
	MSD	1512200-02	ND	109.24	100.00	ug/L	11.1	109	20	75 - 125	
Total Strontium	DUP	**1512200-02**	**5.6800**	**5.8936**		**mg/L**	**3.7**		**20**		
	MS	**1512200-02**	**5.6800**	**5.9130**	**0.50000**	**mg/L**		**46.6**		**75 - 125**	**A03**
	MSD	**1512200-02**	**5.6800**	**6.1347**	**0.50000**	**mg/L**	**3.7**	**90.9**	**20**	**75 - 125**	
Total Thallium	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	371.57	400.00	ug/L		92.9		75 - 125	J
	MSD	1512200-02	ND	370.83	400.00	ug/L	0.2	92.7	20	75 - 125	J
Total Vanadium	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	201.49	200.00	ug/L		101		75 - 125	
	MSD	1512200-02	ND	208.99	200.00	ug/L	3.7	104	20	75 - 125	
Total Zinc	DUP	1512200-02	ND	ND		ug/L			20		
	MS	1512200-02	ND	448.21	500.00	ug/L		89.6		75 - 125	
	MSD	1512200-02	ND	485.29	500.00	ug/L	7.9	97.1	20	75 - 125	

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BSK Associates
Engineers & Laboratories

BSK Associates Fresno
1414 Stanislaus St
Fresno, CA93706
559-497-2888 (Main)
559-485-6935 (FAX)

A5E1797
5/27/2015
Invoice: A510803

Kerrie Vaughan
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308

RE: Report for A5E1797 General: Project Manager-Kerrie Vaughan

Dear Kerrie Vaughan,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 5/20/2015. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2009 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

If additional clarification of any information is required, please contact your Project Manager, Stephane Maupas , at (800) 877-8310 or (559) 497-2888 x212.

Thanks again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Stephane Maupas, Project Manager

Accredited in Accordance with NELAP
ORELAP #4021

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BSK Associates Engineers & Laboratories

A5E1797

General: Project Manager-Kerrie Vaughan

Case Narrative

Project and Report Details		Invoice Details	
Client:	BC Laboratories	**Invoice To:**	BC Laboratories
Report To:	Kerrie Vaughan	**Invoice Attn:**	Kerrie Vaughan
Project #:	1512124	**Project PO#:**	-
Received:	5/20/2015 - 15:40		
Report Due:	5/27/2015		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 4.1

Containers Intact
COC/Labels Agree
Received On Wet Ice
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

MS1.0 Matrix spike recoveries exceed control limits.

Report Distribution

Recipient(s)	Report Format	CC:
Kerrie Vaughan	FINAL.RPT	

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BSK Associates Engineers & Laboratories

A5E1797

General: Project Manager-Kerrie Vaughan

1512124

Certificate of Analysis

Sample ID: A5E1797-01
Sampled By: Client
Sample Description: 1512124-01

Sample Date - Time: 05/18/15 - 11:34
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505621	05/21/15	05/22/15	
1.65 Sigma Uncertainty		0.110	±				
MDA95		536	pCi/L				

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BSK Associates Engineers & Laboratories

A5E1797

General: Project Manager-Kerrie Vaughan

1512124

Certificate of Analysis

Sample ID: A5E1797-02
Sampled By: Client
Sample Description: 1512124-02

Sample Date - Time: 05/18/15 - 14:40
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505621	05/21/15	05/22/15	
1.65 Sigma Uncertainty		0.110	±				
MDA95		536	pCi/L				

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BSK Associates Engineers & Laboratories

A5E1797

General: Project Manager-Kerrie Vaughan

1512124

Certificate of Analysis

Sample ID: A5E1797-03
Sampled By: Client
Sample Description: 1512124-03

Sample Date - Time: 05/18/15 - 14:52
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505621	05/21/15	05/22/15	
1.65 Sigma Uncertainty		0.156	±				
MDA95		536	pCi/L				

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BSK Associates Engineers & Laboratories

A5E1797

General: Project Manager-Kerrie Vaughan

1512124

Certificate of Analysis

Sample ID: A5E1797-04
Sampled By: Client
Sample Description: 1512124-04

Sample Date - Time: 05/18/15 - 14:19
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505621	05/21/15	05/22/15	
1.65 Sigma Uncertainty		0.156	±				
MDA95		536	pCi/L				

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BSK Associates Engineers & Laboratories

A5E1797

General: Project Manager-Kerrie Vaughan

1512124

Certificate of Analysis

Sample ID: A5E1797-05
Sampled By: Client
Sample Description: 1512124-05

Sample Date - Time: 05/18/15 - 12:00
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505748	05/26/15	05/27/15	
1.65 Sigma Uncertainty		0.110	±				
MDA95		1070	pCi/L				

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BSK Associates Engineers & Laboratories

A5E1797

General: Project Manager-Kerrie Vaughan

BSK Associates Fresno

Radiological Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 00-02 - Quality Control											
Batch: A505621										Prepared: 05/21/2015	
Prep Method: EPA 00-02										Analyst: SAB	
Blank (A505621-BLK1)											
1.65 Sigma Uncertainty	ND		±							05/22/15	
Gross Alpha	ND	3	pCi/L							05/22/15	
MDA95	ND	0.00	pCi/L							05/22/15	
Blank Spike (A505621-BS1)											
Gross Alpha	25.8	3	pCi/L	30		86	80-120			05/22/15	
Blank Spike Dup (A505621-BSD1)											
Gross Alpha	31.9	3	pCi/L	30		106	80-120	21	50	05/22/15	
Matrix Spike (A505621-MS1), Source: A5E1173-01											
Gross Alpha	93.0	3	pCi/L	120	5.11	73	70-130			05/22/15	
Matrix Spike (A505621-MS2), Source: A5E1299-01											
Gross Alpha	104	3	pCi/L	120	17.4	72	70-130			05/22/15	
Matrix Spike Dup (A505621-MSD1), Source: A5E1173-01											
Gross Alpha	97.1	3	pCi/L	120	5.11	77	70-130	4	50	05/22/15	
Matrix Spike Dup (A505621-MSD2), Source: A5E1299-01											
Gross Alpha	136	3	pCi/L	120	17.4	99	70-130	26	50	05/22/15	
EPA 00-02 - Quality Control											
Batch: A505748										Prepared: 05/26/2015	
Prep Method: EPA 00-02										Analyst: SAB	
Blank (A505748-BLK1)											
1.65 Sigma Uncertainty	ND		±							05/27/15	
Gross Alpha	ND	3	pCi/L							05/27/15	
MDA95	ND	0.00	pCi/L							05/27/15	
Blank Spike (A505748-BS1)											
Gross Alpha	28.6	3	pCi/L	30		95	80-120			05/27/15	
Blank Spike Dup (A505748-BSD1)											
Gross Alpha	24.0	3	pCi/L	30		80	80-120	17	50	05/27/15	
Matrix Spike (A505748-MS1), Source: A5E1287-01											
Gross Alpha	114	3	pCi/L	120	ND	94	70-130			05/27/15	
Matrix Spike (A505748-MS2), Source: A5E1400-03											
Gross Alpha	100	3	pCi/L	120	ND	83	70-130			05/27/15	
Matrix Spike Dup (A505748-MSD1), Source: A5E1287-01											
Gross Alpha	115	3	pCi/L	120	ND	95	70-130	1	50	05/27/15	

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BSK Associates Engineers & Laboratories

A5E1797

General: Project Manager-Kerrie Vaughan

BSK Associates Fresno

Radiological Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 00-02 - Quality Control											
Batch: A505748										Prepared: 05/26/2015	
Prep Method: EPA 00-02										Analyst: SAB	
Matrix Spike Dup (A505748-MSD1), Source: A5E1287-01											
Matrix Spike Dup (A505748-MSD2), Source: A5E1400-03											
Gross Alpha	80.7	3	pCi/L	120	ND	67	70-130	21	50	05/27/15	MS1.0 Low

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BSK Associates Engineers & Laboratories

A5E1797

General: Project Manager-Kerrie Vaughan

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method , all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected at RL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	Picocuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent Recovered (surrogates)	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit		

Please see the individual Subcontract Lab's report for applicable certifications.

BSK is not accredited under the NELAC program for the following parameters: **NA**

Certifications: Please refer to our website for a copy of our Accredited Fields of Testing under each certification.

Fresno			
State of California - ELAP	1180	State of Hawaii	4021
State of Nevada	CA000792015-1	State of Oregon - NELAC	4021
EPA - UCMR3	CA00079	State of Washington	C997-15
Sacramento			
State of California - ELAP	2435		
Vancouver			
State of Oregon - NELAC	WA100008	State of Washington	C824-14a

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A5E1797

05202015

BCLab4911

Turnaround: Standard
Due Date: 5/26/2015

BC Laboratories

Printed: 5/20/1 Page 11 of 13
Page 1 of 1

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4.1

SUBCONTRACT ORDER
BC Laboratories
1512124

A5E1797 05/20/2015
BCLab4911 3

SENDING LABORATORY:

BC Laboratories
4100 Atlas Ct
Bakersfield, CA 93308
Phone: 661-327-4911
Fax: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY:

BSK Analytical Labs $BSKSA
1414 Stanislaus Street
Fresno, CA 93706
Phone :(800) 877-8310
Fax: (559) 485-6935

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 1512124-01	**Water**	**Sampled:05/18/15 11:34**	[redacted]	
om900.0w Gross Alpha BSKSA	05/26/15 17:00	11/15/15 11:34		
Containers Supplied:				
Sample ID: 1512124-02	**Water**	**Sampled:05/18/15 14:40**	[redacted]	
om900.0w Gross Alpha BSKSA	05/26/15 17:00	11/15/15 14:40		
Containers Supplied:				
Sample ID: 1512124-03	**Water**	**Sampled:05/18/15 14:52**	[redacted]	
om900.0w Gross Alpha BSKSA	05/26/15 17:00	11/15/15 14:52		
Containers Supplied:				
Sample ID: 1512124-04	**Water**	**Sampled:05/18/15 14:19**	[redacted]	
om900.0w Gross Alpha BSKSA	05/26/15 17:00	11/15/15 14:19		
Containers Supplied:				
Sample ID: 1512124-05	**Water**	**Sampled:05/18/15 12:00**	[redacted]	
om900.0w Gross Alpha BSKSA	05/26/15 17:00	11/15/15 12:00		
Containers Supplied:				

Meagan Boyls 5/20/15 — 5-20-15
Released By — Date — Received By — Date

5-20-15 — John Hew 5/20/15 15:40
Released By — Date — Received By — Date

oms.net

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BSK Associates SR-FL-0002-13

A5E1797 05/20/2015
BCLab4911 3

Sample Integrity

BSK Bottles: Yes (No) Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 10°C	(Yes) No NA	Were correct containers and preservatives received for the tests requested?	(Yes) No NA
If samples were taken today, is there evidence that chilling has begun?	Yes No (NA)	Were there bubbles in the VOA vials? (Volatiles Only)	Yes No (NA)
Did all bottles arrive unbroken and intact?	(Yes) No	Was a sufficient amount of sample received?	(Yes) No
Did all bottle labels agree with COC?	(Yes) No	Do samples have a hold time <72 hours?	Yes (No)
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes No (NA)	Was PM notified of discrepancies? PM: By/Time:	Yes No (NA)

Bottles Received "-" means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V)	Checks	Passed?	1-5					
Bacti $Na_2S_2O_3$	—	—						
None (P) White Cap	—	—						
Cr6 (P) BC Green Label $NH_4OH(NH_4)_2SO_4$ DW	Cl, pH > 8	Y N						
Cr6 (P) Pink Label Hex Chrome Buffer DW	pH 9-9.5	Y N						
Cr6 (P) Pink Label Hex Chrome Buffer WW	pH 9.3-9.7	Y N						
HNO_3 (P) Red Cap	—	—	1C					
H_2SO_4 (P) or (AG) Yellow Cap/Label	pH < 2	Y N						
NaOH (P) Green Cap	Cl, pH >10	Y N						
NaOH + ZnAc (P)	pH > 9	Y N			JTH			
Dissolved Oxygen 300ml (g)	—	—			5/22/15			
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—						
HCl (AG) Lt. Blue Label O&G, Diesel	—	—						
Na_2O_3S+HCl (AG) Lt. Pink Label 525	—	—						
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—						
$Na_2S_2O_3$ (AG) Blue Label 547, 515.548, TPH 524	—	—						
$Na_2S_2O_3$ (CG) Blue Label 504, 505	—	—						
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	Y N						
NH_4Cl (AG) Purple Label 552	—	—						
EDA (AG) Brown Label DBPs	—	—						
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—						
Buffer pH 4 (CG)	—	—						
None (CG)	—	—						
H_3PO_4 (CG) Salmon Label	—	—						
Other:								
Asbestos 1Liter Plastic w/ Foil	—	—						
Low Level Hg / Metals Double Baggie	—	—						
Bottled Water	—	—						
Clear Glass Jar: 250 / 500 / 1 Liter	—	—						
Soil Tube Brass / Steel / Plastic	—	—						
Tedlar Bag / Plastic Bag	—	—						

Split

	Container	Preservative	Date/Time/Initials		Container	Preservative	Date/Time/Initials
S P				S P			
S P				S P			

Comments

Labeled by: NP @ 1724 Labels checked by: JTH @ 17:22 RUSH Paged by: @

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Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 03, 2015

Ms. Kerrie Vaughan
BC Laboratories
4100 Atlas Ct.
Bakersfield, CA 93308

RE: Project: 1512124
Pace Project No.: 30148649

Dear Ms. Vaughan:
Enclosed are the analytical results for sample(s) received by the laboratory on May 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carin A. Ferris

Carin Ferris
carin.ferris@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 1512124
Pace Project No.: 30148649

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: PA014572014-4
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 1512124
Pace Project No.: 30148649

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30148649001	1512124-01	Water	05/18/15 11:34	05/21/15 10:00
30148649002	1512124-02	Water	05/18/15 14:40	05/21/15 10:00
30148649003	1512124-03	Water	05/18/15 14:52	05/21/15 10:00
30148649004	1512124-04	Water	05/18/15 14:19	05/21/15 10:00
30148649005	1512124-05	Water	05/18/15 12:00	05/21/15 10:00

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SAMPLE ANALYTE COUNT

Project: 1512124
Pace Project No.: 30148649

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30148649001	1512124-01	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30148649002	1512124-02	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30148649003	1512124-03	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30148649004	1512124-04	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30148649005	1512124-05	EPA 903.1	JC2	1
		EPA 904.0	JLW	1

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PROJECT NARRATIVE

Project: 1512124
Pace Project No.: 30148649

Method: EPA 903.1
Description: 903.1 Radium 226
Client: BC Laboratories
Date: June 03, 2015

General Information:
5 samples were analyzed for EPA 903.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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(724)850-5600

PROJECT NARRATIVE

Project: 1512124
Pace Project No.: 30148649

Method: EPA 904.0
Description: 904.0 Radium 228
Client: BC Laboratories
Date: June 03, 2015

General Information:
5 samples were analyzed for EPA 904.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1512124
Pace Project No.: 30148649

Sample: 1512124-01 **Lab ID: 30148649001** Collected: 05/18/15 11:34 Received: 05/21/15 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Comments:
- Sample collection dates and times were not present on the sample containers.
- Upon receipt at the laboratory, 6 mls of nitric acid were added to the 1 Liter sample container to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
- Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**11.8 ± 9.23 (11.7) C:NA T:86%**	pCi/L	06/01/15 10:09	13982-63-3	
Radium-228	EPA 904.0	**1.49 ± 4.59 (10.4) C:83% T:74%**	pCi/L	06/01/15 16:56	15262-20-1	

Sample: 1512124-02 **Lab ID: 30148649002** Collected: 05/18/15 14:40 Received: 05/21/15 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Comments:
- Sample collection dates and times were not present on the sample containers.
- Upon receipt at the laboratory, 6 mls of nitric acid were added to the 1 Liter sample container to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
- Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**22.3 ± 9.99 (10.5) C:NA T:87%**	pCi/L	06/01/15 10:30	13982-63-3	
Radium-228	EPA 904.0	**4.38 ± 5.04 (10.6) C:83% T:77%**	pCi/L	06/01/15 16:57	15262-20-1	

Sample: 1512124-03 **Lab ID: 30148649003** Collected: 05/18/15 14:52 Received: 05/21/15 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Comments:
- Sample collection dates and times were not present on the sample containers.
- Upon receipt at the laboratory, 6 mls of nitric acid were added to the 1 Liter sample container to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
- Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**16.5 ± 8.37 (9.27) C:NA T:90%**	pCi/L	06/01/15 10:31	13982-63-3	
Radium-228	EPA 904.0	**15.1 ± 6.89 (11.6) C:80% T:77%**	pCi/L	06/01/15 16:57	15262-20-1	

Sample: 1512124-04 **Lab ID: 30148649004** Collected: 05/18/15 14:19 Received: 05/21/15 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Comments:
- Sample collection dates and times were not present on the sample containers.
- Upon receipt at the laboratory, 6 mls of nitric acid were added to the 1 Liter sample container to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
- Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**21.6 ± 10.5 (11.4) C:NA T:91%**	pCi/L	06/01/15 10:50	13982-63-3	
Radium-228	EPA 904.0	**3.44 ± 5.39 (11.7) C:82% T:76%**	pCi/L	06/01/15 16:57	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1512124
Pace Project No.: 30148649

Sample: 1512124-05 **Lab ID: 30148649005** Collected: 05/18/15 12:00 Received: 05/21/15 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Comments:
- Sample collection dates and times were not present on the sample containers.
- Upon receipt at the laboratory, 6 mls of nitric acid were added to the 1 Liter sample container to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
- Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**7.06 ± 10.3 (14.8) C:NA T:89%**	pCi/L	06/01/15 11:10	13982-63-3	
Radium-228	EPA 904.0	**6.22 ± 6.07 (12.5) C:82% T:68%**	pCi/L	06/01/15 16:57	15262-20-1	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512124
Pace Project No.: 30148649

QC Batch: RADC/24569 Analysis Method: EPA 903.1
QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226
Associated Lab Samples: 30148649001, 30148649002, 30148649003, 30148649004, 30148649005

METHOD BLANK: 898090 Matrix: Water
Associated Lab Samples: 30148649001, 30148649002, 30148649003, 30148649004, 30148649005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.382 ± 0.499 (0.823) C:NA T:93%	pCi/L	06/01/15 09:25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512124
Pace Project No.: 30148649

QC Batch: RADC/24592 Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228
Associated Lab Samples: 30148649001, 30148649002, 30148649003, 30148649004, 30148649005

METHOD BLANK: 898957 Matrix: Water
Associated Lab Samples: 30148649001, 30148649002, 30148649003, 30148649004, 30148649005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.000 ± 0.379 (0.842) C:85% T:85%	pCi/L	06/01/15 17:02	

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 1512124
Pace Project No.: 30148649

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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TNI - The NELAC Institute.

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SUBCONTRACT ORDER
BC Laboratories
1512124

RUSH!

SENDING LABORATORY:
BC Laboratories
4100 Atlas Ct
Bakersfield, CA 93308
Phone: 661-327-4911
Fax: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY:
PACE Analytical $PACEA
1638 Roseytown Road, Ste 2,3 &4
Greensburg, PA 15601
Phone :(724) 850-5600
Fax: (724) 850-5601

30148649

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 1512124-01	**Water**	**Sampled:05/18/15 11:34**	[redacted]	001
om904.0w Radium228 PACEA	05/26/15 17:00	11/15/15 11:34		
om903.1w Radium226 PACEA	05/26/15 17:00	11/15/15 11:34		
Containers Supplied:				
Sample ID: 1512124-02	**Water**	**Sampled:05/18/15 14:40**	[redacted]	002
om904.0w Radium228 PACEA	05/26/15 17:00	11/15/15 14:40		
om903.1w Radium226 PACEA	05/26/15 17:00	11/15/15 14:40		
Containers Supplied:				
Sample ID: 1512124-03	**Water**	**Sampled:05/18/15 14:52**	[redacted]	003
om904.0w Radium228 PACEA	05/26/15 17:00	11/15/15 14:52		
om903.1w Radium226 PACEA	05/26/15 17:00	11/15/15 14:52		
Containers Supplied:				
Sample ID: 1512124-04	**Water**	**Sampled:05/18/15 14:19**	[redacted]	004
om904.0w Radium228 PACEA	05/26/15 17:00	11/15/15 14:19		
om903.1w Radium226 PACEA	05/26/15 17:00	11/15/15 14:19		
Containers Supplied:				

Released By	Date	Received By	Date
Meggan Boyles	5/20/15	Alma R Muchmey	5/21/15 ~~0900~~ 1000
			ARM 5/21/15

Page 2 of 3

SUBCONTRACT ORDER

BC Laboratories

1512124

30148649

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 1512124-05	**Water**	**Sampled:05/18/15 12:00**	[redacted]	005
om904.0w Radium228 PACEA	05/26/15 17:00	11/15/15 12:00		
om903.1w Radium226 PACEA	05/26/15 17:00	11/15/15 12:00		
Containers Supplied:				

Meggen Boyles 5/20/15 Alyna R Muchaney Pace 5/21/15 1000

Released By Date Received By Date

Released By Date Received By Date

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Sample Condition Upon Receipt

Pace Analytical

Client Name: BC Labs Project # 30148649 Am

Courier: ☐ Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 1Z9653760161358179

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no Biological Tissue is Frozen: Yes No

Packing Material: Bubble Wrap ✓ Bubble Bags ___ None ___ Other _____

Thermometer Used N/A Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temp.: Observed Temp.: N/A °C Correction Factor: N/A °C Final Temp: N/A °C

Date and Initials of person examining contents: ARM 5/21/15

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☑Yes ☐No ☐N/A	7.
Sufficient Volume:	☑Yes ☑No ☐N/A	8. Low volume
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☑No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11. 1L Rad bottles
Sample Labels match COC:	☐Yes ☑No ☐N/A	12. Samples 001, 002 and 005 have no date/time on bottles. All 500 rad bottles have no date/time on bottles. ML sample bottles for 001→005 have no time on bottles
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☑No ☐N/A	Added 1L Rad 6mL HNO3 to each 1L Rad bottle. pH<2. ARM 5/21/15 110
exceptions: VOA, coliform, TOC, O&G, Phenols	☐Yes ☑No	Initial when completed ARM Lot # of added preservative DL15-0433
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

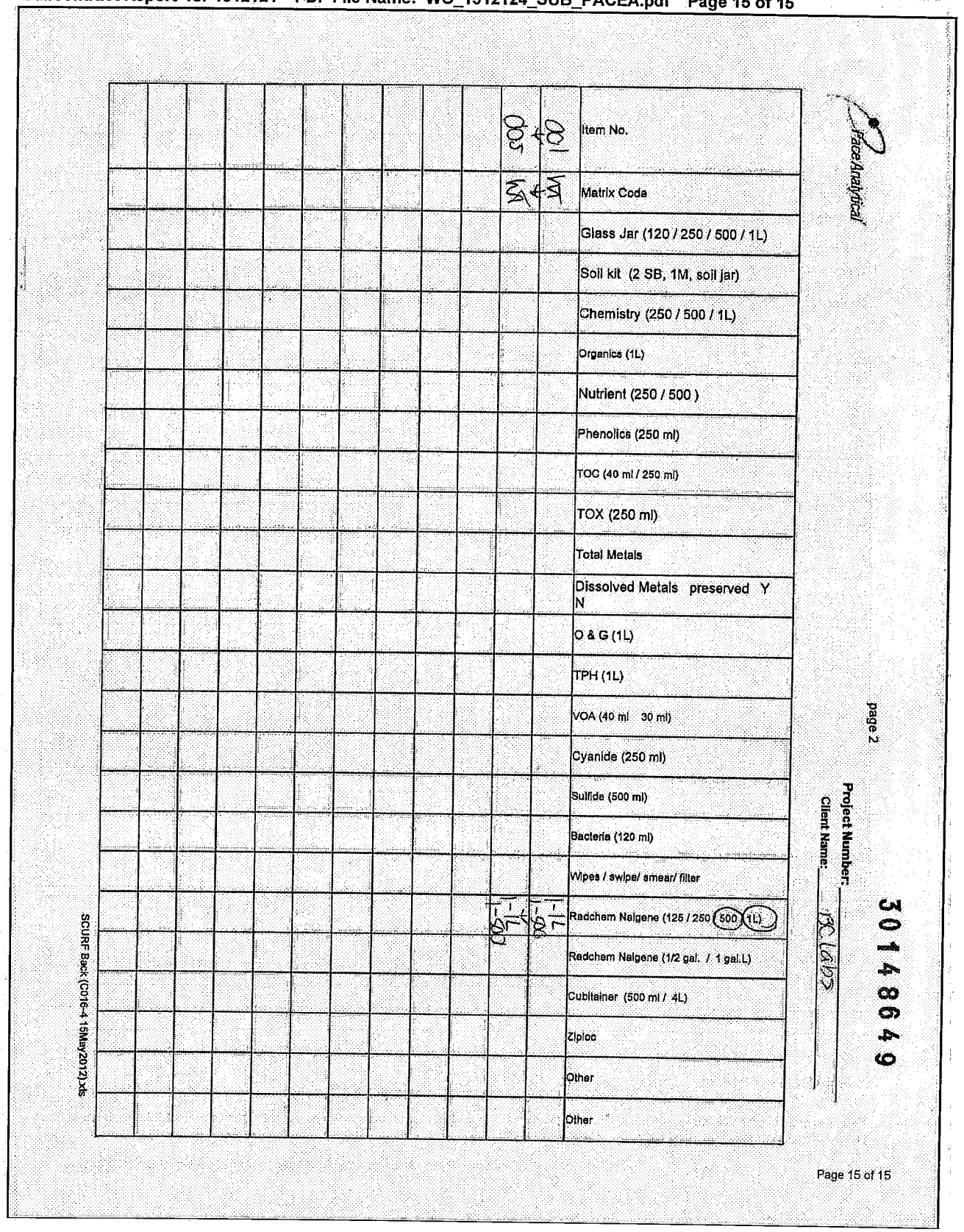
Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Carlos Serrano Date: 5/21/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

J:\QAQC\Master\Document Management\Sample Mgt\SCURF\FALLC003-09 SCUR Front 3March2015 Page 14 of 15



Item No.	001	002
Matrix Code	WT	WT
Glass Jar (120 / 250 / 500 / 1L)		
Soil kit (2 SB, 1M, soil jar)		
Chemistry (250 / 500 / 1L)		
Organics (1L)		
Nutrient (250 / 500)		
Phenolics (250 ml)		
TOC (40 ml / 250 ml)		
TOX (250 ml)		
Total Metals		
Dissolved Metals preserved Y N		
O & G (1L)		
TPH (1L)		
VOA (40 ml 30 ml)		
Cyanide (250 ml)		
Sulfide (500 ml)		
Bacteria (120 ml)		
Wipes / swipe/ smear/ filter		
Radchem Nalgene (125 / 250 500 1L)	1L	1L
Redchem Nalgene (1/2 gal. / 1 gal.L)		
Cubitainer (500 ml / 4L)		
Ziploc		
Other		
Other		

PaceAnalytical

page 2

Project Number: 30148649

Client Name: BC Labs

SCURF Back (C016-4 15May2012).xls

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 12:40
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.
A02	The difference between duplicate readings is less than the quantitation limit.
A03	The sample concentration is more than 4 times the spike level.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
L01	The Laboratory Control Sample Water (LCSW) recovery is not within laboratory established control limits.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.
Z1	50 ul of antifoam added to the sample to avoid foaming of the sample.

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BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 06/03/2015

Rod Bowyer

Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Client Project:	DOW
BCL Project:	Oilfield Produced Water Pond Testing
BCL Work Order:	1512125
Invoice ID:	B204798

Enclosed are the results of analyses for samples received by the laboratory on 5/18/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Kerrie Vaughan
Client Services

Authorized Signature

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Chain of Custody Form

BC Laboratories, Inc.

Report To: Client: AERA Energy LLC	Project #: 9900202982 Diatomite (DOW)
Attn: Rod Bowyer	Project Name:
Street Address:	
City, State, Zip:	Sampler(s):
Phone: Fax:	JUAN GURROLA, BC LABS
Email Address:	ROBERT CORTEZ, BC LABS
Work Order #: 15-12125	

Analysis Requested

Please refer to the back of this page for completion of boxes and method legend.

BTEX Pollution Rpt (See Attached List of Analytes)

Page ____ of ____

Comments:
AERA POND Sampling
EDF REQUESTED
COPY: Bill Pipes/Alex Olsen
See attached

Sample #	Description	Date Sampled	Time Sampled	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No * Standard Turnaround = 10 work days — Notes
-1	BL13 DOW POND 1	5/18/15	9:35a				X				oily water
-2	BL 14 DOW POND 2	5/18/15	10:14a				X				oily water
-3	BL 23 DOW POND 11	5/18/15	1:44p				X				oily water
	~~ANALYZE~~ WATER FRACTION ONLY RBE										Add. samples collected with dipping pole. Crude oil present with all samples.
	Field time 5 hrs Field personnel x 2										

CHK BY | DISTRIBUTION: WORK COPY, FILE COPY, SUB OUT ☐

SHORT HOLDING TIME: Cr^{+6} NO_2 NO_3 OP SS DO Cl_2 BOD MBAS COT

Billing		EDF Required? Geotracker	Global ID (Needed for EDF)			System # (Needed for EDT)	
☐ Same as above		☐ Yes ☐ No	1. Relinquished By	Date	Time	1. Received By	Date 5/18/15 Time 1635
Client:			2. Relinquished By	Date	Time	2. Received By	Date Time
Address:		Send Copy to State of CA? (EDT) ☐ Yes ☐ No	3. Relinquished By	Date	Time	3. Received By	Date Time
City: State Zip							
Attn:							
PO#: 9900202982-Diatomite							

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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15-1212S

BC LABORATORIES, INC
4100 Atlas Ct. Bakersfield, Ca. 93308 Tel: (800) 878 - 4911 Website: www.bclabs.com

Aera - OIL FIELD PRODUCED WATER POND TESTING

CALIFORNIA WATER CODE DIRECTIVE PURSUANT TO SECTION 13267
CHARACTERIZATION OF WASTEWATER FOR DISCHARGE

Collect representative samples of wastewater within each of the ponds. Samples must be analyzed in accordance with the water quality analysis and reporting requirements contained in Attachment B to this Order;[1]

List of Analyses as per Attachment B

A. Total Dissolved Solids

B. Metals, CCR title 22, section 66261.24. subdivision (a)(2)(A) (antimony, arsenic, barium, beryllium, cadmium, chromium, chromium (VI), cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc)

C. benzene, toluene, ethylbenzene, xylenes

D. Total Petroleum Hydrocarbons as Crude Oil

E. Polynuclear Aromatic Hydrocarbons (PAH)

F. Radionuclides (Radium226, Radium 228, Gross Alpha, Uranium)

G. Major and Minor Cations (sodium, potassium, magnesium, calcium)

H. Major and Minor Anions (nitrate, chloride, sulfate, carbonate, bicarbonate, bromide)

I. Trace Elements (lithium, strontium, boron, iron, manganese)

Total Price $624

Electronic results available as an Excel spreadsheet upon request.

Field Service	
Sampling	$50 per hour
Vehicle	$0.60 per mile

[1] All previously obtained analytical data for oil field produced wastewater samples collected at the Facility, if any, with a description of the source and location for each analysis may be submitted in the alternative for re-running tests if the sample(s) was collected and analyzed within 12 months (one year) of the date of this order.

4100 Atlas Ct. Bakersfield, CA 93308 (800) 878-4911 www.bclabs.com

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Chain of Custody and Cooler Receipt Form for 1512125 Page 3 of 5

BC LABORATORIES INC. — COOLER RECEIPT FORM — Rev. No. 18 09/04/14 — Page 1 Of 5

Submission #: 15-12125

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☐ BC Lab Field Service ☒ Other ☐ (Specify)_____	Ice Chest ☒ None ☐ Box ☐ Other ☐ (Specify)_____	YES ☐ NO ☐

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Amber Thermometer ID: 208 Date/Time 5/18/15

Temperature: (A) 2.4 °C / (C) 2.5 °C Analyst Init KIB 1835

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AB	AB	AB							
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER	GH	GH	GH							
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:_____

Sample Numbering Completed By: KIB Date/Time: 5/18/15 1859 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1512125 Page 4 of 5

BC LABORATORIES INC. — COOLER RECEIPT FORM — Rev. No. 18 09/04/14 — Page 2 of 3

Submission #: 15-12125

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☐ NO ☐

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ (Intact? Yes ☐ No ☐) Containers ☐ (Intact? Yes ☐ No ☐) None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: PE Thermometer ID: 208 Date/Time 5/18/15 1835

Temperature: (A) 1.9 °C / (C) 2.0 °C Analyst Init KHB

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	C	C	C							
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	D	D	D							
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:_____
Sample Numbering Completed By: KHB Date/Time: 5/18/15 1859 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]
A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1512125 Page 5 of 5

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 3 Of 3

Submission #: 15-12125

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☑	Ice Chest ☐ None ☐ Box ☒	YES ☐ NO ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____	Other ☐ (Specify)_____	

Refrigerant: Ice ☐ Blue Ice ☐ None ☒ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: PE Thermometer ID: 208 Date/Time 5/18/15 1840

Temperature: (A) 26.0 °C / (C) 26.1 °C Analyst Init KMB

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	EF	EF	EF							
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:

Sample Numbering Completed By: KMB Date/Time: 5/18/15 1900 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1512125-01	**COC Number:**	—	**Receive Date:**	05/18/2015 18:35
	Project Number:	—	**Sampling Date:**	05/18/2015 09:50
	Sampling Location:	—	**Sample Depth:**	—
	Sampling Point:	BL13 Dow Pond 1	**Lab Matrix:**	Water
	Sampled By:	R.Cortez/J.Enriquez	**Sample Type:**	Wastewater
1512125-02	**COC Number:**	—	**Receive Date:**	05/18/2015 18:35
	Project Number:	—	**Sampling Date:**	05/18/2015 10:14
	Sampling Location:	—	**Sample Depth:**	—
	Sampling Point:	BL14 Dow Pond 2	**Lab Matrix:**	Water
	Sampled By:	R.Cortez/J.Enriquez	**Sample Type:**	Wastewater
1512125-03	**COC Number:**	—	**Receive Date:**	05/18/2015 18:35
	Project Number:	—	**Sampling Date:**	05/18/2015 13:44
	Sampling Location:	—	**Sample Depth:**	—
	Sampling Point:	BL23 Dow Pond 11	**Lab Matrix:**	Water
	Sampled By:	R.Cortez/J.Enriquez	**Sample Type:**	Wastewater

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512125-01 | **Client Sample Name:** BL13 Dow Pond 1, 5/18/2015 9:50:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**530**	**ug/L**	**25**	**4.2**	**EPA-8260B**	ND	**A01**	1
Ethylbenzene	**11**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	**Z1**	2
Toluene	**920**	**ug/L**	**25**	**4.6**	**EPA-8260B**	ND	**A01**	1
Total Xylenes	**120**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND	**Z1**	2
p- & m-Xylenes	**72**	**ug/L**	**0.50**	**0.28**	**EPA-8260B**	ND	**Z1**	2
o-Xylene	**45**	**ug/L**	**0.50**	**0.082**	**EPA-8260B**	ND	**Z1**	2
1,2-Dichloroethane-d4 (Surrogate)	97.6	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	97.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	96.4	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	97.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/26/15	05/27/15 02:48	SE1	MS-V12	50	BYE1981
2	EPA-8260B	05/22/15	05/23/15 03:56	SE1	MS-V12	1	BYE1981

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512125-01 | **Client Sample Name:** BL13 Dow Pond 1, 5/18/2015 9:50:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**0.77**	**ug/L**	**0.97**	**0.53**	**EPA-8270C-SIM**	ND	**J,A01**	1
Acenaphthylene	**0.47**	**ug/L**	**0.97**	**0.46**	**EPA-8270C-SIM**	ND	**J,A01**	1
Anthracene	ND	ug/L	0.97	0.16	EPA-8270C-SIM	ND	A01	1
Benzo[a]anthracene	ND	ug/L	0.97	0.25	EPA-8270C-SIM	ND	A01	1
Benzo[b]fluoranthene	ND	ug/L	0.97	0.39	EPA-8270C-SIM	ND	A01	1
Benzo[k]fluoranthene	ND	ug/L	0.97	0.49	EPA-8270C-SIM	ND	A01	1
Benzo[a]pyrene	ND	ug/L	0.97	0.25	EPA-8270C-SIM	ND	A01	1
Benzo[g,h,i]perylene	ND	ug/L	0.97	0.42	EPA-8270C-SIM	ND	A01	1
Chrysene	ND	ug/L	0.97	0.21	EPA-8270C-SIM	ND	A01	1
Dibenzo[a,h]anthracene	ND	ug/L	0.97	0.43	EPA-8270C-SIM	ND	A01	1
Fluoranthene	ND	ug/L	0.97	0.12	EPA-8270C-SIM	ND	A01	1
Fluorene	**2.4**	**ug/L**	**0.97**	**0.29**	**EPA-8270C-SIM**	ND	**A01**	1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.97	0.43	EPA-8270C-SIM	ND	A01	1
Naphthalene	**16**	**ug/L**	**0.97**	**0.75**	**EPA-8270C-SIM**	ND	**A01**	1
Phenanthrene	**3.0**	**ug/L**	**0.97**	**0.21**	**EPA-8270C-SIM**	ND	**A01**	1
Pyrene	ND	ug/L	0.97	0.21	EPA-8270C-SIM	ND	A01	1
Nitrobenzene-d5 (Surrogate)	119	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1
2-Fluorobiphenyl (Surrogate)	70.3	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM		A01	1
p-Terphenyl-d14 (Surrogate)	79.6	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/20/15	05/21/15 22:08	MK1	MS-B4	9.700	BYE1944

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512125-01 | **Client Sample Name:** BL13 Dow Pond 1, 5/18/2015 9:50:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**64000**	**ug/L**	**10000**	**2800**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	76.2	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/20/15	05/21/15 21:11	MWB	GC-13	20	BYE1946

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512125-01 | **Client Sample Name:** BL13 Dow Pond 1, 5/18/2015 9:50:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**140**	**mg/L**	**2.0**	**0.30**	**EPA-6010B**	0.42	**A07**	1
Total Magnesium	**160**	**mg/L**	**1.0**	**0.38**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**9500**	**mg/L**	**10**	**1.0**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**260**	**mg/L**	**20**	**2.6**	**EPA-6010B**	6.9	**A07**	1
Bicarbonate Alkalinity as CaCO3	**2900**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**2900**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**130**	**mg/L**	**10**	**3.5**	**EPA-300.0**	ND	**A07**	3
Chloride	**17000**	**mg/L**	**50**	**6.1**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	44	7.8	EPA-300.0	ND	A07	3
Sulfate	**27**	**mg/L**	**100**	**10**	**EPA-300.0**	ND	**J,A07**	3
Total Dissolved Solids @ 180 C	**29000**	**mg/L**	**1000**	**1000**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/21/15	05/21/15 14:14	ARD	PE-OP3	20	BYE1918
2	EPA-310.1	05/20/15	05/20/15 10:41	RML	MET-1	2	BYE1633
3	EPA-300.0	05/19/15	05/19/15 06:24	OLH	IC2	100	BYE1611
4	EPA-160.1	05/22/15	05/22/15 10:30	CAD	MANUAL	100	BYE1987

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512125-01 | **Client Sample Name:** BL13 Dow Pond 1, 5/18/2015 9:50:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	2000	170	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	1000	160	EPA-6010B	500000	A07	2
Total Barium	**7400**	**ug/L**	**200**	**70**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	200	10	EPA-6010B	75000	A07	2
Total Boron	**100**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	200	22	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	1000	26	EPA-6010B	8000000	A07	2
Total Copper	**25**	**ug/L**	**200**	**22**	**EPA-6010B**	2500000	**J,A07**	2
Total Iron	**0.74**	**mg/L**	**1.0**	**0.60**	**EPA-6010B**		**J,A07**	2
Total Lead	ND	ug/L	1000	80	EPA-6010B	1000000	A07	2
Total Lithium	**7.7**	**mg/L**	**0.40**	**0.12**	**EPA-6010B**		**A07**	2
Total Manganese	ND	mg/L	0.20	0.080	EPA-6010B		A07	2
Total Mercury	**0.075**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000	**J**	3
Total Molybdenum	ND	ug/L	1000	24	EPA-6010B	3500000	A07	2
Total Nickel	ND	ug/L	200	40	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	2000	300	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	200	38	EPA-6010B	500000	A07	2
Total Strontium	**9.6**	**mg/L**	**0.20**	**0.020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	2000	480	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	200	44	EPA-6010B	2400000	A07	2
Total Zinc	**61**	**ug/L**	**1000**	**46**	**EPA-6010B**	5000000	**J,A07**	2
Total Recoverable Uranium	ND	pCi/L	13	1.3	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/19/15	05/19/15 08:37	TDC	KONE-1	5	BYE1774
2	EPA-6010B	05/21/15	05/21/15 14:14	ARD	PE-OP3	20	BYE1918
3	EPA-7470A	05/20/15	05/22/15 10:23	MEV	CETAC1	1	BYE1792
4	EPA-200.8	05/22/15	05/22/15 18:47	SRM	PE-EL2	20	BYE2030

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512125-02 | **Client Sample Name:** BL14 Dow Pond 2, 5/18/2015 10:14:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.17**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND	**J,Z1**	1
Ethylbenzene	**0.43**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	**J,Z1**	1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND	Z1	1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND	Z1	1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260B	ND	Z1	1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260B	ND	Z1	1
1,2-Dichloroethane-d4 (Surrogate)	100	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 04:14	SE1	MS-V12	1	BYE1981

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10000 Ming Ave
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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512125-02 | **Client Sample Name:** BL14 Dow Pond 2, 5/18/2015 10:14:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**2.5**	**ug/L**	**0.99**	**0.54**	**EPA-8270C-SIM**	ND	**A01**	1
Acenaphthylene	**0.97**	**ug/L**	**0.99**	**0.47**	**EPA-8270C-SIM**	ND	**J,A01**	1
Anthracene	ND	ug/L	0.99	0.17	EPA-8270C-SIM	ND	A01	1
Benzo[a]anthracene	ND	ug/L	0.99	0.26	EPA-8270C-SIM	ND	A01	1
Benzo[b]fluoranthene	**0.64**	**ug/L**	**0.99**	**0.40**	**EPA-8270C-SIM**	ND	**J,A01**	1
Benzo[k]fluoranthene	ND	ug/L	0.99	0.50	EPA-8270C-SIM	ND	A01	1
Benzo[a]pyrene	ND	ug/L	0.99	0.26	EPA-8270C-SIM	ND	A01	1
Benzo[g,h,i]perylene	ND	ug/L	0.99	0.43	EPA-8270C-SIM	ND	A01	1
Chrysene	**1.6**	**ug/L**	**0.99**	**0.22**	**EPA-8270C-SIM**	ND	**A01**	1
Dibenzo[a,h]anthracene	ND	ug/L	0.99	0.44	EPA-8270C-SIM	ND	A01	1
Fluoranthene	**0.67**	**ug/L**	**0.99**	**0.12**	**EPA-8270C-SIM**	ND	**J,A01**	1
Fluorene	**7.8**	**ug/L**	**0.99**	**0.30**	**EPA-8270C-SIM**	ND	**A01**	1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.99	0.44	EPA-8270C-SIM	ND	A01	1
Naphthalene	**2.2**	**ug/L**	**0.99**	**0.76**	**EPA-8270C-SIM**	ND	**A01**	1
Phenanthrene	**15**	**ug/L**	**0.99**	**0.22**	**EPA-8270C-SIM**	ND	**A01**	1
Pyrene	**1.7**	**ug/L**	**0.99**	**0.22**	**EPA-8270C-SIM**	ND	**A01**	1
Nitrobenzene-d5 (Surrogate)	122	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1
2-Fluorobiphenyl (Surrogate)	66.0	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM		A01	1
p-Terphenyl-d14 (Surrogate)	42.7	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/20/15	05/21/15 22:35	MK1	MS-B4	9.900	BYE1944

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512125-02 | **Client Sample Name:** BL14 Dow Pond 2, 5/18/2015 10:14:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**40000**	**ug/L**	**5000**	**1400**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	59.4	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/20/15	05/21/15 21:33	MWB	GC-13	10	BYE1946

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512125-02 | **Client Sample Name:** BL14 Dow Pond 2, 5/18/2015 10:14:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**84**	**mg/L**	**2.0**	**0.30**	**EPA-6010B**	0.42	**A07**	1
Total Magnesium	**190**	**mg/L**	**1.0**	**0.38**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**12000**	**mg/L**	**10**	**1.0**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**300**	**mg/L**	**20**	**2.6**	**EPA-6010B**	6.9	**A07**	1
Bicarbonate Alkalinity as CaCO3	**2900**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**2900**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**170**	**mg/L**	**10**	**3.5**	**EPA-300.0**	ND	**A07**	3
Chloride	**19000**	**mg/L**	**50**	**6.1**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	44	7.8	EPA-300.0	ND	A07	3
Sulfate	**38**	**mg/L**	**100**	**10**	**EPA-300.0**	ND	**J,A07**	3
Total Dissolved Solids @ 180 C	**35000**	**mg/L**	**1000**	**1000**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/21/15	05/21/15 14:16	ARD	PE-OP3	20	BYE1918
2	EPA-310.1	05/20/15	05/20/15 10:57	RML	MET-1	2	BYE1633
3	EPA-300.0	05/19/15	05/19/15 06:42	OLH	IC2	100	BYE1611
4	EPA-160.1	05/22/15	05/22/15 10:30	CAD	MANUAL	100	BYE1987

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Aera Energy
10000 Ming Ave
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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512125-02 | **Client Sample Name:** BL14 Dow Pond 2, 5/18/2015 10:14:00AM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	2000	170	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	1000	160	EPA-6010B	500000	A07	2
Total Barium	**8500**	**ug/L**	**200**	**70**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	200	10	EPA-6010B	75000	A07	2
Total Boron	**120**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	200	22	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	1000	26	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Iron	ND	mg/L	1.0	0.60	EPA-6010B		A07	2
Total Lead	ND	ug/L	1000	80	EPA-6010B	1000000	A07	2
Total Lithium	**9.2**	**mg/L**	**0.40**	**0.12**	**EPA-6010B**		**A07**	2
Total Manganese	ND	mg/L	0.20	0.080	EPA-6010B		A07	2
Total Mercury	**0.075**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000	**J**	3
Total Molybdenum	ND	ug/L	1000	24	EPA-6010B	3500000	A07	2
Total Nickel	ND	ug/L	200	40	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	2000	300	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	200	38	EPA-6010B	500000	A07	2
Total Strontium	**11**	**mg/L**	**0.20**	**0.020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	2000	480	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	200	44	EPA-6010B	2400000	A07	2
Total Zinc	**56**	**ug/L**	**1000**	**46**	**EPA-6010B**	5000000	**J,A07**	2
Total Recoverable Uranium	ND	pCi/L	13	1.3	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/19/15	05/19/15 08:37	TDC	KONE-1	5	BYE1774
2	EPA-6010B	05/21/15	05/21/15 14:16	ARD	PE-OP3	20	BYE1918
3	EPA-7470A	05/20/15	05/22/15 10:25	MEV	CETAC1	1	BYE1792
4	EPA-200.8	05/22/15	05/22/15 18:50	SRM	PE-EL2	20	BYE2030

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512125-03 | **Client Sample Name:** BL23 Dow Pond 11, 5/18/2015 1:44:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND	Z1	1
Ethylbenzene	**0.43**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	**J,Z1**	1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND	Z1	1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND	Z1	1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260B	ND	Z1	1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260B	ND	Z1	1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	96.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 04:32	SE1	MS-V12	1	BYE1981

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512125-03 | **Client Sample Name:** BL23 Dow Pond 11, 5/18/2015 1:44:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	ug/L	0.20	0.11	EPA-8270C-SIM	ND		1
Acenaphthylene	**7.7**	**ug/L**	**0.20**	**0.094**	**EPA-8270C-SIM**	ND		1
Anthracene	ND	ug/L	0.20	0.034	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	ND	ug/L	0.20	0.052	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.20	0.080	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.20	0.10	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.20	0.052	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.20	0.086	EPA-8270C-SIM	ND		1
Chrysene	ND	ug/L	0.20	0.044	EPA-8270C-SIM	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.20	0.088	EPA-8270C-SIM	ND		1
Fluoranthene	ND	ug/L	0.20	0.024	EPA-8270C-SIM	ND		1
Fluorene	**1.9**	**ug/L**	**0.20**	**0.060**	**EPA-8270C-SIM**	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.20	0.088	EPA-8270C-SIM	ND		1
Naphthalene	ND	ug/L	0.20	0.15	EPA-8270C-SIM	ND		1
Phenanthrene	**0.41**	**ug/L**	**0.20**	**0.044**	**EPA-8270C-SIM**	ND		1
Pyrene	ND	ug/L	0.20	0.044	EPA-8270C-SIM	ND		1
Nitrobenzene-d5 (Surrogate)	123	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1
2-Fluorobiphenyl (Surrogate)	31.7	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM		S09	1
p-Terphenyl-d14 (Surrogate)	28.9	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/20/15	05/21/15 19:03	MK1	MS-B4	2	BYE1944

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512125-03 | **Client Sample Name:** BL23 Dow Pond 11, 5/18/2015 1:44:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**29000**	**ug/L**	**5000**	**1400**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	57.0	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/20/15	05/21/15 21:56	MWB	GC-13	10	BYE1946

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512125-03 | **Client Sample Name:** BL23 Dow Pond 11, 5/18/2015 1:44:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**60**	**mg/L**	**2.0**	**0.30**	**EPA-6010B**	0.42	**A07**	1
Total Magnesium	**250**	**mg/L**	**1.0**	**0.38**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**17000**	**mg/L**	**10**	**1.0**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**450**	**mg/L**	**20**	**2.6**	**EPA-6010B**	6.9	**A07**	1
Bicarbonate Alkalinity as CaCO3	**2700**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	**440**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**3100**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**230**	**mg/L**	**20**	**7.0**	**EPA-300.0**	ND	**A07**	3
Chloride	**30000**	**mg/L**	**100**	**12**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	88	16	EPA-300.0	ND	A07	3
Sulfate	**170**	**mg/L**	**200**	**20**	**EPA-300.0**	ND	**J,A07**	3
Total Dissolved Solids @ 180 C	**47000**	**mg/L**	**1000**	**1000**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/21/15	05/21/15 14:18	ARD	PE-OP3	20	BYE1918
2	EPA-310.1	05/20/15	05/20/15 11:12	RML	MET-1	2	BYE1633
3	EPA-300.0	05/19/15	05/19/15 07:00	OLH	IC2	200	BYE1611
4	EPA-160.1	05/22/15	05/22/15 10:30	CAD	MANUAL	100	BYE1987

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Aera Energy
10000 Ming Ave
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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512125-03 | **Client Sample Name:** BL23 Dow Pond 11, 5/18/2015 1:44:00PM, R.Cortez/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	2000	170	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	1000	160	EPA-6010B	500000	A07	2
Total Barium	**6100**	**ug/L**	**200**	**70**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	200	10	EPA-6010B	75000	A07	2
Total Boron	**180**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	200	22	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	1000	26	EPA-6010B	8000000	A07	2
Total Copper	**42**	**ug/L**	**200**	**22**	**EPA-6010B**	2500000	**J,A07**	2
Total Iron	**0.95**	**mg/L**	**1.0**	**0.60**	**EPA-6010B**		**J,A07**	2
Total Lead	ND	ug/L	1000	80	EPA-6010B	1000000	A07	2
Total Lithium	**13**	**mg/L**	**0.40**	**0.12**	**EPA-6010B**		**A07**	2
Total Manganese	ND	mg/L	0.20	0.080	EPA-6010B		A07	2
Total Mercury	**0.12**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000	**J**	3
Total Molybdenum	ND	ug/L	1000	24	EPA-6010B	3500000	A07	2
Total Nickel	ND	ug/L	200	40	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	2000	300	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	200	38	EPA-6010B	500000	A07	2
Total Strontium	**10**	**mg/L**	**0.20**	**0.020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	2000	480	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	200	44	EPA-6010B	2400000	A07	2
Total Zinc	**50**	**ug/L**	**1000**	**46**	**EPA-6010B**	5000000	**J,A07**	2
Total Recoverable Uranium	ND	pCi/L	27	2.7	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/19/15	05/19/15 08:37	TDC	KONE-1	5	BYE1774
2	EPA-6010B	05/21/15	05/21/15 14:18	ARD	PE-OP3	20	BYE1918
3	EPA-7470A	05/20/15	05/22/15 10:27	MEV	CETAC1	1	BYE1792
4	EPA-200.8	05/22/15	05/22/15 19:03	SRM	PE-EL2	40	BYE2030

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1981						
Benzene	BYE1981-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BYE1981-BLK1	ND	ug/L	0.50	0.098	
Toluene	BYE1981-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BYE1981-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BYE1981-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BYE1981-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	**BYE1981-BLK1**	**99.6**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BYE1981-BLK1**	**96.8**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BYE1981-BLK1**	**95.8**	%	**80 - 120 (LCL - UCL)**		

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1981										
Benzene	BYE1981-BS1	LCS	27.440	25.000	ug/L	110		70 - 130		
Toluene	BYE1981-BS1	LCS	26.070	25.000	ug/L	104		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYE1981-BS1	LCS	10.550	10.000	ug/L	106		75 - 125		
Toluene-d8 (Surrogate)	BYE1981-BS1	LCS	9.7800	10.000	ug/L	97.8		80 - 120		
4-Bromofluorobenzene (Surrogate)	BYE1981-BS1	LCS	9.8000	10.000	ug/L	98.0		80 - 120		

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1981	Used client sample: N										
Benzene	MS	1511777-08	ND	29.310	25.000	ug/L		117		70 - 130	
	MSD	1511777-08	ND	28.580	25.000	ug/L	2.5	114	20	70 - 130	
Toluene	MS	1511777-08	ND	28.870	25.000	ug/L		115		70 - 130	
	MSD	1511777-08	ND	27.160	25.000	ug/L	6.1	109	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1511777-08	ND	9.9700	10.000	ug/L		99.7		75 - 125	
	MSD	1511777-08	ND	10.080	10.000	ug/L	1.1	101		75 - 125	
Toluene-d8 (Surrogate)	MS	1511777-08	ND	9.8400	10.000	ug/L		98.4		80 - 120	
	MSD	1511777-08	ND	9.8300	10.000	ug/L	0.1	98.3		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1511777-08	ND	9.6000	10.000	ug/L		96.0		80 - 120	
	MSD	1511777-08	ND	9.8800	10.000	ug/L	2.9	98.8		80 - 120	

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1944						
Acenaphthene	BYE1944-BLK1	ND	ug/L	0.10	0.055	
Acenaphthylene	BYE1944-BLK1	ND	ug/L	0.10	0.047	
Anthracene	BYE1944-BLK1	ND	ug/L	0.10	0.017	
Benzo[a]anthracene	BYE1944-BLK1	ND	ug/L	0.10	0.026	
Benzo[b]fluoranthene	BYE1944-BLK1	ND	ug/L	0.10	0.040	
Benzo[k]fluoranthene	BYE1944-BLK1	ND	ug/L	0.10	0.051	
Benzo[a]pyrene	BYE1944-BLK1	ND	ug/L	0.10	0.026	
Benzo[g,h,i]perylene	BYE1944-BLK1	ND	ug/L	0.10	0.043	
Chrysene	BYE1944-BLK1	ND	ug/L	0.10	0.022	
Dibenzo[a,h]anthracene	BYE1944-BLK1	ND	ug/L	0.10	0.044	
Fluoranthene	BYE1944-BLK1	ND	ug/L	0.10	0.012	
Fluorene	BYE1944-BLK1	ND	ug/L	0.10	0.030	
Indeno[1,2,3-cd]pyrene	BYE1944-BLK1	ND	ug/L	0.10	0.044	
Naphthalene	BYE1944-BLK1	ND	ug/L	0.10	0.077	
Phenanthrene	BYE1944-BLK1	ND	ug/L	0.10	0.022	
Pyrene	BYE1944-BLK1	ND	ug/L	0.10	0.022	
Nitrobenzene-d5 (Surrogate)	**BYE1944-BLK1**	**96.0**	%	**40 - 130 (LCL - UCL)**		
2-Fluorobiphenyl (Surrogate)	**BYE1944-BLK1**	**83.5**	%	**50 - 120 (LCL - UCL)**		
p-Terphenyl-d14 (Surrogate)	**BYE1944-BLK1**	**108**	%	**40 - 130 (LCL - UCL)**		

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1944										
Acenaphthene	BYE1944-BS1	LCS	1.0417	1.0000	ug/L	104		60 - 110		
Acenaphthylene	BYE1944-BS1	LCS	1.1540	1.0000	ug/L	115		60 - 120		
Anthracene	BYE1944-BS1	LCS	1.2999	1.0000	ug/L	130		60 - 130		
Benzo[a]anthracene	BYE1944-BS1	LCS	1.1787	1.0000	ug/L	118		60 - 130		
Benzo[b]fluoranthene	BYE1944-BS1	LCS	0.96386	1.0000	ug/L	96.4		50 - 130		
Benzo[k]fluoranthene	BYE1944-BS1	LCS	0.96044	1.0000	ug/L	96.0		60 - 120		
Benzo[a]pyrene	BYE1944-BS1	LCS	1.1279	1.0000	ug/L	113		60 - 120		
Benzo[g,h,i]perylene	BYE1944-BS1	LCS	0.64662	1.0000	ug/L	64.7		40 - 120		
Chrysene	BYE1944-BS1	LCS	1.0778	1.0000	ug/L	108		60 - 110		
Dibenzo[a,h]anthracene	BYE1944-BS1	LCS	0.52252	1.0000	ug/L	52.3		40 - 120		
Fluoranthene	BYE1944-BS1	LCS	1.1163	1.0000	ug/L	112		60 - 120		
luorene	BYE1944-BS1	LCS	1.0753	1.0000	ug/L	108		60 - 120		
Indeno[1,2,3-cd]pyrene	BYE1944-BS1	LCS	0.95810	1.0000	ug/L	95.8		40 - 130		
Naphthalene	BYE1944-BS1	LCS	0.98243	1.0000	ug/L	98.2		60 - 110		
Phenanthrene	BYE1944-BS1	LCS	1.0560	1.0000	ug/L	106		60 - 120		
Pyrene	BYE1944-BS1	LCS	1.2831	1.0000	ug/L	128		50 - 125		L01
Nitrobenzene-d5 (Surrogate)	BYE1944-BS1	LCS	4.1563	4.0000	ug/L	104		40 - 130		
2-Fluorobiphenyl (Surrogate)	BYE1944-BS1	LCS	3.6475	4.0000	ug/L	91.2		50 - 120		
p-Terphenyl-d14 (Surrogate)	BYE1944-BS1	LCS	4.2355	4.0000	ug/L	106		40 - 130		

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10000 Ming Ave
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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1944	Used client sample: N										
Acenaphthene	MS	1511019-04	ND	1.0385	1.0000	ug/L		104		60 - 110	
	MSD	1511019-04	ND	0.97170	1.0000	ug/L	6.6	97.2	30	60 - 110	
Acenaphthylene	MS	1511019-04	ND	1.1479	1.0000	ug/L		115		60 - 120	
	MSD	1511019-04	ND	1.0806	1.0000	ug/L	6.0	108	30	60 - 120	
Anthracene	MS	1511019-04	ND	1.2398	1.0000	ug/L		124		60 - 130	
	MSD	1511019-04	ND	1.2273	1.0000	ug/L	1.0	123	30	60 - 130	
Benzo[a]anthracene	MS	1511019-04	ND	1.1837	1.0000	ug/L		118		60 - 120	
	MSD	1511019-04	ND	1.1536	1.0000	ug/L	2.6	115	30	60 - 120	
Benzo[b]fluoranthene	MS	1511019-04	ND	1.0543	1.0000	ug/L		105		50 - 130	
	MSD	1511019-04	ND	0.93643	1.0000	ug/L	11.8	93.6	30	50 - 130	
Benzo[k]fluoranthene	MS	1511019-04	ND	1.0370	1.0000	ug/L		104		60 - 120	
	MSD	1511019-04	ND	0.93481	1.0000	ug/L	10.4	93.5	30	60 - 120	
Benzo[a]pyrene	MS	1511019-04	ND	1.1659	1.0000	ug/L		117		60 - 120	
	MSD	1511019-04	ND	1.1092	1.0000	ug/L	5.0	111	30	60 - 120	
Benzo[g,h,i]perylene	MS	**1511019-04**	**ND**	**0.52410**	**1.0000**	**ug/L**		**52.4**		**40 - 120**	
	MSD	**1511019-04**	**ND**	**0.87621**	**1.0000**	**ug/L**	**50.3**	**87.6**	**30**	**40 - 120**	**Q02**
Chrysene	MS	1511019-04	ND	1.0717	1.0000	ug/L		107		60 - 110	
	MSD	1511019-04	ND	1.0134	1.0000	ug/L	5.6	101	30	60 - 110	
Dibenzo[a,h]anthracene	MS	**1511019-04**	**ND**	**0.41273**	**1.0000**	**ug/L**		**41.3**		**40 - 120**	
	MSD	**1511019-04**	**ND**	**0.77014**	**1.0000**	**ug/L**	**60.4**	**77.0**	**30**	**40 - 120**	**Q02**
Fluoranthene	MS	1511019-04	ND	1.1687	1.0000	ug/L		117		60 - 120	
	MSD	1511019-04	ND	1.1159	1.0000	ug/L	4.6	112	30	60 - 120	
Fluorene	MS	1511019-04	ND	1.0853	1.0000	ug/L		109		60 - 120	
	MSD	1511019-04	ND	1.0078	1.0000	ug/L	7.4	101	30	60 - 120	
Indeno[1,2,3-cd]pyrene	MS	1511019-04	ND	0.76369	1.0000	ug/L		76.4		40 - 130	
	MSD	1511019-04	ND	1.0074	1.0000	ug/L	27.5	101	30	40 - 130	
Naphthalene	MS	1511019-04	ND	0.98426	1.0000	ug/L		98.4		60 - 110	
	MSD	1511019-04	ND	0.90821	1.0000	ug/L	8.0	90.8	30	60 - 110	
Phenanthrene	MS	1511019-04	ND	1.0468	1.0000	ug/L		105		60 - 120	
	MSD	1511019-04	ND	0.99549	1.0000	ug/L	5.0	99.5	30	60 - 120	
Pyrene	MS	**1511019-04**	**ND**	**1.2769**	**1.0000**	**ug/L**		**128**		**50 - 125**	**Q03**
	MSD	**1511019-04**	**ND**	**1.2026**	**1.0000**	**ug/L**	**6.0**	**120**	**30**	**50 - 125**	
Nitrobenzene-d5 (Surrogate)	MS	1511019-04	ND	3.9599	4.0000	ug/L		99.0		40 - 130	
	MSD	1511019-04	ND	3.7437	4.0000	ug/L	5.6	93.6		40 - 130	
2-Fluorobiphenyl (Surrogate)	MS	1511019-04	ND	3.5087	4.0000	ug/L		87.7		50 - 120	
	MSD	1511019-04	ND	3.4307	4.0000	ug/L	2.2	85.8		50 - 120	

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10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1944	Used client sample: N										
p-Terphenyl-d14 (Surrogate)	MS	1511019-04	ND	4.2147	4.0000	ug/L		105		40 - 130	
	MSD	1511019-04	ND	4.0269	4.0000	ug/L	4.6	101		40 - 130	

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Bakersfield, CA 93311

Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1946						
TPH - Diesel (FFP)	BYE1946-BLK1	ND	ug/L	200	34	
TPH - Crude Oil	BYE1946-BLK1	ND	ug/L	500	140	
Tetracosane (Surrogate)	**BYE1946-BLK1**	**89.3**	%	**37 - 134 (LCL - UCL)**		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1946										
TPH - Diesel (FFP)	BYE1946-BS1	LCS	2018.1	2500.0	ug/L	80.7		52 - 128		
Tetracosane (Surrogate)	BYE1946-BS1	LCS	90.930	100.00	ug/L	90.9		37 - 134		

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Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1946	Used client sample: N										
TPH - Diesel (FFP)	MS	1511019-34	ND	2212.5	2500.0	ug/L		88.5		50 - 127	
	MSD	1511019-34	ND	1906.9	2500.0	ug/L	14.8	76.3	24	50 - 127	
Tetracosane (Surrogate)	MS	1511019-34	ND	100.46	100.00	ug/L		100		37 - 134	
	MSD	1511019-34	ND	90.270	100.00	ug/L	10.7	90.3		37 - 134	

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1611						
Bromide	BYE1611-BLK1	ND	mg/L	0.10	0.035	
Chloride	BYE1611-BLK1	ND	mg/L	0.50	0.061	
Nitrate as NO3	BYE1611-BLK1	ND	mg/L	0.44	0.078	
Sulfate	BYE1611-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BYE1633						
Bicarbonate Alkalinity as CaCO3	BYE1633-BLK1	ND	mg/L	4.1	4.1	
Carbonate Alkalinity as CaCO3	BYE1633-BLK1	ND	mg/L	4.1	4.1	
Hydroxide Alkalinity as CaCO3	BYE1633-BLK1	ND	mg/L	4.1	4.1	
Total Alkalinity as CaCO3	BYE1633-BLK1	ND	mg/L	4.1	4.1	
QC Batch ID: BYE1918						
Total Calcium	**BYE1918-BLK1**	**0.021040**	**mg/L**	**0.10**	**0.015**	**J**
Total Magnesium	BYE1918-BLK1	ND	mg/L	0.050	0.019	
Total Sodium	BYE1918-BLK1	ND	mg/L	0.50	0.051	
Total Potassium	**BYE1918-BLK1**	**0.34494**	**mg/L**	**1.0**	**0.13**	**J**
QC Batch ID: BYE1987						
Total Dissolved Solids @ 180 C	BYE1987-BLK1	ND	mg/L	6.7	6.7	

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1611										
Bromide	BYE1611-BS1	LCS	2.0890	2.0000	mg/L	104		90 - 110		
Chloride	BYE1611-BS1	LCS	50.930	50.000	mg/L	102		90 - 110		
Nitrate as NO3	BYE1611-BS1	LCS	22.767	22.134	mg/L	103		90 - 110		
Sulfate	BYE1611-BS1	LCS	99.037	100.00	mg/L	99.0		90 - 110		
QC Batch ID: BYE1633										
Total Alkalinity as CaCO3	BYE1633-BS3	LCS	99.950	100.00	mg/L	100		90 - 110		
QC Batch ID: BYE1918										
Total Calcium	BYE1918-BS1	LCS	10.212	10.000	mg/L	102		85 - 115		
Total Magnesium	BYE1918-BS1	LCS	10.455	10.000	mg/L	105		85 - 115		
Total Sodium	BYE1918-BS1	LCS	10.497	10.000	mg/L	105		85 - 115		
Total Potassium	BYE1918-BS1	LCS	10.568	10.000	mg/L	106		85 - 115		
QC Batch ID: BYE1987										
Total Dissolved Solids @ 180 C	BYE1987-BS1	LCS	555.00	586.00	mg/L	94.7		90 - 110		

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1611	Used client sample: N										
Bromide	DUP	1512101-01	0.16100	0.16300		mg/L	1.2		10		
	MS	1512101-01	0.16100	2.0828	2.0202	mg/L		95.1		80 - 120	
	MSD	1512101-01	0.16100	2.0970	2.0202	mg/L	0.7	95.8	10	80 - 120	
Chloride	DUP	1512101-01	26.902	26.855		mg/L	0.2		10		
	MS	1512101-01	26.902	78.272	50.505	mg/L		102		80 - 120	
	MSD	1512101-01	26.902	78.426	50.505	mg/L	0.2	102	10	80 - 120	
Nitrate as NO3	DUP	1512101-01	14.356	14.197		mg/L	1.1		10		
	MS	1512101-01	14.356	35.553	22.358	mg/L		94.8		80 - 120	
	MSD	1512101-01	14.356	35.651	22.358	mg/L	0.3	95.2	10	80 - 120	
Sulfate	DUP	1512101-01	90.864	90.965		mg/L	0.1		10		
	MS	1512101-01	90.864	187.90	101.01	mg/L		96.1		80 - 120	
	MSD	1512101-01	90.864	187.98	101.01	mg/L	0.0	96.1	10	80 - 120	
QC Batch ID: BYE1633	Used client sample: N										
Bicarbonate Alkalinity as CaCO3	DUP	1512164-01	429.93	402.24		mg/L	6.7		10		
Carbonate Alkalinity as CaCO3	DUP	1512164-01	ND	ND		mg/L			10		
Hydroxide Alkalinity as CaCO3	DUP	1512164-01	ND	ND		mg/L			10		
Total Alkalinity as CaCO3	DUP	1512164-01	429.93	402.24		mg/L	6.7		10		
QC Batch ID: BYE1918	Used client sample: N										
Total Calcium	DUP	1512260-28	0.086382	0.082267		mg/L	4.9		20		J
	MS	1512260-28	0.086382	10.912	10.000	mg/L		108		75 - 125	
	MSD	1512260-28	0.086382	11.398	10.000	mg/L	4.4	113	20	75 - 125	
Total Magnesium	DUP	1512260-28	ND	ND		mg/L			20		
	MS	1512260-28	ND	11.030	10.000	mg/L		110		75 - 125	
	MSD	1512260-28	ND	10.921	10.000	mg/L	1.0	109	20	75 - 125	
Total Sodium	DUP	1512260-28	ND	ND		mg/L			20		
	MS	1512260-28	ND	11.087	10.000	mg/L		111		75 - 125	
	MSD	1512260-28	ND	11.279	10.000	mg/L	1.7	113	20	75 - 125	
Total Potassium	DUP	1512260-28	0.27414	0.22861		mg/L	18.1		20		J
	MS	1512260-28	0.27414	10.848	10.000	mg/L		106		75 - 125	
	MSD	1512260-28	0.27414	10.932	10.000	mg/L	0.8	107	20	75 - 125	
QC Batch ID: BYE1987	Used client sample: N										
Total Dissolved Solids @ 180 C	DUP	1512080-01	2630.0	2660.0		mg/L	1.1		10		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1774						
Hexavalent Chromium	BYE1774-BLK1	ND	ug/L	2.0	0.70	
QC Batch ID: BYE1792						
Total Mercury	BYE1792-BLK1	ND	ug/L	0.20	0.033	
QC Batch ID: BYE1918						
Total Antimony	BYE1918-BLK1	ND	ug/L	100	8.5	
Total Arsenic	BYE1918-BLK1	ND	ug/L	50	7.8	
Total Barium	BYE1918-BLK1	ND	ug/L	10	3.5	
Total Beryllium	BYE1918-BLK1	ND	ug/L	10	0.50	
Total Boron	**BYE1918-BLK1**	**0.051217**	**mg/L**	**0.10**	**0.013**	**J**
Total Cadmium	BYE1918-BLK1	ND	ug/L	10	1.1	
Total Chromium	BYE1918-BLK1	ND	ug/L	10	1.1	
Total Cobalt	BYE1918-BLK1	ND	ug/L	50	1.3	
Total Copper	BYE1918-BLK1	ND	ug/L	10	1.1	
Total Iron	BYE1918-BLK1	ND	mg/L	0.050	0.030	
Total Lead	BYE1918-BLK1	ND	ug/L	50	4.0	
Total Lithium	BYE1918-BLK1	ND	mg/L	0.020	0.0062	
Total Manganese	BYE1918-BLK1	ND	mg/L	0.010	0.0040	
Total Molybdenum	BYE1918-BLK1	ND	ug/L	50	1.2	
Total Nickel	BYE1918-BLK1	ND	ug/L	10	2.0	
Total Selenium	BYE1918-BLK1	ND	ug/L	100	15	
Total Silver	BYE1918-BLK1	ND	ug/L	10	1.9	
Total Strontium	BYE1918-BLK1	ND	mg/L	0.010	0.0010	
Total Thallium	BYE1918-BLK1	ND	ug/L	100	24	
Total Vanadium	BYE1918-BLK1	ND	ug/L	10	2.2	
Total Zinc	**BYE1918-BLK1**	**4.4850**	**ug/L**	**50**	**2.3**	**J**
QC Batch ID: BYE2030						
Total Recoverable Uranium	BYE2030-BLK1	ND	pCi/L	0.67	0.067	

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Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1774										
Hexavalent Chromium	BYE1774-BS1	LCS	49.989	50.000	ug/L	100		85 - 115		
QC Batch ID: BYE1792										
Total Mercury	BYE1792-BS1	LCS	0.99250	1.0000	ug/L	99.2		85 - 115		
QC Batch ID: BYE1918										
Total Antimony	BYE1918-BS1	LCS	398.94	400.00	ug/L	99.7		85 - 115		
Total Arsenic	BYE1918-BS1	LCS	190.73	200.00	ug/L	95.4		85 - 115		
Total Barium	BYE1918-BS1	LCS	432.17	400.00	ug/L	108		85 - 115		
Total Beryllium	BYE1918-BS1	LCS	200.13	200.00	ug/L	100		85 - 115		
Total Boron	BYE1918-BS1	LCS	1.0948	1.0000	mg/L	109		85 - 115		
Total Cadmium	BYE1918-BS1	LCS	202.66	200.00	ug/L	101		85 - 115		
Total Chromium	BYE1918-BS1	LCS	204.27	200.00	ug/L	102		85 - 115		
otal Cobalt	BYE1918-BS1	LCS	197.92	200.00	ug/L	99.0		85 - 115		
Total Copper	BYE1918-BS1	LCS	385.36	400.00	ug/L	96.3		85 - 115		
Total Iron	BYE1918-BS1	LCS	1.0886	1.0000	mg/L	109		85 - 115		
Total Lead	BYE1918-BS1	LCS	404.04	400.00	ug/L	101		85 - 115		
Total Lithium	BYE1918-BS1	LCS	0.20879	0.20000	mg/L	104		85 - 115		
Total Manganese	BYE1918-BS1	LCS	0.50367	0.50000	mg/L	101		85 - 115		
Total Molybdenum	BYE1918-BS1	LCS	204.87	200.00	ug/L	102		85 - 115		
Total Nickel	BYE1918-BS1	LCS	411.46	400.00	ug/L	103		85 - 115		
Total Selenium	BYE1918-BS1	LCS	193.02	200.00	ug/L	96.5		85 - 115		
Total Silver	BYE1918-BS1	LCS	98.536	100.00	ug/L	98.5		85 - 115		
Total Strontium	BYE1918-BS1	LCS	0.51872	0.50000	mg/L	104		85 - 115		
Total Thallium	BYE1918-BS1	LCS	431.72	400.00	ug/L	108		85 - 115		
Total Vanadium	BYE1918-BS1	LCS	206.94	200.00	ug/L	103		85 - 115		
Total Zinc	BYE1918-BS1	LCS	502.74	500.00	ug/L	101		85 - 115		
QC Batch ID: BYE2030										
Total Recoverable Uranium	BYE2030-BS1	LCS	24.024	26.800	pCi/L	89.6		85 - 115		

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Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1774	Used client sample: Y - Description: BL24 Tow Pond 12, 05/18/2015 11:34										
Hexavalent Chromium	DUP	1512124-01	ND	ND		ug/L			10		
	MS	1512124-01	ND	247.96	263.16	ug/L		94.2		85 - 115	
	MSD	1512124-01	ND	246.48	263.16	ug/L	0.6	93.7	10	85 - 115	
QC Batch ID: BYE1792	Used client sample: N										
Total Mercury	DUP	1512245-01	0.12250	0.10250		ug/L	17.8		20		J
	MS	1512245-01	0.12250	1.0500	1.0000	ug/L		92.8		70 - 130	
	MSD	1512245-01	0.12250	1.0550	1.0000	ug/L	0.5	93.2	20	70 - 130	
QC Batch ID: BYE1918	Used client sample: N										
Total Antimony	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	411.94	400.00	ug/L		103		75 - 125	
	MSD	1512260-28	ND	428.75	400.00	ug/L	4.0	107	20	75 - 125	
Total Arsenic	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	202.74	200.00	ug/L		101		75 - 125	
	MSD	1512260-28	ND	211.04	200.00	ug/L	4.0	106	20	75 - 125	
Total Barium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	453.29	400.00	ug/L		113		75 - 125	
	MSD	1512260-28	ND	451.23	400.00	ug/L	0.5	113	20	75 - 125	
Total Beryllium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	208.23	200.00	ug/L		104		75 - 125	
	MSD	1512260-28	ND	215.32	200.00	ug/L	3.3	108	20	75 - 125	
Total Boron	DUP	**1512260-28**	**0.055543**	**0.042400**		**mg/L**	**26.8**		**20**		**J,A02**
	MS	**1512260-28**	**0.055543**	**1.1062**	**1.0000**	**mg/L**		**105**		**75 - 125**	
	MSD	**1512260-28**	**0.055543**	**1.1533**	**1.0000**	**mg/L**	**4.2**	**110**	**20**	**75 - 125**	
Total Cadmium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	211.69	200.00	ug/L		106		75 - 125	
	MSD	1512260-28	ND	224.13	200.00	ug/L	5.7	112	20	75 - 125	
Total Chromium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	211.44	200.00	ug/L		106		75 - 125	
	MSD	1512260-28	ND	220.02	200.00	ug/L	4.0	110	20	75 - 125	
Total Cobalt	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	206.78	200.00	ug/L		103		75 - 125	
	MSD	1512260-28	ND	218.05	200.00	ug/L	5.3	109	20	75 - 125	
Total Copper	DUP	1512260-28	2.2946	2.0769		ug/L	10.0		20		J
	MS	1512260-28	2.2946	401.24	400.00	ug/L		99.7		75 - 125	
	MSD	1512260-28	2.2946	418.56	400.00	ug/L	4.2	104	20	75 - 125	
Total Iron	DUP	1512260-28	0.047723	0.050511		mg/L	5.7		20		
	MS	1512260-28	0.047723	1.1917	1.0000	mg/L		114		75 - 125	
	MSD	1512260-28	0.047723	1.1837	1.0000	mg/L	0.7	114	20	75 - 125	

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Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1918	Used client sample: N										
Total Lead	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	422.26	400.00	ug/L		106		75 - 125	
	MSD	1512260-28	ND	446.35	400.00	ug/L	5.5	112	20	75 - 125	
Total Lithium	DUP	1512260-28	ND	ND		mg/L			20		
	MS	1512260-28	ND	0.22063	0.20000	mg/L		110		75 - 125	
	MSD	1512260-28	ND	0.22824	0.20000	mg/L	3.4	114	20	75 - 125	
Total Manganese	DUP	1512260-28	ND	ND		mg/L			20		
	MS	1512260-28	ND	0.52541	0.50000	mg/L		105		75 - 125	
	MSD	1512260-28	ND	0.54478	0.50000	mg/L	3.6	109	20	75 - 125	
Total Molybdenum	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	215.96	200.00	ug/L		108		75 - 125	
	MSD	1512260-28	ND	229.18	200.00	ug/L	5.9	115	20	75 - 125	
Total Nickel	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	425.99	400.00	ug/L		106		75 - 125	
	MSD	1512260-28	ND	442.73	400.00	ug/L	3.9	111	20	75 - 125	
Total Selenium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	202.26	200.00	ug/L		101		75 - 125	
	MSD	1512260-28	ND	222.53	200.00	ug/L	9.5	111	20	75 - 125	
Total Silver	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	102.67	100.00	ug/L		103		75 - 125	
	MSD	1512260-28	ND	104.56	100.00	ug/L	1.8	105	20	75 - 125	
Total Strontium	DUP	1512260-28	ND	ND		mg/L			20		
	MS	1512260-28	ND	0.54376	0.50000	mg/L		109		75 - 125	
	MSD	1512260-28	ND	0.55301	0.50000	mg/L	1.7	111	20	75 - 125	
Total Thallium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	441.16	400.00	ug/L		110		75 - 125	
	MSD	1512260-28	ND	473.95	400.00	ug/L	7.2	118	20	75 - 125	
Total Vanadium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	214.79	200.00	ug/L		107		75 - 125	
	MSD	1512260-28	ND	222.51	200.00	ug/L	3.5	111	20	75 - 125	
Total Zinc	DUP	1512260-28	4.8990	4.6892		ug/L	4.4		20		J
	MS	1512260-28	4.8990	528.59	500.00	ug/L		105		75 - 125	
	MSD	1512260-28	4.8990	533.42	500.00	ug/L	0.9	106	20	75 - 125	
QC Batch ID: BYE2030	Used client sample: N										
Total Recoverable Uranium	DUP	1512029-01	ND	0.067000		pCi/L			20		J
	MS	1512029-01	ND	26.103	26.800	pCi/L		97.4		70 - 130	
	MSD	1512029-01	ND	26.068	26.800	pCi/L	0.1	97.3	20	70 - 130	

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BSK Associates Engineers & Laboratories
BSK Associates Fresno
1414 Stanislaus St
Fresno, CA93706
559-497-2888 (Main)
559-485-6935 (FAX)

A5E1793
5/22/2015
Invoice: A510593

Kerrie Vaughan
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308

RE: Report for A5E1793 General: Project Manager-Kerrie Vaughan

Dear Kerrie Vaughan,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 5/20/2015. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2009 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

If additional clarification of any information is required, please contact your Project Manager, Stephane Maupas , at (800) 877-8310 or (559) 497-2888 x212.

Thanks again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Stephane Maupas, Project Manager

NELAP ACCREDITED TNI LABORATORY

Accredited in Accordance with NELAP
ORELAP #4021

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BSK Associates Engineers & Laboratories

A5E1793

General: Project Manager-Kerrie Vaughan

Case Narrative

Project and Report Details		Invoice Details	
Client:	BC Laboratories	**Invoice To:**	BC Laboratories
Report To:	Kerrie Vaughan	**Invoice Attn:**	Kerrie Vaughan
Project #:	1512125	**Project PO#:**	-
Received:	5/20/2015 - 15:41		
Report Due:	5/27/2015		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 4.1

Containers Intact
COC/Labels Agree
Received On Wet Ice
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

None applied

Report Distribution

Recipient(s)	Report Format	CC:
Kerrie Vaughan	FINAL.RPT	

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BSK Associates Engineers & Laboratories

A5E1793

General: Project Manager-Kerrie Vaughan

1512125

Certificate of Analysis

Sample ID: A5E1793-01
Sampled By: Client
Sample Description: 1512125-01

Sample Date - Time: 05/18/15 - 09:50
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505821	05/21/15	05/22/15	
1.65 Sigma Uncertainty		0.156	±				
MDA95		536	pCi/L				

A5E1793 FINAL 05222015 1728
Printed: 05/22/2015
QA-RP-0001-10 Final.rpt

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BSK Associates Engineers & Laboratories

A5E1793

General: Project Manager-Kerrie Vaughan

1512125

Certificate of Analysis

Sample ID: A5E1793-02
Sampled By: Client
Sample Description: 1512125-02

Sample Date - Time: 05/18/15 - 10:14
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505621	05/21/15	05/22/15	
1.65 Sigma Uncertainty		0.156	±				
MDA95		536	pCi/L				

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BSK Associates Engineers & Laboratories

A5E1793

General: Project Manager-Kerrie Vaughan

1512125

Certificate of Analysis

Sample ID: A5E1793-03
Sampled By: Client
Sample Description: 1512125-03

Sample Date - Time: 05/18/15 - 13:44
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505621	05/21/15	05/22/15	
1.65 Sigma Uncertainty		0.110	±				
MDA95		536	pCi/L				

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BSK Associates Engineers & Laboratories

A5E1793

General: Project Manager-Kerrie Vaughan

BSK Associates Fresno

Radiological Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 00-02 - Quality Control											
Batch: A505621										Prepared: 05/21/2015	
Prep Method: EPA 00-02										Analyst: SAB	
Blank (A505621-BLK1)											
1.65 Sigma Uncertainty	ND		±							05/22/15	
Gross Alpha	ND	3	pCi/L							05/22/15	
MDA95	ND	0.00	pCi/L							05/22/15	
Blank Spike (A505621-BS1)											
Gross Alpha	25.8	3	pCi/L	30		86	80-120			05/22/15	
Blank Spike Dup (A505621-BSD1)											
Gross Alpha	31.9	3	pCi/L	30		106	80-120	21	50	05/22/15	
Matrix Spike (A505621-MS1), Source: A5E1173-01											
Gross Alpha	93.0	3	pCi/L	120	5.11	73	70-130			05/22/15	
Matrix Spike (A505621-MS2), Source: A5E1299-01											
Gross Alpha	104	3	pCi/L	120	17.4	72	70-130			05/22/15	
Matrix Spike Dup (A505621-MSD1), Source: A5E1173-01											
Gross Alpha	97.1	3	pCi/L	120	5.11	77	70-130	4	50	05/22/15	
Matrix Spike Dup (A505621-MSD2), Source: A5E1299-01											
Gross Alpha	136	3	pCi/L	120	17.4	99	70-130	26	50	05/22/15	

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BSK Associates Engineers & Laboratories

A5E1793

General: Project Manager-Kerrie Vaughan

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method , all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected at RL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	Picocuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent Recovered (surrogates)	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit		

Please see the individual Subcontract Lab's report for applicable certifications.

BSK is not accredited under the NELAC program for the following parameters: **NA**

Certifications: Please refer to our website for a copy of our Accredited Fields of Testing under each certification.

Fresno

State of California - ELAP	1180	State of Hawaii	4021
State of Nevada	CA000792015-1	State of Oregon - NELAC	4021
EPA - UCMR3	CA00079	State of Washington	C997-15

Sacramento

State of California - ELAP	2435

Vancouver

State of Oregon - NELAC	WA100008	State of Washington	C824-14a

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A5E1793

05202015

BCLab4911

Turnaround: Standard
Due Date: 5/26/2015

BC Laboratories

Printed: 5/20/1

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4.1

SUBCONTRACT ORDER
BC Laboratories
1512125

A5E1793 05/20/2015
BCLab4911 3

SENDING LABORATORY:

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911
FAX: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY:

BSK Analytical Labs
1414 Stanislaus Street
Fresno, CA 93706
Phone: (800) 877-8310
FAX: (559) 485-6935

Analysis	Due	Expires	Comments
Sample ID: 1512125-01	**Water**	**Sampled: 05/18/15 09:50**	
EPA 900.0 Gross Alpha	05/26/15 17:00	11/15/15 09:50	
Containers supplied:			
Sample ID: 1512125-02	**Water**	**Sampled: 05/18/15 10:14**	
EPA 900.0 Gross Alpha	05/26/15 17:00	11/15/15 10:14	
Containers supplied:			
Sample ID: 1512125-03	**Water**	**Sampled: 05/18/15 13:44**	
EPA 900.0 Gross Alpha	05/26/15 17:00	11/15/15 13:44	
Containers supplied:			

3-DAY TAT
STM 5.20.15

Meagan Boyd 5/20/15
Released By Date

Received By 5-20-15
Date

5-20-15
Released By Date

John Her 5/20/15 15:40
Received By Date

Page 9 of 10

BSKSA

ons wet

Page 1 of 1

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BSK Associates SR-FL-0002-13

A5E1793 05/20/2015
BCLab4911 3

Sample Integrity

BSK Bottles: Yes (No) Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 10°C	(Yes) No NA	Were correct containers and preservatives received for the tests requested?	(Yes) No NA
If samples were taken today, is there evidence that chilling has begun?	Yes No (NA)	Were there bubbles in the VOA vials? (Volatiles Only)	Yes No (NA)
Did all bottles arrive unbroken and intact?	(Yes) No	Was a sufficient amount of sample received?	(Yes) No
Did all bottle labels agree with COC?	(Yes) No	Do samples have a hold time <72 hours?	Yes (No)
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes No (NA)	Was PM notified of discrepancies? PM: By/Time:	Yes No (NA)

Bottles Received "_" means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V)	Checks	Passed?	1-3					
Bact $Na_2S_2O_3$	—	—						
None (P) White Cap	—	—						
Cr6 (P) Bc. Green Label $NH_4OH(NH_4)_2SO_4$ DW	Cl, pH > 8	Y N						
Cr6 (P) Pink Label Hex Chrome Buffer DW	pH 9-9.5	Y N						
Cr6 (P) Pink Label Hex Chrome Buffer WW	pH 9.3-9.7	Y N						
HNO_3 (P) Red Cap	—	—	1C					
H_2SO_4 (P) or (AG) Yellow Cap/Label	pH < 2	Y N						
NaOH (P) Green Cap	Cl, pH >10	Y N						
NaOH + ZnAc (P)	pH > 9	Y N			JH			
Dissolved Oxygen 300ml (g)	—	—			5/22/15			
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—						
HCl (AG) Lt. Blue Label O&G, Diesel	—	—						
$Na_2O_3S_2$+HCl (AG) Lt. Pink Label 525	—	—						
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—						
$Na_2S_2O_3$ (AG) Blue Label 547,515,548,TRM,524	—	—						
$Na_2S_2O_3$ (CG) Blue Label 504, 505	—	—						
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	Y N						
NH_4Cl (AG) Purple Label 552	—	—						
EDA (AG) Brown Label DBPs	—	—						
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—						
Buffer pH 4 (CG)	—	—						
None (CG)	—	—						
H_3PO_4 (CG) Salmon Label	—	—						
Other:								
Asbestos 1Liter Plastic w/ Foil	—	—						
Low Level Hg / Metals Double Baggie	—	—						
Bottled Water	—	—						
Clear Glass Jar: 250 / 500 / 1 Liter	—	—						
Soil Tube Brass / Steel / Plastic	—	—						
Tedlar Bag / Plastic Bag	—	—						

Split

	Container	Preservative	Date/Time/Initials		Container	Preservative	Date/Time/Initials
S P				S P			
S P				S P			

Comments

Labeled by: JHS @ 17:15 Labels checked by: JK @ 7/16 RUSH Paged by: @

Page 10 of 10

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 03, 2015

Ms. Kerrie Vaughan
BC Laboratories
4100 Atlas Ct.
Bakersfield, CA 93308

RE: Project: 1512125
Pace Project No.: 30148650

Dear Ms. Vaughan:
Enclosed are the analytical results for sample(s) received by the laboratory on May 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carin A Ferris

Carin Ferris
carin.ferris@pacelabs.com
Project Manager

Enclosures

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 1512125
Pace Project No.: 30148650

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: PA014572014-4
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: 1512125
Pace Project No.: 30148650

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30148650001	1512125-01	Water	05/18/15 09:50	05/21/15 10:00
30148650002	1512125-02	Water	05/18/15 10:14	05/21/15 10:00
30148650003	1512125-03	Water	05/18/15 13:44	05/21/15 10:00

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 1512125
Pace Project No.: 30148650

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30148650001	1512125-01	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30148650002	1512125-02	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30148650003	1512125-03	EPA 903.1	JC2	1
		EPA 904.0	JLW	1

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(724)850-5600

PROJECT NARRATIVE

Project: 1512125
Pace Project No.: 30148650

Method: EPA 903.1
Description: 903.1 Radium 226
Client: BC Laboratories
Date: June 03, 2015

General Information:
3 samples were analyzed for EPA 903.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: 1512125
Pace Project No.: 30148650

Method: EPA 904.0
Description: 904.0 Radium 228
Client: BC Laboratories
Date: June 03, 2015

General Information:
3 samples were analyzed for EPA 904.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1512125
Pace Project No.: 30148650

Sample: 1512125-01 **Lab ID: 30148650001** Collected: 05/18/15 09:50 Received: 05/21/15 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample collection dates and times were not present on the sample containers.
• Upon receipt at the laboratory, 9 mls of nitric acid were added to the 1 Liter sample container to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
• Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**31.6 ± 16.0 (17.3) C:NA T:76%**	pCi/L	06/01/15 11:51	13982-63-3	
Radium-228	EPA 904.0	**9.19 ± 5.95 (11.2) C:83% T:66%**	pCi/L	06/01/15 16:57	15262-20-1	

Sample: 1512125-02 **Lab ID: 30148650002** Collected: 05/18/15 10:14 Received: 05/21/15 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample collection dates and times were not present on the sample containers.
• Upon receipt at the laboratory, 9 mls of nitric acid were added to the 1 Liter sample container to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
• Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**44.3 ± 13.1 (10.0) C:NA T:69%**	pCi/L	06/01/15 12:40	13982-63-3	
Radium-228	EPA 904.0	**10.0 ± 7.20 (14.1) C:82% T:72%**	pCi/L	06/01/15 16:57	15262-20-1	

Sample: 1512125-03 **Lab ID: 30148650003** Collected: 05/18/15 13:44 Received: 05/21/15 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample collection dates and times were not present on the sample containers.
• Upon receipt at the laboratory, 9 mls of nitric acid were added to the 1 Liter sample container to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
• Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**38.3 ± 13.3 (2.89) C:NA T:80%**	pCi/L	06/01/15 13:00	13982-63-3	
Radium-228	EPA 904.0	**23.2 ± 16.2 (31.2) C:80% T:66%**	pCi/L	06/01/15 16:58	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512125
Pace Project No.: 30148650

QC Batch: RADC/24590 Analysis Method: EPA 903.1
QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226
Associated Lab Samples: 30148650001, 30148650002, 30148650003

METHOD BLANK: 898955 Matrix: Water
Associated Lab Samples: 30148650001, 30148650002, 30148650003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.167 ± 0.464 (0.900) C:NA T:90%	pCi/L	06/01/15 11:42	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512125
Pace Project No.: 30148650

QC Batch: RADC/24592 Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228
Associated Lab Samples: 30148650001, 30148650002, 30148650003

METHOD BLANK: 898957 Matrix: Water
Associated Lab Samples: 30148650001, 30148650002, 30148650003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.000 ± 0.379 (0.842) C:85% T:85%	pCi/L	06/01/15 17:02	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 1512125
Pace Project No.: 30148650

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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SUBCONTRACT ORDER
BC Laboratories
1512125

RUSH!

SENDING LABORATORY:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911
FAX: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY:
PACE Analytical
1638 Roseytown Road, Ste 2,3 &4
Greensburg, PA 15601
Phone: (724) 850-5600
FAX: (724) 850-5601

PACEA
30148650

Analysis		Due	Expires	Comments
Sample ID: 1512125-01	**Water**	**Sampled: 05/18/15 09:50**		001
EPA 903.1 Radium 226		05/26/15 17:00	11/15/15 09:50	
EPA 904.0 Radium 228		05/26/15 17:00	11/15/15 09:50	
Containers supplied:				
Sample ID: 1512125-02	**Water**	**Sampled: 05/18/15 10:14**		002
EPA 903.1 Radium 226		05/26/15 17:00	11/15/15 10:14	
EPA 904.0 Radium 228		05/26/15 17:00	11/15/15 10:14	
Containers supplied:				
Sample ID: 1512125-03	**Water**	**Sampled: 05/18/15 13:44**		003
EPA 903.1 Radium 226		05/26/15 17:00	11/15/15 13:44	
EPA 904.0 Radium 228		05/26/15 17:00	11/15/15 13:44	
Containers supplied:				

Meygan Boyles 5/20/15 — Alma R Ruiz Pace 5/21/15 0900
Released By — Date — Received By — Date

1000

Released By — Date — Received By — Date

PACEA

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Page 1 of 1

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Sample Condition Upon Receipt

Pace Analytical

Client Name: BC Labs Project # 30148650

Courier: ☐ Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 1Z9653760160358179

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no Biological Tissue is Frozen: Yes No

Packing Material: Bubble Wrap ✓ Bubble Bags ___ None ___ Other _____

Thermometer Used N/A Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temp.: Observed Temp.: N/A °C Correction Factor: N/A °C Final Temp: N/A °C

Date and initials of person examining contents: ARM 5/21/15

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☑Yes ☐No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8. Low volume
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☑No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: WT	☐Yes ☑No ☐N/A	12. No date/time on 500 mL bottles or on sample 002 1L bottle.
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13. Added 9 mL HNO_3 to 1L Rad bottles. pH<2. ARM 5/21/15 1100
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☑No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, Phenols	☐Yes ☑No	Initial when completed ARM Lot # of added preservative DL15-0433
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Carol Ferris **Date:** 5/21/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

J:\QAQC\Master\Document Management\Sample Mgt\SCURF\FALLC003-09 SCUR Front 3March2015 Page 12 of 13

										001 + 003		Item No.
										WT + WT		Matrix Code
												Glass Jar (120 / 250 / 500 / 1L)
												Soil kit (2 SB, 1M, soil jar)
												Chemistry (250 / 500 / 1L)
												Organics (1L)
												Nutrient (250 / 500)
												Phenolics (250 ml)
												TOC (40 ml / 250 ml)
												TOX (250 ml)
												Total Metals
												Dissolved Metals preserved Y N
												O & G (1L)
												TPH (1L)
												VOA (40 ml 30 ml)
												Cyanide (250 ml)
												Sulfide (500 ml)
												Bacteria (120 ml)
												Wipes / swipe/ smear/ filter
											1-1L 1-500	Radchem Nalgene (125 / 250 / 500 / 1L)
												Radchem Nalgene (1/2 gal. / 1 gal.L)
												Cubitainer (500 ml / 4L)
												Ziploc
												Other
												Other

Pace Analytical

page 2

Project Number: 30148650

Client Name: BC labs

SCURF Back (C016-4 15May2012).xls

Page 13 of 13

Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:34
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.
A02	The difference between duplicate readings is less than the quantitation limit.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
L01	The Laboratory Control Sample Water (LCSW) recovery is not within laboratory established control limits.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.
Z1	50 ul of antifoam added to the sample to avoid foaming of the sample.

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BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 06/03/2015

Rod Bowyer

Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Client Project:	[none]
BCL Project:	Oilfield Produced Water Pond Testing
BCL Work Order:	1512259
Invoice ID:	B204799

Enclosed are the results of analyses for samples received by the laboratory on 5/19/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Kerrie Vaughan
Client Services

Authorized Signature

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Laboratory Control Sample 16
Precision and Accuracy 17

Total Petroleum Hydrocarbons

Method Blank Analysis 19
Laboratory Control Sample 20
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Water Analysis (General Chemistry)

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Metals Analysis

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BC Laboratories, Inc.

Chain of Custody Form

Report To:
Client: Aera
Attn: Rod Bowyer
Street Address:
City, State, Zip:
Phone: Fax:
Email Address:
Work Order #: 15-12259

Project #:
Project Name:
Sampler(s): J. Enriquez

Analysis Requested

Please refer to the back of this page for completion instructions and method legend.

Page ___ of ___

Comments:

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

Sample #	Description	Date Sampled	Time Sampled	RJCE See Attached	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
-1	BL 22 DTR POND 10 ②	5/19/15	1444	X					X		5	

CHK BY DISTRIBUTION SUB OUT

SHORT HOLDING TIME: Cr^{+6} NO_2 NO_3 OP SS JO Cl_2 BOD MBAS COT

Billing ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? Geotracker ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)
System # (Needed for EDT)

	Date	Time		Date	Time
1. Relinquished By: J. Enriquez	5/19/15	1720	1. Received By: Kathleen Bruce	5/19/15	1720
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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15-12125 15-12259
K185/19/15

BC LABORATORIES, INC
4100 Atlas Ct. Bakersfield, Ca. 93308 Tel: (800) 878 - 4911 Website: www.bclabs.com

Aera - OIL FIELD PRODUCED WATER POND TESTING

CALIFORNIA WATER CODE DIRECTIVE PURSUANT TO SECTION 13267
CHARACTERIZATION OF WASTEWATER FOR DISCHARGE

Collect representative samples of wastewater within each of the ponds. Samples must be analyzed in accordance with the water quality analysis and reporting requirements contained in Attachment B to this Order;[1]

List of Analyses as per Attachment B

- √ **A.** Total Dissolved Solids
- √ **B.** Metals, CCR title 22, section 66261.24. subdivision (a)(2)(A) (antimony, arsenic, barium, beryllium, cadmium, chromium, chromium (VI), cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc)
- √ **C.** benzene, toluene, ethylbenzene, xylenes
- √ **D.** Total Petroleum Hydrocarbons as Crude Oil
- √ **E.** Polynuclear Aromatic Hydrocarbons (PAH)
- **F.** Radionuclides (Radium226, Radium 228, Gross Alpha, Uranium)
- √ **G.** Major and Minor Cations (sodium, potassium, magnesium, calcium)
- √ **H.** Major and Minor Anions (nitrate, chloride, sulfate, carbonate, bicarbonate, bromide)
- √ **I.** Trace Elements (lithium, strontium, boron, iron, manganese)

Total Price $624

Electronic results available as an Excel spreadsheet upon request.

Field Service

Sampling	$50 per hour
Vehicle	$0.60 per mile

[1] All previously obtained analytical data for oil field produced wastewater samples collected at the Facility, if any, with a description of the source and location for each analysis may be submitted in the alternative for re-running tests if the sample(s) was collected and analyzed within 12 months (one year) of the date of this order.

4100 Atlas Ct. Bakersfield, CA 93308 (800) 878-4911 www.bclabs.com

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Chain of Custody and Cooler Receipt Form for 1512259 Page 3 of 3

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 Of 1

Submission #: 15-12259

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☐ BC Lab Field Service ☒ Other ☐ (Specify)_____	Ice Chest ☒ None ☐ Box ☐ Other ☐ (Specify)_____	YES ☐ NO ☐

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Amber Thermometer ID: 208 Date/Time: 5/19/15

Temperature: (A) ~~1.9~~ 1.9 °C / (C) 2.0 °C Analyst Init: KHB 1705

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	C									
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	DEF									
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AB									
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M	G									
QT AMBER 8270	H									
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:

Sample Numbering Completed By: KHB Date/Time: 5/19/15 1704

A = Actual / C = Corrected

[S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1512259-01	**COC Number:**	—	**Receive Date:**	05/19/2015 17:20
	Project Number:	—	**Sampling Date:**	05/19/2015 14:44
	Sampling Location:	—	**Sample Depth:**	—
	Sampling Point:	BL22 DTR POND 10	**Lab Matrix:**	Water
	Sampled By:	Juan Enriquez	**Sample Type:**	Wastewater

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512259-01 | **Client Sample Name:** BL22 DTR POND 10, 5/19/2015 2:44:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	25	4.2	EPA-8260B	ND	A01,Z1	1
Ethylbenzene	ND	ug/L	25	4.9	EPA-8260B	ND	A01,Z1	1
Toluene	ND	ug/L	25	4.6	EPA-8260B	ND	A01,Z1	1
Total Xylenes	ND	ug/L	50	18	EPA-8260B	ND	A01,Z1	1
p- & m-Xylenes	ND	ug/L	25	14	EPA-8260B	ND	A01,Z1	1
o-Xylene	ND	ug/L	25	4.1	EPA-8260B	ND	A01,Z1	1
1,2-Dichloroethane-d4 (Surrogate)	93.1	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	94.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	106	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 05:43	SE1	MS-V12	50	BYE2090

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512259-01 | **Client Sample Name:** BL22 DTR POND 10, 5/19/2015 2:44:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**0.42**	**ug/L**	**0.19**	**0.11**	**EPA-8270C-SIM**	ND		1
Acenaphthylene	**0.25**	**ug/L**	**0.19**	**0.091**	**EPA-8270C-SIM**	ND		1
Anthracene	ND	ug/L	0.19	0.033	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	ND	ug/L	0.19	0.050	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.19	0.078	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.19	0.099	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.19	0.050	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.19	0.083	EPA-8270C-SIM	ND		1
Chrysene	ND	ug/L	0.19	0.043	EPA-8270C-SIM	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.19	0.085	EPA-8270C-SIM	ND		1
Fluoranthene	ND	ug/L	0.19	0.023	EPA-8270C-SIM	ND		1
Fluorene	**0.21**	**ug/L**	**0.19**	**0.058**	**EPA-8270C-SIM**	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.19	0.085	EPA-8270C-SIM	ND		1
Naphthalene	**0.16**	**ug/L**	**0.19**	**0.15**	**EPA-8270C-SIM**	ND	J	1
Phenanthrene	**0.20**	**ug/L**	**0.19**	**0.043**	**EPA-8270C-SIM**	ND		1
Pyrene	ND	ug/L	0.19	0.043	EPA-8270C-SIM	ND		1
Nitrobenzene-d5 (Surrogate)	134	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1
2-Fluorobiphenyl (Surrogate)	89.0	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	81.2	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/22/15	05/27/15 12:49	MK1	MS-B4	1.940	BYE2168

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512259-01 | **Client Sample Name:** BL22 DTR POND 10, 5/19/2015 2:44:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**23000**	**ug/L**	**2000**	**560**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	77.8	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/22/15	05/27/15 13:26	MWB	GC-13	4	BYE2282

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10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512259-01 | **Client Sample Name:** BL22 DTR POND 10, 5/19/2015 2:44:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**9.1**	**mg/L**	**2.0**	**0.30**	**EPA-6010B**	0.42	**A07**	1
Total Magnesium	**4.6**	**mg/L**	**1.0**	**0.38**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**12000**	**mg/L**	**10**	**1.0**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**210**	**mg/L**	**20**	**2.6**	**EPA-6010B**	6.9	**A07**	1
Bicarbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Carbonate Alkalinity as CaCO3	**2000**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Hydroxide Alkalinity as CaCO3	**19**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Total Alkalinity as CaCO3	**2000**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**140**	**mg/L**	**10**	**3.5**	**EPA-300.0**	ND	**A07**	3
Chloride	**18000**	**mg/L**	**50**	**6.1**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	44	7.8	EPA-300.0	ND	A07	3
Sulfate	**440**	**mg/L**	**100**	**10**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**23000**	**mg/L**	**1000**	**1000**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/21/15	05/21/15 14:21	ARD	PE-OP3	20	BYE1918
2	EPA-310.1	05/20/15	05/20/15 20:05	RML	MET-1	2	BYE1852
3	EPA-300.0	05/19/15	05/20/15 10:08	OLH	IC2	100	BYE1749
4	EPA-160.1	05/22/15	05/22/15 13:30	CAD	MANUAL	100	BYE2059

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512259-01 | **Client Sample Name:** BL22 DTR POND 10, 5/19/2015 2:44:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	2000	170	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	1000	160	EPA-6010B	500000	A07	2
Total Barium	**170**	**ug/L**	**200**	**70**	**EPA-6010B**	10000000	**J,A07**	2
Total Beryllium	ND	ug/L	200	10	EPA-6010B	75000	A07	2
Total Boron	**180**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	200	22	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	1000	26	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Iron	**5.5**	**mg/L**	**1.0**	**0.60**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	1000	80	EPA-6010B	1000000	A07	2
Total Lithium	**8.0**	**mg/L**	**0.40**	**0.12**	**EPA-6010B**		**A07**	2
Total Manganese	**0.095**	**mg/L**	**0.20**	**0.080**	**EPA-6010B**		**J,A07**	2
Total Mercury	**0.040**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000	**J**	3
Total Molybdenum	**46**	**ug/L**	**1000**	**24**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	ND	ug/L	200	40	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	2000	300	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	200	38	EPA-6010B	500000	A07	2
Total Strontium	**0.12**	**mg/L**	**0.20**	**0.020**	**EPA-6010B**		**J,A07**	2
Total Thallium	ND	ug/L	2000	480	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	200	44	EPA-6010B	2400000	A07	2
Total Zinc	**65**	**ug/L**	**1000**	**46**	**EPA-6010B**	5000000	**J,A07**	2
Total Recoverable Uranium	ND	pCi/L	13	1.3	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/20/15	05/20/15 07:04	TDC	KONE-1	5	BYE1781
2	EPA-6010B	05/21/15	05/21/15 14:21	ARD	PE-OP3	20	BYE1918
3	EPA-7470A	05/21/15	05/22/15 14:53	MEV	CETAC1	1	BYE1923
4	EPA-200.8	05/22/15	05/22/15 18:56	SRM	PE-EL2	20	BYE2030

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2090						
Benzene	BYE2090-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BYE2090-BLK1	ND	ug/L	0.50	0.098	
Toluene	BYE2090-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BYE2090-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BYE2090-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BYE2090-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	**BYE2090-BLK1**	**95.6**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BYE2090-BLK1**	**97.3**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BYE2090-BLK1**	**94.4**	%	**80 - 120 (LCL - UCL)**		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2090										
Benzene	BYE2090-BS1	LCS	25.730	25.000	ug/L	103		70 - 130		
Toluene	BYE2090-BS1	LCS	24.730	25.000	ug/L	98.9		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYE2090-BS1	LCS	9.7100	10.000	ug/L	97.1		75 - 125		
Toluene-d8 (Surrogate)	BYE2090-BS1	LCS	9.5200	10.000	ug/L	95.2		80 - 120		
4-Bromofluorobenzene (Surrogate)	BYE2090-BS1	LCS	10.280	10.000	ug/L	103		80 - 120		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2090	Used client sample: N										
Benzene	MS	1511019-37	ND	24.680	25.000	ug/L		98.7		70 - 130	
	MSD	1511019-37	ND	26.710	25.000	ug/L	7.9	107	20	70 - 130	
Toluene	MS	1511019-37	ND	23.840	25.000	ug/L		95.4		70 - 130	
	MSD	1511019-37	ND	26.160	25.000	ug/L	9.3	105	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-37	ND	9.6800	10.000	ug/L		96.8		75 - 125	
	MSD	1511019-37	ND	9.8200	10.000	ug/L	1.4	98.2		75 - 125	
Toluene-d8 (Surrogate)	MS	1511019-37	ND	9.5100	10.000	ug/L		95.1		80 - 120	
	MSD	1511019-37	ND	9.5400	10.000	ug/L	0.3	95.4		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1511019-37	ND	9.8600	10.000	ug/L		98.6		80 - 120	
	MSD	1511019-37	ND	9.7800	10.000	ug/L	0.8	97.8		80 - 120	

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10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2168						
Acenaphthene	BYE2168-BLK1	ND	ug/L	0.10	0.055	
Acenaphthylene	BYE2168-BLK1	ND	ug/L	0.10	0.047	
Anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.017	
Benzo[a]anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.026	
Benzo[b]fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.040	
Benzo[k]fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.051	
Benzo[a]pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.026	
Benzo[g,h,i]perylene	BYE2168-BLK1	ND	ug/L	0.10	0.043	
Chrysene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Dibenzo[a,h]anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.044	
Fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.012	
Fluorene	BYE2168-BLK1	ND	ug/L	0.10	0.030	
Indeno[1,2,3-cd]pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.044	
Naphthalene	BYE2168-BLK1	ND	ug/L	0.10	0.077	
Phenanthrene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Nitrobenzene-d5 (Surrogate)	**BYE2168-BLK1**	**91.8**	%	**40 - 130 (LCL - UCL)**		
2-Fluorobiphenyl (Surrogate)	**BYE2168-BLK1**	**93.1**	%	**50 - 120 (LCL - UCL)**		
p-Terphenyl-d14 (Surrogate)	**BYE2168-BLK1**	**126**	%	**40 - 130 (LCL - UCL)**		

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Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2168										
Acenaphthene	BYE2168-BS1	LCS	1.0861	1.0000	ug/L	109		60 - 110		
Acenaphthylene	BYE2168-BS1	LCS	1.2020	1.0000	ug/L	120		60 - 120		
Anthracene	BYE2168-BS1	LCS	1.2952	1.0000	ug/L	130		60 - 130		
Benzo[a]anthracene	BYE2168-BS1	LCS	1.1582	1.0000	ug/L	116		60 - 130		
Benzo[b]fluoranthene	BYE2168-BS1	LCS	1.0318	1.0000	ug/L	103		50 - 130		
Benzo[k]fluoranthene	BYE2168-BS1	LCS	1.1474	1.0000	ug/L	115		60 - 120		
Benzo[a]pyrene	BYE2168-BS1	LCS	1.1756	1.0000	ug/L	118		60 - 120		
Benzo[g,h,i]perylene	BYE2168-BS1	LCS	0.92832	1.0000	ug/L	92.8		40 - 120		
Chrysene	BYE2168-BS1	LCS	1.0666	1.0000	ug/L	107		60 - 110		
Dibenzo[a,h]anthracene	BYE2168-BS1	LCS	0.66352	1.0000	ug/L	66.4		40 - 120		
Fluoranthene	BYE2168-BS1	LCS	0.96748	1.0000	ug/L	96.7		60 - 120		
Fluorene	BYE2168-BS1	LCS	1.1357	1.0000	ug/L	114		60 - 120		
Indeno[1,2,3-cd]pyrene	BYE2168-BS1	LCS	1.1326	1.0000	ug/L	113		40 - 130		
Naphthalene	BYE2168-BS1	LCS	0.99890	1.0000	ug/L	99.9		60 - 110		
Phenanthrene	BYE2168-BS1	LCS	1.0604	1.0000	ug/L	106		60 - 120		
Pyrene	BYE2168-BS1	LCS	1.6547	1.0000	ug/L	165		50 - 125		L01
Nitrobenzene-d5 (Surrogate)	BYE2168-BS1	LCS	3.8161	4.0000	ug/L	95.4		40 - 130		
2-Fluorobiphenyl (Surrogate)	BYE2168-BS1	LCS	4.0934	4.0000	ug/L	102		50 - 120		
p-Terphenyl-d14 (Surrogate)	BYE2168-BS1	LCS	4.9744	4.0000	ug/L	124		40 - 130		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2168	Used client sample: N										
Acenaphthene	MS	**1511019-28**	**ND**	**1.1763**	**1.0000**	**ug/L**		**118**		**60 - 110**	**Q03**
	MSD	**1511019-28**	**ND**	**1.0913**	**1.0000**	**ug/L**	**7.5**	**109**	**30**	**60 - 110**	
Acenaphthylene	MS	**1511019-28**	**ND**	**1.3083**	**1.0000**	**ug/L**		**131**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1879**	**1.0000**	**ug/L**	**9.7**	**119**	**30**	**60 - 120**	
Anthracene	MS	**1511019-28**	**ND**	**1.4025**	**1.0000**	**ug/L**		**140**		**60 - 130**	**Q03**
	MSD	**1511019-28**	**ND**	**1.3073**	**1.0000**	**ug/L**	**7.0**	**131**	**30**	**60 - 130**	**Q03**
Benzo[a]anthracene	MS	**1511019-28**	**ND**	**1.2480**	**1.0000**	**ug/L**		**125**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1594**	**1.0000**	**ug/L**	**7.4**	**116**	**30**	**60 - 120**	
Benzo[b]fluoranthene	MS	1511019-28	ND	1.1310	1.0000	ug/L		113		50 - 130	
	MSD	1511019-28	ND	1.0752	1.0000	ug/L	5.1	108	30	50 - 130	
Benzo[k]fluoranthene	MS	**1511019-28**	**ND**	**1.2472**	**1.0000**	**ug/L**		**125**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1434**	**1.0000**	**ug/L**	**8.7**	**114**	**30**	**60 - 120**	
Benzo[a]pyrene	MS	**1511019-28**	**ND**	**1.2360**	**1.0000**	**ug/L**		**124**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.0911**	**1.0000**	**ug/L**	**12.5**	**109**	**30**	**60 - 120**	
Benzo[g,h,i]perylene	MS	1511019-28	ND	1.0647	1.0000	ug/L		106		40 - 120	
	MSD	1511019-28	ND	0.97751	1.0000	ug/L	8.5	97.8	30	40 - 120	
Chrysene	MS	**1511019-28**	**ND**	**1.2087**	**1.0000**	**ug/L**		**121**		**60 - 110**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1388**	**1.0000**	**ug/L**	**6.0**	**114**	**30**	**60 - 110**	**Q03**
Dibenzo[a,h]anthracene	MS	1511019-28	ND	0.78144	1.0000	ug/L		78.1		40 - 120	
	MSD	1511019-28	ND	0.69146	1.0000	ug/L	12.2	69.1	30	40 - 120	
Fluoranthene	MS	1511019-28	ND	1.0666	1.0000	ug/L		107		60 - 120	
	MSD	1511019-28	ND	1.0141	1.0000	ug/L	5.0	101	30	60 - 120	
Fluorene	MS	**1511019-28**	**ND**	**1.2329**	**1.0000**	**ug/L**		**123**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1270**	**1.0000**	**ug/L**	**9.0**	**113**	**30**	**60 - 120**	
Indeno[1,2,3-cd]pyrene	MS	1511019-28	ND	1.2781	1.0000	ug/L		128		40 - 130	
	MSD	1511019-28	ND	1.0352	1.0000	ug/L	21.0	104	30	40 - 130	
Naphthalene	MS	1511019-28	ND	1.0556	1.0000	ug/L		106		60 - 110	
	MSD	1511019-28	ND	0.99619	1.0000	ug/L	5.8	99.6	30	60 - 110	
Phenanthrene	MS	1511019-28	ND	1.1471	1.0000	ug/L		115		60 - 120	
	MSD	1511019-28	ND	1.0638	1.0000	ug/L	7.5	106	30	60 - 120	
Pyrene	MS	**1511019-28**	**ND**	**1.7749**	**1.0000**	**ug/L**		**177**		**50 - 125**	**Q03**
	MSD	**1511019-28**	**ND**	**1.6037**	**1.0000**	**ug/L**	**10.1**	**160**	**30**	**50 - 125**	**Q03**
Nitrobenzene-d5 (Surrogate)	MS	1511019-28	ND	4.0540	4.0000	ug/L		101		40 - 130	
	MSD	1511019-28	ND	3.7488	4.0000	ug/L	7.8	93.7		40 - 130	
2-Fluorobiphenyl (Surrogate)	MS	1511019-28	ND	4.3117	4.0000	ug/L		108		50 - 120	
	MSD	1511019-28	ND	3.9075	4.0000	ug/L	9.8	97.7		50 - 120	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2168	Used client sample: N										
p-Terphenyl-d14 (Surrogate)	MS	1511019-28	ND	5.3878	4.0000	ug/L		135		40 - 130	S09
	MSD	1511019-28	ND	4.9525	4.0000	ug/L	8.4	124		40 - 130	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2282						
TPH - Diesel (FFP)	BYE2282-BLK1	ND	ug/L	200	34	
TPH - Crude Oil	BYE2282-BLK1	ND	ug/L	500	140	
Tetracosane (Surrogate)	**BYE2282-BLK1**	**91.6**	%	**37 - 134 (LCL - UCL)**		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2282										
TPH - Diesel (FFP)	BYE2282-BS1	LCS	2127.6	2500.0	ug/L	85.1		52 - 128		
Tetracosane (Surrogate)	BYE2282-BS1	LCS	97.390	100.00	ug/L	97.4		37 - 134		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2282	Used client sample: N										
TPH - Diesel (FFP)	MS	1511019-59	ND	1902.7	2500.0	ug/L		76.1		50 - 127	
	MSD	1511019-59	ND	2030.1	2500.0	ug/L	6.5	81.2	24	50 - 127	
Tetracosane (Surrogate)	MS	1511019-59	ND	89.695	100.00	ug/L		89.7		37 - 134	
	MSD	1511019-59	ND	91.645	100.00	ug/L	2.2	91.6		37 - 134	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1749						
Bromide	BYE1749-BLK1	ND	mg/L	0.10	0.035	
Chloride	BYE1749-BLK1	ND	mg/L	0.50	0.061	
Nitrate as NO3	BYE1749-BLK1	ND	mg/L	0.44	0.078	
Sulfate	BYE1749-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BYE1852						
Bicarbonate Alkalinity as CaCO3	BYE1852-BLK1	ND	mg/L	4.1	4.1	
Carbonate Alkalinity as CaCO3	BYE1852-BLK1	ND	mg/L	4.1	4.1	
Hydroxide Alkalinity as CaCO3	BYE1852-BLK1	ND	mg/L	4.1	4.1	
Total Alkalinity as CaCO3	BYE1852-BLK1	ND	mg/L	4.1	4.1	
QC Batch ID: BYE1918						
Total Calcium	**BYE1918-BLK1**	**0.021040**	**mg/L**	**0.10**	**0.015**	**J**
Total Magnesium	BYE1918-BLK1	ND	mg/L	0.050	0.019	
Total Sodium	BYE1918-BLK1	ND	mg/L	0.50	0.051	
Total Potassium	**BYE1918-BLK1**	**0.34494**	**mg/L**	**1.0**	**0.13**	**J**
QC Batch ID: BYE2059						
Total Dissolved Solids @ 180 C	BYE2059-BLK1	ND	mg/L	6.7	6.7	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1749										
Bromide	BYE1749-BS1	LCS	2.1550	2.0000	mg/L	108		90 - 110		
Chloride	BYE1749-BS1	LCS	51.338	50.000	mg/L	103		90 - 110		
Nitrate as NO3	BYE1749-BS1	LCS	22.935	22.134	mg/L	104		90 - 110		
Sulfate	BYE1749-BS1	LCS	100.04	100.00	mg/L	100		90 - 110		
QC Batch ID: BYE1852										
Total Alkalinity as CaCO3	BYE1852-BS3	LCS	98.580	100.00	mg/L	98.6		90 - 110		
QC Batch ID: BYE1918										
Total Calcium	BYE1918-BS1	LCS	10.212	10.000	mg/L	102		85 - 115		
Total Magnesium	BYE1918-BS1	LCS	10.455	10.000	mg/L	105		85 - 115		
Total Sodium	BYE1918-BS1	LCS	10.497	10.000	mg/L	105		85 - 115		
Total Potassium	BYE1918-BS1	LCS	10.568	10.000	mg/L	106		85 - 115		
QC Batch ID: BYE2059										
Total Dissolved Solids @ 180 C	BYE2059-BS1	LCS	590.00	586.00	mg/L	101		90 - 110		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1749	Used client sample: N										
Bromide	DUP	**1512245-01**	**0.48300**	**0.55500**		**mg/L**	**13.9**		**10**		**A02**
	MS	**1512245-01**	**0.48300**	**3.4737**	**2.0202**	**mg/L**		**148**		**80 - 120**	**Q03**
	MSD	**1512245-01**	**0.48300**	**3.5556**	**2.0202**	**mg/L**	**2.3**	**152**	**10**	**80 - 120**	**Q03**
Chloride	DUP	1512245-01	113.78	113.44		mg/L	0.3		10		
	MS	1512245-01	113.78	167.12	50.505	mg/L		106		80 - 120	
	MSD	1512245-01	113.78	167.21	50.505	mg/L	0.1	106	10	80 - 120	
Nitrate as NO3	DUP	1512245-01	ND	ND		mg/L			10		
	MS	1512245-01	ND	23.645	22.358	mg/L		106		80 - 120	
	MSD	1512245-01	ND	23.940	22.358	mg/L	1.2	107	10	80 - 120	
Sulfate	DUP	1512245-01	2.6560	2.7300		mg/L	2.7		10		
	MS	1512245-01	2.6560	103.67	101.01	mg/L		100		80 - 120	
	MSD	1512245-01	2.6560	103.95	101.01	mg/L	0.3	100	10	80 - 120	
QC Batch ID: BYE1852	Used client sample: N										
Bicarbonate Alkalinity as CaCO3	DUP	1512262-01	487.74	481.04		mg/L	1.4		10		
Carbonate Alkalinity as CaCO3	DUP	1512262-01	ND	ND		mg/L			10		
Hydroxide Alkalinity as CaCO3	DUP	1512262-01	ND	ND		mg/L			10		
Total Alkalinity as CaCO3	DUP	1512262-01	487.74	481.04		mg/L	1.4		10		
QC Batch ID: BYE1918	Used client sample: N										
Total Calcium	DUP	1512260-28	0.086382	0.082267		mg/L	4.9		20		J
	MS	1512260-28	0.086382	10.912	10.000	mg/L		108		75 - 125	
	MSD	1512260-28	0.086382	11.398	10.000	mg/L	4.4	113	20	75 - 125	
Total Magnesium	DUP	1512260-28	ND	ND		mg/L			20		
	MS	1512260-28	ND	11.030	10.000	mg/L		110		75 - 125	
	MSD	1512260-28	ND	10.921	10.000	mg/L	1.0	109	20	75 - 125	
Total Sodium	DUP	1512260-28	ND	ND		mg/L			20		
	MS	1512260-28	ND	11.087	10.000	mg/L		111		75 - 125	
	MSD	1512260-28	ND	11.279	10.000	mg/L	1.7	113	20	75 - 125	
Total Potassium	DUP	1512260-28	0.27414	0.22861		mg/L	18.1		20		J
	MS	1512260-28	0.27414	10.848	10.000	mg/L		106		75 - 125	
	MSD	1512260-28	0.27414	10.932	10.000	mg/L	0.8	107	20	75 - 125	
QC Batch ID: BYE2059	Used client sample: N										
Total Dissolved Solids @ 180 C	DUP	1512234-02	7250.0	7300.0		mg/L	0.7		10		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1781						
Hexavalent Chromium	BYE1781-BLK1	ND	ug/L	2.0	0.70	
QC Batch ID: BYE1918						
Total Antimony	BYE1918-BLK1	ND	ug/L	100	8.5	
Total Arsenic	BYE1918-BLK1	ND	ug/L	50	7.8	
Total Barium	BYE1918-BLK1	ND	ug/L	10	3.5	
Total Beryllium	BYE1918-BLK1	ND	ug/L	10	0.50	
Total Boron	**BYE1918-BLK1**	**0.051217**	**mg/L**	**0.10**	**0.013**	**J**
Total Cadmium	BYE1918-BLK1	ND	ug/L	10	1.1	
Total Chromium	BYE1918-BLK1	ND	ug/L	10	1.1	
Total Cobalt	BYE1918-BLK1	ND	ug/L	50	1.3	
Total Copper	BYE1918-BLK1	ND	ug/L	10	1.1	
Total Iron	BYE1918-BLK1	ND	mg/L	0.050	0.030	
Total Lead	BYE1918-BLK1	ND	ug/L	50	4.0	
Total Lithium	BYE1918-BLK1	ND	mg/L	0.020	0.0062	
Total Manganese	BYE1918-BLK1	ND	mg/L	0.010	0.0040	
Total Molybdenum	BYE1918-BLK1	ND	ug/L	50	1.2	
Total Nickel	BYE1918-BLK1	ND	ug/L	10	2.0	
Total Selenium	BYE1918-BLK1	ND	ug/L	100	15	
Total Silver	BYE1918-BLK1	ND	ug/L	10	1.9	
Total Strontium	BYE1918-BLK1	ND	mg/L	0.010	0.0010	
Total Thallium	BYE1918-BLK1	ND	ug/L	100	24	
Total Vanadium	BYE1918-BLK1	ND	ug/L	10	2.2	
Total Zinc	**BYE1918-BLK1**	**4.4850**	**ug/L**	**50**	**2.3**	**J**
QC Batch ID: BYE1923						
Total Mercury	BYE1923-BLK1	ND	ug/L	0.20	0.033	
QC Batch ID: BYE2030						
Total Recoverable Uranium	BYE2030-BLK1	ND	pCi/L	0.67	0.067	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1781										
Hexavalent Chromium	BYE1781-BS1	LCS	50.695	50.000	ug/L	101		85 - 115		
QC Batch ID: BYE1918										
Total Antimony	BYE1918-BS1	LCS	398.94	400.00	ug/L	99.7		85 - 115		
Total Arsenic	BYE1918-BS1	LCS	190.73	200.00	ug/L	95.4		85 - 115		
Total Barium	BYE1918-BS1	LCS	432.17	400.00	ug/L	108		85 - 115		
Total Beryllium	BYE1918-BS1	LCS	200.13	200.00	ug/L	100		85 - 115		
Total Boron	BYE1918-BS1	LCS	1.0948	1.0000	mg/L	109		85 - 115		
Total Cadmium	BYE1918-BS1	LCS	202.66	200.00	ug/L	101		85 - 115		
Total Chromium	BYE1918-BS1	LCS	204.27	200.00	ug/L	102		85 - 115		
Total Cobalt	BYE1918-BS1	LCS	197.92	200.00	ug/L	99.0		85 - 115		
Total Copper	BYE1918-BS1	LCS	385.36	400.00	ug/L	96.3		85 - 115		
otal Iron	BYE1918-BS1	LCS	1.0886	1.0000	mg/L	109		85 - 115		
Total Lead	BYE1918-BS1	LCS	404.04	400.00	ug/L	101		85 - 115		
Total Lithium	BYE1918-BS1	LCS	0.20879	0.20000	mg/L	104		85 - 115		
Total Manganese	BYE1918-BS1	LCS	0.50367	0.50000	mg/L	101		85 - 115		
Total Molybdenum	BYE1918-BS1	LCS	204.87	200.00	ug/L	102		85 - 115		
Total Nickel	BYE1918-BS1	LCS	411.46	400.00	ug/L	103		85 - 115		
Total Selenium	BYE1918-BS1	LCS	193.02	200.00	ug/L	96.5		85 - 115		
Total Silver	BYE1918-BS1	LCS	98.536	100.00	ug/L	98.5		85 - 115		
Total Strontium	BYE1918-BS1	LCS	0.51872	0.50000	mg/L	104		85 - 115		
Total Thallium	BYE1918-BS1	LCS	431.72	400.00	ug/L	108		85 - 115		
Total Vanadium	BYE1918-BS1	LCS	206.94	200.00	ug/L	103		85 - 115		
Total Zinc	BYE1918-BS1	LCS	502.74	500.00	ug/L	101		85 - 115		
QC Batch ID: BYE1923										
Total Mercury	BYE1923-BS1	LCS	0.99750	1.0000	ug/L	99.8		85 - 115		
QC Batch ID: BYE2030										
Total Recoverable Uranium	BYE2030-BS1	LCS	24.024	26.800	pCi/L	89.6		85 - 115		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1781	Used client sample: Y - Description: Well #7310F-2, API #04030-52549, 05/19/2015 08:33										
Hexavalent Chromium	DUP	**1512255-01**	**ND**	**ND**		**ug/L**			**10**		
	MS	**1512255-01**	**ND**	**183.86**	**263.16**	**ug/L**		**69.9**		**85 - 115**	**Q03**
	MSD	**1512255-01**	**ND**	**185.81**	**263.16**	**ug/L**	**1.1**	**70.6**	**10**	**85 - 115**	**Q03**
QC Batch ID: BYE1918	Used client sample: N										
Total Antimony	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	411.94	400.00	ug/L		103		75 - 125	
	MSD	1512260-28	ND	428.75	400.00	ug/L	4.0	107	20	75 - 125	
Total Arsenic	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	202.74	200.00	ug/L		101		75 - 125	
	MSD	1512260-28	ND	211.04	200.00	ug/L	4.0	106	20	75 - 125	
Total Barium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	453.29	400.00	ug/L		113		75 - 125	
	MSD	1512260-28	ND	451.23	400.00	ug/L	0.5	113	20	75 - 125	
Total Beryllium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	208.23	200.00	ug/L		104		75 - 125	
	MSD	1512260-28	ND	215.32	200.00	ug/L	3.3	108	20	75 - 125	
Total Boron	DUP	**1512260-28**	**0.055543**	**0.042400**		**mg/L**	**26.8**		**20**		**J,A02**
	MS	**1512260-28**	**0.055543**	**1.1062**	**1.0000**	**mg/L**		**105**		**75 - 125**	
	MSD	**1512260-28**	**0.055543**	**1.1533**	**1.0000**	**mg/L**	**4.2**	**110**	**20**	**75 - 125**	
Total Cadmium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	211.69	200.00	ug/L		106		75 - 125	
	MSD	1512260-28	ND	224.13	200.00	ug/L	5.7	112	20	75 - 125	
Total Chromium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	211.44	200.00	ug/L		106		75 - 125	
	MSD	1512260-28	ND	220.02	200.00	ug/L	4.0	110	20	75 - 125	
Total Cobalt	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	206.78	200.00	ug/L		103		75 - 125	
	MSD	1512260-28	ND	218.05	200.00	ug/L	5.3	109	20	75 - 125	
Total Copper	DUP	1512260-28	2.2946	2.0769		ug/L	10.0		20		J
	MS	1512260-28	2.2946	401.24	400.00	ug/L		99.7		75 - 125	
	MSD	1512260-28	2.2946	418.56	400.00	ug/L	4.2	104	20	75 - 125	
Total Iron	DUP	1512260-28	0.047723	0.050511		mg/L	5.7		20		
	MS	1512260-28	0.047723	1.1917	1.0000	mg/L		114		75 - 125	
	MSD	1512260-28	0.047723	1.1837	1.0000	mg/L	0.7	114	20	75 - 125	
Total Lead	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	422.26	400.00	ug/L		106		75 - 125	
	MSD	1512260-28	ND	446.35	400.00	ug/L	5.5	112	20	75 - 125	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1918	Used client sample: N										
Total Lithium	DUP	1512260-28	ND	ND		mg/L			20		
	MS	1512260-28	ND	0.22063	0.20000	mg/L		110		75 - 125	
	MSD	1512260-28	ND	0.22824	0.20000	mg/L	3.4	114	20	75 - 125	
Total Manganese	DUP	1512260-28	ND	ND		mg/L			20		
	MS	1512260-28	ND	0.52541	0.50000	mg/L		105		75 - 125	
	MSD	1512260-28	ND	0.54478	0.50000	mg/L	3.6	109	20	75 - 125	
Total Molybdenum	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	215.96	200.00	ug/L		108		75 - 125	
	MSD	1512260-28	ND	229.18	200.00	ug/L	5.9	115	20	75 - 125	
Total Nickel	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	425.99	400.00	ug/L		106		75 - 125	
	MSD	1512260-28	ND	442.73	400.00	ug/L	3.9	111	20	75 - 125	
Total Selenium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	202.26	200.00	ug/L		101		75 - 125	
	MSD	1512260-28	ND	222.53	200.00	ug/L	9.5	111	20	75 - 125	
Total Silver	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	102.67	100.00	ug/L		103		75 - 125	
	MSD	1512260-28	ND	104.56	100.00	ug/L	1.8	105	20	75 - 125	
Total Strontium	DUP	1512260-28	ND	ND		mg/L			20		
	MS	1512260-28	ND	0.54376	0.50000	mg/L		109		75 - 125	
	MSD	1512260-28	ND	0.55301	0.50000	mg/L	1.7	111	20	75 - 125	
Total Thallium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	441.16	400.00	ug/L		110		75 - 125	
	MSD	1512260-28	ND	473.95	400.00	ug/L	7.2	118	20	75 - 125	
Total Vanadium	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	214.79	200.00	ug/L		107		75 - 125	
	MSD	1512260-28	ND	222.51	200.00	ug/L	3.5	111	20	75 - 125	
Total Zinc	DUP	1512260-28	4.8990	4.6892		ug/L	4.4		20		J
	MS	1512260-28	4.8990	528.59	500.00	ug/L		105		75 - 125	
	MSD	1512260-28	4.8990	533.42	500.00	ug/L	0.9	106	20	75 - 125	
QC Batch ID: BYE1923	Used client sample: N										
Total Mercury	DUP	1512260-28	ND	ND		ug/L			20		
	MS	1512260-28	ND	0.99750	1.0000	ug/L		99.8		70 - 130	
	MSD	1512260-28	ND	1.0000	1.0000	ug/L	0.3	100	20	70 - 130	
QC Batch ID: BYE2030	Used client sample: N										
Total Recoverable Uranium	DUP	1512029-01	ND	0.067000		pCi/L			20		J
	MS	1512029-01	ND	26.103	26.800	pCi/L		97.4		70 - 130	
	MSD	1512029-01	ND	26.068	26.800	pCi/L	0.1	97.3	20	70 - 130	

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BSK Associates
Engineers & Laboratories

BSK Associates Fresno
1414 Stanislaus St
Fresno, CA93706
559-497-2888 (Main)
559-485-6935 (FAX)

A5E1780
5/26/2015
Invoice: A510691

Kerrie Vaughan
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308

RE: Report for A5E1780 General: Project Manager-Kerrie Vaughan

Dear Kerrie Vaughan,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 5/20/2015. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2009 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

If additional clarification of any information is required, please contact your Project Manager, Stephane Maupas , at (800) 877-8310 or (559) 497-2888 x212.

Thanks again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Stephane Maupas, Project Manager

NELAP ACCREDITED TNI LABORATORY

Accredited in Accordance with NELAP
ORELAP #4021

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BSK Associates Engineers & Laboratories

A5E1780

General: Project Manager-Kerrie Vaughan

Case Narrative

Project and Report Details		Invoice Details	
Client:	BC Laboratories	**Invoice To:**	BC Laboratories
Report To:	Kerrie Vaughan	**Invoice Attn:**	Kerrie Vaughan
Project #:	1512259	**Project PO#:**	-
Received:	5/20/2015 - 15:40		
Report Due:	5/27/2015		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 4.1

Containers Intact
COC/Labels Agree
Received On Wet Ice
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

MS1.0 Matrix spike recoveries exceed control limits.

Report Distribution

Recipient(s)	Report Format	CC:
Kerrie Vaughan	FINAL.RPT	

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BSK Associates Engineers & Laboratories

A5E1780

General: Project Manager-Kerrie Vaughan

1512259

Certificate of Analysis

Sample ID: A5E1780-01
Sampled By: Client
Sample Description: 1512259-01

Sample Date - Time: 05/19/15 - 14:44
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505699	05/22/15	05/26/15	
1.65 Sigma Uncertainty		0.191	±				
MDA95		536	pCi/L				

A5E1780 FINAL 05262015 1628
Printed: 05/26/2015
QA-RP-0001-10 Final.rpt

www.BSKAssociates.com

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BSK Associates Engineers & Laboratories

A5E1780

General: Project Manager-Kerrie Vaughan

BSK Associates Fresno

Radiological Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 00-02 - Quality Control											
Batch: A505699										Prepared: 05/22/2015	
Prep Method: EPA 00-02										Analyst: SAB	
Blank (A505699-BLK1)											
1.65 Sigma Uncertainty	ND		±							05/26/15	
Gross Alpha	ND	3	pCi/L							05/26/15	
MDA95	ND	0.00	pCi/L							05/26/15	
Blank Spike (A505699-BS1)											
Gross Alpha	27.6	3	pCi/L	30		92	80-120			05/26/15	
Blank Spike Dup (A505699-BSD1)											
Gross Alpha	29.1	3	pCi/L	30		97	80-120	5	50	05/26/15	
Matrix Spike (A505699-MS1), Source: A5E1255-01											
Gross Alpha	83.8	3	pCi/L	120	ND	69	70-130			05/26/15	MS1.0 Low
Matrix Spike (A505699-MS2), Source: A5E1300-01											
Gross Alpha	100	3	pCi/L	120	ND	81	70-130			05/26/15	
Matrix Spike Dup (A505699-MSD1), Source: A5E1255-01											
Gross Alpha	89.9	3	pCi/L	120	ND	74	70-130	7	50	05/26/15	
Matrix Spike Dup (A505699-MSD2), Source: A5E1300-01											
Gross Alpha	82.8	3	pCi/L	120	ND	67	70-130	19	50	05/26/15	MS1.0 Low

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BSK Associates Engineers & Laboratories

A5E1780

General: Project Manager-Kerrie Vaughan

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method, all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected at RL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	Picocuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent Recovered (surrogates)	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit		

Please see the individual Subcontract Lab's report for applicable certifications.

BSK is not accredited under the NELAC program for the following parameters: **NA**

Certifications: Please refer to our website for a copy of our Accredited Fields of Testing under each certification.

Fresno

State of California - ELAP	1180	State of Hawaii	4021
State of Nevada	CA000792015-1	State of Oregon - NELAC	4021
EPA - UCMR3	CA00079	State of Washington	C997-15

Sacramento

State of California - ELAP	2435

Vancouver

State of Oregon - NELAC	WA100008	State of Washington	C824-14a

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A5E1780

05202015

BCLab4911

Turnaround: Standard
Due Date: 5/27/2015

BC Laboratories

Printed: 5/20/1

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4.1

SUBCONTRACT ORDER
BC Laboratories
1512259

A5E1780 05/20/2015
BCLab4911 4

SENDING LABORATORY:

BC Laboratories
4100 Atlas Ct
Bakersfield, CA 93308
Phone: 661-327-4911
Fax: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY:

BSK Analytical Labs $BSKSA
1414 Stanislaus Street
Fresno, CA 93706
Phone :(800) 877-8310
Fax: (559) 485-6935

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 1512259-01	**Water**	**Sampled:05/19/15 14:44**	[redacted]	
om900.0w Gross Alpha BSKSA	05/27/15 17:00	11/16/15 14:44		Results needed by 5/27/2015.
Containers Supplied:				

Released By Morgan Boyle Date 5/20/15 Received By BJ Date 5-20-15

Released By BJ Date 5-20-15 Received By Tihm Her Date 5/20/15 15:40

Page 7 of 8

BSK Associates SR-FL-0002-13

A5E1780 05/20/2015
BCLab4911 4

Sample Integrity

BSK Bottles: Yes (No) Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 10°C	(Yes) No NA	Were correct containers and preservatives received for the tests requested?	(Yes) No NA
If samples were taken today, is there evidence that chilling has begun?	Yes No (NA)	Were there bubbles in the VOA vials? (Volatiles Only)	Yes No (NA)
Did all bottles arrive unbroken and intact?	(Yes) No	Was a sufficient amount of sample received?	(Yes) No
Did all bottle labels agree with COC?	(Yes) No	Do samples have a hold time <72 hours?	Yes (No)
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes No (NA)	Was PM notified of discrepancies? PM: By/Time:	Yes No (NA)

Bottles Received "—" means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V)	Checks	Passed?						
Bact $Na_2S_2O_3$	—	—						
None (P) White Cap	—	—						
Cr6 (P) Bc Green Label $NH_4OH/(NH_4)_2SO_4$ DW	Cl, pH > 8	Y N						
Cr6 (P) Pink Label Hex Chrome Buffer DW	pH 9-9.5	Y N						
Cr6 (P) Pink Label Hex Chrome Buffer WW	pH 9.3-9.7	Y N						
HNO_3 (P) Red Cap	—	—	1C					
H_2SO_4 (P) or (AG) Yellow Cap/Label	pH < 2	Y N						
NaOH (P) Green Cap	Cl, pH >10	Y N				JH		
NaOH + ZnAc (P)	pH > 9	Y N						
Dissolved Oxygen 300ml (g)	—	—				5/20/15		
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—						
HCl (AG) Lt. Blue Label O&G, Diesel	—	—						
Na_2O_3S+HCl (AG) Lt. Pink Label 525	—	—						
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—						
$Na_2S_2O_3$ (AG) Blue Label 547,513,548,THM,524	—	—						
$Na_2S_2O_3$ (CG) Blue Label 504, 505	—	—						
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	Y N						
NH_4Cl (AG) Purple Label 552	—	—						
EDA (AG) Brown Label DBPS	—	—						
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—						
Buffer pH 4 (CG)	—	—						
None (CG)	—	—						
H_3PO_4 (CG) Salmon Label	—	—						
Other:								
Asbestos 1Liter Plastic w/ Foil	—	—						
Low Level Hg / Metals Double Baggie	—	—						
Bottled Water	—	—						
Clear Glass Jar: 250 / 500 / 1 Liter	—	—						
Soil Tube Brass / Steel / Plastic	—	—						
Tedlar Bag / Plastic Bag	—	—						

Split

	Container	Preservative	Date/Time/Initials		Container	Preservative	Date/Time/Initials
S P				S P			
S P				S P			

Comments

Labeled by: JHD @ 17:03 Labels checked by: AC @ 1707 RUSH Paged by: @

Page 8 of 8

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Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 03, 2015

Ms. Kerrie Vaughan
BC Laboratories
4100 Atlas Ct.
Bakersfield, CA 93308

RE: Project: 1512259
Pace Project No.: 30148651

Dear Ms. Vaughan:
Enclosed are the analytical results for sample(s) received by the laboratory on May 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carin A. Ferris

Carin Ferris
carin.ferris@pacelabs.com
Project Manager

Enclosures

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 1512259
Pace Project No.: 30148651

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: PA014572014-4
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: 1512259
Pace Project No.: 30148651

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30148651001	1512259-01	Water	05/19/15 14:44	05/21/15 10:00

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 1512259
Pace Project No.: 30148651

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30148651001	1512259-01	EPA 903.1	JC2	1
		EPA 904.0	JLW	1

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: 1512259
Pace Project No.: 30148651

Method: EPA 903.1
Description: 903.1 Radium 226
Client: BC Laboratories
Date: June 03, 2015

General Information:
1 sample was analyzed for EPA 903.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: 1512259
Pace Project No.: 30148651

Method: EPA 904.0
Description: 904.0 Radium 228
Client: BC Laboratories
Date: June 03, 2015

General Information:
1 sample was analyzed for EPA 904.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1512259
Pace Project No.: 30148651

Sample: 1512259-01 **Lab ID: 30148651001** Collected: 05/19/15 14:44 Received: 05/21/15 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Comments:
- Sample collection dates and times were not present on the sample containers.
- Upon receipt at the laboratory, six mls of nitric acid were added to the sample to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
- Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**0.484 ± 2.71 (4.50)** **C:NA T:81%**	pCi/L	06/01/15 12:12	13982-63-3	
Radium-228	EPA 904.0	**6.91 ± 6.59 (13.5)** **C:82% T:69%**	pCi/L	06/01/15 16:58	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512259
Pace Project No.: 30148651

QC Batch: RADC/24590 Analysis Method: EPA 903.1
QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226
Associated Lab Samples: 30148651001

METHOD BLANK: 898955 Matrix: Water
Associated Lab Samples: 30148651001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.167 ± 0.464 (0.900) C:NA T:90%	pCi/L	06/01/15 11:42	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512259
Pace Project No.: 30148651

QC Batch: RADC/24592 Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228
Associated Lab Samples: 30148651001

METHOD BLANK: 898957 Matrix: Water
Associated Lab Samples: 30148651001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.000 ± 0.379 (0.842) C:85% T:85%	pCi/L	06/01/15 17:02	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 1512259
Pace Project No.: 30148651

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Act - Activity
Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)
(MDC) - Minimum Detectable Concentration
Trac - Tracer Recovery (%)
Carr - Carrier Recovery (%)
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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SUBCONTRACT ORDER

BC Laboratories

1512259

RUSH!

SENDING LABORATORY:

BC Laboratories
4100 Atlas Ct
Bakersfield, CA 93308
Phone: 661-327-4911
Fax: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY:

PACE Analytical $PACEA
1638 Roseytown Road, Ste 2,3 &4
Greensburg, PA 15601
Phone :(724) 850-5600
Fax: (724) 850-5601

30148651

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 1512259-01	**Water**	**Sampled:05/19/15 14:44**		
om904.0w Radium228 PACEA	05/27/15 17:00	11/16/15 14:44		Results needed by 5/27/2015.
om903.1w Radium226 PACEA	05/27/15 17:00	11/16/15 14:44		Results needed by 5/27/2015.
Containers Supplied:				

Meggan Boyles 5/20/15 — Released By — Date
Alma B Mudrrey/pace 5/21/15 1000 — Received By — Date

Released By — Date
Received By — Date

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30148651

Sample Condition Upon Receipt

Pace Analytical

Client Name: BC Labs Project #

Courier: ☐ Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 1Z9057370112358179

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals Intact: ☐ yes ☐ no Biological Tissue is Frozen: Yes No

Packing Material: Bubble Wrap ✓ Bubble Bags ___ None ___ Other

Thermometer Used N/A Type of Ice: Wet Blue (None) ☐ Samples on ice, cooling process has begun

Cooler Temp.: Observed Temp.: N/A °C Correction Factor: N/A °C Final Temp: N/A °C

Date and initials of person examining contents: ARM 5/21/15

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☐Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☐Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☐Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☐No ☐N/A	7.
Sufficient Volume:	☐Yes ☐No ☐N/A	8. Low volume
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☐No ☐N/A	
Containers Intact:	☐Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☐N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: WT	☐Yes ☐No ☐N/A	12. No date time on sample bottles
All containers needing preservation have been checked.	☐Yes ☐No ☐N/A	13. added 1mL HNO3 to each sample bottle
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☑No ☐N/A	PH<2. ARM-5/21/15 1100
exceptions: VOA, coliform, TOC, O&G, Phenols	☐Yes ☑No	Initial when completed: JRM Lot # of added preservative: DL15-0433
Samples checked for dechlorination:	☐Yes ☐No ☐N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Carrie Dennis Date: 5/21/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

J:\QAQC\Master\Document Management\Sample Mgt\SCURF\FALLC003-09 SCUR Front 3March2015.pdf Page 12 of 13

Pace Analytical

Item No.	001
Matrix Code	WT
Glass Jar (120 / 250 / 500 / 1L)	
Soil kit (2 SB, 1M, soil jar)	
Chemistry (250 / 500 / 1L)	
Organics (1L)	
Nutrient (250 / 500)	
Phenolics (250 ml)	
TOC (40 ml / 250 ml)	
TOX (250 ml)	
Total Metals	
Dissolved Metals preserved Y N	
O & G (1L)	
TPH (1L)	
VOA (40 ml 30 ml)	
Cyanide (250 ml)	
Sulfide (500 ml)	
Bacteria (120 ml)	
Wipes / swipe/ smear/ filter	
Radchem Nalgene (125 / 250 / 500 / 1L)	1-L 1-SG
Radchem Nalgene (1/2 gal. / 1 gal.L)	
Cubitainer (500 ml / 4L)	
Ziploc	
Other	
Other	

SCURF Back (0016-4 15May2012).xls

page 2

Project Number: 30148651

Client Name: BC LABS

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:35
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.
A02	The difference between duplicate readings is less than the quantitation limit.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
L01	The Laboratory Control Sample Water (LCSW) recovery is not within laboratory established control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.
Z1	50 ul of antifoam added to the sample to avoid foaming of the sample.

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BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 06/03/2015

Rod Bowyer

Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Client Project:	TOW
BCL Project:	Oilfield Produced Water Pond Testing
BCL Work Order:	1512385
Invoice ID:	B204800

Enclosed are the results of analyses for samples received by the laboratory on 5/20/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Kerrie Vaughan
Client Services

Authorized Signature

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1512385-01	COC Number:	—	Receive Date:	05/20/2015 17:13
	Project Number:	—	Sampling Date:	05/20/2015 09:45
	Sampling Location:	—	Sample Depth:	—
	Sampling Point:	BL25 TOW POND 13	Lab Matrix:	Water
	Sampled By:	R.Ogletree/J.Enriquez	Sample Type:	Aqueous
1512385-02	COC Number:	—	Receive Date:	05/20/2015 17:13
	Project Number:	—	Sampling Date:	05/20/2015 10:35
	Sampling Location:	—	Sample Depth:	—
	Sampling Point:	BL26 TOW POND 14	Lab Matrix:	Water
	Sampled By:	R.Ogletree/J.Enriquez	Sample Type:	Aqueous
1512385-03	COC Number:	—	Receive Date:	05/20/2015 17:13
	Project Number:	—	Sampling Date:	05/20/2015 11:30
	Sampling Location:	—	Sample Depth:	—
	Sampling Point:	BL27 TOW POND 15	Lab Matrix:	Water
	Sampled By:	R.Ogletree/J.Enriquez	Sample Type:	Aqueous

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512385-01 | **Client Sample Name:** BL25 TOW POND 13, 5/20/2015 9:45:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**26**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND	Z1	1
Ethylbenzene	**4.6**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	Z1	1
Toluene	**21**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	Z1	1
Total Xylenes	**16**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND	Z1	1
p- & m-Xylenes	**11**	**ug/L**	**0.50**	**0.28**	**EPA-8260B**	ND	Z1	1
o-Xylene	**5.4**	**ug/L**	**0.50**	**0.082**	**EPA-8260B**	ND	Z1	1
1,2-Dichloroethane-d4 (Surrogate)	97.0	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	96.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 00:42	SE1	MS-V12	1	BYE2090

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Bakersfield, CA 93311

Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512385-01 | **Client Sample Name:** BL25 TOW POND 13, 5/20/2015 9:45:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**0.28**	**ug/L**	**0.19**	**0.11**	**EPA-8270C-SIM**	ND		1
Acenaphthylene	**0.74**	**ug/L**	**0.19**	**0.091**	**EPA-8270C-SIM**	ND		1
Anthracene	ND	ug/L	0.19	0.033	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	**0.077**	**ug/L**	**0.19**	**0.050**	**EPA-8270C-SIM**	ND	J	1
Benzo[b]fluoranthene	ND	ug/L	0.19	0.078	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.19	0.099	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.19	0.050	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.19	0.083	EPA-8270C-SIM	ND		1
Chrysene	**0.37**	**ug/L**	**0.19**	**0.043**	**EPA-8270C-SIM**	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.19	0.085	EPA-8270C-SIM	ND		1
Fluoranthene	**0.20**	**ug/L**	**0.19**	**0.023**	**EPA-8270C-SIM**	ND		1
Fluorene	**0.47**	**ug/L**	**0.19**	**0.058**	**EPA-8270C-SIM**	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.19	0.085	EPA-8270C-SIM	ND		1
Naphthalene	**3.1**	**ug/L**	**0.19**	**0.15**	**EPA-8270C-SIM**	ND		1
Phenanthrene	**0.72**	**ug/L**	**0.19**	**0.043**	**EPA-8270C-SIM**	ND		1
Pyrene	**0.56**	**ug/L**	**0.19**	**0.043**	**EPA-8270C-SIM**	ND		1
Nitrobenzene-d5 (Surrogate)	192	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1
2-Fluorobiphenyl (Surrogate)	85.8	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	145	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/22/15	05/27/15 18:34	MK1	MS-B4	1.940	BYE2168

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512385-01 | **Client Sample Name:** BL25 TOW POND 13, 5/20/2015 9:45:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**68000**	**ug/L**	**20000**	**5600**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	0	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/22/15	05/27/15 15:54	MWB	GC-13	40	BYE2282

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512385-01 | **Client Sample Name:** BL25 TOW POND 13, 5/20/2015 9:45:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**140**	**mg/L**	**2.0**	**0.30**	**EPA-6010B**	1.1	**A07**	1
Total Magnesium	**53**	**mg/L**	**1.0**	**0.38**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**3600**	**mg/L**	**10**	**1.0**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**75**	**mg/L**	**20**	**2.6**	**EPA-6010B**	5.6	**A07**	1
Bicarbonate Alkalinity as CaCO3	**840**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**840**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**47**	**mg/L**	**5.0**	**1.8**	**EPA-300.0**	ND	**A07**	3
Chloride	**6300**	**mg/L**	**25**	**3.0**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	**7.7**	**mg/L**	**22**	**3.9**	**EPA-300.0**	ND	**J,A07**	3
Sulfate	**160**	**mg/L**	**50**	**5.0**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**11000**	**mg/L**	**500**	**500**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/22/15	05/26/15 11:54	ARD	PE-OP3	20	BYE2045
2	EPA-310.1	05/21/15	05/21/15 16:33	RML	MET-1	2	BYE1915
3	EPA-300.0	05/20/15	05/21/15 03:11	BMW	IC2	50	BYE1883
4	EPA-160.1	05/26/15	05/26/15 12:30	CAD	MANUAL	50	BYE2132

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512385-01 | **Client Sample Name:** BL25 TOW POND 13, 5/20/2015 9:45:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	2000	170	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	1000	160	EPA-6010B	500000	A07	2
Total Barium	**2000**	**ug/L**	**200**	**70**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	200	10	EPA-6010B	75000	A07	2
Total Boron	**56**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	200	22	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	1000	26	EPA-6010B	8000000	A07	2
Total Copper	**36**	**ug/L**	**200**	**22**	**EPA-6010B**	2500000	**J,A07**	2
Total Iron	**3.7**	**mg/L**	**1.0**	**0.60**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	1000	80	EPA-6010B	1000000	A07	2
Total Lithium	**2.5**	**mg/L**	**0.40**	**0.12**	**EPA-6010B**		**A07**	2
Total Manganese	**0.21**	**mg/L**	**0.20**	**0.080**	**EPA-6010B**		**A07**	2
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	20000		3
Total Molybdenum	**100**	**ug/L**	**1000**	**24**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	ND	ug/L	200	40	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	2000	300	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	200	38	EPA-6010B	500000	A07	2
Total Strontium	**4.6**	**mg/L**	**0.20**	**0.020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	2000	480	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	200	44	EPA-6010B	2400000	A07	2
Total Zinc	ND	ug/L	1000	46	EPA-6010B	5000000	A07	2
Total Recoverable Uranium	ND	pCi/L	6.7	0.67	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/21/15	05/21/15 07:45	TDC	KONE-1	5	BYE2065
2	EPA-6010B	05/22/15	05/26/15 11:54	ARD	PE-OP3	20	BYE2045
3	EPA-7470A	05/26/15	05/26/15 14:59	MEV	CETAC1	1	BYE2170
4	EPA-200.8	05/22/15	05/22/15 17:37	SRM	PE-EL2	10	BYE2042

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512385-02 | **Client Sample Name:** BL26 TOW POND 14, 5/20/2015 10:35:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**36**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND	Z1	1
Ethylbenzene	**8.9**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	Z1	1
Toluene	**32**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	Z1	1
Total Xylenes	**22**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND	Z1	1
p- & m-Xylenes	**14**	**ug/L**	**0.50**	**0.28**	**EPA-8260B**	ND	Z1	1
o-Xylene	**8.5**	**ug/L**	**0.50**	**0.082**	**EPA-8260B**	ND	Z1	1
1,2-Dichloroethane-d4 (Surrogate)	98.4	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	96.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 01:00	SE1	MS-V12	1	BYE2090

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID:	1512385-02	Client Sample Name:	BL26 TOW POND 14, 5/20/2015 10:35:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**0.87**	**ug/L**	**0.19**	**0.11**	**EPA-8270C-SIM**	ND		1
Acenaphthylene	**1.4**	**ug/L**	**0.19**	**0.090**	**EPA-8270C-SIM**	ND		1
Anthracene	ND	ug/L	0.19	0.033	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	**0.058**	**ug/L**	**0.19**	**0.050**	**EPA-8270C-SIM**	ND	J	1
Benzo[b]fluoranthene	ND	ug/L	0.19	0.077	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.19	0.098	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.19	0.050	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.19	0.083	EPA-8270C-SIM	ND		1
Chrysene	**0.51**	**ug/L**	**0.19**	**0.042**	**EPA-8270C-SIM**	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.19	0.084	EPA-8270C-SIM	ND		1
Fluoranthene	**0.23**	**ug/L**	**0.19**	**0.023**	**EPA-8270C-SIM**	ND		1
Fluorene	**0.75**	**ug/L**	**0.19**	**0.058**	**EPA-8270C-SIM**	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.19	0.084	EPA-8270C-SIM	ND		1
Naphthalene	**6.0**	**ug/L**	**0.96**	**0.74**	**EPA-8270C-SIM**	ND	A01	2
Phenanthrene	**1.2**	**ug/L**	**0.19**	**0.042**	**EPA-8270C-SIM**	ND		1
Pyrene	**0.94**	**ug/L**	**0.19**	**0.042**	**EPA-8270C-SIM**	ND		1
Nitrobenzene-d5 (Surrogate)	182	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1
2-Fluorobiphenyl (Surrogate)	86.6	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	182	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/22/15	05/27/15 19:00	MK1	MS-B4	1.920	BYE2168
2	EPA-8270C-SIM	05/22/15	05/28/15 17:38	MK1	MS-B4	9.600	BYE2168

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512385-02 | **Client Sample Name:** BL26 TOW POND 14, 5/20/2015 10:35:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**48000**	**ug/L**	**10000**	**2800**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	78.0	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/22/15	05/27/15 16:16	MWB	GC-13	20	BYE2282

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512385-02 | **Client Sample Name:** BL26 TOW POND 14, 5/20/2015 10:35:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**130**	**mg/L**	**2.0**	**0.30**	**EPA-6010B**	1.1	**A07**	1
Total Magnesium	**50**	**mg/L**	**1.0**	**0.38**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**3500**	**mg/L**	**10**	**1.0**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**71**	**mg/L**	**20**	**2.6**	**EPA-6010B**	5.6	**A07**	1
Bicarbonate Alkalinity as CaCO3	**850**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**850**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**52**	**mg/L**	**5.0**	**1.8**	**EPA-300.0**	ND	**A07**	3
Chloride	**6200**	**mg/L**	**25**	**3.0**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	22	3.9	EPA-300.0	ND	A07	3
Sulfate	**150**	**mg/L**	**50**	**5.0**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**11000**	**mg/L**	**500**	**500**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/22/15	05/26/15 11:55	ARD	PE-OP3	20	BYE2045
2	EPA-310.1	05/21/15	05/21/15 16:43	RML	MET-1	2	BYE1915
3	EPA-300.0	05/20/15	05/21/15 03:30	BMW	IC2	50	BYE1883
4	EPA-160.1	05/26/15	05/26/15 12:30	CAD	MANUAL	50	BYE2132

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512385-02 | **Client Sample Name:** BL26 TOW POND 14, 5/20/2015 10:35:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	2000	170	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	1000	160	EPA-6010B	500000	A07	2
Total Barium	**1800**	**ug/L**	**200**	**70**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	200	10	EPA-6010B	75000	A07	2
Total Boron	**55**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	200	22	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	1000	26	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Iron	**0.78**	**mg/L**	**1.0**	**0.60**	**EPA-6010B**		**J,A07**	2
Total Lead	ND	ug/L	1000	80	EPA-6010B	1000000	A07	2
Total Lithium	**2.5**	**mg/L**	**0.40**	**0.12**	**EPA-6010B**		**A07**	2
Total Manganese	**0.15**	**mg/L**	**0.20**	**0.080**	**EPA-6010B**		**J,A07**	2
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	20000		3
Total Molybdenum	**79**	**ug/L**	**1000**	**24**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	ND	ug/L	200	40	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	2000	300	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	200	38	EPA-6010B	500000	A07	2
Total Strontium	**4.5**	**mg/L**	**0.20**	**0.020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	2000	480	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	200	44	EPA-6010B	2400000	A07	2
Total Zinc	ND	ug/L	1000	46	EPA-6010B	5000000	A07	2
Total Recoverable Uranium	ND	pCi/L	6.7	0.67	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/21/15	05/21/15 07:52	TDC	KONE-1	5	BYE2065
2	EPA-6010B	05/22/15	05/26/15 11:55	ARD	PE-OP3	20	BYE2045
3	EPA-7470A	05/26/15	05/26/15 15:02	MEV	CETAC1	1	BYE2170
4	EPA-200.8	05/22/15	05/22/15 17:40	SRM	PE-EL2	10	BYE2042

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512385-03 | **Client Sample Name:** BL27 TOW POND 15, 5/20/2015 11:30:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND	Z1	1
Ethylbenzene	**0.52**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	**Z1**	1
Toluene	**0.92**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	**Z1**	1
Total Xylenes	**1.0**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND	**Z1**	1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260B	ND	Z1	1
o-Xylene	**1.0**	**ug/L**	**0.50**	**0.082**	**EPA-8260B**	ND	**Z1**	1
1,2-Dichloroethane-d4 (Surrogate)	98.1	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	93.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 01:17	SE1	MS-V12	1	BYE2090

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512385-03 | **Client Sample Name:** BL27 TOW POND 15, 5/20/2015 11:30:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	ug/L	0.20	0.11	EPA-8270C-SIM	ND		1
Acenaphthylene	**0.21**	**ug/L**	**0.20**	**0.092**	**EPA-8270C-SIM**	ND		1
Anthracene	ND	ug/L	0.20	0.033	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	ND	ug/L	0.20	0.051	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.20	0.078	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.20	0.10	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.20	0.051	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.20	0.084	EPA-8270C-SIM	ND		1
Chrysene	ND	ug/L	0.20	0.043	EPA-8270C-SIM	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.20	0.086	EPA-8270C-SIM	ND		1
Fluoranthene	ND	ug/L	0.20	0.024	EPA-8270C-SIM	ND		1
Fluorene	**0.17**	**ug/L**	**0.20**	**0.059**	**EPA-8270C-SIM**	ND	J	1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.20	0.086	EPA-8270C-SIM	ND		1
Naphthalene	**0.36**	**ug/L**	**0.20**	**0.15**	**EPA-8270C-SIM**	ND		1
Phenanthrene	**0.18**	**ug/L**	**0.20**	**0.043**	**EPA-8270C-SIM**	ND	J	1
Pyrene	ND	ug/L	0.20	0.043	EPA-8270C-SIM	ND		1
Nitrobenzene-d5 (Surrogate)	123	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1
2-Fluorobiphenyl (Surrogate)	54.5	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	95.2	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/22/15	05/27/15 19:27	MK1	MS-B4	1.960	BYE2168

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID:	1512385-03	Client Sample Name:	BL27 TOW POND 15, 5/20/2015 11:30:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**24000**	**ug/L**	**5000**	**1400**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	62.2	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/22/15	05/27/15 16:39	MWB	GC-13	10	BYE2282

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512385-03 | **Client Sample Name:** BL27 TOW POND 15, 5/20/2015 11:30:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**260**	**mg/L**	**2.0**	**0.30**	**EPA-6010B**	1.1	**A07**	1
Total Magnesium	**100**	**mg/L**	**1.0**	**0.38**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**6200**	**mg/L**	**10**	**1.0**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**98**	**mg/L**	**20**	**2.6**	**EPA-6010B**	5.6	**A07**	1
Bicarbonate Alkalinity as CaCO3	**810**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**810**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**59**	**mg/L**	**5.0**	**1.8**	**EPA-300.0**	ND	**A07**	3
Chloride	**12000**	**mg/L**	**50**	**6.1**	**EPA-300.0**	ND	**A07**	4
Nitrate as NO3	ND	mg/L	22	3.9	EPA-300.0	ND	A07	3
Sulfate	**260**	**mg/L**	**50**	**5.0**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**20000**	**mg/L**	**1000**	**1000**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/22/15	05/26/15 11:57	ARD	PE-OP3	20	BYE2045
2	EPA-310.1	05/21/15	05/21/15 16:52	RML	MET-1	2	BYE1915
3	EPA-300.0	05/20/15	05/21/15 03:48	BMW	IC2	50	BYE1883
4	EPA-300.0	05/20/15	05/21/15 12:51	BMW	IC2	100	BYE1883
5	EPA-160.1	05/26/15	05/26/15 12:30	CAD	MANUAL	100	BYE2132

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512385-03 | **Client Sample Name:** BL27 TOW POND 15, 5/20/2015 11:30:00AM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	2000	170	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	1000	160	EPA-6010B	500000	A07	2
Total Barium	**3000**	**ug/L**	**200**	**70**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	200	10	EPA-6010B	75000	A07	2
Total Boron	**71**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	200	22	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	1000	26	EPA-6010B	8000000	A07	2
Total Copper	**51**	**ug/L**	**200**	**22**	**EPA-6010B**	2500000	**J,A07**	2
Total Iron	ND	mg/L	1.0	0.60	EPA-6010B		A07	2
Total Lead	ND	ug/L	1000	80	EPA-6010B	1000000	A07	2
Total Lithium	**3.0**	**mg/L**	**0.40**	**0.12**	**EPA-6010B**		**A07**	2
Total Manganese	**0.30**	**mg/L**	**0.20**	**0.080**	**EPA-6010B**		**A07**	2
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	20000		3
Total Molybdenum	**96**	**ug/L**	**1000**	**24**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	ND	ug/L	200	40	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	2000	300	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	200	38	EPA-6010B	500000	A07	2
Total Strontium	**9.0**	**mg/L**	**0.20**	**0.020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	2000	480	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	200	44	EPA-6010B	2400000	A07	2
Total Zinc	ND	ug/L	1000	46	EPA-6010B	5000000	A07	2
Total Recoverable Uranium	**1.1**	**pCi/L**	**6.7**	**0.67**	**EPA-200.8**		**J,A07**	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/21/15	05/21/15 07:52	TDC	KONE-1	5	BYE2065
2	EPA-6010B	05/22/15	05/26/15 11:57	ARD	PE-OP3	20	BYE2045
3	EPA-7470A	05/26/15	05/26/15 15:08	MEV	CETAC1	1	BYE2170
4	EPA-200.8	05/22/15	05/22/15 17:43	SRM	PE-EL2	10	BYE2042

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2090						
Benzene	BYE2090-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BYE2090-BLK1	ND	ug/L	0.50	0.098	
Toluene	BYE2090-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BYE2090-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BYE2090-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BYE2090-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	**BYE2090-BLK1**	**95.6**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BYE2090-BLK1**	**97.3**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BYE2090-BLK1**	**94.4**	%	**80 - 120 (LCL - UCL)**		

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2090										
Benzene	BYE2090-BS1	LCS	25.730	25.000	ug/L	103		70 - 130		
Toluene	BYE2090-BS1	LCS	24.730	25.000	ug/L	98.9		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYE2090-BS1	LCS	9.7100	10.000	ug/L	97.1		75 - 125		
Toluene-d8 (Surrogate)	BYE2090-BS1	LCS	9.5200	10.000	ug/L	95.2		80 - 120		
4-Bromofluorobenzene (Surrogate)	BYE2090-BS1	LCS	10.280	10.000	ug/L	103		80 - 120		

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Bakersfield, CA 93311

Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2090	Used client sample: N										
Benzene	MS	1511019-37	ND	24.680	25.000	ug/L		98.7		70 - 130	
	MSD	1511019-37	ND	26.710	25.000	ug/L	7.9	107	20	70 - 130	
Toluene	MS	1511019-37	ND	23.840	25.000	ug/L		95.4		70 - 130	
	MSD	1511019-37	ND	26.160	25.000	ug/L	9.3	105	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-37	ND	9.6800	10.000	ug/L		96.8		75 - 125	
	MSD	1511019-37	ND	9.8200	10.000	ug/L	1.4	98.2		75 - 125	
Toluene-d8 (Surrogate)	MS	1511019-37	ND	9.5100	10.000	ug/L		95.1		80 - 120	
	MSD	1511019-37	ND	9.5400	10.000	ug/L	0.3	95.4		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1511019-37	ND	9.8600	10.000	ug/L		98.6		80 - 120	
	MSD	1511019-37	ND	9.7800	10.000	ug/L	0.8	97.8		80 - 120	

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2168						
Acenaphthene	BYE2168-BLK1	ND	ug/L	0.10	0.055	
Acenaphthylene	BYE2168-BLK1	ND	ug/L	0.10	0.047	
Anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.017	
Benzo[a]anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.026	
Benzo[b]fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.040	
Benzo[k]fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.051	
Benzo[a]pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.026	
Benzo[g,h,i]perylene	BYE2168-BLK1	ND	ug/L	0.10	0.043	
Chrysene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Dibenzo[a,h]anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.044	
Fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.012	
Fluorene	BYE2168-BLK1	ND	ug/L	0.10	0.030	
ideno[1,2,3-cd]pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.044	
Naphthalene	BYE2168-BLK1	ND	ug/L	0.10	0.077	
Phenanthrene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Nitrobenzene-d5 (Surrogate)	**BYE2168-BLK1**	**91.8**	%	**40 - 130 (LCL - UCL)**		
2-Fluorobiphenyl (Surrogate)	**BYE2168-BLK1**	**93.1**	%	**50 - 120 (LCL - UCL)**		
p-Terphenyl-d14 (Surrogate)	**BYE2168-BLK1**	**126**	%	**40 - 130 (LCL - UCL)**		

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2168										
Acenaphthene	BYE2168-BS1	LCS	1.0861	1.0000	ug/L	109		60 - 110		
Acenaphthylene	BYE2168-BS1	LCS	1.2020	1.0000	ug/L	120		60 - 120		
Anthracene	BYE2168-BS1	LCS	1.2952	1.0000	ug/L	130		60 - 130		
Benzo[a]anthracene	BYE2168-BS1	LCS	1.1582	1.0000	ug/L	116		60 - 130		
Benzo[b]fluoranthene	BYE2168-BS1	LCS	1.0318	1.0000	ug/L	103		50 - 130		
Benzo[k]fluoranthene	BYE2168-BS1	LCS	1.1474	1.0000	ug/L	115		60 - 120		
Benzo[a]pyrene	BYE2168-BS1	LCS	1.1756	1.0000	ug/L	118		60 - 120		
Benzo[g,h,i]perylene	BYE2168-BS1	LCS	0.92832	1.0000	ug/L	92.8		40 - 120		
Chrysene	BYE2168-BS1	LCS	1.0666	1.0000	ug/L	107		60 - 110		
Dibenzo[a,h]anthracene	BYE2168-BS1	LCS	0.66352	1.0000	ug/L	66.4		40 - 120		
Fluoranthene	BYE2168-BS1	LCS	0.96748	1.0000	ug/L	96.7		60 - 120		
Fluorene	BYE2168-BS1	LCS	1.1357	1.0000	ug/L	114		60 - 120		
Indeno[1,2,3-cd]pyrene	BYE2168-BS1	LCS	1.1326	1.0000	ug/L	113		40 - 130		
Naphthalene	BYE2168-BS1	LCS	0.99890	1.0000	ug/L	99.9		60 - 110		
Phenanthrene	BYE2168-BS1	LCS	1.0604	1.0000	ug/L	106		60 - 120		
Pyrene	BYE2168-BS1	LCS	1.6547	1.0000	ug/L	165		50 - 125		L01
Nitrobenzene-d5 (Surrogate)	BYE2168-BS1	LCS	3.8161	4.0000	ug/L	95.4		40 - 130		
2-Fluorobiphenyl (Surrogate)	BYE2168-BS1	LCS	4.0934	4.0000	ug/L	102		50 - 120		
p-Terphenyl-d14 (Surrogate)	BYE2168-BS1	LCS	4.9744	4.0000	ug/L	124		40 - 130		

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2168	Used client sample: N										
Acenaphthene	MS	**1511019-28**	**ND**	**1.1763**	**1.0000**	**ug/L**		**118**		**60 - 110**	**Q03**
	MSD	**1511019-28**	**ND**	**1.0913**	**1.0000**	**ug/L**	**7.5**	**109**	**30**	**60 - 110**	
Acenaphthylene	MS	**1511019-28**	**ND**	**1.3083**	**1.0000**	**ug/L**		**131**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1879**	**1.0000**	**ug/L**	**9.7**	**119**	**30**	**60 - 120**	
Anthracene	MS	**1511019-28**	**ND**	**1.4025**	**1.0000**	**ug/L**		**140**		**60 - 130**	**Q03**
	MSD	**1511019-28**	**ND**	**1.3073**	**1.0000**	**ug/L**	**7.0**	**131**	**30**	**60 - 130**	**Q03**
Benzo[a]anthracene	MS	**1511019-28**	**ND**	**1.2480**	**1.0000**	**ug/L**		**125**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1594**	**1.0000**	**ug/L**	**7.4**	**116**	**30**	**60 - 120**	
Benzo[b]fluoranthene	MS	1511019-28	ND	1.1310	1.0000	ug/L		113		50 - 130	
	MSD	1511019-28	ND	1.0752	1.0000	ug/L	5.1	108	30	50 - 130	
Benzo[k]fluoranthene	MS	**1511019-28**	**ND**	**1.2472**	**1.0000**	**ug/L**		**125**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1434**	**1.0000**	**ug/L**	**8.7**	**114**	**30**	**60 - 120**	
`enzo[a]pyrene	MS	**1511019-28**	**ND**	**1.2360**	**1.0000**	**ug/L**		**124**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.0911**	**1.0000**	**ug/L**	**12.5**	**109**	**30**	**60 - 120**	
Benzo[g,h,i]perylene	MS	1511019-28	ND	1.0647	1.0000	ug/L		106		40 - 120	
	MSD	1511019-28	ND	0.97751	1.0000	ug/L	8.5	97.8	30	40 - 120	
Chrysene	MS	**1511019-28**	**ND**	**1.2087**	**1.0000**	**ug/L**		**121**		**60 - 110**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1388**	**1.0000**	**ug/L**	**6.0**	**114**	**30**	**60 - 110**	**Q03**
Dibenzo[a,h]anthracene	MS	1511019-28	ND	0.78144	1.0000	ug/L		78.1		40 - 120	
	MSD	1511019-28	ND	0.69146	1.0000	ug/L	12.2	69.1	30	40 - 120	
Fluoranthene	MS	1511019-28	ND	1.0666	1.0000	ug/L		107		60 - 120	
	MSD	1511019-28	ND	1.0141	1.0000	ug/L	5.0	101	30	60 - 120	
Fluorene	MS	**1511019-28**	**ND**	**1.2329**	**1.0000**	**ug/L**		**123**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1270**	**1.0000**	**ug/L**	**9.0**	**113**	**30**	**60 - 120**	
Indeno[1,2,3-cd]pyrene	MS	1511019-28	ND	1.2781	1.0000	ug/L		128		40 - 130	
	MSD	1511019-28	ND	1.0352	1.0000	ug/L	21.0	104	30	40 - 130	
Naphthalene	MS	1511019-28	ND	1.0556	1.0000	ug/L		106		60 - 110	
	MSD	1511019-28	ND	0.99619	1.0000	ug/L	5.8	99.6	30	60 - 110	
Phenanthrene	MS	1511019-28	ND	1.1471	1.0000	ug/L		115		60 - 120	
	MSD	1511019-28	ND	1.0638	1.0000	ug/L	7.5	106	30	60 - 120	
Pyrene	MS	**1511019-28**	**ND**	**1.7749**	**1.0000**	**ug/L**		**177**		**50 - 125**	**Q03**
	MSD	**1511019-28**	**ND**	**1.6037**	**1.0000**	**ug/L**	**10.1**	**160**	**30**	**50 - 125**	**Q03**
Nitrobenzene-d5 (Surrogate)	MS	1511019-28	ND	4.0540	4.0000	ug/L		101		40 - 130	
	MSD	1511019-28	ND	3.7488	4.0000	ug/L	7.8	93.7		40 - 130	
2-Fluorobiphenyl (Surrogate)	MS	1511019-28	ND	4.3117	4.0000	ug/L		108		50 - 120	
	MSD	1511019-28	ND	3.9075	4.0000	ug/L	9.8	97.7		50 - 120	

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2168	Used client sample: N										
p-Terphenyl-d14 (Surrogate)	MS	1511019-28	ND	5.3878	4.0000	ug/L		135		40 - 130	S09
	MSD	1511019-28	ND	4.9525	4.0000	ug/L	8.4	124		40 - 130	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2282						
TPH - Diesel (FFP)	BYE2282-BLK1	ND	ug/L	200	34	
TPH - Crude Oil	BYE2282-BLK1	ND	ug/L	500	140	
Tetracosane (Surrogate)	**BYE2282-BLK1**	**91.6**	%	**37 - 134 (LCL - UCL)**		

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Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2282										
TPH - Diesel (FFP)	BYE2282-BS1	LCS	2127.6	2500.0	ug/L	85.1		52 - 128		
Tetracosane (Surrogate)	BYE2282-BS1	LCS	97.390	100.00	ug/L	97.4		37 - 134		

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Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2282	Used client sample: N										
TPH - Diesel (FFP)	MS	1511019-59	ND	1902.7	2500.0	ug/L		76.1		50 - 127	
	MSD	1511019-59	ND	2030.1	2500.0	ug/L	6.5	81.2	24	50 - 127	
Tetracosane (Surrogate)	MS	1511019-59	ND	89.695	100.00	ug/L		89.7		37 - 134	
	MSD	1511019-59	ND	91.645	100.00	ug/L	2.2	91.6		37 - 134	

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1883						
Bromide	BYE1883-BLK1	ND	mg/L	0.10	0.035	
Chloride	BYE1883-BLK1	ND	mg/L	0.50	0.061	
Nitrate as NO3	BYE1883-BLK1	ND	mg/L	0.44	0.078	
Sulfate	BYE1883-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BYE1915						
Bicarbonate Alkalinity as CaCO3	BYE1915-BLK1	ND	mg/L	4.1	4.1	
Carbonate Alkalinity as CaCO3	BYE1915-BLK1	ND	mg/L	4.1	4.1	
Hydroxide Alkalinity as CaCO3	BYE1915-BLK1	ND	mg/L	4.1	4.1	
Total Alkalinity as CaCO3	BYE1915-BLK1	ND	mg/L	4.1	4.1	
QC Batch ID: BYE2045						
Total Calcium	**BYE2045-BLK1**	**0.054045**	**mg/L**	**0.10**	**0.015**	**J**
Total Magnesium	BYE2045-BLK1	ND	mg/L	0.050	0.019	
Total Sodium	BYE2045-BLK1	ND	mg/L	0.50	0.051	
Total Potassium	**BYE2045-BLK1**	**0.27904**	**mg/L**	**1.0**	**0.13**	**J**
QC Batch ID: BYE2132						
Total Dissolved Solids @ 180 C	BYE2132-BLK1	ND	mg/L	6.7	6.7	

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Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1883										
Bromide	BYE1883-BS1	LCS	2.1750	2.0000	mg/L	109		90 - 110		
Chloride	BYE1883-BS1	LCS	50.104	50.000	mg/L	100		90 - 110		
Nitrate as NO3	BYE1883-BS1	LCS	22.497	22.134	mg/L	102		90 - 110		
Sulfate	BYE1883-BS1	LCS	98.113	100.00	mg/L	98.1		90 - 110		
QC Batch ID: BYE1915										
Total Alkalinity as CaCO3	BYE1915-BS3	LCS	99.040	100.00	mg/L	99.0		90 - 110		
QC Batch ID: BYE2045										
Total Calcium	BYE2045-BS1	LCS	9.4422	10.000	mg/L	94.4		85 - 115		
Total Magnesium	BYE2045-BS1	LCS	9.5745	10.000	mg/L	95.7		85 - 115		
Total Sodium	BYE2045-BS1	LCS	9.9617	10.000	mg/L	99.6		85 - 115		
Total Potassium	BYE2045-BS1	LCS	9.8422	10.000	mg/L	98.4		85 - 115		
QC Batch ID: BYE2132										
Total Dissolved Solids @ 180 C	BYE2132-BS1	LCS	565.00	586.00	mg/L	96.4		90 - 110		

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Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1883	Used client sample: N										
Bromide	DUP	I512299-01RE'	0.28600	0.31600		mg/L	10.0		10		
	MS	I512299-01RE'	0.28600	4.9414	4.0404	mg/L		115		80 - 120	
	MSD	I512299-01RE'	0.28600	4.5616	4.0404	mg/L	8.0	106	10	80 - 120	
Chloride	DUP	I512299-01RE'	72.608	72.236		mg/L	0.5		10		
	MS	I512299-01RE'	72.608	184.16	101.01	mg/L		110		80 - 120	
	MSD	I512299-01RE'	72.608	183.37	101.01	mg/L	0.4	110	10	80 - 120	
Nitrate as NO3	DUP	I512299-01RE'	123.68	123.93		mg/L	0.2		10		
	MS	I512299-01RE'	123.68	167.60	44.715	mg/L		98.2		80 - 120	
	MSD	I512299-01RE'	123.68	166.98	44.715	mg/L	0.4	96.8	10	80 - 120	
Sulfate	DUP	I512299-01RE'	116.73	117.00		mg/L	0.2		10		
	MS	I512299-01RE'	116.73	329.03	202.02	mg/L		105		80 - 120	
	MSD	I512299-01RE'	116.73	327.66	202.02	mg/L	0.4	104	10	80 - 120	
QC Batch ID: BYE1915	Used client sample: N										
Bicarbonate Alkalinity as CaCO3	DUP	1512405-01	678.21	673.34		mg/L	0.7		10		
Carbonate Alkalinity as CaCO3	DUP	1512405-01	ND	ND		mg/L			10		
Hydroxide Alkalinity as CaCO3	DUP	1512405-01	ND	ND		mg/L			10		
Total Alkalinity as CaCO3	DUP	1512405-01	678.21	673.34		mg/L	0.7		10		
QC Batch ID: BYE2045	Used client sample: N										
Total Calcium	DUP	1512033-01	1.3059	1.3150		mg/L	0.7		20		
	MS	1512033-01	1.3059	11.446	10.000	mg/L		101		75 - 125	
	MSD	1512033-01	1.3059	11.663	10.000	mg/L	1.9	104	20	75 - 125	
Total Magnesium	DUP	1512033-01	2.3407	2.3180		mg/L	1.0		20		
	MS	1512033-01	2.3407	12.015	10.000	mg/L		96.7		75 - 125	
	MSD	1512033-01	2.3407	12.328	10.000	mg/L	2.6	99.9	20	75 - 125	
Total Sodium	DUP	1512033-01	10.884	10.776		mg/L	1.0		20		
	MS	1512033-01	10.884	20.819	10.000	mg/L		99.3		75 - 125	
	MSD	1512033-01	10.884	21.412	10.000	mg/L	2.8	105	20	75 - 125	
Total Potassium	DUP	**1512033-01**	**1.6945**	**1.3356**		**mg/L**	**23.7**		**20**		**A02**
	MS	**1512033-01**	**1.6945**	**11.681**	**10.000**	**mg/L**		**99.9**		**75 - 125**	
	MSD	**1512033-01**	**1.6945**	**11.551**	**10.000**	**mg/L**	**1.1**	**98.6**	**20**	**75 - 125**	
QC Batch ID: BYE2132	Used client sample: Y - Description: BL25 TOW POND 13, 05/20/2015 09:45										
Total Dissolved Solids @ 180 C	DUP	1512385-01	10750	11050		mg/L	2.8		10		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2042						
Total Recoverable Uranium	BYE2042-BLK1	ND	pCi/L	0.67	0.067	
QC Batch ID: BYE2045						
Total Antimony	BYE2045-BLK1	ND	ug/L	100	8.5	
Total Arsenic	BYE2045-BLK1	ND	ug/L	50	7.8	
Total Barium	BYE2045-BLK1	ND	ug/L	10	3.5	
Total Beryllium	BYE2045-BLK1	ND	ug/L	10	0.50	
Total Boron	**BYE2045-BLK1**	**0.025858**	**mg/L**	**0.10**	**0.013**	**J**
Total Cadmium	BYE2045-BLK1	ND	ug/L	10	1.1	
Total Chromium	BYE2045-BLK1	ND	ug/L	10	1.1	
Total Cobalt	BYE2045-BLK1	ND	ug/L	50	1.3	
Total Copper	BYE2045-BLK1	ND	ug/L	10	1.1	
Total Iron	BYE2045-BLK1	ND	mg/L	0.050	0.030	
Total Lead	BYE2045-BLK1	ND	ug/L	50	4.0	
Total Lithium	BYE2045-BLK1	ND	mg/L	0.020	0.0062	
Total Manganese	BYE2045-BLK1	ND	mg/L	0.010	0.0040	
Total Molybdenum	BYE2045-BLK1	ND	ug/L	50	1.2	
Total Nickel	BYE2045-BLK1	ND	ug/L	10	2.0	
Total Selenium	BYE2045-BLK1	ND	ug/L	100	15	
Total Silver	BYE2045-BLK1	ND	ug/L	10	1.9	
Total Strontium	BYE2045-BLK1	ND	mg/L	0.010	0.0010	
Total Thallium	BYE2045-BLK1	ND	ug/L	100	24	
Total Vanadium	BYE2045-BLK1	ND	ug/L	10	2.2	
Total Zinc	BYE2045-BLK1	ND	ug/L	50	2.3	
QC Batch ID: BYE2065						
Hexavalent Chromium	BYE2065-BLK1	ND	ug/L	2.0	0.70	
QC Batch ID: BYE2170						
Total Mercury	BYE2170-BLK1	ND	ug/L	0.20	0.033	

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Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2042										
Total Recoverable Uranium	BYE2042-BS1	LCS	25.246	26.800	pCi/L	94.2		85 - 115		
QC Batch ID: BYE2045										
Total Antimony	BYE2045-BS1	LCS	387.39	400.00	ug/L	96.8		85 - 115		
Total Arsenic	BYE2045-BS1	LCS	186.63	200.00	ug/L	93.3		85 - 115		
Total Barium	BYE2045-BS1	LCS	398.40	400.00	ug/L	99.6		85 - 115		
Total Beryllium	BYE2045-BS1	LCS	190.47	200.00	ug/L	95.2		85 - 115		
Total Boron	BYE2045-BS1	LCS	0.98031	1.0000	mg/L	98.0		85 - 115		
Total Cadmium	BYE2045-BS1	LCS	190.31	200.00	ug/L	95.2		85 - 115		
Total Chromium	BYE2045-BS1	LCS	189.51	200.00	ug/L	94.8		85 - 115		
Total Cobalt	BYE2045-BS1	LCS	190.43	200.00	ug/L	95.2		85 - 115		
Total Copper	BYE2045-BS1	LCS	365.33	400.00	ug/L	91.3		85 - 115		
Total Iron	BYE2045-BS1	LCS	1.0046	1.0000	mg/L	100		85 - 115		
Total Lead	BYE2045-BS1	LCS	390.59	400.00	ug/L	97.6		85 - 115		
Total Lithium	BYE2045-BS1	LCS	0.19646	0.20000	mg/L	98.2		85 - 115		
Total Manganese	BYE2045-BS1	LCS	0.47598	0.50000	mg/L	95.2		85 - 115		
Total Molybdenum	BYE2045-BS1	LCS	191.90	200.00	ug/L	96.0		85 - 115		
Total Nickel	BYE2045-BS1	LCS	380.79	400.00	ug/L	95.2		85 - 115		
Total Selenium	BYE2045-BS1	LCS	201.07	200.00	ug/L	101		85 - 115		
Total Silver	BYE2045-BS1	LCS	92.503	100.00	ug/L	92.5		85 - 115		
Total Strontium	BYE2045-BS1	LCS	0.48778	0.50000	mg/L	97.6		85 - 115		
Total Thallium	BYE2045-BS1	LCS	414.02	400.00	ug/L	104		85 - 115		
Total Vanadium	BYE2045-BS1	LCS	192.55	200.00	ug/L	96.3		85 - 115		
Total Zinc	BYE2045-BS1	LCS	450.66	500.00	ug/L	90.1		85 - 115		
QC Batch ID: BYE2065										
Hexavalent Chromium	BYE2065-BS1	LCS	49.017	50.000	ug/L	98.0		85 - 115		
QC Batch ID: BYE2170										
Total Mercury	BYE2170-BS1	LCS	1.0150	1.0000	ug/L	102		85 - 115		

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Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2042	Used client sample: N										
Total Recoverable Uranium	DUP	1511953-01	0.55074	0.54739		pCi/L	0.6		20		J
	MS	1511953-01	0.55074	31.392	26.800	pCi/L		115		70 - 130	
	MSD	1511953-01	0.55074	29.657	26.800	pCi/L	5.7	109	20	70 - 130	
QC Batch ID: BYE2045	Used client sample: N										
Total Antimony	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	418.32	400.00	ug/L		105		75 - 125	
	MSD	1512033-01	ND	398.94	400.00	ug/L	4.7	99.7	20	75 - 125	
Total Arsenic	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	197.38	200.00	ug/L		98.7		75 - 125	
	MSD	1512033-01	ND	192.14	200.00	ug/L	2.7	96.1	20	75 - 125	
Total Barium	DUP	1512033-01	49.576	48.831		ug/L	1.5		20		
	MS	1512033-01	49.576	450.03	400.00	ug/L		100		75 - 125	
	MSD	1512033-01	49.576	461.62	400.00	ug/L	2.5	103	20	75 - 125	
otal Beryllium	DUP	1512033-01	3.5796	3.5633		ug/L	0.5		20		J
	MS	1512033-01	3.5796	200.54	200.00	ug/L		98.5		75 - 125	
	MSD	1512033-01	3.5796	202.12	200.00	ug/L	0.8	99.3	20	75 - 125	
Total Boron	DUP	1512033-01	0.10782	0.094299		mg/L	13.4		20		J
	MS	1512033-01	0.10782	1.1111	1.0000	mg/L		100		75 - 125	
	MSD	1512033-01	0.10782	1.1334	1.0000	mg/L	2.0	103	20	75 - 125	
Total Cadmium	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	206.58	200.00	ug/L		103		75 - 125	
	MSD	1512033-01	ND	196.96	200.00	ug/L	4.8	98.5	20	75 - 125	
Total Chromium	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	191.68	200.00	ug/L		95.8		75 - 125	
	MSD	1512033-01	ND	193.83	200.00	ug/L	1.1	96.9	20	75 - 125	
Total Cobalt	DUP	1512033-01	18.925	18.938		ug/L	0.1		20		J
	MS	1512033-01	18.925	227.93	200.00	ug/L		105		75 - 125	
	MSD	1512033-01	18.925	219.34	200.00	ug/L	3.8	100	20	75 - 125	
Total Copper	DUP	1512033-01	3.2479	3.4122		ug/L	4.9		20		J
	MS	1512033-01	3.2479	396.11	400.00	ug/L		98.2		75 - 125	
	MSD	1512033-01	3.2479	395.96	400.00	ug/L	0.0	98.2	20	75 - 125	
Total Iron	DUP	**1512033-01**	**4.8324**	**4.7533**		**mg/L**	**1.6**		**20**		
	MS	**1512033-01**	**4.8324**	**5.9097**	**1.0000**	**mg/L**		**108**		**75 - 125**	
	MSD	**1512033-01**	**4.8324**	**6.2683**	**1.0000**	**mg/L**	**5.9**	**144**	**20**	**75 - 125**	**A03**
Total Lead	DUP	1512033-01	ND	5.2684		ug/L			20		J
	MS	1512033-01	ND	429.07	400.00	ug/L		107		75 - 125	
	MSD	1512033-01	ND	411.45	400.00	ug/L	4.2	103	20	75 - 125	

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Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2045	Used client sample: N										
Total Lithium	DUP	1512033-01	0.73236	0.73111		mg/L	0.2		20		
	MS	1512033-01	0.73236	0.90596	0.20000	mg/L		86.8		75 - 125	
	MSD	1512033-01	0.73236	0.94514	0.20000	mg/L	4.2	106	20	75 - 125	
Total Manganese	DUP	1512033-01	0.15477	0.15602		mg/L	0.8		20		
	MS	1512033-01	0.15477	0.63644	0.50000	mg/L		96.3		75 - 125	
	MSD	1512033-01	0.15477	0.65102	0.50000	mg/L	2.3	99.2	20	75 - 125	
Total Molybdenum	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	207.03	200.00	ug/L		104		75 - 125	
	MSD	1512033-01	ND	198.46	200.00	ug/L	4.2	99.2	20	75 - 125	
Total Nickel	DUP	1512033-01	28.292	27.972		ug/L	1.1		20		
	MS	1512033-01	28.292	410.39	400.00	ug/L		95.5		75 - 125	
	MSD	1512033-01	28.292	420.41	400.00	ug/L	2.4	98.0	20	75 - 125	
Total Selenium	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	219.63	200.00	ug/L		110		75 - 125	
	MSD	1512033-01	ND	198.45	200.00	ug/L	10.1	99.2	20	75 - 125	
Total Silver	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	92.292	100.00	ug/L		92.3		75 - 125	
	MSD	1512033-01	ND	93.806	100.00	ug/L	1.6	93.8	20	75 - 125	
Total Strontium	DUP	1512033-01	0.051236	0.050119		mg/L	2.2		20		
	MS	1512033-01	0.051236	0.55873	0.50000	mg/L		101		75 - 125	
	MSD	1512033-01	0.051236	0.55633	0.50000	mg/L	0.4	101	20	75 - 125	
Total Thallium	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	455.38	400.00	ug/L		114		75 - 125	
	MSD	1512033-01	ND	440.21	400.00	ug/L	3.4	110	20	75 - 125	
Total Vanadium	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	197.10	200.00	ug/L		98.6		75 - 125	
	MSD	1512033-01	ND	197.30	200.00	ug/L	0.1	98.7	20	75 - 125	
Total Zinc	DUP	1512033-01	117.19	112.40		ug/L	4.2		20		
	MS	1512033-01	117.19	577.97	500.00	ug/L		92.2		75 - 125	
	MSD	1512033-01	117.19	597.65	500.00	ug/L	3.3	96.1	20	75 - 125	
QC Batch ID: BYE2065	Used client sample: Y - Description: BL25 TOW POND 13, 05/20/2015 09:45										
Hexavalent Chromium	DUP	1512385-01	ND	ND		ug/L			10		
	MS	1512385-01	ND	240.95	263.16	ug/L		91.6		85 - 115	
	MSD	1512385-01	ND	243.94	263.16	ug/L	1.2	92.7	10	85 - 115	
QC Batch ID: BYE2170	Used client sample: N										
Total Mercury	DUP	**1512415-01**	**0.052500**	**0.037500**		**ug/L**	**33.3**		**20**		**J,A02**
	MS	**1512415-01**	**0.052500**	**1.0875**	**1.0000**	**ug/L**		**104**		**70 - 130**	
	MSD	**1512415-01**	**0.052500**	**1.0050**	**1.0000**	**ug/L**	**7.9**	**95.2**	**20**	**70 - 130**	

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BSK Associates
Engineers & Laboratories

BSK Associates Fresno
1414 Stanislaus St
Fresno, CA93706
559-497-2888 (Main)
559-485-6935 (FAX)

A5E1956
5/27/2015
Invoice: A510815

Kerrie Vaughan
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308

RE: Report for A5E1956 General: Project Manager-Kerrie Vaughan

Dear Kerrie Vaughan,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 5/21/2015. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2009 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

If additional clarification of any information is required, please contact your Project Manager, Stephane Maupas , at (800) 877-8310 or (559) 497-2888 x212.

Thanks again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Stephane Maupas, Project Manager

NELAP ACCREDITED TNI LABORATORY

Accredited in Accordance with NELAP
ORELAP #4021

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BSK Associates Engineers & Laboratories

A5E1956

General: Project Manager-Kerrie Vaughan

Case Narrative

Project and Report Details		Invoice Details	
Client:	BC Laboratories	**Invoice To:**	BC Laboratories
Report To:	Kerrie Vaughan	**Invoice Attn:**	Kerrie Vaughan
Project #:	1512385	**Project PO#:**	-
Received:	5/21/2015 - 15:52		
Report Due:	5/28/2015		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 3.1

Containers Intact
COC/Labels Agree
Received On Wet Ice
Packing Material - Other
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

MS1.0 Matrix spike recoveries exceed control limits.

Report Distribution

Recipient(s)	Report Format	CC:
Kerrie Vaughan	FINAL.RPT	

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BSK Associates Engineers & Laboratories

A5E1956

General: Project Manager-Kerrie Vaughan

1512385

Certificate of Analysis

Sample ID: A5E1956-01
Sampled By: Client
Sample Description: 1512385-01

Sample Date - Time: 05/20/15 - 09:45
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505748	05/26/15	05/27/15	
1.65 Sigma Uncertainty		0.191	±				
MDA95		1070	pCi/L				

A5E1956 FINAL 05272015 1719
Printed: 05/27/2015
QA-RP-0001-10 Final.rpt

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BSK Associates Engineers & Laboratories

A5E1956

General: Project Manager-Kerrie Vaughan

1512385

Certificate of Analysis

Sample ID: A5E1956-02
Sampled By: Client
Sample Description: 1512385-02

Sample Date - Time: 05/20/15 - 10:35
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505748	05/26/15	05/27/15	
1.65 Sigma Uncertainty		0.156	±				
MDA95		1070	pCi/L				

A5E1956 FINAL 05272015 1719
Printed: 05/27/2015
QA-RP-0001-10 Final.rpt

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Page 4 of 10

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BSK Associates Engineers & Laboratories

A5E1956

General: Project Manager-Kerrie Vaughan

1512385

Certificate of Analysis

Sample ID: A5E1956-03
Sampled By: Client
Sample Description: 1512385-03

Sample Date - Time: 05/20/15 - 11:30
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505748	05/26/15	05/27/15	
1.65 Sigma Uncertainty		0.110	±				
MDA95		1070	pCi/L				

A5E1956 FINAL 05272015 1719
Printed: 05/27/2015
QA-RP-0001-10 Final.rpt

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BSK Associates Engineers & Laboratories

A5E1956

General: Project Manager-Kerrie Vaughan

BSK Associates Fresno

Radiological Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 00-02 - Quality Control											
Batch: A505748										Prepared: 05/26/2015	
Prep Method: EPA 00-02										Analyst: SAB	
Blank (A505748-BLK1)											
1.65 Sigma Uncertainty	ND		±							05/27/15	
Gross Alpha	ND	3	pCi/L							05/27/15	
MDA95	ND	0.00	pCi/L							05/27/15	
Blank Spike (A505748-BS1)											
Gross Alpha	28.6	3	pCi/L	30		95	80-120			05/27/15	
Blank Spike Dup (A505748-BSD1)											
Gross Alpha	24.0	3	pCi/L	30		80	80-120	17	50	05/27/15	
Matrix Spike (A505748-MS1), Source: A5E1287-01											
Gross Alpha	114	3	pCi/L	120	ND	94	70-130			05/27/15	
Matrix Spike (A505748-MS2), Source: A5E1400-03											
Gross Alpha	100	3	pCi/L	120	ND	83	70-130			05/27/15	
Matrix Spike Dup (A505748-MSD1), Source: A5E1287-01											
Gross Alpha	115	3	pCi/L	120	ND	95	70-130	1	50	05/27/15	
Matrix Spike Dup (A505748-MSD2), Source: A5E1400-03											
Gross Alpha	80.7	3	pCi/L	120	ND	67	70-130	21	50	05/27/15	MS1.0 Low

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BSK Associates Engineers & Laboratories

A5E1956

General: Project Manager-Kerrie Vaughan

Certificate of Analysis

Notes:

The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.

Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.

All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.

Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.

J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.

(1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.

Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.

RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.

Due to the subjective nature of the Threshold Odor Method , all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.

The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected at RL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	Picocuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent Recovered (surrogates)	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit		

Please see the individual Subcontract Lab's report for applicable certifications.

BSK is not accredited under the NELAC program for the following parameters: **NA**

Certifications: **Please refer to our website for a copy of our Accredited Fields of Testing under each certification.**

Fresno

State of California - ELAP	1180	State of Hawaii	4021
State of Nevada	CA000792015-1	State of Oregon - NELAC	4021
EPA - UCMR3	CA00079	State of Washington	C997-15

Sacramento

State of California - ELAP	2435

Vancouver

State of Oregon - NELAC	WA100008	State of Washington	C824-14a

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A5E1956

05212015

BCLab4911

Turnaround: Standard
Due Date: 5/28/2015

BC Laboratories

Printed: 5/21/ Page 8 of 10
Page 1 of 1

3.1

SUBCONTRACT ORDER
BC Laboratories
1512385

A5E1956 05/21/2015
BCLab4911 4

SENDING LABORATORY:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911
FAX: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATC ...SA
BSK Analytical Labs
1414 Stanislaus Street
Fresno, CA 93706
Phone: (800) 877-8310
FAX: (559) 485-6935

Analysis	Due	Expires	Comments
Sample ID: 1512385-01 **Water**	**Sampled: 05/20/15 09:45**		
EPA 900.0 Gross Alpha	05/28/15 17:00	11/17/15 09:45	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			
Sample ID: 1512385-02 **Water**	**Sampled: 05/20/15 10:35**		
EPA 900.0 Gross Alpha	05/28/15 17:00	11/17/15 10:35	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			
Sample ID: 1512385-03 **Water**	**Sampled: 05/20/15 11:30**		
EPA 900.0 Gross Alpha	05/28/15 17:00	11/17/15 11:30	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			

Meggan Boyles 5/21/15 — Released By / Date
BJ 5-21-15 — Received By / Date
BJ 5-21-15 — Released By / Date
Cecelia White 5/21/15 — Received By / Date
PMS Wet

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BSK Associates SR-FL-0002-13

A5E1956 05/21/2015
BCLab4911 4

Sample Integrity

BSK Bottles: Yes No Page 1 of 1

COC Info				
Was temperature within range? Chemistry ≤ 6°C Micro < 10°C	Yes No NA	Were correct containers and preservatives received for the tests requested?	Yes No NA
If samples were taken today, is there evidence that chilling has begun?	Yes No NA	Were there bubbles in the VOA vials? (Volatiles Only)	Yes No NA
Did all bottles arrive unbroken and intact?	Yes No	Was a sufficient amount of sample received?	Yes No
Did all bottle labels agree with COC?	Yes No	Do samples have a hold time <72 hours?	Yes No
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes No NA	Was PM notified of discrepancies? PM: By/Time:	Yes No NA

Bottles Received "—" means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V)	Checks	Passed?	1-3					
Bacti $Na_2S_2O_3$	—	—						
None (P) White Cap	—	—						
Cr6 (P) Br. Green Label NH4OH(NH4)2SO4 DW	Cl, pH > 8	Y N						
Cr6 (P) Pink Label Hex Chrome Buffer DW	pH 9-9.5	Y N						
Cr6 (P) Pink Label Hex Chrome Buffer WW	pH 9.3-9.7	Y N						
HNO_3 (P) Red Cap	—	—	1c					
H_2SO_4 (P) or (AG) Yellow Cap/Label	pH < 2	Y N						
NaOH (P) Green Cap	Cl, pH >10	Y N						
NaOH + ZnAc (P)	pH > 9	Y N						
Dissolved Oxygen 300ml (g)	—	—						
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—						
HCl (AG) Lt. Blue Label O&G, Diesel	—	—						
Na_2O_3S+HCl (AG) Lt. Pink Label 525	—	—						
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—						
$Na_2S_2O_3$ (AG) Blue Label 547,515,548,THM,524	—	—						
$Na_2S_2O_3$ (CG) Blue Label 504, 505	—	—						
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	Y N						
NH_4Cl (AG) Purple Label 552	—	—						
EDA (AG) Brown Label DBPs	—	—						
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—						
Buffer pH 4 (CG)	—	—						
None (CG)	—	—						
H_3PO_4 (CG) Salmon Label	—	—						
Other:								
Asbestos 1Liter Plastic w/ Foil	—	—						
Low Level Hg / Metals Double Baggie	—	—						
Bottled Water	—	—						
Clear Glass Jar: 250 / 500 / 1 Liter	—	—						
Soil Tube Brass / Steel / Plastic	—	—						
Tedlar Bag / Plastic Bag	—	—						

CW 5/21/15

Split

	Container	Preservative	Date/Time/Initials		Container	Preservative	Date/Time/Initials
S P				S P			
S P				S P			

Comments

Labeled by: JHP @ 16:31 Labels checked by: JLH @ 16:55 RUSH Paged by: Page 10 of 10

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 03, 2015

Ms. Kerrie Vaughan
BC Laboratories
4100 Atlas Ct.
Bakersfield, CA 93308

RE: Project: 1512385
Pace Project No.: 30148785

Dear Ms. Vaughan:
Enclosed are the analytical results for sample(s) received by the laboratory on May 22, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carin A Ferris

Carin Ferris
carin.ferris@pacelabs.com
Project Manager

Enclosures

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 1512385
Pace Project No.: 30148785

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: PA014572014-4
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: 1512385
Pace Project No.: 30148785

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30148785001	1512385-01	Water	05/20/15 09:45	05/22/15 09:50
30148785002	1512385-02	Water	05/20/15 10:35	05/22/15 09:50
30148785003	1512385-03	Water	05/20/15 11:30	05/22/15 09:50

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 1512385
Pace Project No.: 30148785

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30148785001	1512385-01	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30148785002	1512385-02	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30148785003	1512385-03	EPA 903.1	JC2	1
		EPA 904.0	JLW	1

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(724)850-5600

PROJECT NARRATIVE

Project: 1512385
Pace Project No.: 30148785

Method: EPA 903.1
Description: 903.1 Radium 226
Client: BC Laboratories
Date: June 03, 2015

General Information:
3 samples were analyzed for EPA 903.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: 1512385
Pace Project No.: 30148785

Method: EPA 904.0
Description: 904.0 Radium 228
Client: BC Laboratories
Date: June 03, 2015

General Information:
3 samples were analyzed for EPA 904.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1512385
Pace Project No.: 30148785

Sample: 1512385-01 Lab ID: **30148785001** Collected: 05/20/15 09:45 Received: 05/22/15 09:50 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample collection dates and times were not present on the sample containers.
• Upon receipt at the laboratory 3 mls of nitric acid were added to the sample to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
• Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**12.9 ± 6.83 (7.56) C:NA T:77%**	pCi/L	06/02/15 09:36	13982-63-3	
Radium-228	EPA 904.0	**3.64 ± 3.91 (8.10) C:83% T:70%**	pCi/L	06/02/15 12:50	15262-20-1	

Sample: 1512385-02 Lab ID: **30148785002** Collected: 05/20/15 10:35 Received: 05/22/15 09:50 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample collection dates and times were not present on the sample containers.
• Upon receipt at the laboratory 3 mls of nitric acid were added to the sample to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
• Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**13.5 ± 9.69 (11.9) C:NA T:85%**	pCi/L	06/02/15 09:53	13982-63-3	
Radium-228	EPA 904.0	**1.32 ± 4.36 (9.69) C:80% T:71%**	pCi/L	06/02/15 12:50	15262-20-1	

Sample: 1512385-03 Lab ID: **30148785003** Collected: 05/20/15 11:30 Received: 05/22/15 09:50 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample collection dates and times were not present on the sample containers.
• Upon receipt at the laboratory 3 mls of nitric acid were added to the sample to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
• Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**17.5 ± 9.77 (10.7) C:NA T:74%**	pCi/L	06/02/15 10:14	13982-63-3	
Radium-228	EPA 904.0	**11.4 ± 5.41 (9.10) C:83% T:69%**	pCi/L	06/02/15 12:51	15262-20-1	

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512385
Pace Project No.: 30148785

QC Batch: RADC/24591 Analysis Method: EPA 903.1
QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226
Associated Lab Samples: 30148785001, 30148785002, 30148785003

METHOD BLANK: 898956 Matrix: Water
Associated Lab Samples: 30148785001, 30148785002, 30148785003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.430 ± 0.447 (0.666) C:NA T:95%	pCi/L	06/02/15 09:20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Greensburg, PA 15601
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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512385
Pace Project No.: 30148785

QC Batch: RADC/24593 Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228
Associated Lab Samples: 30148785001, 30148785002, 30148785003

METHOD BLANK: 898958 Matrix: Water
Associated Lab Samples: 30148785001, 30148785002, 30148785003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.137 ± 0.396 (0.873) C:83% T:81%	pCi/L	06/01/15 13:09	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 1512385
Pace Project No.: 30148785

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Act - Activity
Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)
(MDC) - Minimum Detectable Concentration
Trac - Tracer Recovery (%)
Carr - Carrier Recovery (%)
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

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SUBCONTRACT ORDER
BC Laboratories
1512385

RUSH!

SENDING LABORATORY:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911
FAX: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY: PACEA
PACE Analytical
1638 Roseytown Road, Ste 2,3 &4
Greensburg, PA 15601
Phone: (724) 850-5600
FAX: (724) 850-5601

30148785 PM

Analysis	Due	Expires	Comments
Sample ID: 1512385-01 Water Sampled: 05/20/15 09:45			001
EPA 903.1 Radium 226	05/28/15 17:00	11/17/15 09:45	Analyze water phase only. Results needed by 5/28/2015.
EPA 904.0 Radium 228	05/28/15 17:00	11/17/15 09:45	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			
Sample ID: 1512385-02 Water Sampled: 05/20/15 10:35			002
EPA 903.1 Radium 226	05/28/15 17:00	11/17/15 10:35	Analyze water phase only. Results needed by 5/28/2015.
EPA 904.0 Radium 228	05/28/15 17:00	11/17/15 10:35	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			
Sample ID: 1512385-03 Water Sampled: 05/20/15 11:30			003
EPA 903.1 Radium 226	05/28/15 17:00	11/17/15 11:30	Analyze water phase only. Results needed by 5/28/2015.
EPA 904.0 Radium 228	05/28/15 17:00	11/17/15 11:30	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			

Released By	Date	Received By	Date
Meggan Boyles	5/21/15	[signature]	5/22/15 0950

PACEA

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Sample Condition Upon Receipt

Pace Analytical

Client Name: BC

Project # 30148785

Courier: ☐ Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 12 965 376 0162415408

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals Intact: ☐ yes ☐ no Biological Tissue is Frozen: Yes No

Packing Material: Bubble Wrap ✓ Bubble Bags ___ None ___ Other _____

Thermometer Used NA Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temp.: Observed Temp.: NA °C Correction Factor: NA °C Final Temp: NA °C

Date and initials of person examining contents: Ann 5/22/15

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☑Yes ☐No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☑No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☐Yes ☑No ☐N/A	12. no date or time on sample
-Includes date/time/ID/Analysis Matrix: wt		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13. added 3 ml HNO3 to 001-003
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☑No ☐N/A	pH<2 Ann 5/22/15 1045
exceptions: VOA, coliform, TOC, O&G, Phenols	☐Yes ☑No	Initial when completed Ann / Lot # of added preservative DL15-0433
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Carmen Bennis Date: 5/22/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

J:\QAQC\Master\Document Management\Sample Mgt\SCURF\FALLC003-09 SCUR Front 3March2015 Page 12 of 13

Pace Analytical

page 2

Project Number: 30148785

Client Name: BC

Item No.	001	002
Matrix Code	W	W
Glass Jar (120 / 250 / 500 / 1L)		
Soil Kit (2 SB, 1M, soil jar)		
Chemistry (250 / 500 / 1L)		
Organics (1L)		
Nutrient (250 / 500)		
Phenolics (250 ml)		
TOC (40 ml / 250 ml)		
TOX (250 ml)		
Total Metals		
Dissolved Metals preserved Y N		
O & G (1L)		
TPH (1L)		
VOA (40 ml 30 ml)		
Cyanide (250 ml)		
Sulfide (500 ml)		
Bacteria (120 ml)		
Wipes / swipe/ smear/ filter		
Radchem Nalgene (125 / 250 / 500 / 1L)	2	
Radchem Nalgene (1/2 gal. / 1 gal.L)		
Cubitainer (500 ml / 4L)		
Ziploc		
Other		
Other		

SCURF Back (CD16-4 15May2012).xls

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:36
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.
A02	The difference between duplicate readings is less than the quantitation limit.
A03	The sample concentration is more than 4 times the spike level.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
A17	Surrogate not reportable due to sample dilution.
L01	The Laboratory Control Sample Water (LCSW) recovery is not within laboratory established control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.
Z1	50 ul of antifoam added to the sample to avoid foaming of the sample.

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BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 06/03/2015

Rod Bowyer

Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Client Project:	DOW
BCL Project:	Oilfield Produced Water Pond Testing
BCL Work Order:	1512386
Invoice ID:	B204801

Enclosed are the results of analyses for samples received by the laboratory on 5/20/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Kerrie Vaughan
Client Services

Authorized Signature

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Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)..... 11
Total Petroleum Hydrocarbons..... 12
Water Analysis (General Chemistry)..... 13
Metals Analysis..... 14

1512386-02 - BL16 DOW POND 4

Volatile Organic Analysis (EPA Method 8260B)..... 15
Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)..... 16
Total Petroleum Hydrocarbons..... 17
Water Analysis (General Chemistry)..... 18
Metals Analysis..... 19

1512386-03 - BL17 DOW POND 5

Volatile Organic Analysis (EPA Method 8260B)..... 20
Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)..... 21
Total Petroleum Hydrocarbons..... 22
Water Analysis (General Chemistry)..... 23
Metals Analysis..... 24

1512386-04 - BL18 DOW POND 6

Volatile Organic Analysis (EPA Method 8260B)..... 25
Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)..... 26
Total Petroleum Hydrocarbons..... 27
Water Analysis (General Chemistry)..... 28
Metals Analysis..... 29

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Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Method Blank Analysis..... 33
Laboratory Control Sample..... 34
Precision and Accuracy..... 35

Total Petroleum Hydrocarbons

Method Blank Analysis..... 37
Laboratory Control Sample..... 38
Precision and Accuracy..... 39

Water Analysis (General Chemistry)

Method Blank Analysis..... 40
Laboratory Control Sample..... 41
Precision and Accuracy..... 42

Metals Analysis

Method Blank Analysis..... 43
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Notes

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BC Laboratories, Inc.

Chain of Custody Form

Page 1 of 1

Report To:
Client: Aera
Attn: Rod Bowyer
Street Address:
City, State, Zip:
Phone: Fax:
Email Address:
Work Order #: 15-12386

Project #:
Project Name:
Sampler(s): J. Enriquez / R. Ogletree

Analysis Requested

Please refer to the back of this page for completion instructions and method legend.

See Attached

Comments:

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

Sample #	Description	Date Sampled	Time Sampled	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
-1	BL 15 DOW POND 3 (4)	5/20/15	1334							5	
-2	BL 16 DOW POND 4 (5)	↓	1420								
-3	BL 17 DOW POND 5 (6)	↓	1519								
-4	BL 18 DOW POND 6	↓	1547								

CHK BY: M

DISTRIBUTION: SUB OUT

SHORT HOLDING TIME: Cr+6 NO2 NO3 OP SS DO Cl2 BOD MBAS COT

Billing ☐ Same as above

Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? Geotracker ☐ Yes ☐ No

Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)

System # (Needed for EDT)

	Date	Time		Date	Time
1. Relinquished By: J C Enriquez	5/20/15	1713	1. Received By: [signature]	5/20/15	1713
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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Chain of Custody and Cooler Receipt Form for 1512386 Page 2 of 5

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 Of 2

Submission #: 15-12386 | AW 5/4/15 3

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☐ BC Lab Field Service ☒ Other ☐ (Specify)_____	Ice Chest ☒ None ☐ Box ☐ Other ☐ (Specify)_____	YES ☐ NO ☐

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO | Emissivity: 0.95 Container: PE Thermometer ID: 208 | Date/Time 5/20/15 1805
Temperature: (A) 1.3 °C / (C) 1.4 °C | Analyst Init KLB

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	C	C								
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	DEF	DEF								
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AB	AB								
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M	H	H								
QT AMBER 8270	I	I								
8 OZ. JAR										
32 OZ. JAR	G	G								
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:
Sample Numbering Completed By: KLB Date/Time: 5/20/15 1836 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]
A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1512386 Page 3 of 5

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 2 Of 2

Submission #: 15-12386 MM 5/21/15 3

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☒ None ☐ Box ☐	YES ☐ NO ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____	Other ☐ (Specify)_____	

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: PE Thermometer ID: 208 Date/Time 5/20/15 1604

Temperature: (A) 1.1 °C / (C) 1.7 °C Analyst Init KMB

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	3x	4x	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL	C									
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	DEF	AD	MM 5/21/15							
PT INORGANIC CHEMICAL METALS		AKMB 5/20/15								
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AB									
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M	H									
QT AMBER 8270	I									
8 OZ. JAR										
32 OZ. JAR	G									
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:

Sample Numbering Completed By: KMB Date/Time: 5/20/15 1832 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1512386 Page 4 of 5

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 3 Of 3

Submission #: 15-12386

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☐ BC Lab Field Service ☒ Other ☐ (Specify)_____	Ice Chest ☒ None ☐ Box ☐ Other ☐ (Specify)_____	YES ☐ NO ☐

Refrigerant: Ice ☒ Blue Ice ☐ None ☒ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Pe Thermometer ID: 208 Date/Time 5/21/15 0740

Temperature: (A) 1.3 °C / (C) 1.4 °C Analyst Init MV1

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	C									
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	EF									
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AB									
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M	H									
QT AMBER 8270	I									
8 OZ. JAR										
32 OZ. JAR	G									
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments: This cooler was missed on 5/20/15, so I added to the lab # created to finish the project

Sample Numbering Completed By: MV1 Date/Time: 5/21/15 @ 0745 (S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC)

A = Actual / C = Corrected

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15-12386

BC LABORATORIES, INC
4100 Atlas Ct. Bakersfield, Ca. 93308 Tel: (800) 878 -4911 Website: www.bclabs.com

Aera - OIL FIELD PRODUCED WATER POND TESTING

CALIFORNIA WATER CODE DIRECTIVE PURSUANT TO SECTION 13267
CHARACTERIZATION OF WASTEWATER FOR DISCHARGE

Collect representative samples of wastewater within each of the ponds. Samples must be analyzed in accordance with the water quality analysis and reporting requirements contained in Attachment B to this Order;[1]

List of Analyses as per Attachment B

- √ A. Total Dissolved Solids
- √ B. Metals, CCR title 22, section 66261.24. subdivision (a)(2)(A) (antimony, arsenic, barium, beryllium, cadmium, chromium, chromium (VI), cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc)
- √ C. benzene, toluene, ethylbenzene, xylenes
- √ D. Total Petroleum Hydrocarbons as Crude Oil √
- √ E. Polynuclear Aromatic Hydrocarbons (PAH)
- F. Radionuclides (Radium226, Radium 228, Gross Alpha, Uranium)
- √ G. Major and Minor Cations (sodium, potassium, magnesium, calcium)
- √ H. Major and Minor Anions (nitrate, chloride, sulfate, carbonate, bicarbonate, bromide)
- √ I. Trace Elements (lithium, strontium, boron, iron, manganese)

Total Price $624

Electronic results available as an Excel spreadsheet upon request.

Field Service	
Sampling	$50 per hour
Vehicle	$0.60 per mile

[1] All previously obtained analytical data for oil field produced wastewater samples collected at the Facility, if any, with a description of the source and location for each analysis may be submitted in the alternative for re-running tests if the sample(s) was collected and analyzed within 12 months (one year) of the date of this order.

4100 Atlas Ct. Bakersfield, CA 93308 (800) 878-4911 www.bclabs.com

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1512386-01	COC Number:	—	Receive Date:	05/20/2015 17:13
	Project Number:	—	Sampling Date:	05/20/2015 13:34
	Sampling Location:	—	Sample Depth:	—
	Sampling Point:	BL15 DOW POND 3	Lab Matrix:	Water
	Sampled By:	R.Ogletree/J.Enriquez	Sample Type:	Aqueous
1512386-02	COC Number:	—	Receive Date:	05/20/2015 17:13
	Project Number:	—	Sampling Date:	05/20/2015 14:20
	Sampling Location:	—	Sample Depth:	—
	Sampling Point:	BL16 DOW POND 4	Lab Matrix:	Water
	Sampled By:	R.Ogletree/J.Enriquez	Sample Type:	Aqueous
1512386-03	COC Number:	—	Receive Date:	05/20/2015 17:13
	Project Number:	—	Sampling Date:	05/20/2015 15:19
	Sampling Location:	—	Sample Depth:	—
	Sampling Point:	BL17 DOW POND 5	Lab Matrix:	Water
	Sampled By:	R.Ogletree/J.Enriquez	Sample Type:	Aqueous
1512386-04	COC Number:	—	Receive Date:	05/20/2015 17:13
	Project Number:	—	Sampling Date:	05/20/2015 15:47
	Sampling Location:	—	Sample Depth:	—
	Sampling Point:	BL18 DOW POND 6	Lab Matrix:	Water
	Sampled By:	R.Ogletree/J.Enriquez	Sample Type:	Aqueous

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512386-01 | **Client Sample Name:** BL15 DOW POND 3, 5/20/2015 1:34:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**2600**	**ug/L**	**50**	**8.3**	**EPA-8260B**	ND	**A01**	1
Ethylbenzene	**97**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	**Z1**	2
Toluene	**4200**	**ug/L**	**50**	**9.3**	**EPA-8260B**	ND	**A01**	1
Total Xylenes	**2200**	**ug/L**	**100**	**36**	**EPA-8260B**	ND	**A01**	1
p- & m-Xylenes	**1500**	**ug/L**	**50**	**28**	**EPA-8260B**	ND	**A01**	1
o-Xylene	**700**	**ug/L**	**50**	**8.2**	**EPA-8260B**	ND	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	98.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	166	%	75 - 125 (LCL - UCL)		EPA-8260B		S09	2
Toluene-d8 (Surrogate)	95.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	99.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	90.4	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/28/15 21:25	SE1	MS-V12	100	BYE2090
2	EPA-8260B	05/22/15	05/23/15 01:35	SE1	MS-V12	1	BYE2090

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512386-01 | **Client Sample Name:** BL15 DOW POND 3, 5/20/2015 1:34:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**2.2**	**ug/L**	**0.97**	**0.53**	**EPA-8270C-SIM**	ND	**A01**	1
Acenaphthylene	**1.3**	**ug/L**	**0.97**	**0.46**	**EPA-8270C-SIM**	ND	**A01**	1
Anthracene	ND	ug/L	0.97	0.16	EPA-8270C-SIM	ND	A01	1
Benzo[a]anthracene	ND	ug/L	0.97	0.25	EPA-8270C-SIM	ND	A01	1
Benzo[b]fluoranthene	ND	ug/L	0.97	0.39	EPA-8270C-SIM	ND	A01	1
Benzo[k]fluoranthene	ND	ug/L	0.97	0.49	EPA-8270C-SIM	ND	A01	1
Benzo[a]pyrene	ND	ug/L	0.97	0.25	EPA-8270C-SIM	ND	A01	1
Benzo[g,h,i]perylene	ND	ug/L	0.97	0.42	EPA-8270C-SIM	ND	A01	1
Chrysene	**0.69**	**ug/L**	**0.97**	**0.21**	**EPA-8270C-SIM**	ND	**J,A01**	1
Dibenzo[a,h]anthracene	ND	ug/L	0.97	0.43	EPA-8270C-SIM	ND	A01	1
Fluoranthene	**0.96**	**ug/L**	**0.97**	**0.12**	**EPA-8270C-SIM**	ND	**J,A01**	1
Fluorene	**6.0**	**ug/L**	**0.97**	**0.29**	**EPA-8270C-SIM**	ND	**A01**	1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.97	0.43	EPA-8270C-SIM	ND	A01	1
Naphthalene	**120**	**ug/L**	**9.7**	**7.5**	**EPA-8270C-SIM**	ND	**A01**	2
Phenanthrene	**9.2**	**ug/L**	**0.97**	**0.21**	**EPA-8270C-SIM**	ND	**A01**	1
Pyrene	**0.62**	**ug/L**	**0.97**	**0.21**	**EPA-8270C-SIM**	ND	**J,A01**	1
Nitrobenzene-d5 (Surrogate)	166	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01,S09	1
2-Fluorobiphenyl (Surrogate)	88.5	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM		A01	1
p-Terphenyl-d14 (Surrogate)	122	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/22/15	05/27/15 13:42	MK1	MS-B4	9.700	BYE2168
2	EPA-8270C-SIM	05/22/15	05/28/15 14:58	MK1	MS-B4	97	BYE2168

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512386-01 | **Client Sample Name:** BL15 DOW POND 3, 5/20/2015 1:34:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	78000	ug/L	5000	1400	EPA-8015B/FFP	ND	A01	1
Tetracosane (Surrogate)	72.0	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/22/15	05/27/15 17:02	MWB	GC-13	10	BYE2282

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512386-01 | **Client Sample Name:** BL15 DOW POND 3, 5/20/2015 1:34:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**200**	**mg/L**	**2.0**	**0.30**	**EPA-6010B**	1.1	**A07**	1
Total Magnesium	**150**	**mg/L**	**1.0**	**0.38**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**9500**	**mg/L**	**10**	**1.0**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**250**	**mg/L**	**20**	**2.6**	**EPA-6010B**	5.6	**A07**	1
Bicarbonate Alkalinity as CaCO3	**2900**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**2900**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**120**	**mg/L**	**10**	**3.5**	**EPA-300.0**	ND	**A07**	3
Chloride	**14000**	**mg/L**	**50**	**6.1**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	44	7.8	EPA-300.0	ND	A07	3
Sulfate	**27**	**mg/L**	**100**	**10**	**EPA-300.0**	ND	**J,A07**	3
Total Dissolved Solids @ 180 C	**24000**	**mg/L**	**1000**	**1000**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/22/15	05/26/15 11:59	ARD	PE-OP3	20	BYE2045
2	EPA-310.1	05/21/15	05/21/15 17:01	RML	MET-1	2	BYE1915
3	EPA-300.0	05/20/15	05/21/15 04:42	BMW	IC2	100	BYE1883
4	EPA-160.1	05/26/15	05/26/15 12:30	CAD	MANUAL	100	BYE2132

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512386-01 | **Client Sample Name:** BL15 DOW POND 3, 5/20/2015 1:34:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	2000	170	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	1000	160	EPA-6010B	500000	A07	2
Total Barium	**8800**	**ug/L**	**200**	**70**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	200	10	EPA-6010B	75000	A07	2
Total Boron	**100**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	200	22	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	1000	26	EPA-6010B	8000000	A07	2
Total Copper	**49**	**ug/L**	**200**	**22**	**EPA-6010B**	2500000	**J,A07**	2
Total Iron	**3.6**	**mg/L**	**1.0**	**0.60**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	1000	80	EPA-6010B	1000000	A07	2
Total Lithium	**7.4**	**mg/L**	**0.40**	**0.12**	**EPA-6010B**		**A07**	2
Total Manganese	**0.17**	**mg/L**	**0.20**	**0.080**	**EPA-6010B**		**J,A07**	2
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	20000		3
Total Molybdenum	ND	ug/L	1000	24	EPA-6010B	3500000	A07	2
Total Nickel	ND	ug/L	200	40	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	2000	300	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	200	38	EPA-6010B	500000	A07	2
Total Strontium	**11**	**mg/L**	**0.20**	**0.020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	2000	480	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	200	44	EPA-6010B	2400000	A07	2
Total Zinc	**82**	**ug/L**	**1000**	**46**	**EPA-6010B**	5000000	**J,A07**	2
Total Recoverable Uranium	ND	pCi/L	6.7	0.67	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/21/15	05/21/15 07:52	TDC	KONE-1	5	BYE2065
2	EPA-6010B	05/22/15	05/26/15 11:59	ARD	PE-OP3	20	BYE2045
3	EPA-7470A	05/26/15	05/26/15 15:10	MEV	CETAC1	1	BYE2170
4	EPA-200.8	05/22/15	05/22/15 17:46	SRM	PE-EL2	10	BYE2042

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512386-02 | **Client Sample Name:** BL16 DOW POND 4, 5/20/2015 2:20:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**1100**	**ug/L**	**25**	**4.2**	**EPA-8260B**	ND	**A01**	1
Ethylbenzene	**140**	**ug/L**	**25**	**4.9**	**EPA-8260B**	ND	**A01**	1
Toluene	**1900**	**ug/L**	**25**	**4.6**	**EPA-8260B**	ND	**A01**	1
Total Xylenes	**1100**	**ug/L**	**50**	**18**	**EPA-8260B**	ND	**A01**	1
p- & m-Xylenes	**750**	**ug/L**	**25**	**14**	**EPA-8260B**	ND	**A01**	1
o-Xylene	**340**	**ug/L**	**25**	**4.1**	**EPA-8260B**	ND	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	94.3	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	93.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/27/15 01:54	SE1	MS-V12	50	BYE2090

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512386-02 | **Client Sample Name:** BL16 DOW POND 4, 5/20/2015 2:20:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**0.81**	**ug/L**	**0.19**	**0.11**	**EPA-8270C-SIM**	ND		1
Acenaphthylene	**7.3**	**ug/L**	**0.96**	**0.45**	**EPA-8270C-SIM**	ND	**A01**	2
Anthracene	ND	ug/L	0.19	0.033	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	ND	ug/L	0.19	0.050	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.19	0.077	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.19	0.098	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.19	0.050	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.19	0.083	EPA-8270C-SIM	ND		1
Chrysene	**0.19**	**ug/L**	**0.19**	**0.042**	**EPA-8270C-SIM**	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.19	0.084	EPA-8270C-SIM	ND		1
Fluoranthene	ND	ug/L	0.19	0.023	EPA-8270C-SIM	ND		1
Fluorene	**3.7**	**ug/L**	**0.96**	**0.29**	**EPA-8270C-SIM**	ND	**A01**	2
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.19	0.084	EPA-8270C-SIM	ND		1
Naphthalene	**80**	**ug/L**	**9.6**	**7.4**	**EPA-8270C-SIM**	ND	**A01**	3
Phenanthrene	**3.4**	**ug/L**	**0.19**	**0.042**	**EPA-8270C-SIM**	ND		1
Pyrene	**0.28**	**ug/L**	**0.19**	**0.042**	**EPA-8270C-SIM**	ND		1
Nitrobenzene-d5 (Surrogate)	160	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1
2-Fluorobiphenyl (Surrogate)	101	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	168	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/22/15	05/27/15 19:53	MK1	MS-B4	1.920	BYE2168
2	EPA-8270C-SIM	05/22/15	05/28/15 18:04	MK1	MS-B4	9.600	BYE2168
3	EPA-8270C-SIM	05/22/15	05/28/15 18:31	MK1	MS-B4	96	BYE2168

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512386-02 | **Client Sample Name:** BL16 DOW POND 4, 5/20/2015 2:20:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**76000**	**ug/L**	**5000**	**1400**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	87.9	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/22/15	05/27/15 17:25	MWB	GC-13	10	BYE2282

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512386-02 | **Client Sample Name:** BL16 DOW POND 4, 5/20/2015 2:20:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**190**	**mg/L**	**2.0**	**0.30**	**EPA-6010B**	1.1	**A07**	1
Total Magnesium	**140**	**mg/L**	**1.0**	**0.38**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**8900**	**mg/L**	**10**	**1.0**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**240**	**mg/L**	**20**	**2.6**	**EPA-6010B**	5.6	**A07**	1
Bicarbonate Alkalinity as CaCO3	**2900**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**2900**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**120**	**mg/L**	**10**	**3.5**	**EPA-300.0**	ND	**A07**	3
Chloride	**14000**	**mg/L**	**50**	**6.1**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	44	7.8	EPA-300.0	ND	A07	3
Sulfate	**26**	**mg/L**	**100**	**10**	**EPA-300.0**	ND	**J,A07**	3
Total Dissolved Solids @ 180 C	**25000**	**mg/L**	**1000**	**1000**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/22/15	05/26/15 12:00	ARD	PE-OP3	20	BYE2045
2	EPA-310.1	05/21/15	05/21/15 17:14	RML	MET-1	2	BYE1915
3	EPA-300.0	05/20/15	05/21/15 05:00	BMW	IC2	100	BYE1883
4	EPA-160.1	05/26/15	05/26/15 12:30	CAD	MANUAL	100	BYE2132

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Aera Energy
10000 Ming Ave
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Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512386-02 | **Client Sample Name:** BL16 DOW POND 4, 5/20/2015 2:20:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	2000	170	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	1000	160	EPA-6010B	500000	A07	2
Total Barium	**8500**	**ug/L**	**200**	**70**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	200	10	EPA-6010B	75000	A07	2
Total Boron	**96**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	200	22	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	1000	26	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Iron	**3.3**	**mg/L**	**1.0**	**0.60**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	1000	80	EPA-6010B	1000000	A07	2
Total Lithium	**7.1**	**mg/L**	**0.40**	**0.12**	**EPA-6010B**		**A07**	2
Total Manganese	**0.15**	**mg/L**	**0.20**	**0.080**	**EPA-6010B**		**J,A07**	2
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	20000		3
Total Molybdenum	ND	ug/L	1000	24	EPA-6010B	3500000	A07	2
Total Nickel	ND	ug/L	200	40	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	2000	300	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	200	38	EPA-6010B	500000	A07	2
Total Strontium	**10**	**mg/L**	**0.20**	**0.020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	2000	480	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	200	44	EPA-6010B	2400000	A07	2
Total Zinc	ND	ug/L	1000	46	EPA-6010B	5000000	A07	2
Total Recoverable Uranium	ND	pCi/L	6.7	0.67	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/21/15	05/21/15 07:52	TDC	KONE-1	5	BYE2065
2	EPA-6010B	05/22/15	05/26/15 12:00	ARD	PE-OP3	20	BYE2045
3	EPA-7470A	05/26/15	05/26/15 15:12	MEV	CETAC1	1	BYE2170
4	EPA-200.8	05/22/15	05/22/15 17:50	SRM	PE-EL2	10	BYE2042

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Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512386-03 | **Client Sample Name:** BL17 DOW POND 5, 5/20/2015 3:19:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	2.5	0.42	EPA-8260B	ND	A10	1
Ethylbenzene	ND	ug/L	2.5	0.49	EPA-8260B	ND	A10	1
Toluene	ND	ug/L	2.5	0.46	EPA-8260B	ND	A10	1
Total Xylenes	ND	ug/L	5.0	1.8	EPA-8260B	ND	A10	1
p- & m-Xylenes	ND	ug/L	2.5	1.4	EPA-8260B	ND	A10	1
o-Xylene	ND	ug/L	2.5	0.41	EPA-8260B	ND	A10	1
1,2-Dichloroethane-d4 (Surrogate)	91.0	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	98.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/27/15 03:06	SE1	MS-V12	5	BYE2090

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10000 Ming Ave
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Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512386-03 | **Client Sample Name:** BL17 DOW POND 5, 5/20/2015 3:19:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	ug/L	0.19	0.10	EPA-8270C-SIM	ND		1
Acenaphthylene	**0.76**	**ug/L**	**0.19**	**0.089**	**EPA-8270C-SIM**	ND		1
Anthracene	ND	ug/L	0.19	0.032	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	ND	ug/L	0.19	0.049	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.19	0.076	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.19	0.097	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.19	0.049	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.19	0.082	EPA-8270C-SIM	ND		1
Chrysene	ND	ug/L	0.19	0.042	EPA-8270C-SIM	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.19	0.084	EPA-8270C-SIM	ND		1
Fluoranthene	ND	ug/L	0.19	0.023	EPA-8270C-SIM	ND		1
Fluorene	**0.16**	**ug/L**	**0.19**	**0.057**	**EPA-8270C-SIM**	ND	J	1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.19	0.084	EPA-8270C-SIM	ND		1
Naphthalene	ND	ug/L	0.19	0.15	EPA-8270C-SIM	ND		1
Phenanthrene	ND	ug/L	0.19	0.042	EPA-8270C-SIM	ND		1
Pyrene	ND	ug/L	0.19	0.042	EPA-8270C-SIM	ND		1
Nitrobenzene-d5 (Surrogate)	90.0	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1
2-Fluorobiphenyl (Surrogate)	68.3	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	60.4	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/22/15	05/27/15 20:20	MK1	MS-B4	1.900	BYE2168

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512386-03 | **Client Sample Name:** BL17 DOW POND 5, 5/20/2015 3:19:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	24000	ug/L	5000	1400	EPA-8015B/FFP	ND	A01	1
Tetracosane (Surrogate)	51.8	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/22/15	05/27/15 17:47	MWB	GC-13	10	BYE2282

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512386-03 | **Client Sample Name:** BL17 DOW POND 5, 5/20/2015 3:19:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**180**	**mg/L**	**2.0**	**0.30**	**EPA-6010B**	1.1	**A07**	1
Total Magnesium	**24**	**mg/L**	**1.0**	**0.38**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**1300**	**mg/L**	**10**	**1.0**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**35**	**mg/L**	**20**	**2.6**	**EPA-6010B**	5.6	**A07**	1
Bicarbonate Alkalinity as CaCO3	**410**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**410**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**15**	**mg/L**	**2.0**	**0.70**	**EPA-300.0**	ND	**A07**	3
Chloride	**2100**	**mg/L**	**10**	**1.2**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	8.8	1.6	EPA-300.0	ND	A07	3
Sulfate	**140**	**mg/L**	**20**	**2.0**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**5200**	**mg/L**	**200**	**200**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/22/15	05/26/15 12:02	ARD	PE-OP3	20	BYE2045
2	EPA-310.1	05/21/15	05/21/15 17:29	RML	MET-1	2	BYE1915
3	EPA-300.0	05/20/15	05/21/15 05:18	BMW	IC2	20	BYE1883
4	EPA-160.1	05/26/15	05/26/15 12:30	CAD	MANUAL	20	BYE2132

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512386-03 | **Client Sample Name:** BL17 DOW POND 5, 5/20/2015 3:19:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	2000	170	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	1000	160	EPA-6010B	500000	A07	2
Total Barium	**510**	**ug/L**	**200**	**70**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	200	10	EPA-6010B	75000	A07	2
Total Boron	**15**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	200	22	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	1000	26	EPA-6010B	8000000	A07	2
Total Copper	**40**	**ug/L**	**200**	**22**	**EPA-6010B**	2500000	**J,A07**	2
Total Iron	**2.2**	**mg/L**	**1.0**	**0.60**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	1000	80	EPA-6010B	1000000	A07	2
Total Lithium	**0.69**	**mg/L**	**0.40**	**0.12**	**EPA-6010B**		**A07**	2
Total Manganese	**0.61**	**mg/L**	**0.20**	**0.080**	**EPA-6010B**		**A07**	2
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	20000		3
Total Molybdenum	**25**	**ug/L**	**1000**	**24**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	**55**	**ug/L**	**200**	**40**	**EPA-6010B**	2000000	**J,A07**	2
Total Selenium	ND	ug/L	2000	300	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	200	38	EPA-6010B	500000	A07	2
Total Strontium	**1.8**	**mg/L**	**0.20**	**0.020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	2000	480	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	200	44	EPA-6010B	2400000	A07	2
Total Zinc	ND	ug/L	1000	46	EPA-6010B	5000000	A07	2
Total Recoverable Uranium	**1.1**	**pCi/L**	**6.7**	**0.67**	**EPA-200.8**		**J,A07**	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/21/15	05/21/15 07:52	TDC	KONE-1	5	BYE2065
2	EPA-6010B	05/22/15	05/26/15 12:02	ARD	PE-OP3	20	BYE2045
3	EPA-7470A	05/26/15	05/26/15 15:14	MEV	CETAC1	1	BYE2170
4	EPA-200.8	05/22/15	05/22/15 17:53	SRM	PE-EL2	10	BYE2042

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Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512386-04 | **Client Sample Name:** BL18 DOW POND 6, 5/20/2015 3:47:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND	Z1a	1
Ethylbenzene	**1.2**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	**Z1a**	1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND	Z1a	1
Total Xylenes	**13**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND	**Z1a**	1
p- & m-Xylenes	**11**	**ug/L**	**0.50**	**0.28**	**EPA-8260B**	ND	**Z1a**	1
o-Xylene	**2.5**	**ug/L**	**0.50**	**0.082**	**EPA-8260B**	ND	**Z1a**	1
1,2-Dichloroethane-d4 (Surrogate)	99.0	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	94.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	82.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/28/15 13:37	SE1	MS-V12	1	BYE2090

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512386-04 | **Client Sample Name:** BL18 DOW POND 6, 5/20/2015 3:47:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**0.38**	**ug/L**	**0.20**	**0.11**	**EPA-8270C-SIM**	ND		1
Acenaphthylene	**1.4**	**ug/L**	**0.20**	**0.092**	**EPA-8270C-SIM**	ND		1
Anthracene	ND	ug/L	0.20	0.033	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	ND	ug/L	0.20	0.051	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.20	0.078	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.20	0.10	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.20	0.051	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.20	0.084	EPA-8270C-SIM	ND		1
Chrysene	**0.24**	**ug/L**	**0.20**	**0.043**	**EPA-8270C-SIM**	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.20	0.086	EPA-8270C-SIM	ND		1
Fluoranthene	ND	ug/L	0.20	0.024	EPA-8270C-SIM	ND		1
Fluorene	**1.3**	**ug/L**	**0.20**	**0.059**	**EPA-8270C-SIM**	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.20	0.086	EPA-8270C-SIM	ND		1
Naphthalene	**1.1**	**ug/L**	**0.20**	**0.15**	**EPA-8270C-SIM**	ND		1
Phenanthrene	**1.5**	**ug/L**	**0.20**	**0.043**	**EPA-8270C-SIM**	ND		1
Pyrene	**0.25**	**ug/L**	**0.20**	**0.043**	**EPA-8270C-SIM**	ND		1
Nitrobenzene-d5 (Surrogate)	93.7	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1
2-Fluorobiphenyl (Surrogate)	89.1	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	126	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/22/15	05/27/15 20:46	MK1	MS-B4	1.960	BYE2168

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Aera Energy
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Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512386-04 | **Client Sample Name:** BL18 DOW POND 6, 5/20/2015 3:47:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**35000**	**ug/L**	**5000**	**1400**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	71.1	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/22/15	05/27/15 18:10	MWB	GC-13	10	BYE2282

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Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512386-04 | **Client Sample Name:** BL18 DOW POND 6, 5/20/2015 3:47:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**220**	**mg/L**	**2.0**	**0.30**	**EPA-6010B**	1.1	**A07**	1
Total Magnesium	**27**	**mg/L**	**1.0**	**0.38**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**1800**	**mg/L**	**10**	**1.0**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**43**	**mg/L**	**20**	**2.6**	**EPA-6010B**	5.6	**A07**	1
Bicarbonate Alkalinity as CaCO3	**280**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**280**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**24**	**mg/L**	**2.0**	**0.70**	**EPA-300.0**	ND	**A07**	3
Chloride	**3000**	**mg/L**	**10**	**1.2**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	8.8	1.6	EPA-300.0	ND	A07	3
Sulfate	**340**	**mg/L**	**20**	**2.0**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**6700**	**mg/L**	**500**	**500**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/22/15	05/26/15 12:04	ARD	PE-OP3	20	BYE2045
2	EPA-310.1	05/21/15	05/21/15 17:37	RML	MET-1	2	BYE1915
3	EPA-300.0	05/20/15	05/21/15 14:26	BMW	IC2	20	BYE1883
4	EPA-160.1	05/26/15	05/26/15 12:30	CAD	MANUAL	50	BYE2132

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Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512386-04 | **Client Sample Name:** BL18 DOW POND 6, 5/20/2015 3:47:00PM, R.Ogletree/J.Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	2000	170	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	1000	160	EPA-6010B	500000	A07	2
Total Barium	**470**	**ug/L**	**200**	**70**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	200	10	EPA-6010B	75000	A07	2
Total Boron	**17**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	200	22	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	1000	26	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Iron	**1.2**	**mg/L**	**1.0**	**0.60**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	1000	80	EPA-6010B	1000000	A07	2
Total Lithium	**0.96**	**mg/L**	**0.40**	**0.12**	**EPA-6010B**		**A07**	2
otal Manganese	**0.29**	**mg/L**	**0.20**	**0.080**	**EPA-6010B**		**A07**	2
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	20000		3
Total Molybdenum	**49**	**ug/L**	**1000**	**24**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	**49**	**ug/L**	**200**	**40**	**EPA-6010B**	2000000	**J,A07**	2
Total Selenium	ND	ug/L	2000	300	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	200	38	EPA-6010B	500000	A07	2
Total Strontium	**2.3**	**mg/L**	**0.20**	**0.020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	2000	480	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	200	44	EPA-6010B	2400000	A07	2
Total Zinc	ND	ug/L	1000	46	EPA-6010B	5000000	A07	2
Total Recoverable Uranium	**3.2**	**pCi/L**	**6.7**	**0.67**	**EPA-200.8**		**J,A07**	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/21/15	05/21/15 08:27	TDC	KONE-1	5	BYE2065
2	EPA-6010B	05/22/15	05/26/15 12:04	ARD	PE-OP3	20	BYE2045
3	EPA-7470A	05/26/15	05/26/15 15:17	MEV	CETAC1	1	BYE2170
4	EPA-200.8	05/22/15	05/22/15 17:56	SRM	PE-EL2	10	BYE2042

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2090						
Benzene	BYE2090-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BYE2090-BLK1	ND	ug/L	0.50	0.098	
Toluene	BYE2090-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BYE2090-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BYE2090-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BYE2090-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	**BYE2090-BLK1**	**95.6**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BYE2090-BLK1**	**97.3**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BYE2090-BLK1**	**94.4**	%	**80 - 120 (LCL - UCL)**		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2090										
Benzene	BYE2090-BS1	LCS	25.730	25.000	ug/L	103		70 - 130		
Toluene	BYE2090-BS1	LCS	24.730	25.000	ug/L	98.9		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYE2090-BS1	LCS	9.7100	10.000	ug/L	97.1		75 - 125		
Toluene-d8 (Surrogate)	BYE2090-BS1	LCS	9.5200	10.000	ug/L	95.2		80 - 120		
4-Bromofluorobenzene (Surrogate)	BYE2090-BS1	LCS	10.280	10.000	ug/L	103		80 - 120		

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10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2090	Used client sample: N										
Benzene	MS	1511019-37	ND	24.680	25.000	ug/L		98.7		70 - 130	
	MSD	1511019-37	ND	26.710	25.000	ug/L	7.9	107	20	70 - 130	
Toluene	MS	1511019-37	ND	23.840	25.000	ug/L		95.4		70 - 130	
	MSD	1511019-37	ND	26.160	25.000	ug/L	9.3	105	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-37	ND	9.6800	10.000	ug/L		96.8		75 - 125	
	MSD	1511019-37	ND	9.8200	10.000	ug/L	1.4	98.2		75 - 125	
Toluene-d8 (Surrogate)	MS	1511019-37	ND	9.5100	10.000	ug/L		95.1		80 - 120	
	MSD	1511019-37	ND	9.5400	10.000	ug/L	0.3	95.4		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1511019-37	ND	9.8600	10.000	ug/L		98.6		80 - 120	
	MSD	1511019-37	ND	9.7800	10.000	ug/L	0.8	97.8		80 - 120	

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Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2168						
Acenaphthene	BYE2168-BLK1	ND	ug/L	0.10	0.055	
Acenaphthylene	BYE2168-BLK1	ND	ug/L	0.10	0.047	
Anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.017	
Benzo[a]anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.026	
Benzo[b]fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.040	
Benzo[k]fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.051	
Benzo[a]pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.026	
Benzo[g,h,i]perylene	BYE2168-BLK1	ND	ug/L	0.10	0.043	
Chrysene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Dibenzo[a,h]anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.044	
Fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.012	
Fluorene	BYE2168-BLK1	ND	ug/L	0.10	0.030	
deno[1,2,3-cd]pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.044	
Naphthalene	BYE2168-BLK1	ND	ug/L	0.10	0.077	
Phenanthrene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Nitrobenzene-d5 (Surrogate)	**BYE2168-BLK1**	**91.8**	%	**40 - 130 (LCL - UCL)**		
2-Fluorobiphenyl (Surrogate)	**BYE2168-BLK1**	**93.1**	%	**50 - 120 (LCL - UCL)**		
p-Terphenyl-d14 (Surrogate)	**BYE2168-BLK1**	**126**	%	**40 - 130 (LCL - UCL)**		

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Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2168										
Acenaphthene	BYE2168-BS1	LCS	1.0861	1.0000	ug/L	109		60 - 110		
Acenaphthylene	BYE2168-BS1	LCS	1.2020	1.0000	ug/L	120		60 - 120		
Anthracene	BYE2168-BS1	LCS	1.2952	1.0000	ug/L	130		60 - 130		
Benzo[a]anthracene	BYE2168-BS1	LCS	1.1582	1.0000	ug/L	116		60 - 130		
Benzo[b]fluoranthene	BYE2168-BS1	LCS	1.0318	1.0000	ug/L	103		50 - 130		
Benzo[k]fluoranthene	BYE2168-BS1	LCS	1.1474	1.0000	ug/L	115		60 - 120		
Benzo[a]pyrene	BYE2168-BS1	LCS	1.1756	1.0000	ug/L	118		60 - 120		
Benzo[g,h,i]perylene	BYE2168-BS1	LCS	0.92832	1.0000	ug/L	92.8		40 - 120		
Chrysene	BYE2168-BS1	LCS	1.0666	1.0000	ug/L	107		60 - 110		
Dibenzo[a,h]anthracene	BYE2168-BS1	LCS	0.66352	1.0000	ug/L	66.4		40 - 120		
Fluoranthene	BYE2168-BS1	LCS	0.96748	1.0000	ug/L	96.7		60 - 120		
Fluorene	BYE2168-BS1	LCS	1.1357	1.0000	ug/L	114		60 - 120		
Indeno[1,2,3-cd]pyrene	BYE2168-BS1	LCS	1.1326	1.0000	ug/L	113		40 - 130		
Naphthalene	BYE2168-BS1	LCS	0.99890	1.0000	ug/L	99.9		60 - 110		
Phenanthrene	BYE2168-BS1	LCS	1.0604	1.0000	ug/L	106		60 - 120		
Pyrene	BYE2168-BS1	LCS	1.6547	1.0000	ug/L	165		50 - 125		L01
Nitrobenzene-d5 (Surrogate)	BYE2168-BS1	LCS	3.8161	4.0000	ug/L	95.4		40 - 130		
2-Fluorobiphenyl (Surrogate)	BYE2168-BS1	LCS	4.0934	4.0000	ug/L	102		50 - 120		
p-Terphenyl-d14 (Surrogate)	BYE2168-BS1	LCS	4.9744	4.0000	ug/L	124		40 - 130		

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Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2168	Used client sample: N										
Acenaphthene	MS	**1511019-28**	**ND**	**1.1763**	**1.0000**	**ug/L**		**118**		**60 - 110**	**Q03**
	MSD	**1511019-28**	**ND**	**1.0913**	**1.0000**	**ug/L**	**7.5**	**109**	**30**	**60 - 110**	
Acenaphthylene	MS	**1511019-28**	**ND**	**1.3083**	**1.0000**	**ug/L**		**131**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1879**	**1.0000**	**ug/L**	**9.7**	**119**	**30**	**60 - 120**	
Anthracene	MS	**1511019-28**	**ND**	**1.4025**	**1.0000**	**ug/L**		**140**		**60 - 130**	**Q03**
	MSD	**1511019-28**	**ND**	**1.3073**	**1.0000**	**ug/L**	**7.0**	**131**	**30**	**60 - 130**	**Q03**
Benzo[a]anthracene	MS	**1511019-28**	**ND**	**1.2480**	**1.0000**	**ug/L**		**125**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1594**	**1.0000**	**ug/L**	**7.4**	**116**	**30**	**60 - 120**	
Benzo[b]fluoranthene	MS	1511019-28	ND	1.1310	1.0000	ug/L		113		50 - 130	
	MSD	1511019-28	ND	1.0752	1.0000	ug/L	5.1	108	30	50 - 130	
Benzo[k]fluoranthene	MS	**1511019-28**	**ND**	**1.2472**	**1.0000**	**ug/L**		**125**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1434**	**1.0000**	**ug/L**	**8.7**	**114**	**30**	**60 - 120**	
Benzo[a]pyrene	MS	**1511019-28**	**ND**	**1.2360**	**1.0000**	**ug/L**		**124**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.0911**	**1.0000**	**ug/L**	**12.5**	**109**	**30**	**60 - 120**	
Benzo[g,h,i]perylene	MS	1511019-28	ND	1.0647	1.0000	ug/L		106		40 - 120	
	MSD	1511019-28	ND	0.97751	1.0000	ug/L	8.5	97.8	30	40 - 120	
Chrysene	MS	**1511019-28**	**ND**	**1.2087**	**1.0000**	**ug/L**		**121**		**60 - 110**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1388**	**1.0000**	**ug/L**	**6.0**	**114**	**30**	**60 - 110**	**Q03**
Dibenzo[a,h]anthracene	MS	1511019-28	ND	0.78144	1.0000	ug/L		78.1		40 - 120	
	MSD	1511019-28	ND	0.69146	1.0000	ug/L	12.2	69.1	30	40 - 120	
Fluoranthene	MS	1511019-28	ND	1.0666	1.0000	ug/L		107		60 - 120	
	MSD	1511019-28	ND	1.0141	1.0000	ug/L	5.0	101	30	60 - 120	
Fluorene	MS	**1511019-28**	**ND**	**1.2329**	**1.0000**	**ug/L**		**123**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1270**	**1.0000**	**ug/L**	**9.0**	**113**	**30**	**60 - 120**	
Indeno[1,2,3-cd]pyrene	MS	1511019-28	ND	1.2781	1.0000	ug/L		128		40 - 130	
	MSD	1511019-28	ND	1.0352	1.0000	ug/L	21.0	104	30	40 - 130	
Naphthalene	MS	1511019-28	ND	1.0556	1.0000	ug/L		106		60 - 110	
	MSD	1511019-28	ND	0.99619	1.0000	ug/L	5.8	99.6	30	60 - 110	
Phenanthrene	MS	1511019-28	ND	1.1471	1.0000	ug/L		115		60 - 120	
	MSD	1511019-28	ND	1.0638	1.0000	ug/L	7.5	106	30	60 - 120	
Pyrene	MS	**1511019-28**	**ND**	**1.7749**	**1.0000**	**ug/L**		**177**		**50 - 125**	**Q03**
	MSD	**1511019-28**	**ND**	**1.6037**	**1.0000**	**ug/L**	**10.1**	**160**	**30**	**50 - 125**	**Q03**
Nitrobenzene-d5 (Surrogate)	MS	1511019-28	ND	4.0540	4.0000	ug/L		101		40 - 130	
	MSD	1511019-28	ND	3.7488	4.0000	ug/L	7.8	93.7		40 - 130	
2-Fluorobiphenyl (Surrogate)	MS	1511019-28	ND	4.3117	4.0000	ug/L		108		50 - 120	
	MSD	1511019-28	ND	3.9075	4.0000	ug/L	9.8	97.7		50 - 120	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2168	Used client sample: N										
p-Terphenyl-d14 (Surrogate)	MS	1511019-28	ND	5.3878	4.0000	ug/L		135		40 - 130	S09
	MSD	1511019-28	ND	4.9525	4.0000	ug/L	8.4	124		40 - 130	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2282						
TPH - Diesel (FFP)	BYE2282-BLK1	ND	ug/L	200	34	
TPH - Crude Oil	BYE2282-BLK1	ND	ug/L	500	140	
Tetracosane (Surrogate)	**BYE2282-BLK1**	**91.6**	%	**37 - 134 (LCL - UCL)**		

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Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2282										
TPH - Diesel (FFP)	BYE2282-BS1	LCS	2127.6	2500.0	ug/L	85.1		52 - 128		
Tetracosane (Surrogate)	BYE2282-BS1	LCS	97.390	100.00	ug/L	97.4		37 - 134		

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Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2282	Used client sample: N										
TPH - Diesel (FFP)	MS	1511019-59	ND	1902.7	2500.0	ug/L		76.1		50 - 127	
	MSD	1511019-59	ND	2030.1	2500.0	ug/L	6.5	81.2	24	50 - 127	
Tetracosane (Surrogate)	MS	1511019-59	ND	89.695	100.00	ug/L		89.7		37 - 134	
	MSD	1511019-59	ND	91.645	100.00	ug/L	2.2	91.6		37 - 134	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE1883						
Bromide	BYE1883-BLK1	ND	mg/L	0.10	0.035	
Chloride	BYE1883-BLK1	ND	mg/L	0.50	0.061	
Nitrate as NO3	BYE1883-BLK1	ND	mg/L	0.44	0.078	
Sulfate	BYE1883-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BYE1915						
Bicarbonate Alkalinity as CaCO3	BYE1915-BLK1	ND	mg/L	4.1	4.1	
Carbonate Alkalinity as CaCO3	BYE1915-BLK1	ND	mg/L	4.1	4.1	
Hydroxide Alkalinity as CaCO3	BYE1915-BLK1	ND	mg/L	4.1	4.1	
Total Alkalinity as CaCO3	BYE1915-BLK1	ND	mg/L	4.1	4.1	
QC Batch ID: BYE2045						
Total Calcium	**BYE2045-BLK1**	**0.054045**	**mg/L**	**0.10**	**0.015**	**J**
Total Magnesium	BYE2045-BLK1	ND	mg/L	0.050	0.019	
Total Sodium	BYE2045-BLK1	ND	mg/L	0.50	0.051	
Total Potassium	**BYE2045-BLK1**	**0.27904**	**mg/L**	**1.0**	**0.13**	**J**
QC Batch ID: BYE2132						
Total Dissolved Solids @ 180 C	BYE2132-BLK1	ND	mg/L	6.7	6.7	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE1883										
Bromide	BYE1883-BS1	LCS	2.1750	2.0000	mg/L	109		90 - 110		
Chloride	BYE1883-BS1	LCS	50.104	50.000	mg/L	100		90 - 110		
Nitrate as NO3	BYE1883-BS1	LCS	22.497	22.134	mg/L	102		90 - 110		
Sulfate	BYE1883-BS1	LCS	98.113	100.00	mg/L	98.1		90 - 110		
QC Batch ID: BYE1915										
Total Alkalinity as CaCO3	BYE1915-BS3	LCS	99.040	100.00	mg/L	99.0		90 - 110		
QC Batch ID: BYE2045										
Total Calcium	BYE2045-BS1	LCS	9.4422	10.000	mg/L	94.4		85 - 115		
Total Magnesium	BYE2045-BS1	LCS	9.5745	10.000	mg/L	95.7		85 - 115		
Total Sodium	BYE2045-BS1	LCS	9.9617	10.000	mg/L	99.6		85 - 115		
Total Potassium	BYE2045-BS1	LCS	9.8422	10.000	mg/L	98.4		85 - 115		
QC Batch ID: BYE2132										
Total Dissolved Solids @ 180 C	BYE2132-BS1	LCS	565.00	586.00	mg/L	96.4		90 - 110		

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Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE1883	Used client sample: N										
Bromide	DUP	I512299-01RE'	0.28600	0.31600		mg/L	10.0		10		
	MS	I512299-01RE'	0.28600	4.9414	4.0404	mg/L		115		80 - 120	
	MSD	I512299-01RE'	0.28600	4.5616	4.0404	mg/L	8.0	106	10	80 - 120	
Chloride	DUP	I512299-01RE'	72.608	72.236		mg/L	0.5		10		
	MS	I512299-01RE'	72.608	184.16	101.01	mg/L		110		80 - 120	
	MSD	I512299-01RE'	72.608	183.37	101.01	mg/L	0.4	110	10	80 - 120	
Nitrate as NO3	DUP	I512299-01RE'	123.68	123.93		mg/L	0.2		10		
	MS	I512299-01RE'	123.68	167.60	44.715	mg/L		98.2		80 - 120	
	MSD	I512299-01RE'	123.68	166.98	44.715	mg/L	0.4	96.8	10	80 - 120	
Sulfate	DUP	I512299-01RE'	116.73	117.00		mg/L	0.2		10		
	MS	I512299-01RE'	116.73	329.03	202.02	mg/L		105		80 - 120	
	MSD	I512299-01RE'	116.73	327.66	202.02	mg/L	0.4	104	10	80 - 120	
QC Batch ID: BYE1915	Used client sample: N										
Bicarbonate Alkalinity as CaCO3	DUP	1512405-01	678.21	673.34		mg/L	0.7		10		
Carbonate Alkalinity as CaCO3	DUP	1512405-01	ND	ND		mg/L			10		
Hydroxide Alkalinity as CaCO3	DUP	1512405-01	ND	ND		mg/L			10		
Total Alkalinity as CaCO3	DUP	1512405-01	678.21	673.34		mg/L	0.7		10		
QC Batch ID: BYE2045	Used client sample: N										
Total Calcium	DUP	1512033-01	1.3059	1.3150		mg/L	0.7		20		
	MS	1512033-01	1.3059	11.446	10.000	mg/L		101		75 - 125	
	MSD	1512033-01	1.3059	11.663	10.000	mg/L	1.9	104	20	75 - 125	
Total Magnesium	DUP	1512033-01	2.3407	2.3180		mg/L	1.0		20		
	MS	1512033-01	2.3407	12.015	10.000	mg/L		96.7		75 - 125	
	MSD	1512033-01	2.3407	12.328	10.000	mg/L	2.6	99.9	20	75 - 125	
Total Sodium	DUP	1512033-01	10.884	10.776		mg/L	1.0		20		
	MS	1512033-01	10.884	20.819	10.000	mg/L		99.3		75 - 125	
	MSD	1512033-01	10.884	21.412	10.000	mg/L	2.8	105	20	75 - 125	
Total Potassium	DUP	**1512033-01**	**1.6945**	**1.3356**		**mg/L**	**23.7**		**20**		**A02**
	MS	**1512033-01**	**1.6945**	**11.681**	**10.000**	**mg/L**		**99.9**		**75 - 125**	
	MSD	**1512033-01**	**1.6945**	**11.551**	**10.000**	**mg/L**	**1.1**	**98.6**	**20**	**75 - 125**	
QC Batch ID: BYE2132	Used client sample: Y - Description: BL25 TOW POND 13, 05/20/2015 09:45										
Total Dissolved Solids @ 180 C	DUP	1512385-01	10750	11050		mg/L	2.8		10		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2042						
Total Recoverable Uranium	BYE2042-BLK1	ND	pCi/L	0.67	0.067	
QC Batch ID: BYE2045						
Total Antimony	BYE2045-BLK1	ND	ug/L	100	8.5	
Total Arsenic	BYE2045-BLK1	ND	ug/L	50	7.8	
Total Barium	BYE2045-BLK1	ND	ug/L	10	3.5	
Total Beryllium	BYE2045-BLK1	ND	ug/L	10	0.50	
Total Boron	**BYE2045-BLK1**	**0.025858**	**mg/L**	**0.10**	**0.013**	**J**
Total Cadmium	BYE2045-BLK1	ND	ug/L	10	1.1	
Total Chromium	BYE2045-BLK1	ND	ug/L	10	1.1	
Total Cobalt	BYE2045-BLK1	ND	ug/L	50	1.3	
Total Copper	BYE2045-BLK1	ND	ug/L	10	1.1	
Total Iron	BYE2045-BLK1	ND	mg/L	0.050	0.030	
Total Lead	BYE2045-BLK1	ND	ug/L	50	4.0	
Total Lithium	BYE2045-BLK1	ND	mg/L	0.020	0.0062	
Total Manganese	BYE2045-BLK1	ND	mg/L	0.010	0.0040	
Total Molybdenum	BYE2045-BLK1	ND	ug/L	50	1.2	
Total Nickel	BYE2045-BLK1	ND	ug/L	10	2.0	
Total Selenium	BYE2045-BLK1	ND	ug/L	100	15	
Total Silver	BYE2045-BLK1	ND	ug/L	10	1.9	
Total Strontium	BYE2045-BLK1	ND	mg/L	0.010	0.0010	
Total Thallium	BYE2045-BLK1	ND	ug/L	100	24	
Total Vanadium	BYE2045-BLK1	ND	ug/L	10	2.2	
Total Zinc	BYE2045-BLK1	ND	ug/L	50	2.3	
QC Batch ID: BYE2065						
Hexavalent Chromium	BYE2065-BLK1	ND	ug/L	2.0	0.70	
QC Batch ID: BYE2170						
Total Mercury	BYE2170-BLK1	ND	ug/L	0.20	0.033	

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10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2042										
Total Recoverable Uranium	BYE2042-BS1	LCS	25.246	26.800	pCi/L	94.2		85 - 115		
QC Batch ID: BYE2045										
Total Antimony	BYE2045-BS1	LCS	387.39	400.00	ug/L	96.8		85 - 115		
Total Arsenic	BYE2045-BS1	LCS	186.63	200.00	ug/L	93.3		85 - 115		
Total Barium	BYE2045-BS1	LCS	398.40	400.00	ug/L	99.6		85 - 115		
Total Beryllium	BYE2045-BS1	LCS	190.47	200.00	ug/L	95.2		85 - 115		
Total Boron	BYE2045-BS1	LCS	0.98031	1.0000	mg/L	98.0		85 - 115		
Total Cadmium	BYE2045-BS1	LCS	190.31	200.00	ug/L	95.2		85 - 115		
Total Chromium	BYE2045-BS1	LCS	189.51	200.00	ug/L	94.8		85 - 115		
Total Cobalt	BYE2045-BS1	LCS	190.43	200.00	ug/L	95.2		85 - 115		
Total Copper	BYE2045-BS1	LCS	365.33	400.00	ug/L	91.3		85 - 115		
Total Iron	BYE2045-BS1	LCS	1.0046	1.0000	mg/L	100		85 - 115		
Total Lead	BYE2045-BS1	LCS	390.59	400.00	ug/L	97.6		85 - 115		
Total Lithium	BYE2045-BS1	LCS	0.19646	0.20000	mg/L	98.2		85 - 115		
Total Manganese	BYE2045-BS1	LCS	0.47598	0.50000	mg/L	95.2		85 - 115		
Total Molybdenum	BYE2045-BS1	LCS	191.90	200.00	ug/L	96.0		85 - 115		
Total Nickel	BYE2045-BS1	LCS	380.79	400.00	ug/L	95.2		85 - 115		
Total Selenium	BYE2045-BS1	LCS	201.07	200.00	ug/L	101		85 - 115		
Total Silver	BYE2045-BS1	LCS	92.503	100.00	ug/L	92.5		85 - 115		
Total Strontium	BYE2045-BS1	LCS	0.48778	0.50000	mg/L	97.6		85 - 115		
Total Thallium	BYE2045-BS1	LCS	414.02	400.00	ug/L	104		85 - 115		
Total Vanadium	BYE2045-BS1	LCS	192.55	200.00	ug/L	96.3		85 - 115		
Total Zinc	BYE2045-BS1	LCS	450.66	500.00	ug/L	90.1		85 - 115		
QC Batch ID: BYE2065										
Hexavalent Chromium	BYE2065-BS1	LCS	49.017	50.000	ug/L	98.0		85 - 115		
QC Batch ID: BYE2170										
Total Mercury	BYE2170-BS1	LCS	1.0150	1.0000	ug/L	102		85 - 115		

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Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2042	Used client sample: N										
Total Recoverable Uranium	DUP	1511953-01	0.55074	0.54739		pCi/L	0.6		20		J
	MS	1511953-01	0.55074	31.392	26.800	pCi/L		115		70 - 130	
	MSD	1511953-01	0.55074	29.657	26.800	pCi/L	5.7	109	20	70 - 130	
QC Batch ID: BYE2045	Used client sample: N										
Total Antimony	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	418.32	400.00	ug/L		105		75 - 125	
	MSD	1512033-01	ND	398.94	400.00	ug/L	4.7	99.7	20	75 - 125	
Total Arsenic	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	197.38	200.00	ug/L		98.7		75 - 125	
	MSD	1512033-01	ND	192.14	200.00	ug/L	2.7	96.1	20	75 - 125	
Total Barium	DUP	1512033-01	49.576	48.831		ug/L	1.5		20		
	MS	1512033-01	49.576	450.03	400.00	ug/L		100		75 - 125	
	MSD	1512033-01	49.576	461.62	400.00	ug/L	2.5	103	20	75 - 125	
Total Beryllium	DUP	1512033-01	3.5796	3.5633		ug/L	0.5		20		J
	MS	1512033-01	3.5796	200.54	200.00	ug/L		98.5		75 - 125	
	MSD	1512033-01	3.5796	202.12	200.00	ug/L	0.8	99.3	20	75 - 125	
Total Boron	DUP	1512033-01	0.10782	0.094299		mg/L	13.4		20		J
	MS	1512033-01	0.10782	1.1111	1.0000	mg/L		100		75 - 125	
	MSD	1512033-01	0.10782	1.1334	1.0000	mg/L	2.0	103	20	75 - 125	
Total Cadmium	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	206.58	200.00	ug/L		103		75 - 125	
	MSD	1512033-01	ND	196.96	200.00	ug/L	4.8	98.5	20	75 - 125	
Total Chromium	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	191.68	200.00	ug/L		95.8		75 - 125	
	MSD	1512033-01	ND	193.83	200.00	ug/L	1.1	96.9	20	75 - 125	
Total Cobalt	DUP	1512033-01	18.925	18.938		ug/L	0.1		20		J
	MS	1512033-01	18.925	227.93	200.00	ug/L		105		75 - 125	
	MSD	1512033-01	18.925	219.34	200.00	ug/L	3.8	100	20	75 - 125	
Total Copper	DUP	1512033-01	3.2479	3.4122		ug/L	4.9		20		J
	MS	1512033-01	3.2479	396.11	400.00	ug/L		98.2		75 - 125	
	MSD	1512033-01	3.2479	395.96	400.00	ug/L	0.0	98.2	20	75 - 125	
Total Iron	DUP	**1512033-01**	**4.8324**	**4.7533**		**mg/L**	**1.6**		**20**		
	MS	**1512033-01**	**4.8324**	**5.9097**	**1.0000**	**mg/L**		**108**		**75 - 125**	
	MSD	**1512033-01**	**4.8324**	**6.2683**	**1.0000**	**mg/L**	**5.9**	**144**	**20**	**75 - 125**	**A03**
Total Lead	DUP	1512033-01	ND	5.2684		ug/L			20		J
	MS	1512033-01	ND	429.07	400.00	ug/L		107		75 - 125	
	MSD	1512033-01	ND	411.45	400.00	ug/L	4.2	103	20	75 - 125	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2045	Used client sample: N										
Total Lithium	DUP	1512033-01	0.73236	0.73111		mg/L	0.2		20		
	MS	1512033-01	0.73236	0.90596	0.20000	mg/L		86.8		75 - 125	
	MSD	1512033-01	0.73236	0.94514	0.20000	mg/L	4.2	106	20	75 - 125	
Total Manganese	DUP	1512033-01	0.15477	0.15602		mg/L	0.8		20		
	MS	1512033-01	0.15477	0.63644	0.50000	mg/L		96.3		75 - 125	
	MSD	1512033-01	0.15477	0.65102	0.50000	mg/L	2.3	99.2	20	75 - 125	
Total Molybdenum	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	207.03	200.00	ug/L		104		75 - 125	
	MSD	1512033-01	ND	198.46	200.00	ug/L	4.2	99.2	20	75 - 125	
Total Nickel	DUP	1512033-01	28.292	27.972		ug/L	1.1		20		
	MS	1512033-01	28.292	410.39	400.00	ug/L		95.5		75 - 125	
	MSD	1512033-01	28.292	420.41	400.00	ug/L	2.4	98.0	20	75 - 125	
Total Selenium	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	219.63	200.00	ug/L		110		75 - 125	
	MSD	1512033-01	ND	198.45	200.00	ug/L	10.1	99.2	20	75 - 125	
Total Silver	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	92.292	100.00	ug/L		92.3		75 - 125	
	MSD	1512033-01	ND	93.806	100.00	ug/L	1.6	93.8	20	75 - 125	
Total Strontium	DUP	1512033-01	0.051236	0.050119		mg/L	2.2		20		
	MS	1512033-01	0.051236	0.55873	0.50000	mg/L		101		75 - 125	
	MSD	1512033-01	0.051236	0.55633	0.50000	mg/L	0.4	101	20	75 - 125	
Total Thallium	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	455.38	400.00	ug/L		114		75 - 125	
	MSD	1512033-01	ND	440.21	400.00	ug/L	3.4	110	20	75 - 125	
Total Vanadium	DUP	1512033-01	ND	ND		ug/L			20		
	MS	1512033-01	ND	197.10	200.00	ug/L		98.6		75 - 125	
	MSD	1512033-01	ND	197.30	200.00	ug/L	0.1	98.7	20	75 - 125	
Total Zinc	DUP	1512033-01	117.19	112.40		ug/L	4.2		20		
	MS	1512033-01	117.19	577.97	500.00	ug/L		92.2		75 - 125	
	MSD	1512033-01	117.19	597.65	500.00	ug/L	3.3	96.1	20	75 - 125	
QC Batch ID: BYE2065	Used client sample: Y - Description: BL25 TOW POND 13, 05/20/2015 09:45										
Hexavalent Chromium	DUP	1512385-01	ND	ND		ug/L			10		
	MS	1512385-01	ND	240.95	263.16	ug/L		91.6		85 - 115	
	MSD	1512385-01	ND	243.94	263.16	ug/L	1.2	92.7	10	85 - 115	
QC Batch ID: BYE2170	Used client sample: N										
Total Mercury	DUP	**1512415-01**	**0.052500**	**0.037500**		**ug/L**	**33.3**		**20**		**J,A02**
	MS	**1512415-01**	**0.052500**	**1.0875**	**1.0000**	**ug/L**		**104**		**70 - 130**	
	MSD	**1512415-01**	**0.052500**	**1.0050**	**1.0000**	**ug/L**	**7.9**	**95.2**	**20**	**70 - 130**	

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BSK Associates Engineers & Laboratories

BSK Associates Fresno
1414 Stanislaus St
Fresno, CA93706
559-497-2888 (Main)
559-485-6935 (FAX)

A5E1958
5/27/2015
Invoice: A510816

Kerrie Vaughan
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308

RE: Report for A5E1958 General: Project Manager-Kerrie Vaughan

Dear Kerrie Vaughan,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 5/21/2015. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2009 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

If additional clarification of any information is required, please contact your Project Manager, Stephane Maupas , at (800) 877-8310 or (559) 497-2888 x212.

Thanks again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Stephane Maupas, Project Manager

NELAP ACCREDITED TNI LABORATORY

Accredited in Accordance with NELAP
ORELAP #4021

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BSK Associates Engineers & Laboratories

A5E1958

General: Project Manager-Kerrie Vaughan

Case Narrative

Project and Report Details		Invoice Details	
Client:	BC Laboratories	**Invoice To:**	BC Laboratories
Report To:	Kerrie Vaughan	**Invoice Attn:**	Kerrie Vaughan
Project #:	1512386	**Project PO#:**	-
Received:	5/21/2015 - 15:52		
Report Due:	5/28/2015		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 3.1

Containers Intact
COC/Labels Agree
Received On Wet Ice
Packing Material - Other
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

MS1.0 Matrix spike recoveries exceed control limits.

Report Distribution

Recipient(s)	Report Format	CC:
Kerrie Vaughan	FINAL.RPT	

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BSK Associates Engineers & Laboratories

A5E1958

General: Project Manager-Kerrie Vaughan

1512386

Certificate of Analysis

Sample ID: A5E1958-01
Sampled By: Client
Sample Description: 1512386-01

Sample Date - Time: 05/20/15 - 13:34
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505748	05/26/15	05/27/15	
1.65 Sigma Uncertainty		0.110	±				
MDA95		1070	pCi/L				

A5E1958 FINAL 05272015 1721
Printed: 05/27/2015
QA-RP-0001-10 Final.rpt

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BSK Associates Engineers & Laboratories

A5E1958

General: Project Manager-Kerrie Vaughan

1512386

Certificate of Analysis

Sample ID: A5E1958-02
Sampled By: Client
Sample Description: 1512386-02

Sample Date - Time: 05/20/15 - 14:20
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505748	05/26/15	05/27/15	
1.65 Sigma Uncertainty		0.220	±				
MDA95		1070	pCi/L				

A5E1958 FINAL 05272015 1721
Printed: 05/27/2015
QA-RP-0001-10 Final.rpt

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BSK Associates Engineers & Laboratories

A5E1958

General: Project Manager-Kerrie Vaughan

1512386

Certificate of Analysis

Sample ID: A5E1958-03
Sampled By: Client
Sample Description: 1512386-03

Sample Date - Time: 05/20/15 - 15:19
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505748	05/26/15	05/27/15	
1.65 Sigma Uncertainty		0.110	±				
MDA95		1070	pCi/L				

A5E1958 FINAL 05272015 1721
Printed: 05/27/2015
QA-RP-0001-10 Final.rpt

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BSK Associates Engineers & Laboratories

A5E1958

General: Project Manager-Kerrie Vaughan

1512386

Certificate of Analysis

Sample ID: A5E1958-04
Sampled By: Client
Sample Description: 1512386-04

Sample Date - Time: 05/20/15 - 15:47
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505748	05/26/15	05/27/15	
1.65 Sigma Uncertainty		0.191	±				
MDA95		1070	pCi/L				

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BSK Associates Engineers & Laboratories

A5E1958

General: Project Manager-Kerrie Vaughan

BSK Associates Fresno

Radiological Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 00-02 - Quality Control											
Batch: A505748										Prepared: 05/26/2015	
Prep Method: EPA 00-02										Analyst: SAB	
Blank (A505748-BLK1)											
1.65 Sigma Uncertainty	ND		±							05/27/15	
Gross Alpha	ND	3	pCi/L							05/27/15	
MDA95	ND	0.00	pCi/L							05/27/15	
Blank Spike (A505748-BS1)											
Gross Alpha	28.6	3	pCi/L	30		95	80-120			05/27/15	
Blank Spike Dup (A505748-BSD1)											
Gross Alpha	24.0	3	pCi/L	30		80	80-120	17	50	05/27/15	
Matrix Spike (A505748-MS1), Source: A5E1287-01											
Gross Alpha	114	3	pCi/L	120	ND	94	70-130			05/27/15	
Matrix Spike (A505748-MS2), Source: A5E1400-03											
Gross Alpha	100	3	pCi/L	120	ND	83	70-130			05/27/15	
Matrix Spike Dup (A505748-MSD1), Source: A5E1287-01											
Gross Alpha	115	3	pCi/L	120	ND	95	70-130	1	50	05/27/15	
Matrix Spike Dup (A505748-MSD2), Source: A5E1400-03											
Gross Alpha	80.7	3	pCi/L	120	ND	67	70-130	21	50	05/27/15	MS1.0 Low

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BSK Associates Engineers & Laboratories

A5E1958

General: Project Manager-Kerrie Vaughan

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method , all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected at RL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	Picocuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent Recovered (surrogates)	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit		

Please see the individual Subcontract Lab's report for applicable certifications.

BSK is not accredited under the NELAC program for the following parameters: **NA**

Certifications: Please refer to our website for a copy of our Accredited Fields of Testing under each certification.

Fresno

State of California - ELAP	1180	State of Hawaii	4021
State of Nevada	CA000792015-1	State of Oregon - NELAC	4021
EPA - UCMR3	CA00079	State of Washington	C997-15

Sacramento

State of California - ELAP	2435

Vancouver

State of Oregon - NELAC	WA100008	State of Washington	C824-14a

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A5E1958

05212015

BCLab4911

Turnaround: Standard
Due Date: 5/28/2015

BC Laboratories

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SUBCONTRACT ORDER
BC Laboratories
1512386

3.1

SENDING LABORATORY:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911
FAX: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY: BSKSA
BSK Analytical Labs
1414 Stanislaus Street
Fresno, CA 93706
Phone: (800) 877-8310
FAX: (559) 485-6935

A5E1958 05/21/2015
BCLab4911 4

Analysis	Due	Expires	Comments
Sample ID: 1512386-01 Water		**Sampled: 05/20/15 13:34**	
EPA 900.0 Gross Alpha	05/28/15 17:00	11/17/15 13:34	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			
Sample ID: 1512386-02 Water		**Sampled: 05/20/15 14:20**	
EPA 900.0 Gross Alpha	05/28/15 17:00	11/17/15 14:20	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			
Sample ID: 1512386-03 Water		**Sampled: 05/20/15 15:19**	
EPA 900.0 Gross Alpha	05/28/15 17:00	11/17/15 15:19	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			
Sample ID: 1512386-04 Water		**Sampled: 05/20/15 15:47**	
EPA 900.0 Gross Alpha	05/28/15 17:00	11/17/15 15:47	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			

Meagen Boyles 5/21/15 — Released By / Date
[signature] 5-21-15 — Received By / Date
[signature] 5-21-15 — Released By / Date
Caroline Whet 5/21/15 — Received By / Date

BSKSA [signature] 15:[illegible]

Page 10 of 11

Page 1 of 1

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BSK Associates SR-FL-0002-13

A5E1958
BCLab4911

05/21/2015
4

Sample Integrity

BSK Bottles: Yes No Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 10°C	Yes	No	NA	Were correct containers and preservatives received for the tests requested?	Yes	No	NA
If samples were taken today, is there evidence that chilling has begun?	Yes	No	NA	Were there bubbles in the VOA vials? (Volatiles Only)	Yes	No	NA
Did all bottles arrive unbroken and intact?	Yes	No		Was a sufficient amount of sample received?	Yes	No	
Did all bottle labels agree with COC?	Yes	No		Do samples have a hold time <72 hours?	Yes	No	
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes	No	NA	Was PM notified of discrepancies? PM: By/Time:	Yes	No	NA

Bottles Received ("-" means preservation/chlorine checks are either N/A or are performed in the lab)

250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V)	Checks	Passed?	
Bacti $Na_2S_2O_3$	—	—	
None (P) White Cap	—	—	
Cr6 (P) Lt. Green Label $NH_4OH/(NH_4)_2SO_4$ DW	Cl, pH > 8	Y N	
Cr6 (P) Pink Label Hex Chrome Buffer DW	pH 9-9.5	Y N	
Cr6 (P) Pink Label Hex Chrome Buffer WW	pH 9.3-9.7	Y N	
HNO_3 (P) Red Cap	—	—	
H_2SO_4 (P) or (AG) Yellow Cap/Label	pH < 2	Y N	
NaOH (P) Green Cap	Cl, pH >10	Y N	
NaOH + ZnAc (P)	pH > 9	Y N	
Dissolved Oxygen 300ml (g)	—	—	
None (AG) 608/3081/8082, 525, 632/8321, 8151, 8270	—	—	
HCl (AG) Lt. Blue Label O&G, Diesel	—	—	
Na_2O_3S+HCl (AG) Lt. Pink Label 525	—	—	
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—	
$Na_2S_2O_3$ (AG) Blue Label 547 515 548 THM 524	—	—	
$Na_2S_2O_3$ (CG) Blue Label 504, 505	—	—	
$Na_2S_2O_3$ + MCAA (CG) Orange Label 551	pH < 3	Y N	
NH_4Cl (AG) Purple Label 552	—	—	
EDA (AG) Brown Label DBPs	—	—	
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—	
Buffer pH 4 (CG)	—	—	
None (CG)	—	—	
H_3PO_4 (CG) Salmon Label	—	—	
Other:			
Asbestos 1 Liter Plastic w/ Foil	—	—	
Low Level Hg / Metals Double Baggie	—	—	
Bottled Water	—	—	
Clear Glass Jar: 250 / 500 / 1 Liter	—	—	
Soil Tube: Brass / Steel / Plastic	—	—	
Tedlar Bag / Plastic Bag	—	—	

1-4
1C
5/21/15

Split

	Container	Preservative	Date/Time/Initials		Container	Preservative	Date/Time/Initials
S P				S P			
S P				S P			

Comments

Labeled by: JHP @ 16:45 Labels checked by: JHA @ 1655 RUSH Paged by: Page 11 of 11

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 03, 2015

Ms. Kerrie Vaughan
BC Laboratories
4100 Atlas Ct.
Bakersfield, CA 93308

RE: Project: 1512386
Pace Project No.: 30148784

Dear Ms. Vaughan:
Enclosed are the analytical results for sample(s) received by the laboratory on May 22, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carin A. Ferris

Carin Ferris
carin.ferris@pacelabs.com
Project Manager

Enclosures

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 1512386
Pace Project No.: 30148784

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: PA014572014-4
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

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SAMPLE SUMMARY

Project: 1512386
Pace Project No.: 30148784

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30148784001	1512386-01	Water	05/20/15 13:34	05/22/15 09:50
30148784002	1512386-02	Water	05/20/15 14:20	05/22/15 09:50
30148784003	1512386-03	Water	05/20/15 15:19	05/22/15 09:50
30148784004	1512386-04	Water	05/20/15 15:47	05/22/15 09:50

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SAMPLE ANALYTE COUNT

Project: 1512386
Pace Project No.: 30148784

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30148784001	1512386-01	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30148784002	1512386-02	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30148784003	1512386-03	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30148784004	1512386-04	EPA 903.1	JC2	1
		EPA 904.0	JLW	1

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PROJECT NARRATIVE

Project: 1512386
Pace Project No.: 30148784

Method: EPA 903.1
Description: 903.1 Radium 226
Client: BC Laboratories
Date: June 03, 2015

General Information:
4 samples were analyzed for EPA 903.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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(724)850-5600

PROJECT NARRATIVE

Project: 1512386
Pace Project No.: 30148784

Method: EPA 904.0
Description: 904.0 Radium 228
Client: BC Laboratories
Date: June 03, 2015

General Information:
4 samples were analyzed for EPA 904.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1512386
Pace Project No.: 30148784

Sample: 1512386-01 Lab ID: 30148784001 Collected: 05/20/15 13:34 Received: 05/22/15 09:50 Matrix: Water
PWS: Site ID: Sample Type:

Comments:
- Upon receipt at the laboratory, 9 mls of nitric acid were added to the sample to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
- Sample Acceptance Policy Waiver on file from the client.
- Sample collection dates and times were not present on the sample containers.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**24.4 ± 10.3 (10.2) C:NA T:79%**	pCi/L	06/02/15 09:32	13982-63-3	
Radium-228	EPA 904.0	**14.1 ± 5.55 (8.41) C:83% T:67%**	pCi/L	06/02/15 12:50	15262-20-1	

Sample: 1512386-02 Lab ID: 30148784002 Collected: 05/20/15 14:20 Received: 05/22/15 09:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**35.0 ± 12.0 (10.5) C:NA T:91%**	pCi/L	06/02/15 09:32	13982-63-3	
Radium-228	EPA 904.0	**10.8 ± 6.04 (11.0) C:81% T:69%**	pCi/L	06/02/15 12:50	15262-20-1	

Sample: 1512386-03 Lab ID: 30148784003 Collected: 05/20/15 15:19 Received: 05/22/15 09:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**5.04 ± 17.1 (26.6) C:NA T:75%**	pCi/L	06/02/15 09:36	13982-63-3	
Radium-228	EPA 904.0	**1.99 ± 5.00 (11.0) C:79% T:70%**	pCi/L	06/02/15 12:50	15262-20-1	

Sample: 1512386-04 Lab ID: 30148784004 Collected: 05/20/15 15:47 Received: 05/22/15 09:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**4.54 ± 10.4 (16.0) C:NA T:70%**	pCi/L	06/02/15 09:53	13982-63-3	
Radium-228	EPA 904.0	**5.43 ± 5.30 (10.8) C:77% T:67%**	pCi/L	06/02/15 12:50	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512386
Pace Project No.: 30148784

QC Batch: RADC/24591 Analysis Method: EPA 903.1
QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226
Associated Lab Samples: 30148784001, 30148784002, 30148784003, 30148784004

METHOD BLANK: 898956 Matrix: Water
Associated Lab Samples: 30148784001, 30148784002, 30148784003, 30148784004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.430 ± 0.447 (0.666) C:NA T:95%	pCi/L	06/02/15 09:20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512386
Pace Project No.: 30148784

QC Batch: RADC/24593 Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228
Associated Lab Samples: 30148784001, 30148784002, 30148784003, 30148784004

METHOD BLANK: 898958 Matrix: Water
Associated Lab Samples: 30148784001, 30148784002, 30148784003, 30148784004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.137 ± 0.396 (0.873) C:83% T:81%	pCi/L	06/01/15 13:09	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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(724)850-5600

QUALIFIERS

Project: 1512386
Pace Project No.: 30148784

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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Date: 06/03/2015 02:12 PM

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SUBCONTRACT ORDER
BC Laboratories
1512386

RUSH!

SENDING LABORATORY:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911
FAX: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY: **PACEA**
PACE Analytical
1638 Roseytown Road, Ste 2,3 &4
Greensburg, PA 15601
Phone: (724) 850-5600
FAX: (724) 850-5601

30148784

Analysis	Due	Expires	Comments
Sample ID: 1512386-01 Water	**Sampled: 05/20/15 13:34**		001
EPA 903.1 Radium 226	05/28/15 17:00	11/17/15 13:34	Analyze water phase only. Results needed by 5/28/2015.
EPA 904.0 Radium 228	05/28/15 17:00	11/17/15 13:34	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			
Sample ID: 1512386-02 Water	**Sampled: 05/20/15 14:20**		002
EPA 903.1 Radium 226	05/28/15 17:00	11/17/15 14:20	Analyze water phase only. Results needed by 5/28/2015.
EPA 904.0 Radium 228	05/28/15 17:00	11/17/15 14:20	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			
Sample ID: 1512386-03 Water	**Sampled: 05/20/15 15:19**		003
EPA 903.1 Radium 226	05/28/15 17:00	11/17/15 15:19	Analyze water phase only. Results needed by 5/28/2015.
EPA 904.0 Radium 228	05/28/15 17:00	11/17/15 15:19	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			
Sample ID: 1512386-04 Water	**Sampled: 05/20/15 15:47**		004
EPA 903.1 Radium 226	05/28/15 17:00	11/17/15 15:47	Analyze water phase only. Results needed by 5/28/2015.
EPA 904.0 Radium 228	05/28/15 17:00	11/17/15 15:47	Analyze water phase only. Results needed by 5/28/2015.
Containers supplied:			

Meggen Bayles 5/21/15 — 5/22/15 0950
Released By Date Received By Date

Released By Date Received By Date

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PACEA
Page 1 of 1

Sample Condition Upon Receipt

Pace Analytical

Client Name: BC

Project # 30148784

Courier: ☐ Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 12 965 376 0162415408

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no Biological Tissue Is Frozen: Yes No

Packing Material: Bubble Wrap ☒ Bubble Bags ____ None ____ Other _____

Thermometer Used NA Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temp.: Observed Temp.: NA °C Correction Factor: NA °C Final Temp: NA °C

Date and Initials of person examining contents: Ann 5/22/15

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☒No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☒Yes ☐No ☐N/A	7.
Sufficient Volume:	☒Yes ☐No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☒No ☐N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☐Yes ☒No ☐N/A	12. no date or time on samples
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing preservation have been checked.	☒Yes ☐No ☐N/A	13. added 9 ml HNO3 to 001 + 002
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☒No ☐N/A	pH<2 Ann 5/22/15 1045
exceptions: VOA, coliform, TOC, O&G, Phenols	☐Yes ☒No	Initial when completed Ann / Lot # of added preservative DL15-0433
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	15.
Trip Blank Present:	☐Yes ☐No ☒N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

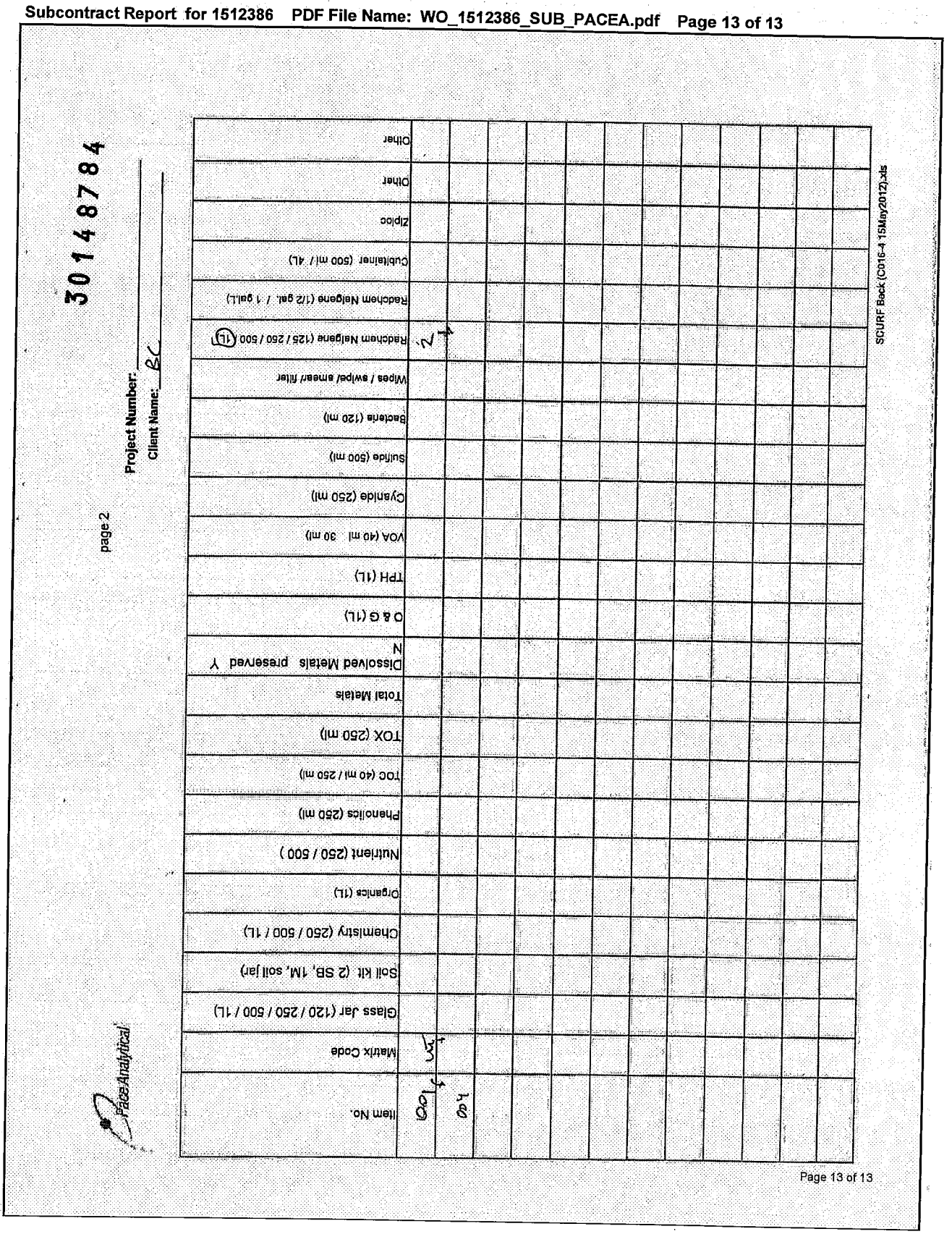
Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Carmen Serrano Date: 5/22/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

J:\QAQC\Master\Document Management\Sample Mgt\SCURF\FALLC003-09 SCUR Front 3March2015 Page 12 of 13



3014878784

Project Number:
Client Name: BC

page 2

Item No.	Matrix Code	Glass Jar (120 / 250 / 500 / 1L)	Soil Kit (2 SB, 1M, soil jar)	Chemistry (250 / 500 / 1L)	Organics (1L)	Nutrient (250 / 500)	Phenolics (250 ml)	TOC (40 ml / 250 ml)	TOX (250 ml)	Total Metals	Dissolved Metals preserved Y N	O & G (1L)	TPH (1L)	VOA (40 ml 30 ml)	Cyanide (250 ml)	Sulfide (500 ml)	Bacteria (120 ml)	Wipes / swipe/ smear/ filter	Radchem Nalgene (125 / 250 / 500 (1L))	Radchem Nalgene (1/2 gal. / 1 gal.L)	Cubitainer (500 ml / 4L)	Ziploc	Other	Other	Other
001	WT																		2						
002	WT																								

SCURF Back (CD16-4 15May2012).xls

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:38
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.
A02	The difference between duplicate readings is less than the quantitation limit.
A03	The sample concentration is more than 4 times the spike level.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
A10	Detection and quantitation limits were raised due to matrix interference.
L01	The Laboratory Control Sample Water (LCSW) recovery is not within laboratory established control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.
Z1	50 ul of antifoam added to the sample to avoid foaming of the sample.
Z1a	50uL of antifoamer added to sample VOA

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BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 06/03/2015

Rod Bowyer

Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Client Project:	TOW
BCL Project:	Oilfield Produced Water Pond Testing
BCL Work Order:	1512507
Invoice ID:	B204802

Enclosed are the results of analyses for samples received by the laboratory on 5/21/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kerrie S. Vaughan

Contact Person: Kerrie Vaughan
Client Services

Authorized Signature

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BC Laboratories, Inc.

Chain of Custody Form

RUSH!

Page 1 of 1

Report To:
Client: Aera
Attn: Rod ~~Boyer~~ JCE Bowyer
Street Address:
City, State, Zip:
Phone: Fax:
Email Address:
Work Order #: 15-12507

Project #:
Project Name:
Sampler(s): J. Enriquez

Analysis Requested

Please refer to the back of this page for completion instructions and method legend.

Comments:

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

Sample #	Description	Date Sampled	Time Sampled	See Attached	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
-1	BL 3 TOW Belridge V.Pond 4 (1)	5/21/15	810	X					X		5 (1)	
-2	BL 1 TOW Belridge V.Pond 3 (2)	↓	910	X					X		5 (2)	

SHORT HOLDING TIME
Cr^{+6} NO_2 NO_3 OP SS
DO Cl_2 BOD MBAS COT

CHK BY
DISTRIBUTION
SUB-OUT

Billing ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? Geotracker ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)
System # (Needed for EDT)

	Relinquished By	Date	Time		Received By	Date	Time
1.	J C Enriquez	5/21/15	1555	1.	MVB	5/21	1555
2.				2.			
3.				3.			

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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BC LABORATORIES, INC.
4100 Atlas Ct. Bakersfield, Ca. 93308 Tel: (800) 878 - 4911 Website: www.bclabs.com

15-12507

OIL FIELD PRODUCED WATER POND TESTING

CALIFORNIA WATER CODE DIRECTIVE PURSUANT TO SECTION 13267
CHARACTERIZATION OF WASTEWATER FOR DISCHARGE

Collect representative samples of wastewater within each of the ponds. Samples must be analyzed in accordance with the water quality analysis and reporting requirements contained in Attachment B to this Order;[1]

List of Analyses as per Attachment B

A. Total Dissolved Solids

B. Metals, CCR title 22, section 66261.24. subdivision (a)(2)(A) (antimony, arsenic, barium, beryllium, cadmium, chromium, chromium (VI), cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc)

C. benzene, toluene, ethylbenzene, xylenes

D. Total Petroleum Hydrocarbons as Crude Oil

E. Polynuclear Aromatic Hydrocarbons (PAH)

F. Radionuclides (Radium226, Radium 228, Gross Alpha, Uranium)

G. Major and Minor Cations (sodium, potassium, magnesium, calcium)

H. Major and Minor Anions (nitrate, chloride, sulfate, carbonate, bicarbonate, bromide)

I. Trace Elements (lithium, strontium, boron, iron, manganese)

Total Price $734

Electronic results available as an Excel spreadsheet upon request.

Field Service

Sampling	$60 per hour
Vehicle	$0.60 per mile

[1] All previously obtained analytical data for oil field produced wastewater samples collected at the Facility, if any, with a description of the source and location for each analysis may be submitted in the alternative for re-running tests if the sample(s) was collected and analyzed within 12 months (one year) of the date of this order.

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Chain of Custody and Cooler Receipt Form for 1512507 Page 3 of 4

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 Of 2

Submission #: 15.12507

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☐ BC Lab Field Service ☐ Other ☐ (Specify)_____	Ice Chest ☐ None ☐ Box ☐ Other ☐ (Specify)_____	YES ☐ NO ☐

Refrigerant: Ice ☐ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: glass Thermometer ID: 208

Temperature: (A) 29.4 °C / (C) 29.2 °C VMB 5/21

Date/Time 5/21/15

Analyst Init MVB 1555

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	G KMB/15									
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	DEP									
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AB									
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M	H									
QT AMBER 8270	I									
8 OZ. JAR										
32 OZ. JAR	G1									
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:

Sample Numbering Completed By: KMB Date/Time: 5/21/15 1740 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1512507 Page 4 of 4

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 2 Of 2

Submission #: 15.12507

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☐ BC Lab Field Service ☑ Other ☐ (Specify)_____	Ice Chest ☑ None ☐ Box ☐ Other ☐ (Specify)_____	YES ☐ NO ☐

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☑ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

☑ COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: PE Thermometer ID: 208

Temperature: (A) 0.2 °C / (C) 0.3 °C

Date/Time 5'21'15 1555

Analyst Init MVB

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	C	BC								
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	DEFJ	DEF J								
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL		AD								
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M		H								
QT AMBER 8270		I								
8 OZ. JAR										
32 OZ. JAR		G								
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:

Sample Numbering Completed By: KTB Date/Time: 5/21/15 1740 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]

A = Actual / C = Corrected

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Aera Energy	**Reported:** 06/03/2015 17:39
10000 Ming Ave	Project: Oilfield Produced Water Pond Testing
Bakersfield, CA 93311	Project Number: TOW
	Project Manager: Rod Bowyer

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1512507-01	**COC Number:**	—	**Receive Date:**	05/21/2015 15:55
	Project Number:	—	**Sampling Date:**	05/21/2015 08:10
	Sampling Location:	—	**Sample Depth:**	—
	Sampling Point:	BL3 TOW Belridge V Pond 4	**Lab Matrix:**	Water
	Sampled By:	Juan Enriquez	**Sample Type:**	Wastewater
1512507-02	**COC Number:**	—	**Receive Date:**	05/21/2015 15:55
	Project Number:	—	**Sampling Date:**	05/21/2015 09:10
	Sampling Location:	—	**Sample Depth:**	—
	Sampling Point:	BL1 TOW Belridge V Pond 3	**Lab Matrix:**	Water
	Sampled By:	Juan Enriquez	**Sample Type:**	Wastewater

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512507-01 | **Client Sample Name:** BL3 TOW Belridge V Pond 4, 5/21/2015 8:10:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**28**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND	Z1	1
Ethylbenzene	**6.5**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	Z1	1
Toluene	**29**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	Z1	1
Total Xylenes	**25**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND	Z1	1
p- & m-Xylenes	**15**	**ug/L**	**0.50**	**0.28**	**EPA-8260B**	ND	Z1	1
o-Xylene	**11**	**ug/L**	**0.50**	**0.082**	**EPA-8260B**	ND	Z1	1
1,2-Dichloroethane-d4 (Surrogate)	98.0	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 01:53	SE1	MS-V12	1	BYE2091

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512507-01 | **Client Sample Name:** BL3 TOW Belridge V Pond 4, 5/21/2015 8:10:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**1.3**	**ug/L**	**0.98**	**0.54**	**EPA-8270C-SIM**	ND	**A01**	1
Acenaphthylene	ND	ug/L	0.98	0.46	EPA-8270C-SIM	ND	A01	1
Anthracene	ND	ug/L	0.98	0.17	EPA-8270C-SIM	ND	A01	1
Benzo[a]anthracene	**0.29**	**ug/L**	**0.98**	**0.25**	**EPA-8270C-SIM**	ND	**J,A01**	1
Benzo[b]fluoranthene	**0.79**	**ug/L**	**0.98**	**0.39**	**EPA-8270C-SIM**	ND	**J,A01**	1
Benzo[k]fluoranthene	ND	ug/L	0.98	0.50	EPA-8270C-SIM	ND	A01	1
Benzo[a]pyrene	ND	ug/L	0.98	0.25	EPA-8270C-SIM	ND	A01	1
Benzo[g,h,i]perylene	ND	ug/L	0.98	0.42	EPA-8270C-SIM	ND	A01	1
Chrysene	**1.9**	**ug/L**	**0.98**	**0.22**	**EPA-8270C-SIM**	ND	**A01**	1
Dibenzo[a,h]anthracene	ND	ug/L	0.98	0.43	EPA-8270C-SIM	ND	A01	1
Fluoranthene	**1.1**	**ug/L**	**0.98**	**0.12**	**EPA-8270C-SIM**	ND	**A01**	1
Fluorene	**0.87**	**ug/L**	**0.98**	**0.29**	**EPA-8270C-SIM**	ND	**J,A01**	1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.98	0.43	EPA-8270C-SIM	ND	A01	1
Naphthalene	**5.7**	**ug/L**	**0.98**	**0.75**	**EPA-8270C-SIM**	ND	**A01**	1
Phenanthrene	**2.1**	**ug/L**	**0.98**	**0.22**	**EPA-8270C-SIM**	ND	**A01**	1
Pyrene	**2.2**	**ug/L**	**0.98**	**0.22**	**EPA-8270C-SIM**	ND	**A01**	1
Nitrobenzene-d5 (Surrogate)	146	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01,S09	1
2-Fluorobiphenyl (Surrogate)	77.7	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM		A01	1
p-Terphenyl-d14 (Surrogate)	114	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/22/15	05/27/15 14:08	MK1	MS-B4	9.800	BYE2168

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID:	1512507-01	Client Sample Name:	BL3 TOW Belridge V Pond 4, 5/21/2015 8:10:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**93000**	**ug/L**	**5000**	**1400**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	80.4	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/22/15	05/27/15 18:33	MWB	GC-13	10	BYE2282

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512507-01 | **Client Sample Name:** BL3 TOW Belridge V Pond 4, 5/21/2015 8:10:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**64**	**mg/L**	**2.0**	**0.30**	**EPA-6010B**	0.53	**A07**	1
Total Magnesium	**30**	**mg/L**	**1.0**	**0.38**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**3400**	**mg/L**	**10**	**1.0**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**70**	**mg/L**	**20**	**2.6**	**EPA-6010B**	ND	**A07**	1
Bicarbonate Alkalinity as CaCO3	**850**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**850**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**55**	**mg/L**	**5.0**	**1.8**	**EPA-300.0**	ND	**A07**	3
Chloride	**6300**	**mg/L**	**25**	**3.0**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	22	3.9	EPA-300.0	ND	A07	3
Sulfate	**190**	**mg/L**	**50**	**5.0**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**12000**	**mg/L**	**500**	**500**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/26/15	05/27/15 10:50	ARD	PE-OP3	20	BYE2179
2	EPA-310.1	05/26/15	05/26/15 13:29	RML	MET-1	2	BYE2035
3	EPA-300.0	05/22/15	05/22/15 12:39	OLH	IC5	50	BYE2119
4	EPA-160.1	05/23/15	05/23/15 11:30	CAD	MANUAL	50	BYE2095

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512507-01 | **Client Sample Name:** BL3 TOW Belridge V Pond 4, 5/21/2015 8:10:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	2000	170	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	1000	160	EPA-6010B	500000	A07	2
Total Barium	**810**	**ug/L**	**200**	**70**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	200	10	EPA-6010B	75000	A07	2
Total Boron	**54**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	200	22	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	1000	26	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	200	22	EPA-6010B	2500000	A07	2
Total Iron	ND	mg/L	1.0	0.60	EPA-6010B		A07	2
Total Lead	ND	ug/L	1000	80	EPA-6010B	1000000	A07	2
Total Lithium	**2.5**	**mg/L**	**0.40**	**0.12**	**EPA-6010B**		**A07**	2
Total Manganese	ND	mg/L	0.20	0.080	EPA-6010B		A07	2
Total Mercury	**0.038**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000	**J**	3
Total Molybdenum	**85**	**ug/L**	**1000**	**24**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	ND	ug/L	200	40	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	2000	300	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	200	38	EPA-6010B	500000	A07	2
Total Strontium	**2.4**	**mg/L**	**0.20**	**0.020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	2000	480	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	200	44	EPA-6010B	2400000	A07	2
Total Zinc	**180**	**ug/L**	**1000**	**46**	**EPA-6010B**	5000000	**J,A07**	2
Total Recoverable Uranium	ND	pCi/L	6.7	0.67	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/22/15	05/22/15 07:51	BMW	KONE-1	5	BYE2071
2	EPA-6010B	05/26/15	05/27/15 10:50	ARD	PE-OP3	20	BYE2179
3	EPA-7470A	05/27/15	05/27/15 16:03	MEV	CETAC1	1	BYE2261
4	EPA-200.8	05/26/15	05/26/15 22:01	SRM	PE-EL2	10	BYE2185

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512507-02 | **Client Sample Name:** BL1 TOW Belridge V Pond 3, 5/21/2015 9:10:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND	Z1	1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND	Z1	1
Toluene	**2.4**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	**Z1**	1
Total Xylenes	**1.2**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND	**Z1**	1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260B	ND	Z1	1
o-Xylene	**1.2**	**ug/L**	**0.50**	**0.082**	**EPA-8260B**	ND	**Z1**	1
1,2-Dichloroethane-d4 (Surrogate)	95.9	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 02:10	SE1	MS-V12	1	BYE2091

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512507-02 | **Client Sample Name:** BL1 TOW Belridge V Pond 3, 5/21/2015 9:10:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**0.39**	**ug/L**	**0.20**	**0.11**	**EPA-8270C-SIM**	ND		1
Acenaphthylene	ND	ug/L	0.20	0.094	EPA-8270C-SIM	ND		1
Anthracene	ND	ug/L	0.20	0.034	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	ND	ug/L	0.20	0.052	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.20	0.080	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.20	0.10	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.20	0.052	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.20	0.086	EPA-8270C-SIM	ND		1
Chrysene	ND	ug/L	0.20	0.044	EPA-8270C-SIM	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.20	0.088	EPA-8270C-SIM	ND		1
Fluoranthene	ND	ug/L	0.20	0.024	EPA-8270C-SIM	ND		1
Fluorene	ND	ug/L	0.20	0.060	EPA-8270C-SIM	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.20	0.088	EPA-8270C-SIM	ND		1
Naphthalene	ND	ug/L	0.20	0.15	EPA-8270C-SIM	ND		1
Phenanthrene	ND	ug/L	0.20	0.044	EPA-8270C-SIM	ND		1
Pyrene	ND	ug/L	0.20	0.044	EPA-8270C-SIM	ND		1
Nitrobenzene-d5 (Surrogate)	114	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1
2-Fluorobiphenyl (Surrogate)	102	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	181	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/22/15	05/27/15 21:13	MK1	MS-B4	2	BYE2168

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Aera Energy
10000 Ming Ave
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Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID:	1512507-02	Client Sample Name:	BL1 TOW Belridge V Pond 3, 5/21/2015 9:10:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**16000**	**ug/L**	**2000**	**560**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	86.0	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/22/15	05/27/15 18:56	MWB	GC-13	4	BYE2282

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Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512507-02 | **Client Sample Name:** BL1 TOW Belridge V Pond 3, 5/21/2015 9:10:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**350**	**mg/L**	**2.0**	**0.30**	**EPA-6010B**	0.53	**A07**	1
Total Magnesium	**110**	**mg/L**	**1.0**	**0.38**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**3700**	**mg/L**	**10**	**1.0**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**78**	**mg/L**	**20**	**2.6**	**EPA-6010B**	ND	**A07**	1
Bicarbonate Alkalinity as CaCO3	**420**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**420**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**62**	**mg/L**	**5.0**	**1.8**	**EPA-300.0**	ND	**A07**	3
Chloride	**7300**	**mg/L**	**25**	**3.0**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	22	3.9	EPA-300.0	ND	A07	3
Sulfate	**490**	**mg/L**	**50**	**5.0**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**14000**	**mg/L**	**1000**	**1000**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/26/15	05/27/15 10:52	ARD	PE-OP3	20	BYE2179
2	EPA-310.1	05/26/15	05/26/15 13:39	RML	MET-1	2	BYE2035
3	EPA-300.0	05/22/15	05/22/15 12:56	OLH	IC5	50	BYE2119
4	EPA-160.1	05/23/15	05/23/15 11:30	CAD	MANUAL	100	BYE2095

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Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512507-02 | **Client Sample Name:** BL1 TOW Belridge V Pond 3, 5/21/2015 9:10:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	2000	170	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	1000	160	EPA-6010B	500000	A07	2
Total Barium	**720**	**ug/L**	**200**	**70**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	200	10	EPA-6010B	75000	A07	2
Total Boron	**52**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	200	22	EPA-6010B	100000	A07	2
Total Chromium	**48**	**ug/L**	**200**	**22**	**EPA-6010B**	2500000	**J,A07**	2
Total Cobalt	ND	ug/L	1000	26	EPA-6010B	8000000	A07	2
Total Copper	**84**	**ug/L**	**200**	**22**	**EPA-6010B**	2500000	**J,A07**	2
Total Iron	**37**	**mg/L**	**1.0**	**0.60**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	1000	80	EPA-6010B	1000000	A07	2
Total Lithium	**2.2**	**mg/L**	**0.40**	**0.12**	**EPA-6010B**		**A07**	2
Total Manganese	**2.7**	**mg/L**	**0.20**	**0.080**	**EPA-6010B**		**A07**	2
Total Mercury	**0.15**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000	**J**	3
Total Molybdenum	**45**	**ug/L**	**1000**	**24**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	**66**	**ug/L**	**200**	**40**	**EPA-6010B**	2000000	**J,A07**	2
Total Selenium	ND	ug/L	2000	300	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	200	38	EPA-6010B	500000	A07	2
Total Strontium	**5.9**	**mg/L**	**0.20**	**0.020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	2000	480	EPA-6010B	700000	A07	2
Total Vanadium	**55**	**ug/L**	**200**	**44**	**EPA-6010B**	2400000	**J,A07**	2
Total Zinc	**1200**	**ug/L**	**1000**	**46**	**EPA-6010B**	5000000	**A07**	2
Total Recoverable Uranium	**26**	**pCi/L**	**6.7**	**0.67**	**EPA-200.8**		**A07**	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/22/15	05/22/15 08:19	BMW	KONE-1	5	BYE2071
2	EPA-6010B	05/26/15	05/27/15 10:52	ARD	PE-OP3	20	BYE2179
3	EPA-7470A	05/27/15	05/27/15 16:01	MEV	CETAC1	1	BYE2261
4	EPA-200.8	05/26/15	05/26/15 22:04	SRM	PE-EL2	10	BYE2185

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2091						
Benzene	BYE2091-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BYE2091-BLK1	ND	ug/L	0.50	0.098	
Toluene	BYE2091-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BYE2091-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BYE2091-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BYE2091-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	**BYE2091-BLK1**	**93.1**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BYE2091-BLK1**	**93.9**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BYE2091-BLK1**	**94.7**	%	**80 - 120 (LCL - UCL)**		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2091										
Benzene	BYE2091-BS1	LCS	23.600	25.000	ug/L	94.4		70 - 130		
Toluene	BYE2091-BS1	LCS	23.290	25.000	ug/L	93.2		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYE2091-BS1	LCS	9.0200	10.000	ug/L	90.2		75 - 125		
Toluene-d8 (Surrogate)	BYE2091-BS1	LCS	9.4400	10.000	ug/L	94.4		80 - 120		
4-Bromofluorobenzene (Surrogate)	BYE2091-BS1	LCS	10.050	10.000	ug/L	100		80 - 120		

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Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2091	Used client sample: N										
Benzene	MS	1511019-38	ND	25.000	25.000	ug/L		100		70 - 130	
	MSD	1511019-38	ND	26.240	25.000	ug/L	4.8	105	20	70 - 130	
Toluene	MS	1511019-38	ND	24.400	25.000	ug/L		97.6		70 - 130	
	MSD	1511019-38	ND	25.830	25.000	ug/L	5.7	103	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-38	ND	9.5200	10.000	ug/L		95.2		75 - 125	
	MSD	1511019-38	ND	9.7300	10.000	ug/L	2.2	97.3		75 - 125	
Toluene-d8 (Surrogate)	MS	1511019-38	ND	9.7000	10.000	ug/L		97.0		80 - 120	
	MSD	1511019-38	ND	9.6400	10.000	ug/L	0.6	96.4		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1511019-38	ND	9.8900	10.000	ug/L		98.9		80 - 120	
	MSD	1511019-38	ND	9.7600	10.000	ug/L	1.3	97.6		80 - 120	

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10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2168						
Acenaphthene	BYE2168-BLK1	ND	ug/L	0.10	0.055	
Acenaphthylene	BYE2168-BLK1	ND	ug/L	0.10	0.047	
Anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.017	
Benzo[a]anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.026	
Benzo[b]fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.040	
Benzo[k]fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.051	
Benzo[a]pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.026	
Benzo[g,h,i]perylene	BYE2168-BLK1	ND	ug/L	0.10	0.043	
Chrysene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Dibenzo[a,h]anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.044	
Fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.012	
Fluorene	BYE2168-BLK1	ND	ug/L	0.10	0.030	
Indeno[1,2,3-cd]pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.044	
Naphthalene	BYE2168-BLK1	ND	ug/L	0.10	0.077	
Phenanthrene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Nitrobenzene-d5 (Surrogate)	**BYE2168-BLK1**	**91.8**	%	**40 - 130 (LCL - UCL)**		
2-Fluorobiphenyl (Surrogate)	**BYE2168-BLK1**	**93.1**	%	**50 - 120 (LCL - UCL)**		
p-Terphenyl-d14 (Surrogate)	**BYE2168-BLK1**	**126**	%	**40 - 130 (LCL - UCL)**		

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Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2168										
Acenaphthene	BYE2168-BS1	LCS	1.0861	1.0000	ug/L	109		60 - 110		
Acenaphthylene	BYE2168-BS1	LCS	1.2020	1.0000	ug/L	120		60 - 120		
Anthracene	BYE2168-BS1	LCS	1.2952	1.0000	ug/L	130		60 - 130		
Benzo[a]anthracene	BYE2168-BS1	LCS	1.1582	1.0000	ug/L	116		60 - 130		
Benzo[b]fluoranthene	BYE2168-BS1	LCS	1.0318	1.0000	ug/L	103		50 - 130		
Benzo[k]fluoranthene	BYE2168-BS1	LCS	1.1474	1.0000	ug/L	115		60 - 120		
Benzo[a]pyrene	BYE2168-BS1	LCS	1.1756	1.0000	ug/L	118		60 - 120		
Benzo[g,h,i]perylene	BYE2168-BS1	LCS	0.92832	1.0000	ug/L	92.8		40 - 120		
Chrysene	BYE2168-BS1	LCS	1.0666	1.0000	ug/L	107		60 - 110		
Dibenzo[a,h]anthracene	BYE2168-BS1	LCS	0.66352	1.0000	ug/L	66.4		40 - 120		
Fluoranthene	BYE2168-BS1	LCS	0.96748	1.0000	ug/L	96.7		60 - 120		
Fluorene	BYE2168-BS1	LCS	1.1357	1.0000	ug/L	114		60 - 120		
Indeno[1,2,3-cd]pyrene	BYE2168-BS1	LCS	1.1326	1.0000	ug/L	113		40 - 130		
Naphthalene	BYE2168-BS1	LCS	0.99890	1.0000	ug/L	99.9		60 - 110		
Phenanthrene	BYE2168-BS1	LCS	1.0604	1.0000	ug/L	106		60 - 120		
Pyrene	BYE2168-BS1	LCS	1.6547	1.0000	ug/L	165		50 - 125		L01
Nitrobenzene-d5 (Surrogate)	BYE2168-BS1	LCS	3.8161	4.0000	ug/L	95.4		40 - 130		
2-Fluorobiphenyl (Surrogate)	BYE2168-BS1	LCS	4.0934	4.0000	ug/L	102		50 - 120		
p-Terphenyl-d14 (Surrogate)	BYE2168-BS1	LCS	4.9744	4.0000	ug/L	124		40 - 130		

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10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2168	Used client sample: N										
Acenaphthene	MS	**1511019-28**	**ND**	**1.1763**	**1.0000**	**ug/L**		**118**		**60 - 110**	**Q03**
	MSD	**1511019-28**	**ND**	**1.0913**	**1.0000**	**ug/L**	**7.5**	**109**	**30**	**60 - 110**	
Acenaphthylene	MS	**1511019-28**	**ND**	**1.3083**	**1.0000**	**ug/L**		**131**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1879**	**1.0000**	**ug/L**	**9.7**	**119**	**30**	**60 - 120**	
Anthracene	MS	**1511019-28**	**ND**	**1.4025**	**1.0000**	**ug/L**		**140**		**60 - 130**	**Q03**
	MSD	**1511019-28**	**ND**	**1.3073**	**1.0000**	**ug/L**	**7.0**	**131**	**30**	**60 - 130**	**Q03**
Benzo[a]anthracene	MS	**1511019-28**	**ND**	**1.2480**	**1.0000**	**ug/L**		**125**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1594**	**1.0000**	**ug/L**	**7.4**	**116**	**30**	**60 - 120**	
Benzo[b]fluoranthene	MS	1511019-28	ND	1.1310	1.0000	ug/L		113		50 - 130	
	MSD	1511019-28	ND	1.0752	1.0000	ug/L	5.1	108	30	50 - 130	
Benzo[k]fluoranthene	MS	**1511019-28**	**ND**	**1.2472**	**1.0000**	**ug/L**		**125**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1434**	**1.0000**	**ug/L**	**8.7**	**114**	**30**	**60 - 120**	
Benzo[a]pyrene	MS	**1511019-28**	**ND**	**1.2360**	**1.0000**	**ug/L**		**124**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.0911**	**1.0000**	**ug/L**	**12.5**	**109**	**30**	**60 - 120**	
Benzo[g,h,i]perylene	MS	1511019-28	ND	1.0647	1.0000	ug/L		106		40 - 120	
	MSD	1511019-28	ND	0.97751	1.0000	ug/L	8.5	97.8	30	40 - 120	
Chrysene	MS	**1511019-28**	**ND**	**1.2087**	**1.0000**	**ug/L**		**121**		**60 - 110**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1388**	**1.0000**	**ug/L**	**6.0**	**114**	**30**	**60 - 110**	**Q03**
Dibenzo[a,h]anthracene	MS	1511019-28	ND	0.78144	1.0000	ug/L		78.1		40 - 120	
	MSD	1511019-28	ND	0.69146	1.0000	ug/L	12.2	69.1	30	40 - 120	
Fluoranthene	MS	1511019-28	ND	1.0666	1.0000	ug/L		107		60 - 120	
	MSD	1511019-28	ND	1.0141	1.0000	ug/L	5.0	101	30	60 - 120	
Fluorene	MS	**1511019-28**	**ND**	**1.2329**	**1.0000**	**ug/L**		**123**		**60 - 120**	**Q03**
	MSD	**1511019-28**	**ND**	**1.1270**	**1.0000**	**ug/L**	**9.0**	**113**	**30**	**60 - 120**	
Indeno[1,2,3-cd]pyrene	MS	1511019-28	ND	1.2781	1.0000	ug/L		128		40 - 130	
	MSD	1511019-28	ND	1.0352	1.0000	ug/L	21.0	104	30	40 - 130	
Naphthalene	MS	1511019-28	ND	1.0556	1.0000	ug/L		106		60 - 110	
	MSD	1511019-28	ND	0.99619	1.0000	ug/L	5.8	99.6	30	60 - 110	
Phenanthrene	MS	1511019-28	ND	1.1471	1.0000	ug/L		115		60 - 120	
	MSD	1511019-28	ND	1.0638	1.0000	ug/L	7.5	106	30	60 - 120	
Pyrene	MS	**1511019-28**	**ND**	**1.7749**	**1.0000**	**ug/L**		**177**		**50 - 125**	**Q03**
	MSD	**1511019-28**	**ND**	**1.6037**	**1.0000**	**ug/L**	**10.1**	**160**	**30**	**50 - 125**	**Q03**
Nitrobenzene-d5 (Surrogate)	MS	1511019-28	ND	4.0540	4.0000	ug/L		101		40 - 130	
	MSD	1511019-28	ND	3.7488	4.0000	ug/L	7.8	93.7		40 - 130	
2-Fluorobiphenyl (Surrogate)	MS	1511019-28	ND	4.3117	4.0000	ug/L		108		50 - 120	
	MSD	1511019-28	ND	3.9075	4.0000	ug/L	9.8	97.7		50 - 120	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2168	Used client sample: N										
p-Terphenyl-d14 (Surrogate)	MS	1511019-28	ND	5.3878	4.0000	ug/L		135		40 - 130	S09
	MSD	1511019-28	ND	4.9525	4.0000	ug/L	8.4	124		40 - 130	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2282						
TPH - Diesel (FFP)	BYE2282-BLK1	ND	ug/L	200	34	
TPH - Crude Oil	BYE2282-BLK1	ND	ug/L	500	140	
Tetracosane (Surrogate)	**BYE2282-BLK1**	**91.6**	%	**37 - 134 (LCL - UCL)**		

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Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2282										
TPH - Diesel (FFP)	BYE2282-BS1	LCS	2127.6	2500.0	ug/L	85.1		52 - 128		
Tetracosane (Surrogate)	BYE2282-BS1	LCS	97.390	100.00	ug/L	97.4		37 - 134		

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Project Number: TOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2282	Used client sample: N										
TPH - Diesel (FFP)	MS	1511019-59	ND	1902.7	2500.0	ug/L		76.1		50 - 127	
	MSD	1511019-59	ND	2030.1	2500.0	ug/L	6.5	81.2	24	50 - 127	
Tetracosane (Surrogate)	MS	1511019-59	ND	89.695	100.00	ug/L		89.7		37 - 134	
	MSD	1511019-59	ND	91.645	100.00	ug/L	2.2	91.6		37 - 134	

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10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2035						
Bicarbonate Alkalinity as CaCO3	BYE2035-BLK1	ND	mg/L	4.1	4.1	
Carbonate Alkalinity as CaCO3	BYE2035-BLK1	ND	mg/L	4.1	4.1	
Hydroxide Alkalinity as CaCO3	BYE2035-BLK1	ND	mg/L	4.1	4.1	
Total Alkalinity as CaCO3	BYE2035-BLK1	ND	mg/L	4.1	4.1	
QC Batch ID: BYE2095						
Total Dissolved Solids @ 180 C	BYE2095-BLK1	ND	mg/L	6.7	6.7	
QC Batch ID: BYE2119						
Bromide	BYE2119-BLK1	ND	mg/L	0.10	0.035	
Chloride	BYE2119-BLK1	ND	mg/L	0.50	0.061	
Nitrate as NO3	BYE2119-BLK1	ND	mg/L	0.44	0.078	
Sulfate	BYE2119-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BYE2179						
Total Calcium	**BYE2179-BLK1**	**0.026720**	**mg/L**	**0.10**	**0.015**	**J**
Total Magnesium	BYE2179-BLK1	ND	mg/L	0.050	0.019	
Total Sodium	BYE2179-BLK1	ND	mg/L	0.50	0.051	
Total Potassium	BYE2179-BLK1	ND	mg/L	1.0	0.13	

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Aera Energy
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Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2035										
Total Alkalinity as CaCO3	BYE2035-BS3	LCS	104.52	100.00	mg/L	105		90 - 110		
QC Batch ID: BYE2095										
Total Dissolved Solids @ 180 C	BYE2095-BS1	LCS	545.00	586.00	mg/L	93.0		90 - 110		
QC Batch ID: BYE2119										
Bromide	BYE2119-BS1	LCS	2.1190	2.0000	mg/L	106		90 - 110		
Chloride	BYE2119-BS1	LCS	51.277	50.000	mg/L	103		90 - 110		
Nitrate as NO3	BYE2119-BS1	LCS	23.272	22.134	mg/L	105		90 - 110		
Sulfate	BYE2119-BS1	LCS	99.431	100.00	mg/L	99.4		90 - 110		
QC Batch ID: BYE2179										
Total Calcium	BYE2179-BS1	LCS	10.137	10.000	mg/L	101		85 - 115		
Total Magnesium	BYE2179-BS1	LCS	9.7663	10.000	mg/L	97.7		85 - 115		
Total Sodium	BYE2179-BS1	LCS	10.282	10.000	mg/L	103		85 - 115		
Total Potassium	BYE2179-BS1	LCS	10.119	10.000	mg/L	101		85 - 115		

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Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2035	Used client sample: N										
Bicarbonate Alkalinity as CaCO3	DUP	1512493-04	226.98	225.00		mg/L	0.9		10		
Carbonate Alkalinity as CaCO3	DUP	1512493-04	ND	ND		mg/L			10		
Hydroxide Alkalinity as CaCO3	DUP	1512493-04	ND	ND		mg/L			10		
Total Alkalinity as CaCO3	DUP	1512493-04	226.98	225.00		mg/L	0.9		10		
QC Batch ID: BYE2095	Used client sample: N										
Total Dissolved Solids @ 180 C	DUP	1512515-01	2100.0	2100.0		mg/L	0		10		
QC Batch ID: BYE2119	Used client sample: N										
Bromide	DUP	1512563-01	0.49400	0.51200		mg/L	3.6		10		
	MS	1512563-01	0.49400	4.7838	4.0404	mg/L		106		80 - 120	
	MSD	1512563-01	0.49400	5.1737	4.0404	mg/L	7.8	116	10	80 - 120	
Chloride	DUP	1512563-01	117.81	117.76		mg/L	0.0		10		
	MS	1512563-01	117.81	225.27	101.01	mg/L		106		80 - 120	
	MSD	1512563-01	117.81	225.20	101.01	mg/L	0.0	106	10	80 - 120	
Nitrate as NO3	DUP	1512563-01	0.29217	0.30988		mg/L	5.9		10		J
	MS	1512563-01	0.29217	46.379	44.715	mg/L		103		80 - 120	
	MSD	1512563-01	0.29217	47.040	44.715	mg/L	1.4	105	10	80 - 120	
Sulfate	DUP	1512563-01	226.68	226.74		mg/L	0.0		10		
	MS	1512563-01	226.68	434.05	202.02	mg/L		103		80 - 120	
	MSD	1512563-01	226.68	433.68	202.02	mg/L	0.1	102	10	80 - 120	
QC Batch ID: BYE2179	Used client sample: N										
Total Calcium	DUP	1510960-01	24.731	25.081		mg/L	1.4		20		
	MS	1510960-01	24.731	36.727	10.000	mg/L		120		75 - 125	
	MSD	1510960-01	24.731	33.867	10.000	mg/L	8.1	91.4	20	75 - 125	
Total Magnesium	DUP	1510960-01	19.471	18.532		mg/L	4.9		20		
	MS	1510960-01	19.471	30.698	10.000	mg/L		112		75 - 125	
	MSD	1510960-01	19.471	27.826	10.000	mg/L	9.8	83.5	20	75 - 125	
Total Sodium	DUP	**1510960-01**	**149.89**	**155.18**		**mg/L**	**3.5**		**20**		
	MS	**1510960-01**	**149.89**	**177.16**	**10.000**	**mg/L**		**273**		**75 - 125**	**A03**
	MSD	**1510960-01**	**149.89**	**162.28**	**10.000**	**mg/L**	**8.8**	**124**	**20**	**75 - 125**	
Total Potassium	DUP	1510960-01	18.558	18.888		mg/L	1.8		20		
	MS	1510960-01	18.558	31.038	10.000	mg/L		125		75 - 125	
	MSD	1510960-01	18.558	28.381	10.000	mg/L	8.9	98.2	20	75 - 125	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2071						
Hexavalent Chromium	BYE2071-BLK1	ND	ug/L	2.0	0.70	
QC Batch ID: BYE2179						
Total Antimony	BYE2179-BLK1	ND	ug/L	100	8.5	
Total Arsenic	BYE2179-BLK1	ND	ug/L	50	7.8	
Total Barium	**BYE2179-BLK1**	**3.5933**	**ug/L**	**10**	**3.5**	**J**
Total Beryllium	BYE2179-BLK1	ND	ug/L	10	0.50	
Total Boron	**BYE2179-BLK1**	**0.013557**	**mg/L**	**0.10**	**0.013**	**J**
Total Cadmium	BYE2179-BLK1	ND	ug/L	10	1.1	
Total Chromium	BYE2179-BLK1	ND	ug/L	10	1.1	
Total Cobalt	BYE2179-BLK1	ND	ug/L	50	1.3	
Total Copper	**BYE2179-BLK1**	**3.9270**	**ug/L**	**10**	**1.1**	**J**
Total Iron	BYE2179-BLK1	ND	mg/L	0.050	0.030	
Total Lead	BYE2179-BLK1	ND	ug/L	50	4.0	
Total Lithium	BYE2179-BLK1	ND	mg/L	0.020	0.0062	
Total Manganese	BYE2179-BLK1	ND	mg/L	0.010	0.0040	
Total Molybdenum	BYE2179-BLK1	ND	ug/L	50	1.2	
Total Nickel	BYE2179-BLK1	ND	ug/L	10	2.0	
Total Selenium	BYE2179-BLK1	ND	ug/L	100	15	
Total Silver	BYE2179-BLK1	ND	ug/L	10	1.9	
Total Strontium	BYE2179-BLK1	ND	mg/L	0.010	0.0010	
Total Thallium	BYE2179-BLK1	ND	ug/L	100	24	
Total Vanadium	BYE2179-BLK1	ND	ug/L	10	2.2	
Total Zinc	**BYE2179-BLK1**	**3.5246**	**ug/L**	**50**	**2.3**	**J**
QC Batch ID: BYE2185						
Total Recoverable Uranium	BYE2185-BLK1	ND	pCi/L	0.67	0.067	
QC Batch ID: BYE2261						
Total Mercury	BYE2261-BLK1	ND	ug/L	0.20	0.033	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2071										
Hexavalent Chromium	BYE2071-BS1	LCS	50.584	50.000	ug/L	101		85 - 115		
QC Batch ID: BYE2179										
Total Antimony	BYE2179-BS1	LCS	399.71	400.00	ug/L	99.9		85 - 115		
Total Arsenic	BYE2179-BS1	LCS	192.10	200.00	ug/L	96.1		85 - 115		
Total Barium	BYE2179-BS1	LCS	398.95	400.00	ug/L	99.7		85 - 115		
Total Beryllium	BYE2179-BS1	LCS	192.09	200.00	ug/L	96.0		85 - 115		
Total Boron	BYE2179-BS1	LCS	0.98260	1.0000	mg/L	98.3		85 - 115		
Total Cadmium	BYE2179-BS1	LCS	196.42	200.00	ug/L	98.2		85 - 115		
Total Chromium	BYE2179-BS1	LCS	196.11	200.00	ug/L	98.1		85 - 115		
Total Cobalt	BYE2179-BS1	LCS	194.91	200.00	ug/L	97.5		85 - 115		
Total Copper	BYE2179-BS1	LCS	367.56	400.00	ug/L	91.9		85 - 115		
Total Iron	BYE2179-BS1	LCS	1.0050	1.0000	mg/L	101		85 - 115		
Total Lead	BYE2179-BS1	LCS	400.69	400.00	ug/L	100		85 - 115		
Total Lithium	BYE2179-BS1	LCS	0.20705	0.20000	mg/L	104		85 - 115		
Total Manganese	BYE2179-BS1	LCS	0.48210	0.50000	mg/L	96.4		85 - 115		
Total Molybdenum	BYE2179-BS1	LCS	199.00	200.00	ug/L	99.5		85 - 115		
Total Nickel	BYE2179-BS1	LCS	390.17	400.00	ug/L	97.5		85 - 115		
Total Selenium	BYE2179-BS1	LCS	198.93	200.00	ug/L	99.5		85 - 115		
Total Silver	BYE2179-BS1	LCS	93.826	100.00	ug/L	93.8		85 - 115		
Total Strontium	BYE2179-BS1	LCS	0.50808	0.50000	mg/L	102		85 - 115		
Total Thallium	BYE2179-BS1	LCS	428.86	400.00	ug/L	107		85 - 115		
Total Vanadium	BYE2179-BS1	LCS	197.03	200.00	ug/L	98.5		85 - 115		
Total Zinc	BYE2179-BS1	LCS	468.95	500.00	ug/L	93.8		85 - 115		
QC Batch ID: BYE2185										
Total Recoverable Uranium	BYE2185-BS1	LCS	24.756	26.800	pCi/L	92.4		85 - 115		
QC Batch ID: BYE2261										
Total Mercury	BYE2261-BS1	LCS	1.0175	1.0000	ug/L	102		85 - 115		

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Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2071	Used client sample: Y - Description: BL3 TOW Belridge V Pond 4, 05/21/2015 08:10										
Hexavalent Chromium	DUP	**1512507-01**	**ND**	**ND**		**ug/L**			**10**		
	MS	**1512507-01**	**ND**	**218.42**	**263.16**	**ug/L**		**83.0**		**85 - 115**	**Q03**
	MSD	**1512507-01**	**ND**	**216.89**	**263.16**	**ug/L**	**0.7**	**82.4**	**10**	**85 - 115**	**Q03**
QC Batch ID: BYE2179	Used client sample: N										
Total Antimony	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	434.76	400.00	ug/L		109		75 - 125	
	MSD	1510960-01	ND	391.17	400.00	ug/L	10.6	97.8	20	75 - 125	
Total Arsenic	DUP	1510960-01	82.260	89.882		ug/L	8.9		20		
	MS	1510960-01	82.260	308.57	200.00	ug/L		113		75 - 125	
	MSD	1510960-01	82.260	277.29	200.00	ug/L	10.7	97.5	20	75 - 125	
Total Barium	DUP	1510960-01	15.894	18.363		ug/L	14.4		20		
	MS	1510960-01	15.894	462.00	400.00	ug/L		112		75 - 125	
	MSD	1510960-01	15.894	436.99	400.00	ug/L	5.6	105	20	75 - 125	
Total Beryllium	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	211.71	200.00	ug/L		106		75 - 125	
	MSD	1510960-01	ND	195.41	200.00	ug/L	8.0	97.7	20	75 - 125	
Total Boron	DUP	1510960-01	2.7217	2.8102		mg/L	3.2		20		
	MS	1510960-01	2.7217	3.8792	1.0000	mg/L		116		75 - 125	
	MSD	1510960-01	2.7217	3.5206	1.0000	mg/L	9.7	79.9	20	75 - 125	
Total Cadmium	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	216.13	200.00	ug/L		108		75 - 125	
	MSD	1510960-01	ND	194.03	200.00	ug/L	10.8	97.0	20	75 - 125	
Total Chromium	DUP	1510960-01	3.9460	3.5827		ug/L	9.7		20		J
	MS	1510960-01	3.9460	211.75	200.00	ug/L		104		75 - 125	
	MSD	1510960-01	3.9460	195.57	200.00	ug/L	7.9	95.8	20	75 - 125	
Total Cobalt	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	209.64	200.00	ug/L		105		75 - 125	
	MSD	1510960-01	ND	189.15	200.00	ug/L	10.3	94.6	20	75 - 125	
Total Copper	DUP	1510960-01	3.6574	3.9733		ug/L	8.3		20		J
	MS	1510960-01	3.6574	415.96	400.00	ug/L		103		75 - 125	
	MSD	1510960-01	3.6574	383.30	400.00	ug/L	8.2	94.9	20	75 - 125	
Total Iron	DUP	1510960-01	ND	ND		mg/L			20		
	MS	1510960-01	ND	1.1413	1.0000	mg/L		114		75 - 125	
	MSD	1510960-01	ND	1.0597	1.0000	mg/L	7.4	106	20	75 - 125	
Total Lead	DUP	**1510960-01**	**6.7584**	**5.4539**		**ug/L**	**21.4**		**20**		**J,A02**
	MS	**1510960-01**	**6.7584**	**435.78**	**400.00**	**ug/L**		**107**		**75 - 125**	
	MSD	**1510960-01**	**6.7584**	**389.49**	**400.00**	**ug/L**	**11.2**	**95.7**	**20**	**75 - 125**	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/03/2015 17:39
Project: Oilfield Produced Water Pond Testing
Project Number: TOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2179	Used client sample: N										
Total Lithium	DUP	1510960-01	0.21533	0.22364		mg/L	3.8		20		
	MS	1510960-01	0.21533	0.45282	0.20000	mg/L		119		75 - 125	
	MSD	1510960-01	0.21533	0.42539	0.20000	mg/L	6.2	105	20	75 - 125	
Total Manganese	DUP	1510960-01	ND	ND		mg/L			20		
	MS	1510960-01	ND	0.51797	0.50000	mg/L		104		75 - 125	
	MSD	1510960-01	ND	0.47831	0.50000	mg/L	8.0	95.7	20	75 - 125	
Total Molybdenum	DUP	1510960-01	8.3033	7.2074		ug/L	14.1		20		J
	MS	1510960-01	8.3033	231.11	200.00	ug/L		111		75 - 125	
	MSD	1510960-01	8.3033	204.37	200.00	ug/L	12.3	98.0	20	75 - 125	
Total Nickel	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	409.38	400.00	ug/L		102		75 - 125	
	MSD	1510960-01	ND	382.82	400.00	ug/L	6.7	95.7	20	75 - 125	
Total Selenium	DUP	1510960-01	ND	15.363		ug/L			20		J
	MS	1510960-01	ND	220.13	200.00	ug/L		110		75 - 125	
	MSD	1510960-01	ND	187.79	200.00	ug/L	15.9	93.9	20	75 - 125	
Total Silver	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	103.36	100.00	ug/L		103		75 - 125	
	MSD	1510960-01	ND	94.787	100.00	ug/L	8.7	94.8	20	75 - 125	
Total Strontium	DUP	**1510960-01**	**0.77319**	**0.80121**		**mg/L**	**3.6**		**20**		
	MS	**1510960-01**	**0.77319**	**1.4218**	**0.50000**	**mg/L**		**130**		**75 - 125**	**Q03**
	MSD	**1510960-01**	**0.77319**	**1.3199**	**0.50000**	**mg/L**	**7.4**	**109**	**20**	**75 - 125**	
Total Thallium	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	448.15	400.00	ug/L		112		75 - 125	
	MSD	1510960-01	ND	407.79	400.00	ug/L	9.4	102	20	75 - 125	
Total Vanadium	DUP	1510960-01	12.199	13.466		ug/L	9.9		20		
	MS	1510960-01	12.199	228.10	200.00	ug/L		108		75 - 125	
	MSD	1510960-01	12.199	211.37	200.00	ug/L	7.6	99.6	20	75 - 125	
Total Zinc	DUP	1510960-01	3.7957	ND		ug/L			20		
	MS	1510960-01	3.7957	517.49	500.00	ug/L		103		75 - 125	
	MSD	1510960-01	3.7957	478.12	500.00	ug/L	7.9	94.9	20	75 - 125	
QC Batch ID: BYE2185	Used client sample: N										
Total Recoverable Uranium	DUP	1512150-01	1.9423	1.7380		pCi/L	11.1		20		
	MS	1512150-01	1.9423	30.339	26.800	pCi/L		106		70 - 130	
	MSD	1512150-01	1.9423	28.584	26.800	pCi/L	6.0	99.4	20	70 - 130	
QC Batch ID: BYE2261	Used client sample: N										
Total Mercury	DUP	1512525-01	ND	ND		ug/L			20		
	MS	1512525-01	ND	1.0050	1.0000	ug/L		100		70 - 130	
	MSD	1512525-01	ND	1.0100	1.0000	ug/L	0.5	101	20	70 - 130	

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BSK Associates
Engineers & Laboratories

BSK Associates Fresno
1414 Stanislaus St
Fresno, CA93706
559-497-2888 (Main)
559-485-6935 (FAX)

A5E2038
5/29/2015
Invoice: A510956

Kerrie Vaughan
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308

RE: Report for A5E2038 General: Project Manager-Kerrie Vaughan

Dear Kerrie Vaughan,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 5/22/2015. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2009 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

If additional clarification of any information is required, please contact your Project Manager, Stephane Maupas , at (800) 877-8310 or (559) 497-2888 x212.

Thanks again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Stephane Maupas, Project Manager

NELAP ACCREDITED TNI LABORATORY

Accredited in Accordance with NELAP
ORELAP #4021

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BSK Associates Engineers & Laboratories

A5E2038

General: Project Manager-Kerrie Vaughan

Case Narrative

Project and Report Details		Invoice Details	
Client:	BC Laboratories	**Invoice To:**	BC Laboratories
Report To:	Kerrie Vaughan	**Invoice Attn:**	Kerrie Vaughan
Project #:	1512507	**Project PO#:**	-
Received:	5/22/2015 - 15:40		
Report Due:	5/29/2015		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 4.0

Containers Intact
COC/Labels Agree
Received On Wet Ice
Packing Material - Bubble Wrap
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

MS1.0 Matrix spike recoveries exceed control limits.

Report Distribution

Recipient(s)	Report Format	CC:
Kerrie Vaughan	FINAL.RPT	

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BSK Associates Engineers & Laboratories

A5E2038

General: Project Manager-Kerrie Vaughan

1512507

Certificate of Analysis

Sample ID: A5E2038-01
Sampled By: Client
Sample Description: 1512507-01

Sample Date - Time: 05/21/15 - 08:10
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505748	05/26/15	05/27/15	
1.65 Sigma Uncertainty		0.158	±				
MDA95		1070	pCi/L				

A5E2038 FINAL 05292015 0842
Printed: 05/29/2015
QA-RP-0001-10 Final.rpt

www.BSKAssociates.com

Page 3 of 9

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BSK Associates Engineers & Laboratories

A5E2038

General: Project Manager-Kerrie Vaughan

1512507

Certificate of Analysis

Sample ID: A5E2038-02
Sampled By: Client
Sample Description: 1512507-02

Sample Date - Time: 05/21/15 - 09:10
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505748	05/26/15	05/27/15	
1.65 Sigma Uncertainty		0.110	±				
MDA95		1070	pCi/L				

A5E2038 FINAL 05292015 0842
Printed: 05/29/2015
QA-RP-0001-10 Final.rpt

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BSK Associates Engineers & Laboratories

A5E2038

General: Project Manager-Kerrie Vaughan

BSK Associates Fresno

Radiological Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 00-02 - Quality Control											
Batch: A505748										Prepared: 05/26/2015	
Prep Method: EPA 00-02										Analyst: SAB	
Blank (A505748-BLK1)											
1.65 Sigma Uncertainty	ND		±							05/27/15	
Gross Alpha	ND	3	pCi/L							05/27/15	
MDA95	ND	0.00	pCi/L							05/27/15	
Blank Spike (A505748-BS1)											
Gross Alpha	28.6	3	pCi/L	30		95	80-120			05/27/15	
Blank Spike Dup (A505748-BSD1)											
Gross Alpha	24.0	3	pCi/L	30		80	80-120	17	50	05/27/15	
Matrix Spike (A505748-MS1), Source: A5E1287-01											
Gross Alpha	114	3	pCi/L	120	ND	94	70-130			05/27/15	
Matrix Spike (A505748-MS2), Source: A5E1400-03											
Gross Alpha	100	3	pCi/L	120	ND	83	70-130			05/27/15	
Matrix Spike Dup (A505748-MSD1), Source: A5E1287-01											
Gross Alpha	115	3	pCi/L	120	ND	95	70-130	1	50	05/27/15	
Matrix Spike Dup (A505748-MSD2), Source: A5E1400-03											
Gross Alpha	80.7	3	pCi/L	120	ND	67	70-130	21	50	05/27/15	MS1.0 Low

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BSK Associates Engineers & Laboratories

A5E2038

General: Project Manager-Kerrie Vaughan

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method , all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected at RL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	Picocuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent Recovered (surrogates)	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit		

Please see the individual Subcontract Lab's report for applicable certifications.

BSK is not accredited under the NELAC program for the following parameters: **NA**

Certifications: **Please refer to our website for a copy of our Accredited Fields of Testing under each certification.**

Fresno

State of California - ELAP	1180	State of Hawaii	4021
State of Nevada	CA000792015-1	State of Oregon - NELAC	4021
EPA - UCMR3	CA00079	State of Washington	C997-15

Sacramento

State of California - ELAP	2435

Vancouver

State of Oregon - NELAC	WA100008	State of Washington	C824-14a

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A5E2038

05222015

BCLab4911

Turnaround: Standard
Due Date: 5/29/2015

BC Laboratories

Printed: 5/22/1 Page 7 of 9
Page 1 of 1

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SUBCONTRACT ORDER

BC Laboratories

4.0 **1512507**

PUSH

SENDING LABORATORY:

BC Laboratories
4100 Atlas Ct
Bakersfield, CA 93308
Phone: 661-327-4911
Fax: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATOR A5E2038 05/22/2015

BSK Analytical Labs $BSI BCLab4911 4
1414 Stanislaus Street
Fresno, CA 93706
Phone :(800) 877-8310
Fax: (559) 485-6935

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 1512507-01	**Water**	**Sampled:05/21/15 08:10**		
om900.0w Gross Alpha BSKSA *Containers Supplied:*	05/29/15 17:00	11/18/15 08:10		Analyze water phase only. Results needed by 5/29/2015.
Sample ID: 1512507-02	**Water**	**Sampled:05/21/15 09:10**		
om900.0w Gross Alpha BSKSA *Containers Supplied:*	05/29/15 17:00	11/18/15 09:10		Analyze water phase only. Results needed by 5/29/2015.

Meggan Boyles 5/22 — 5-22-15
Released By Date Received By Date

5-22-15 — 5-22-15 1540
Released By Date Received By Date

W/BW/pms

Page 8 of 9

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BSK Associates SR-FL-0002-13

A5E2038 05/22/2015
BCLab4911 4

Sample Integrity

BSK Bottles: Yes No Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 10°C	Yes No NA	Were correct containers and preservatives received for the tests requested?	Yes No NA
If samples were taken today, is there evidence that chilling has begun?	Yes No NA	Were there bubbles in the VOA vials? (Volatiles Only)	Yes No NA
Did all bottles arrive unbroken and intact?	Yes No	Was a sufficient amount of sample received?	Yes No
Did all bottle labels agree with COC?	Yes No	Do samples have a hold time <72 hours?	Yes No
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes No NA	Was PM notified of discrepancies? PM: By/Time:	Yes No NA

Bottles Received (*_* means preservation/chlorine checks are either N/A or are performed in the lab)

250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V)	Checks	Passed?	1-2
Bact $Na_2S_2O_3$	—	—	
None (P) White Cap	—	—	
Cr6 (P) Dk. Green Label $NH_4OH/(NH_4)_2SO_4$ DW	Cl, pH > 8	Y N	
Cr6 (P) Pink Label Hex Chrome Buffer DW	pH 9-9.5	Y N	
Cr6 (P) Pink Label Hex Chrome Buffer WW	pH 9.3-9.7	Y N	
HNO_3 (P) Red Cap	—	—	1C
H_2SO_4 (P) or (AG) Yellow Cap/Label	pH < 2	Y N	
NaOH (P) Green Cap	Cl, pH >10	Y N	
NaOH + ZnAc (P)	pH > 9	Y N	5-22-15
Dissolved Oxygen 300ml (g)	—	—	
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—	NP
HCl (AG) Lt. Blue Label O&G, Diesel	—	—	
$Na_2O_3S_2HCl$ (AG) Lt. Pink Label 525	—	—	
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—	
$Na_2S_2O_3$ (AG) Blue Label 547,515,548,THM,524	—	—	
$Na_2S_2O_3$ (CG) Blue Label 504, 505	—	—	
$Na_2S_2O_3$ MCAA (CG) Orange Label 531	pH <3	Y N	
NH_4Cl (AG) Purple Label 552	—	—	
EDA (AG) Brown Label DBPs	—	—	
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—	
Buffer pH 4 (CG)	—	—	
None (CG)	—	—	
H_3PO_4 (CG) Salmon Label	—	—	
Other:			
Asbestos 1 Liter Plastic w/ Foil	—	—	
Low Level Hg / Metals Double Baggie	—	—	
Bottled Water	—	—	
Clear Glass Jar: 250 / 500 / 1 Liter	—	—	
Soil Tube: Brass / Steel / Plastic	—	—	
Tedlar Bag / Plastic Bag	—	—	

Split

	Container	Preservative	Date/Time/Initials		Container	Preservative	Date/Time/Initials
S P				S P			
S P				S P			

Comments

Labeled by: JNS @ 16:44 Labels checked by: CLH @ 1647 RUSH Paged by: Page 9 of 9

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Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 03, 2015

Ms. Kerrie Vaughan
BC Laboratories
4100 Atlas Ct.
Bakersfield, CA 93308

RE: Project: 1512507
Pace Project No.: 30148944

Dear Ms. Vaughan:
Enclosed are the analytical results for sample(s) received by the laboratory on May 26, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carin A Ferris

Carin Ferris
carin.ferris@pacelabs.com
Project Manager

Enclosures

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, Inc..

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 1512507
Pace Project No.: 30148944

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: PA014572014-4
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: 1512507
Pace Project No.: 30148944

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30148944001	1512507-01	Water	05/21/15 08:10	05/26/15 09:45
30148944002	1512507-02	Water	05/21/15 09:10	05/26/15 09:45

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 1512507
Pace Project No.: 30148944

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30148944001	1512507-01	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30148944002	1512507-02	EPA 903.1	JC2	1
		EPA 904.0	JLW	1

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: 1512507
Pace Project No.: 30148944

Method: EPA 903.1
Description: 903.1 Radium 226
Client: BC Laboratories
Date: June 03, 2015

General Information:
2 samples were analyzed for EPA 903.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: 1512507
Pace Project No.: 30148944

Method: EPA 904.0
Description: 904.0 Radium 228
Client: BC Laboratories
Date: June 03, 2015

General Information:
2 samples were analyzed for EPA 904.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1512507
Pace Project No.: 30148944

Sample: 1512507-01 **Lab ID: 30148944001** Collected: 05/21/15 08:10 Received: 05/26/15 09:45 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sample collection dates and times were not present on the sample containers.
• Filter if solids are present

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**14.5 ± 8.82 (9.68) C:NA T:72%**	pCi/L	06/02/15 10:34	13982-63-3	
Radium-228	EPA 904.0	**2.08 ± 7.79 (14.6) C:76% T:75%**	pCi/L	06/02/15 15:48	15262-20-1	

Sample: 1512507-02 **Lab ID: 30148944002** Collected: 05/21/15 09:10 Received: 05/26/15 09:45 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sample collection dates and times were not present on the sample containers.
• Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**9.42 ± 6.67 (3.19) C:NA T:71%**	pCi/L	06/02/15 10:16	13982-63-3	
Radium-228	EPA 904.0	**3.14 ± 7.51 (16.6) C:80% T:72%**	pCi/L	06/02/15 12:53	15262-20-1	

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BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 06/08/2015

Rod Bowyer

Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Client Project:	DOW
BCL Project:	Oilfield Produced Water Pond Testing
BCL Work Order:	1512508
Invoice ID:	B205096

Enclosed are the results of analyses for samples received by the laboratory on 5/21/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kerrie S. Vaughan

Contact Person: Kerrie Vaughan
Client Services

Authorized Signature

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Precision and Accuracy 23

Total Petroleum Hydrocarbons

Method Blank Analysis 25
Laboratory Control Sample 26
Precision and Accuracy 27

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Laboratory Control Sample 29
Precision and Accuracy 30

Metals Analysis

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BC Laboratories, Inc.

Chain of Custody Form

RUSH!

Page 1 of 1

Report To:
Client: Aera
Attn: Rod Bowyer
Street Address:
City, State, Zip:
Phone: Fax:
Email Address:
Work Order #: 15-12508

Project #:
Project Name:
Sampler(s):

Analysis Requested

Please refer to the back of this page for completion instructions and method legend.

See Attached

Comments:

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

Sample #	Description	Date Sampled	Time Sampled	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
-1	BL1847 DOW DHy 2 (3)	5/21/19	1034					X		5	JCE ~~4~~ (3)
-2	BL1807 DOW Sec. 12 (4)	↓	1340					X		5	(4)

SHORT HOLDING TIME
Cr^{+6} NO_2 NO_3 OP SS
DO Cl_2 BOD MBAS COT

CHK BY
DISTRIBUTION
SUB-OUT

Billing ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? Geotracker ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)
System # (Needed for EDT)

	Date	Time		Date	Time
1. Relinquished By: JC Enriquez	5/21/15	1555	1. Received By: MM	5/21	1555
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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BC LABORATORIES, INC
4100 Atlas Ct. Bakersfield, Ca. 93308 Tel: (800) 878 - 4911 Website: www.bclabs.com

15.12508

OIL FIELD PRODUCED WATER POND TESTING

CALIFORNIA WATER CODE DIRECTIVE PURSUANT TO SECTION 13267
CHARACTERIZATION OF WASTEWATER FOR DISCHARGE

Collect representative samples of wastewater within each of the ponds. Samples must be analyzed in accordance with the water quality analysis and reporting requirements contained in Attachment B to this Order;[1]

List of Analyses as per Attachment B

A. Total Dissolved Solids

B. Metals, CCR title 22, section 66261.24. subdivision (a)(2)(A) (antimony, arsenic, barium, beryllium, cadmium, chromium, chromium (VI), cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc)

C. benzene, toluene, ethylbenzene, xylenes

D. Total Petroleum Hydrocarbons as Crude Oil

E. Polynuclear Aromatic Hydrocarbons (PAH)

F. Radionuclides (Radium226, Radium 228, Gross Alpha, Uranium)

G. Major and Minor Cations (sodium, potassium, magnesium, calcium)

H. Major and Minor Anions (nitrate, chloride, sulfate, carbonate, bicarbonate, bromide)

I. Trace Elements (lithium, strontium, boron, iron, manganese)

Total Price $734

Electronic results available as an Excel spreadsheet upon request.

Field Service	
Sampling	$60 per hour
Vehicle	$0.60 per mile

[1] All previously obtained analytical data for oil field produced wastewater samples collected at the Facility, if any, with a description of the source and location for each analysis may be submitted in the alternative for re-running tests if the sample(s) was collected and analyzed within 12 months (one year) of the date of this order.

4100 Atlas Ct. Bakersfield, CA 93308 (800) 878-4911 www.bclabs.com

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Chain of Custody and Cooler Receipt Form for 1512508 Page 3 of 4

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 Of 2

Submission #: 15-12508

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☐ NO ☐

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: PG Thermometer ID: 208

Temperature: (A) 0.6 °C / (C) 0.7 °C

Date/Time 5'21'15

Analyst Init MVB 11555

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	C									
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	DEFJ									
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AB									
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M	H									
QT AMBER 8270	I									
8 OZ. JAR										
32 OZ. JAR	G									
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:

Sample Numbering Completed By: KLB Date/Time: 5/21/15 1743 (S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC)

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1512508 Page 4 of 4

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 2 Of 2

Submission #: 15-12508

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☐ BC Lab Field Service ☐ Other ☐ (Specify)_____	Ice Chest ☑ None ☐ Box ☐ Other ☐ (Specify)_____	YES ☐ NO ☐

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: PG Thermometer ID: 208 Date/Time 5'21'15

Temperature: (A) 0.7 °C / (C) 0.8 °C Analyst Init MVB 1555

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL		C								
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS		DEPJ								
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL		AB								
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M		H								
QT AMBER 8270		I								
8 OZ. JAR										
32 OZ. JAR		G								
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:

Sample Numbering Completed By: MVB Date/Time: 5/21/15 1743 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]

A = Actual / C = Corrected

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1512508-01	COC Number:	---	Receive Date:	05/21/2015 15:55
	Project Number:	---	Sampling Date:	05/21/2015 10:34
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	BL1847 DOW DHy 2	Lab Matrix:	Water
	Sampled By:	Juan Enriquez	Sample Type:	Wastewater
1512508-02	COC Number:	---	Receive Date:	05/21/2015 15:55
	Project Number:	---	Sampling Date:	05/21/2015 13:40
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	BL1807 DOW Sec. 12	Lab Matrix:	Water
	Sampled By:	Juan Enriquez	Sample Type:	Wastewater

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512508-01 | **Client Sample Name:** BL1847 DOW DHy 2, 5/21/2015 10:34:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260B	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.0	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	96.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	91.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/23/15 20:46	SE1	MS-V12	1	BYE2091

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Aera Energy
[illegible]000 Ming Ave
[illegible]kersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512508-01 | **Client Sample Name:** BL1847 DOW DHy 2, 5/21/2015 10:34:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	ug/L	0.20	0.11	EPA-8270C-SIM	ND		1
Acenaphthylene	ND	ug/L	0.20	0.093	EPA-8270C-SIM	ND		1
Anthracene	**0.035**	**ug/L**	**0.20**	**0.034**	**EPA-8270C-SIM**	ND	J	1
Benzo[a]anthracene	ND	ug/L	0.20	0.051	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.20	0.079	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.20	0.10	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.20	0.051	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.20	0.085	EPA-8270C-SIM	ND		1
Chrysene	ND	ug/L	0.20	0.044	EPA-8270C-SIM	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.20	0.087	EPA-8270C-SIM	ND		1
Fluoranthene	**0.26**	**ug/L**	**0.20**	**0.024**	**EPA-8270C-SIM**	ND		1
Fluorene	ND	ug/L	0.20	0.059	EPA-8270C-SIM	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.20	0.087	EPA-8270C-SIM	ND		1
Naphthalene	**0.16**	**ug/L**	**0.20**	**0.15**	**EPA-8270C-SIM**	ND	J	1
[illegible]enanthrene	**0.29**	**ug/L**	**0.20**	**0.044**	**EPA-8270C-SIM**	ND		1
Pyrene	ND	ug/L	0.20	0.044	EPA-8270C-SIM	ND		1
Nitrobenzene-d5 (Surrogate)	108	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1
2-Fluorobiphenyl (Surrogate)	75.1	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	14.6	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/22/15	05/27/15 21:39	MK1	MS-B4	1.980	BYE2168

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512508-01 | **Client Sample Name:** BL1847 DOW DHy 2, 5/21/2015 10:34:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**40000**	**ug/L**	**10000**	**2800**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	69.5	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/22/15	05/27/15 19:18	MWB	GC-13	20	BYE2282

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Aera Energy
0000 Ming Ave
kersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512508-01 | **Client Sample Name:** BL1847 DOW DHy 2, 5/21/2015 10:34:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**41**	**mg/L**	**0.20**	**0.030**	**EPA-6010B**	0.053	**A07**	1
Total Magnesium	**1.1**	**mg/L**	**0.10**	**0.038**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**1200**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**9.0**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**	ND	**A07**	1
Bicarbonate Alkalinity as CaCO3	**500**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	**260**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**750**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**1.2**	**mg/L**	**1.0**	**0.35**	**EPA-300.0**	ND	**A07**	3
Chloride	**350**	**mg/L**	**1.0**	**0.12**	**EPA-300.0**	ND	**A07**	4
Nitrate as NO3	**18**	**mg/L**	**4.4**	**0.78**	**EPA-300.0**	ND	**A07**	3
Sulfate	**360**	**mg/L**	**2.0**	**0.20**	**EPA-300.0**	ND	**A07**	4
Total Dissolved Solids @ 180 C	**4500**	**mg/L**	**200**	**200**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/26/15	05/27/15 10:57	ARD	PE-OP3	2	BYE2179
2	EPA-310.1	05/26/15	05/26/15 13:47	RML	MET-1	2	BYE2035
3	EPA-300.0	05/22/15	05/22/15 12:04	OLH	IC5	10	BYE2119
4	EPA-300.0	06/01/15	06/01/15 23:18	BMW	IC5	2	BYF0131
5	EPA-160.1	05/23/15	05/23/15 11:30	CAD	MANUAL	20	BYE2095

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512508-01 | **Client Sample Name:** BL1847 DOW DHy 2, 5/21/2015 10:34:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	200	17	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	100	16	EPA-6010B	500000	A07	2
Total Barium	**35**	**ug/L**	**20**	**7.0**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	20	1.0	EPA-6010B	75000	A07	2
Total Boron	**1.3**	**mg/L**	**0.20**	**0.026**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	20	2.2	EPA-6010B	100000	A07	2
Total Chromium	**33**	**ug/L**	**20**	**2.2**	**EPA-6010B**	2500000	**A07**	2
Total Cobalt	ND	ug/L	100	2.6	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	20	2.2	EPA-6010B	2500000	A07	2
Total Iron	**0.83**	**mg/L**	**0.10**	**0.060**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	100	8.0	EPA-6010B	1000000	A07	2
Total Lithium	**0.017**	**mg/L**	**0.040**	**0.012**	**EPA-6010B**		**J,A07**	2
Total Manganese	**0.099**	**mg/L**	**0.020**	**0.0080**	**EPA-6010B**		**A07**	2
Total Mercury	**0.88**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000		3
Total Molybdenum	ND	ug/L	100	2.4	EPA-6010B	3500000	A07	2
Total Nickel	ND	ug/L	20	4.0	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	200	30	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	20	3.8	EPA-6010B	500000	A07	2
Total Strontium	**0.20**	**mg/L**	**0.020**	**0.0020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	200	48	EPA-6010B	700000	A07	2
Total Vanadium	**63**	**ug/L**	**20**	**4.4**	**EPA-6010B**	2400000	**A07**	2
Total Zinc	**170**	**ug/L**	**100**	**4.6**	**EPA-6010B**	5000000	**A07**	2
Total Recoverable Uranium	ND	pCi/L	6.7	0.67	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/21/15	05/21/15 20:56	BMW	KONE-1	5	BYE2071
2	EPA-6010B	05/26/15	05/27/15 10:57	ARD	PE-OP3	2	BYE2179
3	EPA-7470A	05/27/15	05/27/15 16:06	MEV	CETAC1	1	BYE2261
4	EPA-200.8	05/26/15	05/26/15 22:07	SRM	PE-EL2	10	BYE2185

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Aera Energy
9000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512508-02 | **Client Sample Name:** BL1807 DOW Sec. 12, 5/21/2015 1:40:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**9.5**	**ug/L**	**2.5**	**0.42**	**EPA-8260B**	ND	**A01,Z1**	1
Ethylbenzene	**3.0**	**ug/L**	**2.5**	**0.49**	**EPA-8260B**	ND	**A01,Z1**	1
Toluene	**22**	**ug/L**	**2.5**	**0.46**	**EPA-8260B**	ND	**A01,Z1**	1
Total Xylenes	**49**	**ug/L**	**5.0**	**1.8**	**EPA-8260B**	ND	**A01,Z1**	1
p- & m-Xylenes	**42**	**ug/L**	**2.5**	**1.4**	**EPA-8260B**	ND	**A01,Z1**	1
o-Xylene	**7.1**	**ug/L**	**2.5**	**0.41**	**EPA-8260B**	ND	**A01,Z1**	1
1,2-Dichloroethane-d4 (Surrogate)	95.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	96.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	97.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/22/15	05/27/15 03:24	SE1	MS-V12	5	BYE2091

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512508-02 | **Client Sample Name:** BL1807 DOW Sec. 12, 5/21/2015 1:40:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**10**	**ug/L**	**1.0**	**0.55**	**EPA-8270C-SIM**	ND	**A01**	1
Acenaphthylene	**4.9**	**ug/L**	**1.0**	**0.47**	**EPA-8270C-SIM**	ND	**A01**	1
Anthracene	ND	ug/L	1.0	0.17	EPA-8270C-SIM	ND	A01	1
Benzo[a]anthracene	**0.76**	**ug/L**	**1.0**	**0.26**	**EPA-8270C-SIM**	ND	**J,A01**	1
Benzo[b]fluoranthene	**1.9**	**ug/L**	**1.0**	**0.40**	**EPA-8270C-SIM**	ND	**A01**	1
Benzo[k]fluoranthene	ND	ug/L	1.0	0.51	EPA-8270C-SIM	ND	A01	1
Benzo[a]pyrene	ND	ug/L	1.0	0.26	EPA-8270C-SIM	ND	A01	1
Benzo[g,h,i]perylene	ND	ug/L	1.0	0.43	EPA-8270C-SIM	ND	A01	1
Chrysene	**6.1**	**ug/L**	**1.0**	**0.22**	**EPA-8270C-SIM**	ND	**A01**	1
Dibenzo[a,h]anthracene	ND	ug/L	1.0	0.44	EPA-8270C-SIM	ND	A01	1
Fluoranthene	**2.3**	**ug/L**	**1.0**	**0.12**	**EPA-8270C-SIM**	ND	**A01**	1
Fluorene	**33**	**ug/L**	**5.0**	**1.5**	**EPA-8270C-SIM**	ND	**A01**	2
Indeno[1,2,3-cd]pyrene	ND	ug/L	1.0	0.44	EPA-8270C-SIM	ND	A01	1
Naphthalene	**30**	**ug/L**	**5.0**	**3.8**	**EPA-8270C-SIM**	ND	**A01**	2
Phenanthrene	**60**	**ug/L**	**5.0**	**1.1**	**EPA-8270C-SIM**	ND	**A01**	2
Pyrene	**8.1**	**ug/L**	**1.0**	**0.22**	**EPA-8270C-SIM**	ND	**A01**	1
Nitrobenzene-d5 (Surrogate)	99.9	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1
2-Fluorobiphenyl (Surrogate)	87.0	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM		A01	1
p-Terphenyl-d14 (Surrogate)	70.8	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/22/15	05/27/15 14:35	MK1	MS-B4	10	BYE2168
2	EPA-8270C-SIM	05/22/15	05/28/15 15:25	MK1	MS-B4	50	BYE2168

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Aera Energy
9000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512508-02 | **Client Sample Name:** BL1807 DOW Sec. 12, 5/21/2015 1:40:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**160000**	**ug/L**	**10000**	**2800**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	75.6	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/22/15	05/28/15 09:15	MWB	GC-13	20	BYE2282

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512508-02 | **Client Sample Name:** BL1807 DOW Sec. 12, 5/21/2015 1:40:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**100**	**mg/L**	**0.20**	**0.030**	**EPA-6010B**	0.053	**A07**	1
Total Magnesium	**10**	**mg/L**	**0.10**	**0.038**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**360**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**18**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**	ND	**A07**	1
Bicarbonate Alkalinity as CaCO3	**240**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**240**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**4.6**	**mg/L**	**0.50**	**0.18**	**EPA-300.0**	ND	**A07**	3
Chloride	**670**	**mg/L**	**2.5**	**0.30**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	2.2	0.39	EPA-300.0	ND	A07	3
Sulfate	**12**	**mg/L**	**5.0**	**0.50**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**2200**	**mg/L**	**100**	**100**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/26/15	05/27/15 10:59	ARD	PE-OP3	2	BYE2179
2	EPA-310.1	05/26/15	05/26/15 13:57	RML	MET-1	2	BYE2035
3	EPA-300.0	05/22/15	05/22/15 16:59	BMW	IC5	5	BYE2119
4	EPA-160.1	05/23/15	05/23/15 11:30	CAD	MANUAL	10	BYE2095

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Aera Energy
9000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512508-02 | **Client Sample Name:** BL1807 DOW Sec. 12, 5/21/2015 1:40:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	40	14	EPA-7196		A07	1
Total Antimony	ND	ug/L	200	17	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	100	16	EPA-6010B	500000	A07	2
Total Barium	**370**	**ug/L**	**20**	**7.0**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	20	1.0	EPA-6010B	75000	A07	2
Total Boron	**2.9**	**mg/L**	**0.20**	**0.026**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	20	2.2	EPA-6010B	100000	A07	2
Total Chromium	**19**	**ug/L**	**20**	**2.2**	**EPA-6010B**	2500000	**J,A07**	2
Total Cobalt	**10**	**ug/L**	**100**	**2.6**	**EPA-6010B**	8000000	**J,A07**	2
Total Copper	**22**	**ug/L**	**20**	**2.2**	**EPA-6010B**	2500000	**A07**	2
Total Iron	**7.0**	**mg/L**	**0.10**	**0.060**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	100	8.0	EPA-6010B	1000000	A07	2
Total Lithium	**0.26**	**mg/L**	**0.040**	**0.012**	**EPA-6010B**		**A07**	2
Total Manganese	**0.68**	**mg/L**	**0.020**	**0.0080**	**EPA-6010B**		**A07**	2
tal Mercury	**0.048**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000	**J**	3
Total Molybdenum	**5.8**	**ug/L**	**100**	**2.4**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	**100**	**ug/L**	**20**	**4.0**	**EPA-6010B**	2000000	**A07**	2
Total Selenium	ND	ug/L	200	30	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	20	3.8	EPA-6010B	500000	A07	2
Total Strontium	**1.1**	**mg/L**	**0.020**	**0.0020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	200	48	EPA-6010B	700000	A07	2
Total Vanadium	**56**	**ug/L**	**20**	**4.4**	**EPA-6010B**	2400000	**A07**	2
Total Zinc	**51**	**ug/L**	**100**	**4.6**	**EPA-6010B**	5000000	**J,A07**	2
Total Recoverable Uranium	**0.74**	**pCi/L**	**6.7**	**0.67**	**EPA-200.8**		**J,A07**	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/22/15	05/22/15 08:14	BMW	KONE-1	20	BYE2071
2	EPA-6010B	05/26/15	05/27/15 10:59	ARD	PE-OP3	2	BYE2179
3	EPA-7470A	05/27/15	05/27/15 16:12	MEV	CETAC1	1	BYE2261
4	EPA-200.8	05/26/15	05/26/15 22:10	SRM	PE-EL2	10	BYE2185

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2091						
Benzene	BYE2091-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BYE2091-BLK1	ND	ug/L	0.50	0.098	
Toluene	BYE2091-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BYE2091-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BYE2091-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BYE2091-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	**BYE2091-BLK1**	**93.1**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BYE2091-BLK1**	**93.9**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BYE2091-BLK1**	**94.7**	%	**80 - 120 (LCL - UCL)**		

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Aera Energy
9000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2091										
Benzene	BYE2091-BS1	LCS	23.600	25.000	ug/L	94.4		70 - 130		
Toluene	BYE2091-BS1	LCS	23.290	25.000	ug/L	93.2		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYE2091-BS1	LCS	9.0200	10.000	ug/L	90.2		75 - 125		
Toluene-d8 (Surrogate)	BYE2091-BS1	LCS	9.4400	10.000	ug/L	94.4		80 - 120		
4-Bromofluorobenzene (Surrogate)	BYE2091-BS1	LCS	10.050	10.000	ug/L	100		80 - 120		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2091	Used client sample: N										
Benzene	MS	1511019-38	ND	25.000	25.000	ug/L		100		70 - 130	
	MSD	1511019-38	ND	26.240	25.000	ug/L	4.8	105	20	70 - 130	
Toluene	MS	1511019-38	ND	24.400	25.000	ug/L		97.6		70 - 130	
	MSD	1511019-38	ND	25.830	25.000	ug/L	5.7	103	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-38	ND	9.5200	10.000	ug/L		95.2		75 - 125	
	MSD	1511019-38	ND	9.7300	10.000	ug/L	2.2	97.3		75 - 125	
Toluene-d8 (Surrogate)	MS	1511019-38	ND	9.7000	10.000	ug/L		97.0		80 - 120	
	MSD	1511019-38	ND	9.6400	10.000	ug/L	0.6	96.4		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1511019-38	ND	9.8900	10.000	ug/L		98.9		80 - 120	
	MSD	1511019-38	ND	9.7600	10.000	ug/L	1.3	97.6		80 - 120	

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Aera Energy
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[illegible]akersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2168						
Acenaphthene	BYE2168-BLK1	ND	ug/L	0.10	0.055	
Acenaphthylene	BYE2168-BLK1	ND	ug/L	0.10	0.047	
Anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.017	
Benzo[a]anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.026	
Benzo[b]fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.040	
Benzo[k]fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.051	
Benzo[a]pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.026	
Benzo[g,h,i]perylene	BYE2168-BLK1	ND	ug/L	0.10	0.043	
Chrysene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Dibenzo[a,h]anthracene	BYE2168-BLK1	ND	ug/L	0.10	0.044	
Fluoranthene	BYE2168-BLK1	ND	ug/L	0.10	0.012	
Fluorene	BYE2168-BLK1	ND	ug/L	0.10	0.030	
Indeno[1,2,3-cd]pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.044	
[illegible]hthalene	BYE2168-BLK1	ND	ug/L	0.10	0.077	
Phenanthrene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Pyrene	BYE2168-BLK1	ND	ug/L	0.10	0.022	
Nitrobenzene-d5 (Surrogate)	**BYE2168-BLK1**	**91.8**	%	**40 - 130 (LCL - UCL)**		
2-Fluorobiphenyl (Surrogate)	**BYE2168-BLK1**	**93.1**	%	**50 - 120 (LCL - UCL)**		
p-Terphenyl-d14 (Surrogate)	**BYE2168-BLK1**	**126**	%	**40 - 130 (LCL - UCL)**		

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Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2168										
Acenaphthene	BYE2168-BS1	LCS	1.0861	1.0000	ug/L	109		60 - 110		
Acenaphthylene	BYE2168-BS1	LCS	1.2020	1.0000	ug/L	120		60 - 120		
Anthracene	BYE2168-BS1	LCS	1.2952	1.0000	ug/L	130		60 - 130		
Benzo[a]anthracene	BYE2168-BS1	LCS	1.1582	1.0000	ug/L	116		60 - 130		
Benzo[b]fluoranthene	BYE2168-BS1	LCS	1.0318	1.0000	ug/L	103		50 - 130		
Benzo[k]fluoranthene	BYE2168-BS1	LCS	1.1474	1.0000	ug/L	115		60 - 120		
Benzo[a]pyrene	BYE2168-BS1	LCS	1.1756	1.0000	ug/L	118		60 - 120		
Benzo[g,h,i]perylene	BYE2168-BS1	LCS	0.92832	1.0000	ug/L	92.8		40 - 120		
Chrysene	BYE2168-BS1	LCS	1.0666	1.0000	ug/L	107		60 - 110		
Dibenzo[a,h]anthracene	BYE2168-BS1	LCS	0.66352	1.0000	ug/L	66.4		40 - 120		
Fluoranthene	BYE2168-BS1	LCS	0.96748	1.0000	ug/L	96.7		60 - 120		
Fluorene	BYE2168-BS1	LCS	1.1357	1.0000	ug/L	114		60 - 120		
Indeno[1,2,3-cd]pyrene	BYE2168-BS1	LCS	1.1326	1.0000	ug/L	113		40 - 130		
Naphthalene	BYE2168-BS1	LCS	0.99890	1.0000	ug/L	99.9		60 - 110		
Phenanthrene	BYE2168-BS1	LCS	1.0604	1.0000	ug/L	106		60 - 120		
Pyrene	BYE2168-BS1	LCS	1.6547	1.0000	ug/L	165		50 - 125		L01
Nitrobenzene-d5 (Surrogate)	BYE2168-BS1	LCS	3.8161	4.0000	ug/L	95.4		40 - 130		
2-Fluorobiphenyl (Surrogate)	BYE2168-BS1	LCS	4.0934	4.0000	ug/L	102		50 - 120		
p-Terphenyl-d14 (Surrogate)	BYE2168-BS1	LCS	4.9744	4.0000	ug/L	124		40 - 130		

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Aera Energy
[illegible]000 Ming Ave
[illegible]akersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2168	Used client sample: N										
Acenaphthene	MS	1511019-28	ND	1.1763	1.0000	ug/L		118		60 - 110	Q03
	MSD	1511019-28	ND	1.0913	1.0000	ug/L	7.5	109	30	60 - 110	
Acenaphthylene	MS	1511019-28	ND	1.3083	1.0000	ug/L		131		60 - 120	Q03
	MSD	1511019-28	ND	1.1879	1.0000	ug/L	9.7	119	30	60 - 120	
Anthracene	MS	1511019-28	ND	1.4025	1.0000	ug/L		140		60 - 130	Q03
	MSD	1511019-28	ND	1.3073	1.0000	ug/L	7.0	131	30	60 - 130	Q03
Benzo[a]anthracene	MS	1511019-28	ND	1.2480	1.0000	ug/L		125		60 - 120	Q03
	MSD	1511019-28	ND	1.1594	1.0000	ug/L	7.4	116	30	60 - 120	
Benzo[b]fluoranthene	MS	1511019-28	ND	1.1310	1.0000	ug/L		113		50 - 130	
	MSD	1511019-28	ND	1.0752	1.0000	ug/L	5.1	108	30	50 - 130	
Benzo[k]fluoranthene	MS	1511019-28	ND	1.2472	1.0000	ug/L		125		60 - 120	Q03
	MSD	1511019-28	ND	1.1434	1.0000	ug/L	8.7	114	30	60 - 120	
Benzo[a]pyrene	MS	1511019-28	ND	1.2360	1.0000	ug/L		124		60 - 120	Q03
	MSD	1511019-28	ND	1.0911	1.0000	ug/L	12.5	109	30	60 - 120	
[illegible]izo[g,h,i]perylene	MS	1511019-28	ND	1.0647	1.0000	ug/L		106		40 - 120	
	MSD	1511019-28	ND	0.97751	1.0000	ug/L	8.5	97.8	30	40 - 120	
Chrysene	MS	1511019-28	ND	1.2087	1.0000	ug/L		121		60 - 110	Q03
	MSD	1511019-28	ND	1.1388	1.0000	ug/L	6.0	114	30	60 - 110	Q03
Dibenzo[a,h]anthracene	MS	1511019-28	ND	0.78144	1.0000	ug/L		78.1		40 - 120	
	MSD	1511019-28	ND	0.69146	1.0000	ug/L	12.2	69.1	30	40 - 120	
Fluoranthene	MS	1511019-28	ND	1.0666	1.0000	ug/L		107		60 - 120	
	MSD	1511019-28	ND	1.0141	1.0000	ug/L	5.0	101	30	60 - 120	
Fluorene	MS	1511019-28	ND	1.2329	1.0000	ug/L		123		60 - 120	Q03
	MSD	1511019-28	ND	1.1270	1.0000	ug/L	9.0	113	30	60 - 120	
Indeno[1,2,3-cd]pyrene	MS	1511019-28	ND	1.2781	1.0000	ug/L		128		40 - 130	
	MSD	1511019-28	ND	1.0352	1.0000	ug/L	21.0	104	30	40 - 130	
Naphthalene	MS	1511019-28	ND	1.0556	1.0000	ug/L		106		60 - 110	
	MSD	1511019-28	ND	0.99619	1.0000	ug/L	5.8	99.6	30	60 - 110	
Phenanthrene	MS	1511019-28	ND	1.1471	1.0000	ug/L		115		60 - 120	
	MSD	1511019-28	ND	1.0638	1.0000	ug/L	7.5	106	30	60 - 120	
Pyrene	MS	1511019-28	ND	1.7749	1.0000	ug/L		177		50 - 125	Q03
	MSD	1511019-28	ND	1.6037	1.0000	ug/L	10.1	160	30	50 - 125	Q03
Nitrobenzene-d5 (Surrogate)	MS	1511019-28	ND	4.0540	4.0000	ug/L		101		40 - 130	
	MSD	1511019-28	ND	3.7488	4.0000	ug/L	7.8	93.7		40 - 130	
2-Fluorobiphenyl (Surrogate)	MS	1511019-28	ND	4.3117	4.0000	ug/L		108		50 - 120	
	MSD	1511019-28	ND	3.9075	4.0000	ug/L	9.8	97.7		50 - 120	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2168	Used client sample: N										
p-Terphenyl-d14 (Surrogate)	MS	1511019-28	ND	5.3878	4.0000	ug/L		135		40 - 130	S09
	MSD	1511019-28	ND	4.9525	4.0000	ug/L	8.4	124		40 - 130	

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Aera Energy
9000 Ming Ave
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Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2282						
TPH - Diesel (FFP)	BYE2282-BLK1	ND	ug/L	200	34	
TPH - Crude Oil	BYE2282-BLK1	ND	ug/L	500	140	
Tetracosane (Surrogate)	**BYE2282-BLK1**	**91.6**	%	**37 - 134 (LCL - UCL)**		

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Aera Energy
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Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2282										
TPH - Diesel (FFP)	BYE2282-BS1	LCS	2127.6	2500.0	ug/L	85.1		52 - 128		
Tetracosane (Surrogate)	BYE2282-BS1	LCS	97.390	100.00	ug/L	97.4		37 - 134		

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Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2282	Used client sample: N										
TPH - Diesel (FFP)	MS	1511019-59	ND	1902.7	2500.0	ug/L		76.1		50 - 127	
	MSD	1511019-59	ND	2030.1	2500.0	ug/L	6.5	81.2	24	50 - 127	
Tetracosane (Surrogate)	MS	1511019-59	ND	89.695	100.00	ug/L		89.7		37 - 134	
	MSD	1511019-59	ND	91.645	100.00	ug/L	2.2	91.6		37 - 134	

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Aera Energy
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Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2035						
Bicarbonate Alkalinity as CaCO3	BYE2035-BLK1	ND	mg/L	4.1	4.1	
Carbonate Alkalinity as CaCO3	BYE2035-BLK1	ND	mg/L	4.1	4.1	
Hydroxide Alkalinity as CaCO3	BYE2035-BLK1	ND	mg/L	4.1	4.1	
Total Alkalinity as CaCO3	BYE2035-BLK1	ND	mg/L	4.1	4.1	
QC Batch ID: BYE2095						
Total Dissolved Solids @ 180 C	BYE2095-BLK1	ND	mg/L	6.7	6.7	
QC Batch ID: BYE2119						
Bromide	BYE2119-BLK1	ND	mg/L	0.10	0.035	
Chloride	BYE2119-BLK1	ND	mg/L	0.50	0.061	
Nitrate as NO3	BYE2119-BLK1	ND	mg/L	0.44	0.078	
Sulfate	BYE2119-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BYE2179						
Total Calcium	**BYE2179-BLK1**	**0.026720**	**mg/L**	**0.10**	**0.015**	**J**
Total Magnesium	BYE2179-BLK1	ND	mg/L	0.050	0.019	
Total Sodium	BYE2179-BLK1	ND	mg/L	0.50	0.051	
Total Potassium	BYE2179-BLK1	ND	mg/L	1.0	0.13	
QC Batch ID: BYF0131						
Chloride	BYF0131-BLK1	ND	mg/L	0.50	0.061	
Sulfate	BYF0131-BLK1	ND	mg/L	1.0	0.10	

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Aera Energy
9000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2035										
Total Alkalinity as CaCO3	BYE2035-BS3	LCS	104.52	100.00	mg/L	105		90 - 110		
QC Batch ID: BYE2095										
Total Dissolved Solids @ 180 C	BYE2095-BS1	LCS	545.00	586.00	mg/L	93.0		90 - 110		
QC Batch ID: BYE2119										
Bromide	BYE2119-BS1	LCS	2.1190	2.0000	mg/L	106		90 - 110		
Chloride	BYE2119-BS1	LCS	51.277	50.000	mg/L	103		90 - 110		
Nitrate as NO3	BYE2119-BS1	LCS	23.272	22.134	mg/L	105		90 - 110		
Sulfate	BYE2119-BS1	LCS	99.431	100.00	mg/L	99.4		90 - 110		
QC Batch ID: BYE2179										
Total Calcium	BYE2179-BS1	LCS	10.137	10.000	mg/L	101		85 - 115		
Total Magnesium	BYE2179-BS1	LCS	9.7663	10.000	mg/L	97.7		85 - 115		
Total Sodium	BYE2179-BS1	LCS	10.282	10.000	mg/L	103		85 - 115		
Total Potassium	BYE2179-BS1	LCS	10.119	10.000	mg/L	101		85 - 115		
QC Batch ID: BYF0131										
Chloride	BYF0131-BS1	LCS	51.651	50.000	mg/L	103		90 - 110		
Sulfate	BYF0131-BS1	LCS	99.638	100.00	mg/L	99.6		90 - 110		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2035	Used client sample: N										
Bicarbonate Alkalinity as CaCO3	DUP	1512493-04	226.98	225.00		mg/L	0.9		10		
Carbonate Alkalinity as CaCO3	DUP	1512493-04	ND	ND		mg/L			10		
Hydroxide Alkalinity as CaCO3	DUP	1512493-04	ND	ND		mg/L			10		
Total Alkalinity as CaCO3	DUP	1512493-04	226.98	225.00		mg/L	0.9		10		
QC Batch ID: BYE2095	Used client sample: N										
Total Dissolved Solids @ 180 C	DUP	1512515-01	2100.0	2100.0		mg/L	0		10		
QC Batch ID: BYE2119	Used client sample: N										
Bromide	DUP	1512563-01	0.49400	0.51200		mg/L	3.6		10		
	MS	1512563-01	0.49400	4.7838	4.0404	mg/L		106		80 - 120	
	MSD	1512563-01	0.49400	5.1737	4.0404	mg/L	7.8	116	10	80 - 120	
Chloride	DUP	1512563-01	117.81	117.76		mg/L	0.0		10		
	MS	1512563-01	117.81	225.27	101.01	mg/L		106		80 - 120	
	MSD	1512563-01	117.81	225.20	101.01	mg/L	0.0	106	10	80 - 120	
Nitrate as NO3	DUP	1512563-01	0.29217	0.30988		mg/L	5.9		10		J
	MS	1512563-01	0.29217	46.379	44.715	mg/L		103		80 - 120	
	MSD	1512563-01	0.29217	47.040	44.715	mg/L	1.4	105	10	80 - 120	
Sulfate	DUP	1512563-01	226.68	226.74		mg/L	0.0		10		
	MS	1512563-01	226.68	434.05	202.02	mg/L		103		80 - 120	
	MSD	1512563-01	226.68	433.68	202.02	mg/L	0.1	102	10	80 - 120	
QC Batch ID: BYE2179	Used client sample: N										
Total Calcium	DUP	1510960-01	24.731	25.081		mg/L	1.4		20		
	MS	1510960-01	24.731	36.727	10.000	mg/L		120		75 - 125	
	MSD	1510960-01	24.731	33.867	10.000	mg/L	8.1	91.4	20	75 - 125	
Total Magnesium	DUP	1510960-01	19.471	18.532		mg/L	4.9		20		
	MS	1510960-01	19.471	30.698	10.000	mg/L		112		75 - 125	
	MSD	1510960-01	19.471	27.826	10.000	mg/L	9.8	83.5	20	75 - 125	
Total Sodium	DUP	**1510960-01**	**149.89**	**155.18**		**mg/L**	**3.5**		**20**		
	MS	**1510960-01**	**149.89**	**177.16**	**10.000**	**mg/L**		**273**		**75 - 125**	**A03**
	MSD	**1510960-01**	**149.89**	**162.28**	**10.000**	**mg/L**	**8.8**	**124**	**20**	**75 - 125**	
Total Potassium	DUP	1510960-01	18.558	18.888		mg/L	1.8		20		
	MS	1510960-01	18.558	31.038	10.000	mg/L		125		75 - 125	
	MSD	1510960-01	18.558	28.381	10.000	mg/L	8.9	98.2	20	75 - 125	
QC Batch ID: BYF0131	Used client sample: N										
Chloride	DUP	1512133-01	145.27	144.72		mg/L	0.4		10		
	MS	1512133-01	145.27	193.23	50.505	mg/L		95.0		80 - 120	
	MSD	1512133-01	145.27	192.95	50.505	mg/L	0.1	94.4	10	80 - 120	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYF0131	Used client sample: N										
Sulfate	DUP	1512133-01	25.504	25.457		mg/L	0.2		10		
	MS	1512133-01	25.504	131.00	101.01	mg/L		104		80 - 120	
	MSD	1512133-01	25.504	130.71	101.01	mg/L	0.2	104	10	80 - 120	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2071						
Hexavalent Chromium	BYE2071-BLK1	ND	ug/L	2.0	0.70	
QC Batch ID: BYE2179						
Total Antimony	BYE2179-BLK1	ND	ug/L	100	8.5	
Total Arsenic	BYE2179-BLK1	ND	ug/L	50	7.8	
Total Barium	**BYE2179-BLK1**	**3.5933**	**ug/L**	**10**	**3.5**	**J**
Total Beryllium	BYE2179-BLK1	ND	ug/L	10	0.50	
Total Boron	**BYE2179-BLK1**	**0.013557**	**mg/L**	**0.10**	**0.013**	**J**
Total Cadmium	BYE2179-BLK1	ND	ug/L	10	1.1	
Total Chromium	BYE2179-BLK1	ND	ug/L	10	1.1	
Total Cobalt	BYE2179-BLK1	ND	ug/L	50	1.3	
Total Copper	**BYE2179-BLK1**	**3.9270**	**ug/L**	**10**	**1.1**	**J**
Total Iron	BYE2179-BLK1	ND	mg/L	0.050	0.030	
Total Lead	BYE2179-BLK1	ND	ug/L	50	4.0	
Total Lithium	BYE2179-BLK1	ND	mg/L	0.020	0.0062	
Total Manganese	BYE2179-BLK1	ND	mg/L	0.010	0.0040	
Total Molybdenum	BYE2179-BLK1	ND	ug/L	50	1.2	
Total Nickel	BYE2179-BLK1	ND	ug/L	10	2.0	
Total Selenium	BYE2179-BLK1	ND	ug/L	100	15	
Total Silver	BYE2179-BLK1	ND	ug/L	10	1.9	
Total Strontium	BYE2179-BLK1	ND	mg/L	0.010	0.0010	
Total Thallium	BYE2179-BLK1	ND	ug/L	100	24	
Total Vanadium	BYE2179-BLK1	ND	ug/L	10	2.2	
Total Zinc	**BYE2179-BLK1**	**3.5246**	**ug/L**	**50**	**2.3**	**J**
QC Batch ID: BYE2185						
Total Recoverable Uranium	BYE2185-BLK1	ND	pCi/L	0.67	0.067	
QC Batch ID: BYE2261						
Total Mercury	BYE2261-BLK1	ND	ug/L	0.20	0.033	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2071										
Hexavalent Chromium	BYE2071-BS1	LCS	50.584	50.000	ug/L	101		85 - 115		
QC Batch ID: BYE2179										
Total Antimony	BYE2179-BS1	LCS	399.71	400.00	ug/L	99.9		85 - 115		
Total Arsenic	BYE2179-BS1	LCS	192.10	200.00	ug/L	96.1		85 - 115		
Total Barium	BYE2179-BS1	LCS	398.95	400.00	ug/L	99.7		85 - 115		
Total Beryllium	BYE2179-BS1	LCS	192.09	200.00	ug/L	96.0		85 - 115		
Total Boron	BYE2179-BS1	LCS	0.98260	1.0000	mg/L	98.3		85 - 115		
Total Cadmium	BYE2179-BS1	LCS	196.42	200.00	ug/L	98.2		85 - 115		
Total Chromium	BYE2179-BS1	LCS	196.11	200.00	ug/L	98.1		85 - 115		
Total Cobalt	BYE2179-BS1	LCS	194.91	200.00	ug/L	97.5		85 - 115		
Total Copper	BYE2179-BS1	LCS	367.56	400.00	ug/L	91.9		85 - 115		
Total Iron	BYE2179-BS1	LCS	1.0050	1.0000	mg/L	101		85 - 115		
Total Lead	BYE2179-BS1	LCS	400.69	400.00	ug/L	100		85 - 115		
Total Lithium	BYE2179-BS1	LCS	0.20705	0.20000	mg/L	104		85 - 115		
Total Manganese	BYE2179-BS1	LCS	0.48210	0.50000	mg/L	96.4		85 - 115		
Total Molybdenum	BYE2179-BS1	LCS	199.00	200.00	ug/L	99.5		85 - 115		
Total Nickel	BYE2179-BS1	LCS	390.17	400.00	ug/L	97.5		85 - 115		
Total Selenium	BYE2179-BS1	LCS	198.93	200.00	ug/L	99.5		85 - 115		
Total Silver	BYE2179-BS1	LCS	93.826	100.00	ug/L	93.8		85 - 115		
Total Strontium	BYE2179-BS1	LCS	0.50808	0.50000	mg/L	102		85 - 115		
Total Thallium	BYE2179-BS1	LCS	428.86	400.00	ug/L	107		85 - 115		
Total Vanadium	BYE2179-BS1	LCS	197.03	200.00	ug/L	98.5		85 - 115		
Total Zinc	BYE2179-BS1	LCS	468.95	500.00	ug/L	93.8		85 - 115		
QC Batch ID: BYE2185										
Total Recoverable Uranium	BYE2185-BS1	LCS	24.756	26.800	pCi/L	92.4		85 - 115		
QC Batch ID: BYE2261										
Total Mercury	BYE2261-BS1	LCS	1.0175	1.0000	ug/L	102		85 - 115		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2071	Used client sample: Y - Description: BL3 TOW Belridge V Pond 4, 05/21/2015 08:10										
Hexavalent Chromium	DUP	**1512507-01**	**ND**	**ND**		**ug/L**			**10**		
	MS	**1512507-01**	**ND**	**218.42**	**263.16**	**ug/L**		**83.0**		**85 - 115**	**Q03**
	MSD	**1512507-01**	**ND**	**216.89**	**263.16**	**ug/L**	**0.7**	**82.4**	**10**	**85 - 115**	**Q03**
QC Batch ID: BYE2179	Used client sample: N										
Total Antimony	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	434.76	400.00	ug/L		109		75 - 125	
	MSD	1510960-01	ND	391.17	400.00	ug/L	10.6	97.8	20	75 - 125	
Total Arsenic	DUP	1510960-01	82.260	89.882		ug/L	8.9		20		
	MS	1510960-01	82.260	308.57	200.00	ug/L		113		75 - 125	
	MSD	1510960-01	82.260	277.29	200.00	ug/L	10.7	97.5	20	75 - 125	
Total Barium	DUP	1510960-01	15.894	18.363		ug/L	14.4		20		
	MS	1510960-01	15.894	462.00	400.00	ug/L		112		75 - 125	
	MSD	1510960-01	15.894	436.99	400.00	ug/L	5.6	105	20	75 - 125	
Total Beryllium	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	211.71	200.00	ug/L		106		75 - 125	
	MSD	1510960-01	ND	195.41	200.00	ug/L	8.0	97.7	20	75 - 125	
Total Boron	DUP	1510960-01	2.7217	2.8102		mg/L	3.2		20		
	MS	1510960-01	2.7217	3.8792	1.0000	mg/L		116		75 - 125	
	MSD	1510960-01	2.7217	3.5206	1.0000	mg/L	9.7	79.9	20	75 - 125	
Total Cadmium	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	216.13	200.00	ug/L		108		75 - 125	
	MSD	1510960-01	ND	194.03	200.00	ug/L	10.8	97.0	20	75 - 125	
Total Chromium	DUP	1510960-01	3.9460	3.5827		ug/L	9.7		20		J
	MS	1510960-01	3.9460	211.75	200.00	ug/L		104		75 - 125	
	MSD	1510960-01	3.9460	195.57	200.00	ug/L	7.9	95.8	20	75 - 125	
Total Cobalt	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	209.64	200.00	ug/L		105		75 - 125	
	MSD	1510960-01	ND	189.15	200.00	ug/L	10.3	94.6	20	75 - 125	
Total Copper	DUP	1510960-01	3.6574	3.9733		ug/L	8.3		20		J
	MS	1510960-01	3.6574	415.96	400.00	ug/L		103		75 - 125	
	MSD	1510960-01	3.6574	383.30	400.00	ug/L	8.2	94.9	20	75 - 125	
Total Iron	DUP	1510960-01	ND	ND		mg/L			20		
	MS	1510960-01	ND	1.1413	1.0000	mg/L		114		75 - 125	
	MSD	1510960-01	ND	1.0597	1.0000	mg/L	7.4	106	20	75 - 125	
Total Lead	DUP	**1510960-01**	**6.7584**	**5.4539**		**ug/L**	**21.4**		**20**		**J,A02**
	MS	**1510960-01**	**6.7584**	**435.78**	**400.00**	**ug/L**		**107**		**75 - 125**	
	MSD	**1510960-01**	**6.7584**	**389.49**	**400.00**	**ug/L**	**11.2**	**95.7**	**20**	**75 - 125**	

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Aera Energy
0000 Ming Ave
kersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2179	Used client sample: N										
Total Lithium	DUP	1510960-01	0.21533	0.22364		mg/L	3.8		20		
	MS	1510960-01	0.21533	0.45282	0.20000	mg/L		119		75 - 125	
	MSD	1510960-01	0.21533	0.42539	0.20000	mg/L	6.2	105	20	75 - 125	
Total Manganese	DUP	1510960-01	ND	ND		mg/L			20		
	MS	1510960-01	ND	0.51797	0.50000	mg/L		104		75 - 125	
	MSD	1510960-01	ND	0.47831	0.50000	mg/L	8.0	95.7	20	75 - 125	
Total Molybdenum	DUP	1510960-01	8.3033	7.2074		ug/L	14.1		20		J
	MS	1510960-01	8.3033	231.11	200.00	ug/L		111		75 - 125	
	MSD	1510960-01	8.3033	204.37	200.00	ug/L	12.3	98.0	20	75 - 125	
Total Nickel	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	409.38	400.00	ug/L		102		75 - 125	
	MSD	1510960-01	ND	382.82	400.00	ug/L	6.7	95.7	20	75 - 125	
Total Selenium	DUP	1510960-01	ND	15.363		ug/L			20		J
	MS	1510960-01	ND	220.13	200.00	ug/L		110		75 - 125	
	MSD	1510960-01	ND	187.79	200.00	ug/L	15.9	93.9	20	75 - 125	
Total Silver	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	103.36	100.00	ug/L		103		75 - 125	
	MSD	1510960-01	ND	94.787	100.00	ug/L	8.7	94.8	20	75 - 125	
Total Strontium	DUP	**1510960-01**	**0.77319**	**0.80121**		**mg/L**	**3.6**		**20**		
	MS	**1510960-01**	**0.77319**	**1.4218**	**0.50000**	**mg/L**		**130**		**75 - 125**	**Q03**
	MSD	**1510960-01**	**0.77319**	**1.3199**	**0.50000**	**mg/L**	**7.4**	**109**	**20**	**75 - 125**	
Total Thallium	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	448.15	400.00	ug/L		112		75 - 125	
	MSD	1510960-01	ND	407.79	400.00	ug/L	9.4	102	20	75 - 125	
Total Vanadium	DUP	1510960-01	12.199	13.466		ug/L	9.9		20		
	MS	1510960-01	12.199	228.10	200.00	ug/L		108		75 - 125	
	MSD	1510960-01	12.199	211.37	200.00	ug/L	7.6	99.6	20	75 - 125	
Total Zinc	DUP	1510960-01	3.7957	ND		ug/L			20		
	MS	1510960-01	3.7957	517.49	500.00	ug/L		103		75 - 125	
	MSD	1510960-01	3.7957	478.12	500.00	ug/L	7.9	94.9	20	75 - 125	
QC Batch ID: BYE2185	Used client sample: N										
Total Recoverable Uranium	DUP	1512150-01	1.9423	1.7380		pCi/L	11.1		20		
	MS	1512150-01	1.9423	30.339	26.800	pCi/L		106		70 - 130	
	MSD	1512150-01	1.9423	28.584	26.800	pCi/L	6.0	99.4	20	70 - 130	
QC Batch ID: BYE2261	Used client sample: N										
Total Mercury	DUP	1512525-01	ND	ND		ug/L			20		
	MS	1512525-01	ND	1.0050	1.0000	ug/L		100		70 - 130	
	MSD	1512525-01	ND	1.0100	1.0000	ug/L	0.5	101	20	70 - 130	

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BSK Associates
Engineers & Laboratories

BSK Associates Fresno
1414 Stanislaus St
Fresno, CA93706
559-497-2888 (Main)
559-485-6935 (FAX)

A5E2039
5/29/2015
Invoice: A510957

Kerrie Vaughan
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308

RE: Report for A5E2039 General: Project Manager-Kerrie Vaughan

Dear Kerrie Vaughan,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 5/22/2015. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2009 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

If additional clarification of any information is required, please contact your Project Manager, Stephane Maupas , at (800) 877-8310 or (559) 497-2888 x212.

Thanks again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Stephane Maupas, Project Manager

Accredited in Accordance with NELAP
ORELAP #4021

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BSK Associates Engineers & Laboratories

A5E2039

General: Project Manager-Kerrie Vaughan

Case Narrative

Project and Report Details		Invoice Details	
Client:	BC Laboratories	**Invoice To:**	BC Laboratories
Report To:	Kerrie Vaughan	**Invoice Attn:**	Kerrie Vaughan
Project #:	1512508	**Project PO#:**	-
Received:	5/22/2015 - 15:40		
Report Due:	5/29/2015		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 4.0

Containers Intact
COC/Labels Agree
Received On Wet Ice
Packing Material - Bubble Wrap
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

MS1.0 Matrix spike recoveries exceed control limits.

Report Distribution

Recipient(s)	Report Format	CC:
Kerrie Vaughan	FINAL.RPT	

A5E2039 FINAL 05292015 0844
Printed: 05/29/2015
QA-RP-0001-10 Final.rpt

www.BSKAssociates.com

Page 2 of 10

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BSK Associates Engineers & Laboratories

A5E2039

General: Project Manager-Kerrie Vaughan

1512508

Certificate of Analysis

Sample ID: A5E2039-01
Sampled By: Client
Sample Description: 1512508-01

Sample Date - Time: 05/21/15 - 10:34
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505748	05/26/15	05/27/15	
1.65 Sigma Uncertainty		0.191	±				
MDA95		1070	pCi/L				

A5E2039 FINAL 05292015 0844
Printed: 05/29/2015
QA-RP-0001-10 Final.rpt

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BSK Associates Engineers & Laboratories

A5E2039

General: Project Manager-Kerrie Vaughan

1512508

Certificate of Analysis

Sample ID: A5E2039-02
Sampled By: Client
Sample Description: 1512508-02

Sample Date - Time: 05/21/15 - 13:40
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505797	05/27/15	05/28/15	
1.65 Sigma Uncertainty		0.110	±				
MDA95		536	pCi/L				

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BSK Associates Engineers & Laboratories

A5E2039

General: Project Manager-Kerrie Vaughan

BSK Associates Fresno

Radiological Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 00-02 - Quality Control											
Batch: A505748										Prepared: 05/26/2015	
Prep Method: EPA 00-02										Analyst: SAB	
Blank (A505748-BLK1)											
1.65 Sigma Uncertainty	ND		±							05/27/15	
Gross Alpha	ND	3	pCi/L							05/27/15	
MDA95	ND	0.00	pCi/L							05/27/15	
Blank Spike (A505748-BS1)											
Gross Alpha	28.6	3	pCi/L	30		95	80-120			05/27/15	
Blank Spike Dup (A505748-BSD1)											
Gross Alpha	24.0	3	pCi/L	30		80	80-120	17	50	05/27/15	
Matrix Spike (A505748-MS1), Source: A5E1287-01											
Gross Alpha	114	3	pCi/L	120	ND	94	70-130			05/27/15	
Matrix Spike (A505748-MS2), Source: A5E1400-03											
Gross Alpha	100	3	pCi/L	120	ND	83	70-130			05/27/15	
Matrix Spike Dup (A505748-MSD1), Source: A5E1287-01											
Gross Alpha	115	3	pCi/L	120	ND	95	70-130	1	50	05/27/15	
Matrix Spike Dup (A505748-MSD2), Source: A5E1400-03											
Gross Alpha	80.7	3	pCi/L	120	ND	67	70-130	21	50	05/27/15	MS1.0 *Low*
EPA 00-02 - Quality Control											
Batch: A505797										Prepared: 05/27/2015	
Prep Method: EPA 00-02										Analyst: NYY	
Blank (A505797-BLK1)											
1.65 Sigma Uncertainty	ND		±							05/28/15	
Gross Alpha	ND	3	pCi/L							05/28/15	
MDA95	ND	0.00	pCi/L							05/28/15	
Blank Spike (A505797-BS1)											
Gross Alpha	28.9	3	pCi/L	30		96	80-120			05/28/15	
Blank Spike Dup (A505797-BSD1)											
Gross Alpha	29.4	3	pCi/L	30		98	80-120	2	50	05/28/15	
Matrix Spike (A505797-MS1), Source: A5E1557-01											
Gross Alpha	113	3	pCi/L	120	3.58	92	70-130			05/28/15	
Matrix Spike (A505797-MS2), Source: A5E1676-01											
Gross Alpha	110	3	pCi/L	120	ND	92	70-130			05/28/15	
Matrix Spike Dup (A505797-MSD1), Source: A5E1557-01											
Gross Alpha	92.0	3	pCi/L	120	3.58	74	70-130	21	50	05/28/15	

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BSK Associates Engineers & Laboratories

A5E2039

General: Project Manager-Kerrie Vaughan

BSK Associates Fresno

Radiological Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 00-02 - Quality Control											
Batch: A505797										Prepared: 05/27/2015	
Prep Method: EPA 00-02										Analyst: NYY	
Matrix Spike Dup (A505797-MSD1), Source: A5E1557-01											
Matrix Spike Dup (A505797-MSD2), Source: A5E1676-01											
Gross Alpha	107	3	pCi/L	120	ND	89	70-130	3	50	05/28/15	

A5E2039 FINAL 05292015 0844
Printed: 05/29/2015
QA-RP-0001-10 Final.rpt

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BSK Associates Engineers & Laboratories

A5E2039

General: Project Manager-Kerrie Vaughan

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method , all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected at RL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	Picocuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent Recovered (surrogates)	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit		

Please see the individual Subcontract Lab's report for applicable certifications.

BSK is not accredited under the NELAC program for the following parameters: **NA**

Certifications: Please refer to our website for a copy of our Accredited Fields of Testing under each certification.

Fresno

State of California - ELAP	1180	State of Hawaii	4021
State of Nevada	CA000792015-1	State of Oregon - NELAC	4021
EPA - UCMR3	CA00079	State of Washington	C997-15

Sacramento

State of California - ELAP	2435

Vancouver

State of Oregon - NELAC	WA100008	State of Washington	C824-14a

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A5E2039

05222015

BCLab4911

Turnaround: Standard
Due Date: 5/29/2015

BC Laboratories

Printed: 5/22/1

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SUBCONTRACT ORDER

BC Laboratories

1512508

40

RUSH!

SENDING LABORATORY:

BC Laboratories
4100 Atlas Ct
Bakersfield, CA 93308
Phone: 661-327-4911
Fax: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY:

BSK Analytical Labs $BSKSA
1414 Stanislaus Street
Fresno, CA 93706
Phone :(800) 877-8310
Fax: (559) 485-6935

A5E2039 05/22/2015
BCLab4911 4

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 1512508-01	**Water**	**Sampled:05/21/15 10:34**		
om900.0w Gross Alpha BSKSA *Containers Supplied:*	05/29/15 17:00	11/18/15 10:34		Analyze water phase only. Results needed by 5/29/2015.
Sample ID: 1512508-02	**Water**	**Sampled:05/21/15 13:40**		
om900.0w Gross Alpha BSKSA *Containers Supplied:*	05/29/15 17:00	11/18/15 13:40		Analyze water phase only. Results needed by 5/29/2015.

MWB 5/22 — BF 5-22-15
Released By / Date — Received By / Date

BF 5-22-15 — 5-22-15 1540
Released By / Date — Received By / Date

W/BW/pmS

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BSK Associates SR-FL-0002-13

A5E2039 05/22/2015
BCLab4911 4

Sample Integrity

BSK Bottles: Yes (No) Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 10°C	(Yes) No NA	Were correct containers and preservatives received for the tests requested?	(Yes) No NA
If samples were taken today, is there evidence that chilling has begun?	Yes No (NA)	Were there bubbles in the VOA vials? (Volatiles Only)	Yes No (NA)
Did all bottles arrive unbroken and intact?	(Yes) No	Was a sufficient amount of sample received?	(Yes) No
Did all bottle labels agree with COC?	(Yes) No	Do samples have a hold time <72 hours?	Yes (No)
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes No (NA)	Was PM notified of discrepancies? PM: By/Time:	Yes No (NA)

Bottles Received ("—" means preservation/chlorine checks are either N/A or are performed in the lab)

250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V)	Checks	Passed?	1-2					
Bacti $Na_2S_2O_3$	—	—						
None (P) White Cap	—	—						
Cr6 (P) Dr. Green Label $NH_4OH(NH_4)2SO_4$ DW	Cl, pH > 8	Y N						
Cr6 (P) Pink Label Hex Chrome Buffer DW	pH 9-9.5	Y N						
Cr6 (P) Pink Label Hex Chrome Buffer WW	pH 9.3-9.7	Y N						
HNO_3 (P) Red Cap	—	—	1C					
H_2SO_4 (P) or (AG) Yellow Cap/Label	pH <2	Y N						
NaOH (P) Green Cap	Cl, pH >10	Y N						
NaOH + ZnAc (P)	pH > 9	Y N					5-22-15	
Dissolved Oxygen 300ml (g)	—	—						
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—					NC	
HCl (AG) Lt. Blue Label O&G, Diesel	—	—						
Na_2O_3S+HCl (AG) Lt. Blue Label 525	—	—						
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—						
$Na_2S_2O_3$ (AG) Blue Label 547, 515, 548, THM, 524	—	—						
$Na_2S_2O_3$ (CG) Blue Label 504, 505	—	—						
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH <3	Y N						
NH_4Cl (AG) Purple Label 552	—	—						
EDA (AG) Brown Label DBPs	—	—						
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—						
Buffer pH 4 (CG)	—	—						
None (CG)	—	—						
H_3PO_4 (CG) Salmon Label	—	—						
Other:								
Asbestos 1Liter Plastic w/ Foil	—	—						
Low Level Hg / Metals Double Baggie	—	—						
Bottled Water	—	—						
Clear Glass Jar: 250 / 500 / 1 Liter	—	—						
Soil Tube: Brass / Steel / Plastic	—	—						
Tedlar Bag / Plastic Bag	—	—						

Split

	Container	Preservative	Date/Time/Initials		Container	Preservative	Date/Time/Initials
S P				S P			
S P				S P			

Comments

Labeled by: MW @ 16:47 Labels checked by: JVD @ 16:48 RUSH Paged by: Page 10 of 10

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 03, 2015

Ms. Kerrie Vaughan
BC Laboratories
4100 Atlas Ct.
Bakersfield, CA 93308

RE: Project: 1512508
Pace Project No.: 30148945

Dear Ms. Vaughan:
Enclosed are the analytical results for sample(s) received by the laboratory on May 26, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carin A. Ferris

Carin Ferris
carin.ferris@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 1512508
Pace Project No.: 30148945

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: PA014572014-4
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

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SAMPLE SUMMARY

Project: 1512508
Pace Project No.: 30148945

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30148945001	1512508-01	Water	05/21/15 10:34	05/26/15 09:45
30148945002	1512508-02	Water	05/21/15 13:40	05/26/15 09:45

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SAMPLE ANALYTE COUNT

Project: 1512508
Pace Project No.: 30148945

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30148945001	1512508-01	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30148945002	1512508-02	EPA 903.1	JC2	1
		EPA 904.0	JLW	1

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PROJECT NARRATIVE

Project: 1512508
Pace Project No.: 30148945

Method: EPA 903.1
Description: 903.1 Radium 226
Client: BC Laboratories
Date: June 03, 2015

General Information:
2 samples were analyzed for EPA 903.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 1512508
Pace Project No.: 30148945

Method: EPA 904.0
Description: 904.0 Radium 228
Client: BC Laboratories
Date: June 03, 2015

General Information:
2 samples were analyzed for EPA 904.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1512508
Pace Project No.: 30148945

Sample: 1512508-01 **Lab ID: 30148945001** Collected: 05/21/15 10:34 Received: 05/26/15 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Comments:
- Sample collection dates and times were not present on the sample containers.
- Upon receipt at the laboratory, 3 mls of nitric acid were added to the sample to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
- Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**2.14 ± 6.41 (10.1)** **C:NA T:71%**	pCi/L	06/02/15 11:16	13982-63-3	
Radium-228	EPA 904.0	**1.17 ± 6.79 (15.4)** **C:76% T:74%**	pCi/L	06/02/15 12:53	15262-20-1	

Sample: 1512508-02 **Lab ID: 30148945002** Collected: 05/21/15 13:40 Received: 05/26/15 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Comments:
- Sample collection dates and times were not present on the sample containers.
- Upon receipt at the laboratory, 3 mls of nitric acid were added to the sample to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
- Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**3.28 ± 14.4 (23.1)** **C:NA T:69%**	pCi/L	06/02/15 10:56	13982-63-3	
Radium-228	EPA 904.0	**3.60 ± 11.3 (25.3)** **C:74% T:65%**	pCi/L	06/02/15 12:53	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512508
Pace Project No.: 30148945

QC Batch: RADC/24595
QC Batch Method: EPA 903.1
Analysis Method: EPA 903.1
Analysis Description: 903.1 Radium-226
Associated Lab Samples: 30148945001, 30148945002

METHOD BLANK: 898960
Matrix: Water
Associated Lab Samples: 30148945001, 30148945002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.000 ± 0.419 (0.853) C:NA T:87%	pCi/L	06/02/15 10:46	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512508
Pace Project No.: 30148945

QC Batch: RADC/24594
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Associated Lab Samples: 30148945001, 30148945002

METHOD BLANK: 898959
Matrix: Water
Associated Lab Samples: 30148945001, 30148945002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.168 ± 0.433 (0.955) C:64% T:76%	pCi/L	06/02/15 12:47	

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 1512508
Pace Project No.: 30148945

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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30148945

SUBCONTRACT ORDER
BC Laboratories
1512508

RUSH!

SENDING LABORATORY:
BC Laboratories
4100 Atlas Ct
Bakersfield, CA 93308
Phone: 661-327-4911
Fax: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY:
PACE Analytical $PACEA
1638 Roseytown Road, Ste 2,3 &4
Greensburg, PA 15601
Phone :(724) 850-5600
Fax: (724) 850-5601

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 1512508-01	**Water**	**Sampled:05/21/15 10:34**	[redacted]	001
om904.0w Radium228 PACEA	05/29/15 17:00	11/18/15 10:34		Analyze water phase only. Results needed by 5/29/2015.
om903.1w Radium226 PACEA	05/29/15 17:00	11/18/15 10:34		Analyze water phase only. Results needed by 5/29/2015.
Containers Supplied:				
Sample ID: 1512508-02	**Water**	**Sampled:05/21/15 13:40**	[redacted]	002
om904.0w Radium228 PACEA	05/29/15 17:00	11/18/15 13:40		Analyze water phase only. Results needed by 5/29/2015.
om903.1w Radium226 PACEA	05/29/15 17:00	11/18/15 13:40		Analyze water phase only. Results needed by 5/29/2015.
Containers Supplied:				

Meggen Boyle 5/22/15 Scott [illegible] Pace 5-26-15 09:15

Released By | Date | Received By | Date

Released By | Date | Received By | Date

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Page 2 of 2

Sample Condition Upon Receipt

Pace Analytical

Client Name: Bc Labs

Project # 30148945

Courier: ☐ Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 1Z 965 376 01 6227 3811

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no Biological Tissue is Frozen: Yes No

Packing Material: Bubble Wrap X Bubble Bags ___ None ___ Other _____

Thermometer Used NA Type of Ice: Wet Blue (None) ☐ Samples on ice, cooling process has begun

Cooler Temp.: Observed Temp.:_____°C Correction Factor: _____°C Final Temp:_____°C

Date and initials of person examining contents: SRA 5-26-15

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☒No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☒Yes ☐No ☐N/A	7.
Sufficient Volume:	☒Yes ☐No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☒No ☐N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: WT	☐Yes ☒No ☐N/A	12. No date or time on Samples
All containers needing preservation have been checked.	☒Yes ☐No ☐N/A	13. Added 3ml HNO3 to Sample #1 @ DZS SRA 5-26-15
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☒No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, Phenols	☐Yes ☒No	Initial when completed SRA / Lot # of added preservative DL15-0453
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	15.
Trip Blank Present:	☐Yes ☒No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Carina Serrano **Date:** 5/26/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

J:\QAQC\Master\Document Management\Sample Mgt\SCURF\FALLC003-09 SCUR Front 3March2015 Page 12 of 13

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30148945

Project Number:
Client Name: BC Labs

page 2

Pace Analytical

Item No.	Matrix Code	Glass Jar (120 / 250 / 500 / 1L)	Soil Kit (2 SB, 1M, soil jar)	Chemistry (250 / 500 / 1L)	Organics (1L)	Nutrient (250 / 500)	Phenolics (250 ml)	TOC (40 ml / 250 ml)	TOX (250 ml)	Total Metals	Dissolved Metals preserved Y N	O & G (1L)	TPH (1L)	VOA (40 ml 30 ml)	Cyanide (250 ml)	Sulfide (500 ml)	Bacteria (120 ml)	Wipes / swipe/ smear/ filter	Radchem Nalgene (125 / 250 / 500 / 1L)	Radchem Nalgene (1/2 gal. / 1 gal.L)	Cubitainer (500 ml / 4L)	Ziploc	Other	Other	Other
001	1																		2	1					
002	1																								

SCURF Back (C016-4 15May2012).xls

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Aera Energy
000 Ming Ave
kersfield, CA 93311

Reported: 06/08/2015 13:06
Project: Oilfield Produced Water Pond Testing
Project Number: DOW
Project Manager: Rod Bowyer

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.
A02	The difference between duplicate readings is less than the quantitation limit.
A03	The sample concentration is more than 4 times the spike level.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
L01	The Laboratory Control Sample Water (LCSW) recovery is not within laboratory established control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.
Z1	50uL of antifoamer added to sample VOA.

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BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 06/11/2015

Rod Bowyer

Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Client Project:	[none]
BCL Project:	Oilfield Produced Water Pond Testing
BCL Work Order:	1512693
Invoice ID:	B205458

Enclosed are the results of analyses for samples received by the laboratory on 5/26/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kerrie S. Vaughan

Contact Person: Kerrie Vaughan
Client Services

Authorized Signature

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BC Laboratories, Inc.

Chain of Custody Form

RUSH!

Page 1 of 1

Report To:
Client: Aera
Attn: Rod Bowyer
Street Address:
City, State, Zip:
Phone: Fax:
Email Address:
Work Order #: 15-12693

Project #:
Project Name:
Sampler(s): J. Enriquez

Analysis Requested

Please refer to the back of this page for completion instructions and method legend.

Comments:

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

Sample #	Description	Date Sampled	Time Sampled	See Attached	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
-1	~~BL 190~~ JCE BL 1910 Energy Sox 32	5/26/15		X					X		5	1

SHORT HOLDING TIME
Cr^{6} NO_2 NO_3 OP SS
DO Cl_2 BOD MBAS COT

CHK BY DISTRIBUTION
SUB-OUT

Billing ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? Geotracker ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)
System # (Needed for EDT)

	Date	Time		Date	Time
1. Relinquished By: J C Enriquez	5/26/15	1633	1. Received By: [signature]	5/26	1633
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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15-12693

BC LABORATORIES INC
4100 Atlas Ct. Bakersfield, Ca. 93308 Tel: (800) 878 - 4911 Website: www.bclabs.com

OIL FIELD PRODUCED WATER POND TESTING

CALIFORNIA WATER CODE DIRECTIVE PURSUANT TO SECTION 13267
CHARACTERIZATION OF WASTEWATER FOR DISCHARGE

Collect representative samples of wastewater within each of the ponds. Samples must be analyzed in accordance with the water quality analysis and reporting requirements contained in Attachment B to this Order;[1]

List of Analyses as per Attachment B

A. Total Dissolved Solids

B. Metals, CCR title 22, section 66261.24. subdivision (a)(2)(A) (antimony, arsenic, barium, beryllium, cadmium, chromium, chromium (VI), cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc)

C. benzene, toluene, ethylbenzene, xylenes

D. Total Petroleum Hydrocarbons as Crude Oil

E. Polynuclear Aromatic Hydrocarbons (PAH)

F. Radionuclides (Radium226, Radium 228, Gross Alpha, Uranium)

G. Major and Minor Cations (sodium, potassium, magnesium, calcium)

H. Major and Minor Anions (nitrate, chloride, sulfate, carbonate, bicarbonate, bromide)

I. Trace Elements (lithium, strontium, boron, iron, manganese)

Total Price $734

Electronic results available as an Excel spreadsheet upon request.

Field Service	
Sampling	$60 per hour
Vehicle	$0.60 per mile

[1] All previously obtained analytical data for oil field produced wastewater samples collected at the Facility, if any, with a description of the source and location for each analysis may be submitted in the alternative for re-running tests if the sample(s) was collected and analyzed within 12 months (one year) of the date of this order.

4100 Atlas Ct. Bakersfield, CA 93308 (800) 878-4911 www.bclabs.com

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Chain of Custody and Cooler Receipt Form for 1512693 Page 3 of 3

KB 5/26/15

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 Of 1

Submission #: 15-126693

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☐ BC Lab Field Service ☑ Other ☐ (Specify)_____	Ice Chest ☐ None ☐ Box ☐ Other ☐ (Specify)_____	YES ☐ NO ☐

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: PE Thermometer ID: 208 Date/Time 5/26/15

Temperature: (A) 0.8 °C / (C) 0.9 °C Analyst Init MNR 1634

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	C									
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	DEF									
PT INORGANIC CHEMICAL METALS	G									
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AB									
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M	H									
QT AMBER 8270	I									
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:

Sample Numbering Completed By: KB Date/Time 5/26/15 1708 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]

A = Actual / C = Corrected

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Aera Energy
000 Ming Ave
akersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1512693-01	**COC Number:**	---	**Receive Date:**	05/26/2015 16:33
	Project Number:	---	**Sampling Date:**	05/26/2015 11:14
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	BL1910 Energy Sox 32	**Lab Matrix:**	Water
	Sampled By:	Juan Enriquez	**Sample Type:**	Wastewater

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512693-01 | **Client Sample Name:** BL1910 Energy Sox 32, 5/26/2015 11:14:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND	Z1	1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND	Z1	1
Toluene	**0.18**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	**J,Z1**	1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND	Z1	1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260B	ND	Z1	1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260B	ND	Z1	1
1,2-Dichloroethane-d4 (Surrogate)	118	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/28/15	05/30/15 00:00	JPT	MS-V13	1	BYE2464

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Aera Energy
[illegible]000 Ming Ave
[illegible]akersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512693-01 | **Client Sample Name:** BL1910 Energy Sox 32, 5/26/2015 11:14:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	ug/L	0.50	0.28	EPA-8270C-SIM	ND		1
Acenaphthylene	ND	ug/L	0.50	0.24	EPA-8270C-SIM	ND		1
Anthracene	ND	ug/L	0.50	0.085	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	ND	ug/L	0.50	0.13	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.50	0.20	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.50	0.26	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.50	0.13	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.50	0.22	EPA-8270C-SIM	ND		1
Chrysene	ND	ug/L	0.50	0.11	EPA-8270C-SIM	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.50	0.22	EPA-8270C-SIM	ND		1
Fluoranthene	ND	ug/L	0.50	0.060	EPA-8270C-SIM	ND		1
Fluorene	ND	ug/L	0.50	0.15	EPA-8270C-SIM	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.50	0.22	EPA-8270C-SIM	ND		1
Naphthalene	ND	ug/L	0.50	0.38	EPA-8270C-SIM	ND		1
[illegible]enanthrene	ND	ug/L	0.50	0.11	EPA-8270C-SIM	ND		1
Pyrene	ND	ug/L	0.50	0.11	EPA-8270C-SIM	ND		1
Nitrobenzene-d5 (Surrogate)	76.3	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1
2-Fluorobiphenyl (Surrogate)	53.3	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	81.7	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	05/27/15	05/28/15 22:29	MK1	MS-B4	5	BYE2442

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512693-01 | **Client Sample Name:** BL1910 Energy Sox 32, 5/26/2015 11:14:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**19000**	**ug/L**	**2500**	**700**	**EPA-8015B/FFP**	ND		1
Tetracosane (Surrogate)	38.6	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	05/27/15	05/28/15 13:19	MWB	GC-13	5	BYE2353

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Aera Energy
[illegible]000 Ming Ave
[illegible]akersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512693-01 | **Client Sample Name:** BL1910 Energy Sox 32, 5/26/2015 11:14:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**220**	**mg/L**	**0.20**	**0.030**	**EPA-6010B**	0.054	**A07**	1
Total Magnesium	**13**	**mg/L**	**0.10**	**0.038**	**EPA-6010B**	0.072	**A07**	1
Total Sodium	**1300**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND	**A07**	1
Total Potassium	**43**	**mg/L**	**2.0**	**0.26**	**EPA-6010B**	ND	**A07**	1
Bicarbonate Alkalinity as CaCO3	**420**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**420**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**11**	**mg/L**	**2.0**	**0.70**	**EPA-300.0**	ND	**A07**	3
Chloride	**2200**	**mg/L**	**10**	**1.2**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	8.8	1.6	EPA-300.0	ND	A07	3
Sulfate	**190**	**mg/L**	**20**	**2.0**	**EPA-300.0**	ND	**A07**	3
Total Dissolved Solids @ 180 C	**5000**	**mg/L**	**500**	**500**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	05/29/15	06/02/15 07:57	ARD	PE-OP3	2	BYE2558
2	EPA-310.1	05/27/15	05/27/15 21:10	RML	MET-1	2	BYE2219
3	EPA-300.0	05/26/15	05/27/15 09:50	OLH	IC5	20	BYE2224
4	EPA-160.1	05/28/15	05/28/15 11:00	CAD	MANUAL	50	BYE2351

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512693-01 | **Client Sample Name:** BL1910 Energy Sox 32, 5/26/2015 11:14:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	10	3.5	EPA-7196		A07	1
Total Antimony	ND	ug/L	200	17	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	100	16	EPA-6010B	500000	A07	2
Total Barium	**150**	**ug/L**	**20**	**7.0**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	20	1.0	EPA-6010B	75000	A07	2
Total Boron	**12**	**mg/L**	**0.20**	**0.026**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	20	2.2	EPA-6010B	100000	A07	2
Total Chromium	**12**	**ug/L**	**20**	**2.2**	**EPA-6010B**	2500000	**J,A07**	2
Total Cobalt	ND	ug/L	100	2.6	EPA-6010B	8000000	A07	2
Total Copper	**22**	**ug/L**	**20**	**2.2**	**EPA-6010B**	2500000	**A07**	2
Total Iron	**0.61**	**mg/L**	**0.10**	**0.060**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	100	8.0	EPA-6010B	1000000	A07	2
Total Lithium	**0.54**	**mg/L**	**0.040**	**0.012**	**EPA-6010B**		**A07**	2
Total Manganese	**0.61**	**mg/L**	**0.020**	**0.0080**	**EPA-6010B**		**A07**	2
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	20000		3
Total Molybdenum	**77**	**ug/L**	**100**	**2.4**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	**31**	**ug/L**	**20**	**4.0**	**EPA-6010B**	2000000	**A07**	2
Total Selenium	**43**	**ug/L**	**200**	**30**	**EPA-6010B**	100000	**J,A07**	2
Total Silver	ND	ug/L	20	3.8	EPA-6010B	500000	A07	2
Total Strontium	**1.2**	**mg/L**	**0.020**	**0.0020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	200	48	EPA-6010B	700000	A07	2
Total Vanadium	**25**	**ug/L**	**20**	**4.4**	**EPA-6010B**	2400000	**A07**	2
Total Zinc	**59**	**ug/L**	**100**	**4.6**	**EPA-6010B**	5000000	**J,A07**	2
Total Recoverable Uranium	**0.97**	**pCi/L**	**6.7**	**0.67**	**EPA-200.8**		**J,A07**	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/27/15	05/27/15 08:14	TDC	KONE-1	5	BYE2265
2	EPA-6010B	05/29/15	06/02/15 07:57	ARD	PE-OP3	2	BYE2558
3	EPA-7470A	05/27/15	05/28/15 11:12	MEV	CETAC1	1	BYE2304
4	EPA-200.8	06/02/15	06/02/15 17:45	GPD	PE-EL2	10	BYF0172

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Aera Energy
9000 Ming Ave
Bakersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2464						
Benzene	BYE2464-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BYE2464-BLK1	ND	ug/L	0.50	0.098	
Toluene	BYE2464-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BYE2464-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BYE2464-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BYE2464-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	**BYE2464-BLK1**	**95.4**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BYE2464-BLK1**	**96.8**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BYE2464-BLK1**	**97.7**	%	**80 - 120 (LCL - UCL)**		

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Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2464										
Benzene	BYE2464-BS1	LCS	22.130	25.000	ug/L	88.5		70 - 130		
Toluene	BYE2464-BS1	LCS	23.430	25.000	ug/L	93.7		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYE2464-BS1	LCS	9.7200	10.000	ug/L	97.2		75 - 125		
Toluene-d8 (Surrogate)	BYE2464-BS1	LCS	10.340	10.000	ug/L	103		80 - 120		
4-Bromofluorobenzene (Surrogate)	BYE2464-BS1	LCS	10.110	10.000	ug/L	101		80 - 120		

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Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2464	Used client sample: N										
Benzene	MS	1511019-62	ND	22.140	25.000	ug/L		88.6		70 - 130	
	MSD	1511019-62	ND	25.800	25.000	ug/L	15.3	103	20	70 - 130	
Toluene	MS	1511019-62	ND	23.270	25.000	ug/L		93.1		70 - 130	
	MSD	1511019-62	ND	25.200	25.000	ug/L	8.0	101	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1511019-62	ND	9.7000	10.000	ug/L		97.0		75 - 125	
	MSD	1511019-62	ND	11.090	10.000	ug/L	13.4	111		75 - 125	
Toluene-d8 (Surrogate)	MS	1511019-62	ND	10.140	10.000	ug/L		101		80 - 120	
	MSD	1511019-62	ND	10.350	10.000	ug/L	2.0	104		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1511019-62	ND	9.9800	10.000	ug/L		99.8		80 - 120	
	MSD	1511019-62	ND	10.010	10.000	ug/L	0.3	100		80 - 120	

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Aera Energy
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Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2442						
Acenaphthene	BYE2442-BLK1	ND	ug/L	0.10	0.055	
Acenaphthylene	BYE2442-BLK1	ND	ug/L	0.10	0.047	
Anthracene	BYE2442-BLK1	ND	ug/L	0.10	0.017	
Benzo[a]anthracene	BYE2442-BLK1	ND	ug/L	0.10	0.026	
Benzo[b]fluoranthene	BYE2442-BLK1	ND	ug/L	0.10	0.040	
Benzo[k]fluoranthene	BYE2442-BLK1	ND	ug/L	0.10	0.051	
Benzo[a]pyrene	BYE2442-BLK1	ND	ug/L	0.10	0.026	
Benzo[g,h,i]perylene	BYE2442-BLK1	ND	ug/L	0.10	0.043	
Chrysene	BYE2442-BLK1	ND	ug/L	0.10	0.022	
Dibenzo[a,h]anthracene	BYE2442-BLK1	ND	ug/L	0.10	0.044	
Fluoranthene	BYE2442-BLK1	ND	ug/L	0.10	0.012	
Fluorene	BYE2442-BLK1	ND	ug/L	0.10	0.030	
Indeno[1,2,3-cd]pyrene	BYE2442-BLK1	ND	ug/L	0.10	0.044	
Naphthalene	BYE2442-BLK1	ND	ug/L	0.10	0.077	
Phenanthrene	BYE2442-BLK1	ND	ug/L	0.10	0.022	
Pyrene	BYE2442-BLK1	ND	ug/L	0.10	0.022	
Nitrobenzene-d5 (Surrogate)	**BYE2442-BLK1**	**101**	%	**40 - 130 (LCL - UCL)**		
2-Fluorobiphenyl (Surrogate)	**BYE2442-BLK1**	**101**	%	**50 - 120 (LCL - UCL)**		
p-Terphenyl-d14 (Surrogate)	**BYE2442-BLK1**	**175**	%	**40 - 130 (LCL - UCL)**		**S09**

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Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2442										
Acenaphthene	BYE2442-BS1	LCS	0.88317	1.0000	ug/L	88.3		60 - 110		
Acenaphthylene	BYE2442-BS1	LCS	0.98214	1.0000	ug/L	98.2		60 - 120		
Anthracene	BYE2442-BS1	LCS	1.0562	1.0000	ug/L	106		60 - 130		
Benzo[a]anthracene	BYE2442-BS1	LCS	0.71276	1.0000	ug/L	71.3		60 - 130		
Benzo[b]fluoranthene	BYE2442-BS1	LCS	0.59310	1.0000	ug/L	59.3		50 - 130		
Benzo[k]fluoranthene	BYE2442-BS1	LCS	0.97553	1.0000	ug/L	97.6		60 - 120		
Benzo[a]pyrene	BYE2442-BS1	LCS	1.1276	1.0000	ug/L	113		60 - 120		
Benzo[g,h,i]perylene	BYE2442-BS1	LCS	1.1096	1.0000	ug/L	111		40 - 120		
Chrysene	BYE2442-BS1	LCS	0.95571	1.0000	ug/L	95.6		60 - 110		
Dibenzo[a,h]anthracene	BYE2442-BS1	LCS	0.84934	1.0000	ug/L	84.9		40 - 120		
Fluoranthene	BYE2442-BS1	LCS	0.66433	1.0000	ug/L	66.4		60 - 120		
Fluorene	BYE2442-BS1	LCS	1.0071	1.0000	ug/L	101		60 - 120		
...no[1,2,3-cd]pyrene	BYE2442-BS1	LCS	1.1538	1.0000	ug/L	115		40 - 130		
Naphthalene	BYE2442-BS1	LCS	0.83270	1.0000	ug/L	83.3		60 - 110		
Phenanthrene	BYE2442-BS1	LCS	0.68613	1.0000	ug/L	68.6		60 - 120		
Pyrene	BYE2442-BS1	LCS	1.9096	1.0000	ug/L	191		50 - 125		L01
Nitrobenzene-d5 (Surrogate)	BYE2442-BS1	LCS	3.2409	4.0000	ug/L	81.0		40 - 130		
2-Fluorobiphenyl (Surrogate)	BYE2442-BS1	LCS	3.5495	4.0000	ug/L	88.7		50 - 120		
p-Terphenyl-d14 (Surrogate)	BYE2442-BS1	LCS	5.7635	4.0000	ug/L	144		40 - 130		S09

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Bakersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2442	Used client sample: N										
Acenaphthene	MS	1511019-58	ND	0.78922	1.0000	ug/L		78.9		60 - 110	
	MSD	1511019-58	ND	0.86939	1.0000	ug/L	9.7	86.9	30	60 - 110	
Acenaphthylene	MS	1511019-58	ND	0.83346	1.0000	ug/L		83.3		60 - 120	
	MSD	1511019-58	ND	0.95377	1.0000	ug/L	13.5	95.4	30	60 - 120	
Anthracene	MS	1511019-58	ND	0.92130	1.0000	ug/L		92.1		60 - 130	
	MSD	1511019-58	ND	1.0360	1.0000	ug/L	11.7	104	30	60 - 130	
Benzo[a]anthracene	MS	**1511019-58**	**ND**	**0.56361**	**1.0000**	**ug/L**		**56.4**		**60 - 120**	**Q03**
	MSD	**1511019-58**	**ND**	**0.62754**	**1.0000**	**ug/L**	**10.7**	**62.8**	**30**	**60 - 120**	
Benzo[b]fluoranthene	MS	**1511019-58**	**ND**	**0.45902**	**1.0000**	**ug/L**		**45.9**		**50 - 130**	**Q03**
	MSD	**1511019-58**	**ND**	**0.57679**	**1.0000**	**ug/L**	**22.7**	**57.7**	**30**	**50 - 130**	
Benzo[k]fluoranthene	MS	1511019-58	ND	0.78274	1.0000	ug/L		78.3		60 - 120	
	MSD	1511019-58	ND	0.84908	1.0000	ug/L	8.1	84.9	30	60 - 120	
Benzo[a]pyrene	MS	1511019-58	ND	0.96618	1.0000	ug/L		96.6		60 - 120	
	MSD	1511019-58	ND	1.0580	1.0000	ug/L	9.1	106	30	60 - 120	
Benzo[g,h,i]perylene	MS	1511019-58	ND	1.1016	1.0000	ug/L		110		40 - 120	
	MSD	1511019-58	ND	1.1909	1.0000	ug/L	7.8	119	30	40 - 120	
Chrysene	MS	1511019-58	ND	0.77652	1.0000	ug/L		77.7		60 - 110	
	MSD	1511019-58	ND	0.92158	1.0000	ug/L	17.1	92.2	30	60 - 110	
Dibenzo[a,h]anthracene	MS	1511019-58	ND	0.70318	1.0000	ug/L		70.3		40 - 120	
	MSD	1511019-58	ND	0.85887	1.0000	ug/L	19.9	85.9	30	40 - 120	
Fluoranthene	MS	1511019-58	ND	0.60432	1.0000	ug/L		60.4		60 - 120	
	MSD	1511019-58	ND	0.68869	1.0000	ug/L	13.1	68.9	30	60 - 120	
Fluorene	MS	1511019-58	ND	0.89244	1.0000	ug/L		89.2		60 - 120	
	MSD	1511019-58	ND	1.0673	1.0000	ug/L	17.8	107	30	60 - 120	
Indeno[1,2,3-cd]pyrene	MS	1511019-58	ND	0.95778	1.0000	ug/L		95.8		40 - 130	
	MSD	1511019-58	ND	1.1295	1.0000	ug/L	16.5	113	30	40 - 130	
Naphthalene	MS	1511019-58	ND	0.70995	1.0000	ug/L		71.0		60 - 110	
	MSD	1511019-58	ND	0.81390	1.0000	ug/L	13.6	81.4	30	60 - 110	
Phenanthrene	MS	**1511019-58**	**ND**	**0.58940**	**1.0000**	**ug/L**		**58.9**		**60 - 120**	**Q03**
	MSD	**1511019-58**	**ND**	**0.67304**	**1.0000**	**ug/L**	**13.3**	**67.3**	**30**	**60 - 120**	
Pyrene	MS	**1511019-58**	**ND**	**1.5708**	**1.0000**	**ug/L**		**157**		**50 - 125**	**Q03**
	MSD	**1511019-58**	**ND**	**1.7749**	**1.0000**	**ug/L**	**12.2**	**177**	**30**	**50 - 125**	**Q03**
Nitrobenzene-d5 (Surrogate)	MS	1511019-58	ND	2.7583	4.0000	ug/L		69.0		40 - 130	
	MSD	1511019-58	ND	3.1219	4.0000	ug/L	12.4	78.0		40 - 130	
2-Fluorobiphenyl (Surrogate)	MS	1511019-58	ND	3.0348	4.0000	ug/L		75.9		50 - 120	
	MSD	1511019-58	ND	3.6076	4.0000	ug/L	17.2	90.2		50 - 120	

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Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2442	Used client sample: N										
p-Terphenyl-d14 (Surrogate)	MS	1511019-58	ND	4.8523	4.0000	ug/L		121		40 - 130	
	MSD	1511019-58	ND	5.6422	4.0000	ug/L	15.1	141		40 - 130	S09

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Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2353						
TPH - Diesel (FFP)	BYE2353-BLK1	ND	ug/L	200	34	
TPH - Crude Oil	BYE2353-BLK1	ND	ug/L	500	140	
Tetracosane (Surrogate)	**BYE2353-BLK1**	**89.1**	%	**37 - 134 (LCL - UCL)**		

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Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2353										
TPH - Diesel (FFP)	BYE2353-BS1	LCS	2105.0	2500.0	ug/L	84.2		52 - 128		
Tetracosane (Surrogate)	BYE2353-BS1	LCS	88.435	100.00	ug/L	88.4		37 - 134		

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Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2353	Used client sample: N										
TPH - Diesel (FFP)	MS	1511019-52	ND	1980.7	2500.0	ug/L		79.2		50 - 127	
	MSD	1511019-52	ND	2114.3	2500.0	ug/L	6.5	84.6	24	50 - 127	
Tetracosane (Surrogate)	MS	1511019-52	ND	85.790	100.00	ug/L		85.8		37 - 134	
	MSD	1511019-52	ND	95.240	100.00	ug/L	10.4	95.2		37 - 134	

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Aera Energy
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[illegible]akersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2219						
Bicarbonate Alkalinity as CaCO3	BYE2219-BLK1	ND	mg/L	4.1	4.1	
Carbonate Alkalinity as CaCO3	BYE2219-BLK1	ND	mg/L	4.1	4.1	
Hydroxide Alkalinity as CaCO3	BYE2219-BLK1	ND	mg/L	4.1	4.1	
Total Alkalinity as CaCO3	BYE2219-BLK1	ND	mg/L	4.1	4.1	
QC Batch ID: BYE2224						
Bromide	BYE2224-BLK1	ND	mg/L	0.10	0.035	
Chloride	BYE2224-BLK1	ND	mg/L	0.50	0.061	
Nitrate as NO3	BYE2224-BLK1	ND	mg/L	0.44	0.078	
Sulfate	BYE2224-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BYE2351						
Total Dissolved Solids @ 180 C	BYE2351-BLK1	ND	mg/L	6.7	6.7	
QC Batch ID: BYE2558						
al Calcium	**BYE2558-BLK1**	**0.026983**	**mg/L**	**0.10**	**0.015**	**J**
Total Magnesium	**BYE2558-BLK1**	**0.036182**	**mg/L**	**0.050**	**0.019**	**J**
Total Sodium	BYE2558-BLK1	ND	mg/L	0.50	0.051	
Total Potassium	BYE2558-BLK1	ND	mg/L	1.0	0.13	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2219										
Total Alkalinity as CaCO3	BYE2219-BS3	LCS	95.840	100.00	mg/L	95.8		90 - 110		
QC Batch ID: BYE2224										
Bromide	BYE2224-BS1	LCS	2.1360	2.0000	mg/L	107		90 - 110		
Chloride	BYE2224-BS1	LCS	52.567	50.000	mg/L	105		90 - 110		
Nitrate as NO3	BYE2224-BS1	LCS	23.466	22.134	mg/L	106		90 - 110		
Sulfate	BYE2224-BS1	LCS	101.44	100.00	mg/L	101		90 - 110		
QC Batch ID: BYE2351										
Total Dissolved Solids @ 180 C	BYE2351-BS1	LCS	585.00	586.00	mg/L	99.8		90 - 110		
QC Batch ID: BYE2558										
Total Calcium	BYE2558-BS1	LCS	10.288	10.000	mg/L	103		85 - 115		
Total Magnesium	BYE2558-BS1	LCS	10.912	10.000	mg/L	109		85 - 115		
Total Sodium	BYE2558-BS1	LCS	10.494	10.000	mg/L	105		85 - 115		
Total Potassium	BYE2558-BS1	LCS	10.539	10.000	mg/L	105		85 - 115		

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Aera Energy
[illegible]000 Ming Ave
[illegible]akersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2219	Used client sample: N										
Bicarbonate Alkalinity as CaCO3	DUP	1512717-01	118.05	118.21		mg/L	0.1		10		
Carbonate Alkalinity as CaCO3	DUP	1512717-01	ND	ND		mg/L			10		
Hydroxide Alkalinity as CaCO3	DUP	1512717-01	ND	ND		mg/L			10		
Total Alkalinity as CaCO3	DUP	1512717-01	118.05	118.21		mg/L	0.1		10		
QC Batch ID: BYE2224	Used client sample: Y - Description: BL1786 DOW LH1, 05/26/2015 13:38										
Bromide	DUP	1512692-01	20.800	21.050		mg/L	1.2		10		
	MS	1512692-01	20.800	134.19	101.01	mg/L		112		80 - 120	
	MSD	1512692-01	20.800	135.51	101.01	mg/L	1.0	114	10	80 - 120	
Chloride	DUP	1512692-01	3905.2	3912.4		mg/L	0.2		10		
	MS	1512692-01	3905.2	6503.1	2525.3	mg/L		103		80 - 120	
	MSD	1512692-01	3905.2	6530.3	2525.3	mg/L	0.4	104	10	80 - 120	
Nitrate as NO3	DUP	1512692-01	ND	ND		mg/L			10		
	MS	1512692-01	ND	1155.7	1117.9	mg/L		103		80 - 120	
	MSD	1512692-01	ND	1161.3	1117.9	mg/L	0.5	104	10	80 - 120	
Sulfate	DUP	1512692-01	11.000	10.700		mg/L	2.8		10		J
	MS	1512692-01	11.000	5004.3	5050.5	mg/L		98.9		80 - 120	
	MSD	1512692-01	11.000	5039.3	5050.5	mg/L	0.7	99.6	10	80 - 120	
QC Batch ID: BYE2351	Used client sample: N										
Total Dissolved Solids @ 180 C	DUP	1512639-01	970.00	970.00		mg/L	0		10		
QC Batch ID: BYE2558	Used client sample: N										
Total Calcium	DUP	512253-01RE	27.445	27.664		mg/L	0.8		20		
	MS	512253-01RE	27.445	38.097	10.000	mg/L		107		75 - 125	
	MSD	512253-01RE	27.445	37.729	10.000	mg/L	1.0	103	20	75 - 125	
Total Magnesium	DUP	**I512253-01RE1**	**20.918**	**20.913**		**mg/L**	**0.0**		**20**		
	MS	**I512253-01RE1**	**20.918**	**32.972**	**10.000**	**mg/L**		**121**		**75 - 125**	
	MSD	**I512253-01RE1**	**20.918**	**33.763**	**10.000**	**mg/L**	**2.4**	**128**	**20**	**75 - 125**	**Q03**
Total Sodium	DUP	**I512253-01RE1**	**368.87**	**369.18**		**mg/L**	**0.1**		**20**		
	MS	**I512253-01RE1**	**368.87**	**401.61**	**10.000**	**mg/L**		**327**		**75 - 125**	**A03**
	MSD	**I512253-01RE1**	**368.87**	**400.34**	**10.000**	**mg/L**	**0.3**	**315**	**20**	**75 - 125**	**A03**
Total Potassium	DUP	512253-01RE	3.5180	3.7837		mg/L	7.3		20		
	MS	512253-01RE	3.5180	14.704	10.000	mg/L		112		75 - 125	
	MSD	512253-01RE	3.5180	14.632	10.000	mg/L	0.5	111	20	75 - 125	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2265						
Hexavalent Chromium	BYE2265-BLK1	ND	ug/L	2.0	0.70	
QC Batch ID: BYE2304						
Total Mercury	BYE2304-BLK1	ND	ug/L	0.20	0.033	
QC Batch ID: BYE2558						
Total Antimony	BYE2558-BLK1	ND	ug/L	100	8.5	
Total Arsenic	BYE2558-BLK1	ND	ug/L	50	7.8	
Total Barium	BYE2558-BLK1	ND	ug/L	10	3.5	
Total Beryllium	BYE2558-BLK1	ND	ug/L	10	0.50	
Total Boron	**BYE2558-BLK1**	**0.044526**	**mg/L**	**0.10**	**0.013**	**J**
Total Cadmium	BYE2558-BLK1	ND	ug/L	10	1.1	
Total Chromium	BYE2558-BLK1	ND	ug/L	10	1.1	
Total Cobalt	BYE2558-BLK1	ND	ug/L	50	1.3	
Total Copper	BYE2558-BLK1	ND	ug/L	10	1.1	
Total Iron	BYE2558-BLK1	ND	mg/L	0.050	0.030	
Total Lead	BYE2558-BLK1	ND	ug/L	50	4.0	
Total Lithium	BYE2558-BLK1	ND	mg/L	0.020	0.0062	
Total Manganese	BYE2558-BLK1	ND	mg/L	0.010	0.0040	
Total Molybdenum	BYE2558-BLK1	ND	ug/L	50	1.2	
Total Nickel	BYE2558-BLK1	ND	ug/L	10	2.0	
Total Selenium	BYE2558-BLK1	ND	ug/L	100	15	
Total Silver	BYE2558-BLK1	ND	ug/L	10	1.9	
Total Strontium	BYE2558-BLK1	ND	mg/L	0.010	0.0010	
Total Thallium	BYE2558-BLK1	ND	ug/L	100	24	
Total Vanadium	BYE2558-BLK1	ND	ug/L	10	2.2	
Total Zinc	**BYE2558-BLK1**	**3.6444**	**ug/L**	**50**	**2.3**	**J**
QC Batch ID: BYF0172						
Total Recoverable Uranium	BYF0172-BLK1	ND	pCi/L	0.67	0.067	

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Aera Energy
9000 Ming Ave
Bakersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2265										
Hexavalent Chromium	BYE2265-BS1	LCS	47.564	50.000	ug/L	95.1		85 - 115		
QC Batch ID: BYE2304										
Total Mercury	BYE2304-BS1	LCS	1.0075	1.0000	ug/L	101		85 - 115		
QC Batch ID: BYE2558										
Total Antimony	BYE2558-BS1	LCS	410.79	400.00	ug/L	103		85 - 115		
Total Arsenic	BYE2558-BS1	LCS	199.97	200.00	ug/L	100		85 - 115		
Total Barium	BYE2558-BS1	LCS	448.37	400.00	ug/L	112		85 - 115		
Total Beryllium	BYE2558-BS1	LCS	200.05	200.00	ug/L	100		85 - 115		
Total Boron	BYE2558-BS1	LCS	1.0692	1.0000	mg/L	107		85 - 115		
Total Cadmium	BYE2558-BS1	LCS	209.75	200.00	ug/L	105		85 - 115		
Total Chromium	BYE2558-BS1	LCS	204.74	200.00	ug/L	102		85 - 115		
Total Cobalt	BYE2558-BS1	LCS	206.28	200.00	ug/L	103		85 - 115		
al Copper	BYE2558-BS1	LCS	396.75	400.00	ug/L	99.2		85 - 115		
Total Iron	BYE2558-BS1	LCS	1.1073	1.0000	mg/L	111		85 - 115		
Total Lead	BYE2558-BS1	LCS	426.53	400.00	ug/L	107		85 - 115		
Total Lithium	BYE2558-BS1	LCS	0.21780	0.20000	mg/L	109		85 - 115		
Total Manganese	BYE2558-BS1	LCS	0.50918	0.50000	mg/L	102		85 - 115		
Total Molybdenum	BYE2558-BS1	LCS	214.59	200.00	ug/L	107		85 - 115		
Total Nickel	BYE2558-BS1	LCS	422.13	400.00	ug/L	106		85 - 115		
Total Selenium	BYE2558-BS1	LCS	199.85	200.00	ug/L	99.9		85 - 115		
Total Silver	BYE2558-BS1	LCS	96.216	100.00	ug/L	96.2		85 - 115		
Total Strontium	BYE2558-BS1	LCS	0.51795	0.50000	mg/L	104		85 - 115		
Total Thallium	BYE2558-BS1	LCS	452.60	400.00	ug/L	113		85 - 115		
Total Vanadium	BYE2558-BS1	LCS	209.26	200.00	ug/L	105		85 - 115		
Total Zinc	BYE2558-BS1	LCS	520.79	500.00	ug/L	104		85 - 115		
QC Batch ID: BYF0172										
Total Recoverable Uranium	BYF0172-BS1	LCS	26.230	26.800	pCi/L	97.9		85 - 115		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2265	Used client sample: Y - Description: Well #7311 C-2, API #04030-52556, 05/26/2015 09:04										
Hexavalent Chromium	DUP	1512695-01	28.790	28.710		ug/L	0.3		10		
	MS	1512695-01	28.790	497.62	526.32	ug/L		89.1		85 - 115	
	MSD	1512695-01	28.790	491.37	526.32	ug/L	1.3	87.9	10	85 - 115	
QC Batch ID: BYE2304	Used client sample: N										
Total Mercury	DUP	1510960-01	ND	ND		ug/L			20		
	MS	1510960-01	ND	1.0025	1.0000	ug/L		100		70 - 130	
	MSD	1510960-01	ND	1.0000	1.0000	ug/L	0.2	100	20	70 - 130	
QC Batch ID: BYE2558	Used client sample: N										
Total Antimony	DUP	512253-01RE	ND	ND		ug/L			20		
	MS	512253-01RE	ND	435.67	400.00	ug/L		109		75 - 125	
	MSD	512253-01RE	ND	434.07	400.00	ug/L	0.4	109	20	75 - 125	
Total Arsenic	DUP	512253-01RE	ND	ND		ug/L			20		
	MS	512253-01RE	ND	213.67	200.00	ug/L		107		75 - 125	
	MSD	512253-01RE	ND	215.31	200.00	ug/L	0.8	108	20	75 - 125	
Total Barium	DUP	512253-01RE	106.18	107.53		ug/L	1.3		20		
	MS	512253-01RE	106.18	558.60	400.00	ug/L		113		75 - 125	
	MSD	512253-01RE	106.18	572.79	400.00	ug/L	2.5	117	20	75 - 125	
Total Beryllium	DUP	512253-01RE	ND	ND		ug/L			20		
	MS	512253-01RE	ND	206.83	200.00	ug/L		103		75 - 125	
	MSD	512253-01RE	ND	209.14	200.00	ug/L	1.1	105	20	75 - 125	
Total Boron	DUP	512253-01RE	1.4120	1.4452		mg/L	2.3		20		
	MS	512253-01RE	1.4120	2.4886	1.0000	mg/L		108		75 - 125	
	MSD	512253-01RE	1.4120	2.5614	1.0000	mg/L	2.9	115	20	75 - 125	
Total Cadmium	DUP	512253-01RE	ND	ND		ug/L			20		
	MS	512253-01RE	ND	216.19	200.00	ug/L		108		75 - 125	
	MSD	512253-01RE	ND	220.53	200.00	ug/L	2.0	110	20	75 - 125	
Total Chromium	DUP	512253-01RE	ND	ND		ug/L			20		
	MS	512253-01RE	ND	207.32	200.00	ug/L		104		75 - 125	
	MSD	512253-01RE	ND	208.19	200.00	ug/L	0.4	104	20	75 - 125	
Total Cobalt	DUP	512253-01RE	ND	ND		ug/L			20		
	MS	512253-01RE	ND	209.43	200.00	ug/L		105		75 - 125	
	MSD	512253-01RE	ND	212.76	200.00	ug/L	1.6	106	20	75 - 125	
Total Copper	DUP	512253-01RE	ND	ND		ug/L			20		
	MS	512253-01RE	ND	425.46	400.00	ug/L		106		75 - 125	
	MSD	512253-01RE	ND	428.78	400.00	ug/L	0.8	107	20	75 - 125	
Total Iron	DUP	512253-01RE	ND	ND		mg/L			20		
	MS	512253-01RE	ND	1.1373	1.0000	mg/L		114		75 - 125	
	MSD	512253-01RE	ND	1.1688	1.0000	mg/L	2.7	117	20	75 - 125	

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Aera Energy
[illegible]000 Ming Ave
[illegible]akersfield, CA 93311

Reported: 06/11/2015 10:22
Project: Oilfield Produced Water Pond Testing
Project Number: [none]
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2558	Used client sample: N										
Total Lead	DUP	512253-01RE	ND	ND		ug/L			20		
	MS	512253-01RE	ND	431.67	400.00	ug/L		108		75 - 125	
	MSD	512253-01RE	ND	435.77	400.00	ug/L	0.9	109	20	75 - 125	
Total Lithium	DUP	512253-01RE	0.067527	0.064985		mg/L	3.8		20		
	MS	512253-01RE	0.067527	0.28137	0.20000	mg/L		107		75 - 125	
	MSD	512253-01RE	0.067527	0.27669	0.20000	mg/L	1.7	105	20	75 - 125	
Total Manganese	DUP	512253-01RE	0.58642	0.59889		mg/L	2.1		20		
	MS	512253-01RE	0.58642	1.1177	0.50000	mg/L		106		75 - 125	
	MSD	512253-01RE	0.58642	1.1277	0.50000	mg/L	0.9	108	20	75 - 125	
Total Molybdenum	DUP	512253-01RE	4.8342	4.0188		ug/L	18.4		20		J
	MS	512253-01RE	4.8342	220.67	200.00	ug/L		108		75 - 125	
	MSD	512253-01RE	4.8342	224.25	200.00	ug/L	1.6	110	20	75 - 125	
Total Nickel	DUP	512253-01RE	2.1994	ND		ug/L			20		
	MS	512253-01RE	2.1994	422.48	400.00	ug/L		105		75 - 125	
	MSD	512253-01RE	2.1994	427.05	400.00	ug/L	1.1	106	20	75 - 125	
Total Selenium	DUP	512253-01RE	ND	ND		ug/L			20		
	MS	512253-01RE	ND	162.45	200.00	ug/L		81.2		75 - 125	
	MSD	512253-01RE	ND	167.02	200.00	ug/L	2.8	83.5	20	75 - 125	
Total Silver	DUP	512253-01RE	ND	ND		ug/L			20		
	MS	512253-01RE	ND	103.69	100.00	ug/L		104		75 - 125	
	MSD	512253-01RE	ND	103.88	100.00	ug/L	0.2	104	20	75 - 125	
Total Strontium	DUP	512253-01RE	0.45278	0.45021		mg/L	0.6		20		
	MS	512253-01RE	0.45278	1.0004	0.50000	mg/L		110		75 - 125	
	MSD	512253-01RE	0.45278	1.0026	0.50000	mg/L	0.2	110	20	75 - 125	
Total Thallium	DUP	512253-01RE	ND	ND		ug/L			20		
	MS	512253-01RE	ND	429.99	400.00	ug/L		107		75 - 125	
	MSD	512253-01RE	ND	429.51	400.00	ug/L	0.1	107	20	75 - 125	
Total Vanadium	DUP	512253-01RE	2.9969	2.6859		ug/L	10.9		20		J
	MS	512253-01RE	2.9969	216.93	200.00	ug/L		107		75 - 125	
	MSD	512253-01RE	2.9969	219.18	200.00	ug/L	1.0	108	20	75 - 125	
Total Zinc	DUP	512253-01RE	ND	ND		ug/L			20		
	MS	512253-01RE	ND	537.61	500.00	ug/L		108		75 - 125	
	MSD	512253-01RE	ND	541.65	500.00	ug/L	0.7	108	20	75 - 125	
QC Batch ID: BYF0172	Used client sample: N										
Total Recoverable Uranium	DUP	1512596-02	0.067000	0.067000		pCi/L	0		20		J
	MS	1512596-02	0.067000	29.393	26.800	pCi/L		109		70 - 130	
	MSD	1512596-02	0.067000	30.098	26.800	pCi/L	2.4	112	20	70 - 130	

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BSK Associates
Engineers & Laboratories

BSK Associates Fresno
1414 Stanislaus St
Fresno, CA93706
559-497-2888 (Main)
559-485-6935 (FAX)

A5E2292
6/02/2015
Invoice: A511231

Kerrie Vaughan
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308

RE: Report for A5E2292 General: Project Manager-Kerrie Vaughan

Dear Kerrie Vaughan,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 5/27/2015. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2009 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

If additional clarification of any information is required, please contact your Project Manager, Stephane Maupas , at (800) 877-8310 or (559) 497-2888 x212.

Thanks again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Stephane Maupas, Project Manager

Accredited in Accordance with NELAP
ORELAP #4021

A5E2292 FINAL 06022015 1655
Printed: 06/02/2015
QA-RP-0001-10 Final.rpt

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BSK Associates Engineers & Laboratories

A5E2292

General: Project Manager-Kerrie Vaughan

Case Narrative

Project and Report Details		Invoice Details	
Client:	BC Laboratories	**Invoice To:**	BC Laboratories
Report To:	Kerrie Vaughan	**Invoice Attn:**	Kerrie Vaughan
Project #:	1512693	**Project PO#:**	-
Received:	5/27/2015 - 16:14		
Report Due:	6/02/2015		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 3.5

Containers Intact
COC/Labels Agree
Received On Wet Ice
Packing Material - Bubble Wrap
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

None applied

Report Distribution

Recipient(s)	Report Format	CC:
Kerrie Vaughan	FINAL.RPT	

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BSK Associates Engineers & Laboratories

A5E2292

General: Project Manager-Kerrie Vaughan

1512693

Certificate of Analysis

Sample ID: A5E2292-01
Sampled By: Client
Sample Description: 1512693-01

Sample Date - Time: 05/26/15 - 00:00
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A505865	05/28/15	06/01/15	
1.65 Sigma Uncertainty		0.110	±				
MDA95		536	pCi/L				

A5E2292 FINAL 06022015 1655
Printed: 06/02/2015
QA-RP-0001-10 Final.rpt

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BSK Associates Engineers & Laboratories

A5E2292

General: Project Manager-Kerrie Vaughan

BSK Associates Fresno

Radiological Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 00-02 - Quality Control											
Batch: A505865										Prepared: 05/28/2015	
Prep Method: EPA 00-02										Analyst: SAB	
Blank (A505865-BLK1)											
1.65 Sigma Uncertainty	ND		±							06/01/15	
Gross Alpha	ND	3	pCi/L							06/01/15	
MDA95	ND	0.00	pCi/L							06/01/15	
Blank Spike (A505865-BS1)											
Gross Alpha	26.3	3	pCi/L	30		88	80-120			06/01/15	
Blank Spike Dup (A505865-BSD1)											
Gross Alpha	27.3	3	pCi/L	30		91	80-120	4	50	06/01/15	
Matrix Spike (A505865-MS1), Source: A5E1879-01											
Gross Alpha	87.9	3	pCi/L	120	ND	73	70-130			06/01/15	
Matrix Spike (A505865-MS2), Source: A5E1950-01											
Gross Alpha	102	3	pCi/L	120	7.15	79	70-130			06/01/15	
Matrix Spike Dup (A505865-MSD1), Source: A5E1879-01											
Gross Alpha	102	3	pCi/L	120	ND	85	70-130	15	50	06/01/15	
Matrix Spike Dup (A505865-MSD2), Source: A5E1950-01											
Gross Alpha	96.1	3	pCi/L	120	7.15	74	70-130	6	50	06/01/15	

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BSK Associates Engineers & Laboratories

A5E2292

General: Project Manager-Kerrie Vaughan

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method , all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected at RL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	Picocuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent Recovered (surrogates)	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit		

Please see the individual Subcontract Lab's report for applicable certifications.

BSK is not accredited under the NELAC program for the following parameters: **NA**

Certifications: Please refer to our website for a copy of our Accredited Fields of Testing under each certification.

Fresno

State of California - ELAP	1180	State of Hawaii	4021
State of Nevada	CA000792015-1	State of Oregon - NELAC	4021
EPA - UCMR3	CA00079	State of Washington	C997-15

Sacramento

State of California - ELAP	2435

Vancouver

State of Oregon - NELAC	WA100008	State of Washington	C824-14a

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A5E2292

05272015

BCLab4911

Turnaround: Standard
Due Date: 6/2/2015

BC Laboratories

Printed: 5/27/

Page 6 of 8
Page 1 of 1

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SUBCONTRACT ORDER A5E2292 05/27/2015
BC Laboratories BCLab4911 4
1512693

SENDING LABORATORY:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911
FAX: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY: BSKSA
BSK Analytical Labs
1414 Stanislaus Street
Fresno, CA 93706
Phone: (800) 877-8310
FAX: (559) 485-6935

Analysis	Due	Expires	Comments
Sample ID: 1512693-01 Water	**Sampled: 05/26/15 00:00**		
EPA 900.0 Gross Alpha	06/02/15 17:00	11/23/15 00:00	Analyze water phase only. Results needed by 6/2/2015.
Containers supplied:			

Meggan Boyles 5/27/15 — Released By — Date
BF — Received By — 5-27-15 — Date
BF — Released By — 5-27-15 — Date
Received By — 5/27/15 — Date

DMS not BW

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BSK Associates SR-FL-0002-13

A5E2292 05/27/2015
BCLab4911 4

Sample Integrity

BSK Bottles: Yes (No) Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 10°C	(Yes) No NA	Were correct containers and preservatives received for the tests requested?	(Yes) No NA
If samples were taken today, is there evidence that chilling has begun?	Yes No (NA)	Were there bubbles in the VOA vials? (Volatiles Only)	Yes No (NA)
Did all bottles arrive unbroken and intact?	(Yes) No	Was a sufficient amount of sample received?	(Yes) No
Did all bottle labels agree with COC?	(Yes) No	Do samples have a hold time <72 hours?	Yes (No)
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes No (NA)	Was PM notified of discrepancies? PM: By/Time:	Yes No (NA)

Bottles Received "—" means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V)	Checks	Passed?
Bacti $Na_2S_2O_3$	—	—
None (P) White Cap	—	—
Cr6 (P) Sr. Green Label $NH_4OH/(NH_4)_2SO_4$ DW	Cl, pH ~ 8	Y N
Cr6 (P) Pink Label Hex Chrome Buffer DW	pH 9-9.5	Y N
Cr6 (P) Pink Label Hex Chrome Buffer WW	pH 9.3-9.7	Y N
HNO_3 (P) Red Cap	—	—
H_2SO_4 (P) or (AG) Yellow Cap/Label	pH < 2	Y N
NaOH (P) Green Cap	Cl, pH >10	Y N
NaOH + ZnAc (P)	pH > 9	Y N
Dissolved Oxygen 300ml (g)	—	—
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—
HCl (AG) Lt. Blue Label O&G, Diesel	—	—
$Na_2O_3S_2$+HCl (AG) Lt. Pink Label 525	—	—
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—
$Na_2S_2O_3$ (AG) Blue Label 547, 515, 548, THM, 524	—	—
$Na_2S_2O_3$ (CG) Blue Label 504, 505	—	—
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	Y N
NH_4Cl (AG) Purple Label 552	—	—
EDA (AG) Brown Label DBPs	—	—
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—
Buffer pH 4 (CG)	—	—
None (CG)	—	—
H_3PO_4 (CG) Salmon Label	—	—
Other:		
Asbestos 1Liter Plastic w/ Foil	—	—
Low Level Hg / Metals Double Baggie	—	—
Bottled Water	—	—
Clear Glass Jar: 250 / 500 / 1 Liter	—	—
Soil Tube Brass / Steel / Plastic	—	—
Tedlar Bag / Plastic Bag	—	—

Split

	Container	Preservative	Date/Time/Initials		Container	Preservative	Date/Time/Initials
S P				S P			
S P				S P			

Comments

Labeled by: JH @ 17:41 Labels checked by: JHD @ 17:15 RUSH Paged by: @

Page 8 of 8

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 11, 2015

Ms. Kerrie Vaughan
BC Laboratories
4100 Atlas Ct.
Bakersfield, CA 93308

RE: Project: 1512693
Pace Project No.: 30149171

Dear Ms. Vaughan:
Enclosed are the analytical results for sample(s) received by the laboratory on May 28, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carin A. Ferris

Carin Ferris
carin.ferris@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 1512693
Pace Project No.: 30149171

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: PA014572014-4
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

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SAMPLE SUMMARY

Project: 1512693
Pace Project No.: 30149171

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30149171001	1512693-01	Water	05/26/15 00:00	05/28/15 10:30

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SAMPLE ANALYTE COUNT

Project: 1512693
Pace Project No.: 30149171

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30149171001	1512693-01	EPA 903.1	JC2	1
		EPA 904.0	JLW	1

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PROJECT NARRATIVE

Project: 1512693
Pace Project No.: 30149171

Method: EPA 903.1
Description: 903.1 Radium 226
Client: BC Laboratories
Date: June 11, 2015

General Information:
1 sample was analyzed for EPA 903.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 1512693
Pace Project No.: 30149171

Method: **EPA 904.0**
Description: 904.0 Radium 228
Client: BC Laboratories
Date: June 11, 2015

General Information:
1 sample was analyzed for EPA 904.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1512693
Pace Project No.: 30149171

Sample: 1512693-01 **Lab ID: 30149171001** Collected: 05/26/15 00:00 Received: 05/28/15 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample collection dates and times were not present on the sample containers.
• Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**-3.148 ± 11.8 (19.7) C:NA T:66%**	pCi/L	06/09/15 09:36	13982-63-3	
Radium-228	EPA 904.0	**1.54 ± 4.88 (11.0) C:86% T:85%**	pCi/L	06/09/15 12:55	15262-20-1	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512693
Pace Project No.: 30149171

QC Batch: RADC/24678 Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228
Associated Lab Samples: 30149171001

METHOD BLANK: 902268 Matrix: Water
Associated Lab Samples: 30149171001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0174 ± 0.281 (0.657) C:91% T:90%	pCi/L	06/08/15 13:17	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512693
Pace Project No.: 30149171

QC Batch: RADC/24674 Analysis Method: EPA 903.1
QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226
Associated Lab Samples: 30149171001

METHOD BLANK: 902264 Matrix: Water
Associated Lab Samples: 30149171001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0778 ± 0.355 (0.723) C:NA T:95%	pCi/L	06/08/15 11:53	

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(724)850-5600

QUALIFIERS

Project: 1512693
Pace Project No.: 30149171

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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SUBCONTRACT ORDER
BC Laboratories
1512693

RUSH!

SENDING LABORATORY:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911
FAX: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY:
PACE Analytical
1638 Roseytown Road, Ste 2,3 &4
Greensburg, PA 15601
Phone: (724) 850-5600
FAX: (724) 850-5601

PACEA

30149171

Analysis	Due	Expires	Comments
Sample ID: 1512693-01 **Water**	**Sampled:**	**05/26/15 00:00**	001
EPA 903.1 Radium 226	06/02/15 17:00	11/23/15 00:00	Analyze water phase only. Results needed by 6/2/2015.
EPA 904.0 Radium 228	06/02/15 17:00	11/23/15 00:00	Analyze water phase only. Results needed by 6/2/2015.
Containers supplied:			

MWB 5/27/15 Alyma B Muchoney /Pace 5/28/15 1030

Released By Date Received By Date

Released By Date Received By Date

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PACEA

Page 1 of 1

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Sample Condition Upon Receipt

VG 30149171

Pace Analytical

Client Name: BC Project #

Courier: ☐ Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 1Z9W73160163800805

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no Biological Tissue is Frozen: Yes No

Packing Material: Bubble Wrap ✓ Bubble Bags ___ None ___ Other ___

Thermometer Used N/A Type of Ice: Wet Blue (None) ☐ Samples on ice, cooling process has begun

Cooler Temp.: Observed Temp.: N/A °C Correction Factor: N/A °C Final Temp: N/A °C

Date and Initials of person examining contents: AKM 5/28/15

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☑Yes ☐No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☑No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☐Yes ☑No ☐N/A	12. NO date/time on sample bottles
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13. AKZ
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, Phenols	☐Yes ☑No	Initial when completed: ARM / Lot # of added preservative:
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Date: 5/28/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

J:\QAQC\Master\Document Management\Sample Mgt\SCURF\FALLC003-09 SCUR Front 3March2015 Page 12 of 13

Face Analytical

page 2

Project Number: 30149171

Client Name: BC

Item No.	Matrix Code	Glass Jar (120 / 250 / 500 / 1L)	Soil Kit (2 SB, 1M, soil jar)	Chemistry (250 / 500 / 1L)	Organics (1L)	Nutrient (250 / 500)	Phenolics (250 ml)	TOC (40 ml / 250 ml)	TOX (250 ml)	Total Metals	Dissolved Metals preserved Y N	O & G (1L)	TPH (1L)	VOA (40 ml 30 ml)	Cyanide (250 ml)	Sulfide (500 ml)	Bacteria (120 ml)	Wipes / swipe/ smear/ filter	Radchem Nalgene (125 / 250 / 500 (1L))	Radchem Nalgene (1/2 gal. / 1 gal.L)	Cubitainer (500 ml / 4L)	Ziploc	Other	Other	Other
001	WT																		2						

SCURF Back (CD16-4 15May2012).xls

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Aera Energy	**Reported:** 06/11/2015 10:22
000 Ming Ave	Project: Oilfield Produced Water Pond Testing
kersfield, CA 93311	Project Number: [none]
	Project Manager: Rod Bowyer

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A03	The sample concentration is more than 4 times the spike level.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
L01	The Laboratory Control Sample Water (LCSW) recovery is not within laboratory established control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.
Z1	[50uL of antifoamer added to sample voa]

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BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 06/10/2015

Rod Bowyer

Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Client Project:	DTR
BCL Project:	Oilfield Produced Water Pond Testing
BCL Work Order:	1512916
Invoice ID:	B205387

Enclosed are the results of analyses for samples received by the laboratory on 5/28/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kerrie S. Vaughan

Contact Person: Kerrie Vaughan
Client Services

Authorized Signature

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Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM) 20
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Metals Analysis

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Notes

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BC Laboratories, Inc.

Chain of Custody Form

RUSH!

Page 1 of 1

Report To: Client: Aera	Project #:
Attn: Rod Bowyer	Project Name:
Street Address:	
City, State, Zip:	Sampler(s): J. Enriquez
Phone: Fax:	
Email Address:	
Work Order #: 15-12916	

Analysis Requested

See Attached

Please refer to the back of this page for explanation, restrictions and method legend.

Comments:

Sample #	Description	Date Sampled	Time Sampled	Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
-1	BL 3212 DTR-28	5/28/15	1023					X		5	(1)
-2	BL3613 DTR-29		1130					X		5	(2)
-3	BL 3515 DTR-33		1331					X		5	(3)
-4	BL 3275 DTR-33		1434					X		5	(4)

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

SHORT HOLDING TIME

Cr+6 NO_2 NO_3 OP SS

DO Cl_2 BOD MBAS COT

CHK BY

DISTRIBUTION

SUB-OUT EDL

Billing ☐ Same as above

Client:

Address:

City: State Zip

Attn:

PO#:

EDF Required? Geotracker ☐ Yes ☐ No

Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)

System # (Needed for EDT)

	Relinquished By	Date	Time	Received By	Date	Time
1.	JC Enriquez	5/28/15	1612	MWS	5/28	1612
2.						
3.						

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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Report ID: 1000362565

4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

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BC Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1512916 Page 1 of 4

BC LABORATORIES, INC
4100 Atlas Ct. Bakersfield, Ca. 93308 Tel: (800) 878 - 4911 Website: www.bclabs.com

15-12916

OIL FIELD PRODUCED WATER POND TESTING

CALIFORNIA WATER CODE DIRECTIVE PURSUANT TO SECTION 13267
CHARACTERIZATION OF WASTEWATER FOR DISCHARGE

Collect representative samples of wastewater within each of the ponds. Samples must be analyzed in accordance with the water quality analysis and reporting requirements contained in Attachment B to this Order;[1]

List of Analyses as per Attachment B

A. Total Dissolved Solids

B. Metals, CCR title 22, section 66261.24. subdivision (a)(2)(A) (antimony, arsenic, barium, beryllium, cadmium, chromium, chromium (VI), cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc)

C. benzene, toluene, ethylbenzene, xylenes

D. Total Petroleum Hydrocarbons as Crude Oil

E. Polynuclear Aromatic Hydrocarbons (PAH)

F. Radionuclides (Radium226, Radium 228, Gross Alpha, Uranium)

G. Major and Minor Cations (sodium, potassium, magnesium, calcium)

H. Major and Minor Anions (nitrate, chloride, sulfate, carbonate, bicarbonate, bromide)

I. Trace Elements (lithium, strontium, boron, iron, manganese)

Total Price $734

Electronic results available as an Excel spreadsheet upon request.

Field Service	
Sampling	$60 per hour
Vehicle	$0.60 per mile

[1] All previously obtained analytical data for oil field produced wastewater samples collected at the Facility, if any, with a description of the source and location for each analysis may be submitted in the alternative for re-running tests if the sample(s) was collected and analyzed within 12 months (one year) of the date of this order.

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Chain of Custody and Cooler Receipt Form for 1512916 Page 3 of 4

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 Of 2

Submission #: 15-12916

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☐ NO ☐

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

☑ COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: PE Thermometer ID: 208
Temperature: (A) 2.0 °C / (C) 2.9 °C
Date/Time 5.28.15
Analyst Init MVB 1612

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	D									
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	EPG	EPG								
PT INORGANIC CHEMICAL METALS	H	H								
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	ABC	ABC								
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M	I	I								
QT AMBER 8270	J	J								
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:
Sample Numbering Completed By: MA Date/Time: 5/28/15 1710 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]
A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1512916 Page 4 of 4

BC LABORATORIES INC. **COOLER RECEIPT FORM** Rev. No. 18 09/04/14 Page 2 of 2

Submission #: 15-12916

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐ Box ☐	YES ☐ NO ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____	Other ☐ (Specify)_____	

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

☑ COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: PG Thermometer ID: 208 Date/Time 5-28-15 1612

Temperature: (A) 4.3 °C / (C) 4.4 °C Analyst Init MVB

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL		D	D	D						
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS			EPG	EPG						
PT INORGANIC CHEMICAL METALS			H	H						
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL			ABC	ABC						
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M			I	I						
QT AMBER 8270			5	5						
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:_____

Sample Numbering Completed By: MA Date/Time: 5-28-15 1700 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]

A = Actual / C = Corrected

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Aera Energy
000 Ming Ave
kersfield, CA 93311

Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1512916-01	**COC Number:**	---	**Receive Date:**	05/28/2015 16:12
	Project Number:	---	**Sampling Date:**	05/28/2015 10:23
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	BL3212 DTR-28	**Lab Matrix:**	Water
	Sampled By:	Juan Enriquez	**Sample Type:**	Wastewater
1512916-02	**COC Number:**	---	**Receive Date:**	05/28/2015 16:12
	Project Number:	---	**Sampling Date:**	05/28/2015 11:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	BL3613 DTR-29	**Lab Matrix:**	Water
	Sampled By:	Juan Enriquez	**Sample Type:**	Wastewater
1512916-03	**COC Number:**	---	**Receive Date:**	05/28/2015 16:12
	Project Number:	---	**Sampling Date:**	05/28/2015 13:31
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	BL3515 DTR-33	**Lab Matrix:**	Water
	Sampled By:	Juan Enriquez	**Sample Type:**	Wastewater
1512916-04	**COC Number:**	---	**Receive Date:**	05/28/2015 16:12
	Project Number:	---	**Sampling Date:**	05/28/2015 14:34
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	BL3275 DTR-33	**Lab Matrix:**	Water
	Sampled By:	Juan Enriquez	**Sample Type:**	Wastewater

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512916-01 | **Client Sample Name:** BL3212 DTR-28, 5/28/2015 10:23:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260B	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	90.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/01/15	06/02/15 03:09	JCC	MS-V14	1	BYF0174

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Aera Energy
000 Ming Ave
kersfield, CA 93311

Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512916-01 | **Client Sample Name:** BL3212 DTR-28, 5/28/2015 10:23:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	ug/L	0.49	0.27	EPA-8270C-SIM	ND		1
Acenaphthylene	ND	ug/L	0.49	0.23	EPA-8270C-SIM	ND		1
Anthracene	ND	ug/L	0.49	0.083	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	ND	ug/L	0.49	0.13	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.49	0.20	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.49	0.25	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.49	0.13	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.49	0.21	EPA-8270C-SIM	ND		1
Chrysene	ND	ug/L	0.49	0.11	EPA-8270C-SIM	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.49	0.22	EPA-8270C-SIM	ND		1
Fluoranthene	ND	ug/L	0.49	0.059	EPA-8270C-SIM	ND		1
Fluorene	ND	ug/L	0.49	0.15	EPA-8270C-SIM	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.49	0.22	EPA-8270C-SIM	ND		1
aphthalene	ND	ug/L	0.49	0.38	EPA-8270C-SIM	ND		1
enanthrene	ND	ug/L	0.49	0.11	EPA-8270C-SIM	ND		1
Pyrene	ND	ug/L	0.49	0.11	EPA-8270C-SIM	ND		1
Nitrobenzene-d5 (Surrogate)	87.4	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1
2-Fluorobiphenyl (Surrogate)	91.6	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	132	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	06/01/15	06/02/15 09:30	MK1	MS-B4	4.900	BYF0334

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512916-01 | **Client Sample Name:** BL3212 DTR-28, 5/28/2015 10:23:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	ND	ug/L	2500	700	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	64.9	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/01/15	06/02/15 11:49	MWB	GC-2	5	BYF0260

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512916-01 | **Client Sample Name:** BL3212 DTR-28, 5/28/2015 10:23:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**10**	mg/L	0.20	0.030	EPA-6010B	ND	A07	1
Total Magnesium	**1.2**	mg/L	0.10	0.038	EPA-6010B	ND	A07	1
Total Sodium	**59**	mg/L	1.0	0.10	EPA-6010B	0.10	A07	1
Total Potassium	**120**	mg/L	2.0	0.26	EPA-6010B	ND	A07	1
Bicarbonate Alkalinity as CaCO3	**110**	mg/L	4.1	4.1	EPA-310.1	ND		2
Carbonate Alkalinity as CaCO3	**63**	mg/L	4.1	4.1	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**180**	mg/L	4.1	4.1	EPA-310.1	ND		2
Bromide	**0.24**	mg/L	0.10	0.035	EPA-300.0	ND		3
Chloride	**46**	mg/L	0.50	0.061	EPA-300.0	ND		3
Nitrate as NO3	ND	mg/L	0.44	0.078	EPA-300.0	ND		3
Sulfate	**34**	mg/L	1.0	0.10	EPA-300.0	ND		3
Total Dissolved Solids @ 180 C	**470**	mg/L	20	20	EPA-160.1	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 09:21	ARD	PE-OP3	2	BYF0081
2	EPA-310.1	05/29/15	05/29/15 15:29	RML	MET-1	1	BYE2586
3	EPA-300.0	05/29/15	05/30/15 02:05	OLH	IC2	1	BYE2627
4	EPA-160.1	06/01/15	06/01/15 12:30	CAD	MANUAL	2	BYF0014

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512916-01 | **Client Sample Name:** BL3212 DTR-28, 5/28/2015 10:23:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	**2.1**	**ug/L**	**2.0**	**0.70**	**EPA-7196**			1
Total Antimony	ND	ug/L	200	17	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	100	16	EPA-6010B	500000	A07	2
Total Barium	**260**	**ug/L**	**20**	**7.0**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	20	1.0	EPA-6010B	75000	A07	2
Total Boron	**0.20**	**mg/L**	**0.20**	**0.026**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	20	2.2	EPA-6010B	100000	A07	2
Total Chromium	**4.5**	**ug/L**	**20**	**2.2**	**EPA-6010B**	2500000	**J,A07**	2
Total Cobalt	ND	ug/L	100	2.6	EPA-6010B	8000000	A07	2
Total Copper	**4.6**	**ug/L**	**20**	**2.2**	**EPA-6010B**	2500000	**J,A07**	2
Total Iron	**1.5**	**mg/L**	**0.10**	**0.060**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	100	8.0	EPA-6010B	1000000	A07	2
Total Lithium	**0.034**	**mg/L**	**0.040**	**0.012**	**EPA-6010B**		**J,A07**	2
Total Manganese	**0.029**	**mg/L**	**0.020**	**0.0080**	**EPA-6010B**		**A07**	2
Total Mercury	ND	ug/L	0.20	0.033	EPA-7470A	20000		3
Total Molybdenum	**13**	**ug/L**	**100**	**2.4**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	**4.2**	**ug/L**	**20**	**4.0**	**EPA-6010B**	2000000	**J,A07**	2
Total Selenium	ND	ug/L	200	30	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	20	3.8	EPA-6010B	500000	A07	2
Total Strontium	**0.15**	**mg/L**	**0.020**	**0.0020**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	200	48	EPA-6010B	700000	A07	2
Total Vanadium	**34**	**ug/L**	**20**	**4.4**	**EPA-6010B**	2400000	**A07**	2
Total Zinc	**340**	**ug/L**	**100**	**4.6**	**EPA-6010B**	5000000	**A07**	2
Total Recoverable Uranium	**1.0**	**pCi/L**	**6.7**	**0.67**	**EPA-200.8**		**J,A07**	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/28/15	05/28/15 22:41	TDC	KONE-1	1	BYE2607
2	EPA-6010B	06/01/15	06/02/15 09:21	ARD	PE-OP3	2	BYF0081
3	EPA-7470A	06/01/15	06/02/15 08:39	MEV	CETAC1	1	BYF0033
4	EPA-200.8	06/02/15	06/02/15 17:57	GPD	PE-EL2	10	BYF0172

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512916-02 | **Client Sample Name:** BL3613 DTR-29, 5/28/2015 11:30:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**1.4**	**ug/L**	**1.0**	**0.17**	**EPA-8260B**	ND	**A01**	1
Ethylbenzene	ND	ug/L	1.0	0.20	EPA-8260B	ND	A01	1
Toluene	**0.83**	**ug/L**	**1.0**	**0.19**	**EPA-8260B**	ND	**J,A01**	1
Total Xylenes	ND	ug/L	2.0	0.72	EPA-8260B	ND	A01	1
p- & m-Xylenes	ND	ug/L	1.0	0.56	EPA-8260B	ND	A01	1
o-Xylene	ND	ug/L	1.0	0.16	EPA-8260B	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	113	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	96.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	94.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	06/01/15	06/02/15 03:32	JCC	MS-V14	2	BYF0174

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512916-02 | **Client Sample Name:** BL3613 DTR-29, 5/28/2015 11:30:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	ND	ug/L	0.48	0.27	EPA-8270C-SIM	ND		1
Acenaphthylene	ND	ug/L	0.48	0.23	EPA-8270C-SIM	ND		1
Anthracene	ND	ug/L	0.48	0.082	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	ND	ug/L	0.48	0.13	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.48	0.19	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.48	0.25	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.48	0.13	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.48	0.21	EPA-8270C-SIM	ND		1
Chrysene	ND	ug/L	0.48	0.11	EPA-8270C-SIM	ND		1
Dibenzo[a,h]anthracene	ND	ug/L	0.48	0.21	EPA-8270C-SIM	ND		1
Fluoranthene	ND	ug/L	0.48	0.058	EPA-8270C-SIM	ND		1
Fluorene	**0.44**	**ug/L**	**0.48**	**0.15**	**EPA-8270C-SIM**	ND	J	1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.48	0.21	EPA-8270C-SIM	ND		1
Naphthalene	ND	ug/L	0.48	0.37	EPA-8270C-SIM	ND		1
Phenanthrene	**0.22**	**ug/L**	**0.48**	**0.11**	**EPA-8270C-SIM**	ND	J	1
Pyrene	**0.33**	**ug/L**	**0.48**	**0.11**	**EPA-8270C-SIM**	ND	J	1
Nitrobenzene-d5 (Surrogate)	143	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1
2-Fluorobiphenyl (Surrogate)	87.1	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	161	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	06/01/15	06/02/15 09:56	MK1	MS-B4	4.850	BYF0334

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512916-02 | **Client Sample Name:** BL3613 DTR-29, 5/28/2015 11:30:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**66000**	**ug/L**	**5000**	**1400**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	73.0	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/01/15	06/04/15 11:17	MWB	GC-2	10	BYF0260

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512916-02 | **Client Sample Name:** BL3613 DTR-29, 5/28/2015 11:30:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**2.0**	**mg/L**	**1.0**	**0.15**	**EPA-6010B**	ND	**A07**	1
Total Magnesium	ND	mg/L	0.50	0.19	EPA-6010B	ND	A07	1
Total Sodium	**4500**	**mg/L**	**5.0**	**0.51**	**EPA-6010B**	0.51	**A07**	1
Total Potassium	**75**	**mg/L**	**10**	**1.3**	**EPA-6010B**	ND	**A07**	1
Bicarbonate Alkalinity as CaCO3	**950**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**950**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**49**	**mg/L**	**5.0**	**1.8**	**EPA-300.0**	ND	**A07**	3
Chloride	**6800**	**mg/L**	**25**	**3.0**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	8.8	1.6	EPA-300.0	ND	A07	4
Sulfate	**190**	**mg/L**	**20**	**2.0**	**EPA-300.0**	ND	**A07**	4
Total Dissolved Solids @ 180 C	**12000**	**mg/L**	**500**	**500**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 09:23	ARD	PE-OP3	10	BYF0081
2	EPA-310.1	05/29/15	05/29/15 15:36	RML	MET-1	2	BYE2586
3	EPA-300.0	05/29/15	05/30/15 04:12	OLH	IC2	50	BYE2627
4	EPA-300.0	05/29/15	05/30/15 03:54	OLH	IC2	20	BYE2627
5	EPA-160.1	06/01/15	06/01/15 12:30	CAD	MANUAL	50	BYF0014

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512916-02 | **Client Sample Name:** BL3613 DTR-29, 5/28/2015 11:30:00AM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	**8.1**	**ug/L**	**2.0**	**0.70**	**EPA-7196**			1
Total Antimony	ND	ug/L	1000	85	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	500	78	EPA-6010B	500000	A07	2
Total Barium	**100**	**ug/L**	**100**	**35**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	100	5.0	EPA-6010B	75000	A07	2
Total Boron	**60**	**mg/L**	**1.0**	**0.13**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	100	11	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	500	13	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Iron	ND	mg/L	0.50	0.30	EPA-6010B		A07	2
Total Lead	ND	ug/L	500	40	EPA-6010B	1000000	A07	2
Total Lithium	**2.8**	**mg/L**	**0.20**	**0.062**	**EPA-6010B**		**A07**	2
otal Manganese	ND	mg/L	0.10	0.040	EPA-6010B		A07	2
otal Mercury	ND	ug/L	0.20	0.033	EPA-7470A	20000		3
Total Molybdenum	**12**	**ug/L**	**500**	**12**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	**37**	**ug/L**	**100**	**20**	**EPA-6010B**	2000000	**J,A07**	2
Total Selenium	ND	ug/L	1000	150	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	100	19	EPA-6010B	500000	A07	2
Total Strontium	**0.022**	**mg/L**	**0.10**	**0.010**	**EPA-6010B**		**J,A07**	2
Total Thallium	ND	ug/L	1000	240	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	100	22	EPA-6010B	2400000	A07	2
Total Zinc	**64**	**ug/L**	**500**	**23**	**EPA-6010B**	5000000	**J,A07**	2
Total Recoverable Uranium	ND	pCi/L	6.7	0.67	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/28/15	05/28/15 23:12	TDC	KONE-1	1	BYE2607
2	EPA-6010B	06/01/15	06/02/15 09:23	ARD	PE-OP3	10	BYF0081
3	EPA-7470A	06/01/15	06/02/15 11:56	MEV	CETAC1	1	BYF0037
4	EPA-200.8	06/02/15	06/02/15 18:00	GPD	PE-EL2	10	BYF0172

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512916-03 | **Client Sample Name:** BL3515 DTR-33, 5/28/2015 1:31:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**1.5**	**ug/L**	**2.5**	**0.42**	**EPA-8260B**	ND	**J,A01**	1
Ethylbenzene	**1.7**	**ug/L**	**2.5**	**0.49**	**EPA-8260B**	ND	**J,A01**	1
Toluene	**4.0**	**ug/L**	**2.5**	**0.46**	**EPA-8260B**	ND	**A01**	1
Total Xylenes	**12**	**ug/L**	**5.0**	**1.8**	**EPA-8260B**	ND	**A01**	1
p- & m-Xylenes	**7.9**	**ug/L**	**2.5**	**1.4**	**EPA-8260B**	ND	**A01**	1
o-Xylene	**3.7**	**ug/L**	**2.5**	**0.41**	**EPA-8260B**	ND	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	92.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/29/15	05/29/15 15:47	JCC	MS-V14	5	BYE2316

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512916-03 | **Client Sample Name:** BL3515 DTR-33, 5/28/2015 1:31:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**1.3**	**ug/L**	**0.50**	**0.28**	**EPA-8270C-SIM**	ND		1
Acenaphthylene	**0.70**	**ug/L**	**0.50**	**0.24**	**EPA-8270C-SIM**	ND		1
Anthracene	ND	ug/L	0.50	0.085	EPA-8270C-SIM	ND		1
Benzo[a]anthracene	ND	ug/L	0.50	0.13	EPA-8270C-SIM	ND		1
Benzo[b]fluoranthene	ND	ug/L	0.50	0.20	EPA-8270C-SIM	ND		1
Benzo[k]fluoranthene	ND	ug/L	0.50	0.26	EPA-8270C-SIM	ND		1
Benzo[a]pyrene	ND	ug/L	0.50	0.13	EPA-8270C-SIM	ND		1
Benzo[g,h,i]perylene	ND	ug/L	0.50	0.22	EPA-8270C-SIM	ND		1
Chrysene	**0.32**	**ug/L**	**0.50**	**0.11**	**EPA-8270C-SIM**	ND	J	1
Dibenzo[a,h]anthracene	ND	ug/L	0.50	0.22	EPA-8270C-SIM	ND		1
Fluoranthene	**0.16**	**ug/L**	**0.50**	**0.060**	**EPA-8270C-SIM**	ND	J	1
Fluorene	**1.8**	**ug/L**	**0.50**	**0.15**	**EPA-8270C-SIM**	ND		1
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.50	0.22	EPA-8270C-SIM	ND		1
aphthalene	**10**	**ug/L**	**0.50**	**0.38**	**EPA-8270C-SIM**	ND		1
nenanthrene	**4.2**	**ug/L**	**0.50**	**0.11**	**EPA-8270C-SIM**	ND		1
Pyrene	**2.1**	**ug/L**	**0.50**	**0.11**	**EPA-8270C-SIM**	ND		1
Nitrobenzene-d5 (Surrogate)	129	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1
2-Fluorobiphenyl (Surrogate)	93.6	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM			1
p-Terphenyl-d14 (Surrogate)	114	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	06/01/15	06/02/15 10:23	MK1	MS-B4	5	BYF0334

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10000 Ming Ave
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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512916-03 | **Client Sample Name:** BL3515 DTR-33, 5/28/2015 1:31:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**470000**	**ug/L**	**25000**	**7000**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	0	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/01/15	06/02/15 20:34	MWB	GC-13	50	BYF0260

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512916-03 | **Client Sample Name:** BL3515 DTR-33, 5/28/2015 1:31:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**4.4**	**mg/L**	**1.0**	**0.15**	**EPA-6010B**	ND	**A07**	1
Total Magnesium	**1.6**	**mg/L**	**0.50**	**0.19**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**4400**	**mg/L**	**5.0**	**0.51**	**EPA-6010B**	0.51	**A07**	1
Total Potassium	**77**	**mg/L**	**10**	**1.3**	**EPA-6010B**	ND	**A07**	1
Bicarbonate Alkalinity as CaCO3	**890**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	**72**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**960**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**51**	**mg/L**	**5.0**	**1.8**	**EPA-300.0**	ND	**A07**	3
Chloride	**7000**	**mg/L**	**25**	**3.0**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	8.8	1.6	EPA-300.0	ND	A07	4
Sulfate	**180**	**mg/L**	**20**	**2.0**	**EPA-300.0**	ND	**A07**	4
Total Dissolved Solids @ 180 C	**13000**	**mg/L**	**1000**	**1000**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 09:25	ARD	PE-OP3	10	BYF0081
2	EPA-310.1	05/29/15	05/29/15 15:45	RML	MET-1	2	BYE2586
3	EPA-300.0	05/29/15	05/30/15 04:48	OLH	IC2	50	BYE2627
4	EPA-300.0	05/29/15	05/30/15 04:30	OLH	IC2	20	BYE2627
5	EPA-160.1	06/01/15	06/01/15 12:30	CAD	MANUAL	100	BYF0014

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512916-03 | **Client Sample Name:** BL3515 DTR-33, 5/28/2015 1:31:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	**8.4**	**ug/L**	**2.0**	**0.70**	**EPA-7196**			1
Total Antimony	ND	ug/L	1000	85	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	500	78	EPA-6010B	500000	A07	2
Total Barium	**58**	**ug/L**	**100**	**35**	**EPA-6010B**	10000000	**J,A07**	2
Total Beryllium	ND	ug/L	100	5.0	EPA-6010B	75000	A07	2
Total Boron	**62**	**mg/L**	**1.0**	**0.13**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	100	11	EPA-6010B	100000	A07	2
Total Chromium	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Cobalt	ND	ug/L	500	13	EPA-6010B	8000000	A07	2
Total Copper	**22**	**ug/L**	**100**	**11**	**EPA-6010B**	2500000	**J,A07**	2
Total Iron	**2.2**	**mg/L**	**0.50**	**0.30**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	500	40	EPA-6010B	1000000	A07	2
Total Lithium	**3.0**	**mg/L**	**0.20**	**0.062**	**EPA-6010B**		**A07**	2
Total Manganese	ND	mg/L	0.10	0.040	EPA-6010B		A07	2
Total Mercury	**0.038**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000	**J**	3
Total Molybdenum	**19**	**ug/L**	**500**	**12**	**EPA-6010B**	3500000	**J,A07**	2
Total Nickel	**24**	**ug/L**	**100**	**20**	**EPA-6010B**	2000000	**J,A07**	2
Total Selenium	ND	ug/L	1000	150	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	100	19	EPA-6010B	500000	A07	2
Total Strontium	**0.045**	**mg/L**	**0.10**	**0.010**	**EPA-6010B**		**J,A07**	2
Total Thallium	ND	ug/L	1000	240	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	100	22	EPA-6010B	2400000	A07	2
Total Zinc	ND	ug/L	500	23	EPA-6010B	5000000	A07	2
Total Recoverable Uranium	ND	pCi/L	6.7	0.67	EPA-200.8		A07	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/28/15	05/28/15 23:12	TDC	KONE-1	1	BYE2607
2	EPA-6010B	06/01/15	06/02/15 09:25	ARD	PE-OP3	10	BYF0081
3	EPA-7470A	06/01/15	06/02/15 11:58	MEV	CETAC1	1	BYF0037
4	EPA-200.8	06/02/15	06/02/15 18:04	GPD	PE-EL2	10	BYF0172

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Aera Energy
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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1512916-04 | **Client Sample Name:** BL3275 DTR-33, 5/28/2015 2:34:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**8.8**	**ug/L**	**2.5**	**0.42**	**EPA-8260B**	ND	**A01**	1
Ethylbenzene	**4.7**	**ug/L**	**2.5**	**0.49**	**EPA-8260B**	ND	**A01**	1
Toluene	**20**	**ug/L**	**2.5**	**0.46**	**EPA-8260B**	ND	**A01**	1
Total Xylenes	**28**	**ug/L**	**5.0**	**1.8**	**EPA-8260B**	ND	**A01**	1
p- & m-Xylenes	**17**	**ug/L**	**2.5**	**1.4**	**EPA-8260B**	ND	**A01**	1
o-Xylene	**10**	**ug/L**	**2.5**	**0.41**	**EPA-8260B**	ND	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	91.6	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	05/29/15	05/29/15 16:10	JCC	MS-V14	5	BYE2316

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

BCL Sample ID: 1512916-04 | **Client Sample Name:** BL3275 DTR-33, 5/28/2015 2:34:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene	**4.0**	**ug/L**	**2.5**	**1.4**	**EPA-8270C-SIM**	ND	**A01**	1
Acenaphthylene	**2.0**	**ug/L**	**2.5**	**1.2**	**EPA-8270C-SIM**	ND	**J,A01**	1
Anthracene	ND	ug/L	2.5	0.42	EPA-8270C-SIM	ND	A01	1
Benzo[a]anthracene	ND	ug/L	2.5	0.64	EPA-8270C-SIM	ND	A01	1
Benzo[b]fluoranthene	**2.2**	**ug/L**	**2.5**	**0.99**	**EPA-8270C-SIM**	ND	**J,A01**	1
Benzo[k]fluoranthene	ND	ug/L	2.5	1.3	EPA-8270C-SIM	ND	A01	1
Benzo[a]pyrene	ND	ug/L	2.5	0.64	EPA-8270C-SIM	ND	A01	1
Benzo[g,h,i]perylene	ND	ug/L	2.5	1.1	EPA-8270C-SIM	ND	A01	1
Chrysene	**2.0**	**ug/L**	**2.5**	**0.54**	**EPA-8270C-SIM**	ND	**J,A01**	1
Dibenzo[a,h]anthracene	ND	ug/L	2.5	1.1	EPA-8270C-SIM	ND	A01	1
Fluoranthene	**0.95**	**ug/L**	**2.5**	**0.30**	**EPA-8270C-SIM**	ND	**J,A01**	1
Fluorene	**10**	**ug/L**	**2.5**	**0.74**	**EPA-8270C-SIM**	ND	**A01**	1
Indeno[1,2,3-cd]pyrene	ND	ug/L	2.5	1.1	EPA-8270C-SIM	ND	A01	1
Naphthalene	**22**	**ug/L**	**2.5**	**1.9**	**EPA-8270C-SIM**	ND	**A01**	1
Phenanthrene	**17**	**ug/L**	**2.5**	**0.54**	**EPA-8270C-SIM**	ND	**A01**	1
Pyrene	**1.4**	**ug/L**	**2.5**	**0.54**	**EPA-8270C-SIM**	ND	**J,A01**	1
Nitrobenzene-d5 (Surrogate)	102	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1
2-Fluorobiphenyl (Surrogate)	83.8	%	50 - 120 (LCL - UCL)		EPA-8270C-SIM		A01	1
p-Terphenyl-d14 (Surrogate)	88.1	%	40 - 130 (LCL - UCL)		EPA-8270C-SIM		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8270C-SIM	06/01/15	06/02/15 12:03	MK1	MS-B4	24.750	BYF0334

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

BCL Sample ID: 1512916-04 | **Client Sample Name:** BL3275 DTR-33, 5/28/2015 2:34:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Crude Oil	**260000**	**ug/L**	**25000**	**7000**	**EPA-8015B/FFP**	ND	**A01**	1
Tetracosane (Surrogate)	82.9	%	37 - 134 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	06/01/15	06/02/15 20:57	MWB	GC-13	50	BYF0260

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

BCL Sample ID: 1512916-04 | **Client Sample Name:** BL3275 DTR-33, 5/28/2015 2:34:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**170**	**mg/L**	**1.0**	**0.15**	**EPA-6010B**	ND	**A07**	1
Total Magnesium	**85**	**mg/L**	**0.50**	**0.19**	**EPA-6010B**	ND	**A07**	1
Total Sodium	**6200**	**mg/L**	**5.0**	**0.51**	**EPA-6010B**	0.51	**A07**	1
Total Potassium	**150**	**mg/L**	**10**	**1.3**	**EPA-6010B**	ND	**A07**	1
Bicarbonate Alkalinity as CaCO3	**2100**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Hydroxide Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Total Alkalinity as CaCO3	**2100**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Bromide	**72**	**mg/L**	**5.0**	**1.8**	**EPA-300.0**	ND	**A07**	3
Chloride	**9600**	**mg/L**	**25**	**3.0**	**EPA-300.0**	ND	**A07**	3
Nitrate as NO3	ND	mg/L	22	3.9	EPA-300.0	ND	A07	3
Sulfate	ND	mg/L	50	5.0	EPA-300.0	ND	A07	3
Total Dissolved Solids @ 180 C	**19000**	**mg/L**	**1000**	**1000**	**EPA-160.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	06/01/15	06/02/15 09:26	ARD	PE-OP3	10	BYF0081
2	EPA-310.1	05/29/15	05/29/15 15:55	RML	MET-1	2	BYE2586
3	EPA-300.0	05/29/15	05/30/15 05:06	OLH	IC2	50	BYE2627
4	EPA-160.1	06/01/15	06/01/15 12:30	CAD	MANUAL	100	BYF0014

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Metals Analysis

BCL Sample ID: 1512916-04 | **Client Sample Name:** BL3275 DTR-33, 5/28/2015 2:34:00PM, Juan Enriquez

Constituent	Result	Units	PQL	MDL	Method	TTLC Limits	Lab Quals	Run #
Hexavalent Chromium	ND	ug/L	20	7.0	EPA-7196		A07	1
Total Antimony	ND	ug/L	1000	85	EPA-6010B	500000	A07	2
Total Arsenic	ND	ug/L	500	78	EPA-6010B	500000	A07	2
Total Barium	**2700**	**ug/L**	**100**	**35**	**EPA-6010B**	10000000	**A07**	2
Total Beryllium	ND	ug/L	100	5.0	EPA-6010B	75000	A07	2
Total Boron	**82**	**mg/L**	**1.0**	**0.13**	**EPA-6010B**		**A07**	2
Total Cadmium	ND	ug/L	100	11	EPA-6010B	100000	A07	2
Total Chromium	**98**	**ug/L**	**100**	**11**	**EPA-6010B**	2500000	**J,A07**	2
Total Cobalt	ND	ug/L	500	13	EPA-6010B	8000000	A07	2
Total Copper	ND	ug/L	100	11	EPA-6010B	2500000	A07	2
Total Iron	**2.4**	**mg/L**	**0.50**	**0.30**	**EPA-6010B**		**A07**	2
Total Lead	ND	ug/L	500	40	EPA-6010B	1000000	A07	2
Total Lithium	**4.3**	**mg/L**	**0.20**	**0.062**	**EPA-6010B**		**A07**	2
Total Manganese	**0.30**	**mg/L**	**0.10**	**0.040**	**EPA-6010B**		**A07**	2
Total Mercury	**0.068**	**ug/L**	**0.20**	**0.033**	**EPA-7470A**	20000	**J**	3
Total Molybdenum	ND	ug/L	500	12	EPA-6010B	3500000	A07	2
Total Nickel	ND	ug/L	100	20	EPA-6010B	2000000	A07	2
Total Selenium	ND	ug/L	1000	150	EPA-6010B	100000	A07	2
Total Silver	ND	ug/L	100	19	EPA-6010B	500000	A07	2
Total Strontium	**6.1**	**mg/L**	**0.10**	**0.010**	**EPA-6010B**		**A07**	2
Total Thallium	ND	ug/L	1000	240	EPA-6010B	700000	A07	2
Total Vanadium	ND	ug/L	100	22	EPA-6010B	2400000	A07	2
Total Zinc	**240**	**ug/L**	**500**	**23**	**EPA-6010B**	5000000	**J,A07**	2
Total Recoverable Uranium	**0.89**	**pCi/L**	**6.7**	**0.67**	**EPA-200.8**		**J,A07**	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	05/28/15	05/29/15 00:26	TDC	KONE-1	10	BYE2607
2	EPA-6010B	06/01/15	06/02/15 09:26	ARD	PE-OP3	10	BYF0081
3	EPA-7470A	06/01/15	06/02/15 12:01	MEV	CETAC1	1	BYF0037
4	EPA-200.8	06/02/15	06/02/15 18:07	GPD	PE-EL2	10	BYF0172

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2316						
Benzene	BYE2316-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BYE2316-BLK1	ND	ug/L	0.50	0.098	
Toluene	BYE2316-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BYE2316-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BYE2316-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BYE2316-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	**BYE2316-BLK1**	**77.1**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BYE2316-BLK1**	**96.5**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BYE2316-BLK1**	**93.0**	%	**80 - 120 (LCL - UCL)**		
QC Batch ID: BYF0174						
Benzene	BYF0174-BLK1	ND	ug/L	0.50	0.083	
Ethylbenzene	BYF0174-BLK1	ND	ug/L	0.50	0.098	
Toluene	BYF0174-BLK1	ND	ug/L	0.50	0.093	
Total Xylenes	BYF0174-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BYF0174-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BYF0174-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	**BYF0174-BLK1**	**97.0**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BYF0174-BLK1**	**99.2**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BYF0174-BLK1**	**94.0**	%	**80 - 120 (LCL - UCL)**		

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Aera Energy
[illegible]000 Ming Ave
[illegible]akersfield, CA 93311

Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2316										
Benzene	BYE2316-BS1	LCS	27.954	25.000	ug/L	112		70 - 130		
Toluene	BYE2316-BS1	LCS	25.367	25.000	ug/L	101		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYE2316-BS1	LCS	8.1000	10.000	ug/L	81.0		75 - 125		
Toluene-d8 (Surrogate)	BYE2316-BS1	LCS	9.9900	10.000	ug/L	99.9		80 - 120		
4-Bromofluorobenzene (Surrogate)	BYE2316-BS1	LCS	9.8400	10.000	ug/L	98.4		80 - 120		
QC Batch ID: BYF0174										
Benzene	BYF0174-BS1	LCS	25.653	25.000	ug/L	103		70 - 130		
Toluene	BYF0174-BS1	LCS	26.615	25.000	ug/L	106		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYF0174-BS1	LCS	9.0200	10.000	ug/L	90.2		75 - 125		
Toluene-d8 (Surrogate)	BYF0174-BS1	LCS	10.080	10.000	ug/L	101		80 - 120		
4-Bromofluorobenzene (Surrogate)	BYF0174-BS1	LCS	9.9800	10.000	ug/L	99.8		80 - 120		

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2316	Used client sample: N										
Benzene	MS	1512828-09	ND	30.154	25.000	ug/L		121		70 - 130	
	MSD	1512828-09	ND	29.071	25.000	ug/L	3.7	116	20	70 - 130	
Toluene	MS	1512828-09	ND	27.721	25.000	ug/L		111		70 - 130	
	MSD	1512828-09	ND	26.620	25.000	ug/L	4.1	106	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1512828-09	ND	8.4300	10.000	ug/L		84.3		75 - 125	
	MSD	1512828-09	ND	8.2200	10.000	ug/L	2.5	82.2		75 - 125	
Toluene-d8 (Surrogate)	MS	1512828-09	ND	10.550	10.000	ug/L		106		80 - 120	
	MSD	1512828-09	ND	10.320	10.000	ug/L	2.2	103		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1512828-09	ND	10.210	10.000	ug/L		102		80 - 120	
	MSD	1512828-09	ND	10.230	10.000	ug/L	0.2	102		80 - 120	
QC Batch ID: BYF0174	Used client sample: N										
Benzene	MS	1512976-01	ND	26.928	25.000	ug/L		108		70 - 130	
	MSD	1512976-01	ND	25.904	25.000	ug/L	3.9	104	20	70 - 130	
Toluene	MS	1512976-01	ND	26.268	25.000	ug/L		105		70 - 130	
	MSD	1512976-01	ND	25.331	25.000	ug/L	3.6	101	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1512976-01	ND	9.8900	10.000	ug/L		98.9		75 - 125	
	MSD	1512976-01	ND	9.0600	10.000	ug/L	8.8	90.6		75 - 125	
Toluene-d8 (Surrogate)	MS	1512976-01	ND	9.7500	10.000	ug/L		97.5		80 - 120	
	MSD	1512976-01	ND	9.4500	10.000	ug/L	3.1	94.5		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1512976-01	ND	10.130	10.000	ug/L		101		80 - 120	
	MSD	1512976-01	ND	9.9900	10.000	ug/L	1.4	99.9		80 - 120	

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYF0334						
Acenaphthene	BYF0334-BLK1	ND	ug/L	0.10	0.055	
Acenaphthylene	BYF0334-BLK1	ND	ug/L	0.10	0.047	
Anthracene	BYF0334-BLK1	ND	ug/L	0.10	0.017	
Benzo[a]anthracene	BYF0334-BLK1	ND	ug/L	0.10	0.026	
Benzo[b]fluoranthene	BYF0334-BLK1	ND	ug/L	0.10	0.040	
Benzo[k]fluoranthene	BYF0334-BLK1	ND	ug/L	0.10	0.051	
Benzo[a]pyrene	BYF0334-BLK1	ND	ug/L	0.10	0.026	
Benzo[g,h,i]perylene	BYF0334-BLK1	ND	ug/L	0.10	0.043	
Chrysene	BYF0334-BLK1	ND	ug/L	0.10	0.022	
Dibenzo[a,h]anthracene	BYF0334-BLK1	ND	ug/L	0.10	0.044	
Fluoranthene	BYF0334-BLK1	ND	ug/L	0.10	0.012	
Fluorene	BYF0334-BLK1	ND	ug/L	0.10	0.030	
Indeno[1,2,3-cd]pyrene	BYF0334-BLK1	ND	ug/L	0.10	0.044	
[illegible]phthalene	BYF0334-BLK1	ND	ug/L	0.10	0.077	
Phenanthrene	BYF0334-BLK1	ND	ug/L	0.10	0.022	
Pyrene	BYF0334-BLK1	ND	ug/L	0.10	0.022	
Nitrobenzene-d5 (Surrogate)	**BYF0334-BLK1**	**94.0**	%	**40 - 130 (LCL - UCL)**		
2-Fluorobiphenyl (Surrogate)	**BYF0334-BLK1**	**93.6**	%	**50 - 120 (LCL - UCL)**		
p-Terphenyl-d14 (Surrogate)	**BYF0334-BLK1**	**119**	%	**40 - 130 (LCL - UCL)**		

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Project Number: DTR
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYF0334										
Acenaphthene	BYF0334-BS1	LCS	1.0546	1.0000	ug/L	105		60 - 110		
Acenaphthylene	BYF0334-BS1	LCS	1.1135	1.0000	ug/L	111		60 - 120		
Anthracene	BYF0334-BS1	LCS	1.2759	1.0000	ug/L	128		60 - 130		
Benzo[a]anthracene	BYF0334-BS1	LCS	1.0877	1.0000	ug/L	109		60 - 130		
Benzo[b]fluoranthene	BYF0334-BS1	LCS	1.0525	1.0000	ug/L	105		50 - 130		
Benzo[k]fluoranthene	BYF0334-BS1	LCS	1.1915	1.0000	ug/L	119		60 - 120		
Benzo[a]pyrene	BYF0334-BS1	LCS	1.1106	1.0000	ug/L	111		60 - 120		
Benzo[g,h,i]perylene	BYF0334-BS1	LCS	0.65933	1.0000	ug/L	65.9		40 - 120		
Chrysene	BYF0334-BS1	LCS	1.0864	1.0000	ug/L	109		60 - 110		
Dibenzo[a,h]anthracene	BYF0334-BS1	LCS	0.47953	1.0000	ug/L	48.0		40 - 120		
Fluoranthene	BYF0334-BS1	LCS	1.1529	1.0000	ug/L	115		60 - 120		
Fluorene	BYF0334-BS1	LCS	1.0485	1.0000	ug/L	105		60 - 120		
Indeno[1,2,3-cd]pyrene	BYF0334-BS1	LCS	0.76027	1.0000	ug/L	76.0		40 - 130		
Naphthalene	BYF0334-BS1	LCS	0.98771	1.0000	ug/L	98.8		60 - 110		
Phenanthrene	BYF0334-BS1	LCS	1.0715	1.0000	ug/L	107		60 - 120		
Pyrene	BYF0334-BS1	LCS	1.2175	1.0000	ug/L	122		50 - 125		
Nitrobenzene-d5 (Surrogate)	BYF0334-BS1	LCS	3.8768	4.0000	ug/L	96.9		40 - 130		
2-Fluorobiphenyl (Surrogate)	BYF0334-BS1	LCS	3.9983	4.0000	ug/L	100		50 - 120		
p-Terphenyl-d14 (Surrogate)	BYF0334-BS1	LCS	4.4899	4.0000	ug/L	112		40 - 130		

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYF0334	Used client sample: N										
Acenaphthene	MS	1511019-82	ND	1.0223	1.0000	ug/L		102		60 - 110	
	MSD	1511019-82	ND	1.0055	1.0000	ug/L	1.7	101	30	60 - 110	
Acenaphthylene	MS	1511019-82	ND	1.0774	1.0000	ug/L		108		60 - 120	
	MSD	1511019-82	ND	1.0597	1.0000	ug/L	1.7	106	30	60 - 120	
Anthracene	MS	1511019-82	ND	1.2440	1.0000	ug/L		124		60 - 130	
	MSD	1511019-82	ND	1.2249	1.0000	ug/L	1.5	122	30	60 - 130	
Benzo[a]anthracene	MS	1511019-82	ND	1.0632	1.0000	ug/L		106		60 - 120	
	MSD	1511019-82	ND	1.0500	1.0000	ug/L	1.3	105	30	60 - 120	
Benzo[b]fluoranthene	MS	1511019-82	ND	1.0680	1.0000	ug/L		107		50 - 130	
	MSD	1511019-82	ND	1.0833	1.0000	ug/L	1.4	108	30	50 - 130	
Benzo[k]fluoranthene	MS	**1511019-82**	**ND**	**1.2303**	**1.0000**	**ug/L**		**123**		**60 - 120**	**Q03**
	MSD	**1511019-82**	**ND**	**1.1780**	**1.0000**	**ug/L**	**4.3**	**118**	**30**	**60 - 120**	
Benzo[a]pyrene	MS	1511019-82	ND	1.0987	1.0000	ug/L		110		60 - 120	
	MSD	1511019-82	ND	1.0448	1.0000	ug/L	5.0	104	30	60 - 120	
[illegible]nzo[g,h,i]perylene	MS	1511019-82	ND	0.64954	1.0000	ug/L		65.0		40 - 120	
	MSD	1511019-82	ND	0.56516	1.0000	ug/L	13.9	56.5	30	40 - 120	
Chrysene	MS	1511019-82	ND	1.0646	1.0000	ug/L		106		60 - 110	
	MSD	1511019-82	ND	1.0297	1.0000	ug/L	3.3	103	30	60 - 110	
Dibenzo[a,h]anthracene	MS	1511019-82	ND	0.45968	1.0000	ug/L		46.0		40 - 120	
	MSD	1511019-82	ND	0.43407	1.0000	ug/L	5.7	43.4	30	40 - 120	
Fluoranthene	MS	1511019-82	ND	1.1225	1.0000	ug/L		112		60 - 120	
	MSD	1511019-82	ND	1.0781	1.0000	ug/L	4.0	108	30	60 - 120	
Fluorene	MS	1511019-82	ND	0.98349	1.0000	ug/L		98.3		60 - 120	
	MSD	1511019-82	ND	1.0411	1.0000	ug/L	5.7	104	30	60 - 120	
Indeno[1,2,3-cd]pyrene	MS	1511019-82	ND	0.64162	1.0000	ug/L		64.2		40 - 130	
	MSD	1511019-82	ND	0.63102	1.0000	ug/L	1.7	63.1	30	40 - 130	
Naphthalene	MS	1511019-82	ND	0.95964	1.0000	ug/L		96.0		60 - 110	
	MSD	1511019-82	ND	0.95036	1.0000	ug/L	1.0	95.0	30	60 - 110	
Phenanthrene	MS	1511019-82	ND	1.0386	1.0000	ug/L		104		60 - 120	
	MSD	1511019-82	ND	1.0268	1.0000	ug/L	1.1	103	30	60 - 120	
Pyrene	MS	1511019-82	ND	1.2275	1.0000	ug/L		123		50 - 125	
	MSD	1511019-82	ND	1.2216	1.0000	ug/L	0.5	122	30	50 - 125	
Nitrobenzene-d5 (Surrogate)	MS	1511019-82	ND	3.7478	4.0000	ug/L		93.7		40 - 130	
	MSD	1511019-82	ND	3.7759	4.0000	ug/L	0.7	94.4		40 - 130	
2-Fluorobiphenyl (Surrogate)	MS	1511019-82	ND	3.8938	4.0000	ug/L		97.3		50 - 120	
	MSD	1511019-82	ND	3.5551	4.0000	ug/L	9.1	88.9		50 - 120	

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Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Polynuclear Aromatic Hydrocarbons (EPA Method 8270C-SIM)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYF0334	Used client sample: N										
p-Terphenyl-d14 (Surrogate)	MS	1511019-82	ND	4.4763	4.0000	ug/L		112		40 - 130	
	MSD	1511019-82	ND	4.5756	4.0000	ug/L	2.2	114		40 - 130	

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Project Number: DTR
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Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYF0260						
TPH - Diesel (FFP)	BYF0260-BLK1	ND	ug/L	200	34	
TPH - Crude Oil	BYF0260-BLK1	ND	ug/L	500	140	
Tetracosane (Surrogate)	**BYF0260-BLK1**	**71.9**	%	**37 - 134 (LCL - UCL)**		

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Project: Oilfield Produced Water Pond Testing
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Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYF0260										
TPH - Diesel (FFP)	BYF0260-BS1	LCS	2103.4	2500.0	ug/L	84.1		52 - 128		
Tetracosane (Surrogate)	BYF0260-BS1	LCS	80.195	100.00	ug/L	80.2		37 - 134		

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Project Number: DTR
Project Manager: Rod Bowyer

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYF0260	Used client sample: N										
TPH - Diesel (FFP)	MS	1511019-62	ND	1725.4	2500.0	ug/L		69.0		50 - 127	
	MSD	1511019-62	ND	2002.6	2500.0	ug/L	14.9	80.1	24	50 - 127	
Tetracosane (Surrogate)	MS	1511019-62	ND	72.685	100.00	ug/L		72.7		37 - 134	
	MSD	1511019-62	ND	73.705	100.00	ug/L	1.4	73.7		37 - 134	

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Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2586						
Bicarbonate Alkalinity as CaCO3	BYE2586-BLK1	ND	mg/L	4.1	4.1	
Carbonate Alkalinity as CaCO3	BYE2586-BLK1	ND	mg/L	4.1	4.1	
Hydroxide Alkalinity as CaCO3	BYE2586-BLK1	ND	mg/L	4.1	4.1	
Total Alkalinity as CaCO3	BYE2586-BLK1	ND	mg/L	4.1	4.1	
QC Batch ID: BYE2627						
Bromide	BYE2627-BLK1	ND	mg/L	0.10	0.035	
Chloride	BYE2627-BLK1	ND	mg/L	0.50	0.061	
Nitrate as NO3	BYE2627-BLK1	ND	mg/L	0.44	0.078	
Sulfate	BYE2627-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BYF0014						
Total Dissolved Solids @ 180 C	BYF0014-BLK1	ND	mg/L	6.7	6.7	
QC Batch ID: BYF0081						
Total Calcium	BYF0081-BLK1	ND	mg/L	0.10	0.015	
Total Magnesium	BYF0081-BLK1	ND	mg/L	0.050	0.019	
Total Sodium	BYF0081-BLK1	ND	mg/L	0.50	0.051	
Total Potassium	BYF0081-BLK1	ND	mg/L	1.0	0.13	

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Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2586										
Total Alkalinity as CaCO3	BYE2586-BS3	LCS	96.760	100.00	mg/L	96.8		90 - 110		
QC Batch ID: BYE2627										
Bromide	BYE2627-BS1	LCS	2.0620	2.0000	mg/L	103		90 - 110		
Chloride	BYE2627-BS1	LCS	52.274	50.000	mg/L	105		90 - 110		
Nitrate as NO3	BYE2627-BS1	LCS	22.988	22.134	mg/L	104		90 - 110		
Sulfate	BYE2627-BS1	LCS	101.94	100.00	mg/L	102		90 - 110		
QC Batch ID: BYF0014										
Total Dissolved Solids @ 180 C	BYF0014-BS1	LCS	595.00	586.00	mg/L	102		90 - 110		
QC Batch ID: BYF0081										
Total Calcium	BYF0081-BS1	LCS	11.261	10.000	mg/L	113		85 - 115		
Total Magnesium	BYF0081-BS1	LCS	10.703	10.000	mg/L	107		85 - 115		
Total Sodium	BYF0081-BS1	LCS	11.162	10.000	mg/L	112		85 - 115		
Total Potassium	BYF0081-BS1	LCS	10.703	10.000	mg/L	107		85 - 115		

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2586	Used client sample: N										
Bicarbonate Alkalinity as CaCO3	DUP	1512906-05	105.12	105.73		mg/L	0.6		10		
Carbonate Alkalinity as CaCO3	DUP	1512906-05	ND	ND		mg/L			10		
Hydroxide Alkalinity as CaCO3	DUP	1512906-05	ND	ND		mg/L			10		
Total Alkalinity as CaCO3	DUP	1512906-05	105.12	105.73		mg/L	0.6		10		
QC Batch ID: BYE2627	Used client sample: Y - Description: BL3212 DTR-28, 05/28/2015 10:23										
Bromide	DUP	**1512916-01**	**0.23800**	**0.20300**		**mg/L**	**15.9**		**10**		**A02**
	MS	**1512916-01**	**0.23800**	**2.3192**	**2.0202**	**mg/L**		**103**		**80 - 120**	
	MSD	**1512916-01**	**0.23800**	**2.3172**	**2.0202**	**mg/L**	**0.1**	**103**	**10**	**80 - 120**	
Chloride	DUP	1512916-01	46.199	46.256		mg/L	0.1		10		
	MS	1512916-01	46.199	104.52	50.505	mg/L		115		80 - 120	
	MSD	1512916-01	46.199	104.77	50.505	mg/L	0.2	116	10	80 - 120	
Nitrate as NO3	DUP	1512916-01	ND	ND		mg/L			10		
	MS	1512916-01	ND	23.006	22.358	mg/L		103		80 - 120	
	MSD	1512916-01	ND	23.095	22.358	mg/L	0.4	103	10	80 - 120	
Sulfate	DUP	1512916-01	34.496	34.531		mg/L	0.1		10		
	MS	1512916-01	34.496	143.95	101.01	mg/L		108		80 - 120	
	MSD	1512916-01	34.496	143.75	101.01	mg/L	0.1	108	10	80 - 120	
QC Batch ID: BYF0014	Used client sample: N										
Total Dissolved Solids @ 180 C	DUP	1512948-01	2080.0	2040.0		mg/L	1.9		10		
QC Batch ID: BYF0081	Used client sample: N										
Total Calcium	DUP	1512333-01	15.289	15.306		mg/L	0.1		20		
	MS	1512333-01	15.289	24.960	10.000	mg/L		96.7		75 - 125	
	MSD	1512333-01	15.289	24.444	10.000	mg/L	2.1	91.5	20	75 - 125	
Total Magnesium	DUP	1512333-01	10.912	10.929		mg/L	0.2		20		
	MS	1512333-01	10.912	20.590	10.000	mg/L		96.8		75 - 125	
	MSD	1512333-01	10.912	19.744	10.000	mg/L	4.2	88.3	20	75 - 125	
Total Sodium	DUP	1512333-01	9.0750	9.1385		mg/L	0.7		20		
	MS	1512333-01	9.0750	19.137	10.000	mg/L		101		75 - 125	
	MSD	1512333-01	9.0750	18.744	10.000	mg/L	2.1	96.7	20	75 - 125	
Total Potassium	DUP	1512333-01	2.3444	2.1478		mg/L	8.8		20		
	MS	1512333-01	2.3444	11.940	10.000	mg/L		96.0		75 - 125	
	MSD	1512333-01	2.3444	11.884	10.000	mg/L	0.5	95.4	20	75 - 125	

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Aera Energy
000 Ming Ave
kersfield, CA 93311

Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYE2607						
Hexavalent Chromium	BYE2607-BLK1	ND	ug/L	2.0	0.70	
QC Batch ID: BYF0033						
Total Mercury	BYF0033-BLK1	ND	ug/L	0.20	0.033	
QC Batch ID: BYF0037						
Total Mercury	BYF0037-BLK1	ND	ug/L	0.20	0.033	
QC Batch ID: BYF0081						
Total Antimony	BYF0081-BLK1	ND	ug/L	100	8.5	
Total Arsenic	BYF0081-BLK1	ND	ug/L	50	7.8	
Total Barium	BYF0081-BLK1	ND	ug/L	10	3.5	
Total Beryllium	BYF0081-BLK1	ND	ug/L	10	0.50	
Total Boron	BYF0081-BLK1	ND	mg/L	0.10	0.013	
tal Cadmium	BYF0081-BLK1	ND	ug/L	10	1.1	
al Chromium	BYF0081-BLK1	ND	ug/L	10	1.1	
Total Cobalt	BYF0081-BLK1	ND	ug/L	50	1.3	
Total Copper	BYF0081-BLK1	ND	ug/L	10	1.1	
Total Iron	BYF0081-BLK1	ND	mg/L	0.050	0.030	
Total Lead	BYF0081-BLK1	ND	ug/L	50	4.0	
Total Lithium	BYF0081-BLK1	ND	mg/L	0.020	0.0062	
Total Manganese	BYF0081-BLK1	ND	mg/L	0.010	0.0040	
Total Molybdenum	BYF0081-BLK1	ND	ug/L	50	1.2	
Total Nickel	BYF0081-BLK1	ND	ug/L	10	2.0	
Total Selenium	BYF0081-BLK1	ND	ug/L	100	15	
Total Silver	BYF0081-BLK1	ND	ug/L	10	1.9	
Total Strontium	BYF0081-BLK1	ND	mg/L	0.010	0.0010	
Total Thallium	BYF0081-BLK1	ND	ug/L	100	24	
Total Vanadium	BYF0081-BLK1	ND	ug/L	10	2.2	
Total Zinc	BYF0081-BLK1	ND	ug/L	50	2.3	
QC Batch ID: BYF0172						
Total Recoverable Uranium	BYF0172-BLK1	ND	pCi/L	0.67	0.067	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BYE2607										
Hexavalent Chromium	BYE2607-BS1	LCS	49.971	50.000	ug/L	99.9		85 - 115		
QC Batch ID: BYF0033										
Total Mercury	BYF0033-BS1	LCS	1.0400	1.0000	ug/L	104		85 - 115		
QC Batch ID: BYF0037										
Total Mercury	BYF0037-BS1	LCS	0.91750	1.0000	ug/L	91.8		85 - 115		
QC Batch ID: BYF0081										
Total Antimony	BYF0081-BS1	LCS	417.47	400.00	ug/L	104		85 - 115		
Total Arsenic	BYF0081-BS1	LCS	199.93	200.00	ug/L	100		85 - 115		
Total Barium	BYF0081-BS1	LCS	444.41	400.00	ug/L	111		85 - 115		
Total Beryllium	BYF0081-BS1	LCS	205.83	200.00	ug/L	103		85 - 115		
Total Boron	BYF0081-BS1	LCS	1.1413	1.0000	mg/L	114		85 - 115		
Total Cadmium	BYF0081-BS1	LCS	208.60	200.00	ug/L	104		85 - 115		
Total Chromium	BYF0081-BS1	LCS	203.38	200.00	ug/L	102		85 - 115		
Total Cobalt	BYF0081-BS1	LCS	205.59	200.00	ug/L	103		85 - 115		
Total Copper	BYF0081-BS1	LCS	401.21	400.00	ug/L	100		85 - 115		
Total Iron	BYF0081-BS1	LCS	1.1046	1.0000	mg/L	110		85 - 115		
Total Lead	BYF0081-BS1	LCS	423.76	400.00	ug/L	106		85 - 115		
Total Lithium	BYF0081-BS1	LCS	0.21464	0.20000	mg/L	107		85 - 115		
Total Manganese	BYF0081-BS1	LCS	0.52840	0.50000	mg/L	106		85 - 115		
Total Molybdenum	BYF0081-BS1	LCS	213.06	200.00	ug/L	107		85 - 115		
Total Nickel	BYF0081-BS1	LCS	416.76	400.00	ug/L	104		85 - 115		
Total Selenium	BYF0081-BS1	LCS	207.46	200.00	ug/L	104		85 - 115		
Total Silver	BYF0081-BS1	LCS	99.053	100.00	ug/L	99.1		85 - 115		
Total Strontium	BYF0081-BS1	LCS	0.56980	0.50000	mg/L	114		85 - 115		
Total Thallium	BYF0081-BS1	LCS	415.42	400.00	ug/L	104		85 - 115		
Total Vanadium	BYF0081-BS1	LCS	207.48	200.00	ug/L	104		85 - 115		
Total Zinc	BYF0081-BS1	LCS	507.11	500.00	ug/L	101		85 - 115		
QC Batch ID: BYF0172										
Total Recoverable Uranium	BYF0172-BS1	LCS	26.230	26.800	pCi/L	97.9		85 - 115		

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Aera Energy
000 Ming Ave
kersfield, CA 93311

Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYE2607	Used client sample: Y - Description: BL3212 DTR-28, 05/28/2015 10:23										
Hexavalent Chromium	DUP	1512916-01	2.0930	2.1830		ug/L	4.2		10		
	MS	1512916-01	2.0930	51.009	52.632	ug/L		92.9		85 - 115	
	MSD	1512916-01	2.0930	51.097	52.632	ug/L	0.2	93.1	10	85 - 115	
QC Batch ID: BYF0033	Used client sample: Y - Description: BL3212 DTR-28, 05/28/2015 10:23										
Total Mercury	DUP	1512916-01	ND	ND		ug/L			20		
	MS	1512916-01	ND	0.96000	1.0000	ug/L		96.0		70 - 130	
	MSD	1512916-01	ND	1.0625	1.0000	ug/L	10.1	106	20	70 - 130	
QC Batch ID: BYF0037	Used client sample: N										
Total Mercury	DUP	1512931-02	ND	ND		ug/L			20		
	MS	1512931-02	ND	0.99000	1.0000	ug/L		99.0		70 - 130	
	MSD	1512931-02	ND	1.0475	1.0000	ug/L	5.6	105	20	70 - 130	
QC Batch ID: BYF0081	Used client sample: N										
Total Antimony	DUP	1512333-01	ND	ND		ug/L			20		
	MS	1512333-01	ND	391.38	400.00	ug/L		97.8		75 - 125	
	MSD	1512333-01	ND	393.33	400.00	ug/L	0.5	98.3	20	75 - 125	
Total Arsenic	DUP	1512333-01	ND	ND		ug/L			20		
	MS	1512333-01	ND	184.36	200.00	ug/L		92.2		75 - 125	
	MSD	1512333-01	ND	181.38	200.00	ug/L	1.6	90.7	20	75 - 125	
Total Barium	DUP	**1512333-01**	**10.120**	**13.151**		**ug/L**	**26.1**		**20**		**A02**
	MS	**1512333-01**	**10.120**	**419.66**	**400.00**	**ug/L**		**102**		**75 - 125**	
	MSD	**1512333-01**	**10.120**	**401.90**	**400.00**	**ug/L**	**4.3**	**97.9**	**20**	**75 - 125**	
Total Beryllium	DUP	1512333-01	ND	ND		ug/L			20		
	MS	1512333-01	ND	192.69	200.00	ug/L		96.3		75 - 125	
	MSD	1512333-01	ND	190.60	200.00	ug/L	1.1	95.3	20	75 - 125	
Total Boron	DUP	**1512333-01**	**0.023577**	**0.015993**		**mg/L**	**38.3**		**20**		**J,A02**
	MS	**1512333-01**	**0.023577**	**0.96592**	**1.0000**	**mg/L**		**94.2**		**75 - 125**	
	MSD	**1512333-01**	**0.023577**	**0.97088**	**1.0000**	**mg/L**	**0.5**	**94.7**	**20**	**75 - 125**	
Total Cadmium	DUP	1512333-01	ND	ND		ug/L			20		
	MS	1512333-01	ND	191.84	200.00	ug/L		95.9		75 - 125	
	MSD	1512333-01	ND	191.76	200.00	ug/L	0.0	95.9	20	75 - 125	
Total Chromium	DUP	1512333-01	7.9512	8.2946		ug/L	4.2		20		J
	MS	1512333-01	7.9512	197.46	200.00	ug/L		94.8		75 - 125	
	MSD	1512333-01	7.9512	196.66	200.00	ug/L	0.4	94.4	20	75 - 125	
Total Cobalt	DUP	1512333-01	ND	ND		ug/L			20		
	MS	1512333-01	ND	187.75	200.00	ug/L		93.9		75 - 125	
	MSD	1512333-01	ND	187.29	200.00	ug/L	0.2	93.6	20	75 - 125	

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYF0081	Used client sample: N										
Total Copper	DUP	1512333-01	1.1245	ND		ug/L			20		
	MS	1512333-01	1.1245	359.37	400.00	ug/L		89.6		75 - 125	
	MSD	1512333-01	1.1245	357.22	400.00	ug/L	0.6	89.0	20	75 - 125	
Total Iron	DUP	1512333-01	ND	ND		mg/L			20		
	MS	1512333-01	ND	1.0645	1.0000	mg/L		106		75 - 125	
	MSD	1512333-01	ND	1.0060	1.0000	mg/L	5.7	101	20	75 - 125	
Total Lead	DUP	1512333-01	ND	ND		ug/L			20		
	MS	1512333-01	ND	386.65	400.00	ug/L		96.7		75 - 125	
	MSD	1512333-01	ND	387.97	400.00	ug/L	0.3	97.0	20	75 - 125	
Total Lithium	DUP	1512333-01	ND	ND		mg/L			20		
	MS	1512333-01	ND	0.20530	0.20000	mg/L		103		75 - 125	
	MSD	1512333-01	ND	0.19977	0.20000	mg/L	2.7	99.9	20	75 - 125	
Total Manganese	DUP	1512333-01	ND	ND		mg/L			20		
	MS	1512333-01	ND	0.48213	0.50000	mg/L		96.4		75 - 125	
	MSD	1512333-01	ND	0.47664	0.50000	mg/L	1.1	95.3	20	75 - 125	
Total Molybdenum	DUP	1512333-01	ND	ND		ug/L			20		
	MS	1512333-01	ND	194.75	200.00	ug/L		97.4		75 - 125	
	MSD	1512333-01	ND	194.54	200.00	ug/L	0.1	97.3	20	75 - 125	
Total Nickel	DUP	1512333-01	ND	ND		ug/L			20		
	MS	1512333-01	ND	375.67	400.00	ug/L		93.9		75 - 125	
	MSD	1512333-01	ND	371.09	400.00	ug/L	1.2	92.8	20	75 - 125	
Total Selenium	DUP	1512333-01	ND	ND		ug/L			20		
	MS	1512333-01	ND	182.71	200.00	ug/L		91.4		75 - 125	
	MSD	1512333-01	ND	184.79	200.00	ug/L	1.1	92.4	20	75 - 125	
Total Silver	DUP	1512333-01	ND	ND		ug/L			20		
	MS	1512333-01	ND	92.612	100.00	ug/L		92.6		75 - 125	
	MSD	1512333-01	ND	91.591	100.00	ug/L	1.1	91.6	20	75 - 125	
Total Strontium	DUP	1512333-01	0.12314	0.12537		mg/L	1.8		20		
	MS	1512333-01	0.12314	0.62927	0.50000	mg/L		101		75 - 125	
	MSD	1512333-01	0.12314	0.61935	0.50000	mg/L	1.6	99.2	20	75 - 125	
Total Thallium	DUP	1512333-01	ND	ND		ug/L			20		
	MS	1512333-01	ND	414.64	400.00	ug/L		104		75 - 125	
	MSD	1512333-01	ND	415.72	400.00	ug/L	0.3	104	20	75 - 125	
Total Vanadium	DUP	1512333-01	9.6866	9.4931		ug/L	2.0		20		J
	MS	1512333-01	9.6866	202.73	200.00	ug/L		96.5		75 - 125	
	MSD	1512333-01	9.6866	200.17	200.00	ug/L	1.3	95.2	20	75 - 125	
Total Zinc	DUP	1512333-01	ND	ND		ug/L			20		
	MS	1512333-01	ND	482.05	500.00	ug/L		96.4		75 - 125	
	MSD	1512333-01	ND	445.17	500.00	ug/L	8.0	89.0	20	75 - 125	

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Aera Energy
9000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYF0172	Used client sample: N										
Total Recoverable Uranium	DUP	1512596-02	0.067000	0.067000		pCi/L	0		20		J
	MS	1512596-02	0.067000	29.393	26.800	pCi/L		109		70 - 130	
	MSD	1512596-02	0.067000	30.098	26.800	pCi/L	2.4	112	20	70 - 130	

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BSK Associates
Engineers & Laboratories

BSK Associates Fresno
1414 Stanislaus St
Fresno, CA93706
559-497-2888 (Main)
559-485-6935 (FAX)

A5E2478
6/04/2015
Invoice: A511448

Kerrie Vaughan
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308

RE: Report for A5E2478 General: Project Manager-Kerrie Vaughan

Dear Kerrie Vaughan,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 5/29/2015. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2009 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

If additional clarification of any information is required, please contact your Project Manager, Stephane Maupas , at (800) 877-8310 or (559) 497-2888 x212.

Thanks again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Stephane Maupas, Project Manager

Accredited in Accordance with NELAP
ORELAP #4021

A5E2478 FINAL 06042015 1524
Printed: 06/04/2015
QA-RP-0001-10 Final.rpt

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BSK Associates Engineers & Laboratories

A5E2478

General: Project Manager-Kerrie Vaughan

Case Narrative

Project and Report Details		Invoice Details	
Client:	BC Laboratories	**Invoice To:**	BC Laboratories
Report To:	Kerrie Vaughan	**Invoice Attn:**	Kerrie Vaughan
Project #:	1512916	**Project PO#:**	-
Received:	5/29/2015 - 15:25		
Report Due:	6/04/2015		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 4.9

Containers Intact
COC/Labels Agree
Received On Wet Ice
Packing Material - Bubble Wrap
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

None applied

Report Distribution

Recipient(s)	Report Format	CC:
Kerrie Vaughan	FINAL.RPT	

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BSK Associates Engineers & Laboratories

A5E2478

General: Project Manager-Kerrie Vaughan

1512916

Certificate of Analysis

Sample ID: A5E2478-01
Sampled By: Client
Sample Description: 1512916-01

Sample Date - Time: 05/28/15 - 10:23
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A506096	06/03/15	06/04/15	
1.65 Sigma Uncertainty		0.191	±				
MDA95		2.17	pCi/L				

A5E2478 FINAL 06042015 1524
Printed: 06/04/2015
QA-RP-0001-10 Final.rpt

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BSK Associates Engineers & Laboratories

A5E2478

General: Project Manager-Kerrie Vaughan
1512916

Certificate of Analysis

Sample ID: A5E2478-02
Sampled By: Client
Sample Description: 1512916-02

Sample Date - Time: 05/28/15 - 11:30
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A506096	06/03/15	06/04/15	
1.65 Sigma Uncertainty		0.191	±				
MDA95		758	pCi/L				

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BSK Associates Engineers & Laboratories

A5E2478

General: Project Manager-Kerrie Vaughan

1512916

Certificate of Analysis

Sample ID: A5E2478-03
Sampled By: Client
Sample Description: 1512916-03

Sample Date - Time: 05/28/15 - 13:31
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A506096	06/03/15	06/04/15	
1.65 Sigma Uncertainty		0.110	±				
MDA95		758	pCi/L				

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BSK Associates Engineers & Laboratories

A5E2478

General: Project Manager-Kerrie Vaughan
1512916

Certificate of Analysis

Sample ID: A5E2478-04
Sampled By: Client
Sample Description: 1512916-04

Sample Date - Time: 05/28/15 - 14:34
Matrix: Water
Sample Type: Grab

BSK Associates Fresno

Radiological

Analyte	Method	Result	Units	Batch	Prepared	Analyzed	Qual
Gross Alpha	EPA 00-02	ND	pCi/L	A506096	06/03/15	06/04/15	
1.65 Sigma Uncertainty		0.110	±				
MDA95		758	pCi/L				

A5E2478 FINAL 06042015 1524
Printed: 06/04/2015
QA-RP-0001-10 Final.rpt

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Page 6 of 11

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BSK Associates Engineers & Laboratories

A5E2478

General: Project Manager-Kerrie Vaughan

BSK Associates Fresno

Radiological Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 00-02 - Quality Control											
Batch: A506096										Prepared: 06/03/2015	
Prep Method: EPA 00-02										Analyst: SAB	
Blank (A506096-BLK1)											
1.65 Sigma Uncertainty	ND		±							06/04/15	
Gross Alpha	ND	3	pCi/L							06/04/15	
MDA95	ND	0.00	pCi/L							06/04/15	
Blank Spike (A506096-BS1)											
Gross Alpha	34.7	3	pCi/L	30		116	80-120			06/04/15	
Blank Spike Dup (A506096-BSD1)											
Gross Alpha	27.6	3	pCi/L	30		92	80-120	23	50	06/04/15	
Matrix Spike (A506096-MS1), Source: A5E2323-01											
Gross Alpha	110	3	pCi/L	120	ND	90	70-130			06/04/15	
Matrix Spike (A506096-MS2), Source: A5E2323-02											
Gross Alpha	97.1	3	pCi/L	120	ND	80	70-130			06/04/15	
Matrix Spike Dup (A506096-MSD1), Source: A5E2323-01											
Gross Alpha	99.1	3	pCi/L	120	ND	80	70-130	11	50	06/04/15	
Matrix Spike Dup (A506096-MSD2), Source: A5E2323-02											
Gross Alpha	112	3	pCi/L	120	ND	93	70-130	15	50	06/04/15	

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BSK Associates Engineers & Laboratories

A5E2478

General: Project Manager-Kerrie Vaughan

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method , all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected at RL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	Picocuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent Recovered (surrogates)	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit		

Please see the individual Subcontract Lab's report for applicable certifications.

BSK is not accredited under the NELAC program for the following parameters: **NA**

Certifications: **Please refer to our website for a copy of our Accredited Fields of Testing under each certification.**

Fresno

State of California - ELAP	1180	State of Hawaii	4021
State of Nevada	CA000792015-1	State of Oregon - NELAC	4021
EPA - UCMR3	CA00079	State of Washington	C997-15

Sacramento

State of California - ELAP	2435

Vancouver

State of Oregon - NELAC	WA100008	State of Washington	C824-14a

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A5E2478

05292015

BCLab4911

Turnaround: Standard
Due Date: 6/5/2015

BC Laboratories

Printed: 5/29/1 Page 9 of 11

Page 1 of 1

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4.9

SUBCONTRACT ORDER
BC Laboratories
1512916

RUSH

SENDING LABORATORY:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911
FAX: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY:
BSK Analytical Labs
1414 Stanislaus Street
Fresno, CA 93706
Phone: (800) 877-8310
FAX: (559) 485-6935

A5E2478 05/29/2015
BCLab4911 5

Analysis	Due	Expires	Comments
Sample ID: 1512916-01 **Water**	**Sampled: 05/28/15 10:23**		
EPA 900.0 Gross Alpha	06/04/15 17:00	11/25/15 10:23	Analyze water phase only. Results needed by 6/4/2015.
Containers supplied:			
Sample ID: 1512916-02 **Water**	**Sampled: 05/28/15 11:30**		
EPA 900.0 Gross Alpha	06/04/15 17:00	11/25/15 11:30	Analyze water phase only. Results needed by 6/4/2015.
Containers supplied:			
Sample ID: 1512916-03 **Water**	**Sampled: 05/28/15 13:31**		
EPA 900.0 Gross Alpha	06/04/15 17:00	11/25/15 13:31	Analyze water phase only. Results needed by 6/4/2015.
Containers supplied:			
Sample ID: 1512916-04 **Water**	**Sampled: 05/28/15 14:34**		
EPA 900.0 Gross Alpha	06/04/15 17:00	11/25/15 14:34	Analyze water phase only. Results needed by 6/4/2015.
Containers supplied:			

Released By	Date	Received By	Date
MNB	5/29/15		5-29-15
	5-29-15	John Hew	5/29/15 15:25

Page 10 of 11

BSKSA Page 1 of 1

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BSK Associates SR-FL-0002-13

A5E2478 05/29/2015
BCLab4911 5

Sample Integrity

BSK Bottles: Yes (No) Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 10°C	(Yes) No NA	Were correct containers and preservatives received for the tests requested?	(Yes) No NA
If samples were taken today, is there evidence that chilling has begun?	Yes No (NA)	Were there bubbles in the VOA vials? (Volatiles Only)	Yes No (NA)
Did all bottles arrive unbroken and intact?	(Yes) No	Was a sufficient amount of sample received?	(Yes) No
Did all bottle labels agree with COC?	(Yes) No	Do samples have a hold time <72 hours?	Yes (No)
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes No (NA)	Was PM notified of discrepancies? PM: By/Time:	Yes No (NA)

Bottles Received (* means preservation/chlorine checks are either N/A or are performed in the lab)

250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V)	Checks	Passed?	1-4
Bacti $Na_2S_2O_3$	—	—	
None (P) White Cap	—	—	
Cr6 (P) Blk Green Label $NH_4OH(NH_4)_2SO_4$ DW	Cl, pH > 8	Y N	
Cr6 (P) Pink Label Hex Chrome Buffer DW	pH 9-9.5	Y N	
Cr6 (P) Pink Label Hex Chrome Buffer WW	pH 9.3-9.7	Y N	
HNO_3 (P) Red Cap	—	—	1C
H_2SO_4 (P) or (AG) Yellow Cap/Label	pH < 2	Y N	JLH
NaOH (P) Green Cap	Cl, pH >10	Y N	5/29/15
NaOH + ZnAc (P)	pH > 9	Y N	
Dissolved Oxygen 300ml (g)	—	—	
None (AG) 608/8081/8082, 625,632/8321 8151, 8270	—	—	
HCl (AG) Lt. Blue Label O&G, Diesel	—	—	
Na_2O_3S+HCl (AG) Lt. Pink Label 525	—	—	
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—	
$Na_2S_2O_3$ (AG) Blue Label 547,515,548,THM,524	—	—	
$Na_2S_2O_3$ (CG) Blue Label 504, 505	—	—	
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	Y N	
NH_4Cl (AG) Purple Label 552	—	—	
EDA (AG) Brown Label DBPS	—	—	
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—	
Buffer pH 4 (CG)	—	—	
None (CG)	—	—	
H_3PO_4 (CG) Salmon Label	—	—	
Other:			
Asbestos - 1Liter Plastic w/ Foil	—	—	
Low Level Hg / Metals Double Baggie	—	—	
Bottled Water	—	—	
Clear Glass Jar: 250 / 500 / 1 Liter	—	—	
Soil Tube - Brass / Steel / Plastic	—	—	
Tedlar Bag / Plastic Bag	—	—	

Split

	Container	Preservative	Date/Time/Initials		Container	Preservative	Date/Time/Initials
S P				S P			
S P				S P			

Comments

Labeled by: JLH @ 15:37 Labels checked by: JLW @ 15:43 RUSH Paged by: Page 11 of 11

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 09, 2015

Ms. Kerrie Vaughan
BC Laboratories
4100 Atlas Ct.
Bakersfield, CA 93308

RE: Project: 1512916
Pace Project No.: 30149467

Dear Ms. Vaughan:
Enclosed are the analytical results for sample(s) received by the laboratory on June 01, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carin A. Ferris

Carin Ferris
carin.ferris@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 1512916
Pace Project No.: 30149467

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: PA01457 2014-4
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

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SAMPLE SUMMARY

Project: 1512916
Pace Project No.: 30149467

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30149467001	**1512916-01**	Water	05/28/15 10:23	06/01/15 10:25
30149467002	**1512916-02**	Water	05/28/15 11:30	06/01/15 10:25
30149467003	**1512916-03**	Water	05/28/15 13:31	06/01/15 10:25
30149467004	**1512916-04**	Water	05/28/15 14:34	06/01/15 10:25

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(724)850-5600

SAMPLE ANALYTE COUNT

Project: 1512916
Pace Project No.: 30149467

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30149467001	1512916-01	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30149467002	1512916-02	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30149467003	1512916-03	EPA 903.1	JC2	1
		EPA 904.0	JLW	1
30149467004	1512916-04	EPA 903.1	JC2	1
		EPA 904.0	JLW	1

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PROJECT NARRATIVE

Project: 1512916
Pace Project No.: 30149467

Method: EPA 903.1
Description: 903.1 Radium 226
Client: BC Laboratories
Date: June 09, 2015

General Information:
4 samples were analyzed for EPA 903.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 1512916
Pace Project No.: 30149467

Method: **EPA 904.0**
Description: 904.0 Radium 228
Client: BC Laboratories
Date: June 09, 2015

General Information:
4 samples were analyzed for EPA 904.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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Greensburg, PA 15601
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1512916
Pace Project No.: 30149467

Sample: 1512916-01 **Lab ID: 30149467001** Collected: 05/28/15 10:23 Received: 06/01/15 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample collection dates and times were not present on the sample containers.
• Upon receipt at the laboratory, six mls of nitric acid were added to the sample to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
• Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**3.28 ± 5.32 (7.89) C:NA T:73%**	pCi/L	06/08/15 10:08	13982-63-3	
Radium-228	EPA 904.0	**0.0294 ± 2.31 (5.36) C:88% T:83%**	pCi/L	06/08/15 17:23	15262-20-1	

Sample: 1512916-02 **Lab ID: 30149467002** Collected: 05/28/15 11:30 Received: 06/01/15 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample collection dates and times were not present on the sample containers.
• Upon receipt at the laboratory, six mls of nitric acid were added to the sample to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
• Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**8.05 ± 8.08 (10.7) C:NA T:88%**	pCi/L	06/08/15 10:11	13982-63-3	
Radium-228	EPA 904.0	**11.5 ± 5.71 (9.94) C:88% T:80%**	pCi/L	06/08/15 17:24	15262-20-1	

Sample: 1512916-03 **Lab ID: 30149467003** Collected: 05/28/15 13:31 Received: 06/01/15 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample collection dates and times were not present on the sample containers.
• Upon receipt at the laboratory, six mls of nitric acid were added to the sample to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
• Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**3.35 ± 7.70 (11.8) C:NA T:72%**	pCi/L	06/08/15 10:28	13982-63-3	
Radium-228	EPA 904.0	**0.978 ± 5.00 (11.4) C:87% T:78%**	pCi/L	06/08/15 17:24	15262-20-1	

Sample: 1512916-04 **Lab ID: 30149467004** Collected: 05/28/15 14:34 Received: 06/01/15 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample collection dates and times were not present on the sample containers.
• Upon receipt at the laboratory, six mls of nitric acid were added to the sample to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
• Sample Acceptance Policy Waiver on file from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**24.4 ± 15.5 (18.4) C:NA T:84%**	pCi/L	06/08/15 10:31	13982-63-3	
Radium-228	EPA 904.0	**9.15 ± 5.15 (9.37) C:89% T:86%**	pCi/L	06/08/15 17:24	15262-20-1	

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Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512916
Pace Project No.: 30149467

QC Batch: RADC/24673 Analysis Method: EPA 903.1
QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226
Associated Lab Samples: 30149467001, 30149467002, 30149467003, 30149467004

METHOD BLANK: 902263 Matrix: Water
Associated Lab Samples: 30149467001, 30149467002, 30149467003, 30149467004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0475 ± 0.487 (0.987) C:NA T:95%	pCi/L	06/08/15 09:24	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1512916
Pace Project No.: 30149467

QC Batch: RADC/24677 Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228
Associated Lab Samples: 30149467001, 30149467002, 30149467003, 30149467004

METHOD BLANK: 902267 Matrix: Water
Associated Lab Samples: 30149467001, 30149467002, 30149467003, 30149467004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.364 ± 0.451 (0.961) C:86% T:83%	pCi/L	06/08/15 17:46	

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 1512916
Pace Project No.: 30149467

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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Date: 06/09/2015 03:37 PM

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30149467

SUBCONTRACT ORDER
BC Laboratories
1512916

RUSH!

SENDING LABORATORY:
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911
FAX: 661-327-1918
Project Manager: Kerrie Vaughan

RECEIVING LABORATORY: **PACEA**
PACE Analytical
1638 Roseytown Road, Ste 2,3 &4
Greensburg, PA 15601
Phone: (724) 850-5600
FAX: (724) 850-5601

Analysis		Due	Expires	Comments
Sample ID: 1512916-01	**Water**	**Sampled:**	**05/28/15 10:23**	001
EPA 903.1 Radium 226		06/04/15 17:00	11/25/15 10:23	Analyze water phase only. Results needed by 6/4/2015.
EPA 904.0 Radium 228		06/04/15 17:00	11/25/15 10:23	Analyze water phase only. Results needed by 6/4/2015.
Containers supplied:				
Sample ID: 1512916-02	**Water**	**Sampled:**	**05/28/15 11:30**	002
EPA 903.1 Radium 226		06/04/15 17:00	11/25/15 11:30	Analyze water phase only. Results needed by 6/4/2015.
EPA 904.0 Radium 228		06/04/15 17:00	11/25/15 11:30	Analyze water phase only. Results needed by 6/4/2015.
Containers supplied:				
Sample ID: 1512916-03	**Water**	**Sampled:**	**05/28/15 13:31**	003
EPA 903.1 Radium 226		06/04/15 17:00	11/25/15 13:31	Analyze water phase only. Results needed by 6/4/2015.
EPA 904.0 Radium 228		06/04/15 17:00	11/25/15 13:31	Analyze water phase only. Results needed by 6/4/2015.
Containers supplied:				
Sample ID: 1512916-04	**Water**	**Sampled:**	**05/28/15 14:34**	004
EPA 903.1 Radium 226		06/04/15 17:00	11/25/15 14:34	Analyze water phase only. Results needed by 6/4/2015.
EPA 904.0 Radium 228		06/04/15 17:00	11/25/15 14:34	Analyze water phase only. Results needed by 6/4/2015.
Containers supplied:				

Released By	Date	Received By	Date
Meggan Bayles	5/29/15	Matt Austin	6-1-15 1035
Released By	Date	Received By	Date

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PACEA Page 1 of 1

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Sample Condition Upon Receipt

Pace Analytical

Client Name: BC

Project # 30149467

Courier: ☐ Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 1Z9653760161708787

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals Intact: ☐ yes ☐ no Biological Tissue is Frozen: Yes No

Packing Material: Bubble Wrap X Bubble Bags ___ None ___ Other _____

Thermometer Used NA Type of Ice: Wet Blue (None) ☐ Samples on Ice, cooling process has begun

Cooler Temp.: Observed Temp.:_____°C Correction Factor: _____°C Final Temp:_____°C

Date and initials of person examining contents: SRA 6-1-15

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☒No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☒Yes ☒No ☐N/A	7. SRA 6-1-15
Sufficient Volume:	☒Yes ☐No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☒No ☐N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☐Yes ☒No ☐N/A	12. No date or time on Samples
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing preservation have been checked.	☒Yes ☐No ☐N/A	13. Added 3ml HNO3 to Sample #4 @1145 6-1-15 SRA
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☒No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, Phenols	☐Yes ☒No	Initial when completed SRA Lot # of added preservative DL15-0433
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	15.
Trip Blank Present:	☐Yes ☒No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Carina Ferrio **Date:** 6/4/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

J:\QAQC\Master\Document Management\Sample Mgt\SCURF\FALLC003-09 SCUR Front 3March2015 Page 12 of 13

Pace Analytical

page 2

Project Number: 30149467

Client Name: BC Labs

Item No.	Matrix Code	Glass Jar (120 / 250 / 500 / 1L)	Soil Kit (2 SB, 1M, soil jar)	Chemistry (250 / 500 / 1L)	Organics (1L)	Nutrient (250 / 500)	Phenolics (250 ml)	TOC (40 ml / 250 ml)	TOX (250 ml)	Total Metals	Dissolved Metals preserved Y N	O & G (1L)	TPH (1L)	VOA (40 ml 30 ml)	Cyanide (250 ml)	Sulfide (500 ml)	Bacteria (120 ml)	Wipes / swipe/ smear/ filter	Radchem Nalgene (125 / 250 / 500 (1L))	Radchem Nalgene (1/2 gal. / 1 gal.L)	Cubitainer (500 ml / 4L)	Ziploc	Other	Other	Other
001	3																		2	1					
004	1																								

SCURF Back (C016-4 15May2012).xls

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Aera Energy
10000 Ming Ave
Bakersfield, CA 93311

Reported: 06/10/2015 14:56
Project: Oilfield Produced Water Pond Testing
Project Number: DTR
Project Manager: Rod Bowyer

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.
A02	The difference between duplicate readings is less than the quantitation limit.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.

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