TECHNICAL REPORT RESPONDING TO WATER CODE SECTION 13267 ORDER DATED APRIL 1, 2015

E&B Natural Resources Management Corp.

1600 Norris Road, Bakersfield, CA 93308

June 12, 2015

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Submitted by: _____

Jennifer Brady, Env. Compliance Coor.

E&B NATURAL RESOURCES

TECHNICAL REPORT RESPONDING TO WATER CODE SECTION 13267 ORDER DATED APRIL 1, 2015

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.

Since April 2014, only oilfield produced water has been discharged into the Antelope Hills, North Antelope Hills, South Belridge, and McVan ponds identified in Attachment A.

In April 2014, E&B discharged oilfield produced water into an unregulated pond from a workover operation and subsequently agreed to a Stipulated Order R5-2014-1566.

B. Analysis of oilfield produced water.

All samples collected were analyzed for the constituents listed in Attachment B. Sample locations were chosen to satisfy the Order's requirements to collect and analyze a sample from each pond that contained wastewater and if the ponds were connected in series then only the upstream pond would be representative for the sample. On May 11, 2015, samples were collected from the Antelope Hills and North Antelope Hills Oil Fields by a Zalco Laboratories, Inc. field technician. The samples were immediately put on ice and transported under chain of custody to Zalco Laboratories in Bakersfield for analysis.

See also the individual lease narratives for further information.

C. Surface Impoundment Information

See attached spreadsheet.

D. Location maps

See individual lease narratives for further information.

SURFACE IMPOUNDMENT INFORMATION

Field	Lease	Pond Number	APN	Latitude (NAD83)	Longitude (NAD83)	Lenth, ft	Width, ft	Depth, ft	Duration of discharge (months)	Approximate Volume/year (bbls)
Antelope Hills	Hopkins A	1	068-230-10-1	35.530364	-119.857123	60	20	7	12	9,200
Antelope Hills	Hopkins A	2	068-230-10-1	35.530347	-119.856928	75	20	7	12	In series with Hopkins A #1
Antelope Hills	Hopkins A	3	068-230-10-1	35.53061	-119.857029	150	130	7	12	In series with Hopkins A #2
Antelope Hills	Hopkins A	Evap 1	068-120-54 & 068-230-08	35.536357	-119.86835	600	400	10	12	In series with Williams #3
Antelope Hills	Hopkins A	Evap 2	068-120-54	35.537428	-119.869466	460	430	10	12	In series with Hopkins A Evap #1
Antelope Hills	Hopkins A	Evap 3	068-120-54	35.538531	-119.87052	500	450	10	12	In series with Hopkins A Evap #2
Antelope Hills	Hopkins A	Evap 4	068-120-54	35.539719	-119.871691	515	500	10	12	In series with Hopkins A Evap #3
Antelope Hills	Hopkins A	Evap 5	068-120-54	35.540839	-119.872851	500	460	10	12	In series with Hopkins A Evap #4
Antelope Hills	Hopkins A	Evap 6	068-120-54	35.541814	-119.873868	400	300	10	12	In series with Hopkins A Evap #5
Antelope Hills	Hopkins A	Evap 7	068-120-49	35.542539	-119.874216	600	300	10	12	In series with Hopkins A Evap #6
Antelope Hills	Phippen	1	085-120-15	35.511216	-119.848473	80	40	7	12	96,000
Antelope Hills	Phippen	2	085-120-15	35.511278	-119.84873	125	90	7	12	In series with #1
Antelope Hills	Pickrell-Mitchel	1	085-120-24-4	35.513106	-119.850268	65	40	7	12	55,000
Antelope Hills	Pickrell-Williams	1	085-120-04-6	35.51351	-119.849251	66	50	7	12	In series with Pickrell-Mitchel #1
Antelope Hills	Pickrell-Williams	2	085-120-04-6	35.51346	-119.848824	30	30	3	0	0
Antelope Hills	Voigt	1	085-120-37-6	35.52256	-119.856595	90	50	7	12	87,000
Antelope Hills	Voigt	2	085-120-37-6	35.522774	-119.85653	155	110	7	12	In series with Voigt #1
Antelope Hills	Voigt	3	085-120-36-6	35.52352	-119.8511	50	30	4	0	0
Antelope Hills	Voigt	4	085-120-36-6	35.523959	-119.850678	260	115	7	0	0
Antelope Hills	Williams	1	085-120-41-8	35.521271	-119.860639	100	90	7	12	595,000
Antelope Hills	Williams	2	085-120-41-8	35.524926	-119.86058	240	75	7	12	In series with Williams #1
Antelope Hills	Williams	3	085-120-41-8	35.525298	-119.860338	40	20	4	12	In series with Williams #2
North Antelope Hills	Hopkins B	1	068-100-35	35.565027	-119.89038	50	30	8	12	54,800
North Antelope Hills	Hopkins B	2	068-100-35	35.564956	-119.889819	150	80	8	12	In series with Hopkins B #1
North Antelope Hills	Hopkins B	3	068-100-35	35.565222	-119.889673	215	80	8	12	In series with Hopkins B #2
North Antelope Hills	Hopkins B	4	068-100-35	35.565543	-119.889475	230	140	10	12	In series with Hopkins B #3

SURFACE IMPOUNDMENT INFORMATION

Field	Lease	Pond Number	APN	Latitude (NAD83)	Longitude (NAD83)	Lenth, ft	Width, ft	Depth, ft	Duration of discharge (months)	Approximate Volume/year (bbls)
South Belridge	Carneros	1	085-230-10	35.454563	-119.746571	125	70	8	0	0
South Belridge	Carneros	Emergency 1	085-230-50	35.454811	-119.746979	90	60	3	0	0
Edison	Shields-Arms	No sump identified	388-040-02	-	-	-	-	-	-	-
Jasmin	JOL	1	051-102-12	35.744387	-119.044177	60	15	3	0	0
Jasmin	JOL	2	051-102-12	35.744446	-199.043944	100	90	5	0	0
Kern Front	L. Luning	1	074-320-13	35.53857	-119.050593	62	30	3	0	0
Kern River	E&M	1	436-070-01	35.438488	-118.94945	80	65	8	0	0
McKittrick	Laymance	1	157-100-22	35.303156	-119.632089	43	30	4	0	0
McKittrick	Laymance	2	157-100-22	35.303248	-119.631857	90	60	8	0	0
Poso Creek	Cauley	1	481-060-03	35.49188	-119.079636	100	55	8	0	0
Poso Creek	Cauley	2	481-060-03	35.493361	-119.079443	200	85	15	0	0
Poso Creek	Cauley	3	481-060-03	35.492942	-119.081213	215	100	15	0	0
Poso Creek	Gov't	1	074-030-02	35.586688	-119.043708	90	65	10	12	18,000
Poso Creek	Gov't	2	074-030-02	35.58668	-119.043966	90	65	10	12	18,000
Poso Creek	Gov't	3	074-030-02	35.584494	-119.044926	16	8	8	0	0
Poso Creek	Section 5	1	481-030-65	35.523627	-119.086521	45	30	15	0	0
Poso Creek	Section 5	2	481-030-65	35.521854	-119.083302	135	75	4	0	0

Hopkins A & Evaporation Ponds

The Hopkins A lease ponds and Evaporation Ponds are located in Section 31, Township 27S, Range 20E and Section 36, Township 27S, Range 19E, in the Antelope Hills Oil Field near Lost Hills, California.

A representative wastewater sample was collected from the Hopkins A pond #1 to be analyzed in accordance with Order 13267 Attachment B listed constituents (see location map). Hopkins A pond #1 is the first pond to which oilfield wastewater discharges from the lease's oil production, and is the first in a series of three unlined wastewater ponds with final disposition for evaporation and/or percolation of the oilfield produced water.

A representative wastewater sample was collected from the Hopkins A Evaporation Pond #1 to be analyzed in accordance with Order 13267 Attachment B listed constituents (see location map). The Evaporation Ponds are for the final disposal of collected produced water discharges from the Williams, Voigt, Phippen, and Pickrell-Mitchel leases' respective series of ponds. Hopkins A Evaporation Pond #1 is the first pond to which the collective oilfield wastewater is discharged, and is the first in a series of seven unlined evaporation ponds.

The Hopkins A ponds and Evaporation Ponds are regulated by WDR #58-443 and a renewal of the WDR was submitted to the Central Valley Regional Water Quality Control Board (CVRWQCB) in November 2013.

Hopkins A
APN:
06823008
APN:
06823010
Sample location – Outfall #1
Surface Impoundments at Hopkins A
N
1:1,500
F&B
NATURAL RESOURCES
Legend
Sump 1
Sump 2
Sump 3
DOGGR_Leases
Parcels
0
90
180
360
Feet

ZALCO LABORATORIES, INC.
Analytical & Consulting Services

4309 Armour Avenue
Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

June 2, 2015

Jennifer Brady
E & B Natural Resources Corp.
3000 James Rd
Bakersfield, CA 93308

TEL: (661) 428-6146
FAX: (661) 616-6179

Project ID:
RE: 1505136

Dear Jennifer Brady:

Zalco Laboratories, Inc. received 1 samples on 5/11/2015 for the analyses presented in the following report.

We appreciate your business and look forward to serving you in the future. Please feel free to call our office if you have any questions regarding these test results.

Sincerely,

Juan Magana
Project Manager
CC:

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505136**
3000 James Rd	Project #:	Reported: 06/02/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505136-01**	Collected By: Justin Graves
Client Sample ID: Hopkins A	Date Collected: 5/11/2015 10:20:00AM

Analyte	Results	MDL	PQL		Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Alkalinity										
Total Alkalinity	1300		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Bicarbonate (HCO3)	1300		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Carbonate (CO3)	<10		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Hydroxide (OH)	<10		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
CAM, Toxicity (17 Metals)				*TTLC Limits*						
Antimony	<2.0		2.0	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Arsenic	<0.20		0.20	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Barium	4.2		1.0	*10000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Beryllium	<0.10		0.10	*75*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cadmium	<0.10		0.10	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Chromium	<0.50		0.50	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cobalt	<1.0		1.0	*8000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Copper	0.53		0.50	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Lead	<0.50		0.50	*1000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Mercury	<0.0020		0.0020	*20*	mg/L		SW846 7470A	5/12/15	5/12/15	SS
Molybdenum	<1.0		1.0	*3500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Nickel	<0.50		0.50	*2000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Selenium	<0.50		0.50	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Silver	<0.20		0.20	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Thallium	<5.0		5.0	*700*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Vanadium	<1.0		1.0	*2400*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Zinc	<0.50		0.50	*5000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
General Chemistry				*MCL Limits*						
Fluoride	<1.0	0.13	1.0	*2*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Nitrate as NO3	<20.0	1.86	20.0	*45*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Electrical Conductivity	30		0.010		mmhos/cm		SM 2510B	5/11/15	5/11/15	SAM
Bromide	43	0.15	1.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Chloride	10000	2.4	1000		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
pH	7.16				pH Units		EPA 150.1	5/11/15	5/11/15	SAM
Sulfate as SO4	55	0.31	5.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Total Dissolved Solids	18000		10		mg/L		SM 2540C	5/13/15	5/13/15	MSS
Hardness										

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Client Sample ID: Hopkins A	Date Collected: 5/11/2015 10:20:00AM

Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Hardness									
Hardness (as CaCO3)	600		2.0	mg/L		SM 2340B	5/15/15	5/15/15	SS
Metals									
Lithium	1.5	0.072	1.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Metals - As Received									
Magnesium	61		0.50	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Potassium	70		5.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Sodium	8400		350	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Calcium	140		0.50	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Iron	<1.0		1.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Boron	53		1.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Barium	4.0		1.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Copper	0.53		0.50	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Silica (SiO2)	<40		40	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Strontium	20		1.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Manganese	<0.30		0.30	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Petroleum Hydrocarbons									
Diesel Range Hydrocarbons	22.3	0.20	0.50	mg/L		SW846 8015B	5/20/15	5/22/15	BIG
Gasoline Range Hydrocarbons	0.394	0.015	0.050	mg/L		SW846 8015B	5/21/15	5/21/15	HLP
Motor Oil Range Hydrocarbons	<1.50		1.50	mg/L		SW846 8015B	5/20/15	5/22/15	BIG

Surrogates	% Recovery	Recovery Limits	Flag	
a,a,a-Trifluorotoluene	85.3	69-125		5/21/15 16:33

Analyte	Results	MDL	PQL	Units	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds								
Indeno(1,2,3-cd)pyrene	<10.0		10.0	ug/L	SW846 8270C	5/13/15	5/14/15	JMM
Naphthalene	<10.0		10.0	ug/L	SW846 8270C	5/13/15	5/14/15	JMM
Acenaphthylene	<10.0	0.5	10.0	ug/L	SW846 8270C	5/13/15	5/14/15	JMM
Acenaphthene	<10.0	0.5	10.0	ug/L	SW846 8270C	5/13/15	5/14/15	JMM
Fluorene	<10.0	0.5	10.0	ug/L	SW846 8270C	5/13/15	5/14/15	JMM
Phenanthrene	<10.0	0.7	10.0	ug/L	SW846 8270C	5/13/15	5/14/15	JMM
Anthracene	<10.0	0.7	10.0	ug/L	SW846 8270C	5/13/15	5/14/15	JMM

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Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds									
Fluoranthene	<10.0	0.8	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Pyrene	<10.0	0.8	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Benzo (a) anthracene	<10.0	0.8	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Chrysene	<10.0	0.8	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Benzo (b) fluoranthene	<10.0	0.7	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Benzo (k) fluoranthene	<10.0	0.8	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Benzo (a) pyrene	<10.0	0.7	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Dibenz (a,h) anthracene	<10.0	0.6	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Benzo (g,h,i) perylene	<10.0	0.8	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM

Surrogates	% Recovery	Recovery Limits	Flag	
Nitrobenzene-d5	22.5	0-95		5/14/15 12:05
2-Fluorobiphenyl	17.6	0-92		5/14/15 12:05
Terphenyl-dl4	5.61	0-100		5/14/15 12:05

Subcontracted Analyses									
Gross Alpha	15.7		15.0	pCi/L		SM 7110C	5/16/15	5/19/15	JMM
Radium-226	17.3		3.00	pCi/L		E903.1	5/18/15	5/21/15	JMM
Radium-228	<2.00		2.00	pCi/L		EPA Ra-05	5/28/15	5/30/15	JMM
Uranium (ug/L)	<20.0		20.0	pCi/L		E908	5/27/15	5/27/15	JMM
Volatile Organic Compounds									
m,p-Xylene	13.2	1.08	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Benzene	22.3	0.37	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Xylenes, total	26.5			ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Methyl tert-Butyl Ether	<5.00	0.67	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Ethylbenzene	17.2	0.28	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Toluene	23.7	0.31	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
o-Xylene	13.3	0.57	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	94.6	89-165		5/21/15 9:29
Toluene-d8	86.1	65-124		5/21/15 9:29
4-Bromofluorobenzene	98.4	94-114		5/21/15 9:29

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June 1, 2015

Zalco Laboratories, Inc.
4309 Armour Avenue
Bakersfield, CA 93308-4573

Lab ID : SP 1505240-001
Customer ID : 2-249

Sampled On : May 11, 2015-10:20
Sampled By : Not Available
Received On : May 12, 2015-11:30
Matrix : Water

Description : 1505136-01
Project : 1505136-01

Sample Result - Radio

Constituent	Result ± Error	MDA	Units	MCL/AL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Radio Chemistry[P]								
Gross Alpha	15.7 ± 9.24	10.6	pCi/L	15/5	900.0	05/16/15-07:00 2P1505675	900.0	05/19/15-16:00 2A1507605
Total Alpha Radium (226)	17.3 ± 1.59	0.470	pCi/L	3	903.0	05/18/15-19:30 2P1505776	903.0	05/21/15-13:20 2A1507600
Uranium	0.000 ± 0.530	0.300	pCi/L	20	908.0	05/27/15-06:55 2P1506101	908.0	05/27/15-22:13 2A1507894
Ra 228	0.000 ± 1.04	0.400	pCi/L	2	Ra - 05	05/28/15-19:30 2P1505775	Ra - 05	05/30/15-11:20 2A1508029

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: N/A * PQL adjusted for dilution.

MDA = Minimum Detectable Activity (Calculated at the 95% confidence level) = Data utilized by DHS to determine matrix interference.
MCL / AL = Maximum Contamination Level / Action Level. Alpha's Action Level of 5 pCi/L is based on the Assigned Value (AV).
AV = Assigned Value(Gross Alpha Result + (0.84 x Error)). CCR Section 64442: Drinking Water Compliance Note: Do the following
If Gross Alpha's (AV) exceeds 5 pCi/L run Uranium. If Gross Alpha's (AV) minus Uranium exceeds 5 pCi/L run Radium 226.

Drinking Water Compliance:
Gross Alpha (AV) minus Uranium is less than or equal to 15 pCi/L
Uranium is less than or equal to 20 pCi/L
Radium 226 + Radium 228 is less than or equal to 5 pCi/L

Note: Samples are held for 3-6 months prior to disposal.

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
TEL: (805)392-2000
Env FAX: (805)525-4172 / Ag FAX: (805)392-2063
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ZALCO LABORATORIES, INC.

4309 Armour Avenue, Bakersfield, CA 93308 (661) 395-0539 FAX (661) 395-3069
2186 Eastman Avenue, Suite 103, Ventura, CA 93003, (805) 477-0114, Fax (805) 477-0125
www.zalcolabs.com

CHAIN OF CUSTODY, ID# _____

Client PO: _____
Project ID: _____
Quote ID: _____

ANALYSIS REQUESTED 1505136

COMPANY: E&B Nat. Resources
CONTACT: Jennifer Brady
PHONE: 661-428-6146 FAX: _____
ADDRESS: 3000 James Rd.
Bakersfield Ca. 93308
E-MAIL: jbrady@ebresources.com
SAMPLER (SIGNATURE): _____

COMMENTS

Turnaround Time:
Routine (# working days) ☐
Rush By ☐ Working Days
EDT ☐
State Form ☐
EMAIL ☐

Notes

LAB #	SAMPLE DESCRIPTION	DATE	TIME	TYPE *	# OF CONTAINERS	GeoChem	TDS	Cam 17	Trace Elements	PAH (8270)	BTEX (8260)	TRPH (Fuel Fingerprint)	Radionuclides					TEMPERATURE (C°)	Notes
1	Hopkins A	5/11/2015	10:20	AQ	12	X	X	X	X	X	X	X	X						26.8
																		X	

Relinquished By:	Company	Date	Time	Received By:	Company:
Justin Graves	Zalco Laboratories Inc.	05/11/15	1405		Zalco

NOTE: Samples Discarded 30 days after results unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

* Sample Type Key: Aq-Aqueous; BS-Biosolid; DW-Drinking Water; GW-Groundwater; G-Gas LPG-Liquid Petroleum Gas; OL-Oil; P-Petroleum; S-Solid/Soil; ST-Storm water WW-Wastewater

APN:
06812051

APN:
06812049

APN:
06823001

Hopkins A

APN:
06812053

APN:
06812054

APN:
06823008

Sample location – Outfall #1

Evaporation Ponds at Hopkins A

Legend

- Evaporation Pond 1
- Evaporation Pond 2
- Evaporation Pond 3
- Evaporation Pond 4
- Evaporation Pond 5
- Evaporation Pond 6
- Evaporation Pond 7
- DOGGR_Leases
- Parcels

N

1:3,258

0 200 400 800 Feet

E&B NATURAL RESOURCES

ZALCO LABORATORIES, INC.
Analytical & Consulting Services

4309 Armour Avenue
Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

June 2, 2015

Jennifer Brady
E & B Natural Resources Corp.
3000 James Rd
Bakersfield, CA 93308

TEL: (661) 428-6146
FAX: (661) 616-6179

Project ID:
RE: 1505137

Dear Jennifer Brady:

Zalco Laboratories, Inc. received 1 samples on 5/11/2015 for the analyses presented in the following report.

We appreciate your business and look forward to serving you in the future. Please feel free to call our office if you have any questions regarding these test results.

Sincerely,

Juan Magana
Project Manager
CC:

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Note: Samples analyzed for regulatory purposes should be put on ice immediately after sampling and received by the laboratory at temperatures between 0-6°C. Microbiological analysis requires samples to be at least 4-10°C when received at the laboratory. For additional information regarding the limitations of the method(s) referred to, please call us at 661-395-0539.

ZALCO LABORATORIES, INC.
Analytical & Consulting Services

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Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505137**
3000 James Rd	Project #:	Reported: 06/02/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505137-01**	Collected By: Justin Graves
Client Sample ID: Hopkins Evaporation	Date Collected: 5/11/2015 10:35:00AM

Analyte	Results	MDL	PQL		Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Alkalinity										
Total Alkalinity	2100		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Bicarbonate (HCO3)	2100		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Carbonate (CO3)	<10		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Hydroxide (OH)	<10		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
CAM, Toxicity (17 Metals)				*TTLC Limits*						
Antimony	<0.20		0.20	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Arsenic	<0.020		0.020	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Barium	0.64		0.10	*10000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Beryllium	<0.010		0.010	*75*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cadmium	<0.010		0.010	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Chromium	<0.050		0.050	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cobalt	<0.10		0.10	*8000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Copper	0.076		0.050	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Lead	<0.050		0.050	*1000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Mercury	<0.0020		0.0020	*20*	mg/L		SW846 7470A	5/12/15	5/12/15	SS
Molybdenum	<0.10		0.10	*3500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Nickel	<0.050		0.050	*2000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Selenium	<0.05		0.05	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Silver	<0.020		0.020	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Thallium	<0.50		0.50	*700*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Vanadium	<0.10		0.10	*2400*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Zinc	<0.050		0.050	*5000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
General Chemistry				*MCL Limits*						
Fluoride	<25	3.3	25	*2*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Nitrate as NO3	<20.0	1.86	20.0	*45*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Electrical Conductivity	12		0.010		mmhos/cm		SM 2510B	5/11/15	5/11/15	SAM
Bromide	9.3	0.15	1.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Chloride	2400	1.2	500		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
pH	7.91				pH Units		EPA 150.1	5/11/15	5/11/15	SAM
Sulfate as SO4	72	0.31	5.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Total Dissolved Solids	6800		10		mg/L		SM 2540C	5/13/15	5/13/15	MSS
Hardness										

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative

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Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505137**
3000 James Rd	Project #:	Reported: 06/02/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505137-01**	Collected By: Justin Graves
Client Sample ID: Hopkins Evaporation	Date Collected: 5/11/2015 10:35:00AM

Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Hardness									
Hardness (as CaCO3)	74		2.0	mg/L		SM 2340B	5/15/15	5/15/15	SS
Metals									
Lithium	0.33	0.0072	0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Metals - As Received									
Magnesium	10		0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Potassium	19		0.50	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Sodium	3300		70	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Calcium	13		0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Iron	<0.10		0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Boron	11		0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Barium	0.63		0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Copper	0.054		0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Silica (SiO2)	20		4.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Strontium	2.3		0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Manganese	<0.030		0.030	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Petroleum Hydrocarbons									
Diesel Range Hydrocarbons	15.4	0.20	0.50	mg/L		SW846 8015B	5/20/15	5/21/15	BIG
Gasoline Range Hydrocarbons	0.279	0.015	0.050	mg/L		SW846 8015B	5/21/15	5/21/15	HLP
Motor Oil Range Hydrocarbons	18.2		1.50	mg/L		SW846 8015B	5/20/15	5/21/15	BIG

Surrogates	% Recovery	Recovery Limits	Flag	
a,a,a-Trifluorotoluene	90.6	69-125		5/21/15 16:33

Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds									
Indeno(1,2,3-cd)pyrene	<10.0	1.9	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Naphthalene	<10.0	2.6	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Acenaphthylene	<10.0	2.7	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Acenaphthene	<10.0	2.9	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Fluorene	<10.0	2.5	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Phenanthrene	15.8	1.8	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Anthracene	<10.0	1.7	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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Analytical & Consulting Services

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Bakersfield, California 93308

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E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505137**
3000 James Rd	Project #:	Reported: 06/02/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505137-01** Collected By: Justin Graves

Client Sample ID: Hopkins Evaporation Date Collected: 5/11/2015 10:35:00AM

Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds									
Fluoranthene	<10.0	1.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Pyrene	<10.0	1.5	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (a) anthracene	<10.0	1.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Chrysene	<10.0	1.1	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (b) fluoranthene	<10.0	1.5	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (k) fluoranthene	<10.0	2.3	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (a) pyrene	<10.0	1.3	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Dibenz (a,h) anthracene	<10.0	2.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (g,h,i) perylene	<10.0	2.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM

Surrogates	% Recovery	Recovery Limits	Flag	
Nitrobenzene-d5	53.1	0-95		5/20/15 14:28
2-Fluorobiphenyl	49.7	0-92		5/20/15 14:28
Terphenyl-dl4	36.6	0-100		5/20/15 14:28

Subcontracted Analyses									
Gross Alpha	<15.0		15.0	pCi/L		SM 7110C	5/16/15	5/19/15	JMM
Radium-226	5.05		3.00	pCi/L		E903.1	5/18/15	5/21/15	JMM
Radium-228	<2.00		2.00	pCi/L		EPA Ra-05	5/28/15	5/30/15	JMM
Uranium (ug/L)	<20.0		20.0	pCi/L		E908	5/27/15	5/27/15	JMM
Volatile Organic Compounds									
m,p-Xylene	19.0	1.08	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Benzene	71.6	0.37	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Xylenes, total	28.2			ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Methyl tert-Butyl Ether	<5.00	0.67	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Ethylbenzene	6.52	0.28	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Toluene	36.3	0.31	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
o-Xylene	9.22	0.57	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	91.7	89-165		5/21/15 9:29
Toluene-d8	88.7	65-124		5/21/15 9:29
4-Bromofluorobenzene	94.3	94-114		5/21/15 9:29

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June 1, 2015

Zalco Laboratories, Inc.
4309 Armour Avenue
Bakersfield, CA 93308-4573

Lab ID : SP 1505241-001
Customer ID : 2-249

Sampled On : May 11, 2015-10:35
Sampled By : Not Available
Received On : May 12, 2015-11:30
Matrix : Water

Description : 1505137-01
Project : 1505137-01

Sample Result - Radio

Constituent	Result ± Error	MDA	Units	MCL/AL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Radio Chemistry[P]								
Gross Alpha	0.000 ± 5.07	8.51	pCi/L	15/5	900.0	05/16/15-07:00 2P1505675	900.0	05/19/15-16:00 2A1507607
Total Alpha Radium (226)	5.05 ± 0.873	0.470	pCi/L	3	903.0	05/18/15-19:30 2P1505776	903.0	05/21/15-13:40 2A1507600
Uranium	0.000 ± 0.581	0.300	pCi/L	20	908.0	05/27/15-06:55 2P1506101	908.0	05/27/15-22:38 2A1507894
Ra 228	0.000 ± 1.01	0.506	pCi/L	2	Ra - 05	05/28/15-19:30 2P1505775	Ra - 05	05/30/15-12:00 2A1508030

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: N/A * PQL adjusted for dilution.

MDA = Minimum Detectable Activity (Calculated at the 95% confidence level) = Data utilized by DHS to determine matrix interference.
MCL / AL = Maximum Contamination Level / Action Level. Alpha's Action Level of 5 pCi/L is based on the Assigned Value (AV).
AV = Assigned Value(Gross Alpha Result + (0.84 x Error)). CCR Section 64442: Drinking Water Compliance Note: Do the following
If Gross Alpha's (AV) exceeds 5 pCi/L run Uranium. If Gross Alpha's (AV) minus Uranium exceeds 5 pCi/L run Radium 226.

Drinking Water Compliance:
Gross Alpha (AV) minus Uranium is less than or equal to 15 pCi/L
Uranium is less than or equal to 20 pCi/L
Radium 226 + Radium 228 is less than or equal to 5 pCi/L

Note: Samples are held for 3-6 months prior to disposal.

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
TEL: (805)392-2000
Env FAX: (805)525-4172 / Ag FAX: (805)392-2063
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Office & Laboratory
563 E. Lindo Avenue
Chico, CA 95926
TEL: (530)343-5818
FAX: (530)343-3807
CA ELAP Certification No. 2670

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3442 Empresa Drive, Suite D
San Luis Obispo, CA 93401
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FAX: (805)783-2912
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Visalia, CA 93291
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FAX: (559)734-8435
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ZALCO LABORATORIES, INC.

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2186 Eastman Avenue, Suite 103, Ventura, CA 93003, (805) 477-0114, Fax (805) 477-0125
www.zalcolabs.com

CHAIN OF CUSTODY, ID# _____

Client PO: _____
Project ID: _____
Quote ID: _____

ANALYSIS REQUESTED 1505137

COMPANY E&B Nat. Resources
CONTACT Jennifer Brady
PHONE 661-428-6146 FAX _____
ADDRESS 3000 James Rd.
Bakersfield Ca. 93308
E-MAIL jbrady@ebresources.com
SAMPLER (SIGNATURE)

LAB #	SAMPLE DESCRIPTION	DATE	TIME	TYPE *	# OF CONTAINERS	GeoChem	TDS	Cam 17	Trace Elements	PAH (8270)	BTEX (8260)	TRPH (Fuel Fingerprint)	Radionuclides					TEMPERATURE (C)	Notes
1	Hopkins Evaporation	5/11/2015	10:35	AQ	12	X	X	X	X	X	X	X	X						27.8

COMMENTS
Turnaround Time:
Routine (# working days) ☐
Rush By ☐ Working Days
EDT ☐
State Form ☐
EMAIL ☐

Notes

Received Chilled ☐
Sample Preserved ☐
Sufficient Sample ☐
Received Short Hold Time ☐

Relinquished By:	Company	Date	Time	Received By:	Company:
Justin Graves	Zalco Laboratories Inc.	05/11/15	1405		Zalco

NOTE: Samples Discarded 30 days after results unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

* Sample Type Key: Aq-Aqueous; BS-Biosolid; DW-Drinking Water; GW-Groundwater; G-Gas LPG-Liquid Petroleum Gas; OL-Oil; P-Petroleum; S-Solid/Soil; ST-Storm water WW-Wastewater

Hopkins B

The Hopkins B lease ponds are located in Section 23, Township 27S, Range 19E, in the North Antelope Hills Oil Field near Lost Hills, California.

A representative wastewater sample was collected from the Hopkins B pond #1 to be analyzed in accordance with Order 13267 Attachment B listed constituents (see location map). Hopkins B pond #1 is the first pond to which oilfield wastewater discharges from the lease's oil production, and is the first in a series of four unlined wastewater ponds with final disposition for evaporation and/or percolation of the oilfield produced water.

The Hopkins B ponds may be regulated under a 1958 WDR #58-443 for the Antelope Hills Oil Field and is currently being reviewed by E&B with the assistance of the CVRWQCB.

Hopkins B

APN:
06810035

APN:
06810018

APN:
06810012

Sample location – Outfall #1

Surface Impoundments at Hopkins B

Legend

- Sump 1
- Sump 2
- Sump 3
- Sump 4
- DOGGR_Leases
- Parcels

N

1:2,000

0 125 250 500 Feet

E&B NATURAL RESOURCES

ZALCO LABORATORIES, INC.
Analytical & Consulting Services

4309 Armour Avenue
Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

June 2, 2015

Jennifer Brady
E & B Natural Resources Corp.
3000 James Rd
Bakersfield, CA 93308

TEL: (661) 428-6146
FAX: (661) 616-6179

Project ID:
RE: 1505135

Dear Jennifer Brady:

Zalco Laboratories, Inc. received 1 samples on 5/11/2015 for the analyses presented in the following report.

We appreciate your business and look forward to serving you in the future. Please feel free to call our office if you have any questions regarding these test results.

Sincerely,

Juan Magana
Project Manager
CC:

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505135**
3000 James Rd	Project #:	Reported: 06/02/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505135-01**	Collected By: Justin Graves
Client Sample ID: Hopkins B	Date Collected: 5/11/2015 9:55:00AM

Analyte	Results	MDL	PQL		Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Alkalinity										
Total Alkalinity	1500		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Bicarbonate (HCO3)	1500		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Carbonate (CO3)	<10		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Hydroxide (OH)	<10		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
CAM, Toxicity (17 Metals)				*TTLC Limits*						
Antimony	<2.0		2.0	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Arsenic	<0.20		0.20	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Barium	3.5		1.0	*10000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Beryllium	<0.10		0.10	*75*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cadmium	<0.10		0.10	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Chromium	<0.50		0.50	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cobalt	<1.0		1.0	*8000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Copper	0.55		0.50	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Lead	<0.50		0.50	*1000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Mercury	<0.0020		0.0020	*20*	mg/L		SW846 7470A	5/12/15	5/12/15	SS
Molybdenum	<1.0		1.0	*3500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Nickel	<0.50		0.50	*2000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Selenium	<0.50		0.50	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Silver	<0.20		0.20	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Thallium	<5.0		5.0	*700*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Vanadium	<1.0		1.0	*2400*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Zinc	<0.50		0.50	*5000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
General Chemistry				*MCL Limits*						
Fluoride	<1.0	0.13	1.0	*2*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Nitrate as NO3	<20.0	1.86	20.0	*45*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Electrical Conductivity	32		0.010		mmhos/cm		SM 2510B	5/11/15	5/11/15	SAM
Bromide	46	0.15	1.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Chloride	11000	2.4	1000		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
pH	7.28				pH Units		EPA 150.1	5/11/15	5/11/15	SAM
Sulfate as SO4	69	0.31	5.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Total Dissolved Solids	18000		10		mg/L		SM 2540C	5/13/15	5/13/15	MSS
Hardness										

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505135**
3000 James Rd	Project #:	Reported: 06/02/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505135-01**	Collected By: Justin Graves
Client Sample ID: Hopkins B	Date Collected: 5/11/2015 9:55:00AM

Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Hardness									
Hardness (as CaCO3)	400		2.0	mg/L		SM 2340B	5/15/15	5/15/15	SS
Metals									
Lithium	1.6	0.072	1.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Metals - As Received									
Magnesium	50		0.50	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Potassium	69		5.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Sodium	7800		350	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Calcium	77		0.50	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Iron	<1.0		1.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Boron	48		1.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Barium	3.7		1.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Copper	0.53		0.50	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Silica (SiO2)	<40		40	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Strontium	15		1.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Manganese	<0.30		0.30	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Petroleum Hydrocarbons									
Diesel Range Hydrocarbons	25.4	0.20	0.50	mg/L		SW846 8015B	5/20/15	5/21/15	BIG
Gasoline Range Hydrocarbons	0.088	0.015	0.050	mg/L		SW846 8015B	5/21/15	5/21/15	HLP
Motor Oil Range Hydrocarbons	29.6		1.50	mg/L		SW846 8015B	5/20/15	5/21/15	BIG

Surrogates	% Recovery	Recovery Limits	Flag			
a,a,a-Trifluorotoluene	91.3	69-125				5/21/15 16:33

Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds									
Indeno(1,2,3-cd)pyrene	<10.0		10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Naphthalene	<10.0		10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Acenaphthylene	<10.0	0.5	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Acenaphthene	<10.0	0.5	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Fluorene	<10.0	0.5	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Phenanthrene	5.4	0.7	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Anthracene	<10.0	0.7	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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Bakersfield, California 93308

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FAX (661) 395-3069

E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505135**
3000 James Rd	Project #:	Reported: 06/02/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505135-01**	Collected By: Justin Graves
Client Sample ID: Hopkins B	Date Collected: 5/11/2015 9:55:00AM

Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds									
Fluoranthene	<10.0	0.8	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Pyrene	<10.0	0.8	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Benzo (a) anthracene	<10.0	0.8	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Chrysene	<10.0	0.8	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Benzo (b) fluoranthene	<10.0	0.7	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Benzo (k) fluoranthene	<10.0	0.8	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Benzo (a) pyrene	<10.0	0.7	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Dibenz (a,h) anthracene	<10.0	0.6	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM
Benzo (g,h,i) perylene	<10.0	0.8	10.0	ug/L		SW846 8270C	5/13/15	5/14/15	JMM

Surrogates	% Recovery	Recovery Limits	Flag	
Nitrobenzene-d5	9.27	0-95		5/14/15 12:05
2-Fluorobiphenyl	7.02	0-92		5/14/15 12:05
Terphenyl-dl4	4.37	0-100		5/14/15 12:05

Subcontracted Analyses									
Gross Alpha	<15.0		15.0	pCi/L		SM 7110C	5/16/15	5/19/15	JMM
Radium-226	23.0		3.00	pCi/L		E903.1	5/18/15	5/21/15	JMM
Radium-228	<2.00		2.00	pCi/L		EPA Ra-05	5/28/15	5/30/15	JMM
Uranium (ug/L)	<20.0		20.0	pCi/L		E908	5/27/15	5/27/15	JMM
Volatile Organic Compounds									
m,p-Xylene	<5.00	1.08	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Benzene	8.94	0.37	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Xylenes, total	0.00			ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Methyl tert-Butyl Ether	<5.00	0.67	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Ethylbenzene	7.64	0.28	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Toluene	17.5	0.31	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
o-Xylene	<5.00	0.57	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	99.8	89-165		5/21/15 9:29
Toluene-d8	86.5	65-124		5/21/15 9:29
4-Bromofluorobenzene	**93.9***	94-114	S-GC	5/21/15 9:29

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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June 1, 2015

Zalco Laboratories, Inc.
4309 Armour Avenue
Bakersfield, CA 93308-4573

Lab ID : SP 1505238-001
Customer ID : 2-249

Sampled On : May 11, 2015-09:55
Sampled By : Not Available
Received On : May 12, 2015-11:30
Matrix : Water

Description : 1505135-01
Project : 1505135-01

Sample Result - Radio

Constituent	Result ± Error	MDA	Units	MCL/AL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Radio Chemistry[P]								
Gross Alpha	10.6 ± 8.83	11.0	pCi/L	15/5	900.0	05/16/15-07:00 2P1505675	900.0	05/19/15-16:00 2A1507602
Total Alpha Radium (226)	23.0 ± 1.83	0.470	pCi/L	3	903.0	05/18/15-19:30 2P1505776	903.0	05/21/15-12:40 2A1507600
Uranium	0.000 ± 0.474	0.300	pCi/L	20	908.0	05/27/15-06:55 2P1506101	908.0	05/27/15-21:23 2A1507894
Ra 228	0.001 ± 1.02	0.506	pCi/L	2	Ra - 05	05/28/15-19:30 2P1505775	Ra - 05	05/30/15-11:20 2A1508030

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: N/A * PQL adjusted for dilution.

MDA = Minimum Detectable Activity (Calculated at the 95% confidence level) = Data utilized by DHS to determine matrix interference.
MCL / AL = Maximum Contamination Level / Action Level. Alpha's Action Level of 5 pCi/L is based on the Assigned Value (AV).
AV = Assigned Value(Gross Alpha Result + (0.84 x Error)). CCR Section 64442: Drinking Water Compliance Note: Do the following
If Gross Alpha's (AV) exceeds 5 pCi/L run Uranium. If Gross Alpha's (AV) minus Uranium exceeds 5 pCi/L run Radium 226.

Drinking Water Compliance:
Gross Alpha (AV) minus Uranium is less than or equal to 15 pCi/L
Uranium is less than or equal to 20 pCi/L
Radium 226 + Radium 228 is less than or equal to 5 pCi/L

Note: Samples are held for 3-6 months prior to disposal.

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
TEL: (805)392-2000
Env FAX: (805)525-4172 / Ag FAX: (805)392-2063
CA ELAP Certification No. 1573

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209)942-0182
FAX: (209)942-0423
CA ELAP Certification No. 1563

Office & Laboratory
563 E. Lindo Avenue
Chico, CA 95926
TEL: (530)343-5818
FAX: (530)343-3807
CA ELAP Certification No. 2670

Office & Laboratory
3442 Empresa Drive, Suite D
San Luis Obispo, CA 93401
TEL: (805)783-2940
FAX: (805)783-2912
CA ELAP Certification No. 2775

Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
TEL: (559)734-9473
FAX: (559)734-8435
CA ELAP Certification No. 2810

ZALCO LABORATORIES, INC.

4309 Armour Avenue, Bakersfield, CA 93308 (661) 395-0539 FAX (661) 395-3069
2186 Eastman Avenue, Suite 103, Ventura, CA 93003, (805) 477-0114, Fax (805) 477-0125
www.zalcolabs.com

CHAIN OF CUSTODY, ID# _____

Client PO: _____
Project ID: _____
Quote ID: _____

ANALYSIS REQUESTED 1505135

COMPANY **E & B Natural Resources**
CONTACT Jennifer Brady
PHONE 661-428-6146 FAX _____
ADDRESS 3000 James Road
Bakersfield, CA 93308
E-MAIL jbrady@edresources.com
SAMPLER (SIGNATURE) _____

LAB #	SAMPLE DESCRIPTION	DATE	TIME	TYPE *	# OF CONTAINERS	RWQCB Ponds Geo (less Sulfides)	CAM 17	Trace Elements	PNA (8270)	BTEX (8260)	TPH (Fuel Fingerprint)	Radionuclides					No Sample Available (Dry Pond)	TEMPERATURE (C)	Notes
1	Hopkins B	5/11/2015	9:55	AQ	12	x	x	x	x	x	x	x							

COMMENTS
Turnaround Time:
Routine (# working days) ☐
Rush By ☐ Working Days
EDT ☐
State Form ☐
EMAIL ☐
Notes

Relinquished By:	Company	Date	Time	Received By:	Company:
Justin Graves	Zalco Laboratories Inc.	~~05/08/15~~	14:05		Zalco

NOTE: Samples Discarded 30 days after results unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

* Sample Type Key: Aq-Aqueous; BS-Biosolid; DW-Drinking Water; GW-Groundwater; G-Gas LPG-Liquid Petroleum Gas; OL-Oil; P-Petroleum; S-Solid/Soil; ST-Storm water WW-Wastewater

Phippen

The Phippen lease ponds are located in Section 8, Township 28S, Range 20 E, in the Antelope Hills Oil Field near Lost Hills, California.

A representative wastewater sample was collected from the Phippen pond #1 to be analyzed in accordance with Order 13267 Attachment B listed constituents (see location map). Phippen pond #1 is the first pond to which oilfield wastewater discharges from the lease's oil production, and is the first in a series of two unlined wastewater ponds at the Phippen lease. The wastewater is then pumped to the Williams pond #1 and ultimately discharges to the Hopkins A Evaporation Ponds.

The Phippen ponds are regulated by WDR #58-443 and a renewal of the WDR was submitted to the CVRWQCB in November 2013.

Sample location – Outfall #1
APN:
08512024
Pickrell-Mitchel
APN:
08512015
Phippen
Surface Impoundments at Phippen
1:1,120
Legend
Sump 1
Sump 2
DOGGR_Leases
Parcels
0
70
140
280
Feet
NATURAL RESOURCES

ZALCO LABORATORIES, INC.
Analytical & Consulting Services

4309 Armour Avenue
Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

June 3, 2015

Jennifer Brady
E & B Natural Resources Corp.
3000 James Rd
Bakersfield, CA 93308

TEL: (661) 428-6146
FAX: (661) 616-6179

Project ID:
RE: 1505141

Dear Jennifer Brady:

Zalco Laboratories, Inc. received 2 samples on 5/11/2015 for the analyses presented in the following report.

We appreciate your business and look forward to serving you in the future. Please feel free to call our office if you have any questions regarding these test results.

Sincerely,

Juan Magana
Project Manager
CC:

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505141**
3000 James Rd	Project #:	Reported: 06/03/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505141-01**	Collected By: Justin Graves
Client Sample ID: Phippen	Date Collected: 5/11/2015 11:25:00AM

Analyte	Results	PQL		Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Alkalinity									
Total Alkalinity	1800	10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Bicarbonate (HCO3)	1700	10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Carbonate (CO3)	110	10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Hydroxide (OH)	<10	10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
CAM, Toxicity (17 Metals)			*TTLC Limits*						
Antimony	<0.20	0.20	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Arsenic	0.027	0.020	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Barium	1.1	0.10	*10000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Beryllium	<0.010	0.010	*75*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cadmium	<0.010	0.010	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Chromium	<0.050	0.050	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cobalt	<0.10	0.10	*8000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Copper	0.065	0.050	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Lead	<0.050	0.050	*1000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Mercury	<0.0020	0.0020	*20*	mg/L		SW846 7470A	5/12/15	5/12/15	SS
Molybdenum	<0.10	0.10	*3500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Nickel	<0.050	0.050	*2000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Selenium	<0.05	0.05	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Silver	<0.020	0.020	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Thallium	<0.50	0.50	*700*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Vanadium	<0.10	0.10	*2400*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Zinc	<0.050	0.050	*5000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
General Chemistry			*MCL Limits*						
Fluoride	<1.0	1.0	*2*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Nitrate as NO3	<20.0	20.0	*45*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Electrical Conductivity	19	0.010		mmhos/cm		SM 2510B	5/11/15	5/11/15	SAM
Bromide	23	1.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Chloride	5600	500		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
pH	8.44			pH Units		EPA 150.1	5/11/15	5/11/15	SAM
Sulfate as SO4	220	5.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Total Dissolved Solids	11000	10		mg/L		SM 2540C	5/13/15	5/13/15	MSS
Hardness									

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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ZALCO LABORATORIES, INC.
Analytical & Consulting Services

4309 Armour Avenue
Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505141**
3000 James Rd	Project #:	Reported: 06/03/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505141-01**	Collected By: Justin Graves
Client Sample ID: Phippen	Date Collected: 5/11/2015 11:25:00AM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Hardness								
Hardness (as CaCO3)	180	2.0	mg/L		SM 2340B	5/15/15	5/15/15	SS
Metals								
Lithium	0.74	0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Metals - As Received								
Magnesium	37	0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Potassium	27	0.50	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Sodium	6400	70	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Calcium	11	0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Iron	<0.10	0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Boron	19	0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Barium	0.71	0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Copper	0.051	0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Silica (SiO2)	32	4.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Strontium	3.8	0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Manganese	<0.030	0.030	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Semivolatile Organic Compounds								
Indeno(1,2,3-cd)pyrene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Naphthalene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Acenaphthylene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Acenaphthene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Fluorene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Phenanthrene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Anthracene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Fluoranthene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Pyrene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (a) anthracene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Chrysene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (b) fluoranthene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (k) fluoranthene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (a) pyrene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Dibenz (a,h) anthracene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (g,h,i) perylene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM

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E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505141**
3000 James Rd	Project #:	Reported: 06/03/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505141-01**	Collected By: Justin Graves
Client Sample ID: Phippen	Date Collected: 5/11/2015 11:25:00AM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds								
Surrogates		**% Recovery**	**Recovery Limits**	**Flag**				
Nitrobenzene-d5		61.2	0-95				5/20/15 14:28	
2-Fluorobiphenyl		39.8	0-92				5/20/15 14:28	
Terphenyl-dl4		12.9	0-100				5/20/15 14:28	
Subcontracted Analyses								
Gross Alpha	<15.0	15.0		pCi/L	SM 7110C	5/26/15	5/27/15	JMM
Radium-226	5.40	3.00		pCi/L	E903.1	5/18/15	5/21/15	JMM
Radium-228	<2.00	2.00		pCi/L	EPA Ra-05	5/28/15	5/30/15	JMM
Uranium (ug/L)	<20.0	20.0		pCi/L	E908	5/29/15	5/29/15	JMM
Volatile Organic Compounds								
m,p-Xylene	9.34	5.00		ug/L	SW846 8260B	5/21/15	5/21/15	HLP
Benzene	<5.00	5.00		ug/L	SW846 8260B	5/21/15	5/21/15	HLP
Xylenes, total	9.34			ug/L	SW846 8260B	5/21/15	5/21/15	HLP
Methyl tert-Butyl Ether	<5.00	5.00		ug/L	SW846 8260B	5/21/15	5/21/15	HLP
Ethylbenzene	<5.00	5.00		ug/L	SW846 8260B	5/21/15	5/21/15	HLP
Toluene	8.30	5.00		ug/L	SW846 8260B	5/21/15	5/21/15	HLP
o-Xylene	<5.00	5.00		ug/L	SW846 8260B	5/21/15	5/21/15	HLP
Surrogates		**% Recovery**	**Recovery Limits**	**Flag**				
1,2-Dichloroethane-d4		**88.3***	89-165	S-GC			5/21/15 9:29	
Toluene-d8		90.0	65-124				5/21/15 9:29	
4-Bromofluorobenzene		**89.2***	94-114	S-GC			5/21/15 9:29	

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E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505141**
3000 James Rd	Project #:	Reported: 06/03/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505141-02**
Client Sample ID: Mitchel

Collected By:
Date Collected: 6/1/2015 1:50:00PM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Petroleum Hydrocarbons								
Diesel Range Hydrocarbons	58.6	5.00	mg/L		SW846 8015B	6/2/15	6/2/15	BIG
Gasoline Range Hydrocarbons	0.051	0.050	mg/L		SW846 8015B	6/2/15	6/2/15	HLP
Motor Oil Range Hydrocarbons	30.4	15.0	mg/L		SW846 8015B	6/2/15	6/2/15	BIG

Surrogates	% Recovery	Recovery Limits	Flag		
a,a,a-Trifluorotoluene	82.9	69-125		6/2/15	9:47

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June 1, 2015

Zalco Laboratories, Inc.
4309 Armour Avenue
Bakersfield, CA 93308-4573

Description : 1505141-01
Project : 1505141-01

Lab ID : SP 1505243-001
Customer ID : 2-249

Sampled On : May 11, 2015-11:25
Sampled By : Not Available
Received On : May 12, 2015-11:30
Matrix : Water

Sample Result - Radio

Constituent	Result ± Error	MDA	Units	MCL/AL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Radio Chemistry[P]								
Gross Alpha	4.58 ± 6.63	9.50	pCi/L	15/5	900.0	05/26/15-08:00 2P1506046	900.0	05/27/15-08:00 2A1507903
Total Alpha Radium (226)	5.40 ± 0.899	0.470	pCi/L	3	903.0	05/18/15-19:30 2P1505776	903.0	05/21/15-14:20 2A1507600
Uranium	0.000 ± 0.492	0.300	pCi/L	20	908.0	05/29/15-06:15 2P1506220	908.0	05/29/15-15:51 2A1508054
Ra 228	0.000 ± 1.10	0.506	pCi/L	2	Ra - 05	05/28/15-19:30 2P1505775	Ra - 05	05/30/15-12:20 2A1508030

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: N/A * PQL adjusted for dilution.

MDA = Minimum Detectable Activity (Calculated at the 95% confidence level) = Data utilized by DHS to determine matrix interference.
MCL / AL = Maximum Contamination Level / Action Level. Alpha's Action Level of 5 pCi/L is based on the Assigned Value (AV).
AV = Assigned Value(Gross Alpha Result + (0.84 x Error)). CCR Section 64442: Drinking Water Compliance Note: Do the following
If Gross Alpha's (AV) exceeds 5 pCi/L run Uranium. If Gross Alpha's (AV) minus Uranium exceeds 5 pCi/L run Radium 226.

Drinking Water Compliance:
Gross Alpha (AV) minus Uranium is less than or equal to 15 pCi/L
Uranium is less than or equal to 20 pCi/L
Radium 226 + Radium 228 is less than or equal to 5 pCi/L

Note: Samples are held for 3-6 months prior to disposal.

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
TEL: (805)392-2000
Env FAX: (805)525-4172 / Ag FAX: (805)392-2063
CA ELAP Certification No. 1573

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209)942-0182
FAX: (209)942-0423
CA ELAP Certification No. 1563

Office & Laboratory
563 E. Lindo Avenue
Chico, CA 95926
TEL: (530)343-5818
FAX: (530)343-3807
CA ELAP Certification No. 2670

Office & Laboratory
3442 Empresa Drive, Suite D
San Luis Obispo, CA 93401
TEL: (805)783-2940
FAX: (805)783-2912
CA ELAP Certification No. 2775

Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
TEL: (559)734-9473
FAX: (559)734-8435
CA ELAP Certification No. 2810

ZALCO LABORATORIES, INC.

4309 Armour Avenue, Bakersfield, CA 93308 (661) 395-0539 FAX (661) 395-3069
2186 Eastman Avenue, Suite 103, Ventura, CA 93003, (805) 477-0114, Fax (805) 477-0125
www.zalcolabs.com

CHAIN OF CUSTODY, ID# _____

Client PO: _____
Project ID: _____
Quote ID: _____

ANALYSIS REQUESTED 1505141

COMPANY E&B Nat. Resources
CONTACT Jennifer Brady
PHONE 661-428-6146 FAX
ADDRESS 3000 James Rd.
Bakersfield Ca. 93308
E-MAIL jbrady@ebresources.com
SAMPLER (SIGNATURE)

COMMENTS
Turnaround Time:
Routine (# working days) ☐
Rush By ☐ Working Days
EDT ☐
State Form ☐
EMAIL ☐
Notes

LAB #	SAMPLE DESCRIPTION	DATE	TIME	TYPE *	# OF CONTAINERS	GeoChem	TDS	Cam 17	Trace Elements	PAH (8270)	BTEX (8260)	TRPH (Fuel Fingerprint)	Radionuclides					TEMPERATURE (C)	Notes
1	Phippen	5/11/2015	11:25	AQ	12	X	X	X	X	X	X	X	X						25.4

Logged in Subbed Printed
Scanned Short Hold Time

Relinquished By:	Company	Date	Time	Received By:	Company:
Justin Graves	Zalco Laboratories Inc.	05/11/15	1405		Zalco

NOTE: Samples Discarded 30 days after results unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

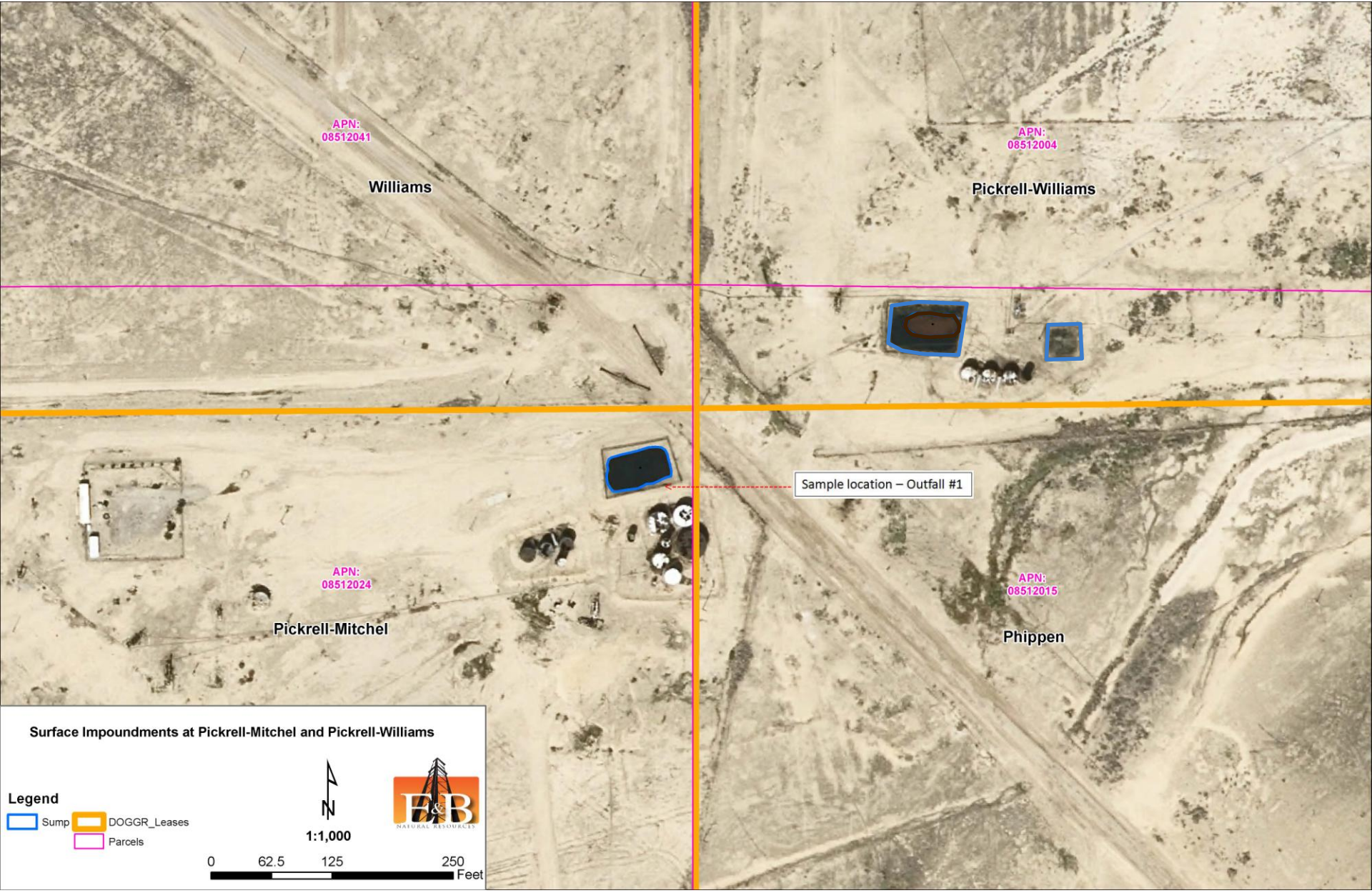
* Sample Type Key: Aq-Aqueous; BS-Biosolid; DW-Drinking Water; GW-Groundwater; G-Gas LPG-Liquid Petroleum Gas; OL-Oil; P-Petroleum; S-Solid/Soil; ST-Storm water WW-Wastewater

Pickrell-Mitchel & Pickrell-Williams

The Pickrell-Mitchel lease pond and the Pickrell-Williams lease ponds are located in Section 7 and Section 5, Township 28S, Range 20E, respectively, in the Antelope Hills Oil Field near Lost Hills, California.

A representative wastewater sample was collected from the Pickrell-Mitchel pond #1 to be analyzed in accordance with Order 13267 Attachment B listed constituents (see location map). Pickrell-Mitchel pond #1 is the first pond to which oilfield wastewater discharges from the lease's oil production, and is the first pond in a series of two unlined ponds on the Pickrell-Mitchel and on Pickrell-Williams leases. The wastewater from the Pickrell-Mitchel pond #1 is pumped to the Pickrell-Williams pond #1, then to Williams pond #1, and ultimately discharges to the Hopkins A Evaporation Ponds. The oilfield production from Pickrell-Williams is all directed to the Williams lease facilities, and no other wastewater is discharged to the Pickrell-Williams pond #1 than the Pickrell-Mitchel produced water. The Pickrell-Williams pond #2 is out of service and no piping is connected to that pond.

The Pickrell-Mitchel and Pickrell-Williams ponds are regulated by WDR #69-111 and a renewal of the WDR was submitted to the CVRWQCB in November 2013.


APN:
08512041
Williams
APN:
08512004
Pickrell-Williams
Sample location – Outfall #1
APN:
08512024
Pickrell-Mitchel
APN:
08512015
Phippen
Surface Impoundments at Pickrell-Mitchel and Pickrell-Williams
Legend
Sump
DOGGR_Leases
Parcels
N
1:1,000
0
62.5
125
250
Feet

ZALCO LABORATORIES, INC.
Analytical & Consulting Services

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Bakersfield, California 93308

(661) 395-0539
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June 3, 2015

Jennifer Brady
E & B Natural Resources Corp.
3000 James Rd
Bakersfield, CA 93308

TEL: (661) 428-6146
FAX: (661) 616-6179

Project ID:
RE: 1505140

Dear Jennifer Brady:

Zalco Laboratories, Inc. received 2 samples on 5/11/2015 for the analyses presented in the following report.

We appreciate your business and look forward to serving you in the future. Please feel free to call our office if you have any questions regarding these test results.

Sincerely,

Juan Magana
Project Manager
CC:

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505140**
3000 James Rd	Project #:	Reported: 06/03/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505140-01**	Collected By: Justin Graves
Client Sample ID: Mitchel	Date Collected: 5/11/2015 11:15:00AM

Analyte	Results	PQL		Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Alkalinity									
Total Alkalinity	2300	10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Bicarbonate (HCO3)	2200	10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Carbonate (CO3)	77	10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Hydroxide (OH)	<10	10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
CAM, Toxicity (17 Metals)			*TTLC Limits*						
Antimony	<0.20	0.20	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Arsenic	<0.020	0.020	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Barium	0.42	0.10	*10000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Beryllium	<0.010	0.010	*75*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cadmium	<0.010	0.010	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Chromium	<0.050	0.050	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cobalt	<0.10	0.10	*8000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Copper	0.066	0.050	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Lead	<0.050	0.050	*1000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Mercury	<0.0020	0.0020	*20*	mg/L		SW846 7470A	5/12/15	5/12/15	SS
Molybdenum	<0.10	0.10	*3500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Nickel	<0.050	0.050	*2000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Selenium	<0.05	0.05	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Silver	<0.020	0.020	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Thallium	<0.50	0.50	*700*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Vanadium	<0.10	0.10	*2400*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Zinc	<0.050	0.050	*5000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
General Chemistry			*MCL Limits*						
Fluoride	<25	25	*2*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Nitrate as NO3	<20.0	20.0	*45*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Electrical Conductivity	11	0.010		mmhos/cm		SM 2510B	5/11/15	5/11/15	SAM
Bromide	7.6	1.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Chloride	2100	500		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
pH	8.42			pH Units		EPA 150.1	5/11/15	5/11/15	SAM
Sulfate as SO4	62	5.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Total Dissolved Solids	6000	10		mg/L		SM 2540C	5/13/15	5/13/15	MSS
Hardness									

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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ZALCO LABORATORIES, INC.
Analytical & Consulting Services

4309 Armour Avenue
Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505140**
3000 James Rd	Project #:	Reported: 06/03/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505140-01**	Collected By: Justin Graves
Client Sample ID: Mitchel	Date Collected: 5/11/2015 11:15:00AM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Hardness								
Hardness (as CaCO3)	41	2.0	mg/L		SM 2340B	5/15/15	5/15/15	SS
Metals								
Lithium	0.32	0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Metals - As Received								
Magnesium	5.2	0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Potassium	13	0.50	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Sodium	3500	70	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Calcium	7.8	0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Iron	<0.10	0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Boron	11	0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Barium	0.39	0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Copper	0.054	0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Silica (SiO2)	21	4.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Strontium	1.1	0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Manganese	<0.030	0.030	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Semivolatile Organic Compounds								
Indeno(1,2,3-cd)pyrene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Naphthalene	14.3	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Acenaphthylene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Acenaphthene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Fluorene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Phenanthrene	85.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Anthracene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Fluoranthene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Pyrene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (a) anthracene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Chrysene	11.4	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (b) fluoranthene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (k) fluoranthene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (a) pyrene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Dibenz (a,h) anthracene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (g,h,i) perylene	<10.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM

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E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505140**
3000 James Rd	Project #:	Reported: 06/03/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505140-01**	Collected By: Justin Graves
Client Sample ID: Mitchel	Date Collected: 5/11/2015 11:15:00AM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds								
Surrogates		**% Recovery**	**Recovery Limits**	**Flag**				
Nitrobenzene-d5		58.0	0-95				5/20/15 14:28	
2-Fluorobiphenyl		68.5	0-92				5/20/15 14:28	
Terphenyl-dl4		**124***	0-100				5/20/15 14:28	
Subcontracted Analyses								
Gross Alpha	<15.0	15.0		pCi/L	SM 7110C	5/16/15	5/19/15	MCS
Radium-226	4.07	3.00		pCi/L	E903.1	5/18/15	5/21/15	MCS
Radium-228	<2.00	2.00		pCi/L	EPA Ra-05	5/28/15	5/30/15	MCS
Uranium (ug/L)	<20.0	20.0		pCi/L	E908	5/27/15	5/27/15	MCS
Volatile Organic Compounds								
m,p-Xylene	52.0	5.00		ug/L	SW846 8260B	5/21/15	5/21/15	HLP
Benzene	21.4	5.00		ug/L	SW846 8260B	5/21/15	5/21/15	HLP
Xylenes, total	82.8			ug/L	SW846 8260B	5/21/15	5/21/15	HLP
Methyl tert-Butyl Ether	<5.00	5.00		ug/L	SW846 8260B	5/21/15	5/21/15	HLP
Ethylbenzene	13.4	5.00		ug/L	SW846 8260B	5/21/15	5/21/15	HLP
Toluene	45.9	5.00		ug/L	SW846 8260B	5/21/15	5/21/15	HLP
o-Xylene	30.8	5.00		ug/L	SW846 8260B	5/21/15	5/21/15	HLP
Surrogates		**% Recovery**	**Recovery Limits**	**Flag**				
1,2-Dichloroethane-d4		97.2	89-165				5/21/15 9:29	
Toluene-d8		96.8	65-124				5/21/15 9:29	
4-Bromofluorobenzene		**89.6***	94-114	S-GC			5/21/15 9:29	

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E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505140**
3000 James Rd	Project #:	Reported: 06/03/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505140-02**	Collected By:
Client Sample ID: Mitchel	Date Collected: 6/1/2015 1:50:00PM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Petroleum Hydrocarbons								
Diesel Range Hydrocarbons	1010	15.0	mg/L		SW846 8015B	6/2/15	6/2/15	BIG
Gasoline Range Hydrocarbons	0.528	0.050	mg/L		SW846 8015B	6/2/15	6/2/15	HLP
Motor Oil Range Hydrocarbons	1200	45.0	mg/L		SW846 8015B	6/2/15	6/2/15	BIG

Surrogates	% Recovery	Recovery Limits	Flag	
a,a,a-Trifluorotoluene	99.5	69-125		6/2/15 9:47

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June 1, 2015

Zalco Laboratories, Inc.
4309 Armour Avenue
Bakersfield, CA 93308-4573

Lab ID : SP 1505242-001
Customer ID : 2-249

Sampled On : May 11, 2015-11:15
Sampled By : Not Available
Received On : May 12, 2015-11:30
Matrix : Water

Description : 1505140-01
Project : 1505140-01

Sample Result - Radio

Constituent	Result ± Error	MDA	Units	MCL/AL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Radio Chemistry[P]								
Gross Alpha	2.73 ± 5.38	7.95	pCi/L	15/5	900.0	05/16/15-07:00 2P1505675	900.0	05/19/15-18:00 2A1507602
Total Alpha Radium (226)	4.07 ± 0.789	0.470	pCi/L	3	903.0	05/18/15-19:30 2P1505776	903.0	05/21/15-14:00 2A1507600
Uranium	0.000 ± 0.474	0.300	pCi/L	20	908.0	05/27/15-06:55 2P1506101	908.0	05/27/15-23:03 2A1507894
Ra 228	0.000 ± 1.14	0.400	pCi/L	2	Ra - 05	05/28/15-19:30 2P1505775	Ra - 05	05/30/15-11:40 2A1508029

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: N/A * PQL adjusted for dilution.

MDA = Minimum Detectable Activity (Calculated at the 95% confidence level) = Data utilized by DHS to determine matrix interference.
MCL / AL = Maximum Contamination Level / Action Level. Alpha's Action Level of 5 pCi/L is based on the Assigned Value (AV).
AV = Assigned Value(Gross Alpha Result + (0.84 x Error)). CCR Section 64442: Drinking Water Compliance Note: Do the following
If Gross Alpha's (AV) exceeds 5 pCi/L run Uranium. If Gross Alpha's (AV) minus Uranium exceeds 5 pCi/L run Radium 226.

Drinking Water Compliance:
Gross Alpha (AV) minus Uranium is less than or equal to 15 pCi/L
Uranium is less than or equal to 20 pCi/L
Radium 226 + Radium 228 is less than or equal to 5 pCi/L

Note: Samples are held for 3-6 months prior to disposal.

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
TEL: (805)392-2000
Env FAX: (805)525-4172 / Ag FAX: (805)392-2063
CA ELAP Certification No. 1573

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209)942-0182
FAX: (209)942-0423
CA ELAP Certification No. 1563

Office & Laboratory
563 E. Lindo Avenue
Chico, CA 95926
TEL: (530)343-5818
FAX: (530)343-3807
CA ELAP Certification No. 2670

Office & Laboratory
3442 Empresa Drive, Suite D
San Luis Obispo, CA 93401
TEL: (805)783-2940
FAX: (805)783-2912
CA ELAP Certification No. 2775

Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
TEL: (559)734-9473
FAX: (559)734-8435
CA ELAP Certification No. 2810

ZALCO LABORATORIES, INC.

4309 Armour Avenue, Bakersfield, CA 93308 (661) 395-0539 FAX (661) 395-3069
2186 Eastman Avenue, Suite 103, Ventura, CA 93003, (805) 477-0114, Fax (805) 477-0125
www.zalcolabs.com

CHAIN OF CUSTODY, ID# _____

Client PO: _____
Project ID: _____
Quote ID: _____

ANALYSIS REQUESTED 15051840

COMPANY: E&B Nat. Resources
CONTACT: Jennifer Brady
PHONE: 661-428-6146 FAX: _____
ADDRESS: 3000 James Rd.
Bakersfield Ca. 93308
E-MAIL: jbrady@ebresources.com
SAMPLER (SIGNATURE): _____

LAB #	SAMPLE DESCRIPTION	DATE	TIME	TYPE *	# OF CONTAINERS	GeoChem	TDS	Cam 17	Trace Elements	PAH (8270)	BTEX (8260)	TRPH (Fuel Fingerprint)	Radionuclides					TEMPERATURE (C)	Notes
1	Mitchel	5/11/2015	11:15	AQ	12	X	X	X	X	X	X	X	X						27
																			X

COMMENTS
Turnaround Time:
Routine (# working days) ☐
Rush By ☐ Working Days
EDT ☐
State Form ☐
EMAIL ☐

Relinquished By:	Company	Date	Time	Received By:	Company:
Justin Graves	Zalco Laboratories Inc.	05/11/15	1405		Zalco

NOTE: Samples Discarded 30 days after results unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

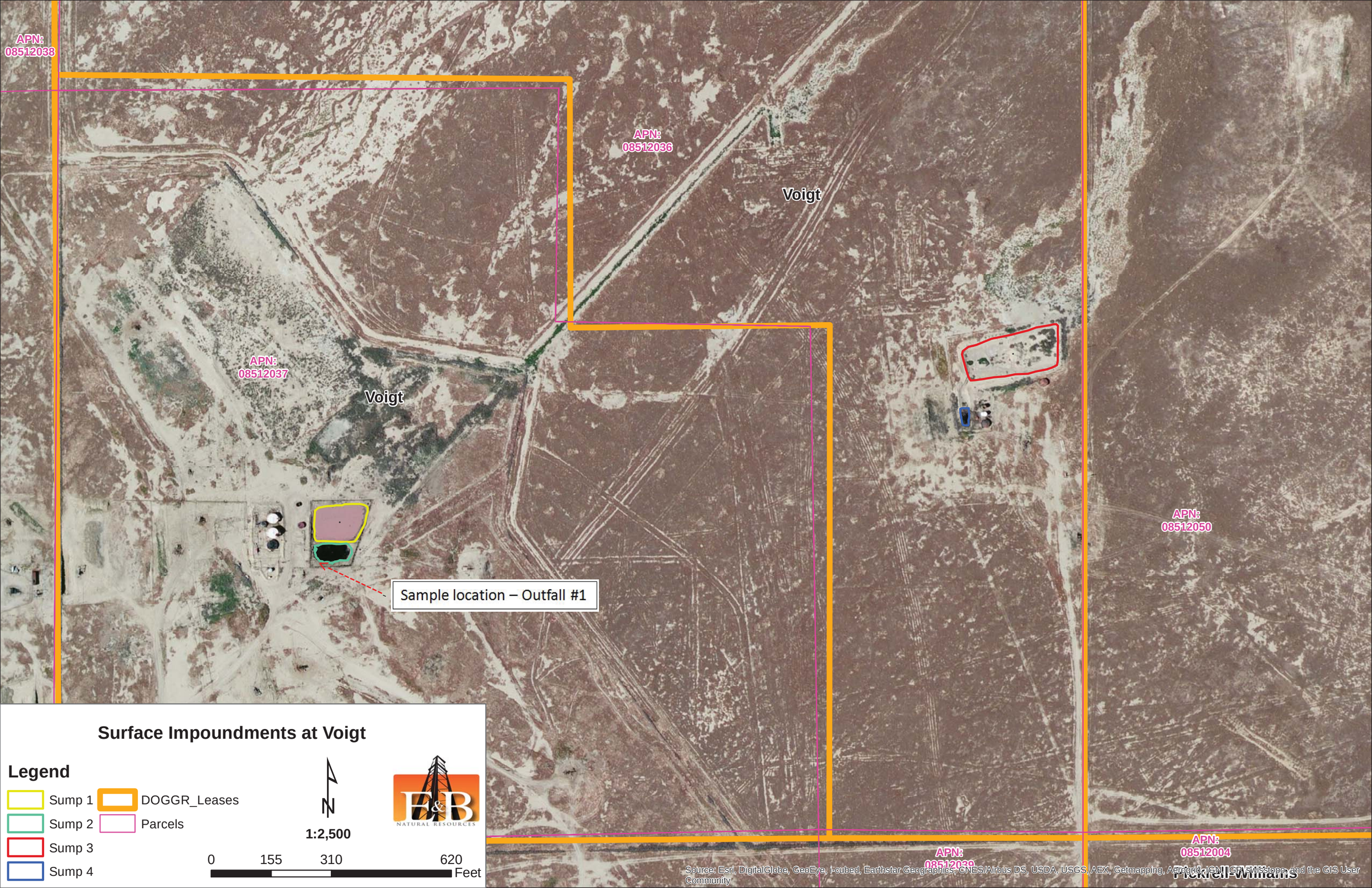
* Sample Type Key: Aq-Aqueous; BS-Biosolid; DW-Drinking Water; GW-Groundwater; G-Gas LPG-Liquid Petroleum Gas; OL-Oil; P-Petroleum; S-Solid/Soil; ST-Storm water WW-Wastewater

Voigt

The Voigt lease ponds are located in Section 6, Township 28S, Range 20E in the Antelope Hills Oil Field near Lost Hills, California.

A representative wastewater sample was collected from the Voigt pond #1 to be analyzed in accordance with Order 13267 Attachment B listed constituents (see location map). Voigt pond #1 is the first pond to which oilfield wastewater discharges from the lease's oil production, and is the first in a series of two unlined wastewater ponds at the Voigt lease. The wastewater from Voigt pond #2 is pumped to the Williams pond #1 and ultimately discharges to the Hopkins A Evaporation Ponds. There are two out of service Voigt ponds to the east of the main Voigt producing facility and do not have any current production or wastewater discharge.

The Voigt ponds are regulated by WDR #58-443 and a renewal of the WDR was submitted to the CVRWQCB in November 2013.



APN: 08512038
APN: 08512036
Voigt
APN: 08512037
Voigt
APN: 08512050
Sample location – Outfall #1
APN: 08512039
APN: 08512004
Pickrell-Williams
Surface Impoundments at Voigt
Legend
Sump 1
Sump 2
Sump 3
Sump 4
DOGGR_Leases
Parcels
N
1:2,500
0
155
310
620
Feet
E&B NATURAL RESOURCES
Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

ZALCO LABORATORIES, INC.
Analytical & Consulting Services

4309 Armour Avenue
Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

June 2, 2015

Jennifer Brady
E & B Natural Resources Corp.
3000 James Rd
Bakersfield, CA 93308

TEL: (661) 428-6146
FAX: (661) 616-6179

Project ID:
RE: 1505139

Dear Jennifer Brady:

Zalco Laboratories, Inc. received 1 samples on 5/11/2015 for the analyses presented in the following report.

We appreciate your business and look forward to serving you in the future. Please feel free to call our office if you have any questions regarding these test results.

Sincerely,

Juan Magana
Project Manager
CC:

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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3000 James Rd	Project #:	Reported: 06/02/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505139-01**	Collected By: Justin Graves
Client Sample ID: Voight	Date Collected: 5/11/2015 11:00:00AM

Analyte	Results	MDL	PQL		Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Alkalinity										
Total Alkalinity	440		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Bicarbonate (HCO3)	440		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Carbonate (CO3)	<10		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Hydroxide (OH)	<10		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
CAM, Toxicity (17 Metals)				*TTLC Limits*						
Antimony	<0.20		0.20	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Arsenic	<0.020		0.020	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Barium	2.3		0.10	*10000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Beryllium	<0.010		0.010	*75*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cadmium	<0.010		0.010	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Chromium	<0.050		0.050	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cobalt	<0.10		0.10	*8000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Copper	0.087		0.050	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Lead	<0.050		0.050	*1000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Mercury	<0.0020		0.0020	*20*	mg/L		SW846 7470A	5/12/15	5/12/15	SS
Molybdenum	<0.10		0.10	*3500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Nickel	0.057		0.050	*2000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Selenium	<0.05		0.05	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Silver	<0.020		0.020	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Thallium	<0.50		0.50	*700*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Vanadium	<0.10		0.10	*2400*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Zinc	<0.050		0.050	*5000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
General Chemistry				*MCL Limits*						
Fluoride	<1.0	0.13	1.0	*2*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Nitrate as NO3	<20.0	1.86	20.0	*45*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Electrical Conductivity	23		0.010		mmhos/cm		SM 2510B	5/11/15	5/11/15	SAM
Bromide	38	0.15	1.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Chloride	11000	1.2	500		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
pH	6.95				pH Units		EPA 150.1	5/11/15	5/11/15	SAM
Sulfate as SO4	<5.0	0.31	5.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Total Dissolved Solids	14000		10		mg/L		SM 2540C	5/13/15	5/13/15	MSS
Hardness										

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3000 James Rd	Project #:	Reported: 06/02/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505139-01**	Collected By: Justin Graves
Client Sample ID: Voight	Date Collected: 5/11/2015 11:00:00AM

Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Hardness									
Hardness (as CaCO3)	920		2.0	mg/L		SM 2340B	5/15/15	5/15/15	SS
Metals									
Lithium	0.75	0.0072	0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Metals - As Received									
Magnesium	66		0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Potassium	110		0.50	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Sodium	7100		70	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Calcium	260		0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Iron	0.25		0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Boron	63		0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Barium	2.4		0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Copper	0.060		0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Silica (SiO2)	34		4.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Strontium	24		0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Manganese	0.030		0.030	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Petroleum Hydrocarbons									
Diesel Range Hydrocarbons	66.8	0.40	1.00	mg/L		SW846 8015B	5/20/15	5/21/15	BIG
Gasoline Range Hydrocarbons	52.7	0.373	1.25	mg/L		SW846 8015B	5/21/15	5/21/15	HLP
Motor Oil Range Hydrocarbons	44.2		1.50	mg/L		SW846 8015B	5/20/15	5/21/15	BIG

Surrogates	% Recovery	Recovery Limits	Flag	
a,a,a-Trifluorotoluene	101	69-125		5/21/15 16:33

Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds									
Indeno(1,2,3-cd)pyrene	<10.0	1.9	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Naphthalene	26.0	2.6	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Acenaphthylene	<10.0	2.7	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Acenaphthene	<10.0	2.9	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Fluorene	<10.0	2.5	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Phenanthrene	6.0	1.8	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Anthracene	<10.0	1.7	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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ZALCO LABORATORIES, INC.
Analytical & Consulting Services

4309 Armour Avenue
Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505139**
3000 James Rd	Project #:	Reported: 06/02/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505139-01**	Collected By: Justin Graves
Client Sample ID: Voight	Date Collected: 5/11/2015 11:00:00AM

Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds									
Fluoranthene	<10.0	1.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Pyrene	<10.0	1.5	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (a) anthracene	<10.0	1.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Chrysene	<10.0	1.1	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (b) fluoranthene	<10.0	1.5	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (k) fluoranthene	<10.0	2.3	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (a) pyrene	<10.0	1.3	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Dibenz (a,h) anthracene	<10.0	2.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (g,h,i) perylene	<10.0	2.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM

Surrogates	% Recovery	Recovery Limits	Flag	
Nitrobenzene-d5	4.62	0-95		5/20/15 14:28
2-Fluorobiphenyl	4.20	0-92		5/20/15 14:28
Terphenyl-dl4	4.29	0-100		5/20/15 14:28

Subcontracted Analyses									
Gross Alpha	<15.0		15.0	pCi/L		SM 7110C	5/26/15	5/27/15	MCS
Radium-226	<3.00		3.00	pCi/L		E903.1	5/18/15	5/22/15	MCS
Radium-228	<2.00		2.00	pCi/L		EPA Ra-05	5/28/15	5/30/15	MCS
Uranium (ug/L)	<20.0		20.0	pCi/L		E908	5/29/15	5/29/15	MCS
Volatile Organic Compounds									
m,p-Xylene	4650	54.0	250	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Benzene	6730	18.5	250	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Xylenes, total	6660			ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Methyl tert-Butyl Ether	<5.00	0.67	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Ethylbenzene	1040	14.0	250	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Toluene	7130	15.5	250	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
o-Xylene	2010	28.5	250	ug/L		SW846 8260B	5/21/15	5/21/15	HLP

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	116	89-165		5/21/15 9:29
Toluene-d8	**47.7***	65-124		5/21/15 9:29
4-Bromofluorobenzene	112	94-114		5/21/15 9:29

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June 1, 2015

Zalco Laboratories, Inc.
4309 Armour Avenue
Bakersfield, CA 93308-4573

Description : 1505139-01
Project : 1505139-01

Lab ID : SP 1505245-001
Customer ID : 2-249

Sampled On : May 11, 2015-11:00
Sampled By : Not Available
Received On : May 12, 2015-11:30
Matrix : Water

Sample Result - Radio

Constituent	Result ± Error	MDA	Units	MCL/AL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Radio Chemistry[P]								
Gross Alpha	0.797 ± 6.55	10.7	pCi/L	15/5	900.0	05/26/15-08:00 2P1506046	900.0	05/27/15-10:00 2A1507901
Total Alpha Radium (226)	0.539 ± 0.323	0.470	pCi/L	3	903.0	05/18/15-19:30 2P1505776	903.0	05/22/15-07:00 2A1507600
Uranium	0.000 ± 0.449	0.300	pCi/L	20	908.0	05/29/15-06:15 2P1506220	908.0	05/29/15-16:41 2A1508054
Ra 228	0.000 ± 1.11	0.506	pCi/L	2	Ra - 05	05/28/15-19:30 2P1505775	Ra - 05	05/30/15-12:40 2A1508030

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: N/A * PQL adjusted for dilution.

MDA = Minimum Detectable Activity (Calculated at the 95% confidence level) = Data utilized by DHS to determine matrix interference.
MCL / AL = Maximum Contamination Level / Action Level. Alpha's Action Level of 5 pCi/L is based on the Assigned Value (AV).
AV = Assigned Value(Gross Alpha Result + (0.84 x Error)). CCR Section 64442: Drinking Water Compliance Note: Do the following
If Gross Alpha's (AV) exceeds 5 pCi/L run Uranium. If Gross Alpha's (AV) minus Uranium exceeds 5 pCi/L run Radium 226.

Drinking Water Compliance:
Gross Alpha (AV) minus Uranium is less than or equal to 15 pCi/L
Uranium is less than or equal to 20 pCi/L
Radium 226 + Radium 228 is less than or equal to 5 pCi/L

Note: Samples are held for 3-6 months prior to disposal.

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
TEL: (805)392-2000
Env FAX: (805)525-4172 / Ag FAX: (805)392-2063
CA ELAP Certification No. 1573

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209)942-0182
FAX: (209)942-0423
CA ELAP Certification No. 1563

Office & Laboratory
563 E. Lindo Avenue
Chico, CA 95926
TEL: (530)343-5818
FAX: (530)343-3807
CA ELAP Certification No. 2670

Office & Laboratory
3442 Empresa Drive, Suite D
San Luis Obispo, CA 93401
TEL: (805)783-2940
FAX: (805)783-2912
CA ELAP Certification No. 2775

Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
TEL: (559)734-9473
FAX: (559)734-8435
CA ELAP Certification No. 2810

CHAIN OF CUSTODY, ID# _____

ZALCO LABORATORIES, INC.
4309 Armour Avenue, Bakersfield, CA 93308 (661) 395-0539 FAX (661) 395-3069
2186 Eastman Avenue, Suite 103, Ventura, CA 93003, (805) 477-0114, Fax (805) 477-0125
www.zalcolabs.com

Client PO:
Project ID:
Quote ID:

ANALYSIS REQUESTED 505139

COMPANY: E&B Nat. Resources
CONTACT: Jennifer Brady
PHONE: 661-428-6146 FAX:
ADDRESS: 3000 James Rd.
Bakersfield Ca. 93308
E-MAIL: jbrady@ebresources.com
SAMPLER (SIGNATURE):

COMMENTS
Turnaround Time:
Routine (# working days) ☐
Rush By ☐ Working Days
EDT ☐
State Form ☐
EMAIL ☐

LAB #	SAMPLE DESCRIPTION	DATE	TIME	TYPE *	# OF CONTAINERS	GeoChem	TDS	Cam 17	Trace Elements	PAH (8270)	BTEX (8260)	TRPH (Fuel Fingerprint)	Radionuclides					TEMPERATURE (C)	Notes
1	Voight	5/11/2015	11:00	AQ	12	X	X	X	X	X	X	X	X						25.2
																		X	Ice Subject Present ☐ ☐ Sealed Shipping Box ☐

Relinquished By:	Company	Date	Time	Received By:	Company:
Justin Graves	Zalco Laboratories Inc.	05/11/15	1405		Zalco

NOTE: Samples Discarded 30 days after results unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

* Sample Type Key: Aq-Aqueous; BS-Biosolid; DW-Drinking Water; GW-Groundwater; G-Gas LPG-Liquid Petroleum Gas; OL-Oil; P-Petroleum; S-Solid/Soil; ST-Storm water WW-Wastewater

Williams

The Williams lease ponds are located in Section 6, Township 28S, Range 20E in the Antelope Hills Oil Field near Lost Hills, California.

A representative wastewater sample was collected from the Williams pond #1 to be analyzed in accordance with Order 13267 Attachment B listed constituents (see location map). Williams pond #1 is the first pond to which oilfield wastewater discharges from the lease's oil production, and is the first in a series of three unlined wastewater ponds at the Williams lease. The wastewater from the Williams ponds ultimately discharges to the Hopkins A Evaporation Ponds.

The Williams ponds are regulated by WDR #58-443 and a renewal of the WDRs was submitted to the CVRWQCB in November 2013.

APN:
08512041
Williams
Voigt
APN:
08512037
Surface Impoundments at Williams
Legend
Sump 1
Sump 2
Sump 3
DOGGR_Leases
Parcels
N
1:1,800
0
112.5
225
450
Feet
NATURAL RESOURCES
Sample location – Outfall #1
Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

ZALCO LABORATORIES, INC.
Analytical & Consulting Services

4309 Armour Avenue
Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

June 2, 2015

Jennifer Brady
E & B Natural Resources Corp.
3000 James Rd
Bakersfield, CA 93308

TEL: (661) 428-6146
FAX: (661) 616-6179

Project ID:
RE: 1505138

Dear Jennifer Brady:

Zalco Laboratories, Inc. received 1 samples on 5/11/2015 for the analyses presented in the following report.

We appreciate your business and look forward to serving you in the future. Please feel free to call our office if you have any questions regarding these test results.

Sincerely,

Juan Magana
Project Manager
CC:

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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Bakersfield, California 93308

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E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505138**
3000 James Rd	Project #:	Reported: 06/02/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505138-01**	Collected By: Justin Graves
Client Sample ID: Williams	Date Collected: 5/11/2015 10:45:00AM

Analyte	Results	MDL	PQL		Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Alkalinity										
Total Alkalinity	2100		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Bicarbonate (HCO3)	2100		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Carbonate (CO3)	<10		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
Hydroxide (OH)	<10		10		mg/L		SM 2320B	5/11/15	5/11/15	SAM
CAM, Toxicity (17 Metals)				*TTLC Limits*						
Antimony	<0.20		0.20	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Arsenic	<0.020		0.020	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Barium	0.66		0.10	*10000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Beryllium	<0.010		0.010	*75*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cadmium	<0.010		0.010	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Chromium	<0.050		0.050	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Cobalt	<0.10		0.10	*8000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Copper	0.072		0.050	*2500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Lead	<0.050		0.050	*1000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Mercury	<0.0020		0.0020	*20*	mg/L		SW846 7470A	5/12/15	5/12/15	SS
Molybdenum	<0.10		0.10	*3500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Nickel	<0.050		0.050	*2000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Selenium	<0.05		0.05	*100*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Silver	<0.020		0.020	*500*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Thallium	<0.50		0.50	*700*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Vanadium	<0.10		0.10	*2400*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
Zinc	<0.050		0.050	*5000*	mg/L		SW846 6010B	5/13/15	5/15/15	SS
General Chemistry				*MCL Limits*						
Fluoride	<25	3.3	25	*2*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Nitrate as NO3	<20.0	1.86	20.0	*45*	mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Electrical Conductivity	11		0.010		mmhos/cm		SM 2510B	5/11/15	5/11/15	SAM
Bromide	7.4	0.15	1.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Chloride	2100	1.2	500		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
pH	7.88				pH Units		EPA 150.1	5/11/15	5/11/15	SAM
Sulfate as SO4	44	0.31	5.0		mg/L		EPA 300.0	5/13/15	5/13/15	MSS
Total Dissolved Solids	6100		10		mg/L		SM 2540C	5/13/15	5/13/15	MSS
Hardness										

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
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Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505138**
3000 James Rd	Project #:	Reported: 06/02/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505138-01**	Collected By: Justin Graves
Client Sample ID: Williams	Date Collected: 5/11/2015 10:45:00AM

Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Hardness									
Hardness (as CaCO3)	39		2.0	mg/L		SM 2340B	5/15/15	5/15/15	SS
Metals									
Lithium	0.31	0.0072	0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Metals - As Received									
Magnesium	6.8		0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Potassium	17		0.50	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Sodium	3300		70	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Calcium	4.3		0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Iron	<0.10		0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Boron	11		0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Barium	0.38		0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Copper	0.055		0.050	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Silica (SiO2)	19		4.0	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Strontium	1.5		0.10	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Manganese	<0.030		0.030	mg/L		EPA 200.7	5/15/15	5/15/15	SS
Petroleum Hydrocarbons									
Diesel Range Hydrocarbons	9.88	0.20	0.50	mg/L		SW846 8015B	5/20/15	5/21/15	BIG
Gasoline Range Hydrocarbons	0.570	0.075	0.250	mg/L		SW846 8015B	5/21/15	5/21/15	HLP
Motor Oil Range Hydrocarbons	10.5		1.50	mg/L		SW846 8015B	5/20/15	5/21/15	BIG

Surrogates	% Recovery	Recovery Limits	Flag	
a,a,a-Trifluorotoluene	103	69-125		5/21/15 16:33

Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds									
Indeno(1,2,3-cd)pyrene	<10.0	1.9	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Naphthalene	<10.0	2.6	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Acenaphthylene	<10.0	2.7	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Acenaphthene	8.4	2.9	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Fluorene	<10.0	2.5	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Phenanthrene	68.2	1.8	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Anthracene	<10.0	1.7	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM

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Bakersfield, California 93308

(661) 395-0539
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E & B Natural Resources Corp.	Project: RWQCB Oilfield Ponds - 2Q2015	Work Order No.: **1505138**
3000 James Rd	Project #:	Reported: 06/02/2015
Bakersfield, CA 93308	Attention: Jennifer Brady	Received: 05/11/2015 14:05

Lab Sample ID: **1505138-01**	Collected By: Justin Graves
Client Sample ID: Williams	Date Collected: 5/11/2015 10:45:00AM

Analyte	Results	MDL	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic Compounds									
Fluoranthene	<10.0	1.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Pyrene	<10.0	1.5	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (a) anthracene	<10.0	1.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Chrysene	8.7	1.1	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (b) fluoranthene	<10.0	1.5	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (k) fluoranthene	<10.0	2.3	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (a) pyrene	<10.0	1.3	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Dibenz (a,h) anthracene	<10.0	2.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM
Benzo (g,h,i) perylene	<10.0	2.0	10.0	ug/L		SW846 8270C	5/14/15	5/20/15	JMM

Surrogates	% Recovery	Recovery Limits	Flag	
Nitrobenzene-d5	46.8	0-95		5/20/15 14:28
2-Fluorobiphenyl	28.0	0-92		5/20/15 14:28
Terphenyl-dl4	15.4	0-100		5/20/15 14:28

Subcontracted Analyses									
Gross Alpha	<15.0		15.0	pCi/L		SM 7110C	5/26/15	5/27/15	JMM
Radium-226	<3.00		3.00	pCi/L		E903.1	5/18/15	5/22/15	JMM
Radium-228	<2.00		2.00	pCi/L		EPA Ra-05	5/28/15	5/30/15	JMM
Uranium (ug/L)	<20.0		20.0	pCi/L		E908	5/29/15	5/29/15	JMM
Volatile Organic Compounds									
m,p-Xylene	33.0	1.08	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Benzene	57.2	0.37	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Xylenes, total	49.2			ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Methyl tert-Butyl Ether	<5.00	0.67	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Ethylbenzene	9.16	0.28	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
Toluene	44.7	0.31	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP
o-Xylene	16.2	0.57	5.00	ug/L		SW846 8260B	5/21/15	5/21/15	HLP

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	96.5	89-165		5/21/15 9:29
Toluene-d8	96.9	65-124		5/21/15 9:29
4-Bromofluorobenzene	102	94-114		5/21/15 9:29

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level *: See Case Narrative
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Note: Samples analyzed for regulatory purposes should be put on ice immediately after sampling and received by the laboratory at temperatures between 0-6°C. Microbiological analysis requires samples to be at least 4-10°C when received at the laboratory. For additional information regarding the limitations of the method(s) referred to, please call us at 661-395-0539.

June 1, 2015

Zalco Laboratories, Inc.
4309 Armour Avenue
Bakersfield, CA 93308-4573

Lab ID : SP 1505246-001
Customer ID : 2-249

Sampled On : May 11, 2015-10:45
Sampled By : Not Available
Received On : May 12, 2015-11:30
Matrix : Water

Description : 1505138-01
Project : 1505138-01

Sample Result - Radio

Constituent	Result ± Error	MDA	Units	MCL/AL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Radio Chemistry[P]								
Gross Alpha	6.77 ± 6.63	9.09	pCi/L	15/5	900.0	05/26/15-08:00 2P1506046	900.0	05/27/15-09:00 2A1507904
Total Alpha Radium (226)	1.82 ± 0.519	0.470	pCi/L	3	903.0	05/18/15-19:30 2P1505776	903.0	05/22/15-07:20 2A1507600
Uranium	0.000 ± 0.492	0.300	pCi/L	20	908.0	05/29/15-06:15 2P1506220	908.0	05/29/15-17:06 2A1508054
Ra 228	0.000 ± 1.12	0.400	pCi/L	2	Ra - 05	05/28/15-19:30 2P1505775	Ra - 05	05/30/15-12:20 2A1508029

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: N/A * PQL adjusted for dilution.

MDA = Minimum Detectable Activity (Calculated at the 95% confidence level) = Data utilized by DHS to determine matrix interference.
MCL / AL = Maximum Contamination Level / Action Level. Alpha's Action Level of 5 pCi/L is based on the Assigned Value (AV).
AV = Assigned Value(Gross Alpha Result + (0.84 x Error)). CCR Section 64442: Drinking Water Compliance Note: Do the following
If Gross Alpha's (AV) exceeds 5 pCi/L run Uranium. If Gross Alpha's (AV) minus Uranium exceeds 5 pCi/L run Radium 226.

Drinking Water Compliance:
Gross Alpha (AV) minus Uranium is less than or equal to 15 pCi/L
Uranium is less than or equal to 20 pCi/L
Radium 226 + Radium 228 is less than or equal to 5 pCi/L

Note: Samples are held for 3-6 months prior to disposal.

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
TEL: (805)392-2000
Env FAX: (805)525-4172 / Ag FAX: (805)392-2063
CA ELAP Certification No. 1573

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209)942-0182
FAX: (209)942-0423
CA ELAP Certification No. 1563

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563 E. Lindo Avenue
Chico, CA 95926
TEL: (530)343-5818
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3442 Empresa Drive, Suite D
San Luis Obispo, CA 93401
TEL: (805)783-2940
FAX: (805)783-2912
CA ELAP Certification No. 2775

Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
TEL: (559)734-9473
FAX: (559)734-8435
CA ELAP Certification No. 2810

CHAIN OF CUSTODY, ID#

ZALCO LABORATORIES, INC.
4309 Armour Avenue, Bakersfield, CA 93308 (661) 395-0539 FAX (661) 395-3069
2186 Eastman Avenue, Suite 103, Ventura, CA 93003, (805) 477-0114, Fax (805) 477-0125
www.zalcolabs.com

Client PO:
Project ID:
Quote ID:

ANALYSIS REQUESTED 1505138

COMPANY E&B Nat. Resources
CONTACT Jennifer Brady
PHONE 661-428-6146 FAX
ADDRESS 3000 James Rd.
Bakersfield Ca. 93308
E-MAIL jbrady@ebresources.com
SAMPLER (SIGNATURE)

LAB #	SAMPLE DESCRIPTION	DATE	TIME	TYPE *	# OF CONTAINERS	GeoChem	TDS	Cam 17	Trace Elements	PAH (8270)	BTEX (8260)	TRPH (Fuel Fingerprint)	Radionuclides					TEMPERATURE (C)	Notes
1	Williams	5/11/2015	10:45	AQ	12	X	X	X	X	X	X	X	X						30.2

COMMENTS
Turnaround Time:
Routine (# working days)
Rush By Working Days
EDT
State Form
EMAIL
Notes

Relinquished By:	Company	Date	Time	Received By:	Company:
Justin Graves	Zalco Laboratories Inc.	05/11/15	1405		Zalco

NOTE: Samples Discarded 30 days after results unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

* Sample Type Key: Aq-Aqueous; BS-Biosolid; DW-Drinking Water; GW-Groundwater; G-Gas LPG-Liquid Petroleum Gas; OL-Oil; P-Petroleum; S-Solid/Soil; ST-Storm water WW-Wastewater

Carneros

The Carneros pond and emergency overflow pond are located in Section 31, Township 28S, Range 21E in the South Belridge Oil Field near Lost Hills, California.

Produced water from E&B's South Belridge leases is disposed of by a water injection well. The Carneros pond #1 is out of service and no wastewater is discharged. E&B plans to close this pond when a Closure Work Plan is approved by the CVRWQCB. The emergency overflow pond has received wastewater discharge since April 2014 and a representative sample was collected by CVRWQCB inspector Joshua Mahoney in February 2015 during a routine inspection. At the time of this Order, no wastewater was present in the overflow pond to collect a sample. E&B does not plan to close the emergency overflow as it is part of the Carneros facility's secondary containment structure in the event of a catastrophic tank failure.

Carneros

APN:
08523003

Bank of
California

APN:
08523020

APN:
08523050

Mission

APN:
08523010

Carneros

Surface Impoundments at Carneros

Legend

- Emergency Overflow
- DOGGR_Leases
- Sump
- Parcels

N

1:1,500

F&B NATURAL RESOURCES

0 90 180 360 Feet

Laymance

The Laymance ponds are located in Section 20, Township 30S, Range 22E in the McKittrick Oil Field near McKittrick, California.

Produced water from E&B's McKittrick leases is disposed of by water injection wells. At the time of this Order, there was no wastewater available to collect for analysis per the Order 13267 Attachment B. The ponds are not currently regulated under WDRs and E&B plans to submit a Report of Waste Discharge application for the Laymance ponds.

APN: 15710025

Del Monte

APN: 15710013

APN: 15710041

Laymance

APN: 15710014

California Standard

APN: 15710028

APN: 15710021

APN: 15710022

Rice

APN: 15710016

Surface Impoundments at McKittrick:Laymance

N

1:1,250

E&B NATURAL RESOURCES

Legend

- Sump 1
- Sump 2
- DOGGR_Leases
- Parcels

0 75 150 300 Feet

Shields-Arms

The Shields-Arms lease is located in Section 32, Township 29S, Range 29E in the Edison Oil Field near Bakersfield, California.

No produced water pond was identified by E&B personnel, nor by CVRWQCB inspectors during an inspection on 16 April 2014 at the Shields-Arms lease. Therefore, a representative wastewater sample was not collected for analysis per the Order 13265 Attachment B.

E&B is coordinating with the CVRWQCB to remove the referenced Shields-Arms pond from the list.

X/Y:
Feet

N

6299100

2320900

2320900

T29S R29E Sec. 32

APN: 388-040-02
Shields Arms Lease
T29S R29E Section 32
Edison Field, Kern Cty CA

SHIELDS-ARMS

SHIELDS

EDISON RD

BRECKENRIDGE RD

Legend

Lease Boundary

6299100

E&B NATURAL RESOURSES

SECTION 13267 ORDER

Edison Field, Kern County California

Scale = 1:3000

0 250 500 750 ft

Shields Arms Lease Base Map
APN: 388-040-02
T29S R29E Section 32 MDBM
Jennifer Brady
June 12th, 2015

tanb@JAM-TANB
06/15/15 11:17:46

J.O.L.

The J.O.L ponds are located in Section 23, Township 25S, Range 27E in the Jasmin Oil Field near Delano, California.

The produced water from E&B's Jasmin leases is disposed by water injection wells. At the time of the Order, the J.O.L. ponds 1 & 2 did not contain any wastewater to collect for analysis per the Order 13267 Attachment B.

The J.O.L. ponds are regulated under WDR #68-206.

X/Y:
Feet

1689800

818800

N

APN: 051-102-12
Name: J.O.L. #2
T25S R27E Section 23
J.O.L. Lease
Area: 8276.97 sq ft
Jasmin, Kern Cty CA

J.O.L. (E&B)

TETRA

T25S R27E Sec. 22

APN: 051-102-12
Name: J.O.L. #1
T25S R27E Section 23
J.O.L. Lease
Area: 1584.39 sq ft
Jasmin, Kern Cty CA

T25S R27E Sec. 23

Mayflower

25 S 27 E

Legend

Lease Boundary

Sump Outline

1689800

818800

E&B Natural Resources Management

SECTION 13267 ORDER

Jasmin, Kern County California

Scale = 1:2869

0 239 478 717 ft

J.O.L. Lease Base Map
Sump: J.O.L. #1 & J.O.L. #2 Location
APN: 051-102-12
T25S R27E Section 23 MDBM
Jennifer Brady
June 12th, 2015

tanb@JAM-TANB
06/12/15 18:26:47

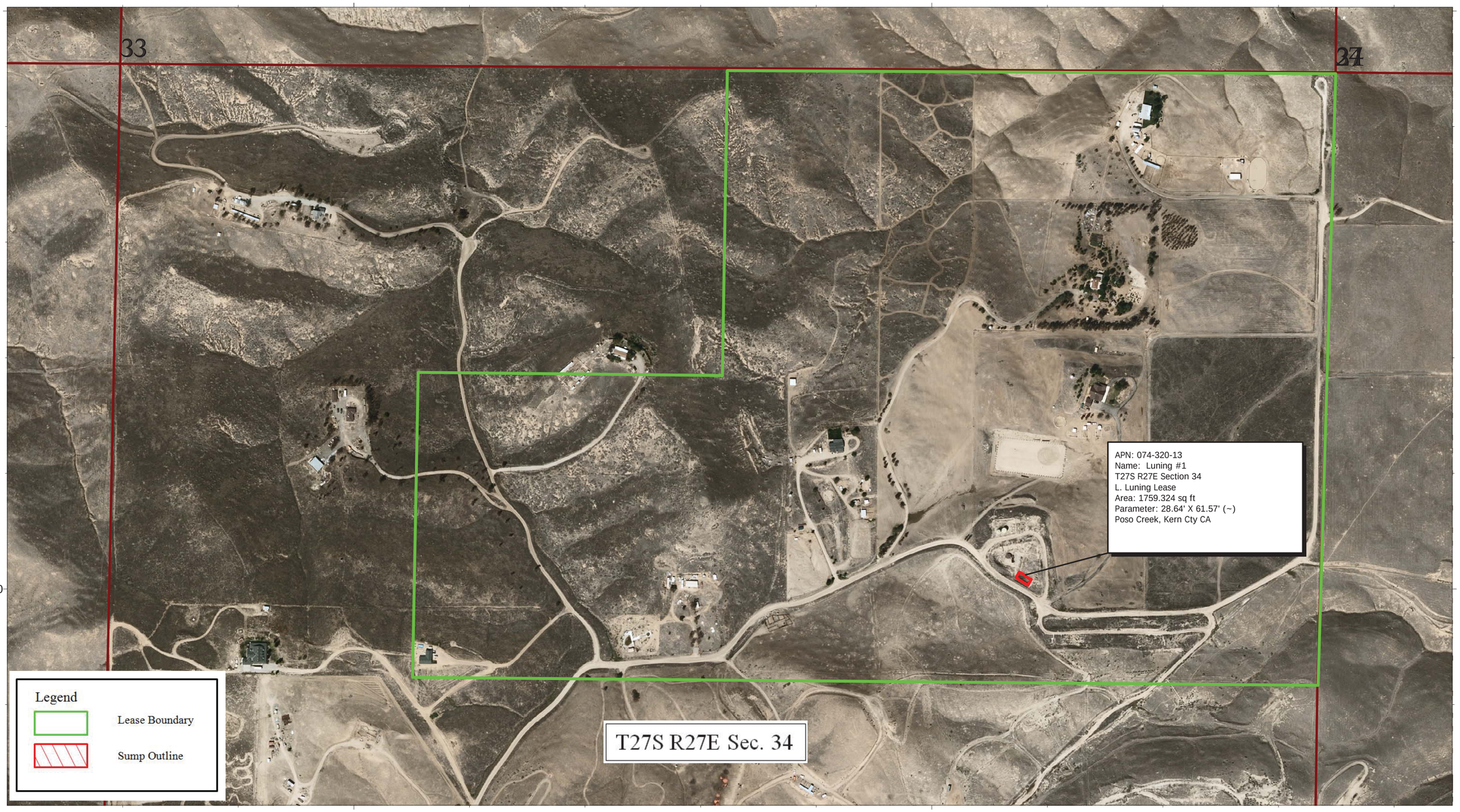
L. Luning

The L. Luning pond is located in Section 34, Township 27S, Range 27E in the Kern Front Oil Field near Bakersfield, California.

The L. Luning pond #1 is out of service and no produced water discharge has occurred since E&B took over operations. At the time of this Order, the pond did not contain any wastewater to sample for analysis per the Order 13267 Attachment B. The Bureau of Land Management (BLM) has ordered E&B to abandon the lease since it can no longer produce economically. The BLM has approved the sundry notice and Closure Work Plan for the pond closure. E&B plans to close the pond when a Closure Work Plan is approved by the CVRWQCB.

X/Y:
Feet

1684800



743500

743500

1684800

N

E&B Natural Resources Management

SECTION 13267 ORDER

Poso Creek Field, Kern County California

Scale = 1:3699

0 308 617 925 ft

L. Luning Lease Base Map
Sump: Luning #1 Location
APN: 074-320-13
T27S R27E Section 34 MDBM
Jennifer Brady
June 12th, 2015

tanb@JAM-TANB
06/12/15 15:35:23

E&M

The E&M pond is located in Section 2, Township 29S, Range 28E in the Kern River Oil Field near Bakersfield, California.

The produced water from E&B's E&M lease is disposed by water injection wells. The E&M pond # 1 does not have any connected piping for wastewater disposal and at the time of this Order did not contain any wastewater to collect for analysis per the Order 13267 Attachment B. E&B plans to close this pond when a Closure Work Plan is approved by the CVRWQCB.

X/Y:
Feet

N

1718800

707100

707100

E&M

T29S R28E Sec. 02

APN: 436-070-01
Name: EM #1
T29S R28E Section 2
EM Lease
Area: 4629.5 sq ft
Kern River, Kern Cty CA

Legend

Lease Boundary

Sump Outline

1718800

E&B NATURAL RESOURCES

SECTION 13267 ORDER

Kern River Field, Kern County, CA

Scale = 1:1360

0 113 227 340 ft

E & M Lease Base Map
Sump: E&M #1 Location
APN: 436-070-01
T29S R28E Section 2
Jennifer Brady
June 12th, 2015

tanb@JAM-TANB
06/15/15 10:13:19

Cauley

The Cauley ponds are located in Section 16, Township 28S, Range 27E in the Poso Creek Oil Field near Bakersfield, California.

The produced water from E&B's Cauley lease is disposed by water injection wells. The Cauley ponds 1, 2 and 3 do not have any connected piping for wastewater disposal and at the time of this Order, the three unlined ponds identified in Attachment A did not contain any wastewater to collect for analysis per the Order 13267 Attachment B. E&B plans to close these ponds when a Closure Work Plan is approved by the CVRWQCB.

X/Y:
Feet

N

1679800

728500

723500

1679800

esnon

Seskayden-Sesnon

Cauley

Senson

Newhouse

APN: 481-060-03
Name: Cauley #3
T28S R27E Section 16
Cauley Lease
Area: 30226.79 sq ft
Poso Creek, Kern Cty CA

APN: 481-060-03
Name: Cauley #2
T28S R27E Section 16
Cauley Lease
Area: 17322.24 sq ft
Poso Creek, Kern Cty CA

APN: 481-060-03
Name: Cauley #1
T28S R27E Section 16
Cauley Lease
Area: 5727.08 sq ft
Poso Creek, Kern Cty CA

T28S R27E Sec. 16

Cauley

16

21

Legend

Lease Boundary

Sump Outline

E&B Natural Resources Management

SECTION 13267 ORDER

Poso Creek Field, Kern County California

Scale = 1:5709

0 476 951 1427 ft

Cauley Lease Base Map
Sump: Cauley #1, Cauley #2, Cauley #3 Location
APN: 481-060-03
T28S R27E Section 16 MDBM
Jennifer Brady
June 12th, 2015

tanb@JAM-TANB
06/12/15 17:55:06

Gov’t

The Gov’t ponds are located in Section 14, Township 27S, Range 27E in the McVan Area of Poso Creek Oil Field near Bakersfield, California.

The produced water from E&B’s Gov’t lease is disposed by water injection wells. At the time of this Order, the Gov’t ponds 1, 2, and 3 did not contain any wastewater to collect for analysis per the Order 13267 Attachment B. However, a sample was collected from the produced water tank for another project that would be a representative sample of the wastewater from ponds 1 and 2. E&B plans to close these ponds under the Cleanup & Abatement Order adopted by the CVRWQCB on 4 June 2015.

X/Y:
Feet

1689800

N

APN: 074-030-02
Name: Gov't #2
T27S R27E Section 14
Gov't Lease
Area: 6396.28 sq ft
Poso Creek, Kern Cty CA

APN: 074-030-02
Name: Gov't #1
T27S R27E Section 14
Gov't Lease
Area: 5285.04 sq ft
Poso Creek, Kern Cty CA

T27S R27E Sec. 15

T27S R27E Sec. 14

Gov't

APN: 074-030-02
Name: Gov't #3
T27S R27E Section 14
Gov't Lease
Area: 1273.33 sq ft
Poso Creek, Kern Cty CA

Legend

Lease Boundary

Sump Outline

1689800

E&B Natural Resources Management

SECTION 13267 ORDER

Poso Creek Field, Kern County California

Scale = 1:1462

0 122 243 365 ft

Gov't Lease Base Map
Sump: Gov't #1, Gov't #2, Gov't #3 Location
APN: 074-320-13
T27S R27E Section 14 MDBM
Jennifer Brady
June 12th, 2015

tanb@JAM-TANB
06/12/15 17:07:56

Section 5

The Section 5 ponds are located in Section 5, Township 28S, Range 27E in the Poso Creek Oil Field near Bakersfield, California.

The produced water from E&B's Section 5 lease is disposed by water injection wells. Section 5 pond #1 is lined and at the time of this Order, did not contain any wastewater to collect for analysis per the Order 13267 Attachment B. Section 5 pond #2 is unlined and at the time of this Order, did not contain any wastewater to collect for analysis per the Order 13267 Attachment B. E&B plans to close these ponds when a Closure Work Plan is approved by the CVRWQCB. A third Section 5 pond listed in Attachment A does not exist.

X/Y:
Feet

N

1674800

738500

APN: 481-030-65
Name: Section 5 #1
T28S R27E Section 5
Section 5 Lease
Area: 10711.54 sq ft
Poso Creek, Kern Cty CA

APN: 481-030-65
Name: Section 5 #2
T28S R27E Section 5
Section 5 Lease
Area: 3729.95 sq ft
Poso Creek, Kern Cty CA

Section 5

T28S R27E Sec. 05

6

5

8

Legend

Lease Boundary

Sump Outline

1674800

738500

E&B Natural Resources Management

SECTION 13267 ORDER

Poso Creek Field, Kern County California

Scale = 1:6000

0 500 1000 1500 ft

Section 5 Lease Base Map
Sump: Section 5 #1 & Section 5 #2 Locations
APN: 481-030-65
T28S R27E Section 5 MDBM
Jennifer Brady
June 12th, 2015

tanb@JAM-TANB
06/15/15 10:42:55