

LONGVIEW ENERGY COMPANY

April 24, 2015

California Regional Water Quality Control Board
1685 E Street
Fresno, California 93708
C/O Dane Johnson

RE: Tentative Cleanup and Abatement Order, Longview Energy Company

Dear Mr. Johnson:

Longview Energy Company ("Longview"), successor by merger to Longview Production Company, is in receipt of the Tentative Cleanup and Abatement Order R5-2015-0XXX, (Attachment 1) ("Tentative Order"). This letter and the attachments shall comprise Longview's comments to the Tentative Order.

Longview would like to take this opportunity to clarify and correct some misconceptions, misleading statements and misinformation contained in the Tentative Order as well as provide to you a description of steps already taken by Longview to resolve the issues raised by the Tentative Order. A more detailed report describing Longview's responses was prepared by Longview's consultant, WZI, Inc. (Attachment 2) which Longview hereby adopts and verifies as part of this comment letter.

At the outset Longview would like to make clear that it does not want or require a WDR for a pond for disposal of produced water, because Longview has a closed injection system that is adequate for the disposal of the facility's produced water. In addition, the facilities are currently being modified to ensure better spill control. Please also refer to Attachment 3, Proposed Changes to the CAO and Attachment 4 Proposed Changes to the MRP.

We respectfully submit our comments to the Hearing Board to address:

- Longview's commitment to meeting the regulatory requirements set forth by those agencies having jurisdiction either in the form of permit requirements or Laws, Ordinances or Regulations;
- Longview's concerns about any potential mischaracterization of the depression that is a closed former lined sump; and
- Longview's desire to ensure that both Longview and staff have a clear plan to implement a consolidated order to correct any deficiencies on the Surfluh lease;

We at Longview Energy Company take the staff's concerns, the NOV they issued and tentative order very seriously. Since receipt of the Tentative Order and the Notice of Violation, Longview has taken the following steps:

- Independent site review of the area cited in the NOV;
- Leveled (regraded) the depression resulting from the soil collapse of the fill in the historic lined sump that was closed under jurisdiction of the Regional Water Quality Control Board, (Attachment 5, Closure Inspection Report);

- Independent review and correction of production and injection procedures and reporting;
- Updated Spill Pollution Prevention and Counter Measure training of all personnel;
- Install an additional water tank for emergencies such as power loss.
- Independent supervision and completion of an enhanced berm at the Surfluh 14 tank battery to contain any future spills and elimination of all erosion channels leading to the depression;
- Independent supervision and completion of the enhancements and clean up of the Surfluh 13 battery.

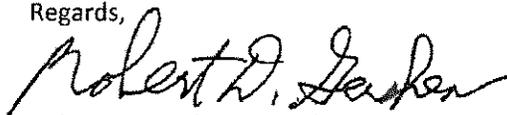
Longview respectfully requests the following changes to the Tentative Order since no produced water will be discharged to land other than in permitted injection wells (See attachments #5 and #6 for specifics):

- Remove the requirement to submit a Report of Waste Discharge
- Remove the ability for Longview to discharge to a surface impoundment other than in an event of a catastrophic equipment failure in accordance with their SPCC plan.
- Remove the requirements for monitoring the discharge to a "pond" other than as required for the purposes of the hydrogeologic assessment as determined in the approved Work Plan. Quarterly reports for the Work Plan will include the disposition of the produced waste water from the property subject to the order.

Longview regrets the confusion surrounding the depression at the Surfluh site and mischaracterization of its disposal system and will make every reasonable effort to mitigate the effects of the subsidence and spills that may have accumulated in the depression. Longview hopes this letter and the attachments help clarify and explain Longview's wastewater disposal system. Longview would welcome the opportunity to meet with staff to go over this information and resolve all issues and requests prior to the hearing.

If you have any questions, please do not hesitate to contact me.

Regards,



Robert D. Gershen, President
Longview Energy Company

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION**

**CLEANUP AND ABATEMENT ORDER NO. R5-2015-0XXX
FOR LONGVIEW PRODUCTION COMPANY
SURFLUH LEASE, RAISIN CITY OIL FIELD
FRESNO COUNTY**

The California Regional Water Quality Control Board, Central Valley Region (hereafter Central Valley Water Board), finds that:

1. The Longview Production Company (hereinafter Discharger) operates a petroleum production and petroleum wastewater discharge facility at its Surfluh Lease in the Raisin City Oil Field (Surfluh Lease). The Surfluh Lease, approximately seven miles south of Kerman (Assessor's Parcel Number 030-007-71), is located in the southeast quarter of the northeast quarter of Section 14, T15S, R17E, MDB&M (see Attachment A, which is attached hereto and made a part of this Order).
2. The Surfluh Lease contains one wastewater injection well (API No. 01905581) and one pond to which wastewater is periodically released. Wastewater is separated from the extracted crude oil and discharged to the injection well and is allowed to flow to the unlined pond for percolation and evaporation. The pond is approximately 50 feet in diameter (see Attachment B, which is attached hereto and made a part of this Order).
3. The Surfluh Lease is not regulated by Waste Discharge Requirements (WDRs) for the discharge of petroleum production wastewaters. The Discharger has not submitted a Report of Waste Discharge.
4. This Order contains a time schedule to achieve compliance with the California Water Code (Water Code) and the *Water Quality Control Plan for the Tulare Lake Basin Second Edition, Revised January 2004* (Basin Plan), and requires that by 31 December 2016, the Discharger demonstrate that the discharge to these ponds can comply with the applicable laws, policies, and regulations or the discharge will have to cease by that date.
5. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for all waters of the Basin.
6. Surface drainage is toward the James Bypass in the Raisin Hydrologic Area (551.20) of the Tulare Lake Basin. Surface waters in the Raisin Hydrologic Area are designated as Valley Floor Waters. The designated beneficial uses of Valley Floor Waters, as specified in the Basin Plan, are agricultural supply; industrial service and process supply; water contact and non-contact water recreation; warm fresh water habitat; preservation of rare, threatened and endangered species; and groundwater recharge.
7. The Surfluh Lease is in the Delta Mendota Basin Hydrologic Unit, Detailed Analysis Unit (DAU) 235. The designated beneficial uses of the groundwater, as specified in the Basin Plan for DAU 235 are municipal and domestic water supply, agricultural supply, industrial service and process supply, non-contact water recreation, and wildlife habitat.

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8. Information obtained from the United States Geological Survey and the California Department of Water Resources identified four groundwater supply wells within about one-mile of the facility.
9. Groundwater samples were obtained from the wells from 1955 to 1973. Chemical analysis of those samples showed the following constituents at the indicated values: From a well about one mile away from the Surfluh Lease:

	<u>Units:</u>	<u>Measured Value Range:</u>
<u>Specific EC:</u>	micromohs per centimeter (µmhos/cm)	482 – 491
<u>Chloride:</u>	milligrams per liter (mg/l)	82 - 86
<u>Boron:</u>	mg/l	None Detected – 0.12

From a well adjacent to the Surfluh Lease:

	<u>Units:</u>	<u>Measured Values:</u>
<u>Specific EC:</u>	µmhos/cm	9,000
<u>Chloride:</u>	mg/l	115
<u>Boron:</u>	mg/l	4.5

10. This Cleanup and Abatement Order is based upon: 1) Chapter 5, Enforcement and Implementation commencing with section 13300, of the Porter-Cologne Water Quality Control Act (Water Code Division 7, commencing with section 13000); 2) Water Code section 13267,¹ Investigations; inspections, Chapter 4, Regional Water Quality Control; 3) all applicable provisions of the Basin Plan including beneficial uses, water quality objectives, and implementation plans; 4) California State Water Resources Control Board (State Water Board) Resolution No. 68-16 (*Statement of Policy with Respect to Maintaining High Quality of Waters in California*); 5) State Water Board Resolution No. 92-49 (*Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code section 13304*); 6) and all other applicable legal authority.

¹ Water Code section 13267, subdivision (b)(1) states: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

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11. Discharge of Waste to Land: This information is based upon the 4 February 2014 Central Valley Water Board inspection of the Surfluh Lease. The Basin Plan sets forth the following specific waste constituent limits for discharges of oil field wastewater to unlined ponds:

	<u>Units:</u>	<u>Limitation Value:</u>
<u>Specific EC:</u>	µmhos/cm	1000
<u>Chloride:</u>	mg/l	200
<u>Boron:</u>	mg/l	1

12. The Basin Plan allows discharges of oil field wastewater that exceed the above maximum salinity limits to unlined sumps, stream channels, or surface waters if the Discharger successfully demonstrates to the Central Valley Water Board in a public hearing that the proposed discharge will not substantially affect water quality nor cause a violation of water quality objectives.

13. The results of the analyses of wastewater sampled from the Surfluh Lease pond were reported in the inspection report at the following values for the listed constituents:

	<u>Units:</u>	<u>Measured Value:</u>
<u>Specific EC:</u>	µmhos/cm	41,000
<u>Chloride:</u>	mg/l	15,000
<u>Boron:</u>	mg/l	7.7

14. On 27 March 2015, the Central Valley Water Board issued a Notice of Violation (NOV) to the Discharger (see Attachment C, which is attached hereto and made a part of this Order). The NOV alleged that the discharge was in violation of Section 13260 of the California Water Code for failure to submit a Report of Waste Discharge before discharging waste that could affect the quality of waters of the state, and that the Discharger was discharging wastewater in excess of the numerical limitations specified in the Basin Plan (see Finding No. 10), which is causing, or is threatening to cause a condition of pollution,² contamination or nuisance.³

15. Section 13304(a) of the Water Code provides that:

Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has

² "Pollution" is defined by Water Code section 13050, subdivision (l)(1) as, an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: (A) The waters for beneficial uses; (B) Facilities which serve these beneficial uses.

³ "Nuisance" means anything which meets all of the following requirements: (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. (3) Occurs during, or as a result of, the treatment or disposal of wastes. Water Code §13050(m).

caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. A cleanup and abatement order issued by the state board or a regional board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.

16. Oil field produced water can contain elevated concentrations of general minerals (especially total dissolved solids and chloride), metals (i.e., arsenic), trace elements (i.e., boron, strontium, thallium, lithium, etc.), petroleum hydrocarbons, polynuclear aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs, i.e., benzene, toluene, ethylbenzene, and xylenes [BTEX]), and radionuclides. The unauthorized discharge of waste containing oil field waste constituents to ground and/or groundwater creates, or threatens to create, a condition of pollution in groundwater, and may result in the degradation of water quality.
17. Land surrounding the Surfluh Lease is being used for agricultural production. Many of the crops are irrigated with groundwater from local supply wells. Based on Ayers and Westcott (1985), irrigation water with a chloride concentration above 350 mg/l can cause severe crop problems. Boron toxicity can occur on sensitive crops at concentrations less than 1 mg/l in irrigation water.
18. Underlying groundwater may be degraded if mixed with oil field wastewater. Oil field wastewater constituents could impair the groundwater for municipal and domestic supply and agricultural supply uses.
19. An investigation is necessary to determine whether the discharge of wastewater in excess of water quality objectives has caused or threatens to cause a threat or condition of pollution or nuisance to groundwater.
20. The following actions will determine the threat and/or impacts to groundwater as a result of the discharges at the Surfluh Lease in violation of the Basin Plan and the California Water Code:
 - a. Development of a work plan to conduct a hydrogeological site characterization and assess potential groundwater degradation by discharges from this facility;

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- b. Documentation of the average monthly volume of wastewater discharged to the ponds during the previous year will be submitted, and continued discharge during the investigation will not exceed the average monthly discharge rate calculated for the prior year; and
 - c. This Order requires that if degradation of groundwater due to discharge from any of the ponds is documented, then a work plan to delineate the nature and extent of the release and a plan to remediate the effects of the release must be submitted.
21. The deliverables ordered herein (work plans, signing up for WDRs, investigations, etc. as necessary) are needed to provide information to the Central Valley Water Board regarding (a) the nature and extent of the discharge, (b) the nature and extent of pollution conditions in State waters created by the discharge, (c) the threat to public health posed by the discharge, and (d) appropriate cleanup and abatement measures. The deliverables will enable the Central Valley Water Board to determine the vertical and lateral extent of the discharge, ascertain whether the condition of pollution poses a threat to human health in the vicinity of the Surfluh Lease, and provide technical information to determine the cleanup and abatement measures necessary to bring the Site into compliance with applicable water quality standards. Based on the nature and possible consequences of the discharges, including impacts to groundwater supply, the burden of providing the required information, including costs, bears a reasonable relationship to the need for the required reports, and the benefits to be obtained from the reports. The deadlines set forth herein are reasonable given the need to investigate the potential threat to groundwater quality.
22. In accordance with Water Code section 13267(b), these findings provide the Discharger with a written explanation with regard to the need for remedial action and reports, and identify the evidence that supports the requirement to implement investigative activities, to implement cleanup and abatement activities if needed, and to submit the reports. The Discharger owns a portion of the mineral rights and operates the Surfluh Lease which is subject to this Cleanup and Abatement Order. The technical and monitoring reports required by this Order are necessary to determine compliance with this Cleanup and Abatement Order.
23. Issuance of this Cleanup and Abatement Order is being taken for the protection of the environment and as such is exempt from provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq.) in accordance with California Code of Regulations, title 14, sections 15061(b)(3), 15306, 15307, 15308, and 15321. This Cleanup and Abatement Order generally requires the Discharger to submit plans for approval prior to implementation of investigative and, if necessary, cleanup activities at the Surfluh Lease. Mere submission of plans is exempt from CEQA as submission will not cause a direct or indirect physical change in the environment and/or is an activity that cannot possibly have a significant effect on the environment. CEQA review at this time would be premature and speculative, as there is simply not enough information concerning the Discharger's proposed remedial activities and possible associated environmental impacts. If the Central Valley Water Board determines that implementation of any plan required by this Cleanup and Abatement Order will have a

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significant effect on the environment, the Central Valley Water Board will conduct the necessary and appropriate environmental review prior to the Executive Officer's approval of the applicable plan.

24. The Discharger will bear the costs, including the Central Valley Water Board's costs, of determining whether implementation of any plan required by this Cleanup and Abatement Order will have a significant effect on the environment and, if so, in preparing and handing any documents necessary for environmental review. If necessary, the Discharger and a consultant acceptable to the Central Valley Water Board shall enter into a memorandum of understanding with the Central Valley Water Board regarding such costs prior to undertaking any environmental review.

IT IS HEREBY ORDERED that, pursuant to section 13304 and section 13267 of Division 7 of the California Water Code, the Longview Production Company shall cease the discharge of wastewater in violation of applicable laws, policies, and regulations, and clean up and abate the condition of unauthorized discharge in accordance with the schedule below:

1. By **15 July 2015**, the Discharger shall prepare and submit to the Central Valley Water Board a Work Plan with a time schedule proposed by the Discharger and approved by the Assistant Executive Officer. The schedule shall provide the ability to determine whether the discharge can comply with applicable laws, policies, and regulations that would allow the issuance of waste discharge requirements by 31 October 2016. If issuance of waste discharge requirements is not obtained by 31 December 2016, the discharge shall cease. The Work Plan needs to include, but is not limited to, the following tasks:
 - a. Identify all owners of the surface rights and the mineral rights of the Surfluh Lease property.
 - b. Conduct a hydrogeological site characterization to assess the effects of the discharge of high-salinity wastewater on underlying groundwater. The characterization shall be conducted in a manner to utilize acquired information to further assess the impacts of the wastewater discharge on groundwater;
 - c. The hydrogeological characterization, and a determination whether there has been a release of waste constituents to groundwater shall be consistent with the detection monitoring requirements of Title 27, CCR, section 20005 et seq. (Title 27). This includes the development of a Sampling and Analysis Plan (SAP); the location and installation of groundwater monitoring wells; soil sampling locations (if necessary); and the sampling and analysis methods for groundwater and soil samples;
 - d. Monitoring wells installed for the hydrogeological characterization shall be installed at appropriate depths that will allow the collection of representative groundwater samples. Existing groundwater wells documented to be in

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appropriate locations, where well depth and construction details can be provided, may be proposed as sampling points;

- e. Collect and submit representative groundwater and soil samples for laboratory analysis for the waste constituents listed in Table I of Monitoring and Reporting Program No. R5-2015-XXXX in accordance with a SAP approved by the Assistant Executive Officer;
- f. Conduct a well survey to identify all water supply wells within one-mile of the ponds. The Discharger shall sample the identified domestic water supply wells and analyze the samples for the waste constituents listed in Table I of Monitoring and Reporting Program No. R5-2015-XXXX. If access to private property is needed, requested, and denied, a demonstration of that is required;
- g. If the investigation determines that a release of wastewater to groundwater or soils has occurred, the hydrogeological characterization shall include a characterization of the nature and extent of the release consistent with the evaluation monitoring program requirements contained in section 20425 of Title 27;
- h. If the investigation determines that a release of wastewater to groundwater or soils has occurred, then following the characterization of the nature and extent of the release, a groundwater remediation program shall be submitted for Assistant Executive Officer review and approval that is consistent with the corrective action program requirements contained in section 20430 of Title 27. This will entail the preparation of an engineering feasibility study followed by a proposed corrective action program;
- i. Include in the report a table that provides the total monthly discharge in barrels and gallons to the sump(s) subject to this Order from 1 January 2013 to the end of the month immediately preceding the date of the report. The table shall include a description of the sources and volume of each individual waste stream going to the pond;
- j. Calculation of the average monthly discharge of wastes to the ponds from 1 June 2014 through 1 June 2015;
- k. The pond shall either be free of oil or effectively screened and maintained to preclude entry of birds or animals;
- l. Pond adjacent to natural drainage courses shall be protected from inundation or washout, or properly closed; and
- m. Based on information acquired during the hydrogeological site characterization, submit a report of waste discharge (RWD) for preparation of waste discharge requirements, if appropriate, consistent with current regulations and policies. It is anticipated that general WDRs for discharges to unlined ponds will be presented to the Central Valley Water Board for adoption by August 2016. Submittal of a

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Notice of Intent to come under a general WDR, with the additional technical information, will meet the requirement of a RWD.

2. Beginning **1 September 2015**, or a date approved by the Assistant Executive, and quarterly thereafter until all Work Plan activities are complete, the Discharger shall submit technical reports that provide information to document the Work Plan activities completed to date and to ultimately document that all elements of the Work Plan have been completed. Corrective actions shall be proposed and included in these technical reports when Work Plan activities fail to satisfy any interim or final success criteria.
3. The Discharger shall comply with Monitoring and Reporting Program No. R5-2015-XXXX (MRP), which is part of this Order, and any revisions thereto as ordered by the Assistant Executive Officer. The submission dates of self-monitoring reports shall be no later than the submission date specified in the MRP.
4. The monthly discharge volume of oil field wastewater to the pond shall not exceed the average monthly discharge volume calculated in Order 1.j. above.
5. The Discharger shall not discharge produced fluids to any location on the Surfluh Lease other than a permitted injection well, a permitted pond or disposal facility, or the pond which is the subject of this Order.
6. **All activities in the Work Plan shall be completed** in accordance with time frames included in the Work Plan as approved by the Assistant Executive Officer.
7. With each report required by this Cleanup and Abatement Order, the Discharger shall provide under penalty of perjury under the laws of California a "Certification" statement to the Central Valley Water Board. The "Certification" shall include the following signed statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Pursuant to Water Code section 13350, any person who intentionally or negligently violates a cleanup and abatement order may be liable civilly in an amount which shall not exceed five thousand dollars (\$5,000), but shall not be less than five hundred dollars (\$500), for each day in which the cleanup and abatement order is violated.
8. If it is determined that discharges from the Surfluh Lease have impacted the beneficial uses of water, the Discharger can be further required upon notification

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by the Assistant Executive Officer to provide a replacement water supply or treat the water to allow continued use.

NOTIFICATIONS

1. **Applicability.** Requirements established pursuant to Water Code sections 13304 and 13267(b) are enforceable when signed by the Assistant Executive Officer of the Central Valley Water Board.
2. **Enforcement Actions.** The Central Valley Water Board reserves its right to take any enforcement action authorized by law for violations, including but not limited to, violations of the terms and conditions of this Cleanup and Abatement Order.
3. **Inspection and Entry.** The Discharger shall allow the Central Valley Water Board or State Water Board, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to at reasonable times do the following:
 - a. Enter upon the properties;
 - b. Access and copy any records related to this Cleanup and Abatement Order;
 - c. Inspect and photograph any facilities, equipment, practices, or operations regulated or required by this Cleanup and Abatement Order; and
 - d. Sample or monitor any substances or parameters on-site for the purposes of assuring Cleanup and Abatement Order compliance or as otherwise authorized by the Porter-Cologne Water Quality Control Act.
4. **Potential Liability.** Pursuant to Water Code section 13350, any person who intentionally or negligently violates a cleanup and abatement order may be liable civilly in an amount which shall not exceed five thousand dollars (\$5,000), but shall not be less than five hundred dollars (\$500), for each day in which the cleanup and abatement order is violated. Pursuant to Water Code section 13268, any person failing or refusing to furnish technical or monitoring program reports as required by section 13267, or falsifying any information provided therein, is guilty of a misdemeanor, and may be liable civilly in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.
5. **Cost Reimbursement.** Pursuant to Water Code section 13304, the Central Valley Water Board is entitled to, and may seek reimbursement for, all reasonable costs it actually incurs to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Cleanup and Abatement Order. The Discharger shall reimburse the State of California for all reasonable costs actually incurred by the Central Valley Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Cleanup and Abatement Order, according to billing statements prepared from time to time by the

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State Water Board.

6. **Waste Management.** The Discharger shall properly manage, store, treat, and dispose of contaminated soils and groundwater which are extracted or disturbed during the investigation in accordance with applicable federal, state, and local laws and regulations. The storage, handling, treatment, or disposal of soil containing waste constituents and polluted groundwater shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050(m). The Discharger shall obtain or apply for coverage under waste discharge requirements or a conditional waiver of waste discharge requirements for any discharge of the waste to (a) land for treatment, storage, or disposal or (b) waters of the State.
7. **Requesting Administrative Review by the State Water Board.** Any person aggrieved by an action of the Central Valley Water Board that is subject to review as set forth in Water Code section 13320(a), may petition the State Water Board to review the action. Any petition must be made in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 and following. The State Water Board must receive the petition within thirty (30) days of the date the action was taken, except that if the thirtieth day following the date the action was taken falls on a Saturday, Sunday, or state holiday, then the State Water Board must receive the petition by 5:00 p.m. on the next business day. Copies of the laws and regulations applicable to filing petitions may be found on the internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.shtml or will be provided upon request.
8. **Modifications.** Any modification to this Cleanup and Abatement Order shall be in writing and approved by the Assistant Executive Officer, including any extensions. Any written extension request by the Discharger shall include justification for the delay.
9. **No Limitation of Water Board Authority.** This Cleanup and Abatement Order in no way limits the authority or ability of the Central Valley Water Board to institute additional enforcement actions or to require additional investigation and any necessary cleanup of the property consistent with the Water Code. This Cleanup and Abatement Order may be revised as additional information becomes available.

REPORTING REQUIREMENTS

1. **Duty to Use Qualified Professionals.** The Discharger shall provide documentation that plans and reports required under this Cleanup and Abatement Order are prepared under the direction of appropriately qualified professionals. Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of licensed professionals. The Discharger shall include a statement of qualifications and license numbers, if applicable, of the responsible lead professionals in all plans and reports required under this Cleanup and Abatement Order. The lead professional shall sign and affix their license stamp, as applicable, to the report, plan, or document.

2. **Electronic and Paper Media Reporting Requirements.** The Discharger shall submit both electronic and paper copies of all reports required under this Cleanup and Abatement Order including work plans, technical reports, and monitoring reports. Larger documents shall be divided into separate files at logical places in the report to keep file sizes under 150 megabytes. The Discharger shall continue to provide a paper transmittal letter, a paper copy of all figures larger than 8.5 inches by 14 inches (legal size), and an electronic copy (on Compact Disc [CD] or other appropriate media) of all reports to the Central Valley Water Board. All paper correspondence and documents submitted to the Central Valley Water Board must include the following identification numbers in the header or subject line: Geotracker Site ID: T10000006602. The Discharger shall comply with the following reporting requirements for all reports and plans (and amendments thereto) required by this Cleanup and Abatement Order:
- a. Reports and Plans Required by this Cleanup and Abatement Order. The Discharger shall submit one paper and one electronic, searchable Portable Document Format (PDF) copy of all technical reports, monitoring reports, progress reports, and plans required by this Cleanup and Abatement Order. The PDF copy of all the reports shall also be uploaded into the Geotracker database, as required by Reporting Requirement 2.(b)(iv) below.
 - b. Electronic Data Submittals to the Central Valley Water Board in compliance with the Cleanup and Abatement Order are required to be submitted electronically via the Internet into the Geotracker database <http://geotracker.waterboards.ca.gov/> (Geotracker Site ID: T10000006602). The electronic data shall be uploaded on or prior to the regulatory due dates set forth in the Cleanup and Abatement Order or addenda thereto. To comply with these requirements, The Discharger shall upload to the Geotracker database the following minimum information:
 - i. Laboratory Analytical Data: Analytical data (including geochemical data) for all waste, soil, and water samples shall be submitted in Electronic Deliverable Format (EDF), which facilitates the transfer of data from the laboratory to the end user. Waste, soil, and water include analytical results of samples collected from the following locations and devices: surface samples, equipment, monitoring wells, boreholes, gas and vapor wells or other collection devices, groundwater, piezometers, and stockpiles.
 - ii. Locational Data: All permanent monitoring locations (monitoring wells, sediment sampling locations, etc.) shall be surveyed with latitude and longitude coordinates in a decimal degree format basin on the North American Datum 1983 ellipsoid, and accurate to within one meter (3 feet).
 - iii. Site Map: Site map or maps which display discharge locations, streets bordering the facility, and sampling locations for all waste, soil, and water samples. The site map is a stand-alone document that may be submitted in various electronic formats. A site map must also be uploaded to show the maximum extent of any soil impact and water pollution. An update to

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Longview Production Company
Surfluh Lease, Raisin City Oil Field
Fresno County

the site map may be uploaded at any time.

- iv. **Electronic Report:** A complete copy (in character searchable PDF) of all work plans, work plan modifications, assessment, cleanup, and monitoring reports including the signed transmittal letters, professional certifications, and all data presented in the reports.
3. **Oversight Reimbursement.** Reimburse the Central Valley Water Board for reasonable costs associated with oversight of the investigation and remediation of the Site, as provided in Water Code section 13304(c) (1). **By 15 July 2015**, provide the name and address where the invoices shall be sent. Failure to provide a name and address for invoices and/or failure to reimburse the Central Valley Water Board's reasonable oversight costs shall be considered a violation of this Cleanup and Abatement Order.
4. **Signatory Requirements.** All reports required under this Cleanup and Abatement Order shall be signed and certified by The Discharger or by a duly authorized representative and submitted to the Central Valley Water Board. A person is a duly authorized representative only if: 1) The authorization is made in writing by The Discharger; and 2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.).
5. All monitoring and technical reports required under this Cleanup and Abatement Order shall be submitted to:

California Regional Water Quality Control Board
Central Valley Region
1685 E Street, Suite 200
Fresno, CA 93706
Attn: Ron Holcomb
Geotracker Site ID: **T10000006602**
6. **FAILURE TO COMPLY WITH THE PROVISIONS OF THIS CLEANUP AND ABATEMENT ORDER MAY SUBJECT YOU TO FURTHER ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO, ASSESSMENT OF CIVIL LIABILITY UNDER SECTIONS 13268 AND 13350 OF THE WATER CODE AND REFERRAL TO THE DISTRICT ATTORNEY OR ATTORNEY GENERAL FOR INJUNCTIVE RELIEF AND CIVIL OR CRIMINAL LIABILITY.**

Ordered by:

PAMELA C. CREEDON
Executive Officer

Date

Attachment 2
WZI Report

**Review of Longview Energy Company
Surfluh 13 and Surfluh 14
Tentative Cleanup and Abatement Order**

Prepared for:
Longview Energy Company
12001 North Central Expressway, Suite 640
Dallas, TX 75243

Prepared by:
WZI Inc.
1717 28th Street
Bakersfield, California 93301



April 2015

Attachment 2

Attachment 2

WZI Report

WZI INC.

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Attachment 2

WZI INC.

WZI Report

Exhibit 28	Surfluh 13 Berm Repair #11
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Exhibit 38	Surfluh 14 Regrade Progress #10

Attachment 2

WZI Report

1 Introduction

WZI Inc. was requested by Longview Energy Company (Longview) to provide technical assistance in the matter concerning a Notice of Violation and a related tentative Cleanup and Abatement Order. WZI reviewed the operations of the two subject sites (Surfluh 13 and Surfluh 14) and made recommendations for mitigation measures and potential revisions to the Cleanup and Abatement Order. This report delineates the WZI review, findings, and recommendations.

2 Summary and Conclusions

Longview operates the Surfluh 13 and Surfluh 14 leases through a single water disposal system which injects produced water into two permitted injection wells on the Surfluh 14 lease. The waste water is shipped via buried pipelines from the Surfluh 13 tank battery to the Surfluh 14 tank battery for injection. The “pond” at issue in the NOV and tentative order is not used or required by Longview for its injection operations.

The review indicates that with the exception of several spills from January 1, 2013 to the present, the produced water volumes and the injected water volumes are balanced. The spills were primarily tied to the pipe ruptures and volumes were limited by the response time. The review did indicate that clerical and reporting errors had been made by both Longview employees and the California Department of Conservation Division of Oil, Gas and Geothermal Resources in the published reports.

The root causes of the spills from January 2013 to present were found to be a combination of poor utility reliability, insufficient emergency storage to allow time for operators to respond and insufficient operator training on the critical elements of the Spill Prevention, Control and Counter Measure Plan.

In addition, the depression (which had accumulated spills near the Surfluh 14 tank battery) was covered (at our recommendation) with compacted clean fill to prevent further infiltration of water in that location. Based on the results of our review, it is recommended that Longview request a modification to the RWQCB’s tentative Cleanup and Abatement Order and the associated Monitoring and Reporting Program to remove the requirement to apply for Waste Discharge Requirements and to update the Spill Prevention Control and Counter Measure Plans to provide for utility service interruptions with associated changed procedures and training.

To resolve the Notice of Violation, the crude oil and water spill in the Surfluh 13 tank battery was remediated and the containment berms were repaired. The SPCC should be updated and training for the plan conducted. WZI will continue monitoring the site and update the SPCC for both Surfluh 13 and Surfluh 14.

WZI Report

3 Discussion

In the course of this study WZI conducted an independent review of the Surfluh 13 and Surfluh 14 lease and tank batteries including but not limited to:

- Independent inspection of the Surfluh leases;
- Independent review of production and injection operating procedures and records;
- Interviews with various employees;
- Review of historical aerial photographs; and
- Review of the Notice of Violation and site inspection report of the Central Valley Regional Water Quality Control Board and the resultant tentative Cleanup and Abatement Order and associated documents.

During the review, recommendations for certain mitigation measures were made to the Longview management team and were implemented by the field employees in order to minimize and or prevent any future spills, and to correct reporting errors to the DOGGR or recordation errors made by DOGGR as discovered in the WZI review.

4 Review Results

4.1 Surfluh 14 Tank Battery Depression:

The “pond” that staff highlights in their NOV (**Exhibit 1: CVRWQCB Staff Photo B**) is not a purposeful fluid collection area.

Historic photos show that the depression is the location where an original gunite lined sump was closed under the jurisdiction of the CVRWQCB. (**Exhibit 1: CVRWQCB Staff Photo B**¹),. This location, central to the facility, is commonly used for traffic and parking of site related equipment, (**Exhibit 2: Traffic Scars in Depression**). Over the 14 years since the approved closure, the fill soil over the abandoned sump has compressed under the weight of wheel loads and subsided to create the depression (below site grade), (**Exhibit 3: Depression from Traffic**) and during the spring, rainfall will accumulate in the low spot, (**Exhibit 4, and 5 : Surfluh Historic Spring Depression Photos, 2011 and 2014**). Note that several aerial images taken by various historic satellite sources are dated in March and show what appears to be moisture or standing water in the depression. This can be attributed to seasonal conditions.

The photo taken in August, the later part of the dry season shows no evidence of moisture, (**Exhibit 6: Surfluh Historic Summer Depression Photo**). **Exhibit 7, Original Surfluh 14 Sump August 1998** shows the original sump in 1998. Additionally, any flange leaks or pipe failures outside of the berm area could collect in the depression if the spill occurred within reasonable proximity to the depression (at a sufficient elevation difference for the hydraulic gradient to create flow channels in the loose soil) leading to the depression. There is a location where water has flowed showing signs of erosion from a 200 psi spill which operators made no effort to regrade as part of berm maintenance, (**Exhibit 8: Surfluh 14 Erosion Channel**).

¹ This photo provided by staff appears to be sourced from the ESRI data file and is either December 2009 or December 2010.

WZI Report

Historically, Longview made no effort to fill in the low spot as it was not viewed as anything other than a simple depression that while being a nuisance during wet periods was not considered a sufficient operational hinderance or traffic hazard to warrant the possible damage to surrounding pipes in the process of earthmoving to regrade the subsidence. Upon receiving WZI's recommendation to place clean compacted fill in the low spot to prevent further infiltration, Longview leveled the area to match grade. The low spot is now compacted and level with the site's grade, (**Exhibit 9: Surfluh 14 Current Grade**). As part of the site regrading the erosion channel was also eliminated, (**Exhibit 10, Erosion Channel Location**).

4.2 Review of Production, Injection and Reporting Procedures

4.2.1 Water Balance in Operations

The produced water and Injected water are in balance for the Surfluh leases. There is no indication that the depression near the Surfluh 14 Tank Battery has been used for waste water disposal purposes.

Longview operates the Surfluh 13 and Surfluh 14 leases through a single water disposal system which injects produced water into two permitted injection wells on the Surfluh 14 lease. The waste water is shipped from the Surfluh 13 tank battery to the Surfluh 14 tank battery for injection, (**Exhibit 11: Generalized Schematic-Surfluh Leases, Exhibit 12: Surfluh 13 Tank Battery Detail, and Exhibit 13: Surfluh 14 Tank Battery Detail**)

According to DOGGR records Longview's Surfluh lease has 105 Active, Idle or Plugged wells; of which, 35 are producible, Longview reports 22 active producers and 2 active injectors, (**Exhibit 14: DOGGR Well data**). The Surfluh injectors are capable of taking in excess of 140,000 bbl/month, (**Exhibit 15: Raisin City Water Disposal**) as demonstrated by the monthly injection volumes.

Longview Energy Company wells Surfluh 5-14 (API 1905490) and Surfluh 8-14 (API 1920751) are permitted Class II injection wells to dispose of oil field waste water. The operating wells are sufficient to dispose of the water produced on the Surfluh lease which is the subject of the order.

The operational record review indicates that it is Longview's practice to maintain balance between production and injection. Operators, when queried on operational response to upsets, stated that it is their practice during periods when one of the injection wells is not functioning, larger producing wells i.e., large producers of water are shut-in until injection can recommence. Operational records show a consistent application of the stated operational procedure, (**Exhibit 16: Longview Daily Production Reports**).

4.2.2 Notifications

Operators are notified by an automated service (which ties certain alarm functions to automatic phone calls) in the event there is an upset such as high tank levels, loss of power or other preset conditions demanding operator attention and action, (**Exhibit 17: Longview Alarm History Surfluh Site**). Many instances are noted where the automated notification was sent out for High Tank Level and the operators responded in time to prevent spills or overflow. In one case the operators were notified on 4/26/2014 of a high tank level at 11:16 and responded at 11:18 advising the notification service that "...power was out at the location which caused the high

WZI Report

tank alarm”, (**Exhibit 17: Longview Alarm History Surfluh Site**). At this point the operators took action, “Surfluh 14, low prod[uction] due to prod[uction] stacking in wash tank – SD [shut down] 10-14 [producing well] and 11-14 [producing well] so water tank could catch up...OK, restarted 11-14 [producing well] today”[ed.](**Exhibit 16: Longview Daily Production Reports**).

4.2.3 Production and Injection Records and Reporting

The review of both the Longview Raisin City water balance and specifically the Surfluh leases’ water balance indicates that with the exception of several spills from January 1, 2013 to the present, the produced water volumes and the injected water volumes are balanced. The review did indicate that clerical and reporting errors had been made by both Longview employees and the California Department of Conservation Division of Oil, Gas and Geothermal Resources in the published reports.

Longview’s DOGGR Raisin City Oil Field Water production and injection records were reviewed. The results were reviewed with the Longview staff and the operator’s reporting discrepancies were resolved, (**Exhibit 15: Raisin City Water Disposal**).

4.2.3.1 November 2014

The November 2014 error was clerical reporting error in a non-Surfluh lease operation which did not affect the balances on the Surfluh lease, (**Exhibit 14 : Raisin City Water Water Disposal.xlsx**, “Summary”). Corrections were submitted to DOGGR.

4.2.3.2 March 2014

The March 2014 error appears to be a typographical error by DOGGR between the Raisin City Oil Field data and the DOGGR report, (**Exhibit 15: Raisin City Water Disposal**). DOGGR report shows one non-Surfluh well with a transcription error that is 10 times higher than the actual reported value. Corrections were submitted to DOGGR.

4.2.3.3 February 2014

In reviewing the February 2014 records a field-wide discrepancy was found to be the result of a clerical error in transcription of some lease’s production and injection data from a previous spreadsheet to the February spreadsheet which when reviewed against the Form 110b injection data was found to be inconsistent with the actual February 2014 injection data. The February injection data were corrected but the production data were not corrected to reflect the February data thus leaving the wrong balances for water produced reported against the February balances of water injected for some leases, (**Exhibit 15 : Raisin City Water Disposal**).

This error did affect the Surfluh water balance however the correct months data when incorporated balanced for the Surfluh facilities. Corrections were submitted to DOGGR.

WZI Report

4.2.3.4 June and July 2013

The June and July 2013 data discrepancy also shows the same trend. On both of these reports submitted to the State, the two NCC SWD wells (not associated with the Surfluh leases) were inadvertently left off the Injection Report; however, the volumes from these two wells when properly included balance for Longview's Raisin City operations, (**Exhibit 15 : Raisin City Water Disposal**).

WZI recommends that Longview management audit the clerical reporting procedures to ensure that the field production data are properly entered into the spreadsheets corresponding to DOGGR report formats, that DOGGR reports are checked for errors in entry and that DOGGR reports are checked for proper entries.

4.3 Spills

The root causes of the spills from January 2013 to present were found to be a combination of poor utility reliability, insufficient emergency storage to allow time for operators to respond and insufficient operator training on the critical elements of the Spill Prevention, Control and Counter Measure Plan.

WZI reviewed the automated notification service records and interviewed the operations personnel to establish dates, spill type, causes and responses. There were three spills that were found to have occurred. The automated service vendor was queried for call out records to help identify the root cause of the spills and tank overflow.

4.3.1 April 16, 2015 (Surfluh 14)

Power outage caused the tank to overflow and the call out system failed due to a back up battery failure, this occurred during maintenance activities to replace pipe that required the berm to be breached for access. A temporary berm was placed in the breach overnight. The temporary berm was insufficient to hold the overflow resulting from the power outage knocking out the injection well pump. This was a non-pipe-rupture-related spill of produced water slated for injection. The spill was estimated to be approximately 300 barrels of water before operators were on site to manage the event.

4.3.2 January 26, 2015 (Surfluh 13)

The automated notification detected a High Level Alarm on Surfluh 13 Tank Battery. No automated notification was received by the operations personnel due to the failure of a utility transformer coupled with the failure of the backup battery (which was approaching expiration). The spill was completely contained inside the Surfluh 13 Tank Battery berm and posed no threat of reaching the depression in Section 14. The oil spill was approximately 2 barrels with approximately 200 barrels of water. The spill had not been fully remediated at the time of the February inspection.

4.3.3 December 9, 2014 (Surfluh 14)

A pipeline break occurred in the injection line prior to the split to the two injection wells outside of the bermed area surrounding the Surfluh 14 tank battery. The pressure on the pipeline was 200 psi and the spray from the release of water at that pressure washed out soil and created a channel upstream of the depression. The spill was approximately 300 barrels of water.

WZI Report

4.3.4 July 19, 2013 (Surfluh 14)

In this case the Polyethylene pipe to Surfluh 8-14 ruptured and repairs were made. On August 2, 2013 the Polyethylene pipe to Surfluh 8-14 was replaced.

4.3.5 May 2, 2013 (Surfluh 14)

In this case the Polyethylene pipe to Surfluh 8-14 ruptured the notification service advised the operators of a high tank level, operators responded when they were onsite and repairs were completed.

The root causes appear to be a combination of insufficient tank volume normally held open by level controllers on site to allow accumulation of fluids during upset conditions such as utility failures (approximately 2 hours of tankspace between the high level alarm and the overflow level), inadequate berm maintenance, piping, flanges and couplings failing or a dying back-up battery for the ring-down system.

Longview is now encasing the “poly” [Polyethylene Pipe] with PVC [Polyvinyl Chloride] Pipe to protect the poly pipe.

WZI recommends that Longview management audit the field practices to encourage high levels of training and proactive measures.

5 Implementation of Recommendations and Temporary Mitigation Measures

5.1 Regarding Crude Oil Clean Up and Berm Repair

The Surfluh stock and water tanks overflowed as a result of a utility service power loss and a failure of the site emergency notice system to bring the condition to the operator’s attention. **Exhibit 18: Surfluh 13 Berm Repair #1** shows the spill at Surfluh 13. The producing wells continued to flow oil and water to the tanks. The operators indicated in interviews that less than 1 barrel of oil was lost from the water tanks and approximately 100 barrels of produced water overflowed the same. The water and oil were cleaned up but some oil remained in the bermed area and was not viewed as being of sufficient quantity to warrant report as a spill.

The operators temporarily breached the berm, then removed the oily dirt which is set aside for future use as stabilized berm material. **Exhibit 19: Surfluh 14 Berm Repair , #2** through **Exhibit 22: Surfluh 14 Berm Repair #5** show repairs to Surfluh 14 berms. **Exhibit 23: Surfluh 13 Berm Repair #6** through **Exhibit 28: Surfluh 13 Berm Repair #10** show cleanup and repairs at Surfluh 13.

5.2 Regarding the depression and site to match to eliminate location that accumulates water

Longview directed operations personnel to eliminate the nuisance depression that has existed as the loose fill soil collapsed since the original sump closure. The photos (**Exhibit 29: Surfluh 14 Regrade Progress #1 through Exhibit 38, Surfluh 14 Regrade Progress #10**) show the original site, progress and final condition. The clean fill has been compacted as the additional fill materials were spread over the depression to raise the grade to prevent infiltration.

5.3 Install additional tank capacity

Longview has moved an additional 125 bbl tank to the site to increase time storage capacity to provide additional time to respond to upsets such as utility power failures. The addition of the

WZI Report

tank will increase the safe response time by 1 hour. The SPCC will be revised to incorporate the modifications.

6 Recommendations Related to the NOV and CAO

In conclusion, it appears to WZI Inc. that there was confusion surrounding the depression at the Surfluh 14 site. Reasonable efforts to mitigate the effects of the subsidence and spills that may have accumulated in the depression have been taken.

WZI Inc. recommends that Longview requests changes to the tentative order since no produced water will be discharged to land other than in permitted injection wells:

- Remove the requirement to submit a Report of Waste Discharge
- Remove the ability for Longview to discharge to a surface impoundment other than in an event of a catastrophic equipment failure in accordance with their SPCC plan.
- Remove the requirements for monitoring the discharge to a “pond” other than as required for the purposes of the hydrogeologic assessment as determined in the approved Work Plan. Quarterly reports for the Work Plan will include the disposition of the produced waste water from the property subject to the order.

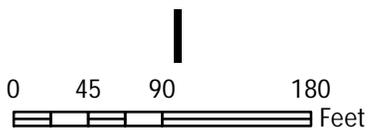
Longview
Exhibit 1
Staff Exhibit Photo



Pond

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Section 16, T28S, R27E, MDB&M



LEASE MAP
CLEANUP AND ABATEMENT
ORDER NO. XXXXXXXX
FOR
LONGVIEW PRODUCTION COMPANY
RAISIN CITY OIL FIELD, SURFLUH LEASE
KERN COUNTY

ATTACHMENT B

Longview
Exhibit 2
Traffic Scars in Depression





Longview

Exhibit 4

Springtime Aerial Photo

2011

Legend

APN: 03007071S

Surfluh 14 Tank Battery: 4/2011



Surfluh 14 Tank Battery 4/2014

Longview
Exhibit 5
Springtime Aerial Photo
2014

Legend
🏠 APN: 03007071S



Surfluh 14 Tank Battery 8/2012

Longview
Exhibit 6
Summer Aerial Photo
2012

Legend
🏠 APN: 03007071S



Surfluh 14 Tank Battery 8/1998

Longview
Exhibit 7
Original Sump,
August 1998



Longview
Exhibit 8
Erosion Channel





Photo 2. Unauthorized discharge erosional drainage channel.



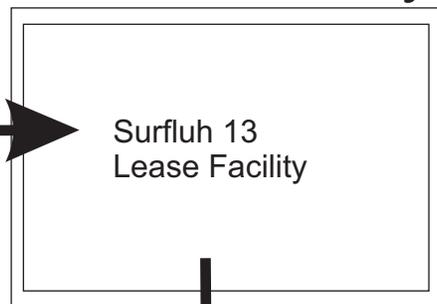
Photos were taken by Alejandra Lopez, RWQCB Engineering Geologist

Generalized Surfluh Lease Schematic

Producing Wells

Surfluh 13 525-13
546-13
547-13
Hamilton 518-13

Tank Battery



Injection Wells

Section 13

Section 14

Surfluh 14 2-14
4-14
6-14
7-14
10-14
11-14
31A-14
32-14
63-14
64-14
504-14
507-14
510-14
512-14
538-14
550-14
F22-14

Surfluh 14
Lease Facility

Surfluh 5-14

Surfluh 8-14

Eagle
Sunset 19-11

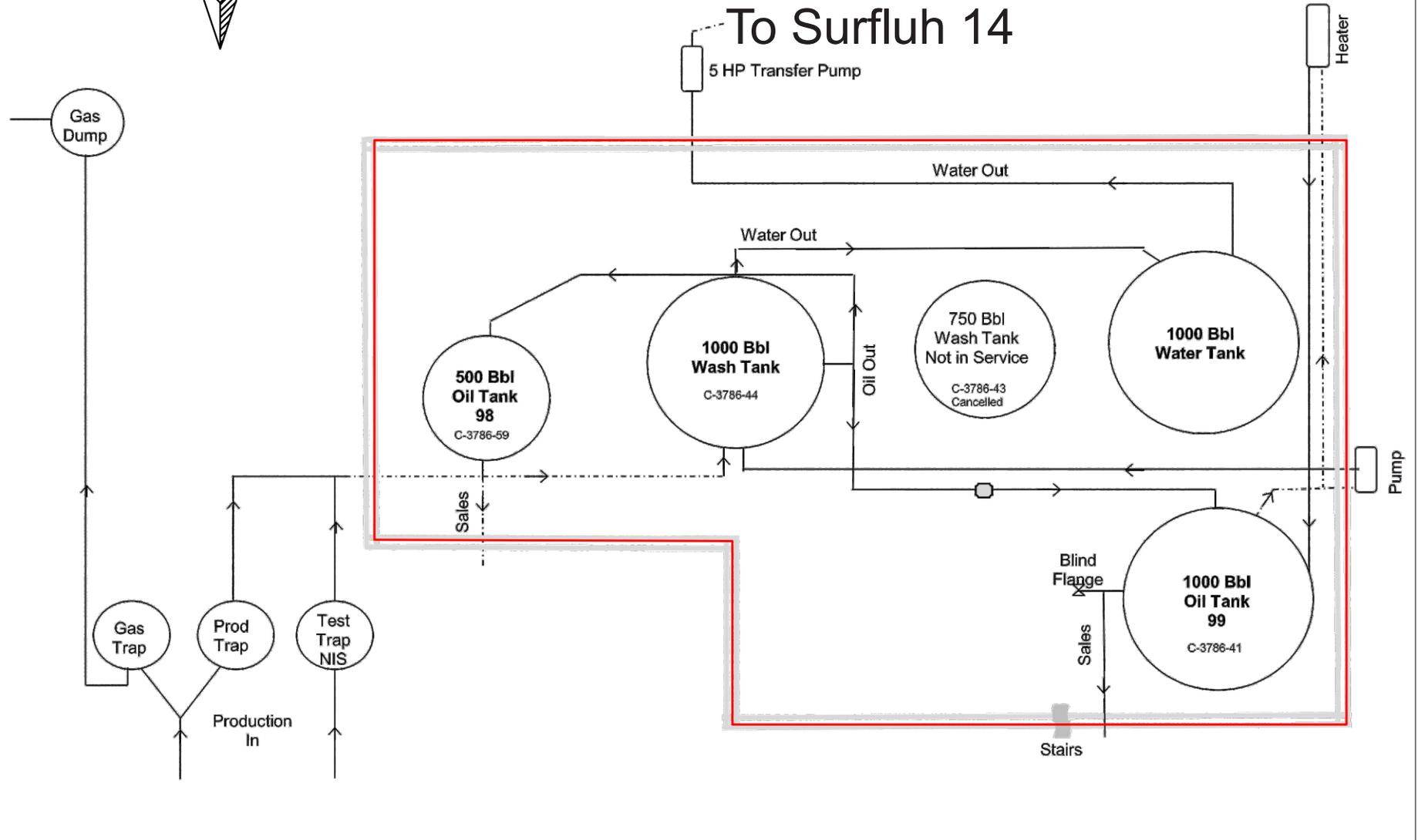
	WZI INC. BAKERSFIELD, CALIFORNIA	
	Longview Energy Generalized Schematic- Surfluh Leases	
DATE: 2/14	LONGVIEWPROD-108	EXHIBIT: 3

Longview Energy Company
Surfluh 13 Tank Battery

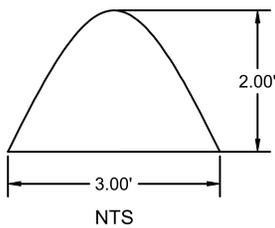
Longview
Exhibit 12



To Surfluh 14



BERM PROFILE



LEGEND

— BERM



WZI INC.
BAKERSFIELD, CALIFORNIA

LONGVIEW PRODUCTION RIVERDALE
SURFLUH 13

TANK BATTERY DETAIL

DATE: 2/14

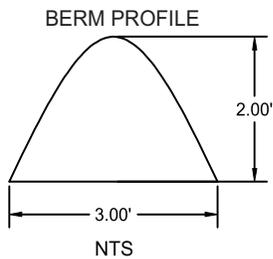
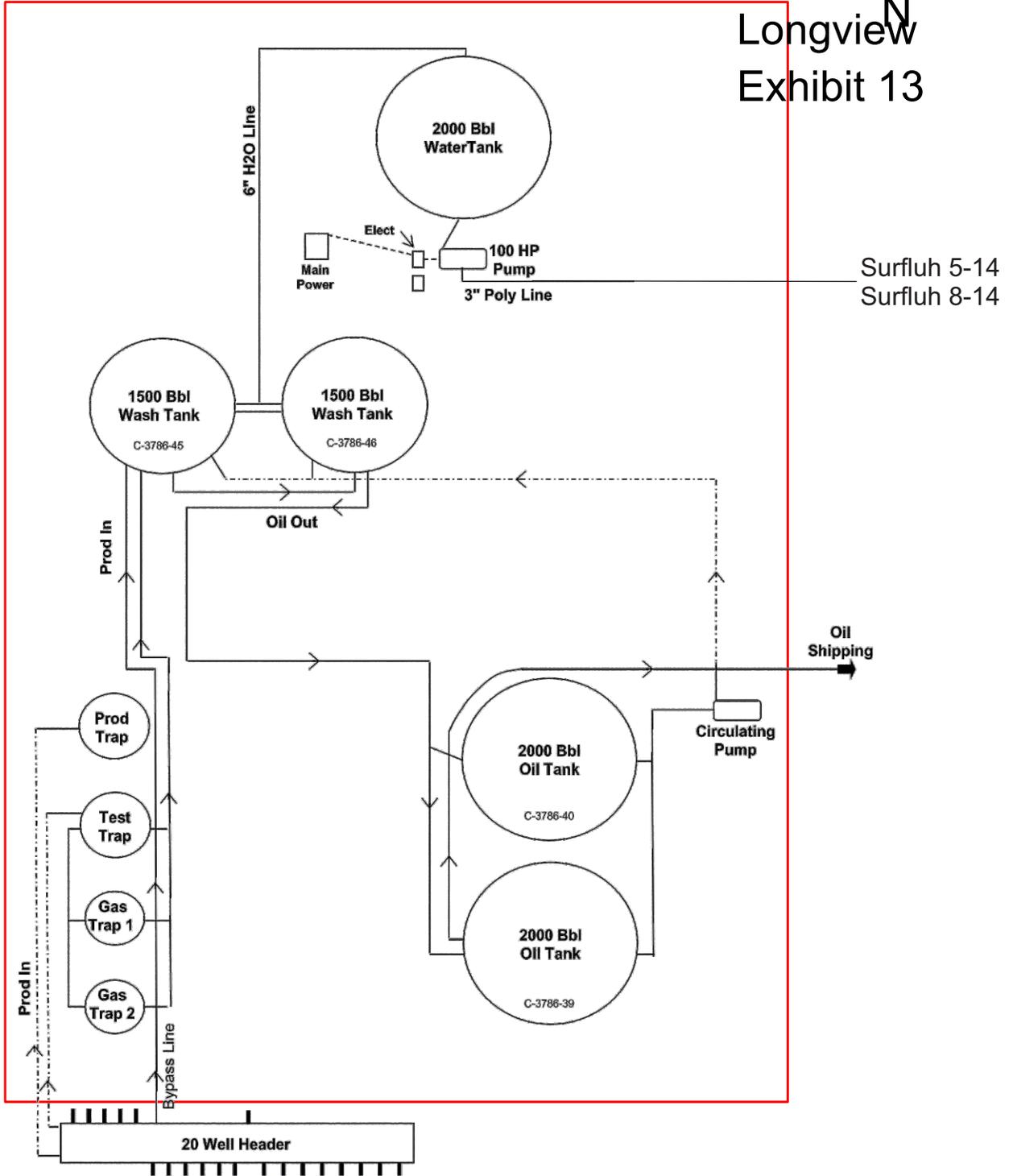
LONGVIEWPROD-108

EXHIBIT: 3

Longview Energy Company Surfluh 14 Tank Battery



Longview
Exhibit 13



LEGEND

— BERM



WZI INC.
BAKERSFIELD, CALIFORNIA

LONGVIEW PRODUCTION RIVERDALE
SURFLUH 14

TANK BATTERY DETAIL

DATE: 2/14

LONGVIEWPROD-108

EXHIBIT: 3

DOGGR Well Data

pi.consrv.ca.gov/opi/opi.dll/WellList?

Dist	Operator	Field Name	Lease	Well#	API	Well Stat	Pool	WellType	PWT Stat	S	T	R	BM	Op Cd	Field	Area	Area Name	Pool Name
5	Longview E	Raisin City	Surfluh	52-14	1900026	Plugged	8	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	52-14	1900026	Plugged	5	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Miocene Tar	
5	Longview E	Raisin City	Surfluh	52-14	1900026	Plugged	15	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Eocene	
5	Longview E	Raisin City	Surfluh	8A-13	1900050	Active	8	OG	Active		13 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	8A-13	1900050	Active	5	OG	Plugged		13 15S	17E	MD	L2507	584	0 Any Area	Miocene Tar	
5	Longview E	Raisin City	Surfluh	13-Jan	1905407	Idle	8	OG	Active		13 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	13-Jan	1905407	Idle	5	OG	Plugged		13 15S	17E	MD	L2507	584	0 Any Area	Miocene Tar	
5	Longview E	Raisin City	Surfluh	13-Jan	1905407	Idle	10	OG	Plugged		13 15S	17E	MD	L2507	584	0 Any Area	Miocene	
5	Longview E	Raisin City	Surfluh	13-Mar	1905409	Active	8	OG	Active		13 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	13-Mar	1905409	Active	5	OG	Plugged		13 15S	17E	MD	L2507	584	0 Any Area	Miocene Tar	
5	Longview E	Raisin City	Surfluh	13-May	1905411	Idle	8	OG	Active		13 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	13-May	1905411	Idle	5	OG	Plugged		13 15S	17E	MD	L2507	584	0 Any Area	Miocene Tar	
5	Longview E	Raisin City	Surfluh	13-Jun	1905412	Idle	8	OG	Active		13 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	13-Jun	1905412	Idle	5	OG	Plugged		13 15S	17E	MD	L2507	584	0 Any Area	Miocene Tar	
5	Longview E	Raisin City	Surfluh	13-Jul	1905413	Active	8	OG	Active		13 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	13-Jul	1905413	Active	10	OG	Plugged		13 15S	17E	MD	L2507	584	0 Any Area	Miocene	
5	Longview E	Raisin City	Surfluh	13-Aug	1905414	Active	8	OG	Active		13 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	13-Aug	1905414	Active	10	OG	Plugged		13 15S	17E	MD	L2507	584	0 Any Area	Miocene	
5	Longview E	Raisin City	Surfluh	1A-14	1905486	Plugged	8	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	1A-14	1905486	Plugged	5	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Miocene Tar	
5	Longview E	Raisin City	Surfluh	14-Feb	1905487	Active	8	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	14-Feb	1905487	Active	5	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Miocene Tar	
5	Longview E	Raisin City	Surfluh	14-Feb	1905487	Active	15	OG	Active		14 15S	17E	MD	L2507	584	0 Any Area	Eocene	
5	Longview E	Raisin City	Surfluh	14-Mar	1905488	Idle	8	OG	Active		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	14-Mar	1905488	Idle	10	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Miocene	
5	Longview E	Raisin City	Surfluh	14-Apr	1905489	Active	8	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	14-Apr	1905489	Active	5	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Miocene Tar	
5	Longview E	Raisin City	Surfluh	14-Apr	1905489	Active	15	OG	Active		14 15S	17E	MD	L2507	584	0 Any Area	Eocene	
5	Longview E	Raisin City	Surfluh	14-May	1905490	Active	0	WD	Active		14 15S	17E	MD	L2507	584	0 Any Area	No Pool Breakdown	
5	Longview E	Raisin City	Surfluh	14-May	1905490	Active	20	WD			14 15S	17E	MD	L2507	584	0 Any Area	Pliocene	
5	Longview E	Raisin City	Surfluh	14-Jun	1905491	Active	8	OG	Active		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	14-Jun	1905491	Active	5	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Miocene Tar	
5	Longview E	Raisin City	Surfluh	14-Jun	1905491	Active	15	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Eocene	
5	Longview E	Raisin City	Surfluh	21-14	1905573	Idle	8	OG	Active		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	21-14	1905573	Idle	10	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Miocene	
5	Longview E	Raisin City	Surfluh	F22-14	1905574	Active	15	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Eocene	
5	Longview E	Raisin City	Surfluh	F22-14	1905574	Active	30	DG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Panoche (ABD)	
5	Longview E	Raisin City	Surfluh	F22-14	1905574	Active	8	OG	Active		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	31-14	1905576	Active	8	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	31-14	1905576	Active	5	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Miocene Tar	
5	Longview E	Raisin City	Surfluh	31-14	1905576	Active	8	WD	Active		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	31A-14	1905577	Active	8	OG	Active		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	31A-14	1905577	Active	10	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Miocene	
5	Longview E	Raisin City	Surfluh	31A-14	1905577	Active	15	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Eocene	
5	Longview E	Raisin City	Surfluh	32-14	1905579	Active	15	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Eocene	
5	Longview E	Raisin City	Surfluh	32-14	1905579	Active	15	DG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Eocene	
5	Longview E	Raisin City	Surfluh	32-14	1905579	Active	8	OG	Active		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	41-14	1905580	Idle	8	OG	Active		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	41-14	1905580	Idle	10	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Miocene	
5	Longview E	Raisin City	Surfluh	42-14	1905581	Active	0	WD	Active		14 15S	17E	MD	L2507	584	0 Any Area	No Pool Breakdown	
5	Longview E	Raisin City	Surfluh	42-14	1905581	Active	20	WD			14 15S	17E	MD	L2507	584	0 Any Area	Pliocene	
5	Longview E	Raisin City	Surfluh	51-14	1905583	Plugged	8	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	
5	Longview E	Raisin City	Surfluh	51-14	1905583	Plugged	10	OG	Plugged		14 15S	17E	MD	L2507	584	0 Any Area	Miocene	
5	Longview E	Raisin City	Surfluh	53-14	1905584	Idle	8	OG	Idle		14 15S	17E	MD	L2507	584	0 Any Area	Zilch	

Longview Exhibit 14

DOGGR Well Data

5	Longview	F	Raisin City	Surfluh	53-14	1905584	Idle	5	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Miocene Tar
5	Longview	F	Raisin City	Surfluh	53-14	1905584	Idle	10	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Miocene
5	Longview	F	Raisin City	Surfluh	61-14	1905585	Idle	8	OG	Active	14	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	61-14	1905585	Idle	10	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Miocene
5	Longview	F	Raisin City	Surfluh	61-14	1905585	Idle	5	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Miocene Tar
5	Longview	F	Raisin City	Surfluh	63-14	1905586	Idle	8	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	63-14	1905586	Idle	5	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Miocene Tar
5	Longview	F	Raisin City	Surfluh	63-14	1905586	Idle	15	OG	Active	14	15S	17E	MD	L2507	584	0	Any Area	Eocene
5	Longview	F	Raisin City	Surfluh	64-14	1905587	Active	8	OG	Active	14	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	64-14	1905587	Active	10	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Miocene
5	Longview	F	Raisin City	Surfluh	64-14	1905587	Active	15	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Eocene
5	Longview	F	Raisin City	Surfluh	14-Jul	1920737	Active	8	OG	Active	14	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	14-Jul	1920737	Active	15	DG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Eocene
5	Longview	F	Raisin City	Surfluh	14-Aug	1920751	Active	8	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	14-Aug	1920751	Active	5	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Miocene Tar
5	Longview	F	Raisin City	Surfluh	14-Aug	1920751	Active	0	WD	Active	14	15S	17E	MD	L2507	584	0	Any Area	No Pool Breakdown
5	Longview	F	Raisin City	Surfluh	14-Sep	1920811	Plugged	8	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	14-Sep	1920811	Plugged	5	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Miocene Tar
5	Longview	F	Raisin City	Surfluh	14-Oct	1920812	Active	8	OG	Active	14	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	14-Oct	1920812	Active	5	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Miocene Tar
5	Longview	F	Raisin City	Surfluh	14-Nov	1921543	Active	8	OG	Active	14	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	14-Nov	1921543	Active	5	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Miocene Tar
5	Longview	F	Raisin City	Surfluh	14-Nov	1921543	Active	15	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Eocene
5	Longview	F	Raisin City	Surfluh	14-Dec	1921544	Idle	8	OG	Active	14	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	14-Dec	1921544	Idle	10	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Miocene
5	Longview	F	Raisin City	Surfluh	13-Sep	1921875	Idle	8	OG	Active	13	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	13-Sep	1921875	Idle	5	OG	Plugged	13	15S	17E	MD	L2507	584	0	Any Area	Miocene Tar
5	Longview	F	Raisin City	Surfluh	13-Sep	1921875	Idle	15	DG	Plugged	13	15S	17E	MD	L2507	584	0	Any Area	Eocene
5	Longview	F	Raisin City	Surfluh	5A-13	1923768	Cancelled	8	OG	Cancelled	13	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	501	1924002	Cancelled	0	OG	Cancelled	14	15S	17E	MD	L2507	584	0	Any Area	No Pool Breakdown
5	Longview	F	Raisin City	Surfluh	504	1924358	Active	15	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Eocene
5	Longview	F	Raisin City	Surfluh	504	1924358	Active	8	OG	Active	14	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	505	1924372	Cancelled	30	DG	Cancelled	14	15S	17E	MD	L2507	584	0	Any Area	Panoche (ABD)
5	Longview	F	Raisin City	Surfluh	507	1924412	Active	30	DG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Panoche (ABD)
5	Longview	F	Raisin City	Surfluh	507	1924412	Active	8	OG	Active	14	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	508	1924413	Active	28	DG	Plugged	13	15S	17E	MD	L2507	584	0	Any Area	Moreno (ABD)
5	Longview	F	Raisin City	Surfluh	508	1924413	Active	15	OG	Plugged	13	15S	17E	MD	L2507	584	0	Any Area	Eocene
5	Longview	F	Raisin City	Surfluh	508	1924413	Active	10	OG	Cancelled	13	15S	17E	MD	L2507	584	0	Any Area	Miocene
5	Longview	F	Raisin City	Surfluh	508	1924413	Active	8	OG	Active	13	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	510	1924414	Active	15	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Eocene
5	Longview	F	Raisin City	Surfluh	510	1924414	Active	8	OG	Active	14	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	512	1924496	Active	15	OG	Plugged	14	15S	17E	MD	L2507	584	0	Any Area	Eocene
5	Longview	F	Raisin City	Surfluh	512	1924496	Active	8	OG	Active	14	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	546	1924529	Active	28	DG	Plugged	13	15S	17E	MD	L2507	584	0	Any Area	Moreno (ABD)
5	Longview	F	Raisin City	Surfluh	546	1924529	Active	15	OG	Active	13	15S	17E	MD	L2507	584	0	Any Area	Eocene
5	Longview	F	Raisin City	Surfluh	525	1924530	Active	15	OG	Plugged	13	15S	17E	MD	L2507	584	0	Any Area	Eocene
5	Longview	F	Raisin City	Surfluh	525	1924530	Active	8	OG	Active	13	15S	17E	MD	L2507	584	0	Any Area	Zilch
5	Longview	F	Raisin City	Surfluh	538-14	1925459	Active	15	OG	Active	14	15S	17E	MD	L2507	584	0	Any Area	Eocene
5	Longview	F	Raisin City	Surfluh	550-14	1925460	Active	15	OG	Active	14	15S	17E	MD	L2507	584	0	Any Area	Eocene
5	Longview	F	Raisin City	Surfluh	547-13	1925528	Active	15	OG	Active	13	15S	17E	MD	L2507	584	0	Any Area	Eocene

Count 104

Longview Exhibit 15

Water Production and Injection

Comments supplied by Judy Anderson: Longview Staff

"Feb and March 2014: 127,000 more barrels were produced than were injected"

Feb 14 When I was preparing the Feb report for submission to the State, I completed the Production Report (110) first. When I started to complete the Injection Report (110b), I had found an error in my water injection worksheet I use for my allocations (tab Feb 14c) - this worksheet links to another workbook pulling in the SWD well volumes and I had neglected to change that link from January to February. I corrected my worksheet (which not only changes the injection numbers, but also the allocations to the wells). I then corrected the State Water Injection Report (110b), but did not go back and correct the allocation to the wells on the Production Report (110) before submitting to the State.

See Tabs Feb 14a, b & c

Mar 14 The produced water on the State Production Report (110) match the injection volume on the Injection Report (110b) submitted to the State, however the State database is incorrect (shows 453,510 when the volume reported is 372,471)

See Tab Mar 14

"Jun, Jul 2013: 66,000 barrels were not injected or properly accounted for"

Jun 13 & Jul 13 On both of these reports submitted to the State, the two NCC SWD wells were inadvertently left off Injection Report; however, the volumes from these two wells input on the Production Report (110)

See Tabs Jun 13a & 13b and Jul 13a & 13b

	NCC 1-11	NCC 6-10		
June	25,604	5,763	Total	63,381
July	23,730	8,284		

In addition to those brought to our attention the following was found:

Nov 14 State Reports submitted show 367,988 bbls water produced, but 386,849 bbls injected - Found that the water allocated to the Ripperdan 77 on the Production Report is incorrect - reported 15,421 (which is the volume inadvertently picked up from the Ripperdan 88) - the correct bbls allocated to Ripperdan 77 is 34,282

See Tabs Nov 14a, b & c

Water Production and Injection

Production Submitted

Corrected Production Numbers

Injection Submitted

LEASE	Well Number	API Number	POOL	Pool Code	Pool Well Type	WATER PRODUCED (BBL)
A	1	01905389	Zilch	08	OG	33,887
B	3-19	01920979	Zilch	08	OG	12,157
Eagle-Sunset	19	01900041	Zilch	08	OG	3,630
Eagle-Sunset	2	01905501	Zilch	08	OG	31,899
Eagle-Sunset	21	01905595	Zilch	08	OG	29,394
Hamilton	518-13	01924579	Zilch	08	OG	3,356
N.C.C.	7-10	01905484	Zilch	08	OG	26,839
Ripperdan	35-13	01905552	Zilch	08	OG	6,622
Ripperdan	45-13	01905554	Zilch	08	OG	12,871
Ripperdan	502	01924050	Zilch	08	OG	1,398
Ripperdan	503	01924357	Zilch	08	OG	8,383
Ripperdan	506	01924374	Zilch	08	OG	2,268
Ripperdan	509-13	01924623	Zilch	08	OG	5,146
Ripperdan	513	01924495	Eocene	15	OG	119
Ripperdan	515	01924531	Eocene	15	OG	11,641
Ripperdan	544-13	01925328	Eocene	15	OG	5,738
Ripperdan	56-13	01905558	Eocene	15	OG	34
Ripperdan	57-13	01905559	Zilch	08	OG	13,377
Ripperdan	77-13	01905564	Zilch	08	OG	38,994
Ripperdan	88-13	01905569	Zilch	08	OG	20,828
Surfluh	10-14	01920812	Zilch	08	OG	42,142
Surfluh	11-14	01921543	Zilch	08	OG	41,018
Surfluh	31A-14	01905577	Zilch	08	OG	2,083
Surfluh	32-14	01905579	Zilch	08	OG	14,943
Surfluh	4-14	01905489	Eocene	15	OG	4,390
Surfluh	504	01924358	Zilch	08	OG	521
Surfluh	507	01924412	Zilch	08	OG	587
Surfluh	510	01924414	Zilch	08	OG	460
Surfluh	512	01924496	Zilch	08	OG	59
Surfluh	525	01924530	Zilch	08	OG	7,161
Surfluh	538-14	01925459	Eocene	15	OG	268
Surfluh	546	01924529	Eocene	15	OG	63
Surfluh	547-13	01925528	Eocene	15	OG	43
Surfluh	550-14	01925460	Eocene	15	OG	14,693
Surfluh	6-14	01905491	Zilch	08	OG	2,535
Surfluh	63-14	01905586	Eocene	15	OG	463

Total 400,010

LEASE	Well Number	API Number	POOL	Pool Code	Pool Well Type	WATER PRODUCED (BBL)
A	1	01905389	Zilch	08	OG	30,247
B	3-19	01920979	Zilch	08	OG	10,851
Eagle-Sunset	19	01900041	Zilch	08	OG	3,009
Eagle-Sunset	2	01905501	Zilch	08	OG	28,473
Eagle-Sunset	21	01905595	Zilch	08	OG	26,237
Hamilton	518-13	01924579	Zilch	08	OG	2,782
N.C.C.	7-10	01905484	Zilch	08	OG	26,118
Ripperdan	35-13	01905552	Zilch	08	OG	6,072
Ripperdan	45-13	01905554	Zilch	08	OG	11,802
Ripperdan	502	01924050	Zilch	08	OG	1,282
Ripperdan	503	01924357	Zilch	08	OG	7,687
Ripperdan	506	01924374	Zilch	08	OG	2,080
Ripperdan	509-13	01924623	Zilch	08	OG	4,718
Ripperdan	513	01924495	Eocene	15	OG	109
Ripperdan	515	01924531	Eocene	15	OG	10,675
Ripperdan	544-13	01925328	Eocene	15	OG	5,262
Ripperdan	56-13	01905558	Eocene	15	OG	31
Ripperdan	57-13	01905559	Zilch	08	OG	12,266
Ripperdan	77-13	01905564	Zilch	08	OG	35,757
Ripperdan	88-13	01905569	Zilch	08	OG	19,099
Surfluh	10-14	01920812	Zilch	08	OG	34,942
Surfluh	11-14	01921543	Zilch	08	OG	34,010
Surfluh	31A-14	01905577	Zilch	08	OG	1,727
Surfluh	32-14	01905579	Zilch	08	OG	12,390
Surfluh	4-14	01905489	Eocene	15	OG	3,640
Surfluh	504	01924358	Zilch	08	OG	432
Surfluh	507	01924412	Zilch	08	OG	486
Surfluh	510	01924414	Zilch	08	OG	381
Surfluh	512	01924496	Zilch	08	OG	49
Surfluh	525	01924530	Zilch	08	OG	5,938
Surfluh	538-14	01925459	Eocene	15	OG	222
Surfluh	546	01924529	Eocene	15	OG	52
Surfluh	547-13	01925528	Eocene	15	OG	35
Surfluh	550-14	01925460	Eocene	15	OG	12,182
Surfluh	6-14	01905491	Zilch	08	OG	2,102
Surfluh	63-14	01905586	Eocene	15	OG	384

Total 353,529

LEASE	Well Number	API Number	POOL	Pool Code	Pool Well Type	WATER OR STEAM INJECTED (bb)
A	4	01905392	No Pool Breakdown	00	WD	47,176
Eagle-Sunset	14	01905509	No Pool Breakdown	00	WD	48,632
Eagle-Sunset	20	01905514	No Pool Breakdown	00	WD	
Hamilton	43-13	01905462	No Pool Breakdown	00	WD	
N.C.C.	1-11	01905471	No Pool Breakdown	00	WD	19,788
N.C.C.	6-10	01905483	No Pool Breakdown	00	WD	6,330
Properties, Inc.	37-18	01905517	No Pool Breakdown	00	WD	
Ripperdan	82-24	01905528	No Pool Breakdown	00	WD	36,464
Ripperdan	86-13	01905566	No Pool Breakdown	00	WD	63,986
Ripperdan	88A-13	01905570	No Pool Breakdown	00	WD	16,391
SA & FL	25X-29	01923429	No Pool Breakdown	00	WD	
Surfluh	31-14	01905576	Zilch	08	WD	
Surfluh	42-14	01905581	No Pool Breakdown	00	WD	
Surfluh	5-14	01905490	No Pool Breakdown	00	WD	72,133
Surfluh	8-14	01920751	No Pool Breakdown	00	WD	42,630

Total 353,530

Raisin City Oil Production/Sales - February 2014

Longview

Exhibit 15

Water Production and Injection

Lease	Well	Well No	API No	Well Test BOPD	Well Test BWPD	# Days Prod	Oil Gravity	Calc Bbls Oil	% of Calc Bbls	Calc Bbls Wtr	Allocated Bbls Wtr	Oil Beg Inv	Oil Prod	Est Oil Sales	Actual Oil Sales	Oil B&W	Oil Inj	Amount Received	Avg Price
Raisin City Field																			
Surfluh 13	525-13	24218	01924530	5.24	518.46	11		57.64	0.1283	5,703.06	5,931.14		98.77		103.33			\$10,508.52	
	546-13	24217	01924529	4.50	1.80	28		126.00	0.2804	50.40	52.47		211.38		227.20			\$22,971.44	
	547-13	24181	01925528	9.64	1.26	27		260.28	0.5792	34.02	35.42		436.65		469.32			\$47,452.42	
Hamilton	518-13	24215	01924579	0.21	102.79	26		5.46	0.0122	2,672.54	2,782.41		9.16		9.85			\$995.43	
Surfluh 13	Total						24.60	449.38	1.0000	8,460.02		329.44	753.88	801.23	810.30	-	273.02	\$81,927.81	\$101.11
Surfluh 14																			
	2-14	24046	01905487			0		-	-	-	-		-		-			\$0.00	
	4-14	24048	01905489	10.12	129.48	27		273.24	0.0932	3,495.96	3,639.69		325.08		437.04			\$43,662.05	
	6-14	24053	01905491	10.21	77.64	26		265.46	0.0905	2,018.64	2,101.63		315.82		424.59			\$42,418.86	
	7-14	24055	01920737			0		-	-	-	-		-		-			\$0.00	
	10-14	24060	01920812	10.29	1,459.21	23		236.67	0.0807	33,561.83	34,941.62		281.57		378.55			\$37,818.39	
	11-14	24061	01921543	6.25	1,555.55	21		131.25	0.0448	32,666.55	34,009.54		156.15		209.93			\$20,972.93	
	31A-14	24065	01905577	30.20	75.40	22		664.40	0.2266	1,658.80	1,727.00		790.45		1,062.69			\$106,166.99	
	32-14	24066	01905579	6.03	440.77	27		162.81	0.0555	11,900.79	12,390.05		193.70		260.41			\$26,016.03	
	63-14	24073	01905586	4.62	14.18	26		120.12	0.0410	368.68	383.84		142.91		192.13			\$19,194.43	
	64-14	24002	01905587			0		-	-	-	-		-		-			\$0.00	
	504-14	24204	01924358	1.25	15.95	26		32.50	0.0111	414.70	431.75		38.67		51.98			\$5,193.30	
	507-14	24153	01924412	2.03	17.97	26		52.78	0.0180	467.22	486.43		62.79		84.42			\$8,433.92	
	510-14	24155	01924414	1.14	13.56	27		30.78	0.0105	366.12	381.17		36.62		49.23			\$4,918.45	
	512-14	24207	01924496	7.17	1.73	27		193.59	0.0660	46.71	48.63		230.32		309.64			\$30,934.48	
	538-14	24219	01925459	11.49	7.91	27		310.23	0.1058	213.57	222.35		369.09		496.20			\$49,572.83	
	550-14	24183	01925460	9.12	433.38	27		246.24	0.0840	11,701.26	12,182.32		292.96		393.85			\$39,347.62	
	F22-14	24005	01905574			0		-	-	-	-		-		-			\$0.00	
Eagle Sunset	19-11	24090	01900041	11.81	160.59	18		212.58	0.0725	2,890.62	3,009.46		252.91		340.01			\$33,968.96	
Surfluh 14	Total						21.80	2,932.65	1.0000	101,771.45	114,763.30	2,268.18	3,489.04	4,837.07	4,690.68	146.39	920.15	\$468,619.24	\$99.90
Ripperdan 13																			
	5-24	24012	01905522			0		-	-	-	-		-		-			\$0.00	
	35-13	24008	01905552	20.70	238.10	23		476.10	0.1219	5,476.30	6,072.36		597.79		664.48			\$65,806.29	
	45-13	24022	019-0554	17.05	425.75	25		426.25	0.1092	10,643.75	11,802.25		535.20		594.91			\$58,916.05	
	56-13	24026	01905558	4.06	1.04	27		109.62	0.0281	28.08	31.14		137.64		152.99			\$15,151.62	
	57-13	24003	01905559	11.72	395.08	28		328.16	0.0841	11,062.24	12,266.29		412.04		458.01			\$45,358.10	
	77-13	24034	01905564	27.43	1,151.67	28		768.04	0.1967	32,246.76	35,756.59		964.35		1,071.94			\$106,158.08	
	86A-13	24039	01905567			0		-	-	-	-		-		-			\$0.00	
	88-13	24041	01905569	4.35	615.15	28		121.80	0.0312	17,224.20	19,098.93		152.93		169.99			\$16,835.13	
	502-13	24001	01924050	27.80	41.30	28		778.40	0.1994	1,156.40	1,282.27		977.36		1,086.40			\$107,590.04	
	503-13	24203	01924357	1.04	277.31	25		26.00	0.0067	6,932.75	7,687.33		32.65		36.29			\$3,593.71	
	506-13	24206	01924374	4.41	66.99	28		123.48	0.0316	1,875.72	2,079.88		155.04		172.34			\$17,067.34	
	509-13	24209	01924623	4.99	170.21	25		124.75	0.0320	4,255.25	4,718.40		156.64		174.11			\$17,242.88	
	513-13	24211	01924495	13.70	3.50	28		383.60	0.0983	98.00	108.67		481.65		535.38			\$53,020.99	
	515-13	24213	01924531	2.74	418.56	23		63.02	0.0161	9,626.88	10,674.70		79.13		87.96			\$8,710.59	
	544-13	24174	01925328	7.00	189.82	25		175.00	0.0448	4,745.50	5,262.01		219.73		244.24			\$24,188.41	
Hamilton	5-13	24102	01920793			0		-	-	-	-		-		-			\$0.00	
Ripperdan 13	Total						19.80	3,904.22	1.0000	105,371.83	116,840.80	2,274.67	4,902.14	5,367.33	5,449.04	-	1,727.77	\$539,639.22	\$99.03
NCC 10																			
	7-10	24117	01905484	3.82	1,086.48	27		103.14	1.0000	29,334.96	26,117.70		55.13		153.74			\$15,069.59	
	9B-10	24119	01920302			0		-	-	-	-		-		-			\$0.00	
	10-10	24120	01920837			0		-	-	-	-		-		-			\$0.00	
NCC 10 & 11	Total						17.90	103.14	1.0000	29,334.96	26,117.70	143.74	55.13	157.42	153.74	3.68	41.45	\$15,069.59	\$98.02
E.S 19																			
	2	24075	01905501	6.68	1,106.92	26		173.68	0.2851	28,779.92	28,473.03		260.06		179.79			\$17,957.52	
	21	24092	01905595	8.72	1,060.78	25		218.00	0.3578	26,519.50	26,236.71		326.42		225.67			\$22,539.96	
S.A. "A" Sec 19	A-1	24130	01905389	6.59	1,091.91	28		184.52	0.3029	30,573.48	30,247.46		276.29		191.01			\$19,078.32	
S.A. "B" Sec 19	B-3	24136	01920979	1.18	391.72	28		33.04	0.0542	10,968.16	10,851.20		49.47		34.20			\$3,416.15	
ES 19	Total						21.80	609.24	1.0000	96,841.06	95,808.40	238.57	912.24	627.89	630.67	-	520.14	\$62,991.95	\$99.88
TOTAL RAISIN CITY								7,998.63		341,779.32	353,530.20	5,254.60	10,112.43	11,790.94	11,734.43	150.07	3,482.53	\$1,168,247.81	\$99.59

Longview Exhibit 15

Water Injection Report February 2014

Water Production and Injection

<u>Raisin City</u>	<u>Water Injected</u>		
<u>NCC</u>	<u>NCC 6-10</u>	<u>NCC 1-11</u>	
	6,330	19,788	
	28	28	
<u>Eagle Sunset 11</u>	<u>Surfluh 31-14</u>	down - not taking water	
	0		
<u>Eagle Sunset 19</u>	<u>ES 14</u>	<u>Lease A 4</u>	
	48,632	47,176	
	28	28	
<u>Ripperdan</u>	<u>Rip 86-13</u>	<u>Rip 82-24</u>	<u>88A-13</u>
(Includes Hamilton 5-13)	63,986	36,464	16,391
	28	28	28
<u>Surfluh 13</u>			
(Includes Hamilton 518-13)			
	<u>Surfluh 5-14</u>	<u>Surfluh 8-14</u>	D-1 & D-3 taken out of service
	72,133	42,630	<u>Taylor D-1</u> <u>Taylor D-3</u>
(Includes Eagle Sunset 19-11)	28	28	
TOTAL INJECTED	353,530		

Longview Exhibit 15

Water Production and Injection

LEASE	Well Number	API Number	POOL	Pool Code	Pool Well Type	WATER PRODUCE D (BBL)
A	1	01905389	Zilch	08	OG	34,091
B	3-19	01920979	Zilch	08	OG	12,603
Eagle-Sunset	19	01900041	Zilch	08	OG	4,349
Eagle-Sunset	2	01905501	Zilch	08	OG	31,629
Eagle-Sunset	21	01905595	Zilch	08	OG	29,661
Hamilton	518-13	01924579	Zilch	08	OG	14,186
N.C.C.	7-10	01905484	Zilch	08	OG	14,257
Ripperdan	35-13	01905552	Zilch	08	OG	9,140
Ripperdan	45-13	01905554	Zilch	08	OG	14,499
Ripperdan	502	01924050	Zilch	08	OG	1,229
Ripperdan	503	01924357	Zilch	08	OG	5,256
Ripperdan	506	01924374	Zilch	08	OG	5,005
Ripperdan	509-13	01924623	Zilch	08	OG	6,428
Ripperdan	513	01924495	Eocene	15	OG	84
Ripperdan	544-13	01925328	Eocene	15	OG	9,004
Ripperdan	56-13	01905558	Eocene	15	OG	29
Ripperdan	57-13	01905559	Zilch	08	OG	12,602
Ripperdan	77-13	01905564	Zilch	08	OG	38,909
Ripperdan	88-13	01905569	Zilch	08	OG	20,500
Surfluh	10-14	01920812	Zilch	08	OG	43,305
Surfluh	11-14	01921543	Zilch	08	OG	29,156
Surfluh	31A-14	01905577	Zilch	08	OG	509
Surfluh	32-14	01905579	Zilch	08	OG	8,540
Surfluh	4-14	01905489	Eocene	15	OG	3,407
Surfluh	504	01924358	Zilch	08	OG	1,161
Surfluh	507	01924412	Zilch	08	OG	528
Surfluh	510	01924414	Zilch	08	OG	564
Surfluh	512	01924496	Zilch	08	OG	44
Surfluh	525	01924530	Zilch	08	OG	5,443
Surfluh	538-14	01925459	Eocene	15	OG	158
Surfluh	546	01924529	Eocene	15	OG	54
Surfluh	547-13	01925528	Eocene	15	OG	36
Surfluh	550-14	01925460	Eocene	15	OG	13,537
Surfluh	6-14	01905491	Zilch	08	OG	2,126
Surfluh	63-14	01905586	Eocene	15	OG	442

Total 372,471

LEASE	Well Number	API Number	POOL	Pool Code	Pool Well Type	WATER PRODUCE D (BBL)	STEAM INJECTED (bbl)
A	4	01905392	No Pool Breakdown	00	WD		52,967
Eagle-Sunset	14	01905509	No Pool Breakdown	00	WD		55,016
Eagle-Sunset	20	01905514	No Pool Breakdown	00	WD		
Hamilton	43-13	01905462	No Pool Breakdown	00	WD		
N.C.C.	1-11	01905471	No Pool Breakdown	00	WD		10,781
N.C.C.	6-10	01905483	No Pool Breakdown	00	WD		3,476
Properties, Inc.	37-18	01905517	No Pool Breakdown	00	WD		
Ripperdan	82-24	01905528	No Pool Breakdown	00	WD		38,387
Ripperdan	86-13	01905566	No Pool Breakdown	00	WD		65,814
Ripperdan	88A-13	01905570	No Pool Breakdown	00	WD		18,485
SA & FL	25X-29	01923429	No Pool Breakdown	00	WD		
Surfluh	31-14	01905576	Zilch	08	WD		
Surfluh	42-14	01905581	No Pool Breakdown	00	WD		
Surfluh	5-14	01905490	No Pool Breakdown	00	WD		80,867
Surfluh	8-14	01920751	No Pool Breakdown	00	WD		46,680

Total 372,473

NOTE: The difference is due to rounding

Water Production and Injection

LEASE	Well Number	API Number	POOL	Pool Code	Pool Well Type	WATER OR STEAM INJECTED (bbt)
A	4	01905392	No Pool Breakdown	00	WD	46,958
Eagle-Sunset	14	01905509	No Pool Breakdown	00	WD	47,781
Eagle-Sunset	20	01905514	No Pool Breakdown	00	WD	
Hamilton	43-13	01905462	No Pool Breakdown	00	WD	
N.C.C.	1-11	01905471	No Pool Breakdown	00	WD	
N.C.C.	6-10	01905483	No Pool Breakdown	00	WD	
Properties, Inc.	37-18	01905517	No Pool Breakdown	00	WD	
Ripperdan	82-24	01905528	No Pool Breakdown	00	WD	50,931
Ripperdan	86-13	01905566	No Pool Breakdown	00	WD	28,658
Ripperdan	88A-13	01905570	No Pool Breakdown	00	WD	33,503
SA & FL	25X-29	01923429	No Pool Breakdown	00	WD	
Surfluh	31-14	01905576	Zilch	08	WD	
Surfluh	42-14	01905581	No Pool Breakdown	00	WD	
Surfluh	5-14	01905490	No Pool Breakdown	00	WD	78,036
Surfluh	8-14	01920751	No Pool Breakdown	00	WD	68,184
Taylor	D-1	01905418	No Pool Breakdown	00	WD	
Taylor	D-3	01905417	No Pool Breakdown	00	WD	

LEASE	Well Number	API Number
A	4	01905392
Eagle-Sunset	14	01905509
Eagle-Sunset	20	01905514
Hamilton	43-13	01905462
N.C.C.	1-11	01905471
N.C.C.	6-10	01905483
Properties, Inc.	37-18	01905517
Ripperdan	82-24	01905528
Ripperdan	86-13	01905566
Ripperdan	88A-13	01905570
SA & FL	25X-29	01923429
Surfluh	31-14	01905576
Surfluh	42-14	01905581
Surfluh	5-14	01905490
Surfluh	8-14	01920751
Taylor	D-1	01905418
Taylor	D-3	01905417

Total 354,051

Injection Numbers

Production Submitted
Water Production and Injection

POOL	Pool Code	Pool Well Type	WATER OR STEAM INJECTED (bbl)
No Pool Breakdown	00	WD	46,958
No Pool Breakdown	00	WD	47,781
No Pool Breakdown	00	WD	
No Pool Breakdown	00	WD	
No Pool Breakdown	00	WD	25,604
No Pool Breakdown	00	WD	5,763
No Pool Breakdown	00	WD	
No Pool Breakdown	00	WD	50,931
No Pool Breakdown	00	WD	28,658
No Pool Breakdown	00	WD	33,503
No Pool Breakdown	00	WD	
Zilch	08	WD	
No Pool Breakdown	00	WD	
No Pool Breakdown	00	WD	78,036
No Pool Breakdown	00	WD	68,184
No Pool Breakdown	00	WD	
No Pool Breakdown	00	WD	

Total 385,418

LEASE	Well Number	API Number	POOL	Pool Code	Pool Well Type	WATER PRODUCED (BBL)
A	1	01905389	Zilch	08	OG	33,625
B	3-19	01920979	Zilch	08	OG	11,250
Eagle-Sunset	19	01900041	Zilch	08	OG	1,577
Eagle-Sunset	2	01905501	Zilch	08	OG	20,321
Eagle-Sunset	21	01905595	Zilch	08	OG	29,543
Hamilton	5-13	01920793	Zilch	08	OG	520
Hamilton	518-13	01924579	Zilch	08	OG	5,467
N.C.C.	10-10	01920837	Zilch	08	OG	2,980
N.C.C.	7-10	01905484	Zilch	08	OG	28,387
Ripperdan	35-13	01905552	Zilch	08	OG	6,191
Ripperdan	45-13	01905554	Zilch	08	OG	15,515
Ripperdan	502	01924050	Zilch	08	OG	94
Ripperdan	503	01924357	Zilch	08	OG	11,648
Ripperdan	506	01924374	Zilch	08	OG	7,093
Ripperdan	509-13	01924623	Zilch	08	OG	4,085
Ripperdan	513	01924495	Eocene	15	OG	195
Ripperdan	515	01924531	Eocene	15	OG	8,065
Ripperdan	544-13	01925328	Eocene	15	OG	22
Ripperdan	56-13	01905558	Eocene	15	OG	24
Ripperdan	57-13	01905559	Zilch	08	OG	13,394
Ripperdan	77-13	01905564	Zilch	08	OG	36,713
Ripperdan	88-13	01905569	Zilch	08	OG	9,534
Surfluh	10-14	01920812	Zilch	08	OG	37,941
Surfluh	11-14	01921543	Zilch	08	OG	65,424
Surfluh	2-14	01905487	Eocene	15	OG	3,963
Surfluh	31A-14	01905577	Zilch	08	OG	617
Surfluh	32-14	01905579	Zilch	08	OG	10,797
Surfluh	4-14	01905489	Eocene	15	OG	3,281
Surfluh	507	01924412	Zilch	08	OG	1,751
Surfluh	510	01924414	Zilch	08	OG	460
Surfluh	512	01924496	Eocene	15	OG	10,887
Surfluh	546	01924529	Eocene	15	OG	36
Surfluh	6-14	01905491	Zilch	08	OG	2,943
Surfluh	63-14	01905586	Eocene	15	OG	86
Surfluh	64-14	01905587	Zilch	08	OG	989

Total 385,418

Longview Exhibit 15

Water Injection Report June 2011

Water Production and Injection

<u>Raisin City</u>	<u>Water Injected</u>		
<u>NCC</u>	<u>NCC 6-10</u>	<u>NCC 1-11</u>	
	5,763 29	25,604 30	
<u>Eagle Sunset 11</u>	<u>Surfluh 31-14</u> 0	down - not taking water	
<u>Eagle Sunset 19</u>	<u>ES 14</u> 47,781 30	<u>Lease A 4</u> 46,958 30	
<u>Ripperdan</u> (Includes Hamilton 5-13)	<u>Rip 86-13</u> 28,658 30	<u>Rip 82-24</u> 50,931 30	<u>88A-13</u> 33,503 30
<u>Surfluh 13</u> (Includes Hamilton 518-13)			D-1 & D-3 taken out of service
	<u>Surfluh 5-14</u>	<u>Surfluh 8-14</u>	<u>Taylor D-1</u> <u>Taylor D-3</u>
<u>Surfluh 14</u> (Includes Eagle Sunset 19-11)	78,036 30	68,184 30	
TOTAL INJECTED	385,418		

Water Production and Injection

LEASE	Well Number	API Number	POOL	Pool Code	Pool Well Type	WATER OR STEAM INJECTED (bbl)
A	4	01905392	No Pool Breakdown	00	WD	53,983
Eagle-Sunset	14	01905509	No Pool Breakdown	00	WD	58,318
Eagle-Sunset	20	01905514	No Pool Breakdown	00	WD	
Hamilton	43-13	01905462	No Pool Breakdown	00	WD	
N.C.C.	1-11	01905471	No Pool Breakdown	00	WD	
N.C.C.	6-10	01905483	No Pool Breakdown	00	WD	
Properties, Inc.	37-18	01905517	No Pool Breakdown	00	WD	
Ripperdan	82-24	01905528	No Pool Breakdown	00	WD	51,246
Ripperdan	86-13	01905566	No Pool Breakdown	00	WD	58,696
Ripperdan	88A-13	01905570	No Pool Breakdown	00	WD	27,176
SA & FL	25X-29	01923429	No Pool Breakdown	00	WD	
Surfluh	31-14	01905576	Zilch	08	WD	
Surfluh	42-14	01905581	No Pool Breakdown	00	WD	
Surfluh	5-14	01905490	No Pool Breakdown	00	WD	75,261
Surfluh	8-14	01920751	No Pool Breakdown	00	WD	59,597
Taylor	D-1	01905418	No Pool Breakdown	00	WD	
Taylor	D-3	01905417	No Pool Breakdown	00	WD	

LEASE	Well Number	API Number
A	4	01905392
Eagle-Sunset	14	01905509
Eagle-Sunset	20	01905514
Hamilton	43-13	01905462
N.C.C.	1-11	01905471
N.C.C.	6-10	01905483
Properties, Inc.	37-18	01905517
Ripperdan	82-24	01905528
Ripperdan	86-13	01905566
Ripperdan	88A-13	01905570
SA & FL	25X-29	01923429
Surfluh	31-14	01905576
Surfluh	42-14	01905581
Surfluh	5-14	01905490
Surfluh	8-14	01920751
Taylor	D-1	01905418
Taylor	D-3	01905417

Total 384,277

Longview Exhibit 15

Injection Numbers

Production Submitted Water Production and Injection

POOL	Pool Code	Pool Well Type	WATER OR STEAM INJECTED (bbl)
No Pool Breakdown	00	WD	53,983
No Pool Breakdown	00	WD	58,318
No Pool Breakdown	00	WD	
No Pool Breakdown	00	WD	
No Pool Breakdown	00	WD	23,730
No Pool Breakdown	00	WD	8,284
No Pool Breakdown	00	WD	
No Pool Breakdown	00	WD	51,246
No Pool Breakdown	00	WD	58,696
No Pool Breakdown	00	WD	27,176
No Pool Breakdown	00	WD	
Zilch	08	WD	
No Pool Breakdown	00	WD	
No Pool Breakdown	00	WD	75,261
No Pool Breakdown	00	WD	59,597
No Pool Breakdown	00	WD	
No Pool Breakdown	00	WD	

Total 416,291

LEASE	Well Number	API Number	POOL	Pool Code	Pool Well Type	WATER PRODUCED (BBL)
A	1	01905389	Zilch	08	OG	35,833
B	3-19	01920979	Zilch	08	OG	12,089
Eagle-Sunset	19	01900041	Zilch	08	OG	1,468
Eagle-Sunset	2	01905501	Zilch	08	OG	32,441
Eagle-Sunset	21	01905595	Zilch	08	OG	31,938
Hamilton	518-13	01924579	Zilch	08	OG	13,343
N.C.C.	7-10	01905484	Zilch	08	OG	28,970
N.C.C.	9B-10	01920302	Zilch	08	OG	3,043
Ripperdan	35-13	01905552	Zilch	08	OG	5,529
Ripperdan	45-13	01905554	Zilch	08	OG	15,113
Ripperdan	503	01924357	Zilch	08	OG	12,027
Ripperdan	506	01924374	Zilch	08	OG	10,071
Ripperdan	509-13	01924623	Zilch	08	OG	3,282
Ripperdan	513	01924495	Eocene	15	OG	52
Ripperdan	515	01924531	Eocene	15	OG	15,717
Ripperdan	544-13	01925328	Eocene	15	OG	6
Ripperdan	56-13	01905558	Eocene	15	OG	33
Ripperdan	57-13	01905559	Zilch	08	OG	12,660
Ripperdan	77-13	01905564	Zilch	08	OG	36,206
Ripperdan	86A-13	01905567	Zilch	08	OG	8,794
Ripperdan	88-13	01905569	Zilch	08	OG	17,629
Surfluh	10-14	01920812	Zilch	08	OG	35,440
Surfluh	11-14	01921543	Zilch	08	OG	54,307
Surfluh	2-14	01905487	Eocene	15	OG	5,416
Surfluh	31A-14	01905577	Zilch	08	OG	442
Surfluh	32-14	01905579	Zilch	08	OG	8,761
Surfluh	4-14	01905489	Eocene	15	OG	3,122
Surfluh	507	01924412	Zilch	08	OG	352
Surfluh	510	01924414	Zilch	08	OG	769
Surfluh	512	01924496	Eocene	15	OG	7,845
Surfluh	525	01924530	Zilch	08	OG	162
Surfluh	546	01924529	Eocene	15	OG	63
Surfluh	6-14	01905491	Zilch	08	OG	2,255
Surfluh	63-14	01905586	Eocene	15	OG	430
Surfluh	64-14	01905587	Zilch	08	OG	683

Total 416,291

Longview Exhibit 15

Water Injection Report Water Production and Injection

<u>Raisin City</u>	<u>Water Injected</u>		
<u>NCC</u>	<u>NCC 6-10</u>	<u>NCC 1-11</u>	
	8,284 28	23,730 29	
<u>Eagle Sunset 11</u>	<u>Surfluh 31-14</u> 0	down - not taking water	
<u>Eagle Sunset 19</u>	<u>ES 14</u> 58,318 30	<u>Lease A 4</u> 53,983 30	
<u>Ripperdan</u> (Includes Hamilton 5-13)	<u>Rip 86-13</u> 58,696 30	<u>Rip 82-24</u> 51,246 30	<u>88A-13</u> 27,176 30
<u>Surfluh 13</u> (Includes Hamilton 518-13)			D-1 & D-3 taken out of service
	<u>Surfluh 5-14</u>	<u>Surfluh 8-14</u>	<u>Taylor D-1</u> <u>Taylor D-3</u>
<u>Surfluh 14</u> (Includes Eagle Sunset 19-11)	75,261 30	59,597 30	
TOTAL INJECTED	416,291		

Longview Exhibit 15

Water Production and Injection

LEASE	Well Number	API Number	POOL	Pool Code	Pool Well Typ	WATER PRODUCE D (BBL)
A	1	01905389	Zilch	08	OG	31,621
B	3-19	01920979	Zilch	08	OG	12,786
Eagle-Sunset	19	01900041	Zilch	08	OG	924
Eagle-Sunset	2	01905501	Zilch	08	OG	30,260
Eagle-Sunset	21	01905595	Zilch	08	OG	33,707
Hamilton	518-13	01924579	Zilch	08	OG	14,093
N.C.C.	7-10	01905484	Zilch	08	OG	19,914
Ripperdan	35-13	01905552	Zilch	08	OG	956
Ripperdan	45-13	01905554	Zilch	08	OG	15,125
Ripperdan	502	01924050	Zilch	08	OG	732
Ripperdan	503	01924357	Zilch	08	OG	4
Ripperdan	506	01924374	Zilch	08	OG	5,103
Ripperdan	509-13	01924623	Zilch	08	OG	3,259
Ripperdan	513	01924495	Eocene	15	OG	191
Ripperdan	515	01924531	Eocene	15	OG	16,746
Ripperdan	544-13	01925328	Zilch	08	OG	1,795
Ripperdan	56-13	01905558	Eocene	15	OG	21
Ripperdan	57-13	01905559	Zilch	08	OG	21,141
Ripperdan	77-13	01905564	Zilch	08	OG	15,421
Ripperdan	86A-13	01905567	Zilch	08	OG	22,021
Ripperdan	88-13	01905569	Zilch	08	OG	15,421
Surfluh	10-14	01920812	Zilch	08	OG	38,834
Surfluh	11-14	01921543	Zilch	08	OG	15,718
Surfluh	31A-14	01905577	Zilch	08	OG	149
Surfluh	32-14	01905579	Zilch	08	OG	15,329
Surfluh	4-14	01905489	Eocene	15	OG	4,683
Surfluh	504	01924358	Zilch	08	OG	163
Surfluh	507	01924412	Zilch	08	OG	918
Surfluh	510	01924414	Zilch	08	OG	33
Surfluh	512	01924496	Zilch	08	OG	19
Surfluh	525	01924530	Zilch	08	OG	4,998
Surfluh	538-14	01925459	Eocene	15	OG	28
Surfluh	546	01924529	Eocene	15	OG	74
Surfluh	547-13	01925528	Eocene	15	OG	54
Surfluh	550-14	01925460	Eocene	15	OG	21,297
Surfluh	6-14	01905491	Zilch	08	OG	4,210
Surfluh	63-14	01905586	Eocene	15	OG	240

Total 367,988

LEASE	Well Number	API Number	POOL	Pool Code	Pool Well Typ	WATER PRODUCE D (BBL)
A	1	01905389	Zilch	08	OG	31,621
B	3-19	01920979	Zilch	08	OG	12,786
Eagle-Sunset	19	01900041	Zilch	08	OG	924
Eagle-Sunset	2	01905501	Zilch	08	OG	30,260
Eagle-Sunset	21	01905595	Zilch	08	OG	33,707
Hamilton	518-13	01924579	Zilch	08	OG	14,093
N.C.C.	7-10	01905484	Zilch	08	OG	19,914
Ripperdan	35-13	01905552	Zilch	08	OG	956
Ripperdan	45-13	01905554	Zilch	08	OG	15,125
Ripperdan	502	01924050	Zilch	08	OG	732
Ripperdan	503	01924357	Zilch	08	OG	4
Ripperdan	506	01924374	Zilch	08	OG	5,103
Ripperdan	509-13	01924623	Zilch	08	OG	3,259
Ripperdan	513	01924495	Eocene	15	OG	191
Ripperdan	515	01924531	Eocene	15	OG	16,746
Ripperdan	544-13	01925328	Zilch	08	OG	1,795
Ripperdan	56-13	01905558	Eocene	15	OG	21
Ripperdan	57-13	01905559	Zilch	08	OG	21,141
Ripperdan	77-13	01905564	Zilch	08	OG	34,282
Ripperdan	86A-13	01905567	Zilch	08	OG	22,021
Ripperdan	88-13	01905569	Zilch	08	OG	15,421
Surfluh	10-14	01920812	Zilch	08	OG	38,834
Surfluh	11-14	01921543	Zilch	08	OG	15,718
Surfluh	31A-14	01905577	Zilch	08	OG	149
Surfluh	32-14	01905579	Zilch	08	OG	15,329
Surfluh	4-14	01905489	Eocene	15	OG	4,683
Surfluh	504	01924358	Zilch	08	OG	163
Surfluh	507	01924412	Zilch	08	OG	918
Surfluh	510	01924414	Zilch	08	OG	33
Surfluh	512	01924496	Zilch	08	OG	19
Surfluh	525	01924530	Zilch	08	OG	4,998
Surfluh	538-14	01925459	Eocene	15	OG	28
Surfluh	546	01924529	Eocene	15	OG	74
Surfluh	547-13	01925528	Eocene	15	OG	54
Surfluh	550-14	01925460	Eocene	15	OG	21,297
Surfluh	6-14	01905491	Zilch	08	OG	4,210
Surfluh	63-14	01905586	Eocene	15	OG	240

Total 386,849

LEASE	Well Number	API Number	POOL	Pool Code	Pool Well Typ	WATER PRODUCE D (BBL)	WATER INJECTED (bbl)
A	4	01905392	No Pool Breakdown	00	WD	53,117	
Eagle-Sunset	14	01905509	No Pool Breakdown	00	WD	55,258	
Eagle-Sunset	20	01905514	No Pool Breakdown	00	WD		
Hamilton	43-13	01905462	No Pool Breakdown	00	WD		
N.C.C.	1-11	01905471	No Pool Breakdown	00	WD	19,888	
N.C.C.	6-10	01905483	No Pool Breakdown	00	WD	26	
Properties, Inc.	37-18	01905517	No Pool Breakdown	00	WD		
Ripperdan	82-24	01905528	No Pool Breakdown	00	WD	59,348	
Ripperdan	86-13	01905566	No Pool Breakdown	00	WD	69,909	
Ripperdan	88A-13	01905570	No Pool Breakdown	00	WD	7,540	
SA & FL	25X-29	01923429	No Pool Breakdown	00	WD		
Surfluh	31-14	01905576	Zilch	08	WD		
Surfluh	42-14	01905581	No Pool Breakdown	00	WD		
Surfluh	5-14	01905490	No Pool Breakdown	00	WD	80,863	
Surfluh	8-14	01920751	No Pool Breakdown	00	WD	40,900	

Total 386,849

Raisin City Oil Production/Sales - November 2014

Longview

Exhibit 15

Water Production and Injection

Lease	Well	Well No	API No	Well Test BOPD	Well Test BWPD	# Days Prod	Oil Gravity	Calc Bbls Oil	% of Calc Bbls Oil	Calc Bbls Wtr	Allocated Bbls Wtr	Oil Beg Inv	Oil Prod	Est Oil Sales	Actual Oil Sales	Oil B&W	Oil F&I	Amount Received	Avg Price
Raisin City Field																			
Surfluh 13	525-13	24218	01924530	3.12	182.50	25		78.00	0.1016	4,562.50	4,998.11		97.99		64.42			\$4,398.53	
	546-13	24217	01924529	10.23	5.17	13		132.99	0.1733	67.21	73.63		167.02		110.17			\$7,499.50	
	547-13	24181	01925528	16.91	3.79	13		219.83	0.2864	49.27	53.97		276.08		182.12			\$12,396.53	
Hamilton	518-13	24215	01924579	11.61	443.59	29		336.69	0.4387	12,864.11	14,092.50		422.84		278.93			\$18,986.43	
Surfluh 13	Total						21.10	767.51	1.0000			188.90	963.90	641.43	635.84	5.59	511.37	\$43,280.99	\$68.07
Surfluh 14																			
	2-14	24046	01905487			0		-	-	-	-		-		-			\$0.00	
	4-14	24048	01905489	4.20	142.50	30		126.00	0.0592	4,275.00	4,683.22		144.12		183.08			\$12,356.51	
	6-14	24053	01905491	11.60	128.10	30		348.00	0.1635	3,843.00	4,209.97		398.06		505.66			\$34,127.49	
	7-14	24055	01920737			0		-	-	-	-		-		-			\$0.00	
	10-14	24060	01920812	11.44	1,417.96	25		286.00	0.1344	35,449.00	38,834.01		327.14		415.57			\$28,047.31	
	11-14	24061	01921543	8.04	494.76	29		233.16	0.1096	14,348.04	15,718.13		266.70		338.79			\$22,865.42	
	31A-14	24065	01905577	8.93	9.07	15		133.95	0.0629	136.05	149.04		153.22		194.64			\$13,136.14	
	32-14	24066	01905579	1.25	499.75	28		35.00	0.0164	13,993.00	15,329.18		40.03		50.86			\$3,432.36	
	63-14	24073	01905586	0.20	7.30	30		6.00	0.0028	219.00	239.91		6.86		8.72			\$588.41	
	64-14	24002	01905587			0		-	-	-	-		-		-			\$0.00	
	504-14	24204	01924358	26.32	21.28	7		184.24	0.0866	148.96	163.18		210.74		267.71			\$18,067.96	
	507-14	24153	01924412	6.30	119.70	7		44.10	0.0207	837.90	917.91		50.44		64.08			\$4,324.78	
	510-14	24155	01924414	6.29	7.61	4		25.16	0.0118	30.44	33.35		28.78		36.56			\$2,467.38	
	512-14	24207	01924496	9.48	2.52	7		66.36	0.0312	17.64	19.32		75.91		96.42			\$6,507.76	
	538-14	24219	01925459	12.98	2.52	10		129.80	0.0610	25.20	27.61		148.47		188.61			\$12,729.16	
	550-14	24183	01925460	14.58	648.02	30		437.40	0.2056	19,440.60	21,296.97		500.32		635.56			\$42,894.73	
	F22-14	24005	01905574			0		-	-	-	-		-		-			\$0.00	
Eagle Sunset	19-11	24090	01900041	3.83	44.37	19		72.77	0.0342	843.03	923.53		83.24		105.74			\$7,136.37	
Surfluh 14	Total						19.70	2,127.94	1.0000	111,149.95	121,763.60	2,345.56	2,434.04	3,169.88	3,092.00	77.88	1,609.72	\$208,681.78	\$67.49
Ripperdan 13																			
	35-13	24008	01905552	0.97	101.53	8		7.76	0.0023	812.24	955.73		10.42		8.22			\$552.47	
	45-13	24022	019-05554	15.54	428.46	30		466.20	0.1403	12,853.80	15,124.50		625.72		494.13			\$33,190.85	
	56-13	24026	01905558	7.40	1.60	11		81.40	0.0245	17.60	20.71		109.25		86.28			\$5,795.23	
	57-13	24003	01905559	24.80	598.90	30		744.00	0.2238	17,967.00	21,140.97		998.57		788.57			\$52,968.67	
	77-13	24034	01905564	25.92	971.18	30		777.60	0.2340	29,135.40	34,282.34		1,043.67		824.19			\$55,360.81	
	86A-13	24039	01905567	5.83	891.17	21		122.43	0.0368	18,714.57	22,020.61		164.32		129.76			\$8,716.34	
	88-13	24041	01905569	6.65	436.85	30		199.50	0.0600	13,105.50	15,420.66		267.76		211.45			\$14,203.29	
	502-13	24001	01924050	23.90	77.80	8		191.20	0.0575	622.40	732.35		256.62		202.65			\$13,612.38	
	503-13	24203	01924357	0.01	0.69	5		0.05	0.0000	3.45	4.06		0.07		0.05			\$3.56	
	506-13	24206	01924374	9.70	180.70	24		232.80	0.0700	4,336.80	5,102.92		312.46		246.75			\$16,574.07	
	509-13	24209	01924623	2.17	98.93	28		60.76	0.0183	2,770.04	3,259.38		81.55		64.40			\$4,325.78	
	513-13	24211	01924495	11.21	5.40	30		336.30	0.1012	162.00	190.62		451.37		356.45			\$23,942.70	
	515-13	24213	01924531	3.10	474.40	30		93.00	0.0280	14,232.00	16,746.16		124.82		98.57			\$6,621.08	
	544-13	24174	01925328	1.19	169.51	9		10.71	0.0032	1,525.59	1,795.09		14.37		11.35			\$762.49	
Hamilton	5-13	24102	01920793			0		-	-	-	-		-		-			\$0.00	
Ripperdan 13	Total						19.00	3,323.71	1.0000	116,258.39	136,796.10	1,096.92	4,460.98	3,597.56	3,522.83	74.73	1,960.34	\$236,629.72	\$67.17
NCC 10																			
	7-10	24117	01905484	3.14	1,043.06	21		65.94	1.0000	21,904.26	19,914.40		59.31		-			\$0.00	
	9B-10	24119	01920302			0		-	-	-	-		-		-			-	
	10-10	24120	01920837			0		-	-	-	-		-		-			-	
NCC 10 & 11	Total							65.94	1.0000	21,904.26	19,914.40	111.99	59.31	-	-	-	171.30	-	-
E.S 19																			
	2	24075	01905501	4.66	927.04	30		139.80	0.2461	27,811.20	30,259.97		270.66		315.26			\$21,739.87	
	21	24092	01905595	6.76	1,032.64	30		202.80	0.3570	30,979.20	33,706.91		392.63		457.33			\$31,536.81	
S.A. "A" Sec 19																			
	A-1	24130	01905389	7.31	1,117.79	26		190.06	0.3346	29,062.54	31,621.49		367.97		428.60			\$29,555.65	
S.A. "B" Sec 19																			
	B-3	24136	01920979	1.18	391.72	30		35.40	0.0623	11,751.60	12,786.33		68.54		79.83			\$5,504.95	
ES 19	Total						23.30	568.06	1.0000	99,604.54	108,374.70	736.53	1,099.80	1,274.64	1,281.03	-	555.30	\$88,337.29	\$68.96
TOTAL RAISIN CITY								6,853.16		348,917.14	386,848.80	4,479.90	9,018.03	8,683.51	8,531.70	158.20	4,808.03	\$576,929.78	\$67.92

Water Injection Report
Nov-14

Water Production and Injection

<u>Raisin City</u>	<u>Water Injected</u>		
<u>NCC</u>	<u>NCC 6-10</u>	<u>NCC 1-11</u>	
	26 20	19,888 20	
<u>Eagle Sunset 11</u>	<u>Surfluh 31-14</u> 0	down - not taking water	
<u>Eagle Sunset 19</u>	<u>ES 14</u> 55,258 29	<u>Lease A 4</u> 53,117 29	
<u>Ripperdan</u> (Includes Hamilton 5-13)	<u>Rip 86-13</u> 69,909 29	<u>Rip 82-24</u> 59,348 29	<u>88A-13</u> 7,540 29
<u>Surfluh 13</u> (Includes Hamilton 518-13)	<u>Surfluh 5-14</u>	<u>Surfluh 8-14</u>	D-1 & D-3 taken out of service <u>Taylor D-1</u> <u>Taylor D-3</u>
<u>Surfluh 14</u> (Includes Eagle Sunset 19-11)	80,863 28	40,900 28	
TOTAL INJECTED	386,849		

Longview
Exhibit 16
Longview Energy Company

2/8/2014

	Oil/bbls	Gas/mcf	Remarks
Raisin City	552.61	0.00	see notes below
Helm		0.00	
Helm East	32.48		
Bains 650-6	54.50		
Helm West	33.30		
Riverdale		204.10	
Riverdale Central	157.00		
Total	829.89	204.10	

Daily Well Tests

ES 21-19 24-hr test 1025.4 bbls @ 1.05% OC (10.8 bopd, 1014.6 bwpd, tbg 150, csg 70 (0.6% & 1.5%))

Sur 504-14 24-hr test 17.2 bbls @ 7.25% OC (1.2 bopd, 16 bwpd), tbg 120, csg 15 (8.2% & 6.3%)

Bains 650-6 24-hr test 62.9 bbls @ 86.5% OC (54.4 bopd, 8.5 bwpd), tbg 35, csg 20 (86.9%, 84.5%, 88.1%)

NOTES

Surfluh 14 10-14 SD 9:00 am - high water tank level

Longview
Exhibit 16
Longview Energy Company

4/26/2014

	Oil/bbls	Gas/mcf	Remarks
Raisin City	251.78	0.00	see notes below
Helm		51.60	
Helm East	75.73		Cap gas 84.5
Bains 650-6	7.35		gauged 2.5 hrs late
Helm West	9.20		
WR Helm Central	33.40		flare gas 9.9, see notes below
Riverdale		112.60	
Riverdale Central	93.53		pumped 3.34 bbls wet oil off tank 3, see notes below
Total	470.99	164.20	

Daily Well Tests

Bains 650-6 24-hr test 27.3 bbls @ 24.1% OC (6.7 bopd, 20.7 bwpd), tbg 40, csg 35 (21.6% & 26.6%)
 Yparrea 42-23 24-hr test 71.4 bbls @ 64.35% OC (45.95 bopd, 25.45 bwpd), 33.7 mcf, tbg 350, csg 600 (68.7% & 60%)

Notes

Eagle Sunset 19 Closed overflow for shipping
 Ripperdan 13 pumped 10.81 bbls wet oil off tank 31 for shipping
 Surfloh 14 low prod due to prod stacking in wash tank - SD 10-14 & 11-14 so water tank could catch up - breaker tripped water pump - reset - OK, restarted 11-14 today

WR Helm Central 63-8 down due to rain - restarted 6:30 am, high water tank alarm, gauged 3 hrs early

Riverdale Central Brum 846 and Young 806 down due to rain - restarted Brum 9:30 am and Young 7:30 am

Longview

Exhibit 16

Longview Energy Company

4/27/2014

	Oil/bbls	Gas/mcf	Remarks
Raisin City	266.07	0.00	see notes below
Helm		55.50	
Helm East	77.77		Cap gas 72.8
Bains 650-6	6.44		
Helm West	15.80		
WR Helm Central	35.91		flare gas 9.4, pumped 3.34 bbls wet oil off tank 60
Riverdale			
Riverdale Central	117.75	117.10	
Total	519.74	172.60	

Daily Well Tests

Sur 546-13 24-hr test 5.8 bbls @ 86.9% OC (5 bopd, 0.8 bwpd), 3.6 mcf, tbg 120, csg 70 (88.8% & 85%)

Sur 547-13 24-hr test 11.1 bbls @ 90.55% OC (10.05 bopd, 1.05 bwpd), tbg 135, csg 65 (93.7% & 87.4%)

Bains 650-6 24-hr test 27.7 bbls @ 23% OC (6.4 bopd, 21.3 bwpd), tbg 40, csg 40 (24.2% & 21.8%)

Yparrea 42-23 24-hr test 67.7 bbls @ 51.8% OC (35.1 bopd, 32.6 bwpd), 30.5 mcf, tbg 320, csg 600 (48.1% & 55.5%)

Notes

Eagle Sunset 19 Overflow closed for shipping

Ripperdan 13 pumped 10.81 bbls wet oil off tank 31 for shipping

Surfluh 14 10-14 & 11-14 SD due to high water tank level - restarted

Longview
Exhibit 16
Longview Energy Company

8/31/2014

	Oil/bbls	Gas/mcf	Remarks
Raisin City	387.52	0.00	see notes below
Helm		42.20	
Helm East	62.26		44.6 mcf
Helm West	30.80		
Helm Central	67.64		28.4 mcf, see note below
Riverdale	159.51	129.50	
Total	707.73	171.70	

Daily Well Tests

Notes

Surfluh 14 10-14 SD - water well not taking all water, pumped 30.82 bbls wet oil off tank 202 for shipping

Helm Central Wilson F41-7 down due to fluid in scrubber - started 2:00 pm

Alarm Occurrence Report

CS# 011530
 Site Name Longview Energy Company
 Address ***Surfluh Site***
 Fresno, CA

Alt ID
 System Type NAPCO-MA1008E
 UL Code
 Policed Alarms 0

Installer 1410-FRESNO - SEBASTIAN
 Corporate Account

559- 567-6035

214- 692-7777

Map

Pg

Coord

Open Early

Open Late

Close Early

Close Late

Incident#	Date	Operator	Zone	State	Event	Location/Comment	User	Elapsed Sec.
1988790	1/6/2013 03:08:00				G-NOTT TIMER TEST NOT RECEI			0
	1/6/2013 03:08:00				G-NOTT TIMER TEST NOT RECEI			0
	1/6/2013 03:08:05	TMV			AA ALARM ACCESSED			5
	1/6/2013 03:08:15	TMV			NOTT No Timer Test Received	Full Clear Auto TT Jan 20, 2013 04:		15
					see notes			
2008180	1/20/2013 04:08:01				G-NOTT TIMER TEST NOT RECEI			0
	1/20/2013 04:08:01				G-NOTT TIMER TEST NOT RECEI			0
	1/20/2013 04:08:06	LG			AA ALARM ACCESSED			5
	1/20/2013 04:08:14	LG			NOTT No Timer Test Received	Full Clear Auto TT Feb 03, 2013 05		13
2026170	2/3/2013 05:08:01				G-NOTT TIMER TEST NOT RECEI			0
	2/3/2013 05:08:01				G-NOTT TIMER TEST NOT RECEI			0
	2/3/2013 05:08:11	TLL			AA ALARM ACCESSED			10
	2/3/2013 05:08:17	TLL			NOTT No Timer Test Received	Full Clear Auto TT Feb 17, 2013 06		16
2044850	2/17/2013 06:08:01				G-NOTT TIMER TEST NOT RECEI			0
	2/17/2013 06:08:01				G-NOTT TIMER TEST NOT RECEI			0
	2/17/2013 06:08:25	10MR			AA ALARM ACCESSED			24
	2/17/2013 06:08:50	10MR			FC FULL CLEAR	Full Clear		49
					UNABLE TO HAVE CUSTOMER TEST			

Alarm Occurrence Report

CS# 011530
Site Name Longview Energy Company
Address ***Surfluh Site***
Fresno, CA

Alt ID
System Type NAPCO-MA1008E
UL Code
Policed Alarms 0

Installer 1410-FRESNO - SEBASTIAN
Corporate Account

559- 567-6035 214- 692-7777

Map Pg Coord Open Early Open Late Close Early Close Late

Incident#	Date	Operator	Zone	State	Event	Location/Comment	User	Elapsed Sec.
2140080	5/2/2013 21:21:07		1	A	850 TROUBLE	High Tank Level		0
	5/2/2013 21:21:20	TMV			AA ALARM ACCESSED			13
	5/2/2013 21:22:02	TMV			AMM ANSWERING MACHINE - LF Bob Richardson			55
	5/2/2013 21:23:11	TMV			AMM ANSWERING MACHINE - LF Mike Gosvener			124
	5/2/2013 21:24:00	TMV			AMM ANSWERING MACHINE - LF Mike Gosvener			173
	5/2/2013 21:24:52	TMV			AMM ANSWERING MACHINE - LF John Tarver			225
	5/2/2013 21:25:48	TMV			CCI CUSTOMER CALLED IN, GAV Full Clear Priority:100			281

Mike called back and has been advised and will go check it out

Incident#	Date	Operator	Zone	State	Event	Location/Comment	User	Elapsed Sec.
2140160	5/2/2013 22:28:49		1	A	850 TROUBLE	High Tank Level		0
	5/2/2013 22:29:02	15AF			AA ALARM ACCESSED			13
	5/2/2013 22:30:54	15AF				Bob Richardson		125
	5/2/2013 22:31:44	15AF				Mike Gosvener		175
	5/2/2013 22:32:08	15AF			CCI CUSTOMER CALLED IN, GAV Full Clear Priority:100			199

Mike is at site.

Incident#	Date	Operator	Zone	State	Event	Location/Comment	User	Elapsed Sec.
2161570	5/16/2013 23:38:00				G-NOTT TIMER TEST NOT RECEI			0
	5/16/2013 23:38:07	11VJ			AA ALARM ACCESSED			7
	5/16/2013 23:38:27	11VJ			NOTT No Timer Test Received	Full Clear Auto TT May 31, 2013 00		27

Late Timer Test May 16 2013 11:38PM

Incident#	Date	Operator	Zone	State	Event	Location/Comment	User	Elapsed Sec.
2181150	5/31/2013 00:38:02				G-NOTT TIMER TEST NOT RECEI			0
	5/31/2013 00:38:09	10MR			AA ALARM ACCESSED			7
	5/31/2013 00:38:55	10MR			NOTT No Timer Test Received	Full Clear Auto TT Jun 14, 2013 01:		53

Late Timer Test May 31 2013 12:38AM

Alarm Occurrence Report

CS# 011530
Site Name Longview Energy Company
Address ***Surfluh Site***
Fresno, CA

Alt ID
System Type NAPCO-MA1008E
UL Code
Policed Alarms 0

Installer 1410-FRESNO - SEBASTIAN
Corporate Account

559- 567-6035

214- 692-7777

Map

Pg

Coord

Open Early

Open Late

Close Early

Close Late

Incident#	Date	Operator	Zone	State	Event	Location/Comment	Priority	Elapsed Min	Full Clear Disp	User	Elapsed Sec.
2209170	6/14/2013 01:38:01				G-NOTT TIMER TEST NOT RECEI		0				0
	6/14/2013 01:38:01				Late Timer Test Jun 14 2013 1:38AM						
	6/14/2013 01:38:17	MEM			AA ALARM ACCESSED						16
	6/14/2013 01:39:30	MEM			FC FULL CLEAR	Full Clear					89
					Removed ATI hours since already tested and couldn't upload.						
2252440	7/15/2013 12:03:38				850 TROUBLE	High Tank Level	50				
	7/15/2013 12:03:38		1	A							0
	7/15/2013 12:03:45	TL			AA ALARM ACCESSED						7
	7/15/2013 12:04:26	TL			DIS DICONNECTED PHONE NUM	Bob Richardson					48
	7/15/2013 12:05:31	TL			RP RP NOTIFIED	Full Clear Priority:100					113
					Notified Mike he stated that Bob is at the site.						
2252480	7/15/2013 13:13:37				850 TROUBLE	High Tank Level	50				
	7/15/2013 13:13:37		1	A							0
	7/15/2013 13:13:46	MEM			AA ALARM ACCESSED						9
	7/15/2013 13:15:14	MEM			AMM ANSWERING MACHINE - LF	Bob Richardson					97
	7/15/2013 13:15:34	MEM			A ANSWERED PHONE CALL	Mike Gosvener					117
	7/15/2013 13:16:04	MEM			RP RP NOTIFIED	Full Clear Priority:100					147
					Mike.						
2252620	7/15/2013 15:39:37				850 TROUBLE	High Tank Level	50				
	7/15/2013 15:39:37		1	A							0
	7/15/2013 15:40:56	TL			AA ALARM ACCESSED						79
	7/15/2013 15:42:33	TL			RP RP NOTIFIED	Priority:100					176
					Mike						
	7/15/2013 15:42:41	TL			AA ALARM ACCESSED						184
	7/15/2013 15:42:42	TL			FC FULL CLEAR	Full Clear					185

Alarm Occurrence Report

CS# 011530
Site Name Longview Energy Company
Address ***Surfluh Site***
Fresno, CA

Alt ID
System Type NAPCO-MA1008E
UL Code
Policed Alarms 0

Installer 1410-FRESNO - SEBASTIAN
Corporate Account

559- 567-6035 214- 692-7777

Map **Pg** **Coord** **Open Early** **Open Late** **Close Early** **Close Late**

Incident#	Date	Time	Operator	Zone	State	Event	Location/Comment	User	Elapsed Sec.
2273860	7/30/2013	23:58:00		1	A	850 TROUBLE	High Tank Level		0
	7/30/2013	23:58:11	11VJ			AA ALARM ACCESSED			11
	7/30/2013	23:58:54	11VJ			A ANSWERED PHONE CALL	Bob Richardson		54
	7/30/2013	23:59:03	11VJ			RP RP NOTIFIED	Full Clear Priority:100		63
	Bob notified								

Incident#	Date	Time	Operator	Zone	State	Event	Location/Comment	User	Elapsed Sec.
2591380	2/7/2014	22:27:10		1	A	850 TROUBLE	High Tank Level		0
	2/7/2014	22:27:14	TMV			AA ALARM ACCESSED			4
	2/7/2014	22:28:47	TMV			CCI CUSTOMER CALLED IN, GAV	Full Clear Priority:100		97
	Mike called in and stated he is on the site.								

Incident#	Date	Time	Operator	Zone	State	Event	Location/Comment	User	Elapsed Sec.
2748640	4/26/2014	11:13:49		1	A	850 TROUBLE	High Tank Level		0
	4/26/2014	11:14:01	TMV			AA ALARM ACCESSED			12
	4/26/2014	11:14:59	TMV			AMM ANSWERING MACHINE - LF	Bob Richardson		70
	4/26/2014	11:16:16	TMV			AMM ANSWERING MACHINE - LF	Mike Gosvener		147
	4/26/2014	11:16:51	TMV			A ANSWERED PHONE CALL	Mike Gosvener		182
	4/26/2014	11:18:34	TMV			RP RP NOTIFIED	Full Clear Priority:100		285
	Mike stated the power is out at the location which caused the high tank level								

Incident#	Date	Time	Operator	Zone	State	Event	Location/Comment	User	Elapsed Sec.
2986160	8/31/2014	07:54:30		1	A	850 TROUBLE	High Tank Level		0
	8/31/2014	07:54:36	MEM			AA ALARM ACCESSED			6
	8/31/2014	07:55:14	MEM			A ANSWERED PHONE CALL	Mike Gosvener		44
	8/31/2014	07:55:40	MEM			RP RP NOTIFIED	Full Clear Priority:100		70
	Mike.								

Alarm Occurrence Report

CS# 011530
Site Name Longview Energy Company
Address ***Surfluh Site***
Fresno, CA

Alt ID
System Type NAPCO-MA1008E
UL Code
Policed Alarms 0

Installer 1410-FRESNO - SEBASTIAN
Corporate Account

559- 567-6035

214- 692-7777

Map

Pg

Coord

Open Early

Open Late

Close Early

Close Late

Incident#	Date	Operator	Zone	State	Event	Location/Comment	User	Elapsed Sec.
2986210	8/31/2014 08:40:10		1	A	850 TROUBLE	High Tank Level		0
	8/31/2014 08:40:19	MWR			AA ALARM ACCESSED			9
	8/31/2014 08:41:31	MWR			AMM ANSWERING MACHINE - LF	Mike Gosvener		81
	8/31/2014 08:43:15	MWR			AMM ANSWERING MACHINE - LF	Oscar DeLeon		185
	8/31/2014 08:44:08	MWR			A ANSWERED PHONE CALL	Robert Richardson		238
	8/31/2014 08:44:41	MWR			FC FULL CLEAR	Full Clear		271
ROBERT WAS ADVISED AND HE WILL TRY TO REACH MIKE.								

Incident#	Date	Operator	Zone	State	Event	Location/Comment	User	Elapsed Sec.
3299810	4/16/2015 07:17:46		1	A	850 TROUBLE	High Tank Level		0
	4/16/2015 07:17:50	RH			AA ALARM ACCESSED			4
	4/16/2015 07:18:22	RH			AMM ANSWERING MACHINE - LF	Robert Richardson		36
	4/16/2015 07:19:41	RH			A ANSWERED PHONE CALL	Mike Gosvener		115
	4/16/2015 07:21:48	RH			FAC FALSE ALARM PIN GIVEN	Full Clear Priority:100		242
		Mike						

Incident#	Date	Operator	Zone	State	Event	Location/Comment	User	Elapsed Sec.
3299950	4/16/2015 09:02:21		1	A	850 TROUBLE	High Tank Level		0
	4/16/2015 09:02:25	MEM			AA ALARM ACCESSED			4
	4/16/2015 09:08:11	MEM			A ANSWERED PHONE CALL	Robert Richardson		350
	4/16/2015 09:09:22	MEM			RP RP NOTIFIED	Full Clear Priority:100		421
Robert. There is staff working on site. They will call and advise when they are finished.								

Photo 8. Crude oil spill pools.



Photos were taken by Alejandra Lopez, RWQCB Engineering Geologist















WASH TANK
155-207-4117

G-3786-43-0





LONGVIEW
ENERGY
SURFLUH 13 TANK BATTERY
559-567-6034



















CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

Longview
Attachment 3

CLEANUP AND ABATEMENT ORDER NO. R5-2015-0XXX
FOR LONGVIEW PRODUCTION COMPANY
SURFLUH LEASE, RAISIN CITY OIL FIELD
FRESNO COUNTY

The California Regional Water Quality Control Board, Central Valley Region (hereafter Central Valley Water Board), finds that:

1. The Longview Production Company (hereinafter Discharger) operates a petroleum production and petroleum wastewater discharge facility at its Surfluh Lease in the Raisin City Oil Field (Surfluh Lease). The Surfluh Lease, approximately seven miles south of Kerman (Assessor's Parcel Number 030-007-71), is located in the southeast quarter of the northeast quarter of Section 14, T15S, R17E, MDB&M (see Attachment A, which is attached hereto and made a part of this Order).
2. The Surfluh Lease production system contains ~~one-two~~ wastewater injection wells (API No. 04905584) and one pond-depression to which ~~wastewater is periodically released/spills can accumulate~~. Wastewater is separated from the extracted crude oil and discharged to the injection well-system and is not allowed to flow to the ~~unlined pond for percolation and evaporation/depression except during spill events~~. The pond depression is approximately 50 feet in diameter (see Attachment B, which is attached hereto and made a part of this Order).
3. The Surfluh Lease is not regulated by Waste Discharge Requirements (WDRs) for the discharge of petroleum production wastewaters. The Discharger has not submitted a Report of Waste Discharge.
4. ~~This Order contains a time schedule to achieve compliance with the California Water Code (Water Code) and the Water Quality Control Plan for the Tulare Lake Basin Second Edition, Revised January 2004 (Basin Plan), and requires that by 31 December 2016, the Discharger demonstrate that the discharge to these ponds can comply with the applicable laws, policies, and regulations or the discharge will have to cease by that date. [Currently Longview has complied as there is no surface discharge.]~~
5. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for all waters of the Basin.
6. Surface drainage is toward the James Bypass in the Raisin Hydrologic Area (551.20) of the Tulare Lake Basin. Surface waters in the Raisin Hydrologic Area are designated as Valley Floor Waters. The designated beneficial uses of Valley Floor Waters, as specified in the Basin Plan, are agricultural supply; industrial service and process supply; water contact and non-contact water recreation; warm fresh water habitat; preservation of rare, threatened and endangered species; and groundwater recharge.
7. The Surfluh Lease is in the Delta Mendota Basin Hydrologic Unit, Detailed Analysis Unit (DAU) 235. The designated beneficial uses of the groundwater, as specified in the Basin Plan for DAU 235 are municipal and domestic water supply, agricultural supply, industrial service and process supply, non-contact water recreation, and wildlife habitat.

8. Information obtained from the United States Geological Survey and the California Department of Water Resources identified four groundwater supply wells within about one-mile of the facility.
9. Groundwater samples were obtained from the wells from 1955 to 1973. Chemical analysis of those samples showed the following constituents at the indicated values: From a well about one mile away from the Surfluh Lease:

	<u>Units:</u>	<u>Measured Value Range:</u>
<u>Specific EC:</u>	micromohs per centimeter (µmhos/cm)	482 – 491
<u>Chloride:</u>	milligrams per liter (mg/l)	82 - 86
<u>Boron:</u>	mg/l	None Detected – 0.12

From a well adjacent to the Surfluh Lease:

	<u>Units:</u>	<u>Measured Values:</u>
<u>Specific EC:</u>	µmhos/cm	9,000
<u>Chloride:</u>	mg/l	115
<u>Boron:</u>	mg/l	4.5

10. This Cleanup and Abatement Order is based upon: 1) Chapter 5, Enforcement and Implementation commencing with section 13300, of the Porter-Cologne Water Quality Control Act (Water Code Division 7, commencing with section 13000); 2) Water Code section 13267,¹ Investigations; inspections, Chapter 4, Regional Water Quality Control; 3) all applicable provisions of the Basin Plan including beneficial uses, water quality objectives, and implementation plans; 4) California State Water Resources Control Board (State Water Board) Resolution No. 68-16 (*Statement of Policy with Respect to Maintaining High Quality of Waters in California*); 5) State Water Board Resolution No. 92-49 (*Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code section 13304*); 6) and all other applicable legal authority.

¹ Water Code section 13267, subdivision (b)(1) states: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

11. Discharge of Waste to Land: This information is based upon the 4 February 2014 Central Valley Water Board inspection of the Surfluh Lease. The Basin Plan sets forth the following specific waste constituent limits for discharges of oil field wastewater to unlined ponds:

	<u>Units:</u>	<u>Limitation Value:</u>
<u>Specific EC:</u>	µmhos/cm	1000
<u>Chloride:</u>	mg/l	200
<u>Boron:</u>	mg/l	1

12. The Basin Plan allows discharges of oil field wastewater that exceed the above maximum salinity limits to unlined sumps, stream channels, or surface waters if the Discharger successfully demonstrates to the Central Valley Water Board in a public hearing that the proposed discharge will not substantially affect water quality nor cause a violation of water quality objectives.

13. The results of the analyses of wastewater sampled from the Surfluh Lease ~~pond~~ depression were reported in the inspection report at the following values for the listed constituents:

	<u>Units:</u>	<u>Measured Value:</u>
<u>Specific EC:</u>	µmhos/cm	41,000
<u>Chloride:</u>	mg/l	15,000
<u>Boron:</u>	mg/l	7.7

14. On 27 March 2015, the Central Valley Water Board issued a Notice of Violation (NOV) to the Discharger (see Attachment C, which is attached hereto and made a part of this Order). The NOV alleged that the discharge was in violation of Section 13260 of the California Water Code for failure to submit a Report of Waste Discharge before discharging waste that could affect the quality of waters of the state, and that the Discharger was discharging wastewater in excess of the numerical limitations specified in the Basin Plan (see Finding No. 10), which is causing, or is threatening to cause a condition of pollution,² contamination or nuisance.³

15. Section 13304(a) of the Water Code provides that:

Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has

² "Pollution" is defined by Water Code section 13050, subdivision (l)(1) as, an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: (A) The waters for beneficial uses; (B) Facilities which serve these beneficial uses.

³ "Nuisance" means anything which meets all of the following requirements: (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. (3) Occurs during, or as a result of, the treatment or disposal of wastes. Water Code §13050(m).

caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. A cleanup and abatement order issued by the state board or a regional board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.

16. Oil field produced water can contain elevated concentrations of general minerals (especially total dissolved solids and chloride), metals (i.e., arsenic), trace elements (i.e., boron, strontium, thallium, lithium, etc.), petroleum hydrocarbons, polynuclear aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs, i.e., benzene, toluene, ethylbenzene, and xylenes [BTEX]), and radionuclides. The unauthorized discharge of waste containing oil field waste constituents to ground and/or groundwater creates, or threatens to create, a condition of pollution in groundwater, and may result in the degradation of water quality.
17. Land surrounding the Surfluh Lease is being used for agricultural production. Many of the crops are irrigated with groundwater from local supply wells. Based on Ayers and Westcott (1985), irrigation water with a chloride concentration above 350 mg/l can cause severe crop problems. Boron toxicity can occur on sensitive crops at concentrations less than 1 mg/l in irrigation water.
18. Underlying groundwater may be degraded if mixed with oil field wastewater. Oil field wastewater constituents could impair the groundwater for municipal and domestic supply and agricultural supply uses.
19. An investigation is necessary to determine whether the discharge of wastewater in excess of water quality objectives has caused or threatens to cause a threat or condition of pollution or nuisance to groundwater.
20. The following actions will determine the threat and/or impacts to groundwater as a result of the discharges at the Surfluh Lease in violation of the Basin Plan and the California Water Code:
 - a. Development of a work plan to conduct a hydrogeological site characterization and assess potential groundwater degradation by discharges from this facility;

Longview Attachment 3

- b. Documentation of the average monthly volume of wastewater discharged to the ~~ponds-depression~~ during the previous year will be submitted, and ~~continued dischargeany spills~~ during the investigation will be reported to the Regional Water Quality Control Board not exceed the average monthly discharge rate calculated for the prior year; and
 - c. This Order requires that if degradation of groundwater due to discharge from ~~any of the ponds isis the depression is~~ documented, then a work plan to delineate the nature and extent of the release and a plan to remediate the effects of the release must be submitted.
21. The deliverables ordered herein (work plans, ~~signing up for WDRs~~, investigations, etc. as necessary) are needed to provide information to the Central Valley Water Board regarding (a) the nature and extent of the discharge, (b) the nature and extent of pollution conditions in State waters created by the discharge, (c) the threat to public health posed by the discharge, and (d) appropriate cleanup and abatement measures. The deliverables will enable the Central Valley Water Board to determine the vertical and lateral extent of the discharge, ascertain whether the condition of pollution poses a threat to human health in the vicinity of the Surfluh Lease, and provide technical information to determine the cleanup and abatement measures necessary to bring the Site into compliance with applicable water quality standards. Based on the nature and possible consequences of the discharges, including impacts to groundwater supply, the burden of providing the required information, including costs, bears a reasonable relationship to the need for the required reports, and the benefits to be obtained from the reports. The deadlines set forth herein are reasonable given the need to investigate the potential threat to groundwater quality.
22. In accordance with Water Code section 13267(b), these findings provide the Discharger with a written explanation with regard to the need for remedial action and reports, and identify the evidence that supports the requirement to implement investigative activities, to implement cleanup and abatement activities if needed, and to submit the reports. The Discharger owns a portion of the mineral rights and operates the Surfluh Lease which is subject to this Cleanup and Abatement Order. The technical and monitoring reports required by this Order are necessary to determine compliance with this Cleanup and Abatement Order.
23. Issuance of this Cleanup and Abatement Order is being taken for the protection of the environment and as such is exempt from provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq.) in accordance with California Code of Regulations, title 14, sections 15061(b)(3), 15306, 15307, 15308, and 15321. This Cleanup and Abatement Order generally requires the Discharger to submit plans for approval prior to implementation of investigative and, if necessary, cleanup activities at the Surfluh Lease. Mere submission of plans is exempt from CEQA as submission will not cause a direct or indirect physical change in the environment and/or is an activity that cannot possibly have a significant effect on the environment. CEQA review at this time would be premature and speculative, as there is simply not enough information concerning the Discharger's proposed remedial activities and possible associated environmental impacts. If the Central Valley Water Board determines that implementation of any plan required by this Cleanup and Abatement Order will have a

significant effect on the environment, the Central Valley Water Board will conduct the necessary and appropriate environmental review prior to the Executive Officer's approval of the applicable plan.

24. The Discharger will bear the costs, including the Central Valley Water Board's costs, of determining whether implementation of any plan required by this Cleanup and Abatement Order will have a significant effect on the environment and, if so, in preparing and handing any documents necessary for environmental review. If necessary, the Discharger and a consultant acceptable to the Central Valley Water Board shall enter into a memorandum of understanding with the Central Valley Water Board regarding such costs prior to undertaking any environmental review.

IT IS HEREBY ORDERED that, pursuant to section 13304 and section 13267 of Division 7 of the California Water Code, the Longview Production Company shall cease the discharge of wastewater in violation of applicable laws, policies, and regulations, and clean up and abate the condition of unauthorized discharge in accordance with the schedule below:

1. By **15 July 2015**, the Discharger shall prepare and submit to the Central Valley Water Board a Work Plan with a time schedule proposed by the Discharger and approved by the Assistant Executive Officer. ~~The schedule shall provide the ability to determine whether the discharge can comply with applicable laws, policies, and regulations that would allow the issuance of waste discharge requirements by 31 October 2016. If issuance of waste discharge requirements is not obtained by 31 December 2016, the discharge shall cease.~~ The Work Plan needs to include, but is not limited to, the following tasks:
 - a. Identify all owners of the surface rights and the mineral rights of the Surfluh Lease property.
 - b. Conduct a hydrogeological site characterization to assess the effects of the discharge of high-salinity wastewater on underlying groundwater. The characterization shall be conducted in a manner to utilize acquired information to further assess the impacts of the wastewater discharge on groundwater;
 - c. The hydrogeological characterization, and a determination whether there has been a release of waste constituents to groundwater shall be consistent with the detection monitoring requirements of Title 27, CCR, section 20005 et seq. (Title 27). This includes the development of a Sampling and Analysis Plan (SAP); the location and installation of groundwater monitoring wells; soil sampling locations (if necessary); and the sampling and analysis methods for groundwater and soil samples;
 - d. Monitoring wells installed for the hydrogeological characterization shall be installed at appropriate depths that will allow the collection of representative groundwater samples. Existing groundwater wells documented to be in

- appropriate locations, where well depth and construction details can be provided, may be proposed as sampling points;
- e. Collect and submit representative groundwater and soil samples for laboratory analysis for the waste constituents listed in Table I of Monitoring and Reporting Program No. R5-2015-XXXX in accordance with a SAP approved by the Assistant Executive Officer;
 - f. Conduct a well survey to identify all water supply wells within one-mile of the ~~ponds depression~~. The Discharger shall sample the identified domestic water supply wells and analyze the samples for the waste constituents listed in Table I of Monitoring and Reporting Program No. R5-2015-XXXX. If access to private property is needed, requested, and denied, a demonstration of that is required;
 - g. If the investigation determines that a release of wastewater to groundwater or soils has occurred, the hydrogeological characterization shall include a characterization of the nature and extent of the release consistent with the evaluation monitoring program requirements contained in section 20425 of Title 27;
 - h. If the investigation determines that a release of wastewater to groundwater or soils has occurred, then following the characterization of the nature and extent of the release, a groundwater remediation program shall be submitted for Assistant Executive Officer review and approval that is consistent with the corrective action program requirements contained in section 20430 of Title 27. This will entail the preparation of an engineering feasibility study followed by a proposed corrective action program;
 - i. Include in the report a table that provides the total monthly discharge in barrels and gallons to the ~~sump(s)depression~~ subject to this Order from 1 January 2013 to the end of the month immediately preceding the date of the report. The table shall include a description of the sources and volume of each individual waste stream going to the ~~ponddepression; [The depression has been regraded]~~
 - j. Calculation of the average monthly discharge of wastes to the ~~ponds depression~~ from 1 June 2014 through 1 June 2015;
 - k. ~~The pond shall either be free of oil or effectively screened and maintained to preclude entry of birds or animals;~~
 - ~~l. Pond adjacent to natural drainage courses shall be protected from inundation or washout, or properly closed; and~~
 - ~~m. Based on information acquired during the hydrogeological site characterization, submit a report of waste discharge (RWD) for preparation of waste discharge requirements, if appropriate, consistent with current regulations and policies. It is anticipated that general WDRs for discharges to unlined ponds will be presented to the Central Valley Water Board for adoption by August 2016. Submittal of a~~

~~Notice of Intent to come under a general WDR, with the additional technical information, will meet the requirement of a RWD.~~

2. Beginning **1 September 2015**, or a date approved by the Assistant Executive, and quarterly thereafter until all Work Plan activities are complete, the Discharger shall submit technical reports that provide information to document the Work Plan activities completed to date and to ultimately document that all elements of the Work Plan have been completed. Corrective actions shall be proposed and included in these technical reports when Work Plan activities fail to satisfy any interim or final success criteria.
- ~~3. The Discharger shall comply with Monitoring and Reporting Program No. R5-2015-XXXX (MRP), which is part of this Order, and any revisions thereto as ordered by the Assistant Executive Officer. The submission dates of self-monitoring reports shall be no later than the submission date specified in the MRP.~~
- ~~4.3. The monthly discharge volume of oil field wastewater to the pond shall not exceed the average monthly discharge volume calculated in Order 1.j. above.~~
- ~~5.4. The Discharger shall not discharge produced fluids to any location on the Surfluh Lease other than a permitted injection well, a permitted pond or disposal facility, or the pond which is the subject of this Order.~~
- ~~6.5. All activities in the Work Plan shall be completed~~ in accordance with time frames included in the Work Plan as approved by the Assistant Executive Officer.
- ~~7.6. With each report required by this Cleanup and Abatement Order, the Discharger shall provide under penalty of perjury under the laws of California a "Certification" statement to the Central Valley Water Board. The "Certification" shall include the following signed statement:~~

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Pursuant to Water Code section 13350, any person who intentionally or negligently violates a cleanup and abatement order may be liable civilly in an amount which shall not exceed five thousand dollars (\$5,000), but shall not be less than five hundred dollars (\$500), for each day in which the cleanup and abatement order is violated.

- ~~8.7. If it is determined that discharges from the Surfluh Lease have impacted the beneficial uses of water, the Discharger can be further required upon notification~~

by the Assistant Executive Officer to provide a replacement water supply or treat the water to allow continued use.

NOTIFICATIONS

1. **Applicability.** Requirements established pursuant to Water Code sections 13304 and 13267(b) are enforceable when signed by the Assistant Executive Officer of the Central Valley Water Board.
2. **Enforcement Actions.** The Central Valley Water Board reserves its right to take any enforcement action authorized by law for violations, including but not limited to, violations of the terms and conditions of this Cleanup and Abatement Order.
3. **Inspection and Entry.** The Discharger shall allow the Central Valley Water Board or State Water Board, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to at reasonable times do the following:
 - a. Enter upon the properties;
 - b. Access and copy any records related to this Cleanup and Abatement Order;
 - c. Inspect and photograph any facilities, equipment, practices, or operations regulated or required by this Cleanup and Abatement Order; and
 - d. Sample or monitor any substances or parameters on-site for the purposes of assuring Cleanup and Abatement Order compliance or as otherwise authorized by the Porter-Cologne Water Quality Control Act.
4. **Potential Liability.** Pursuant to Water Code section 13350, any person who intentionally or negligently violates a cleanup and abatement order may be liable civilly in an amount which shall not exceed five thousand dollars (\$5,000), but shall not be less than five hundred dollars (\$500), for each day in which the cleanup and abatement order is violated. Pursuant to Water Code section 13268, any person failing or refusing to furnish technical or monitoring program reports as required by section 13267, or falsifying any information provided therein, is guilty of a misdemeanor, and may be liable civilly in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.
5. **Cost Reimbursement.** Pursuant to Water Code section 13304, the Central Valley Water Board is entitled to, and may seek reimbursement for, all reasonable costs it actually incurs to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Cleanup and Abatement Order. The Discharger shall reimburse the State of California for all reasonable costs actually incurred by the Central Valley Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Cleanup and Abatement Order, according to billing statements prepared from time to time by the

State Water Board.

6. **Waste Management.** The Discharger shall properly manage, store, treat, and dispose of contaminated soils and groundwater which are extracted or disturbed during the investigation in accordance with applicable federal, state, and local laws and regulations. The storage, handling, treatment, or disposal of soil containing waste constituents and polluted groundwater shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050(m). The Discharger shall obtain or apply for coverage under waste discharge requirements or a conditional waiver of waste discharge requirements for any discharge of the waste to (a) land for treatment, storage, or disposal or (b) waters of the State.
7. **Requesting Administrative Review by the State Water Board.** Any person aggrieved by an action of the Central Valley Water Board that is subject to review as set forth in Water Code section 13320(a), may petition the State Water Board to review the action. Any petition must be made in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 and following. The State Water Board must receive the petition within thirty (30) days of the date the action was taken, except that if the thirtieth day following the date the action was taken falls on a Saturday, Sunday, or state holiday, then the State Water Board must receive the petition by 5:00 p.m. on the next business day. Copies of the laws and regulations applicable to filing petitions may be found on the internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.shtml or will be provided upon request.
8. **Modifications.** Any modification to this Cleanup and Abatement Order shall be in writing and approved by the Assistant Executive Officer, including any extensions. Any written extension request by the Discharger shall include justification for the delay.
9. **No Limitation of Water Board Authority.** This Cleanup and Abatement Order in no way limits the authority or ability of the Central Valley Water Board to institute additional enforcement actions or to require additional investigation and any necessary cleanup of the property consistent with the Water Code. This Cleanup and Abatement Order may be revised as additional information becomes available.

REPORTING REQUIREMENTS

1. **Duty to Use Qualified Professionals.** The Discharger shall provide documentation that plans and reports required under this Cleanup and Abatement Order are prepared under the direction of appropriately qualified professionals. Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of licensed professionals. The Discharger shall include a statement of qualifications and license numbers, if applicable, of the responsible lead professionals in all plans and reports required under this Cleanup and Abatement Order. The lead professional shall sign and affix their license stamp, as applicable, to the report, plan, or document.

2. **Electronic and Paper Media Reporting Requirements.** The Discharger shall submit both electronic and paper copies of all reports required under this Cleanup and Abatement Order including work plans, technical reports, and monitoring reports. Larger documents shall be divided into separate files at logical places in the report to keep file sizes under 150 megabytes. The Discharger shall continue to provide a paper transmittal letter, a paper copy of all figures larger than 8.5 inches by 14 inches (legal size), and an electronic copy (on Compact Disc [CD] or other appropriate media) of all reports to the Central Valley Water Board. All paper correspondence and documents submitted to the Central Valley Water Board must include the following identification numbers in the header or subject line: Geotracker Site ID: T10000006602. The Discharger shall comply with the following reporting requirements for all reports and plans (and amendments thereto) required by this Cleanup and Abatement Order:
- a. Reports and Plans Required by this Cleanup and Abatement Order. The Discharger shall submit one paper and one electronic, searchable Portable Document Format (PDF) copy of all technical reports, monitoring reports, progress reports, and plans required by this Cleanup and Abatement Order. The PDF copy of all the reports shall also be uploaded into the Geotracker database, as required by Reporting Requirement 2.(b)(iv) below.
 - b. Electronic Data Submittals to the Central Valley Water Board in compliance with the Cleanup and Abatement Order are required to be submitted electronically via the Internet into the Geotracker database <http://geotracker.waterboards.ca.gov/> (Geotracker Site ID: T10000006602). The electronic data shall be uploaded on or prior to the regulatory due dates set forth in the Cleanup and Abatement Order or addenda thereto. To comply with these requirements, The Discharger shall upload to the Geotracker database the following minimum information:
 - i. Laboratory Analytical Data: Analytical data (including geochemical data) for all waste, soil, and water samples shall be submitted in Electronic Deliverable Format (EDF), which facilitates the transfer of data from the laboratory to the end user. Waste, soil, and water include analytical results of samples collected from the following locations and devices: surface samples, equipment, monitoring wells, boreholes, gas and vapor wells or other collection devices, groundwater, piezometers, and stockpiles.
 - ii. Locational Data: All permanent monitoring locations (monitoring wells, sediment sampling locations, etc.) shall be surveyed with latitude and longitude coordinates in a decimal degree format basin on the North American Datum 1983 ellipsoid, and accurate to within one meter (3 feet).
 - iii. Site Map: Site map or maps which display discharge locations, streets bordering the facility, and sampling locations for all waste, soil, and water samples. The site map is a stand-alone document that may be submitted in various electronic formats. A site map must also be uploaded to show the maximum extent of any soil impact and water pollution. An update to

the site map may be uploaded at any time.

- iv. Electronic Report: A complete copy (in character searchable PDF) of all work plans, work plan modifications, assessment, cleanup, and monitoring reports including the signed transmittal letters, professional certifications, and all data presented in the reports.
3. **Oversight Reimbursement.** Reimburse the Central Valley Water Board for reasonable costs associated with oversight of the investigation and remediation of the Site, as provided in Water Code section 13304(c) (1). **By 15 July 2015**, provide the name and address where the invoices shall be sent. Failure to provide a name and address for invoices and/or failure to reimburse the Central Valley Water Board's reasonable oversight costs shall be considered a violation of this Cleanup and Abatement Order.
4. **Signatory Requirements.** All reports required under this Cleanup and Abatement Order shall be signed and certified by The Discharger or by a duly authorized representative and submitted to the Central Valley Water Board. A person is a duly authorized representative only if: 1) The authorization is made in writing by The Discharger; and 2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.).
5. All monitoring and technical reports required under this Cleanup and Abatement Order shall be submitted to:

California Regional Water Quality Control Board
Central Valley Region
1685 E Street, Suite 200
Fresno, CA 93706
Attn: Ron Holcomb
Geotracker Site ID: **T1000006602**
6. FAILURE TO COMPLY WITH THE PROVISIONS OF THIS CLEANUP AND ABATEMENT ORDER MAY SUBJECT YOU TO FURTHER ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO, ASSESSMENT OF CIVIL LIABILITY UNDER SECTIONS 13268 AND 13350 OF THE WATER CODE AND REFERRAL TO THE DISTRICT ATTORNEY OR ATTORNEY GENERAL FOR INJUNCTIVE RELIEF AND CIVIL OR CRIMINAL LIABILITY.

Ordered by:

PAMELA C. CREEDON
Executive Officer

Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

Longview
Attachment 4

MONITORING AND REPORTING PROGRAM R5-2015-XXXX
FOR
LONGVIEW PRODUCTION COMPANY
SURFLUH LEASE
RAISIN CITY OIL FIELD
FRESNO COUNTY

Compliance with this Monitoring and Reporting Program is required pursuant to Water Code section 13267 as ordered by Cleanup and Abatement Order R5-2015-XXXX (the "CAO"). Failure to comply with this program constitutes noncompliance with the CAO and the Water Code, which can result in the imposition of civil liability. All sampling and analyses shall be by United States Environmental Protection Agency (USEPA) approved methods. The test methods chosen for detection of the constituents of concern shall be subject to review and concurrence by the California Regional Water Quality Control Board, Central Valley Region ("Central Valley Water Board").

A complete list of substances which are tested for and reported on by the testing laboratory shall be provided to the Central Valley Water Board. All peaks must be reported. In addition, both the method detection limit and the practical quantification limit shall be reported. Detection limits shall equal or be more precise than USEPA methodologies. Water samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136. All quality assurance/quality control (QA/QC) samples must be run on the same dates when samples were actually analyzed. Proper chain of custody procedures must be followed and a copy of the completed chain of custody form shall be submitted with the report. All analyses must be performed by a California Department of Public Health certified laboratory.

The Discharger shall maintain all sampling and analytical results: date, exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Central Valley Water Board.

GROUNDWATER MONITORING

The Discharger shall operate and maintain a groundwater monitoring system that complies with the requirements of the CAO and is consistent with the detection monitoring requirements of section 20420 et seq. of Title 27, CCR, section 20005 et seq. (Title 27). The monitoring system shall be certified by a California-licensed professional civil engineer or geologist as being consistent with the detection monitoring requirements of Title 27. The Discharger shall revise the groundwater monitoring system (after review and approval by Central Valley Water Board staff) as needed to characterize the groundwater and to delineate the nature and extent of any release of waste constituents due to the operation of the surface impoundments (~~ponds~~depressions) that are the subject of the CAO.

Groundwater samples shall be collected from groundwater monitoring wells and other sampling points established in accordance with the hydrogeological characterization required by the CAO. The collected samples shall be analyzed for the parameters and constituents listed in Table I in accordance with the specified methods and frequencies. The Discharger shall collect, preserve, and transport groundwater samples in accordance with the Sample Collection and Analysis Plan approved by the Assistant Executive Officer.

INFLUENT MONITORING

Produced water samples shall be collected at a point in the system before discharge to the ~~ponds~~ injection well system.¹ Time of collection of the sample shall be recorded. The collected produced water samples shall be analyzed for the parameters and constituents listed in Table I in accordance with the specified methods and frequencies. The Discharger shall collect, preserve, and transport produced water samples in accordance with the approved Sample Collection and Analysis Plan.

FACILITY MONITORING

~~Permanent markers shall be in place with calibrations indicating the water level at design capacity and available operational freeboard. The freeboard shall be monitored on all ponds to the nearest tenth of a foot monthly.~~

~~Annually, prior to the anticipated rainy season, but **no later than 30 September**, the Discharger shall conduct an inspection of the facility. The inspection shall assess repair and maintenance needed for: drainage control systems; slope failure; groundwater monitoring wells, or any change in site conditions that could impair the integrity of the waste management unit or precipitation and drainage control structures; and shall assess preparedness for winter conditions including, but not limited to, erosion and sedimentation control. The Discharger shall take photos of any problems areas before and after repairs. Any necessary construction, maintenance, or repairs shall be **completed by 31 October**. Annual facility inspection reporting shall be **submitted by 30 November**.~~

~~The Discharger shall inspect all precipitation, diversion, and drainage facilities for damage **within 7 days** following major storm events (e.g., a storm that causes continual runoff for at least one hour) capable of causing flooding, damage, or significant erosion. The Discharger shall take photos of any problems areas before and after repairs. Necessary repairs shall be completed **within 30 days** of the inspection. Notification and reporting requirements for major storm events shall be conducted as required in Reporting Requirements 2. of this MRP.~~

~~The Discharger shall monitor and record on-site rainfall data using an automated rainfall gauge. Data shall be used in establishing the severity of storm events and wet seasons for comparison with design parameters used for waste management unit design and conveyance and drainage design. Daily data and on-site observation shall be used for establishing the need for inspection and repairs after major storm events. Rainfall data shall be reported in the quarterly monitoring reports as required by this MRP.~~

REPORTING REQUIREMENTS

¹ The sampling will conform with the 13267 Order dated April 1, 2015 and be the sample for this Monitoring and Reporting Program related to the CAO.

Longview Attachment 4

1. The Discharger shall report all monitoring data and information as specified herein. Reports that do not comply with the required format will be **REJECTED** and the Discharger shall be deemed to be in noncompliance with this Monitoring and Reporting Program.

2. Quarterly groundwater monitoring and remediation system reports shall be submitted to the Central Valley Water Board according to the schedule below.

<u>Monitoring Period</u>	<u>Report Due</u>
January – March	April 30
April – June	July 31
July – September	October 31
October – December	January 31

Each quarterly report shall include the following minimum information:

- (a) a description and discussion of the groundwater sampling event and results, including trends in the concentrations of waste constituents and groundwater elevations in the wells. If there are any deficiencies during the sampling event or if impacts to groundwater extend beyond recent historical boundaries, the report shall include an explanation and/or evaluation and propose options for addressing or correcting the deficiencies;
- (b) field logs that contain, at a minimum, water quality parameters measured before, during, and after purging, method of purging, depth of water, volume of water purged, etc.;
- (c) groundwater contour maps for all groundwater zones, if applicable;
- (d) waste constituent isoconcentration maps for all groundwater zones, if applicable;
- (e) a table showing well construction details that shall include, at a minimum, well number, groundwater zone being monitored, measuring point elevation, depth to top and bottom of screen, water level elevation, and depth to water;
- (f) cumulative data tables containing all historical water quality analytical results and depth to groundwater;
- (g) a copy of all laboratory analytical data reports;
- (i) results of any monitoring done more frequently than required at the locations specified in this Monitoring and Reporting Program or at other locations at the site shall be reported to the Central Valley Water Board;
- (j) a summary of any spills/releases that occurred during the quarter and tasks undertaken in response to the spills/releases;
- (k) an update and status on each of the outstanding tasks required by the CAO or Assistant Executive Officer;
- (l) a map showing all wells on the facility;

3. In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with the requirements. All data shall be submitted in an electronic form acceptable to the Assistant Executive Officer.
4. The Discharger shall submit an **annual report by 31 January** of each year for the preceding year. The report can be combined with the Discharger's fourth quarter report. The report shall contain:
 - a. Both tabular and graphical summaries of all data obtained during the year;
 - b. An in-depth evaluation of groundwater conditions at the site including short and long-term trends of the constituents of concern in each area of the site;
 - c. An evaluation of the effectiveness of the groundwater monitoring network in delineating the lateral and vertical extent of impacts to groundwater in all affected areas of the site. This needs to include an identification of any data gaps and potential deficiencies in the monitoring system or reporting program. The report shall include recommendations to address any deficiencies in the monitoring and report program;
 - d. An evaluation of the effectiveness of each of the remediation systems. The evaluation shall include the effectiveness of the systems in remediating impacted groundwater and each of the source areas or suspected source areas. The report shall include recommendations for improving or expanding the systems, if necessary;
 - e. A summary of the performance of each remediation system including the amount and percentage of operating and downtime, and the amount of petroleum hydrocarbons removed, if applicable; and
 - f. A summary of all spills/releases, if any, that occurred during the year, tasks undertaken in response to the spills, the results of the tasks undertaken.
5. For each required quarterly and annual report, one report shall be submitted containing all monitoring data collected at the site by the Discharger and include all information cited in the above sections. A hard copy of all required reports on/or responses shall be submitted by the due date unless otherwise arranged with Central Valley Water Board staff.
6. The Discharger may request that the Assistant Executive Officer change the monitoring frequency or constituents of concern after the first year of monitoring. The request needs to include a demonstration that adequate data has been collected to determine background groundwater conditions and a justification for the change.
6. The Discharger shall maintain a data base containing historical and current monitoring data in an electronic form acceptable to the Assistant Executive Officer. The data base shall be updated quarterly and provided to the Central Valley Water Board in electronic format.

7. The Discharger shall submit electronic copies of all workplans, reports, analytical results, and groundwater elevation data over the Internet to the State Water Board Geographic Environmental Information Management System database (GeoTracker) at <http://geotracker.swrcb.ca.gov>. Electronic submittals shall comply with GeoTracker standards and procedures as specified on the State Water Board's web site. Uploads to Geotracker shall be completed on or prior to the due date. In addition, a hardcopy of each document shall be submitted to:

California Regional Water Quality Control Board
Central Valley Region
1685 E Street, Suite 200
Fresno, CA 93706
Attn: Ron Holcomb
Geotracker Site ID: **T10000006602**

8. A transmittal letter explaining the essential points shall accompany each report. At a minimum, the transmittal letter shall identify any violations found since the last report was submitted, and if the violations were corrected. If no violations have occurred since the last submittal, this shall be stated in the transmittal letter. The transmittal letter shall also state that a discussion of any violations found since the last report was submitted, and a description of the actions taken or planned for correcting those violations, including any references to previously submitted time schedules, is contained in the accompanying report. The transmittal letter shall contain a statement identical to that required by the CAO by the discharger, or the discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate, and complete.

The Discharger shall implement the above monitoring program on the effective date of this Program.

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

(Date)

OFFICE NO 5F

FACILITIES INSPECTION
REPORT

INSPECTOR: HUBBARDD

SWRCB 001 (REV.5-81)

Program Type: SUB15

SD101019N08 WDS NUMBER	GOLDEN EXPLOR & PRODUCTION CORP NAME OF AGENCY OR PARTY RESPONSIBLE FOR DISCHARGE	RAISIN CITY, SURFLUH (N08) NAME OF FACILITY
NPDES NUMBER	1801 BROADWAY, STE 600 AGENCY STREET	SE1/4,NE1/4,SEC14,T15S,R17E,MD FACILITY STREET
(YY) (MM) (TYPE) SCHEDULED INS. DATA	DENVER,CO 80802- AGENCY CITY AND STATE	FRESNO COUNTY FACILITY CITY AND STATE
010905 (YYMMDD)	TIM COLLINS AGENCY CONTACT PERSON	LEE LAMBERSON ONSITE FACILITY CONTACT PERSON
ACTUAL INS. DATE	(303) 296-1908 AGENCY PHONE NO.	(661) 871-8612 FACILITY PHONE NO.

S Inspection agency (State = S, State / EPA Joint = J)

N If this inspection is a Compliance Inspection of an NPDES facility, send a copy of this report to SWRCB's Division of Water Quality, Program Support Unit

INSPECTION TYPE (Check One)

- A1 "A" type compliance -- Comprehensive inspection in which samples are taken. (EPA Type S)
- B1 "B" type compliance -- A routine nonsampling inspection. (EPA Type C)
- 02 Noncompliance follow-up -- Inspection made to verify correction of previously identified violation.
- 03 Enforcement follow-up -- Inspection made to verify that conditions of an enforcement action are being met.
- 04 Complaint -- Inspection made in response to a complaint.
- 05 Pre-requirement -- Inspection made to gather info. relative to preparing, modifying, or rescinding requirements.
- 06 Miscellaneous -- Any inspection type not mentioned above.

If this is an EPA inspection not mentioned above, please note type.
(e.g. -- biomonitoring, performance audit, diagnostic, etc.)

(Type)

N Were VIOLATIONS noted during this inspection? (Yes/No/Pending Sample Results)

N Was this a Quality Assurance-Based Inspection? (Y/N)

N Were bioassay samples taken? (N = No) If YES, then S = Static or F = Flowthrough

INSPECTION SUMMARY (REQUIRED) (100 character limit)

One sump closed-satisfactory; closure report/lab results/photos received and reviewed.

INSPECTOR'S DATA:

Staff ID HUBBARDD

SIGNATURE 

DATE 13 Sept 2001

For Internal Use: Reviewed by: (1)  (2) _____ (3) _____
Reg. WDS Coordinator

WDS Data Entry Date: _____ Regional Board File Number: _____ Inspection ID _____ 1574

FACILITIES INSPECTION
REPORT

SWRCB 001 (REV.5-91)

Page 2

VIOLATION (IF APPLICABLE)

VIOL (A-G): _____ (See pages IK05.0 and IK05.1 of the Micro Waste Discharger System Users Manual)

Date Violation Occurred (YYMMDD): _____

Date Violation Determined (YYMMDD): _____

DESCRIPTION (200 CHARACTER LIMIT):

EPA SUGGESTED INSPECTION CHECKLIST

(S= Satisfactory, M= Marginal, U= Unsatisfactory, N= Not Evaluated)

_____ Permit	_____ Flow Measurement	_____ Pretreatment	_____ Operations and Maintenance
_____ Records/Reports	_____ Laboratories	_____ Compliance Schedules	_____ Sludge Disposal
_____ Facility Site Review	_____ Eff./Receiving Waters	_____ Self-Monitoring	_____ Other

_____ Overall Facility Operation Evaluation (5= Very reliable, 3= Satisfactory, 1= Unreliable)

HISTORICAL INFORMATION

MOST RECENT ORDERS

ORDER NO. DATE ADOPTED TYPE

MOST RECENT INSPECTIONS:

DATE TYPE VIOLATIONS?

04/13/2000	B1	Y
08/28/1998	A1	N

MOST RECENT VIOLATIONS:

VIOL. TYPE DATE

ADDITIONAL COMMENTS, SPECIAL INSTRUCTIONS, ITEMS FOR FOLLOWUP ON FUTURE INSPECTIONS, NOTES, ETC. (Attach additional pages, if necessary)

The purpose of my inspection was to observe and document closure activities for the Surfluh Lease wastewater disposal sump located in the NE 1/4 of Section 14 (Photo 1). Golden's wastewater disposal operations in Raisin City Oil Field are regulated by Waste Discharge Requirements (WDRs), Resolution No. 69-291.

According to Golden's field representative, the gunite-lined sump was sampled and cleaned, and the oily sludge was removed last fall and stockpiled nearby (Photo 2). Additionally, the representative indicated the oily sludge will be used on lease roads for dust control and/or for expanding storage tank containment berms.

The closure report, dated 18 April 2001, with photographs and analytical results was received, reviewed, and found to be satisfactory. A composite sample was obtained from the sump sludge and submitted to a State-certified laboratory for Title 22 metals analysis. The analytical results indicate the excavated sludge is non-hazardous.

**FACILITIES INSPECTION
REPORT**

SWRCB 001 (REV.6-91)

Page 3

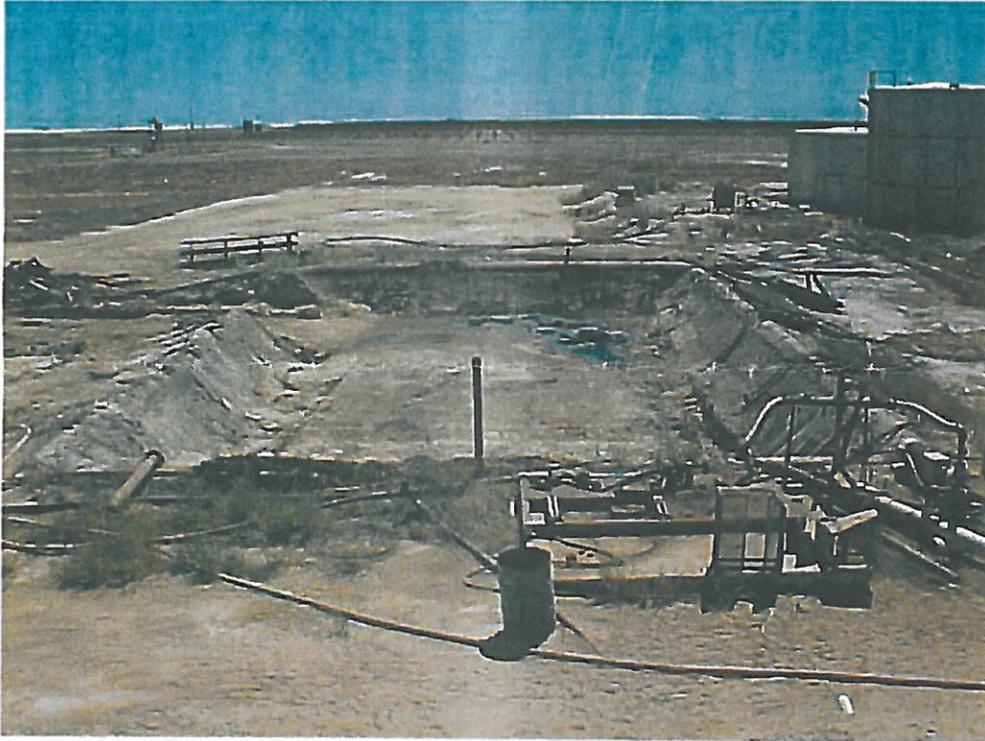
Based on my observations and review of the information presented in the closure report, the sump can be considered closed.

Other Golden disposal operations in Raisin City Oil Field are regulated by WDRs Resolution No. 69-291. Once all of the remaining regulated sumps are properly closed, the WDRs can be rescinded.

CONCLUSIONS:

1. The gunite-lined sump at the Surfluh Lease has been closed.
2. After all of Golden's sumps in Raisin City are properly closed, WDRs Resolution No. 69-291 can be rescinded.

GOLDEN EXPLORATION & PRODUCTION CORP.
Raisin City Oil Field, Fresno County
Surfluh Lease, SE ¼ NE ¼ Section 14 T15S R17E, MDB&M
Inspection date: 5 September 2001



Photograph 1 – View of Surfluh sump looking south from the tank setting.



Photograph 2 – Stockpile of sludge removed from the Surfluh sump. View is looking southeast from the tank setting. Surfluh Well No. 2-14 is indicated.