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3	Telephone: (661) 327-9661 Facsimile: (661) 327-0720 dgosling@youngwooldridge.com	
5	Attorneys for Petitioner	
6	JACO PRODUCTION COMPANY	
7	STATE O	F CALIFORNIA
8	STATE WATER RESO	URCES CONTROL BOARD
9		
10	In re Matter of August 26, 2015 Cleanup and Abatement Order No. R5-2015-0721 of the	File No.:
11	Central Valley Regional Quality Control Board to Jaco Production Company.	JACO PRODUCTION COMPANY'S PETITION FOR REVIEW OF REGIONAL
12	(C.E. Houchin Lease)	BOARD ORDER AND HEARING ON PETITION
13		
14	Jaco Production Company ("Petitioner"	) hereby timely files this Petition for Review and
15	Request for Hearing regarding the August 26,	2015 Cleanup and Abatement Order No. R5-2015-
16	0721 ("Order") issued by the Central Valley R	egional Water Quality Control Board ("Regional
17	Board") related to the C.E. Houchin Lease ("Le	ease"). Petitioner desires to work toward a resolution
18	of the contested issues and anticipates the parti	ies can amicably resolve the inadvertent
19	identification of the sumps subject to this Orde	er with the Regional Board. Petitioner hereby
20	reserves the right to amend this Petition for Re	eview with additional information and legal points
21	and authorities if a resolution of the issues being	ng challenged cannot be achieved with the Regional
22	Board.	
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## Central Valley Regional Water Quality Control Board

26 August 2015

Jaco Production Company Richard A. Woodall P.O. Box 82515 Bakersfield, CA 93380 CERTIFIED MAIL 7015 0640 0003 6852 1394

CLEANUP AND ABATEMENT ORDER NO. R5-2015-0721, JACO PRODUCTION COMPANY, C. E. HOUCHIN ET AL LEASE, MIDWAY-SUNSET OIL FIELD, KERN COUNTY

Enclosed is Cleanup and Abatement Order No. R5-2015-0721 (CAO), and Monitoring and Reporting Program No. R5-2015-0721 (MRP), for the disposal ponds in the C. E. Houchin et al Lease in the Midway-Sunset Oil Field.

The CAO requires Jaco Production Company to submit, by 27 October 2015, a Work Plan and time schedule to determine whether the discharge can comply with applicable laws, policies, and regulations that would allow the issuance of waste discharge requirements.

Please submit your Work Plan to the attention of:

Alejandra Lopez
Central Valley Water Board
1685 E Street
Fresno, CA 93706
Alejandra.Lopez@waterboards.ca.gov

The CAO and MRP requires Jaco Production Company to perform specific tasks by specific dates. Failure to comply with the CAO and MRP will subject Jaco Production Company to further enforcement actions including the potential assessment of civil liability.

If you have any questions regarding this matter, please contact Alejandra Lopez of this office at (559) 445-6071 or at the above e-mail address.

RONALD E. HOLCOMB

Senior Engineering Geologist

CEG No. 2390

CC: Julia Macedo, Office of Enforcement, State Water Resources Control Board Patrick Pulupa, Office of Chief Counsel, State Water Resources Control Board John Borkovitch, Division of Water Quality, State Water Resources Control Board

KARL E. LONGLEY SCD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

# CLEANUP AND ABATEMENT ORDER NO. R5-2015-0721 FOR JACO PRODUCTION COMPANY C. E. HOUCHIN ET AL LEASE, MIDWAY-SUNSET OIL FIELD KERN COUNTY

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

- 1. Jaco Production Company (hereinafter Discharger), is the owner of the C. E. Houchin et al Lease in the Midway-Sunset Oil Field (C. E. Houchin et al Lease). The C. E. Houchin et al Lease, is an idle petroleum production wastewater discharge facility. The Lease is located approximately ten miles northwest of Taft in Section 9, T31S, R22E, MDB&M.
- 2. The C. E. Houchin et al Lease contains two unlined surface impoundments (ponds). Oil production wastewater and residual crude oil was discharged to the unlined ponds for percolation and evaporation. The two ponds contain crude oil coated soil. Pond one is approximately 50 feet long by 35 feet wide and depth is unknown. Pond two is approximately 115 feet long by 50 feet wide and depth is unknown.
- 3. The Discharger has not submitted a Report of Waste Discharge. The C. E. Houchin et al Lease is not regulated by Waste Discharge Requirements (WDRs) for the discharge of petroleum production wastewaters.
- 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 Discharger may Close the ponds 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. The site is located in the Taft Hydrologic Area (557.20) of the Tulare Lake Basin. Site surface drainage is toward the west. The designated beneficial uses of South Valley Floor Waters, as specified in the Basin Plan, are agricultural supply; industrial supply; process water supply; water contact and non-contact water recreation; warm fresh water habitat; wildlife habitat; preservation of rare, threatened or endangered species; and groundwater recharge.
- 7. The C. E. Houchin et al Lease is in the Kern County Basin Hydrologic Unit, Detailed Analysis Unit (DAU) 260. The designated beneficial uses of the groundwater, as specified in the Basin Plan for DAU 260 are municipal and domestic water supply, agricultural supply, industrial service and process supply.

- 8. 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 13267¹, 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); and 6) all other applicable legal authority.
- 9. The Basin Plan sets forth the following specific waste constituent limits for discharges of oil field wastewater to unlined ponds overlying ground water with existing and future probable beneficial uses are:

Constituent	Limitation	Units
Electrical Conductivity (EC): Chloride:	1000 200	micromhos per centimeter (µmhos/cm) milligrams per liter (mg/L)
Boron:	1	mg/L

- 10. The Basin Plan allows discharges of oil field wastewater that exceed the above maximum salinity limits to unlined ponds, 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.
- 11. On 3 April 2015, the Central Valley Water Board issued a Notice of Violation (NOV) to the Discharger that was the result of an inspection conducted on 27 February 2015. 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. Discharging waste that could affect the quality of waters of the State without obtaining WDRs is a violation of Sections 13260 and 13264 of the California Water Code.
- 12. On 1 April 2015, the Central Valley Water Board issued a California Water Code Directive Pursuant to Section 13267 to the Discharger. It required the Discharger to submit a technical report that includes Lease information, wastewater disposal practices,

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."

and wastewater discharge analytical data. The technical report was due by 15 June 2015 and an incomplete report was received on 16 July 2015.

13. 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 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 iurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.

- 14. 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.
- 15. 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.

A wastewater sample was collected from the West pond by Michael Criden on 24 April 2015. The submitted analytical results were:

Constituent	Concentration	Units	
EC:	20,000	µmhos/cm	
TDS:	15,000	mg/L	
550,555,550,000,000	CALLED A CONTRACTOR CO		
Chloride:	5,700	mg/L	
Boron:	24	mg/L	

A wastewater sample was collected from the East pond by Michael Criden on 24 April 2015. The submitted analytical results were:

Constituent	Concentration	Units	
EC:	28,000	µmhos/cm	
TDS:	17,000	mg/L	
Chloride:	9,900	mg/L	
Boron:	28	mg/L	

Wastewater precipitates and crude oil on the ponds surface pose a threat to groundwater. The ponds are a source of contaminants with the potential to become dissolved and mobile within the vadose zone. Rain water accumulation in the ponds or water discharged to the ponds results in wastewater with dissolved petroleum production contaminants.

- 16. An investigation is necessary to determine whether the discharge of wastewater with crude oil has caused or threatens to cause a condition of pollution in groundwater or the development of nuisance conditions.
- 17. The following actions will determine the threat and/or impacts to groundwater as a result of the discharges at the C. E. Houchin et al Lease in violation of the Water Code:
  - a. Development of a work plan to conduct a hydrogeological site characterization and assess potential groundwater degradation by discharges from this facility:
  - 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.
- 18. 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 Discharger, with concurrence from 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 C. E. Houchin et al 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.

- 19. 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 C. E. Houchin et al 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.
- Issuance of this Cleanup and Abatement Order is being taken for the protection of the 20. 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 C. E. Houchin et al 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 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.
- 21. 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, Jaco 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 **27 October 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 and the ponds shall be properly closed. The Work Plan shall include, but is not limited to, the following tasks:

- a. Identify all owners of the surface rights and the mineral rights of the C. E. Houchin et al Lease.
- b. Conduct a hydrogeological site characterization to assess the effects of the discharge of oil field wastes 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. If the Discharger demonstrates that the wastes discharged to the ponds cannot affect the quality of underlying groundwater, the Assistant Executive Officer may rescind by signed letter all or part of the requirements to complete the groundwater investigation and groundwater monitoring portions of this Order.
- 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 Sample Collection and Analysis Plan (SCAP); the location and installation of groundwater monitoring wells; soil sampling locations (if necessary); and the sampling and analysis methods for groundwater and soil samples, in accordance with Monitoring and Reporting Program No. R5-2015-0721 (MRP), which is attached hereto and made part of this Order.
- 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 waste constituents in Monitoring and Reporting Program
  No. R5-2015-0721 in accordance with a SCAP approved by the Assistant Executive Officer.
- f. The methods of analysis and the method detection limits (MDLs) used must be appropriate for the expected concentrations. The laboratory reporting limits (RLs) for all reported monitoring data shall be set no greater than the practical quantitation limit (PQL). MDLs, PQLs and RLs shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. Analysis with an MDL greater than the most stringent drinking water standard that results in non-detection needs to be reanalyzed with the MDL set lower than the drinking water standard or at the lowest level achievable by the laboratory:

- g. 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. R5-2015-0721. If access to private property is needed, requested and denied, a demonstration of that is required.
- h. 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.
- i. 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.
- j. 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.
- k. Include in the report a table that provides the total monthly discharge in barrels and gallons to the pond(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 each pond.
- I. Include in the report a calculation of the average monthly discharge of wastes to the ponds from 1 June 2014 through 1 June 2015.
- 2. Beginning **24 November 2015**, or a date approved by the Assistant Executive Officer, 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 the 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 ponds shall not exceed the average monthly discharge volume calculated in Order 1.l. above.
- The Discharger shall not discharge produced fluids to any location on the
   E. Houchin et al Lease other than a permitted injection well, a permitted pond or disposal facility, or the ponds which are the subject of this Order.
- 6. The ponds shall either be free of oil or effectively screened and maintained to preclude entry of birds or animals.
- 7. Ponds adjacent to natural drainage courses shall be protected from inundation or washout, or properly closed.
- 8. 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.
- 9. With each report and work plan 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.

10. If it is determined that discharges from the C. E. Houchin et al 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**

 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:
  - 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.
- 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.

- Provided 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 <a href="http://www.waterboards.ca.gov/public notices/petitions/water quality/index.shtml">http://www.waterboards.ca.gov/public notices/petitions/water quality/index.shtml</a> 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 comply with the following reporting requirements for all reports and plans (and amendments thereto) required by this Cleanup and Abatement Order:
  - a. 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.(d) below.
  - b. Larger documents shall be divided into separate files at logical places in the report to keep file sizes under 150 megabytes.

- c. All paper correspondence and documents submitted to the Central Valley Water Board must include the GeoTracker Site Global ID
- d. 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 <a href="http://GeoTracker.waterboards.ca.gov/">http://GeoTracker.waterboards.ca.gov/</a> (GeoTracker Site Global ID: T10000006771). 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.
- Oversight Reimbursement. The Discharger may be required to 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 28 September 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 and work plans 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: Alejandra Lopez

GeoTracker Site Global ID: T10000006771 for the C. E. Houchin et al Lease

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: CLAY L. RODGERS, Assistant Executive Officer

(Date)

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2015-0721
FOR
JACO PRODUCTION COMPANY
C. E. HOUCHIN ET AL LEASE
MIDWAY-SUNSET OIL FIELD
KERN COUNTY

Compliance with this Monitoring and Reporting Program is required pursuant to Water Code section 13267 as ordered by Cleanup and Abatement Order R5-2015-0721 (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 (MDL) and the practical quantification limit shall be reported. Detection limits shall equal or be more precise than USEPA methodologies. Analysis with an MDL greater than the most stringent drinking water standard that results in non-detection needs to be reanalyzed with the MDL set lower than the drinking water standard or at the lowest level achievable by the laboratory. 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) that are the subject of the CAO.

Groundwater samples shall be collected quarterly 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.

MONITORING AND REPORTING PROGRAM R5-2015-0721 FOR JACO PRODUCTION COMPANY C. E. HOUCHIN ET AL LEASE MIDWAY-SUNSET OIL FIELD, KERN COUNTY

### **WASTEWATER MONITORING**

Produced water samples shall be collected quarterly at a point in the system before discharge to the ponds. 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.

The Discharger shall record the volume of wastewater discharged to the ponds monthly. The wastewater volumes shall be reported in the quarterly monitoring reports.

## **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 problem 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 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 and wastewater monitoring and remediation system reports shall be submitted to the Central Valley Water Board according to the schedule below.

Monitoring Period	Report Due
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 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;
- (h) 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;
- (i) a summary of any spills/releases that occurred during the quarter and tasks undertaken in response to the spills/releases;
- (j) an update and status on each of the outstanding tasks required by the CAO or Assistant Executive Officer;
- (k) a map showing all wells on the facility and the location of wastewater sampling;

MONITORING AND REPORTING PROGRAM R5-2015-0721 FOR JACO PRODUCTION COMPANY C. E. HOUCHIN ET AL LEASE MIDWAY-SUNSET OIL FIELD, KERN COUNTY

- 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. Each quarterly monitoring report shall be submitted as a single document and contain all monitoring data collected at the site including all information cited in the above sections. A hard copy of all required reports or responses shall be submitted by the due date unless otherwise arranged with Central Valley Water Board staff.
- 5. 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 monitoring 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.
- 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.
- 7. 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.

8. The Discharger shall submit electronic copies of all work plans, reports, analytical results, and groundwater elevation data over the Internet to the State Water Board Geographic Environmental Information Management System database (GeoTracker) at <a href="http://GeoTracker.swrcb.ca.gov">http://GeoTracker.swrcb.ca.gov</a>. 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 Global ID: T10000006771 for the C. E. Houchin et al Lease

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: CLAY L. RODGERS, Assistant Executive Officer

Date

Table 1 – Wastewater and Groundwater Monitoring						
<u>Parameters</u>	<u>Units</u>	Monitoring Frequency	US EPA or other Method	Reporting Frequency		
Groundwater Elevation	feet & hundredths, MSL <sup>1</sup>	Quarterly		Quarterly		
Field Parameters						
Temperature Electrical Conductivity pH	°F² µmhos/cm³ pH units	Quarterly Quarterly Quarterly		Quarterly Quarterly Quarterly		
Monitoring Parameters						
Total Dissolved Solids (TDS) Electrical Conductivity Boron, dissolved	mg/L⁴ µmhos/cm mg/L	Quarterly Quarterly Quarterly	160.1 120.1 6010B	Quarterly Quarterly Quarterly		
Standard Minerals Alkalinity as CaCO3 Bicarbonate Alkalinity as CaCO3 Carbonate Alkalinity as CaCO3 Hydroxide Alkalinity as CaCO3 Sulfate, dissolved Nitrate-N, dissolved Calcium, dissolved Magnesium, dissolved Sodium, dissolved Potassium Chloride	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	Quarterly	310.1 310.1 310.1 310.1 300.0 300.0 6010B 6010B 6010B 300.0	Quarterly		
<u>Total Petroleum</u> Hydrocarbons (TPH)	μg/L	Quarterly	418.1	Quarterly		
Volatile Organic Compounds Full Scan	μg/L	Quarterly	8260B	Quarterly		

Table 1 – Wastewater and Groundwater Monitoring						
<u>Parameters</u>	<u>Units</u>	Monitoring Frequency	US EPA or other Method	Reporting Frequency		
Stable Isotopes Oxygen ( <sup>18</sup> O) Deuterium (Hydrogen 2, <sup>2</sup> H, or D)	pCi/L <sup>7</sup> pCi/L	Quarterly Quarterly	900.0 900.0	Quarterly Quarterly		
Radionuclides Radium-226 Radium-228 Gross Alpha particle (excluding radon and	pCi/L pCi/L pCi/L	Quarterly Quarterly Quarterly	SM <sup>8</sup> 7500-Ra SM 7500-Ra SM 7110	Quarterly Quarterly Quarterly		
uranium) Uranium	pCi/L	Quarterly	200.8	Quarterly		
Constituents of Concern						
Lithium Strontium Iron Manganese Antimony Arsenic Barium Beryllium Cadmium Chromium (total) Chromium (hexavalent) Cobalt Copper Lead	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	Quarterly	200.7 200.8 200.8 200.8 200.8 200.8 200.8 200.8 200.8 7196A 200.8 200.8 200.8	Quarterly		
Mercury	mg/L mg/L	Quarterly Quarterly	7470A	Quarterly		

Table 1 – Wastewater and Groundwater Monitoring						
<u>Parameters</u>	<u>Units</u>	Units Monitoring Frequency		Reporting Frequency		
Molybdenum	mg/L	Quarterly	200.8	Quarterly		
Nickel	mg/L Quarterly	Quarterly	200.8	Quarterly		
Selenium	mg/L	Quarterly	200.8	Quarterly		
Silver	mg/L	Quarterly	200.8	Quarterly		
Thallium	mg/L	Quarterly	200.8	Quarterly		
Vanadium	mg/L	Quarterly	200.8	Quarterly		
Zinc	mg/L	Quarterly	200.8	Quarterly		

<sup>&</sup>lt;sup>1</sup> Mean Sea Level <sup>2</sup> Degrees Fahrenheit

<sup>&</sup>lt;sup>3</sup> Micromhos per centimeter

<sup>&</sup>lt;sup>4</sup> Milligrams per liter
<sup>5</sup> Polycyclic aromatic hydrocarbons
<sup>6</sup> micrograms per liter
<sup>7</sup> Picocuries per liter

<sup>&</sup>lt;sup>8</sup> Standard Methods





# Central Valley Regional Water Quality Control Board

3 April 2015

## NOTICE OF VIOLATION

Richard Woodall Jaco Oil Company PO Box 82515 Bakersfield, CA 93380 CERTIFIED MAIL 7014 1200 0000 3347 6374

# INSPECTION REPORT – JACO OIL COMPANY, CE HOUCHIN ET AL LEASE, MIDWAY-SUNSET OIL FIELD, KERN COUNTY

Central Valley Regional Water Quality Control Board staff (Staff) inspected the CE Houchin et al Lease in the Midway-Sunset Oil Field on 27 February 2015 to ascertain the status of two surface impoundments (ponds) identified by the California Division of Oil, Gas, and Geothermal Resources (DOGGR) as active. Disposal operations at the facility are not regulated by Waste Discharge Requirements (WDRs). Staff's observations and comments are presented in the enclosed inspection report:

Two unlined ponds were observed. Oil stained soil, fluid, and oil on the fluid surface was observed in Pond #1. Oil stained soil and fluid was observed in Pond #2. Multiple inlet pipes were observed in the ponds, including an overflow pipe between Ponds #1 and #2. The discharge of waste to a pond without WDRs is a violation of Section 13260(a) of the California Water Code. Jaco Oil Company is in violation of the California Water Code for wastewater in Ponds #1 and #2. Netting and freeboard appeared to be adequate.

Staff observed two pipes extruding from the hillside approximately 50 feet east of Pond #1. The pipes originate from Pond #1 and appear to be overflow pipes to prevent fluid from rising above the embankment height of Pond #1. The discharge of waste to land is a violation of Section 13260(a) of the California Water Code. Jaco Oil Company needs to remove the pipes, or verify the pipes are permanently plugged to prevent the discharge of waste outside of the ponds.

KARL E. LONGLEY SCD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

A black hose, approximate diameter of 4 inches, was observed in Pond #2. Staff followed the hose to locate the point of origin. The hose was identified by Staff 500 feet west of Pond #2, before the hose was buried near the tank farm. Staff observed another black hose of the same diameter 400 feet southwest of the tank farm. Staff followed the line for 0.7 miles along the entrance road to the Facility. Staff was no longer able to continue following the hose when the direction changed off the dirt road and over a hill into private property. Jaco Oil Company needs to remove the black hose from Pond #2 and submit documentation verifying the hose has been removed. A 13267 Order will be issued to Jaco Oil Company requiring information regarding the black hose that originated off the CE Houchin et al Lease.

If Jaco Oil Company intends to retain the ponds for the discharge of wastes during maintenance or other upset conditions, a Report of Waste Discharge (RWD), along with the appropriate filing fee, needs to be submitted for issuance of WDRs. The discharge of wastes to a pond without WDRs, or before 140 days following a determination that the submitted RWD is complete and adequate, is a violation of Section 13260 of the California Water Code (CWC). The RWD needs to include a demonstration that the California Environmental Quality Act (CEQA) has been satisfied. A violation of 13260(a) of the CWC may subject Jaco Oil Company to potential liability pursuant to CWC Section 13350 or 13261, in an amount up to \$10 for each gallon discharged or \$5,000 for each day that the discharge occurs, and/or up to \$1,000 for each day the RWD is not submitted.

If Jaco Oil Company plans to close the ponds, please submit a closure plan prepared by a California registered professional. In addition, please submit a history of waste discharge (volumes & dates) to the ponds.

If you have any questions regarding this inspection, please contact Josh Mahoney at (559) 444-2449 or by email at Joshua.Mahoney@waterboards.ca.gov.

DANE S. JOHNSÓN

Senior Engineering Geologist Professional Geologist No. 4239

Enclosure:

Inspection Report

cc: Mike Toland, California Division of Oil, Gas, and Geothermal Resources, Bakersfield

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OKDER NO	•	NEO MENGONE ID						
	JAC	O OIL COMPANY	9 	·MI	DWAY-SUNSE	T OIL FIELD; CE		AL LEAS
		DISCHARGER NAME			050	FACILITY NAME		
		PO BOX 82515 STREET ADDRESS			SEC	TION 9, T31S, R2		
	BAKE	RSFIELD, CA 933	30	KERN COUNTY				€
		ITY, STATE, ZIP CODE				CITY, STATE, ZIP C		
RICHARD WOODALL						RICHARD WOO	DALL	
		ARGER CONTACT PERSO	N	(0)		FACILITY CONTACT P	ERSON	
(661) 30 TELEPHO	Account to the second s	F-MAII	ADDRESS		61) 633-7527 ELEPHONE NO.		E-MAIL ADDRESS	
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Inspection T	уре: В Туре	Compliance Inspe	ection			Lead Inspector: _	Joshua Maho	ney
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Josh	nua Mahone	y Cen	tral Valley Wa	ater Board	(559) 445-51	16 Joshu	a.Mahoney@wat	erboards.ca.g
	NAME		COMPANY/AGE	NCY	TELEPHONE N	10.	E-MAIL ADDR	RESS
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1	988667	Unauthorized Di	scharge Fluid	d observed in the	ponds		Section 133	260(a) of the Water Code
2							Jamoina	
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ilename:		Oil Field, CE Houchin		/QS Entry Date:	4/1/2015	CIWQS inspe	ection ID:	19965057

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### **FACILITIES INSPECTION REPORT**

JACO OIL COMPANY

CE HOUCHIN ET AL LEASE, MIDWAY-SUNSET OIL FIELD

### **FACILITY INFORMATION**

Crude oil production facility. Tank farm with oil and water	Active	
FACILITY DESCRIPTION (e.g., total area in acres, number of waste management units, etc.)	STATUS (active, inactive, closed)	
Oil field production wastewater.		Oil/Gas Extraction
WASTE TYPES	FACILITY CLASSIFICATION	
Surface impoundment		
DISPOSAL DESCRIPTION (e.g., composting, landfill, surface impoundment, etc.)		
BACK	GROUND	
The CE Houchin et al Lease is unregulated and has not be	een previously inspected.	
INSPECTI	ON GIS DATA	

GIS Equipment used:

MANUFACTURER		MODEL	SERIAL NO.	DATUM
Description of Measured Point	Latitude	Longitude	Datum	Comments
Centroid of Pond #1	35°14'29.01"N	119°37'19.01"W	NAD 83	Active – Recorded by DOGGR
Centroid of Pond #2	35°14'28.63"N	119°37'20.16"W	NAD 83	Active – Recorded by DOGGR
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### INSPECTION OBSERVATIONS AND FINDINGS

Describe observations and findings and identify those that document and reference each violation listed in the Inspection Violations Summary table by identifying the cited violation number within parentheses following the observation/finding (e.g., Exposed waste on top deck (V1)).

The CE Houchin et al Lease (Facility) in the Midway-Sunset Oil Field was inspected to ascertain the status of two ponds identified by the DOGGR as active. Disposal operations are not regulated by WDRs. Photographs were taken to document conditions observed (see page 5). The following are Staff's observations:

#### Pond #1:

- Oil stained soil;
- Fluid;
- Oil on the fluid surface;
- Netting appeared adequate;
- Approximate fluid depth of 12 inches;
- Two inlet pipes;

### Pond #2:

- Oil stained soil;
- Fluid;
- Netting appeared adequate;
- Approximate fluid depth of 8-10 inches;
- One inlet pipes;

Around the perimeter of Ponds #1 and #2 was a raised embankment, approximately 1.5 feet tall. The embankments appeared to be constructed in a manner to prevent all runoff, from the Facility, into the ponds. On 22 and 23 February 2014, <a href="www.wunderground.com">www.wunderground.com</a> recorded 0.68 inches of rainfall for McKittrick California. No additional rainfall was recorded before the 27 February 2015 inspection for the month of February 2015. The depth of the fluid in the pond appears to be greater than the rainfall recorded for the area. Since any additional fluid from the Facility as runoff would have been diverted from the ponds, a discharge to the ponds is most likely to have occurred. The discharge of waste to a pond without WDRs is a violation of Section 13260(a) of the California Water Code. Staff was unable to obtain a sample from the fluid since the gate hinges to the pond were rusted and would not open. Jaco Oil Company is in violation of the California Water Code for oil and wastewater in Ponds #1 and #2.

JACO OIL COMPANY

CE HOUCHIN ET AL LEASE, MIDWAY-SUNSET OIL FIELD

Two pipes were observed extruding from the side of a hill adjacent to Pond #1. Staff observed two pipes in Pond #1 with the same diameter as the pipes extruding from the hillside. One of the pipes was plugged (Photograph 5), but the second pipe was unable to be viewed by Staff due to vegetation covering the outlet. A natural erosion channel was located near the outlet pipes, which flows east to the Buena Vista Creek approximately 0.15 miles away. Oil stained soil and a visual indication of a recent discharge was unable to be determined due to vegetation and steep side slopes preventing staff from accessing all areas. The discharge of waste to land is a violation of Section 13260(a) of the California Water Code. Jaco Oil Company needs to remove the pipes from Pond #1, or demonstrate the pipes are permanently plugged.

Staff observed a black hose (approximate diameter is 4 inches) entering Pond #2. Staff attempted to locate the point of origin of the hose, but was unable to follow the hose when it was buried approximately 500 feet west of Pond #2 near the tank farm. Approximately 500 feet southwest of the tank farm, a black hose of similar diameter was observed. Staff continued to follow the hose for approximately 0.70 miles southwest, along the entrance road to the Facility (Photograph 8). Staff was unable to continue tracking the hose when it went onto private property and over a hill (Photograph 9). Jaco Oil Company needs to find the source of the hose and remove it from Pond #2.

CAMPI NO INFORMATION AND ODGETIVATIONS								
SAMPLING INFORMATION AND OBSERVATIONS								
Nere samples collected during the inspection? ☐ Yes ☒ No Are sample results included in report? ☐ Yes ☒ No								
Did discharger collect split samples?	☐ Yes ☒ No	,		_				
	OLI ECTION INFORM	ATION AND OBSERVATI	ONG					
OAM EE O	DELECTION IN ORM	ATION AND OBSERVATI	ONS	121				
SAMPLE ID	SAMPLE DESCRIPTION/OBSE	RVATIONS	SAMPLE TIME (hours)	PHOTO NO.				
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SAMPLE ID	SAMPLE DESCRIPTION/OBSE	RVATIONS	SAMPLE TIME (hours)	РНОТО NO.				
SAMPLE ID	SAMPLE DESCRIPTION/OBSE	RVATIONS	SAMPLE TIME (hours)	РНОТО NO.				
	DISCUSSION OF SAI	MPLING RESULTS	OUT DO TO THE PROPERTY OF THE					
Discuss sampling results (e.g., discuss whether s	ampling results show comp	liance with WDRs).						
No sample was collected.								
140 Sample Was Concoled.	2	40						

# FACILITIES INSPECTION REPORT JACO OIL COMPANY

CE HOUCHIN ET AL LEASE, MIDWAY-SUNSET OIL FIELD

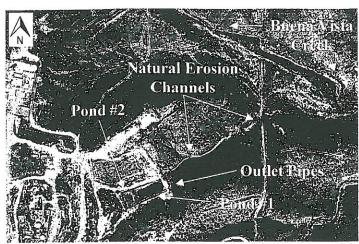
## CONCLUSIONS

Summarize the conclusions of the inspection(s) below.

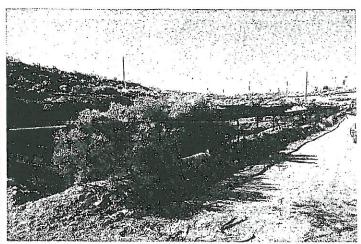
- The Facility contains two unlined ponds with the potential to be used for the disposal of oil field produced wastewater. The discharge of waste to a pond without WDRs is a violation of Section 13260(a) of the California Water Code.
- 2. Jaco Oil Company is in violation of Section 13260(a) of the California Water Code for waste in Pond #1.
- 3. Jaco Oil Company is in violation of Section 13260(a) of the California Water Code for waste and oil on the fluid surface in Pond #2.
- 4. The two pipes extruding from the hill side adjacent to Pond #1 need to be removed. The discharge of waste to land is a violation of Section 13260(a) of the California Water Code.
- 5. The hose from Pond #2 that Staff observed needs to be removed from Pond #2.

5/6

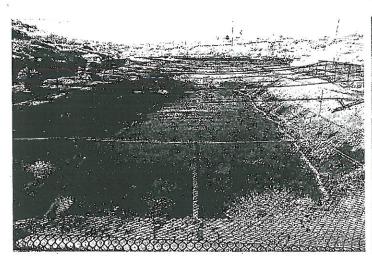
### **PHOTOGRAPHS**



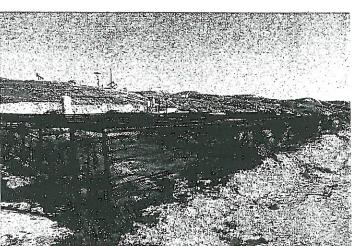
Photograph 1. – Aerial of the facility (2012).



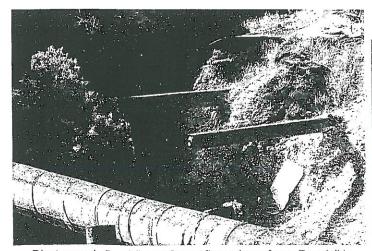
Photograph 2. - View of Pond #1 looking west.



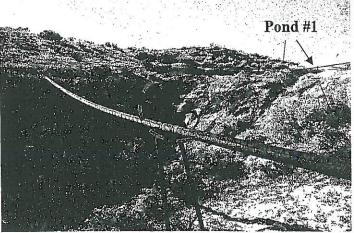
Photograph 3. - View of oil and fluid in Pond #1.



Photograph 4. - View of Pond #2 looking northeast.

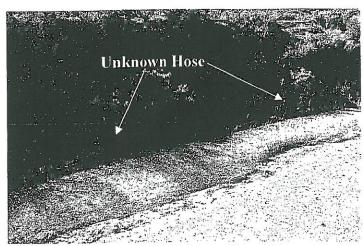


Photograph 5. – View of overflow pipes from Pond #1.

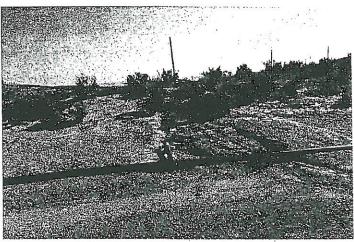


Photograph 6. – View of overflow pipes from Pond #1.

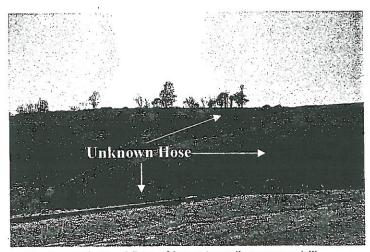
# **PHOTOGRAPHS**



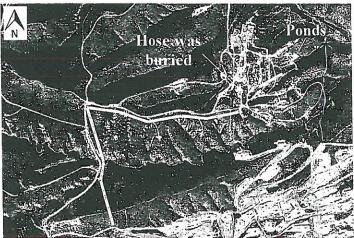
Photograph 7. - View of hose near Pond #1.



Photograph 8. - View of hose west of tankfarm.



Photograph 9. - View of hose traveling over a hill.



Photograph 10. – Approximate location of where the hose was observed by Staff (2012 image).

Jaco Production Company
P.O. Box 82515
Bakersfield, CA 93380
661-633-7527
richardw@jaco.com

Mr. Ron Holcomb Central Valley Water Board 1685 E Street Fresno, CA 93706

RE: Draft Cleanup and Abatement Order No. R5-2015-0XXX Certification Statement

With respect to Draft Cleanup and Abatement Order No. R5-2015-0XXX, please note that the C.E. Houchin et al Lease in the Midway Sunset Oilfield is owned by Jaco Production Company, rather than Jaco Oil Company.

Produced crude oil and associated water was last produced on this property in May 1998 by the previous owner of the oil and gas working interest, Midsun Partners from Radnor, PA. Midsun Partners operated a co-generation facility on the Houchin property from about 1986 to May 1998 subject to an oil/gas lease and/or Ground Lease from Jaco Production Company and it's other co-owners. Midsun Partners produced electricity from the power plant and utilized heat from the gas turbine to generate steam which was injected into the shallow Marvic zone oil reservoir to enhance oil recovery. The surface and/or minerals of the C.E. Houchin property is co-owned by Jaco Production Company and others from whom Midsun Partners and/or its predecessors leased both the surface and minerals for its co-gen/oil production activities. When Midsun ceased operations in mid-1998 on the C.E. Houchin property and negotiated a settlement of future financial obligations with all the co-owners of the surface/minerals including Jaco Production Company, one aspect of the settlement was Jaco Production Company's acquisition of the oil wells and associated facilities. At this juncture, Jaco Production Company became the designated "operator" with the California Division of Oil, Gas and Geothermal Resources of the wells on the C.E. Houchin property. This being said, Jaco Production Company is the operator of the wells in name only. Never have we produced the wells and consequently, never has wastewater been separated from any extracted crude and discharged into the unlined ponds since Midsun Partners ceased it's cogeneration/oilfield operations in May 1998. In fact, after Jaco Production Company took over "operatorship", the oilfield electrical main panel was decommissioned as a safety measure and as a consequence, the wells are inoperable. Jaco Production Company took over "operatorship" of the wells in name only to prevent some unknown/unrelated party taking over the wells. As one of the coowners of the surface/mineral rights, we wanted to control our own destiny with respect to property. Since taking over the "operatorship" of the wells in mid-1998, Jaco Production Company has conformed with the monthly reporting requirements of the California Division of Oil, Gas and Geothermal Resources (DOGGR). A review of the online production records of the DOGGR will reveal that zero production has been reported from the C.E. Houchin property

since May 1998. A copy of the DOGGR historical production from the C.E. Houchin property is attached. Also, annual idle well assessments have been paid to DOGGR as a consequence of the wells being idle since mid-1998. Further, the DOGGR requested that certain tankage on the C.E. Houchin property be marked with "Out of Service" notations painted on the side and cleaned. While the work was being done to satisfy this requirement, a vacuum truck load of hot water was brought from offsite onto the C.E. Houchin property for cleaning the tanks in preparation of painting the "Out of Service" notation on the tanks. At the conclusion of this work, the remaining water brought onto the site was pumped from the vacuum truck into the two ponds. It was this water that was observed by Joshua Mahoney of the Regional Water Quality Control Board's Fresno, CA office. This was a one-time event and will not recur. It is estimated that approximately 2,000-3,000 gallons of water was pumped into the sumps from the vacuum truck. At the request of Joshua Mahoney, two samples were taken from the sumps and sent to Zalco Laboratories for analysis. Although the Zalco reports have been previously provided Joshua Mahoney, copies are also attached. Please note that except for high sodium levels, the water contained no undesirable constituents. Please also note that any ground water in the vicinity of the C.E. Houchin also contains high levels of sodium.

In that the water in the C.E. Houchin sumps was a consequence of a one-time event, it is requested the draft Cleanup and Abatement Order No. R5-2015-0XXX, be deferred.

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.

Regards,

By:

Richard A. Woodall

President, Richard Woodall, Incorporated

**General Partner** 

Jaco Production Company

Number of Well Types Having
Types:

Well Types Having
16 Injection:

Oper: Jaco Production Co. J0700

Lease: C. E. Houchin et al

▼ Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
06/2015	0	0	0	0
05/2015	0	0	0	0
04/2015	0	0	0	0
03/2015	0	0	0	0
02/2015	0	0	0	0
01/2015	0	0	0	0
Total 2015	0	0	0	0
12/2014	0	0	0	0
11/2014	0	0	0	0
10/2014	0	0	0	0
09/2014	0	0	0	0
08/2014	0	0	0	0
		0		0
07/2014	0		0	
06/2014	0	0	0	0
05/2014	0	0	0	0
04/2014	0	0	0	0
03/2014	0	0	0	0
02/2014	0	0	0	0
01/2014	0	0	0	0
Total 2014	0	0	0	0
12/2013	0	0	0	0
11/2013	0	0	0	0
10/2013	0	0	0	0
09/2013	0	0	0	0
08/2013	0	0	0	0
07/2013	0	0	0	0
06/2013	0	0	0	0
05/2013	0	0	0	0
04/2013	0	0	0	0
03/2013	0	0	0	0
02/2013	0	0	0	0
01/2013	0	0	0	0
Total 2013	0	0	0	0
12/2012	0	0	0	0
11/2012	0	0	0	0
10/2012	0	0	0	0
09/2012	0	0	0	0
08/2012	0	0	0	0
08/2012	0	0	0	0
			•	
06/2012	0	0	0	0
05/2012	0	0	0	0
04/2012	0	0	0	0
03/2012	0	0	0	0
02/2012	0	0	0	0
01/2012	0	0	0	0
Total 2012	0	0	0	0
12/2011	0	0	0	0
11/2011	0	0	0	0
10/2011	0	0	0	0
09/2011	0	0	0	0
08/2011	0	0	0	0
07/2011	0	0	0	0
06/2011	0	0	0	0

<b>▼</b> Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
05/2011	0	0	0	0
04/2011	0	0	0	0
03/2011	0	0	0	0
02/2011	0	0	0	0
01/2011	0	0	0	0
Total 2011	0	0	0	0
12/2010	0	0	0	0
11/2010	0	0	0	0
10/2010	0	0	0	0
09/2010	0	0	0	0
08/2010	0	0	0	0
07/2010	0	0	0	0
06/2010	0	0	0	0
05/2010	0	0	0	0
04/2010	0	0	0	0
03/2010	0	0	0	0
02/2010	0	0	0	0
01/2010	0	0	0	0
Total 2010	0	0	0	0
12/2009	0	0	0	0
11/2009	0	0	0	0
10/2009	0	0	0	0
09/2009	0	0	0	0
08/2009	0	0	0	0
07/2009	0	0	0	0
06/2009	0	0	0	0
05/2009	0	0	0	0
04/2009	0	0	0	0
03/2009	0	0	0	0
02/2009	0	0	0	0
01/2009	0	0	0	0
Total 2009	0	0	0	0
12/2008	0	0	0	0
11/2008	0	0	0	0
09/2008	0	0	0	0
08/2008	0	0	0	0
07/2008	0	0	0	0
06/2008	0	0	0	0
05/2008	0	0	0	0
04/2008	0	0	0	0
03/2008	0	0	0	0
02/2008	0	0	0	0
01/2008	0	0	0	0
Total 2008	0	0	0	0
12/2007	0	0	0	0
11/2007	0	0	0	0
10/2007	0	0	0	0
09/2007	0	0	0	0
08/2007	0	0	0	0
07/2007	0	0	0	0
06/2007	0	0	0	0
05/2007	0	0	0	0
04/2007	0	0	0	0
03/2007	0	0	0	0
02/2007	0	0	0	0
01/2007	0	0	0	0
Total 2007	0	0	0	0
12/2006	0	0	0	0
11/2006	0	0	0	0
	0	0	0	0
10/2006 09/2006	0	0	0	0
U9/2UUD	U	U	Į U	J U

<b>▼</b> Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
08/2006	0	0	0	0
07/2006	0	0	0	0
06/2006	0	0	0	0
05/2006	0	0	0	0
04/2006	0	0	0	0
03/2006	0	0	0	0
02/2006	0	0	0	0
01/2006	0	0	0	0
Total 2006	0	0	0	0
12/2005	0	0	0	0
11/2005	0	0	0	0
10/2005	0	0	0	0
09/2005	0	0	0	0
08/2005	0	0	0	0
07/2005	0	0	0	0
06/2005	0	0	0	0
05/2005	0	0	0	0
04/2005	0	0	0	0
03/2005	0	0	0	0
02/2005	0	0	0	0
01/2005 Total 2005	0	0	0	0
Total 2005	0	0	0	0
12/2004 11/2004	0	0	0	0
10/2004	0	0	0	0
09/2004	0	0	0	0
08/2004	0	0	0	0
07/2004	0	0	0	0
06/2004	0	0	0	0
05/2004	0	0	0	0
04/2004	0	0	0	0
03/2004	0	0	0	0
02/2004	0	0	0	0
01/2004	0	0	0	0
Total 2004	0	0	0	0
12/2003	0	0	0	0
11/2003	0	0	0	0
10/2003	0	0	0	0
09/2003	0	0	0	0
08/2003	0	0	0	0
07/2003	0	0	0	0
06/2003	0	0	0	0
05/2003	0	0	0	0
04/2003	0	0	0	0
03/2003	0	0	0	0
02/2003	0	0	0	0
01/2003	0	0	0	0
Total 2003	0	0	0	0
12/2002	0	0	0	0
11/2002	0	0	0	0
10/2002	0	0	0	0
09/2002	0	0	0	0
08/2002	0	0	0	0
07/2002	0	0	0	0
06/2002	0	0	0	0
05/2002	0	0	0	0
04/2002	0	0	0	0
03/2002	0	0	0	0
02/2002	0	0	0	0
01/2002 Total 2002	0	0	0	0
10tal 2002	U	U	U	<del>                                     </del>
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<b>▼</b> Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
12/2001	0	0	0	0
11/2001	0	0	0	0
10/2001	0	00	0	0
09/2001	0	0	0	0
08/2001	0	0	0	0
07/2001	0	0	0	0
06/2001	0	0	0	0
05/2001	0	0	0	0
04/2001	0	0	0	0
03/2001	0	0	0	0
02/2001	0	0	0	0
01/2001	0	0	0	0
Total 2001	0	0	0	0
12/2000	0	0	0	0
11/2000	0	0	0	0
10/2000	0	0	0	0
09/2000	0	0	0	0
08/2000	0	0	0	0
07/2000	0	0	0	0
06/2000	0	0	0	0
05/2000	0	0	0	0
04/2000	0	0	0	0
03/2000	0	0	0	0
02/2000	0	0	0	0
01/2000	0	0	0	0
Total 2000	0	0	0	0
12/1999	0	0	0	0
11/1999	0	0	0	0
10/1999	0	0	0	0
09/1999	0	0	0	0
08/1999	0	0	0	0
07/1999	0	0	0	0
06/1999	0	0	0	0
05/1999	0	0	0	0
04/1999	0	0	0	0
03/1999	0	0	0	0
02/1999	0	0	0	0
01/1999 Tabal 1000	0	0	0	0
Total 1999	0	0	0	0
12/1998	0	0	0	0
11/1998	0	0		0
10/1998 09/1998	0	0	0	0
08/1998	0	0	0	0
	0	0	0	0
07/1998 06/1998	0	0	0	0
05/1998	1,574	25,436	0	317
04/1998	1,252	25,436	0	300
03/1998	1,611	29,542	0	298
03/1998	1,414	31,207	0	308
02/1998	1,783	32,934	0	332
Total 1998	7,634	<u> </u>	0	1,555
12/1997	2,066	34,514	0	332
11/1997	2,086	34,514	0	332
10/1997	2,028	40,155	0	330
09/1997		39,523	0	332
	2,838 2,691		0	330
08/1997 07/1997	2,464	37,390 34,189	0	319
06/1997	2,464	34,189	0	301
05/1997			0	307
05/1997	2,005	30,533	0	317
U <del>4</del> / 133/	2,311	28,832	ı U	1 324

<b>▼</b> Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
03/1997	2,470	33,541	0	324
02/1997	2,566	28,789	0	285
01/1997	2,746	33,741	0	330
Total 1997	28,879	411,594	0	3,831
12/1996	3,026	39,907	0	336
11/1996	3,043	39,003	0	327
10/1996	2,867	40,475	0	318
09/1996	2,596	32,894	0	307
08/1996	1,743	15,553	0	292
07/1996	1,751	24,440	0	278
06/1996	1,754		0	282
· · · · · · · · · · · · · · · · · · ·		16,018	7	
05/1996	1,798	16,234	0	295
04/1996	1,606	12,554	0	273
03/1996	1,735	12,406	0	254
02/1996	1,487	11,166	0	234
01/1996	1,308	13,713	0	299
Total 1996	24,714	274,363	0	3,495
12/1995	1,354	9,220	0	255
11/1995	1,260	11,550	0	270
10/1995	1,534	11,935	0	279
09/1995	1,431	13,187	0	256
08/1995	1,680	15,966	0	260
07/1995	2,314	12,519	0	268
06/1995	2,080	15,303	0	206
05/1995	2,746	21,670	0	232
04/1995	3,133	24,787	0	256
03/1995	1,821	27,256	0	219
	1,698		0	193
02/1995		12,031	0	193
01/1995	1,826	14,821		
Total 1995	22,877	190,245	0	2,884
12/1994	1,343	15,517	0	295
11/1994	1,177	15,800	0	270
10/1994	920	14,628	0	145
09/1994	1,682	9,878	0	180
08/1994	1,016	13,905	0	225
07/1994	1,931	15,318	0	245
06/1994	1,826	16,776	0	240
05/1994	913	11,138	0	217
04/1994	840	11,625	0	240
03/1994	2,170	13,388	0	279
02/1994	2,098	13,604	0	224
01/1994	1,315	15,115	0	241
Total 1994	17,231	166,692	0	2,801
12/1993	750	13,350	0	2,001
11/1993	938	16,300	0	290
10/1993	855	23,700	0	300
			·	
09/1993	775	20,900	0	248
08/1993	670	18,900	0	188
07/1993	253	12,100	0	108
06/1993	897	21,250	0	194
05/1993	950	26,008	0	239
04/1993	711	21,960	0	165
03/1993	1,000	15,846	0	157
02/1993	806	19,037	0	196
01/1993	451	19,759	0	217
Total 1993	9,056	229,110	0	2,579
12/1992	670	26,135	0	217
11/1992	780	20,132	0	180
10/1992	568	12,229	0	186
<u> </u>	<del>-</del> \\\\\\\\		7	
09/1992	147	9,278	0	180
08/1992	1,299	25,110	0	248

<b>▼</b> Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
07/1992	664	20,214	0	248
06/1992	825	19,350	0	270
05/1992	1,151	21,180	0	248
04/1992	637	15,494	0	180
03/1992	765	16,076	0	217
02/1992	584	7,838	0	196
01/1992	578	16,085	0	217
Total 1992	8,668	209,121	0	2,587
12/1991	389	13,091	0	248
11/1991	609	12,303	0	240
10/1991	782	16,487	0	248
09/1991	577	10,955	0	240
08/1991	809	14,651	0	248
07/1991	910	11,500	0	248
05/1991	836	12,547	0	217
04/1991	643	11,435	0	210
03/1991	525	7,800	0	120
Total 1991	6,080	110,769	0	2,019
12/1990	553	10,200	0	267
11/1990	657	12,400	0	262
10/1990	488	16,655	0	248
09/1990	932	17,500	0	248
08/1990	1,104	16,423	0	248
07/1990	957	14,132	0	220
06/1990	1,042	9,062	0	215
05/1990	283	8,905	0	108
04/1990	303	10,507	0	126
03/1990	0	0	0	0
02/1990	516	9,545	0	184
01/1990	831	11,888	0	246
Total 1990	7,666	137,217	0	2,364
12/1989	480	17,127	0	195
11/1989	401	18,520	0	168
10/1989	586	22,780	0	205
09/1989	77	3,978	0	69
08/1989	447	15,427	0	122
07/1989	240	3,300	0	21
06/1989	0	0	0	0
05/1989	0	0	0	0
04/1989	0	0	0	0
03/1989	0	0	0	0
02/1989	0	0	0	0
01/1989	0	0	0	0
Total 1989	2,231	81,132	0	780
12/1988	0	0	0	0
11/1988	0	0	0	0
10/1988	0	0	0	0
09/1988	0	0	0	0
08/1988	0	0	0	0
07/1988	0	0	0	0
02/1988	0	0	0	0
01/1988	0	0	0	0
Total 1988	0	0	0	0
12/1987	0	0	0	0
11/1987	0	0	0	0
10/1987	0	0	0	0
09/1987	0	0	0	0
08/1987	0	0	0	0
07/1987	0	0	0	0
06/1987	0	0	0	0
05/1987	0	0	0	0
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▼Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
04/1987	0	0	0	0
03/1987	0	0	0	0
02/1987	0	0	0	0
01/1987	0	0	0	0
Total 1987	0	0	0	0
12/1986	0	0	0	0
11/1986	0	0	0	0
10/1986	0	0	0	0
09/1986	0	0	0	0
08/1986	0	0	0	0
07/1986	0	0	0	0
06/1986	0	0	0	0
05/1986	0	0	0	0
04/1986	0	0	0	0
03/1986	0	0	0	0
02/1986	0	0	0	0
	0	0		0
01/1986			0	
Total 1986	0	0	0	0
12/1985	0	0	0	0
11/1985	0	0	0	0
10/1985	0	0	0	0
09/1985	0	0	0	0
08/1985	0	0	0	0
07/1985	0	0	0	0
06/1985	0	0	0	0
05/1985	0	0	0	0
04/1985	0	0	0	0
03/1985	0	0	0	0
02/1985	0	0	0	0
01/1985	84	1,513	0	248
Total 1985	84	1,513	0	248
12/1984	380	5,218	0	248
11/1984	325	4,929	0	240
10/1984	457	8,816	0	239
09/1984	707	18,101	0	290
08/1984	505	19,073	0	331
07/1984	674	26,510	0	297
06/1984	378	11,414	0	202
05/1984	529	16,043	0	297
04/1984	485	13,110	0	212
03/1984	581	25,455	0	236
02/1984	664	34,814	0	220
01/1984	391	21,222	0	149
Total 1984	6,076	204,705	0	2,963
12/1983	280	5,558	0	310
11/1983	304	5,517	0	297
10/1983	309	6,021	0	300
09/1983	393	328	0	283
08/1983	0	0	0	0
	0	0	0	0
07/1983	0			0
06/1983		0	0	
05/1983	0	0	0	0
04/1983	70	5,925	0	180
03/1983	23	3,169	0	132
02/1983	77	2,268	0	112
01/1983	57	3,214	0	134
Total 1983	1,513	32,000	0	1,748
12/1982	87	5,168	0	203
11/1982	119	6,159	0	231
	138	8,602	0	248
10/1982	1 130 .			

▼ Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
08/1982	224	8,675	0	242
07/1982	193	9,347	0	242
06/1982	398	8,901	0	238
05/1982	138	9,217	0	226
04/1982	138	9,312	0	225
03/1982	458	10,246	0	248
02/1982	419	9,128	0	218
01/1982	272	10,230	0	248
Total 1982	2,663	105,519	0	2,798
12/1981	255	8,594	0	171
11/1981	538	6,687	0	128
10/1981	387	4,726	0	154
09/1981	250	4,860	0	165
08/1981	148	6,936	0	214
07/1981	171	7,300	0	217
06/1981	185	10,015	0	205
05/1981	339	10,139	0	189
04/1981	349	9,964	0	208
03/1981	580	10,624	0	197
02/1981	331	7,592	0	138
01/1981	621	10,946	0	201
Total 1981	4,154	98,383	0	2,187
12/1980	309	13,343	0	106
11/1980	532	14,883	0	141
10/1980	240	13,031	0	159
09/1980	617	16,488	0	144
08/1980	312	10,042	0	154
07/1980	703	8,636	0	122
06/1980	641	11,366	0	118
05/1980	524	12,457	0	165
04/1980	119	19,580	0	120
03/1980	58	6,816	0	72
02/1980	522	5,328	0	54
01/1980	233	6,531	0	63
Total 1980	4,810	138,501	0	1,418
12/1979	442	10,995	0	109
11/1979	622	11,456	0	106
10/1979	980	13,051	0	155
09/1979	716	12,390	0	150
08/1979	1,183	15,025	0	140
07/1979	263	15,698	0	103
06/1979	455	7,707	0	95
05/1979	75	4,016	0	47
04/1979	10	7,070	0	133
03/1979	42	1,913	0	20
02/1979	0	0	0	0
01/1979	0	0	0	0
Total 1979	4,788	99,321	0	1,058
12/1978	0	0	0	0
11/1978	0	0	0	0
10/1978	0	0	0	0
09/1978	0	0	0	0
08/1978	0	0	0	0
07/1978	251	5,860	0	60
06/1978	108	9,660	0	90
05/1978	10	840	0	9
04/1978	0	0	0	0
03/1978	154	6,585	0	30
02/1978	141	1,410	0	20
01/1978	160	9,297	0	60
Total 1978	824	33,652	0	269

<b>▼</b> Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
12/1977	29	2,754	0	17
11/1977	105	3,240	0	20
10/1977	0	0	0	0
09/1977	0	0	0	0
08/1977	0	0	0	0
Total 1977	134	5,994	0	37



**Analytical & Consulting Services** 

4309 Armour Avenue Bakersfield, California 93308 (661) 395-0539 FAX (661) 395-3069

June 12, 2015

Richard Woodall Jaco Oil Company P O Box 82515 Bakersfield, CA 93380

TEL: (661) 393-7000 FAX: (661) 393-8738

Project ID: RE: 1504281

Dear Richard Woodall:

Zalco Laboratories, Inc. received 2 samples on 4/24/2015 for the analyses presented in the following report.

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

Sincerely,

Juan Magana Project Manager

CC:



Analytical & Consulting Services

#### 4309 Armour Avenue Bakersfield, California 93308

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

Jaco Oil Company P O Box 82515

Project: RWQCB Oilfield Ponds - 2Q2015

Work Order No.: 1504281

Project #:

Reported: 06/12/2015

Bakersfield, CA 93380

Attention: Richard Woodall

Received: 04/24/2015 15:30

Lab Sample ID: 1504281-01

Collected By: Michael C.

Client Sample ID: Waste Water Disposal Pond (West)

Date Collected: 4/24/2015 1:00:00PM

							Date	Date	
Analyte	Results	PQL		Units	Flag	Method	Prepared	Analyzed	Init.
Alkalinity									
Total Alkalinity	760	10		mg/L		SM 2320B	4/24/15	4/24/15	SAM
Bicarbonate (HCO3)	760	10		mg/L		SM 2320B	4/24/15	4/24/15	SAM
Carbonate (CO3)	<10	10		mg/L		SM 2320B	4/24/15	4/24/15	SAM
Hydroxide (OH)	<10	10		mg/L		SM 2320B	4/24/15	4/24/15	SAM
CAM, Toxicity (17 Met	tals)		TTLC Limits						
Antimony	<0.20	0.20	500	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Arsenic	0.10	0.020	500	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Barium	0.29	0.10	10000	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Beryllium	<0.010	0.010	75	mg/L		SW846 6010B	4/28/15	4/28/15	ss
Cadmium	<0.010	0.010	100	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Chromium	<0.050	0.050	2500	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Cobalt	<0.10	0.10	8000	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Copper	0.22	0.050	2500	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Lead	<0.050	0.050	1000	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Mercury	<0.0020	0.0020	20	mg/L		SW846 7470A	4/28/15	4/28/15	SS
Molybdenum	<0.10	0.10	3500	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Nickel	0.17	0.050	2000	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Selenium	<0.05	0.05	100	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Silver	<0.020	0.020	500	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Thallium	<0.50	0.50	700	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Vanadium	<0.10	0.10	2400	mg/L		SW846 6010B	4/28/15	4/28/15	SS
Zinc	0.11	0.050	5000	mg/L		SW846 6010B	4/28/15	4/28/15	SS
General Chemistry			MCL Limits						
Fluoride	<1.0	1.0	2	mg/L		EPA 300.0	4/24/15	4/24/15	MSS
Nitrate as NO3	<500	500	45	mg/L		EPA 300.0	4/24/15	4/24/15	MSS
Electrical Conductivity	20	0.010		mmhos/cm		SM 2510B	4/24/15	4/25/15	SAM
Bromide	23	1.0		mg/L		EPA 300.0	4/24/15	4/24/15	MSS
Chloride	5700	500		mg/L		EPA 300.0	4/24/15	4/24/15	MSS
рН	6.91			pH Units		EPA 150.1	4/24/15	4/24/15	SAM
Sulfate as SO4	2100	120		mg/L		EPA 300.0	4/24/15	4/24/15	MSS
Total Dissolved Solids	15000	10		mg/L		SM 2540C	4/29/15	4/29/15	MSS

#### Hardness

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

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Analytical & Consulting Services

4309 Armour Avenue Bakersfield, California 93308

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

Jaco Oil Company P O Box 82515

Project: RWQCB Oilfield Ponds - 2Q2015

Work Order No.: 1504281

Reported: 06/12/2015

Bakersfield, CA 93380

Attention: Richard Woodall

Received: 04/24/2015 15:30

Lab Sample ID: 1504281-01

Collected By: Michael C.

Client Sample ID: Waste Water Disposal Pond (West)

Date Collected: 4/24/2015 1:00:00PM

					Date	Date	
Analyte	Results	PQL	Units	Flag Method	Prepared	Analyzed	Init.
Hardness							
Hardness (as CaCO3)	2000	2.0	mg/L	SM 2340B	4/28/15	4/28/15	SS
Metals - As Received							
Magnesium	170	0.050	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Potassium	240	0.50	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Sodium	4500	70	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Calcium	530	0.050	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Iron	0.72	0.10	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Boron	24	0.10	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Barium	0.30	0.10	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Copper	0.38	0.050	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Silica (SiO2)	89	4.0	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Strontium	9.4	0.10	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Manganese	1.6	0.030	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Oil & Grease Testing							
TRPH	<5.00	5.00	mg/L	EPA 1664	5/8/15	5/8/15	BIG
Semivolatile Organic C	Compounds						
Indeno(1,2,3-cd)pyrene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Naphthalene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Acenaphthylene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Acenaphthene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Fluorene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Phenanthrene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Anthracene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Fluoranthene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Pyrene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Benzo (a) anthracene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Chrysene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Benzo (b) fluoranthene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Benzo (k) fluoranthene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Benzo (a) pyrene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Dibenz (a,h) anthracene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Benzo (g,h,i) perylene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM

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

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**Analytical & Consulting Services** 

4309 Armour Avenue Bakersfield, California 93308

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

Jaco Oil Company P O Box 82515

Project: RWQCB Oilfield Ponds - 2Q2015

Work Order No.: 1504281

Project #:

Reported: 06/12/2015

Bakersfield, CA 93380

Attention: Richard Woodall

Received: 04/24/2015 15:30

Lab Sample ID: 1504281-01

Collected By: Michael C.

Client Sample ID: Waste Water Disposal Pond (West)

Date Collected: 4/24/2015 1:00:00PM

							Date	Date	
Analyte	Results	PQL		Units	Flag	Method	Prepared	Analyzed	Init.
Semivolatile Organic (	Compounds								
Surrogates		% Recovery	Recovery Limits	Flag					
Nitrobenzene-d5		2.96	0-95				4	/28/15 9:31	
2-Fluorobiphenyl		2.62	0-92					/28/15 9:31	
Terphenyl-dl4		1.29	0-100				4.	/28/15 9:31	
Subcontracted Analys	es								
Gross Alpha	<15.0	15.0		pCi/L		SM 7110C	5/4/15	5/5/15	MCS
Radium-226	<3.00	3.00		pCi/L		E903.1	5/6/15	5/8/15	MCS
Radium-228	<2.00	2.00		pCi/L		EPA Ra-05	5/15/15	5/18/15	MCS
Uranium (ug/L)	<20.0	20.0		pCi/L		E908	5/13/15	5/13/15	MCS
Volatile Organic Comp	oounds								
m,p-Xylene	<5.00	5.00		ug/L		SW846 8260B	5/8/15	5/8/15	HLP
Benzene	9.80	5.00		ug/L		SW846 8260B	5/8/15	5/8/15	HLP
Xylenes, total	0.00			ug/L		SW846 8260B	5/8/15	5/8/15	HLP
Methyl tert-Butyl Ether	<5.00	5.00		ug/L		SW846 8260B	5/8/15	5/8/15	HLP
Ethylbenzene	<5.00	5.00		ug/L		SW846 8260B	5/8/15	5/8/15	HLP
Toluene	11.1	5.00		ug/L		SW846 8260B	5/8/15	5/8/15	HLP
o-Xylene	<5.00	5.00		ug/L		SW846 8260B	5/8/15	5/8/15	HLP
Surrogates		% Recovery	Recovery Limits	Flag					
1.2-Dichloroethane-d4		98.2	89-165					5/8/15 9:44	
Toluene-d8		99.5	65-124					5/8/15 9:44	
4-Bromofluorobenzene		111	94-114					5/8/15 9:44	

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



Analytical & Consulting Services

4309 Armour Avenue Bakersfield, California 93308

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

Jaco Oil Company P O Box 82515

Project: RWQCB Oilfield Ponds - 2Q2015

Work Order No.: 1504281

Project #:

Reported: 06/12/2015

Bakersfield, CA 93380

Attention: Richard Woodall

Received: 04/24/2015 15:30

Lab Sample ID: 1504281-02

Collected By: Michael C.

Client Sample ID: Waste Water Disposal Pond (East)

Date Collected: 4/24/2015 1:00:00PM

Analyse							Date	Date	
Property	Analyte	Results	PQL		Units	Flag Method	Prepared	Analyzed	Init.
Bicarbonate (HCO3)   700   10   mg/L   SM 2320B   4/24/15   4/24/15   SAM Carbonate (CO3)   410   10   mg/L   SM 2320B   4/24/15   4/24/15   SAM Plydroxide (OH)   410   10   mg/L   SM 2320B   4/24/15   4/24/15   SAM Plydroxide (OH)   410   10   mg/L   SM 2320B   4/24/15   4/24/15   SAM Plydroxide (OH)   410	Alkalinity								
Carbonate (CO3)   410   10   10   mg/L   SM 2308   4/24/15   4/24/15   SAM   Hydroxide (OH)   410   10   mg/L   SM 2308   4/24/15   4/24/15   SAM   AVAIN	Total Alkalinity	700	10		mg/L	SM 2320B	4/24/15	4/24/15	SAM
CAM, Toxicity (17 Metals)         TTLC Limits           CAM, Toxicity (17 Metals)         TTLC Limits           Antimony         < 0.20         0.20         500         mg/L         SW846 60108         4/28/15         4/28/15         SS           Arsenic         0.026         0.020         500         mg/L         SW846 60108         4/28/15         4/28/15         4/28/15         SS           Barium         0.38         0.10         10000         mg/L         SW846 60108         4/28/15         4/28/15         8/28/15         5/28/15 </td <td>Bicarbonate (HCO3)</td> <td>700</td> <td>10</td> <td></td> <td>mg/L</td> <td>SM 2320B</td> <td>4/24/15</td> <td>4/24/15</td> <td>SAM</td>	Bicarbonate (HCO3)	700	10		mg/L	SM 2320B	4/24/15	4/24/15	SAM
CAM, Toxicity (17 Metals)         TTLC Limits           Antimony         <0.20         0.20         500         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Arsenic         0.026         0.020         500         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Barium         0.38         0.10         10000         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Barjilim         <0.010	Carbonate (CO3)	<10	10		mg/L	SM 2320B	4/24/15	4/24/15	SAM
Antimony	Hydroxide (OH)	<10	10		mg/L	SM 2320B	4/24/15	4/24/15	SAM
Antimony         <0.20         500         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Arsenic         0.026         0.020         500         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Barium         0.38         0.10         10000         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Beryllium         <0.010	CAM, Toxicity (17 Met	als)		TTLC Limits					
Arsenic   0.026	Antimony	<0.20	0.20		ma/L	SW846 6010B	4/28/15	4/28/15	SS
Barlum         0.38         0.10         10000         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Beryllim         <0.010	Arsenic	0.026			•				
Beryllium         < 0.010         0.010         75         mg/L         SW846 60108         4/28/15         4/28/15         SS           Cadmium         < 0.010	Barium	0.38	0.10	10000	•				
Cadmium         < 0.010         0.010         100         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Chromium         < 0.050	Beryllium	<0.010	0.010	75	<del>-</del>				
Chromium         < 0.050         0.050         2500         mg/L         SW846 60108         4/28/15         4/28/15         SS           Cobalt         < 0.10	Cadmium	<0.010	0.010	100	-				
Cobalt         <0.10         0.10         8000         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Copper         0.19         0.050         2500         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Lead         <0.050	Chromium	<0.050	0.050	2500	-				
Copper         0.19         0.050         2500         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Lead         <0.050	Cobalt	<0.10	0.10	8000	<del>-</del>	SW846 6010B	4/28/15		
Mercury         <0.0020         0.0020         20         mg/L         SW846 7470A         4/28/15         4/28/15         SS           Molybdenum         <0.10	Copper	0.19	0.050	2500	_	SW846 6010B	4/28/15	4/28/15	
Molybdenum         < 0.10         0.10         3500         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Nickel         0.068         0.050         2000         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Selenium         < 0.05	Lead	<0.050	0.050	1000	mg/L	SW846 6010B	4/28/15	4/28/15	SS
Nickel 0.068 0.050 2000 mg/L SW846 6010B 4/28/15 4/28/15 SS Selenium < 0.05 0.05 100 mg/L SW846 6010B 4/28/15 4/28/15 SS Selenium < 0.020 0.020 500 mg/L SW846 6010B 4/28/15 4/28/15 SS Thallium < 0.50 0.50 700 mg/L SW846 6010B 4/28/15 4/28/15 SS Vanadium < 0.10 0.10 2400 mg/L SW846 6010B 4/28/15 4/28/15 SS Vanadium < 0.050 0.050 5000 mg/L SW846 6010B 4/28/15 4/28/15 SS Vanadium < 0.050 0.050 5000 mg/L SW846 6010B 4/28/15 4/28/15 SS Vanadium < 0.050 0.050 5000 mg/L SW846 6010B 4/28/15 4/28/15 SS VANAGIUM SW846 6010B 4/28/15 4/28/15 MSS VANAGIUM SW846 6010B 4/28/15 4/24/15 MSS VANAGIUM SW846 6010B 4/28/15 MSS VANAGIUM SW846 6010B 4/28/15 4/24/15 MSS VANAGIUM SW846 6010B 4/28/15	Mercury	<0.0020	0.0020	20	mg/L	SW846 7470A	4/28/15	4/28/15	SS
Selenium         <0.05         0.05         100         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Silver         <0.020	Molybdenum	<0.10	0.10	3500	mg/L	SW846 6010B	4/28/15	4/28/15	SS
Silver         < 0.020         0.020         500         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Thallium         < 0.50	Nickel	0.068	0.050	2000	mg/L	SW846 6010B	4/28/15	4/28/15	SS
Thallium <0.50 0.50 700 mg/L SW846 6010B 4/28/15 4/28/15 SS Vanadium <0.10 0.10 2400 mg/L SW846 6010B 4/28/15 4/28/15 SS Zinc <0.050 0.050 5000 mg/L SW846 6010B 4/28/15 4/28/15 SS SS VANADIUM SW846 6010B 4/28/15 4/28/15 SS VANADIUM SW846 6010B 4/28/15 4/24/15 MSS VANADIUM SW846 6010B 4/28/15	Selenium	<0.05	0.05	100	mg/L	SW846 6010B	4/28/15	4/28/15	SS
Vanadium         <0.10         0.10         2400         mg/L         SW846 6010B         4/28/15         4/28/15         SS           Zinc         <0.050         0.050         5000         mg/L         SW846 6010B         4/28/15         4/28/15         SS           General Chemistry           MCL Limits           Fluoride         <1.0         1.0         2         mg/L         EPA 300.0         4/24/15         4/24/15         MSS           Nitrate as NO3         <20.0         20.0         45         mg/L         EPA 300.0         4/24/15         4/24/15         MSS           Electrical Conductivity         28         0.010         mmhos/cm         SM 2510B         4/24/15         4/25/15         SAM           Bromide         39         1.0         mg/L         EPA 300.0         4/24/15         4/24/15         MSS           Chloride         9900         1000         mg/L         EPA 300.0         4/24/15         4/24/15         AM           Bulk         4.742         PH Units         EPA 150.1         4/24/15         4/24/15         SAM           Sulfate as SO4         110         5.0         mg/L         EPA 300.0         4/24/15	Silver	<0.020	0.020	500	mg/L	SW846 6010B	4/28/15	4/28/15	SS
Zinc < 0.050 0.050 5000 mg/L SW846 6010B 4/28/15 4/28/15 SS  General Chemistry  **MCL Limits**  Fluoride	Thallium	<0.50	0.50	700	mg/L	SW846 6010B	4/28/15	4/28/15	SS
General Chemistry         MCL Limits           Fluoride         <1.0         1.0         2         mg/L         EPA 300.0         4/24/15         MSS           Nitrate as NO3         <20.0	Vanadium	<0.10	0.10	2400	mg/L	SW846 6010B	4/28/15	4/28/15	SS
Fluoride <1.0 1.0 2 mg/L EPA 300.0 4/24/15 4/24/15 MSS Nitrate as NO3 <20.0 20.0 45 mg/L EPA 300.0 4/24/15 4/24/15 MSS Electrical Conductivity 28 0.010 mmhos/cm SM 2510B 4/24/15 4/25/15 SAM Bromide 39 1.0 mg/L EPA 300.0 4/24/15 4/24/15 MSS Chloride 9900 1000 mg/L EPA 300.0 4/24/15 4/24/15 MSS PH 7.42 pH Units EPA 150.1 4/24/15 SAM Sulfate as SO4 110 5.0 mg/L EPA 300.0 4/24/15 4/24/15 MSS	Zinc	<0.050	0.050	5000	mg/L	SW846 6010B	4/28/15	4/28/15	SS
Nitrate as NO3         <20.0         20.0         45         mg/L         EPA 300.0         4/24/15         4/24/15         MSS           Electrical Conductivity         28         0.010         mmhos/cm         SM 2510B         4/24/15         4/25/15         SAM           Bromide         39         1.0         mg/L         EPA 300.0         4/24/15         4/24/15         MSS           Chloride         9900         1000         mg/L         EPA 300.0         4/24/15         4/24/15         MSS           pH         7.42         pH Units         EPA 150.1         4/24/15         4/24/15         SAM           Sulfate as SO4         110         5.0         mg/L         EPA 300.0         4/24/15         4/24/15         MSS	General Chemistry			MCL Limits					
Electrical Conductivity         28         0.010         mmhos/cm         SM 2510B         4/24/15         4/25/15         SAM           Bromide         39         1.0         mg/L         EPA 300.0         4/24/15         4/24/15         MSS           Chloride         9900         1000         mg/L         EPA 300.0         4/24/15         4/24/15         MSS           pH         7.42         pH Units         EPA 150.1         4/24/15         4/24/15         SAM           Sulfate as SO4         110         5.0         mg/L         EPA 300.0         4/24/15         4/24/15         MSS	Fluoride	<1.0	1.0	2	mg/L	EPA 300.0	4/24/15	4/24/15	MSS
Electrical Conductivity         28         0.010         mmhos/cm         SM 2510B         4/24/15         4/25/15         SAM           Bromide         39         1.0         mg/L         EPA 300.0         4/24/15         4/24/15         MSS           Chloride         9900         1000         mg/L         EPA 300.0         4/24/15         4/24/15         MSS           pH         7.42         pH Units         EPA 150.1         4/24/15         4/24/15         SAM           Sulfate as SO4         110         5.0         mg/L         EPA 300.0         4/24/15         4/24/15         MSS	Nitrate as NO3	<20.0	20.0	45	<del>-</del>	EPA 300.0			
Bromide         39         1.0         mg/L         EPA 300.0         4/24/15         MSS           Chloride         9900         1000         mg/L         EPA 300.0         4/24/15         4/24/15         MSS           pH         7.42         pH Units         EPA 150.1         4/24/15         4/24/15         SAM           Sulfate as SO4         110         5.0         mg/L         EPA 300.0         4/24/15         4/24/15         MSS	Electrical Conductivity	28	0.010		mmhos/cm	SM 2510B			
Chloride         9900         1000         mg/L         EPA 300.0         4/24/15         MSS           pH         7.42         pH Units         EPA 150.1         4/24/15         4/24/15         SAM           Sulfate as SO4         110         5.0         mg/L         EPA 300.0         4/24/15         4/24/15         MSS	Bromide	39	1.0		mg/L	EPA 300.0	4/24/15	4/24/15	
pH 7.42 pH Units EPA 150.1 4/24/15 SAM Sulfate as SO4 110 5.0 mg/L EPA 300.0 4/24/15 4/24/15 MSS	Chloride	9900	1000		-	EPA 300.0	4/24/15		
Sulfate as SO4 110 5.0 mg/L EPA 300.0 4/24/15 MSS	Hq	7.42			pH Units	EPA 150.1	4/24/15		
W ( 1 P) 1 1 1 P 1 1 1 P 1 1 P 1 P 1 P 1 P	Sulfate as SO4	110	5.0		mg/L	EPA 300.0	4/24/15	4/24/15	
	Total Dissolved Solids	17000	10		mg/L	SM 2540C	4/29/15	4/29/15	MSS

#### Hardness

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

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Analytical & Consulting Services

4309 Armour Avenue Bakersfield, California 93308

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

Jaco Oil Company P O Box 82515

Project: RWQCB Oilfield Ponds - 2Q2015

Work Order No.: 1504281

Bakersfield, CA 93380

Project #:

Reported: 06/12/2015

Attention: Richard Woodall

Received: 04/24/2015 15:30

Lab Sample ID: 1504281-02

Collected By: Michael C.

Client Sample ID: Waste Water Disposal Pond (East)

Date Collected: 4/24/2015 1:00:00PM

					Date	Date	
Analyte	Results	PQL	Units	Flag Method	Prepared	Analyzed	Init.
Hardness							
Hardness (as CaCO3)	660	2.0	mg/L	SM 2340B	4/28/15	4/28/15	SS
Metals - As Received							
Magnesium	93	0.050	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Potassium	110	0.50	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Sodium	7500	70	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Calcium	110	0.050	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Iron	0.51	0.10	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Boron	28	0.10	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Barium	0.35	0.10	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Copper	0.37	0.050	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Silica (SiO2)	110	40	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Strontium	9.1	0.10	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Manganese	0.056	0.030	mg/L	EPA 200.7	4/28/15	4/28/15	SS
Oil & Grease Testing							
TRPH	<5.00	5.00	mg/L	EPA 1664	5/8/15	5/8/15	BIG
Semivolatile Organic C	Compounds						
Indeno(1,2,3-cd)pyrene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Naphthalene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Acenaphthylene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Acenaphthene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Fluorene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Phenanthrene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Anthracene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Fluoranthene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Pyrene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Benzo (a) anthracene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Chrysene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Benzo (b) fluoranthene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Benzo (k) fluoranthene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Benzo (a) pyrene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Dibenz (a,h) anthracene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Benzo (g,h,i) perylene	<10.0	10.0	ug/L	SW846 8270C	4/27/15	4/28/15	JMM
Solizo (girin) poryiono	- 10.0			3,,0,0,0,00			

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

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Analytical & Consulting Services

## 4309 Armour Avenue Bakersfield, California 93308

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

Jaco Oil Company P O Box 82515

Project: RWQCB Oilfield Ponds - 2Q2015

Work Order No.: 1504281

Project #:

Reported: 06/12/2015

Bakersfield, CA 93380

Attention: Richard Woodall

Received: 04/24/2015 15:30

Lab Sample ID: 1504281-02

Collected By: Michael C.

Client Sample ID: Waste Water Disposal Pond (East)

Date Collected: 4/24/2015 1:00:00PM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
Semivolatile Organic	Compounds						- May 200	111111
Surrogates		% Recovery Recovery Limits	Flag					
Nitrobenzene-d5		4.10 0-95				4	/28/15 9:31	
2-Fluorobiphenyl		4.05 0-92					/28/15 9:31 /28/15 9:31	
Terphenyl-dl4		3.00 0-100					/28/15 9:31	
Subcontracted Analys	ses							
Gross Alpha	<15.0	15.0	pCi/L		SM 7110C	5/4/15	5/5/15	MCS
Radium-226	<3.00	3.00	pCi/L		E903.1	5/6/15	5/8/15	MCS
Radium-228	<2.00	2.00	pCi/L		EPA Ra-05	5/15/15	5/18/15	MCS
Uranium (ug/L)	<20.0	20.0	pCi/L		E908	5/13/15	5/13/15	MCS
Volatile Organic Comp	oounds							
m,p-Xylene	<5.00	5.00	ug/L	S	W846 8260B	5/8/15	5/8/15	HLP
Benzene	<5.00	5.00	ug/L	S'	W846 8260B	5/8/15	5/8/15	HLP
Xylenes, total	0.00		ug/L	S	W846 8260B	5/8/15	5/8/15	HLP
Methyl tert-Butyl Ether	<5.00	5.00	ug/L	S	W846 8260B	5/8/15	5/8/15	HLP
Ethylbenzene	<5.00	5.00	ug/L	S¹	W846 8260B	5/8/15	5/8/15	HLP
Toluene	<5.00	5.00	ug/L	S	W846 8260B	5/8/15	5/8/15	HLP
o-Xylene	<5.00	5.00	ug/L	SI	W846 8260B	5/8/15	5/8/15	HLP
Surrogates		% Recovery Recovery Limits	Flag					
1,2-Dichloroethane-d4		98.3 89-165				_		
Toluene-d8		98.3 89-165 85.4 65-124					/8/15 9:44	
4-Bromofluorobenzene		103 94-114					/8/15 9:44 /8/15 9:44	

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

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JM"	REL					2						Sample No. *	SAMPLED BY:	Email: Results	Fax: Results D	Phone: Results □	Attention:	City, State, Zip:	Address: 2	Client:				
chael laide	RELINQUISHED By: Signature				part (east	Worst Water				West)	huaste mater dispo	Sample Description	D BY:	ruchand (a) k		1 del 393-700	Prichard 11) occol	e, zip:13/krstld 93303	3101 State Rd	ace Production-Oil	REPORT INFO		4309 Armour Avenue, Bakersfield,	ZALCO LABORAT
	PRINT COMPANY					disposal Hallison						Sample Date Time	EMPLOYED BY:	[MO] ( OM) ,	Fax:	Phone:	Attention:	City, State, Zip:	Address:	Invoice To: Same as Client	INVOICE INFO		4309 Armour Avenue, Bakersfield, CA 93308 (661) 395-0539 FAX (661) 395-3069 www.zalcolabs.com	ABORATORIES, INC. CHAIR OF CUSIODY, 10#
ASY ISS	Date Time					\ X				-	XXC	Type* s P	m X	0-1 0-1	±40	z c	/ec	т Д	0	4:			1069 www.zalcolabs.	STODY, ID#
ON A RA	e RECEIVED By: Signature										7,	C			C -1	A :	o m		· m -		ANALYSIS		com	O Floor
advide	nature PRINT		×			00000	Pollmumin 1	P10060 SON	Har Client	14975			Send Copy to County?	Attention To:	Yes I No I	Send Convito State of CAS		and Tim	COMMENTS:	QUOTE ID:	PROJECT ID:	Client PO #	Zalco Lab #	Pageofof

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

\*Sample Type Key: AQ-Aqueous; BS-Biosolid; DW-Drinking Water; GW-Ground Water; G-Gas; LPG-Liquid Petroleum Gas; 0L-0ii; 0-0ther; P-Petroleum; S-Soil/Solid; ST-Storm Water; WW-Wastewater \*Sample No.: FOR OFFICE USE ONLY

		2201507	. 1	C 4 4 4 D 1 E 4 1						14571100	* * 5 = 1 + 0 = 0	2252111	•1				-				CRIVELE	25001		1		
CHENT	DDOJECT	PROJECT		SAMPLEN			CANADDATE	DEDDATE	ANADATE		METHOD	PREPNAN			SURROG			LINUTC	DACIC		SPIKELE		DCI LOWEDCI	ANIALVCT	DCOLIDG LNOTE	ANOTE
CLIENT	PROJECT	NUM	LABNAME	+	ID	IVIATRIX	SAMPDATE I	PREPDATE	ANADATE BATCH	CODE	NAME	E	ANALYTE	CASNUMBER	AIE	RESULT D	L RL	UNITS	BASIS	ION	VEL	ERY UPPE	RCL LOWERCL	ANALYSI	PSOLIDS LNOTE	ANOTE
	DWOCD			Waste																						
	RWQCB Oilfield		7alaa	Water								No Dron														
l 0:1				Disposal	1504201					A II. a I : a : b		No Prep -	Disarbana													
Jaco Oil	Ponds -	[nana]	Laboratori		1504281-	Matar	4/24/2015 12:00	4/24/2015 17:00	4/24/2015 17:00 7504415	Alkalinity-	CN4 2220D	Bench	Bicarbona te (HCO3)		FALSE	760		10	NI A	1				SAM		
Company	2Q2013	[none]	es, Inc.	· · ·	01	Water	4/24/2013 13.00	4/24/2013 17.00	4/24/2015 17:00 Z504415	310123200	3IVI 2320B	Chem	te (ncos)		FALSE	700		10 mg/L	NA	1				SAIVI		
	RWQCB			Waste Water																						
	Oilfield		Zalco	Disposal								No Prep -														
Jaco Oil	Ponds -		Laboratori		1504281-					Alkalinity-		Bench	Carbonat													
Company		[none]			01	Water	4/24/2015 13:00	4/24/2015 17:00	4/24/2015 17:00 Z504415	,	SM 2320B		e (CO3)	NΛ	FALSE	ND		10 mg/L	NA	1				SAM		
Company	202013	[HOHE]	C3, 111C.	Waste	01	Water	4/24/2013 13:00	4/24/2013 17:00	4/24/2013 17:00 2304413	314123200	3101 23200	CHEIII	e (CO3)	INA	TALSE	IND		10 mg/L	INA	1				JAIVI		
	RWQCB			Waster																						
	Oilfield		Zalco	Disposal								No Prep -														
Jaco Oil	Ponds -		Laboratori		1504281-					Alkalinity-	_	Bench	Hydroxide													
Company		[none]			01	Water	4/24/2015 13:00	4/24/2015 17:00	4/24/2015 17:00 Z504415	,	SM 2320B			10035-10-6	FALSE	ND		10 mg/L	NA	1				SAM		
- Company	242015	[	23,	Waste	-		1/21/2020 20100	1,21,201017100	., = ., = 0.00 = 0.00	5.11.25255	0 25205	G.I.C.III	(0)	10000 10 0	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			208/ 2		_				0		
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								No Prep -														
Jaco Oil	Ponds -		Laboratori		1504281-	-				Alkalinity-	_	Bench	Total													
	2Q2015	[none]			01	Water	4/24/2015 13:00	4/24/2015 17:00	4/24/2015 17:00 Z504415	,	SM 2320B		Alkalinity	NA	FALSE	760		10 mg/L	NA	1				SAM		
	1	,	1 -	Waste							1		-,		-			<u> </u>								
	RWQCB			Water																						
	Oilfield		Zalco	Disposal						Ba-As		Metals -														
Jaco Oil	Ponds -		Laboratori		1504281-	-				Received-	-	As														
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:03 Z504435	E200.7	EPA 200.7	Received	Barium	7440-39-3	FALSE	0.3		0.1 mg/L	NA	1				SS		
				Waste																						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal						B-As		Metals -														
Jaco Oil	Ponds -		Laboratori	Pond	1504281-	-				Received-	-	As														
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:03 Z504435	E200.7	EPA 200.7	Received	Boron	7440-42-8	FALSE	24		0.1 mg/L	NA	1				SS		
				Waste																						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								No Prep -														
Jaco Oil	Ponds -		Laboratori	Pond	1504281-	-						Instrumer	า													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/24/2015 14:21	4/24/2015 21:28 Z504425	Br-E300.0	EPA 300.0	t Chem	Bromide	24959-67-9	FALSE	23	0.15	1 mg/L	NA	10				MSS		
				Waste																						
	RWQCB			Water																						
	Oilfield			Disposal									1,2-													
Jaco Oil	Ponds -		Laboratori		1504281-						SW846		Dichloroe													
Company	2Q2015	[none]	es, Inc.	` '	01	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099	SW8260B	8260B	5030B	thane-d4	10706-07-0	TRUE	49.1		ug/L	NA	1	50	98.2	165 89	HLP		
				Waste																						
	RWQCB			Water									4-													
lact C"	Oilfield			Disposal	1504221					DTCV4.4	CVAYOAC	ED.	Bromoflu													
	Ponds -	[01	Laboratori		1504281-	\\/ata	4/24/2045 42 02	F /9/2015 0 11	F /0 /2015 0:44 7505000	BTEXM-		EPA	orobenze	460.00.4	TDUE			/1	NIA			111	114	шь		
Company	20215	[none]	es, Inc.	,,	01	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099	SW8260B	82008	5030B	ne	460-00-4	TRUE	55.7		ug/L	NA	1	50	111	114 94	HLP		
	RWQCB			Waste Water																						
	Oilfield		Zalco																							
laco Oil			Zalco Laboratori	Disposal	1504281-					BTEXM-	SINIQAE	ΕDΛ														
Jaco Oil Company	Ponds -	[none]			01	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099			EPA 5030B	Benzene	71-42-2	FALSE	9.8	0.05	5 ug/L	NA	1				HLP		
Company	202013	[HOHE]		Waste	01	vvalei	+/2+/2013 13.00	3/0/2013 0.41	2/0/2013 3.44 2303099	3 VV 0 Z 0 U B	02000	20200	Delizelle	, 1- <del>4</del> 3-4	IALJE	3.0	0.03	J ug/ L	IVA	1				(TEI		
	RWQCB			Waster																						
	Oilfield		Zalco	Disposal																						
Jaco Oil	Ponds -		Laboratori		1504281-	.				BTEXM-	SW846	EPA	Ethylbenz													
Company		[none]		(West)	01	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099			5030B	-	100-41-4	FALSE	ND	0.05	5 ug/L	NA	1				HLP		
Company	2013	[HOHE]	C3, 111C.	Waste	01	vvater	7/27/2013 13:00	3,0,2013 0.41	3/0/2013 3.44 2303033	34402000	32000	30300	CIIC	100 41-4	IALJL	.40	0.03	J 46/ L	14/3	1						
	RWQCB			Waster																						
	Oilfield		Zalco	Disposal																						
Jaco Oil	Ponds -		Laboratori		1504281-	.				BTEXM-	SW846	EPA	m,p-	108-38-												
Company		[none]			01	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099			5030B		3/106-42-3	FALSE	ND		5 ug/L	NA	1				HLP		
- company	-4-013	[5,1,6]	23,	, ,	1	**acci	1/2 1/2013 13:00	3/ 3/ 2013 0.41	3, 5, 2513 3.44 2303033	J.1.J.200D	02000	30300	Aylenc	5, 100 TL 3	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,,,		J 46/ L								1

		PROJECT		SAMDLEN	LABSAMP	)				METHOD	METHOD	DREDNIAN	1		SURROG	T				DILLIT	SPIKELE	RECOV			
CLIENT	PROJEC	T NUM	LABNAME		ID	MATRIX	SAMPDATE P	PREPDATE A	NADATE BATCH	CODE	NAME	F		CASNUMBER		RESULT DI	L RL	UNITS	BASIS	ION		ERY UPPERCL LOWERCL	ANALYST	PSOLIDS LNOTE	ANOTE
CLILIVI	I KOJEC	1 110111	E (B) () (IVIE	Waste		IVII (TTUIX	574411 57412	TEL DATE A	TOTAL DITTOT	CODE	TO UVIE	_	7117712112	CASITOTALI	7112	INESCET DI		011113	D/ 1313	1011	V-L-	ERT OFFEREE EGWERGE	741712131	1 30LIBS LITOTE	7.11012
	RWQCB			Waster																					
	Oilfield		Zalco	Disposal									Methyl												
lace Oil				-	1504201					BTEXM-	SW846	EPA	tert-Buty												
Jaco Oil	Ponds -	. []	Laborator		1504281-		4/24/2015 12:00	F /0/2015 0.41	F /0 /2015 0:44 7505000				-		FALCE	ND		5/1	NI A	1					
Company	2Q2015	[none]	es, Inc.	· · ·	01	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099	SW8260B	826UB	5030B	Ether	1634-04-4	FALSE	ND		5 ug/L	NA	1			HLP		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal																					
Jaco Oil	Ponds -		Laborator	i Pond	1504281-	-						EPA													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099	SW8260B	8260B	5030B	o-Xylene	95-47-6	FALSE	ND	0.05	5 ug/L	NA	1			HLP		
				Waste																					
	RWQCB	3		Water																					
	Oilfield		Zalco	Disposal																					
Jaco Oil	Ponds -		Laborator	i Pond	1504281-	-				BTEXM-	SW846	EPA													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099	SW8260B	8260B	5030B	Toluene	108-88-3	FALSE	11.1	0.05	5 ug/L	NA	1			HLP		
				Waste																					
	RWQCB	3		Water																					
	Oilfield		Zalco	Disposal																					
Jaco Oil	Ponds -		Laborator		1504281-	_				BTEXM-	SW846	EPA	Toluene-												
Company		[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099			5030B	d8	2037-26-5	TRUE	49.7		ug/L	NA	1	50	99.5 124 65	HLP		
Company	- 42013	Limitel	c3, 111C.	Waste	01	·· atci	1, 2 1, 2013 13.00	3, 3, 2013 0.41	3, 0, 2013 3.74 2303033	3.V0200B	02000	30300	4.5	2037 20-3	INOL	73.7		u8/ L	11/4	1	. 50	33.3 124 03	1151		
	RWQCB			Waster																					
	Oilfield		72122																						
				Disposal	4504204					DTEVA 4	CIMOAC	ED 4	V 1												
Jaco Oil	Ponds -		Laborator		1504281-		. / /	- 10 100 - 0 - 1	- /- /	BTEXM-	SW846	EPA	Xylenes,												
Company	2Q2015	[none]	es, Inc.		01	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099	SW8260B	8260B	5030B	total	1330-20-7	FALSE	0		ug/L	NA	1			HLP		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal						Ca-As		Metals -													
Jaco Oil	Ponds -		Laborator	i Pond	1504281-	-				Received-		As													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:03 Z504435	E200.7	EPA 200.7	Received	Calcium	7440-70-2	FALSE	530		0.05 mg/L	NA	1			SS		
				Waste																					
	RWQCB	3		Water																					
	Oilfield		Zalco	Disposal																					
Jaco Oil	Ponds -		Laborator	i Pond	1504281-	-				CAM-Met	- SW846	EPA													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441	Ag-6010	6010B	3010A	Silver	7440-22-4	FALSE	ND		0.02 mg/L	NA	1			SS		
		. ,	-	Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal																					
Jaco Oil	Ponds -		Laborator	-	1504281-	_				Cam-Met-	SW846	EPA													
Company		[none]			01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441			3010A	Arconic	7440-38-2	FALSE	0.1		0.02 mg/L	NA	1			SS		
Company	20213	[Hone]	es, iiic.		01	Water	4/24/2013 13.00	4/20/2013 13.40	4/20/2013 13:21 2304441	A3-0010	00100	3010A	Arsenic	7440-38-2	TALSE	0.1		0.02 mg/L	IVA	1			33		
	RWQCB	,		Waste																					
			7oles	Water																					
	Oilfield			Disposal	1504304					Carry 5.4 :	CMCAC	ED A													
	Ponds -		Laborator		1504281-		4/24/2045 12 25	4/20/2045 12 12	4/20/2045 45 24 350	Cam-Met		EPA	Da :	7440 20 2	E4105	0.00		0.1	NI 4	_			cc		
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441	Ba-6010	POTOR	3010A	Barium	7440-39-3	FALSE	0.29		0.1 mg/L	NA	1			SS		
	D14:55			Waste																					
	RWQCB			Water																					
	Oilfield			Disposal																					
	Ponds -		Laborator		1504281-					Cam-Met		EPA													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441	Be-6010	6010B	3010A	Berylliun	7440-41-7	FALSE	ND		0.01 mg/L	NA	1			SS		
				Waste																					
	RWQCB	3		Water																					
	Oilfield		Zalco	Disposal																					
Jaco Oil	Ponds -		Laborator		1504281-	-				Cam-Met	- SW846	EPA													
Company			es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441	Cd-6010		3010A	Cadmiun	7440-43-9	FALSE	ND		0.01 mg/L	NA	1			SS		
F - 7				Waste				. ,					T					- Or							
	RWQCB	3		Water																					
	Oilfield		Zalco	Disposal																					
	Ponds -		Laborator	-	1504281-	_				Cam-Met-	SW846	EPA													
Company					01	Water	A/2A/201E 12:00	4/28/2015 13:40	4/28/2015 15:21 Z504441			3010A	Cobalt	7440-48-4	FALSE	ND		0.1 mg/L	NA	1			SS		
LCOMPANY	242013	, נווטוופן	cs, IIIC.	(AACST)	01	vvalei	7/24/2013 13.00	7/20/2013 13.40	7/20/2013 13.21 2304441	CO-0010	OOTOD	POTOM	CODdit	/++U-4ō-4	IALSE	ואט		O'T IIIR/ F	NA	1	1		၁၁		

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		PROJECT		SAMPLEN							METHOD	PREPNAM			SURROG						RECOV			
CLIENT	PROJECT	NUM	LABNAME		ID	MATRIX	SAMPDATE I	PREPDATE	ANADATE BATCH	CODE	NAME	E	ANALYTE	CASNUMBER	ATE	RESULT DI	L RL UNITS	BASIS	ION	VEL	ERY UPPERCL LOWERCL	ANALYST	PSOLIDS LNOTE	ANOTE
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal																				
Jaco Oil	Ponds -		Laboratori	Pond	1504281-	-				Cam-Met	- SW846	EPA	Chromiu											
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441	Cr-6010	6010B	3010A	m	7440-47-3	FALSE	ND	0.05 mg/L	NA	1			SS		
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal																				
Jaco Oil	Ponds -		Laboratori		1504281-					Cam-Met	- SW846	EPA												
Company		[none]			01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441			3010A	Copper	7440-50-8	FALSE	0.22	0.05 mg/L	NA	1			SS		
Company	202013	[HOHC]	C3, 111C.	Waste	01	Water	4/24/2013 13:00	4/20/2015 15.40	4,20,2013 13:21 2304441	Cu 0010	00100	3010/	Сорреі	7440-30-8	IALJE	0.22	0.03 mg/L	IVA				33		
	RWQCB			Waster																				
	Oilfield		7-1									ED A												
1 0"				Disposal	4504204					C 14-1	CIACOAC	EPA												
Jaco Oil	Ponds -		Laboratori		1504281-		4/24/2045 42 00	1/20/2015 12 50	1/20/2015 11 02 7501110	Cam-Met		7470A		7400 07 6	E4165		0.000							
Company	2Q2015	[none]	es, Inc.	` '	01	Water	4/24/2015 13:00	4/28/2015 12:50	4/28/2015 14:03 Z504440	Hg-/4/0	/4/0A	Prep	Mercury	7439-97-6	FALSE	ND	0.002 mg/L	NA	1			SS		
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal																				
Jaco Oil	Ponds -		Laboratori	Pond	1504281-	-				Cam-Met	- SW846	EPA	Molybdei	n										
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441	Mo-6010	6010B	3010A	um	7439-98-7	FALSE	ND	0.1 mg/L	NA	1			SS		
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal																				
Jaco Oil	Ponds -		Laboratori	1 -	1504281-					Cam-Met	- SW846	EPA												
Company		[none]		(West)	01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441			3010A	Antimony	7440-36-0	FALSE	ND	0.2 mg/L	NA	1			SS		
	- 4	[	55,	Waste			1/ = 1/ = = = = = = = = = = = = = = = =	,, = 0, = 0 = 0	1, 21, 2020 2012 200 1112				,,						_					
	RWQCB			Water																				
	Oilfield		Zalco	Disposal																				
lace Oil	Ponds -		Laboratori		1504281-					Cam-Met	CMOAG	EPA												
Jaco Oil		[nono]				Motor	4/24/2015 12:00	4/20/2015 12:40	4/29/2015 15:21 7504441				Colonium	7792 40 2	FALCE	ND	0.05 mg/l	NIA	1			cc		
Company	2Q2015	[none]	es, Inc.	· · ·	01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441	26-9010	POTOR	3010A	Seienium	7782-49-2	FALSE	ND	0.05 mg/L	NA	1			SS		
				Waste																				
	RWQCB			Water																				
	Oilfield			Disposal																				
Jaco Oil	Ponds -		Laboratori		1504281-	-				Cam-Met		EPA												
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441	Zn-6010	6010B	3010A	Zinc	7440-66-6	FALSE	0.11	0.05 mg/L	NA	1			SS		
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal								No Prep -												
	Ponds -		Laboratori	Pond	1504281-							Instrumer	า											
Company	2Q2015	[none]	es, Inc.			Water	4/24/2015 13:00	4/24/2015 14:21	4/24/2015 21:12 Z504425	CI-E300.0	EPA 300.0	t Chem	Chloride	16887-00-6	FALSE	5700	1.2 500 mg/L	NA	250			MSS		
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal								No Prep -												
Jaco Oil	Ponds -		Laboratori		1504281-	. [						Instrumer	1											
Company		[none]			01	Water	4/24/2015 13:00	4/24/2015 14·21	4/24/2015 21:28 Z504425	F-F300 0	EPA 300 0			16984-48-8	FALSE	ND	0.13 1 mg/L	NA	10			MSS		
Company		[	25,	Waste	-		.,,	., = ., = 515 1 1.21	., 2 ., 2020 21.20 250 4425	. 2300.0	2.7.300.0	5		20001 100					10					
1	RWQCB			Waster																				
	Oilfield		Zalco	Disposal						Eq. Ac		Metals -												
lace Oil					1504204					Fe-As		Nieldis -												
Jaco Oil	Ponds -	[max3	Laboratori		1504281-	14/24	4/24/2045 42 00	4/20/2045 0.24	4/20/2015 42 02 750 4425	Received-		AS Dansing I		7420 00 0	FALCE	0.73	0.4	N. A	_			cc		
Company	ZQZ015	[none]		, ,	01	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:03 Z504435	E200.7	EPA 200.7	keceived	iron	7439-89-6	FALSE	0.72	0.1 mg/L	NA	1			SS		
				Waste																				
	RWQCB		L.	Water																				
	Oilfield			Disposal						K-As		Metals -												
Jaco Oil	Ponds -		Laboratori		1504281-	· [				Received-		As												
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:03 Z504435	E200.7	EPA 200.7	Received	Potassiun	n 9/7/7440	FALSE	240	0.5 mg/L	NA	1			SS		
	1			Waste														-						
	RWQCB			Water																				
1	Oilfield		Zalco	Disposal						Na-As		Metals -												
Jaco Oil	Ponds -		Laboratori		1504281-					Received-	-	As												
Company		[none]			01	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:03 Z504435			Received	Sodium	7440-23-5	FALSE	4500	70 mg/L	NA	10			SS		
	-,		,		1.	1	, , ========	., ==, ==13 5.21	, ==, ==== 10.00   200   100							.500	, 56/ -	1		I			11	

		PROJECT		SAMPLEN	LABSAMP	)				METHOD	METHOD	PREPNAM	1		SURROG					DILUT	SPIKELE	RECOV			$\Box$
CLIENT	PROJEC		LABNAME		ID	MATRIX	SAMPDATE	PREPDATE A	ANADATE BATCH	CODE	NAME	E		CASNUMBER		RESULT	DL R	L UNITS	BASIS	ION		ERY UPPERCL LOWERCL	ANALYST	PSOLIDS LNOTE	ANOTE
				Waste																					
	RWQCB			Water																					
1 0"	Oilfield			Disposal	4504204					1102		No Prep -													
Jaco Oil Company	Ponds -	[none]	Laboratori es, Inc.	l	1504281- 01	Water	4/24/2015 13:00	4/24/2015 14:21	4/24/2015 21:12 Z504425	NO3-	EPA 300.0		Nitrate as	14797-55-8	FALSE	ND	46.6	500 mg/L	NA	250			MSS		
Company	LQLUIS	[HOHE]	co, me.	Waste	01	Water	1/2 1/2013 13:00	1/2 1/2013 1 1.21	1/2 1/2013 21:12 230 1123	2500.0	2171300.0	Cilcin	1103	11737 33 0	TALSE	110	10.0	300 1116/ 2	107.	250			11133		
	RWQCB			Water																					
	Oilfield		Zalco	Disposal						Radium		***													
Jaco Oil	Ponds -		Laboratori		1504281-	-				226-		DEFAULT													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	5/6/2015 19:00	5/8/2015 9:20 Z506036	E903.0	E903.1	PREP ***	226	13982-63-3	FALSE	ND		3 pCi/L	NA	1			MCS		
	RWQCB			Waste Water																					
	Oilfield		Zalco	Disposal																					
Jaco Oil	Ponds -		Laboratori	-	1504281-					Cam-Met-	SW846	EPA													
Company		[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441	Ni-6010	6010B	3010A	Nickel	7440-02-0	FALSE	0.17		0.05 mg/L	NA	1			SS		
				Waste																					
	RWQCB			Water																					
1 0"	Oilfield			Disposal	4504204					C 14-1	CMOAC	ED 4													
Jaco Oil Company	Ponds -	[none]	Laboratori es, Inc.	(West)	1504281- 01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441	Cam-Met-		EPA 3010A	Lead	7439-92-1	FALSE	ND		0.05 mg/L	NA	1			SS		
Company	202013	[HOHE]	C3, 111C.	Waste	01	Water	4/24/2013 13:00	4/20/2013 13.40	+/20/2013 13:21 230+4+1	1 5 0010	00100	3010/4	Lead	7433 32 1	TALSE	IND		0.03 mg/ L	IVA		•		33		
	RWQCB			Water																					
	Oilfield		Zalco	Disposal																					
Jaco Oil	Ponds -		Laboratori		1504281-					Cam-Met-		EPA													
Company	2Q2015	[none]			01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441	TI-6010	6010B	3010A	Thallium	7440-28-0	FALSE	ND		0.5 mg/L	NA	1			SS		
	RWQCB			Waste																					
	Oilfield		Zalco	Water Disposal																					
Jaco Oil	Ponds -		Laboratori	-	1504281-					Cam-Met-	SW846	EPA													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:21 Z504441	V-6010	6010B	3010A	Vanadiun	n 7440-62-2	FALSE	ND		0.1 mg/L	NA	1			SS		
				Waste																					
	RWQCB			Water																					
lace Oil	Oilfield			Disposal	1504281-					Cu-As		Metals -													
Jaco Oil Company	Ponds -	[none]	Laboratori es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:03 Z504435	Received-	EPA 200.7	AS Received	Conner	7440-50-8	FALSE	0.38		0.05 mg/L	NA	1			SS		
Company	202013	[HOHE]	cs, mc.	Waste	01	vater	1/2 1/2013 13:00	1,20,2013 3.21	1/20/2013 13:03 230 1133	2200.7	2171200.7	neceived	Соррег	7 1 10 30 0	171252	0.50		0.03 1116, 2	10/1	-			33		+
	RWQCB			Water																					
	Oilfield		Zalco	Disposal								No Prep -	Electrical												
Jaco Oil	Ponds -	_	Laboratori		1504281-					EC-		Bench	Conducti	v				mmhos							
Company	2Q2015	[none]		` '	01	Water	4/24/2015 13:00	4/24/2015 17:00	4/25/2015 17:00 Z504421	SM2510B	SM 2510B	Chem	ity		FALSE	20		0.01 m	NA	1			SAM		
	RWQCB			Waste Water																					
	Oilfield		Zalco	Disposal						Gross		***													
Jaco Oil	Ponds -		Laboratori		1504281-					Alpha EPA		DEFAULT													
Company	2Q2015	[none]		(West)	01	Water	4/24/2015 13:00	5/4/2015 8:00	5/5/2015 9:00 Z506036	900.0	SM 7110C	PREP ***	Alpha	NA	FALSE	ND		15 pCi/L	NA	1			MCS		
	D1 * 1 C C -			Waste																					
	RWQCB Oilfield		72100	Water								Matal-	Hawde												
Jaco Oil	Ponds -		Zalco Laboratori	Disposal	1504281-					Hardness-		Metals -	Hardness (as												
Company		[none]			01	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:03 Z504435		SM 2340B	Received	(as CaCO3)	NA	FALSE	2000		2 mg/L	NA	1			SS		
	-,		,	Waste	-		, , , , , , , , , , , , , , , , , , , ,	, -,	, ,, , , , , , , , , , , , , , , , , , ,		1333												-		+
	RWQCB			Water																					
	Oilfield			Disposal						Mg-As		Metals -													
Jaco Oil	Ponds -	Fer 3	Laboratori		1504281-	\\\\-\-\-	4/24/2045 12.55	4/20/2045 0.25	4/20/2045 42 02 750445	Received-	EDA 200 -	As	Magnesiu		FALCE	470		0.05 ** **	NI A				CC		
Company	2Q2015	[none]		(West) Waste	01	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:03 Z504435	E200.7	EPA 200.7	Keceived	m	7439-95-4	FALSE	170		0.05 mg/L	NA	1			SS		+
	RWQCB			Waster																					
	Oilfield			Disposal						Mn-As		Metals -													
Jaco Oil	Ponds -		Laboratori		1504281-					Received-		As	Mangane												
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:03 Z504435	E200.7	EPA 200.7	Received	se	7439-96-5	FALSE	1.6		0.03 mg/L	NA	1			SS		

	1	DDOJECT	- 1	CANADIEN	LADCANAD					MASTUOD	METHOD	DDEDALAA		1	CLIDDOC					DULIT	CDUVELE	DECOV/				
CLIENT	PROJECT	PROJECT	LABNAME		LABSAMP ID	MATRIX	SAMPDATE I	PREPDATE A	ANADATE BATCH	CODE	METHOD NAME	PREPNAIV		CASNUMBER	SURROG	RESULT DL	RL	UNITS	BASIS	ION	SPIKELE		PERCL LOWER	T ANIALVCT	PSOLIDS LNOTE	ANOTE
CLIENT	PROJEC	INUIVI	LABINAIVIE		טו	IVIATRIX	SAIVIPDATE	PREPUATE A	ANADATE BATCH	CODE	INAIVIE	E	ANALTIE	CASINUIVIBER	AIE	KESULI DL	. KL	UNITS	BASIS	ION	VEL	ERT UP	PERCL LOWER	L ANALYSI	PSOLIDS LINUTE	ANOTE
	RWQCB			Waste Water																						
	Oilfield		Zalco									No Prep -														
laco Oil			Laboratori	Disposal	1504281-					n L		Bench														
Jaco Oil Company	Ponds -	[none]	es, Inc.		01	Water	4/24/2015 12:00	4/24/2015 17:00	4/24/2015 17:00 Z504415	μπ- E150 1	EPA 150.1		рН	NA	FALSE	6.91		pH Units	NIA	1				SAM		
Company	2Q2013	[HOHE]	es, inc.	Waste	01	water	4/24/2013 13.00	4/24/2013 17.00	4/24/2013 17.00 2304413	L130.1	LFA 130.1	CHEIII	pri	IVA	TALSL	0.91		pri onits	IVA	1				JAIVI		
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								EPA	2-													
Jaco Oil	Ponds -		Laboratori		1504281-	_				PNA-	SW846	3510C_M	Fluorobin													
Company		[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486			S 100_IVI	henyl	321-60-8	TRUE	2.62		ug/L	NA	1	100	2.62	92	0 JMM		
Company	202013	[HOHE]	cs, mc.	Waste	01	Water	4/24/2013 13:00	4/2//2013 3.23	4/20/2013 3.31 2304400	34402700	02700	3	ПСПУ	321 00 0	TROL	2.02		ug/L	INA		100	2.02	32	O JIVIIVI		
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								EPA														
Jaco Oil	Ponds -		Laboratori	-	1504281-	_				PNA-	SW846	3510C_M	Acenanht													
Company		[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486			S	hene	83-32-9	FALSE	ND	0.5	10 ug/L	NA	1				JMM		
company	242015	[]	23,	Waste	01	Truce.	1,21,201010100	1,2.72025 5.25	., 20, 2013 3.81 230	01102700	02.00			00 02 0	171202	.,,,	0.5	10 08/ 2		_						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								EPA														
Jaco Oil	Ponds -		Laboratori	1 -	1504281-	_				PNA-	SW846	3510C_M	Acenapht													
	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486			S	hylene	208-96-8	FALSE	ND	0.5	10 ug/L	NA	1				JMM		
11	1, 123		,	Waste			. , : : ==::30	. ,	, , : : : : = =========================	1 21 30			,		<u> </u>		-	- 0, -		1 -						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								EPA														
Jaco Oil	Ponds -		Laboratori	1 -	1504281-	-				PNA-	SW846	3510C_M	Anthrace													
Company		[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486			S	ne	120-12-7	FALSE	ND	0.7	10 ug/L	NA	1				JMM		
			,	Waste														- J.								
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								EPA	Benzo (a)													
Jaco Oil	Ponds -		Laboratori		1504281-	-				PNA-	SW846	3510C_M	anthracer	n												
Company		[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	e	56-55-3	FALSE	ND	0.8	10 ug/L	NA	1				JMM		
				Waste																						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								EPA														
Jaco Oil	Ponds -		Laborator	i Pond	1504281-	-				PNA-	SW846	3510C_M	Benzo (a)													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	pyrene	50-32-8	FALSE	ND	0.7	10 ug/L	NA	1				JMM		
				Waste																						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								EPA	Benzo (b)													
Jaco Oil	Ponds -		Laborator	i Pond	1504281-	-				PNA-	SW846	3510C_M	fluoranth													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	ene	205-99-2	FALSE	ND	0.7	10 ug/L	NA	1				JMM		
				Waste			$\Box$																			
	RWQCB			Water																						
	Oilfield			Disposal								EPA	Benzo													
	Ponds -		Laborator		1504281-					PNA-		3510C_M														
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	perylene	191-24-2	FALSE	ND	0.8	10 ug/L	NA	1				JMM		
	D) 4 ( C C C			Waste																						
	RWQCB		7-1	Water								ED.4	D													
last O''	Oilfield			Disposal	1504201					DNIA	CMCAC	EPA	Benzo (k)													
Jaco Oil	Ponds -	[nc1	Laboratori		1504281-		4/24/2015 12:00	4/27/2015 0:25	4/20/201F 0:24 7F0440C	PNA-	SW846	3510C_M		207.00.0	FALCE	ND	0.8	10	NIA					10.40.4		
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	2008270C	82/UC	3	ene	207-08-9	FALSE	טוט	8.0	10 ug/L	NA	1				JMM		
	DWOCD			Waste																						
	RWQCB Oilfield		7alco	Water								ΕDΛ														
laca Oil				Disposal	1504281-					PNA-	SW846	EPA 3510C_M														
Jaco Oil Company	Ponds -	[nonol	Laboratori es, Inc.	(West)	01		4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486			22106 101		218-01-9	FALSE	ND	0.8	10/!	NΛ	1				JMM		
Company	20215	[none]	es, iiic.		01	Water	4/24/2015 15:00	4/2//2015 9:25	4/20/2013 9:31 2304486	30082700	02/00	3	ciii ysene	210-01-9	FALSE	ואט	0.0	10 ug/L	NA	1				JIVIIVI		
1	RWQCB			Waste Water									Dibonz													
	Oilfield		Zalco									EPA	Dibenz (a,h)													
Jaco Oil	Ponds -		Laboratori	Disposal	1504281-					PNA-	SW846	3510C_M														
Company		[none]		1	01	Water	4/24/2015 13:00	4/27/2015 0.25	4/28/2015 9:31 Z504486			22106 141	anunacei	53-70-3	FALSE	ND	0.6	10 ug/L	NA	1				JMM		
Company	2ر2013	[11011E]	دی, ۱۱۱۱۰،	( ww Car)	01	vvalei	7/2-1/2013 13.00	7/2//2013 3.23	4/20/2013 3.31 2304480	34402/00	02/00	٠	C	JJ-1U-J	IALJE	שויו	0.0	TO US/L	INA	1				2141141		

	1	2201507	. 1	C 4 4 4 D 1 E 4 1		- 1					1.45 <b>T</b> U.O.D	2252444	- I	1	CLIBBOO						CRIVELE	250011				1
CLIENT	DDOJECT	PROJECT		SAMPLEN			CANADDATE	DEDD ATE	DATCH		METHOD	PREPNAN			SURROG			LINUTC	DACIC		SPIKELE		DDEDGI I OMEDGI	ANIALVET	DCOLIDS LNOTE	ANIOTE
CLIENT	PROJECT	NUM	LABNAME		ID	MATRIX	SAMPDATE F	PREPDATE	ANADATE BATCH	CODE	NAME	E	ANALYTE	CASNUMBER	AIE	RESULT D	L RL	UNITS	BASIS	ION	VEL	ERY U	PPERCL LOWERCI	ANALYST	PSOLIDS LNOTE	ANOTE
	21110.02			Waste																						
	RWQCB			Water																						
	Oilfield			Disposal								EPA														
Jaco Oil	Ponds -		Laboratori		1504281-					PNA-	SW846	3510C_M	Fluoranth													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	ene	206-44-0	FALSE	ND	0.8	10 ug/L	NA	1				JMM		
				Waste																						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								EPA														
Jaco Oil	Ponds -		Laboratori	Pond	1504281-	-				PNA-	SW846	3510C_M														
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	Fluorene	86-73-7	FALSE	ND	0.5	10 ug/L	NA	1				JMM		
				Waste																						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								EPA	Indeno(1,													
Jaco Oil	Ponds -		Laboratori	-	1504281-	_				PNA-	SW846	3510C_M														
Company		[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486			S		193-39-5	FALSE	ND		10 ug/L	NA	1				JMM		
Company	2Q2013	[HOHE]	es, me.	-	01	water	4/24/2013 13.00	4/2//2013 3.23	4/28/2013 3.31 2304480	3002700	. 62760	3	саругене	155-55-5	TALSE	IND		10 ug/L	ING					JIVIIVI		
	DIMOCE			Waste																						
	RWQCB		7-1	Water								ED.4														
	Oilfield			Disposal	450.55						G1 4 1 G 7 G	EPA														
Jaco Oil	Ponds -		Laboratori		1504281-			. / /	. /	PNA-	SW846	3510C_M	Naphthal													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	ene	91-20-3	FALSE	ND		10 ug/L	NA	1				JMM		
				Waste																						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								EPA														
Jaco Oil	Ponds -		Laboratori	Pond	1504281-	-				PNA-	SW846	3510C_M	Nitrobenz													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	ene-d5	NA	TRUE	2.96		ug/L	NA	1	100	2.96	95	JMM		
				Waste																						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								EPA														
Jaco Oil	Ponds -		Laboratori		1504281-	-				PNA-	SW846		Phenanth													
Company		[none]		(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486			ς		85-01-8	FALSE	ND	0.7	10 ug/L	NA	1				JMM		
Company	2Q2013	[HOHE]	es, iiic.	Waste	01	water	4/24/2013 13.00	4/2//2013 3.23	4/28/2013 3.31 2304480	3002700	02700	3	Terre	03-01-0	TALSE	IND	0.7	10 ug/L	INA					JIVIIVI		
	RWQCB																									
			7-1	Water								ED 4														
	Oilfield			Disposal	4504004					2014	6144646	EPA														
Jaco Oil	Ponds -		Laboratori		1504281-		. / /	. /2= /2	. / /	PNA-		3510C_M														
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	Pyrene	129-00-0	FALSE	ND	0.8	10 ug/L	NA	1				JMM		
				Waste																						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal								EPA														
	Ponds -		Laboratori	Pond	1504281-	-				PNA-	SW846	3510C_M	Terpheny	I-												
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	dl4	NA	TRUE	1.29		ug/L	NA	1	100	1.29	100	JMM		
				Waste																						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal						Radium		***														
Jaco Oil	Ponds -		Laboratori		1504281-	-				228-EPA		DEFAULT	Radium-													
Company		[none]		(West)	01	Water	4/24/2015 13:00	5/15/2015 16:30	5/18/2015 18:50 Z506036		EPA Ra-05			15262-20-1	FALSE	ND		2 pCi/L	NA	1				MCS		
				Waste	1		, , ========	,	, ,, , , , , , , , , , , , , , , , , , ,		1		-					157 -		+ -						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal						SiO2-As		Metals -														
	Ponds -		Laboratori		1504281-					Received-	_	Victais -	Silica													
		[nonol					4/24/2015 13:00	4/28/2015 9:21	A/28/2015 12:02 7504425		EPA 200.7	Pocoinad		763-18-69	FALSE	89		1 ma/1	NI A	1				SS		
Company	20215	[none]		(West)	01	Water	4/24/2015 15:00	4/20/2013 9:21	4/28/2015 13:03 Z504435	E200.7	EPA 200.7	neceived	(SiO2)	102-19-03	FALSE	89		4 mg/L	NA	1				JJ		
	DVACCE			Waste																						
	RWQCB			Water																						
	Oilfield			Disposal								No Prep -														
	Ponds -		Laboratori		1504281-					SO4-			Sulfate as													
Company	2Q2015	[none]	es, Inc.	(West)	01	Water	4/24/2015 13:00	4/24/2015 14:21	4/24/2015 21:12 Z504425	E300.0	EPA 300.0	t Chem	SO4	148-08-798	FALSE	2100	7.8	120 mg/L	NA	250				MSS		
	1			Waste			$\top$	T																		
	RWQCB			Water																						
	Oilfield		Zalco	Disposal						Sr-As		Metals -														
Jaco Oil	Ponds -		Laboratori		1504281-	-				Received-	-	As														
Company		[none]			01	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:03 Z504435			Received	Strontium	7440-24-6	FALSE	9.4		0.1 mg/L	NA	1				SS		
F7	1	,	1 .	1 ,	1		, , ========	, -,	,				1					- 1.01 -			1	11	1	1	L	

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CLIENT	DDOLEGE	PROJECT		SAMPLEN			CANADDATE	DDEDD ATE	DATCH		METHOD	PREPNAM		SURROG		D	LINUTC	DACIC	DILUT			DEDCI LOWED	N ANIALVCT	DCOLIDG LAIGTE	ANOTE
CLIENT	PROJECT	NUIVI	LABNAME		ID	MATRIX	SAMPDATE I	PREPDATE A	ANADATE BATCH	CODE	NAME	E	ANALYTE CASN	OMBER ATE	RESULT I	DL RL	UNITS	BASIS	ION	VEL	ERY U	PPERCL LOWERO	L ANALYSI	PSOLIDS LNOTE	ANOTE
	DIMOCD			Waste																					
	RWQCB Oilfield		Zalaa	Water								No Dron	Total												
Jana 0:1				Disposal	1504281-					TDC		No Prep -	Total Dissolved												
Jaco Oil	Ponds -	[nono]	Laboratori			Matar	4/24/2015 12:00	4/29/2015 13:23	4/29/2015 13:28 Z504454	TDS-	CN4 2540C	Bench	Solids NA	FALSE	15000		10 ma/l	NIA	1				MSS		
Company	2Q2013	[none]	es, Inc.	· · · · ·	01	Water	4/24/2013 13.00	4/29/2015 15.25	4/29/2013 13.28 2304434	310123400	3IVI 2340C	Chem	JOHUS INA	FALSE	13000		10 mg/L	NA	1				IVISS		
	RWQCB			Waste Water																					
	Oilfield		Zalco									No Prep -													
Jaco Oil	Ponds -		Laboratori	Disposal	1504281-					Alkalinity-		Bench	Bicarbona												
Company		[none]		(East)	02	Water	4/24/2015 12:00	4/24/2015 17:00	4/24/2015 17:00 Z504415	,	CM 2220B		te (HCO3)	FALSE	700		10 mg/l	NA	1				SAM		
Company	2Q2013	[HOHE]	es, IIIc.	Waste	02	water	4/24/2013 13.00	4/24/2013 17.00	4/24/2013 17:00 2304413	310123200	3IVI 2320D	CHEIII	te (HCO3)	FALSE	700		10 mg/L	INA	1				SAIVI		
	RWQCB			Waster																					
	Oilfield		Zalco	Disposal								No Prep -													
Jaco Oil	Ponds -		Laboratori	1	1504281-					Alkalinity-		Bench	Carbonat												
Company		[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/24/2015 17:00	4/24/2015 17:00 Z504415	,	SM 2320B		e (CO3) NA	FALSE	ND		10 mg/L	NA	1				SAM		
Company	202013	[HOHE]	C3, 111C.	Waste	02	Water	4/24/2013 13:00	4/24/2013 17:00	4/24/2013 17:00 2304413	314123200	31V1 2320D	CHCIII	C (COS) 14A	TALSE	IVD		10 mg/L	IVA					J/IIVI		
	RWQCB			Waster																					
	Oilfield		Zalco	Disposal								No Prep -													
Jaco Oil	Ponds -		Laboratori	1	1504281-					Alkalinity-		Bench	Hydroxide												
Company		[none]		(East)	02	Water	4/24/2015 13:00	4/24/2015 17:00	4/24/2015 17:00 Z504415	,	SM 2320B			5-10-6 FALSE	ND		10 mg/L	NA	1				SAM		
Company		[.ione]	23, 1110.	Waste	-		., _ 1, _ 015 15.00	.,,,	., = ., = 515 17.00 2507415	525200	5 23200	J	1003.	- 10 0 TALUE			1116/ -		1			+	J. 1171		
	RWQCB			Waster																					
	Oilfield		Zalco	Disposal								No Prep -													
Jaco Oil	Ponds -		Laboratori		1504281-					Alkalinity-		Bench	Total												
Company		[none]		(East)	02	Water	4/24/2015 13:00	4/24/2015 17:00	4/24/2015 17:00 Z504415	,	SM 2320B		Alkalinity NA	FALSE	700		10 mg/L	NA	1				SAM		
company	-42015	[]		Waste	-		1,2 1,2010 10100	1,2 1,2013 17100	., 2 ., 2010 17.00 200 1.15	020200	5 25203	G.I.C.III	rancomine, not		7.00		108/ 2		_				0,		
	RWQCB			Water																					
	Oilfield		Zalco	Disposal								No Prep -													
Jaco Oil	Ponds -		Laboratori		1504281-	_						Instrumer	1												
Company		[none]		(East)	02	Water	4/24/2015 13:00	4/24/2015 14:21	4/24/2015 21:59 Z504425	Br-E300.0	EPA 300.0		Bromide 24959	9-67-9 FALSE	39	0.15	1 mg/L	NA	10				MSS		
company	-42015	[]	23,	Waste	-		1,21,20101010	.,,	.,,	2. 2000.0	2.77.000.0	t Gileiii	2.5	7 07 3 171202		0.13	26/ 2								
	RWQCB			Water																					
	Oilfield		Zalco	Disposal									1,2-												
Jaco Oil	Ponds -		Laboratori		1504281-	_				BTEXM-	SW846	EPA	Dichloroe												
Company		[none]		(East)	02	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099			5030B	thane-d4 1070	6-07-0 TRUE	49.2		ug/L	NA	1	50	98.3	165	39 HLP		
		[]		Waste			, ,	-,-,	.,,,								- 0,								
	RWQCB			Water									4-												
	Oilfield		Zalco	Disposal									Bromoflu												
Jaco Oil	Ponds -		Laboratori	-	1504281-	-				BTEXM-	SW846	EPA	orobenze												
Company	202015	[none]	es, Inc.		02	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099				ne 460-0	00-4 TRUE	51.5		ug/L	NA	1	50	103	114	94 HLP		
· '			,	Waste				, ,									- J.								
	RWQCB			Water																					
	Oilfield		Zalco	Disposal																					
Jaco Oil	Ponds -		Laboratori	-	1504281-	.				BTEXM-	SW846	EPA													
Company		[none]		(East)	02	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099			5030B	Benzene 71-43	-2 FALSE	ND	0.05	5 ug/L	NA	1				HLP		
				Waste													-								
	RWQCB			Water																					
	Oilfield		Zalco	Disposal																					
Jaco Oil	Ponds -		Laboratori		1504281-	- [				BTEXM-	SW846	EPA	Ethylbenz												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099	SW8260B	8260B	5030B	ene 100-4	1-4 FALSE	ND	0.05	5 ug/L	NA	1				HLP		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal																					
Jaco Oil	Ponds -		Laboratori		1504281-	- [				BTEXM-	SW846	EPA	m,p- 108-3	8-											
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099	SW8260B	8260B	5030B	Xylene 3/106		ND		5 ug/L	NA	1				HLP		
		-		Waste													-								
	RWQCB			Water																					
	Oilfield		Zalco	Disposal									Methyl												
Jaco Oil	Ponds -		Laboratori	Pond	1504281-	- [				BTEXM-	SW846	EPA	tert-Butyl												
Company		[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099	SW8260B	8260B	5030B	Ether 1634	-04-4 FALSE	ND		5 ug/L	NA	1				HLP		
					•		-		· · · · · · · · · · · · · · · · · · ·	-						l						-			

	1	DD 0150T	. 1	C 4 4 4 D 1 E 4 1							1.45 <b>T</b> U.00	222244	-		CLIBBOO					D	CDUVELE	250011				
CHENT	DDOJECT	PROJECT			LABSAMP		CANADDATE	DEDD ATE	DATCH		METHOD	PREPNAN		CACALLINADE	SURROG		DI DI	LINUTC	DACIC		SPIKELE		SERCI LOWER	CI ANIALVET	DCOLLDS LAIOTE	ANIOTE
CLIENT	PROJECT	NUM	LABNAME		ID	MATRIX	SAMPDATE I	PREPDATE A	ANADATE BATCH	CODE	NAME	E	ANALYTE	CASNUMBE	KAIE	RESULT [	DL RL	. UNITS	BASIS	ION	VEL	ERY UPF	PERCL LOWER	CL ANALYSI	PSOLIDS LNOTE	ANOTE
	D1440 6D			Waste																						
	RWQCB		7-1	Water																						
	Oilfield			Disposal																						
Jaco Oil	Ponds -	, ,	Laboratori		1504281-	-	. / /	- /2 /2 2 2 2 2 2 2	- /- /	BTEXM-		EPA														
Company	2Q2015	[none]	es, Inc.	· '	02	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099	SW8260E	8260B	5030B	o-Xylene	95-47-6	FALSE	ND	0.05	5 ug/L	NA	1				HLP		
				Waste																						
	RWQCB			Water																						
	Oilfield			Disposal																						
Jaco Oil	Ponds -		Laboratori		1504281-					BTEXM-		EPA														
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099	SW8260E	8260B	5030B	Toluene	108-88-3	FALSE	ND	0.05	5 ug/L	NA	1				HLP		
				Waste																						
	RWQCB			Water																						
	Oilfield			Disposal																						
Jaco Oil	Ponds -		Laboratori		1504281-					BTEXM-		EPA	Toluene-													
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099	SW8260E	8260B	5030B	d8	2037-26-5	TRUE	42.7		ug/L	NA	1	50	85.4	124	65 HLP		
				Waste																						
	RWQCB			Water																						
	Oilfield			Disposal																						
Jaco Oil	Ponds -		Laboratori		1504281-	-					SW846	EPA	Xylenes,													
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	5/8/2015 8:41	5/8/2015 9:44 Z505099	SW8260E	8260B	5030B	total	1330-20-7	FALSE	0		ug/L	NA	1				HLP		
				Waste																						
	RWQCB			Water																						
	Oilfield			Disposal																						
Jaco Oil	Ponds -		Laboratori		1504281-	-				CAM-Met		EPA														
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:23 Z504441	Ag-6010	6010B	3010A	Silver	7440-22-4	FALSE	ND		0.02 mg/L	NA	1				SS		
				Waste																						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal																						
Jaco Oil	Ponds -		Laboratori		1504281-	-				Cam-Met		EPA														
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:23 Z504441	As-6010	6010B	3010A	Arsenic	7440-38-2	FALSE	0.026		0.02 mg/L	NA	1				SS		
				Waste																						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal																						
Jaco Oil	Ponds -		Laboratori	Pond	1504281-	-				Cam-Met		EPA														
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:23 Z504441	Cd-6010	6010B	3010A	Cadmium	7440-43-9	FALSE	ND		0.01 mg/L	NA	1				SS		
				Waste																						
	RWQCB			Water																						
	Oilfield		Zalco	Disposal																						
Jaco Oil	Ponds -		Laboratori		1504281-	-				Cam-Met		EPA														
Company	2Q2015	[none]	es, Inc.	` '	02	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:23 Z504441	Co-6010	6010B	3010A	Cobalt	7440-48-4	FALSE	ND		0.1 mg/L	NA	1				SS		
				Waste																						
	RWQCB			Water																						
	Oilfield			Disposal								EPA														
	Ponds -		Laboratori		1504281-					Cam-Met		7470A														
Company	2Q2015	[none]		(East)	02	Water	4/24/2015 13:00	4/28/2015 12:50	4/28/2015 14:05 Z504440	Hg-7470	7470A	Prep	Mercury	7439-97-6	FALSE	ND		0.002 mg/L	NA	1				SS		
				Waste																						
	RWQCB			Water																						
1.	Oilfield			Disposal																						
Jaco Oil	Ponds -		Laboratori		1504281-					Cam-Met		EPA	Molybde													
Company	2Q2015	[none]		(East)	02	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:23 Z504441	Mo-6010	6010B	3010A	um	7439-98-7	FALSE	ND		0.1 mg/L	NA	1				SS		
				Waste																						
	RWQCB			Water																						
	Oilfield			Disposal																						
Jaco Oil	Ponds -		Laboratori		1504281-					Cam-Met		EPA														
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:23 Z504441	Sb-6010	6010B	3010A	Antimony	7440-36-0	FALSE	ND		0.2 mg/L	NA	1				SS		
				Waste																						
	RWQCB			Water																						
	Oilfield			Disposal																						
Jaco Oil	Ponds -		Laboratori		1504281-					Cam-Met		EPA														
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:23 Z504441	Se-6010	6010B	3010A	Selenium	7782-49-2	FALSE	ND		0.05 mg/L	NA	1				SS		

	1	2201507	. 1	C 4 4 4 D 1 E 4 1								22521111			CLIDDOO				D	CDUVELE	105001	1		
01.151.17	220150	PROJECT		SAMPLEN				22522475			METHOD	PREPNAM			SURROG			2 4 616			RECOV		2001120	
CLIENT	PROJECT	NUM	LABNAME	-	ID	MATRIX	SAMPDATE I	PREPDATE	ANADATE BATCH	CODE	NAME	E	ANALYTE	CASNUMBER	ATE	RESULT DL	RL UNITS	BASIS	ION	VEL	ERY UPPERCL LOWERCL	ANALYST	PSOLIDS LNOTE	ANOTE
				Waste																				
	RWQCB			Water																				
	Oilfield			Disposal																				
Jaco Oil	Ponds -		Laboratori		1504281-					Cam-Met-		EPA												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:23 Z504441	Zn-6010	6010B	3010A	Zinc	7440-66-6	FALSE	ND	0.05 mg/L	NA	1			SS		
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal								No Prep -												
Jaco Oil	Ponds -		Laboratori	Pond	1504281-							Instrumer	ı											
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/24/2015 14:21	4/24/2015 21:43 Z504425	CI-E300.0	EPA 300.0	t Chem	Chloride	16887-00-6	FALSE	9900	2.4 1000 mg/L	NA	500			MSS		
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal																				
Jaco Oil	Ponds -		Laboratori		1504281-					TRPH-														
Company		[none]		(West)	01	Water	4/24/2015 13:00	5/8/2015 10:00	5/8/2015 15:47 Z505093		EPA 1664	FPA 3535	TRPH	NA	FALSE	ND	5 mg/L	NA	1			BIG		
company	EQEOIS	[none]	cs, me.	Waste	01	Water	1/2 1/2013 13:00	3/0/2013 10:00	3/0/2013 13:17 2303033	21001	217(1001	LI 7 ( 3333	1111111	10.0	1711252		3 1116/ 2	107				DIG		
1	RWQCB			Waster																				
1	Oilfield		Zalco	Disposal								***												
laco Oil			Laboratori	1	1504281-					Uranium-		DEFAULT	Hranium											
Jaco Oil	Ponds -	[nonol					A/2A/201E 12:00	5/12/2015 7:00	5/12/201E 16:26 7F06026			PREP ***		7440 61 1	EVICE	ND	20 ~ 0: /1	NIA	4			MCS		
company	2Q2015	[none]	es, Inc.	` '	01	Water	4/24/2015 13:00	5/13/2015 /:00	5/13/2015 16:26 Z506036	E908	ESUS	<b>PKEP</b> ****	(ug/L)	7440-61-1	FALSE	טאו	20 pCi/L	NA	1	-		MCS		
1	DIALOGO			Waste																				
1	RWQCB		7-1	Water						D - 1														
	Oilfield			Disposal						Ba-As		Metals -												
Jaco Oil	Ponds -		Laboratori		1504281-					Received-		As												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:14 Z504435	E200.7	EPA 200.7	Received	Barium	7440-39-3	FALSE	0.35	0.1 mg/L	NA	1			SS		
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal						B-As		Metals -												
Jaco Oil	Ponds -		Laboratori	Pond	1504281-					Received-		As												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:14 Z504435	E200.7	EPA 200.7	Received	Boron	7440-42-8	FALSE	28	0.1 mg/L	NA	1			SS		
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal						Ca-As		Metals -												
Jaco Oil	Ponds -		Laboratori		1504281-					Received-		As												
Company		[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:14 Z504435	E200.7	EPA 200.7	Received	Calcium	7440-70-2	FALSE	110	0.05 mg/L	NA	1			SS		
			•	Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal																				
Jaco Oil	Ponds -		Laboratori		1504281-					Cam-Met-	SW846	EPA												
Company	202015	[none]	es, Inc.			Water	4/24/2015 13:00	4/28/2015 13·40	4/28/2015 15:23 Z504441				Barium	7440-39-3	FALSE	0.38	0.1 mg/L	NA	1			SS		
Company		[	23, 1116.	Waste	-		.,,	., _5, _515 15.40	., 20, 2010 10.20 200+441	20 0010	55105	3020/1	20110111			0.55	0.1 III8/ L							
1	RWQCB			Waster																				
1	Oilfield		Zalco	Disposal																				
lace Oil				-	1504281-					Cam Mact	CIMOAC	EDΛ												
	Ponds -	[nonol	Laboratori		02	Matar	4/24/2015 12:00	4/28/2015 13:40	4/28/2015 15:23 Z504441	Cam-Met- Be-6010		EPA 3010A	Don III	7440-41-7	EALCE	ND	0.01	NIA	4			SS		
Company	20215	[none]		(East)	UZ	Water	4/24/2013 15:00	+/20/2013 13:40	4/20/2013 13.23 2304441	DE-0010	OOTOR	POTON	bei yillum	/440-41-/	FALSE	טוו	0.01 mg/L	NA	1			<i>33</i>		
1	DWOCD			Waste																				
1	RWQCB		7-1	Water																				
	Oilfield			Disposal	4504551					0- 1-	C) 4 ( C) 4 C	ED.4	Cl											
Jaco Oil	Ponds -		Laboratori		1504281-		4/04/2015	1/20/22:5	1/20/2017 17 27	Cam-Met-		EPA	Chromiu	7446	= · · · · ·									
Company	2Q2015	[none]		(East)	02	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:23 Z504441	Cr-6010	6010B	3010A	m	7440-47-3	FALSE	ND	0.05 mg/L	NA	1			SS		
1				Waste																				
1	RWQCB			Water																				
1	Oilfield		Zalco	Disposal																				
Jaco Oil	Ponds -		Laboratori		1504281-					Cam-Met-		EPA												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:23 Z504441	Cu-6010	6010B	3010A	Copper	7440-50-8	FALSE	0.19	0.05 mg/L	NA	1	<u></u>		SS		
				Waste																				
1	RWQCB			Water																				
1	Oilfield		Zalco	Disposal																				
Jaco Oil	Ponds -		Laboratori		1504281-					Cam-Met-	SW846	EPA												
Company		[none]		(East)	02	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:23 Z504441				Nickel	7440-02-0	FALSE	0.068	0.05 mg/L	NA	1			SS		
1	1			· ·	1	1					1	l								1		1	1	

	1	2201507		C 4 4 4 D 1 E 4 1						14571100		2252444		1	CLIDDOO				D	CDUVELE	D5001/	1		
CLIENT	DDOJECT	PROJECT		SAMPLEN			CANADDATE	DEDD ATE	ANIADATE DATOU		METHOD	PREPNAN			SURROG		DI LINUTC	DACIC			RECOV	ANIALVET	DCOLIDS LAIOTE	ANOTE
CLIENT	PROJECT	NUM	LABNAME		ID	MATRIX	SAMPDATE I	PREPDATE	ANADATE BATCH	CODE	NAME	E	ANALYTE	CASNUMBER	AIE	RESULT DL	RL UNITS	BASIS	ION	VEL	ERY UPPERCL LOWERCL	ANALYSI	PSOLIDS LNOTE	ANOTE
	DWOCD			Waste																				
	RWQCB Oilfield		Zalaa	Water																				
Jana 0:1				Disposal	1504201					C 11-t	CMOAC	ED A												
Jaco Oil Company	Ponds -	[nono]	Laboratori		1504281- 02	Water	4/24/2015 12:00	4/20/2015 12:40	4/28/2015 15:23 Z504441	Cam-Met		EPA 3010A	Lood	7439-92-1	FALSE	ND	0.05 mg/L	NA	1			SS		
Company	2Q2013	[none]	es, Inc.	· · ·	UZ	water	4/24/2013 13.00	4/20/2015 15.40	4/28/2013 13:23 2304441	PD-0010	00100	3010A	Lead	7459-92-1	FALSE	ND	0.05 IIIg/L	IVA	1			33		
	RWQCB			Waste Water																				
	Oilfield		Zalco	Disposal																				
Jaco Oil	Ponds -		Laboratori		1504281-					Cam-Met	- SW846	EPA												
Company		[none]			02	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:23 Z504441			3010A	Thallium	7440-28-0	FALSE	ND	0.5 mg/L	NA	1			SS		
Company	202013	[HOHE]	C3, 111C.	Waste	02	vvater	4/24/2013 13:00	4/20/2013 13.40	4,20,2013 13.23 2304441	11 0010	00100	30107	mamam	7440 20 0	TALSE	IND	0.5 mg/L	INA				33		
	RWQCB			Water																				
	Oilfield			Disposal																				
Jaco Oil	Ponds -		Laboratori	-	1504281-					Cam-Met	- SW846	EPA												
Company		[none]	es, Inc.		02	Water	4/24/2015 13:00	4/28/2015 13:40	4/28/2015 15:23 Z504441			3010A	Vanadium	7440-62-2	FALSE	ND	0.1 mg/L	NA	1			SS		
			,	Waste			, ,	, -,	, , , , , , , , , , , , , , , , , , , ,								- 0,							
	RWQCB			Water																				
	Oilfield		Zalco	Disposal						Cu-As		Metals -												
Jaco Oil	Ponds -		Laboratori	-	1504281-					Received-	-	As												
Company		[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:14 Z504435		EPA 200.7	Received	Copper	7440-50-8	FALSE	0.37	0.05 mg/L	NA	1			SS		
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal								No Prep -	Electrical											
Jaco Oil	Ponds -		Laboratori	Pond	1504281-					EC-		Bench	Conductiv	,			mmhos	s/c						
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/24/2015 17:00	4/25/2015 17:00 Z504421	SM2510B	SM 2510B	Chem	ity		FALSE	28	0.01 m	NA	1			SAM		
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal								No Prep -												
Jaco Oil	Ponds -		Laboratori		1504281-							Instrumer	1											
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/24/2015 14:21	4/24/2015 21:59 Z504425	F-E300.0	EPA 300.0	t Chem	Fluoride	16984-48-8	FALSE	ND	0.13 1 mg/L	NA	10			MSS		
				Waste																				
	RWQCB			Water																				
	Oilfield			Disposal						Fe-As		Metals -												
	Ponds -		Laboratori		1504281-		. / /	. / /	. / /	Received-		As												
Company	2Q2015	[none]	es, Inc.	` <i>'</i>	02	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:14 Z504435	E200.7	EPA 200.7	Received	Iron	7439-89-6	FALSE	0.51	0.1 mg/L	NA	1			SS		
	21110 02			Waste																				
	RWQCB		7.1	Water						14. 4 -														
laca Oil	Oilfield			Disposal	1504201					K-As		Metals -												
Jaco Oil	Ponds -	[nono]	Laboratori es, Inc.		1504281- 02		4/24/201E 12:00	4/20/201E 0:21	4/28/2015 13:14 Z504435	Received-	EDA 200 7	AS Pacaiyad	Dotaccium	0/7/7440	EVICE	110	0.5 mg/L	NIA	1			SS		
Company	ZQZ015	[none]	es, iiic.	(East) Waste	UZ	Water	4/24/2015 15:00	4/20/2013 9:21	4/20/2013 13:14 2304435	E200./	EPA 200.7	neceived	rotdssiuff	3///440	FALSE	110	U.5 IIIg/L	NA	1	<del>                                     </del>		33		
	RWQCB			Waster																				
	Oilfield		Zalco	Disposal						Na-As		Metals -												
Jaco Oil	Ponds -		Laboratori		1504281-					Received-		As												
Company		[none]		(East)	02	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:14 Z504435		EPA 200.7	Received	Sodium	7440-23-5	FALSE	7500	70 mg/L	NA	10			SS		
		[]		Waste			., = ., = 525 25.00	.,,	,,							. 300	, 56/ E							
	RWQCB			Water																				
	Oilfield		Zalco	Disposal								No Prep -												
Jaco Oil	Ponds -		Laboratori		1504281-					NO3-		-	Nitrate as											
Company		[none]			02	Water	4/24/2015 13:00	4/24/2015 14:21	4/24/2015 21:59 Z504425		EPA 300.0		NO3	14797-55-8	FALSE	ND	1.86 20 mg/L	NA	10			MSS		
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal						Radium		***												
Jaco Oil	Ponds -		Laboratori		1504281-					226-		DEFAULT												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	5/6/2015 19:00	5/8/2015 9:40 Z506036	E903.0	E903.1	PREP ***	226	13982-63-3	FALSE	ND	3 pCi/L	NA	1			MCS		
				Waste																				
	RWQCB			Water																				
	Oilfield		Zalco	Disposal						Sr-As		Metals -												
Jaco Oil	Ponds -		Laboratori	Pond	1504281-					Received-	-	As												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:14 Z504435	E200.7	EPA 200.7	Received	Strontium	7440-24-6	FALSE	9.1	0.1 mg/L	NA	1	<u> </u>		SS		
									· · · · · · · · · · · · · · · · · · ·				-			-	· · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · · · ·			

	1	DDOJECT	- 1	CANADIEN	LADCANAD					MATTHOD	MATTHOD	DDEDNIAN		1	CLIDDOC	1			DII 115	CDIVELE	DECOV/				
CLIENT	DDOJECT	PROJECT		SAMPLEN			CAMPDATE	DDEDDATE	NADATE DATCH		METHOD	PREPNAN			SURROG		DI LIA	ITC DACIC		SPIKELE		DEDCI LOWEDCI	ANIALVCT	DCOLIDG LAIOTE	ANOTE
CLIENT	PROJECT	NUM	LABNAME		ID	MATRIX	SAMPDATE	PREPDATE A	ANADATE BATCH	CODE	NAME	E	ANALYTE	CASNUMBER	AIE	RESULT DL	. RL UN	ITS BASIS	ION	VEL	ERY UF	PPERCL LOWERCE	ANALYSI	PSOLIDS LNOTE	ANOTE
	DIMOCD			Waste																					
	RWQCB			Water																					
	Oilfield			Disposal								No Prep -	Total												
Jaco Oil	Ponds -		Laborator		1504281-					TDS-		Bench	Dissolved												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/29/2015 13:23	4/29/2015 13:28 Z504454	SM2540C	SM 2540C	Chem	Solids	NA	FALSE	17000	10 mg	/L NA		1			MSS		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal						Gross		***													
Jaco Oil	Ponds -		Laborator		1504281-	-				Alpha EPA		DEFAULT													
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	5/4/2015 8:00	5/5/2015 11:00 Z506036	900.0	SM 7110C	PREP ***	Alpha	NA	FALSE	ND	15 pC	/L NA		1			MCS		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal								Metals -	Hardness												
Jaco Oil	Ponds -		Laboratori	i Pond	1504281-	-				Hardness-	-	As	(as												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:14 Z504435	SM2340B	SM 2340B	Received	CaCO3)	NA	FALSE	660	2 mg	/L NA		1			SS		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal						Mg-As		Metals -													
Jaco Oil	Ponds -		Laboratori		1504281-	.				Received-		As	Magnesiu												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:14 Z504435	E200.7	EPA 200.7	Received	m	7439-95-4	FALSE	93	0.05 mg	/L NA		1			SS		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal						Mn-As		Metals -													
Jaco Oil	Ponds -		Laborator		1504281-					Received-		As	Mangane												
Company		[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:14 Z504435		EPA 200.7	Received	se	7439-96-5	FALSE	0.056	0.03 mg	/L NA		1			SS		
		[]	55,	Waste	-		7 - 7 - 5 - 5 - 5 - 5	,, = 0, = 0 = 0 = 0	1, 20, 2020 2012 200 100									, -							
	RWQCB			Water																					
	Oilfield		Zalco	Disposal								No Prep -													
Jaco Oil	Ponds -		Laboratori		1504281-					nH-		Bench													
Company		[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/24/2015 17:00	4/24/2015 17:00 Z504415	F150 1	EPA 150.1		рН	NA	FALSE	7.42	nH	Units NA		1			SAM		
Company	2Q2013	[HOHE]	C3, IIIC.	Waste	02	water	4/24/2013 13.00	4/24/2013 17.00	4/24/2013 17:00 2304413	L130.1	LI A 130.1	CHEIII	pri	IVA	TALSE	7.42	pi	OIIICS INA		1			JAIVI		
	RWQCB			Waster																					
	Oilfield		Zalco									EPA	2												
Jaco Oil	Ponds -		Laboratori	Disposal	1504281-					PNA-	SW846		Fluorobip												
Company		[nono]		(East)	02	Water	4/24/2015 13:00	4/27/2015 0:25	4/28/2015 9:31 Z504486			2210C_IAI	henyl	321-60-8	TRUE	4.05	ug	L NA		1 100	4.05	92	JMM		
Company	2Q2013	[none]	es, Inc.	-	02	vvatei	4/24/2013 13.00	4/2//2013 9.23	4/28/2013 9.31 2304480	30002700	8270C	3	пепу	321-00-8	INOL	4.03	ug	L INA		1 100	4.03	92	JIVIIVI		
	RWQCB			Waste																					
	Oilfield		7alaa	Water								ED A													
lana Oil			Zalco	Disposal	1504201					DNIA	CVAIGAG	EPA	A												
	Ponds -	[]	Laboratori		1504281- 02		4/24/2015 12:00	4/27/2015 0:25	4/28/2015 9:31 Z504486		SW846			83-32-9	FALCE	ND	0.5	/1 010		4			10.40.4		
Company	2Q2015	[none]	es, Inc.	` '	02	Water	4/24/2015 13:00	4/2//2015 9:25	4/28/2015 9:31 2504486	SW8270C	8270C	5	nene	83-32-9	FALSE	ND	0.5 10 ug	L NA		1			JMM		
	DVAVOCE			Waste																					
	RWQCB		701	Water								ED A													
lace O'	Oilfield			Disposal	1504304					DNIA	CMOAC	EPA	A 0 = = = 1 ·												
	Ponds -	[n 1	Laboratori		1504281-	Mata	4/24/2015 12 00	4/27/2015 0 25	4/20/2045 0:24 7504400			2210C_W	Acenapht		LVICE	ND	0.5	/1		1			10.40.4		
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	3VV82/UC	82/UC	3	hylene	208-96-8	FALSE	מט	0.5 10 ug	L NA		1			JMM		
	DIMOCE			Waste																					
	RWQCB		701	Water								ED A													
last C''	Oilfield			Disposal	1504224					DAVA	CMOAC	EPA	A 1												
Jaco Oil	Ponds -	f 3	Laboratori		1504281-	14/	4/24/2045 12 65	4/27/2045 2 25	4/20/2045 0 24 750462			3510C_M	Anthrace	120 12 7	E41.05	ND	0.7	/1		1			10.40.4		
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82/0C	82/UC	5	ne	120-12-7	FALSE	ND	0.7 10 ug	L NA		1			JMM		
	DV410 ==			Waste																					
	RWQCB		7-1	Water								ED.4	D												
	Oilfield			Disposal	480.00						C14:2:-	EPA	Benzo (a)												
Jaco Oil	Ponds -		Laboratori		1504281-	· [						3510C_M	anthracer												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW8270C	8270C	S	е	56-55-3	FALSE	ND	0.8 10 ug	L NA		1			JMM		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal								EPA													
	Ponds -		Laborator		1504281-	- [						3510C_M	Benzo (a)												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW8270C	8270C	S	pyrene	50-32-8	FALSE	ND	0.7 10 ug	L NA		1			JMM		

	1		. 1			_ 1						T	.1	T				<u> </u>		1		I	-		
C	DD 0 150T	PROJECT		SAMPLEN				20522475			METHOD	PREPNAM			SURROG				2 4 616		SPIKELE			2001120	
CLIENT	PROJECT	NUM	LABNAME		ID	MATRIX	SAMPDATE F	PREPDATE	ANADATE BATCH	CODE	NAME	E	ANALYTE	CASNUMBER	ATE	RESULT DL	. RL	UNITS	BASIS	ION	VEL	ERY UPPERCL LOWERC	L ANALYST	PSOLIDS LNOTE	ANOTE
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal								EPA	Benzo (b)												
Jaco Oil	Ponds -		Laborator	i Pond	1504281-	-				PNA-	SW846	3510C_M	fluoranth												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	ene	205-99-2	FALSE	ND	0.7	10 ug/L	NA	1			JMM		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal								EPA	Benzo												
Jaco Oil	Ponds -		Laborator		1504281-	-				PNA-	SW846	3510C_M													
Company		[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486			S	perylene	191-24-2	FALSE	ND	0.8	10 ug/L	NA	1			JMM		
company	-42015	[oe]	23,	Waste		Trute.	1,21,2020 20100	., ,	., 20, 2010 3.01 20000	01102700	02.00		peryiene	131 2 1 2	171232	110	0.0	10 46/2	147.				3141141		
	RWQCB			Water																					
	Oilfield		Zalco									EDA	Panza (k)												
lace Oil			Zalco	Disposal	1504281-					PNA-	CMOAC	EPA 3510C_M	Benzo (k)												
Jaco Oil	Ponds -	[1	Laborator				4/24/2015 12:00	4/27/2015 0.25	4/20/2015 0:21 7504406		SW846	2210C IN		207.00.0	FALCE	ND	0.0	10/1	N1.0	1			10.40.4		
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	5W8270C	. 8270C	5	ene	207-08-9	FALSE	ND	8.0	10 ug/L	NA	1			JMM		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal								EPA													
Jaco Oil	Ponds -		Laborator		1504281-	-				PNA-	SW846	3510C_M													
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	Chrysene	218-01-9	FALSE	ND	8.0	10 ug/L	NA	1			JMM		
				Waste																					
	RWQCB			Water									Dibenz												
	Oilfield		Zalco	Disposal								EPA	(a,h)												
Jaco Oil	Ponds -		Laborator	i Pond	1504281-	-				PNA-	SW846	3510C_M	anthracer												
Company		[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700		S		53-70-3	FALSE	ND	0.6	10 ug/L	NA	1			JMM		
, ,	-, -			Waste			, ,	, ,	, .,									- 5,					-		
	RWQCB			Water																					
	Oilfield		Zalco	Disposal								EPA													
Jaco Oil	Ponds -		Laborator		1504281-					PNA-	SW846		Fluoranth												
		[nono]					4/24/2015 12:00	4/27/2015 0.25	4/29/2015 0:21 7504496			2210C_IVI			FALCE	ND	0.0	10/1	NIA	1			10.40.4		
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	5W8270C	8270C	5	ene	206-44-0	FALSE	ND	0.8	10 ug/L	NA	1			JMM		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal								EPA													
Jaco Oil	Ponds -		Laborator		1504281-					PNA-	SW846	3510C_M													
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	Fluorene	86-73-7	FALSE	ND	0.5	10 ug/L	NA	1			JMM		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal								EPA	Indeno(1,												
	Ponds -		Laborator	i Pond	1504281-	-				PNA-	SW846	3510C_M	2,3-												
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486			S	cd)pyrene	193-39-5	FALSE	ND		10 ug/L	NA	1			JMM		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal								EPA													
Jaco Oil	Ponds -		Laborator	-	1504281-	_				PNA-	SW846	3510C_M	Naphthal												
Company		[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486			S		91-20-3	FALSE	ND		10 ug/L	NA	1			JMM		
		[	,	Waste			.,, _ 515 15.00	.,, _013 3.23	.,,			-								+ -					
	RWQCB			Waster																					
	Oilfield		Zalco	Disposal								EPA													
					1504304					DNIA	CIMOAC		Nitrober												
	Ponds -	[1	Laborator		1504281-		4/24/2045 42 00	4/27/2045 0 25	4/20/2045 0 24 7504400	PNA-	SW846	2210C IA	Nitrobenz		TDUE	4.4		11	NI A	_	400	4.4	0 10 40 4		
Company	ZUZU15	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82/00	82/UC	3	ene-d5	NA	TRUE	4.1		ug/L	NA	1	100	4.1 95	0 JMM		
				Waste																					
	RWQCB			Water																					
	Oilfield			Disposal								EPA													
Jaco Oil	Ponds -		Laborator		1504281-	-				PNA-	SW846	3510C_M													
Company	2Q2015	[none]	es, Inc.	(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW82700	8270C	S	rene	85-01-8	FALSE	ND	0.7	10 ug/L	NA	1			JMM		
				Waste																					
	RWQCB			Water																					
	Oilfield		Zalco	Disposal								EPA													
Jaco Oil	Ponds -		Laborator		1504281-	-				PNA-	SW846	3510C_M													
Company		[none]		(East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486			S		129-00-0	FALSE	ND	0.8	10 ug/L	NA	1			JMM		
		[]	,	,/	1	1	., = ., =010 10.00	., , _ 0 10 5 . 10	.,,	232.30		1	,,				5.5	49/ -	1				******	1	

			T			1			1		T										-1		1	
		PROJECT		EN LABSAMP							PREPNAM			SURROG						PIKELE RECO				
CLIENT	PROJECT	NUM	LABNAME AME	ID	MATRIX	SAMPDATE	PREPDATE A	ANADATE BATCH	CODE	NAME	E ANA	ALYTE C	ASNUMBER	ATE	RESULT	DL	RL UNITS	BASIS	ION V	EL ERY	UPPERCL	LOWERCL ANALYST PSOLIDS	LNOTE	ANOTE
			Waste																					
	RWQCB		Water																					
	Oilfield		Zalco Disposa	al							EPA													
Jaco Oil	Ponds -		Laboratori Pond	1504281-					PNA-	SW846	3510C_M Ter	phenyl-												
Compan	y 2Q2015	[none]	es, Inc. (East)	02	Water	4/24/2015 13:00	4/27/2015 9:25	4/28/2015 9:31 Z504486	SW8270C	8270C	S dl4	N	Α	TRUE	3	3	ug/L	NA	1	100	3 100	0 JMM		
			Waste																					
	RWQCB		Water																					
	Oilfield		Zalco Disposa	al					Radium		***													
Jaco Oil	Ponds -		Laboratori Pond	1504281-					228-EPA		DEFAULT Rad	dium-												
Compan		[none]	es, Inc. (East)		Water	4/24/2015 13:00	5/15/2015 16:30	5/18/2015 19:10 Z506036		EPA Ra-0	5 PREP *** 228		5262-20-1	FALSE	ND		2 pCi/L	NA	1			MCS		
	,	[	Waste			, ,	, , ,	, , ,									F - 7							
	RWQCB		Water																					
	Oilfield		Zalco Disposa	al					SiO2-As		Metals -													
Jaco Oil	Ponds -		Laboratori Pond	1504281-					Received-		As Silic	ra												
	y 2Q2015	[none]	es, Inc. (East)		Water	4/24/2015 13:00	4/28/2015 9:21	4/28/2015 13:16 Z504435		EPA 200	7 Received (SiO		63-18-69	FALSE	110	)	40 mg/L	NA	10			SS		
compan	, 202013	[none]	Waste	02	Water	1/2 1/2013 13:00	1,20,2013 3.21	1/20/2013 13:10 230 1133	2200.7	217(200.	, neceived (510	, ,	03 10 03	TALSE	110	,	10 1118/ 2	147.	10					
	RWQCB		Water																					
	Oilfield		Zalco Disposa	al							No Prep -													
Jaco Oil	Ponds -		Laboratori Pond	1504281-					SO4-		Instrumen Sulf	fato ac												
		[none]	es, Inc. (East)		Water	4/24/2015 13:00	4/24/2015 14:21	4/24/2015 21:59 Z504425		EPA 300.0			48-08-798	FALSE	110	0.31	5 mg/L	NA	10			MSS		
Compan	y 2Q2013	[HOHE]	Waste	02	vvalci	4/24/2013 13.00	7 7/24/2013 14.21	4/24/2013 21.33 2304423	L300.0	LFA 300.0	304	+ 1·	+0-00-730	IALJE	110	0.51	J IIIg/L	IVA	10			IVISS		
	RWQCB		Waster																					
	Oilfield		Zalco Disposa	.																				
lace Cil			· ·						TRPH-															
Jaco Oil	Ponds -	f 1	Laboratori Pond	1504281-	14/-1	4/24/2045 42 00	F /0 /2045 40 00	5 /0 /204 5 4 5 4 7 7 5 0 5 0 0 0		EDA 4664	EDA 3535 TDD		•	FALCE	ND		5					DIC.		
Compan	y 2Q2015	[none]	es, Inc. (East)	02	Water	4/24/2015 13:00	5/8/2015 10:00	5/8/2015 15:47 Z505093	£1664	EPA 1664	EPA 3535 TRP	PH N	А	FALSE	ND		5 mg/L	NA	1			BIG		
	DV4/OCS		Waste																					
	RWQCB		Water	.							***													
	Oilfield		Zalco Disposa																					
Jaco Oil	Ponds -		Laboratori Pond	1504281-					Uranium-		DEFAULT Ura													
Compan	y 2Q2015	[none]	es, Inc. (East)	02	Water	4/24/2015 13:00	5/13/2015 7:00	5/13/2015 16:51 Z506036	E908	E908	PREP *** (ug/	/L) 7	440-61-1	FALSE	ND		20 pCi/L	NA	1			MCS		

					T		T	T			1				DILLITIO			DECOVED.	T					
LABNAME LABSAMPID	QCTYPE MATRIX	PREPDATE A	ANADATE I	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATI	F RESULT	DL RL	LINITS	BASIS	DILUTIO N	SOURCEID	SOURCERES SPIKELEVEL	RECOVER	RPD UPP	ERCL LOWERC	RPDCI	ANALYST	PSOLIDS LNOTE	ANOTE
Zalco	QCTTE WATER	TREIDATE	NADAIL	BATCH	WETTOBCOBE	WETHODIVAIVE	TRETTVAIVE	AIVALITE	CASIVONIBLIC	JOHNOGATI	LINESOLI	DE INE	ONTS	DASIS		JOONCLID	JOONELNES STIRELEVEL		011	LINEE LOWLING	I III DCL	AIVALIST	130LIDS LIVOTE	ANOTE
Laboratories, Z504415-							No Prep -																	
Inc. DUP1	Duplicate Water	4/24/2015 17:00	4/24/2015 17:00	Z504415	Alkalinity-SM2320B	SM 2320B	Bench Chem	Total Alkalinity	NA	FALSE	180	0	10 mg/L	NA	1	1504275-01	1800		1.03		1	15 SAM		
Zalco Laboratories, Z504415-							No Dron																	
Inc. SRM1	Reference Water	4/24/2015 17:00	4/24/2015 17:00	7504415	Alkalinity-SM2320B	SM 2320B	No Prep - Bench Chem	Total Alkalinity	NA	FALSE	10	0	mg/L	NA	1		85.	4 117		119.44 79	.998	SAM		
Zalco	Treater trater	1,21,201317100	1,2 1,2015 17100	2501125	randimity Sinizszes	5 25255	Berreit Grieni	Total 7 illiamicy		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10		6/ 2				33.			115111	.550	57		
Laboratories, Z504415-							No Prep -																	
Inc. DUP1	Duplicate Water	4/24/2015 17:00	4/24/2015 17:00	Z504415	Alkalinity-SM2320B	SM 2320B	Bench Chem	Hydroxide (OH)	10035-10-6	FALSE	ND		10 mg/L	NA	1	1504275-01	0					L5 SAM		
Zalco Laboratories, Z504415-							No Prep -																	
Inc. DUP1	Duplicate Water	4/24/2015 17:00	4/24/2015 17:00	Z504415	Alkalinity-SM2320B	SM 2320B		Carbonate (CO3)	NA	FALSE	ND		10 mg/L	NA	1	1504275-01	0					L5 SAM		
Zalco	·				,			` `																
Laboratories, Z504415-							No Prep -	Bicarbonate																
Inc. DUP1 Zalco	Duplicate Water	4/24/2015 17:00	4/24/2015 17:00 2	Z504415	Alkalinity-SM2320B	SM 2320B	Bench Chem	(HCO3)		FALSE	180	0	10 mg/L	NA	1	1504275-01	1800		1.03		1	15 SAM		
Laboratories, Z504415-							No Prep -																	
Inc. BLK1	Blank Water	4/24/2015 17:00	4/24/2015 17:00	Z504415	Alkalinity-SM2320B	SM 2320B		Total Alkalinity	NA	FALSE	ND		10 mg/L	NA	1							SAM		
Zalco																								
Laboratories, Z504415-	Plank Water	4/24/2015 17:00	4/24/2015 17:00	7504415	Alkalinity CM422200	CM 2220B	No Prep -	Hydroxida (OLI)	10025 10 6	EALCE	ND		10 m~/	NA	4							CANA		
Inc. BLK1 Zalco	Blank Water	4/24/2015 17:00	4/24/2015 17:00	£3U4415	Alkalinity-SM2320B	SIVI ZSZUB	bench Chem	Hydroxide (OH)	10035-10-6	FALSE	טא		10 mg/L	NA	1							SAM		
Laboratories, Z504415-							No Prep -																	
Inc. BLK1	Blank Water	4/24/2015 17:00	4/24/2015 17:00	Z504415	Alkalinity-SM2320B	SM 2320B		Carbonate (CO3)	NA	FALSE	ND		10 mg/L	NA	1							SAM		
Zalco		T	$\top$				No December	Disput							1									
Laboratories, Z504415- Inc. BLK1	Blank Water	4/24/2015 17:00	4/24/2015 17:00	7504415	Alkalinity-SM2320B	SM 2320B	No Prep - Bench Chem	Bicarbonate (HCO3)		FALSE	ND		10 mg/L	NA	1							SAM		
Zalco	Diank Water	4/24/2013 17:00	4,24,2013 17.00	2304413	Tilkaminey Sivi2S20B	3111 23200	benen enem	(Heds)		TALSE	IND		10 1116/ 2	10/1	-							57 (141		+
Laboratories, Z504435-	Matrix				B-As Received-		Metals - As																	
Inc. MS1	Spike Water	4/28/2015 9:21	4/28/2015 16:26	Z504435	E200.7	EPA 200.7	Received	Boron	7440-42-8	FALSE	0.8	7 (	).1 mg/L	NA	1	1504300-01	ND	1 86.6		130	70	SS		
Zalco Laboratories, Z504435-					B-As Received-		Metals - As																	
Inc. DUP3	Duplicate Water	4/28/2015 9:21	4/28/2015 13:25	Z504435	E200.7	EPA 200.7	Received	Boron	7440-42-8	FALSE	0.9	6 (	).1 mg/L	NA	1	1504302-01	1		4.95		2	20 SS		
Zalco																								
Laboratories, Z504435-					B-As Received-		Metals - As																	
Inc. DUP1 Zalco	Duplicate Water	4/28/2015 9:21	4/28/2015 12:31	Z504435	E200.7	EPA 200.7	Received	Boron	7440-42-8	FALSE	0.7	3 (	).1 mg/L	NA	1	1504273-01	0.67		7.56			20 SS		
Laboratories, Z504435-					B-As Received-		Metals - As																	
Inc. DUP2	Duplicate Water	4/28/2015 9:21	4/28/2015 12:36	Z504435	E200.7	EPA 200.7	Received	Boron	7440-42-8	FALSE	0.1	1 (	).1 mg/L	NA	1	1504295-01	0.12		6.76		2	20 SS		
Zalco							_																	
Laboratories, Z504435- Inc. MSD1	Matrix	4/29/2015 0:21	4/28/2015 12:26	7504425	B-As Received- E200.7	EPA 200.7	Metals - As	Doron	7440-42-8	FALCE	0.8		) 1 mg/l	NA	1	1504300-01	ND	1 87.7	1.2	130	70	20 SS		
Inc. MSD1 Zalco	Spike Dup Water	4/28/2015 9:21	4/28/2015 12:26 2	2504435	E200.7	EPA 200.7	Received	Boron	7440-42-8	FALSE	0.8	8 (	).1 mg/L	NA	1	1504300-01	ND	87.7	1.3	130	70 2	20 55		+
Laboratories, Z504435-	Calibration				B-As Received-		Metals - As																	
Inc. CCV1	Check Water	4/28/2015 9:21	4/28/2015 12:08	Z504435	E200.7	EPA 200.7	Received	Boron	7440-42-8	FALSE	3.	6	mg/L	NA	1			4 90.5		200	0	SS		
Zalco Laboratories, Z504435-					P. As Possinad		Motals As																	
Inc. BSD1	LCS Dup Water	4/28/2015 9:21	4/28/2015 12:20	Z504435	B-As Received- E200.7	EPA 200.7	Metals - As Received	Boron	7440-42-8	FALSE	1.	1 1	).1 mg/L	NA	1			1 109	19.4	120	80 2	20 SS		
Zalco	22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	.,,,	,,10 12.20	2200							1.	<del>    `</del>						133						+
Laboratories,					B-As Received-		Metals - As																	
Inc. Z504435-BS Zalco	1 LCS Water	4/28/2015 9:21	4/28/2015 12:11	Z504435	E200.7	EPA 200.7	Received	Boron	7440-42-8	FALSE	0.	9 (	).1 mg/L	NA	1			1 89.6		120	80	SS		
Laboratories, Z504435-					B-As Received-		Metals - As																	
Inc. BLK1	Blank Water	4/28/2015 9:21	4/28/2015 16:26	Z504435		EPA 200.7	Received	Boron	7440-42-8	FALSE	ND		).1 mg/L	NA	1							SS		
Zalco																								
Laboratories, Z504435- Inc. SRM1	Reference Water	A/28/2015 0:21	4/28/2015 16:48	750//25	B-As Received-	EPA 200.7	Metals - As Received	Boron	7440-42-8	FALSE	0.9	2	ma/I	NA	1			1 91.8		110	90	SS		
Zalco	vereience Maret	4/20/2013 9.21	+/20/2013 10:48 /	LJU4433	2200.7	LFA 200./	neceived	501011	/++U-4Z-0	FALSE	0.9	_	mg/L	INA	1			1 91.8		110	30	JJ		
Laboratories, Z504435-	Matrix				Ba-As Received-		Metals - As																	
Inc. MSD1	Spike Dup Water	4/28/2015 9:21	4/28/2015 12:26	Z504435	E200.7	EPA 200.7	Received	Barium	7440-39-3	FALSE	0.98	4 (	).1 mg/L	NA	1	1504300-01	0.0483	1 93.5	0.0471	130	70 2	20 SS		
Zalco					Pa Ac Pacair := 1		Motals A-																	
Laboratories, Z504435- Inc. DUP3	Duplicate Water	4/28/2015 9:21	4/28/2015 13:25	Z504435	Ba-As Received- E200.7	EPA 200.7	Metals - As Received	Barium	7440-39-3	FALSE	0.53	1 1	).1 mg/L	NA	1	1504302-01	0.536		0.928			20 SS		
Zalco	7, 72.0	,,	, .,								0.55	+ + - `						1						+
Laboratories, Z504435-					Ba-As Received-		Metals - As																	
Inc. DUP2	Duplicate Water	4/28/2015 9:21	4/28/2015 12:36	Z504435	E200.7	EPA 200.7	Received	Barium	7440-39-3	FALSE	0.0045	5 (	).1 mg/L	NA	1	1504295-01	0.0056	1	20.5		1	20 SS		Z-05
Zalco Laboratories, Z504435-	Matrix				Ba-As Received-		Metals - As																	
Inc. MS1	Spike Water	4/28/2015 9:21	4/28/2015 16:26	Z504435		EPA 200.7		Barium	7440-39-3	FALSE	0.98	4 (	).1 mg/L	NA	1	1504300-01	0.0483	1 93.6		130	70	SS		
		.,,,	, = 0, = 0.20		1						5.50		- 10	1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		33.0	I			1		

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LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	RESULT DL	RL UNITS	BASIS	DILUTIO	SOURCEID SOL	JRCERES		ECOVER RPD	UPPERC	L LOWER	CL RPDCL	ANALYST PSOLIDS	LNOTE ANOTE
Zalco																								
Laboratories,				. /22 /22 / 2 2 4	. /20 /20	Ba-As Received-		Metals - As					0.4							. =0		_		
Inc. Zalco	DUP1	Duplicate	Water	4/28/2015 9:21	4/28/2015 12:31 Z504435	E200.7	EPA 200.7	Received	Barium	7440-39-3	FALSE	0.0952	0.1 mg/L	NA	1	1504273-01	0.0935			1.79		2	0 SS	
Laboratories,	Z504435-					Ba-As Received-		Metals - As																
Inc.	BSD1	LCS Dup	Water	4/28/2015 9:21	4/28/2015 12:20 Z504435	E200.7	EPA 200.7	Received	Barium	7440-39-3	FALSE	1.02	0.1 mg/L	NA	1	L		1	102	2.7	120	80 2	0 SS	
Zalco	7504425					Do As Dossivad		Motols As																
Laboratories, Inc.		Reference	Water	4/28/2015 9:21	4/28/2015 16:48 Z504435	Ba-As Received- E200.7	EPA 200.7	Metals - As Received	Barium	7440-39-3	FALSE	1.04	mg/L	NA	1			1	104		110	90	SS	
Zalco	-				, , , , , , , , , , , , , , , , , , , ,																			
Laboratories,						Ba-As Received-		Metals - As																
Inc. Zalco	Z504435-BS1	LCS	Water	4/28/2015 9:21	4/28/2015 12:11 Z504435	E200.7	EPA 200.7	Received	Barium	7440-39-3	FALSE	0.993	0.1 mg/L	NA	1	L		1	99.3		120	80	SS	
Laboratories,	Z504435-					Ba-As Received-		Metals - As																
Inc.		Blank	Water	4/28/2015 9:21	4/28/2015 16:26 Z504435	E200.7	EPA 200.7	Received	Barium	7440-39-3	FALSE	ND	0.1 mg/L	NA	1	L							SS	
Zalco	7504425					Co As Dassived		14-t-l- 1-																
Laboratories, Inc.		Blank	Water	4/28/2015 9:21	4/28/2015 16:26 Z504435	Ca-As Received- E200.7	EPA 200.7	Metals - As Received	Calcium	7440-70-2	FALSE	ND	0.05 mg/L	NA	1								SS	
Zalco	DEIXE	Diam	Trace.	1,20,2013 3.21	1,20,2010 10:20 200 1:30	220017	2.712007	necerred.	Carciani	7110702	171202		0103 1118/ 2											
Laboratories,						Ca-As Received-		Metals - As																
Inc.	Z504435-BS1	LCS	Water	4/28/2015 9:21	4/28/2015 12:11 Z504435	E200.7	EPA 200.7	Received	Calcium	7440-70-2	FALSE	8	0.05 mg/L	NA	1	L		10	80		120	80	SS	
Zalco Laboratories,	Z504435-					Ca-As Received-		Metals - As																
Inc.		Duplicate	Water	4/28/2015 9:21	4/28/2015 12:31 Z504435		EPA 200.7	Received	Calcium	7440-70-2	FALSE	60.7	0.05 mg/L	NA	1	1504273-01	57.1			5.99		2	0 SS	
Zalco																								
Laboratories,	Z504435- BSD1	LCS Dup	Mator	4/29/2015 0:21	4/28/2015 12:20 Z504435	Ca-As Received- E200.7	EPA 200.7	Metals - As	Calcium	7440-70-2	FALSE	10.2	0.05 mg/l	NA				10	102	24.1	120	80 2	0 SS	Z-04
Inc. Zalco	בעכם	LC3 Dup	water	4/28/2015 9.21	4/28/2015 12:20 2504435	E200.7	EPA 200.7	Received	Calcium	7440-70-2	FALSE	10.2	0.05 mg/L	INA	-	L		10	102	24.1	120	80 2	0 33	2-04
Laboratories,	Z504435-	Matrix				Ca-As Received-		Metals - As																
Inc.	MS1	Spike	Water	4/28/2015 9:21	4/28/2015 16:26 Z504435	E200.7	EPA 200.7	Received	Calcium	7440-70-2	FALSE	21	0.05 mg/L	NA	1	1504300-01	14.4	10	65.8		130	70	SS	QM-07
Zalco Laboratories,	7504425					Ca-As Received-		Metals - As																
Inc.		Duplicate	Water	4/28/2015 9:21	4/28/2015 13:25 Z504435		EPA 200.7	Received	Calcium	7440-70-2	FALSE	117	0.05 mg/L	NA	1	1504302-01	120			2.78		2	0 SS	
Zalco				1, 20, 2020 0122	,, =0, =0 =0 =0 =0 =0 =0 =0 =0 =0 =0 =0 =0 =0																	_		
Laboratories,						Ca-As Received-		Metals - As																
Inc.	DUP2	Duplicate	Water	4/28/2015 9:21	4/28/2015 12:36 Z504435	E200.7	EPA 200.7	Received	Calcium	7440-70-2	FALSE	1.33	0.05 mg/L	NA	1	1 1504295-01	1.47			9.79		2	0 SS	
Zalco Laboratories,	Z504435-	Matrix				Ca-As Received-		Metals - As																
Inc.		Spike Dup	Water	4/28/2015 9:21	4/28/2015 12:26 Z504435		EPA 200.7	Received	Calcium	7440-70-2	FALSE	20.8	0.05 mg/L	NA	1	1504300-01	14.4	10	64	0.831	130	70 2	0 SS	QM-07
Zalco																								
Laboratories,		Calibration		4/29/2015 0:21	4/28/2015 12:08 Z504435	Ca-As Received- E200.7	EPA 200.7	Metals - As	Calcium	7440-70-2	FALSE	48.2	ma/l	NA				50	96.4		110	90	SS	
Inc. Zalco	CCVI	Check	Water	4/28/2015 9.21	4/26/2015 12:06 2504435	E200.7	EPA 200.7	Received	Calcium	7440-70-2	FALSE	46.2	mg/L	INA	-	L		50	90.4		110	90	33	
Laboratories,	Z504441-																							
Inc.	DUP1	Duplicate	Water	4/28/2015 13:40	4/28/2015 15:03 Z504441	CAM-Met-Ag-6010	SW846 6010B	EPA 3010A	Silver	7440-22-4	FALSE	ND	0.02 mg/L	NA	1	1504262-03 ND						2	0 SS	
Zalco Laboratories,	7504441																							
Inc.		Blank	Water	4/28/2015 13:40	4/28/2015 14:53 Z504441	CAM-Met-Ag-6010	0 SW846 6010B	EPA 3010A	Silver	7440-22-4	FALSE	ND	0.02 mg/L	NA	1								SS	
Zalco				, 2,2525 25.10	, ., 233.141																		-	
Laboratories,		Calibration			. ( (- )																			
Inc.	CCV1	Check	Water	4/28/2015 13:40	4/29/2015 9:54 Z504441	CAM-Met-Ag-6010	SW846 6010B	EPA 3010A	Silver	7440-22-4	FALSE	0.502	mg/L	NA	1	L		0.5	100		110	90	SS	
Zalco Laboratories,	Z504441-																							
Inc.		Reference	Water	4/28/2015 13:40	4/28/2015 14:42 Z504441	CAM-Met-Ag-6010	SW846 6010B	EPA 3010A	Silver	7440-22-4	FALSE	0.145	mg/L	NA	1	ı İ		0.125	116		110	90	SS	Z-06
Zalco																								
Laboratories,		LCS Dup	Water.	A/28/2015 12:40	4/28/2015 14:56 Z504441	CAM-Mat- Ag 6010	) SW846 6010B	EPA 3010A	Silver	7440-22-4	FALSE	0.484	0.02 mg/L	NA				0.5	96.8	219	120	80 2	0 SS	
Zalco	דחכם	LC3 Dup	water	4/20/2015 15:40	4,20,2013 14.30 2304441	CAIVI-IVIEL-Ag-0010	344040 00108	EPA 3010A	Silvei	/440-22-4	FALSE	0.464	U.UZ IIIg/L	INA	1			0.5	30.0	J. 213	120	ου Z	.0 33	
Laboratories,																								
Inc.	Z504441-BS1	LCS	Water	4/28/2015 13:40	4/28/2015 14:55 Z504441	CAM-Met-Ag-6010	SW846 6010B	EPA 3010A	Silver	7440-22-4	FALSE	0.485	0.02 mg/L	NA	1	L		0.5	97		120	80	SS	
Zalco	7504441	Matrix																						
Laboratories, Inc.		Matrix Spike Dup	Water	4/28/2015 13:40	4/28/2015 15:07 Z504441	CAM-Met-Ag-6010	SW846 6010B	EPA 3010A	Silver	7440-22-4	FALSE	0.489	0.02 mg/L	NA	1	L 1504262-03 ND		0.5	97.8	0.849	125	75 2	0 SS	
Zalco		3F2 2 4P		.,,,	, = 1, = 1 = 1 = 1 = 1	2	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				252	555			1	22.22.03.10		0.5						
Laboratories,		Matrix																						
Inc.	MS1	Spike	Water	4/28/2015 13:40	4/28/2015 15:05 Z504441	CAM-Met-Ag-6010	SW846 6010B	EPA 3010A	Silver	7440-22-4	FALSE	0.485	0.02 mg/L	NA	1	1504262-03 ND		0.5	97		125	75	SS	
Zalco Laboratories,	Z504441-	Matrix																						
Inc.			Water	4/28/2015 13:40	4/28/2015 15:05 Z504441	Cam-Met-As-6010	SW846 6010B	EPA 3010A	Arsenic	7440-38-2	FALSE	0.397	0.02 mg/L	NA	1	1504262-03 ND		0.5	79.3		125	75	SS	
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LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	RESULT DL	RL UNITS	BASIS	DILUTIO N	SOURCEID SOURCERES		RECOVER RP	D L	JPPERCL	LOWERCL	RPDCL /	ANALYST PSOLIDS	LNOTE ANOTE
Zalco Laboratories,	Z504441-	Matrix																						
Inc.		Spike Dup	Water	4/28/2015 13:40	4/28/2015 15:07 Z504441	Cam-Met-As-6010	SW846 6010B	EPA 3010A	Arsenic	7440-38-2	FALSE	0.38	0.02 mg/L	NA	1	1504262-03 ND	0.5	76.1	4.16	125	75	20 5	SS	
Zalco Laboratories,	Z504441-																							
Inc. Zalco	BSD1	LCS Dup	Water	4/28/2015 13:40	4/28/2015 14:56 Z504441	Cam-Met-As-6010	SW846 6010B	EPA 3010A	Arsenic	7440-38-2	FALSE	0.384	0.02 mg/L	NA	1		0.5	76.7	6.66	120	80	20 5	SS	Z-04
Laboratories,																								
Inc. Zalco	Z504441-BS1	LCS	Water	4/28/2015 13:40	4/28/2015 14:55 Z504441	Cam-Met-As-6010	SW846 6010B	EPA 3010A	Arsenic	7440-38-2	FALSE	0.41	0.02 mg/L	NA	1		0.5	82		120	80	9	SS	
Laboratories,																								
Inc. Zalco	BLK1	Blank	Water	4/28/2015 13:40	4/28/2015 14:53 Z504441	Cam-Met-As-6010	SW846 6010B	EPA 3010A	Arsenic	7440-38-2	FALSE	ND	0.02 mg/L	NA	1							5	SS	
Laboratories,		Calibration		4/20/2015 12:40	4/20/2015 0:54 7504444	C M-+ A- C010	CMOAC COAOD	EDA 2010A	A	7440 20 2	FALCE	0.000	/1	NI A	1			00.0		110	00		56	
Inc. Zalco	CCV1	Check	Water	4/28/2015 13:40	4/29/2015 9:54 Z504441	Cam-Met-AS-6010	SW846 6010B	EPA 3010A	Arsenic	7440-38-2	FALSE	0.999	mg/L	NA	1		1	99.9		110	90		SS	
Laboratories, Inc.		Duplicate	W/ater	A/28/2015 13·A0	4/28/2015 15:03 Z504441	Cam-Met-As-6010	SW846 6010B	EPA 3010A	Arsenic	7440-38-2	FALSE	ND	0.02 mg/L	NA	1	1504262-03 ND						20 5	22	
Zalco		Duplicate	water	4/28/2013 13:40	4/26/2013 13.03 2304441	Calli-Met-A3-0010	3W840 0010B	LFA 3010A	Arsenic	7440-38-2	TALSE	ND	0.02 mg/L	INA	1	1304202-03 ND						20.	33	
Laboratories, Inc.		Reference	Water	4/28/2015 13:40	4/28/2015 14:42 Z504441	Cam-Met-As-6010	SW846 6010B	EPA 3010A	Arsenic	7440-38-2	FALSE	1.13	mg/L	NA	1		1	113		110	90		SS	Z-06
Zalco				, , , , , , , , , , , , , , , , , , , ,	, , , , , ,								Or .											
Laboratories, Inc.	Z504441-BS1	LCS	Water	4/28/2015 13:40	4/28/2015 14:55 Z504441	Cam-Met-Ba-6010	SW846 6010B	EPA 3010A	Barium	7440-39-3	FALSE	0.44	0.1 mg/L	NA	1		0.5	87		120	80		SS	
Zalco Laboratories,	7504441	Matrix																						
Inc.		Spike Dup	Water	4/28/2015 13:40	4/28/2015 15:07 Z504441	Cam-Met-Ba-6010	SW846 6010B	EPA 3010A	Barium	7440-39-3	FALSE	0.44	0.1 mg/L	NA	1	1504262-03 0.02	0.5	84.5	0.0373	125	75	20 5	SS	
Zalco Laboratories,	Z504441-	Calibration																						
Inc.			Water	4/28/2015 13:40	4/29/2015 9:54 Z504441	Cam-Met-Ba-6010	SW846 6010B	EPA 3010A	Barium	7440-39-3	FALSE	1.9	mg/L	NA	1		2	94.7		110	90	9	SS	
Zalco Laboratories,	Z504441-																							
Inc.	SRM1	Reference	Water	4/28/2015 13:40	4/28/2015 14:42 Z504441	Cam-Met-Ba-6010	SW846 6010B	EPA 3010A	Barium	7440-39-3	FALSE	1	mg/L	NA	1		1	105		110	90		SS	
Zalco Laboratories,	Z504441-																							
Inc. Zalco	BLK1	Blank	Water	4/28/2015 13:40	4/28/2015 14:53 Z504441	Cam-Met-Ba-6010	SW846 6010B	EPA 3010A	Barium	7440-39-3	FALSE	ND	0.1 mg/L	NA	1							5	SS	
Laboratories,																								
Inc. Zalco	DUP1	Duplicate	Water	4/28/2015 13:40	4/28/2015 15:03 Z504441	Cam-Met-Ba-6010	SW846 6010B	EPA 3010A	Barium	7440-39-3	FALSE	0.021	0.1 mg/L	NA	1	1504262-03 0.02			7.11			20 5	SS	
Laboratories,		165.5	<b>NA</b> /-1	4/20/2045 42 40	4/20/2045 44 56 7504444	C M D. COMO	CIAIDAC COADD	EDA 2040A	5	7440 20 2	FALCE	0.44	0.4				0.5	07.4	0.447	420	00	20/		
Inc. Zalco	BSD1	LCS Dup	Water	4/28/2015 13:40	4/28/2015 14:56 Z504441	Cam-Met-Ba-6010	SW846 6010B	EPA 3010A	Barium	7440-39-3	FALSE	0.44	0.1 mg/L	NA	1		0.5	87.1	0.147	120	80	20 5	55	
Laboratories,		Matrix Spike	Water	4/28/201E 12:40	4/28/2015 15:05 Z504441	Cam Mot Ba 6010	CW/946 6010B	EPA 3010A	Parium	7440-39-3	FALSE	0.44	0.1 mg/L	NA	1	1504262-03 0.02	0.5	84.6		125	75		SS	
Zalco		эріке	water	4/28/2013 13.40	4/26/2013 13.03 2304441	Calli-Met-Ba-0010	3W640 0010B	EPA 3010A	Dallulli	7440-39-3	FALSE	0.44	U.I IIIg/L	INA	1	1304202-03 0.02	. 0.3	84.0		123	/3		55	
Laboratories,		Duplicate	Water	4/28/2015 13:40	4/28/2015 15:03 Z504441	Cam-Met-Be-6010	SW846 6010B	EPA 3010A	Bervllium	7440-41-7	FALSE	0.000384	0.01 mg/L	NA	1	1504262-03 0.0000339			168			20 5	ss	Z-05
Zalco		.,		, ,, ,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,, : : : : : : : : : : : : : : : : :	.,			. ,							2.22.23333								
Laboratories, Inc.		Reference	Water	4/28/2015 13:40	4/28/2015 14:42 Z504441	Cam-Met-Be-6010	SW846 6010B	EPA 3010A	Beryllium	7440-41-7	FALSE	1.04	mg/L	NA	1		1	104		110	90		SS	
Zalco Laboratories,	7504441-																							
Inc.		Blank	Water	4/28/2015 13:40	4/28/2015 14:53 Z504441	Cam-Met-Be-6010	SW846 6010B	EPA 3010A	Beryllium	7440-41-7	FALSE	ND	0.01 mg/L	NA	1							9	SS	
Zalco Laboratories,	Z504441-	Matrix																						
Inc.		Spike	Water	4/28/2015 13:40	4/28/2015 15:05 Z504441	Cam-Met-Be-6010	SW846 6010B	EPA 3010A	Beryllium	7440-41-7	FALSE	0.417	0.01 mg/L	NA	1	1504262-03 0.0000339	0.5	83.3		125	75		SS	
Zalco Laboratories,	Z504441-	Calibration																						
Inc.			Water	4/28/2015 13:40	4/29/2015 9:54 Z504441	Cam-Met-Be-6010	SW846 6010B	EPA 3010A	Beryllium	7440-41-7	FALSE	0.48	mg/L	NA	1		0.5	96		110	90	9	SS	
Zalco Laboratories,																								
Inc. Zalco	Z504441-BS1	LCS	Water	4/28/2015 13:40	4/28/2015 14:55 Z504441	Cam-Met-Be-6010	SW846 6010B	EPA 3010A	Beryllium	7440-41-7	FALSE	0.422	0.01 mg/L	NA	1		0.5	84.3		120	80	9	SS	
Laboratories,				1/00/5	. /		014045						0.51					_						
Inc. Zalco	BSD1	LCS Dup	Water	4/28/2015 13:40	4/28/2015 14:56 Z504441	Cam-Met-Be-6010	SW846 6010B	EPA 3010A	Beryllium	7440-41-7	FALSE	0.42	0.01 mg/L	NA	1		0.5	84	0.4	120	80	20 5	SS	
Laboratories,		Matrix	Mot	4/20/2045 42 12	4/29/2045 45:07 750444	Com M-+ D : CO42	CIMPAC COACD	EDA 20404	Don di:	7440 44 7	FALCE	0.422	0.04 //	NA		1504262 02 0 0000000	2.5	04.5	1.35	435	<del></del> -	30		
inc.	MSD1	Spike Dup	vvater	4/28/2015 13:40	4/28/2015 15:07 Z504441	cam-iviet-Be-6010	5W846 6010B	EPA 3010A	Beryllium	7440-41-7	FALSE	0.422	0.01 mg/L	NA	1	1504262-03 0.0000339	0.5	84.5	1.35	125	75	20 5	>>	

AND	LNOTE ANOTE
Discontinues	
Description   Control	Z-06
The Control of Contr	Z-06
Independent	Z-06
Column   C	Z-06
200   200	Z-06
Fig.   Start   Marker   Mark	Z-06
Table   Controlled   Controll	Z-06
Decided   Proc.   Control   Contro	
Mode	
Designation	
Dec   Dep	
December   Color   C	
Laboratories, Z90441- Inc.    St.	
No.   SUL   Blunk   Water   4/28/2015 13-40	
Zalco Laboratories, 2504441- Inc.  S501  CS Dup Water  4/28/2015 13:40  4/	+
Inc.   RSD1   LCS Dup   Water   4/28/2015 13:40   4/28/2015 13:50   5/20441   Cam-Met-Co-6010   5/846 60108   FPA 3010A   Cobalt   7440-48-4   FALSE   0.43   0.1 mg/L   NA	1
Take abortatories, Z50441- Check Water 4/28/2015 13-40 4/29/2015 9-54 250441 Cam-Met-Co-6010 SW846 60108 EPA 3010A Cadmium 7440-48-4 FALSE 0.43 0.1 mg/L NA 1 1504262-03 0.000085 0.5 88-3 125 75 SS Call Laboratories, Z50441- Inc. MS1 Spike Dup Water 4/28/2015 13-40 4/28/2015 13-40 4/28/2015 13-40 4/28/2015 13-40 Spike Dup Water 4/28/2015 13-40 A/28/2015 13-50 Spike	
Laboratories, 2504441- Inc. CV1 Cheek Water 4/28/2015 13:40 4/	+
Inc. CCV1 Check Water 4/28/2015 13:40 4/29/2015 9:54 2504441 Cam-Met-Co-6010 SW846 60108 EPA 3010A Cadmium 7440-43-9 FALSE 0.487 mg/L NA 1 0.05 97.4 110 90 SS Cadmium 7440-48-9 FALSE 0.487 mg/L NA 1 1504262-03 0.000085 0.5 85.3 125 75 SS Cadmium 7440-48-4 FALSE 0.43 0.1 mg/L NA 1 1504262-03 0.000085 0.5 85.3 125 75 SS Cadmium 7440-48-4 FALSE 0.43 0.1 mg/L NA 1 1504262-03 0.000085 0.5 85.3 125 75 SS Cadmium 7440-48-4 FALSE 0.43 0.1 mg/L NA 1 1504262-03 0.000085 0.5 85.3 125 75 SS Cadmium 7440-48-4 FALSE 0.43 0.1 mg/L NA 1 1504262-03 0.000085 0.5 86.9 1.89 125 75 20 SS Cadmium 7440-48-4 FALSE 0.43 0.1 mg/L NA 1 1504262-03 0.000085 0.5 86.8 0.94 120 80 20 SS Cadmium 7440-48-4 FALSE 0.43 0.1 mg/L NA 1 1504262-03 0.000085 0.5 86.8 0.94 120 80 20 SS Cadmium 7440-48-4 FALSE 0.43 0.1 mg/L NA 1 1504262-03 0.000085 0.5 86.8 0.94 120 80 20 SS Cadmium 7440-48-4 FALSE 0.43 0.1 mg/L NA 1 1504262-03 0.000085 0.5 86.8 0.94 120 80 20 SS Cadmium 7440-48-4 FALSE 0.43 0.1 mg/L NA 1 1504262-03 0.000085 0.5 86.8 0.94 120 80 20 SS Cadmium 7440-48-4 FALSE 0.43 0.1 mg/L NA 1 1504262-03 0.000085 0.5 86.8 0.94 120 80 20 SS Cadmium 7440-48-4 FALSE 0.43 0.1 mg/L NA 1 0.5 86.8 0.94 120 80 20 SS Cadmium 7440-48-4 FALSE 0.44 0.1 mg/L NA 1 1504262-03 0.000085 0.5 87.6 120 80 SS Cadmium 7440-48-4 FALSE 0.44 0.1 mg/L NA 1 1504262-03 0.000085 0.5 87.6 120 80 SS Cadmium 7440-48-4 FALSE 0.44 0.1 mg/L NA 1 1504262-03 0.000085 0.5 87.6 120 80 SS Cadmium 7440-48-4 FALSE ND 0.1 mg/L NA 1 1504262-03 0.000085 0.5 87.6 120 80 SS Cadmium 7440-48-4 FALSE ND 0.1 mg/L NA 1 1504262-03 0.000085 0.5 87.6 120 80 SS Cadmium 7440-48-4 FALSE ND 0.1 mg/L NA 1 1504262-03 0.000085 0.5 87.6 120 80 SS Cadmium 7440-48-4 FALSE ND 0.1 mg/L NA 1 1504262-03 0.000085 0.5 87.6 120 80 SS Cadmium 7440-48-4 FALSE ND 0.1 mg/L NA 1 1504262-03 0.000085 0.5 87.6 120 80 SS Cadmium 7440-48-4 FALSE ND 0.1 mg/L NA 1 1504262-03 0.000085 0.5 87.6 120 80 SS Cadmium 7440-48-4 FALSE ND 0.1 mg/L NA 1 1504262-03 0.000085 0.5 87.6 120 80 SS Cadmium 7440-48-4 FALSE ND 0.1 mg/L NA 1 1504262-03 0.00	
Raboratories   Rabo	
Inc. MS1 Spike Water 4/28/2015 13:40 4/28/2015	
Zaico Laboratories, Z504441- Matrix Inc. MSD1 Spike Dup Water 4/28/2015 13:40	
Laboratories, Z504441- MSD1 Spike Dup Water 4/28/2015 13:40 4/	
Zaico Laboratories, Z504441- Inc. BSD1 LCS Dup Water 4/28/2015 13:40 4/28/2015	
Laboratories, Z504441- Inc. 85D1 LCS Dup Water 4/28/2015 13:40 4/28/2015 13:40 4/28/2015 14:55 Z504441 Cam-Met-Co-6010 SW846 60108 EPA 3010A Cobalt 7440-48-4 FALSE 0.43 0.1 mg/L NA 1 0.5 86.8 0.94 120 80 20 SS	
Inc.   BSD1   LCS Dup   Water   4/28/2015 13:40   4/28/2015 13:4	
Zalco Laboratories, Inc.	
Laboratories, Inc. Z504441-BS1 LCS Water 4/28/2015 13:40 4/28/	
Zalco Laboratories, Z504441- Inc. DUP1 Duplicate Water 4/28/2015 13:40 4/28/2015 13:40 4/28/2015 15:03 Z504441 Cam-Met-Co-6010 SW846 6010B EPA 3010A Cobalt 7440-48-4 FALSE ND 0.1 mg/L NA 1 1504262-03 0.000085 20 SS 204441- Calibration Inc. CCV1 Check Water 4/28/2015 13:40 4/29/2015 9:54 Z504441 Cam-Met-Co-6010 SW846 6010B EPA 3010A Cobalt 7440-48-4 FALSE 1.9 mg/L NA 1 1 2 2 95.8 110 90 SS 20 S	
Laboratories, Z504441- Inc. DUP1 Duplicate Water 4/28/2015 13:40 4/28/2015 13:40 4/28/2015 15:03 Z504441 Cam-Met-Co-6010 SW846 6010B EPA 3010A Cobalt 7440-48-4 FALSE ND 0.1 mg/L NA 1 1504262-03 0.000085	
Inc. DUP1 Duplicate Water 4/28/2015 13:40 4/28/2015 13:40 4/28/2015 13:40 4/28/2015 13:40 4/28/2015 13:40 4/28/2015 13:40 4/28/2015 13:40 4/29/2015 9:54 Z504441 Cam-Met-Co-6010 SW846 6010B EPA 3010A Cobalt 7440-48-4 FALSE ND 0.1 mg/L NA 1 1504262-03 0.000085	
Zalco Laboratories, Z504441- Calibration Inc. CCV1 Check Water 4/28/2015 13:40 4/29/2015 9:54 Z504441 Cam-Met-Co-6010 SW846 6010B EPA 3010A Cobalt 7440-48-4 FALSE 1.9 mg/L NA 1 2 95.8 110 90 SS 28 28 28 28 28 28 28 28 28 28 28 28 28	
Inc. CCV1 Check Water 4/28/2015 13:40 4/29/2015 9:54 Z504441 Cam-Met-Co-6010 SW846 6010B EPA 3010A Cobalt 7440-48-4 FALSE 1.9 mg/L NA 1 2 95.8 110 90 SS Zalco	
Zalco	
Laboratories, Z504441-	
Inc.   SRM1   Reference   Water   4/28/2015 13:40   4/28/2015 14:42   Z504441   Cam-Met-Co-6010   SW846 6010B   EPA 3010A   Cobalt   7440-48-4   FALSE   1.1   mg/L   NA   1   1   107   110   90   SS	
Zalco de la	
Laboratories, Z504441-	
Inc. BLK1 Blank Water 4/28/2015 13:40 4/28/2015 14:53 Z504441 Cam-Met-Co-6010 SW846 6010B EPA 3010A Cobalt 7440-48-4 FALSE ND 0.1 mg/L NA 1 SS SS Z3100	+
Laboratories, Z504441-	
Inc. SRM1 Reference Water 4/28/2015 13:40 4/28/2015 14:42 Z504441 Cam-Met-Cr-6010 SW846 6010B EPA 3010A Chromium 7440-47-3 FALSE 1.07 mg/L NA 1 1 107 110 90 SS	
Zalco	
Laboratories,   Z504441-   Matrix	
Zalco    +	
Laboratories,	
Inc.   Z504441-B51   LCS   Water   4/28/2015 13:40   4/28/2015 14:55   Z504441   Cam-Met-Cr-6010   SW846 6010B   EPA 3010A   Chromium   7440-47-3   FALSE   0.459   0.05   mg/L   NA   1   0.5   91.7   120   80   SS   Cam-Met-Cr-6010   SW846 6010B   EPA 3010A   Chromium   Cam-Met-Cr-6010   SW846 6010B   Chromium   Cam-Met-Cr-6010   SW846 6010B   Chromium   Cam-Met-Cr-6010   SW846 6010B   Chromium   Cam-Met-Cr-6010   Chromium   Cam-Met-Cr-60	
Zalco Laboratories, Z504441-	
Inc. BLK1 Blank Water 4/28/2015 13:40 4/28/2015 14:53 Z504441 Cam-Met-Cr-6010 SW846 6010B EPA 3010A Chromium 7440-47-3 FALSE ND 0.05 mg/L NA 1	В
Zalco   2   2   2   2   2   2   2   2   2	
Laboratories, Z504441-	
Inc. BSD1 LCS Dup Water 4/28/2015 13:40 4/28/2015 13:40 4/28/2015 14:56 Z504441 Cam-Met-Cr-6010 SW846 6010B EPA 3010A Chromium 7440-47-3 FALSE 0.457 0.05 mg/L NA 1 0.5 91.5 0.278 120 80 20 SS	
Zalco   Laboratories, Z504441- Matrix	
Inc. MS1 Spike Water 4/28/2015 13:40 4/28/2015 15:05 Z504441 Cam-Met-Cr-6010 SW846 6010B EPA 3010A Chromium 7440-47-3 FALSE 0.439 0.05 mg/L NA 1 1504262-03 0.0127 0.5 85.2 125 75 SS	
Zalco	
Laboratories,   Z504441-	
Inc.   DUP1   Duplicate   Water   4/28/2015 13:40   4/28/2015 15:03   Z504441   Cam-Met-Cr-6010   SW846 6010B   EPA 3010A   Chromium   7440-47-3   FALSE   0.013   0.05   mg/L   NA   1   1504262-03   0.0127   2.4   20   SS	

<u> </u>							1	T	T	1		- 1		-	DILLITIO	T I	DECOM	- D					
LABNAME LABSAMPID	OCTYPE	MATRIX	PREPDATE	ANADATE	ВАТСН	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	RESULT	DL RL UNITS	BASIS	DILUTIO N SOURCEID	SOURCERES SPIKELEVE	RECOVI	:K RPD	UPPERCL	LOWERCL	RPDCL ANALYST	PSOLIDS LNOTE	ANOTE
Zalco	QCITTE	IVI) (I I II)	THEIRITE	7 TO TO THE	Битеп	WETTOBCOBE	WETTO BIT WILL	THE TWANE	, wo terre	CASIVOTALER	SOMMOGNIE	RESOLI	DE INC ONITS	D/ 1313	TV SOURCEID	SOURCERES STREET	- '	1.11 5	OTTERCE	LOWENCE	THE DEE THE TELEST	130EIB3 ENGTE	7.11012
	Calibration																						
	Check	Water	4/28/2015 13:40	4/29/2015 9:54	Z504441	Cam-Met-Cr-6010	SW846 6010B	EPA 3010A	Chromium	7440-47-3	FALSE	1.91	mg/L	NA	1		2 9	5.6	1:	0	90 SS		
Zalco																							
Laboratories, Z504441- Inc. BSD1	LCS Dup	\\/ator	4/28/2015 13:40	4/29/2015 14:56	7504441	Cam-Met-Cu-6010	SW946 6010B	EPA 3010A	Connor	7440-50-8	FALSE	0.67	0.05 mg/l	NA	1		).5 1	34 9.	28 12		80 20 SS		Z-04
Inc. BSD1 Zalco	LC3 Dup	Water	4/28/2015 15:40	4/28/2015 14:50	2504441	Cam-Met-Cu-6010	3W840 0010B	EPA 3010A	Copper	7440-50-8	FALSE	0.67	0.05 mg/L	INA	1		).5 1	34 9.	20 12	.0	80 20 33		Z-04
	Calibration																						
•		Water	4/28/2015 13:40	4/29/2015 9:54	Z504441	Cam-Met-Cu-6010	SW846 6010B	EPA 3010A	Copper	7440-50-8	FALSE	1.79	mg/L	NA	1		2 89	9.4	13	.0	90 SS		Z-06
Zalco																							1
Laboratories, Z504441-																							
	Duplicate	Water	4/28/2015 13:40	4/28/2015 15:03	3 Z504441	Cam-Met-Cu-6010	SW846 6010B	EPA 3010A	Copper	7440-50-8	FALSE	0.284	0.05 mg/L	NA	1 1504262-03	0.3		5.	62		20 SS		
Zalco Laboratories, Z504441-																							
•	Blank	Water	4/28/2015 13:40	4/28/2015 14:53	Z504441	Cam-Met-Cu-6010	SW846 6010B	EPA 3010A	Copper	7440-50-8	FALSE	0.43	0.05 mg/L	NA	1						SS		В
Zalco				, ,									G,										1
Laboratories, Z504441-																							
	Reference	Water	4/28/2015 13:40	4/28/2015 14:42	Z504441	Cam-Met-Cu-6010	SW846 6010B	EPA 3010A	Copper	7440-50-8	FALSE	0.876	mg/L	NA	1		1 8	7.6	13	0	90 SS		Z-06
Zalco																							
·	Matrix Spike Dup	\M/ator	4/28/2015 13:40	4/29/201E 1E:07	7 7504441	Cam-Met-Cu-6010	SW946 6010B	EPA 3010A	Connor	7440-50-8	FALSE	0.615	0.05 mg/L	NA	1 1504262-03	0.3	).5	63 0.1	29 12	_	75 20 SS		QM-07
Inc. MSD1 Zalco	эріке Бир	water	4/28/2015 15:40	4/28/2015 15:07	2504441	Cam-Met-Cu-6010	3W840 0010B	EPA 3010A	Copper	7440-50-6	FALSE	0.015	U.US IIIg/L	INA	1 1504202-03	0.5	J.5	03 0.1	29 12	.5	75 20 SS		QIVI-07
Laboratories,																							
Inc. Z504441-BS1	LCS	Water	4/28/2015 13:40	4/28/2015 14:55	Z504441	Cam-Met-Cu-6010	SW846 6010B	EPA 3010A	Copper	7440-50-8	FALSE	0.735	0.05 mg/L	NA	1	(	).5 1	47	12	.0	80 SS		Z-04
Zalco																							1
·	Matrix																						
	Spike	Water	4/28/2015 13:40	4/28/2015 15:05	Z504441	Cam-Met-Cu-6010	SW846 6010B	EPA 3010A	Copper	7440-50-8	FALSE	0.616	0.05 mg/L	NA	1 1504262-03	0.3	0.5 63	3.1	12	.5	75 SS		QM-07
Zalco Laboratories, Z504440-								EPA 7470A															
	LCS Dup	Water	4/28/2015 12:50	4/28/2015 13:25	7504440	Cam-Met-Hg-7470	SW846 74704	Prep	Mercury	7439-97-6	FALSE	0.00513	mg/L	NA	1	0.0	05 1	03 6.	17 12	0	80 20 SS		
Zalco	LC3 Dup	vvater	4/20/2013 12:30	4/20/2013 13.23	2304440	Carri Wice rig 7470	340407470A	ПСР	Wicreary	7433 37 0	TALSE	0.00313	1116/ L	IVA	1	0.0	05 1	0.5	1/ 1/	.0	20 33		+
Laboratories, Z504440-								EPA 7470A															
Inc. BLK1	Blank	Water	4/28/2015 12:50	4/28/2015 13:32	Z504440	Cam-Met-Hg-7470	SW846 7470A	Prep	Mercury	7439-97-6	FALSE	ND	0.002 mg/L	NA	1						SS		
Zalco																							
·	Calibration		. /20 /2015 10 50	. /20 /20				EPA 7470A															
Inc. CCV1 Zalco	Check	Water	4/28/2015 12:50	4/28/2015 13:29	2504440	Cam-Met-Hg-7470	SW846 /4/UA	Prep	Mercury	7439-97-6	FALSE	0.00547	mg/L	NA	1	0.0	05 1	09	1:	.0	90 SS		+
Laboratories, Z504440-								EPA 7470A															
•	Duplicate	Water	4/28/2015 12:50	4/28/2015 13:36	Z504440	Cam-Met-Hg-7470	SW846 7470A	Prep	Mercury	7439-97-6	FALSE	ND	0.002 mg/L	NA	1 1504259-01	ND					20 SS		
Zalco			· · ·																				
Laboratories, Z504440-								EPA 7470A															
	Reference	Water	4/28/2015 12:50	4/28/2015 13:27	Z504440	Cam-Met-Hg-7470	SW846 7470A	Prep	Mercury	7439-97-6	FALSE	0.00324	mg/L	NA	1	0.0	04 80	).9	1:	0	90 SS		Z-06
Zalco	N 4 = 4 = i							EDA 7470A															
·	Matrix Spike	Water	4/28/2015 12:50	1/29/2015 12:29	7504440	Cam-Met-Hg-7470	\$\\\\$46.74704	EPA 7470A Prep	Mercury	7439-97-6	FALSE	0.00502	mg/L	NA	1 1504259-01	-0.0000785 0.0	05 1	00	13	0	70 SS		
Zalco	Spike	vvatei	4/28/2013 12.30	4/20/2013 13.30	2304440	Cam-iviet-rig-7470	3W840 7470A	гтер	ivier cury	7439-97-0	TALSE	0.00302	IIIg/L	INA	1 1304239-01	-0.0000783 0.0	05 1	00	1.		70 33		+
Laboratories, Z504440-								EPA 7470A															
	Duplicate	Water	4/28/2015 12:50	4/28/2015 14:00	Z504440	Cam-Met-Hg-7470	SW846 7470A	Prep	Mercury	7439-97-6	FALSE	ND	0.002 mg/L	NA	1 1504262-03	ND					20 SS		
Zalco																							
	Matrix		1/00/05:-:-	4/00/07:				EPA 7470A															
	Spike Dup	Water	4/28/2015 12:50	4/28/2015 13:41	Z504440	Cam-Met-Hg-7470	SW846 7470A	Prep	Mercury	7439-97-6	FALSE	0.00553	mg/L	NA	1 1504259-01	-0.0000785 0.0	05 1	11 9.	79 13	U	70 30 SS		
Zalco Laboratories,								EPA 7470A															
Inc. Z504440-BS1	LCS	Water	4/28/2015 12:50	4/28/2015 13:23	Z504440	Cam-Met-Hg-7470	SW846 7470A	Prep	Mercury	7439-97-6	FALSE	0.00545	mg/L	NA	1	0.0	05 1	09	12	0	80 SS		
Zalco			, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,		1 27.19.170		- F	,										-				<u> </u>
Laboratories, Z504441-																							
	Blank	Water	4/28/2015 13:40	4/28/2015 14:53	Z504441	Cam-Met-Mo-6010	SW846 6010B	EPA 3010A	Molybdenum	7439-98-7	FALSE	ND	0.1 mg/L	NA	1						SS		
Zalco																							
Laboratories, Z504441-	Dunlicata	Water	4/20/2015 12:40	4/20/2015 15:02	7504444	Cam Mot Ma 6010	SWOAE EDIOD	EDA 2010A	Molyhdanim	7420 00 7	EVICE	0.010	0.1	NA	1 1504262 02	0.020		4.	1.2		20 55		7.05
Inc. DUP1 Zalco	Duplicate	vvaler	4/20/2015 13:40	4/20/2015 15:03	2504441	Cam-Met-Mo-6010	24A940 00TOR	EPA 3010A	Molybdenum	7439-98-7	FALSE	0.019	0.1 mg/L	INA	1 1504262-03	0.029		44	+. ∠		20 SS		Z-05
Laboratories, Z504441-																							
	Reference	Water	4/28/2015 13:40	4/28/2015 14:42	Z504441	Cam-Met-Mo-6010	SW846 6010B	EPA 3010A	Molybdenum	7439-98-7	FALSE	1.1	mg/L	NA	1		1 1	08	1:	.0	90 SS		
Zalco																							
Laboratories,																							
Inc. Z504441-BS1	LCS	Water	4/28/2015 13:40	4/28/2015 14:55	Z504441	Cam-Met-Mo-6010	SW846 6010B	EPA 3010A	Molybdenum	7439-98-7	FALSE	0.5	0.1 mg/L	NA	1	(	).5 1	00	12	0	80 SS		
Zalco	Calibratia																						
	Calibration Check	Water	4/28/2015 13:40	4/29/2015 0.54	1 7504441	Cam-Met-Mo-6010	SW846 6010B	ΕΡΔ 3010Δ	Molybdenum	7439-98-7	FALSE	1.9	mg/L	NA	1		2 90	5.2	11	0	90 SS		
IIIC. CCV1	CHUCK	· · · u · C I	7/20/2013 13.40	7/23/2013 3.34		Cam Mict-Mi0-0010	244040 0010D	LI A 3010A	Morybuenum	1-05-50-1	IALJE	1.9	IIIg/L	14/4	1		ا ع		1.		JU   JJ		

										1					DILUTIO		R	ECOVER						
LABNAME LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	ВАТСН	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE F	RESULT	DL RL UNITS	BASIS		SOURCERES SPIKI			RPD	UPPERCL	LOWERCL	RPDCL ANALYST	PSOLIDS LNO	TE ANOTE
Zalco																								
Laboratories, Z504441-	Matrix																							
	Spike	Water	4/28/2015 13:40	4/28/2015 15:05	5 Z504441	Cam-Met-Mo-6010	SW846 6010B	EPA 3010A	Molybdenum	7439-98-7	FALSE	0.5	0.1 mg/L	NA	1 1504262-03	0.029	0.5	93.4		125	75	SS		
Zalco																								
Laboratories, Z504441- Inc. MSD1	Matrix	Matar	4/29/2015 12:40	4/20/2015 15:05	7 7504441	Cam-Met-Mo-6010	SW846 6010B	EDA 2010A	Malubdanum	7439-98-7	FALSE	0.5	0.1 mg/l	N/A	1 1504262-03	0.029	0.5	04.4	1.02	125	75	20 SS		
Zalco	Spike Dup	water	4/28/2015 13:40	4/28/2015 15:07	7 2304441	Calli-Met-Mo-6010	3 3 V 8 4 0 0 1 U B	EPA 3010A	Molybdenum	7439-96-7	FALSE	0.5	0.1 mg/L	NA	1 1504202-03	0.029	0.5	94.4	1.02	123	/5	20 33		
Laboratories, Z504441-																								
· ·	LCS Dup	Water	4/28/2015 13:40	4/28/2015 14:56	6 Z504441	Cam-Met-Mo-6010	SW846 6010B	EPA 3010A	Molybdenum	7439-98-7	FALSE	0.51	0.1 mg/L	NA	1		0.5	103	2.59	120	80	20 SS		
Zalco									,															
·	Matrix																							
	Spike Dup	Water	4/28/2015 13:40	4/28/2015 15:07	7 Z504441	Cam-Met-Ni-6010	SW846 6010B	EPA 3010A	Nickel	7440-02-0	FALSE	0.531	0.05 mg/L	NA	1 1504262-03	0.0256	0.5	101	1.67	125	75	20 SS		
Zalco																								
Laboratories, Z504441- Inc. SRM1	Reference	Mator	4/29/201E 12:40	4/20/201E 14:42	7504441	Cam-Met-Ni-6010	SW946 6010B	EPA 3010A	Nickol	7440-02-0	FALSE	1.05	ma/I	NA	1		1	105		110	90	SS		
Zalco	Reference	vvatei	4/20/2013 13.40	4/28/2013 14.42	2 2304441	Calli-Met-M-0010	3W840 0010B	EPA 3010A	Nickei	7440-02-0	FALSE	1.03	mg/L	INA	1		1	103		110	90	33		
Laboratories, Z504441-																								
· ·	Blank	Water	4/28/2015 13:40	4/28/2015 14:53	3 Z504441	Cam-Met-Ni-6010	SW846 6010B	EPA 3010A	Nickel	7440-02-0	FALSE 1	ND	0.05 mg/L	NA	1							SS		
Zalco																								
Laboratories, Z504441-																								
	LCS Dup	Water	4/28/2015 13:40	4/28/2015 14:56	6 Z504441	Cam-Met-Ni-6010	SW846 6010B	EPA 3010A	Nickel	7440-02-0	FALSE	0.502	0.05 mg/L	NA	1		0.5	100	0.541	120	80	20 SS		
Zalco	C-III																							
· ·	Calibration	Water	4/28/2015 13:40	4/20/201E 0:F	7504441	Cam-Met-Ni-6010	SW846 6010D	EPA 3010A	Nickel	7440-02-0	FALSE	1.92	ma/1	NA	1		2	96		110	90	cc		
Inc. CCV1 Zalco	Check	Water	4/20/2013 13:40	4/ 23/ 2013 9:54	- 6304441	Cam-wet-w-0010	2440 00100	FLW 2010W	MICKEL	7440-02-0	1 ALSE	1.92	mg/L	IVA	1		۷	90		110	90	SS	+	
Laboratories,																								
Inc. Z504441-BS1	LCS	Water	4/28/2015 13:40	4/28/2015 14:55	5 Z504441	Cam-Met-Ni-6010	SW846 6010B	EPA 3010A	Nickel	7440-02-0	FALSE	0.499	0.05 mg/L	NA	1		0.5	99.8		120	80	SS		
Zalco																								
·	Matrix																							
	Spike	Water	4/28/2015 13:40	4/28/2015 15:05	5 Z504441	Cam-Met-Ni-6010	SW846 6010B	EPA 3010A	Nickel	7440-02-0	FALSE	0.522	0.05 mg/L	NA	1 1504262-03	0.0256	0.5	99.3		125	75	SS		
Zalco																								
Laboratories, Z504441- Inc. DUP1	Duplicate	Water	1/28/2015 12:40	4/28/2015 1E:03	3 7504441	Cam-Met-Ni-6010	SW846 6010B	EPA 3010A	Nickel	7440-02-0	FALSE	0.0218	0.05 mg/L	NA	1 1504262-03	0.0256			16.1			20 SS		
Zalco	Dupiicate	vvalci	+/20/2013 13:40	4/20/2015 15:05	2304441	Cam-wet-w-0010	2440 00100	LFA JUIUA	IAICKEI	7440-02-0	IALSE	0.0218	0.03 IIIg/L	INA	1 1304202-03	0.0230			10.1			20 33		
Laboratories, Z504441-																								
Inc. BSD1	LCS Dup	Water	4/28/2015 13:40	4/28/2015 14:56	6 Z504441	Cam-Met-Pb-6010	SW846 6010B	EPA 3010A	Lead	7439-92-1	FALSE	0.42	0.05 mg/L	NA	1		0.5	84.2	1.45	120	80	20 SS		
Zalco																								
Laboratories, Z504441-																								
	Blank	Water	4/28/2015 13:40	4/28/2015 14:53	3 Z504441	Cam-Met-Pb-6010	SW846 6010B	EPA 3010A	Lead	7439-92-1	FALSE 1	ND	0.05 mg/L	NA	1							SS		
Zalco																								
Laboratories, Z504441- Inc. SRM1	Reference	Mater.	4/28/2015 12:40	4/28/2015 14:43	7504441	Cam-Met-Pb-6010	SW846 6010B	EPA 3010A	Lead	7439-92-1	FALSE	1.1	ma/l	NA	1		1	105		110	90	SS		
Inc. SRM1 Zalco	Mererence	vv atcl	+/20/2013 13:40	4/20/2013 14:42	£ 204441	Cam-wet-ru-0010	2440 00100	LFA JUIUA	Leau	7433-32-1	IALJE	1.1	mg/L	INA	1		1	103		110	30	33	+	
Laboratories,																								
Inc. Z504441-BS1	LCS	Water	4/28/2015 13:40	4/28/2015 14:55	5 Z504441	Cam-Met-Pb-6010	SW846 6010B	EPA 3010A	Lead	7439-92-1	FALSE	0.41	0.05 mg/L	NA	1		0.5	83		120	80	SS		
Zalco																								
· ·	Matrix																							
	Spike Dup	Water	4/28/2015 13:40	4/28/2015 15:07	7 Z504441	Cam-Met-Pb-6010	SW846 6010B	EPA 3010A	Lead	7439-92-1	FALSE	0.42	0.05 mg/L	NA	1 1504262-03	ND	0.5	84.6	2.84	125	75	20 SS		
Zalco	Matrix																							
	Matrix Spike	Water	1/28/2015 12:40	1/28/2015 1E-01	5 7504441	Cam-Met-Pb-6010	SW846 6010B	EPA 3010A	Lead	7439-92-1	FALSE	0.41	0.05 mg/L	NΔ	1 1504262-03	ND	0.5	82.2		125	75	SS		
Zalco	Shire	vv atcl	+/20/2013 13:40	4/20/2015 15:05	2304441	Cam-wet-ru-0010	2440 00100	LFA JUIUA	Leau	7433-32-1	IALJE	0.41	0.03 IIIg/L	INA	1 1304202-03	140	0.5	02.2		123	/3	33	+	
	Calibration																							
		Water	4/28/2015 13:40	4/29/2015 9:54	4 Z504441	Cam-Met-Pb-6010	SW846 6010B	EPA 3010A	Lead	7439-92-1	FALSE	1.9	mg/L	NA	1		2	97		110	90	SS		
Zalco																								
Laboratories, Z504441-																								
	Duplicate	Water	4/28/2015 13:40	4/28/2015 15:03	3 Z504441	Cam-Met-Pb-6010	SW846 6010B	EPA 3010A	Lead	7439-92-1	FALSE	0.0011	0.05 mg/L	NA	1 1504262-03	ND			200			20 SS		Z-05
Zalco																								
Laboratories, Z504441- Inc. DUP1	Dunlicato	Water	1/28/201E 12:40	1/28/201E 1E:01	3 7504441	Cam-Met-Sb-6010	SW846 6010B	EPA 3010A	Antimony	7440-36-0	FALSE	0.016	0.2 mg/L	NA	1 1504262-03	0.016			0.0843			20 SS		
Inc. DUP1 Zalco	Duplicate	vvalei	4/20/2015 15:40	4/20/2013 13:03	2304441	Calli-Met-20-0010	2440 00100	LFA SUIUA	Anumony	7440-30-0	FALSE	0.016	U.Z IIIg/L	IVA	1 1304202-03	0.010	+	+	0.0843			20 33	+	
	Calibration																							
	Check	Water	4/28/2015 13:40	4/29/2015 9:54	4 Z504441	Cam-Met-Sb-6010	SW846 6010B	EPA 3010A	Antimony	7440-36-0	FALSE	2.9	mg/L	NA	1		3	97.6		110	90	ss		
Zalco				, , , , , , ,					,															
	Matrix																							
	Spike Dup	Water	4/28/2015 13:40	4/28/2015 15:07	7 Z504441	Cam-Met-Sb-6010	SW846 6010B	EPA 3010A	Antimony	7440-36-0	FALSE	0.47	0.2 mg/L	NA	1 1504262-03	0.016	0.5	91.2	2.65	125	75	20 SS		
Zalco														Ţ				T			1			
Laboratories, Z504441- Inc. BSD1	1 CC D		4/20/2017 12:-	4/20/2215 1 : = :		0	C14/0.46 62122	EDA 20121		7440.35.5	FA/ 05											20.55		
	LCS Dup	water	4/28/2015 13:40	4/28/2015 14:56	b Z5U4441	Cam-Met-Sb-6010	SW846 6010B	EPA 3010A	Antimony	7440-36-0	FALSE	0.5	0.2 mg/L	NA	1	1	0.5	99.1	2.46	120	80	20 SS		

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LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	RESULT DL	RL UNITS	BASIS	DILUTIO N	SOURCEID SOUR	RCERES SPI		ECOVER RPD	UPPERCL	LOWERCL	RPDCL	ANALYST PSOLIDS	LNOTE ANOTE
Zalco																								
Laboratories																								
Inc. Zalco	Z504441-BS1	LCS	Water	4/28/2015 13:40	4/28/2015 14:55 Z504441	Cam-Met-Sb-6010	SW846 6010B	EPA 3010A	Antimony	7440-36-0	FALSE	0.51	0.2 mg/L	NA	1			0.5	102	120	80	)	SS	
Laboratories	Z504441-																							
Inc.	BLK1	Blank	Water	4/28/2015 13:40	4/28/2015 14:53 Z504441	Cam-Met-Sb-6010	SW846 6010B	EPA 3010A	Antimony	7440-36-0	FALSE	ND	0.2 mg/L	NA	1								SS	
Zalco	7504444	N 4 = + = i																						
Laboratories, Inc.		Matrix Spike	Water	4/28/2015 13:40	4/28/2015 15:05 Z504441	Cam-Met-Sb-6010	SW846 6010B	EPA 3010A	Antimony	7440-36-0	FALSE	0.46	0.2 mg/L	NA	1	1504262-03	0.016	0.5	88.7	125	5 75	5	SS	
Zalco		-		,, = 0, = 0 = 0 = 0 = 0	,, =0,=================================				,,															
Laboratories																								
Inc. Zalco	SRM1	Reference	Water	4/28/2015 13:40	4/28/2015 14:42 Z504441	Cam-Met-Sb-6010	SW846 6010B	EPA 3010A	Antimony	7440-36-0	FALSE	1.1	mg/L	NA	1			1	111	110	90	)	SS	Z-06
Laboratories	Z504441-																							
Inc.		LCS Dup	Water	4/28/2015 13:40	4/28/2015 14:56 Z504441	Cam-Met-Se-6010	SW846 6010B	EPA 3010A	Selenium	7782-49-2	FALSE	0.194	0.05 mg/L	NA	1			0.5	38.9 3.	16 120	80	20	SS	Z-04
Zalco																								
Laboratories, Inc.		Reference	Mator	4/20/201E 12:40	4/28/2015 14:42 Z504441	Cam Mot So 6010	SW946 6010B	EPA 3010A	Colonium	7782-49-2	FALSE	0.949	mg/L	NA	1			1	94.9	110	90		SS	
Zalco	SKIVII	Reference	water	4/28/2013 13.40	4/26/2013 14.42 2304441	Calli-Met-3e-0010	30040 00108	EPA 3010A	Selemum	7782-49-2	FALSE	0.949	IIIg/L	INA	1			1	34.3	110	, 90	,	33	
Laboratories																								
Inc.	Z504441-BS1	LCS	Water	4/28/2015 13:40	4/28/2015 14:55 Z504441	Cam-Met-Se-6010	SW846 6010B	EPA 3010A	Selenium	7782-49-2	FALSE	0.201	0.05 mg/L	NA	1			0.5	40.1	120	) 80	)	SS	Z-04
Zalco Laboratories	7504441-																							
Inc.		Blank	Water	4/28/2015 13:40	4/28/2015 14:53 Z504441	Cam-Met-Se-6010	SW846 6010B	EPA 3010A	Selenium	7782-49-2	FALSE	ND	0.05 mg/L	NA	1								SS	
Zalco													- Gr											
Laboratories		Calibration		4/20/2045 42 40	4/20/2045 0 54 7504444	C M C CO10	S14/0.45 504.0D	EDA 2040A	C. L	7702 40 2	FALCE	2.06						2	402	44				
Inc. Zalco	CCV1	Check	Water	4/28/2015 13:40	4/29/2015 9:54 Z504441	Cam-Met-Se-6010	SW846 6010B	EPA 3010A	Selenium	7782-49-2	FALSE	2.06	mg/L	NA	1			2	103	110	90	)	SS	
Laboratories	Z504441-																							
Inc.	DUP1	Duplicate	Water	4/28/2015 13:40	4/28/2015 15:03 Z504441	Cam-Met-Se-6010	SW846 6010B	EPA 3010A	Selenium	7782-49-2	FALSE	ND	0.05 mg/L	NA	1	1504262-03 ND						20	SS	
Zalco	7504444																							
Laboratories		Matrix Spike	Water	4/28/2015 13:40	4/28/2015 15:05 Z504441	Cam-Met-Se-6010	SW846 6010B	EPA 3010A	Selenium	7782-49-2	FALSE	0.233	0.05 mg/L	NA	1	1504262-03 ND		0.5	46.6	125	5 75		SS	QM-07
Zalco	11131	Эрікс	Water	4,20,2013 13.40	4/20/2013 13:03 2304441	Carri Wice Sc 0010	34040 00100	EI / ( 3010 / (	Selemani	7702 43 2	TALSE	0.233	0.03 1116/ 2	107		1304202 03 110		0.5	40.0	12.	, ,,	,		Q.W. 07
Laboratories		Matrix																						
Inc.	MSD1	Spike Dup	Water	4/28/2015 13:40	4/28/2015 15:07 Z504441	Cam-Met-Se-6010	SW846 6010B	EPA 3010A	Selenium	7782-49-2	FALSE	0.198	0.05 mg/L	NA	1	1504262-03 ND		0.5	39.5	5.4 125	5 75	5 20	SS	QM-07
Zalco Laboratories	7504441-																							
Inc.		Reference	Water	4/28/2015 13:40	4/28/2015 14:42 Z504441	Cam-Met-Tl-6010	SW846 6010B	EPA 3010A	Thallium	7440-28-0	FALSE	0.97	mg/L	NA	1			1	97	110	90		SS	
Zalco																								
Laboratories		Matrix	14/	4/20/2015 12:40	4/20/2015 15:05 7504444	C M-+ TI C010	SWOAC COAOD	EDA 2010A	Th - II:	7440 20 0	EALCE	0.27	0.5			1504262.02	0.002	0.5	72.7	121	,		cc	014.07
Inc. Zalco	MS1	Spike	Water	4/28/2015 13:40	4/28/2015 15:05 Z504441	Cam-Met-11-6010	SW846 6010B	EPA 3010A	Inallium	7440-28-0	FALSE	0.37	0.5 mg/L	NA	1	1504262-03	0.002	0.5	73.7	125	5 75	0	SS	QM-07
Laboratories	Z504441-																							
Inc.	DUP1	Duplicate	Water	4/28/2015 13:40	4/28/2015 15:03 Z504441	Cam-Met-Tl-6010	SW846 6010B	EPA 3010A	Thallium	7440-28-0	FALSE	0.02	0.5 mg/L	NA	1	1504262-03	0.002		1	70		20	SS	Z-05
Zalco Laboratories	7504441																							
Inc.		Blank	Water	4/28/2015 13:40	4/28/2015 14:53 Z504441	Cam-Met-Tl-6010	SW846 6010B	EPA 3010A	Thallium	7440-28-0	FALSE	ND	0.5 mg/L	NA	1								SS	
Zalco				.,, 2013 13.40	.,,,		211270 00100			200			3.56/ -		1									
Laboratories																								
Inc. Zalco	Z504441-BS1	LCS	Water	4/28/2015 13:40	4/28/2015 14:55 Z504441	Cam-Met-Tl-6010	SW846 6010B	EPA 3010A	Thallium	7440-28-0	FALSE	0.37	0.5 mg/L	NA	1			0.5	73.7	120	80	)	SS	Z-04
Laboratories	Z504441-																							
Inc.		LCS Dup	Water	4/28/2015 13:40	4/28/2015 14:56 Z504441	Cam-Met-Tl-6010	SW846 6010B	EPA 3010A	Thallium	7440-28-0	FALSE	0.4	0.5 mg/L	NA	1			0.5	79.8 8.	01 120	80	20	SS	Z-04
Zalco	7504444	6.1"																						
Laboratories		Calibration Check	Water	4/28/2015 13:40	4/29/2015 9:54 Z504441	Cam-Met-TI-6010	SW846 6010B	EPA 3010A	Thallium	7440-28-0	FALSE	2.8	mg/L	NA	1			3	93.4	110	90		SS	
Zalco	CCAT	CHECK	*vulci	7/20/2013 13.40	7/ 23/ 2013 3.34 2304441	Cam Mer-11-0010	244040 0010B	FI V 2010W	mamum	/ <del>11</del> 0-20-0	IALJE	2.0	IIIg/L	14/4	1			3	JJ.4	110	, 90	1		
Laboratories		Matrix																						
Inc.	MSD1	Spike Dup	Water	4/28/2015 13:40	4/28/2015 15:07 Z504441	Cam-Met-Tl-6010	SW846 6010B	EPA 3010A	Thallium	7440-28-0	FALSE	0.4	0.5 mg/L	NA	1	1504262-03	0.002	0.5	79.4 7.	41 125	75	20	SS	
Zalco Laboratories	75044/1-	Matrix																						
Inc.		Spike Dup	Water	4/28/2015 13:40	4/28/2015 15:07 Z504441	Cam-Met-V-6010	SW846 6010B	EPA 3010A	Vanadium	7440-62-2	FALSE	0.45	0.1 mg/L	NA	1	1504262-03 ND		0.5	90.9	2 125	5 75	20	SS	
Zalco													<u> </u>											
Laboratories		Calibration		4/20/2045 42 52	4/20/2045 0:54 7504445	Com Mart V 5045	SWIGAS COACE	EDA 20104	Vanadi	7440 63 3	FALCE	4.0	h	NI A	_				05.0				cc	
Inc. Zalco	CCV1	Check	Water	4/28/2015 13:40	4/29/2015 9:54 Z504441	Cam-IVIET-V-6010	5W846 6U1UB	EPA 3010A	vanagium	7440-62-2	FALSE	1.9	mg/L	NA	1			2	95.8	110	90	,	SS	
Laboratories	Z504441-																							
Inc.		Duplicate	Water	4/28/2015 13:40	4/28/2015 15:03 Z504441	Cam-Met-V-6010	SW846 6010B	EPA 3010A	Vanadium	7440-62-2	FALSE	ND	0.1 mg/L	NA	1	1504262-03 ND						20	SS	
										-			-											

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LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	RESULT DL	RL UNITS	BASIS	DILUTIO N	SOURCEID SOUI	RCERES :		RECOVER RPI	D U	PPERCL	LOWERCL	RPDCL	ANALYST PSOLII	S LNOTE	ANOTE
Zalco Laboratories,	7504441-																									
Inc.		Blank	Water	4/28/2015 13:40	4/28/2015 14:53 Z504441	Cam-Met-V-6010	SW846 6010B	EPA 3010A	Vanadium	7440-62-2	FALSE	ND	0.1 mg/L	NA	1									SS		
Zalco Laboratories,																										
Inc.	Z504441-BS1	LCS	Water	4/28/2015 13:40	4/28/2015 14:55 Z504441	Cam-Met-V-6010	SW846 6010B	EPA 3010A	Vanadium	7440-62-2	FALSE	0.46	0.1 mg/L	NA	1			0.5	92.4		120	80		SS		
Zalco Laboratories,	7504441-	Matrix																								
Inc.		Spike	Water	4/28/2015 13:40	4/28/2015 15:05 Z504441	Cam-Met-V-6010	SW846 6010B	EPA 3010A	Vanadium	7440-62-2	FALSE	0.45	0.1 mg/L	NA	1	1504262-03 ND		0.5	89.8		125	75		SS		
Zalco Laboratories,	7504441-																									
Inc.		Reference	Water	4/28/2015 13:40	4/28/2015 14:42 Z504441	Cam-Met-V-6010	SW846 6010B	EPA 3010A	Vanadium	7440-62-2	FALSE	1.1	mg/L	NA	1			1	107		110	90		SS		
Zalco Laboratories,	7504441-																									
Inc.		LCS Dup	Water	4/28/2015 13:40	4/28/2015 14:56 Z504441	Cam-Met-V-6010	SW846 6010B	EPA 3010A	Vanadium	7440-62-2	FALSE	0.46	0.1 mg/L	NA	1			0.5	91.8	0.679	120	80	20	SS		
Zalco Laboratories,	7504441-																									
Inc.		Reference	Water	4/28/2015 13:40	4/28/2015 14:42 Z504441	Cam-Met-Zn-6010	SW846 6010B	EPA 3010A	Zinc	7440-66-6	FALSE	1.08	mg/L	NA	1			1	108		110	90		SS		
Zalco Laboratories,	7504441-																									
Inc.		Duplicate	Water	4/28/2015 13:40	4/28/2015 15:03 Z504441	Cam-Met-Zn-6010	SW846 6010B	EPA 3010A	Zinc	7440-66-6	FALSE	0.071	0.05 mg/L	NA	1	1504262-03	0.074			4.41			20	SS		
Zalco Laboratories,	7504441-	Matrix																								
Inc.		Spike	Water	4/28/2015 13:40	4/28/2015 15:05 Z504441	Cam-Met-Zn-6010	SW846 6010B	EPA 3010A	Zinc	7440-66-6	FALSE	0.447	0.05 mg/L	NA	1	1504262-03	0.074	0.5	74.6		125	75		SS		QM-07
Zalco Laboratories,	7504441-	Matrix																								
Inc.		Spike Dup	Water	4/28/2015 13:40	4/28/2015 15:07 Z504441	Cam-Met-Zn-6010	SW846 6010B	EPA 3010A	Zinc	7440-66-6	FALSE	0.447	0.05 mg/L	NA	1	1504262-03	0.074	0.5	74.7	0.148	125	75	20	SS		QM-07
Zalco Laboratories,																										
Inc.	Z504441-BS1	LCS	Water	4/28/2015 13:40	4/28/2015 14:55 Z504441	Cam-Met-Zn-6010	SW846 6010B	EPA 3010A	Zinc	7440-66-6	FALSE	0.468	0.05 mg/L	NA	1			0.5	93.7		120	80		SS		
Zalco Laboratories,	7504441-																									
Inc.		Blank	Water	4/28/2015 13:40	4/28/2015 14:53 Z504441	Cam-Met-Zn-6010	SW846 6010B	EPA 3010A	Zinc	7440-66-6	FALSE	0.093	0.05 mg/L	NA	1									SS		В
Zalco Laboratories,	7504441-	Calibration																								
Inc.			Water	4/28/2015 13:40	4/29/2015 9:54 Z504441	Cam-Met-Zn-6010	SW846 6010B	EPA 3010A	Zinc	7440-66-6	FALSE	1.92	mg/L	NA	1			2	96		110	90		SS		
Zalco Laboratories,	7504441-																									
Inc.		LCS Dup	Water	4/28/2015 13:40	4/28/2015 14:56 Z504441	Cam-Met-Zn-6010	SW846 6010B	EPA 3010A	Zinc	7440-66-6	FALSE	0.443	0.05 mg/L	NA	1			0.5	88.7	5.48	120	80	20	SS		
Zalco Laboratories,	7504435-					Cu-As Received-		Metals - As																		
Inc.		LCS Dup	Water	4/28/2015 9:21	4/28/2015 12:20 Z504435	E200.7	EPA 200.7		Copper	7440-50-8	FALSE	0.6	0.05 mg/L	NA	1			0.5	120	19.2	120	80	20	SS		
Zalco Laboratories,	7504435-					Cu-As Received-		Metals - As																		
Inc.		Duplicate	Water	4/28/2015 9:21	4/28/2015 12:31 Z504435		EPA 200.7		Copper	7440-50-8	FALSE	0.29	0.05 mg/L	NA	1	1504273-01	0.41			33.7			20	SS		Z-05
Zalco Laboratories,	7504435-					Cu-As Received-		Metals - As																		
Inc.		Duplicate	Water	4/28/2015 9:21	4/28/2015 12:36 Z504435		EPA 200.7		Copper	7440-50-8	FALSE	0.067	0.05 mg/L	NA	1	1504295-01	0.091			31.3			20	SS		Z-05
Zalco Laboratories,						Cu-As Received-		Metals - As																		
Inc.	Z504435-BS1	LCS	Water	4/28/2015 9:21	4/28/2015 12:11 Z504435		EPA 200.7		Copper	7440-50-8	FALSE	0.49	0.05 mg/L	NA	1			0.5	99		120	80		SS		
Zalco Laboratories,	7504435-					Cu-As Received-		Metals - As																		
Inc.		Duplicate	Water	4/28/2015 9:21	4/28/2015 13:25 Z504435	E200.7	EPA 200.7		Copper	7440-50-8	FALSE	0.27	0.05 mg/L	NA	1	1504302-01	0.24			12.1			20	SS		
Zalco Laboratories,	7504425-					Cu-As Received-		Metals - As																		
Inc.		Blank	Water	4/28/2015 9:21	4/28/2015 16:26 Z504435	E200.7	EPA 200.7		Copper	7440-50-8	FALSE	ND	0.05 mg/L	NA	1									SS		
Zalco Laboratories,	7504435-					Cu-As Received-		Metals - As																		
Inc.		Reference	Water	4/28/2015 9:21	4/28/2015 16:48 Z504435		EPA 200.7		Copper	7440-50-8	FALSE	0.92	mg/L	NA	1			1	92.3		110	90	)	SS		
Zalco Laboratories,	7504/25-	Matrix				Cu-As Received-		Metals - As																		
Inc.		Spike Dup	Water	4/28/2015 9:21	4/28/2015 12:26 Z504435	E200.7	EPA 200.7		Copper	7440-50-8	FALSE	0.6	0.05 mg/L	NA	1	1504300-01	0.21	0.5	76.9	1.49	130	70	20	SS		
Zalco Laboratories,	750//25-	Matrix				Cu-As Received-		Metals - As																		
Inc.			Water	4/28/2015 9:21	4/28/2015 16:26 Z504435		EPA 200.7		Copper	7440-50-8	FALSE	0.61	0.05 mg/L	NA	1	1504300-01	0.21	0.5	78.7		130	70		SS		
Zalco Laboratories,	750//21							No Prop	Electrical				mmhos/													
Inc.		Reference	Water	4/24/2015 17:00	4/25/2015 17:00 Z504421	EC-SM2510B	SM 2510B	No Prep - Bench Chem	Conductivity		FALSE	13		NA	1			12.9	100		200	0		SAM		
				•		•	-		· · · · · · · · · · · · · · · · · · ·		-			•	•					-						

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LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	RESULT DL	RL UNITS		DILUTIO N	SOURCEID SO	OURCERES		RECOVER Y RPD	UPPEI	RCL LC	OWERCL	RPDCL A	NALYST PSOLIDS	LNOTE ANOTE
Zalco		201112																							
Laboratories,		D. Illiania		4/24/2045 47 00	4/25/2045 47 00 7504424	56 CM2540D	CA 4 25 4 0 D	No Prep -	Electrical		FALCE	45	mmhos/			4504275.04	4.4			207			45.6		
Inc. Zalco	DUP1	Duplicate	water	4/24/2015 17:00	4/25/2015 17:00 Z504421	EC-SM2510B	SM 2510B	Bench Chem	Conductivity		FALSE	15	0.01 cm	NA	1	1504275-01	14		0.	207			15 S	AM	
Laboratories,	Z504421-							No Prep -	Electrical				mmhos/												
Inc.	BLK1	Blank	Water	4/24/2015 17:00	4/25/2015 17:00 Z504421	EC-SM2510B	SM 2510B	Bench Chem	Conductivity		FALSE	ND	0.01 cm	NA	1								S	AM	
Zalco Laboratories,	7504421-							No Prep -	Electrical				mmhos/												
Inc.		Reference	Water	4/24/2015 17:00	4/25/2015 17:00 Z504421	EC-SM2510B	SM 2510B		Conductivity		FALSE	1.4	1	NA	1			1.412	101		200	0	s	AM	
Zalco																									
Laboratories,		Matrix Spike	Mater	4/20/2015 0:21	4/28/2015 16:26 Z504435	Fe-As Received- E200.7	EPA 200.7	Metals - As	Iron	7439-89-6	FALSE	1.07	0.1 mg/l	NA	1	1504300-01	0.0683	1	100		130	70	s	c	
Zalco	INIOT	эріке	Water	4/28/2015 9.21	4/28/2013 16:26 2304433	E200.7	EPA 200.7	Received	Iron	7439-89-0	FALSE	1.07	0.1 mg/L	INA	1	1504500-01	0.0083	1	100		130	70	3	3	
Laboratories,	Z504435-					Fe-As Received-		Metals - As																	
Inc.	DUP2	Duplicate	Water	4/28/2015 9:21	4/28/2015 12:36 Z504435	E200.7	EPA 200.7	Received	Iron	7439-89-6	FALSE	0.132	0.1 mg/L	NA	1	1504295-01	0.158		:	17.6			20 S	S	
Zalco Laboratories,	7504435-					Fe-As Received-		Metals - As																	
Inc.		Duplicate	Water	4/28/2015 9:21	4/28/2015 12:31 Z504435	E200.7	EPA 200.7		Iron	7439-89-6	FALSE	7.03	0.1 mg/L	NA	1	1504273-01	6.83			2.9			20 S	S	
Zalco																									
Laboratories,		Plank	Mator	4/29/201E 0:21	4/29/2015 16·26 7504425	Fe-As Received- E200.7	EDA 200 7	Metals - As	Iron	7420 80 6	EVICE	ND	0.1 mg/l	NA	1								s	c	
Inc. Zalco	DEKT	Blank	Water	4/28/2015 9:21	4/28/2015 16:26 Z504435	L200.7	EPA 200.7	Received	Iron	7439-89-6	FALSE	ואט	0.1 mg/L	NA	1								3		
Laboratories,						Fe-As Received-		Metals - As																	
Inc.	BSD1	LCS Dup	Water	4/28/2015 9:21	4/28/2015 12:20 Z504435	E200.7	EPA 200.7	Received	Iron	7439-89-6	FALSE	1.05	0.1 mg/L	NA	1			1	105	0.5	120	80	20 S	S	
Zalco Laboratories,	Z504435-	Matrix				Fe-As Received-		Metals - As																	
Inc.		Spike Dup	Water	4/28/2015 9:21	4/28/2015 12:26 Z504435	E200.7	EPA 200.7		Iron	7439-89-6	FALSE	1.08	0.1 mg/L	NA	1	1504300-01	0.0683	1	102	1.39	130	70	20 S	S	
Zalco																									
Laboratories,		Reference	Water	4/28/2015 0:21	4/28/2015 16:48 Z504435	Fe-As Received- E200.7	EPA 200.7	Metals - As Received	Iron	7439-89-6	FALSE	1.15	mg/L	NA	1			1	115		110	90	s	c	Z-06
Inc. Zalco	SVINIT	Reference	water	4/28/2013 9.21	4/26/2013 10.46 2304433	E200.7	EPA 200.7	Received	IIIII	7439-89-0	FALSE	1.13	IIIg/L	INA	1			1	113		110	90	3	3	2-00
Laboratories,	Z504435-					Fe-As Received-		Metals - As																	
Inc.	DUP3	Duplicate	Water	4/28/2015 9:21	4/28/2015 13:25 Z504435	E200.7	EPA 200.7	Received	Iron	7439-89-6	FALSE	ND	0.1 mg/L	NA	1	1504302-01 N	D						20 S	S	
Zalco Laboratories,						Fe-As Received-		Metals - As																	
Inc.	Z504435-BS1	LCS	Water	4/28/2015 9:21	4/28/2015 12:11 Z504435	E200.7	EPA 200.7		Iron	7439-89-6	FALSE	1.06	0.1 mg/L	NA	1			1	106		120	80	s	S	
Zalco																									
Laboratories, Inc.		Duplicate	Water	4/28/2015 9:21	4/28/2015 12:36 Z504435	Hardness-SM23/IOB	SM 23/0B	Metals - As Received	Hardness (as CaCO3)	NA	FALSE	3.2	2 mg/L	NA	1	1504295-01	3.7			4.1			20 S	s	
Zalco	DO1 2	Duplicate	water	4/20/2013 3.21	4/20/2013 12:30 2304433	Tidi diless Sivi2540b	31VI 2540B	neceived	cacos	IVA	TALSE	3.2	2 1116/ L	IVA	1	1304233 01	3.7			14.1			20 3	5	
Laboratories,								Metals - As	Hardness (as																
Inc.	DUP1	Duplicate	Water	4/28/2015 9:21	4/28/2015 12:31 Z504435	Hardness-SM2340B	SM 2340B	Received	CaCO3)	NA	FALSE	170	2 mg/L	NA	1	1504273-01	160		(	5.03			20 S	S	
Zalco Laboratories,	Z504435-							Metals - As	Hardness (as																
Inc.		Blank	Water	4/28/2015 9:21	4/28/2015 16:26 Z504435	Hardness-SM2340B	SM 2340B	Received	CaCO3)	NA	FALSE	ND	2 mg/L	NA	1								s	S	
Zalco																									
Laboratories,		Duplicate	Water.	4/28/2015 0·21	4/28/2015 13:25 Z504435	Hardness-SM2240B	SM 2240B	Metals - As Received	Hardness (as CaCO3)	NA	FALSE	300	2 mg/L	NA	1	1504302-01	300		0.0	265			20 S	c	
Zalco	50.5	Sapincate	.vatci	7, 20, 2013 3.21	1, 20, 2013 13.23 2304433		5.11.25400	neceived	545531	177.	IADL	300	2 mg/ L	14/3	1	230-302-01	300		0.0	_03			20/3		
Laboratories,						K-As Received-		Metals - As																	
Inc.	DUP1	Duplicate	Water	4/28/2015 9:21	4/28/2015 12:31 Z504435	E200.7	EPA 200.7	Received	Potassium	9/7/7440	FALSE	24	0.5 mg/L	NA	1	1504273-01	24			1.72			20 S	S	
Zalco Laboratories,	Z504435-	Calibration				K-As Received-		Metals - As																	
Inc.			Water	4/28/2015 9:21	4/28/2015 12:08 Z504435		EPA 200.7		Potassium	9/7/7440	FALSE	42	mg/L	NA	1			50	83.9		110	90	S	S	Z-06
Zalco	7504435	NA-4 C				K A- D : : : '		NA-A-I									_	T							
Laboratories, Inc.		Matrix Spike Dup	Water	4/28/2015 9·21	4/28/2015 12:26 Z504435	K-As Received- E200.7	EPA 200.7	Metals - As Received	Potassium	9/7/7440	FALSE	8.4	0.5 mg/L	NA	1	1504300-01	0.8	10	75.8	2.6	130	70	20 S	s	
Zalco		-pc bap		., 23, 2013 3.21	., 20, 2010 12.20 2504455				. occosioni	3/1/1440		0.7	5.56/ 5				0.0	10	, 5.0		230	70	20 3	-	
Laboratories,						K-As Received-		Metals - As																	
Inc. Zalco	DUP2	Duplicate	Water	4/28/2015 9:21	4/28/2015 12:36 Z504435	E200.7	EPA 200.7	Received	Potassium	9/7/7440	FALSE	ND	0.5 mg/L	NA	1	1504295-01 N	D						20 S	S	
Laboratories,	Z504435-					K-As Received-		Metals - As																	
Inc.		Duplicate	Water	4/28/2015 9:21	4/28/2015 13:25 Z504435	E200.7	EPA 200.7		Potassium	9/7/7440	FALSE	880	5 mg/L	NA	10	1504302-01	860			2.3			20 S	S	
Zalco	7504435	Matri				K As Deserting 1		Motels A																	
Laboratories, Inc.		Matrix Spike	Water	4/28/2015 9-21	4/28/2015 16:26 Z504435	K-As Received- F200.7	EPA 200.7	Metals - As Received	Potassium	9/7/7///	FALSE	8.6	0.5 mg/L	NA	1	1504300-01	0.8	10	78		130	70	s	s	
Zalco		Spine	·vacci	7, 20, 2013 3.21	., 20, 2015 10.20 2507433		2.7.200.7	cccivcu	. otassiaiii	3/1/1440	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.0	0.5 IIIB/ L	147.	1	130-300 01	0.0	10	70		130	70			
Laboratories,						K-As Received-		Metals - As																	
Inc.	BLK1	Blank	Water	4/28/2015 9:21	4/28/2015 16:26 Z504435	E200.7	EPA 200.7	Received	Potassium	9/7/7440	FALSE	ND	0.5 mg/L	NA	1								S	S	
					·								-											·	

	1				1										DILLITIO	T	DECO	/ED					1	
LABNAME LABSAMPID	OCTYPE	MATRIX	PREPDATE	ANADATE	ВАТСН	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE RESUL	т	DL RL UNITS	BASIS	DILUTIO SOURCEID	SOURCERES SPIKELEVE	RECO'	VEK RPE	UPPE	RCL LO	OWERCL	RPDCL ANALYST	PSOLIDS LNOTI	E ANOTE
Zalco	Q01112			7.110.127.112	5, 11 6.1				7.1.7.12.1.2	G. ISTOTISET.	701111007112 112302		52 112 011113	27.10.10	TO SOURCE D	STATE OF THE PERSON			0	.02	-	7.1.7.2.0.		7.1.012
Laboratories,						K-As Received-		Metals - As													ļ			
Inc. Z504435-BS1	LCS	Water	4/28/2015 9:21	4/28/2015 12:11	Z504435	E200.7	EPA 200.7	Received	Potassium	9/7/7440	FALSE	8.1	0.5 mg/L	NA	1		10	30.7		120	80	SS		
Zalco Laboratories, Z504435-						K-As Received-		Metals - As																!
·	LCS Dup	Water	4/28/2015 9:21	4/28/2015 12:20	7504435	E200.7	EPA 200.7	Received	Potassium	9/7/7440	FALSE	8.9	0.5 mg/L	NA	1		10	39.2	10	120	80	20 SS		!
Zalco	LCS Dup	vucci	4,20,2013 3.21	4/20/2013 12:20	2304433	2200.7	2177200.7	Received	i otassiani	3/1/1440	TALSE	0.5	0.5 1116/ 2	147.	1		10	33.2	10	120		20 33		
Laboratories, Z504435-	Matrix					Mg-As Received-		Metals - As																!
	Spike	Water	4/28/2015 9:21	4/28/2015 16:26	Z504435	E200.7	EPA 200.7	Received	Magnesium	7439-95-4	FALSE	9.9	0.05 mg/L	NA	1 1504300-01	1.63	10	32.7		130	70	SS		'
Zalco																								!
·	Calibration	Matar	4/28/2015 9:21	4/28/2015 12:08	7504425	Mg-As Received- E200.7	EPA 200.7	Metals - As	Magnesium	7439-95-4	FALSE	9.58	ma/1	NA	1		10	95.8		110	90	cc		
Inc. CCV1 Zalco	Check	Water	4/28/2015 9:21	4/28/2015 12:08	2504435	E200.7	EPA 200.7	Received	Magnesium	7439-95-4	FALSE	9.56	mg/L	INA	1		10	35.6		110	90	SS		
Laboratories, Z504435-						Mg-As Received-		Metals - As																
	Duplicate	Water	4/28/2015 9:21	4/28/2015 12:31	Z504435	E200.7	EPA 200.7	Received	Magnesium	7439-95-4	FALSE	4.84	0.05 mg/L	NA	1 1504273-01	4.82			0.409			20 SS		
Zalco																								
Laboratories, Z504435-			. /20 /2015 0 01	. /00/00/5 40 0/		Mg-As Received-		Metals - As					0.05									20.00		
	Duplicate	Water	4/28/2015 9:21	4/28/2015 12:36	2504435	E200.7	EPA 200.7	Received	Magnesium	7439-95-4	FALSE ND		0.05 mg/L	NA	1 1504295-01	ND						20 SS		
Zalco Laboratories, Z504435-						Mg-As Received-		Metals - As																
·	LCS Dup	Water	4/28/2015 9:21	4/28/2015 12:20	Z504435	E200.7	EPA 200.7	Received	Magnesium	7439-95-4	FALSE	10.6	0.05 mg/L	NA	1		10	106	22.2	120	80	20 SS		Z-04
Zalco																								
Laboratories, Z504435-	Matrix					Mg-As Received-		Metals - As																!
	Spike Dup	Water	4/28/2015 9:21	4/28/2015 12:26	Z504435	E200.7	EPA 200.7	Received	Magnesium	7439-95-4	FALSE	9.79	0.05 mg/L	NA	1 1504300-01	1.63	10	31.6	1.14	130	70	20 SS		
Zalco Laboratories,						Mg-As Received-		Metals - As													ļ			
Inc. Z504435-BS1	LCS	Water	4/28/2015 9:21	4/28/2015 12:11	Z504435	E200.7	EPA 200.7	Received	Magnesium	7439-95-4	FALSE	8.47	0.05 mg/L	NA	1		10	34.7		120	80	ss		!
Zalco	200	. rate.	., 20, 2010 3.21	1/20/2013 12:11	230.133	220017	217120017		· · · · · · · · · · · · · · · · · · ·	7 133 33 1	771252	0,	0.03							120				
Laboratories, Z504435-						Mg-As Received-		Metals - As													ļ			
	Blank	Water	4/28/2015 9:21	4/28/2015 16:26	Z504435	E200.7	EPA 200.7	Received	Magnesium	7439-95-4	FALSE ND		0.05 mg/L	NA	1							SS		'
Zalco						Man An Dannis and		N4-+-I- A-													ļ			
Laboratories, Z504435- Inc. DUP3	Duplicate	Mater .	4/28/2015 9:21	4/28/2015 13:25	7504425	Mg-As Received- E200.7	EPA 200.7	Metals - As Received	Magnesium	7439-95-4	FALSE	0.518	0.05 mg/L	NA	1 1504302-01	0.539			3.88			20 SS		!
Zalco	Duplicate	vvatei	4/28/2013 3.21	4/28/2013 13.23	2304433	L200.7	LFA 200.7	Received	iviagnesium	7439-93-4	TALSE	0.516	0.03 mg/L	INA	1 1304302-01	0.539			3.88			20 33		-
Laboratories, Z504435-						Mn-As Received-		Metals - As																!
Inc. DUP3	Duplicate	Water	4/28/2015 9:21	4/28/2015 13:25	Z504435	E200.7	EPA 200.7	Received	Manganese	7439-96-5	FALSE ND		0.03 mg/L	NA	1 1504302-01	ND						20 SS		
Zalco								_																!
Laboratories, Z504435-	B P		4/20/2045 0.24	4/20/2045 42 24	7504425	Mn-As Received-	FDA 200 7	Metals - As		7420.06.5	FALCE	0.54	0.00		4 4504272 04	0.53			4.00			20.55		!
Inc. DUP1 Zalco	Duplicate	water	4/28/2015 9:21	4/28/2015 12:31	2504435	E200.7	EPA 200.7	Received	Manganese	7439-96-5	FALSE	0.54	0.03 mg/L	NA	1 1504273-01	0.52			4.09			20 SS		-
Laboratories, Z504435-						Mn-As Received-		Metals - As																!
·	Duplicate	Water	4/28/2015 9:21	4/28/2015 12:36	Z504435	E200.7	EPA 200.7		Manganese	7439-96-5	FALSE ND		0.03 mg/L	NA	1 1504295-01	0.00044						20 SS		!
Zalco																								
Laboratories, Z504435-						Mn-As Received-		Metals - As																!
	Reference	Water	4/28/2015 9:21	4/28/2015 16:48	3 Z504435	E200.7	EPA 200.7	Received	Manganese	7439-96-5	FALSE	1.1	mg/L	NA	1		1	108		110	90	SS		
Zalco Laboratories, Z504435-						Mn-As Received-		Metals - As																!
	Blank	Water	4/28/2015 9:21	4/28/2015 16:26	Z504435		EPA 200.7	Received	Manganese	7439-96-5	FALSE ND		0.03 mg/L	NA	1							SS		!
Zalco			, -,	, ,, ,, ,, ,,					. 0		- 11-			1										
	Matrix					Na-As Received-		Metals - As																
	Spike	Water	4/28/2015 9:21	4/28/2015 16:26	Z504435	E200.7	EPA 200.7	Received	Sodium	7440-23-5	FALSE	55	7 mg/L	NA	1 1504300-01	41	20	58.3		130	70	SS		QM-07
Zalco						No. As Possived		Motals As																
Laboratories, Z504435- Inc. DUP3	Duplicate	Water	4/28/2015 9:21	4/28/2015 13:25	Z504435	Na-As Received- E200.7	EPA 200.7	Metals - As Received	Sodium	7440-23-5	FALSE	960	70 mg/L	NA	10 1504302-01	920			3.89			20 SS		
Zalco	_ = = = = = = = = = = = = = = = = = = =		., 25, 2015 5.21	., 23, 2013 13.23	200 1700				- 50.0	7.1.0 25 5		200	70 1116/ 2		10 130 1302 01	320			05			20,33		
Laboratories, Z504435-						Na-As Received-		Metals - As																
	LCS Dup	Water	4/28/2015 9:21	4/28/2015 12:20	Z504435	E200.7	EPA 200.7	Received	Sodium	7440-23-5	FALSE	16	7 mg/L	NA	1		20	30.8	).936	120	80	20 SS		
Zalco																								
Laboratories,	ıcc	Matar	4/20/2015 0.21	4/20/2015 12:11	7504425	Na-As Received-	EDA 200 7	Metals - As	Cadium	7440 22 5	FALSE	16	7 /1	NI A	1		20	90		120	90	cc		!
Inc. Z504435-BS1 Zalco	LCS	Water	4/28/2015 9:21	4/28/2015 12:11	4304435	E2UU./	EPA 200.7	Received	Sodium	7440-23-5	FALSE	16	7 mg/L	NA	1		20	80		120	80	SS		
Laboratories, Z504435-						Na-As Received-		Metals - As																
	Blank	Water	4/28/2015 9:21	4/28/2015 16:26	Z504435	E200.7	EPA 200.7	Received	Sodium	7440-23-5	FALSE ND		7 mg/L	NA	1						ļ	SS		
Zalco																								
·	Matrix		. 100 15 - :			Na-As Received-		Metals - As												4.5	_	20 5-		
	Spike Dup	Water	4/28/2015 9:21	4/28/2015 12:26	Z504435	E200.7	EPA 200.7	Received	Sodium	7440-23-5	FALSE	55	7 mg/L	NA	1 1504300-01	41	20	58.2 0	U374	130	70	20 SS		QM-07
Zalco Laboratories, Z504435-						Na-As Received-		Metals - As																
	Duplicate	Water	4/28/2015 9:21	4/28/2015 12:36	Z504435		EPA 200.7		Sodium	7440-23-5	FALSE	45	7 mg/L	NA	1 1504295-01	46			3.22			20 SS		
1	.,		, -,	, ,, .,					1		-					-1			1			-   ***	1	

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LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	RESULT DL	RL UNITS	BASIS	N	SOURCEID SOL	JRCERES S		' RPD	UPPERCL	LOWERCL	RPDCL ANA	ALYST PSOLIDS	LNOTE ANOTE
Zalco																								
Laboratories,		Durlinska	14/	4/20/2015 0:21	4/20/2045 42-24 7504425	Na-As Received-	FDA 200 7	Metals - As	Cadima	7440 22 5	EALCE	210	7 (1	N/A	1	1504272.01	200		-			20.55		
Inc. Zalco	DUP1	Duplicate	water	4/28/2015 9:21	4/28/2015 12:31 Z504435	E200.7	EPA 200.7	Received	Sodium	7440-23-5	FALSE	310	7 mg/L	NA	1	1504273-01	290		5.	00		20 SS		
Laboratories,	Z504435-	Calibration				Na-As Received-		Metals - As																
Inc.	CCV1	Check	Water	4/28/2015 9:21	4/28/2015 12:08 Z504435	E200.7	EPA 200.7	Received	Sodium	7440-23-5	FALSE	43	mg/L	NA	1			50	86.5	110	90	SS		Z-06
Zalco	7504425	Calibaatiaa				CiO2 As Dassius																		
Laboratories, Inc.		Calibration Check	Water	4/28/2015 9:21	4/28/2015 12:08 Z504435	SiO2-As Received-	EPA 200.7	Metals - As Received	Silica (SiO2)	763-18-69	FALSE	21	mg/L	NA	1			21.39	97.5	110	90	SS		
Zalco	0012	Circon	· · · · · ·	1,20,2013 3121	1,20,2013 12100 230 1 133	220017	2.712007		5 (5.52)	7 05 10 05	171202		8/ =		_			22.03	37.13	110	30			
Laboratories,						SiO2-As Received-		Metals - As																
Inc.	DUP1	Duplicate	Water	4/28/2015 9:21	4/28/2015 12:31 Z504435	E200.7	EPA 200.7	Received	Silica (SiO2)	763-18-69	FALSE	69	4 mg/L	NA	1	1504273-01	65		5.	78		20 SS		
Zalco Laboratories,	7504435-					SiO2-As Received-		Metals - As																
Inc.		Duplicate	Water	4/28/2015 9:21	4/28/2015 12:36 Z504435	E200.7	EPA 200.7		Silica (SiO2)	763-18-69	FALSE	19	4 mg/L	NA	1	1504295-01	19		2.	52		20 SS		
Zalco																								
Laboratories,		DI. I		4/20/2045 0 24	1/20/2015 15 25 7501125	SiO2-As Received-	EDA 200 7	Metals - As	S:1: (S:03)	762.40.60	FALCE	NB	4									66		
zalco	BLK1	Blank	Water	4/28/2015 9:21	4/28/2015 16:26 Z504435	E200.7	EPA 200.7	Received	Silica (SiO2)	763-18-69	FALSE	ND	4 mg/L	NA	1							SS		
Laboratories,	Z504435-					SiO2-As Received-		Metals - As																
Inc.		LCS Dup	Water	4/28/2015 9:21	4/28/2015 12:20 Z504435	E200.7	EPA 200.7	Received	Silica (SiO2)	763-18-69	FALSE	24	4 mg/L	NA	1			21.39	113 24	.4 120	80	20 SS		Z-04
Zalco	7504425	Matri				SiO2 A-D		Motele																
Laboratories, Inc.		Matrix Spike Dup	Water	4/28/2015 9-21	4/28/2015 12:26 Z504435	SiO2-As Received- E200.7	EPA 200.7	Metals - As Received	Silica (SiO2)	763-18-69	FALSE	31	4 mg/L	NA	1	1504300-01	12	21.39	86.2 1.	78 120	80	20 SS		
Zalco		-pc Dup		., 25, 2015 5.21	., 20, 2013 11.20 2301133		_,,,,,			. 00 10 00		31	1116/2		1			21.55	30.2 1.	- 120	30	20 33		
Laboratories,						SiO2-As Received-		Metals - As																
Inc.	DUP3	Duplicate	Water	4/28/2015 9:21	4/28/2015 13:25 Z504435	E200.7	EPA 200.7	Received	Silica (SiO2)	763-18-69	FALSE	17	4 mg/L	NA	1	1504302-01	17		0.5	18		20 SS		
Zalco Laboratories,	7504435-	Matrix				SiO2-As Received-		Metals - As																
Inc.		Spike	Water	4/28/2015 9:21	4/28/2015 16:26 Z504435	E200.7	EPA 200.7		Silica (SiO2)	763-18-69	FALSE	30	4 mg/L	NA	1	1504300-01	12	21.39	83.7	120	80	SS		
Zalco																								
Laboratories,				. /00/00/5 0 04	. /20 /20	SiO2-As Received-		Metals - As	(0.00)			10						24.00		400				
Inc. Zalco	Z504435-BS1	LCS	Water	4/28/2015 9:21	4/28/2015 12:11 Z504435	E200.7	EPA 200.7	Received	Silica (SiO2)	763-18-69	FALSE	19	4 mg/L	NA	1			21.39	88.3	120	80	SS		-
Laboratories,	Z504415-							No Prep -																
Inc.	SRM2	Reference	Water	4/24/2015 17:00	4/24/2015 17:00 Z504415	pH-E150.1	EPA 150.1	Bench Chem	рН	NA	FALSE	9.13	pH Unit	ts NA	1			9.15	99.8	102.2	97.5	SAN	Л	
Zalco	7504445																							
Laboratories,		Duplicate	Water	4/24/2015 17:00	4/24/2015 17:00 Z504415	nH-F150 1	EPA 150.1	No Prep - Bench Chem	nH	NA	FALSE	8.13	pH Unit	rc ΝΔ	1	1504275-01	8.07		0.7	11		5 SAN	4	
Zalco	5011	Daplicate	Water	4,24,2013 17.00	4/24/2013 17:00 2304413	pii 2130.1	217(130.1	Benefit Chem	pri	10/1	TALSE	0.13	priorin	.5 10/1		1304273 01	0.07		0.7			3 37 11		
Laboratories,	Z504415-							No Prep -																
Inc.	BLK1	Blank	Water	4/24/2015 17:00	4/24/2015 17:00 Z504415	pH-E150.1	EPA 150.1	Bench Chem	рН	NA	FALSE	6.5	pH Unit	ts NA	1							SAN	И	
Zalco Laboratories,	7504486-							FPΔ																
Inc.		Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C MS	Fluoranthene	206-44-0	FALSE	ND 0.	8 10 ug/L	NA	1							JMI	м	
Zalco																								
Laboratories,		Diami	M/=+::	4/27/2045 0 25	A /20 /2045 0 24 7504425	DNIA CIA/COTOC	SW046 02700		Indeno(1,2,3-	102.20.5	FA1.05	ND	10 . //	N/C										
Inc. Zalco	BLK1	Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-5W82/0C	SW846 8270C	3510C_MS	cd)pyrene	193-39-5	FALSE	טא	10 ug/L	NA	1							JMN	VI	
Laboratories,	Z504486-							EPA																
Inc.		Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Fluorene	86-73-7	FALSE	ND 0.	5 10 ug/L	NA	1							JMN	И	
Zalco	7504400							EDA.	Dames (1)								T							
Laboratories,		Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	EPA 3510C_MS	Benzo (k) fluoranthene	207-08-9	FALSE	ND 0	8 10 ug/L	NA	1							JMI	м	
Zalco	DENT	SIGIIK	· · · · · · · ·	7, 27, 2013 3.23	7, 20, 2010 3.31 2004400	. 1471 34402700	3110-70 02/00	22±0C_IVI3		20, 00.9	IAL		10 ug/ L	14/5	1							31411		
Laboratories,								EPA	Benzo (g,h,i)															
Inc.	BLK1	Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	perylene	191-24-2	FALSE	ND 0.	8 10 ug/L	NA	1							JMN	И	
Zalco Laboratories,	7504486-							FPΔ																
Inc.		LCS Dup	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C MS	2-Fluorobiphenyl	321-60-8	TRUE	51.3	ug/L	NA	1			100	51.3	92	0	JMN	м	
Zalco		- 1		, , , , , , , , , ,				-	,				- 0,											
Laboratories,								EPA																
	BSD1	LCS Dup	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Pyrene	129-00-0	FALSE	47.1 0.	8 10 ug/L	NA	1			100	47.1 7.	26 142	10	20 JMN	M	
Zalco Laboratories,	Z504486-							EPA	N-Nitrosodi-n-															
		LCS Dup	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C		propylamine	621-64-7	FALSE	58.2	ug/L	NA	1			100	58.2 17	.1 125	10	20 JMN	м	
Zalco								_																
Laboratories,		Diami	M/=+:	4/27/2045 0 25	A /20 /2015 0 24 7504425	DNIA CIA/COTOC	SW046 02700	EPA	Benzo (b)	205.00.2	FA1.05	ND -	10 . "	N/C										
inc.	BLK1	Blank	Water	4/2//2015 9:25	4/28/2015 9:31 Z504486	MNA-SW82/UC	SW846 8270C	3510C_MS	nuorantnene	205-99-2	FALSE	ND 0.	7 10 ug/L	NA	1					1	1	JMN	VI	

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LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	RESULT	DL	RL UNITS	BASIS	DILUTIO N	SOURCEID SOURCERES		RECOVER Y RPD	UPPERCL	LOWERCL	RPDCL	ANALYST PSOLIDS	LNOTE ANOTE
Zalco	7504496							EDA.	Dibonz (o.b)															
Laboratories, Inc.		Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Dibenz (a,h) anthracene	53-70-3	FALSE	ND	0.6	10 ug/L	NA	1							JMM	
Zalco	7504406							504																
Laboratories, Inc.		Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Chrysene	218-01-9	FALSE	ND	0.8	10 ug/L	NA	1							JMM	
Zalco				, ,	, , , , , , , , , , , , , , , , , , , ,				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,															
Laboratories,		Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	EPA 3510C MS	Benzo (a) pyrene	50-32-8	FALSE	ND	0.7	10 ug/L	NA	1							JMM	
Zalco		Diam.	Truce.	1,27,2013 3123	1,720,2013 3131 230 1100		0.00.002700	551005	Denizo (a) pyrene	30 32 0	171252		0.7	20 08/2										
Laboratories,		Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	DNIA-SW/8270C	SW846 8270C	EPA 3510C MS	Benzo (a) anthracene	56-55-3	FALSE	ND	0.8	10 ug/L	NA	1							JMM	
Zalco	DEKI	DIGTIK	water	4/2//2013 9.23	4/28/2013 9.31 2304480	FNA-3W8270C	37700	3310C_IVI3	antinacene	30-33-3	TALSE	ND	0.8	IO ug/L	INA	1							JIVIIVI	+
Laboratories,		Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	DNIA SWIGOTOC	SW846 8270C	EPA 3510C_MS	Anthracana	120-12-7	FALSE	ND	0.7	10 ug/L	NA	1							MML	
Inc. Zalco	DLKI	DIGITK	water	4/2//2013 9.23	4/28/2013 9.31 2304480	FNA-3W8270C	30040 82700	3310C_IVI3	Antinacene	120-12-7	FALSE	IND	0.7	IO ug/L	INA	1							JIVIIVI	
Laboratories,		Diami	\A/=+==	4/27/2015 0:25	4/20/2015 0:21 7504406	DNIA CIA/0270C	CW046 02706	EPA	A	200.00.0	FALCE	ND	0.5	40/	NI A	1							10.40.4	
zalco	BLK1	Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_IMS	Acenaphthylene	208-96-8	FALSE	ND	0.5	10 ug/L	NA	1							JMM	
Laboratories,		Dis. I		4/27/2247 2	4/20/2045 0 24 =======	DNIA CIAICOTOS	C) 4/0 4/5 22725	EPA		02.22.2	F4105	NB		40 "										
Inc. Zalco	BLK1	Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Acenaphthene	83-32-9	FALSE	ND	0.5	10 ug/L	NA	1							JMM	+ +
Laboratories,								EPA																
Inc. Zalco	BLK1	Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	2-Fluorobiphenyl	321-60-8	TRUE	39	9.3	ug/L	NA	1		100	39.3	92	. (	)	JMM	+ +
Laboratories,								EPA																
Inc. Zalco	BSD1	LCS Dup	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Terphenyl-dl4	NA	TRUE	51	1.6	ug/L	NA	1		100	51.6	100	(	0	JMM	
Laboratories,								EPA	1,2,4-															
Inc.	Z504486-BS1	LCS	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Trichlorobenzene	120-82-1	FALSE	42	2.4	ug/L	NA	1		100	42.4	97	' (	)	JMM	
Zalco Laboratories,								EPA																
Inc.	Z504486-BS1	LCS	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	2,4-Dinitrotoluen	e 121-14-2	FALSE	39	9.9	ug/L	NA	1		100	39.9	109	14	1	JMM	
Zalco Laboratories,								EPA	1,4-															
Inc.	Z504486-BS1	LCS	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Dichlorobenzene	106-46-7	FALSE	38	8.4	ug/L	NA	1		100	38.4	90	(	)	JMM	
Zalco Laboratories,								EPA																
Inc.	Z504486-BS1	LCS	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	2-Fluorobiphenyl	321-60-8	TRUE	40	0.7	ug/L	NA	1		100	40.7	92	. (	)	JMM	
Zalco Laboratories,								EPA																
Inc.	Z504486-BS1	LCS	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Pyrene	129-00-0	FALSE	43	3.8 0.8	10 ug/L	NA	1		100	43.8	142	10	)	JMM	
Zalco Laboratories,								FPΔ																
Inc.	Z504486-BS1	LCS	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Terphenyl-dl4	NA	TRUE	50	0.8	ug/L	NA	1		100	50.8	100	(	0	JMM	
Zalco Laboratories,	7504486-							EPA																
Inc.		Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C		Nitrobenzene-d5	NA	TRUE	36	6.6	ug/L	NA	1		100	36.6	95	(	0	JMM	
Zalco Laboratories,	7504496	1						EDΛ																
Inc.		Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Naphthalene	91-20-3	FALSE	ND		10 ug/L	NA	1							JMM	
Zalco	7504400							EDA.																
Laboratories, Inc.		LCS Dup	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	EPA 3510C_MS	Acenaphthene	83-32-9	FALSE	57	7.1 0.5	10 ug/L	NA	1		100	57.1 24	.3 107	,	4 20	JMM	QR-02
Zalco								-																
Laboratories, Inc.		Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C MS	Terphenyl-dl4	NA	TRUE	59	9.3	ug/L	NA	1		100	59.3	100			JMM	
Zalco				, , :==::==	, , , , , , , , , , , , , , , , , , , ,				, , , ,			33		- Gr -		1					<u> </u>			
Laboratories,		LCS Dup	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	EPA 3510C MS	Nitrobenzene-d5	NA	TRUE	40	9.1	ug/L	NA	1		100	49.1	95	,		JMM	
Zalco		ap		., _, _ 2013 5.23	.,,		2.1.2.10.02.700		I Senzene do	7	52	-10		~6/ -				100	.5.2	35				+ + +
Laboratories, Inc.	Z504486-BS1	ICS	Water	4/27/2015 0.25	4/28/2015 9:31 Z504486	PNA-SW/82700	SW846 8270C	EPA 3510C MS	Acenaphthene	83-32-9	FALSE	11	4.7 0.5	10 ug/L	NA	1		100	44.7	107	,	1	JMM	
Zalco			vater	7/2//2013 3.23	-1/20/2013 3.31 2304400	114A 34402/0C	JVV040 02/0C	2210C IAI2	Acchaphthene	33 32-3	IALSL	44	/ 0.3	TO UE/L	IVA	1		100	77./	107		*		+ +
Laboratories,		Blank	\\/a+or	A/27/2015 0:25	A/28/201E 0-21 7504486	DNIA_\$\\\\02700	S/M/8/16 02700	EPA	Dhananthrana	Q5_01 0	FALSE	ND	0.7	10/1	N/A	4							JMM	
Inc. Zalco	PLKI	Blank	Water	4/2//2013 9:25	4/28/2015 9:31 Z504486	FINA-SVV6Z/UC	SW846 8270C	22TOC_INI2	Phenanthrene	85-01-8	FALSE	ואט	0.7	10 ug/L	NA	1							JIVIIVI	+ +
Laboratories,		1.66		4/27/2245 2	4/20/2045 0.24 ========	DNIA CIAICOTOS	C) 4/O 4/C 22722	EPA	N-Nitrosodi-n-	624 61 7	F41.05		0.4					10-	10.6					
inc.	Z504486-BS1	LCS	Water	4/2//2015 9:25	4/28/2015 9:31 Z504486	PNA-5W8270C	SW846 8270C	3510C_MS	propylamine	621-64-7	FALSE	49	9.1	ug/L	NA	1		100	49.1	125	10	וע	JMM	

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LABNAME	LABSAMPID	OCTYPE	MATRIX	PREPDATE	ANADATE BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	RESULT [	DL F	RL UNITS	BASIS	DILUTIO	SOURCEID SOURC	ERES SPIKEL		ECOVER	PD	UPPERCL	LOWERCL	RPDCL	ANALYST PSOLIDS	LNOTE ANOTE
Zalco	27.557.1171.15	ασ			7 HO TO				7	0.101101115211	5511116-57111		-		57 1010		5001102.15	2.11.20 0.11.1.2.2				01121102	201121102	502	7.1.1.2.10.	2.1012 7.11012
Laboratories,								EPA	1,4-																	
Inc.	BSD1	LCS Dup	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Dichlorobenzene	106-46-7	FALSE	47.7		ug/L	NA	1			100	47.7	21.5	5 9	0	0 20	JMM	QR-02
Zalco	7504496							EDA.																		
Laboratories, Inc.		LCS Dup	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNIA-SW/8270C	SW846 8270C	3510C_MS	2,4-Dinitrotoluene	e 121-1 <i>1</i> -2	FALSE	51.7		ug/L	NA	1			100	51.7	25.7	7 10	0 1	4 20	DIMM	QR-02
Zalco	DJD1	LC3 Dup	Water	4/2//2013 3.23	4/20/2013 3.31 2304400	1 NA 3W6276C	34040 02700	33100_1013	z,4 Dillitrotoluciii	2 121 14 2	TALSE	31.7		ug/ L	IVA				100	31.7	23.7	, 10	J 1	- 20	SIVIIVI	QIV 02
Laboratories,	Z504486-							EPA	1,2,4-																	
Inc.	BSD1	LCS Dup	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Trichlorobenzene	120-82-1	FALSE	52.7		ug/L	NA	1			100	52.7	21.7	7 9	7	0 20	JMM	QR-02
Zalco																										
Laboratories,	Z504486-BS1	ıcc	Mator	4/27/2015 9:25	4/28/2015 9:31 Z504486	DNA CW9270C	SW846 8270C	EPA	Nitrobenzene-d5	NIA	TRUE	40.8		/1	NA	1			100	40.8		g	_	0	JMM	
Inc. Zalco	Z504486-B31	LCS	Water	4/2//2015 9:25	4/28/2015 9:31 2504480	PINA-3W8270C	3W840 8270C	3210C_INI2	Mitrobenzene-us	INA	IKUE	40.8		ug/L	INA	1			100	40.8		9	5	U	JIVIIVI	
Laboratories,	Z504486-							EPA																		
Inc.	BLK1	Blank	Water	4/27/2015 9:25	4/28/2015 9:31 Z504486	PNA-SW8270C	SW846 8270C	3510C_MS	Pyrene	129-00-0	FALSE	ND	0.8	10 ug/L	NA	1									JMM	
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Laboratories,		1.00	M/=+:	4/20/2045 0.24	4/20/2045 42 44 7504425	Sr-As Received-	EDA 200 7	Metals - As	Charaction	7440 24 6	FALCE	0.05		0.1	NI A					04.7					cc	
Inc.	Z504435-BS1	LCS	Water	4/28/2015 9:21	4/28/2015 12:11 Z504435	E200.7	EPA 200.7	Received	Strontium	7440-24-6	FALSE	0.85		0.1 mg/L	NA	1			1	84.7		12	0 8	U	SS	
Zalco Laboratories,	Z504435-	Matrix				Sr-As Received-		Metals - As																		
Inc.		Spike	Water	4/28/2015 9:21	4/28/2015 16:26 Z504435	E200.7	EPA 200.7		Strontium	7440-24-6	FALSE	1		0.1 mg/L	NA	1	1504300-01	0.1	1	91.7		12	0 8	0	SS	
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Inc.	DUP3	Duplicate	Water	4/28/2015 9:21	4/28/2015 13:25 Z504435	E200.7	EPA 200.7	Received	Strontium	7440-24-6	FALSE	2.4		0.1 mg/L	NA	1	1504302-01	2.4			3.07	7		20	O SS	
Zalco Laboratories,	7504425					Sr-As Received-		Metals - As																		
Inc.		Blank	Water	4/28/2015 9:21	4/28/2015 16:26 Z504435	E200.7	EPA 200.7	Received	Strontium	7440-24-6	FALSE	ND		0.1 mg/L	NA	1									SS	
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Laboratories,	Z504435-					Sr-As Received-		Metals - As																		
Inc.	BSD1	LCS Dup	Water	4/28/2015 9:21	4/28/2015 12:20 Z504435	E200.7	EPA 200.7	Received	Strontium	7440-24-6	FALSE	1.1		0.1 mg/L	NA	1			1	107	22.9	9 12	0 8	0 20	SS	Z-04
Zalco	7504425					Cr As Dosaivad		Metals - As																		
Laboratories, Inc.		Reference	Water	4/28/2015 9·21	4/28/2015 16:48 Z504435	Sr-As Received- E200.7	EPA 200.7		Strontium	7440-24-6	FALSE	0.93		mg/L	NA	1			1	92.8		11	0 9	0	SS	
Zalco	SKIVII	nererence	Water	4,20,2013 3.21	4/20/2013 10:40 2304433	2200.7	2171200.7	neceived	Strontium	7440 24 0	TALSE	0.55		6/ -	1471	-			-	32.0			3		33	
Laboratories,	Z504435-	Matrix				Sr-As Received-		Metals - As																		
Inc.	MSD1	Spike Dup	Water	4/28/2015 9:21	4/28/2015 12:26 Z504435	E200.7	EPA 200.7	Received	Strontium	7440-24-6	FALSE	1		0.1 mg/L	NA	1	1504300-01	0.1	1	90.1	1.6	5 12	0 8	0 20	SS	
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Laboratories,		Dunlianta	Mator	4/20/2015 0:21	4/28/2015 12:36 Z504435	Sr-As Received- E200.7	EDA 200 7	Metals - As	Ctrontium	7440 24 6	FALCE	ND		0.1 mg/l	NA	1	1504295-01 ND							20	oss	
Zalco	DUPZ	Duplicate	water	4/28/2015 9:21	4/28/2013 12:30 2304433	E200.7	EPA 200.7	Received	Strontium	7440-24-6	FALSE	ND		0.1 mg/L	INA	1	1504295-01 ND							20	7 33	
Laboratories,	Z504435-					Sr-As Received-		Metals - As																		
Inc.		Duplicate	Water	4/28/2015 9:21	4/28/2015 12:31 Z504435	E200.7	EPA 200.7	Received	Strontium	7440-24-6	FALSE	0.74		0.1 mg/L	NA	1	1504273-01	0.71			3.78	8		20	ss	
Zalco																										
Laboratories,		Dlas!:	M/ot	4/20/2045 42.55	4/20/2045 42:20 750445	TDC CN425400	SN4 25 400	No Prep -	Total Dissolved	N A	FALCE	ND		10 "	NIA										MCC	
Inc. Zalco	BLK1	Blank	Water	4/29/2015 13:23	4/29/2015 13:28 Z504454	1DS-SIVI2540C	SM 2540C	Bench Chem	SOIIOS	NA	FALSE	טא		10 mg/L	NA	1									MSS	
Laboratories,	Z504454-							No Prep -	Total Dissolved																	
Inc.		Duplicate	Water	4/29/2015 13:23	4/29/2015 13:28 Z504454	TDS-SM2540C	SM 2540C	Bench Chem		NA	FALSE	3000		10 mg/L	NA	1	1504296-02	3000			1.32	2			MSS	
Zalco																										
Laboratories,									Total Dissolved		_															
Inc.	DUP3	Duplicate	Water	4/29/2015 13:23	4/29/2015 13:28 Z504454	TDS-SM2540C	SM 2540C	Bench Chem	Solids	NA	FALSE	5300		10 mg/L	NA	1	1504302-01	5400			2.62	2		5	MSS	
Zalco Laboratories,	7504454-							No Prep -	Total Dissolved																	
Inc.		Duplicate	Water	4/29/2015 13:23	4/29/2015 13:28 Z504454	TDS-SM2540C	SM 2540C	Bench Chem		NA	FALSE	17000		10 mg/L	NA	1	1504281-02	17000			(	o			MSS	
Zalco		,		. , : : :::::::::::::::::::::::::::::::	, , = = ======									37 -				-								
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Inc.	BLK1	Blank	Water	5/8/2015 10:00	5/8/2015 15:47 Z505093	TRPH-E1664	EPA 1664	EPA 3535	TRPH	NA	FALSE	ND		5 mg/L	NA	1									BIG	
Zalco	7505003																									
Laboratories, Inc.		LCS Dup	Water	5/8/2015 10:00	5/8/2015 15:47 Z505093	TRPH-F1664	EPA 1664	EPA 3535	TRPH	NA	FALSE	24		5 mg/L	NA	1			40	60	(	0 12	3 5	0 20	BIG	
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Inc.	Z505093-BS1	LCS	Water	5/8/2015 10:00	5/8/2015 15:47 Z505093	TRPH-E1664	EPA 1664	EPA 3535	TRPH	NA	FALSE	24		5 mg/L	NA	1			40	60		12	3 5	0	BIG	

QUALIFIER	DESCRIPTION
В	Analyte is found in the associated blank as well as in the sample (CLP B-flag).
	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was
QM-07	accepted based on acceptable LCS recovery.
	The RPD result exceeded the QC control limits; however, both percent recoveries were
	acceptable. Sample results for the QC batch were accepted based on percent recoveries and
QR-02	completeness of QC data.
Z-04	LCS/LCSD is outside laboratory limits.
Z-05	Duplicate Relative Percent Difference (RPD) is outside laboratory limits.
Z-06	Quality Control Reference Sample is outside laboratory limits.

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Pursuant to California Water Code ("CWC") § 13320, and California Code of Regulations Section 2050, Petitioner alleges as follows:

#### 1. Name, Address, Telephone Number and Email Address of the Petitioner.

Jaco Production Company Richard A. Woodall P.O. Box 82515 Bakersfield, CA 93380 (661) 393-7000

Please direct notices and other communications to:

Doug Gosling Young Wooldridge, LLP 1800 30<sup>th</sup> Street, Fourth Floor Bakersfield, CA 93301 (661) 377-7137 dgosling@youngwooldridge.com

# 2. The Action or Inaction of the Regional Water Board Being Petitioned, Including a Copy of the Action Being Challenged.

Petitioner seeks review of the Regional Board's Order No. R5-2015-0721 and the administrative record underlying the Regional Board's order. Attached as Exhibit 1 is a true and correct copy of the Order.

#### 3. The Date the Regional Board Acted.

The Regional Board's Order was signed on August 26, 2015.

#### 4. Full and Complete Statement of the Reasons the Action was Inappropriate or Improper.

The Regional Board's Order is based on its authority under Section 13267 to require specifically described persons to "furnish...technical or monitoring program reports which the regional board requires" in connection with its "investigation of the quality of waters within its region." (CWC § 13267(b)(1).) That authority is subject to the express mandatory limitation, however, that "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." (CWC § 13267(b)(1).) As detailed below, the activity mandated by the Order bears no reasonable relationship either to the need for such activity or any benefit to be obtained by it.

The Regional Board took action on August 26, 2015 and issued an Order to Petitioner stating that Petitioner had been identified as the owner and operator of the subject Lease and discharges oil field wastewater to unlined sumps. (Ex. 1, Findings ¶1, 11, 19) The Order is inappropriate and improper because Petitioner does not discharge "oil production wastewater" or "oil field produced water" at the Lease, in fact, the Petitioner has never operated the Lease for oil production and thus has never discharged production water into the subject sumps. Neither does the Petitioner permit third-parties to discharge any oil production wastewater at the Lease. The Order assumes the sumps are active and utilized for oil production activities without Waste Discharge Requirements and thus demands the preparation of reports containing detailed information beginning now and continuing for many years into the foreseeable future and including the application for Waste Discharge Requirements.

The fluids observed by the Regional Board on February 27, 2015 were the result of a one-time release of unused water obtained from a local groundwater well. Since receiving a Notice of Violation (NOV) on or about April 3, 2015, Petitioner has provided the Regional Board with detailed information supporting its position related to the one-time release of unused water. Petitioner appreciates that the Regional Board is inspecting active oil sumps; however, respectfully disagrees with the Order and the demanded activities due to the Regional Board inadvertent mistake related to this Lease. The demand for extensive testing of unused sumps is arbitrary, capricious, an abuse of discretion and a violation of law. Petitioner requests the Order be rescinded and set aside due to its improper basis.

#### 5. How the Petitioner is Aggrieved.

The activity mandated by the Order is irreconcilable and contradictory in light of the accurate identification of the dormant land containing historic *sumps*. It also serves no substantial purpose and there is no substantial benefit. The Order also assumes erroneous factual assumptions based upon inaccurate information—information that is not current as demonstrated by a current search of California Division of Oil, Gas and Geothermal Resources' (DOGGR) records (Ex. 4) and the information submitted by Petitioners to the Regional Board. The circumstances surrounding the Order issued to Petitioner demonstrates the process is arbitrary and capricious. The Order notes that

false information, is a misdemeanor, and may result in additional enforcement actions, including issuance of an Administrative Civil Liability Complaint pursuant to California Water Code section 13268. Liability may be imposed pursuant to California Water Code section 13268 in an amount not to exceed one thousand dollars (\$1,000) for each day in which the violation occurs." The Order threatens any failure "to comply with these requirements may constitute a misdemeanor under Water Code section 13265 or a felony under Water Code section 13387, and may also subject Petitioner to judicial or administrative civil liabilities." The Order has already imposed unnecessary monetary and management burdens upon Petitioner. The Order has exposed Petitioner to substantial legal penalties, associated damages related to the value and use of Petitioner's property, and potential future unknown impacts to its business disruption. The Order finally creates an unwarranted stigma about Petitioner without any justification.

any failure "to furnish the required report, or the submission of a substantially incomplete report or

#### 6. The Action the Petitioner Requests the State Board Take.

Petitioner requests that the Regional Board's Order be rescinded and set aside and that the Regional Board be directed to take no further action with respect to the subject matter of its Order until it has first reviewed the information and material that was provided by Petitioner in response to the Regional Board's Order and reasonably determines from that review that further action is in fact required.

Petitioner further requests that the Regional Board be instructed, should it reasonably determine that further action concerning the subject matter of its Order is required, to direct any further order to an appropriate party (i.e. third-parties) in accordance with the provisions of Section 13267 and to provide evidence demonstrating that further action is warranted. Petitioner further requests both a hearing on this Petition to provide the parties the opportunity to analyze the requested testing material and pursue a collaborative action to remedy the Regional Board's concerns regarding any discharges.

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#### 7. A Statement of Points and Authorities of Legal Issues Raised in the Petition.

#### The Inappropriate and Improper Order

The Regional Board's Order is based on its authority in part under the Porter-Cologne Act, Section 13267, California State Water Resources Control Board Resolution No. 68-16 and Resolution No. 92-49, and requires specifically described persons to "furnish...technical or monitoring program reports which the regional board requires" in connection with its "investigation of the quality of waters within its region." (CWC § 13267(b)(1).) That authority is subject to the express mandatory limitation that "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." (CWC § 13267(b)(1).)

Such authority is also subject to the limitations adopted by the State Water Board in California Code of Regulations, Title 23, Division 3, Chapter 15, Section 2510, subdivision (c). Section 2510 provides that compliance with prescriptive standards issued from the Regional or State Board may not be feasible when such compliance (1) is unreasonably and unnecessarily burdensome and will cost substantially more than alternatives which meet the criteria in subsection (b) of this section; or (2) is impractical and will not promote attainment of applicable performance standards. Regional boards shall consider all relevant technical and economic factors including, but not limited to, present and projected costs of compliance, potential costs for remedial action in the event that waste or leachate is released to the environment, and the extent of ground water resources which could be affected.

First, the Order is based upon factual assumptions that are demonstrably incorrect. Therefore, there is no need for the demanded activity nor any appreciable benefit to be obtained.

Second, contrary to the specific requirements of Section 13267, the burden, including costs, of the activity mandated by the Order bears no reasonable relationship either to the need for such activity or any benefit to be obtained by it.

Finally, contrary to the specific requirements of Section 13267, the Order directs actions expressly and explicitly related to oil production wastewater. As noted, Petitioner is always willing and open to comply with the Regional Board, but the sumps in question have never been used by Petitioner for disposal of oil production wastewater, neither has Petitioner permitted third-parties to

use the sumps for oil production wastewater disposal. Therefore, there is no need for the demanded activity nor any appreciable benefit to be obtained.

Petitioner is not discharging oil production wastewater into the subject sumps. The Order is based upon information provided by DOGGR to the Regional Board that is not current or accurate creating this unnecessary action and proceeding. Petitioner has submitted information to the Regional Board to address the misinformation—but due to the 30-day deadline per CWC section 13320 and others, Petitioner is compelled to file this petition for review of the Order to preserve its rights and pursue resolution of this Order as soon as possible.

#### B. Summary of Facts

On or about April 3, 2015 the Regional Board issued a Notice of Violation to Petitioner related to the Lease. (Ex. 2) The Regional Board also issued a 13267 Order to Petitioner on or about April 1, 2015 for the Lease. (Ex. 1, Findings ¶12) Petitioner immediately contacted the Regional Board to inform it about its inaccurate understanding about the inactive sumps. (Woodall Decl. ¶3) On or about July 16, 2015, Petitioner submitted the requested 13267 technical report for the Lease to the Regional Board. (Ibid.) Petitioner continued to ask the Regional Board to re-evaluate its position and misunderstanding about the Lease, but to no avail.

The Regional Board later transmitted a DRAFT Cleanup and Abatement Order (CAO) to Petitioner reasserting its misunderstanding about the Lease. Again, Petitioner contacted the Regional Board and provided comments to the DRAFT CAO and documentation under the penalty of perjury explaining that the Lease was not used for disposal of oil production wastewater and that the Regional Board was mistaken. (Woodall Decl. ¶4; Ex. 3)

Petitioner explained to the Regional Board that produced crude oil and associated water was last produced on the Lease in May 1998 by the previous owner of the oil and gas working interest, Midsun Partners. (Woodall Decl. ¶5; Ex. 3) Petitioner is informed and believes that Midsun operated a co-generation facility on the Lease from about 1986 to May 1998 subject to an oil/gas lease and/or ground lease from Petitioner and other co-owners. (Ibid.) Midsun produced electricity from the power plant and utilized heat from the gas turbine to generate steam which was injected into the shallow Marvic zone oil reservoir to enhance oil recovery. (Ibid.) When Midsun ceased operations

in mid-1998 on the Lease, Petitioner became the designated "operator" with DOGGR for the wells on the property. (Ibid.) Petitioner is the *operator* of the wells in name only. Petitioner has <u>never produced the wells</u> and consequently, never has wastewater been separated from any extracted crude and discharged into the sumps by Petitioner. (Ibid.) In fact, after Petitioner took over "*operatorship*", the oilfield electrical main panel was decommissioned as a safety measure and as a consequence, the wells are inoperable. (Ibid.)

Since taking over the "operatorship" of the wells in mid-1998, Petitioner has conformed to the monthly reporting requirements of DOGGR. (Woodall Decl. ¶6) A review of the online production records of DOGGR reveals that zero production has been reported from the Lease since May 1998. Petitioner provided a copy of the DOGGR historical production from the Lease to the Regional Board. (Ibid; Ex. 4) Also, annual idle well assessments have been paid to DOGGR as a consequence of the wells being idle since mid-1998. (Ibid.)

At issue in the current action, DOGGR requested that certain tankage at the Lease be marked with "Out of Service" notations painted on the side and cleaned. (Woodall Decl. ¶7) While the work was being done to satisfy this requirement, a vacuum truck loaded with hot water from a local groundwater well was brought from offsite onto the Lease for cleaning the tanks in preparation of painting the "Out of Service" notation on the tanks. (Ibid.) At the conclusion of this work, the remaining water brought onto the site was released from the vacuum truck into the two ponds. (Ibid.) It was this water that was observed by the Regional Board. (Ibid.) This was a one-time event and will not recur. (Ibid.) It is estimated that approximately 2,000-3,000 gallons of water was released into the sumps from the vacuum truck. (Ibid.) At the request of the Regional Board, two samples were taken from the sumps and sent to Zalco Laboratories for analysis. (Ibid.) Petitioner advised the Regional Board that except for high sodium levels, the water contained no undesirable constituents. (Ibid.) Petitioner also requested the Regional Board note that any groundwater in the vicinity of the Lease also contains high levels of sodium. (Ibid.) Petitioner fully incorporates those comments and attachments as fully set forth herein and re-asserts those comments within this Petition.

Petitioner also provided the Regional Board with a parcel map and an aerial photo of the Lease in Midway-Sunset Oilfield, Kern County to assist with the review. (Woodall Decl. ¶8; Ex. 5)

Petitioner detailed for the Regional Board that the 80 acre Lease is designated on the Kern County Assessor's Map No. 183-14 as parcel 10 for the 80 acres of surface and as parcel 28 for the underlying mineral rights on this 80 acre parcel being the West half of the Southwest quarter of Section 9 Township 31 South, Range 22 East. (Ibid.)

Finally, on August 11, 2015, Petitioner visited the Lease and took pictures of both sumps and provided copies of the pictures to the Regional Board. (Woodall Decl. ¶9; Ex. 6) As Petitioner suspected, the water had completely evaporated. (Ibid.) The ground on the bottom of the sumps had lighter and darker spots as depicted in the photos, but no water was present. (Ibid.)

On or about August 26, 2015, the Regional Board issued its final Order to Petitioner regarding the sumps and ignoring the data provided by Petitioner. Again, the Order is inaccurate and improper.

#### C. No Reasonable Relationship Between The Idle Sumps And The Order

As detailed above, the deliverables demanded do not bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. Throughout the Porter-Cologne Act, there is an underlying requirement of reasonableness to the regulation of water quality in the state. For example, under section 13300, the State may only regulate water quality "reasonabl[y], considering all demands being made and to be made on those waters." Similarly, under section 13050, "pollution means any alteration of the quality of water which may unreasonably affect" the waters of the state. While each regional board is required to ensure the "reasonable protection of beneficial uses,...it is recognized that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses." (CWC § 13241 [setting forth the Act's water quality objectives].) These multiple references to reasonableness indicate the legislature's desire for moderation and balance. This Order falls short of that statutory requirement.

Petitioner notes the various errors in the Order and will highlight a few for example: (1)
Paragraph 1 of the Order states that the Lease property is approximately 10 miles NW of Taft when in fact it is 13+ miles from Taft. (Ex. 1; Woodall Decl. ¶10) Paragraph 2 states that oil production wastewater and residual crude oil was discharged to the unlined ponds for percolation and evaporation, when in fact Petitioner has never produced oil on the property. (Ibid.) There is no

electrical service to the property for safety reasons in that the oil property has been idle since 1998. (Ibid.) Petitioner disposed of hot water trucked to the property to aid in cleaning the two tanks that were placed in an Out of Service state pursuant to a directive from DOGGR. (Ibid.) Any minimal crude oil stained soil observed in the ponds was from actual oilfield operations almost two decades ago by Midsun Partners, LP and its predecessors and not from a discharge by Petitioner or Petitioner's contractor, Crider Construction. (Ibid.) Paragraph 12 of the Order states that a technical report was due on 15 June 2015; however, Petitioner did not have the water analyses back from Zalco Labs until mid-July, it was impossible to submit the technical report. (Ibid.)

Furthermore, the Inspection Report attached to the Notice of Violation dated 3 April 2015 in the Facilities Information section (Page 2 of 6) cites rainfall of 0.68 inches on 22 and 23 February 2014 which would have contributed to fluid in the sumps. (Woodall Decl. ¶11; Ex. 2) On page 3 of 6 of this Facilities Information report, the inspector confused similar 4" black pipes in the area. (Ibid.) The pipe the inspector observed along the access <u>road to the 80 acre Lease property</u>, but <u>not on the Lease</u> property does not terminate into either the tank battery of the sumps on the Lease property. (Ibid.)

Thus, the Order is inaccurate and unreasonable and should be rescinded.

#### D. The Order Violates The Specific Mandatory Limitation Provided in Section 13267

The burden upon Petitioner of complying with the Order greatly outweighs any need for the demanded reports and any benefit which might be obtained from it. The Order demands investigations and detailed hydrological, geologic, and chemical analysis of a variety of items. (See Ex. 1, generally) The Order demands, including but not limited to, a Work Plan and Electronic and Paper Media Reporting Requirements, drilling potential monitoring wells, quarterly groundwater and wastewater monitoring reports with exhaustive requests. (Ibid.) The Order demands Annual Reports and the maintenance of a digital data base with information acceptable to the Regional Board. (Ibid.) Again, as stated above, Petitioner is not discharging oil production water—period. There are no active oil wells on the Lease. Finally, Petitioner is not permitting any third-parties to discharge oil production water on its Lease. Any historic pipes or hoses abandoned on the Lease are remnants of past owners and long ago operations—not attributable or associated with Petitioner.

## E. Midway-Sunset Oil Field Does Not Contain Any Fresh Water

It is the policy of the state (the antidegradation policy) to regulate the disposal of wastes into the waters of the state so as to achieve the "highest water quality consistent with maximum benefit to the people of the State...." To this end, existing high quality water must be maintained unless any change will be consistent with the maximum benefit to the people of the state, will not unreasonably affect the beneficial use, and will not result in water quality that is below that prescribed by water policies. High quality water is the best water quality achieved since the adoption of the antidegradation policy by the State Board in 1968. The State Board's authority to adopt the policy was confirmed in 1969 in the Porter—Cologne Water Quality Control Act (Water Quality Act), which continued the provisions of prior law, granting the State Board authority to enact state policy for water quality control. The Water Quality Act also continued the authority of the nine regional water quality control boards (formerly the Regional Water Pollution Control Boards) to implement the policy. (CWC § 13000, 13240; see Stats 1949, c. 1549, § 1 p. 2785 [former provisions].)

High quality water, as defined by the State Board, is "water with existing background quality unaffected by the discharge of waste and of better quality than that necessary to protect beneficial uses." So defined, most, if not all, groundwater waters found within the Midway-Sunset Oil Field, the very far western edge of the Regional Board's jurisdiction are not high quality water.

Pursuant to California Code of Regulations Title 14, Division 2, Chapter 4, Section 1722 (k), the State Oil and Gas Supervisor may establish Field Rules for any oil and gas pool or zone in a field when sufficient geologic and engineering data is available from previous drilling operations. Field Rules supplement more broadly applicable statutory and regulatory requirements. Each Field Rule is specific to a field, and in many cases, specific to Areas and Zones or Pools within a field. DOGGR has established Field Rules for those fields where geologic and engineering information is available to accurately describe subsurface conditions including the depth to fresh water. The current rules for the Midway-Sunset Area state that there is no fresh water in the field except in the far southeast region—miles from the Lease. (Ex. 7)

Midway-Sunset Oilfield has been in production since before 1894 with innumerable operators and varied production and steaming techniques. (Ex. 8) The sumps in questions are located on the

western margin of the San Joaquin Valley within the Tulare Lake Hydrologic Region, Kern County sub-basin 5-22.14 (DWR Bulletin 118, 2006). The San Joaquin Valley is the southern portion of the Great Central Valley of California. The San Joaquin Valley is bounded on the east and south by the granitic and metamorphic rock containing Sierra Nevada and Tehachapi Mountains, and on the west and southwest by the marine sediments within the San Emidgio Mountains and Coast Ranges. Surface drainage in the area of the sumps is west—away from the Kern County Valley floor. (Ex. 1, Findings ¶6)

Here, an isolated <u>non-producing</u> lease that is disconnected from any useable or protected aquifers, is not impacting any high quality waters of the basin—in fact it is likely that any groundwater is unable to communicate with the Kern County Sub-basin of the Tulare Lake Basin due to its location far to the west in Midway-Sunset Oil Field. (Ex. 9) The Midway-Sunset Oil Field is predominantly unsaturated or contains water with salinity greater than 10,000 ppm TDS. Finally, Petitioner is unaware of any springs or evidence of shallow subsurface water sources present in or around the Lease. The Order's demand for detailed reporting and large investment projected to be incurred for years bears no a reasonable relationship to the need for the reports and the benefits to be obtained from the reports as currently demanded in the Order.

Thus, due to the incorrect basis for the Order and the deliverables demanded—the Order is arbitrary, capricious, an abuse of discretion and a violation of law. The Order as written will potentially require Petitioner to expend large amounts of capital to create and maintain data that previously existed through multiple subsurface studies of the Midway-Sunset Oil Field and related to land not used in the past 20 years for discharge of oil production water.

The Regional Board has many times acknowledged that a total prohibition on unlined pits or sumps is not needed since groundwater quality in the Central Valley varies significantly and certain areas have poor quality groundwater that does not warrant protection. Also as detailed above, the location and surrounding area does not contain any fresh water or high quality water.

Petitioner further reserves the right to submit supplemental briefing on arguments made and on issues raised by this Petition. Lastly, Petitioner will respond to any additional questions the State Board may have regarding the issues in this Petition.

1	8. Statement that copies of the Petition have been sent to the Regional Board.
2	A copy of this Petition for Review was sent by email per section 2050(b), to the Regional
3	Board, on September 25, 2015, to the attention of Clay L. Rodgers, Assistant Executive Officer.
4	9. Explanation of Why Petitioner Could Not Raise These Objections Before the Regional
5	Board.
6	The Order was issued without any formal hearing allowing Petitioner to raise the
7	substantive concerns. Petitioner was provided an unsigned DRAFT CAO to provide written
8	comments to the <i>content</i> of the DRAFT CAO. Petitioner provided comments to the DRAFT CAO
9	that were ignored. Petitioner notes that formal objections are proper when the Regional Board acts
10	and those acts are subject to a petition to the State Board. The Regional Board acted when the
11	Assistant Executive Officer signed the Order.
12	10. A Copy of the Request to the Regional Board for Preparation of the Administrative
13	Record.
14	Petitioner has also requested that the Regional Board prepare the administrative record. (Ex. 10)
15	11. Petitioner Request for an Evidentiary Hearing.
16	Petitioner requests that the State Board conduct a full evidentiary hearing to consider this
17	Petition in accordance with Title 23, California Code of Regulations Section 2052. Petitioner also
18	hereby reserves the right to provide additional documentation and evidence at any such hearing.
19	Young Wooldridge, LLP
20	TOUNG WOOLDRIDGE, ELL
21	Date: September 25, 2015 By:
22	DOUGLAS A. GOSLING
23	Attorneys for Petitioner,  JACO PRODUCTION COMPANY
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#### **DECLARATION OF RICHARD WOODALL**

#### I, RICHARD WOODALL, declare as follows:

- 1. I am the President of Richard Woodall Incorporated, a General Partner of Jaco Production Company. I make this Declaration in Support of Petitioner, Jaco Production Company's ("Petitioner") Petition for Review of the Order issued by the Central Valley Regional Water Quality Control Board ("Order"). The following matters are within my own personal knowledge, and if called as a witness, I could testify competently thereto.
- 2. I am personally familiar with the facts surrounding this pleading except as to matters stated on information and belief. As to statements provided on information and belief, I believe them to be true based on due inquiry and the information available to me at the time of this Declaration.
- 3. On or about April 3, 2015 the Regional Board issued a Notice of Violation to Petitioner related to the Lease. The Regional Board also issued a 13267 Order to Petitioner on or about April 1, 2015 for the Lease. Petitioner immediately contacted the Regional Board to inform it about its inaccurate understanding about the inactive sumps. On or about July 16, 2015, Petitioner submitted the requested 13267 technical report for the Lease to the Regional Board.
- 4. Petitioner contacted the Regional Board and provided comments to the DRAFT CAO and documentation under the penalty of perjury explaining that the Lease was not used for disposal of oil production wastewater and that the Regional Board was mistaken. (A true and accurate copy of the correspondence is attached and incorporated herein as Ex. 3)
- 5. Petitioner explained to the Regional Board that produced crude oil and associated water was last produced on the Lease in May 1998 by the previous owner of the oil and gas working interest, Midsun Partners. Petitioner is informed and believes that Midsun operated a co-generation facility on the Lease from about 1986 to May 1998 subject to an oil/gas lease and/or ground lease from Petitioner and other co-owners. Midsun produced electricity from the power plant and utilized heat from the gas turbine to generate steam which was injected into the shallow Marvic zone oil reservoir to enhance oil recovery. When Midsun ceased operations in mid-1998 on the Lease, Petitioner became the designated "operator" with California Division of Oil, Gas and Geothermal Resources' (DOGGR) for the wells on the property. Petitioner is the *operator* of the wells in name only.

Petitioner has <u>never produced the wells</u> and consequently, never has wastewater been separated from any extracted crude and discharged into the sumps by Petitioner. (Ibid.) In fact, after Petitioner took over "operatorship", the oilfield electrical main panel was decommissioned as a safety measure and as a consequence, the wells are inoperable.

- 6. Since taking over the "operatorship" of the wells in mid-1998, Petitioner has conformed to the monthly reporting requirements of DOGGR. A review of the online production records of DOGGR reveals that zero production has been reported from the Lease since May 1998. Petitioner provided a copy of the DOGGR historical production from the Lease to the Regional Board. (A true and accurate copy of the reports are attached and incorporated as Ex. 4) Also, annual idle well assessments have been paid to DOGGR as a consequence of the wells being idle since mid-1998.
- 7. DOGGR requested that certain tankage at the Lease be marked with "Out of Service" notations painted on the side and cleaned. While the work was being done to satisfy this requirement, a vacuum truck loaded with hot water from a local groundwater well was brought from offsite onto the Lease for cleaning the tanks in preparation of painting the "Out of Service" notation on the tanks. At the conclusion of this work, the remaining water brought onto the site was released from the vacuum truck into the two ponds. It was this water that was observed by the Regional Board. This was a one-time event and will not recur. It is estimated that approximately 2,000-3,000 gallons of water was released into the sumps from the vacuum truck. At the request of the Regional Board, two samples were taken from the sumps and sent to Zalco Laboratories for analysis. Petitioner advised the Regional Board that except for high sodium levels, the water contained no undesirable constituents. Petitioner also requested the Regional Board note that any groundwater in the vicinity of the Lease also contains high levels of sodium.
- 8. Petitioner also provided the Regional Board with a parcel map and an aerial photo of the Lease in Midway-Sunset Oilfield, Kern County to assist with the review. (A true and accurate copy of the correspondence is attached and incorporated herein as Ex.5) Petitioner detailed for the Regional Board that the 80 acre Lease is designated on the Kern County Assessor's Map No. 183-14

as parcel 10 for the 80 acres of surface and as parcel 28 for the underlying mineral rights on this 80 acre parcel being the West half of the Southwest quarter of Section 9 Township 31 South, Range 22 East.

- 9. On or about August 11, 2015, Petitioner visited the sumps and took pictures of both sumps and provided copies of the pictures to the Regional Board. (A true and accurate copy of the correspondence is attached and incorporated herein as Ex.6) As Petitioner suspected, the water had completely evaporated. The ground on the bottom of the sumps had lighter and darker spots as depicted in the photos, but no water was present.
- 10. Paragraph 1 of the Order states that the Lease property is approximately 10 miles NW of Taft when in fact it is 13+ miles from Taft. Paragraph 2 of the Order states that oil production wastewater and residual crude oil was discharged to the unlined ponds for percolation and evaporation, when in fact Petitioner has never produced oil on the property. There is no electrical service to the property for safety reasons in that the oil property has been idle since 1998. Petitioner disposed of hot water trucked to the property to aid in cleaning the two tanks that were placed in an Out of Service state pursuant to a directive from DOGGR. Any minimal crude oil stained soil observed in the ponds was from actual oilfield operations almost two decades ago by Midsun Partners, LP and its predecessors and not from a discharge by Petitioner or Petitioner's contractor, Crider Construction. Paragraph 12 of the Order states that a technical report was due on 15 June 2015; however, Petitioner did not have the water analyses back from Zalco Labs until mid-July, it was impossible to submit the technical report.
- 11. The Inspection Report attached to the Notice of Violation dated 3 April 2015 in the Facilities Information section (Page 2 of 6) cites rainfall of 0.68 inches on 22 and 23 February 2014 which would have contributed to fluid in the sumps. On page 3 of 6 of this Facilities Information report, the inspector confused similar 4" black pipes in the area. The pipe the inspector observed along the access <u>road to the 80 acre Lease property</u>, but <u>not on the Lease</u> property does not terminate into either the tank battery of the sumps on the Lease property.

1	I declare under penalty of periury under the laws of the State of California that the foregoing
2	I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct on this 23day of September 2015.
3	
4	Al Woods
5	RICHARD WOODALL
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## PROOF OF SERVICE

2	STATE OF CALIFORNIA,
3	COUNTY OF KERN
4	I, KRISTEN L. MOEN, declare: I am and was at the times of the service hereunder mentioned over the age of eighteen (18) years, and not a party to the within cause. My business address is Th
5	Law Office of Young Wooldridge, 1800 30th Street, Fourth Floor, Bakersfield, CA 93301.
6	On September 25, 2015, I caused to be served the below listed document(s) entitled as
7	PETITION FOR REVIEW OF REGIONAL BOARD ORDER; REQUEST FOR PLACEMENT IN ABEYANCE on the interested parties in this action, as listed below:
8	State Water Resources Control Board  Via Electronic Service
9	Office of Chief Counsel
10	Jeanette L. Bashaw, Legal Analyst P.O. Box 100
11	Sacramento, CA 95812-0100 Email: adrianna.crowl@waterboards.ca.gov
12	Email: waterqualitypetitions@waterboards.ca.gov
13	Central Valley Regional Water Quality Control Board Via Electronic Service
14	Clay L. Rodgers, Assistant Executive Officer 1685 E Street
15	Fresno, CA 93706 Email: Clay.Rodgers@waterboards.ca.gov
16	Eman. Clay.Rodgers@waterboards.ca.gov
17	[X] (BY ELECTRONIC SERVICE) on the date indicated below, pursuant to C.C.P. Section
18	1010.6; 1013(g), I caused such document to be electronically delivered to the recipient via electronic service.
19	[X] (STATE) I declare under penalty of perjury under the laws of the State of California that the
20	above is true and correct.
21	Executed on September 25, 2015, at Bakersfield, California.
22	1 2001/1/100
23	KRISTEN I. MOEN
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Number of Well Types Having
Types:

Well Types Having
16 Injection:

Oper: Jaco Production Co. J0700

Lease: C. E. Houchin et al

<b>▼</b> Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
06/2015	0	0	0	0
05/2015	0	0	0	0
04/2015	0	0	0	0
03/2015	0	0	0	0
02/2015	0	0	0	0
01/2015	0	0	0	0
Total 2015	0	0	0	0
12/2014	0	0	0	0
11/2014	0	0	0	0
10/2014	0	0	0	0
09/2014	0	0	0	0
08/2014	0	0	0	0
07/2014	0	0	0	0
06/2014	0	0	0	0
05/2014	0	0	0	0
04/2014	0	0	0	0
03/2014	0	0	0	0
02/2014	0	0	0	0
01/2014	0	0	0	0
Total 2014	0	0	0	0
12/2013	0	0	0	0
11/2013	0	0	0	0
10/2013	0	0	0	0
09/2013	0	0	0	0
08/2013	0	0	0	0
07/2013	0	0	0	0
06/2013	0	0	0	0
05/2013	0	0	0	0
04/2013	0	0	0	0
03/2013	0	0	0	0
02/2013	0	0	0	0
01/2013	0	0	0	0
	0	0	0	0
Total 2013 12/2012	0	0	0	0
11/2012		0	7	0
	0		0	0
10/2012	0	0	0	7.
09/2012	0	0	0	0
08/2012	0	0	0	0
07/2012	0	0	0	0
06/2012	0	0	0	0
05/2012	0	0	0	0
04/2012	0	0	0	0
03/2012	0	0	0	0
02/2012	0	0	0	0
01/2012	0	0	0	0
Total 2012	0	0	0	0
12/2011	0	0	0	0
11/2011	0	0	0	0
10/2011	0	0	0	0
09/2011	0	0	0	0
08/2011	0	0	0	0
07/2011	0	0	0	0
06/2011	0	0	0	0

▼ Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
05/2011	0	0	0	0
04/2011	0	0	0	0
03/2011	0	0	0	0
02/2011	0	0	0	0
01/2011	0	0	0	0
Total 2011	0	0	0	0
12/2010	0	0	0	0
11/2010	0	0	0	0
10/2010	0	0	0	0
09/2010	0	0	0	0
08/2010	0	0	0	0
07/2010	0	0	0	0
06/2010	0	0	0	0
05/2010	0	0	0	0
04/2010	0	0	0	0
03/2010	0	0	0	0
02/2010	0	0	0	0
01/2010	0	0	0	0
Total 2010	0	0	0	0
12/2009	0	0	0	0
11/2009	0	0	0	0
10/2009	0	0	0	0
09/2009	0	0	0	0
08/2009	0	0	0	0
07/2009	0	0	0	0
06/2009	0	0	0	0
	0	0	0	0
05/2009				
04/2009	0	0	0	0
03/2009	0	0	0	0
02/2009	0	0	0	0
01/2009	0	0	0	0
Total 2009	0	0	0	0
12/2008	0	0	0	0
11/2008	0	0	0	0
09/2008	0	0	0	0
08/2008	0	0	0	0
07/2008	0	0	0	0
06/2008	0	0	0	0
05/2008	0	0	0	0
04/2008	0	0	0	0
03/2008	0	0	0	0
02/2008	0	0	0	0
01/2008	0	0	0	0
Total 2008	0	0	0	0
12/2007	0	0	0	0
11/2007	0	0	0	0
10/2007	0	0	0	0
09/2007	0	0	0	0
08/2007	0	0	0	0
07/2007	0	0	0	0
06/2007	0	0	0	0
05/2007	0	0	0	0
04/2007	0	0	0	0
03/2007	0	0	0	0
02/2007	0	0	0	0
01/2007	0	0	0	0
Total 2007	0	0	0	0
12/2006	0	0	0	0
11/2006	0	0	0	0
10/2006	0	0	0	0
09/2006	0	0	0	0

<b>▼</b> Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
08/2006	0	0	0	0
07/2006	0	0	0	0
06/2006	0	0	0	0
05/2006	0	0	0	0
04/2006	0	0	0	0
03/2006	0	0	0	0
02/2006	0	0	0	0
01/2006	0	0	0	0
Total 2006	0	0	0	0
12/2005	0	0	0	0
11/2005	0	0	0	0
10/2005	0	0	0	0
09/2005	0	0	0	0
08/2005	0	0	0	0
07/2005	0	0	0	0
06/2005	0	0	0	0
05/2005	0	0	0	0
04/2005	0	0	0	0
03/2005	0	0	0	0
02/2005	0	0	0	0
01/2005 Total 2005	0	0	0	0
Total 2005	0	0	0	0
12/2004 11/2004	0	0	0	0
10/2004	0	0	0	0
09/2004	0	0	0	0
08/2004	0	0	0	0
07/2004	0	0	0	0
06/2004	0	0	0	0
05/2004	0	0	0	0
04/2004	0	0	0	0
03/2004	0	0	0	0
02/2004	0	0	0	0
01/2004	0	0	0	0
Total 2004	0	0	0	0
12/2003	0	0	0	0
11/2003	0	0	0	0
10/2003	0	0	0	0
09/2003	0	0	0	0
08/2003	0	0	0	0
07/2003	0	0	0	0
06/2003	0	0	0	0
05/2003	0	0	0	0
04/2003	0	0	0	0
03/2003	0	0	0	0
02/2003	0	0	0	0
01/2003	0	0	0	0
Total 2003	0	0	0	0
12/2002	0	0	0	0
11/2002	0	0	0	0
10/2002	0	0	0	0
09/2002	0	0	0	0
08/2002	0	0	0	0
07/2002	0	0	0	0
06/2002	0	0	0	0
05/2002		0	0	0
04/2002	0	0	0	0
03/2002 02/2002	0	0	0	0
	0	0	0	0
01/2002 Total 2002	0	0	0	0
10(a) 2002	+	U	U U	U

▼ Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
12/2001	0	0	0	0
11/2001	0	0	0	0
10/2001	0	0	0	0
09/2001	0	0	0	0
08/2001	0	0	0	0
07/2001	0	0	0	0
06/2001	0	0	0	0
05/2001	0	0	0	0
04/2001	0	0	0	0
03/2001	0	0	0	0
02/2001	0	0	0	0
01/2001	0	0	0	0
Total 2001	0	0	0	0
			-1	0
12/2000	0	0	0	
11/2000	0	0	0	0
10/2000	0	0	0	0
09/2000	0	0	0	0
08/2000	0	0	0	0
07/2000	0	0	0	0
06/2000	0	0	0	0
05/2000	0	0	0	0
04/2000	0	0	0	0
03/2000	0	0	0	0
02/2000	0	0	0	0
01/2000	0	0	0	0
Total 2000	0	0	0	0
12/1999	0	0	0	0
11/1999	0	0	0	0
10/1999	0	0	0	0
	0	0	<b>-</b>	0
09/1999			0	
08/1999	0	0	0	0
07/1999	0	0	0	0
06/1999	0	0	0	0
05/1999	0	0	0	0
04/1999	0	0	0	0
03/1999	0	0	0	0
02/1999	0	0	0	0
01/1999	0	0	0	0
Total 1999	0	0	0	0
12/1998	0	0	0	0
11/1998	0	0	0	0
10/1998	0	0	0	0
09/1998	0	0	0	0
08/1998	0	0	0	0
07/1998	0	0	0	0
	0	0	0	0
06/1998				
05/1998	1,574	25,436	0	317
04/1998	1,252	25,305	0	300
03/1998	1,611	29,542	0	298
02/1998	1,414	31,207	0	308
01/1998	1,783	32,934	0	332
Total 1998	7,634	144,424	0	1,555
12/1997	2,066	34,514	0	332
11/1997	2,028	36,767	0	330
10/1997	2,471	40,155	0	332
09/1997	2,838	39,523	0	330
08/1997	2,691	37,390	0	319
07/1997	2,464	34,189	0	301
06/1997	2,223	33,620	0	307
				/
05/1997 04/1997	2,005	30,533 28,832	0	317
nzi/1uu/	2,311	ו אַ אַנ	. ()	324

<b>▼</b> Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
03/1997	2,470	33,541	0	324
02/1997	2,566	28,789	0	285
01/1997	2,746	33,741	0	330
Total 1997	28,879	411,594	0	3,831
12/1996	3,026	39,907	0	336
11/1996	3,043	39,003	0	327
10/1996	2,867	40,475	0	318
09/1996	2,596	32,894	0	307
08/1996	1,743	15,553	0	292
07/1996	1,751	24,440	0	278
06/1996	1,754	16,018	0	282
05/1996	1,798	16,234	0	295
04/1996	1,606	12,554	0	273
03/1996	1,735	12,406	0	254
02/1996	1,487	11,166	0	234
01/1996	1,308	13,713	0	299
Total 1996	24,714	274,363	0	3,495
12/1995	1,354	9,220	0	255
11/1995	1,260	11,550	0	270
10/1995	1,534	11,935	0	279
09/1995	1,431	13,187	0	256
08/1995	1,680	15,966	0	260
07/1995	2,314	12,519	0	268
06/1995	2,080	15,303	0	206
05/1995	2,746	21,670	0	232
04/1995	3,133	24,787	0	256
03/1995	1,821	27,256	0	219
02/1995	1,698	12,031	0	193
01/1995	1,826	14,821	0	190
Total 1995	22,877	190,245	0	2,884
12/1994	1,343	15,517	0	295
11/1994	1,177	15,800	0	270
	<del></del>	·		
10/1994	920	14,628	0	145
09/1994	1,682	9,878	0	180
08/1994	1,016	13,905	0	225
07/1994	1,931	15,318	0	245
06/1994	1,826	16,776	0	240
05/1994	913	11,138	0	217
04/1994	840	11,625	0	240
03/1994	2,170	13,388	0	279
02/1994	2,098	13,604	0	224
01/1994	1,315	15,115	0	241
Total 1994	17,231	166,692	0	2,801
12/1993	750	13,350	0	277
11/1993	938	16,300	0	290
10/1993	855	23,700	0	300
09/1993	775	20,900	0	248
08/1993	670	18,900	0	188
07/1993	253	12,100	0	108
06/1993	897	21,250	0	194
05/1993	950	26,008	0	239
	711		0	165
04/1993		21,960	,	
03/1993	1,000	15,846	0	157
02/1993	806	19,037	0	196
01/1993	451	19,759	0	217
Total 1993	9,056	229,110	0	2,579
12/1992	670	26,135	0	217
11/1992	780	20,132	0	180
10/1992	568	12,229	0	186
09/1992	147	9,278	0	180
08/1992	1,299	25,110	0	248

<b>▼</b> Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
07/1992	664	20,214	0	248
06/1992	825	19,350	0	270
05/1992	1,151	21,180	0	248
04/1992	637	15,494	0	180
03/1992	765	16,076	0	217
02/1992	584	7,838	0	196
01/1992	578	16,085	0	217
Total 1992	8,668	209,121	0	2,587
12/1991	389	13,091	0	248
11/1991	609	12,303	0	240
10/1991	782	16,487	0	248
09/1991	577	10,955	0	240
08/1991	809	14,651	0	248
07/1991	910	11,500	0	248
05/1991	836	12,547	0	217
04/1991	643	11,435	0	210
03/1991	525	7,800	0	120
Total 1991	6,080	110,769	0	2,019
12/1990	553	10,200	0	267
11/1990	657	12,400	0	262
10/1990	488	16,655	0	248
	932		7	
09/1990 08/1990		17,500 16,423	0	240
	1,104			248
07/1990	957	14,132	0	220
06/1990	1,042	9,062	0	215
05/1990	283	8,905	0	108
04/1990	303	10,507	0	126
03/1990	0	0	0	0
02/1990	516	9,545	0	184
01/1990	831	11,888	0	246
Total 1990	7,666	137,217	0	2,364
12/1989	480	17,127	0	195
11/1989	401	18,520	0	168
10/1989	586	22,780	0	205
09/1989	77	3,978	0	69
08/1989	447	15,427	0	122
07/1989	240	3,300	0	21
06/1989	0	0	0	0
05/1989	0	0	0	0
04/1989	0	0	0	0
03/1989	0	0	0	0
02/1989	0	0	0	0
01/1989	0	0	0	0
Total 1989	2,231	81,132	0	780
12/1988	0	0	0	0
11/1988	0	0	0	0
10/1988	0	0	0	0
09/1988	0	0	0	0
08/1988	0	0	0	0
07/1988	0	0	0	0
02/1988	0	0	0	0
01/1988	0	0	0	0
Total 1988	0	0	0	0
12/1987	0	0	0	0
11/1987	0	0	0	0
10/1987	0	0	0	0
09/1987	0	0	0	0
08/1987	0	0	0	0
07/1987	0	0	0	0
06/1987	0	0	0	0
05/1987	0	0	0	0
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▼ Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Day
04/1987	0	0	0	0
03/1987	0	0	0	0
02/1987	0	0	0	0
01/1987	0	0	0	0
Total 1987	0	0	0	0
12/1986	0	0	0	0
11/1986	0	0	0	0
10/1986	0	0	0	0
09/1986	0	0	0	0
08/1986	0	0	0	0
07/1986	0	0	0	0
06/1986	0	0	0	0
05/1986	0	0	0	0
04/1986	0	0	0	0
03/1986	0	0	0	0
02/1986	0	0	0	0
01/1986	0	0	0	0
Total 1986	0	0	0	0
			,	
12/1985	0	0	0	0
11/1985	0	0	0	0
10/1985	0	0	0	0
09/1985	0	0	0	0
08/1985	0	0	0	0
07/1985	0	0	0	0
06/1985	0	0	0	0
05/1985	0	0	0	0
04/1985	0	0	0	0
03/1985	0	0	0	0
02/1985	0	0	0	0
01/1985	84	1,513	0	248
Total 1985	84	1,513	0	248
12/1984	380	5,218	0	248
11/1984	325	4,929	0	240
10/1984	457	8,816	0	239
09/1984	707	18,101	0	290
	505	19,073	0	331
08/1984				
07/1984	674	26,510	0	297
06/1984	378	11,414	0	202
05/1984	529	16,043	0	297
04/1984	485	13,110	0	212
03/1984	581	25,455	0	236
02/1984	664	34,814	0	220
01/1984	391	21,222	0	149
Total 1984	6,076	204,705	0	2,96
12/1983	280	5,558	0	310
11/1983	304	5,517	0	297
10/1983	309	6,021	0	300
09/1983	393	328	0	283
08/1983	0	0	0	0
07/1983	0	0	0	0
06/1983	0	0	0	0
05/1983	0	0	0	0
04/1983	70	5,925	0	180
03/1983	23	3,169	0	132
02/1983	77	2,268	0	112
01/1983	57	3,214	0	134
Total 1983	1,513	32,000	0	1,74
12/1982	87	5,168	0	203
11/1982	119	6,159	0	231
10/1982	138	8,602	0	248
09/1982	79	10,534	0	229

<b>▼</b> Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
08/1982	224	8,675	0	242
07/1982	193	9,347	0	242
06/1982	398	8,901	0	238
05/1982	138	9,217	0	226
04/1982	138	9,312	0	225
03/1982	458	10,246	0	248
02/1982	419	9,128	0	218
01/1982	272	10,230	0	248
Total 1982	2,663	105,519	0	2,798
12/1981	255	8,594	0	171
11/1981	538	6,687	0	128
10/1981	387	4,726	0	154
09/1981	250	4,860	0	165
08/1981	148	6,936	0	214
07/1981	171	7,300	0	217
06/1981	185	10,015	0	205
05/1981	339	10,139	0	189
04/1981	349	9,964	0	208
03/1981	580	10,624	0	197
02/1981	331	7,592	0	138
01/1981	621	10,946	0	201
Total 1981	4,154	98,383	0	2,187
12/1980	309	13,343	0	106
11/1980	532	14,883	0	141
10/1980	240	13,031	0	159
09/1980	617	16,488	0	144
· · · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , , ,	•	4.	
08/1980	312	10,042	0	154
07/1980	703	8,636	0	122
06/1980	641	11,366	0	118
05/1980	524	12,457	0	165
04/1980	119	19,580	0	120
03/1980	58	6,816	0	72
02/1980	522	5,328	0	54
01/1980	233	6,531	0	63
Total 1980	4,810	138,501	0	1,418
12/1979	442	10,995	0	109
11/1979	622	11,456	0	106
10/1979	980	13,051	0	155
09/1979	716	12,390	0	150
08/1979	1,183	15,025	0	140
07/1979	263	15,698	0	103
06/1979	455	7,707	0	95
05/1979	75	4,016	0	47
04/1979	10	7,070	0	133
03/1979	42	1,913	0	20
02/1979	0	0	0	0
01/1979	0	0	0	0
Total 1979	4,788	99,321	0	1,058
12/1978	0	0	0	0
11/1978	0	0	0	0
10/1978	0	0	0	0
09/1978	0	0	0	0
08/1978	0	0	0	0
07/1978	251	5,860	0	60
06/1978	108	9,660	0	90
05/1978	10	840	0	9
04/1978	0	0	0	0
03/1978	154	6,585	0	30
			,	— / <sub>1</sub>
02/1978	141	1,410	0	20
01/1978	160	9,297	0	60
Total 1978	824	33,652	0	269

<b>▼</b> Date ▲	Oil(bbl)	Water(bbl)	Gas (Mcf)	Days
12/1977	29	2,754	0	17
11/1977	105	3,240	0	20
10/1977	0	0	0	0
09/1977	0	0	0	0
08/1977	0	0	0	0
Total 1977	134	5,994	0	37

From: Richard Woodall

**Sent:** Tuesday, August 04, 2015 1:13 PM **To:** 'Joshua.Mahoney@Waterboards.ca.gov'

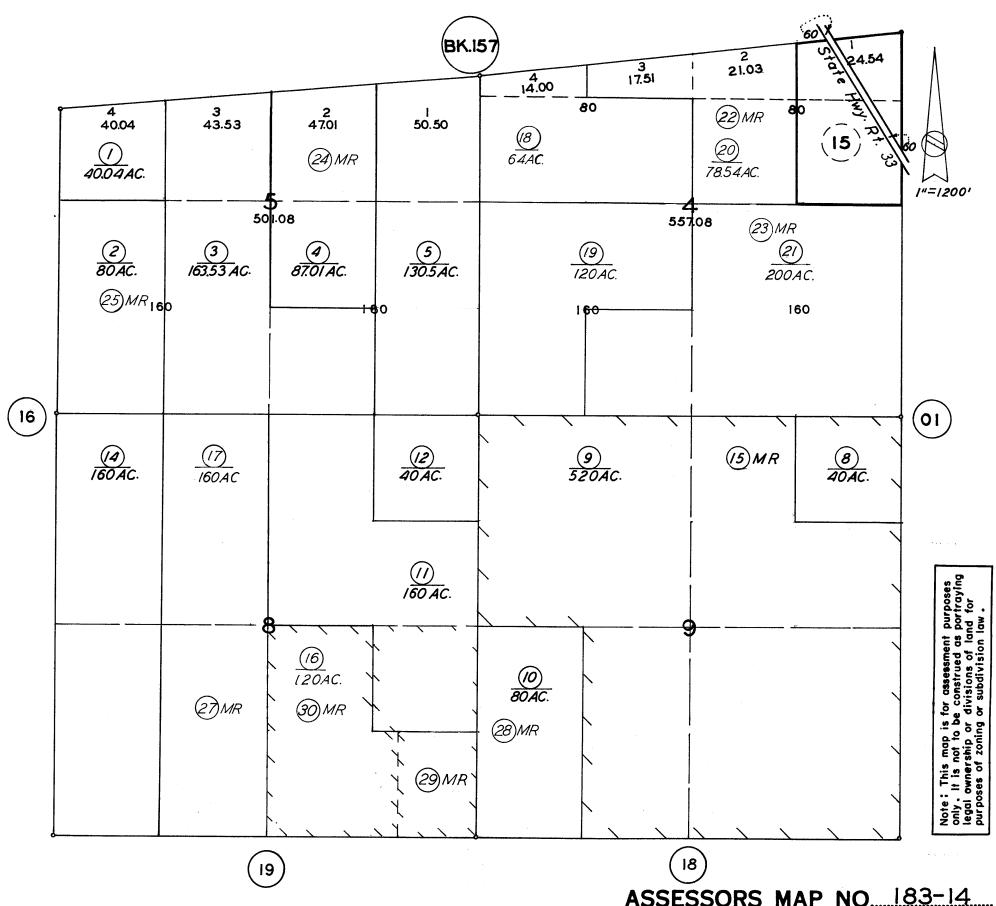
Subject: Parcel Map and Aerial Photo of CE Houchin property- Midway Sunset Oilfield, Kern County, CA

Josh,

I have also provided you with a parcel map and aerial photo of the CE Houchin property- Midway Sunset Oilfield, Kern County, CA.

The 80 acre CE Houchin property is designated on the Kern County Assessor's Map No. 183-14 as parcel 10 for the 80 acres of surface and as parcel 28 for the underlying mineral rights on this 80 acre parcel being the West half of the Southwest quarter of Section 9-Township 31 South, Range 22 East.

Richard A. Woodall
Jaco Production Company
P.O. Box 82515
Bakersfield, CA 93380-2515
661-633-7527 direct
661-303-7000 cell
661-393-7000 main switchboard
855-635-2323 fax
richardw@jaco.com
Physical address:
3101 State Road
Bakersfield, CA 93308



ASSESSORS MAP NO. 183-14 COUNTY OF KERN

8/4/2015 Google Maps





Imagery @2015 DigitalGlobe, U.S. Geological Survey, USDA Farm Service Agency, Map data @2015 Google 100 ft

From: Richard Woodall

**Sent:** Wednesday, August 12, 2015 11:47 AM **To:** 'Joshua.Mahoney@Waterboards.ca.gov'

Subject: Houchin property, Midway Sunset Oilfiled, Jaco Production Company Pictures of sumps

Josh,

I visited the Houchin property yesterday afternoon and took a few pictures of both sumps and have provided you with copies of the picture of each sump.

As we suspected, the water has completely evaporated. The ground on the bottom of the sumps has lighter and darker spots as depicted in the photos, but no water is present.

Richard Woodall Jaco Production Company 661-633-7527 office 661-303-7000 cell richardw@jaco.com





### **MIDWAY-SUNSET FIELD RULES**

NO.: 407-0045

	IVIID	VVAI-S	DONOL	I FIELD ROLE	.3	
						Date: 5/30/2007
Area(s) N/A				(s)/Pool(s): Monarch (Spella noltz (Metson), Republic	acy), Web	ster, Moco, Obispo, Pacific,
CASING PROGRAM						
Casing String		С	ementing D	Depth		Annular Cement Fill
Caomig Camig	Marker o			Remarks		Marker or Zone +')
Conductor	Competent be			T. C.	Surface	
Surface	Competent be 10% of propo depth	ed at least	Casing sh if liner run	noe at top of productive zone	Surface	
Production	Competent be	ed	Casing sh	noe	Surface	
Liner	Competent be		Casing sh		50 feet + cemente	into surface casing (if run, if d)
GEOLOGIC DATA Reference: DOGGR public	cation TR-11, Vol	lume I, Calif	ornia Oil &	Gas Fields		
BLOWOUT PREVENTION	I EQUIPMENT P	ROGRAM (	(Reference	d from MO7)		
Operation	Surface Pressure Category	DOGGR C	lass	Additional Requirements		
Drilling	Low	IIA2M		Diverter on conductor, hydr	aulic BOF	E
Completion	Low	Lubricator	or IIA2M	Hydraulic BOPE (Obispo ar		
Additional Comments:		•				
BASE OF FRESH WATE	RS					
Marker: see comments	Depth: see comments	_	omments: oproximatel	No fresh water in field exce ly 500 feet.	ept extrem	e SE tip where base is
GENERAL COMMENTS						
	drilling and con	npletion op	erations fo	or new production wells.		
These pools are freque	ntly commingled	througho	ut the field			
	off history. The	Division w		ollowing conditions: 1. No y monitor production data,		er present. 2. Pools have omalous water production
Field rules apply to developm	ent wells only. All	operations ar	e subject to	California Code of Regulations.,	Title 14, D	ivision 2, Chapter 4.
				Hal Bopp	,State	Oil and Gas Supervisor
		B	y <u>Origin</u>	al Signed by R. A. Adams (Signature)	_,	District Deputy (Title)

### **MIDWAY-SUNSET FIELD RULES**

NO.: <u>407-0046</u>

	IVIID	VVA 1-3	OUNO	I FIELD RUL	EƏ	Date: 5/30/2007
Area(s) N/A				(s)/Pool(s) e, Mya Tar Sands, Top Oil	I, Kinsey, V	/ilhelm, Gusher, Calitroleum*
CASING PROGRAM			1			
Casing String		C	ementing D	)enth		Annular Cement Fill
Caomig Camig	Marker			Remarks	(	Marker or Zone +')
Conductor	Competent be			rtomanto	Surface	,
Surface	Competent be	ed at or	Casing sh	Casing shoe, top of zone		
Liner	Competent be	ed	Casing sh	noe (if run, if cemented)	50 feet cemente	+ into surface casing (if ed)
GEOLOGIC DATA						
Reference: DOGGR publ	ication TR-11, Vo	lume I, Cali	fornia Oil &	Gas Fields		
BLOWOUT PREVENTIO	N EQUIPMENT F	ROGRAM (	Reference	d from MO7)		
Operation	Surface Pressure Category	DOGGR C	lass	Additional Requirements		
Drilling	Low	IIA2M		Diverter on conductor, hy	draulic BO	PE
Completion	Low	Lubricator	or IIA2M	Hydraulic BOPE		
Additional Comments:	·					
BASE OF FRESH WATE	RS					
Marker: N/A	Depth: N/A	_	omments: oproximate	No fresh water in field ex y 500 feet.	cept extrer	ne SE tip where base is
GENERAL COMMENTS						
This rule applies only to	drilling and cor	npletion op	erations fo	or new production wells.		
*These pools are freque	ntly commingled	d throughou	ut the field			
	off history. The	Division w				ter present. 2. Pools have nomalous water production
Field rules apply to developn	nent wells only. All	operations are	e subject to	California Code of Regulations	s., Title 14, L	Division 2, Chapter 4.
				Hal Bopp	,State	Oil and Gas Supervisor
		B	y Origin	al Signed by R. A. Adams		District Deputy
				(Signature)		(Title)

### **MIDWAY-SUNSET FIELD RULES**

NO.: 407-0044

	IVIID	WA1-3	OUNO	EI FIELD KUL	<b>-</b> 5	<b>.</b>		
						Date: 5/30/2007		
Area(s) N/A				e(s)/Pool(s) view, Sub-Lakeview, Potter	, Marvic, A	antelope Shale*		
CASING PROGRAM								
Casing String		С	ementing [	Denth		Annular Cement Fill		
odomig odmig	Marker or Zone			Remarks	(1	Marker or Zone +')		
Conductor	Competent be	Competent bed			Surface			
Surface	Competent be 10% of propos depth		Casing sl if liner rur	noe at top of productive zon	e Surface			
Production	Competent be below top of z				Surface			
Liner	Competent be	ed		noe if cemented. Run only ir on with surface casing.	50 feet - cemente	r into surface casing (if ed)		
GEOLOGIC DATA								
Reference: DOGGR pub	lication TR-11, Vo	lume I, Cali	fornia Oil 8	Gas Fields				
BLOWOUT PREVENTIO	N EQUIPMENT P	ROGRAM (	(Reference					
Operation	Surface Pressure Category	DOGGR C	lass	Additional Requirements				
Drilling	Low to Medium	IIA2M or 3	М	Diverter on conductor, hyd	raulic BOF	PE		
Completion	Low	IIA2M		Hydraulic BOPE				
Additional Comments: 3N control fluid flow	I rated BOPEs are	required in	areas req	uiring drilling mud weights o	f ten poun	ds per gallon or more to		
BASE OF FRESH WATE								
Marker: N/A	Depth: N/A	_	omments: oproximate	No fresh water in field exc ly 500 feet.	ept extrem	ne SE tip where base is		
GENERAL COMMENTS								
	drilling and con	nletion on	erations f	or new production wells.				
This rule applies only to	dining and con	ipiction op	Ciations i	or new production wens.				
*These pools are freque	ntly commingled	l throughou	ut the field	l.				
	-off history. The	Division w				ter present. 2. Pools have nomalous water production		
Field rules apply to developn	nent wells only. All o	operations ar	e subject to	California Code of Regulations.	, Title 14, D	Division 2, Chapter 4.		
				НаІ Ворр	,State	Oil and Gas Supervisor		
		B	y <u>Origi</u> na	al Signed by R. A. Adams	,	District Deputy		
				(Signature)		(Title)		

### WOLUME I North and East Central California

# CALIFORNIA OIL AND GAS FIELDS

CALIFORNIA DIVISION OF OIL AND GAS

## CALIFORNIA OIL AND GAS FIELDS

### **VOLUME 1**

North and East Central California

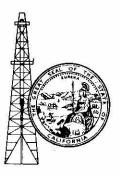
A Publication of the

CALIFORNIA DIVISION OF OIL AND GAS

Sacramento

- **1**973

PRICE: \$14,50



### HOW TO USE THIS VOLUME

Volume I consists of oil and gas field maps and data sheets arranged alphabetically by the API regions North California and East Central California, shown on the index map on page vii. Turn to the index map first to determine in which region the field is located, then use the index tabs to find the region. All data sheets are arranged alphabetically; however, North Coles Levee will be found listed as Coles Levee, North, etc. Regional cross sections are found at the beginning of each regional section, as are the index maps outlining the productive areas of all fields in the region.

LOCATION: Vicinity of Taft, about 28 miles southwest of Bakersfield

Kern and San Luis Obispo Counties

TYPE OF TRAP: Regional homocline modified by: anticlines; anticlinal moses; lithofacies variations; angular unconformities; lenticular sands; fractured shales ELEVATION: 600 - 1,750

DISCOVERY DATA

						l daily ection	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & 1	Oil (bbl)	Gas (Mcf)	Date of completion
Tulare	Operator name and well number unknown	Same as present	N.A.	.4D	N.A.	N.A.	prior to
Mya Tar	Getty Oil Co. No. 101	Associated Oil Co. No. 101	2 31S 22E	MD	10	N.A.	Jan 1920
Top Oil	Operator name and well number unknown	Operator name and well number unknown	N.A.	MD	N.A.	N.A.	N.A.
Kinsey	Same as above	Same as above	N.A.	MD	N.A.	N.A.	N.A.
Wilhelm	Same as above	Same as above	N.A.	MD	N.A.	N.A.	N.A.
Gusher	Chanslor-Western Oil & Dev. Co. No. 2	Chanslor-Canfield Midway Oil Co. No. 2 A	6 32S 23E	MD	3,000	N.A.	Nov 1909
Calitroleum	Operator name and well number unknown	Same as present	N.A.	MD	N.A.	N.A.	N.A.
Lakeview and Sub- Lakeview	Mobil Oll Corp. "Lakeview" 1	Lake View Oil Co. B No. 1	25 12N 24W	CANAGE .	68,000	N.A.	Mar 1910
Potter	Exeter Oil Co. Ltd. "Exeter-BAOC" 101-15	Dominion Oil Co. No. 1	15 31S 22E	MD	100	N.A.	Jan 1910
Marvic	Mobil Gil Corp. "Marvic" 1	Marvic Associates Ltd. No. 1	16 31S 22E	MD	72	N.A.	May 1941
Monarch	Standard Oil Co. of Calif. "Monarch" 28	Sunset-Monarch Oil Co. No. 1	2 11N 24W	SB	N.A.	N.A.	about 1902
Webster	Directors Oil Co. No. 7	Ruby Oil Co. No. 7	2 11N 24W	SB	35	N.A.	Dec 1913
Moco	Mobil Oil Corp. "Noco 35" WT 504	General Petroleum Corp. "Moco 35" 204	35 12N 24W	SB	188	20	Jul 1957
Obispo	Union Oil Co. of Calif, "Obispo" 6	Obispo Oil Co. No. 6	32 12N 23W	SB	6,000	N.A.	Sep 1925
Pacific	Mobil Gil Corp. "Pacific" 4	General Petroloum Corp. "Pacific" 4	32 12N 23W	SB	1,078	N.A.	Jun 1947
Metson	Tenneco Oil Co. "Metson" 47-24	Bankline Oil Co. "Metson" 47-24	24 11N 23W	SB	27	0	Mar 1953
Leutholtz	Gulf Oil Corp. No. 2 - "I.M. Woodward USL"	Western Gulf Oil Co. No. 2 - "T.M. Woodward USL"	21 11N 23W		1,021	120	Aug 1945
Republic	Shell Oil Co. "Sec. 8" 25	Republic Petroleum Co. No. 25	8 32S 23E	MD	1,114	350	Mar 1928

Remarks: A First of over 100 gushers in field and is the first significant production from the Gusher zone.

B "America's Most Spectacular Gusher" blew out and flowed uncontrolled for 18 months after which the flow stopped probably because the bottom of the hole caved in. It was estimated that the early flow rate was about 68,000 b/d and that production amounted to 8-1/4 million barrels oil of which 3-1/2 million barrels was lost by evaporation and seepage.

DEEPEST WELL DATA

		Date		Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.		Strata	Age
The Superior Oil Co. "C.W.O.D." 58-21	Same	Nov 1957	21 32S 23E	14,504		early Mio

PRODUCING ZONES

Zone Average depth (feet)		Average net thickness		Geologic	Oil gravity (*API) or	Satinity of zone water	Class 80PE
	(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Mulare	200 - 1,400	50 - 200	Pleistocene	Tulare	13	200 - 1,000	None
Mya Tar	1,100	150	Pliocene	San Joaquin	12	260	None
Fop Gil	500 - 2,500	20 - 50	Pliocene	San Joaquin	15 - 23	1,490 - 2,160	None
(insey	2,000 - 3,600	15 - 175	Pliocene	Etchegoin	14 - 26	1,500 - 1,860	None
Vilhelm	2,000 - 3,000	100	Pliocene	Etchegoin	14 - 26	1,700 - 2,100	None
Gusher	2,000 - 3,000	75	Pliocene	Etchegoin	14 - 26	1,440 -	None
Calitroleum	1,500 - 4,500	80	Pliocene	Etchegoin	14 - 26	1,620 - 2,040	None
Lakeview	2,600 - 3,300	20 - 200	late Miocene	Monterey	21	1,670	None
Sub-Lakeview	400 - 3,100	10 - 300	late Miocene	Monterey	22	440	III
Potter	200 - 2,500	60 - 500	late Miocene	Monterey	14	5 - 400	None
Marvic	1,000	200	late Miocene	Monterey	13	40	None
donarch	600 - 2,000	50 - 400	late Miocene	Monterey	13 - 17	50 - 1,300	None
Nebster	1,500 - 1,800	50 - 250	late Miocene	Monterey	14	N.A.	None
loco	2,150	70 - 450	late Miocene	Monterey	15	980	111
Obispo	3,600	50 - 1,500	late Miocene	Monterey	14 - 27	970	III
Pacific	3,700	50 - 300	late Miocene	Monterey	16	600	III
letson	1,250	400	late Miocene	Monterey	8 - 12	790	None
Leutholtz	3,200	40 - 400	late Miocene	Monterey	15 - 24	550	III
Republic	1,300 - 4,900	150	late Miocene	Monterey	12 - 24	70	III

1972 Production		1972 1972 Proved Average number		Cumulative production		Peak oil production		Total number of wells		Maximum proved	
Oli (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
34,579,424	5,810,674	66.810.031	24.370	5.549	1.157.831.025	500.583.802	34.579.424	1972	10,318	9,486	28,090

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Comulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1954	20,838,718	15
Steam flood	1963	15,398,177	47
Cvclic-steam	1963	195,087,515	4,870

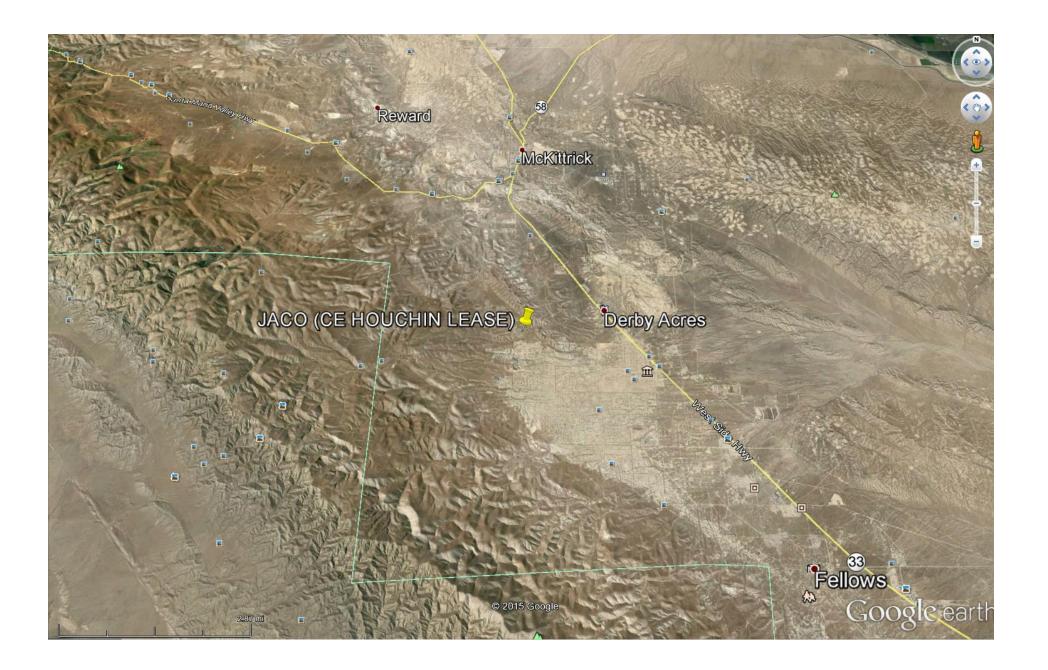
Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Air injection for a fire flood	1960	N.A.	24
Gas injection for pressure maint- enance BASE OF FRESH WA	1944 TFR: None	43,302,959	7

SPACING ACT: Does not apply except at extreme southeast end of field.

CURRENT CASING PROGRAM: Various; depending on zone and location.

METHOD OF WASTE DISPOSAL: Percolation and evaporation sumps; during 1972, 6,222,115 bbl. of waste water was injected into 7 disposal wells.

REMARKS: In a report by N.L. Watts titled "Sunset Oil Claims" in the Calif. State Mining Bureau Bull. No. 3 (1894) mention is made of steam injection into a well in Sec. 21, T. 11N., R. 23W., S.B.B. § M to reduce the viscosity of the heavy oil so it can be pumped to the surface. Later application and refinement of this method of reservoir stimulation was a significant contributing factor toward attaining the peak oil production in 1972.





DOUGLAS A. GOSLING

September 25, 2015

#### VIA E-MAIL

Clay L. Rodgers (Clay.Rodgers@waterboards.ca.gov) Assistant Executive Officer Central Valley Regional Water Quality Control Board 1685 E Street Fresno, CA 93706

Re: Cleanup and Abatement Order No. R5-2015-0721 - Jaco Production Company

C.E. Houchin Lease, Midway-Sunset Oil Field, Kern County

### Mr. Rodgers:

My office serves as legal counsel for Jaco Production Company in regards to the August 26, 2015 Central Valley Regional Water Quality Control Board's Cleanup and Abatement Order (CAO) No. R5-2015-0721. Attached herein is a copy of the Petition for Review and Request for Hearing filed by Jaco Production Company related to the CAO. As part of the Petition for Review process, Jaco Production Company is required to request that the Regional Board prepare the administrative record. This letter serves that purpose.

Jaco Production Company is petitioning for review and rescission of the CAO because the subject lease has <u>not</u> been in production for nearly twenty years and there is no discharge of oil production water occurring at the site. But per the 30-day deadline to file a petition for review, Petitioner is compelled to file this petition to preserve its rights and obtain resolution of the incorrect CAO. We desire to informally discuss the issues with your office to amicably resolve the outstanding misunderstanding.

Jaco Production Company does not anticipate any conflicts, it merely is preserving the record in this matter. We look forward to working with the Regional Board to satisfy its information needs to the best of our abilities, while at the same time addressing and reserving Jaco Production Company's concerns. If you have any questions related to above, please contact me at (661) 327-9661.

Regards,

DOUGLAS A. GOSLING

cc: client