

Mr. Ronald Holcomb  
California Central Valley Regional Water Quality Control Board  
1685 E Street  
Fresno, CA 93706

July 28, 2015

**Subject: Response to 1 April, 2015 Letter Regarding Wastewater Discharge Ponds  
Cantleberry Lease, T25S, R27E, Section 22  
Rio Bravo Jasmin Oil Field,  
Kern County, California**

Mr. Holcomb:

This letter is prepared in response to your 1 April 2015 letter regarding petroleum production wastewater disposal ponds located at the Cantleberry Lease (Site), of the Jasmin Oil Field located in the northeast quarter of Section 22, Township 25 South, Range 27 East, in Kern County, California (Figure 1). The letter identifies Rio Bravo Jasmin as the owner or operator of the ponds on the subject property.

### **Recent Ownership History**

The Cantleberry Lease of the Jasmin Oil Field was originally identified in 1943. Rio Bravo Jasmin purchased the lease from Tosco Enhanced Oil Recovery Corporation in 1987. Tetra Oil Company operated the lease for Rio Bravo Jasmin from July 25, 1989 until November 1, 2013. Banks Energy operated the lease from June 1, 2014 through April 1, 2015. Rio Bravo Jasmin filed a partial quit claim on the lease on April 7, 2015. The lease is currently operated by Hathaway LLC.

### **Site Description**

The Cantleberry Lease covers two separate parcels: 051-102-267 (13.44 acres) and 051-102-275 (148.28 acres) in the northern portion of Kern County immediately east of California Highway 65 approximately 3.2 miles south of the shared Kern/Kings County line. The lease lies on otherwise undeveloped land and is bordered to the west by parcels used for agriculture and Highway 65, to the east by a parcel used for petroleum production, and to the north and south by undeveloped land.

There are eight topographic surface depressions formerly used as liquid storage ponds on the lease. These were identified by CVRWQCB as sumps: Sump 1, Sump 2, Sump 3, Sump 4, Sump 5, Sump 6, Sump 7, and Sump 8 in a 2014 inspection Report<sup>1</sup>. A ninth depression associated with the Red Drain Tank (a/k/a Lease Tank) Sump at the time of the inspection but has since been overexcavated to remove impacted soils, sampled, and backfilled (Figure 2). The associated tank has been removed. Three sumps (Sump 3, Sump 4, and Drain Tank Sump) have been inspected by the CVRWQCB and have undergone remediation in accordance with an approved remediation plan<sup>2,3</sup>. A report of the remedial efforts for these sumps is forthcoming.

<sup>1</sup> CVRWQCB, 2014. *Facilities Inspection Report, Jasmin Cantleberry Lease, NE ¼, Sec 22, T25S, R27E, Kern County, CA*. Performed and reported by Ryan K. West, October 29, 2014.

<sup>2</sup> Numeric Solutions, 2015. *Remediation Work Plan Addendum. Cantleberry Lease, T25S, R27E, Section 22, Rio Bravo Jasmin Oil Field, Kern County, California*. April 21, 2015.

<sup>3</sup> CVRWQCB, 2015. *Review of Remediation Work Plan, Hathaway LLC, Cantleberry Lease, Jasmin Oil Field, Kern County*. June 10.

The remaining sumps (Sump 1, Sump 2, Sump 5, Sump 6, Sump 7, and Sump 8) are dry. Sumps #1 and Sump 2 were drained in 2015 and have been overexcavated to petroleum hydrocarbon impacted soils. The remaining sumps were dry prior to April 1, 2014 and are not known to have contained received oil field produced water since April 1, 2014. A summary of the sump dimensions and map coordinates as requested by CVRWQCB is provided in Table 1.

### **Discharges of Oil Field Produced Waters**

Rio Bravo Jasmin holds a Waste Discharge Requirement (WDR) No. R5-2002-0065 that specifies methods for handling and disposing oil field produced liquids at the subject property. Rio Bravo Jasmin operates a wastewater disposal well on the lease (API 02908698) under permit from the State of California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR).

Since no liquids remain in the sumps, it is not possible to collect a sample at this time. The 2014 inspection report<sup>1</sup> states that on July 10, 2014, CVRWQCB collected a wastewater sample (Sample ID RKW 141007-1) from a pipe near the separation tanks (Attachment A). Since this sample was collected, Banks has re-routed the wastewater and now directs the flow from the wash water tank, via pipeline, to its permitted deep wastewater injection well. According to Banks Energy records, approximately 4,895,184 gallons of oil field produced waters have been discharged to the well in accordance with the WDR conditions. Prior to rerouting the wastewater, approximately 75,600 gallons were discharged to the sumps after April 1, 2014. No oil field produced liquids have been discharged to the sumps since May, 2014.

### **Perjury 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.

Sincerely,



Steve Iliff  
Financial Manager  
Rio Bravo Jasmin

Attachments

Figure 1 – Facility Location Map

Figure 2 – Sump Locations

Table 1 - Summary of Sump Dimensions

Attachment A: CVRWQCB October 29, 2014 Inspection Report

Cc:



### Legend

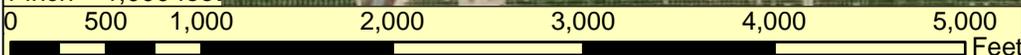
- Mineral Leases (With APNs)
- Section 22, T25S, R27E

Kern County Tax Parcels (Mineral) Source:  
 Kern County Assessor's Office,  
 Assessment Standards Division, Mapping Section  
 Edition: 2012 Prelim 06

Facility Location:  
 Kern County, CA



1:12,000  
 Original Scale  
 1 inch = 1,000 feet



22

051-310-01  
 051310019

051-102-36  
 051102366

**- FIGURE 1 -  
 FACILITY LOCATION MAP  
 CANTLEBERRY LEASE  
 Rio Bravo Jasmin Oil Field  
 Kern County, CA**



### Legend



#### FIGURE NOTES:

- 1) BASE PHOTO FROM GOOGLE EARTH (6/2015)
- 2) SUMP ID's BASED ON CVRWQCB (2014);  
*INSPECTION REPORT- RIO BRAVO JASMIN,  
CANTLEBERRY LEASE, JASMIN OILFIELD,  
KERN COUNTY.*
- 3) SUMP LIMITS ESTIMATED; BASED ON VISUAL  
APPROXIMATION OF SURFACE TOPOGRAPHIC  
DEPRESSIONS BY NUMERIC SOLUTIONS,  
MAY & JUNE, 2015.

**Red Drain Tank Sump**  
Latitude: 35.743567  
Longitude: -119.047487  
GCS: WGS 1984

**Sump 1**  
Latitude: 35.743571  
Longitude: -119.047152  
GCS: WGS 1984

**Sump 2**  
Latitude: 35.743459  
Longitude: -119.046713  
GCS: WGS 1984

**Sump 8**  
Latitude: 35.743012  
Longitude: -119.047224  
GCS: WGS 1984

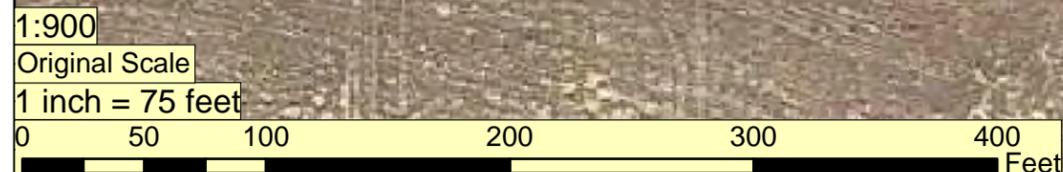
**Sump 7**  
Latitude: 35.742752  
Longitude: -119.046547  
GCS: WGS 1984

**Sump 3**  
Latitude: 35.74284  
Longitude: -119.046216  
GCS: WGS 1984

**Sump 4**  
Latitude: 35.742719  
Longitude: -119.045995  
GCS: WGS 1984

**Sump 6**  
Latitude: 35.742664  
Longitude: -119.046144  
GCS: WGS 1984

**Sump 5**  
Latitude: 35.742533  
Longitude: -119.04594  
GCS: WGS 1984



**- FIGURE 2 -  
SUMP LOCATIONS**  
Cantleberry Lease  
Rio Bravo Jasmin Oil Field  
Kern County, CA

**TABLE 1**  
**Summary of Sump Dimensions**  
**Cantleberry Lease, T25S, R27E, Section 22**  
**Rio Bravo Jasmin**  
**Kern County, CA**

Sump ID	Approximate Dimensions (in Feet)			Comments	Latitude (WGS 84)	Longitude (WGS 84)	Parcel Located On (Kern Co. APN)
	Length	Width	Depth				
Sump 1	110	50	23	Overexcavated/ Mtl Stockpiled	35.74357066	-119.0471517	051-102-275
Sump 2	140	50	15	Overexcavated/ Mtl Stockpiled	35.74345861	-119.0467134	051-102-275
Sump 3	42	26	11	Overexcavated/ Mtl Stockpiled	35.74284028	-119.0462156	051-102-275
Sump 4	52	26	13	Overexcavated/ Mtl Stockpiled	35.74271878	-119.0459946	051-102-275
Sump 5	78	47	6		35.74253335	-119.0459398	051-102-275
Sump 6	55	24	6		35.74266375	-119.0461436	051-102-275
Sump 7	180	125	6		35.74275171	-119.0465474	051-102-275
Sump 8	75	18	3		35.74301223	-119.0472237	051-102-275
Former Red Drain Tank Sump	15	15	10	Overexcavated/ Mtl Stockpiled Backfilled 2014	35.74356735	-119.0474869	051-102-275

Notes:

- All sump dimensions approximate
- Sumps 3, 4, and Former Red Drain Tank Sump addressed in other remedial actions

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## Central Valley Regional Water Quality Control Board

29 October 2014

Steve Iliff  
Rio Bravo Jasmin  
19100 Von Karman – Suite 450  
Irvine, CA 92612

### **INSPECTION REPORT – RIO BRAVO JASMIN, CANTLEBERRY LEASE, JASMIN OIL FIELD, KERN COUNTY**

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff (Staff) inspected the subject wastewater disposal facility on 10 July 2014 and 14 August 2014. Disposal operations are regulated by Waste Discharge Requirements Order R5-2002-0065 (WDRs). Staff's observations are presented in the enclosed inspection report.

Crude oil was discharged into Sump 3 on the Cantleberry Lease (lease), as a result of cleanup activities associated with an oil tank on the lease. Crude oil impacted soils at the tank location, in Sump 3, and in Sump 4 need to be remediated (see inspection report for details). Rio Bravo Jasmin has initiated the process of cleaning up crude oil impacted soils on the lease.

Staff conditionally concurred with a work plan dated 18 June 2014 for remediation of crude oil impacted soils within Sump 3 on the lease. However, now that additional areas of the lease have been found to contain crude oil impacted soils, a revised work plan needs to be submitted which includes the entire scope of remediation on the lease. The work plan needs to be signed by an appropriately registered professional (i.e. Professional Geologist or Professional Engineer). The conditions of the Notice of Violation issued on 6 June 2013 still have not been met.

Analytical results of the wastewater sample collected by Staff demonstrated that the boron concentration in lease wastewater (1.1 milligrams per liter [mg/L]) exceeds the maximum concentration limit for boron (1.0 mg/L) stipulated in the WDRs and prescribed in the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition, revised January 2004* (Basin Plan). However, previous sampling events and annual monitoring data have not shown boron exceedances in lease wastewater.

**By 28 November 2014**, please submit a work plan which includes the entire scope of remediation on the lease.

If you have any questions, please contact Dane Johnson at (559) 445-5525 or by email at [Dane.Johnson@waterboards.ca.gov](mailto:Dane.Johnson@waterboards.ca.gov)

A handwritten signature in black ink, appearing to read "Dane S. Johnson". The signature is fluid and cursive, with a long horizontal stroke at the end.

DANE S. JOHNSON  
Senior Engineering Geologist  
PG No. 4239

Enclosure: Inspection Report

cc: Mike Toland, CDOG&GR, Bakersfield

RIO BRAVO JASMIN	JASMIN, CANTLEBERRY LEASE
DISCHARGER NAME	FACILITY NAME
19100 VON KARMAN – SUITE 450	NE ¼ OF SECTION 22, T25S, R27E, MDB&M
STREET ADDRESS	STREET ADDRESS
IRVINE, CA 92612	KERN COUNTY
CITY, STATE, ZIP CODE	CITY, STATE, ZIP CODE
STEVE LLIFF	STEVE LLIFF
DISCHARGER CONTACT PERSON	FACILITY CONTACT PERSON
(949) 852-0606	(949) 852-0606
TELEPHONE NO.	TELEPHONE NO.
E-MAIL ADDRESS	E-MAIL ADDRESS

### GENERAL INSPECTION INFORMATION

Inspection Type: A Type Sampling Inspection      Lead Inspector: R. West

7/10/2014 to 8/14/2014      10:15 am      Clear, Sunny

INSPECTION DATE(S)      INSPECTION TIME      GENERAL WEATHER CONDITIONS

#### INSPECTION ATTENDEE(S)

Ted Guth	Consultant	(619) 670-3157	drtedguth@AOL.com
NAME	COMPANY/AGENCY	TELEPHONE NO.	E-MAIL ADDRESS
NAME	COMPANY/AGENCY	TELEPHONE NO.	E-MAIL ADDRESS
NAME	COMPANY/AGENCY	TELEPHONE NO.	E-MAIL ADDRESS

### INSPECTION SUMMARY (for CIWQS entry – 500 character maximum)

Staff inspected the Cantleberry Lease (lease) on 7/10/14 and again on 8/14/14 to observe areas of the lease that have been impacted by crude oil. Rio Bravo Jasmin has begun cleanup of crude oil impacted soils within Sump 3, Sump 4, and a secondary containment area of one of the above ground storage tanks on the lease.

### INSPECTION VIOLATIONS SUMMARY (if applicable)

Identify VIOLATIONS noted during inspection in table below. For each violation documented entered into CIWQS, identify Violation ID and Violation Type, describe violation, and identify section of the WDRs or Water Code violated.

Label	Violation ID	Violation Type	Violation Description	Section of the WDRs Violated
V1				
V2				
V3				
V4				
V5				
V6				

### OTHER VIOLATIONS (if applicable)

SMR violations?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Evaluated	Notes:
File Review violations?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Evaluated	Notes: Unresolved NOV for buried petroleum impacted soil in Sump 3.

Lead Inspector ID: 139472      Signature: Ryan K. West      Date: 10/29/14

Inspection Tracking Information      Reviewed by: (1) [Signature]      (2) \_\_\_\_\_      (3) (RKW) 139472  
CIWQS Coordinator

Filename: \_\_\_\_\_      CIWQS Entry Date: 10/14/2014      CIWQS Inspection ID: 17943946

**FACILITY INFORMATION**

Oil field production facility. FACILITY DESCRIPTION (e.g., total area in acres, number of waste management units, etc.)	Active STATUS (active, inactive, closed)
Oil field produced water. WASTE TYPES	Oil/Gas Extraction FACILITY CLASSIFICATION
Eight unlined surface impoundments DISPOSAL DESCRIPTION (e.g., composting, landfill, surface impoundment, etc.)	

**BACKGROUND**

The previous operator (Tetra Oil Company) of the lease used a backhoe to mix crude oil and dirt in Sump 3 and the mixture was left in place and covered with clean dirt. A Notice of Violation (NOV) was issued on 6 June 2013 that required the removal of crude oil contaminated soils from Sump 3 and a report documenting the proper closure of the sump. Crude oil contaminated soils have not been removed from Sump 3 and the conditions of the NOV have not been met.

In March of 2014, Rio Bravo Jasmin (Rio Bravo) submitted a completed form 200 and took ownership of the lease and assumed responsibility of the WDRs. Rio Bravo has currently contracted Banks Energy to operate the lease.

**INSPECTION GIS DATA**

GIS Equipment used:

	MANUFACTURER	MODEL	SERIAL NO.	DATUM
Description of Measured Point	Latitude	Longitude	Datum	Comments
Centroid of Sump Area	35.74387	-119.04711	NAD 83	

**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)).

On 7/10/2014, I inspected the lease in order to meet with Ted Guth, consultant for Rio Bravo, and to observe and discuss cleanup requirements for soils impacted by crude oil on the lease. During the inspection, I observed that one of the above ground storage tanks on the lease (see Figure 1 for tank location) contained crude oil within a secondary containment area surrounding the tank (Photograph 1). I also observed several areas around the main tank farm that contained crude oil on the ground surface (Photograph 6). Mr. Guth stated that Rio Bravo would clean up the crude oil observed in the secondary containment area, as well as the crude oil observed on the ground surface of the tank farm. Photographs were taken to document conditions observed (see page 4).

I collected one wastewater sample (sample ID RKW141007-1) during the 7/10/2014 inspection. The sample was collected from a pipe on one of the above ground oil/water separation tanks; Rio Bravo Jasmin staff opened and closed the valve on the tank for the collection of the sample. The wastewater sample was submitted under chain-of-custody to a California state certified laboratory for analysis of general minerals. Analytical results of the sample are provided below in the "Discussion of Sampling Results" section of this inspection report.

On 8/24/2014 I conducted a follow up inspection of the lease due to information obtained from the previous operator (Tetra Oil Co.) of the lease. Apparently, during the cleanup of crude oil around the tank shown in Photograph 1, the current operator (Banks Energy) discharged the crude oil into Sump 3 (Photograph 2). As identified in the "Background" section of this inspection report, Sump 3 had previously been used for disposal of crude oil impacted soil; the discharge of crude oil into Sump 3 by the current operator compounded the problems associated with the sump. Rio Bravo had begun cleanup of crude oil impacted soils on the lease. Mr. Guth informed me that crude oil impacted soils were also encountered in Sump 4. Rio Bravo had begun excavation of crude oil impacted soils from the tank area and within Sumps 3 and 4. Excavated soils were stockpiled on visqueen pending disposal or potential reuse on the lease (Photograph 5).

**SAMPLING INFORMATION AND OBSERVATIONS**

Were samples collected during the inspection?  Yes  No      Are sample results included in report?  Yes  No  
 Did discharger collect split samples?  Yes  No

**SAMPLE COLLECTION INFORMATION AND OBSERVATIONS**

SAMPLE ID	SAMPLE DESCRIPTION/OBSERVATIONS	SAMPLE TIME (hours)	PHOTO NO.

**DISCUSSION OF SAMPLING RESULTS**

Discuss sampling results (e.g., discuss whether sampling results show compliance with WDRs).

Analytical results for general minerals were: specific conductance (EC) 730 microsiemens per centimeter; total dissolved solids (TDS) 500 milligrams per liter (mg/L); chloride 59 mg/L; and boron 1.1 mg/L.

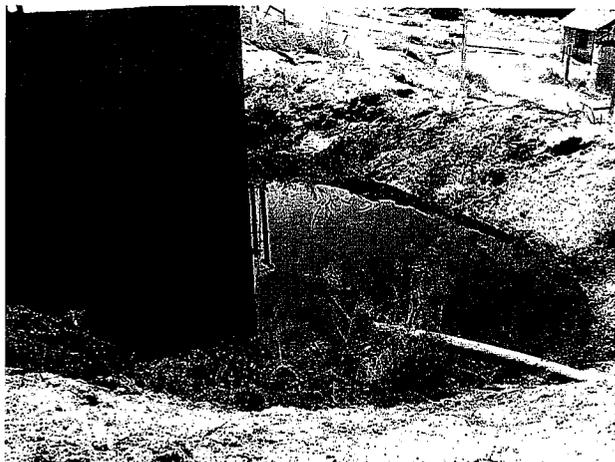
The boron concentration in the wastewater sample exceeded the maximum concentration limit for boron (1.0 mg/L) stipulated in the WDRs and prescribed in the Water Quality Control Plan for the Tulare Lake Basin, Second Edition, revised January 2004 (Basin Plan).

**CONCLUSIONS**

Summarize the conclusions of the inspection(s) below.

1. Crude oil was discharged into Sump 3 as a result of cleanup activities associated with an oil tank on the lease.
2. Crude oil impacted soils at the tank location, in Sump 3, and in Sump 4 need to be remediated.
3. Rio Bravo has initiated the process of cleaning up crude oil impacted soils on the lease.
4. Staff conditionally concurred with a work plan dated 18 June 2014 for remediation of crude oil impacted soils within Sump 3 on the lease. However, now that additional areas of the lease have been found to contain crude oil impacted soils, a revised work plan needs to be submitted which includes the entire scope of remediation on the lease. The work plan needs to be signed by an appropriately registered professional (i.e. Professional Geologist or Professional Engineer).
5. Analytical results of the wastewater sample collected by Staff demonstrate that the boron concentration in lease wastewater (1.1 mg/L) exceeds the maximum concentration limit for boron (1.0 mg/L) stipulated in the WDRs and prescribed in the Basin Plan. However, previous sampling events and annual monitoring data have not shown boron exceedances in lease wastewater.
6. The conditions of the NOV issued for the lease on 6 June 2013 still have not been met.

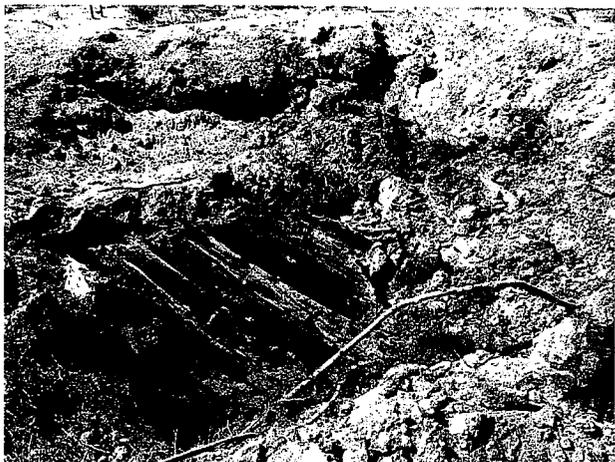
**PHOTOGRAPHS**



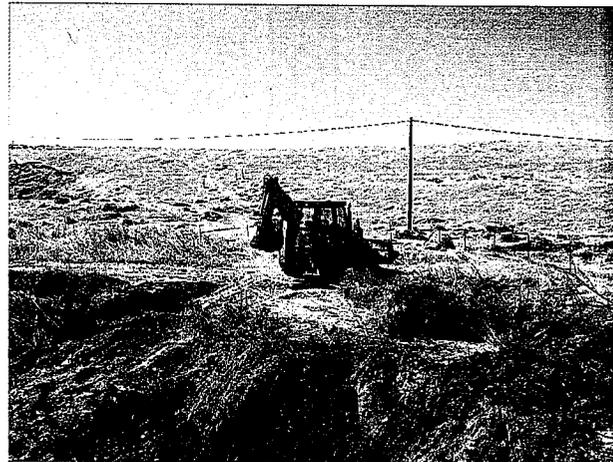
Photograph 1. – Crude oil observed within the secondary containment area of an above ground storage tank.



Photograph 2. – Discharge of crude oil into Sump 3; the crude oil originated from the tank in Photograph 1.



Photograph 3. – View of the base of the red tank shown in Photograph 1, subsequent to tank removal.



Photograph 4. – Excavator working on Sumps 3 and 4.



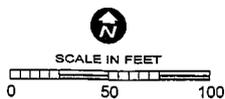
Photograph 5. – Excavated crude oil impacted soil stored on visqueen.



Photograph 6. – View of crude oil impacted soil at the tank farm on the lease.



Map Source:  
ESRI's ArcGIS Online Premium Services  
Section 22, T25S, R27E, MDB&M



**SITE MAP**  
RIO BRAVO JASMIN  
CANTLEBERRY LEASE  
JASMIN OIL FIELD  
KERN COUNTY

FIGURE 1



2527 Fresno Street  
Fresno, CA 93721  
(559) 268-7021 Phone  
(559) 268-0740 Fax

California ELAP Certificate #1371

RWQCB - Fresno 1685 E Street Fresno CA, 93706-2007	Project: 13-014-150 Project Number: Jasmin Oil Field, Kern County Project Manager: Anthony Toto	Reported: 7/24/2014
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**RKW141007-1**

AG10028-01 (Water)

Sampled:07/10/14 10:35

Analyte	Flag	Result	Reporting Limit	MDL	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Method
<b>Inorganics</b>											
Total Alkalinity as CaCO <sub>3</sub>		200	1.0	0.23	mg/L	1	U4G1019	CMG	7/10/14 16:26	7/11/14 1:18	SM2320B
Bicarbonate Alkalinity as HCO <sub>3</sub>		250	1.3	0.23	mg/L	1	U4G1019	CMG	7/10/14 16:26	7/11/14 1:18	SM2320B
Carbonate Alkalinity as CO <sub>3</sub>		ND	1.0	0.23	mg/L	1	U4G1019	CMG	7/10/14 16:26	7/11/14 1:18	SM2320B
Hydroxide Alkalinity as OH		ND	1.0	0.23	mg/L	1	U4G1019	CMG	7/10/14 16:26	7/11/14 1:18	SM2320B
Cation/Anion Balance (% Difference)		3.6			%	1	U4G2405	JAA	7/24/14 10:39	7/24/14 10:42	CALC
Chloride		59	4.0	0.037	mg/L	2	U4G1026	ETH	7/10/14 18:44	7/10/14 23:34	EPA 300.0
Specific Conductance (EC)		730	1.0	0.26	µS/cm	1	U4G1019	CMG	7/10/14 16:26	7/11/14 1:18	SM2510B
Nitrate as NO <sub>3</sub>	J	3.5	4.0	0.035	mg/L	2	U4G1026	ETH	7/10/14 18:44	7/10/14 23:34	EPA 300.0
Nitrite as N		ND	0.60	0.021	mg/L	2	U4G1026	ETH	7/10/14 18:44	7/10/14 23:34	EPA 300.0
Orthophosphate as P		0.072	0.010	0.0046	mg/L	1	U4G1007	ETH	7/10/14 17:55	7/10/14 17:55	EPA 365.3/SM4500 P
Sulfate as SO <sub>4</sub>		85	4.0	0.019	mg/L	2	U4G1026	ETH	7/10/14 18:44	7/10/14 23:34	EPA 300.0
Total Dissolved Solids		500	10	8.1	mg/L	1	U4G1423	MVY	7/14/14 16:52	7/16/14 12:30	SM 2540C
<b>Metals - Totals</b>											
Boron		1.1	0.050	0.00083	mg/L	1	U4G1121	DAR	7/16/14 16:00	7/18/14 1:14	EPA 200.7
Calcium		10	0.10	0.0076	mg/L	1	U4G1121	DAR	7/16/14 16:00	7/18/14 1:14	EPA 200.7
Hardness		26	0.66		mg equiv. CaCO <sub>3</sub> /L	1	[CALC]	DAR	7/16/14 16:00	7/18/14 1:14	[CALC]
Iron	J	0.065	0.10	0.017	mg/L	1	U4G1121	DAR	7/16/14 16:00	7/18/14 1:14	EPA 200.7
Magnesium	J	0.034	0.10	0.0091	mg/L	1	U4G1121	DAR	7/16/14 16:00	7/18/14 1:14	EPA 200.7
Manganese		0.0086	0.0050	0.00017	mg/L	1	U4G1121	DAR	7/16/14 16:00	7/18/14 1:14	EPA 200.7
Potassium		1.4	1.0	0.077	mg/L	1	U4G1121	DAR	7/16/14 16:00	7/18/14 1:14	EPA 200.7
Sodium		150	1.0	0.26	mg/L	1	U4G1121	DAR	7/16/14 16:00	7/18/14 1:14	EPA 200.7

Moore Twining Associates, Inc.

Juliane Adams, Director of Analytical Chemistry

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.