

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

HOBBS OCD

MAR 08 2013

RECEIVED

Form C-141
Revised August 8, 2011

Submit Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company	Murchison Oil & Gas, Inc.	Contact	Greg Boans
Address	1100 Mira Vista Blvd, Plano, TX 75093	Telephone No.	(575) 361-4962
Facility Name	Jackson Unit #8	Facility Type	Production Battery
Surface Owner	State of New Mexico	Mineral Owner	API No. 30-025-35328

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	22	24S	33E	1980	North	1980	West	Lea

Latitude 32°12'17.64" N Longitude 103°33'44.424" W

NATURE OF RELEASE

Type of Release	Produced water and oil skim	Volume of Release	Unknown	Volume Recovered	Unknown
Source of Release	Line rupture	Date and Hour of Occurrence	1/17/2013 5:30 pm	Date and Hour of Discovery	1/17/2013 5:30 pm
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? E-mail and phone call to Geoffrey Leking			
By Whom?	Greg Boans, Production Superintendent	Date and Hour - 1/18/2013 9:17 am			
Was a Watercourse Reached?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. unknown			

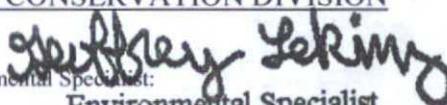
DTW = 175'

If a Watercourse was Impacted, Describe Fully.* Fluid flowed southwest from the tank into an ephemeral drainage channel for approximately 30 linear feet until it was blocked by one of many existing artificial earthen berms across the drainage channel.

Describe Cause of Problem and Remedial Action Taken. - A fill line to the tank battery ruptured causing fluid to flow out of a tank, cutting through the berm at the southwest corner of the location pad. A backhoe was promptly mobilized to remove obviously-damp surface soils (approx. 4 in) from the affected area to disposal at a permitted facility. After the damp material was removed, discrete samples were collected from the new surface (4" BGS) and 14" BGS. Chloride field tests on these samples yielded concentrations similar to background with slightly higher concentrations at the two areas of pooling, all of which dissipated at 14" BGS. A new replacement tank was recently installed.

Describe Area Affected and Cleanup Action Taken. - The affected area measures approximately 750 ft². Additionally, a fine spray from the release affected a 200 ft x 200 ft area, coating mesquite bushes with a sheen. Many of these mesquite bushes were also removed to a disposal facility. Confirmation samples of the excavated soil and of the soil remaining in place were collected for laboratory analysis. The affected surface was disc harrowed on two occasions to facilitate remediation of remaining hydrocarbon constituents. Upon approval, the site will be seeded with a blend of native vegetation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understanding pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Greg Boans	 Approved by Environmental Specialist: Environmental Specialist	
Title: Production Superintendent	Approval Date: 07/02/14	Expiration Date: -
E-mail Address: gboans@jdmii.com	Conditions of Approval: -	Attached <input type="checkbox"/>
Date: 3/6/2013 Phone: (575) 628-3932		IRP-4360

* Attach Additional Sheets If Necessary

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

March 6, 2013

HOBBS OCD

Mr. Geoffrey R. Leking
NMOCD District 1
1625 N. French Drive
Hobbs, New Mexico 88240
Via Email and US Mail

MAR 08 2013

RECEIVED

RE: Jackson Unit #8 Release
Final C-141, Request for Closure

Dear Mr. Leking:

On behalf of Murchison Oil and Gas, R.T Hicks Consultants is pleased to submit the attached Final Report for the above-referenced release. Figure 1 shows the tank in the southwest corner of the location from which this release originated.

Figure 2 shows the area impacted by the release, as described on the attached C-141. On 1/18/2013, Murchison removed the upper 4-inches of stained and saturated soil and placed this excavated material on a liner on location. We performed chloride field tests at four sample locations within the excavated footprint of the release: two of which included areas of obvious fluid pooling (sample numbers 1 and 3 on Figure 2). Chloride concentrations dissipated at 14 inches below ground surface. We returned on 1/21/2013 to collect laboratory confirmation samples. Laboratory analyses of a 5-point composite sample from the excavated surface yielded the results in the attached laboratory reports and shown in the Table below. Laboratory analysis of the excavated material showed a similar chloride concentration but lower concentrations of hydrocarbons. This result led us to conclude that simple aeration of the material could result in reduction of hydrocarbon concentrations over time.

Based upon these results, the release area was disc harrowed and contoured on two occasions in February in order to remediate residual hydrocarbons. On 2/19/2013, a second 5-point composite sample was collected from the harrowed surface for laboratory analysis. Results show that regulated hydrocarbons have declined to less than detectable limits, chloride remains unchanged as expected, and the long-chained hydrocarbons represented by TPH, GRO and DRO have also shown significant declines in concentration.

Analyte	Impacted Stockpile Composite 1/21/2013	Excavated Surface Composite (4" BGS) 1/21/2013	Remediated Surface Composite (4" BGS) 2/19/2013
Benzene	ND	ND	ND
Toluene	2.42	16.5	ND
Ethylbenzene	1.38	5.83	ND
Total Xylenes	21	105	ND
Total BTEX	24.8	127	ND
Chloride	352	480	320
TPH	12100	NA	4020
GRO	536	NA	12.8
DRO	2790	NA	2040

March 6, 2013

Page 2

The nearest water well is approximately 5000 feet away, east-southeast. Data from this well and others shown in Figure 3 were employed to estimate groundwater depth at this site to be 287 feet below ground surface, or at an elevation of 3245 feet. Depth to water in the wells associated with the Bell Lake area on the north portion of the map were not used because they obviously tap a shallow water table associated with the ancient collapse feature. Our investigation (previously submitted to OCD) suggests that the shallow water table is localized to the Bell Lake area.

The ephemeral drainage channel described in the C-141 forms is considered a "watercourse" as defined by NMOCD Rules. However, this dry channel (visible in Figure 1) is not a surface water body or "significant watercourse" as it is neither a named drainage nor a first order tributary. Moreover, regulated constituent concentrations are too low to pose a threat to surface water.

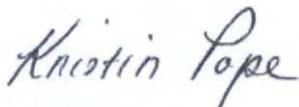
Referencing NMOCD's "Guidelines for Remediation of Leaks, Spills and Releases" (August 13, 1993), site ranking criteria for the unsaturated soils left in place results in a score of 0. Hydrocarbon constituents remaining at this site meet Recommended Remediation Action Levels of 10 ppm Benzene, 50 ppm BTEX, and 5000 ppm TPH. Further, non-residential risk-based screening levels (RBSL) for diesel fuel (C10-C22) in surface soils were established as 42,000 mg/kg by Sara J. McMillen, et. al in 2001¹.

While we conclude that this release *impacted* surface soils, we can also reasonably conclude that the soil, groundwater, or the environment will not be *impaired* by this release. We respectfully request approval of the final C-141 and closure of the regulatory file associated with this release. Upon approval of this final C-141, Murchison will seed the release footprint with a blend of native vegetation appropriate to the soil type.

Do not hesitate to contact me with any questions regarding this request.

Sincerely,

R.T. Hicks Consultants



Kristin Pope

Copy: Murchison Oil & Gas, State Land Office

Enclosures: final C-141, figures 1-3, laboratory analysis, disposal ticket, initial C-141

¹ http://www.epa.org/environment-health-and-safety/environmental-performance/~/_/media/AD08DDC869FE49ACA3C8B0A29B6CA3CC.ashx p. 126



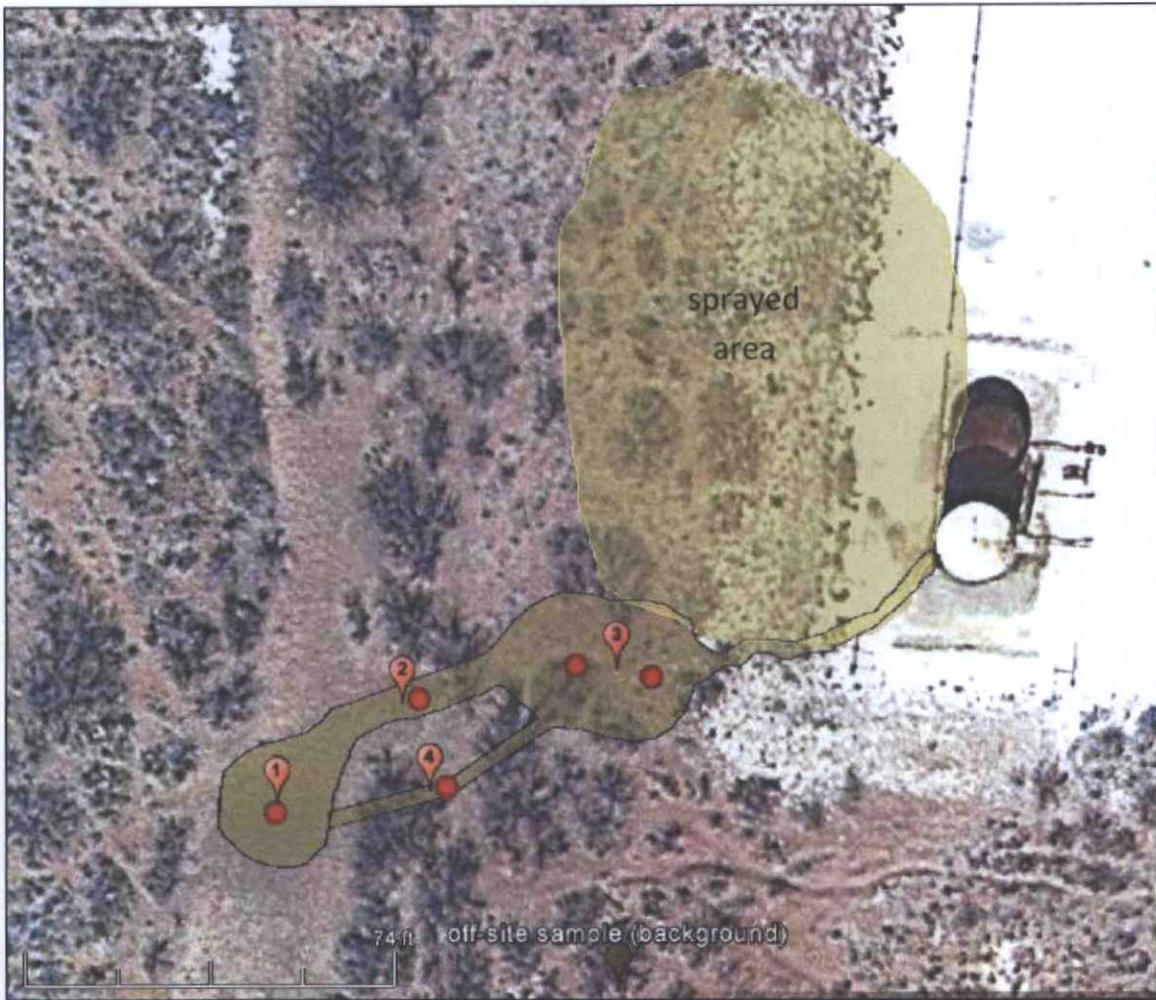
R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

Recent Air Photo of Location

Figure 1

Murchison - Jackson Unit #8

Feb 2013

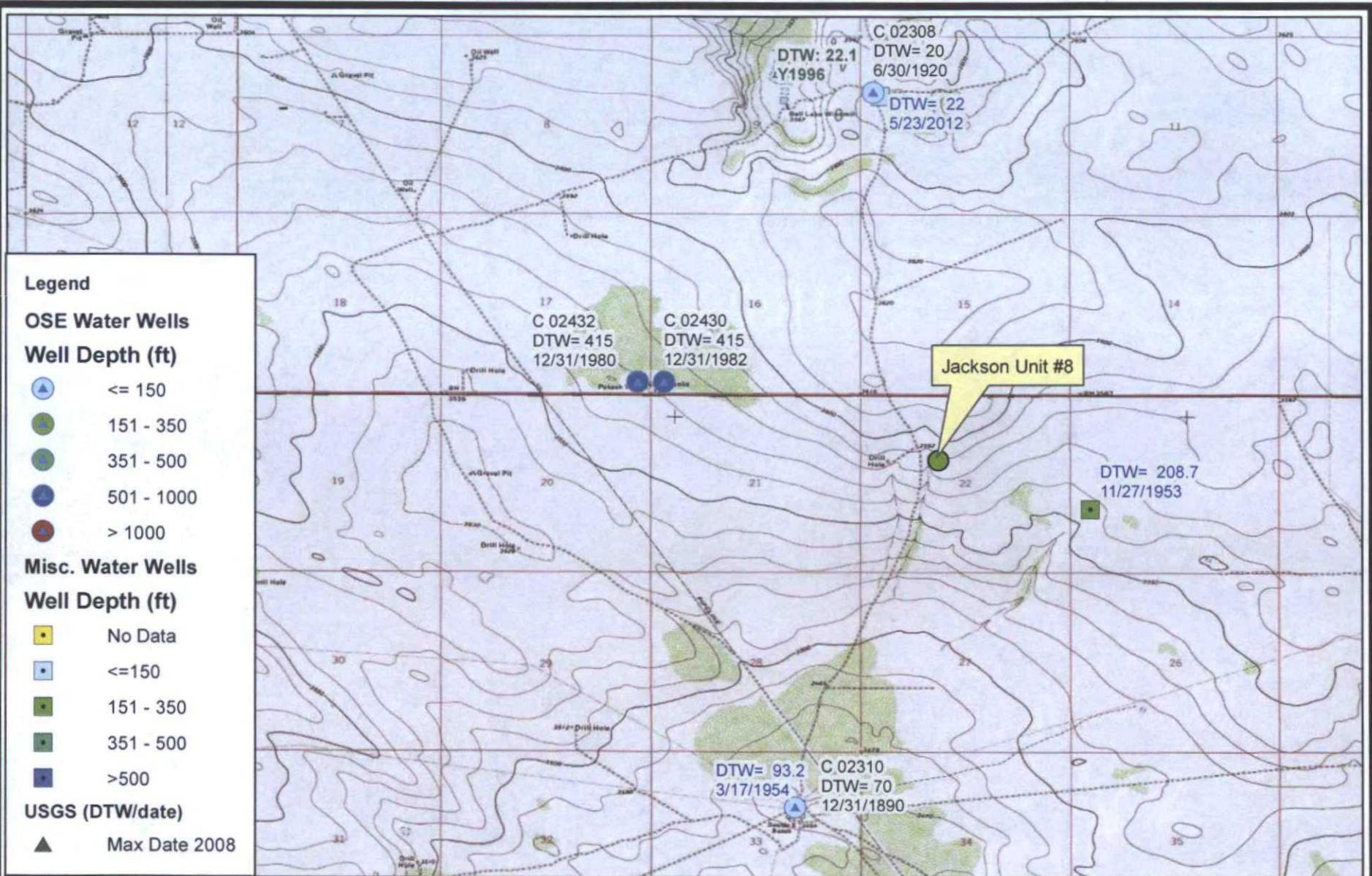


Chloride Field Tests		
Sample Point	Depth (in. BGS)	Cl ⁻ (mg/kg)
1	4	563
	14	107
2	4	104
	14	58
3	4	654
	14	71
4	4	171
	14	62
off-site (background)	0	143
	4	119
	14	65
5-pt comp.	4	362
remed. comp.	4	320*

 Sample Location
 Composite Sample Component

*2/19/2013 sample after remediation with disc harrow

R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW, Suite F-142 Albuquerque, NM 87104 505-266-5004	Release Area and Sample Locations - 1/21/2013	
	Murchison - Jackson Unit #8	Figure 2
	February 2013	



R.T. Hicks Consultants, Ltd
901 Rio Grande Blvd NW Suite F-142
Albuquerque, NM 87104
Ph: 505.266.5004

Depth to Groundwater

Murchison - Jackson Unit #8

Figure 3

Feb 2013

February 27, 2013

KRISTIN POPE

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: JACKSON UNIT #8 RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 02/20/13 10:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

 Received: 02/20/2013
 Reported: 02/27/2013
 Project Name: JACKSON UNIT #8 RELEASE
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 02/19/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: REMEDIATED SURFACE COMP. (H300465-01)

BTEX 8021B		mg/kg		Analyzed By: AP					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/26/2013	ND	1.85	92.6	2.00	17.8		
Toluene*	<0.050	0.050	02/26/2013	ND	1.82	91.2	2.00	16.9		
Ethylbenzene*	<0.050	0.050	02/26/2013	ND	1.78	89.0	2.00	16.3		
Total Xylenes*	<0.150	0.150	02/26/2013	ND	5.40	90.0	6.00	17.0		
Total BTEX	<0.300	0.300	02/26/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 145 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	02/25/2013	ND	416	104	400	3.77		

TPH 418.1		mg/kg		Analyzed By: AM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TPH 418.1	4020	100	02/25/2013	ND	4230	84.5	5000	0.236		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	12.8	10.0	02/26/2013	ND	177	88.3	200	12.4		
DRO >C10-C28	2040	10.0	02/26/2013	ND	161	80.7	200	15.8		

Surrogate: 1-Chlorooctane 99.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 142 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

 101 East Mariand, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

Company Name: <i>R.T. Hicks Consultants</i>		BILL TO		ANALYSIS REQUEST												
Project Manager: <i>Kristin Pope</i>		P.O. #:		<i>CL 3001</i> <i>Benzene TOSIB & B2608</i> <i>total BTEX "</i> <i>TPH 418.1</i> <i>PRG/GRG 2015M</i>												
Address:		Company: <i>RT Hicks</i>														
City:	State:	Zip:	Attn:													
Phone #:	Fax #:	Address:														
Project #:	Project Owner: <i>Murphyson</i>															
Project Name: <i>Jackson Unit #8 Release</i>		City:														
Project Location:		State: Zip:														
Sampler Name: <i>Kristin Pope</i>		Phone #:														
Fax #:																
FOR LAB USE ONLY																
Lab I.D.	Sample I.D.	(GRAB OR (COMP. # CONTAINERS	MATRIX	PRESERV	SAMPLING											
			GROUNDWATER		DATE	TIME										
<i>H300465</i>	<i>1 Remediated Surface Comp.</i>	<i>C 2</i>	WASTEWATER		<i>02/19/13</i>	<i>1433</i>										
			SOIL													
			OIL													
			SLUDGE													
			OTHER:													
			ACID/BASE:													
			ICE / COOL													
			OTHER:													

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates, or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <i>Kristin Pope</i>	Date: <i>02/20/13</i>	Received By: <i>Douglas Pope</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Time: <i>0700</i>	Received By:	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One)	Date: <i>2/19/13</i>	Received By: <i>Jodi Newson</i>	REMARKS: <i>email to kristin@rthicksconsult.com</i>	
Sampler - UPS - Bus - Other:	Time: <i>10:35</i>	Sample Condition: Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>	CHECKED BY: (Initials) <i>JAN</i>	
		<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

January 30, 2013

KRISTIN POPE

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: MURCHINSON JACKSON UNIT #8 RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 01/23/13 10:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

 Received: 01/23/2013
 Reported: 01/30/2013
 Project Name: MURCHINSON JACKSON UNIT #8 RELEA
 Project Number: NONE GIVEN
 Project Location: UNIT 'F', SEC. 22, T24S, R33E

 Sampling Date: 01/21/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: EXCAVATED PILE COMP. (H300185-01)

BTEX 8021B		mg/kg		Analyzed By: AP				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/29/2013	ND	2.19	110	2.00	6.64		
Toluene*	2.42	0.050	01/29/2013	ND	2.20	110	2.00	5.29		
Ethylbenzene*	1.38	0.050	01/29/2013	ND	2.24	112	2.00	4.10		
Total Xylenes*	21.0	0.150	01/29/2013	ND	6.77	113	6.00	4.01		
Total BTEX	24.8	0.300	01/29/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 517 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	01/28/2013	ND	400	100	400	0.00		

TPH 418.1		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TPH 418.1	12100	100	01/24/2013	ND	2100	84.0	2500	3.28		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	536	10.0	01/26/2013	ND	152	76.0	200	12.7		
DRO >C10-C28	2790	10.0	01/26/2013	ND	142	70.9	200	15.1		

Surrogate: 1-Chlorooctane 109 % 65.2-140

Surrogate: 1-Chlorooctadecane 117 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/23/2013	Sampling Date:	01/21/2013
Reported:	01/30/2013	Sampling Type:	Soil
Project Name:	MURCHINSON JACKSON UNIT #8 RELEA	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UNIT 'F', SEC. 22, T24S, R33E		

Sample ID: BACKGROUND @ SURFACE (H300185-02)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/29/2013	ND	2.19	110	2.00	6.64		
Toluene*	<0.050	0.050	01/29/2013	ND	2.20	110	2.00	5.29		
Ethylbenzene*	<0.050	0.050	01/29/2013	ND	2.24	112	2.00	4.10		
Total Xylenes*	<0.150	0.150	01/29/2013	ND	6.77	113	6.00	4.01		
Total BTEX	<0.300	0.300	01/29/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 112 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	01/28/2013	ND	400	100	400	0.00		

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Caley D. Keene, Lab Director/Quality Manager

Analytical Results For:

 R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/23/2013	Sampling Date:	01/21/2013
Reported:	01/30/2013	Sampling Type:	Soil
Project Name:	MURCHINSON JACKSON UNIT #8 RELEA	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UNIT 'F', SEC. 22, T24S, R33E		

Sample ID: #2 @ SURFACE (4") (H300185-03)

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/29/2013	ND	2.19	110	2.00	6.64		
Toluene*	<0.050	0.050	01/29/2013	ND	2.20	110	2.00	5.29		
Ethylbenzene*	<0.050	0.050	01/29/2013	ND	2.24	112	2.00	4.10		
Total Xylenes*	<0.150	0.150	01/29/2013	ND	6.77	113	6.00	4.01		
Total BTEX	<0.300	0.300	01/29/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 107 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	01/28/2013	ND	400	100	400	0.00		

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/23/2013	Sampling Date:	01/21/2013
Reported:	01/30/2013	Sampling Type:	Soil
Project Name:	MURCHINSON JACKSON UNIT #8 RELEA	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UNIT 'F', SEC. 22, T24S, R33E		

Sample ID: #3 @ SURFACE (4") (H300185-04)

BTEX 8021B		mg/kg		Analyzed By: AP					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	1.56	0.200	01/30/2013	ND	2.19	110	2.00	6.64		
Toluene*	15.2	0.200	01/30/2013	ND	2.20	110	2.00	5.29		
Ethylbenzene*	5.26	0.200	01/30/2013	ND	2.24	112	2.00	4.10		
Total Xylenes*	71.6	0.600	01/30/2013	ND	6.77	113	6.00	4.01		
Total BTEX	93.6	1.20	01/30/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 300 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	640	16.0	01/28/2013	ND	400	100	400	0.00		

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/23/2013	Sampling Date:	01/21/2013
Reported:	01/30/2013	Sampling Type:	Soil
Project Name:	MURCHINSON JACKSON UNIT #8 RELEA	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UNIT 'F', SEC. 22, T24S, R33E		

Sample ID: 5-PT SURFACE COMP. (4") (H300185-05)

BTEX 8021B		mg/kg		Analyzed By: AP					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.500	0.500	01/30/2013	ND	2.19	110	2.00	6.64		
Toluene*	16.5	0.500	01/30/2013	ND	2.20	110	2.00	5.29		
Ethylbenzene*	5.83	0.500	01/30/2013	ND	2.24	112	2.00	4.10		
Total Xylenes*	105	1.50	01/30/2013	ND	6.77	113	6.00	4.01		
Total BTEX	127	3.00	01/30/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 197 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	480	16.0	01/28/2013	ND	400	100	400	0.00		

Conductivity 120.1		uS/cm		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Conductivity	1510	1.00	01/30/2013		484	96.8	500			

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
 Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

Company Name: <i>R.T. Hicks Consultants</i>				BILL TO				ANALYSIS REQUEST														
Project Manager: <i>Kristin Pope</i>				P.O. #:				BTEX 8621B & 2361B CI- 300.0 Benzene 2631B TPH 412.1 PRO/GRO 417.1 EC														
Address:				Company: <i>RT Hicks</i>																		
City:		State:		Zip:		Attn: <i>Consultants</i>																
Phone #: <i>575.302.6755</i>		Fax #:		Address:																		
Project #:		Project Owner:		City:																		
Project Name: <i>Murchinson Jackson Unit #8 Release</i>				State:		Zip:																
Project Location: <i>Unit 'F', Sec. 22, T24S, R33E</i>				Phone #:																		
Sampler Name: <i>K. Pope</i>				Fax #:																		
<small>FOR LAB USE ONLY</small>																						
Lab I.D.	Sample I.D.	(GRAB OR (COMP # CONTAINERS	MATRIX									PRESERV		SAMPLING								
			GROUNDWATER	WASTEWATER	SOIL	OIL	SILUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME									
<i>H300185</i>																						
<i>1</i>	<i>Excavated pits comp.</i>	<i>C</i>	<i>1</i>			<i>X</i>				<i>X</i>		<i>1.21.13</i>	<i>16:10</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>					
<i>2</i>	<i>Background @ surface</i>	<i>G</i>	<i>1</i>			<i>X</i>				<i>X</i>		<i>1.21.13</i>	<i>16:22</i>	<i>X</i>	<i>X</i>							
<i>3</i>	<i>#2 @ surface (4")</i>	<i>G</i>	<i>1</i>			<i>X</i>				<i>X</i>		<i>1.21.13</i>	<i>16:15</i>	<i>X</i>	<i>X</i>							
<i>4</i>	<i>#3 @ surface (4")</i>	<i>G</i>	<i>1</i>			<i>X</i>				<i>X</i>		<i>1.21.13</i>	<i>16:20</i>	<i>X</i>	<i>X</i>							
<i>5</i>	<i>5-pt surface comp (4")</i>	<i>C</i>	<i>1</i>			<i>X</i>				<i>X</i>		<i>1.21.13</i>	<i>16:00</i>	<i>X</i>	<i>X</i>					<i>X</i>		

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Relinquished By: <i>Kristin Pope</i>	Date: <i>1/23/13</i> Time: <i>6:00</i>	Received By: <i>Dorothy Lopez</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date: <i>1/23/13</i> Time: <i>10:30</i>	Received By: <i>Jodi Menson</i>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	<i>4:50</i>	Sample Condition: Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: <i>JM</i> (initials)	
REMARKS: <i>Email results to kristin@rthicksconsult.com</i>				

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

#26



R360 Environmental Solutions, LLC
Permian Basin Region

P.O. Box 3452
 Hobbs, NM 88241
 Federal Tax ID: 94-3283464

Invoice

Date: 1/31/2013
 Invoice #: C107008

Terms: Due Upon Receipt
 Generator: MURCHISON OIL & GAS INC
 Lease: JACKSON
 Well: 8
 Rig:
 PO:
 Memo:

Bill To
 MURCHISON OIL & GAS INC
 PO BOX 627
 CARLSBAD, NM 88220



Item	Qty	Desc	Disc	Price	Amount	Ticket	Date	3rd Party #	Co. Man	Trucking Co
Cont Soil	12.00			\$29.00	\$348.00	472686	1/25/2013	NA	CHACE WALLS	BOGGS TRUCKING
Cont Soil	12.00			\$29.00	\$348.00	472719	1/25/2013	NA	CHACE WALLS	BOGGS TRUCKING
Cont Soil	12.00			\$29.00	\$348.00	472760	1/25/2013	NA	CHACE WALLS	BOGGS TRUCKING
Cont Soil	12.00			\$29.00	\$348.00	473403	1/26/2013	NA	CHANCE WALLS	BOGGS TRUCKING
Trash	12.00	wood with oil		\$29.00	\$348.00	473444	1/26/2013	NA	CHANCE WALLS	BOGGS TRUCKING
Cont Soil	12.00			\$29.00	\$348.00	473536	1/28/2013	NA	CHANCE WALLS	BOGGS TRUCKING
Cont Soil	12.00			\$29.00	\$348.00	473878	1/29/2013	NA	CHACE WALLS	BOGGS TRUCKING
Cont Soil	10.00			\$29.00	\$290.00	473723	1/29/2013	NA	CHACE WALLS	BOGGS TRUCKING

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company	Murchison Oil & Gas, Inc.	Contact	Greg Boans
Address	1100 Mira Vista Blvd, Plano, TX 75093	Telephone No.	(575) 361-4962
Facility Name	Jackson Unit #8	Facility Type	Production Battery
Surface Owner	State of New Mexico	Mineral Owner	API No. 30-025-35328

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	22	24S	33E	1980	North	1980	West	Lea

Latitude 32°12'17.64" N Longitude 103°33'44.424" W

NATURE OF RELEASE

Type of Release	Produced water and oil skim	Volume of Release	Unknown	Volume Recovered	Unknown
Source of Release	Line rupture	Date and Hour of Occurrence	1/17/2013 5:30 pm	Date and Hour of Discovery	1/17/2013 5:30 pm
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? E-mail and phone call to Geoffrey Leking			
By Whom?	Greg Boans, Production Superintendent	Date and Hour - 1/18/2013 9:17 am			
Was a Watercourse Reached?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. unknown			

If a Watercourse was Impacted, Describe Fully.* Fluid flowed southwest from the tank into an ephemeral drainage channel for approximately 30 linear feet until it was blocked by one of many existing artificial earthen berms across the drainage channel.

Describe Cause of Problem and Remedial Action Taken. - A fill line to the tank battery ruptured causing fluid to flow out of a tank, cutting through the berm at the southwest corner of the location pad. A backhoe was promptly mobilized to remove obviously-damp surface soils (approx. 4 in. or 28 yd³) from the affected area. The excavated material was staged on a 20-mil reinforced poly liner placed on the nearby pad. After the damp material was removed, discrete samples were collected from the new surface (4" BGS) and 14" BGS. Chloride field tests on these samples yielded concentrations similar to background with slightly higher concentrations at the two areas of pooling, all of which dissipated at 14" BGS. A new replacement tank will be installed.

Describe Area Affected and Cleanup Action Taken. - The affected area measures approximately 750 ft². Additionally, a fine spray from the release affected a 200 ft x 200 ft area, coating mesquite bushes with a sheen. In addition to removing the affected material as described above, many of the mesquite bushes were grubbed and placed on the poly liner. Confirmation samples of the excavated soil and of the soil remaining in place were collected for laboratory analysis, which will determine the surface restoration plan.

I hereby certify that the information given above is true and complete to the best of my knowledge and understanding pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

		<u>OIL CONSERVATION DIVISION</u>	
Signature:	Approved by Environmental Specialist:		
Printed Name:	Approval Date:	Expiration Date:	
Title:	Conditions of Approval:		Attached <input type="checkbox"/>
E-mail Address:			
Date:	Phone:		

* Attach Additional Sheets If Necessary