

CARROLL, RICHARD V

30-045-30567

**From:** CARROLL, RICHARD V  
**Sent:** Friday, August 02, 2013 7:35 AM  
**To:** 'Powell, Brandon, EMNRD'  
**Cc:** Malone, Ryan [ENGlobal]; Lindsey, Don (LLIN)  
**Subject:** RE: Chevron LM Barton #1C - Produced Water Tank removal  
**Attachments:** C-141 LM Barton #1C .pdf

Mr. Brandon Powell,

Please find attached the required C-141 Form for the LM Barton #1C BGT removal referenced below in my email last week. A hard copy of this document will be mailed to the NMOCD office in Aztec, NM early next week. A final C-141 will be submitted with the final Closure Report at a later date.

If you have any questions or comments, please contact me.

Richard Carroll  
Waste & Water Specialist  
Chevron - MCBU - Rocky Mountain Area  
760 Horizon Drive  
Grand Junction, CO 81506  
Office: 970-257-6026  
Cell: 970-589-9847  
[rcvb@chevron.com](mailto:rcvb@chevron.com)

RCVD AUG 6 '13  
OIL CONS. DIV.

DIST. 3

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**From:** CARROLL, RICHARD V  
**Sent:** Thursday, July 25, 2013 10:10 AM  
**To:** Powell, Brandon, EMNRD  
**Cc:** Malone, Ryan [ENGlobal]; Lindsey, Don (LLIN)  
**Subject:** Chevron LM Barton #1C - Produced Water Tank removal

Mr. Brandon Powell,

In a follow up to our phone conversation yesterday regarding the **Chevron LM Barton #1C (API# 30-045-30567)**, I am providing the following information.

- The LM Barton #1C location is currently being retrofitted with electrical power and is undergoing renovation including removal of much of the old equipment. As part of this project, a 95 barrel produced water tank was removed and initial sampling below the tank completed. In the past few days it has come to Chevron's attention that required notification to the OCD and the landowner prior to commencing clean up operations was not provided. The failure to provide the proper notifications seemed to evolve around confusion on if the tank was a BGT or an AGT. A C144 Form was submitted back in 2010 (see attached) permitting the tank as a BGT but a visual inspection of the site by the project team indicated the tank to be an AGT. The resulting confusion on the tanks regulatory status contributed to the proper notifications not being submitted.

This email is intended to provide the proper notification to the NMOCD of the closure activities at the location and to provide notice of cleanup activities scheduled for next Tuesday (July 30<sup>th</sup>). Notification to the landowner is to be provided today via certified mail.

- Site assessment results indicate the soil beneath the tank to exceed chloride levels of 600 mg/kg for soils less than 50 feet above groundwater. A site map is attached showing the sampling locations and chloride results. Chevron intends to close the site in accordance with all applicable rules and regulations. Once cleanup of the site is completed, a proper closure report will be filed with the agency with all the required documentation.

Chevron apologizes for the oversight in not providing the proper notifications sooner. If you have need for any further information, please contact me at your convenience.

Richard Carroll  
Waste & Water Specialist  
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Grand Junction, CO 81506  
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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

Form C-141  
Revised August 8, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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 <i>Four Star Oil and Gas Company</i>	Contact <i>Richard Carroll</i>
Address <i>Post Office Box 36366 Houston, Texas 77236</i>	Telephone No. <i>970-257-6026</i>
Facility Name <i>LM Barton #1C</i>	Facility Type <i>Gas Well</i>
Surface Owner <i>Private</i>	Mineral Owner
API No. <i>3004530567</i>	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<i>N</i>	<i>12</i>	<i>30N</i>	<i>12W</i>	<i>660</i>	<i>South</i>	<i>1935</i>	<i>West</i>	<i>San Juan</i>

Latitude *36.821354* Longitude *-108.052051*

**NATURE OF RELEASE**

Type of Release <i>Produced Water</i>	Volume of Release <i>Unknown</i>	Volume Recovered <i>None</i>
Source of Release <i>Below Grade Tank</i>	Date and Hour of Occurrence <i>Unknown</i>	Date and Hour of Discovery <i>July 10, 2013 7:46am</i>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <i>Brandon Powell</i>	
By Whom? <i>Richard Carroll</i>	Date and Hour <i>July 25, 2013 10:10am</i>	<b>RCVD AUG 6 '13</b>
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	<b>OIL CONS. DIV. DIST. 3</b>

If a Watercourse was Impacted, Describe Fully.\*  
*No watercourse was impacted.*

Describe Cause of Problem and Remedial Action Taken.\*

*Produced water from a gas well at the above mentioned location formerly discharged into a Below Grade Tank (BGT) on location. The Below Grade Tank was removed on July 8, 2013. Soil sampling from directly beneath the tank in accordance with Subsection E of 19.15.17.13 NMAC was performed on July 8, 2013, indicated that a release had occurred due to chloride concentrations being above 250 mg/kg.*

Describe Area Affected and Cleanup Action Taken.\*

*A five (5) point composite sample was collected from directly beneath the former BGT immediately once it was removed. The sample was analyzed in the field for total petroleum hydrocarbons (TPH) using USEPA Method 418.1, and in Envirotech's Analytical Laboratory for benzene and total BTEX using USEPA Method 8021 and for total chlorides using USEPA Method 4500B. The sample returned results at or below the 'Pit Rule' standards of 100 mg/kg TPH, 0.2 mg/kg benzene, and 50 mg/kg total BTEX; however the total chloride concentration was 1,740 mg/kg, confirming that a release had occurred. Analytical results are attached for your reference. The BGT pit has been excavated and the soil disposed of at Envirotech's NMOCD Permitted Soil Remediation Facility, Landfarm #2. A final C-141 report and documentation will be submitted with the BGT Closure Documentation at a later date.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that 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: <i>Richard Carroll</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <i>Richard Carroll</i>	Approved by Environmental Specialist: <i>Janet D. Kelly</i>	
Title: <i>Waste and Water Specialist</i>	Approval Date: <i>9/11/2013</i>	Expiration Date:
E-mail Address: <i>RCVB@Chevron.com</i>	Conditions of Approval:	Attached <input type="checkbox"/>
Date:	Phone: <i>970-257-6026</i>	

\* Attach Additional Sheets If Necessary

*NJK1325455314*

## Analytical Report

### Report Summary

Client: Chevron

Chain Of Custody Number: 15842

Samples Received: 7/8/2013 1:30:00PM

Job Number: 92270-1128

Work Order: P307021

Project Name/Location: LM Barton #1C/ BGT  
Closure

Entire Report Reviewed By:

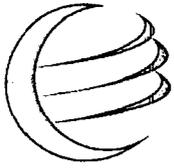


Date: 7/10/13

Tim Cain, Laboratory Manager

Supplement to analytical report generated on: 7/10/13 7:46 am

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.



# envirotech

Analytical Laboratory

Chevron	Project Name:	LM Barton #1C/ BGT Closure	<b>Reported:</b> 10-Jul-13 08:39
322 Road 3100	Project Number:	92270-1128	
Aztec NM, 87410	Project Manager:	Chevron	

## Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
1	P307021-01A	Soil	07/08/13	07/08/13	Glass Jar, 4 oz.

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Chevron 322 Road 3100 Aztec NM, 87410	Project Name: LM Barton #1C/ BGT Closure Project Number: 92270-1128 Project Manager: Chevron	Reported: 10-Jul-13 08:39
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**1**  
**P307021-01 (Solid)**

Analyte	Result	Reporting			Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units							
<b><u>Volatile Organics by EPA 8021</u></b>										
Benzene	ND	0.05	mg/kg	1	1328005	08-Jul-13	09-Jul-13	EPA 8021B		
Toluene	ND	0.05	mg/kg	1	1328005	08-Jul-13	09-Jul-13	EPA 8021B		
Ethylbenzene	ND	0.05	mg/kg	1	1328005	08-Jul-13	09-Jul-13	EPA 8021B		
p,m-Xylene	ND	0.05	mg/kg	1	1328005	08-Jul-13	09-Jul-13	EPA 8021B		
o-Xylene	ND	0.05	mg/kg	1	1328005	08-Jul-13	09-Jul-13	EPA 8021B		
Total Xylenes	ND	0.05	mg/kg	1	1328005	08-Jul-13	09-Jul-13	EPA 8021B		
Total BTEX	ND	0.05	mg/kg	1	1328005	08-Jul-13	09-Jul-13	EPA 8021B		
<i>Surrogate: Bromochlorobenzene</i>		99.5 %	80-120		1328005	08-Jul-13	09-Jul-13	EPA 8021B		
<i>Surrogate: 1,4-Difluorobenzene</i>		96.8 %	80-120		1328005	08-Jul-13	09-Jul-13	EPA 8021B		
<i>Surrogate: Fluorobenzene</i>		96.2 %	80-120		1328005	08-Jul-13	09-Jul-13	EPA 8021B		
<b><u>Nonhalogenated Organics by 8015</u></b>										
Gasoline Range Organics (C6-C10)	ND	5.00	mg/kg	1	1328004	08-Jul-13	09-Jul-13	EPA 8015D		
<b>Diesel Range Organics (C10-C28)</b>	<b>36.8</b>	5.00	mg/kg	1	1328004	08-Jul-13	09-Jul-13	EPA 8015D		
<b>GRO and DRO Combined Fractions</b>	<b>36.8</b>	5.00	mg/kg	1	1328004	08-Jul-13	09-Jul-13	EPA 8015D		
<b><u>Cation/Anion Analysis</u></b>										
<b>Chloride</b>	<b>1740</b>	10.0	mg/kg	1	1328006	08-Jul-13	08-Jul-13	EPA 300.0		

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Chevron 322 Road 3100 Aztec NM, 87410	Project Name: LM Barton #1C/ BGT Closure Project Number: 92270-1128 Project Manager: Chevron	Reported: 10-Jul-13 08:39
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**Volatile Organics by EPA 8021 - Quality Control**  
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1328005 - Purge and Trap EPA 5030A**

<b>Blank (1328005-BLK1)</b>		Prepared: 08-Jul-13 Analyzed: 09-Jul-13								
Benzene	ND	0.05	mg/kg							
Toluene	ND	0.05	"							
Ethylbenzene	ND	0.05	"							
p,m-Xylene	ND	0.05	"							
o-Xylene	ND	0.05	"							
Total Xylenes	ND	0.05	"							
Total BTEX	ND	0.05	"							
Surrogate: Bromochlorobenzene	49.5		ug/L	50.0		98.9	80-120			
Surrogate: 1,4-Difluorobenzene	50.9		"	50.0		102	80-120			
Surrogate: Fluorobenzene	50.2		"	50.0		100	80-120			

<b>Duplicate (1328005-DUPI)</b>		Source: P307020-01		Prepared: 08-Jul-13 Analyzed: 09-Jul-13						
Benzene	ND	0.05	mg/kg		ND					30
Toluene	ND	0.05	"		ND					30
Ethylbenzene	ND	0.05	"		ND					30
p,m-Xylene	ND	0.05	"		ND					30
o-Xylene	ND	0.05	"		ND					30
Surrogate: Bromochlorobenzene	50.2		ug/L	50.0		100	80-120			
Surrogate: 1,4-Difluorobenzene	48.3		"	50.0		96.5	80-120			
Surrogate: Fluorobenzene	48.2		"	50.0		96.5	80-120			

<b>Matrix Spike (1328005-MS1)</b>		Source: P307020-01		Prepared: 08-Jul-13 Analyzed: 09-Jul-13						
Benzene	0.05	0.001	mg/kg	0.0498	ND	97.9	39-150			
Toluene	0.05	0.001	"	0.0498	ND	97.7	46-148			
Ethylbenzene	0.05	0.001	"	0.0498	ND	97.0	32-160			
p,m-Xylene	0.10	0.001	"	0.0997	ND	97.2	46-148			
o-Xylene	0.05	0.001	"	0.0498	ND	97.8	46-148			
Surrogate: Bromochlorobenzene	52.0		ug/L	50.0		104	80-120			
Surrogate: 1,4-Difluorobenzene	49.8		"	50.0		99.6	80-120			
Surrogate: Fluorobenzene	49.9		"	50.0		99.9	80-120			

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Chevron 322 Road 3100 Aztec NM, 87410	Project Name: LM Barton #1C/ BGT Closure Project Number: 92270-1128 Project Manager: Chevron	Reported: 10-Jul-13 08:39
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**Nonhalogenated Organics by 8015 - Quality Control**  
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1328004 - GRO/DRO Extraction EPA 3550C**

**Blank (1328004-BLK1)** Prepared: 08-Jul-13 Analyzed: 09-Jul-13

Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg							
Diesel Range Organics (C10-C28)	ND	4.99	"							
GRO and DRO Combined Fractions	ND	4.99	"							

**Duplicate (1328004-DUP1)** Prepared: 08-Jul-13 Analyzed: 09-Jul-13

Gasoline Range Organics (C6-C10)	ND	4.98	mg/kg		ND				30	
Diesel Range Organics (C10-C28)	ND	4.98	"		ND				30	

**Matrix Spike (1328004-MS1)** Prepared: 08-Jul-13 Analyzed: 09-Jul-13

Gasoline Range Organics (C6-C10)	263	5.26	mg/kg	263	ND	100	75-125			
Diesel Range Organics (C10-C28)	260	5.26	"	263	ND	98.9	75-125			

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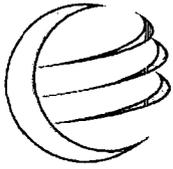
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Analytical Laboratory

Chevron 322 Road 3100 Aztec NM, 87410	Project Name: LM Barton #1C/ BGT Closure Project Number: 92270-1128 Project Manager: Chevron	Reported: 10-Jul-13 08:39
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### Cation/Anion Analysis - Quality Control

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch 1328006 - Anion Extraction EPA 300.0

**Blank (1328006-BLK1)** Prepared & Analyzed: 08-Jul-13

Chloride	ND	9.98	mg/kg							
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**Duplicate (1328006-DUP1)** Source: P307020-01 Prepared & Analyzed: 08-Jul-13

Chloride	5420	9.99	mg/kg		4400			20.8	30	
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Chevron	Project Name:	LM Barton #1C/ BGT Closure	<b>Reported:</b> 10-Jul-13 08:39
322 Road 3100	Project Number:	92270-1128	
Aztec NM, 87410	Project Manager:	Chevron	

**Notes and Definitions**

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

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# CHAIN OF CUSTODY RECORD

15842

Client: <i>Chewon</i>	Project Name / Location: <i>LM Barton #1C / BGT Closure</i>	ANALYSIS / PARAMETERS													
Email results to:	Sampler Name: <i>René García Reyes</i>	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
Client Phone No.:	Client No.: <i>92270-1128</i>														

Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact	
					HNO <sub>3</sub>	HCl	iod															
<i>I</i>	<i>7/8/13</i>	<i>10:30</i>	<i>P307021-01</i>	<i>402</i>			<i>iod</i>	<i>X</i>	<i>X</i>	<i>X</i>							<i>X</i>			<i>X</i>	<i>X</i>	

Relinquished by: (Signature) <i>[Signature]</i>	Date <i>7/8</i>	Time <i>13:30</i>	Received by: (Signature) <i>[Signature]</i>	Date <i>7/8/13</i>	Time <i>13:30</i>
Relinquished by: (Signature)			Received by: (Signature)		
Sample Matrix Soil <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>					

Sample(s) dropped off after hours to secure drop off area.

*RUSH*



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