

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*

5. Lease Serial No.  
NMNM104609

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

8. Well Name and No.  
JUNIPER WEST SWD 1

9. API Well No.  
30-045-33771-00-S1

10. Field and Pool or Exploratory Area  
BLANCO MESAVERDE  
SWD MESAVERDE

11. County or Parish, State  
SAN JUAN COUNTY, NM

1. Type of Well  
 Oil Well  Gas Well  Other: UNKNOWN OTH

2. Name of Operator Contact: MICHAEL T HANSON  
COLEMAN OIL & GAS INCORPORATED Email: mhanson@cog-fmn.com

3a. Address FARMINGTON, NM 87499  
3b. Phone No. (include area code)  
Ph: 505-327-0356 Ext: 106  
Fx: 505-327-9425

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 24 T24N R11W SESW 700FSL 1715FWL  
36.293568 N Lat, 107.957689 W Lon

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Coleman Oil & Gas respectfully request permission to accept Mancos Produced Water into the Juniper West SWD #1 Disposal. Water will be primarily transferred through produced water gathering system operated by Coleman Oil & Gas, Inc. See the attached water analysis taken from three Mancos producers. Mancos produced water will be blended with Basin Fruitland Coal water

Coleman Oil & Gas is a joint working interest owner in the Pinon Unit, Horizontal Mancos producers.

Juniper West SWD #1 Administrative Order SWD-1055

**OIL CONS. DIV DIST. 3**  
**SEP 13 2017**

14. I hereby certify that the foregoing is true and correct.  
**Electronic Submission #386117 verified by the BLM Well Information System For COLEMAN OIL & GAS INCORPORATED, sent to the Farmington Committed to AFMSS for processing by ABDELGADIR ELMADANI on 09/07/2017 (17AE0322SE)**

Name (Printed/Typed) MICHAEL T HANSON	Title ENGINEER
Signature (Electronic Submission)	Date 08/24/2017

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By <u>ABDELGADIR ELMANDANI</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>09/07/2017</u>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office <u>Farmington</u>

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2) **\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***



## Analytical Report

### Report Summary

Client: Coleman Oil & Gas  
Chain Of Custody Number:  
Samples Received: 11/16/2015 7:05:00AM  
Job Number: 05206-0001  
Work Order: P511032  
Project Name/Location: Pinon 01H

Entire Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Tim Cain', is written over a horizontal line.

Date: 11/25/15

Tim Cain, Laboratory Manager

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.

5796 US Highway 64, Farmington, NM 87401

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (505) 632-0615 Fx (505) 632-1865

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com

laboratory@envirotech-inc.com



Coleman Oil & Gas P.O. Box 3337 Farmington NM, 87499	Project Name: Pinon 01H Project Number: 05206-0001 Project Manager: Mike Hanson	Reported: 25-Nov-15 12:05
--	---	------------------------------

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Pinon 01H	P511032-01A	Aqueous	11/13/15	11/16/15	Poly 500mL

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com



Coleman Oil & Gas P.O. Box 3337 Farmington NM, 87499	Project Name: Pinon 01H Project Number: 05206-0001 Project Manager: Mike Hanson	Reported: 25-Nov-15 12:05
--	---	------------------------------

**Pinon 01H**  
**P511032-01 (Water)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

**Cation/Anion Analysis**

pH @20.1°C	7.39		pH Units	1	1547032	11/20/15 14:31	11/20/15 14:35	150.1/4500H	
Electrical Conductivity	42800		umhos/cm	1	1547032	11/20/15 14:31	11/20/15 14:35	EPA 120.1	
Total Dissolved Solids	29100	10.0	mg/L	1	1547020	11/19/15	11/19/15	160.1/2540C	
Sodium Absorption Ratio	178		N/A	1	1548015	11/25/15	11/25/15	[CALC]	
Total Alkalinity as CaCO3	519	90.0	mg/L	1	1547021	11/19/15	11/20/15	Hach Method 8203	
Total Hardness as CaCO3	657	18.6	mg/L		[CALC]	11/20/15	11/24/15	[CALC]	
Bicarbonate as CaCO3	ND	10.0	mg/L	1	1547021	11/19/15	11/20/15	Hach Method 8203	
Carbonate as CaCO3	ND	10.0	mg/L	1	1547021	11/19/15	11/20/15	Hach Method 8203	
Hydroxide as CaCO3	ND	10.0	mg/L	1	1547021	11/19/15	11/20/15	Hach Method 8203	
Nitrate-N	4.40	0.25	mg/L	1	1547013	11/18/15 09:00	11/18/15 16:02	EPA 300.0	H2
Nitrite-N	50.5	0.25	mg/L	1	1547013	11/18/15 09:00	11/19/15 18:25	EPA 300.0	H2
Chloride	16300	2.00	mg/L	1	1547013	11/18/15	11/19/15	EPA 300.0	
Fluoride	1.75	0.25	mg/L	1	1547013	11/18/15	11/18/15	EPA 300.0	
o-Phosphate-P	105	0.25	mg/L	1	1547013	11/18/15 09:00	11/19/15 18:25	EPA 300.0	H2
Sulfate	ND	2.00	mg/L	1	1547013	11/18/15	11/18/15	EPA 300.0	
Iron	ND	4.50	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	
Calcium	187	4.50	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	
Magnesium	46.4	1.80	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	
Potassium	86.4	4.50	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	
Sodium	10500	18.0	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com



Coleman Oil & Gas P.O. Box 3337 Farmington NM, 87499	Project Name: Pinon 01H Project Number: 05206-0001 Project Manager: Mike Hanson	Reported: 25-Nov-15 12:05
--	---	------------------------------

**Cation/Anion Analysis - Quality Control**  
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1547013 - Anion Extraction EPA 300.0**

<b>Blank (1547013-BLK1)</b>				Prepared & Analyzed: 18-Nov-15						
Nitrate-N	ND	0.25	mg/L							
Nitrite-N	ND	0.25	"							
Chloride	ND	2.00	"							
Fluoride	ND	0.25	"							
o-Phosphate-P	ND	0.25	"							
Sulfate	ND	2.00	"							

<b>LCS (1547013-BS1)</b>				Prepared & Analyzed: 18-Nov-15						
Nitrate-N	4.76	0.25	mg/L	5.00		95.2	90-110			
Nitrite-N	5.13	0.25	"	5.00		103	90-110			
Chloride	48.6	2.00	"	50.0		97.1	90-110			
Fluoride	5.13	0.25	"	5.00		103	90-110			
o-Phosphate-P	25.6	0.25	"	25.0		102	90-110			
Sulfate	47.2	2.00	"	50.0		94.5	90-110			

<b>Matrix Spike (1547013-MS1)</b>				Source: P511036-01		Prepared & Analyzed: 18-Nov-15				
Nitrate-N	48.2	2.50	mg/L	50.0	ND	96.4	80-120			
Nitrite-N	51.4	2.50	"	50.0	ND	103	80-120			
Chloride	571	20.0	"	500	77.7	98.6	80-120			
Fluoride	56.0	2.50	"	50.0	3.90	104	80-120			
o-Phosphate-P	257	2.50	"	250	ND	103	80-120			
Sulfate	475	20.0	"	500	ND	95.0	80-120			

<b>Matrix Spike Dup (1547013-MSD1)</b>				Source: P511036-01		Prepared & Analyzed: 18-Nov-15				
Nitrate-N	48.1	2.50	mg/L	50.0	ND	96.3	80-120	0.104	20	
Nitrite-N	51.5	2.50	"	50.0	ND	103	80-120	0.136	20	
Chloride	570	20.0	"	500	77.7	98.6	80-120	0.0473	20	
Fluoride	56.0	2.50	"	50.0	3.90	104	80-120	0.0715	20	
o-Phosphate-P	257	2.50	"	250	ND	103	80-120	0.0778	20	
Sulfate	475	20.0	"	500	ND	95.0	80-120	0.0211	20	

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com



Coleman Oil & Gas	Project Name:	Pinon 01H	<b>Reported:</b> 25-Nov-15 12:05
P.O. Box 3337	Project Number:	05206-0001	
Farmington NM, 87499	Project Manager:	Mike Hanson	

**Notes and Definitions**

- H2 Sample was analyzed after regulatory hold-time exceeded for target analyte.
- 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

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com





## Analytical Report

### Report Summary

Client: Coleman Oil & Gas

Chain Of Custody Number:

Samples Received: 11/16/2015 7:05:00AM

Job Number: 05206-0001

Work Order: P511031

Project Name/Location: Pinon 02H

Entire Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Tim Cain', is written over a horizontal line.

Date: 11/25/15

Tim Cain, Laboratory Manager

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.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com



Coleman Oil & Gas P.O. Box 3337 Farmington NM, 87499	Project Name: Pinon 02H Project Number: 05206-0001 Project Manager: Mike Hanson	Reported: 25-Nov-15 12:04
--	---	------------------------------

**Analytical Report for Samples**

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Pinon 2H	P511031-01A	Aqueous	11/13/15	11/16/15	Poly 500mL

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com



Coleman Oil & Gas	Project Name:	Pinon 02H	Reported:
P.O. Box 3337	Project Number:	05206-0001	25-Nov-15 12:04
Farmington NM, 87499	Project Manager:	Mike Hanson	

**Pinon 2H**  
**P511031-01 (Water)**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Cation/Anion Analysis</b>									
pH @20.4°C	7.08		pH Units	1	1547032	11/20/15 14:31	11/20/15 14:35	150.1/4500H	
Electrical Conductivity	43000		umhos/cm	1	1547032	11/20/15 14:31	11/20/15 14:35	EPA 120.1	
Total Dissolved Solids	28800	10.0	mg/L	1	1547020	11/19/15	11/19/15	160.1/2540C	
Sodium Absorption Ratio	164		N/A	1	1548015	11/25/15	11/25/15	[CALC]	
Total Alkalinity as CaCO3	950	10.0	mg/L	1	1547021	11/19/15	11/20/15	Hach Method 8203	
Total Hardness as CaCO3	765	18.6	mg/L		[CALC]	11/20/15	11/24/15	[CALC]	
Bicarbonate as CaCO3	ND	10.0	mg/L	1	1547021	11/19/15	11/20/15	Hach Method 8203	
Carbonate as CaCO3	ND	10.0	mg/L	1	1547021	11/19/15	11/20/15	Hach Method 8203	
Hydroxide as CaCO3	ND	10.0	mg/L	1	1547021	11/19/15	11/20/15	Hach Method 8203	
Nitrate-N	5.32	0.25	mg/L	1	1547013	11/18/15 09:00	11/18/15 14:35	EPA 300.0	H2
Nitrite-N	3.04	0.25	mg/L	1	1547013	11/18/15 09:00	11/18/15 14:35	EPA 300.0	H2
Chloride	15400	2.00	mg/L	1	1547013	11/18/15	11/19/15	EPA 300.0	
Fluoride	ND	0.25	mg/L	1	1547013	11/18/15	11/18/15	EPA 300.0	
o-Phosphate-P	6.77	0.25	mg/L	1	1547013	11/18/15 09:00	11/18/15 14:35	EPA 300.0	H2
Sulfate	ND	2.00	mg/L	1	1547013	11/18/15	11/18/15	EPA 300.0	
Iron	23.1	4.50	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	
Calcium	226	4.50	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	
Magnesium	48.5	1.80	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	
Potassium	88.6	4.50	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	
Sodium	10400	18.0	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com



Coleman Oil & Gas P.O. Box 3337 Farmington NM, 87499	Project Name: Pinon 02H Project Number: 05206-0001 Project Manager: Mike Hanson	Reported: 25-Nov-15 12:04
--	---	------------------------------

**Cation/Anion Analysis - Quality Control**  
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1547013 - Anion Extraction EPA 300.0**

<b>Blank (1547013-BLK1)</b>				Prepared & Analyzed: 18-Nov-15						
Nitrate-N	ND	0.25	mg/L							
Nitrite-N	ND	0.25	"							
Chloride	ND	2.00	"							
Fluoride	ND	0.25	"							
o-Phosphate-P	ND	0.25	"							
Sulfate	ND	2.00	"							

<b>LCS (1547013-BS1)</b>				Prepared & Analyzed: 18-Nov-15						
Nitrate-N	4.76	0.25	mg/L	5.00	95.2	90-110				
Nitrite-N	5.13	0.25	"	5.00	103	90-110				
Chloride	48.6	2.00	"	50.0	97.1	90-110				
Fluoride	5.13	0.25	"	5.00	103	90-110				
o-Phosphate-P	25.6	0.25	"	25.0	102	90-110				
Sulfate	47.2	2.00	"	50.0	94.5	90-110				

<b>Matrix Spike (1547013-MS1)</b>				Source: P511036-01		Prepared & Analyzed: 18-Nov-15				
Nitrate-N	48.2	2.50	mg/L	50.0	ND	96.4	80-120			
Nitrite-N	51.4	2.50	"	50.0	ND	103	80-120			
Chloride	571	20.0	"	500	77.7	98.6	80-120			
Fluoride	56.0	2.50	"	50.0	3.90	104	80-120			
o-Phosphate-P	257	2.50	"	250	ND	103	80-120			
Sulfate	475	20.0	"	500	ND	95.0	80-120			

<b>Matrix Spike Dup (1547013-MSD1)</b>				Source: P511036-01		Prepared & Analyzed: 18-Nov-15				
Nitrate-N	48.1	2.50	mg/L	50.0	ND	96.3	80-120	0.104	20	
Nitrite-N	51.5	2.50	"	50.0	ND	103	80-120	0.136	20	
Chloride	570	20.0	"	500	77.7	98.6	80-120	0.0473	20	
Fluoride	56.0	2.50	"	50.0	3.90	104	80-120	0.0715	20	
o-Phosphate-P	257	2.50	"	250	ND	103	80-120	0.0778	20	
Sulfate	475	20.0	"	500	ND	95.0	80-120	0.0211	20	

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com



Coleman Oil & Gas  
P.O. Box 3337  
Farmington NM, 87499

Project Name: Pinon 02H  
Project Number: 05206-0001  
Project Manager: Mike Hanson

Reported:  
25-Nov-15 12:04

#### Notes and Definitions

- H2 Sample was analyzed after regulatory hold-time exceeded for target analyte.
- 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

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com

Client: Coleman Oil & Gas, Inc  
 Project: Pinon 02H  
 Sampler: Mike Hanson  
 Phone: 505-330-2903  
 Email(s): mhanson@co9-fmw.com  
 Project Manager: Mike Hanson

RUSH?  
 1d  
 3d

Lab Use Only		Analysis and Method						Lab Only		
Lab WO#		GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	Cation	Anion	WTR Analysis	Lab Number	Correct Cont/Prsrv (s) Y/N
P 511031										
Job Number		of								
05206-0001										

Sample ID	Sample Date	Sample Time	Matrix	Containers QTY - Vol/TYPE/Preservative	GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	Cation	Anion	WTR Analysis	Lab Number	Correct Cont/Prsrv (s) Y/N
Pinon 2H	11/13/2015	3:30 PM	H2O	No								1	Y

Relinquished by: (Signature) <u>Mike Hanson</u>	Date 11/13/2015	Time 5:30 PM	Received by: (Signature) <u>Dana Zozin</u>	Date 11-16-15	Time 7:05	Lab Use Only					
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	**Received on Ice Y / N					
						T1 <u>5.8</u> T2 _____ T3 _____					
						AVG Temp °C <u>5.8</u>					

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

\*\*Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

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

Chain of Custody \_\_\_\_\_

Notes/Billing info: \_\_\_\_\_



5796 US Highway 64, Farmington, NM 87401  
 Three Springs - 65 Mercader Street, Suite 115, Durango, CO 81301

Ph (505) 632-0615 Fx: (505) 632-1865  
 Ph (970) 259-0615 Fx (800) 362-1874

envirotech-inc.com  
 3345 Highway 64, Farmington, NM 87401



## Analytical Report

### Report Summary

Client: Coleman Oil & Gas  
Chain Of Custody Number:  
Samples Received: 11/16/2015 7:05:00AM  
Job Number: 05206-0001  
Work Order: P511033  
Project Name/Location: Good Times 24-10

Entire Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Tim Cain', is written over a horizontal line.

Date: 11/25/15

Tim Cain, Laboratory Manager

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.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com

laboratory@envirotech-inc.com



Coleman Oil & Gas P.O. Box 3337 Farmington NM, 87499	Project Name: Good Times 24-10 Project Number: 05206-0001 Project Manager: Mike Hanson	Reported: 25-Nov-15 12:07
--	--	------------------------------

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Good Times 24-10	P511033-01A	Aqueous	11/13/15	11/16/15	Poly 500mL

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com



Coleman Oil & Gas  
 P.O. Box 3337  
 Farmington NM, 87499

Project Name: Good Times 24-10  
 Project Number: 05206-0001  
 Project Manager: Mike Hanson

Reported:  
 25-Nov-15 12:07

**Good Times 24-10**  
**P511033-01 (Water)**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Cation/Anion Analysis</b>									
pH @20.6°C	5.59		pH Units	1	1547032	11/20/15 14:31	11/20/15 14:35	150.1/4500H	
Electrical Conductivity	28900		umhos/cm	1	1547032	11/20/15 14:31	11/20/15 14:35	EPA 120.1	
Total Dissolved Solids	24700	10.0	mg/L	1	1547020	11/19/15	11/19/15	160.1/2540C	
Sodium Absorption Ratio	140		N/A	1	1548015	11/25/15	11/25/15	[CALC]	
Total Alkalinity as CaCO3	1080	10.0	mg/L	1	1547021	11/19/15	11/19/15	Hach Method 8203	
Total Hardness as CaCO3	574	18.6	mg/L		[CALC]	11/20/15	11/24/15	[CALC]	
Bicarbonate as CaCO3	ND	10.0	mg/L	1	1547021	11/19/15	11/19/15	Hach Method 8203	
Carbonate as CaCO3	ND	10.0	mg/L	1	1547021	11/19/15	11/19/15	Hach Method 8203	
Hydroxide as CaCO3	ND	10.0	mg/L	1	1547021	11/19/15	11/19/15	Hach Method 8203	
Nitrate-N	4.43	0.25	mg/L	1	1547013	11/18/15 09:00	11/18/15 18:35	EPA 300.0	H2
Nitrite-N	54.1	0.25	mg/L	1	1547013	11/18/15 09:00	11/19/15 19:09	EPA 300.0	H2
Chloride	12200	2.00	mg/L	1	1547013	11/18/15	11/19/15	EPA 300.0	
Fluoride	ND	0.25	mg/L	1	1547013	11/18/15	11/19/15	EPA 300.0	
o-Phosphate-P	105	0.25	mg/L	1	1547013	11/18/15 09:00	11/19/15 19:09	EPA 300.0	H2
Sulfate	18.1	2.00	mg/L	1	1547013	11/18/15	11/18/15	EPA 300.0	
Iron	178	4.50	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	
Calcium	174	4.50	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	
Magnesium	33.9	1.80	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	
Potassium	203	4.50	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	
Sodium	7720	18.0	mg/L	9	1547033	11/20/15	11/24/15	EPA 6010C	

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
 laboratory@envirotech-inc.com



Coleman Oil & Gas P.O. Box 3337 Farmington NM, 87499	Project Name: Good Times 24-10 Project Number: 05206-0001 Project Manager: Mike Hanson	Reported: 25-Nov-15 12:07
--	--	------------------------------

**Cation/Anion Analysis - Quality Control**  
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1547013 - Anion Extraction EPA 300.0**

**Blank (1547013-BLK1)**

Prepared & Analyzed: 18-Nov-15

Nitrate-N	ND	0.25	mg/L							
Nitrite-N	ND	0.25	"							
Chloride	ND	2.00	"							
Fluoride	ND	0.25	"							
o-Phosphate-P	ND	0.25	"							
Sulfate	ND	2.00	"							

**LCS (1547013-BS1)**

Prepared & Analyzed: 18-Nov-15

Nitrate-N	4.76	0.25	mg/L	5.00		95.2	90-110			
Nitrite-N	5.13	0.25	"	5.00		103	90-110			
Chloride	48.6	2.00	"	50.0		97.1	90-110			
Fluoride	5.13	0.25	"	5.00		103	90-110			
o-Phosphate-P	25.6	0.25	"	25.0		102	90-110			
Sulfate	47.2	2.00	"	50.0		94.5	90-110			

**Matrix Spike (1547013-MS1)**

Source: P511036-01

Prepared & Analyzed: 18-Nov-15

Nitrate-N	48.2	2.50	mg/L	50.0	ND	96.4	80-120			
Nitrite-N	51.4	2.50	"	50.0	ND	103	80-120			
Chloride	571	20.0	"	500	77.7	98.6	80-120			
Fluoride	56.0	2.50	"	50.0	3.90	104	80-120			
o-Phosphate-P	257	2.50	"	250	ND	103	80-120			
Sulfate	475	20.0	"	500	ND	95.0	80-120			

**Matrix Spike Dup (1547013-MSD1)**

Source: P511036-01

Prepared & Analyzed: 18-Nov-15

Nitrate-N	48.1	2.50	mg/L	50.0	ND	96.3	80-120	0.104	20	
Nitrite-N	51.5	2.50	"	50.0	ND	103	80-120	0.136	20	
Chloride	570	20.0	"	500	77.7	98.6	80-120	0.0473	20	
Fluoride	56.0	2.50	"	50.0	3.90	104	80-120	0.0715	20	
o-Phosphate-P	257	2.50	"	250	ND	103	80-120	0.0778	20	
Sulfate	475	20.0	"	500	ND	95.0	80-120	0.0211	20	

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com



Coleman Oil & Gas	Project Name:	Good Times 24-10	<b>Reported:</b> 25-Nov-15 12:07
P.O. Box 3337	Project Number:	05206-0001	
Farmington NM, 87499	Project Manager:	Mike Hanson	

**Notes and Definitions**

- H2 Sample was analyzed after regulatory hold-time exceeded for target analyte.
- 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

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (505) 632-0615 Fx (505) 632-1865

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
laboratory@envirotech-inc.com

Client: Coleman Oil & Gas, Inc  
 Project: Good Times 24-10  
 Sampler: Mike Hanson  
 Phone: 505-330-2903  
 Email(s): mhanson@co9-fmw.com  
 Project Manager: Mike Hanson

RUSH?  
 1d  
 3d

Lab Use Only		Analysis and Method				lab Only		
Lab WO# <b>P 511033</b>		GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	CATION ANION WTR ANALYSIS	Lab Number	Correct Coft/Prsv (s) Y/N
Job Number <b>05206-0001</b>								
Page <u>1</u> of <u>1</u>								

Sample ID	Sample Date	Sample Time	Matrix	Containers QTY - Vol/TYPE/Preservative	GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	CATION ANION WTR ANALYSIS	Lab Number	Correct Coft/Prsv (s) Y/N
<u>GOOD TIMES 24-10</u>	<u>11/13/15</u>	<u>3:00PM</u>	<u>H2O</u>	<u>None</u>					<input checked="" type="checkbox"/>	<u>11</u>	<u>Y</u>

Relinquished by: (Signature) <u>Mike Hanson</u>	Date <u>11/13</u>	Time <u>5:30PM</u>	Received by: (Signature) <u>Demi Z...</u>	Date <u>11-16-15</u>	Time <u>7:05</u>	Lab Use Only	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	T1 <u>6.0</u>	T2 _____
						T3 _____	
						AVG Temp °C <u>6.0</u>	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

\*\*Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Sample(s) dropped off after hours to a secure drop off area. Chain of Custody Notes/Billing info:



5775 US Highway 64, Farmington, NM 87401  
 Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (505) 632-0615 Fx (505) 632-1866  
 Ph (970) 259-0615 Fx (800) 362-1576