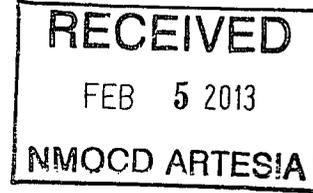


February 4, 2013

Mr. Mike Bratcher  
Oil Conservation Division  
Artesia, NM

Re: Nix GP/Lawrence Battery  
30-015-21910  
Section 22, T18S-R26E  
Eddy County, New Mexico



Dear Mr. Bratcher:

Yates Petroleum Corp. would like to submit for your consideration the enclosed work plan for the above captioned well. The plan is being submitted in response to the C-141 report dated October 4, 2012.

If you have any questions call me at 575-748-4311

Thank you.

Yates Petroleum Corporation

Jeremy Haass  
Environmental Regulatory Agent

Enclosure(s):

Diagram of Spill with Equipment  
Diagram of Spill with Sample points  
Google Earth Image of location and Upgrade Well  
Analytical Summary Reports  
Analytical Report H202544, H202664, H202734,  
454862, H300278

**Yates Petroleum Corporation**  
**Nix GP/Lawrence Battery Work Plan**  
**Section 22, T18S-R26E**  
**Eddy County, New Mexico**  
**February 4, 2013**

**I. Location**

Go south on Hwy. 285 turn East (left) on Dayton Rd. then go approx. 1.4 miles turn North (left) on lease road then immediately turn East (right) and follow road to location.

**II. Background**

On September 22, 2012 a release occurred of 450 B/PW of which 4000 B/PW was recovered. Yates submitted a C-141 on October 4, 2012 to the NMOCD District II office. The total affected area was 60 feet x 30 feet. Initial delineation samples were taken (10/16/12) and sent to an NMOCD approved laboratory (10/18/12 results enclosed).

**III. Surface and Ground Water**

Area surface geology is Cenozoic. The nearest Depth to Groundwater record listed on the New Mexico Office of the State Engineer (Section 22, T18S-R26E) shows depth of groundwater to be approximately 72 feet. After finding wet soil during core sampling at 54 feet YPC went upgrade of the spill and drilled a monitor well that established ground water at 85 feet making the site ranking for this site a ten (10). Watercourses in the area are dry except for infrequent flows in response to major precipitation events.

The ranking for this site is zero (0) based on the as following:

Depth to ground water	> 100'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

**IV. Soils**

The area consists of soils that are caliche and interspersed with clay seams providing a low permeability barrier to retard vertical percolation of contaminants into the subsurface.

**V. Scope of Work**

After consulting with OCD District II Environmental Specialist Mike Bratcher Yates Petroleum Corp. performed the following:

- The first foot of impacted material was excavated and taken to a NMOCD approved facility for disposal.
- The excavation site was divided into four sections (S1, S2, S3, and S4).
  - Initial sampling was done with a backhoe to a total depth of S1 = 16', S2 = 16', S3 = 14', S4 = 7'.
  - Once analytical data was received from the lab (see attached), additional soil was removed in the four areas to the following depths S1 = 7', S2 = 7', S3 = 1', S4 = 3'.
  - The additional impacted material was also removed.
  - Yates submitted and received verbal approval from Mike Bratcher for the initial "Work Plan" dated November 16, 2012.

- As per the approved "Work Plan" the excavated area was then backfilled and a coring rig was brought in to further delineate the vertical extent of chlorides in the impacted area. Samples were pulled with a split spoon auger starting at 24' and ending at 54' approximately every 3'.
  - The soil was a marbled mix of clay and caliche. Drilling was stopped at 54' because the soil became wet. The hole was then cased and 10' of screen was left at the bottom of the hole to allow any water to fill the bore. The next week the hole was checked and no water was found. Since the "Bottom" of chlorides was not found at 54' Yates was directed by Mike Bratcher to step out of the impacted area and drill two monitor wells, one upgrade and the other downgrade of the impacted area. The purpose of the monitor wells was first to establish depth to ground water (OSE records show 72') and to determine if the spill had impacted ground water.
  - Drilling commenced on the upgrade well on January 29, 2012 to a total depth of 90'. Yates encountered the same marbled clay to a depth of 60' where the soil changed to very thick and compact clay that ran the total depth of 90'. The monitor well determined that ground water is actually at a depth of 85' and wet soil found in the core sampling hole was a perched water pocket. A soil sample was pulled from this well at 10' for a background sample and the results were 272 ppm chlorides.
  - Due to the depth of ground water (85'), the dense clay found at 60', and the verbal approval of Mike Bratcher, Yates determined that it would be safe to continue to drill in the 54' core sampling hole in the impacted area to perhaps find a bottom rather than drilling a second monitor well. Once the rig was moved and the hole was deepened samples were taken at 60', 65', and 71'. The same thick clay was found as in the upgradient monitor well.
  - With the analytical results being within RRAL's for BTEX (50 ppm) and TPH (1000 ppm) for the Total Ranking Score of Ten (10), the cap of clean material that was backfilled, and a 20 mil liner that has been placed over the impacted area to impede further migration of chlorides and to protect against future releases Yates will submit analytical results, and request closure of the site.

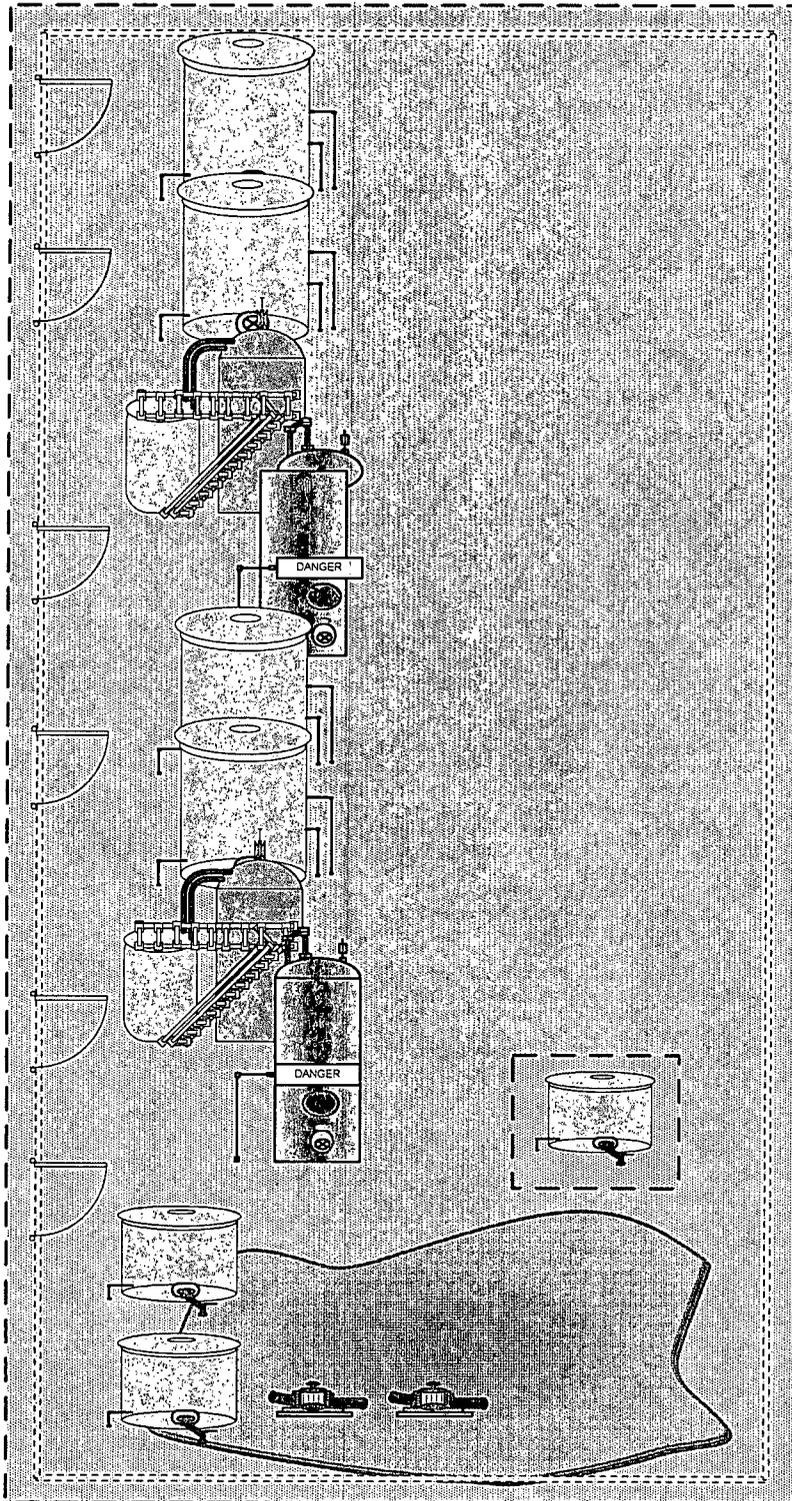
# YATES PETROLEUM CORPORATION

NIX GP/Lawrence Battery  
API # 30-015-21910

11/16/2012

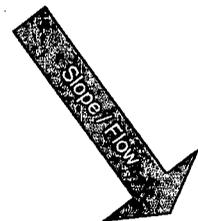
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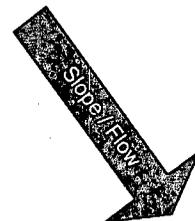
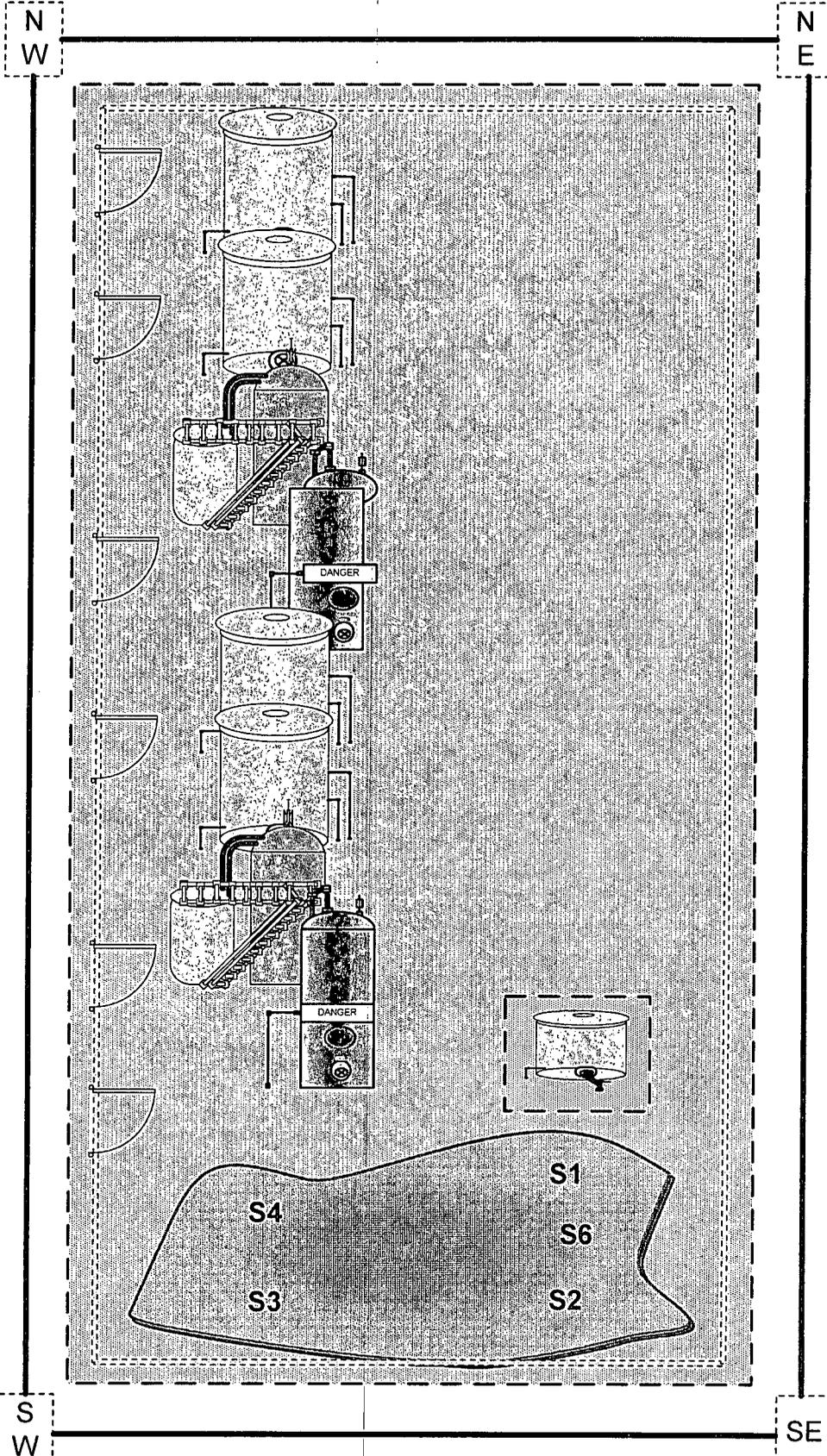
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# YATES PETROLEUM CORPORATION

NIX GP/Lawrence Battery  
API # 30-015-21910

11/16/2012





Analytical Report- H202544 & 664 & 734	Sample Date	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
*S1 3'	10/17/2012	3'	.24	ND	ND	ND	13200
*S1 5'	10/17/2012	5'	ND	ND	ND	ND	9800
*S1 7'	10/17/2012	7'	ND	ND	ND	ND	6500
S1 10'	11/7/2012	10'	-	-	-	-	640
S1 12'	11/7/2012	12'	-	-	-	-	624
S1 14'	11/7/2012	14'	-	-	-	-	1180
S1 16'	11/7/2012	16'	-	-	-	-	9860

*S2 3'	10/17/2012	3'	116.78	778	263	1041	6800
*S2 5'	10/17/2012	5'	ND	ND	ND	ND	2240
*S2 7'	10/17/2012	7'	ND	ND	ND	ND	6400
S2 10'	11/7/2012	10'	-	-	-	-	8400
S2 12'	11/7/2012	12'	-	-	-	-	10300
S2 14'	11/7/2012	14'	-	-	-	-	22600
S2 16'	11/7/2012	16'	-	-	-	-	10900

S3 3'	10/31/2012	3'	.236	ND	ND	ND	2080
S3 5'	10/31/2012	5'	ND	ND	ND	ND	6640
S3 7'	10/31/2012	7'	ND	ND	ND	ND	5760
S3 10'	11/7/2012	10'	-	-	-	-	6660
S3 12'	11/7/2012	12'	-	-	-	-	5520
S3 14'	11/7/2012	14'	-	-	-	-	7040

*S4 3'	10/31/2012	3'	ND	ND	2450	2450	192
S4 5'	10/31/2012	5'	ND	ND	ND	ND	112
S4 7'	10/31/2012	7'	ND	ND	ND	ND	144

Site Ranking is Zero (10). Depth to Ground Water <100' (approx. 85', per Drilled Well).

All results are ppm.Chlorides for documentation.

Released: 450 B/PW; Recovered: 400 B/PW. Release Date: 9/22/2012

Removed and Hauled

### Coring Hole

	Analytical Report 454862 & H300278	Sample Date	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
Marbled/Clay	S6 24'	12/20/2012	24'	-	-	-	-	1180
Marbled/Clay	S6 27'	12/20/2012	27'	-	-	-	-	3150
Marbled/Clay	S6 30'	12/20/2012	30'	-	-	-	-	9060
Marbled/Clay	S6 33'	12/20/2012	33'	-	-	-	-	4060
Marbled/Clay	S6 36'	12/20/2012	36'	-	-	-	-	5570
Marbled/Clay	S6 42'	12/20/2012	42'	-	-	-	-	7500
Marbled/Clay	S6 45'	12/20/2012	45'	-	-	-	-	8280
Marbled/Clay	S6 48'	12/20/2012	48'	-	-	-	-	4530
Marbled/Clay	S6 51'	12/20/2012	51'	-	-	-	-	6200
Marbled/Clay	S6 54'	12/20/2012	54'	-	-	-	-	11400

### Deeper Coring

Solid/Clay	B-1 60'	1/29/2013	60'	-	-	-	-	8400
Solid/Clay	B-1 65'	1/29/2013	65'	-	-	-	-	512
Solid/Clay	B-1 71'	1/29/2013	71'	-	-	-	-	304

### Upgrade Background Sample

MW-1 10'	1/29/2013	10'	-	-	-	-	272
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**Site Ranking is Zero (10).** Depth to Ground Water <100' (approx. 85', per Drilled Well).

All results are ppm.Chlorides for documentation.

Released: 450 B/PW; Recovered: 400 B/PW. Release Date: 9/22/2012

October 24, 2012

JEREMY HAASS

Yates Energy Petroleum Corp

105 S 4th Street

Artesia, NM 88210

RE: NIX GP BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 10/18/12 12:12.

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/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/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:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	10/18/2012	Sampling Date:	10/17/2012
Reported:	10/24/2012	Sampling Type:	Soil
Project Name:	NIX GP BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	EDDY		

**Sample ID: S1 3' (H202544-01)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Benzene*</b>	<b>0.150</b>	0.050	10/23/2012	ND	1.98	99.0	2.00	2.23		
<b>Toluene*</b>	<b>0.090</b>	0.050	10/23/2012	ND	2.15	108	2.00	2.85		
Ethylbenzene*	<0.050	0.050	10/23/2012	ND	2.16	108	2.00	2.30		
Total Xylenes*	<0.150	0.150	10/23/2012	ND	6.54	109	6.00	2.75		

Surrogate: 4-Bromofluorobenzene (PIC) 103 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>13200</b>	16.0	10/19/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<50.0	50.0	10/19/2012	ND	166	83.2	200	5.81		
DRO >C10-C28	<50.0	50.0	10/19/2012	ND	159	79.4	200	9.04		

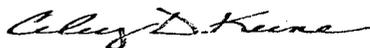
Surrogate: 1-Chlorooctane 75.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 83.1 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

 Received: 10/18/2012  
 Reported: 10/24/2012  
 Project Name: NIX GP BATTERY  
 Project Number: NONE GIVEN  
 Project Location: EDDY

 Sampling Date: 10/17/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S1 5' (H202544-02)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/23/2012	ND	1.76	88.1	2.00	0.795		
Toluene*	<0.050	0.050	10/23/2012	ND	1.93	96.6	2.00	1.35		
Ethylbenzene*	<0.050	0.050	10/23/2012	ND	1.93	96.7	2.00	1.60		
Total Xylenes*	<0.150	0.150	10/23/2012	ND	5.85	97.6	6.00	2.00		

Surrogate: 4-Bromofluorobenzene (PIC) 103 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9800	16.0	10/19/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	10/19/2012	ND	166	83.2	200	5.81		
DRO >C10-C28	<10.0	10.0	10/19/2012	ND	159	79.4	200	9.04		

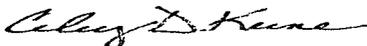
Surrogate: 1-Chlorooctane 76.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 80.3 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

 Received: 10/18/2012  
 Reported: 10/24/2012  
 Project Name: NIX GP BATTERY  
 Project Number: NONE GIVEN  
 Project Location: EDDY

 Sampling Date: 10/17/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S1 7' (H202544-03)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/23/2012	ND	1.76	88.1	2.00	0.795		
Toluene*	<0.050	0.050	10/23/2012	ND	1.93	96.6	2.00	1.35		
Ethylbenzene*	<0.050	0.050	10/23/2012	ND	1.93	96.7	2.00	1.60		
Total Xylenes*	<0.150	0.150	10/23/2012	ND	5.85	97.6	6.00	2.00		

Surrogate: 4-Bromofluorobenzene (PIC) 103 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6500	16.0	10/19/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	10/19/2012	ND	166	83.2	200	5.81		
DRO >C10-C28	<10.0	10.0	10/19/2012	ND	159	79.4	200	9.04		

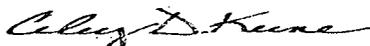
Surrogate: 1-Chlorooctane 74.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 78.1 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	10/18/2012	Sampling Date:	10/17/2012
Reported:	10/24/2012	Sampling Type:	Soil
Project Name:	NIX GP BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	EDDY		

**Sample ID: S2 3' (H202544-04)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Benzene*</b>	<b>10.3</b>	1.00	10/24/2012	ND	1.76	88.1	2.00	0.795		
<b>Toluene*</b>	<b>53.3</b>	1.00	10/24/2012	ND	1.93	96.6	2.00	1.35		
<b>Ethylbenzene*</b>	<b>9.98</b>	1.00	10/24/2012	ND	1.93	96.7	2.00	1.60		
<b>Total Xylenes*</b>	<b>43.2</b>	3.00	10/24/2012	ND	5.85	97.6	6.00	2.00		

*Surrogate: 4-Bromofluorobenzene (PIC) 107 % 89.4-126*

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>6800</b>	16.0	10/19/2012	ND	416	104	400	0.00		

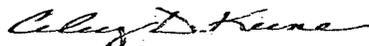
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>778</b>	50.0	10/20/2012	ND	166	83.2	200	5.81		
<b>DRO &gt;C10-C28</b>	<b>263</b>	50.0	10/20/2012	ND	159	79.4	200	9.04		

*Surrogate: 1-Chlorooctane 88.4 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 102 % 63.6-154*

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	10/18/2012	Sampling Date:	10/17/2012
Reported:	10/24/2012	Sampling Type:	Soil
Project Name:	NIX GP BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	EDDY		

**Sample ID: S2 5' (H202544-05)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/23/2012	ND	1.76	88.1	2.00	0.795		
Toluene*	<0.050	0.050	10/23/2012	ND	1.93	96.6	2.00	1.35		
Ethylbenzene*	<0.050	0.050	10/23/2012	ND	1.93	96.7	2.00	1.60		
Total Xylenes*	<0.150	0.150	10/23/2012	ND	5.85	97.6	6.00	2.00		

*Surrogate: 4-Bromofluorobenzene (PIL) 105 % 89.4-126*

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>2240</b>	16.0	10/19/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	10/20/2012	ND	166	83.2	200	5.81		
DRO >C10-C28	<10.0	10.0	10/20/2012	ND	159	79.4	200	9.04		

*Surrogate: 1-Chlorooctane 79.5 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 84.4 % 63.6-154*

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	10/18/2012	Sampling Date:	10/17/2012
Reported:	10/24/2012	Sampling Type:	Soil
Project Name:	NIX GP BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	EDDY		

**Sample ID: S2 7' (H202544-06)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/23/2012	ND	1.76	88.1	2.00	0.795		
Toluene*	<0.050	0.050	10/23/2012	ND	1.93	96.6	2.00	1.35		
Ethylbenzene*	<0.050	0.050	10/23/2012	ND	1.93	96.7	2.00	1.60		
Total Xylenes*	<0.150	0.150	10/23/2012	ND	5.85	97.6	6.00	2.00		

Surrogate: 4-Bromofluorobenzene (PIC) 103 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6400	16.0	10/19/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	10/20/2012	ND	166	83.2	200	5.81		
DRO >C10-C28	<10.0	10.0	10/20/2012	ND	159	79.4	200	9.04		

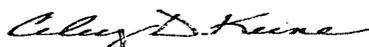
Surrogate: 1-Chlorooctane 77.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 83.4 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

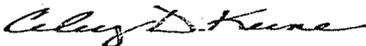
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported 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: <u>YPC</u>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>																				
Project Manager: <u>Jeremy Hoass</u>		P.O. #: <u>103-2636</u>																						
Address:		Company: <u>YPC</u>																						
City: <u>Artesia</u> State: <u>NM</u> Zip: <u>88240</u>		Attn: <u>Jeremy Hoass</u>																						
Phone #: _____ Fax #: _____		Address: _____																						
Project #: _____ Project Owner: <u>Jeremy Hoass</u>		City: _____																						
Project Name: <u>Nix GP Battery</u>		State: _____ Zip: _____																						
Project Location: <u>Eddy</u>		Phone #: _____																						
Sampler Name: <u>Jeremy Hoass</u>		Fax #: _____																						
FOR LAB USE ONLY	Lab I.D.	Sample I.D.	# CONTAINERS	MATRIX					PRESERV		SAMPLING													
			(GRAB OR (C)OMP.	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE/COOL	OTHER:	DATE	TIME	<u>TPH + BTEX</u> <u>Chloride X</u>									
	<u>H202544</u>					X				X			<u>10/17</u>											
	<u>01</u>	<u>S1 3'</u>				X				X			<u>10/17</u>											
	<u>02</u>	<u>S1 5'</u>				X				X			<u>10/17</u>											
	<u>03</u>	<u>S1 7'</u>				X				X			<u>10/17</u>											
	<u>04</u>	<u>S2 3'</u>				X				X			<u>10/17</u>											
	<u>05</u>	<u>S2 5'</u>				X				X			<u>10/17</u>											
	<u>06</u>	<u>S2 7'</u>				X				X			<u>10/17</u>											

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Relinquished By: <u>[Signature]</u>	Date: <u>10/18</u>	Received By: <u>[Signature]</u>	Date: <u>12-12</u>	Time: _____	Time: _____	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #: _____		
Relinquished By: _____	Date: _____	Received By: _____	Date: _____	Time: _____	Time: _____	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #: _____		
Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____		Sample Condition Cool: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CHECKED BY: (Initials) <u>Col</u>					REMARKS:	

November 02, 2012

JEREMY HAASS

Yates Energy Petroleum Corp

105 S 4th Street

Artesia, NM 88210

RE: NIX GP BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 11/01/12 14:53.

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](http://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:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/01/2012	Sampling Date:	10/31/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	NIX GP BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY		

**Sample ID: S3 3' (H202664-01)**

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Benzene*</b>	<b>0.083</b>	0.050	11/02/2012	ND	1.91	95.6	2.00	19.9		
<b>Toluene*</b>	<b>0.153</b>	0.050	11/02/2012	ND	2.09	104	2.00	18.6		
Ethylbenzene*	<0.050	0.050	11/02/2012	ND	2.10	105	2.00	17.8		
Total Xylenes*	<0.150	0.150	11/02/2012	ND	6.34	106	6.00	17.7		
Total BTEX	<0.300	0.300	11/02/2012	ND						

*Surrogate: 4-Bromofluorobenzene (PIC) 108 % 89.4-126*

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>2080</b>	16.0	11/02/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	11/02/2012	ND	192	95.8	200	2.44		
DRO >C10-C28	<10.0	10.0	11/02/2012	ND	200	100	200	4.46		

*Surrogate: 1-Chlorooctane 86.6 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 96.2 % 63.6-154*

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/01/2012	Sampling Date:	10/31/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	NIX GP BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY		

**Sample ID: S3 5' (H202664-02)**

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	11/02/2012	ND	1.91	95.6	2.00	19.9		
Toluene*	<0.050	0.050	11/02/2012	ND	2.09	104	2.00	18.6		
Ethylbenzene*	<0.050	0.050	11/02/2012	ND	2.10	105	2.00	17.8		
Total Xylenes*	<0.150	0.150	11/02/2012	ND	6.34	106	6.00	17.7		
Total BTEX	<0.300	0.300	11/02/2012	ND						

*Surrogate: 4-Bromofluorobenzene (PIC) 108 % 89.4-126*

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6640	16.0	11/02/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	11/02/2012	ND	192	95.8	200	2.44		
DRO >C10-C28	<10.0	10.0	11/02/2012	ND	200	100	200	4.46		

*Surrogate: 1-Chlorooctane 88.2 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 97.1 % 63.6-154*

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

 Received: 11/01/2012  
 Reported: 11/02/2012  
 Project Name: NIX GP BATTERY  
 Project Number: NONE GIVEN  
 Project Location: EDDY

 Sampling Date: 10/31/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S3 7' (H202664-03)**

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Benzene*</b>	<b>0.050</b>	0.050	11/02/2012	ND	1.91	95.6	2.00	19.9		
Toluene*	<0.050	0.050	11/02/2012	ND	2.09	104	2.00	18.6		
Ethylbenzene*	<0.050	0.050	11/02/2012	ND	2.10	105	2.00	17.8		
Total Xylenes*	<0.150	0.150	11/02/2012	ND	6.34	106	6.00	17.7		
Total BTEX	<0.300	0.300	11/02/2012	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 108 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>5760</b>	16.0	11/02/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	11/02/2012	ND	192	95.8	200	2.44		
DRO >C10-C28	<10.0	10.0	11/02/2012	ND	200	100	200	4.46		

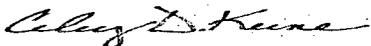
Surrogate: 1-Chlorooctane 81.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 88.1 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/01/2012	Sampling Date:	10/31/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	NIX GP BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY		

**Sample ID: S4 3' (H202664-04)**

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	11/02/2012	ND	1.91	95.6	2.00	19.9		
Toluene*	<0.050	0.050	11/02/2012	ND	2.09	104	2.00	18.6		
Ethylbenzene*	<0.050	0.050	11/02/2012	ND	2.10	105	2.00	17.8		
Total Xylenes*	<0.150	0.150	11/02/2012	ND	6.34	106	6.00	17.7		
Total BTEX	<0.300	0.300	11/02/2012	ND						

*Surrogate: 4-Bromofluorobenzene (PIC) 108 % 89.4-126*

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>192</b>	16.0	11/02/2012	ND	416	104	400	0.00		

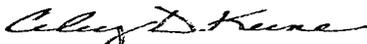
TPH 8015M		mg/kg		Analyzed By: MS							S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<50.0	50.0	11/02/2012	ND	192	95.8	200	2.44			
<b>DRO &gt;C10-C28</b>	<b>2450</b>	50.0	11/02/2012	ND	200	100	200	4.46			

*Surrogate: 1-Chlorooctane 84.5 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 164 % 63.6-154*

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/01/2012	Sampling Date:	10/31/2012
Reported:	11/02/2012	Sampling Type:	Soil
Project Name:	NIX GP BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY		

**Sample ID: S4 5' (H202664-05)**

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	11/02/2012	ND	1.91	95.6	2.00	19.9		
Toluene*	<0.050	0.050	11/02/2012	ND	2.09	104	2.00	18.6		
Ethylbenzene*	<0.050	0.050	11/02/2012	ND	2.10	105	2.00	17.8		
Total Xylenes*	<0.150	0.150	11/02/2012	ND	6.34	106	6.00	17.7		
Total BTEX	<0.300	0.300	11/02/2012	ND						

Surrogate: 4-Bromofluorobenzene (PII) 106 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	11/02/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	11/02/2012	ND	192	95.8	200	2.44		
DRO >C10-C28	<10.0	10.0	11/02/2012	ND	200	100	200	4.46		

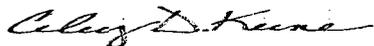
Surrogate: 1-Chlorooctane 93.1 % 65.2-140

Surrogate: 1-Chlorooctadecane 103 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

 Received: 11/01/2012  
 Reported: 11/02/2012  
 Project Name: NIX GP BATTERY  
 Project Number: NONE GIVEN  
 Project Location: EDDY

 Sampling Date: 10/31/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S4 7' (H202664-06)**

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	11/02/2012	ND	1.91	95.6	2.00	19.9		
Toluene*	<0.050	0.050	11/02/2012	ND	2.09	104	2.00	18.6		
Ethylbenzene*	<0.050	0.050	11/02/2012	ND	2.10	105	2.00	17.8		
Total Xylenes*	<0.150	0.150	11/02/2012	ND	6.34	106	6.00	17.7		
Total BTEX	<0.300	0.300	11/02/2012	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>144</b>	16.0	11/02/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	11/02/2012	ND	192	95.8	200	2.44		
DRO >C10-C28	<10.0	10.0	11/02/2012	ND	200	100	200	4.46		

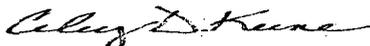
Surrogate: 1-Chlorooctane 88.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 98.2 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

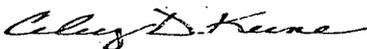
- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 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



November 12, 2012

JEREMY HAASS

Yates Energy Petroleum Corp

105 S 4th Street

Artesia, NM 88210

RE: NIX GP BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 11/09/12 11:23.

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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

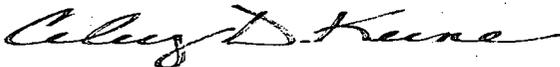
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

 Received: 11/09/2012  
 Reported: 11/12/2012  
 Project Name: NIX GP BATTERY  
 Project Number: 103-2636  
 Project Location: EDDY

 Sampling Date: 11/07/2012  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Jodi Henson

**Sample ID: S 1 10' (H202734-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	640	16.0	11/09/2012	ND	432	108	400	0.00		

**Sample ID: S 1 12' (H202734-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	624	16.0	11/09/2012	ND	432	108	400	0.00		

**Sample ID: S 1 14' (H202734-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1180	16.0	11/09/2012	ND	432	108	400	0.00		

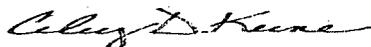
**Sample ID: S 1 16' (H202734-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9860	16.0	11/09/2012	ND	432	108	400	0.00		

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

 Received: 11/09/2012  
 Reported: 11/12/2012  
 Project Name: NIX GP BATTERY  
 Project Number: 103-2636  
 Project Location: EDDY

 Sampling Date: 11/07/2012  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Jodi Henson

**Sample ID: S 2 10' (H202734-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	8400	16.0	11/09/2012	ND	432	108	400	0.00		

**Sample ID: S 2 12' (H202734-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10300	16.0	11/09/2012	ND	432	108	400	0.00		

**Sample ID: S 2 14' (H202734-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	22600	16.0	11/09/2012	ND	432	108	400	0.00		

**Sample ID: S 2 16' (H202734-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10900	16.0	11/09/2012	ND	432	108	400	0.00		

**Sample ID: S 3 10' (H202734-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6660	16.0	11/09/2012	ND	432	108	400	0.00		

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Yates Energy Petroleum Corp  
 JEREMY HAASS  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/09/2012	Sampling Date:	11/07/2012
Reported:	11/12/2012	Sampling Type:	Soil
Project Name:	NIX GP BATTERY	Sampling Condition:	** (See Notes)
Project Number:	103-2636	Sample Received By:	Jodi Henson
Project Location:	EDDY		

**Sample ID: S 3 12' (H202734-10)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5520	16.0	11/09/2012	ND	432	108	400	0.00		

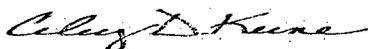
**Sample ID: S 3 14' (H202734-11)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7040	16.0	11/09/2012	ND	432	108	400	0.00		

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

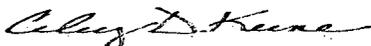
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

---

Cardinal Laboratories

\*=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: <b>YPC</b>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>																							
Project Manager: <b>Jeremy Hoass</b>		P.O. #: <b>103-2636</b>																									
Address:		Company: <b>YPC</b>																									
City: <b>Artesia</b> State: <b>NM</b> Zip: <b>88210</b>		Attn: <b>Jeremy Hoass</b>																									
Phone #: Fax #:		Address:																									
Project #: Project Owner: <b>Jeremy Hoass</b>		City:																									
Project Name: <b>Nix GP Battery</b>		State: Zip:																									
Project Location: <b>Eddy</b>		Phone #:																									
Sampler Name: <b>Jeremy Hoass</b>		Fax #:																									
FOR LAB USE ONLY																											
Lab I.D.	Sample I.D.	(GRAB OR C)COMP.	# CONTAINERS	MATRIX					PRESERV.	SAMPLING																	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME													
<b>1207734</b>																											
1	S2 10'					X							11/7		X	Chlorides											
2	S1 12'					X									X												
3	S2 14'					X									X												
4	S1 16'					X									X												
5	S2 10'					X									X												
6	S2 12'					X									X												
7	S2 14'					X									X												
8	S2 16'					X									X												
9	S3 10'					X									X												
10	S3 12'					X									X												

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Relinquished By: <b>[Signature]</b>	Date: <b>11/9</b> Time: <b>11:23</b>	Received By: <b>[Signature]</b>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
Relinquished By:	Date:	Received By:	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:
Delivered By: (Circle One)	Sample Condition	CHECKED BY:	REMARKS:
Sampler - UPS - Bus - Other:	Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Initials): <b>[Signature]</b>	<b>Rush</b>

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

2

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:		<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																							
Project Manager:		P.O. #:																											
Address:		Company:																											
City:	State:	Zip:	Attn:																										
Phone #:	Fax #:		Address:																										
Project #:	Project Owner:		City:																										
Project Name:		State:			Zip:																								
Project Location:		Phone #:			Fax #:																								
Sampler Name:																													
FOR LAB USE ONLY																													
Lab I.D.	Sample I.D.	GIRAB OR (COM)P.	# CONTAINERS	MATRIX														PRESERV.		SAMPLING		DATE	TIME	X Chlorides					
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER																	
11202734	53 14'			X																									

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Relinquished By: <i>[Signature]</i>	Date: 11/2 Time: 11:23	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: (Initials)	
REMARKS:  <i>Rush</i>				

# Analytical Report 454862

## for Yates Petroleum Corporation

**Project Manager: Jeremy Haass**

**Nix 'GP' Battery**

**30-015-21910**

**07-JAN-13**

Collected By: Client



**12600 West I-20 East Odessa, Texas 79765**

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)  
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)  
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)  
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD ( L10-135)  
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)

Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)



07-JAN-13

Project Manager: **Jeremy Haass**  
**Yates Petroleum Corporation**  
105 South Fourth St.  
Artesia, NM 88210

Reference: XENCO Report No(s): **454862**  
**Nix 'GP' Battery**  
Project Address: Eddy County

**Jeremy Haass:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 454862. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 454862 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

---

**Nicholas Straccione**

Project Manager

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.  
Certified and approved by numerous States and Agencies.  
A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America



# Sample Cross Reference 454862



Yates Petroleum Corporation, Artesia, NM

Nix 'GP' Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S6-24'	S	12-20-12 00:00	24 - 24 ft	454862-001
S6-27'	S	12-20-12 00:00	27 - 27 ft	454862-002
S6-30'	S	12-20-12 00:00	30 - 30 ft	454862-003
S6-33'	S	12-20-12 00:00	33 - 33 ft	454862-004
S6-36'	S	12-20-12 00:00	36 - 36 ft	454862-005
S6-42'	S	12-20-12 00:00	42 - 42 ft	454862-006
S6-45'	S	12-20-12 00:00	45 - 45 ft	454862-007
S6-48'	S	12-20-12 00:00	48 - 48 ft	454862-008
S6-51'	S	12-20-12 00:00	51 - 51 ft	454862-009
S6-54'	S	12-20-12 00:00	54 - 54 ft	454862-010



## CASE NARRATIVE

*Client Name: Yates Petroleum Corporation*

*Project Name: Nix 'GP' Battery*



*Project ID: 30-015-21910*  
*Work Order Number(s): 454862*

*Report Date: 07-JAN-13*  
*Date Received: 12/28/2012*

---

**Sample receipt non conformances and comments:**

None

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**Sample receipt non conformances and comments per sample:**

None

**Analytical non conformances and comments:**

*Batch: LBA-904135 Inorganic Anions by EPA 300/300.1*  
*E300*

*Batch 904135, Chloride recovered below QC limits in the Matrix Spike.*

*Samples affected are: 454862-001.*

*The Laboratory Control Sample for Chloride is within laboratory Control Limits*



# Certificate of Analysis Summary 454862

Yates Petroleum Corporation, Artesia, NM

Project Name: Nix 'GP' Battery



Project Id: 30-015-21910

Contact: Jeremy Haass

Project Location: Eddy County

Date Received in Lab: Fri Dec-28-12 11:13 am

Report Date: 07-JAN-13

Project Manager: Nicholas Straccione

<i>Analysis Requested</i>	<i>Lab Id:</i>	454862-001	454862-002	454862-003	454862-004	454862-005	454862-006
	<i>Field Id:</i>	S6-24'	S6-27'	S6-30'	S6-33'	S6-36'	S6-42'
	<i>Depth:</i>	24-24 ft	27-27 ft	30-30 ft	33-33 ft	36-36 ft	42-42 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-20-12 00:00					
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<i>Extracted:</i>	Jan-03-13 22:14	Jan-04-13 17:33	Jan-04-13 18:07	Jan-04-13 18:24	Jan-04-13 18:41	Jan-04-13 18:58
	<i>Analyzed:</i>	Jan-03-13 22:14	Jan-04-13 17:33	Jan-04-13 18:07	Jan-04-13 18:24	Jan-04-13 18:41	Jan-04-13 18:58
	<i>Units/RL:</i>	mg/kg RL					
Chloride		1180 1.34	3150 11.3	9060 34.0	4060 14.8	5570 13.3	7500 32.8
<b>Percent Moisture SUB: TX104704215</b>	<i>Extracted:</i>						
	<i>Analyzed:</i>	Jan-02-13 11:38					
	<i>Units/RL:</i>	% RL					
Percent Moisture		25.7 1.00	11.5 1.00	26.4 1.00	32.5 1.00	24.7 1.00	23.6 1.00

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Nicholas Straccione  
Project Manager



# Certificate of Analysis Summary 454862

Yates Petroleum Corporation, Artesia, NM

Project Name: Nix 'GP' Battery



Project Id: 30-015-21910

Contact: Jeremy Haass

Project Location: Eddy County

Date Received in Lab: Fri Dec-28-12 11:13 am

Report Date: 07-JAN-13

Project Manager: Nicholas Straccione

<i>Analysis Requested</i>	<i>Lab Id:</i>	454862-007	454862-008	454862-009	454862-010		
	<i>Field Id:</i>	S6-45'	S6-48'	S6-51'	S6-54'		
	<i>Depth:</i>	45-45 ft	48-48 ft	51-51 ft	54-54 ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	Dec-20-12 00:00	Dec-20-12 00:00	Dec-20-12 00:00	Dec-20-12 00:00		
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<i>Extracted:</i>	Jan-04-13 19:16	Jan-04-13 20:07	Jan-04-13 20:24	Jan-04-13 20:41		
	<i>Analyzed:</i>	Jan-04-13 19:16	Jan-04-13 20:07	Jan-04-13 20:24	Jan-04-13 20:41		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		8280 31.5	4530 13.7	6200 15.1	11400 41.9		
<b>Percent Moisture SUB: TX104704215</b>	<i>Extracted:</i>						
	<i>Analyzed:</i>	Jan-02-13 11:38	Jan-02-13 11:38	Jan-02-13 11:38	Jan-02-13 11:38		
	<i>Units/RL:</i>	% RL	% RL	% RL	% RL		
Percent Moisture		20.3 1.00	27.2 1.00	33.7 1.00	40.3 1.00		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Nicholas Straccione  
Project Manager



# Flagging Criteria

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

+ NELAC certification not offered for this compound.

\* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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 2505 North Falkenburg Rd, Tampa, FL 33619  
 12600 West I-20 East, Odessa, TX 79765  
 6017 Financial Drive, Norcross, GA 30071  
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Phone	Fax
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(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



# BS / BSD Recoveries



Project Name: Nix 'GP' Battery

Work Order #: 454862

Analyst: JOL

Date Prepared: 01/03/2013

Project ID: 30-015-21910

Date Analyzed: 01/03/2013

Lab Batch ID: 904135

Sample: 632018-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

## BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<1.00	100	105	105	100	105	105	0	80-120	20	

Analyst: JOL

Date Prepared: 01/04/2013

Date Analyzed: 01/04/2013

Lab Batch ID: 904201

Sample: 632067-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

## BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<1.00	100	98.0	98	100	97.0	97	1	80-120	20	

Relative Percent Difference RPD =  $200 * \frac{(C-F)}{(C+F)}$

Blank Spike Recovery [D] =  $100 * \frac{(C)}{[B]}$

Blank Spike Duplicate Recovery [G] =  $100 * \frac{(F)}{[E]}$

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS Recoveries



Project Name: Nix 'GP' Battery

Work Order #: 454862  
Lab Batch #: 904135  
Date Analyzed: 01/03/2013  
QC- Sample ID: 454862-001 S  
Reporting Units: mg/kg

Date Prepared: 01/03/2013

Project ID: 30-015-21910  
Analyst: JOL

Batch #: 1 Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	1180	134	1280	75	80-120	X

Lab Batch #: 904201  
Date Analyzed: 01/04/2013  
QC- Sample ID: 454862-002 S  
Reporting Units: mg/kg

Date Prepared: 01/04/2013

Analyst: JOL

Batch #: 1 Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	3150	1130	4310	103	80-120	

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B  
Relative Percent Difference [E] = 200\*(C-A)/(C+B)  
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit



# Sample Duplicate Recovery



Project Name: Nix 'GP' Battery

Work Order #: 454862

Lab Batch #: 903939

Project ID: 30-015-21910

Date Analyzed: 01/02/2013 11:38

Date Prepared: 01/02/2013

Analyst: RKO

QC- Sample ID: 454822-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	53.6	53.5	0	20	

Lab Batch #: 903939

Date Analyzed: 01/02/2013 11:38

Date Prepared: 01/02/2013

Analyst: RKO

QC- Sample ID: 454862-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	25.7	25.6	0	20	

Spike Relative Difference RPD  $200 * |(B-A)/(B+A)|$   
 All Results are based on MDL and validated for QC purposes.  
 BRL - Below Reporting Limit





# XENCO Laboratories



## Prelogin/Nonconformance Report- Sample Log-In

Client: Yates Petroleum Corporation

Date/ Time Received: 12/28/2012 11:13:00 AM

Work Order #: 454862

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	Yes

\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst: _____	PH Device/Lot#: _____
----------------	-----------------------

Checklist completed by: \_\_\_\_\_

Date: \_\_\_\_\_

Checklist reviewed by: \_\_\_\_\_

Date: \_\_\_\_\_

February 01, 2013

Bob Allen  
Safety & Environmental Solutions  
703 East Clinton  
Hobbs, NM 88240

RE: LAWRENCE AD BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 01/31/13 10:25.

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](http://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:**

 Safety & Environmental Solutions  
 Bob Allen  
 703 East Clinton  
 Hobbs NM, 88240  
 Fax To: (575) 393-4388

Received:	01/31/2013	Sampling Date:	01/29/2013
Reported:	02/01/2013	Sampling Type:	Soil
Project Name:	LAWRENCE AD BATTERY	Sampling Condition:	** (See Notes)
Project Number:	YAT-13-001	Sample Received By:	Jodi Henson
Project Location:	S. ARTESIA, NM		

**Sample ID: MW-1, 10' (H300278-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	02/01/2013	ND	432	108	400	3.77		

**Sample ID: B-1, 60' (H300278-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	8400	16.0	02/01/2013	ND	432	108	400	3.77		

**Sample ID: B-1, 65' (H300278-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	512	16.0	02/01/2013	ND	432	108	400	3.77		

**Sample ID: B-1, 71' (H300278-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	02/01/2013	ND	432	108	400	3.77		

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

- 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

