Form 3160-5 (March 2012)

## **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2014

5. Lease Serial No. NM-81953

6. If Indian, Allottee or Tribe Name

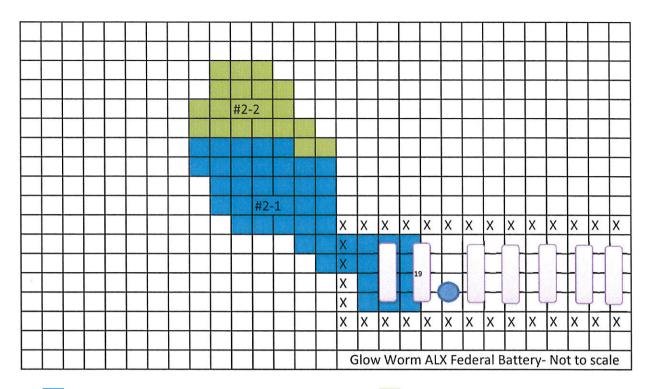
# SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an

abandoned well.	Use Form 3160-3 (APD) for suc	ch proposals.			
SUBMIT	T IN TRIPLICATE – Other instructions or	n page 2.	200 A COLOR OF THE RESERVE OF THE RE	ment, Name and/or No.	
1. Type of Well			N/A		
✓ Oil Well Gas W	Vell Other		<ol><li>Well Name and No. Glow Worm ALX Fe</li></ol>	deral Battery	
2. Name of Operator Yates Petroleum Corporation			9. API Well No. 30-015-35313		
3a. Address	3b. Phone No.	(include area code)	10. Field and Pool or E	Exploratory Area	
105 S. 4th St., Artesia, NM 88210	575-748-417	1	Los Medanos; Delaware		
4. Location of Well (Footage, Sec., T., 330' FNL & 2310' FWL, Section 3, T23S-R31E	R.,M., or Survey Description)		11. County or Parish, S Eddy County, New N		
12. CHEC	K THE APPROPRIATE BOX(ES) TO IND	ICATE NATURE OF NOTIC	CE, REPORT OR OTH	ER DATA	
TYPE OF SUBMISSION		TYPE OF ACT	ION		
Notice of Intent	Acidize Deep Alter Casing Fract		uction (Start/Resume)	Water Shut-Off Well Integrity	
✓ Subsequent Report		Construction Reco	mplete	Other Clean up actions to	
Final Abandonment Notice	Change Plans Plug Convert to Injection Plug		oorarily Abandon or Disposal	be taken.	
the proposal is to deepen direction. Attach the Bond under which the variable following completion of the involve testing has been completed. Final determined that the site is ready foo The horizontal knockout separator fimpacted within the lined, bermed be overspray area approximately 50' X from the failed gasket allowed fluids roustabout crew was called to repail approved facility. Soil samples wer NMOCD approved laboratory. The the overspray area showed to be un area of this release will be addresse requesting closure. Depth to Grour Surface Water Body: >1000', SITE	for the Glow Worm ALX Federal #19 well sattery and an approximate area of 65' X 50' to the north of the pooling area. The sto impact areas within and outside of the rather the horizontal knockout. A backhoe was taken immediately after impacted soils analytical data corresponded with previonder RRALs for TPH & BTEX and ND for the with the already approved work plan for the Water: >100' (approximately 105', Sec RANKING IS 0.	ace locations and measured at No. on file with BLM/BIA. In the provided in the	nd true vertical depths of tequired subsequent repletion in a new interval reclamation, have been set failure. An approximated by a prior relocated on the west e acuum truck was call ate impacted soils, whis of TPH & BTEX and the same pooling are all data corresponds we in Initial/Final Report,	f all pertinent markers and zones. Forts must be filed within 30 days, a Form 3160-4 must be filed once completed and the operator has timate area of 25' X 40' was ease. There was also an and of the battery and the spray ed to remove standing fluid and a lich were hauled to a NMOCD d chlorides were conducted by an a from the previous release and ith previous release, impacted C-141 is submitted to the OCD	
Chase Settle	2	Title NM Environmental	Regulatory Agent		
Signature	5	Date 09/23/2015			
	THIS SPACE FOR FEDE	RAL OR STATE OF	FICE USE		
Approved by		Title		Date	
	ed. Approval of this notice does not warrant or title to those rights in the subject lease which we thereon	certify		Dutc	

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.



Release & Previous Release Area



Overspray Area

1509908	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
#2-1-1'	Release Area	9/17/2015	Backhoe	1'	ND	ND	ND	5500
#2-1-2'	Release Area	9/17/2015	Backhoe	2'	ND	ND	ND	1600
#2-1-3'	Release Area	9/17/2015	Backhoe	3'	ND	ND	ND	820
#2-1-4'	Release Area	9/17/2015	Backhoe	4'	ND	ND	ND.	800
#2-2-1'	Release Area	9/17/2015	Hand Auger	1'	ND	ND	ND	ND
#2-2-2'	Release Area	9/17/2015	Hand Auger	2'	ND	ND	ND	ND

Site Ranking is Zero (0). >100' (105', Section 3, T23S-R31E, Trend Map All results are ppm. Chlorides for documentation Released: 8 B/O & 12 B/PW; Recovered: 3 B/O & 0 B/PW, Release Date: 9/17/2015

# Lab Order 1509908

Date Reported:

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Yates Petroleum Corporation

Glow Worm ALX Federal Battery

Lab ID: 1509908-001

Client Sample ID: #2-1-1'

Collection Date: 9/17/2015 1:50:00 PM

Received Date: 9/19/2015 7:50:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANIC	S			Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	9/22/2015 11:00:44 AM
Surr: DNOP	81.8	57.9-140	%REC	1	9/22/2015 11:00:44 AM
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	5500	300	mg/Kg	200	9/22/2015 2:57:00 PM
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst: DJF
Benzene	ND	0.050	mg/Kg	1	9/22/2015 11:29:36 AM
Toluene	ND	0.050	mg/Kg	1	9/22/2015 11:29:36 AM
Ethylbenzene	ND	0.050	mg/Kg	1	9/22/2015 11:29:36 AM
Xylenes, Total	ND	0.10	mg/Kg	1	9/22/2015 11:29:36 AM
Surr: 1,2-Dichloroethane-d4	101	70-130	%REC	1	9/22/2015 11:29:36 AM
Surr: 4-Bromofluorobenzene	100	70-130	%REC	1	9/22/2015 11:29:36 AM
Surr: Dibromofluoromethane	110	70-130	%REC	1	9/22/2015 11:29:36 AM
Surr: Toluene-d8	96.9	70-130	%REC	1	9/22/2015 11:29:36 AM
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/22/2015 11:29:36 AM
Surr: BFB	103	70-130	%REC	1	9/22/2015 11:29:36 AM

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order 1509908

Date Reported:

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Yates Petroleum Corporation

Glow Worm ALX Federal Battery

Lab ID: 1509908-002

Client Sample ID: #2-1-2'

Collection Date: 9/17/2015 1:55:00 PM

Received Date: 9/19/2015 7:50:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	Analyst: <b>KJH</b>				
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	9/22/2015 11:22:18 AM
Surr: DNOP	101	57.9-140	%REC	1	9/22/2015 11:22:18 AM
<b>EPA METHOD 300.0: ANIONS</b>					Analyst: JRR
Chloride	1600	75	mg/Kg	50	9/22/2015 3:09:00 PM
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst: DJF
Benzene	ND	0.049	mg/Kg	1	9/22/2015 11:57:03 AM
Toluene	ND	0.049	mg/Kg	1	9/22/2015 11:57:03 AM
Ethylbenzene	ND	0.049	mg/Kg	1	9/22/2015 11:57:03 AM
Xylenes, Total	ND	0.098	mg/Kg	1	9/22/2015 11:57:03 AM
Surr: 1,2-Dichloroethane-d4	94.2	70-130	%REC	1	9/22/2015 11:57:03 AM
Surr: 4-Bromofluorobenzene	99.1	70-130	%REC	1	9/22/2015 11:57:03 AM
Surr: Dibromofluoromethane	104	70-130	%REC	1	9/22/2015 11:57:03 AM
Surr: Toluene-d8	93.8	70-130	%REC	1	9/22/2015 11:57:03 AM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/22/2015 11:57:03 AM
Surr: BFB	99.3	70-130	%REC	1	9/22/2015 11:57:03 AM

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order 1509908

Date Reported:

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Yates Petroleum Corporation

Glow Worm ALX Federal Battery

Lab ID: 1509908-003

Client Sample ID: #2-1-3'

Collection Date: 9/17/2015 2:00:00 PM

Received Date: 9/19/2015 7:50:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	Analyst: <b>KJH</b>				
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	9/22/2015 11:44:01 AM
Surr: DNOP	101	57.9-140	%REC	1	9/22/2015 11:44:01 AM
<b>EPA METHOD 300.0: ANIONS</b>					Analyst: LGT
Chloride	820	30	mg/Kg	20	9/21/2015 6:45:16 PM
EPA METHOD 8260B: VOLATILES SHO	RT LIST				Analyst: DJF
Benzene	ND	0.049	mg/Kg	. 1	9/22/2015 12:24:41 PM
Toluene	ND	0.049	mg/Kg	1	9/22/2015 12:24:41 PM
Ethylbenzene	ND	0.049	mg/Kg	1	9/22/2015 12:24:41 PM
Xylenes, Total	ND	0.099	mg/Kg	1	9/22/2015 12:24:41 PM
Surr: 1,2-Dichloroethane-d4	98.0	70-130	%REC	1	9/22/2015 12:24:41 PM
Surr: 4-Bromofluorobenzene	106	70-130	%REC	1	9/22/2015 12:24:41 PM
Surr: Dibromofluoromethane	108	70-130	%REC	1	9/22/2015 12:24:41 PM
Surr: Toluene-d8	94.3	70-130	%REC	1	9/22/2015 12:24:41 PM
EPA METHOD 8015D MOD: GASOLINE	RANGE				Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/22/2015 12:24:41 PM
Surr: BFB	105	70-130	%REC	1	9/22/2015 12:24:41 PM

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order 1509908

Date Reported:

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Yates Petroleum Corporation

ect: Glow Worm ALX Federal Battery

**Lab ID:** 1509908-004

Client Sample ID: #2-1-4'

Collection Date: 9/17/2015 2:05:00 PM

Received Date: 9/19/2015 7:50:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANIC	S			Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	9/22/2015 12:05:29 PM
Surr: DNOP	102	57.9-140	%REC	1	9/22/2015 12:05:29 PM
EPA METHOD 300.0: ANIONS					Analyst: LGT
Chloride	800	30	mg/Kg	20	9/21/2015 6:57:41 PM
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst: DJF
Benzene	ND	0.047	mg/Kg	1	9/22/2015 12:52:18 PM
Toluene	ND	0.047	mg/Kg	1	9/22/2015 12:52:18 PM
Ethylbenzene	ND	0.047	mg/Kg	1	9/22/2015 12:52:18 PM
Xylenes, Total	ND	0.095	mg/Kg	1	9/22/2015 12:52:18 PM
Surr: 1,2-Dichloroethane-d4	103	70-130	%REC	1	9/22/2015 12:52:18 PM
Surr: 4-Bromofluorobenzene	96.9	70-130	%REC	1	9/22/2015 12:52:18 PM
Surr: Dibromofluoromethane	113	70-130	%REC	1	9/22/2015 12:52:18 PM
Surr: Toluene-d8	94.9	70-130	%REC	1	9/22/2015 12:52:18 PM
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/22/2015 12:52:18 PM
Surr: BFB	103	70-130	%REC	1	9/22/2015 12:52:18 PM

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit

## Date Reported:

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Yates Petroleum Corporation

Client Sample ID: #2-2-1'

Project:

Glow Worm ALX Federal Battery

Collection Date: 9/17/2015 1:40:00 PM

Lab ID:

1509908-005

Matrix: SOIL

Received Date: 9/19/2015 7:50:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	Analyst: <b>KJH</b>				
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	9/22/2015 12:27:06 PM
Surr: DNOP	117	57.9-140	%REC	1	9/22/2015 12:27:06 PM
EPA METHOD 300.0: ANIONS					Analyst: LGT
Chloride	ND	30	mg/Kg	20	9/21/2015 7:34:55 PM
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst: DJF
Benzene	ND	0.048	mg/Kg	1	9/22/2015 1:19:57 PM
Toluene	ND	0.048	mg/Kg	1	9/22/2015 1:19:57 PM
Ethylbenzene	ND	0.048	mg/Kg	1	9/22/2015 1:19:57 PM
Xylenes, Total	ND	0.097	mg/Kg	1	9/22/2015 1:19:57 PM
Surr: 1,2-Dichloroethane-d4	99.9	70-130	%REC	1	9/22/2015 1:19:57 PM
Surr: 4-Bromofluorobenzene	97.7	70-130	%REC	1	9/22/2015 1:19:57 PM
Surr: Dibromofluoromethane	111	70-130	%REC	1	9/22/2015 1:19:57 PM
Surr: Toluene-d8	94.2	70-130	%REC	1	9/22/2015 1:19:57 PM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/22/2015 1:19:57 PM
Surr: BFB	105	70-130	%REC	1	9/22/2015 1:19:57 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 0
- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order 1509908

Date Reported:

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: #2-2-2' Glow Worm ALX Federal Battery

Lab ID:

1509908-006 Matrix: SOIL Collection Date: 9/17/2015 1:45:00 PM Received Date: 9/19/2015 7:50:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAI	Analyst: KJH				
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	9/22/2015 12:48:32 PM
Surr: DNOP	116	57.9-140	%REC	1	9/22/2015 12:48:32 PM
EPA METHOD 300.0: ANIONS					Analyst: LGT
Chloride	ND	30	mg/Kg	20	9/21/2015 7:47:20 PM
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst: DJF
Benzene	ND	0.049	mg/Kg	1	9/22/2015 1:47:38 PM
Toluene	ND	0.049	mg/Kg	1	9/22/2015 1:47:38 PM
Ethylbenzene	ND	0.049	mg/Kg	1	9/22/2015 1:47:38 PM
Xylenes, Total	ND	0.098	mg/Kg	1	9/22/2015 1:47:38 PM
Surr: 1,2-Dichloroethane-d4	103	70-130	%REC	1	9/22/2015 1:47:38 PM
Surr: 4-Bromofluorobenzene	98.4	70-130	%REC	1	9/22/2015 1:47:38 PM
Surr: Dibromofluoromethane	113	70-130	%REC	1	9/22/2015 1:47:38 PM
Surr: Toluene-d8	94.9	70-130	%REC	1	9/22/2015 1:47:38 PM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/22/2015 1:47:38 PM
Surr: BFB	103	70-130	%REC	1	9/22/2015 1:47:38 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 6 of 0 J
- Sample pH Not In Range
- Reporting Detection Limit