

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

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NKL1629453480
District RP	1RP-4475
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources, Inc.	OGRID 7377
Contact Name Chase Settle	Contact Telephone 575-748-1471
Contact email Chase_Settle@eogresources.com	Incident # NKL1629453480
Contact mailing address 104 S. 4th Street, Artesia, NM 88210	

Location of Release Source

Latitude 33.03027 Longitude -103.76710
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Vespa BME Federal #1H	Site Type Battery
Date Release Discovered 10/11/2016	API# 30-005-29095

Unit Letter	Section	Township	Range	County
I	12	15S	31E	Chaves

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 15	Volume Recovered (bbls) 7
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 10	Volume Recovered (bbls) 6
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Please refer to the attached original C-141 form for 1RP-4475 for cause of release and immediate action steps. EOG Resources is submitting for closure via the new form to formally close out this incident. All sampling and correspondence is also attached.

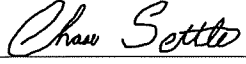
State of New Mexico
Oil Conservation Division

Incident ID	NKL1629453480
District RP	1RP-4475
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Chase Settle</u>	Title: <u>Rep Safety & Environmental Sr</u>
Signature: <u></u>	Date: <u>10/5/2021</u>
email: <u>Chase_Settle@eogresources.com</u>	Telephone: <u>575-748-1471</u>
<u>OCD Only</u>	
Received by: _____	Date: _____

Incident ID	NKL1629453480
District RP	1RP-4475
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☐ Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	NKL1629453480
District RP	1RP-4475
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NKL1629453480
District RP	1RP-4475
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NKL1629453480
District RP	1RP-4475
Facility ID	
Application ID	


Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities


I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Chase Settle Title: Rep Safety and Environmental Sr
Signature:  Date: 10/5/2021
email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by:  Date: 10/06/2021
Printed Name: Bradford Billings Title: Envi.Spec.A

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

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

REVIEWED

By Kristen Lynch at 3:00 pm, Oct 20, 2016

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR		<input checked="" type="checkbox"/> Initial Report	<input type="checkbox"/> Final Report
Name of Company Yates Petroleum Corporation	Contact Chase Settle		
Address 104 S. 4 th Street, Artesia, NM 88210	Telephone No. 575-748-4171		
Facility Name Vespa BME Federal #1H	Facility Type Battery		
Surface Owner Private	Mineral Owner Federal	API No. 30-005-29095	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	12	15S	31E	2500	South	200	East	Chaves

Latitude 33.03027 Longitude -103.76710**NATURE OF RELEASE**

Type of Release Crude Oil and Produced Water	Volume of Release 15 B/O & 10 B/PW	Volume Recovered 7 B/O & 6 B/PW
Source of Release Horizontal Knockout	Date and Hour of Occurrence 10/11/2016; AM	Date and Hour of Discovery 10/11/2016; 10:30 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Kristen Lynch, Rick Flores	
By Whom? Robert Asher	Date and Hour 10/12/2016; 9:01 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.* N/A

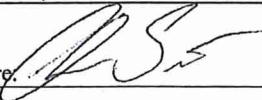

Describe Cause of Problem and Remedial Action Taken.*

A collar failed on the horizontal knockout allowing the site glass nipple to be pushed out by pressure causing the release.

Describe Area Affected and Cleanup Action Taken.*

An approximate area of 54' X 40' was affected within the lined berm of the battery and 55' X 40' on the adjacent pad to the south of the battery between the battery and the gas meter house. Vacuum truck was contracted to recover standing fluid and a backhoe was dispatched to remove impacted soils. Excavated soils will be hauled to a NMOCD approved facility. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 0) a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL's a work plan will be submitted to the OCD. **Depth to Ground Water: >100' (approximately 240', Section 12, T15S-R31E, per Trend Map), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0.**

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

OIL CONSERVATION DIVISION	
Signature: 	Approved by Environmental Specialist: 
Printed Name: Chase Settle	Approval Date: <u>10/20/2016</u> Expiration Date: <u>12/20/2016</u>
Title: NM Environmental Representative	NMOCD accepts discrete samples only
E-mail Address: csettle@yatespetroleum.com	Conditions of Approval: Work plan's submitted will be approved based upon not only BTEX & TPH, but also
Date: 10/18/2016 Phone: 575-748-4171	Attached <input type="checkbox"/> IRP 4475
* Attach Additional Sheets If Necessary	chlorides. Please notify NMOCD prior to sampling. Delineation plan must be submitted no later than 11/20/2016.
	nKL1629453480 pKL1629453878

From: [Oberding, Tomas, EMNRD](#)
To: [Katie Parker](#); [Yu, Olivia, EMNRD](#); [Chase Settle](#)
Cc: [Griswold, Jim, EMNRD](#); [Bob Asher](#); [Amber Griffin](#)
Subject: RE: C-141 Final Vespa BME Federal #1H
Date: Wednesday, February 8, 2017 7:47:14 AM
Attachments: [image001.png](#)
[image002.png](#)

Ms. Parker Mr. Settle et al,

To address the point brought up by Mr. Settle it has been a long time policy to have a workplan approved by the division as noted in the regulations-

The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.
 [emphasis added]

Without such confirmation all work done by the responsible party is done at the RP's own risk.

Ms. Parker, to address your point- we review items in the order in which they are received.

Thank you for your understanding.

-Dr. Oberding

Tomáš 'Doc' Oberding PhD
 Hydrologist, Adv-District 1
 Oil Conservation Division, EMNRD
 (505) 476-3403
 E-Mail: tomas.oberding@state.nm.us

一期一会

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Katie Parker [mailto:Katie_Parker@eogresources.com]
Sent: Tuesday, February 7, 2017 7:58 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Bob Asher <Bob_Asher@eogresources.com>; Amber Griffin <Amber_Griffin@eogresources.com>
Subject: FW: C-141 Final Vespa BME Federal #1H

Dear Ms. Yu,

I am following up on the request for closure for this site. The initial samples following excavation of impacted material show that this site should be closed. Please let us know if you will approve the closure request based on the information provided.

Thank you,

Katie Parker

Safety & Environmental Manager
EOG Resources, Inc – Artesia NM Division
105 S. Fourth Street
Artesia, NM 88210

Cell: 575-513-9915
Office: 575-748-4193



From: Chase Settle
Sent: Monday, January 16, 2017 10:29 AM
To: 'Yu, Olivia, EMNRD'
Cc: stucker@blm.gov; Oberding, Tomas, EMNRD; 'Flores, Rick'; Katie Parker; Bob Asher; Amber Griffin
Subject: RE: C-141 Final Vespa BME Federal #1H

Ms. Yu,

Unfortunately, I do not have any documentation of approval for a work plan to conduct delineation activities. Until I received your email specifically pointing out that request in the C-141 Initial, I had not noticed it. This is the first time a request has ever been made for a prior work plan before delineation activities occur. The normal operating procedure has been to submit a work plan after delineation activities have been completed in order to get approval for final remediation work. Luckily, the initial clean up excavation removed all impacted soils at this release as evidenced by the previously enclosed analytical results of the soil sampling procedures that were conducted, which should be noted, were scheduled prior to receiving Ms. Lynch's email on 10/20/2016. I do apologize for the oversight in regards to a delineation plan, but EOG Resources, Inc. still requests closure based on the analytical results that have been provided. We see no reason for continued activities when analytical results have deemed the release as posing no danger to public health or the environment, the obligation for remediation activities under both the Oil & Gas Act and Water Quality Act.

Thank you,

Chase Settle, M.S.

Rep Safety & Environmental II

EOG Resources

105 S. 4th Street
Artesia, NM 88210
575-748-4171 (Office)
575-703-6537 (Cell)



From: Yu, Olivia, EMNRD [<mailto:Olivia.Yu@state.nm.us>]
Sent: Wednesday, January 11, 2017 8:45 AM
To: csettle@yatespetroleum.com
Cc: stucker@blm.gov; Oberding, Tomas, EMNRD
Subject: RE: C-141 Final Vespa BME Federal #1H

**** External email. Use caution.****

Dear Chase:

I need to see documentation of a workplan approval before I review your final C-141. If you have an email from OCD with workplan approval, please forward it to me. According to your initial C-141 (attached), a delineation and characterization workplan must be submitted to OCD BEFORE sampling.

Thanks,

Olivia Yu
Environmental Specialist; District 1
OCD-EMNRD
575-393-6161 x 113
Olivia.yu@state.nm.us

From: Chase Settle
Sent: Tuesday, December 27, 2016 1:31:38 PM (UTC-07:00) Mountain Time (US & Canada)
To: Lynch, Kristen, EMNRD; rflores@blm.gov
Cc: Oberding, Tomas, EMNRD; Katie Parker; Bob Asher; Veronica Alvarado; Amber Griffin
Subject: C-141 Final Vespa BME Federal #1H

Please find attached the C-141 Final for the below listed location. Enclosed with the C-141 Final are the analytical results and a site diagram, EOG Y Resources, Inc. requests closure.

Vespa BME Federal #1H
30-005-29095
Section 12, T15S-R31E
2500' FSL & 200' FEL

Chaves County, New Mexico

Thank you,

Chase Settle, M.S.

Adv. Environmental Representative

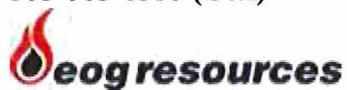
EOG Resources

105 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

575-703-6537 (Cell)



Page 12 of 73
Received by OCD: 10/6/2021 10:28:59 AM
Released to Imaging: 10/6/2021 12:58:01 PM

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

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company EOG Y Resources, Inc.	Contact Chase Settle	
Address 104 S. 4 th Street, Artesia, NM 88210	Telephone No. 575-748-4171	
Facility Name Vespa BME Federal #1H	Facility Type Battery	
Surface Owner Private	Mineral Owner Federal	API No. 30-005-29095

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	12	15S	31E	2500	South	200	East	Chaves

Latitude 33.03027 Longitude -103.76710

NATURE OF RELEASE

Type of Release Crude Oil and Produced Water	Volume of Release 15 B/O & 10 B/PW	Volume Recovered 7 B/O & 6 B/PW
Source of Release Horizontal Knockout	Date and Hour of Occurrence 10/11/2016; AM	Date and Hour of Discovery 10/11/2016; 10:30 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Kristen Lynch, Rick Flores	
By Whom? Robert Asher	Date and Hour 10/12/2016; 9:01 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.* N/A


Describe Cause of Problem and Remedial Action Taken.*

A collar failed on the horizontal knockout allowing the site glass nipple to be pushed out by pressure causing the release.

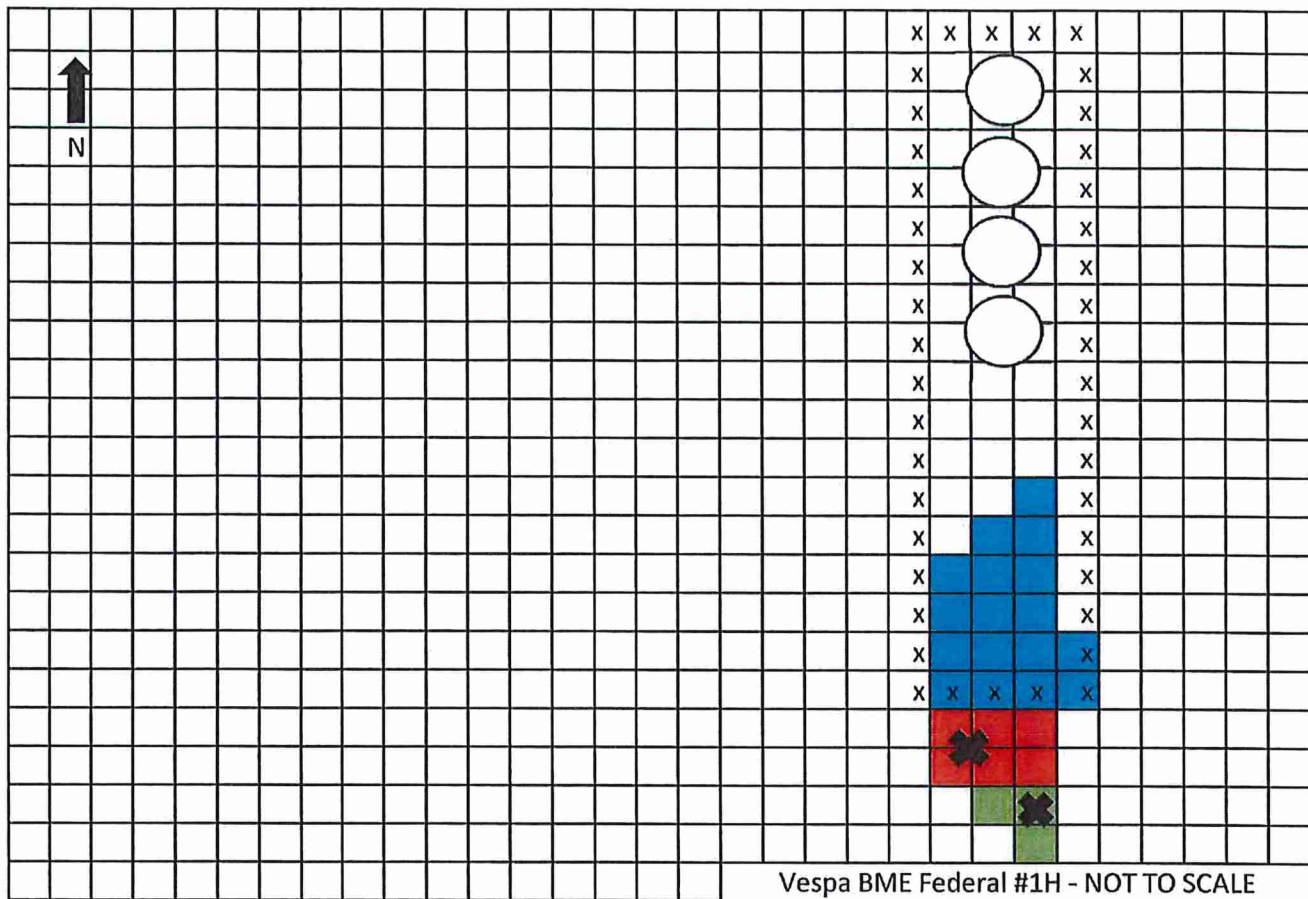
Describe Area Affected and Cleanup Action Taken.*

An approximate area of 54' X 40' was affected within the lined berm of the battery and 55' X 40' on the adjacent pad to the south of the battery between the battery and the gas meter house. Vacuum truck was contracted to recover standing fluid and a backhoe was dispatched to remove impacted soils. Excavated soils will be hauled to a NMOCD approved facility. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 0) a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL's a work plan will be submitted to the OCD. **Depth to Ground Water: >100' (approximately 240', Section 12, T15S-R31E, per Trend Map), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0. Based on enclosed analytical results, EOG Y Resources, Inc. requests closure.**

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

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Chase Settle	Approved by Environmental Specialist:		
Title: NM Adv. Environmental Representative	Approval Date:	Expiration Date:	
E-mail Address: Chase.Settle@eogresources.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 12/27/2016	Phone: 575-748-4171		

* Attach Additional Sheets If Necessary



Intact Lined Berm
 S1 Area
 S2 Area

Site Ranking is Zero (0). DTGW >100' (approx 240', Section 12, T15S-R31E, Trend Map)
 All results are ppm, Chlorides for documentation.
 Released: 15 B/O & 10 B/PW Recovered: 7 B/O & 6 B/PW Release Date: 10/11/2016

ANALYTICAL DATA

1611464	Sample Area	Sample Date	Sampe Type	Depth	BTEX	GRO	DRO	CHLORIDE
S1-1'	Release Area	10/28/2016	Backhoe	1'	ND	ND	ND	ND
S1-2'	Release Area	10/28/2016	Backhoe	2'	ND	ND	55	59
S2-1'	Release Area	10/28/2016	Backhoe	1'	ND	ND	ND	33
S2-2'	Release Area	10/28/2016	Backhoe	2'	ND	ND	170	100
S2-3'	Release Area	10/28/2016	Backhoe	3'	ND	ND	93	ND
S2-3.5'	Release Area	10/28/2016	Backhoe	3.5'	ND	ND	76	40

NMOCD will accept data for delineation purposes for 1RP-4475.

REVIEWED

By Olivia Yu at 2:38 pm, Sep 22, 2017



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 11, 2016

Chase Settle

Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
TEL: (575) 748-4111
FAX

RE: Vespa BME Federal #1

OrderNo.: 1611464

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 6 sample(s) on 11/1/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1611464

Date Reported: 11/11/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S1-1'

Project: Vespa BME Federal #1

Collection Date: 10/28/2016 8:37:00 AM

Lab ID: 1611464-001

Matrix: SOIL

Received Date: 11/1/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	11/10/2016 11:40:08 AM	28610
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/10/2016 12:29:18 PM	28597
Surr: DNOP	88.6	70-130		%Rec	1	11/10/2016 12:29:18 PM	28597
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/10/2016 11:46:59 AM	28570
Surr: BFB	84.4	68.3-144		%Rec	1	11/10/2016 11:46:59 AM	28570
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	11/10/2016 11:46:59 AM	28570
Toluene	ND	0.048		mg/Kg	1	11/10/2016 11:46:59 AM	28570
Ethylbenzene	ND	0.048		mg/Kg	1	11/10/2016 11:46:59 AM	28570
Xylenes, Total	ND	0.097		mg/Kg	1	11/10/2016 11:46:59 AM	28570
Surr: 4-Bromofluorobenzene	98.0	80-120		%Rec	1	11/10/2016 11:46:59 AM	28570

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Page 1 of 10

Analytical Report

Lab Order 1611464

Date Reported: 11/11/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S1-2'

Project: Vespa BME Federal #1

Collection Date: 10/28/2016 8:58:00 AM

Lab ID: 1611464-002

Matrix: SOIL

Received Date: 11/1/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	59	30		mg/Kg	20	11/10/2016 12:17:22 PM	28610
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	55	10		mg/Kg	1	11/10/2016 12:14:39 PM	28597
Surr: DNOP	84.7	70-130		%Rec	1	11/10/2016 12:14:39 PM	28597
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/10/2016 12:10:36 PM	28570
Surr: BFB	82.1	68.3-144		%Rec	1	11/10/2016 12:10:36 PM	28570
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	11/10/2016 12:10:36 PM	28570
Toluene	ND	0.049		mg/Kg	1	11/10/2016 12:10:36 PM	28570
Ethylbenzene	ND	0.049		mg/Kg	1	11/10/2016 12:10:36 PM	28570
Xylenes, Total	ND	0.098		mg/Kg	1	11/10/2016 12:10:36 PM	28570
Surr: 4-Bromofluorobenzene	94.3	80-120		%Rec	1	11/10/2016 12:10:36 PM	28570

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Page 2 of 10

Analytical Report

Lab Order 1611464

Date Reported: 11/11/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S2-1'

Project: Vespa BME Federal #1

Collection Date: 10/28/2016 9:01:00 AM

Lab ID: 1611464-003

Matrix: SOIL

Received Date: 11/1/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	33	30		mg/Kg	20	11/10/2016 6:42:07 PM	28610
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/10/2016 12:41:57 PM	28597
Surr: DNOP	82.8	70-130		%Rec	1	11/10/2016 12:41:57 PM	28597
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/10/2016 12:34:19 PM	28570
Surr: BFB	83.7	68.3-144		%Rec	1	11/10/2016 12:34:19 PM	28570
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	11/10/2016 12:34:19 PM	28570
Toluene	ND	0.049		mg/Kg	1	11/10/2016 12:34:19 PM	28570
Ethylbenzene	ND	0.049		mg/Kg	1	11/10/2016 12:34:19 PM	28570
Xylenes, Total	ND	0.098		mg/Kg	1	11/10/2016 12:34:19 PM	28570
Surr: 4-Bromofluorobenzene	95.5	80-120		%Rec	1	11/10/2016 12:34:19 PM	28570

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Page 3 of 10

Analytical Report

Lab Order 1611464

Date Reported: 11/11/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S2-2'

Project: Vespa BME Federal #1

Collection Date: 10/28/2016 9:03:00 AM

Lab ID: 1611464-004

Matrix: SOIL

Received Date: 11/1/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	100	30		mg/Kg	20	11/10/2016 6:54:32 PM	28610
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	170	9.6		mg/Kg	1	11/10/2016 12:48:13 PM	28597
Surr: DNOP	97.7	70-130		%Rec	1	11/10/2016 12:48:13 PM	28597
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/10/2016 12:57:50 PM	28570
Surr: BFB	82.8	68.3-144		%Rec	1	11/10/2016 12:57:50 PM	28570
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/10/2016 12:57:50 PM	28570
Toluene	ND	0.049		mg/Kg	1	11/10/2016 12:57:50 PM	28570
Ethylbenzene	ND	0.049		mg/Kg	1	11/10/2016 12:57:50 PM	28570
Xylenes, Total	ND	0.099		mg/Kg	1	11/10/2016 12:57:50 PM	28570
Surr: 4-Bromofluorobenzene	94.3	80-120		%Rec	1	11/10/2016 12:57:50 PM	28570

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Page 4 of 10

Analytical Report

Lab Order 1611464

Date Reported: 11/11/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S2-3'

Project: Vespa BME Federal #1

Collection Date: 10/28/2016 9:06:00 AM

Lab ID: 1611464-005

Matrix: SOIL

Received Date: 11/1/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	11/10/2016 7:06:57 PM	28610
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	93	10		mg/Kg	1	11/10/2016 1:33:42 PM	28597
Surr: DNOP	97.1	70-130		%Rec	1	11/10/2016 1:33:42 PM	28597
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/10/2016 1:21:20 PM	28570
Surr: BFB	83.7	68.3-144		%Rec	1	11/10/2016 1:21:20 PM	28570
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	11/10/2016 1:21:20 PM	28570
Toluene	ND	0.047		mg/Kg	1	11/10/2016 1:21:20 PM	28570
Ethylbenzene	ND	0.047		mg/Kg	1	11/10/2016 1:21:20 PM	28570
Xylenes, Total	ND	0.094		mg/Kg	1	11/10/2016 1:21:20 PM	28570
Surr: 4-Bromofluorobenzene	96.6	80-120		%Rec	1	11/10/2016 1:21:20 PM	28570

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Page 5 of 10

Analytical Report

Lab Order 1611464

Date Reported: 11/11/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S2-3.5'

Project: Vespa BME Federal #1

Collection Date: 10/28/2016 9:26:00 AM

Lab ID: 1611464-006

Matrix: SOIL

Received Date: 11/1/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	40	30		mg/Kg	20	11/10/2016 7:19:21 PM	28610
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	76	9.9		mg/Kg	1	11/10/2016 2:14:15 PM	28597
Surr: DNOP	96.4	70-130		%Rec	1	11/10/2016 2:14:15 PM	28597
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/10/2016 5:39:03 PM	28570
Surr: BFB	84.9	68.3-144		%Rec	1	11/10/2016 5:39:03 PM	28570
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/10/2016 5:39:03 PM	28570
Toluene	ND	0.049		mg/Kg	1	11/10/2016 5:39:03 PM	28570
Ethylbenzene	ND	0.049		mg/Kg	1	11/10/2016 5:39:03 PM	28570
Xylenes, Total	ND	0.098		mg/Kg	1	11/10/2016 5:39:03 PM	28570
Surr: 4-Bromofluorobenzene	99.3	80-120		%Rec	1	11/10/2016 5:39:03 PM	28570

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Page 6 of 10

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1611464

11-Nov-16

Client: Yates Petroleum Corporation

Project: Vespa BME Federal #1

Sample ID	MB-28610	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	28610	RunNo:	38626					
Prep Date:	11/10/2016	Analysis Date:	11/10/2016	SeqNo:	1206570	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-28610	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	28610	RunNo:	38626					
Prep Date:	11/10/2016	Analysis Date:	11/10/2016	SeqNo:	1206571	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

Qualifiers:

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

Page 7 of 10

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1611464

11-Nov-16

Client: Yates Petroleum Corporation

Project: Vespa BME Federal #1

Sample ID	LCS-28593	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	28593	RunNo:	38609					
Prep Date:	11/10/2016	Analysis Date:	11/10/2016	SeqNo:	1205792	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		5.000		81.6	70	130			

Sample ID	LCS-28593	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	28593	RunNo:	38609					
Prep Date:	11/10/2016	Analysis Date:	11/10/2016	SeqNo:	1205793	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		84.9	70	130			

Sample ID	MB-28593	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	28593	RunNo:	38609					
Prep Date:	11/10/2016	Analysis Date:	11/10/2016	SeqNo:	1205794	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.0		10.00		90.1	70	130			

Sample ID	MB-28597	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	28597	RunNo:	38609					
Prep Date:	11/10/2016	Analysis Date:	11/10/2016	SeqNo:	1205795	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.5		10.00		84.9	70	130			

Sample ID	LCS-28572	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	28572	RunNo:	38609					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206232	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		89.0	70	130			

Sample ID	MB-28572	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	28572	RunNo:	38609					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206235	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		92.7	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611464

11-Nov-16

Client: Yates Petroleum Corporation

Project: Vespa BME Federal #1

Sample ID	MB-28570	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	28570	RunNo:	38598					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206092	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	820		1000		82.3	68.3	144			

Sample ID	LCS-28570	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	28570	RunNo:	38598					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206093	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.8	74.6	123			
Surr: BFB	890		1000		88.6	68.3	144			

Sample ID	MB-28565	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	28565	RunNo:	38598					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206108	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	850		1000		84.9	68.3	144			

Sample ID	LCS-28565	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	28565	RunNo:	38598					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206109	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		91.0	68.3	144			

Qualifiers:

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

Page 9 of 10

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611464

11-Nov-16

Client: Yates Petroleum Corporation

Project: Vespa BME Federal #1

Sample ID	MB-28570	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID: 28570			RunNo: 38598					
Prep Date:	11/9/2016	Analysis Date: 11/10/2016			SeqNo: 1206124		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		96.9	80	120			

Sample ID	LCS-28570		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 28570		RunNo: 38598					
Prep Date:	11/9/2016		Analysis Date: 11/10/2016		SeqNo: 1206125		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	113	75.2	115			
Toluene	1.0	0.050	1.000	0	103	80.7	112			
Ethylbenzene	1.0	0.050	1.000	0	100	78.9	117			
Xylenes, Total	3.0	0.10	3.000	0	99.5	79.2	115			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	MB-28565	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	28565	RunNo:	38598					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206416	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID	LCS-28565	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	28565	RunNo:	38598					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206417	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Qualifiers:

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

Page 10 of 10



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EOG/Yates

Work Order Number: 1611464

RcptNo: 1

Received by/date: AS 11/01/16

Logged By: Anne Thorne 11/1/2016 10:00:00 AM

Completed By: Anne Thorne 11/9/2016

Reviewed By: JS 11/09/16

Anne Thorne

Anne Thorne

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☒ No ☐ Not Present ☐
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

From: [Yu, Olivia, EMNRD](#)
To: ["Chase Settle"](#)
Cc: [Katie Parker](#); [Billings, Bradford, EMNRD](#)
Subject: RE: Vespa BME Federal #1H- 1RP-4475
Date: Friday, September 22, 2017 2:54:00 PM
Attachments: image001.png

Dear Mr. Settle:

As indicated by Dr. Oberding in an email dated February 8, 2017, remedial activities completed without an approved corrective action plan will be considered completed at risk. However, NMOCD will consider delineation completed for 1RP-4475, based on the data submitted along with the unapproved Final C-141.

In order to verify remediation was completed, NMOCD requires the following items before approval for backfilling is granted.

1. laboratory analyses (BTEX, TPH extended, and chlorides) from a minimum of 4 sidewalls and 1 bottom samples. Please mark confirmation sample locations on a scaled map.
2. a statement affirming that the liner under the battery has and will continue to contain liquids. Photo documentation are required to serve as a record of the removal of contaminated fill or proper disposal of liquids.

Thanks,

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
575-393-6161 x113

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Chase Settle [mailto:Chase_Settle@eogresources.com]
Sent: Tuesday, September 5, 2017 1:20 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: Katie Parker <Katie_Parker@eogresources.com>
Subject: Vespa BME Federal #1H- 1RP-4475

Ms. Yu,

I would like to know the status of this release listed below so that we can forward with backfilling the

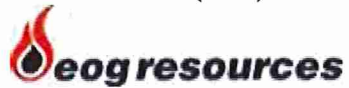
open excavation where the initial excavation activities were completed.

Vespa BME Federal #1H
30-005-29095
Section 12, T15S-R31E
2500' FSL & 200' FEL
Chaves County, New Mexico
1RP-4475

Thank you,

Chase Settle, M.S.
Rep Safety & Environmental II

EOG Resources
105 S. 4th Street
Artesia, NM 88210
575-748-4171 (Office)
575-703-6537 (Cell)





EOG Resources, Inc.
Artesia Division Office
104 S. 4th Street
Artesia, N. M. 88210

November 28, 2017

Ms. Olivia Yu
NMOCD District I
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Vespa BME Federal #1H
30-005-29095
Section 12, T15S-R31E
2500' FSL & 200' FEL
Chaves County, New Mexico
1RP-4475

Ms. Yu,

EOG Y Resources, Inc. is submitting the enclosed CLOSURE REPORT and C-141 Final for the above captioned remediation. The plan is being submitted in response to the C-141 report dated October 18, 2016.

If you have any questions, feel free to call me at (575) 748-1471

Thank you.

EOG Y Resources, Inc.

Chase Settle
Rep Safety & Environmental II

I. Location

From Crossroads, NM, take Carrol Rd (T-170) west for approximately 3.5 miles, then turn south on lease road, follow lease road for 0.7 mile, and then follow the pipeline ROW southwest for 1200 feet to the release area.

II. Background

On October 18, 2016, EOG Y Resources, Inc. submitted to the NMOCD District I office a Form C-141 for the release of 15 B/O & 10 B/PW with 7 B/O & 6 B/PW recovered. The affected area was approximately 54 feet by 40 within the lined berm of the battery and 55 feet by 40 feet on the adjacent pad to the south of the battery between the battery and gas meter house. Preliminary excavation of visually impacted material outside of the battery included removing between 1 and 2 feet of soil within the release area, with this soil being hauled to a NMOCD approved disposal facility. Also hauled to the disposal facility was the impacted gravel and dirt that had accumulated within the lined battery. Initial delineation samples were taken (10/28/2016) and sent to a NMOCD approved laboratory (11/11/2016, results enclosed). On the instruction of NMOCD, confirmation sampling was conducted (10/12/2017) and sent to a NMOCD approved laboratory (10/25/2017, results enclosed).

III. Surface and Ground Water

Area surface geology is Cenozoic Tertiary. Based on information collected from New Mexico Office of the State Engineer and USGS National Water Information System, depth to groundwater at this location (Section 12, T15S-R31E) is approximately 230 feet, making the site ranking a zero (0). 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 release area consists of soils that are caliche and rock since it occurred on an active production pad.

V. Scope of Work Completed

No further work was needed beyond the initial excavation work completed to remove the visually impacted soils, as evidenced by the analytical data returned from soil sampling.

A C-141 Final is submitted requesting closure for the site.

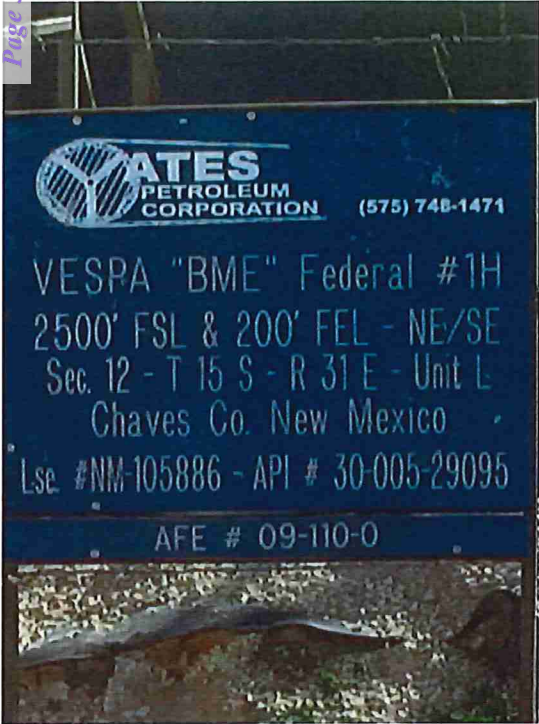
Figure 1

Site Map

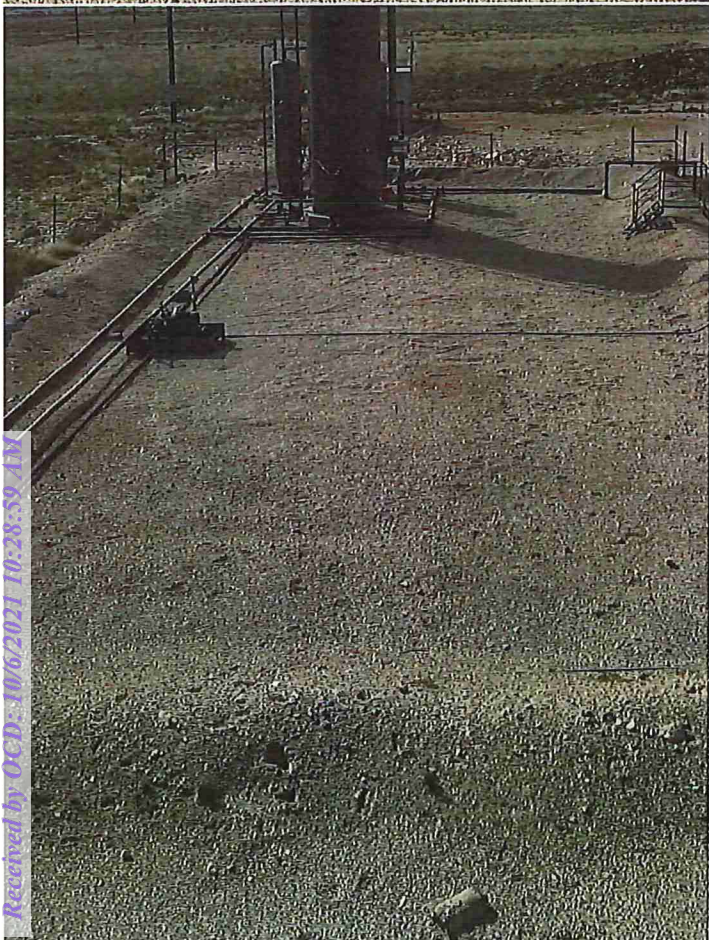
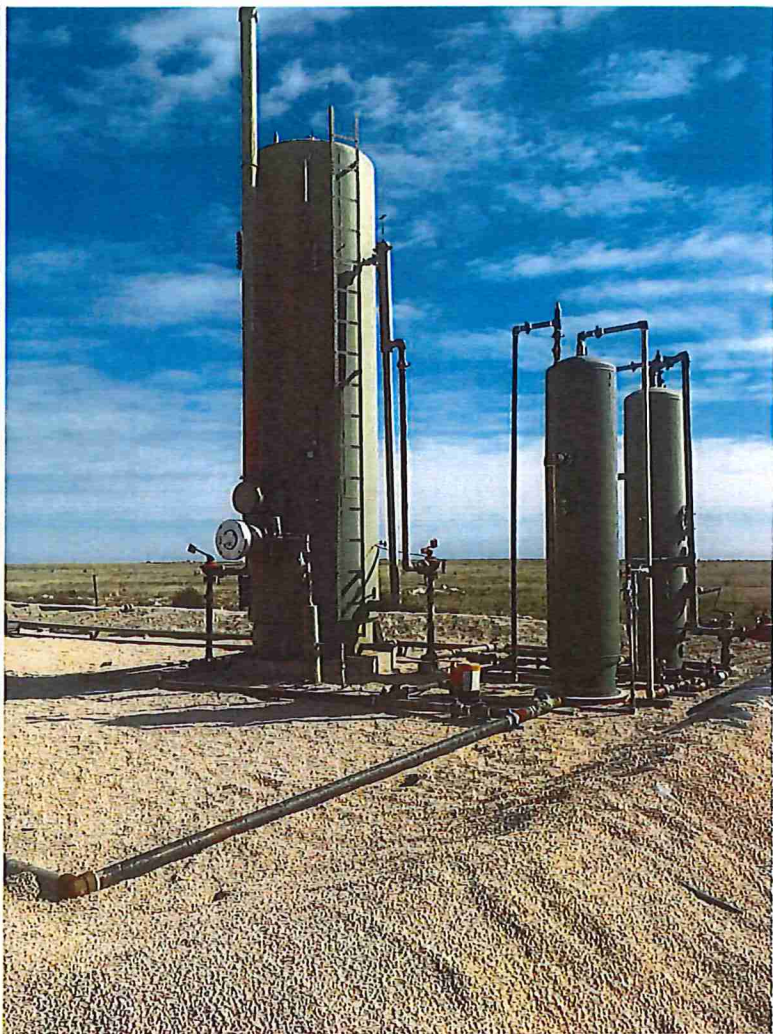
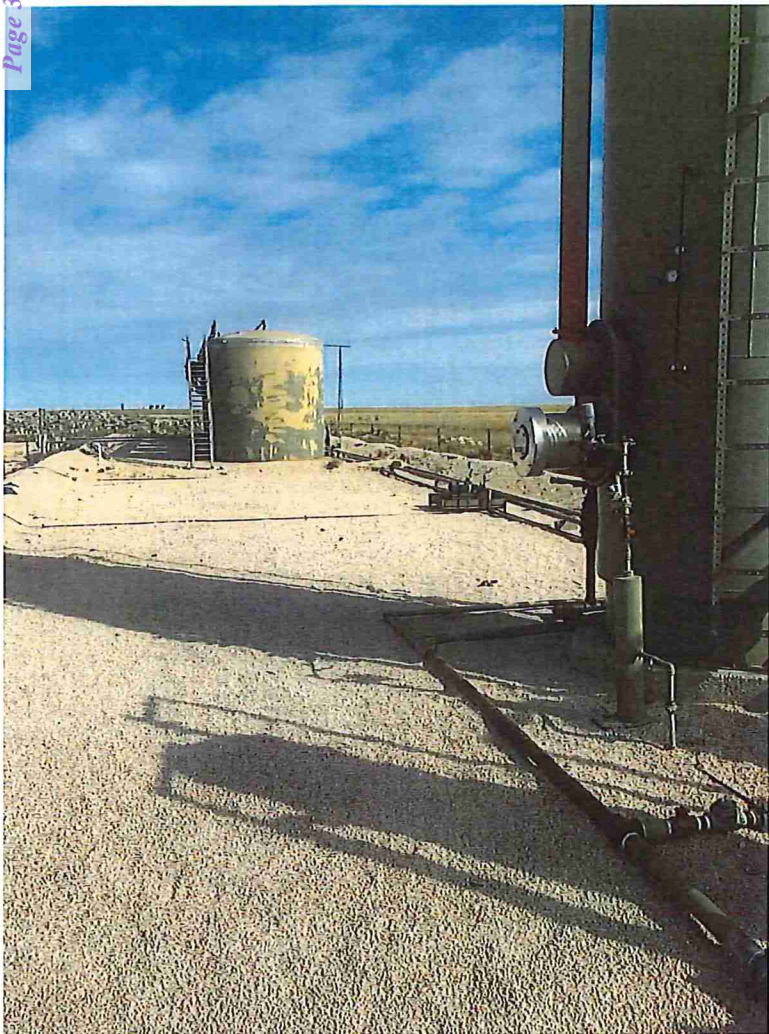


Photos

Before Clean Up



After Clean Up



Appendix A

NMOSE Well Log Information



New Mexico Office of the State Engineer

Wells with Well Log Information

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(in feet)

POD Number	Code	Subbasin	County	Source	q	q	q	q	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
L 06328		L	CH	Shallow	64	16	4	4	07	15S	32E	616360	3655352*	1233	06/14/1968	06/20/1968	07/29/1968	345	234	BRADY, W.H.	359
L 12528 POD1		L	CH	Shallow	1	3	1	12	15S	31E		613665	3655617*	1495	03/04/2010	03/04/2010	03/24/2010	335		EADES, ALAN	1044
L 12598 POD1		L	LE	Shallow	2	2	4	13	15S	31E		615155	3653704*	1603	09/24/2010	09/24/2010	09/30/2010	330		EADES, ALAN	1044
L 12515 POD1		L	LE	Shallow	1	1	3	13	15S	31E		613770	3653562*	2210	02/18/2010	02/18/2010	04/22/2010	335		EADES, ALAN	1044
L 06338		L	LE	Shallow	1	3	05	15S	32E			617044	3656873*	2474	06/14/1968	06/26/1968	07/29/1968	334	233	BRADY, W.H.	359
L 06307		L	CH	Shallow	2	4	3	11	15S	31E		612686	3654805*	2492	05/23/1968	06/08/1968	07/29/1968	297	264	BRADY, W.H.	359
L 09614		L	LE	Shallow	3	3	4	08	15S	32E		617875	3654869*	2782	04/01/1985	04/01/1985	04/04/1985	290		GLENN, CLARK A."CORKY" (LD)	421
L 06572		L	LE	Shallow	3	3	3	17	15S	32E		616989	3653150*	2849	08/04/1969	08/06/1969	08/08/1969	330	240	MURRELL ABBOTT	46
L 03600		L	LE	Shallow	1	1	1	24	15S	31E		613718	3652811*	2867	07/09/1962	07/16/1962	07/19/1962	332	246	BURKE, EDWARD B.	111
L 05142 X11		L	LE	Shallow	2	3	3	31	14S	32E		615462	3658234*	2945	10/08/1963	10/14/1963	10/31/1963	339	220		111
L 06737		L	LE	Shallow	4	3	3	17	15S	32E		617189	3653150*	2984	11/25/1970	11/29/1970	12/03/1970	329	226		46

Record Count: 11

UTM NAD83 Radius Search (in meters):

Easting (X): 615127.71

Northing (Y): 3655307.65

Radius: 3000

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/28/17 10:23 AM

WELLS WITH WELL LOG INFORMATION

Appendix B

USGS Water Well Information



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

- [Please see news on new formats](#)
- [Full News](#) 

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =
• 330145103451701

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 330145103451701 15S.32E.07.41223

Available data for this site

Lea County, New Mexico

Hydrologic Unit Code 12080003

Latitude 33°01'51", Longitude 103°45'12" NAD27

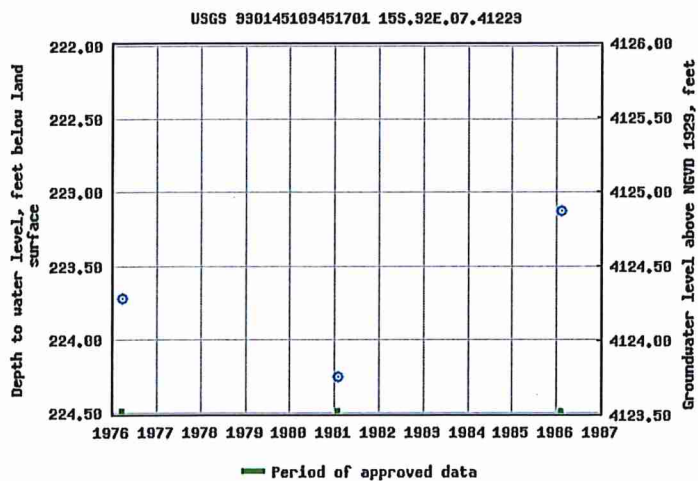
Land-surface elevation 4,348.00 feet above NGVD29

The depth of the well is 345 feet below land surface.

This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

Accessibility Plug-Ins FOIA Privacy Policies and Notices

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels/>





USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- [Please see news on new formats](#)
- [Full News](#)

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 330122103465501

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 330122103465501 15S.31E.12.131

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 12080003

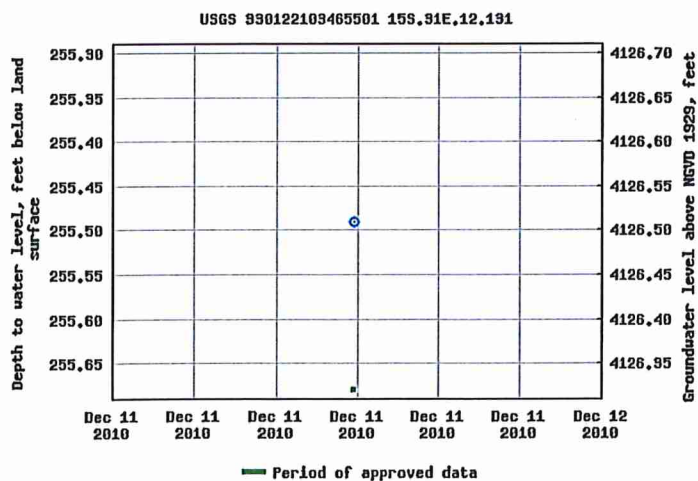
Latitude 33°01'21.8", Longitude 103°46'55.4" NAD83

Land-surface elevation 4,382.0 feet above NGVD29

The depth of the well is 335.0 feet below land surface.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

Accessibility Plug-Ins FOIA Privacy Policies and Notices

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>

Page Contact Information: [USGS Water Data Support Team](#)





Water-Data Report 2011

330122103465501 Local number 15S.31E.12.131

Undefined Aquifer
Undefined Aquifer

Lea County, NM

LOCATION.--Lat 33°01'21.8", long 103°46'55.4" referenced to North American Datum of 1983, in NW ¼ SW ¼ NW ¼ sec.12, T.15 S., R.31 E., Lea County, NM, Hydrologic Unit is unknown.

GROUNDWATER RECORDS

WELL CHARACTERISTICS.--Depth 335 ft. Upper casing diameter undefined; top of first opening 275 ft, bottom of last opening 335 ft.

DATUM.--Land-surface datum is 4,382 ft above National Geodetic Vertical Datum of 1929. Measuring point: Slot for wires, 1.4 ft above land-surface datum, Dec. 11, 2010, to present.

WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

[Measurement method: S, steel tape. Water-level status: --, static.]

Date	Water level	Measurement method	Water-level status
Dec 11	255.49	S	--

Period of record highest: 255.49, Dec 11, 2010; lowest: 255.49, Dec 11, 2010
Record available from Dec 11, 2010, to Dec 11, 2010; 1 entries

Appendix C

Sample Data Sheet

Vespa BME Federal #1H Sample Analysis

Sample ID	Depth (bgs)	Date	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH (GRO)	TPH (DRO)	TPH EXT DRO	Total TPH	Chlorides
S1-1'	1'	10/28/16	ND	ND	ND	ND	ND	ND	ND	-	ND	ND
S1-2'	2'	10/28/16	ND	ND	ND	ND	ND	ND	55	-	55	59
S2-1'	1'	10/28/16	ND	ND	ND	ND	ND	ND	ND	-	ND	33
S2-2'	2'	10/28/16	ND	ND	ND	ND	ND	ND	170	-	170	100
S2-3'	3'	10/28/16	ND	ND	ND	ND	ND	ND	93	-	93	ND
S2-3.5'	3.5'	10/28/16	ND	ND	ND	ND	ND	ND	76	-	76	40
B1- Conf	1'	10/12/17	0.054	0.124	0.052	<0.0150	0.358	<10.0	85.5	51.2	136.7	48
B2- Conf	2'	10/12/17	<0.050	<0.050	<0.050	<0.0150	<0.300	<10.0	502	173	675	112
N- Conf	6"	10/12/17	<0.050	<0.050	<0.050	<0.0150	<0.300	<10.0	1750	628	2378	96
W- Conf	6"	10/12/17	<0.050	<0.050	<0.050	<0.0150	<0.300	<10.0	<10.0	<10.0	<10.0	64
S- Conf	2'	10/12/17	<0.050	<0.050	<0.050	<0.0150	<0.300	<10.0	<10.0	<10.0	<10.0	16
E- Conf	1.5'	10/12/17	<0.050	<0.050	<0.050	<0.0150	<0.300	<10.0	<10.0	<10.0	<10.0	128

Appendix D

Analytical Data



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 11, 2016

Chase Settle

Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
TEL: (575) 748-4111
FAX

RE: Vespa BME Federal #1

OrderNo.: 1611464

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 6 sample(s) on 11/1/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1611464

Date Reported: 11/11/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S1-1'

Project: Vespa BME Federal #1

Collection Date: 10/28/2016 8:37:00 AM

Lab ID: 1611464-001

Matrix: SOIL

Received Date: 11/1/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	11/10/2016 11:40:08 AM	28610
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/10/2016 12:29:18 PM	28597
Surr: DNOP	88.6	70-130		%Rec	1	11/10/2016 12:29:18 PM	28597
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/10/2016 11:46:59 AM	28570
Surr: BFB	84.4	68.3-144		%Rec	1	11/10/2016 11:46:59 AM	28570
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	11/10/2016 11:46:59 AM	28570
Toluene	ND	0.048		mg/Kg	1	11/10/2016 11:46:59 AM	28570
Ethylbenzene	ND	0.048		mg/Kg	1	11/10/2016 11:46:59 AM	28570
Xylenes, Total	ND	0.097		mg/Kg	1	11/10/2016 11:46:59 AM	28570
Surr: 4-Bromofluorobenzene	98.0	80-120		%Rec	1	11/10/2016 11:46:59 AM	28570

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Page 1 of 10

Analytical Report

Lab Order 1611464

Date Reported: 11/11/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S1-2'

Project: Vespa BME Federal #1

Collection Date: 10/28/2016 8:58:00 AM

Lab ID: 1611464-002

Matrix: SOIL

Received Date: 11/1/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	59	30		mg/Kg	20	11/10/2016 12:17:22 PM	28610
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	55	10		mg/Kg	1	11/10/2016 12:14:39 PM	28597
Surr: DNOP	84.7	70-130		%Rec	1	11/10/2016 12:14:39 PM	28597
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/10/2016 12:10:36 PM	28570
Surr: BFB	82.1	68.3-144		%Rec	1	11/10/2016 12:10:36 PM	28570
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	11/10/2016 12:10:36 PM	28570
Toluene	ND	0.049		mg/Kg	1	11/10/2016 12:10:36 PM	28570
Ethylbenzene	ND	0.049		mg/Kg	1	11/10/2016 12:10:36 PM	28570
Xylenes, Total	ND	0.098		mg/Kg	1	11/10/2016 12:10:36 PM	28570
Surr: 4-Bromofluorobenzene	94.3	80-120		%Rec	1	11/10/2016 12:10:36 PM	28570

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Page 2 of 10

Analytical Report

Lab Order 1611464

Date Reported: 11/11/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S2-1'

Project: Vespa BME Federal #1

Collection Date: 10/28/2016 9:01:00 AM

Lab ID: 1611464-003

Matrix: SOIL

Received Date: 11/1/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	33	30		mg/Kg	20	11/10/2016 6:42:07 PM	28610
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/10/2016 12:41:57 PM	28597
Surr: DNOP	82.8	70-130		%Rec	1	11/10/2016 12:41:57 PM	28597
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/10/2016 12:34:19 PM	28570
Surr: BFB	83.7	68.3-144		%Rec	1	11/10/2016 12:34:19 PM	28570
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	11/10/2016 12:34:19 PM	28570
Toluene	ND	0.049		mg/Kg	1	11/10/2016 12:34:19 PM	28570
Ethylbenzene	ND	0.049		mg/Kg	1	11/10/2016 12:34:19 PM	28570
Xylenes, Total	ND	0.098		mg/Kg	1	11/10/2016 12:34:19 PM	28570
Surr: 4-Bromofluorobenzene	95.5	80-120		%Rec	1	11/10/2016 12:34:19 PM	28570

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Page 3 of 10

Analytical Report

Lab Order 1611464

Date Reported: 11/11/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S2-2'

Project: Vespa BME Federal #1

Collection Date: 10/28/2016 9:03:00 AM

Lab ID: 1611464-004

Matrix: SOIL

Received Date: 11/1/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	100	30		mg/Kg	20	11/10/2016 6:54:32 PM	28610
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	170	9.6		mg/Kg	1	11/10/2016 12:48:13 PM	28597
Surr: DNOP	97.7	70-130		%Rec	1	11/10/2016 12:48:13 PM	28597
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/10/2016 12:57:50 PM	28570
Surr: BFB	82.8	68.3-144		%Rec	1	11/10/2016 12:57:50 PM	28570
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/10/2016 12:57:50 PM	28570
Toluene	ND	0.049		mg/Kg	1	11/10/2016 12:57:50 PM	28570
Ethylbenzene	ND	0.049		mg/Kg	1	11/10/2016 12:57:50 PM	28570
Xylenes, Total	ND	0.099		mg/Kg	1	11/10/2016 12:57:50 PM	28570
Surr: 4-Bromofluorobenzene	94.3	80-120		%Rec	1	11/10/2016 12:57:50 PM	28570

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Page 4 of 10

Analytical Report

Lab Order 1611464

Date Reported: 11/11/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S2-3'

Project: Vespa BME Federal #1

Collection Date: 10/28/2016 9:06:00 AM

Lab ID: 1611464-005

Matrix: SOIL

Received Date: 11/1/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	11/10/2016 7:06:57 PM	28610
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	93	10		mg/Kg	1	11/10/2016 1:33:42 PM	28597
Surr: DNOP	97.1	70-130		%Rec	1	11/10/2016 1:33:42 PM	28597
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/10/2016 1:21:20 PM	28570
Surr: BFB	83.7	68.3-144		%Rec	1	11/10/2016 1:21:20 PM	28570
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	11/10/2016 1:21:20 PM	28570
Toluene	ND	0.047		mg/Kg	1	11/10/2016 1:21:20 PM	28570
Ethylbenzene	ND	0.047		mg/Kg	1	11/10/2016 1:21:20 PM	28570
Xylenes, Total	ND	0.094		mg/Kg	1	11/10/2016 1:21:20 PM	28570
Surr: 4-Bromofluorobenzene	96.6	80-120		%Rec	1	11/10/2016 1:21:20 PM	28570

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Page 5 of 10

Analytical Report
 Lab Order 1611464
 Date Reported: 11/11/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: S2-3.5'
 Project: Vespa BME Federal #1 Collection Date: 10/28/2016 9:26:00 AM
 Lab ID: 1611464-006 Matrix: SOIL Received Date: 11/1/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	40	30		mg/Kg	20	11/10/2016 7:19:21 PM	28610
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	76	9.9		mg/Kg	1	11/10/2016 2:14:15 PM	28597
Surr: DNOP	96.4	70-130		%Rec	1	11/10/2016 2:14:15 PM	28597
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/10/2016 5:39:03 PM	28570
Surr: BFB	84.9	68.3-144		%Rec	1	11/10/2016 5:39:03 PM	28570
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	11/10/2016 5:39:03 PM	28570
Toluene	ND	0.049		mg/Kg	1	11/10/2016 5:39:03 PM	28570
Ethylbenzene	ND	0.049		mg/Kg	1	11/10/2016 5:39:03 PM	28570
Xylenes, Total	ND	0.098		mg/Kg	1	11/10/2016 5:39:03 PM	28570
Surr: 4-Bromofluorobenzene	99.3	80-120		%Rec	1	11/10/2016 5:39:03 PM	28570

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611464
11-Nov-16

Client: Yates Petroleum Corporation
Project: Vespa BME Federal #1

Sample ID	MB-28610	SampType:	mbk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	28610	RunNo:	38626					
Prep Date:	11/10/2016	Analysis Date:	11/10/2016	SeqNo:	1206570	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-28610	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	28610	RunNo:	38626					
Prep Date:	11/10/2016	Analysis Date:	11/10/2016	SeqNo:	1206571	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

- Qualifiers:
- * 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
 - P Sample pH Not In Range
 - RL Reporting Detection Limit
 - W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611464

11-Nov-16

Client: Yates Petroleum Corporation

Project: Vespa BME Federal #1

Sample ID	LCS-28593	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	28593	RunNo:	38609					
Prep Date:	11/10/2016	Analysis Date:	11/10/2016	SeqNo:	1205792	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		5.000		81.6	70	130			

Sample ID	LCS-28593	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	28593	RunNo:	38609					
Prep Date:	11/10/2016	Analysis Date:	11/10/2016	SeqNo:	1205793	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		84.9	70	130			

Sample ID	MB-28593	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	28593	RunNo:	38609					
Prep Date:	11/10/2016	Analysis Date:	11/10/2016	SeqNo:	1205794	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.0		10.00		90.1	70	130			

Sample ID	MB-28597	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	28597	RunNo:	38609					
Prep Date:	11/10/2016	Analysis Date:	11/10/2016	SeqNo:	1205795	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.5		10.00		84.9	70	130			

Sample ID	LCS-28572	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	28572	RunNo:	38609					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206232	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		89.0	70	130			

Sample ID	MB-28572	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	28572	RunNo:	38609					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206235	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		92.7	70	130			

Qualifiers:

* 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
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Page 8 of 10

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611464

11-Nov-16

Client: Yates Petroleum Corporation

Project: Vespa BME Federal #1

Sample ID	MB-28570	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	28570	RunNo:	38598					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206092	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	820		1000		82.3	68.3	144			

Sample ID	LCS-28570	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	28570	RunNo:	38598					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206093	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.8	74.6	123			
Surr: BFB	890		1000		88.6	68.3	144			

Sample ID	MB-28565	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	28565	RunNo:	38598					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206108	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	850		1000		84.9	68.3	144			

Sample ID	LCS-28565	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	28565	RunNo:	38598					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206109	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		91.0	68.3	144			

Qualifiers:

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

Page 9 of 10

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611464
11-Nov-16

Client: Yates Petroleum Corporation
Project: Vespa BME Federal #1

Sample ID	MB-28570	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID: 28570			RunNo: 38598					
Prep Date:	11/9/2016	Analysis Date: 11/10/2016			SeqNo: 1206124		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		96.9	80	120			

Sample ID	LCS-28570	SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID: 28570			RunNo: 38598					
Prep Date:	11/9/2016	Analysis Date: 11/10/2016			SeqNo: 1206125		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	113	75.2	115			
Toluene	1.0	0.050	1.000	0	103	80.7	112			
Ethylbenzene	1.0	0.050	1.000	0	100	78.9	117			
Xylenes, Total	3.0	0.10	3.000	0	99.5	79.2	115			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	MB-28565	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	28565	RunNo:	38598					
Prep Date:	11/9/2016	Analysis Date:	11/10/2016	SeqNo:	1206416	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID	LCS-28565		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	LCSS		Batch ID:	28565		RunNo:	38598				
Prep Date:	11/9/2016		Analysis Date:	11/10/2016		SeqNo:	1206417		Units: %Rec		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120				

- Qualifiers:
- * 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

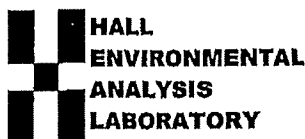
E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EOG/Yates

Work Order Number: 1611464

RcptNo: 1

Received by/date: AS 11/01/16

Logged By: Anne Thorne 11/1/2016 10:00:00 AM

Completed By: Anne Thorne 11/9/2016

Reviewed By: JS 11/09/16

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☒ No ☐ Not Present ☐
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 8.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

By Whom:

Regarding:

Client Instructions:

Date

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

October 25, 2017

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: VESPA BME FEDERAL #1H

Enclosed are the results of analyses for samples received by the laboratory on 10/18/17 16:11.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 10/18/2017
Reported: 10/25/2017
Project Name: VESPA BME FEDERAL #1H
Project Number: 30-005-29095
Project Location: CHAVES COUNTY

Sampling Date: 10/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: B1 - CONFIRMATION (H702831-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.054	0.050	10/21/2017	ND	1.71	85.3	2.00	1.15	
Toluene*	0.124	0.050	10/21/2017	ND	1.70	84.8	2.00	0.528	
Ethylbenzene*	0.052	0.050	10/21/2017	ND	1.70	84.9	2.00	1.24	
Total Xylenes*	<0.150	0.150	10/21/2017	ND	5.05	84.2	6.00	1.09	
Total BTEX	0.358	0.300	10/21/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 106 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/23/2017	ND	432	108	400	3.64	

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	10/20/2017	ND	214	107	200	2.10	
DRO >C10-C28	85.5	10.0	10/20/2017	ND	217	108	200	4.09	
EXT DRO >C28-C36	51.2	10.0	10/20/2017	ND					

Surrogate: 1-Chlorooctane 92.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 99.6 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 10/18/2017
Reported: 10/25/2017
Project Name: VESPA BME FEDERAL #1H
Project Number: 30-005-29095
Project Location: CHAVES COUNTY

Sampling Date: 10/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: B2 - CONFIRMATION (H702831-02)

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	10/21/2017	ND	1.71	85.3	2.00	1.15		
Toluene*	<0.050	0.050	10/21/2017	ND	1.70	84.8	2.00	0.528		
Ethylbenzene*	<0.050	0.050	10/21/2017	ND	1.70	84.9	2.00	1.24		
Total Xylenes*	<0.150	0.150	10/21/2017	ND	5.05	84.2	6.00	1.09		
Total BTEX	<0.300	0.300	10/21/2017	ND						

Surrogate: 4-Bromofluorobenzene (PII) 113 % 72-148

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	10/23/2017	ND	432	108	400	3.64		

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	10/20/2017	ND	214	107	200	2.10	
DRO >C10-C28	502	10.0	10/20/2017	ND	217	108	200	4.09	
EXT DRO >C28-C36	173	10.0	10/20/2017	ND					

Surrogate: 1-Chlorooctane 76.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 94.8 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 10/18/2017
Reported: 10/25/2017
Project Name: VESPA BME FEDERAL #1H
Project Number: 30-005-29095
Project Location: CHAVES COUNTY

Sampling Date: 10/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: N - CONFIRMATION (H702831-03)

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	10/21/2017	ND	1.71	85.3	2.00	1.15		
Toluene*	<0.050	0.050	10/21/2017	ND	1.70	84.8	2.00	0.528		
Ethylbenzene*	<0.050	0.050	10/21/2017	ND	1.70	84.9	2.00	1.24		
Total Xylenes*	<0.150	0.150	10/21/2017	ND	5.05	84.2	6.00	1.09		
Total BTEX	<0.300	0.300	10/21/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 108 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	10/23/2017	ND	432	108	400	3.64	

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	10/20/2017	ND	214	107	200	2.10	
DRO >C10-C28	1750	50.0	10/20/2017	ND	217	108	200	4.09	
EXT DRO >C28-C36	628	50.0	10/20/2017	ND					

Surrogate: 1-Chlorooctane 63.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 105 % 34.7-157

Cardinal Laboratories

* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 10/18/2017
Reported: 10/25/2017
Project Name: VESPA BME FEDERAL #1H
Project Number: 30-005-29095
Project Location: CHAVES COUNTY

Sampling Date: 10/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: W- CONFIRMATION (H702831-04)

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	10/24/2017	ND	1.83	91.4	2.00	0.101	QR-03	
Toluene*	<0.050	0.050	10/24/2017	ND	1.81	90.5	2.00	0.00944	QR-03	
Ethylbenzene*	<0.050	0.050	10/24/2017	ND	1.79	89.3	2.00	0.250	QR-03	
Total Xylenes*	<0.150	0.150	10/24/2017	ND	5.34	89.1	6.00	0.858		
Total BTEX	<0.300	0.300	10/24/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 109 % 72-148

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	10/23/2017	ND	432	108	400	3.64		

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	10/20/2017	ND	214	107	200	2.10	
DRO >C10-C28	<10.0	10.0	10/20/2017	ND	217	108	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	10/20/2017	ND					

Surrogate: 1-Chlorooctane 84.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 82.8 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 10/18/2017
Reported: 10/25/2017
Project Name: VESPA BME FEDERAL #1H
Project Number: 30-005-29095
Project Location: CHAVES COUNTY

Sampling Date: 10/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S- CONFIRMATION (H702831-05)

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	10/23/2017	ND	1.83	91.4	2.00	0.101		
Toluene*	<0.050	0.050	10/23/2017	ND	1.81	90.5	2.00	0.00944		
Ethylbenzene*	<0.050	0.050	10/23/2017	ND	1.79	89.3	2.00	0.250		
Total Xylenes*	<0.150	0.150	10/23/2017	ND	5.34	89.1	6.00	0.858		
Total BTEX	<0.300	0.300	10/23/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 99.6 % 72-148

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	10/23/2017	ND	432	108	400	3.64		

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	10/20/2017	ND	214	107	200	2.10		
DRO >C10-C28	<10.0	10.0	10/20/2017	ND	217	108	200	4.09		
EXT DRO >C28-C36	<10.0	10.0	10/20/2017	ND						

Surrogate: 1-Chlorooctane 83.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 81.8 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received: 10/18/2017
Reported: 10/25/2017
Project Name: VESPA BME FEDERAL #1H
Project Number: 30-005-29095
Project Location: CHAVES COUNTY

Sampling Date: 10/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: E - CONFIRMATION (H702831-06)

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	10/23/2017	ND	1.83	91.4	2.00	0.101		
Toluene*	<0.050	0.050	10/23/2017	ND	1.81	90.5	2.00	0.00944		
Ethylbenzene*	<0.050	0.050	10/23/2017	ND	1.79	89.3	2.00	0.250		
Total Xylenes*	<0.150	0.150	10/23/2017	ND	5.34	89.1	6.00	0.858		
Total BTEX	<0.300	0.300	10/23/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 96.5 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	10/23/2017	ND	432	108	400	3.64	

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	10/20/2017	ND	214	107	200	2.10	
DRO >C10-C28	<10.0	10.0	10/20/2017	ND	217	108	200	4.09	
EXT DRO >C28-C36	<10.0	10.0	10/20/2017	ND					

Surrogate: 1-Chlorooctane 84.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 83.9 % 34.7-157

Cardinal Laboratories

* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

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

Celey D. Keene, Lab Director/Quality Manager



ARDINAL LABORATORIES
101 East Marand Hobbs, NM 88240

(505) 393-2326 FAX (505) 393-2476

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Chase Settle

Company Name **EOG Resources, Inc.**

Company Address: 104 South 4th Street

City/State/Zip: Artesia, NM 88210

Telephone No: 575-748-4171

Sampler Signature:

e-mail:

Chase.Settle@eogresources.com

Fax No:

Report Format:

☐ Standard

TRRP

☐ NPDES

PO #: 205-0570

Project Name: **Vespa BME Federal #1H**
Project #: **30-005-29095**

Project #: 30-005-29095

Project Loc: Chaves County

Page 9 of 9

[illegible]

Appendix E

Liner Integrity Statement



EOG Resources, Inc.
Artesia Division Office
104 S. 4th Street
Artesia, N. M. 88210


October 26, 2017

Ms. Olivia Yu
NMOCD District I
1625 N. French Drive
Hobbs, NM 88240


Re: Vespa BME Federal #1H
30-005-29095
Section 12, T15S-R31E
2500' FSL & 200' FEL
Chaves County, New Mexico
1RP-4475

Ms. Yu,

EOG Y Resources, Inc. is submitting this letter as a statement to affirm that the liner in within the Vespa BME Federal #1H Battery is intact and will continue to contain liquids. At the time of the release, October 11, 2016, the impacted material on top of the liner was removed and sent to an NMOCD approved facility for disposal. The liner was then inspected by the undersigned foreman, Noel Gomez, for any defects before new gravel was installed to help protect the liner from wear and tear associated with being exposed to the natural elements and production activities.



Noel Gomez
Foreman Production Sr
EOG Resources, Inc.



Chase Settle
Rep Safety & Environmental II
EOG Y Resources, Inc.

Appendix F

Form C-141 Initial

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

State of New Mexico
Energy Minerals and Natural Resources

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

REVIEWED

By Kristen Lynch at 3:00 pm, Oct 20, 2016

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Yates Petroleum Corporation	Contact Chase Settle
Address 104 S. 4 th Street, Artesia, NM 88210	Telephone No. 575-748-4171
Facility Name Vespa BME Federal #1H	Facility Type Battery

Surface Owner Private	Mineral Owner Federal	API No. 30-005-29095
--------------------------	--------------------------	-------------------------

LOCATION OF RELEASE

Unit Letter I	Section 12	Township 15S	Range 31E	Feet from the 2500	North/South Line South	Feet from the 200	East/West Line East	County Chaves
------------------	---------------	-----------------	--------------	-----------------------	---------------------------	----------------------	------------------------	------------------

Latitude 33.03027 Longitude -103.76710

NATURE OF RELEASE

Type of Release Crude Oil and Produced Water	Volume of Release 15 B/O & 10 B/PW	Volume Recovered 7 B/O & 6 B/PW
Source of Release Horizontal Knockout	Date and Hour of Occurrence 10/11/2016; AM	Date and Hour of Discovery 10/11/2016; 10:30 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Kristen Lynch, Rick Flores	
By Whom? Robert Asher	Date and Hour 10/12/2016; 9:01 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.* N/A



Describe Cause of Problem and Remedial Action Taken.*

A collar failed on the horizontal knockout allowing the site glass nipple to be pushed out by pressure causing the release.

Describe Area Affected and Cleanup Action Taken.*

An approximate area of 54' X 40' was affected within the lined berm of the battery and 55' X 40' on the adjacent pad to the south of the battery between the battery and the gas meter house. Vacuum truck was contracted to recover standing fluid and a backhoe was dispatched to remove impacted soils. Excavated soils will be hauled to a NMOCD approved facility. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 0) a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL's a work plan will be submitted to the OCD. Depth to Ground Water: >100' (approximately 240', Section 12, T15S-R31E, per Trend Map), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0.

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

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Chase Settle	Approved by Environmental Specialist: 	
Title: NM Environmental Representative	Approval Date: 10/20/2016	Expiration Date: 12/20/2016
E-mail Address: csettle@yatespetroleum.com	NMOCD accepts discrete samples only Conditions of Approval: Work plan's submitted will be approved based upon not only BTEX & TPH, but also	
Date: 10/18/2016 Phone: 575-748-4171	Attached <input type="checkbox"/> 1RP 4475	

* Attach Additional Sheets If Necessary

chlorides. Please notify NMOCD prior to
sampling. Delineation plan must be
submitted no later than 11/20/2016.

nKL1629453480
pKL1629453878

Appendix G

Form C-141 Final

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised April 3, 2017

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company EOG Y Resources, Inc.	Contact Chase Settle
Address 104 S. 4 th Street, Artesia, NM 88210	Telephone No. 575-748-1471
Facility Name Vespa BME Federal #1H	Facility Type Battery

Surface Owner Fee	Mineral Owner Federal	API No. 30-005-29095
----------------------	--------------------------	-------------------------

LOCATION OF RELEASE

Unit Letter I	Section 12	Township 15S	Range 31E	Feet from the 2500	North/South Line South	Feet from the 200	East/West Line East	County Chaves
------------------	---------------	-----------------	--------------	-----------------------	---------------------------	----------------------	------------------------	------------------

Latitude 33.03027 Longitude -103.76710 NAD83

NATURE OF RELEASE

Type of Release Crude Oil and Produced Water	Volume of Release 15 B/O & 10 B/PW	Volume Recovered 7 B/O & 6 B/PW
Source of Release Horizontal Knockout	Date and Hour of Occurrence 10/11/2016; AM	Date and Hour of Discovery 10/11/2016; 10:30 a.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Kristen Lynch, Rick Flores	
By Whom? Robert Asher	Date and Hour 10/12/2016; 9:01 a.m.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*

A collar failed on the horizontal knockout allowing the site glass nipple to be pushed out by pressure causing the release.

Describe Area Affected and Cleanup Action Taken.*

An approximate area of 54' X 40' was affected within the lined berm of the battery and 55' X 40' on the adjacent pad to the south of the battery between the battery and the gas meter house. Vacuum truck was contracted to recover standing fluid and a backhoe was dispatched to remove impacted soils. Excavated soils will be hauled to a NMOCD approved facility. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 0) a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL's a work plan will be submitted to the OCD. Depth to Ground Water: >100' (approximately 230', Section 12, T15S-R31E, per NMOSE and USGS), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0. Based on enclosed analytical results, EOG Y Resources, Inc. requests closure.

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

Signature: <i>Chase Settle</i>	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Chase Settle	Approved by Environmental Specialist:	
Title: Safety & Environmental Representative II	Approval Date:	Expiration Date:
E-mail Address: Chase.Settle@eogresources.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: November 28, 2017 Phone: 575-748-1471		

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 54408

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 54408
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	None	10/6/2021