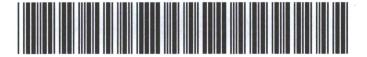


AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



App Number: pCS1731038891

144B - 13126
WILLIAMS FOUR CORNERS

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.

Form C-144 Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.

For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87505	to the appropriate NMOCD District Office.
TRAcking#	Pit, Below-Grade Tank, or	
	ative Method Permit or Closure	Plan Application
		OIL CONS. DIV DIST. 3
Domnit of	a pit or proposed alternative method	FFD 6 0 004C
	f a pit, below-grade tank, or proposed alterna	tive method FEB 0 8 2016
	ion to an existing permit/or registration an only submitted for an existing permitted of	or non-permitted nit helow-grade tank
or proposed alternative method	an only submitted for an existing permitted of	or non-permitted pit, below-grade tank,
	pplication (Form C-144) per individual pit, below	w-grade tank or alternative request
Please be advised that approval of this request does not rel environment. Nor does approval relieve the operator of its	ieve the operator of liability should operations result	t in pollution of surface water, ground water or the
Operator: Williams Four Corners LLC Address: 188 County Road 4900, Bloomfield, N	OGRID #:_	
Address: 188 County Road 4900, Bloomfield, N	M 87413	
21 6 CDD		
	OCD Permit Number:	
U/L or Qtr/Qtr SW/4 SW/4 Section 01	Township 30N Range 06W	County: Rio Arriba
API Number: U/L or Qtr/Qtr	Longitude -107.420244	NAD: □1927 ■ 1983
Surface Owner: Federal State Private Tr		
2.		
Pit: Subsection F, G or J of 19.15.17.11 NMAC		
Temporary: Drilling Workover		
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A	Multi-Well Fluid Management	Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness	mil LLDPE HDPE PVC (Other
☐ String-Reinforced		
Liner Seams:	Volume: b	bl Dimensions: L x W x D
3. Below-grade tank: Subsection I of 19.15.17.11	NMAC	
Volume: 165bbl Type of fluid		
Tank Construction material: Steel		
	Tielble eldervelle lines 6 inch lift and externation	avardam dant off
Secondary containment with leak detection Visible sidewalls and lines Visible sidewalls	_	
☐ Visible sidewalls and liner ☐ Visible sidewalls		
Liner type: Thicknessmil _	HDPE PVC Other	
4.		
Alternative Method:	i a contra la co	
Submittal of an exception request is required. Except	ions must be submitted to the Santa Fe Environm	nental Bureau office for consideration of approval.
5. Fencing: Subsection D of 19.15.17.11 NMAC (Appli	ies to permanent pits, temporary pits, and helow-	grade tanks)
Chain link, six feet in height, two strands of barbed		
institution or church)		
Four foot height, four strands of barbed wire evenl		
Alternate. Please specify eight foot fence surro	unds facility	

6. Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
☐ Screen ☐ Netting ☐ Other covered top	
■ Monthly inspections (If netting or screening is not physically feasible)	
7.	
Signs: Subsection C of 19.15.17.11 NMAC	
■ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
☐ Signed in compliance with 19.15.16.8 NMAC	
8.	
Variances and Exceptions:	
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance. Please check a box if one or more of the following is requested, if not leave blank:	
Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.	
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
Siting Criteria (regarding permitting): 19.15.17.10 NMAC	
Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accel material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	ptable source
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - INM Office of the State Engineer - iWATERS database search; IUSGS; ID Data obtained from nearby wells	Yes No
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks) - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. (Does not apply to below grade tanks) - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. (Does not apply to below grade tanks) - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured	
from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	Yes No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	☐ Yes ☐ No
application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No									
Temporary Pit Non-low chloride drilling fluid										
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site										
ithin 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image										
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, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No									
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes No									
Permanent Pit or Multi-Well Fluid Management Pit										
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No									
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No									
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No									
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No									
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC										
Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached. Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC A List of wells with approved application for permit to drill associated with the pit. Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Previously Approved Design (attach copy of design) API Number: or Permit Number: or Permit Number:	15.17.9 NMAC									

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the	documents are
Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Climatological Factors Assessment Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC Quality Control/Quality Assurance Construction and Installation Plan Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Nuisance or Hazardous Odors, including H₂S, Prevention Plan Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.	
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F	luid Management Pit
☐ Alternative Proposed Closure Method: Waste Excavation and Removal ☐ Waste Removal (Closed-loop systems only) ☐ On-site Closure Method (Only for temporary pits and closed-loop systems) ☐ In-place Burial ☐ On-site Trench Burial ☐ Alternative Closure Method	
14. Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be	attached to the
closure plan. Please indicate, by a check mark in the box, that the documents are attached. ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	
15.	
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable south provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. In 19.15.17.10 NMAC for guidance.	
Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	Yes No

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality										
	☐ Yes ☐ No									
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division										
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 										
Within a 100-year floodplain FEMA map	☐ Yes ☐ No ☐ Yes ☐ No									
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plants are check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17. Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19. Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannum Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	11 NMAC 15.17.11 NMAC									
Operator Application Certification: I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and believed.	ief.									
Name (Print): Title:										
Signature: Date:										
e-mail address: Telephone:										
18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)	, ,									
OCD Representative Signature: Approval Date:	6/17									
Title: Frontsonmental Spec OCD Permit Number: 13126										
19. Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date: 02/03/20	complete this									
Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	complete this									

22.	
Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure report belief. I also certify that the closure complies with all applicable closure requirements	
Name (Print): Kelsey Christiansen	Title: Environmental Specialist
Signature: Jely Moda	Date: 02/03/16
e-mail address: kelsey.christiansen@williams.com	Telephone: (505) 632-4606



Williams Four Corners LLC Below Grade Tank Closure Report Facility Name: 31-6 CDP

The following provides information related to the retirement and closure of the below grade tank (BGT) at the named location. All work was performed in accordance with Rule 19.15.17.13 NMAC and was consistent with the Williams BGT Closure Plan approved by NMOCD.

Requirement: Provide notices to NMOCD and landowner prior to closure actions.

Action: Notification made to landowner by mail and to NMOCD Aztec District Office by either mail (included with C-144) or by email.

Requirement: Eliminate discharge to BGT and remove free-standing liquids from BGT and or containment.

<u>Action:</u> Discharge to the BGT was eliminated and liquids, when present, were removed by a licensed hauler and taken to a NMOCD-permitted facility listed in the aforementioned closure plan.

Requirement: Remove ancillary equipment including piping, liner material, and fencing.

<u>Action:</u> Piping, liner material, and fencing were removed in advance or at the time of BGT retirement work. Scrap steel was recycled or placed in a Williams-owned storage area to allow evaluation for final disposition.

Requirement: Sample and test soils beneath the BGT to determine if there was hydrocarbon impact.

<u>Action:</u> Soils were sampled and analyzed for TPH, BTEX and chlorides. Results are attached to the C-144 Closure Form and are part of the closure documentation.

Requirement: Address contamination consistent with the Closure Plan or Remedial Action Plan/Protocol.

Action: Contaminated soil was encountered during the BGT, and was removed and disposed of at approved disposal facility.

Requirement: Backfill containment/excavation with acceptably clean materials and return area to grade such that ponding and erosion are mitigated.

Action: BGT's were replaced with similar tanks while the facility is still in operation, backfill will occur once the new BGTs are no longer necessary and removed.

Requirement: Reclaim and re-seed the area consistent with the Pit Rule and Closure Plan criteria.

Action: This requirement was not completed and will be done so once the facility is out of operation and all equipment removed..

Any additional work performed and not described herein was completed consistent with the BGT Closure Plan and/or applicable NMOCD requirements. Further information is provided in the C-144 Closure Form as specified in the Pit Rule.

Ruybalid, Tristen

From:

Christiansen, Kelsey

Sent:

Tuesday, November 24, 2015 2:19 PM

To:

Smith, Cory, EMNRD; kdiemer@blm.gov

Cc:

Ruybalid, Tristen; Webre, Matt; Rothlisberger, Vern

Subject:

BGT Removal Notification,

Attachments:

BGT Removal Notification, 31-6 CDP.pdf

Cory,

Pursuant to the requirements of the New Mexico Oil Conservation District (OCD), Williams hereby provides notice of the intent to remove two BGT's at the following location:

Willaims 31-6 CDP

Section 07, Township 31N, Range 11W

Williams operated the BGT to capture liquids from the 31-6 CDP operating system. The BGT's (165 bbl Used Oil and 165 bbl Waste Water Tanks) will be replaced with like kind tanks once sample results have been determined to meet standards.

BGT removal is schedule to begin on Monday, November 30th, 2015.

Katherina,

A hardcopy of the attached notification will be mailed to your office today.

Please contact me if you have any questions regarding the proposed BGT removals and/or schedule.

-Kelsey

Kelsey Christiansen | Environmental Specialist, Environmental Services - FCA | Operational Excellence | Williams O: 505-632-

4606 | C: 505-215-7433 kelsey.christiansen@williams.com

"Achieving environmental excellence through stewardship, common sense, and innovation for our company, customers and communities."



Environmental Affairs 188 County Road 4900 Bloomfield, NM 87413 505/632-4600 505/632-4781 Fax

November 24, 2015

Ms. Katherina E Diemer USBLM – Farmington Field Office 6251 College Blvd. Suite A Farmington, New Mexico 87402

RE: Notification of Below Ground Tank Closure - 31-6 CDP

Dear Ms. Diemer:

Pursuant to the requirements of the New Mexico Oil Conservation Division (OCD), Williams hereby provides notice of the intent to close two BGT's at the following location:

31-6 CDP

SW¹/₄ SW¹/₄, S01, T30N, R06W

The BGT's will be replaced with another like kind tank.

Lelany Chrodium

The BGT will be closed consistent with the Williams BGT Closure Plan that was approved by the NMOCD on October 12, 2015 via email response from Mr. Cory Smith. Removal of the BGT's is schedule to commence on November 30, 2015.

You may contact me at (505) 632-4606 with any questions regarding this notification.

Sincerely,

Kelsey Christiansen

Environmental Specialist



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

OrderNo.: 1512181

December 07, 2015

Kelsey Christiansen Williams Field Services 188 Co. Rd 4900 Bloomfield, NM 87413 TEL: FAX

RE: 31-6 Tank Change Out

Dear Kelsey Christiansen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/4/2015 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 qualifers 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,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1512181

Date Reported: 12/7/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Client Sample ID: 31-6 Tank Confirmation

Project: 31-6 Tank Change Out

Collection Date: 12/3/2015 11:48:00 AM

Lab ID: 1512181-001 **Matrix:** MEOH (SOIL)

Received Date: 12/4/2015 8:00:00 AM

Analyses	Result	RL (Qual Units	DF Date Analyzed	l Batch
EPA METHOD 418.1: TPH				A	Analyst: TOM
Petroleum Hydrocarbons, TR	52	20	mg/Kg	1 12/4/2015 10:04	:00 AM 22635
EPA METHOD 300.0: ANIONS				A	Analyst: LGT
Chloride	ND	30	mg/Kg	20 12/4/2015 12:29	:35 PM 22638
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S		A	Analyst: KJH
Diesel Range Organics (DRO)	10	9.6	mg/Kg	1 12/4/2015 10:43	:16 AM 22634
Surr: DNOP	98.8	70-130	%REC	1 12/4/2015 10:43	:16 AM 22634
EPA METHOD 8015D: GASOLINE RANG	Ε			A	Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1 12/4/2015 11:20	:45 AM A30626
Surr: BFB	94.8	66.2-112	%REC	1 12/4/2015 11:20	:45 AM A30626
EPA METHOD 8021B: VOLATILES				A	Analyst: NSB
Benzene	ND	0.041	mg/Kg	1 12/4/2015 11:20	:45 AM B30626
Toluene	ND	0.041	mg/Kg	1 12/4/2015 11:20	:45 AM B30626
Ethylbenzene	ND	0.041	mg/Kg	1 12/4/2015 11:20	:45 AM B30626
Xylenes, Total	ND	0.082	mg/Kg	1 12/4/2015 11:20	:45 AM B30626
Surr: 4-Bromofluorobenzene	121	80-120	S %REC	1 12/4/2015 11:20	:45 AM B30626

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

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 Page 1 of 7
- P Sample pH Not In Range
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1512181

07-Dec-15

Client:

Williams Field Services

Project:

31-6 Tank Change Out

Sample ID MB-22638

SampType: MBLK

TestCode: EPA Method 300.0: Anions

LowLimit

Client ID:

Batch ID: 22638

SPK value SPK Ref Val

RunNo: 30634

Units: mg/Kg

Prep Date: Analyte

12/4/2015

Analysis Date: 12/4/2015

SeqNo: 936263

HighLimit

%RPD **RPDLimit**

Qual

Chloride

ND 1.5

Sample ID LCS-22638

SampType: LCS

TestCode: EPA Method 300.0: Anions

%REC

Client ID: LCSS Prep Date: 12/4/2015 Batch ID: 22638

RunNo: 30634

Analysis Date: 12/4/2015

SeqNo: 936264

Units: mg/Kg

Analyte

1.5

PQL

SPK value SPK Ref Val %REC

LowLimit

HighLimit 110

Chloride

15.00

0 94.6

%RPD **RPDLimit**

Qual

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

RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

E Value above quantitation range

J Analyte detected below quantitation limits

Page 2 of 7

P Sample pH Not In Range

Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1512181

07-Dec-15

Client:

Williams Field Services

Project:

31-6 Tank Change Out

Sample ID MB-22635

SampType: MBLK

TestCode: EPA Method 418.1: TPH

Client ID: PBS

Batch ID: 22635

RunNo: 30622

Units: mg/Kg

Analyte

Prep Date:

12/4/2015

Analysis Date: 12/4/2015 PQL

20

SeqNo: 935345 %REC

HighLimit

RPDLimit

Qual

Petroleum Hydrocarbons, TR Sample ID LCS-22635 ND

SampType: LCS

TestCode: EPA Method 418.1: TPH

LowLimit

Client ID: LCSS

Batch ID: 22635

RunNo: 30622

Prep Date: Analyte

12/4/2015

Analysis Date: 12/4/2015 PQL

SeqNo: 935346

Units: mg/Kg

%REC

HighLimit

116

Petroleum Hydrocarbons, TR

Result 99

SPK value SPK Ref Val 20 100.0

99.3

LowLimit 83.6 %RPD **RPDLimit** Qual

Sample ID LCSD-22635

SampType: LCSD

Result

TestCode: EPA Method 418.1: TPH

Client ID: LCSS02 Batch ID: 22635

RunNo: 30622

Units: mg/Kg

Prep Date: 12/4/2015 Analysis Date: 12/4/2015

SeqNo: 935347

HighLimit

RPDLimit

Qual

Analyte

PQL SPK value SPK Ref Val

0

%REC 101

%RPD 1.35

%RPD

Petroleum Hydrocarbons, TR

100 20

100.0

SPK value SPK Ref Val

LowLimit 83.6

116

S

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RPD outside accepted recovery limits R

В Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits Page 3 of 7

P Sample pH Not In Range

Reporting Detection Limit RL

Qualifiers:

% Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

WO#:

1512181

07-Dec-15

Client:

Williams Field Services

Project:

31-6 Tank Change Out

Sample ID MB-22634 Client ID: **PBS**

SampType: MBLK

TestCode: EPA Method 8015M/D: Diesel Range Organics

Batch ID: 22634

PQL

10

RunNo: 30624

Prep Date: 12/4/2015 Analysis Date: 12/4/2015

SeqNo: 935424

%REC

Units: mg/Kg

130

HighLimit

Analyte Diesel Range Organics (DRO)

ND 9.8 SPK value SPK Ref Val 10.00

RPDLimit Qual

Qual

Surr: DNOP

SampType: LCS

TestCode: EPA Method 8015M/D: Diesel Range Organics

%RPD

Sample ID LCS-22634 Client ID: LCSS

Prep Date:

12/4/2015

Batch ID: 22634

RunNo: 30624

97.7

SeqNo: 935425

Units: mg/Kg

139

130

Analyte

Analysis Date: 12/4/2015

SPK value SPK Ref Val

LowLimit

70

HighLimit %RPD **RPDLimit**

Result PQL %REC LowLimit Diesel Range Organics (DRO) 45 10 50.00 89.6 57.4 Surr: DNOP 4.8 5.000 96.2 70

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 4 of 7

- P Sample pH Not In Range
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

RPDLimit

1512181

07-Dec-15

Client:

Williams Field Services

Project:

31-6 Tank Change Out

Sample ID 5ML RB

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: A30626

PQL

5.0

RunNo: 30626

Prep Date:

Surr: BFB

Analysis Date: 12/4/2015

SeqNo: 935784

SPK value SPK Ref Val %REC LowLimit

Units: mg/Kg

Qual

Analyte Gasoline Range Organics (GRO)

ND 850

Result

1000

84.6

112

HighLimit

Sample ID 2.5UG GRO LCS

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

LCSS

Batch ID: A30626

RunNo: 30626

Prep Date:

Analysis Date: 12/4/2015

Units: mg/Kg

Analyte

Result PQL

SeqNo: 935785

RPDLimit Qual

Gasoline Range Organics (GRO) Surr: BFB

23 1000

Result

900

SPK value SPK Ref Val 5.0 25.00

%REC 93.4

79.6 66.2

LowLimit

66.2

HighLimit %RPD 122

%RPD

1000 SampType: MBLK

102

TestCode: EPA Method 8015D: Gasoline Range

112

Client ID:

Sample ID MB-22611

Sample ID LCS-22611

PBS

12/3/2015

Batch ID: 22611

RunNo: 30626

Units: %REC

112

Analyte

Analysis Date: 12/4/2015

SeqNo: 935788 %REC

90.5

LowLimit HighLimit %RPD

RPDLimit Qual

Surr: BFB

Prep Date:

SampType: LCS

Analysis Date: 12/4/2015

PQL

TestCode: EPA Method 8015D: Gasoline Range

RunNo: 30626

66.2

Prep Date:

Client ID:

12/3/2015

LCSS

Batch ID: 22611

SPK value SPK Ref Val

SeqNo: 935789

Units: %REC

Qual

Analyte

Result

SPK value SPK Ref Val

1000

%REC LowLimit

Surr: BFB

1100

1000

111

66.2

HighLimit 112

RPDLimit %RPD

Qualifiers:

H

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix S

Holding times for preparation or analysis exceeded

- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Detection Limit

Page 5 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#:

1512181

07-Dec-15

Client:

Williams Field Services

Project:

31-6 Tank Change Out

Sample ID 5ML RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method 8021B: Volatiles											
Client ID: PBS	Batch	n ID: B3	0626	F	RunNo: 3	0626											
Prep Date:	Analysis D)ate: 12	2/4/2015	5	SeqNo: 935815			Units: mg/Kg									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit %RPI		RPDLimit	Qual							
Benzene	ND	0.050															
Toluene	ND	0.050															
Ethylbenzene	ND	0.050															
Xylenes, Total	ND	0.10															
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120										

Sample ID 100NG BTEX L	CS Samp	S SampType: LCS TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batc	Batch ID: B30626 RunNo: 30626								
Prep Date:	Analysis [Date: 12	ate: 12/4/2015 SeqNo: 935816				Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.050	1.000	0	98.2	80	120			
Toluene	0.92	0.050	1.000	0	91.6	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.6	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.6	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		117	80	120			

Sample ID 1512181-001AN	001AMS SampType: MS TestCode: EPA Method 8021B: Volatiles									
Client ID: 31-6 Tank Con	firmat Batcl	n ID: B3	0626	F	RunNo: 3					
Prep Date:	8	SeqNo: 9	35817	Units: mg/k	(g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.041	0.8217	0	95.6	69.6	136			
Toluene	0.74	0.041	0.8217	0	90.7	76.2	134			
Ethylbenzene	0.80	0.041	0.8217	0	97.9	75.8	137			
Xylenes, Total	2.4	0.082	2.465	0.01693	94.9	78.9	133			
Surr: 4-Bromofluorobenzene	1.2		0.8217		145	80	120			S

Sample ID 1512181-001AM	ISD SampT	mpType: MSD TestCode: EPA Method 8021B: Volatiles								
Client ID: 31-6 Tank Conf	irmat Batch	n ID: B3	B30626 RunNo: 30626							
Prep Date:	Prep Date: Analysis Date: 12/4/2015				SeqNo: 9	35818	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.041	0.8217	0	95.7	69.6	136	0.136	20	
Toluene	0.76	0.041	0.8217	0	92.3	76.2	134	1.79	20	
Ethylbenzene	0.81	0.041	0.8217	0	99.0	75.8	137	1.12	20	
Xylenes, Total	2.4	0.082	2.465	0.01693	96.5	78.9	133	1.66	20	
Surr: 4-Bromofluorobenzene	1.2		0.8217		140	80	120	0	0	S

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
- Page 6 of 7

- P Sample pH Not In Range
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1512181

07-Dec-15

Client:

Williams Field Services

Project:

31-6 Tank Change Out

Sample ID MB-22611

SampType: MBLK

TestCode: EPA Method 8021B: Volatiles

Client ID:

PBS

Batch ID: 22611

RunNo: 30626

12/3/2015

PQL

Prep Date:

Analysis Date: 12/4/2015

SeqNo: 935819

Units: %REC

120

%RPD

%RPD

Analyte Surr: 4-Bromofluorobenzene Result 1.2 SPK value SPK Ref Val %REC

LowLimit 117

HighLimit

Qual

Sample ID LCS-22611

SampType: LCS

TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS

Batch ID: 22611

RunNo: 30626

Prep Date:

12/3/2015

Analysis Date: 12/4/2015

SeqNo: 935820

Units: %REC

HighLimit

Qual

Analyte

Result

SPK value SPK Ref Val %REC

1.000

132

RPDLimit

RPDLimit

S

80

Surr: 4-Bromofluorobenzene

1.3

1.000

LowLimit

120

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank B

E Value above quantitation range

Analyte detected below quantitation limits

Page 7 of 7

P Sample pH Not In Range

Reporting Detection Limit



Hall Environmental Analysis Laboratory 4901 Huwkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107
Webvite: www.hallenvironmental.com

Sample Log-In Check List

Website: www.hallenvironmental.com ReptNo: 1 WILLIAMS FIELD SERVI Work Order Number: 1512181 Client Name: 12/04/15 Received by/date: Celin Som Logged By: 12/4/2015 8:00:00 AM Celina Sessa Celin Som Completed By: Celina Sessa 12/4/2015 9;04:28 AM 12 10415 Reviewed By: Chain of Custody Not Present V Yes 1 Custody seals intact on sample bottles? No L Not Present Yes V 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In No _ NA | Yes V 4. Was an attempt made to cool the samples? No 🗌 NA T 5. Were all samples received at a temperature of >0° C to 6.0°C No 🗌 Yes V Sample(s) in proper container(s)? 7. Sufficient sample volume for indicated test(s)? Yes V 8. Are samples (except VOA and ONG) properly preserved? No V NA 🗌 Yes 9. Was preservative added to bottles? No VOA Vials No . Yes 10. VOA vials have zero headspace? Yes 11. Were any sample containers received broken? # of preserved bottles checked No 🗆 for pH: Yes V 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No . 13. Are matrices correctly identified on Chain of Custody? No [14. Is it clear what analyses were requested? No 🗌 Checked by: Yes V 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) NA V Yes _ No 🗌 16. Was client notified of all discrepancies with this order? Date Person Notified: eMail Phone Fax By Whom: Via: In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp *C | Condition | Seal Intact | Seal No | Seal Date

1.3

Good

	Chair-Or-Custouv Necoru				Turn-Around Time:				HALL ENVIRONMENTAL												
lient:	WF.	5		☐ Standard	☑ Rush	Same Da													TO		
				Project Name):	3		www.hallenvironmental.com													
lailing	Address	188	CR 4900	31-1 3	TINK C	6 cars out		4901 Hawkins NE - Albuquerque, NM 87109													
RI	06 l		I NM 874/3	Project Name: 31-6 Fank Chense out Project #:				Tel. 505-345-3975 Fax 505-345-4107													
			15-7433					Analysis Request													
			Christian Quillian ca	Project Manager:				(yl	(P)					04)							
A/QC	Package:								Gas on Gas on (O / MR)												
] Stan	dard		☐ Level 4 (Full Validation)	Kelseychristicns on					8			SIMS)		Ъ,	2 P(
ccredi				Sampler: Morgan Killion					0	=	7	079		NO	808						Î
NEL		□ Othe	r	On Ice:				+	RO	418	504	r 82	S	O3	188		(A)				or
EDD	(Type)_	17411		Sample Tem	perature: 1,5	S	1 24	18	3 (G	po	po ;	00	etal	N,N	side	8)-i	3			5
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + M TBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270	RCRA 8 Metals	Anions (F,CI,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)	Chlorde			Air Bubbles (Y or N)
13/15	1/:48	661	31-6 TANK CONFIRMATION	1-402	Carl		X	Ш.	$\sqrt{}$	$\frac{1}{2}$			<u> </u>	1	ω	ω_	ω	X		+-1	1
110	7.78	3011	CONFIRMATION	1 702	CUI	-001	-			-				_			\vdash	,	_		-
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