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-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.

16038

Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action:
- ☐ Below grade tank registration
- ☐ Permit of a pit or proposed alternative method
- ■ Closure of a pit, below-grade tank, or proposed alternative method
- ☐ Modification to an existing permit/or registration
- ☐ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: Williams Four Corners LLC OGRID #:
Address: 1755 Arroyo Dr., Bloomfield, NM 87413
Facility or well name: Helen Jackson 2A
API Number: 30-045-23294 OCD Permit Number:
U/L or Qtr/Qtr SW/4 SE/4 Section 33 Township 29N Range 9W County: San Juan
Center of Proposed Design: Latitude 36.677695 Longitude -107.785079 NAD: ☐ 1927 ■ 1983
Surface Owner: ■ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

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: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L_____ x W_____ x D_____

3.
■ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: 30 bbl Type of fluid: Produced water
Tank Construction material: Steel
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
■ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness 6 mil ■ HDPE ☐ PVC ☐ Other _____

4.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.
Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*
☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*
☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
■ Alternate. Please specify 4 foot Hog Wire

22

1755 Arroyo Dr.
Bloomfield, NM 87413
(505) 632-4700
Fax (505) 632-4782

Via US Mail

March 28, 2017

Mr. Cory Smith
Environmental Specialist
New Mexico Oil Conservation Division
1000 Rio Brazos
Aztec, NM 87410

Re: C-144 – Helen Jackson Below-Grade Tank Closure Report

Dear Mr. Smith,

Please find attached the C-144 and supplemental documentation for the Williams Four Corners LLC (WFC) below-grade tank (BGT) closure. The tank was removed from the Helen Jackson 2A well pad located in Section 33, Township 29 North, Range 9 West in San Juan County, New Mexico on February 24, 2017.

Best Regards,

Michael Hannan, PE
Engineer, Sr.

6.
Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

■ Screen ☐ Netting ☐ Other_____

☐ 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.

9.
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 acceptable source material are provided below. **Siting criteria does not apply to drying pads or above-grade tanks.**

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - ■ NM Office of the State Engineer - iWATERS database search; ■ USGS; ☐ Data obtained from nearby wells	☐ Yes ■ No ☐ NA
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 application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
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	☐ 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 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

10.

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

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

11.

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 documents are 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 19.15.17.9 NMAC 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: _____

12.
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 attached.

- ☐ 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 H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.
Proposed Closure: 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 Fluid 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 source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 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 ☐ NA
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 ☐ NA
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	☐ Yes ☐ No
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. - 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	☐ Yes ☐ No
Within an unstable area. - 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. - FEMA map	☐ Yes ☐ No

16.
On-Site 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.***

- ☐ 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 19.15.17.11 NMAC
- ☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ 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 cannot be achieved)
- ☐ 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

17.
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 belief.

Name (Print): Michael Hannan Title: Engineer, Sr.

Signature: Date: 03/28/2017

e-mail address: michael.hannan@williams.com Telephone: 505-632-4807

18.
OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: **Approval Date:** 8/23/17

Title: Environmental Spec. **OCD Permit Number:**

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. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

■ **Closure Completion Date:** 02/24/2017

20.
Closure Method:

■ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

21.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

- ■ Proof of Closure Notice (surface owner and division)
- ☐ Proof of Deed Notice (required for on-site closure for private land only)
- ☐ Plot Plan (for on-site closures and temporary pits)
- ■ Confirmation Sampling Analytical Results (if applicable)
- ☐ Waste Material Sampling Analytical Results (required for on-site closure)
- ☐ Disposal Facility Name and Permit Number
- ☐ Soil Backfilling and Cover Installation
- ☐ Re-vegetation Application Rates and Seeding Technique
- ■ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude Longitude NAD: ☐1927 ☐ 1983

22.
Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Michael Hannan Title: Engineer, Sr.

Signature: Date: 03/28/2017

e-mail address: michael.hannan@williams.com Telephone: (505) 632-4807

Williams Four Corners LLC
Below Grade Tank Closure Report
Facility Name: Helen Jackson 2A
API Number: 3004523294

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 and to NMOCD Aztec District Office by email.

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

Action: 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.

Action: 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.

Action: 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 removal, and was removed and disposed of at an approved disposal facility.

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

Action: The BGT was replaced with a similar tank while the facility is still in operation. Backfill will occur once the new BGT is no longer necessary and is removed.

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

Action: This requirement was not completed as the BGT was located on an active right-of-way (ROW). As stated in the approved plan, this requirement is deferred pending further well production and/or subsequent actions of the leaseholder and will be addressed when the well site is reclaimed.

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.

From:	Thomas, Leigh
To:	Hannan, Michael
Cc:	Templeton, Charles; Lucero, Christopher; Fields, Vanessa, EMNRD; Smith, Cory, EMNRD
Subject:	[EXTERNAL] Re: Notice of BGT Removal - Helen Jackson 2A
Date:	Wednesday, February 22, 2017 8:14:36 AM
Attachments:	image020.png image016.png image001.png image018.png image017.png image021.png image019.png

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Mike,

The BLM approves Williams to move forward with this project.

Thank you
Whitney

On Tue, Feb 21, 2017 at 12:30 PM, Hannan, Michael <Michael.Hannan@williams.com> wrote:

> Whitney,
>
> We are trying to get a variance to the 72-hour notification to replace a BGT at Helen Jackson 2A. As you know, weather conditions have been difficult and so when sites can be accessed is not predictable. This can make work planning and thus the 72-hour notification challenging.
>
> Please let us know as soon as possible if we have approval to move forward with the BGT replacement, as we'd like to complete the work on Wednesday February 22, 2017 (tomorrow).
>
> If you concur, please consider this our official notification.
>
> Williams hereby provides notice of the intent to replace the below-grade tank (BGT) at the following location:
>
> Well Name: Helen Jackson 2A
>
> API No: 30-045-23294
>
> Location: SW¼ SE¼, S33, T29N, R09W

Please contact me if you have any questions regarding the proposed BGT replacement schedule.

Regards,

Mike

Michael S. Hannan, P.E. | Williams | Engineer, Sr. | FCA Environmental Services

Office: 505-632-4807 | Cell: 505-215-7274 | 1755 Arroyo Dr., Bloomfield, NM 87402

--

Whitney Thomas
Natural Resource Specialist
Farmington Field Office
6251 North College Boulevard
Suite A
Farmington, NM 87402
Office: 505-564-7680
Cell: 505-635-9796
email: wthomas@blm.gov

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

February 27, 2017

Mike Hannan
Williams Field Services
1755 Arroyo Dr.,
Bloomfield, NM 87413
TEL: (505) 632-4442
FAX

RE: Helen Jackson 2A OrderNo.: 1702A87

Dear Mike Hannan:

Hall Environmental Analysis Laboratory received 2 sample(s) on 2/24/2017 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
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1702A87**
Date Reported: **2/27/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Helen Jackson 2A
Lab ID: 1702A87-001
Matrix: MEOH (SOIL)
Client Sample ID: Helen Jackson 2A Sidewall
Collection Date: 2/23/2017 11:15:00 AM
Received Date: 2/24/2017 8:08:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	2/24/2017 10:00:00 AM	30377
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	210	30		mg/Kg	20	2/24/2017 10:29:13 AM	30388
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	2/24/2017 11:04:16 AM	D40977
Surr: BFB	91.2	70-130		%Rec	5	2/24/2017 11:04:16 AM	D40977
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/24/2017 9:34:33 AM	30376
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/24/2017 9:34:33 AM	30376
Surr: DNOP	95.5	70-130		%Rec	1	2/24/2017 9:34:33 AM	30376
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.089		mg/Kg	5	2/24/2017 11:04:16 AM	B40977
Toluene	ND	0.18		mg/Kg	5	2/24/2017 11:04:16 AM	B40977
Ethylbenzene	ND	0.18		mg/Kg	5	2/24/2017 11:04:16 AM	B40977
Xylenes, Total	ND	0.36		mg/Kg	5	2/24/2017 11:04:16 AM	B40977
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	5	2/24/2017 11:04:16 AM	B40977
Surr: 4-Bromofluorobenzene	91.2	70-130		%Rec	5	2/24/2017 11:04:16 AM	B40977
Surr: Dibromofluoromethane	102	70-130		%Rec	5	2/24/2017 11:04:16 AM	B40977
Surr: Toluene-d8	97.3	70-130		%Rec	5	2/24/2017 11:04:16 AM	B40977

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

Analytical Report
Lab Order **1702A87**
Date Reported: **2/27/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Helen Jackson 2A
Lab ID: 1702A87-002 **Matrix:** MEOH (SOIL)

Client Sample ID: Helen Jackson 2A Bottom
Collection Date: 2/23/2017 11:20:00 AM
Received Date: 2/24/2017 8:08:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	130	19		mg/Kg	1	2/24/2017 10:00:00 AM	30377
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	140	30		mg/Kg	20	2/24/2017 10:41:38 AM	30388
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	65	19		mg/Kg	5	2/24/2017 11:32:54 AM	D40977
Surr: BFB	94.1	70-130		%Rec	5	2/24/2017 11:32:54 AM	D40977
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	68	9.2		mg/Kg	1	2/24/2017 10:01:51 AM	30376
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/24/2017 10:01:51 AM	30376
Surr: DNOP	99.8	70-130		%Rec	1	2/24/2017 10:01:51 AM	30376
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.093		mg/Kg	5	2/24/2017 11:32:54 AM	B40977
Toluene	ND	0.19		mg/Kg	5	2/24/2017 11:32:54 AM	B40977
Ethylbenzene	ND	0.19		mg/Kg	5	2/24/2017 11:32:54 AM	B40977
Xylenes, Total	1.9	0.37		mg/Kg	5	2/24/2017 11:32:54 AM	B40977
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	5	2/24/2017 11:32:54 AM	B40977
Surr: 4-Bromofluorobenzene	91.1	70-130		%Rec	5	2/24/2017 11:32:54 AM	B40977
Surr: Dibromofluoromethane	101	70-130		%Rec	5	2/24/2017 11:32:54 AM	B40977
Surr: Toluene-d8	99.5	70-130		%Rec	5	2/24/2017 11:32:54 AM	B40977

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#: **1702A87**

27-Feb-17

Client: Williams Field Services

Project: Helen Jackson 2A

Sample ID	**MB-30388**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**30388**	RunNo:	**40976**					
Prep Date:	**2/24/2017**	Analysis Date:	**2/24/2017**	SeqNo:	**1283735**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-30388**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**30388**	RunNo:	**40976**					
Prep Date:	**2/24/2017**	Analysis Date:	**2/24/2017**	SeqNo:	**1283736**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1702A87**

27-Feb-17

Client: Williams Field Services

Project: Helen Jackson 2A

Sample ID **MB-30377** SampType: **MBLK** TestCode: **EPA Method 418.1: TPH**

Client ID: **PBS** Batch ID: **30377** RunNo: **40966**

Prep Date: **2/24/2017** Analysis Date: **2/24/2017** SeqNo: **1283463** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID **LCS-30377** SampType: **LCS** TestCode: **EPA Method 418.1: TPH**

Client ID: **LCSS** Batch ID: **30377** RunNo: **40966**

Prep Date: **2/24/2017** Analysis Date: **2/24/2017** SeqNo: **1283464** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	108	61.7	138			

Sample ID **LCSD-30377** SampType: **LCSD** TestCode: **EPA Method 418.1: TPH**

Client ID: **LCSS02** Batch ID: **30377** RunNo: **40966**

Prep Date: **2/24/2017** Analysis Date: **2/24/2017** SeqNo: **1283465** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	107	61.7	138	1.22	20	

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#: **1702A87**

27-Feb-17

Client: Williams Field Services

Project: Helen Jackson 2A

Sample ID **LCS-30376**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **30376**			RunNo: **40959**					
Prep Date: **2/24/2017**	Analysis Date: **2/24/2017**			SeqNo: **1283317**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.3	63.8	116			
Surr: DNOP	4.9		5.000		97.6	70	130			

Sample ID **MB-30376**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **30376**			RunNo: **40959**					
Prep Date: **2/24/2017**	Analysis Date: **2/24/2017**			SeqNo: **1283318**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	70	130			

Sample ID **1702A87-001AMS**	SampType: **MS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **Helen Jackson 2A S**	Batch ID: **30376**			RunNo: **40960**					
Prep Date: **2/24/2017**	Analysis Date: **2/24/2017**			SeqNo: **1283474**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	9.8	49.21	5.697	106	51.6	130			
Surr: DNOP	4.8		4.921		98.2	70	130			

Sample ID **1702A87-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **Helen Jackson 2A S**	Batch ID: **30376**			RunNo: **40960**					
Prep Date: **2/24/2017**	Analysis Date: **2/24/2017**			SeqNo: **1283513**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	9.1	45.62	5.697	103	51.6	130	8.69	20	
Surr: DNOP	4.5		4.562		99.7	70	130	0	0	

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#: **1702A87**

27-Feb-17

Client: Williams Field Services

Project: Helen Jackson 2A

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **B40977**	RunNo: **40977**
Prep Date:	Analysis Date: **2/24/2017**	SeqNo: **1283902** 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: 1,2-Dichloroethane-d4	0.53		0.5000		106	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.0	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.50		0.5000		99.9	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **B40977**	RunNo: **40977**
Prep Date:	Analysis Date: **2/24/2017**	SeqNo: **1283903** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	105	70	130			
Toluene	0.98	0.050	1.000	0	98.5	70	130			
Surr: 1,2-Dichloroethane-d4	0.55		0.5000		110	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.4	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		100	70	130			
Surr: Toluene-d8	0.49		0.5000		98.4	70	130			

Sample ID **1702a87-001ams**	SampType: **MS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **Helen Jackson 2A S**	Batch ID: **B40977**	RunNo: **40977**
Prep Date:	Analysis Date: **2/24/2017**	SeqNo: **1283904** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.6	0.089	3.558	0	102	61.9	146			
Toluene	3.4	0.18	3.558	0	95.2	70	130			
Surr: 1,2-Dichloroethane-d4	1.9		1.779		109	70	130			
Surr: 4-Bromofluorobenzene	1.6		1.779		90.5	70	130			
Surr: Dibromofluoromethane	1.8		1.779		104	70	130			
Surr: Toluene-d8	1.8		1.779		100	70	130			

Sample ID **1702a87-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **Helen Jackson 2A S**	Batch ID: **B40977**	RunNo: **40977**
Prep Date:	Analysis Date: **2/24/2017**	SeqNo: **1283905** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.5	0.089	3.558	0	97.3	61.9	146	4.29	20	
Toluene	3.4	0.18	3.558	0	94.2	70	130	1.05	20	

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#: **1702A87**

27-Feb-17

Client: Williams Field Services

Project: Helen Jackson 2A

Sample ID **1702a87-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **Helen Jackson 2A S** Batch ID: **B40977** RunNo: **40977**

Prep Date: Analysis Date: **2/24/2017** SeqNo: **1283905** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	2.0		1.779		112	70	130	0	0	
Surr: 4-Bromofluorobenzene	1.6		1.779		91.4	70	130	0	0	
Surr: Dibromofluoromethane	1.8		1.779		103	70	130	0	0	
Surr: Toluene-d8	1.8		1.779		99.3	70	130	0	0	

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#: **1702A87**

27-Feb-17

Client: Williams Field Services

Project: Helen Jackson 2A

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **D40977**	RunNo: **40977**
Prep Date:	Analysis Date: **2/24/2017**	SeqNo: **1283928** 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	450		500.0		90.6	70	130			

Sample ID **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **D40977**	RunNo: **40977**
Prep Date:	Analysis Date: **2/24/2017**	SeqNo: **1283931** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	119	70	130			
Surr: BFB	530		500.0		106	70	130			

Sample ID **1702a87-002ams**	SampType: **MS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **Helen Jackson 2A B**	Batch ID: **D40977**	RunNo: **40977**
Prep Date:	Analysis Date: **2/24/2017**	SeqNo: **1283932** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	140	19	92.94	65.02	83.2	63.2	128			
Surr: BFB	1800		1859		95.5	70	130			

Sample ID **1702a87-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **Helen Jackson 2A B**	Batch ID: **D40977**	RunNo: **40977**
Prep Date:	Analysis Date: **2/24/2017**	SeqNo: **1283933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	130	19	92.94	65.02	73.6	63.2	128	6.52	20	
Surr: BFB	1700		1859		93.4	70	130	0	0	

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: WILLIAMS FIELD SERVI Work Order Number: 1702A87 RcptNo: 1

Received by/date: AG 02/24/17

Logged By: Ashley Gallegos 2/24/2017 8:08:00 AM

Completed By: Ashley Gallegos 2/24/2017 8:11:32 AM

Reviewed By: AJS 02/24/17

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° 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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: WFS

Mailing Address: 188 CR 4900

Bloom Field NM 87413

Phone #: 505-632-4802

email or Fax#: Mike.Hannan@williams.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: Same day

☐ Standard ☑ Rush 2-24-17

Project Name:

Project #:

Helen Jackson 2A

Project Manager:

Mike Hannan

Sampler: Morgan Killion

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1702A87
2/23/17	11:15	Soil	Helen Jackson 2A Sidewall	1-4oz	Cool	-001
2/23/17	11:20	Soil	Helen Jackson 2A Bottom	1-4oz	Cool	-002

Analysis Request

BTEX + MTBE + 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 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride				Air Bubbles (Y or N)
X		X	X								X				
X		X	X								X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/23/17	1500	Morgan Killion	Chris Ward	2/23/17	1500
2/23/17	1841	Kristine Waller	Ashley Gallegos	02/24/17	0808

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.