

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 August 1, 2011

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

11196
Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☒ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, 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: 188 County Road 4900, Bloomfield, NM 87413	
Facility or well name: NEBU No. 37A	
API Number: 30-045-24218	OCD Permit Number: _____
U/L or Qtr/Qtr P Section 6 Township 30 N Range 7 W County Rio Arriba	
Center of Proposed Design: Latitude 36.836714 Longitude -107.605059 NAD: <input type="checkbox"/> 1927 <input checked="" type="checkbox"/> 1983	
Surface Owner: <input checked="" type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Tribal Trust or Indian Allotment	

2.	
<input type="checkbox"/> Pit: Subsection F or G of 19.15.17.11 NMAC	RCVD APR 26 '13 OIL CONS. DIV. DIST. 3
Temporary: <input type="checkbox"/> Drilling <input type="checkbox"/> Workover	
<input type="checkbox"/> Permanent <input type="checkbox"/> Emergency <input type="checkbox"/> Cavitation <input type="checkbox"/> P&A	
<input type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type: Thickness _____ mil <input type="checkbox"/> LLDPE <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____	
<input type="checkbox"/> String-Reinforced	
Liner Seams: <input type="checkbox"/> Welded <input type="checkbox"/> Factory <input type="checkbox"/> Other _____ Volume: _____ bbl Dimensions: L _____ x W _____ x D _____	

3.	
<input type="checkbox"/> Closed-loop System: Subsection H of 19.15.17.11 NMAC	
Type of Operation: <input type="checkbox"/> P&A <input type="checkbox"/> Drilling a new well <input type="checkbox"/> Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)	
<input type="checkbox"/> Drying Pad <input type="checkbox"/> Above Ground Steel Tanks <input type="checkbox"/> Haul-off Bins <input type="checkbox"/> Other _____	
<input type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type: Thickness _____ mil <input type="checkbox"/> LLDPE <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____	
Liner Seams: <input type="checkbox"/> Welded <input type="checkbox"/> Factory <input type="checkbox"/> Other _____	

4.	
<input checked="" type="checkbox"/> Below-grade tank: Subsection I of 19.15.17.11 NMAC	
Volume: 45 bbl	Type of fluid: Produced Water
Tank Construction Material Steel	
<input type="checkbox"/> Secondary containment with leak detection <input type="checkbox"/> Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	
<input type="checkbox"/> Visible sidewalls and liner <input checked="" type="checkbox"/> Visible sidewalls only <input type="checkbox"/> Other	
Liner type: Thickness _____ mil <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____	

5.	
<input type="checkbox"/> Alternative Method:	
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	

6.

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 _____

7.

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)

8.

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

9.

Administrative Approvals 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:

- ☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.
- ☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

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. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No
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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

11.

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: _____

12.

Closed-loop Systems 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.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - 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: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13.

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 H₂S, 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

14.

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 ☐ Closed-loop System

☐ 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 (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.

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 F 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 I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ 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 I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

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 may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 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 between 50 and 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

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 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 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 private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, 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

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 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ 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

18.

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 F of 19.15.17.13 NMAC

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements 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 Subsection F of 19.15.17.13 NMAC

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F 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 I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

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): _____ Title: _____
 Signature: _____ Date: _____
 e-mail address: _____ Telephone: _____

20.

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

OCD Representative Signature: Jonathan D. Kelly Approval Date: 5/2/2013
 Title: Compliance Officer OCD Permit Number: _____

21.

Closure Report (required within 60 days of closure completion): Subsection K of 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: 3/5/2013

22.

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. _____

23.

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____
 Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

- ☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.

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)
☐ 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 Industrial Ecosystems, Inc.; Permit No. NM-01-0010B
☒ Soil Backfilling and Cover Installation Completed 3/5/2013
☐ Re-vegetation Application Rates and Seeding Technique
☒ Site Reclamation (Photo Documentation)

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

25.

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): Matthew Webre Title: Environmental Specialist
 Signature: [Signature] Date: 4/24/2013
 e-mail address: matt.webre@williams.com Telephone: (505) 632-4442

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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	Williams Four Corners LLC	Contact	Matt Webre
Address	188 CR 4900, Bloomfield, NM 87413	Telephone No.	505-632-4442
Facility Name	NEBU No. 37A	Facility Type	Below Grade Tank Removal

Surface Owner	Bureau of Reclamation	Mineral Owner		API No.	30-045-24218
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	6	30N	7W					Rio Arriba

Latitude 36.836714 N Longitude 107.605059 W

NATURE OF RELEASE

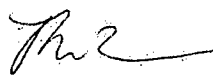
Type of Release	N/A – Below Grade Tank Removal	Volume of Release	0	Volume Recovered	0
Source of Release	Compressor and Above Grade Tank	Date and Hour of Occurrence		Date and Hour of Discovery	
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?		Date and Hour			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
N/A – Below grade tank removal.

Describe Area Affected and Cleanup Action Taken.*

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: 	<u>OIL CONSERVATION DIVISION</u>		
Printed Name: Matt Webre	Approved by Environmental Specialist:		
Title: Environmental Specialist	Approval Date:	Expiration Date:	
E-mail Address: matt.webre@williams.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 4/24/2013	Phone: 505-632-4442		

* Attach Additional Sheets If Necessary

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State of New Mexico
Energy Minerals and Natural Resources

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

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:

Williams Four Corners, LLC., 188 Country Road 4900, Bloomfield, NM 87413

2. Originating Site:

NEBU 37A

3. Location of Material (Street Address, City, State or ULSTR):

Unit P, Section 6, Township 30N, Range 7W

4. Source and Description of Waste:

Source/Description: Produced water/condensate release from pipeline/Soil impacted from release

Estimated Volume 12 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Matt Webre Th2, representative or authorized agent for Williams Four Corners, LLC do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☒ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Matt Webre Th2, representative for Williams Four Corners, LLC authorize Industrial Ecosystems, Inc. to complete the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for Industrial Ecosystems, Inc. do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: JFJ Landfarm c/o Industrial Ecosystems, Inc. Permit # NM-01-0010B

Address of Facility: # 49 CR 3150, Aztec, NM 87410

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: _____ DATE: _____

SIGNATURE: _____ TELEPHONE NO.: _____

Surface Waste Management Facility Authorized Agent



Williams Four Corners LLC
Below Grade Tank Closure Report
Well Name: NEBU 37A
API Number: 30-045-24218

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.

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 disposed at NMOCD approved landfarm (identified in the approved Closure Plan). Bedrock was encountered at the excavation floor with elevated TPH concentration. Per approval from NMOCD, potassium permanganate was applied to the floor of the excavation to address residual hydrocarbon impacts.

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

Action: Clean soil (as defined) was used to return the BGT area to grade and was contoured/leveled consistent with the Pit Rule criteria.

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 well pad. 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.

Webre, Matt

From: Webre, Matt
Sent: Wednesday, February 13, 2013 3:41 PM
To: 'Powell, Brandon, EMNRD'; Dombrowski Mike (mdombrowski@usbr.gov)
Cc: Valdez, Dwayne
Subject: RE: BGT Closure Request- NEBU 37A
Attachments: Rpt_1301727_v2.pdf

Brandon,

Attached are the TPH 8015 results including a summary below. There was no staining observed on the cliff.

Analyte	NEBU 37A BOTTOM COMP 001
TPH-GRO	250 mg/kg
TPH-DRO	430 mg/kg

Data in email incorrectly switched for TPH-GRO and TPH-DRO analytical results.
TPH-GRO 430 mg/kg
TPH-DRO 250 mg/kg

Matt

From: Powell, Brandon, EMNRD [<mailto:Brandon.Powell@state.nm.us>]
Sent: Thursday, January 31, 2013 3:29 PM
To: Webre, Matt; Dombrowski Mike (mdombrowski@usbr.gov)
Cc: Valdez, Dwayne
Subject: RE: BGT Closure Request- NEBU 37A

Matt-

I apologize, we will only need the floor sampled.

Thank You
Brandon Powell
I & E Supervisor
New Mexico Oil Conservation
Office: (505) 334-6178 ext. 116

"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"

From: Webre, Matt [<mailto:Matt.Webre@Williams.com>]
Sent: Thursday, January 31, 2013 3:27 PM
To: Powell, Brandon, EMNRD; Dombrowski Mike (mdombrowski@usbr.gov)
Cc: Valdez, Dwayne
Subject: RE: BGT Closure Request- NEBU 37A

Brandon,

I would request that will only have to run the floor sample for TPH 8015 at this location since the sidewall sample was non-detect. Please let me know ASAP so I can submit the request into the lab.

Thanks,
Matt

From: Powell, Brandon, EMNRD [<mailto:Brandon.Powell@state.nm.us>]
Sent: Thursday, January 31, 2013 3:18 PM
To: Webre, Matt; Dombrowski Mike (mdombrowski@usbr.gov)
Cc: Valdez, Dwayne
Subject: RE: BGT Closure Request- NEBU 37A

Good afternoon Matt-

Because this location is at the edge of the cliff leading to Navajo Lake we are requesting you to have the sidewalls and bottom sampled for DRO/GRO using method 8015. Using this method we will be able to determine if the remaining contamination is still mobile. Also if possible could you have your field personnel inspect the cliff where the bedrock out crops to check for any staining. If there is staining please sample it as well.

For wells in similar situations in the future I would recommend having the initial sample analyzed for DRO/GRO as it is a good resource in evaluating the mobility and risk of the remaining contaminants.

Thank You
Brandon Powell
I & E Supervisor
New Mexico Oil Conservation
Office: (505) 334-6178 ext. 116

"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"

From: Webre, Matt [<mailto:Matt.Webre@Williams.com>]
Sent: Thursday, January 31, 2013 2:27 PM
To: Powell, Brandon, EMNRD; Dombrowski Mike (mdombrowski@usbr.gov)
Cc: Valdez, Dwayne
Subject: RE: BGT Closure Request- NEBU 37A

I made a slight error in my previous message. Please see my changes in red below.

From: Webre, Matt
Sent: Thursday, January 31, 2013 1:46 PM
To: 'Powell, Brandon, EMNRD'; Dombrowski Mike (mdombrowski@usbr.gov)
Cc: Valdez, Dwayne
Subject: BGT Closure Request- NEBU 37A

Brandon and Mike,

We are in the process of closing a BGT at NEBU 37A. Excavation activities have been completed and we reached bedrock beneath the BGT. I am requesting approval to backfill based on the information provided in this message.

We collected a composite sample from the excavation **floor** (NEBU 37A BOTTOM COMP. 001) and one from the excavation **sidewalls** (NEBU 37A WELL COMPOSITE 002). I have attached the analytical results for your review and they are summarized in the following table.

Analyte	NEBU 37A BOTTOM COMP 001	NEBU 37A WELL COMPOSITE 002
Benzene	<0.47 mg/kg	<0.049 mg/kg
Toluene	3.3 mg/kg	<0.049 mg/kg
Ethylbenzne	1.8 mg/kg	<0.049 mg/kg
Xylenes, Total	26 mg/kg	<0.049 mg/kg

Total BTEX	31.1 mg/kg	<0.049 mg/kg
TPH (418.1)	860 mg/kg	<20 mg/kg
Chloride	19 mg/kg	16 mg/kg

Based on the NMOCD site ranking criteria determined for the Site: (1) depth to water greater than 100 feet below ground surface, (2) no private, domestic, or water sources located within 1,000 feet, and (3) a surface water body is located within 525 feet, the remediation action levels were determined to be 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total BTEX, and 1,000 mg/kg for total TPH. The remediation target for chloride was determined to be 250 mg/kg based on other applicable NMOCD remediation/closure requirements. The analytical data indicates the remaining concentrations are below the remediation action levels listed above.

Can you please provide me with your approval or disapproval to complete final closure activities.

Thanks,

Matt Webre, P.G.
Environmental Specialist III
Williams Four Corners, LLC
(505) 632-4442 work
(505) 215-8059 cell
(505) 632-4782 fax
matt.webre@williams.com

Webre, Matt

From: Powell, Brandon, EMNRD [Brandon.Powell@state.nm.us]
Sent: Thursday, February 28, 2013 7:13 AM
To: Webre, Matt
Subject: RE: Approval to Apply Potassium Permanganate at NEBU 37A

You have our approval for the application of the potassium permanganate.

Thank You
Brandon Powell
I & E Supervisor
New Mexico Oil Conservation
Office: (505) 334-6178 ext. 116

"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"

From: Webre, Matt [<mailto:Matt.Webre@Williams.com>]
Sent: Wednesday, February 27, 2013 12:27 PM
To: Powell, Brandon, EMNRD
Cc: Dombrowski Mike (mdombrowski@usbr.gov); Valdez, Dwayne
Subject: Approval to Apply Potassium Permanganate at NEBU 37A

Brandon,

Williams is requesting approval to apply 150 gallons of potassium permanganate solution on the floor of a 25 feet by 25 feet excavation as part of the BGT closure at the NEBU 37A located in Unit P, Section 6, Township 30N, Range 7W.

Application is scheduled to be completed by Envirotech on Friday, March 1, 2013 once approval is received from the OCD.

Please let me know at your earliest convenience.

Thanks,

Matt Webre, P.G.
Environmental Specialist III
Williams Four Corners, LLC
(505) 632-4442 work
(505) 215-8059 cell
(505) 632-4782 fax
matt.webre@williams.com

Webre, Matt

From: Webre, Matt
Sent: Friday, December 07, 2012 12:56 PM
To: Powell, Brandon, EMNRD
Cc: Valdez, Dwayne; morgankillion@yahoo.com; Ruybalid, Tristen
Subject: Notice of BGT Removal - NEBU 37A

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

NEBU 37A API No. 30-045-24218 Unit P, Section 6, Township 30N, Range 7W

Williams operated the BGT to capture liquids from a condensate tank located at the location.

The closure plan was approved by OCD on September 26, 2012. BGT removal is schedule to begin on Wednesday, December 12, 2012.

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

Matt Webre, P.G.
Environmental Specialist III
Williams Four Corners, LLC
(505) 632-4442 work
(505) 215-8059 cell
(505) 632-4781 fax
matt.webre@williams.com



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

December 20, 2012

Mike Dombrowski
Bureau of Reclamation
Western Colorado Area Office – Four Corners Division
835 East Second Avenue, Suite 300
Durango, Colorado 81301-5475

RE: Notification of Below Ground Tank Closure – NEBU 37A

Dear Mr. Dombroski:

Pursuant to the requirements of the New Mexico Oil Conservation District (OCD), Williams hereby provides notice for the removal of a BGT at the following location:

NEBU 37A API No. 3004524218 Unit P, Section 6, Township 30N, Range 7W

The closure plan was approved by OCD on September 26, 2012. BGT removal was completed on Wednesday, December 12, 2012.

You may contact me at (505) 632-4442 with any questions regarding this notification.

Sincerely,

A handwritten signature in dark ink, appearing to read "Matt Webre". The signature is fluid and cursive, with a long horizontal stroke at the end.

Matt Webre, P.G.
Environmental Specialist

I DO HEREBY CERTIFY that this document was sent by CERTIFIED MAIL to the named recipient at the address above on December 27th, 2012 By Kayleigh Ruybalid

Certified mail # 7010 1870 0002 9779 2309

SENDER: COMPLETE THIS SECTION

- ☒ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- ☒ Print your name and address on the reverse so that we can return the card to you.
- ☒ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mike Dombrowski
Bureau of Reclamation
Western Colorado Area Office
Four Corners Division
185 Suttle Street, Suite 2
Durango, CO 81303

2. Article Number

(Transfer from service label)

7010 1870 0002 9779 2309

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ YesIf YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail☐ Express Mail☐ Registered☒ Return Receipt for Merchandise☐ Insured Mail☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

U.S. Postal Service

CERTIFIED MAIL RECEIPT

(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

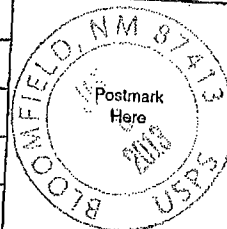
OFFICIAL USE

Postage \$

Certified Fee

Return Receipt Fee
(Endorsement Required)Restricted Delivery Fee
(Endorsement Required)

Total Postage & Fees \$



Sent To

Bureau of Reclamation - Western
Mike Dombrowski, Colorado Area Office - Four Corners Div.
Street, Apt. No.,
or PO Box No. 185 Suttle Street, Suite 2
City, State, Zip+4 Durango, CO 81303

PS Form 3800, August 2006

See Reverse for Instructions

7010 1870 0002 9779 2309



envirotech
Analytical Laboratory

Report Summary

Client: WFS

Chain of Custody Number: 14398

Samples Received: 12-12-12

Job Number: 00068-0146

Sample Number(s): 63932-63933

Project Name/Location: NEBU #47 & 37A 5 Point Comp.

Entire Report Reviewed By: _____

Date: _____

12/28/12

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Client:	WFS	Project #:	00068-0146
Sample ID:	Nebu #47 001 5 Point Comp.	Date Reported:	12-17-12
Laboratory Number:	63932	Date Sampled:	12-12-12
Chain of Custody:	14398	Date Received:	12-12-12
Sample Matrix:	Soil	Date Analyzed:	12-14-12
Preservative:	Cool	Date Extracted:	12-13-12
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	50

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	10.0
Toluene	ND	10.0
Ethylbenzene	ND	10.0
p,m-Xylene	ND	10.0
o-Xylene	ND	10.0
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	86.2 %
	1,4-difluorobenzene	93.9 %
	Bromochlorobenzene	86.9 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Nebu #47 & 37A 5 Point Comp.

Client:	WFS	Project #:	00068-0146
Sample ID:	Nebu #37A 001 5 Point Comp.	Date Reported:	12-17-12
Laboratory Number:	63933	Date Sampled:	12-12-12
Chain of Custody:	14398	Date Received:	12-12-12
Sample Matrix:	Soil	Date Analyzed:	12-14-12
Preservative:	Cool	Date Extracted:	12-13-12
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	50

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	10.0
Toluene	ND	10.0
Ethylbenzene	ND	10.0
p,m-Xylene	ND	10.0
o-Xylene	ND	10.0
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	85.7 %
	1,4-difluorobenzene	87.8 %
	Bromochlorobenzene	89.9 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Nebu #47 & 37A 5 Point Comp.



**EPA METHOD 8021
AROMATIC VOLATILE ORGANICS**

Client:	N/A	Project #:	N/A
Sample ID:	1214BCAL QA/QC	Date Reported:	12-17-12
Laboratory Number:	63923	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-14-12
Condition:	N/A	Analysis:	BTEX
		Dilution:	50

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	%Diff	Blank Conc	Detect Limit
	Accept. Range 0-15%				
Benzene	9.4881E-05	9.5355E-05	0.005	ND	0.2
Toluene	8.6969E-05	8.6604E-05	0.004	ND	0.2
Ethylbenzene	9.7567E-05	9.9099E-05	0.016	ND	0.2
p,m-Xylene	8.1757E-05	8.1955E-05	0.002	ND	0.2
o-Xylene	9.9685E-05	1.0273E-04	0.031	ND	0.2

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff	Accept Range	Detect. Limit
Benzene	ND	ND	0.00	0 - 30%	10
Toluene	ND	ND	0.00	0 - 30%	10
Ethylbenzene	ND	ND	0.00	0 - 30%	10
p,m-Xylene	ND	ND	0.00	0 - 30%	10
o-Xylene	ND	ND	0.00	0 - 30%	10

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	2500	2500	100	39 - 150
Toluene	ND	2500	2490	99.6	46 - 148
Ethylbenzene	ND	2500	2560	102	32 - 160
p,m-Xylene	ND	5000	5000	100	46 - 148
o-Xylene	ND	2500	2570	103	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 63923-63929 and 63932-63933.



envirotech

Analytical Laboratory

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	WFS	Project #:	00068-0146
Sample ID:	Nebu #47 001 5 Point Comp.	Date Reported:	12-20-12
Laboratory Number:	63932	Date Sampled:	12-12-12
Chain of Custody No:	14398	Date Received:	12-12-12
Sample Matrix:	Soil	Date Extracted:	12-20-12
Preservative:	Cool	Date Analyzed:	12-20-12
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----------	--------------------------	--------------------------

Total Petroleum Hydrocarbons	108	6.7
------------------------------	-----	-----

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Nebu #47 & 37A 5 Point Comp.



envirotech
Analytical Laboratory

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	WFS	Project #:	00068-0146
Sample ID:	Nebu #37A 001 5 Point Comp.	Date Reported:	12-20-12
Laboratory Number:	63933	Date Sampled:	12-12-12
Chain of Custody No:	14398	Date Received:	12-12-12
Sample Matrix:	Soil	Date Extracted:	12-20-12
Preservative:	Cool	Date Analyzed:	12-20-12
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----------	--------------------------	--------------------------

Total Petroleum Hydrocarbons	390	6.7
------------------------------	-----	-----

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Nebu #47 & 37A 5 Point Comp.



envirotech

Analytical Laboratory

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	QA/QC	Date Reported:	12-20-12
Laboratory Number:	12-20-TPH.QA/QC 63934	Date Sampled:	N/A
Sample Matrix:	Freon-113	Date Analyzed:	12-20-12
Preservative:	N/A	Date Extracted:	12-20-12
Condition:	N/A	Analysis Needed:	TPH

Calibration	I-Cal Date	C-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept Range
	11-15-12	12-20-12	1,680	1,720	2.4%	+/- 10%

Blank Conc. (mg/Kg)	Concentration	Detection Limit
TPH	ND	6.7

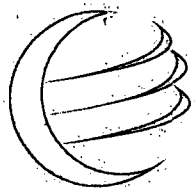
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
TPH	16,800	14,800	11.9%	+/- 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
TPH	16,800	2,000	17,500	93.1%	80 - 120%

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: QA/QC for Samples 63932-63939, 64011.



envirotech

Analytical Laboratory

Chloride

Client:	WFS	Project #:	00068-0146
Sample ID:	NEBU #47 001 5 Point Comp.	Date Reported:	12-14-12
Lab ID#:	63932	Date Sampled:	12-12-12
Sample Matrix:	Soil	Date Received:	12-12-12
Preservative:	Cool	Date Analyzed:	12-13-12
Condition:	Intact	Chain of Custody:	14398

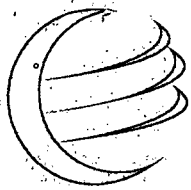
Parameter	Concentration (mg/Kg)
-----------	-----------------------

Total Chloride

24.4

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **NEBU #47 & 37A 5 Point Comp.**



envirotech

Analytical Laboratory

Chloride

Client:	WFS	Project #:	00068-0146
Sample ID:	NEBU #37A 001 5 Point Comp.	Date Reported:	12-14-12
Lab ID#:	63933	Date Sampled:	12-12-12
Sample Matrix:	Soil	Date Received:	12-12-12
Preservative:	Cool	Date Analyzed:	12-13-12
Condition:	Intact	Chain of Custody:	14398

Parameter	Concentration (mg/Kg)
-----------	-----------------------

Total Chloride



40.3

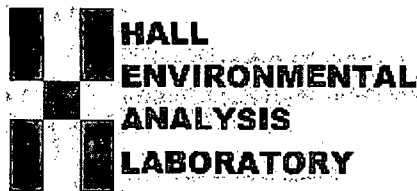
Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **NEBU #47 & 37A 5 Point Comp.**

CHAIN OF CUSTODY RECORD

14398

Client: WFS			Project Name / Location: 5 Point Comp. NEBU # 47 & 37A			ANALYSIS / PARAMETERS														
Email results to: Mgtf. webre@williams.com			Sampler Name: Morgan Killian			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact	
Client Phone No.: 505-215-8059			Client No.: 00068-0146																	
Sample No. / Identification	Sample Date	Sample Time	Lab No.	No. / Volume of Containers	Preservative															
					HgCl ₂	HCl														
NEBU # 47 001 5 Point Comp.	12-12-12	1:00	U03932 P212037-01A	1-40Z																
NEBU # 37A 001 5 Point Comp.	12-12-12	1:30	U03933 P212037-02A	1-40Z																
Relinquished by: (Signature) Morgan Killian				Date 12/12/12	Time 3:15	Received by: (Signature) 				Date 12/12/12	Time 3:15									
Relinquished by: (Signature)						Received by: (Signature)														
Sample Matrix Soil <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>																				
<input type="checkbox"/> Sample(s) dropped off after hours to secure drop off area.																				
5795 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 • laboratory@envirotech-inc.com																				



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

February 06, 2013

Matt Webre

Williams Field Services

188 Co. Rd 4900

Bloomfield, New Mexico 87413

TEL: (505) 632-4442

FAX

RE: NeBu #37A Bottom Comp. 001 Wall Comp.002

OrderNo.: 1301727

Dear Matt Webre:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/23/2013 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued January 29, 2013.

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. 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. All samples are reported as received unless otherwise indicated.

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

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 1301727

Date Reported: 2/6/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Client Sample ID: NeBu 37A Bottom Comp. 001

Project: NeBu #37A Bottom Comp. 001 Wall Co

Collection Date: 1/22/2013 11:30:00 AM

Lab ID: 1301727-001

Matrix: SOIL

Received Date: 1/23/2013 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: MMD
Diesel Range Organics (DRO)	250	10		mg/Kg	1	2/5/2013 10:27:55 AM
Motor Oil Range Organics (MRO)	83	51		mg/Kg	1	2/5/2013 10:27:55 AM
Surr: DNOP	98.6	72.4-120		%REC	1	2/5/2013 10:27:55 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	430	47		mg/Kg	10	1/24/2013 5:04:11 PM
Surr: BFB	235	84-116	S	%REC	10	1/24/2013 5:04:11 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.47		mg/Kg	10	1/24/2013 5:04:11 PM
Toluene	3.3	0.47		mg/Kg	10	1/24/2013 5:04:11 PM
Ethylbenzene	1.8	0.47		mg/Kg	10	1/24/2013 5:04:11 PM
Xylenes, Total	26	0.94		mg/Kg	10	1/24/2013 5:04:11 PM
Surr: 4-Bromofluorobenzene	114	80-120		%REC	10	1/24/2013 5:04:11 PM
EPA METHOD 300.0: ANIONS						Analyst: JRR
Chloride	19	1.5		mg/Kg	1	1/25/2013 9:52:25 AM
EPA METHOD 418.1: TPH						Analyst: ECH
Petroleum Hydrocarbons, TR	860	20		mg/Kg	1	1/25/2013

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1301727

Date Reported: 2/6/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Client Sample ID: NeBu 37A Well Composite 002

Project: NeBu #37A Bottom Comp. 001 Wall Co

Collection Date: 1/22/2013 11:40:00 AM

Lab ID: 1301727-002

Matrix: SOIL

Received Date: 1/23/2013 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: MMD
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/5/2013 10:49:38 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/5/2013 10:49:38 AM
Surr: DNOP	98.0	72.4-120		%REC	1	2/5/2013 10:49:38 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/24/2013 5:32:55 PM
Surr: BFB	116	84-116	S	%REC	1	1/24/2013 5:32:55 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	1/24/2013 5:32:55 PM
Toluene	ND	0.049		mg/Kg	1	1/24/2013 5:32:55 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/24/2013 5:32:55 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/24/2013 5:32:55 PM
Surr: 4-Bromofluorobenzene	111	80-120		%REC	1	1/24/2013 5:32:55 PM
EPA METHOD 300.0: ANIONS						Analyst: JRR
Chloride	16	7.5		mg/Kg	5	1/25/2013 10:17:14 AM
EPA METHOD 418.1: TPH						Analyst: ECH
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	1/25/2013

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1301727

06-Feb-13

Client: Williams Field Services

Project: NeBu #37A Bottom Comp. 001 Wall Comp.002

Sample ID	MB-5846	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	5846	RunNo:	8287					
Prep Date:	1/25/2013	Analysis Date:	1/25/2013	SeqNo:	239381	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-5846	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	5846	RunNo:	8287					
Prep Date:	1/25/2013	Analysis Date:	1/25/2013	SeqNo:	239382	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.7	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1301727

06-Feb-13

Client: Williams Field Services

Project: NeBu #37A Bottom Comp. 001 Wall Comp.002

Sample ID	MB-5819	SampType:	MBLK	TestCode:	EPA Method 418.1: TPH					
Client ID:	PBS	Batch ID:	5819	RunNo:	8264					
Prep Date:	1/24/2013	Analysis Date:	1/25/2013	SeqNo:	238885	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-5819	SampType:	LCS	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS	Batch ID:	5819	RunNo:	8264					
Prep Date:	1/24/2013	Analysis Date:	1/25/2013	SeqNo:	238886	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	7.600	100	80	120			

Sample ID	LCSD-5819	SampType:	LCSD	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS02	Batch ID:	5819	RunNo:	8264					
Prep Date:	1/24/2013	Analysis Date:	1/25/2013	SeqNo:	238887	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	7.600	94.7	80	120	5.14	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1301727

06-Feb-13

Client: Williams Field Services

Project: NeBu #37A Bottom Comp. 001 Wall Comp.002

Sample ID	MB-5946	SampType:	MBLK	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID:	5946	RunNo:	8445					
Prep Date:	2/1/2013	Analysis Date:	2/5/2013	SeqNo:	243401	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	9.4		10.00		94.4	72.4	120			

Sample ID	LCS-5946	SampType:	LCS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	5946	RunNo:	8445					
Prep Date:	2/1/2013	Analysis Date:	2/5/2013	SeqNo:	243402	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.6	47.4	122			
Surr: DNOP	4.5		5.000		89.3	72.4	120			

Sample ID	1301961-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	5946	RunNo:	8445					
Prep Date:	2/1/2013	Analysis Date:	2/5/2013	SeqNo:	243432	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.61	0	87.7	12.6	148			
Surr: DNOP	4.4		5.061		87.8	72.4	120			

Sample ID	1301961-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	5946	RunNo:	8445					
Prep Date:	2/1/2013	Analysis Date:	2/5/2013	SeqNo:	243433	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.20	0	90.2	12.6	148	2.04	22.5	
Surr: DNOP	4.5		5.020		89.7	72.4	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1301727

06-Feb-13

Client: Williams Field Services

Project: NeBu #37A Bottom Comp. 001 Wall Comp.002

Sample ID	MB-5805	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	5805	RunNo:	8244					
Prep Date:	1/23/2013	Analysis Date:	1/24/2013	SeqNo:	238379	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	1000		1000		102	84	116			

Sample ID	LCS-5805	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	5805	RunNo:	8244					
Prep Date:	1/23/2013	Analysis Date:	1/24/2013	SeqNo:	238380	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	116	74	117			
Surr: BFB	1100		1000		108	84	116			

Sample ID	1301766-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	5805	RunNo:	8244					
Prep Date:	1/23/2013	Analysis Date:	1/24/2013	SeqNo:	238386	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.7	23.47	1.414	101	70	130			
Surr: BFB	980		939.0		104	84	116			

Sample ID	1301766-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	5805	RunNo:	8244					
Prep Date:	1/23/2013	Analysis Date:	1/24/2013	SeqNo:	238387	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.8	23.99	1.414	104	70	130	4.14	22.1	
Surr: BFB	1000		959.7		106	84	116	0	0	

Sample ID	MB-5845	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	5845	RunNo:	8306					
Prep Date:	1/25/2013	Analysis Date:	1/28/2013	SeqNo:	239872	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		96.0	84	116			

Sample ID	LCS-5845	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	5845	RunNo:	8306					
Prep Date:	1/25/2013	Analysis Date:	1/28/2013	SeqNo:	239873	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		1000		98.1	84	116			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1301727

06-Feb-13

Client: Williams Field Services

Project: NeBu #37A Bottom Comp. 001 Wall Comp.002

Sample ID	1301798-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	5845	RunNo:	8306					
Prep Date:	1/25/2013	Analysis Date:	1/28/2013	SeqNo:	239875	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		997.0		108	84	116			

Sample ID	1301798-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	5845	RunNo:	8306					
Prep Date:	1/25/2013	Analysis Date:	1/28/2013	SeqNo:	239876	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		997.0		107	84	116	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1301727

06-Feb-13

Client: Williams Field Services

Project: NeBu #37A Bottom Comp. 001 Wall Comp.002

Sample ID	MB-5805		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 5805		RunNo: 8244					
Prep Date:	1/23/2013		Analysis Date: 1/24/2013		SeqNo: 238402		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	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		113	80	120			

Sample ID	LCS-5805		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 5805		RunNo: 8244					
Prep Date:	1/23/2013		Analysis Date: 1/24/2013		SeqNo: 238403		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	104	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.2	0.10	3.000	0	106	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID	MB-5845		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 5845		RunNo: 8306					
Prep Date:	1/25/2013		Analysis Date: 1/28/2013		SeqNo: 239889		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	LCS-5845		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 5845		RunNo: 8306					
Prep Date:	1/25/2013		Analysis Date: 1/28/2013		SeqNo: 239890		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID	1301798-001A MS		SampType: MS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	BatchQC		Batch ID: 5845		RunNo: 8306					
Prep Date:	1/25/2013		Analysis Date: 1/28/2013		SeqNo: 239892		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		0.9950		114	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1301727

06-Feb-13

Client: Williams Field Services

Project: NeBu #37A Bottom Comp. 001 Wall Comp.002

Sample ID	1301798-001A MSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	BatchQC	Batch ID:	5845	RunNo:	8306					
Prep Date:	1/25/2013	Analysis Date:	1/28/2013	SeqNo:	239893	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		0.9970		112	80	120	0	0	

Sample ID	1301727-001AMS	SampType:	MS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	NeBu 37A Bottom C	Batch ID:	5805	RunNo:	8306					
Prep Date:	1/23/2013	Analysis Date:	1/28/2013	SeqNo:	239944	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.46	0.9294	0	97.8	67.2	113			
Toluene	4.4	0.46	0.9294	3.274	123	62.1	116			S
Ethylbenzene	3.0	0.46	0.9294	1.826	124	67.9	127			
Xylenes, Total	33	0.93	2.788	25.95	247	60.6	134			S
Surr: 4-Bromofluorobenzene	11		9.294		119	80	120			

Sample ID	1301727-001AMSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	NeBu 37A Bottom C	Batch ID:	5805	RunNo:	8306					
Prep Date:	1/23/2013	Analysis Date:	1/28/2013	SeqNo:	239946	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.47	0.9434	0	98.6	67.2	113	2.30	14.3	
Toluene	4.5	0.47	0.9434	3.274	133	62.1	116	2.32	15.9	S
Ethylbenzene	3.1	0.47	0.9434	1.826	131	67.9	127	2.87	14.4	S
Xylenes, Total	33	0.94	2.830	25.95	242	60.6	134	0.0699	12.6	S
Surr: 4-Bromofluorobenzene	8.4		9.434		89.5	80	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

Sample Log-In Check List

Client Name: WILLIAMS FIELD SERVICES		Work Order Number: 1301727
Received by/date: <u>AG</u> <u>01/23/13</u>		
Logged By: Michelle Garcia	1/23/2013 10:05:00 AM	<i>Michelle Garcia</i>
Completed By: Michelle Garcia	1/23/2013 11:58:07 AM	<i>Michelle Garcia</i>
Reviewed By: <u>TO</u> <u>01/23/2013</u>		

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. 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)

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

Person Notified: _____	Date: _____
By Whom: _____	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding: _____	
Client Instructions: _____	

18. Additional remarks:

19. Cooler Information

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

