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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.
Proposed Alter Type of action: Permi Closu Modif Closu below-grade tank, or propose Instructions: Please submit one application Please be advised that approval of this request does not	<u>Closed-Loop System, Below-Grade</u> <u>ernative Method Permit or Closure F</u> t of a pit, closed-loop system, below-grade tank, o re of a pit, closed-loop system, below-grade tank, fication to an existing permit re plan only submitted for an existing permitted or sed alternative method ntion (Form C-144) per individual pit, closed-loop syste ot relieve the operator of liability should operations result i of its responsibility to comply with any other applicable go	Plan Application r proposed alternative method or proposed alternative method non-permitted pit, closed-loop system, em, below-grade tank or alternative request n pollution of surface water, ground water or the
Address: 188 County Road 4900, Bloomfield, Facility or well name: Florance Y44A API Number: 3004522249 U/L or Qtr/Qtr O Section 3 Center of Proposed Design: Latitude	NM 87413 OCD Permit Number 1 Township 30 N Range 8 W	
String-Reinforced		
intent) Drying Pad Above Ground Steel Tanks	well Workover or Drilling (Applies to activities wh Haul-off Bins Other	
Tank Construction Material Steel Secondary containment with leak detection Image: Secondary containment with leak detection Visible sidewalls and liner Visible sidewalls	7.11 NMAC of fluid: <u>Condensate/Produced Water</u> Visible sidewalls, liner, 6-inch lift and automatic ov valls only Other	rerflow shut-off
 5. Alternative Method: Submittal of an exception request is required. Ex 	xceptions must be submitted to the Santa Fe Environme	ntal Bureau office for consideration of approval.

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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

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

Alternate. Please specify_

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7.

 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. <u>Administrative Approvals and Exceptions:</u> Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance. <i>Please check a box if one or more of the following is requested, if not leave blank:</i> 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.} <u>Siting Criteria (regarding permitting)</u> : 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appro- office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dryi above-grade tanks associated with a closed-loop system.	priate district pproval.	
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	🗌 Yes 🗍 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 	🗋 Yes 🗌 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 	□ Yes □ No □ 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 		
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		
 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 		
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 		
Within a 100-year floodplain. - FEMA map	🗌 Yes 🗌 No	

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. Image: Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Image: Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Image: Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Image: Design Plan - based upon the appropriate requirements of 19.15.17.10 NMAC Image: Departing and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Image: Design 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)
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 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 Quality Control/Quality Assurance Construction and Installation Plan Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Heregency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Errosion Control Plan Closure Plan - based upon the appropriate requirements 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 I of 19.15.17.13 NMAC

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^{16.} Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.) Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if a 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 <i>will not</i> be used for future ser Yes (If yes, please provide the information below) No	vice and operations?	
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	с	
^{17.} <u>Siting Criteria (regarding on-site closure methods only)</u> : 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate dist considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Just demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	rict office or may be	
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 	🗋 Ýes 🗌 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 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 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. 		

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

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19. Operator Application Certification:		
I hereby certify that the information submitted with this application is true, acc	rate 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) X Closure	Plan-(only) OCD Conditions (see attachment)	
OCD Representative Signature:	Approval Date: 7/9/2013	
Title: Om Junce Office	OCD Permit Number:	
^{21.} Closure Report (required within 60 days of closure completion): Subsection Instructions: Operators are required to obtain an approved closure plan prio The closure report is required to be submitted to the division within 60 days of section of the form until an approved closure plan has been obtained and the	to implementing any closure activities and submitting the closure report. The completion of the closure activities. Please do not complete this	
	Closure Completion Date: May 10, 2013	
 22. Closure Method: Waste Excavation and Removal On-Site Closure Method Alter If different from approved plan, please explain. 	native Closure Method 🔲 Waste Removal (Closed-loop systems only)	
^{23.} Closure Report Regarding Waste Removal Closure For Closed-loop System Instructions: Please indentify the facility or facilities for where the liquids, du two facilities were utilized.		
Disposal Facility Name:	Disposal Facility Permit Number:	
Disposal Facility Name:	Disposal Facility Permit Number:	
	Disposal Facility Permit Number:	
Disposal Facility Name: Were the closed-loop system operations and associated activities performed on □ Yes (If yes, please demonstrate compliance to the items below) □ No Required for impacted areas which will not be used for future service and operation □ Site Reclamation (Photo Documentation) □ Soil Backfilling and Cover Installation □ Re-vegetation Application Rates and Seeding Technique	Disposal Facility Permit Number:	
Disposal Facility Name: Were the closed-loop system operations and associated activities performed on Yes (If yes, please demonstrate compliance to the items below) No <i>Required for impacted areas which will not be used for future service and operal</i> 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 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 Envirotech, Inc., NM-01-000 Soil Backfilling and Cover Installation Completed May 10, 2013 Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation)	Disposal Facility Permit Number:	
Disposal Facility Name: Were the closed-loop system operations and associated activities performed on Yes (If yes, please demonstrate compliance to the items below) No <i>Required for impacted areas which will not be used for future service and operal</i> 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 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 Envirotech, Inc., NM-01-00 Soil Backfilling and Cover Installation Completed May 10, 2013 Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude	Disposal Facility Permit Number:	
Disposal Facility Name: Were the closed-loop system operations and associated activities performed on Yes (If yes, please demonstrate compliance to the items below) No <i>Required for impacted areas which will not be used for future service and operal</i> 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 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 Envirotech, Inc., NM-01-00 Soil Backfilling and Cover Installation Completed May 10, 2013 Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude	Disposal Facility Permit Number:	
Disposal Facility Name: Were the closed-loop system operations and associated activities performed on Yes (If yes, please demonstrate compliance to the items below) No <i>Required for impacted areas which will not be used for future service and operal</i> 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 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 Envirotech, Inc., NM-01-00 Soil Backfilling and Cover Installation Completed May 10, 2013 Re-vegetation Applications: Latitude Long 25. Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure	Disposal Facility Permit Number:	
Disposal Facility Name: Were the closed-loop system operations and associated activities performed on Yes (If yes, please demonstrate compliance to the items below) No <i>Required for impacted areas which will not be used for future service and operal</i> 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 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 Envirotech, Inc., NM-01-00 Soil Backfilling and Cover Installation Completed May 10, 2013 Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude	Disposal Facility Permit Number:	



Williams Four Corners LLC Below Grade Tank Closure Report Well Name: Florance Y44A API Number: 30-045-22249

The following provides information related to the retirement and closure of the below grate 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.

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

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

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

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

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

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

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

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

<u>Action:</u> 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 verbal approval from NMOCD via a phone conversation between Brandon Powell (NMOCD) and Matt Webre (Williams), 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.

<u>Action:</u> 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.

<u>Action</u>: 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, April 03, 2013 5:10 PM
To:	'charlie.perrin@state.nm.us'; Sherrie Landon (slandon@blm.gov)
Cc:	Valdez, Dwayne
Subject:	Remedy Approval for Florance Y44A - Please Response At Your Earliest Convenience
Attachments:	1303B96.pdf; Rpt_1303B96_Final_v1.pdf
Importance:	High

Charlie and Sherrie,

We are in the process of closing a BGT at Florance Y44A. 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 are recommending that we apply potassium permanganate to the excavation floor and the small visibly stained area located on the southeast sidewall were a thin layer (18-inches) of impacted soil remains. The excavation is currently 47 feet x 36 feet wide by 9 feet deep. The small layer of impacted soil remaining (8 to 9 feet below the surface) was excavated back to the edge of the well pad and was been observed to be thinning out. Williams halted excavation activities of the remaining stained soil because we would be required to excavate material off the well pad.

Williams collected a composite sample from the excavation floor (Florance Y 44A Bottom) and one from the excavation sidewalls (Florance Y 44A Side Walls). We also collected a sample (Florance Y-44A S/E Corner 10') from a visually impacted zone. I have attached the analytical results for your review and they are summarized in the following table.

Analyte	Florance Y 44A Bottom	Florance Y 44A Side Walls	Florance Y-44A S/E Corner 10'
Benzene	2.8 mg/kg	<0.050 mg/kg	<0.25 mg/kg
Toluene	50 mg/kg	<0.050 mg/kg	<0.50 mg/kg
Ethylbenzne	10 mg/kg	<0.050 mg/kg	<0.50 mg/kg
Xylenes, Total	220 mg/kg	<0.10 mg/kg	<1.0 mg/kg
Total BTEX	282.8 mg/kg	ND	ND
TPH (418.1)	600 mg/kg	390 mg/kg	6300 mg/kg
TPH GRO	3500 mg/kg	<5.0 mg/kg	560 mg/kg
TPH DRO	22 mg/kg	12 mg/kg	2000 mg/kg
Chloride	31 mg/kg	220 mg/kg	NA

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 greater than 1,000 feet away, the remediation action levels were determined to be 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total BTEX, and 5,000 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 some of the remaining concentrations exceed the remediation action levels listed above.

Williams is proposing to apply potassium permanganate to the excavation to address the elevation concentrations. After the application, Williams will backfill the former BGT location.

Can you please provide me with your approval or disapproval to complete recommended closure activities at your earliest convenience. The produced was required to shut-in the well during remediation and is anxious to get this work completed ASAP.

Thanks,

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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:	Wednesday, May 08, 2013 4:16 PM
To:	'Kelly, Mark'; Landon, Sherrie; Powell, Brandon, EMNRD; Perrin, Charlie, EMNRD
Cc:	Valdez, Dwayne
Subject:	RE: Remedy Approval for Florance Y44A - Please Response At Your Earliest Convenience

I wanted to provide you all with an update for this work. We completed our excavation of the impacted material that Mark Kelly requested we complete as documented in the email below. Williams received preliminary lab results today indicating the concentrations are below all the cleanup standards for the sidewall/impacted zone that required the additional excavation. We are getting a application volume for the potassium permanganate from Envirotech at this time. Our proposed path moving forward is that I will submit a formal request to OCD regarding the potassium permanganate application after that information is received, unless OCD can provide the approval at this time. Once received, Williams will complete the potassium permanganate application and then backfill the excavation so BP can get their production back up at the location. BLM already provided approval for the potassium permanganate in the email below.

Please call me with any questions.

Matt Webre, P.G. Environmental Services (505) 632-4442 work (505) 215-8059 cell matt.webre@williams.com

From: Kelly, Mark [mailto:mkelly@blm.gov]
Sent: Thursday, April 04, 2013 3:52 PM
To: Landon, Sherrie; Webre, Matt; Powell, Brandon, EMNRD
Subject: Re: Remedy Approval for Florance Y44A - Please Response At Your Earliest Convenience

Matt,

Per our telephone conversation today regarding the contaminated levels at this well site. Pursuant to BLM FFO NTL 93-1 "Unlined Surface Impoundment Closure Guidelines", requirements state that contaminated soils must be excavated to the maximum depth and horizontal extent practicable. Based on your report, the practical depth of the excavation has been reached and the proposed potassium promanganate may be applied to the bottom of the excavation prior to closure. However, the horizontal extent has not been achieved. According to the test data that was submitted for the SE corner of the excavated area, the TPH, DRO and GRO levels do not meet the minimum closure level limits. Based on this data, excavation of the contaminated soils should continue until test results determine that the contamination has been removed or until the practical extent of the excavation has been reached. As we discussed earlier, because the excavation is at the edge of the existing well location, any new surface disturbance will need to have NEPA clearance prior to proceeding with the excavation.

Let me know if you have more questions.

Regards, Mark

On Thu, Apr 4, 2013 at 6:02 AM, Landon, Sherrie <<u>slandon@blm.gov</u>> wrote:

----- Forwarded message ------From: Webre, Matt <Matt.Webre@williams.com> Date: Wed, Apr 3, 2013 at 5:09 PM Subject: Remedy Approval for Florance Y44A - Please Response At Your Earliest Convenience To: "charlie.perrin@state.nm.us" <charlie.perrin@state.nm.us>, "Sherrie Landon (slandon@blm.gov)" <slandon@blm.gov>

Cc: "Valdez, Dwayne" < Dwayne.Valdez@williams.com>

Charlie and Sherrie,

We are in the process of closing a BGT at Florance Y44A. 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 are recommending that we apply potassium permanganate to the excavation floor and the small visibly stained area located on the southeast sidewall were a thin layer (18-inches) of impacted soil remains. The excavation is currently 47 feet x 36 feet wide by 9 feet deep. The small layer of impacted soil remaining (8 to 9 feet below the surface) was excavated back to the edge of the well pad and was been observed to be thinning out. Williams halted excavation activities of the remaining stained soil because we would be required to excavate material off the well pad.

Williams collected a composite sample from the excavation floor (Florance Y 44A Bottom) and one from the excavation sidewalls (Florance Y 44A Side Walls). We also collected a sample (Florance Y-44A S/E Corner 10') from a visually impacted zone. I have attached the analytical results for your review and they are summarized in the following table.

	Florance Y 44A	Florance Y 44A Side	Florance Y-44A S/E
Analyte	Bottom	Walls	Corner 10'
Benzene	2.8 mg/kg	<0.050 mg/kg	<0.25 mg/kg
Toluene	50 mg/kg	<0.050 mg/kg	<0.50 mg/kg
Ethylbenzne	10 mg/kg	<0.050 mg/kg	<0.50 mg/kg
Xylenes, Total	220 mg/kg	<0.10 mg/kg	<1.0 mg/kg
Total BTEX	282.8 mg/kg	ND	ND
TPH (418.1)	600 mg/kg	390 mg/kg	6300 mg/kg
TPH GRO	3500 mg/kg	<5.0 mg/kg	560 mg/kg
TPH DRO	22 mg/kg	12 mg/kg	2000 mg/kg
Chloride	31 mg/kg	220 mg/kg	NA

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 greater than 1,000 feet away, the remediation action levels were determined to be 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total BTEX, and 5,000 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 some of the remaining concentrations exceed the remediation action levels listed above.

Williams is proposing to apply potassium permanganate to the excavation to address the elevation concentrations. After the application, Williams will backfill the former BGT location.

Can you please provide me with your approval or disapproval to complete recommended closure activities at your earliest convenience. The produced was required to shut-in the well during remediation and is anxious to get this work completed ASAP.

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

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From:	Landon, Sherrie [slandon@blm.gov]
Sent:	Thursday, May 09, 2013 2:03 PM
То:	Webre, Matt
Subject:	Re: Request for Approval to Apply Potassium Permanganate at Florance Y44A

You have the go ahead from the BLM. I will stop at the location tomorrow and just check in. thanks sherrie

On Thu, May 9, 2013 at 8:56 AM, Webre, Matt <<u>Matt.Webre@williams.com</u>> wrote: Brandon,

Williams is requesting approval to apply 350 gallons of potassium permanganate solution on the floor of a 59 feet by 48 feet excavation as part of the BGT closure at the FloranceY44A located in Unit O, Section 31, Township 30N, Range 8W.

Application is scheduled to be completed by Envirotech on Friday, May 10, 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 State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action				
	OPERATOR	🔲 Initi	al Report	Final Report
Name of Company Williams Four Corners LLC	Contact Matt Webre			
Address 188 CR 4900, Bloomfield, NM 87413	Telephone No. 505-632-44	42		
Facility Name Florance Y44A	Facility Type Below Grade	e Tank Removal		
Surface Owner Bureau of Land Management Mineral Owner		API No).	
LOCATIO	N OF RELEASE			
Unit LetterSectionTownshipRangeFeet from theNorthO3130N8W	n/South Line Feet from the	East/West Line	County San Juan	
Latitude <u>36.76386</u>	<u>N</u> Longitude <u>107.71238 W</u>			
NATURE	C OF RELEASE			
Type of Release N/A – Below Grade Tank Removal	Volume of Release 0		Recovered 0	
Source of Release Below Grade Tank	Date and Hour of Occurrenc	e Date and	Hour of Disco	very
Was Immediate Notice Given?	If YES, To Whom?	If YES, To Whom?		
Yes No X Not Required				
By Whom?	Date and Hour			
Was a Watercourse Reached?	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				
regulations all operators are required to report and/or file certain release public health or the environment. The acceptance of a C-141 report by the				

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: The 2	OIL CONSERVATION DIVISION		
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
Date: 6/28/2013 Phone: 505-632-4442			

* Attach Additional Sheets If Necessary

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 *Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

 Generator Name and Address: Williams Four Corners LLC., 188 Country Road 4900, Bloomfield, NM 87413
2. Originating Site: Florance Y44A
3. Location of Material (Street Address, City, State or ULSTR): Unit O, Section 31, Township 30N, Range 8W
4. Source and Description of Waste: Source/Description: Produced water/condensate release from below-grade tank/Soil impacted from release
Estimated Volume 100 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) yd^3 / bbls
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS I, Matt Webre M, 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,, representative for Envirotech, 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 #: Envirotech Remediation FacilityPermit # NM-01-0011
Address of Facility: Hilltop, New Mexico
Method of Treatment and/or Disposal:
🗌 Evaporation 🔲 Injection 🔲 Treating Plant 🔀 Landfarm 🔲 Landfill 🔲 Other
Waste Acceptance Status:
PRINT NAME: DATE: DATE:
SIGNATURE: TELEPHONE NO.: Surface Waste Management Facility Authorized Agent

Webre, Matt

From:Webre, MattSent:Friday, December 07, 2012 12:46 PMTo:Powell, Brandon, EMNRDCc:Valdez, Dwayne; morgankillion@yahoo.com; Ruybalid, TristenSubject:Notice of BGT Removal - Florance Y44A

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:

Florance Y44A API No. 30-045-22249 Unit O, Section 31, Township 30N, Range 8W

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

The closure plan was approved by OCD on November 19, 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 <u>matt.webre@williams.com</u>



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

December 7, 2012

Mr. Mark Kelly USBLM – Farmington District 1235 La Plata Highway, Suite A Farmington, New Mexico 87401

RE: Notification of Below Ground Tank Closure - Florance Y44A

Dear Mr. Kelly:

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:

Florance Y44A API No. 3004522249 Unit O, Section 31, Township 30N, Range 8W

The closure plan was approved by OCD on November 19, 2012. BGT removal is schedule to begin on Wednesday, December 12, 2012.

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

Sincerely,

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 <u>December</u> 10th, 2012. By <u>Kayleigh Ruybalich</u>

Certified Mail #

7012 0470 0001 1641 2666

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×S∃N⊧	ER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
iten 留 Prir so t 図 Atta	nplete items 1, 2, and 3. Also complete n 4 If Restricted Delivery is desired. It your name and address on the reverse hat we can return the card to you. ach this card to the back of the mailpiece, on the front if space permits.	A. Signature X Agent B. Received by (Printed Name) D. Is delivery address different from item 1? Yes
1. Artic	le Addressed to:	If YES, enter delivery address below: No
ſ	nark Kelly	6251 COLLEGEBLVD
us	BLM-Farmington District	STEA FARMINGTON, NM 87400-
	35 La Plata Highway	3. Service Type 100 Certified Mail □ Express Mail
	ute A	Registered Insured Mail C.O.D.
Fa	rmington, NM 87401	4. Restricted Delivery? (Extra Fee)
	le Number Isfer from service label) 7012	0470 0001 1641 2666
PS For	m 3811, February 2004 Domestic Ret	urn Receipt 102595-02-M-1540
UNI	TED STATES POSTAL SERVICE	First-Class Mail Postage & Fees Paid USPS Permit No. G-10
	• Sender: Please print your name,	address, and ZIP+4 in this box •
	williams Four G	orners, LLC
·	Attn: Environment	al Dept.
	188 County Road	d 4900 WILLIAMS
	Bloomfield, NM 87	
		FERRIS AREA
· ·	· · ·	have not come the second of the second second second

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п. 	U.S. Postal Servicem CERTIFIED MAIL: RECEIPT (Domestic Mail Only: Notinsurance Coverage Rrovided)
ת ה ד ת ה ד ה ה ת ת ת ת ת ת ת ת ת ת ת ת	Forscellivery/informet/fonv/siteourave
7000 00 02 h	Return Receipt Fee (Endorsement Required) %2.35 Postmark (1)Hare % Restricted Delivory Fee (Endorsement Required) %0.00 % % % Total Postage & Fees \$ %5.75 12/10/2017
0 2102	Sent To Max K Kelly USBLM-Farmington District Sireel, Api. Na; or PO Bax No. 1235 La Plata Huy Surte A City, State, ZIP+4 Farmington, NM 57401 Farmington, Some State Survey and Surv



April 01, 2013

Matt Webre Williams Field Services 188 Co. Rd 4900 Bloomfield, New Mexico 87413 TEL: (505) 632-4442 FAX

RE: Florence Y 44A 10'-6"

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

OrderNo.: 1303B96

Dear Matt Webre:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/30/2013 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 <u>www.hallenvironmental.com</u> 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. 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.

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1303B96 Date Reported: 4/1/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services Client Sample ID: Florance Y-44A S/E Corner 10'-Florence Y 44A 10'-6" Collection Date: 3/29/2013 1:30:00 PM **Project:** Lab ID: 1303B96-001 Matrix: SOIL Received Date: 3/30/2013 10:00:00 AM **RL** Qual Units DF **Date Analyzed** Analyses Result **EPA METHOD 8015B: DIESEL RANGE ORGANICS** Analyst: MMD Diesel Range Organics (DRO) 2000 100 10 4/1/2013 12:03:54 PM mg/Kg Surr: DNOP 0 72.4-120 s %REC 10 4/1/2013 12:03:54 PM **EPA METHOD 8015B: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 50 mg/Kg 10 3/30/2013 2:35:37 PM 560 Surr: BFB 500 84-116 S %REC 10 3/30/2013 2:35:37 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.25 mg/Kg 10 3/30/2013 2:35:37 PM Toluene ND 0.50 mg/Kg 10 3/30/2013 2:35:37 PM Ethylbenzene ND mg/Kg 3/30/2013 2:35:37 PM 0.50 10 Xylenes, Total ND mg/Kg 1.0 10 3/30/2013 2:35:37 PM Surr: 4-Bromofluorobenzene %REC 3/30/2013 2:35:37 PM 125 80-120 S 10 EPA METHOD 418.1: TPH Analyst: LRW Petroleum Hydrocarbons, TR 6300 200 mg/Kg 10 4/1/2013

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	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
	Р	Sample pH greater than 2	R	RPD outside accepted recovery limits
	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

WO#:	1303B96
	01-Apr-13

Client: Project:		ns Field Servi ce Y 44A 10'-							-		
Sample ID	MB-6747	SampTy	/pe: ME	зlк	Tes	tCode: El	PA Method	418.1: TPH			
Client ID:	PBS	Batch	ID: 67	47	F	RunNo: 9	548				
Prep Date:	4/1/2013	Analysis Da	ate: 4/	1/2013	S	SeqNo: 2	72505	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydr	ocarbons, TR	ND	20								
Sample ID	LCS-6747	SampTy	/pe: LC	s .	Tes	tCode: El	PA Method	418.1: TPH			
Client ID:	LCSS	Batch	ID: 67	47	F	RunNo: 9	548				
Prep Date:	4/1/2013	Analysis Da	ate: 4/	1/2013	S	SeqNo: 2	72506	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydr	ocarbons, TR	88	20	100.0	0	88.4	80	120			
Sample ID	LCSD-6747	SampTy	/pe: LC	SD	Tes	tCode: El	PA Method	418.1: TPH			
Client ID:	LCSS02	Batch	ID: 674	47	F	RunNo: 9	548				
Prep Date:	4/1/2013	Analysis Da	ate: 4/	1/2013	S	SeqNo: 2	72507	Units: mg/k	ίg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydr	ocarbons, TR	91	20	100.0	0	90.9	80	120	2.79	20	

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

Page 2 of 5

WO#:	1303B96
	01-Apr-13

	ams Field Servence Y 44A 10									
Sample ID MB-6751	Samp	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8015B: Dies	el Range (Drganics	
Client ID: PBS	Batc	h ID: 67	51	F	RunNo: 9	544				
Prep Date: 4/1/2013	Analysis E	Date: 4/	1/2013	S	SeqNo: 2	72410	Units: mg/#	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.5		10.00		95.0	72.4	120			
Sample ID LCS-6751	Samp1	Гуре: LC	s	Tes	tCode: El	PA Method	8015B: Diese	el Range C	Drganics	
Client ID: LCSS	Batc	h ID: 67	51	F	RunNo: 9	544				
Prep Date: 4/1/2013	Analysis D	Date: 4/	1/2013	S	SeqNo: 2	72411	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.4	47.4	122			
Surr: DNOP	5.3		5.000		105	72.4	120			

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

Page 3 of 5

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

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Client:	Williams Field Services		
Project:	Florence Y 44A 10'-6"		

Sample ID 5ML RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015B: Gasc	oline Rang	e	
Client ID: PBS	Batch	n ID: R9	512	F	RunNo: 9	512				
Prep Date:	Analysis D	ate: 3/	30/2013	5	SeqNo: 2	71773	Units: mg/K	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		88.6	84	116			
Sample ID 2.5UG GRO LCS	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015B: Gasc	oline Rang	e	
Sample ID 2.5UG GRO LCS Client ID: LCSS	•	ype: LC			tCode: El RunNo: 9		8015B: Gasc	bline Rang	e	
,	•	n ID: R9		F		512	8015B: Gasc Units: mg/K	-	e	
Client ID: LCSS	Batch	n ID: R9	512 30/2013	F	RunNo: 9 SeqNo: 2	512		-	e RPDLimit	Qual
Client ID: LCSS Prep Date:	Batch Analysis D	n ID: R9 Pate: 3 /	512 30/2013	F	RunNo: 9 SeqNo: 2	512 71774	Units: mg/ K	(g		Qual

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#:	1303B96
	1505070

01-Apr-13

	ms Field Serv ice Y 44A 10									
Sample ID 5ML RB	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batcl	h ID: R9	512	F	RunNo: 9	512				
Prep Date:	Analysis E	Date: 3/	30/2013	S	eqNo: 2	71814	Units: mg/M	(g		
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	0.91		1.000		90.7	80	120			
Sample ID 100NG BTEX L	_CS SampT	Type: LC	s	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batcl	h ID: R9	512	F	lunNo: 9	512				
Prep Date:	Analysis D	Date: 3/	30/2013	S	eqNo: 2	71815	Units: mg/H	(g		
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	1.0	0.050	1.000	0	105	80	120			
Xylenes, Total	3.2	0.10	3.000	0	106	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000	•	101	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
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- P Sample pH greater than 2
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 - R RPD outside accepted recovery limits
 - S Spike Recovery outside accepted recovery limits

HALL Enviroi Ntal Analysis Laboratory	Ai TEL: 505-345-39	al Analysis Laborator 4901 Hawkins N Ibuquerque, NM 8710 75 FAX: 505-345-410 hallenvironmental.com		ple Log-In C	heck List
Client Name: WILLIAMS FIELD SERVI	Work Order Numbe	er: 1303B96		RcptNo:	1
Received by/date: AT 03/30//3			·		
Logged By: Anne Thorne 3/	30/2013 10:00:00 A	M			
Completed By: Anne Thorne 3/	30/2013				
Reviewed By: 17-03/30/13				· ·	·
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?					
<u>Log In</u>					
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 🗹	# of preserved bottles checked	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 🗆	for pH: (<2 or	>12 unless noted)
13, Are matrices correctly identified on Chain of Cu	istody?	Yes 🗹	No 🗌	Adjusted?	
14. Is it clear what analyses were requested?		Yes 🗹		Checked by:	
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No L_		
Special Handling (if applicable)					
16. Was client notified of all discrepancies with this	order?	Yes 🗌	No 🗹	NA	
Person Notified:	Date				
By Whom:	Via:	🗌 eMail 🔲 Pho	ne 🗌 Fax	In Person	
Regarding:		n 1997 - San		and the second	
Client Instructions:	n an	er an alle ener a commune dels av Califord Markan av er la d	ina mandantika yang bilan katalo	The first data and the second se	
17. Additional remarks:					
18. <u>Cooler Information</u> Cooler No Temp °C Condition Seal.	Intact Seal No	Seal Date Si	gned By		
1 2.6 Good Yes			Suca 53		

Page 1 of 1

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C	hain	-of-Cu	istody Record	Turn-Around	Time:	(Same Do 4-2-13	ar)							ic r			30	RI K	a e i	NTA		۰,
Client:	NFS			☐ Standard	🗹 Rush	4-2-13	3,															•
2			·····	Project Name): ;			چ د	8	5 g.					i		al.co				¥9. #	•
Mailing	Address	5: 100	CR 4900	- The second	AV				400	14 LL									100			
		100		Project #:	<u> 1447</u>	10-6"									1		e, NN 245					
1310	<u>epric</u>	212 N	m 87413 2-4442						THE R. LEWIS CO., LANSING MICH.	I. 50	the set of the set						345- uesi					ક્ર ે રેં
			lebre Williams. com	Project Mana	der:				- <u></u>		<u>*</u>	3 <u>6</u> 3.6			75 A							<u>े स</u> ैर
	Package:	VI41]- W	Chice Willing Cont		yeı.			21)	b	Ě					S.	3's						
□ Star	-		Level 4 (Full Validation)	matt w	ebre			TMB'e (8021)	(Gas	RO/I			SIMS)		PO4	2 PCB'						
Accred		🗆 Othe	er	Sampler: m	orgen Kil	'[.'o~ □ No		EM1	HdT	0/0	8.1)				3,NO2	/ 8082		7				Ŝ
	(Type)			Sample Tem	perature:	26		ц	щ	(GR	d 41	d 50	D OL	tals	N.	des	2	0				٤
Date	Time	Matrix	Sample Request ID		Preservative Type			BTEX + MTBE	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270	RCRA 8 Metals	Anions (E,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles (Y or N)
3-29-13	1:30	soil	Clorance Y-44A SIE Corner 16-6"	1-402			rl	X			X		-+									
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Date:	Time:	Relinquish	Fillion	Received by:	a Deels	Date Time 3/29/13/3	520	Ren	narks	5:			. –								_	
3/29/13			rit Vale	Received by:	m	Date Time 103/30//	3															

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.

1



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

April 04, 2013 Matt Webre Williams Field Services 188 Co. Rd 4900 Bloomfield, New Mexico 87413 TEL: (505) 632-4442 FAX

RE: Walls & Bottoms Florance Y 44A Confirmation Sample

OrderNo.: 1304055

Dear Matt Webre:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/2/2013 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 <u>www.hallenvironmental.com</u> 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. 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.

Sincerely,

andis

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 1304055 Date Reported: 4/4/2013

44A Confir			-		
	SOIL				
Result	RL	Qual	Units	DF	Date Analyzed
ORGANICS					Analyst: MMD
22	9.8		mg/Kg	1	4/2/2013 1:49:53 PM
108	72.4-120		%REC	1	4/2/2013 1:49:53 PM
NGE					Analyst: NSB
3500	50		mg/Kg	10	4/2/2013 2:57:34 PM
722	84-116	S	%REC	10	4/2/2013 2:57:34 PM
					Analyst: NSB
2.8	0.50		mg/Kg	10	4/2/2013 2:57:34 PM
50	5.0		mg/Kg	100	4/2/2013 4:52:24 PM
10	0.50		mg/Kg	10	4/2/2013 2:57:34 PM
220	10		mg/Kg	100	4/2/2013 4:52:24 PM
105	80-120		%REC	100	4/2/2013 4:52:24 PM
					Analyst: JRR
31	30		mg/Kg	20	4/2/2013 12:34:24 PM
					Analyst: LRW
600	20		mg/Kg	1	4/2/2013 12:00:00 PM
	Result 22 108 NGE 3500 722 2.8 50 10 220 105 31	Matrix: SOIL Result RL 22 9.8 108 72.4-120 NGE 3500 50 322 84-116 2.8 0.50 50 5.0 10 0.50 220 10 105 80-120 31 30	Attrix: SOIL Result RL Qual CORGANICS 22 9.8 108 72.4-120 NGE 3500 50 3500 50 722 84-116 S 2.8 0.50 50 5.0 10 0.50 220 10 105 80-120 31 30	44A Confir Collection D Matrix: SOIL Received D Result RL Qual Units 22 9.8 mg/Kg 108 72.4-120 %REC NGE 3500 50 mg/Kg 2.8 0.50 mg/Kg 50 5.0 mg/Kg 10 0.50 mg/Kg 105 80-120 %REC 31 30 mg/Kg	Matrix: SOIL Received Date: 4/2/201 Result RL Qual Units DF 22 9.8 mg/Kg 1 108 72.4-120 %REC 1 NGE 3500 50 mg/Kg 10 722 84-116 S %REC 10 2.8 0.50 mg/Kg 10 10 50 5.0 mg/Kg 10 10 10 0.50 mg/Kg 10 10 10 0.50 mg/Kg 10 10 31 30 mg/Kg 20 20

Qualifiers:

*

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

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

Analytical Report
Lab Order 1304055

Date Reported: 4/4/2013

Hall Environmental Analysis Laboratory, Inc.

Walls & Bottoms Florance Y 44A Confir

CLIENT: Williams Field Services

Project:

Client Sample ID: Florance Y 44A Side Walls Collection Date: 4/1/2013 1:36:00 PM Received Date: 4/2/2013 9:50:00 AM

Lab ID: 1304055-002	Matrix:	SOIL	Received D	ate: 4/2/20	13 9:50:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	E ORGANICS			·	Analyst: MMD
Diesel Range Organics (DRO)	12	9.8	mg/Kg	1	4/2/2013 2:11:33 PM
Surr: DNOP	102	72.4-120	%REC	1	4/2/2013 2:11:33 PM
EPA METHOD 8015B: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/2/2013 3:26:17 PM
Surr: BFB	101	84-116	%REC	1	4/2/2013 3:26:17 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	4/2/2013 3:26:17 PM
Toluene	ND	0.050	mg/Kg	1	4/2/2013 3:26:17 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/2/2013 3:26:17 PM
Xylenes, Total	ND	0.10	mg/Kg	1	4/2/2013 3:26:17 PM
Surr: 4-Bromofluorobenzene	97.9	80-120	%REC	1	4/2/2013 3:26:17 PM
EPA METHOD 300.0: ANIONS	-				Analyst: JRR
Chloride	220	30	mg/Kg	20	4/2/2013 12:46:48 PM
EPA METHOD 418.1: TPH					Analyst: LRW
Petroleum Hydrocarbons, TR	390	20	mg/Kg	1	4/2/2013 12:00:00 PM

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

Hall Environmental Analysis Laboratory, Inc.

WO#:	1304055
	04-Apr-13

Client: Project:		Field Serv Bottoms Fl		Y 44A Co	nfirmation						
Sample ID	MB-6784	SampT	ype: Mi	BLK	Tes	tCode: E	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch	ID: 67	84	F	RunNo: 9	604				
Prep Date:	4/2/2013	Analysis D	ate: 4	/2/2013	S	SeqNo: 2	273886	Units: mg/K	g		
Analyte Chloride		Result ND	PQL 1.5	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID	LCS-6784	SampT	ype: LC	s	Tes	tCode: E	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	ID: 67	84	F	RunNo: 9	604				
Prep Date:	4/2/2013	Analysis D	ate: 4/	/2/2013	S	SeqNo: 2	73887	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		16	1.5	15.00	0	103	90	110			
Sample ID	1303B79-001AMS	SampT	ype: M	S	Tes	tCode: E	PA Method	300.0: Anion	s		
Client ID:	BatchQC	Batch	ID: 67	84	F	RunNo: 9	604				
Prep Date:	4/2/2013	Analysis D	ate: 4/		5	SeqNo: 2	73891	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		51	15	15.00	34.77	107	64.4	117			
Sample ID	1303B79-001AMS	D SampT	ype: MS	SD	Tes	tCode: E	PA Method	300.0: Anion	s		
Client ID:	BatchQC	Batch	ID: 67	84	F	RunNo: 9	604				
Prep Date:	4/2/2013	Analysis D	ate: 4/	/2/2013	S	SeqNo: 2	273892	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		48	15	15.00	34.77	87.7	64.4	117	5.74	20	

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

Page 3 of 7

Hall Environmental Analysis Laboratory, Inc.

	ms Field Services & Bottoms Florance Y 44A Co	nfirmation		
Sample ID MB-6792	SampType: MBLK	TestCode: EPA Method	418.1: TPH	
Client ID: PBS	Batch ID: 6792	RunNo: 9578		
Prep Date: 4/2/2013	Analysis Date: 4/2/2013	SeqNo: 273231	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-6792	SampType: LCS	TestCode: EPA Method	418.1: TPH	
Client ID: LCSS	Batch ID: 6792	RunNo: 9578		
Prep Date: 4/2/2013	Analysis Date: 4/2/2013	SeqNo: 273232	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Petroleum Hydrocarbons, TR	93 20 100.0	0 92.6 80	120	
Sample ID LCSD-6792	SampType: LCSD	TestCode: EPA Method	418.1: TPH	
Client ID: LCSS02	Batch ID: 6792	RunNo: 9578		
Prep Date: 4/2/2013	Analysis Date: 4/2/2013	SeqNo: 273233	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Petroleum Hydrocarbons, TR	91 20 100.0	0 91.4 80	120 1.35	20

Qualifiers:

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J

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RL

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Value exceeds Maximum Contaminant Level.

Analyte detected below quantitation limits

Value above quantitation range

Sample pH greater than 2

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

Page 4 of 7

WO#: **1304055** *04-Apr-13*

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	1304055
	04-Apr-13

Client: Project:		Field Serv Bottoms F		Y 44A Coi	ıfirmation						
Sample ID	MB-6790	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015B: Diese	el Range (Drganics	
Client ID:	PBS	Batch	n ID: 67	90	F	RunNo: 9	569				
Prep Date:	4/2/2013	Analysis D	ate: 4/	2/2013	s	SeqNo: 2	73111	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Surr: DNOP	Organics (DRO)	ND 9.5	10	10.00		95.0	72.4	120			
Sample ID	LCS-6790	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015B: Diese	el Range (Drganics	· · · · ·
Client ID:	LCSS	Batch	n ID: 67	90	F	RunNo: 9	569				
Prep Date:	4/2/2013	Analysis D	ate: 4/	2/2013	5	SeqNo: 2	73112	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	50	10	50.00	0	100	47.4	122			
Surr: DNOP		5.3		5.000		105	72.4	120			
Sample ID	1303B09-002AMS	SampT	ype: MS	3	Tes	tCode: El	PA Method	8015B: Diese	el Range (Drganics	
Client ID:	BatchQC	Batch	n ID: 67	51	F	RunNo: 9	576				
Prep Date:	4/1/2013	Analysis D	ate: 4/	2/2013	S	SeqNo: 2	74056	Units: %RE	с		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.7		5.045		113	72.4	120			
Sample ID	1303B09-002AMS	D SampT	ype: MS	SD	Tes	tCode: El	PA Method	8015B: Diese	el Range (Drganics	
Client ID:	BatchQC	Batch	n ID: 67	51	F	RunNo: 9	576				
Prep Date:	4/1/2013	Analysis D	ate: 4/	2/2013	5	SeqNo: 2	74057	Units: %RE	с		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.5		4.869		114	72.4	120	0	0	

Qualifiers:

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Value exceeds Maximum Contaminant Level. *

E Value above quantitation range

- J Analyte detected below quantitation limits
- Р Sample pH greater than 2
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Н 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

Page 5 of 7

Hall Environmental Analysis Laboratory, Inc.

Client: Project:		Field Serv Bottoms Fl		Y 44A Cor	nfirmation						
Sample ID	MB-6738	SampT	ype: MI	3LK	Tes	tCode: El	PA Method	8015B: Gasc	line Rang	e	
Client ID:	PBS	Batch	ID: R9	583	F	lunNo: 9	583				
Prep Date:	3/29/2013	Analysis D	ate: 4/	2/2013	S	eqNo: 2	73935	Units: mg/H	ξg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 860	5.0	1000		86.4	84	116			
Sample ID	LCS-6738	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015B: Gasc	line Rang	e	
Client ID:	LCSS	Batch	ID: R9	583	F	lunNo: 9	583				
Prep Date:	3/29/2013	Analysis D	ate: 4/	2/2013	S	SeqNo: 2	73936	Units: mg/k	ξg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	e Organics (GRO)	27	5.0	25.00	0	106	62.6	136			
Surr: BFB		950		1000		95.4	84	116			
Sample ID	5ML RB	SampT	ype: MI	3LK	Tes	tCode: El	PA Method	8015B: Gasc	line Rang	e	
Client ID:	PBS	Batch	ID: RS	583	F	tunNo: 9	583				
Prep Date:		Analysis D	ate: 4/	2/2013	S	eqNo: 2	73962	Units: mg/#	ζg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	ND	5.0								
Surr: BFB		890		1000		88.8		116		<u></u>	
Sample ID	2.5UG GRO LCS	SampT	ype: LC	s	. Tes	tCode: El	PA Method	8015B: Gasc	line Rang	e	
Client ID:	LCSS	Batch	ID: R9	583	F	lunNo: 9	583				
Prep Date:		Analysis D	ate: 4/	2/2013	S	eqNo: 2	73963	Units: mg/K	ίg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	e Organics (GRO)	27	5.0	25.00	0	108	62.6	136			
Surr: BFB		930		1000		93.1	84	116			

Qualifiers:

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- 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

Page 6 of 7

Hall Environmental Analysis Laboratory, Inc.

	ns Field Serv & Bottoms F		Y 44A Coi	nfirmation								
Sample ID MB-6738	SampT	Гуре: МЕ	3LK	Tes	tCode: El	PA Method	8021B: Vola	tiles	·····			
Client ID: PBS	Batcl	h ID: R9	583	F	RunNo: 9583							
Prep Date: 3/29/2013	Analysis D	Date: 4/	2/2013	S	SeqNo: 2	73969	Units: mg/k	(g				
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	0.96		1.000		95.5	80	120					
Sample ID LCS-6738	SampT	Type: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles				
Client ID: LCSS	Batcl	h ID: R9	583	F	RunNo: 9	583						
Prep Date: 3/29/2013	Analysis E	Date: 4/	2/2013	S	SeqNo: 2	73970	Units: mg/#	ίg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	1.1	0.050	1.000	0	107	80	120					
Toluene	1.1	0.050	1.000	0	108	80	120					
Ethylbenzene	1.1	0.050	1.000	0	107	80	120					
Xylenes, Totai	3.2	0.10	3.000	0	106	80	120					
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120					

Qualifiers:

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- 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

WO#: **1304055**

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962 	ANALYSIS							
	LABO	RATORY						

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Received by/date: 0716-04102113	
Logged By: Anne Thorne 4/2/2013 9:50:00 AM	
Completed By: Anne Thorne 4/2/2013	
Reviewed By: 16 04/2/2013	
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?	
<u>Log In</u>	
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 V No 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 Ves where any sample containers received broken? Yes where any sample containers received broken?	
12.Does paperwork match bottle labels? Yes ✓ No for pH:	
(Note discrepancies on chain of custody) (<2 or >12	unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes 🗹 No 🗌 Adjusted?	
14, Is it clear what analyses were requested? Yes 🗹 No 🗌	
15. Were all holding times able to be met? Yes	
Special Handling (if applicable)	
16. Was client notified of all discrepancies with this order? Yes No No No NA	
Person Notified: Date	
By Whom:	
Regarding:	
Client Instructions:	
17. Additional remarks:	
18. <u>Cooler Information</u> Cooler No. Temp °C Condition Seal Intact Seal No. Seal Date Signed By	

Page 1 of 1

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Yes

Ċ	hain	-of-Cu	ustody Record	Turn-Around	Time:		<u> </u>				8_	N 29.)	a n			T (**)	~ R #	読みて	- 1 17	ГАК	
Client:	WFS			□ Standard Project Name Floravice Project #:	⊡ (Rusi	1 Sam	e Day												ENT Ato		
	<u>v.v. (</u>			Project Nam	e:	41/5×	Boffens		i and a state of the state of t								l.com	29 H. 462			-
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3100	mFiel	2 9/1	n 874/3	Project #:		// [[)5-34					-	45-41				
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email o	or Fax#: j	vatt.We	brc@ Willians, com	Project Mana	ager:				(עור	(Q					(*)						
	Package:] .				3021	(Gas only)	DRO / MRO)			<i>(</i> 0		4'S(PCB's					
□ Star	ndard		Level 4 (Full Validation)	Matt We) j	(Ge	RO			SIMS)		PO DO	E D					
Accred		_ 0"		Sampler: Mo	rgan Killi De Yes	σN		T MB's- (8021-)	ТРН	1	.	(0/3		δ.	/ 8082					Î
			er	On Ice (perature:	⊡ No			+	(GRO	418	504	5 8	S	Š	es /					د د
) (Type)	1	1	1	1	New Constraint of the Day	and the base of the second second	Ē	MTBE	5B ((hod	poq	10	Meta	Ū.	ticid			605195) se
Date	Time	Matrix	Sample Request ID	Container	Preservative Type			2		3015	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270	RCRA 8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	Pesticides	8260B (VOA) 8270 (Semi-VOA)				Air Bubbles (Y or N)
Date	1 Inte			·) · · · · · · · ·				BTEX-+	BTEX	TPH 8015	НЧ Н	DB	AH's	CR/	nion	8081		7			ir Bu
		· · · ·		Meattle		12051	<u>().S.S.B.B.B.B.</u> ?				F	<u>ш</u>		~	<u>₹</u>	8	άδ		<u>┤</u> ─┤		<
		F	FLORANCE Y 44 A BOHOM FLORANCE Y 44 JUSIS	1-402	TCC		-70	X		X	X			-+							+
4 <u>-1-1</u> 3	1336	501	Florance 1441 WEIIS	1-402	ICC	×	-001	X.		Х	X							X			
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Date:	Time:	Relinguist	ned by:	Received by:		Date	· Time	Rer	nark	s:	iI		I	I	l				_ _		
4-1-13	1545	mo	& Killon	/ hante	1.)00/4	. "{I] _I	3 1545														
Date:	Time:	Relinquist	ned by:	Received by:		Date	Time	1													
4/2/12	1020	MAIN	tras 1 Draota.	FM i	11 mail	- OHLOS	13 1958	:													
		y 1000	www. unevers	- property	a - pull	$ \mu \gamma$	12012	<u>ــــــــــــــــــــــــــــــــــــ</u>													

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.

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

May 10, 2013 Matt Webre Williams Field Services 188 Co. Rd 4900 Bloomfield, NM 87413 TEL: (505) 632-4442 FAX:

RE: Florance Y # 44A East Wall Composite

OrderNo.: 1305277

Dear Matt Webre:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/8/2013 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 <u>www.hallenvironmental.com</u> 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. 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.

Sincerely,

India

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1305277

Date Reported: 5/10/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services

Lab ID:

Florance Y # 44A East Wall Composite **Project:**

> 1305277-001 Matrix: MEOH (SOIL)

Client Sample ID: Florance #44A East Wall Collection Date: 5/7/2013 3:00:00 PM Received Date: 5/8/2013 9:50:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analyst: GSA
Diesel Range Organics (DRO)	12	10	mg/Kg	1	5/8/2013 12:42:53 PM
Surr: DNOP	` 108	63-147	%REC	1	5/8/2013 12:42:53 PM
EPA METHOD 8015D: GASOLINE R	ANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/8/2013 11:46:28 AM
Surr: BFB	94.5	80-120	%REC	1	5/8/2013 11:46:28 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	5/8/2013 11:46:28 AM
Toluene	ND	0.050	mg/Kg	1	5/8/2013 11:46:28 AM
Ethylbenzene	ND	0.050	mg/Kg	1	5/8/2013 11:46:28 AM
Xylenes, Total	ND	0.10	mg/Kg	1	5/8/2013 11:46:28 AM
Surr: 4-Bromofluorobenzene	100	80-120	%REC	1	5/8/2013 11:46:28 AM
EPA METHOD 418.1: TPH					Analyst: LRW
Petroleum Hydrocarbons, TR	26	20	mg/Kg	1	5/8/2013 12:00:00 PM

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

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

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Hall Environmental Analysis Laboratory, Inc.

Client:Williams Field ServicesProject:Florance Y # 44A East Wall Composite

									······		
Sample ID: MB-7351	SampType: M	BLK	Tes	TestCode: EPA Method 418.1: TPH							
Client ID: PBS	Batch ID: 7:	351	F	RunNo: 10)481						
Prep Date: 5/8/2013	Analysis Date: 5	/8/2013	S	SeqNo: 29	96334	Units: mg/K	g				
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Petroleum Hydrocarbons, TR	ND 20										
Sample ID: LCS-7351	le ID: LCS-7351 SampType: LCS TestCode: EPA Method 418.1: TPH										
Client ID: LCSS	Batch ID: 7:	351	RunNo: 10481								
Prep Date: 5/8/2013	Analysis Date: 5	/8/2013	S	SeqNo: 29	96335	Units: mg/Kg					
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Petroleum Hydrocarbons, TR	99 20	100.0	0	99.1	80	120					
Sample ID: LCSD-7351	SampType: L	CSD	Tes	tCode: EF	A Method	418.1: TPH					
Client ID: LCSS02	Batch ID: 7:	351	F	RunNo: 10)481						
Prep Date: 5/8/2013	Analysis Date: 5	/8/2013	S	SeqNo: 29	6336	Units: mg/K	g				
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Petroleum Hydrocarbons, TR	100 20	100.0	0	102	80	120	2.84	20			

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

Page 2 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:	1305277
	10-May-13

	iams Field Serv ance Y # 44A E		ll Composi	te						
Sample ID: MB-7350 Client ID: PBS Prep Date: 5/8/2013	•	ype: ME DID: 73	50	_ F	tCode: El RunNo: 10 SeqNo: 29	0475	8015D: Dies Units: mg/k	U	Drganics	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO) Surr: DNOP	ND 11	10	10.00		111	63	147			
Sample ID: LCS-7350	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Dies	el Range C	Drganics	
Client ID: LCSS	Batch	1D: 73	50	ŕF	RunNo: 1	0475				
Prep Date: 5/8/2013	Analysis D	ate: 5/	8/2013	S	SeqNo: 2	96055	Units: mg/H	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO) Surr: DNOP	41 4.4	10	50.00 5.000	0	82.6 87.0	47.4 63	122 147			

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

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Hall Environmental Analysis Laboratory, Inc.

	ns Field Services e Y # 44A East Wall Composit	te
Sample ID: MB-7324	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range
Client ID: PBS	Batch ID: 7324	RunNo: 10472
Prep Date: 5/7/2013	Analysis Date: 5/8/2013	SeqNo: 296777 Units: %REC
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: BFB	940 1000	93.8 80 120
Sample ID: LCS-7324	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range
Client ID: LCSS	Batch ID: 7324	RunNo: 10472
Prep Date: 5/7/2013	Analysis Date: 5/8/2013	SeqNo: 296778 Units: %REC
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: BFB	1000 1000	103 80 120
Sample ID: 1305156-001AM	S SampType: MS	TestCode: EPA Method 8015D: Gasoline Range
Client ID: BatchQC	Batch ID: 7324	RunNo: 10472
Prep Date: 5/7/2013	Analysis Date: 5/8/2013	SeqNo: 296780 Units: %REC
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: BFB	990 941.6	106 80 120
Sample ID: 1305156-001AM	SD SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range
Client ID: BatchQC	Batch ID: 7324	RunNo: 10472
Prep Date: 5/7/2013	Analysis Date: 5/8/2013	SeqNo: 296781 Units: %REC
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: BFB	980 942.5	104 80 120 0 0
Sample ID: MB-7324	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range
Client ID: PBS	Batch ID: R10472	RunNo: 10472
Prep Date: 5/7/2013	Analysis Date: 5/8/2013	SeqNo: 296787 Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 940 1000	93.8 80 120
Sample ID: LCS-7324	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range
Client ID: LCSS	Batch ID: R10472	RunNo: 10472
Prep Date: 5/7/2013	Analysis Date: 5/8/2013	SeqNo: 296788 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 62.6 136
Surr: BFB	1000 1000	103 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

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

Page 4 of 6

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Hall Environmental Analysis Laboratory, Inc.

	Field Serv Y # 44A E		II Composit	e						
Sample ID: MB-7324	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volati	iles		
Client ID: PBS	Batch	ID: 732	24	F	RunNo: 1	0472				
Prep Date: 5/7/2013	Analysis D	ate: 5/ 8	B/2013	S	SeqNo: 2	96807	Units: %REC	2		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			
Sample ID: LCS-7324	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volati	iles		
Client ID: LCSS	Batch	ID: 732	24	F	RunNo: 1	0472				
Prep Date: 5/7/2013	Analysis D	ate: 5 /3	B/2013	S	SeqNo: 2	96808	Units: %REC	3		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			
Sample ID: 1305213-001AMS	SampT	ype: MS		Tes	tCode: El	PA Method	8021B: Volati	iles		
Client ID: BatchQC	Batch	ID: 732	24	F	RunNo: 1	0472				
Prep Date: 5/7/2013	Analysis D	ate: 5/	8/2013	S	SeqNo: 2	96810	Units: %REC	2		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		0.9461		108	80	120			
Sample ID: 1305213-001AMSE	D SampT	ype: MS		Tes	tCode: E	PA Method	8021B: Volati	iles	<u></u>	
Client ID: BatchQC	Batch	ID: 73	24	F	RunNo: 1	0472				
Prep Date: 5/7/2013	Analysis D	ate: 5/	8/2013	S	SeqNo: 2	96811	Units: %REC	2		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		0.9443		107	80	120	0	0	
Sample ID: MB-7324	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volati	iles		
Client ID: PBS	Batch	ID: R1	0472	F	RunNo: 1	0472				
Prep Date: 5/7/2013	Analysis D	ate: 5/ 8	B/2013	S	SeqNo: 2	96813	Units: mg/K	g		
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 Surr: 4-Bromofluorobenzene	ND 1.0	0.10	1.000		102	80	120			
Sample ID: 1 CS 7224		ype: LC					8021B: Volati			
Sample ID: LCS-7324 Client ID: LCSS		ID: R1			RunNo: 1		8021B: Volat	lies		
Prep Date: 5/7/2013	Analysis D				SeqNo: 2		Units: mg/K	a		
Analyte	Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000		107	80	120			
Toluene	1.1	0.050	1.000	0	107	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

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

Page 5 of 6

Hall Environmental Analysis Laboratory, Inc.

Client:	Williams Field Services
Project:	Florance Y # 44A East Wall Composite

Sample ID: LCS-7324	SampType: LCS			Tes	TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS Batch ID: R10472 RunN					tunNo: 1	o: 10472						
Prep Date: 5/7/2013	Analysis Date: 5/8/2013			SeqNo: 296814			Units: mg/K	g				
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit		LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Ethylbenzene	1.1	0.050	1.000	0	109	80	120					
Xylenes, Total	3.3	0.10	3.000	0	111	80	120					
Surr: 4-Bromofluorobenzene	1.1		1.000		109	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
- 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

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HALL ENVIRON TAL ANALYSIS LABORATORY	Hall Environmental Albı TEL: 505-345-3975 Website: www.ha	4901 Hawk uquerque, NM FAX: 505-34	tins NE (87105 Sam) (5-4107	ple Log-In Check List
Client Name: WILLIAMS FIELD SERVI	Work Order Number:	1305277		. RcptNo: 1
Received by/date:	05/08/13	· <u> </u>		
Logged By: Lindsay Mangin	5/8/2013 9:50:00 AM		JuniyHlapo	
Completed By: Lindsay Mangin	5/8/2013 10:09:26 AM		Junty Happ	
Reviewed By:	05/08/13			
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?		<u>Courier</u>		
Log In				
4. Was an attempt made to cool the sample	es?	Yes 🗹	No 🗌	
5. Were all samples received at a temperate	ure of >0° C to 6.0°C	Yes 🔽	No 🗌	
6. Sample(s) in proper container(s)?		Yes 🔽	No 🗌	
7. Sufficient sample volume for indicated tes	st(s)?	Yes 🗹	No 🗌	
8. Are samples (except VOA and ONG) proj	perly 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	oken?	Yes	No 🗹	H = F = = = = = = = = = = = = = = = = =
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No []	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain	of Custody?	Yes 🗹	No 🗋	Adjusted?
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	Checked by:

Special Handling (if applicable)

16.V	Vas client notified of all o	discrepancies with this order?	Yes	No 🗋	NA 🗹
ſ	Person Notified:		Date:		
	By Whom:		Via: 🗌 eMail 🔲	Phone 🗌 Fax 📋	In Person
	Regarding:	n na	A second s		ا
	Client Instructions:				

17. Additional remarks:

...

18. Cooler Information

Cooler No	Temp ⁰C	in Astronom C	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record		Turn-Around Time:														'n					
Client:	WFS			│ □ Standard	🗹 Rush	Some Day															
	<u>,,,,</u>			Project Name:			WWW.hallenvironmental.com														
Mailing	Address	: 188	CR 4900	Fast wall compsite			4901 Hawkins NE - Albuquerque, NM 87109														
Ble	Mailing Address: 188 CR 4900 Bloom Ficht Nm 87413 Phone #: 505-632-4442		□ Standard ■ Rush <u>Scme</u> Day Project Name: Florence Y # LI4A East wall compsife Project #:				Tel. 505-345-3975 Fax 505-345-4107														
											Â	ialys	sis	Requ	uest	28 Yr					
email o	r Fax#:	matt. l	webre@ willians.con	Project Mana	ger:		E	uly)	<u>ð</u>					04) 04)							
	QA/QC Package:		matt	Webre		+ TMB 's (8021)	+ TPH (Gas only)	(DRO HNRO)			SIMS)		PO4,S	PCB's							
Accred		:		Sampler: M	10 marsh	11.00]⊈[H		7		8270 5		20 20	3082						F
		Othe	er	On Ice:	.ĭ⊈∕Yes				B	418.1)	504	or 82	s	ő	3 / Se		(A)			ן ל	5
) (Type) <u>-</u> I	r	·	Sample Tem	oerature:			1BE	Å	po	g	6	letal	U,N	cide	Â) -ir				s (1
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	ETEX+ WTBE	BTEX + MTBE	TPH 8015B(GR0	TPH (Method	EDB (Method 504.1)	PAH's (8310	RCRA 8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)			Air Bubbles /V or NI)	AIL BUDDIE
5-7-13	3:00	soil	FlorGNCC Y 44 A EGST Wall	1-402	ICC	- 001	X														<u>`</u>
<u> </u>																					
						:															
<u></u>			· · · · · · · · · · · · · · · · · · ·																		
Date: 5-7-[3	Time:	Relinquished by:		Received by: Date Time $5/7/13$ 1600			Ren	narks	5:												
	Time:	Relinquish	the Walla	Received by:	\sim	Date Time	1						·								
	I	semples subi	mitted to Hall Environmental may be subc	ontracted to other ad	ccredited laboratorie	es. This serves as notice of this	s possil	bility. /	Any su	b-contr	acted (data w	rill be c	leariy	/ notat	ted on	the ana	alytical r	eport.		—

h는 그는 수도 가지 않는 수도 있는 수도 한 것을 수도 있는 것을 수도 있는 것을 하는 것을 했다. 것을 하는 것

 $2^{p_{1}}$. The $2^{p_{1}}$ - $2^{p_{2}}$, where p_{1} is the probability of p_{2} , p_{2} , p_{3} , p_{4} , $p_$