For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office. For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application
Type of action: Below grade tank registration Permit of a pit or proposed alternative method Closure of a pit, below-grade tank, or proposed alternative method Modification to an existing permit/or registration Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
1. Operator: <u>Enduring Resources, LLC</u> OGRID #: <u>120782</u>
Address: 200 Energy Court Farmington, New Mexico 87401
Facility or well name: <u>MC 7 COM 161H</u>
API Number: 30-039-31344 OCD Permit Number:
U/L or Qtr/Qtr <u>G</u> Section <u>6</u> Township <u>23N</u> Range <u>7W</u> County: <u>Rio Arriba</u>
Center of Proposed Design: Latitude <u>36.2590286</u> Longitude <u>-107.613756</u> NAD83
Surface Owner: X Federal State Private Tribal Trust or Indian Allotment
2. Description F, G or J of 19.15.17.11 NMAC OCT 2 9 2018
Temporary: Drilling Workover
Permanent Emergency Cavitation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other
String-Reinforced
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D
3.
Below-grade tank: Subsection I of 19.15.17.11 NMAC
Volume: 120 bbl Type of fluid: Produced Water
Tank Construction material: Steel
Secondary containment with leak detection 🗌 Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
Visible sidewalls and liner Visible sidewalls only Other
Liner type: Thickness mil
4.
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.
 5. Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specify

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

Screen Netting Other

Monthly inspections (If netting or screening is not physically feasible)

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

Variances and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9. <u>Siting Criteria (regarding permitting)</u> : 19.15.17.10 NMAC <i>Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptate acceptate and the provided below.</i> Siting criteria does not apply to drying pads or above-grade tanks.	ptable source
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank	☐ Yes ☐ No ☐ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
 Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks) Written confirmation or verification from the municipality; Written approval obtained from the municipality 	🗌 Yes 🗌 No
 Within the area overlying a subsurface mine. (Does not apply to below grade tanks) Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division 	Yes No
 Within an unstable area. (Does not apply to below grade tanks) Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	Yes No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	Yes No
Below Grade Tanks	
 Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No
 Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
 Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) Topographic map; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	🗌 Yes 🗌 No

Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

🗌 Yes 🗌 No

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) Topographic map; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	🗌 Yes 🗌 No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) Topographic map; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No
 Within 500 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No
10. Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NM. Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documattached.	uments are NMAC 5.17.9 NMAC
11. Multi Wall Fluid Management Bit Charkligt, Subsection P of 10 15 17 0 NMAC	
Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the document attached.	5.17.9 NMAC

Permanent Pine Permit Application Checklist: Solvection B of 19.15.17.9 NMAC Instruction:: Each of the following loose must be attached in the application. Please indicate, by a check mark in the bax, that the documents are attached. Hydrogologic Report - based upon the requirements of Pangraph (1) of Subsection B of 19.15.17.19 NMAC Climatologic applications Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC Leak Decirement and upon the appropriate requirements of 19.15.17.11 NMAC Departing and Maintenace Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Departing and Maintenace Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Departing and Maintenace Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Departing and Maintenace Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Departing and Maintenace Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Departing and Maintenace Plan - based upon the appropriate requirements of 19.15.17.13 NMAC Proceed Closure: 19.15.17.13 NMAC Thrattactures: The appropriate requirement Pli Delow-grade Tank Maintenace Plan - based upon the appropriate requirement Pli Delow-grade Tank Multi-well Pluid Management Pli Type: Delower Plan Checklikiki (19.15.17.13 NMAC Proceed Closure Method Quark Execution and Removal Closure Method Quark Execution and Removal Closure Pla		
Hydrogeologic Report - based upon the appropriate requirements of 19.15.17.9 NMAC Siting Criteria Compliance Demonstration - based upon the appropriate requirements of 19.15.7.11 NMAC Certifical Encirctor Assessment Operating and Maintenance Phane - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Phane - based upon the appropriate requirements of 19.15.17.12 NMAC Operating and Maintenance Phane - based upon the appropriate requirements of 19.15.17.13 NMAC Of Field Wast Stream Chanacterization Maintenance Phane Phane Of Field Wast Stream Chanacterization Proposed Closure Plane - based upon the appropriate requirements of 19.15.17.13 NMAC Terestorians Plane Pla	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
instructions: Please complete the applicable backs, Backs 14 through 18, in regards to the proposed closure plan. Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well Fluid Management Pit Proposed Closure Method: Waste Encouval (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) Implay the Back and the Destination on the Destite Trench Burial Waste Encouval (Closed-loop systems only) On-site Closure Method Implay the Closure Method Waste Encouval (Closed-loop systems only) On-site Trench Burial Implay the Closure Method Waste Encouval (Closed-loop systems only) On-site Trench Burial Implay the Closure Method Waste Encouval (Closed-loop systems only) On-site Trench Burial Implay the Close and Proceedures - based upon the appropriat requirements of Subsection C of 19.15.17.13 NMAC Oconfirmation Sampling Point (Fapricia) he appropriate requirements of Subsection H of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cutings) Subsection H of 19.15.17.13 NMAC Sting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Master Encounts on the appropriate requirements of Subsection H of 19.15.17.13 NMAC Sting Criteria (regarding on-site closure methods	 Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Climatological Factors Assessment Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC Leak Detections and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC Quality Control/Quality Assurance Construction and Installation Plan Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Nuisance or Hazardous Odors, including H₂S, Prevention Plan Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Closure Plan - based upon the appropriate requirements of 19.15.17.9 NMAC and 19.15.17.13 NMAC 	
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) Implace Burial On-site Closure Method 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. Places indicates, by a check mark in the bax, that the dacuments are attached. Protocols and Procedures - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) Silting Criteria (regarding on-site closure methods only): 19.15.17.13 NMAC Box Request requirements of Subsection H of 19.15.17.13 NMAC Instructions: Each silting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain silting criteria requirements of Subsection H of 19.15.17.13 NMAC Instructions: Each silting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain silting criteria requirements of Subsection H of 19.15.17.10 NMAC Instructions: Each silting criteria requires a sacch; USGS; Data obtained from nearby wells NA Ground water is between 25-50 feet below the bottom of the buried waste. NM Office of the S	Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.	
Site Criteria (regarding on-site closure methods only): 19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the appropriate requirements of Subsection C of 19.15.17.13 NMAC Site Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Instructions: Each sing criteria requires a demonstration of compliance in the closure plan. Recommendations of equivalency. Please refer to 19.15.17.10 NMAC Instructions: Each sing criteria requires a demonstration of compliance in the closure plan. Recommendations of equivalency. Please refer to 19.15.17.10 NMAC for guidance. Ground water is less than 25 feet below the bottom of the buried waste. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Ground water is hetween 25-50 feet below the bottom of the buried waste. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Molifice of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells NA Yes No	 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 	luid Management Pit
closure plan. Please indicate, by a check mark in the box, that the documents are attached.		
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance. Ground water is less than 25 feet below the bottom of the buried waste.	 closure plan. Please indicate, by a check mark in the box, that the documents are attached. Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC 	
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 NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells NA Ground water is between 25-50 feet below the bottom of the buried waste NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells 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 NA Ground water is more than 100 feet below the bottom of the buried waste. 	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 require justifications and/or demonstrations of equivalency.	
 NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells 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 Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site 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 Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site Written confirmation or verification from the municipality; Written approval obtained from the municipality Yes No Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 		
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lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Yes \No - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image - Yes \No Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - No - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site - Yes \No Written confirmation or verification from the municipality; Written approval obtained from the municipality - Yes \No Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site - Yes \No		
 Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site Written confirmation or verification from the municipality; Written approval obtained from the municipality Yes No Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	lake (measured from the ordinary high-water mark).	🗌 Yes 🗌 No
at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site Yes Yes No		🗌 Yes 🗌 No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site Yes	at the time of initial application.	🗌 Yes 🗌 No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Written confirmation or verification from the municipality; Written approval obtained from the municipality	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 	
- written commation of verification from the municipality, written approval obtained from the municipality	Yes No
 Within the area overlying a subsurface mine. Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division 	🗌 Yes 🗌 No
Within an unstable area.	
 Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	🗌 Yes 🗌 No
Within a 100-year floodplain.	
- FEMA map	Yes No
 16. On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure planet by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.13 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannet Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC 	.11 NMAC 15.17.11 NMAC
^{17.} Operator Application Certification:	
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and bel	ief.
Name (Print): Title:	
Signature: Date:	
Signature: Date: e-mail address: Telephone:	
e-mail address: Telephone:	
e-mail address: Telephone:	
e-mail address: Telephone:	
e-mail address: Telephone:	
e-mail address: Telephone:	1 2018
e-mail address:	1 2018
e-mail address: Telephone:	the closure report.

22. Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.		
Name (Print): Chad Snell	Title: <u>HSE Tech</u>	
Signature:	Date: <u>10/18/2018</u>	
e-mail address: csnell@enduringresources.com	Telephone: <u>505-444-0586</u>	

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

)

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Enduring Resources, LLC	OGRID: 120782	
Contact Name: Chad Snell	Contact Telephone: (505)444-0586	
Contact email: csnell@enduringresources.com	Incident # (assigned by OCD)	
Contact mailing address: 200 Energy Court Farmington, NM	M	
87401		

Location of Release Source

Latitude 36.2590286 Longitude -107.613756 (NAD 83 in decimal degrees to 5 decimal places) -107.613756 -107.613756			
Site Name: M	C 7 COM 161H	Site Type: Well Site	
Date Release I	Discovered: N/A	API# (if applicable): 30-039-31344	

Unit Letter	Section	Township	Range	County	
G	6	23N	7W	Rio Arriba	

Surface Owner: State Federal Tribal Private (Name: _____

Nature and Volume of Release

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

Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release: No I	Release	

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
release as defined by	
19.15.29.7(A) NMAC?	
🗌 Yes 🖾 No	
If YES, was immediate ne	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Initial Response

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

The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name:	Title:
Signature:	Date:
email:	Telephone:
OCD Only	
Received by:	Date:

Form C-141 Page 3 State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data

Data table of soil contaminant concentration data

Depth to water determination

Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release

Boring or excavation logs

Photographs including date and GIS information

Topographic/Aerial maps

Laboratory data including chain of custody

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

Form C-141	State of New Mexico	Incident ID
Page 4	Oil Conservation Division	District RP
		Facility ID
		Application ID
regulations all operators a public health or the enviro failed to adequately inves addition, OCD acceptance and/or regulations. Printed Name: Signature: email:	are required to report and/or file certain release notifica onment. The acceptance of a C-141 report by the OCI stigate and remediate contamination that pose a threat t e of a C-141 report does not relieve the operator of res T	t of my knowledge and understand that pursuant to OCD rules and ations and perform corrective actions for releases which may endanger O does not relieve the operator of liability should their operations have o groundwater, surface water, human health or the environment. In ponsibility for compliance with any other federal, state, or local laws itle:
OCD Only Received by:		Date:

Form C-141 Page 5 State of New Mexico Oil Conservation Division

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

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

 Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) 				
Deferral Requests Only: Each of the following items must be conju	firmed as part of any request for deferral of remediation.			
Contamination must be in areas immediately under or around prodeconstruction.	oduction equipment where remediation could cause a major facility			
Extents of contamination must be fully delineated.				
Contamination does not cause an imminent risk to human health,	the environment, or groundwater.			
I hereby certify that the information given above is true and complete rules and regulations all operators are required to report and/or file co which may endanger public health or the environment. The acceptant liability should their operations have failed to adequately investigate surface water, human health or the environment. In addition, OCD a responsibility for compliance with any other federal, state, or local late Printed Name:	ertain release notifications and perform corrective actions for releases ce of a C-141 report by the OCD does not relieve the operator of and remediate contamination that pose a threat to groundwater, cceptance of a C-141 report does not relieve the operator of ws and/or regulations.			
Signature:	Date:			
email:	Telephone:			
OCD Only				
Received by:	Date:			
Approved Approved with Attached Conditions of A	Approval Denied Deferral Approved			
Signature:	Date:			

Form C-141 Page 6 State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

<u>Closure Report Attachment Checklist</u>: Each of the following items must be included in the closure report.

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

Description of remediation activities: Remediation not required, No Realease

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

Printed Name: Ched Snell	Title: HSE Tech		
Signature: 12	Title: <u>HSE Tech</u> Date: <u>10-18-18</u> Telephone: <u>(505)444-0586</u>		
email: CSnell@enduringresources.com	Telephone: (505) 444-0586		
OCD Only			
Received by:	Date:		
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.			
Closure Approved by:	Date:		
Printed Name:	Title:		

Enduring Resources, LLC Below Grade Tank Closure Report

Lease Name:MC 7 COM 161HAPI No.:30-039-31344Description:Unit G, Section 6, Township 23N, Range 7W, Rio Arriba County, NM

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of below-grade tanks on Enduring Resources, LLC. (Enduring) locations. This is Enduring's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

General Plan

- Enduring will close below-grade tanks within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.
 Closure Date is October 4, 2018
- Enduring will close a below-grade tank that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC. Closure Date is October 4, 2018
- Enduring will close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17
 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on form C-144.
 Required C-144 Form is attached to this document.
- 4. Enduring will remove liquids and sludge from below-grade tanks prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility. Approved facilities and waste streams include:

Envirotech Permit No. NM01-0011 and IEI Permit No. NM 01-0010B Soil contaminated by exempt petroleum hydrocarbons Produced sand, pit sludge and contaminated bottoms from storage of exempt wastes

Basin Disposal Permit No. NM01-005

Produced water

All liquids and sludge were removed from the tank prior to closure activities.

Enduring will remove the below-grade tank and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.
 Enduring has removed the below grade tank, and will dispose of it at a division approved facility, or recycle, reclaim or reuse it in a manner that is approved by the division.

- Enduring will remove any on-site equipment associated with a below-grade tank unless the equipment is required for some other purpose.
 This location is still in production. All other on-site equipment will be utilized in the continued production of oil and gas.
- 7. Enduring will test the soils beneath the below-grade tank to determine whether a release has occurred. At a minimum 5 point composite sample will be collected along with individual grab samples from any area that is wet, discolored or showing other evidence of a release. Samples will be analyzed for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 8015M or other EPA method that the division approves, does not exceed 100mg/kg; and the chloride concentration, as determined by EPA method 9056A or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. Enduring will notify the division of its results on form C-141.

Components	Test Method	Limit (mg/Kg)	Results
Benzene	EPA SW-846 8021B or 8260B	0.2	< 0.0125 mg/kg
BTEX	EPA SW-846 8021B or 8260B	50	< 0.175 mg/kg
ТРН	EPA SW-846 8015M	100	< 10.5 mg/kg
Chlorides	EPA 9056A	250 or background	24.8 mg/kg

A five point composite sample was taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.1 3(B)(1)(b). (Sample results attached).

- If Enduring or the division determines that a release has occurred, Enduring will comply with 19.15.3.116 NMAC and 19.15.1.19NMAC as appropriate.
 No Release has occurred at this location
- 9. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, Enduring will backfill the excavation with compacted, non-waste containing, earthen material; construct a division prescribed soil cover; recontour and re-vegetate the site.
 The site has been backfilled, and will be recontoured and revegetated upon P&A of the wellsite.
- 10. Notice of Closure operations will be given to the Aztec Division District III office between 72 hours and one week prior to the start of closure activities via email or verbally. The notification will include the following:
 - i. Operator's name
 - ii. Well Name and API Number
 - iii. Location by Unit Letter, Section, Township, and Range

Notification was provided to Mr. Cory Smith with the Aztec office of the OCD via email on September 20, 2018; see attached email printout.

The surface owner shall be notified of Enduring's proposal to close the BGT as per the approved closure plan using certified mail, return receipt requested.

The BLM was notified on September 20, 2018 via email; see attached email printout.

11. Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

This site will be recontoured and revegitated once plugging and abandoning activities have been completed. The site will be recontoured to match the above mentioned specifications.

12. A minimum of 4 feet of cover shall be achieved and the cover shall include 1 foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

The area has been backfilled to match these specifications.

13. Enduring will seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs. The site will be re-seeded per the BLM MOU once plugging and abandoning activities have

The site will be re-seeded per the BLM MOU once plugging and abandoning activities have been completed.

- 14. All closure activities will include proper documentation and be available for review upon request and will be submitted in closure report form to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on form C-144 and incorporate the following:
 - Proof of closure notice to division and surface owner; attached
 - Details on capping and covering, where applicable; per OCD Specifications
 - Confirmation sampling analytical results; attached
 - Disposal facility name(s) and permit number(s); attached
 - Soil backfilling and cover installation; per OCD Specifications
 - Re-vegetation application rates and seeding techniques, (or approved alternative to re-vegetation requirements if applicable); **pursuant to BLM MOU**
 - Photo documentation of the site reclamation. attached

James McDaniel

From:	James McDaniel
Sent:	Thursday, September 20, 2018 11:32 AM
То:	'Smith, Cory, EMNRD'; Fields, Vanessa, EMNRD
Cc:	'Thomas, Leigh'; 'emartin@slo.state.nm.us'
Subject:	BGT Closures

Please accept this email as the required notification for BGT closure Activities at the following locations:

Rincon 32A – 30-039-22312 – Unit P, Section 16, Township 27N, Range 6W, Rio Arriba County, NM – STATE LAND Scheduled closure activity to take place on Tuesday, September 25th @ 10 AM.

MC 7 COM 161H – 30-039-31344 – Unit G, Section 6, Township 23N, Range 7W, Rio Arroba County, NM – BLM LAND Scheduled closure activity to take place on Wednesday, September 26th @ 12 Noon

James McDaniel HSE Supervisor Enduring Resources CSP #30009 CHMM #15676 *Office:* 505-636-9731 *Cell:* 505-444-3004 jmcdaniel@enduringresources.com



A CONTRACT		NG RESOURCE	S
1111	ON-	SITE FORM	
Well Name MC7 Com 161 H API# Section 6 Township 23 N Range 7 W County R:s Arr:b State NM Contractors On-Site MST5 Time On-Site 11:30 cm Time Off-Site 1:10pm Spill Amount 6 bbls Spilled (Oil/Produced Water/Other 7) Recovered 6 Land Use (Range / Residential / Tribe) Spill Area x Www.e Enthrow Removed. Www.e Enthrow Spill Area x Spill A			
Site Diagram			Sample Location
Comments Samples			
Time Sample #	Sample Description	Characteristics	OVM (ppm) Analysis Requested
NA	100 Standard	NA	NA
12: 30pm	BGT Bottom	Sendy, Dry, No odor	8021, 8015, Chlorida

Name (Print) Check Sne ()	 Date 9-2	6-1

-18

Name (Signature) Company Endering Reservces



Enduring Resources, LLC BGT Closure Report MC 7 Com 161H 30-039-31344

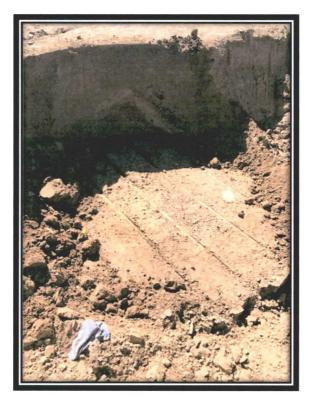


PHOTO 1: Scaled Diagram of Pit and sample locations.



Enduring Resources, LLC BGT Closure Report MC 7 Com 161H 30-039-31344

Photo 2: Area where BGT was.





Enduring Resources, LLC BGT Closure Report MC 7 Com 161H 30-039-31344



Photo 3: Area back filled





ANALYTICAL REPORT

October 04, 2018

Enduring Resources

Sample Delivery Group:
Samples Received:
Project Number:
Description:

L1029613 09/27/2018

MC 7 COM 161 H

Report To:

James McDaniel 332 County Road 3100 Aztec, NM 87410

Entire Report Reviewed By:

Olivia Studebaker Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

			Collected by Chad Snell	Collected date/time 09/26/18 12:50	Received date/time 09/27/18 09:00					
BGT BOTTOM L1029613-01 Solid	3GT BOTTOM L1029613-01 Solid									
Method	Batch	Dilution	Preparation	Analysis	Analyst					
			date/time	date/time						
Total Solids by Method 2540 G-2011	WG1174351	1	10/02/18 11:05	10/02/18 11:13	KDW					
Wet Chemistry by Method 9056A	WG1173293	1	10/01/18 20:27	10/02/18 17:34	MAJ					
Volatile Organic Compounds (GC) by Method 8015/8021	WG1175135	25	09/26/18 12:50	10/04/18 00:13	DWR					
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1173382	1	10/02/18 07:02	10/02/18 12:21	MG					



ACCOUNT: Enduring Resources PROJECT:

SDG: L1029613 DATE/TIME: 10/04/18 17:35

PAGE: 3 of 13

BGT BOTTOM Collected date/time: 09/26/18 12:50

SAMPLE RESULTS - 01

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch		Cp		
Analyte	%			date / time			2		
Total Solids	92.0		1	10/02/2018 11:13	WG1174351		Tc		
Wet Chemistry I	by Method 9056A						³ Ss		
	Desult	Qualifier	PDI	Dilution Ar	alveis	Batch	_		

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg		date / time		⁴ Cn
Chloride	24.8		10.0	1	10/02/2018 17:34	WG1173293	CII

Volatile Organic Compounds (GC) by Method 8015/8021

	Result	Qualifier	RDL	Dilution	Analysis	Batch	6
Analyte	mg/kg		mg/kg		date / time		C
Benzene	ND		0.0125	25	10/04/2018 00:13	WG1175135	
Toluene	ND		0.125	25	10/04/2018 00:13	WG1175135	7
Ethylbenzene	ND		0.0125	25	10/04/2018 00:13	WG1175135	
Total Xylene	ND		0.0375	25	10/04/2018 00:13	WG1175135	8
TPH (GC/FID) Low Fraction	ND		2.50	25	10/04/2018 00:13	WG1175135	4
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		10/04/2018 00:13	WG1175135	L
(S) a,a,a-Trifluorotoluene(PID)	102		72.0-128		10/04/2018 00:13	WG1175135	9

Sample Narrative:

L1029613-01 WG1175135: Only received MEOH vial.

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.00	1	10/02/2018 12:21	WG1173382
C28-C40 Oil Range	ND		4.00	1	10/02/2018 12:21	WG1173382
(S) o-Terphenyl	75.0		18.0-148		10/02/2018 12:21	WG1173382

WG1173293

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

TC

Ss

Cn

Sr

GI

Method Blank (MB)

(MB) R3346993-1 1	0/02/18 14:01				
	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	mg/kg		mg/kg	mg/kg	
Chloride	1.01	L	0.795	10.0	

L1029503-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1029503-01 10/02/1	8 16:06 • (DUP)	R3346993-4	10/02/18 1	6:15			
	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits	
Analyte	mg/kg	mg/kg		%		%	
Chloride	2490	2240	5	10.8		15	

L1029813-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1029813-05 10/02/1	8 18:36 • (DUP)	R3346993-7	10/02/18 1	8:44		
	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
lyte	mg/kg	mg/kg		%		%
Chloride	1500	1630	5	8.20		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3346993-2 10/02/18 14:10 • (LCSD) R3346993-3 10/02/18 14:19											
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits	
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%	
Chloride	200	204	196	102	97.9	80.0-120			3.90	15	

SDG: L1029613

WG1175135

Volatile Organic Compounds (GC) by Method 8015/8021

QUALITY CONTROL SUMMARY

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L1029402-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1029402-12 10/03/18	(OS) L1029402-12 10/03/18 23:06 • (MS) R3347552-6 10/04/18 00:58 • (MSD) R3347552-7 10/04/18 01:20											
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.0500	0.00149	0.0113	0.0121	19.6	21.3	1	10.0-155			7.32	32
Toluene	0.0500	ND	0.0105	0.0115	12.7	14.6	1	10.0-160			8.48	34
Ethylbenzene	0.0500	0.00153	0.00631	0.00656	9.55	10.0	1	10.0-160	<u>J6</u>		3.85	32
Total Xylene	0.150	0.00257	0.0143	0.0164	7.85	9.21	1	10.0-160	<u>J6</u>	<u>J6</u>	13.3	32
(S) a,a,a-Trifluorotoluene(FID)					93.1	90.7		77.0-120				
(S) a,a.a-Trifluorotoluene(PID)					95.6	92.8		72.0-128				

L1029402-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1029402-12 10/03/18 23:06 • (MS) R3347552-8 10/04/18 01:43 • (MSD) R3347552-9 10/04/18 02:05													7
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	GI
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%	
TPH (GC/FID) Low Fraction	5.50	0.142	1.28	1.43	20.6	23.3	1	10.0-151			11.1	28	⁸ Al
(S) a,a,a-Trifluorotoluene(FID)					93.1	90.8		77.0-120					
(S) a,a,a-Trifluorotoluene(PID)					97.6	95.7		72.0-128					Sc



GLOSSARY OF TERMS

Тс

Ss

Cn

Sr

Qc

AI

Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group. Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and
(S)	Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the resu reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section fo each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
Qualifier	Description
Guainei	Description

J6

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

	Billing Information:						1	Analysis /	lysis / Container / Preservative						Chain of Custody	Pageof		
Enduring Resources 332 County Road 3100			332 Cou	IcDaniel nty Road 31 M 87410	Pres Chk											*F	ESC	
Aztec, NM 87410			ALLEC, N	141 87410					and the								LA.B 5.0	CITENCE
Report to: Sames Midaniel Project Description: MC 7 Com 161 H				Email To: 5 Mcdaniel & Enduring Resource City/State Collected:													12965 Lebacon Ad Mount Juliet, TN 371222 Phone: 615-758-5859 Fax: 615-758-5859	
Phone: 505-636-9731 Client Project #							Rol									L# 10.9613 E165		
Collected by (print): Ched Snd/	Site/Facility ID) #		P.O. #				6R01D	des								Acctnum: ENDRESANM	
Collected by (signature):	Same Da	ab MUST Be	Day	Quote # Date Results Needed			(BTEX										Template: Prelogin:	
Immediately Packed on Ice N Y	Two Day Three D	γ5 Day γ16 Da ay	(Rad Only) IV (Rad Only)	Date	lesuits Needed	No. of	1202	Bols (thloride							in the	TSR: 288 - Daphne Richards P8:	
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	So	No con	D								Shipped Via: Remarks	Sample # (lab only)
BGT Bottom	Comp.	53		9-26-1	8 12:50pm	n 2												01
			-					10000					1	100	Carles .	10	19.55-10	
	A COLOR			1900									1					
													Recta				1	
and and the second										1000								
				and the second second				-				al an				12-1-1	a service a s	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bloassay	Remarks:	EN: <0).5 mP	t/hr		pH Temp					Sample Receipt Check at COC Soal Present/Intacti DNF Y _B COC Signed/Accurate:N Bottles arive intact:N							
DW - Drinking Water OT - Other			Tracking # 4	ling # 4196 3260 1736									Correct bottles used: Sufficient volume sent: If Applicable VOA Zero Headapace: Y					
Relinquished by ; (Signature) Date: 9-20		Date: 9-26-		Time: 2:54pm	Received by: (Sign		19		Trip Blank Received:			HCL / M	eoH	Vok zero meadspace: Preservation Correct/Checked:Y				
1. The second se		Date:		Time:	Received by: (Sign					Temp: °C Bottles Received:				If preservation required by Login: Date/Time				
Relinquished by : (Signature) Dat		Date:		Time: I	Received for lab b	ture)	8	61	Date: Time: 9/27//8 9:00					Hold:			Condition: NCF / OK	