

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-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	APP2107529251
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party TapRock Operating LLC.	OGRID 37243
Contact Name Christian Combs	Contact Telephone (720) 360-4028
Contact email ccombs@taprk.com	Incident # (assigned by OCD) APP2107529251
Contact mailing address 523 Park Point Dr #200	Golden, CO, 80401

Location of Release Source

Latitude **32.00285** Longitude **-103.83296**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Nailed It Fed Com #234	Site Type Well
Date Release Discovered 3/8/21	API# (if applicable)

Unit Letter	Section	Township	Range	County
B	36	26S	30E	Eddy

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)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 2	Volume Recovered (bbls) 2
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 7	Volume Recovered (bbls) 7
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release


Produced sand eroded the flowline resulting in a release.

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice 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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> 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: <u>Christian Combs</u>	Title: <u>EHSR Manager</u>
Signature: <u></u>	Date: <u>11/16/2021</u>
email: <u>ccombs@taprk.com</u>	Telephone: <u>(720) 360-4028</u>
<u>OCD Only</u>	
Received by: _____	Date: _____

Incident ID	APP2107529251
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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?	<u>>100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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 ½-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.

Oil Conservation Division

Incident ID	APP2107529251
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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: Christian Combs Title: EHSR Manager
Signature:  Date: 11/16/2021
email: ccombs@taprk.com Telephone: (720) 360-4028

OCD Only

Received by: _____ Date: _____

Incident ID	APP2107529251
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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.

Closure Report Attachment Checklist: *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

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: Christian Combs Title: EHSR Manager
Signature:  Date: 11/16/2021
email: ccombs@taprk.com Telephone: (720) 360-4028

OCD Only

Received by: Chad Hensley Date: 12/20/2021

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: 12/20/2021
Printed Name: Chad Hensley Title: Environmental Specialist Advanced



CDH Consulting, LLC
Thornton, Colorado
720.431.7468
www.CDHConsult.com

Soil Assessment and Remediation Work Plan:

Nailed It Fed Com #234
Incident # nAPP2107529251

Prepared For:

Tap Rock Resources, LLC.
Golden, CO

Prepared By:

CDH Consulting
Thornton, CO



CDH Consulting, LLC
Thornton, Colorado
720.431.7468
www.CDHConsult.com

Subject: Soil Assessment and Closure Report
Nailed It Fed Com #234
Incident # nAPP2107529251

To Whom it May Concern,

Tap Rock Resources LLC (Tap Rock) has contracted CDH Consulting LLC (CDH) to preform appropriate remediation services at the Cypress 34B CTB (Site). The results of our soil assessment and proposed remediation activities are described in the following pages. As a result of the site remediation activities, Tap Rock is requesting Closure and no further action on Incident Number APP2116533180.

SITE INFORMATION

The release at the Site is located approximately 20 miles Southeast of Malaga New Mexico (NM), in Unit B, Section 36, Township 26S, Range 30E, Eddy County, NM.

On March 8, 2021, a flowline failed, resulting in the release of 2 barrels (bbls) of crude oil and 7 bbls of produced water onto the surrounding well pad. The location of the release is shown on Figure 1. Upon discovery, crews arrived onsite to recover and freestanding fluids. Approximately 2 bbls of crude oil and 7 bbls of produced water was recovered.

Tap Rock submitted a form C-141 on April 12, 2021 and was assigned Incident Number nAPP2116533180.

GROUNDWATER AND SITE RANKING

The closest significant watercourse is an unnamed riverine located approximately 700 feet northwest of the release location.

Based on the closest groundwater well to the Site, USGS groundwater well 320125103514701, located approximately 2.5 miles northwest of the Site, depth to groundwater is 117 feet below ground surface (bgs). This well was most recently measured in October 1987. There are three other relevant groundwater wells in the area within 5.75 miles of the site, the most recently measured well, USGS well 320016103434201, was measured in January 1998 and was determined to have a depth to water of 183 feet bgs.

As outlined in Table 1 of 19.15.29.12 NMAC, the applicable Closer Criteria for the Site is as follows;

- 10 mg/kg Benzene
- 50 mg/kg Total BTEX (Benzene, Toluene, Ethylbenzene, Total Xylenes)
- 1,000 mg/kg GRO + DRO
- 2,500 mg/kg Total TPH
- 20,000 mg/kg Chlorides



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SITE INVESTIGATION AND EXCAVATION

After delays due to ongoing drilling and flow-back operations at the Site, on June 1, 2021 CDH employees visited the Site to visually assess the impact of the crude oil and produced water release. Impacted soil was removed initially at the time of release by hydrovac, then additionally with a backhoe. Approximately 209 cubic yards of impacted soil were excavated and transported to R360 Environmental Solutions, a licensed disposal facility. The field excavation crew visually inspected the impacted area to determine the extent of the release. CDH employee then returned to the Site on September 9, 2021 in order to collect confirmation soil samples inside the release extent to confirm all impacted soil was removed. Photos of the site during sampling are included as Attachment 1.

A total of 5 samples were collected in the impacted area, as shown on Figure 1, and analyzed for chlorides, total petroleum hydrocarbons (TPH) including gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube organics (MRO), benzene, toluene, ethylbenzene, total xylenes (BTEX). Laboratory analytical results are summarized in Table 1 and laboratory data is included as Attachment 2. Sample results were compared to 19.15.29.12(C) (4) NMAC, Table I, Depth to ground water greater than 100 feet. At the completion of excavation, all samples were compliant with Closure Criteria. At the completion of excavation activities, no samples were above Table I standards.

CONCLUSION

The final excavation extent was approximately 209 cubic yards of impacted soil. At the completion of soil remediation efforts, all five samples were compliant with the Closure Criteria for the Site. The location has been backfilled with clean soil and graded with the rest of the production pad.

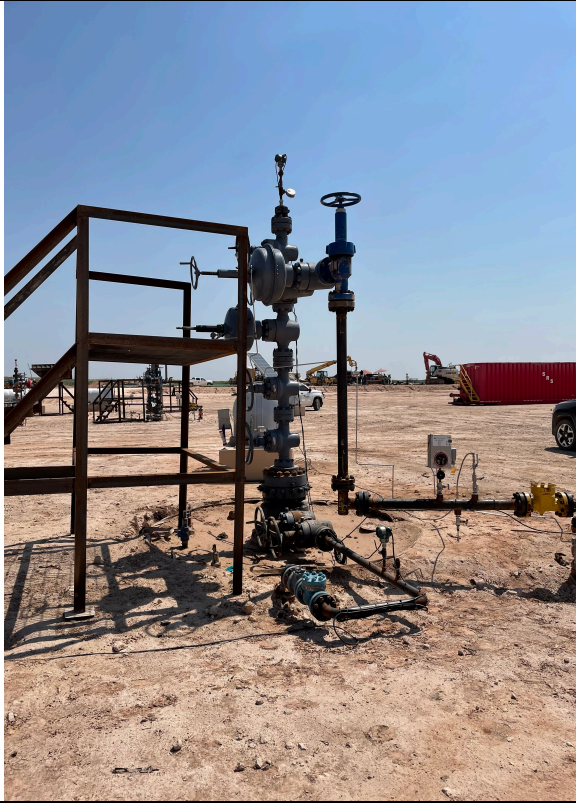


CDH Consulting, LLC
Thornton, Colorado
720.431.7468
www.CDHConsult.com

ATTACHMENT 1

Site Photos

Viewing Direction: Southeast



Sample Site, West of wellhead

Viewing Direction: North



Samples taken slightly to the West of wellhead



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720.431.7468
www.CDHConsult.com

ATTACHMENT 2



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-1239-1

Laboratory Sample Delivery Group: Eddy County
Client Project/Site: Nailed It 234H

For:

CDH Consulting
9446 Clermont St,
Thornton, Colorado 80229

Attn: Chris Del Hierro

A handwritten signature in black ink, appearing to read "Irene Vann".

Authorized for release by:
9/15/2021 4:59:05 PM

Irene Vann, Project Manager
(210)509-3334
irene.vann@eurofinset.com

LINKS

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results through
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Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: CDH Consulting
Project/Site: Nailed It 234H

Laboratory Job ID: 890-1239-1
SDG: Eddy County

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Definitions/Glossary

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Job ID: 890-1239-1**Laboratory: Eurofins Xenco, Carlsbad****Narrative****Job Narrative
890-1239-1****Receipt**

The samples were received on 9/9/2021 3:58 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: 234H-West (890-1239-4). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: 234H-North (890-1239-1) and (LCS 880-7797/2-A). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Client Sample ID: 234H-North

Lab Sample ID: 890-1239-1

Date Collected: 09/09/21 12:10

Matrix: Solid

Date Received: 09/09/21 15:58

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/13/21 10:18	09/13/21 23:09	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/13/21 10:18	09/13/21 23:09	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/13/21 10:18	09/13/21 23:09	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		09/13/21 10:18	09/13/21 23:09	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/13/21 10:18	09/13/21 23:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/13/21 10:18	09/13/21 23:09	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/13/21 10:18	09/13/21 23:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/13/21 10:18	09/13/21 23:09	1
1,4-Difluorobenzene (Surr)	110		70 - 130	09/13/21 10:18	09/13/21 23:09	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 11:49	1
Total TPH	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 11:49	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 11:49	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 11:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	09/13/21 09:36	09/13/21 11:49	1
o-Terphenyl	135	S1+	70 - 130	09/13/21 09:36	09/13/21 11:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.7		4.99		mg/Kg			09/15/21 02:52	1

Client Sample ID: 234H-East

Lab Sample ID: 890-1239-2

Date Collected: 09/09/21 12:15

Matrix: Solid

Date Received: 09/09/21 15:58

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/13/21 23:30	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/13/21 23:30	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/13/21 23:30	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		09/13/21 10:18	09/13/21 23:30	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/13/21 10:18	09/13/21 23:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/13/21 10:18	09/13/21 23:30	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/13/21 23:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/13/21 10:18	09/13/21 23:30	1
1,4-Difluorobenzene (Surr)	112		70 - 130	09/13/21 10:18	09/13/21 23:30	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Client Sample ID: 234H-East

Lab Sample ID: 890-1239-2

Date Collected: 09/09/21 12:15

Matrix: Solid

Date Received: 09/09/21 15:58

Sample Depth: 1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 12:52	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 12:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 12:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 12:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	09/13/21 09:36	09/13/21 12:52	1
o-Terphenyl	129		70 - 130	09/13/21 09:36	09/13/21 12:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.3		5.01		mg/Kg			09/15/21 02:58	1

Client Sample ID: 234H-South

Lab Sample ID: 890-1239-3

Date Collected: 09/09/21 12:20

Matrix: Solid

Date Received: 09/09/21 15:58

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/13/21 23:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/13/21 23:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/13/21 23:50	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		09/13/21 10:18	09/13/21 23:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/13/21 10:18	09/13/21 23:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/13/21 10:18	09/13/21 23:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/13/21 23:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	09/13/21 10:18	09/13/21 23:50	1
1,4-Difluorobenzene (Surr)	96		70 - 130	09/13/21 10:18	09/13/21 23:50	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 13:13	1
Total TPH	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 13:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 13:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 13:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/13/21 09:36	09/13/21 13:13	1
o-Terphenyl	124		70 - 130	09/13/21 09:36	09/13/21 13:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.0		5.05		mg/Kg			09/15/21 03:15	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Client Sample ID: 234H-West

Lab Sample ID: 890-1239-4

Date Collected: 09/09/21 12:25

Matrix: Solid

Date Received: 09/09/21 15:58

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/14/21 00:11	1
Ethylbenzene	0.00369		0.00200		mg/Kg		09/13/21 10:18	09/14/21 00:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/14/21 00:11	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		09/13/21 10:18	09/14/21 00:11	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/13/21 10:18	09/14/21 00:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/13/21 10:18	09/14/21 00:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/14/21 00:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130				09/13/21 10:18	09/14/21 00:11	1
1,4-Difluorobenzene (Surr)	87		70 - 130				09/13/21 10:18	09/14/21 00:11	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 13:34	1
Total TPH	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 13:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 13:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/21 09:36	09/13/21 13:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130				09/13/21 09:36	09/13/21 13:34	1
o-Terphenyl	145	S1+	70 - 130				09/13/21 09:36	09/13/21 13:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.8		4.97		mg/Kg			09/15/21 03:20	1

Client Sample ID: 234H-Base

Lab Sample ID: 890-1239-5

Date Collected: 09/09/21 12:30

Matrix: Solid

Date Received: 09/09/21 15:58

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/14/21 00:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/14/21 00:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/14/21 00:31	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		09/13/21 10:18	09/14/21 00:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/13/21 10:18	09/14/21 00:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/13/21 10:18	09/14/21 00:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/13/21 10:18	09/14/21 00:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				09/13/21 10:18	09/14/21 00:31	1
1,4-Difluorobenzene (Surr)	103		70 - 130				09/13/21 10:18	09/14/21 00:31	1

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Client Sample Results

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Client Sample ID: 234H-Base

Lab Sample ID: 890-1239-5

Date Collected: 09/09/21 12:30

Matrix: Solid

Date Received: 09/09/21 15:58

Sample Depth: 1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 13:56	1
Total TPH	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 13:56	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 13:56	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/21 09:36	09/13/21 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	09/13/21 09:36	09/13/21 13:56	1
o-Terphenyl	119		70 - 130	09/13/21 09:36	09/13/21 13:56	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.8		4.95		mg/Kg			09/15/21 03:26	1

Surrogate Summary

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1239-1	234H-North	113	110
890-1239-2	234H-East	113	112
890-1239-3	234H-South	121	96
890-1239-4	234H-West	132 S1+	87
890-1239-5	234H-Base	110	103
LCS 880-7802/1-A	Lab Control Sample	98	98
LCSD 880-7802/2-A	Lab Control Sample Dup	98	99
MB 880-7802/5-A	Method Blank	124	109
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1239-1	234H-North	120	135 S1+
890-1239-1 MS	234H-North	114	118
890-1239-1 MSD	234H-North	111	116
890-1239-2	234H-East	111	129
890-1239-3	234H-South	108	124
890-1239-4	234H-West	126	145 S1+
890-1239-5	234H-Base	110	119
LCS 880-7797/2-A	Lab Control Sample	127	131 S1+
LCSD 880-7797/3-A	Lab Control Sample Dup	116	118
MB 880-7797/1-A	Method Blank	102	111
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7802/5-A

Matrix: Solid

Analysis Batch: 7820

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7802

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 17:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 17:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 17:06	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		09/13/21 10:18	09/13/21 17:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/13/21 10:18	09/13/21 17:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/13/21 10:18	09/13/21 17:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/21 10:18	09/13/21 17:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	09/13/21 10:18	09/13/21 17:06	1
1,4-Difluorobenzene (Surr)	109		70 - 130	09/13/21 10:18	09/13/21 17:06	1

Lab Sample ID: LCS 880-7802/1-A

Matrix: Solid

Analysis Batch: 7820

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7802

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09562		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.1017		mg/Kg		102	70 - 130
Toluene	0.100	0.09515		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.1829		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09161		mg/Kg		92	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-7802/2-A

Matrix: Solid

Analysis Batch: 7820

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7802

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09300		mg/Kg		93	70 - 130	3	35
Ethylbenzene	0.100	0.09909		mg/Kg		99	70 - 130	3	35
Toluene	0.100	0.1019		mg/Kg		102	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1777		mg/Kg		89	70 - 130	3	35
o-Xylene	0.100	0.09112		mg/Kg		91	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

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QC Sample Results

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-7797/1-A

Matrix: Solid

Analysis Batch: 7790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 10:45	1
Total TPH	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 10:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 10:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/21 09:36	09/13/21 10:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	09/13/21 09:36	09/13/21 10:45	1
o-Terphenyl	111		70 - 130	09/13/21 09:36	09/13/21 10:45	1

Lab Sample ID: LCS 880-7797/2-A

Matrix: Solid

Analysis Batch: 7790

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	985.0		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1022		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	127		70 - 130
o-Terphenyl	131	S1+	70 - 130

Lab Sample ID: LCSD 880-7797/3-A

Matrix: Solid

Analysis Batch: 7790

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7797

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1017		mg/Kg		102	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	916.9		mg/Kg		92	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	116		70 - 130
o-Terphenyl	118		70 - 130

Lab Sample ID: 890-1239-1 MS

Matrix: Solid

Analysis Batch: 7790

Client Sample ID: 234H-North

Prep Type: Total/NA

Prep Batch: 7797

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	1009		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	1009		mg/Kg		98	70 - 130

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QC Sample Results

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-1239-1 MS

Matrix: Solid

Analysis Batch: 7790

Client Sample ID: 234H-North

Prep Type: Total/NA

Prep Batch: 7797

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	118		70 - 130

Lab Sample ID: 890-1239-1 MSD

Matrix: Solid

Analysis Batch: 7790

Client Sample ID: 234H-North

Prep Type: Total/NA

Prep Batch: 7797

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	997.1		mg/Kg		100	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	998.3		mg/Kg		97	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	116		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7767/1-A

Matrix: Solid

Analysis Batch: 7831

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/15/21 02:07	1

Lab Sample ID: LCS 880-7767/2-A

Matrix: Solid

Analysis Batch: 7831

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	260.5		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-7767/3-A

Matrix: Solid

Analysis Batch: 7831

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	261.1		mg/Kg		104	90 - 110	0	20

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QC Association Summary

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

GC VOA

Prep Batch: 7802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1239-1	234H-North	Total/NA	Solid	5035	
890-1239-2	234H-East	Total/NA	Solid	5035	
890-1239-3	234H-South	Total/NA	Solid	5035	
890-1239-4	234H-West	Total/NA	Solid	5035	
890-1239-5	234H-Base	Total/NA	Solid	5035	
MB 880-7802/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7802/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7802/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 7820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1239-1	234H-North	Total/NA	Solid	8021B	7802
890-1239-2	234H-East	Total/NA	Solid	8021B	7802
890-1239-3	234H-South	Total/NA	Solid	8021B	7802
890-1239-4	234H-West	Total/NA	Solid	8021B	7802
890-1239-5	234H-Base	Total/NA	Solid	8021B	7802
MB 880-7802/5-A	Method Blank	Total/NA	Solid	8021B	7802
LCS 880-7802/1-A	Lab Control Sample	Total/NA	Solid	8021B	7802
LCSD 880-7802/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7802

GC Semi VOA

Analysis Batch: 7790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1239-1	234H-North	Total/NA	Solid	8015B NM	7797
890-1239-2	234H-East	Total/NA	Solid	8015B NM	7797
890-1239-3	234H-South	Total/NA	Solid	8015B NM	7797
890-1239-4	234H-West	Total/NA	Solid	8015B NM	7797
890-1239-5	234H-Base	Total/NA	Solid	8015B NM	7797
MB 880-7797/1-A	Method Blank	Total/NA	Solid	8015B NM	7797
LCS 880-7797/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7797
LCSD 880-7797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7797
890-1239-1 MS	234H-North	Total/NA	Solid	8015B NM	7797
890-1239-1 MSD	234H-North	Total/NA	Solid	8015B NM	7797

Prep Batch: 7797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1239-1	234H-North	Total/NA	Solid	8015NM Prep	
890-1239-2	234H-East	Total/NA	Solid	8015NM Prep	
890-1239-3	234H-South	Total/NA	Solid	8015NM Prep	
890-1239-4	234H-West	Total/NA	Solid	8015NM Prep	
890-1239-5	234H-Base	Total/NA	Solid	8015NM Prep	
MB 880-7797/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7797/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1239-1 MS	234H-North	Total/NA	Solid	8015NM Prep	
890-1239-1 MSD	234H-North	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

HPLC/IC

Leach Batch: 7767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1239-1	234H-North	Soluble	Solid	DI Leach	
890-1239-2	234H-East	Soluble	Solid	DI Leach	
890-1239-3	234H-South	Soluble	Solid	DI Leach	
890-1239-4	234H-West	Soluble	Solid	DI Leach	
890-1239-5	234H-Base	Soluble	Solid	DI Leach	
MB 880-7767/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7767/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7767/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 7831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1239-1	234H-North	Soluble	Solid	300.0	7767
890-1239-2	234H-East	Soluble	Solid	300.0	7767
890-1239-3	234H-South	Soluble	Solid	300.0	7767
890-1239-4	234H-West	Soluble	Solid	300.0	7767
890-1239-5	234H-Base	Soluble	Solid	300.0	7767
MB 880-7767/1-A	Method Blank	Soluble	Solid	300.0	7767
LCS 880-7767/2-A	Lab Control Sample	Soluble	Solid	300.0	7767
LCSD 880-7767/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7767

Lab Chronicle

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Client Sample ID: 234H-North

Lab Sample ID: 890-1239-1

Date Collected: 09/09/21 12:10

Matrix: Solid

Date Received: 09/09/21 15:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7802	09/13/21 10:18	KL	XEN MID
Total/NA	Analysis	8021B		1	7820	09/13/21 23:09	KL	XEN MID
Total/NA	Prep	8015NM Prep			7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7790	09/13/21 11:49	AJ	XEN MID
Soluble	Leach	DI Leach			7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		1	7831	09/15/21 02:52	CH	XEN MID

Client Sample ID: 234H-East

Lab Sample ID: 890-1239-2

Date Collected: 09/09/21 12:15

Matrix: Solid

Date Received: 09/09/21 15:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7802	09/13/21 10:18	KL	XEN MID
Total/NA	Analysis	8021B		1	7820	09/13/21 23:30	KL	XEN MID
Total/NA	Prep	8015NM Prep			7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7790	09/13/21 12:52	AJ	XEN MID
Soluble	Leach	DI Leach			7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		1	7831	09/15/21 02:58	CH	XEN MID

Client Sample ID: 234H-South

Lab Sample ID: 890-1239-3

Date Collected: 09/09/21 12:20

Matrix: Solid

Date Received: 09/09/21 15:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7802	09/13/21 10:18	KL	XEN MID
Total/NA	Analysis	8021B		1	7820	09/13/21 23:50	KL	XEN MID
Total/NA	Prep	8015NM Prep			7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7790	09/13/21 13:13	AJ	XEN MID
Soluble	Leach	DI Leach			7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		1	7831	09/15/21 03:15	CH	XEN MID

Client Sample ID: 234H-West

Lab Sample ID: 890-1239-4

Date Collected: 09/09/21 12:25

Matrix: Solid

Date Received: 09/09/21 15:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7802	09/13/21 10:18	KL	XEN MID
Total/NA	Analysis	8021B		1	7820	09/14/21 00:11	KL	XEN MID
Total/NA	Prep	8015NM Prep			7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7790	09/13/21 13:34	AJ	XEN MID
Soluble	Leach	DI Leach			7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		1	7831	09/15/21 03:20	CH	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Client Sample ID: 234H-Base Lab Sample ID: 890-1239-5
Date Collected: 09/09/21 12:30 Matrix: Solid
Date Received: 09/09/21 15:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7802	09/13/21 10:18	KL	XEN MID
Total/NA	Analysis	8021B		1	7820	09/14/21 00:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			7797	09/13/21 09:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7790	09/13/21 13:56	AJ	XEN MID
Soluble	Leach	DI Leach			7767	09/10/21 14:24	CH	XEN MID
Soluble	Analysis	300.0		1	7831	09/15/21 03:26	CH	XEN MID

Laboratory References:
XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0		Solid	Chloride
8015B NM	8015NM Prep	Solid	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Prep	Solid	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Prep	Solid	Oil Range Organics (Over C28-C36)
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Benzene
8021B	5035	Solid	Ethylbenzene
8021B	5035	Solid	m-Xylene & p-Xylene
8021B	5035	Solid	o-Xylene
8021B	5035	Solid	Toluene
8021B	5035	Solid	Total BTEX
8021B	5035	Solid	Xylenes, Total

Method Summary

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Carlsbad

Sample Summary

Client: CDH Consulting
Project/Site: Nailed It 234H

Job ID: 890-1239-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1239-1	234H-North	Solid	09/09/21 12:10	09/09/21 15:58	1
890-1239-2	234H-East	Solid	09/09/21 12:15	09/09/21 15:58	1
890-1239-3	234H-South	Solid	09/09/21 12:20	09/09/21 15:58	1
890-1239-4	234H-West	Solid	09/09/21 12:25	09/09/21 15:58	1
890-1239-5	234H-Base	Solid	09/09/21 12:30	09/09/21 15:58	1

1
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9
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11
12
13
14

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing

Xenco



Work Order No:

www.xenco.com Page 1 of 1

Project Manager:	Chris Del Hierro	Bill to: (if different)	
Company Name:	CDH Consulting	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	(720) 431-7468	Email:	chr@sdcconsult.com

Project Name:	Nailed It 234H	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code	
Project Number:		Due Date:			
Project Location:	Eddy County	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Elizabeth Naka				
P.O. #:					

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Pres. Code
234H-North	S	9/09/21	12:10	1'		1	Chloride (EPA 800.0)	
234H-East			12:15				TPH (Method 8015A)	
234H-South			12:20				BTEX (Method 8021B)	
234H-West			12:25					
234H-Base			12:30					

Total	200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471		

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>			9/19/21 8:58
3 <i>[Signature]</i>				
5 <i>[Signature]</i>				

Revised Date: 08/25/2020 Rev. 2020.2

Chain of Custody

Houston, TX (281) 249-4200; Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing

Xenco



Work Order No:

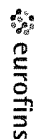
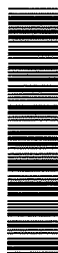
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[illegible]

Eurofins Xenco, Carlsbad

1089 N Canal St.
Carlsbad NM 88220
Phone. 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing America

Client Information (Sub Contract Lab)				Sampler		Lab PM		Carrier Tracking No(s)		COC No	
Client Contact				Vann Irene		890-402 1					
Shipping/Receiving				Phone				State of Origin		Page	
Company				Eurofins Xenco		Irene.vann@eurofinsel.com		New Mexico		Page 1 of 1	
Address				1211 W Florida Ave		Due Date Requested		9/15/2021		Job #	
City				Midland		TAT Requested (days)		7		890-1239-1	
State, Zip				TX 79701		PO #				Preservation Codes	
Phone				432-704-5440(Tel)		WO #				A. HCL B. NaOH C. Zn Acetate D. Nitric Acid E. NaHSO4 F. MeOH G. Amchlor H. Ascorbic Acid I. Ice J. DI Water K. EDTA L. EDA M. Hexane N. None O. AsNaO2 P. Na2OAS Q. Na2SO3 R. Na2S2O3 S. H2SO4 T. TSP Dodecylhydrate U. Acetone V. MCAA W. pH 4-5 Z. other (specify)	
Email				432-704-5440(Tel)		Project #		89000037		Special Instructions/Note	
Project Name				Nailed It 234H		SSOW#					
Site											

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (G=Comp, G=grab)	Matrix (W=water, S=solid, O=oil)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of containers	Special Instructions/Note
234H-North (890-1239-1)	9/9/21	12 10	Mountain	Solid	X	X	8016MOD_NM/8016NM_S_Prep (MOD) Full TPH	X	
234H-East (890-1239-2)	9/9/21	12 15	Mountain	Solid	X	X	300_ORGFM_28D/DI_LEACH Chloride	X	
234H-South (890-1239-3)	9/9/21	12 20	Mountain	Solid	X	X	8021B/6036FP_Calc BTEX - LL	X	
234H-West (890-1239-4)	9/9/21	12 25	Mountain	Solid	X	X		X	
234H-Base (890-1239-5)	9/9/21	12 30	Mountain	Solid	X	X		X	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification

Unconfirmed

Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2

Empty Kit Relinquished by Date Time Company

Relinquished by *Cue Cup 9.10.21* Date/Time Company

Relinquished by Date/Time Company

Relinquished by Date/Time Company

Custody Seals Intact: Custody Seal No

Δ Yes Δ No

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months

Special Instructions/QC Requirements

Method of Shipment: Date/Time Company

Received by *[Signature]* Date/Time Company

Received by *[Signature]* Date/Time Company

Received by *[Signature]* Date/Time Company

Cooler Temperature(s) °C and other Remarks: *2.1/12.6*

Login Sample Receipt Checklist

Client: CDH Consulting

Job Number: 890-1239-1

SDG Number: Eddy County

Login Number: 1239

List Source: Eurofins Xenco, Carlsbad

List Number: 1

Creator: Olivas, Nathaniel

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: CDH Consulting

Job Number: 890-1239-1

SDG Number: Eddy County

Login Number: 1239

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 09/13/21 09:26 AM

Creator: Copeland, Tatiana

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1 / 2.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



CDH Consulting, LLC
Thornton, Colorado
720.431.7468
www.CDHConsult.com

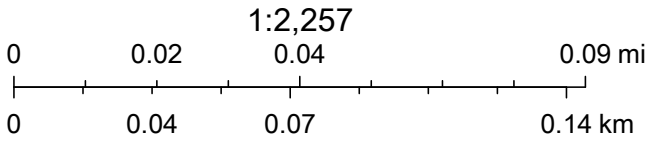
FIGURE 1

Tap Rock Operations



5/4/2021, 11:00:03 AM

-  **Counties**
-  **Active**
-  **Sample Location**



Maxar, Microsoft, Esri, HERE, Garmin, iPC



CDH Consulting, LLC
Thornton, Colorado
720.431.7468
www.CDHConsult.com

TABLE 1

Sample ID	Date Sampled	Depth (in. bgs)	Chlorides (mg/kg)	TPH ⁽²⁾	BTEX (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)
NMOCD Table I Soil Standard (mg/kg)⁽¹⁾			600 mg/kg	100 mg/kg	50 mg/kg	10 mg/kg			
234H-North	09/09/2021	12	20.7	<49.8	<0.00402	<00201	<00201	<00201	<0.00402
234H-East	09/09/2021	12	18.3	<50.0	<0.00398	<0.00199	<0.00199	<0.00199	<0.00398
234H-South	09/09/2021	12	14.0	<49.9	<0.00398	<0.00199	<0.00199	<0.00199	<0.00398
234H-West	09/09/202	12	17.8	<49.9	<0.00399	<0.00200	<0.00200	0.00369	<0.00399
234H-Base	09/09/2021	12	17.8	<49.8	<0.00398	<0.00199	<0.00199	<0.00199	<0.00398

Notes:

1. Standards for soil are taken from 19.15.29.12(C)(4) NMAC, Table I, Depth to ground water 51 - 100 ft
2. TPH - total volatile and extractable hydrocarbons. Value calculated by adding GRO, DRO and MRO concentrations

BOLD = Result above closure criteria

NMOCD = New Mexico Oil Conservation Division

(<) = Analytical result is less than the indicated laboratory reporting limit

GRO = Total volatile petroleum hydrocarbons - gasoline range organics

DRO = Total volatile petroleum hydrocarbons - diesel range organics

MRO = Total volatile petroleum hydrocarbons - motor oil/lube range organics

BTEX = Total benzene, toluene, ethylbenzene, and total xylenes

mg/kg = Milligrams per kilogram

in. = inch

ft = Feet

bgs = Below ground surface

NA = Constituent not analyzed

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 62167

COMMENTS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 62167
	Action Type: [C-141] Release Corrective Action (C-141)

COMMENTS

Created By	Comment	Comment Date
chensley	Called and worked with consultant on discrepancies with the report.	12/20/2021

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 62167

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 62167
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	12/20/2021