

Incident ID	nAB1535756628
District RP	2RP-3465
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.

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: Carmen E. Pitt Title: Senior HSE Specialist
Signature: Carmen E Pitt Date: 1/04/2021
email: cpitt@grizzlyenergyllc.com Telephone: (432)248-8145

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: Brittany Hall Date: 12/16/2022

Printed Name: Brittany Hall Title: Environmental Specialist

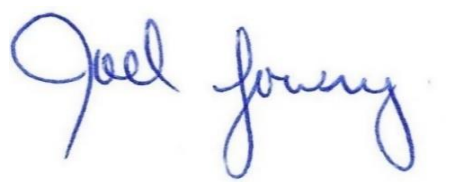
Remediation Summary and Soil Closure Request

Grizzly Energy, LLC
Aspen 32 State Com No 1 Transfer Line Historical
Eddy County, New Mexico
Unit Letter J, Section 32, Township 17 South, Range 28 East
Latitude 32.77555 North, Longitude 104.20605 West
NMOCD Reference No. nAB1535756628 (2RP-3465)

Prepared By:

Etech Environmental & Safety Solutions, Inc.
3100 Plains Highway
Lovington, New Mexico 88260



Ben J. Arguijo

Joel W. Lowry

Midland • San Antonio • Lubbock • Lovington • Lafayette

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1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Grizzly Energy, LLC (Grizzly), has prepared this Remediation Summary and Soil Closure Request for the release site known as the Aspen 32 State Com No 1 Transfer Line Historical. Details of the release are summarized below:

Location of Release Source

Latitude: 32.77555 Longitude: -104.20605

Provided GPS are in WGS84 format.

Site Name: Aspen 32 State Com No 1 Transfer Line Historical	Site Type: Flowline
Date Release Discovered: 12/11/2015	API # (if applicable): 30-015-34148

Unit Letter	Section	Township	Range	County
J	32	17S	28E	Eddy

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name _____)

Nature and Volume of Release

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 50	Volume Recovered (bbls) 12
	Is the concentration of total dissolved solids (TDS) in the produced water > 10,000 mg/L?	☒ Yes ☐ No ☐ N/A
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released	Volume/Weight Recovered

Cause of Release:

A pinhole in a valve transition on the 3" line bringing produced water from the Aspen 32 State Com. No. 1 to the Walter Solt State No. 1 SWD.

Initial Response

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Release materials have been contained via the use of berms or dikes, absorbent pad, or other containment devices
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

The previously submitted NMOCD Form C-141 is available on the NMOCD Imaging System.

2.0 SITE CHARACTERIZATION

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) was conducted in an effort to determine the horizontal distance to known water sources within a half mile radius of the Release Site. Probable groundwater depth was determined using data generated by numeric models based on available water well data and published information. Depth to groundwater information is provided as Appendix A.

What is the shallowest depth to groundwater beneath the area affected by the release?	75' - 80'	
Did the 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 any 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 the 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

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted on Figures 1, 2, 4, and 5.

3.0 REGULATORY APPROVALS AND STIPULATIONS

From July 25 through 28, 2017, an initial assessment of the release was conducted by an environmental contractor that is no longer affiliated with the site.

On August 16, 2017, based on field observations and laboratory analytical data from soil samples collected during the July 2017 site assessment, a *Site Characterization and Work Plan* was submitted to the NMOCD, outlining a plan to advance the site to an approved closure. The work plan was subsequently approved by the NMOCD, with the stipulation that the areas characterized by sample locations SP-1 and SP-2 be excavated to a total depth of six (6) feet below ground surface (bgs) prior to the installation of a liner at four (4) feet bgs and backfilling of the excavation.

Please reference the 2017 *Site Characterization and Work Plan* for additional details regarding the initial site assessment and proposed remediation activities.

4.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

Pursuant to the 2017 Site Characterization and Work Plan and Section 19.15.29.13.D.(1) of the New Mexico Administrative Code (NMAC), the NMOCD Closure Criteria and Reclamation Standards for the site are as follows:

Probable Depth to Groundwater	Constituent	Method	Closure Criteria	Reclamation Standard*
~53'	Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg	600 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	1,000 mg/kg	100 mg/kg
	DRO + GRO	EPA SW-846 Method 8015M	N/A	N/A
	BTEX	EPA SW-846 Methods 8021b or 8260b	50 mg/kg	50 mg/kg
	Benzene	EPA SW-846 Methods 8021b or 8260b	10 mg/kg	10 mg/kg

* The NMOCD Reclamation Standard applies only to the top 4' of soil in non-production areas.

5.0 REMEDIATION ACTIVITIES SUMMARY

In February 2020, Grizzly contracted Etech to assume remediation activities for the release.

On November 16, 2020, remediation activities commenced at the site. Impacted soil was excavated vertically in accordance with the approved 2017 work plan and added stipulations. The sidewalls of the excavation were advanced until field observations and test results suggested BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard. Although the NMOCD-approved 2017 work plan specified a remediation action level of 1,000 mg/kg for TPH, impacted soil was excavated in accordance with the more stringent Reclamation Standard of 100 mg/kg. Excavated soil was stockpiled on-site, pending transfer to an NMOCD-approved surface waste facility for disposal.

On November 24, 2020, Etech collected nine (9) excavation confirmation soil samples (NW-1, NW-2, EW-1, EW-2, EW-3, WW-1, and WW-2). The soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples, with the exception of sample EW-2, which exhibited a chloride concentration of 640 mg/kg.

On November 25, 2020, Etech collected seven (7) excavation confirmation soil samples (SW-1, EW-4, WW-3, and FL-1 through FL-4). The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples, with the exceptions of samples FL-1 through FL-4, which exhibited chloride concentrations ranging from 4,000 mg/kg (FL-4) to 12,200 mg/kg (FL-2).

On December 1, 2020, the excavation was advanced in the area characterized by sample point EW-2. Etech collected one (1) excavation confirmation sample (EW-2B) and submitted it to the laboratory for analysis of chloride. Laboratory analytical results indicated the chloride concentration in the soil sample was below the NMOCD Closure Criterion and the NMOCD Reclamation Standard.

On December 3, 2020, pursuant to the approved 2017 work plan, a 20-mil polyethylene liner was installed on the floor of the excavated area. Prior to installation of the liner, the area characterized by sample point FL-1 was backfilled to 4 feet bgs to match the topography of the remainder of the excavation. An approximate 6-inch layer of pad material was installed above and below the liner in an effort to maintain its integrity during backfilling activities. This engineering control is designed to inhibit the vertical migration of contaminants left in-situ.

The final dimensions of the excavated area were 200 feet in length, 25 to 106 feet in width, and ranged from 4 to 6 feet in depth. During the course of remediation activities, approximately 2,680 cubic yards of impacted soil were transported to an NMOCD-approved surface waste facility for disposal.

A "Site & Sample Location Map" is provided as Figure 3. A soil chemistry table is provided as Table 1. Field data and soil profile logs are provided in Appendix B. Laboratory analytical reports are provided in Appendix C. General photographs of the release site are provided in Appendix D.

6.0 RESTORATION, RECLAMATION AND RE-VEGETATION PLAN

Upon receiving laboratory analytical results from confirmation soil samples, excavated areas were backfilled with locally sourced, non-impacted "like" material placed at or near original relative positions. The affected area was contoured and/or compacted to achieve erosion control, stability and preservation of surface water flow to the extent practicable. Affected areas will be reseeded with an agency and/or landowner-approved seed mixture free of noxious weeds during the first favorable growing season following closure of the site.

7.0 SOIL CLOSURE REQUEST

Remediation activities were conducted in accordance with the NMOCD-approved 2017 *Site Characterization and Work Plan*. Impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard was excavated and transported to an NMOCD-approved disposal facility. Laboratory analytical results from confirmation soil samples indicate concentrations of BTEX and TPH are below the NMOCD Closure Criteria and/or NMOCD Reclamation Standard.

Based on laboratory analytical results and field activities conducted to date, Etech recommends Grizzly Energy, LLC, provide copies of this *Remediation Summary and Soil Closure Request* to the appropriate agencies and request closure be granted to the Aspen 32 State Com No 1 Transfer Line Historical Site.

8.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this *Remediation Summary and Soil Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents reference in the report and on oral statements made by certain individuals. Etech has not conducted an independent examination of the facts contained in referenced materials and statements. Etech has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Etech has prepared the report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Grizzly Energy, LLC. Use of the information contained in this report is prohibited without the consent of Etech and/or Grizzly Energy, LLC.

9.0 DISTRIBUTION

Grizzly Energy, LLC

4001 Penbrook
Suite 201
Odessa, TX 79762

New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division, District 2
811 S. First Street
Artesia, NM 88210

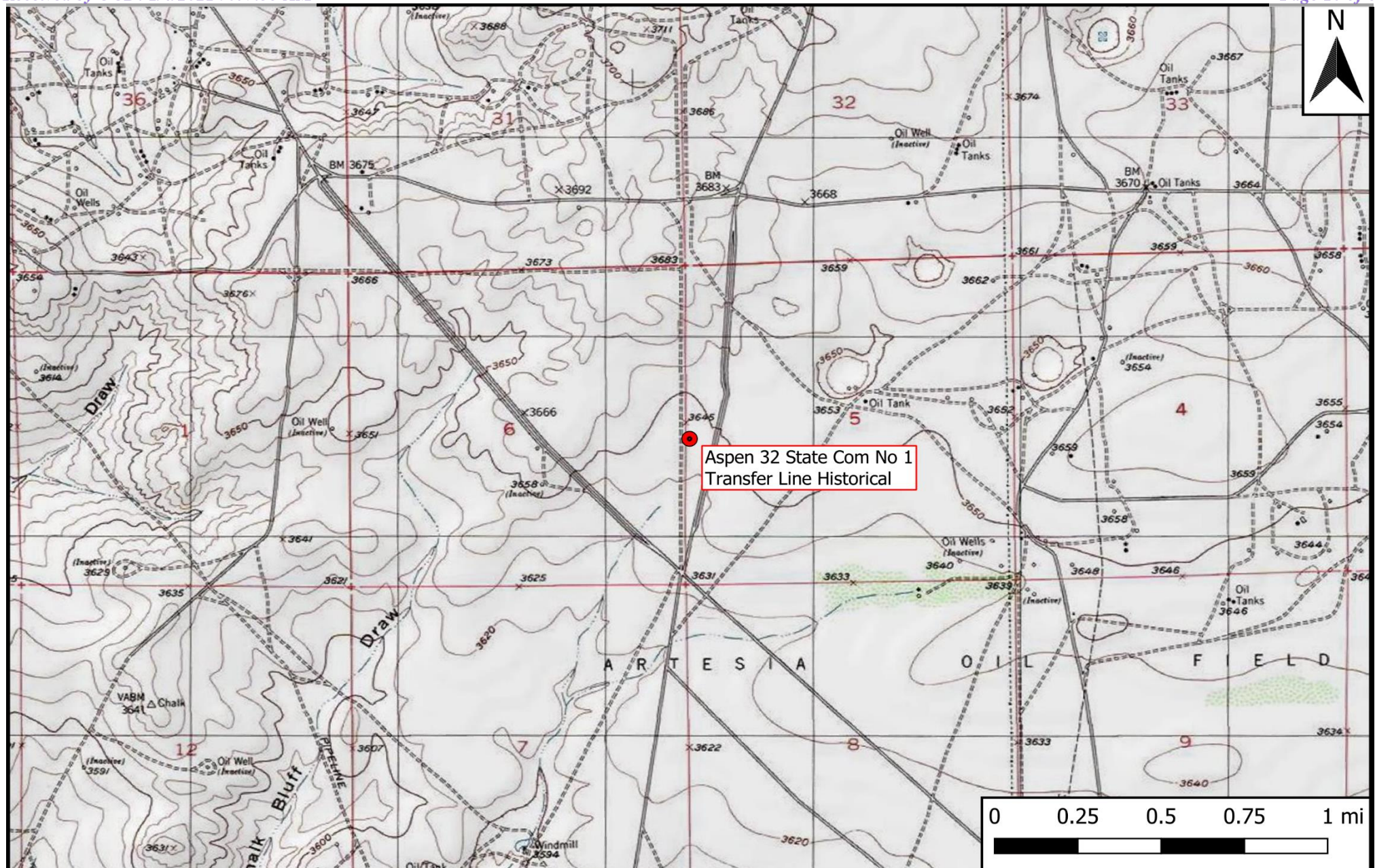
Hobbs Field Office

New Mexico State Land Office
2827 North Dal Paso Street
Suite 117
Hobbs, NM 88240

(Electronic Submission)

Figure 1

Topographic Map



Legend

● Site Location

Figure 1

Topographic Map

Grizzly Energy, LLC

Aspen 32 State Com No 1 Transfer Line Historical

GPS: 32.77555, -104.20605

Eddy County

ETECH
Environmental & Safety Solutions, Inc.

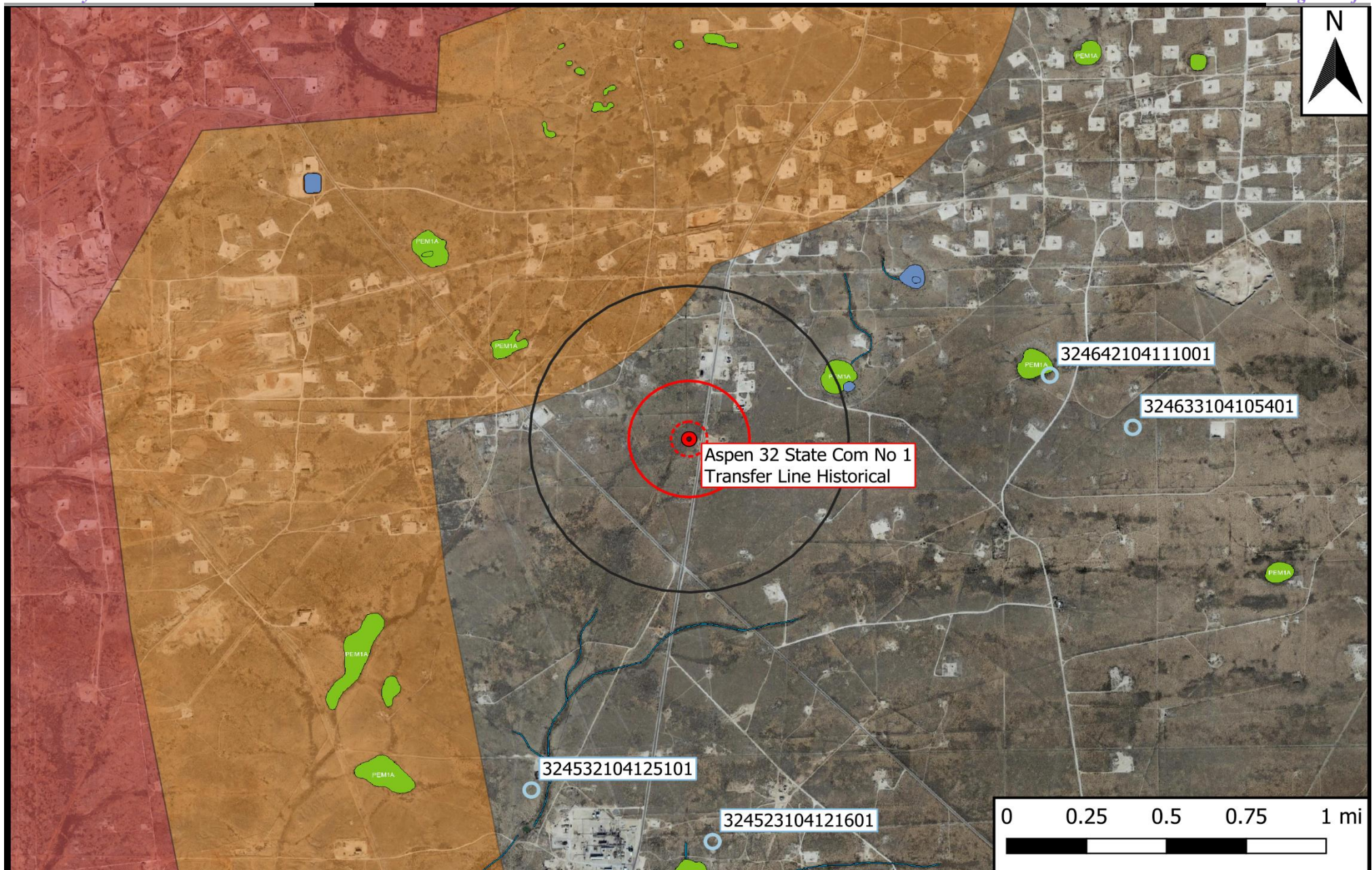
Drafted: bja

Checked: jwl

Date: 12/8/20

Figure 2

Aerial Proximity Map



Legend

- | | |
|--|---|
| ● Site Location | 300-Ft Radius |
| ○ Well - NMOSE | 1,000-Ft Radius |
| ○ Well - USGS | 0.5-Mi Radius |
| High Karst | 1% Annual Flood Chance |
| Medium Karst | Lake/Freshwater Pond |
| Potash Mine Workings | Emergent/Forested Wetlands |
| | Riverine |

Figure 2

Aerial Map

Grizzly Energy, LLC

Aspen 32 State Com No 1 Transfer Line Historical

GPS: 32.77555, -104.20605

Eddy County



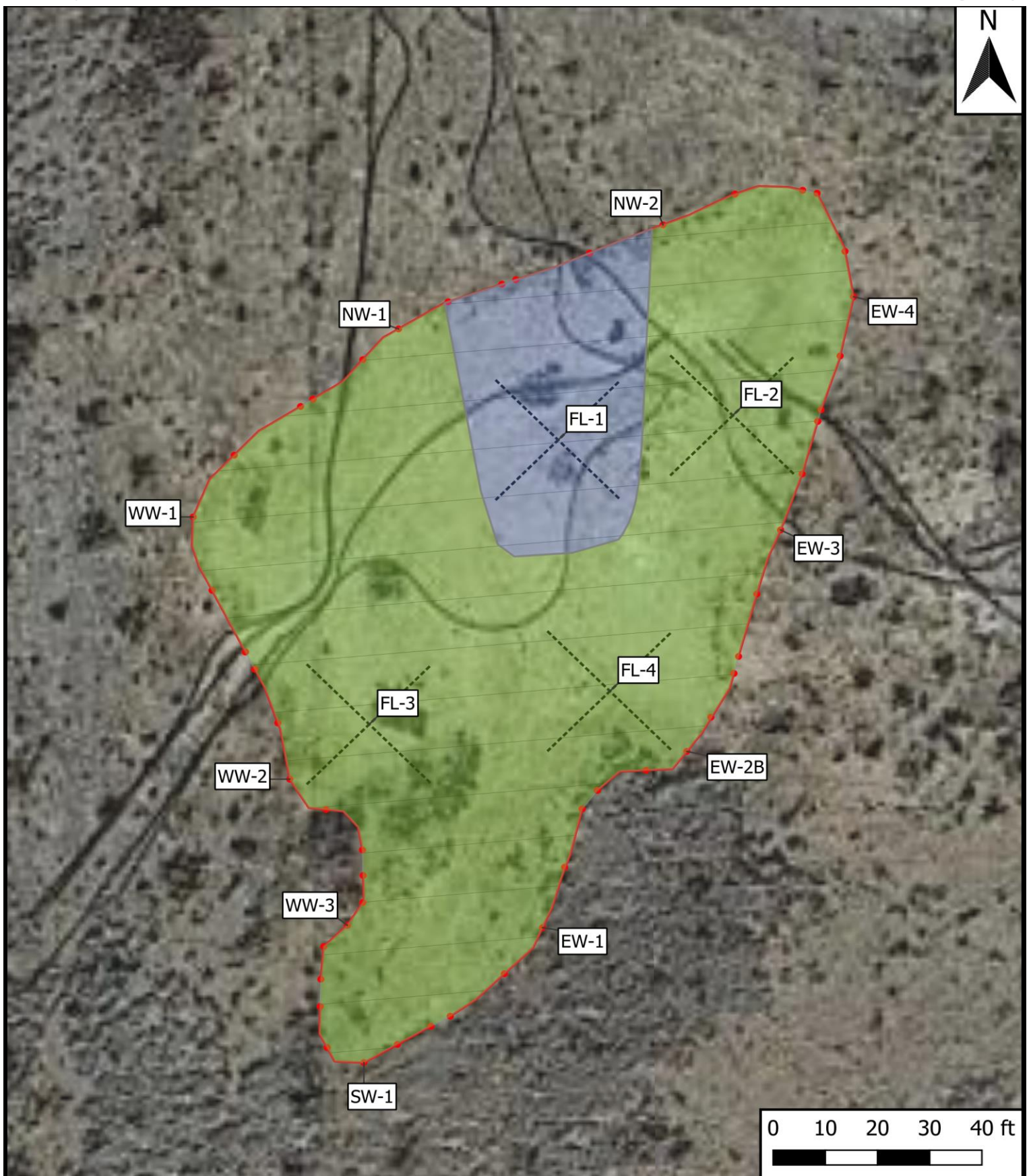
Drafted: bja

Checked: jwl

Date: 12/10/20

Figure 3

Site & Sample Location Map



Legend

- Excavation (4' bgs)
- Excavation (6' bgs)
- 20-mil Liner (4' bgs)
- Composite Floor Sample
- Composite Wall Sample

Figure 3

Site & Sample Location Map
 Grizzly Energy, LLC
 Aspen 32 State Com No 1 Transfer Line Historical
 GPS: 32.77555, -104.20605
 Eddy County

eTECH

Environmental & Safety Solutions, Inc.

Drafted: bja

Checked: jwl

Date: 12/29/20

Table 1
Concentrations of BTEX, TPH, and/or Chloride in Soil

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL
Grizzly Energy, LLC
Aspen 32 State Com No 1 Transfer Line Historical
NMOCD Ref. #: pAB1535755783 (2RP-3465)

NMOCD Closure Criteria				10	50	N/A	N/A	N/A	N/A	1,000	600
NMOCD Reclamation Standard				10	50	N/A	N/A	N/A	N/A	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
NW-1	11/24/2020	0' - 4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
NW-2	11/24/2020	0' - 4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	61.0
EW-1	11/24/2020	0' - 4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW-2	11/24/2020	0' - 4'	Excavated	ND	ND	ND	ND	ND	ND	ND	640
EW-3	11/24/2020	0' - 4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
WW-1	11/24/2020	0' - 4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	94.0
WW-2	11/24/2020	0' - 4'	In-Situ	ND	ND	ND	9.80	9.80	ND	9.80	180
SW-1	11/25/2020	0' - 4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
EW-4	11/25/2020	0' - 4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	200
WW-3	11/25/2020	0' - 4'	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND
FL-1	11/25/2020	6'	In-Situ	-	-	-	-	-	-	-	6,010
FL-2	11/25/2020	4'	In-Situ	-	-	-	-	-	-	-	12,100
FL-3	11/25/2020	4'	In-Situ	-	-	-	-	-	-	-	5,770
FL-4	11/25/2020	4'	In-Situ	-	-	-	-	-	-	-	4,000
EW- 2B	12/1/2020	0' - 4'	In-Situ	-	-	-	-	-	-	-	64.0

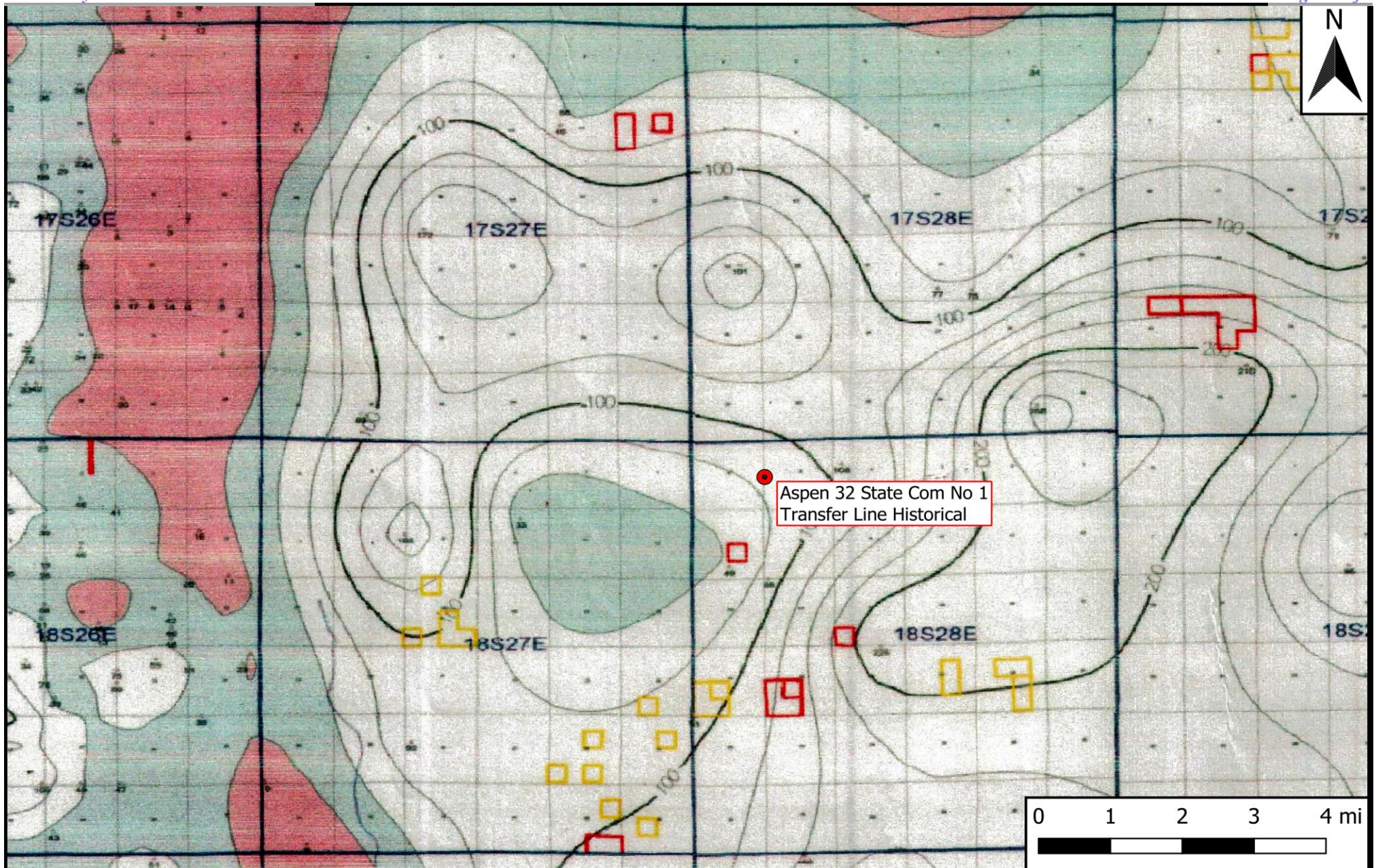
NOTES:

- = Sample not analyzed for that constituent.

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

Appendix A

Depth to Groundwater Information



Legend

- Site Location

Figure 4

Inferred Depth to Groundwater Trend Map
 Grizzly Energy, LLC
 Aspen 32 State Com No 1 Transfer Line Historical
 GPS: 32.77555, -104.20605
 Eddy County



Drafted: bja

Checked: jwl

Date: 12/8/20



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

UTMNA83 Radius Search (in meters):

Easting (X): 574355.71 **Northing (Y):** 3626683.74 **Radius:** 804.67

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

4/23/20 11:26 AM

WATER COLUMN/ AVERAGE
DEPTH TO WATER



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
RA 11857 POD1		RA	ED	1	1	2	05	18S	26E	577784	3625988	3498	235	95	140
RA 12456 POD1		RA	ED	1	4	4	24	17S	27E	572348	3630969	4732	220	92	128

Average Depth to Water: **93 feet**

Minimum Depth: **92 feet**

Maximum Depth: **95 feet**

Record Count: 2

UTM NAD83 Radius Search (in meters):

Easting (X): 574355.71

Northing (Y): 3626683.74

Radius: 4830

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

4/23/20 11:27 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
RA	12456 POD1	1	4	4	24	17S	27E	572348	3630969

x

Driller License: 1058 **Driller Company:** KEY'S DRILLING & PUMP SERVICE

Driller Name: DON KUEHN III

Drill Start Date: 09/07/2016

Drill Finish Date: 09/09/2016

Plug Date:

Log File Date: 09/15/2016

PCW Rcv Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield: 10 GPM

Casing Size: 4.50

Depth Well: 220 feet

Depth Water: 92 feet

x

Water Bearing Stratifications:

Top	Bottom	Description
90	110	Sandstone/Gravel/Conglomerate
160	180	Shale/Mudstone/Siltstone
180	200	Sandstone/Gravel/Conglomerate
200	210	Sandstone/Gravel/Conglomerate
210	220	Sandstone/Gravel/Conglomerate

x

Casing Perforations:

Top	Bottom
200	220

x

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

4/23/20 11:27 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
RA	11857 POD1	1	1	2	05	18S	26E	577784	3625988

x

Driller License: 1064 **Driller Company:** DELFORD W. MARTIN

Driller Name: MARTIN, DELFORD

Drill Start Date:	09/25/2012	Drill Finish Date:	10/01/2012	Plug Date:	
Log File Date:	10/15/2012	PCW Rcv Date:		Source:	Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:	95 GPM
Casing Size:	5.00	Depth Well:	235 feet	Depth Water:	95 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	95	130	Sandstone/Gravel/Conglomerate
	160	235	Sandstone/Gravel/Conglomerate

x

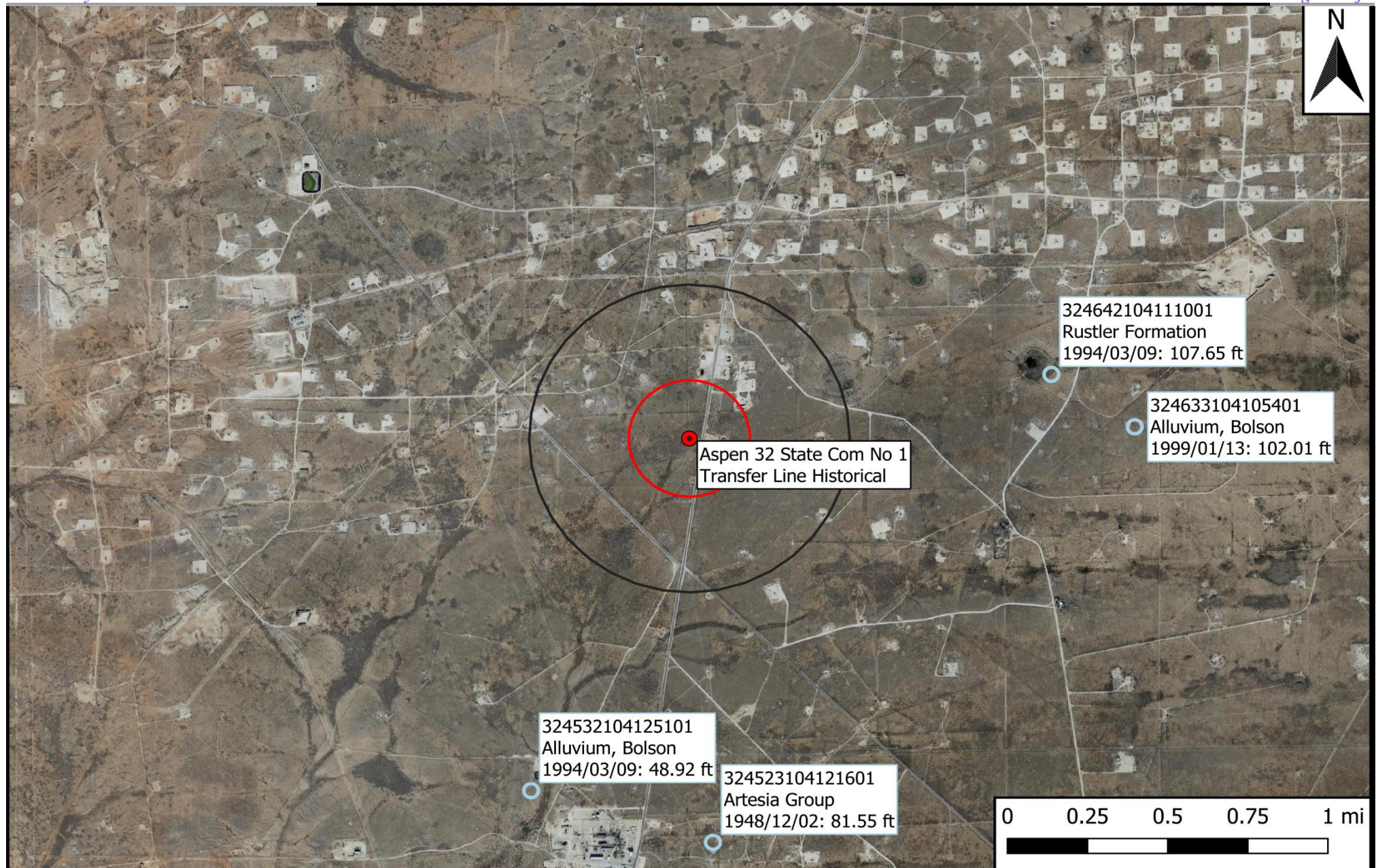
Casing Perforations:	Top	Bottom
	140	235

x

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

4/23/20 11:27 AM

POINT OF DIVERSION SUMMARY



Legend

- Site Location
- Well - USGS
- 1,000-Ft Radius
- 0.5-Mi Radius

Figure 5

USGS Well Proximity Map
Grizzly Energy, LLC
Aspen 32 State Com No 1 Transfer Line Historical
GPS: 32.77555, -104.20605
Eddy County



Drafted: bja

Checked: jwl

Date: 12/10/20



National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater Geographic Area: United States GO

Click to hideNews Bulletins

- Notice** - The USGS Water Resources Mission Area's priority is to maintain the safety and well-being of our communities, including providing critical situational awareness in times of flooding in all 50 U.S. states and additional territories. Our hydrologic monitoring stations continue to send data in near real-time to NWISWeb, and we are continuing critical water monitoring activities to protect life and property on a case-by-case basis. The health and safety of the public and our employees are our highest priorities, and we continue to follow guidance from the White House, the CDC, and state and local authorities.
- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#)

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 324523104121601

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 324523104121601 18S.28E.17.111212

Eddy County, New Mexico
Latitude 32°45'23", Longitude 104°12'16" NAD27
Land-surface elevation 3,611 feet above NAVD88
This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

Table of data	
Tab-separated data	
Graph of data	
Reselect period	

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1948-12-02			D	81.55		2		U		U	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater Geographic Area: United States GO

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list = 324523104121701

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 324523104121701 18S.28E.17.111211

Eddy County, New Mexico
Latitude 32°45'16.4", Longitude 104°12'17.7" NAD83
Land-surface elevation 3,601 feet above NAVD88
This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1983-04-13		D	85.59			2		U		U	A
1989-02-02		D	86.75			2		U		U	A
1994-03-09		D	88.21			2		S		U	A
1999-02-19		D	88.79			2		S	USGS	S	A
2015-12-16	12:05 MST	m	99.07			2		S	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	S	Measured by personnel of reporting agency.
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2020-04-23 12:53:22 EDT

3.91 0.28 nadww01



National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater Geographic Area: United States GO

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list = 324532104125101

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 324532104125101 18S.28E.07.43131

Eddy County, New Mexico
Latitude 32°45'32", Longitude 104°12'51" NAD27
Land-surface elevation 3,601 feet above NAVD88
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1983-04-13		D	42.20			2		U		U	A
1989-02-22		D	44.81			2		U		U	A
1994-03-09		D	48.92			2		S		U	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2020-04-23 12:53:22 EDT

2.08 0.26 nadww01



National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater Geographic Area: United States GO

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 324633104105401

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 324633104105401 18S.28E.04.32412

Eddy County, New Mexico
Latitude 32°46'33", Longitude 104°10'54" NAD27
Land-surface elevation 3,665 feet above NAVD88
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1985-06-04		D	103.08			2		U			A
1989-02-02		D	107.27			2		U			A
1994-03-09		D	100.78			2		S			A
1999-01-13		D	102.01			2		S	USGS		A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	S	Measured by personnel of reporting agency.
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



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0.62 0.3 nadww01



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Data Category: Groundwater Geographic Area: United States GO

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 324642104111001

Minimum number of levels = 1
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USGS 324642104111001 18S.28E.04.131444

Eddy County, New Mexico
Latitude 32°46'42", Longitude 104°11'10" NAD27
Land-surface elevation 3,640 feet above NGVD29
The depth of the well is 145.00 feet below land surface.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1985-06-04		D	109.39			2	Z	S		U	A
1990-09-19		D	106.60			2	Z	S		U	A
1994-03-09		D	107.65			2	Z	S		U	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status	Z	Other conditions existed that would affect the measured water level (explain in remarks).
Method of measurement	S	Steel-tape measurement.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Title: Groundwater for USA: Water Levels

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0.55 0.27 nadww01

Appendix B

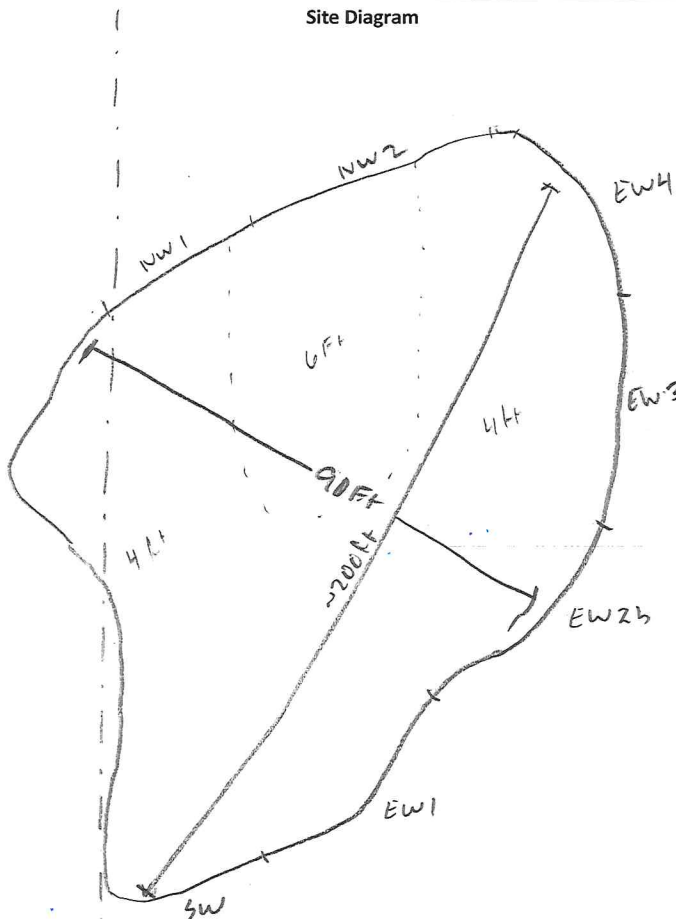
Field Data and Soil Profile Logs



Initial Release Assessment Form

Project: 32 State Com No 1 Transfer Line Hi Clean Up Level: 0
 Date: 12/11/2020
 Project Number: 11985 Latitude: 32.77555 Longitude: -104.20605

Site Diagram



Notes: - Collect Excavation Confirmation Samples
 - Prep for liner install
 - move Poly Pipe

~Length: 200 Ft ~Width: 90 Ft ~Area: 11,700 Ft² ~Depth: 4-6 Ft

3-4 Representative Pictures of the Affected Area including sample locations?
 Necessary Samples Field Screened and on Ice?
 Sample and Field Screen Data Entered on Sample Log?
 Was horizontal and vertical delineation achieved?

Yes	No
☒	☐
☒	☐
☒	☐
☒	☐



Sample Log

Date: _____

Project: 32 State Com No 1 Transfer Line Hi

Project Number:	pending	Latitude:	32.77555	Longitude:	-104.20605
-----------------	---------	-----------	----------	------------	------------

[illegible]

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples= SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

Released to Imaging: 12/16/2022 1:15:01 PM



Soil Profile

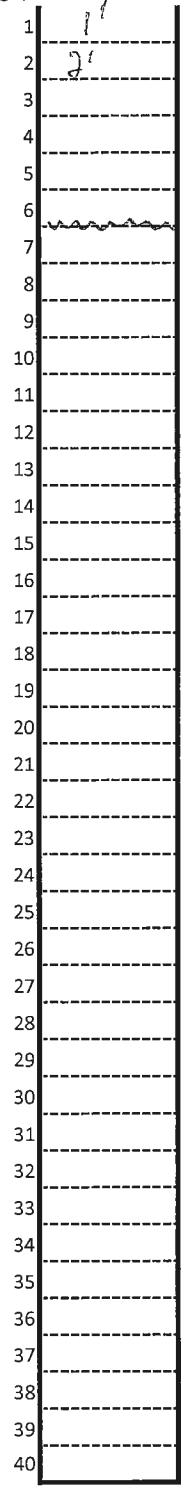
Date: 11-16-20

Project: 32 State Com No 1 Transfer Line Hi

Project Number: pending Latitude: 32.77555 Longitude: -104.20605

Depth (ft. bgs)

Description

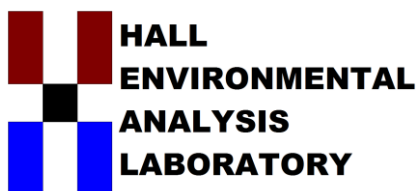


topsoil
caliche / soil

caliche / rock

Appendix C

Laboratory Analytical Reports



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

December 02, 2020

Joel Lowry
Etech Environmental
3100 Plains Hwy
Lovington, NM 88260
TEL: (575) 936-2378
FAX

RE: Aspen 32 State Com

OrderNo.: 2011C96

Dear Joel Lowry:

Hall Environmental Analysis Laboratory received 10 sample(s) on 11/28/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2011C96

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Etech Environmental

Client Sample ID: WW1

Project: Aspen 32 State Com

Collection Date: 11/24/2020

Lab ID: 2011C96-001

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/30/2020 7:18:11 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/30/2020 7:18:11 PM
Surr: DNOP	74.2	30.4-154		%Rec	1	11/30/2020 7:18:11 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	94	60		mg/Kg	20	11/30/2020 10:29:16 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/30/2020 12:59:33 AM
Toluene	ND	0.049		mg/Kg	1	11/30/2020 12:59:33 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 12:59:33 AM
Xylenes, Total	ND	0.099		mg/Kg	1	11/30/2020 12:59:33 AM
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	11/30/2020 12:59:33 AM
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	11/30/2020 12:59:33 AM
Surr: Dibromofluoromethane	110	70-130		%Rec	1	11/30/2020 12:59:33 AM
Surr: Toluene-d8	91.2	70-130		%Rec	1	11/30/2020 12:59:33 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 12:59:33 AM
Surr: BFB	96.3	70-130		%Rec	1	11/30/2020 12:59:33 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C96

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Etech Environmental

Client Sample ID: WW2

Project: Aspen 32 State Com

Collection Date: 11/24/2020

Lab ID: 2011C96-002

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	9.8	9.4		mg/Kg	1	11/30/2020 7:27:50 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/30/2020 7:27:50 PM
Surr: DNOP	99.4	30.4-154		%Rec	1	11/30/2020 7:27:50 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	180	60		mg/Kg	20	11/30/2020 10:41:41 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/30/2020 1:26:30 AM
Toluene	ND	0.049		mg/Kg	1	11/30/2020 1:26:30 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 1:26:30 AM
Xylenes, Total	ND	0.099		mg/Kg	1	11/30/2020 1:26:30 AM
Surr: 1,2-Dichloroethane-d4	93.1	70-130		%Rec	1	11/30/2020 1:26:30 AM
Surr: 4-Bromofluorobenzene	98.9	70-130		%Rec	1	11/30/2020 1:26:30 AM
Surr: Dibromofluoromethane	110	70-130		%Rec	1	11/30/2020 1:26:30 AM
Surr: Toluene-d8	91.3	70-130		%Rec	1	11/30/2020 1:26:30 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 1:26:30 AM
Surr: BFB	96.0	70-130		%Rec	1	11/30/2020 1:26:30 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C96

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Etech Environmental

Client Sample ID: NW1

Project: Aspen 32 State Com

Collection Date: 11/24/2020

Lab ID: 2011C96-003

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	11/30/2020 7:37:28 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/30/2020 7:37:28 PM
Surr: DNOP	91.5	30.4-154		%Rec	1	11/30/2020 7:37:28 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	11/30/2020 10:54:05 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	11/30/2020 1:53:30 AM
Toluene	ND	0.049		mg/Kg	1	11/30/2020 1:53:30 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 1:53:30 AM
Xylenes, Total	ND	0.097		mg/Kg	1	11/30/2020 1:53:30 AM
Surr: 1,2-Dichloroethane-d4	91.2	70-130		%Rec	1	11/30/2020 1:53:30 AM
Surr: 4-Bromofluorobenzene	95.8	70-130		%Rec	1	11/30/2020 1:53:30 AM
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/30/2020 1:53:30 AM
Surr: Toluene-d8	91.3	70-130		%Rec	1	11/30/2020 1:53:30 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 1:53:30 AM
Surr: BFB	95.5	70-130		%Rec	1	11/30/2020 1:53:30 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 3 of 15

Analytical Report

Lab Order 2011C96

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Etech Environmental

Client Sample ID: NW2

Project: Aspen 32 State Com

Collection Date: 11/24/2020

Lab ID: 2011C96-004

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	11/30/2020 7:47:05 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	11/30/2020 7:47:05 PM
Surr: DNOP	105	30.4-154		%Rec	1	11/30/2020 7:47:05 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	61	60		mg/Kg	20	11/30/2020 11:06:30 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	11/30/2020 2:20:26 AM
Toluene	ND	0.049		mg/Kg	1	11/30/2020 2:20:26 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 2:20:26 AM
Xylenes, Total	ND	0.097		mg/Kg	1	11/30/2020 2:20:26 AM
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%Rec	1	11/30/2020 2:20:26 AM
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	11/30/2020 2:20:26 AM
Surr: Dibromofluoromethane	107	70-130		%Rec	1	11/30/2020 2:20:26 AM
Surr: Toluene-d8	92.0	70-130		%Rec	1	11/30/2020 2:20:26 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 2:20:26 AM
Surr: BFB	94.5	70-130		%Rec	1	11/30/2020 2:20:26 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C96

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Etech Environmental

Client Sample ID: EW1

Project: Aspen 32 State Com

Collection Date: 11/24/2020

Lab ID: 2011C96-005

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/30/2020 7:56:39 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2020 7:56:39 PM
Surr: DNOP	95.7	30.4-154		%Rec	1	11/30/2020 7:56:39 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	11/30/2020 11:18:54 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/30/2020 2:47:21 AM
Toluene	ND	0.050		mg/Kg	1	11/30/2020 2:47:21 AM
Ethylbenzene	ND	0.050		mg/Kg	1	11/30/2020 2:47:21 AM
Xylenes, Total	ND	0.10		mg/Kg	1	11/30/2020 2:47:21 AM
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%Rec	1	11/30/2020 2:47:21 AM
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	11/30/2020 2:47:21 AM
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/30/2020 2:47:21 AM
Surr: Toluene-d8	88.9	70-130		%Rec	1	11/30/2020 2:47:21 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/30/2020 2:47:21 AM
Surr: BFB	92.2	70-130		%Rec	1	11/30/2020 2:47:21 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011C96

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Etech Environmental

Client Sample ID: EW2

Project: Aspen 32 State Com

Collection Date: 11/24/2020

Lab ID: 2011C96-006

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	11/30/2020 8:06:13 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	11/30/2020 8:06:13 PM
Surr: DNOP	67.5	30.4-154		%Rec	1	11/30/2020 8:06:13 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	640	59		mg/Kg	20	11/30/2020 11:31:19 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/30/2020 3:14:17 AM
Toluene	ND	0.050		mg/Kg	1	11/30/2020 3:14:17 AM
Ethylbenzene	ND	0.050		mg/Kg	1	11/30/2020 3:14:17 AM
Xylenes, Total	ND	0.10		mg/Kg	1	11/30/2020 3:14:17 AM
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	11/30/2020 3:14:17 AM
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	11/30/2020 3:14:17 AM
Surr: Dibromofluoromethane	110	70-130		%Rec	1	11/30/2020 3:14:17 AM
Surr: Toluene-d8	89.5	70-130		%Rec	1	11/30/2020 3:14:17 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/30/2020 3:14:17 AM
Surr: BFB	93.8	70-130		%Rec	1	11/30/2020 3:14:17 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C96

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Etech Environmental

Client Sample ID: EW3

Project: Aspen 32 State Com

Collection Date: 11/24/2020

Lab ID: 2011C96-007

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	11/30/2020 8:15:46 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/30/2020 8:15:46 PM
Surr: DNOP	85.5	30.4-154		%Rec	1	11/30/2020 8:15:46 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	59		mg/Kg	20	11/30/2020 11:43:43 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/30/2020 3:41:11 AM
Toluene	ND	0.049		mg/Kg	1	11/30/2020 3:41:11 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 3:41:11 AM
Xylenes, Total	ND	0.098		mg/Kg	1	11/30/2020 3:41:11 AM
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%Rec	1	11/30/2020 3:41:11 AM
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	11/30/2020 3:41:11 AM
Surr: Dibromofluoromethane	113	70-130		%Rec	1	11/30/2020 3:41:11 AM
Surr: Toluene-d8	92.1	70-130		%Rec	1	11/30/2020 3:41:11 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 3:41:11 AM
Surr: BFB	92.9	70-130		%Rec	1	11/30/2020 3:41:11 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2011C96

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Etech Environmental

Client Sample ID: WW3

Project: Aspen 32 State Com

Collection Date: 11/25/2020

Lab ID: 2011C96-008

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/30/2020 8:25:18 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/30/2020 8:25:18 PM
Surr: DNOP	81.7	30.4-154		%Rec	1	11/30/2020 8:25:18 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	11/30/2020 11:56:08 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	11/30/2020 4:08:05 AM
Toluene	ND	0.049		mg/Kg	1	11/30/2020 4:08:05 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 4:08:05 AM
Xylenes, Total	ND	0.098		mg/Kg	1	11/30/2020 4:08:05 AM
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	1	11/30/2020 4:08:05 AM
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	1	11/30/2020 4:08:05 AM
Surr: Dibromofluoromethane	114	70-130		%Rec	1	11/30/2020 4:08:05 AM
Surr: Toluene-d8	86.8	70-130		%Rec	1	11/30/2020 4:08:05 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 4:08:05 AM
Surr: BFB	92.0	70-130		%Rec	1	11/30/2020 4:08:05 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C96

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Etech Environmental

Client Sample ID: SW1

Project: Aspen 32 State Com

Collection Date: 11/25/2020

Lab ID: 2011C96-009

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/30/2020 8:34:48 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2020 8:34:48 PM
Surr: DNOP	84.7	30.4-154		%Rec	1	11/30/2020 8:34:48 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	59		mg/Kg	20	12/1/2020 12:08:33 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/30/2020 4:35:00 AM
Toluene	ND	0.049		mg/Kg	1	11/30/2020 4:35:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 4:35:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	11/30/2020 4:35:00 AM
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%Rec	1	11/30/2020 4:35:00 AM
Surr: 4-Bromofluorobenzene	93.5	70-130		%Rec	1	11/30/2020 4:35:00 AM
Surr: Dibromofluoromethane	114	70-130		%Rec	1	11/30/2020 4:35:00 AM
Surr: Toluene-d8	88.0	70-130		%Rec	1	11/30/2020 4:35:00 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 4:35:00 AM
Surr: BFB	94.6	70-130		%Rec	1	11/30/2020 4:35:00 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2011C96

Date Reported: 12/2/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Etech Environmental

Client Sample ID: EW4

Project: Aspen 32 State Com

Collection Date: 11/25/2020

Lab ID: 2011C96-010

Matrix: SOIL

Received Date: 11/28/2020

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/30/2020 9:12:47 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/30/2020 9:12:47 PM
Surr: DNOP	85.3	30.4-154		%Rec	1	11/30/2020 9:12:47 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	200	60		mg/Kg	20	12/1/2020 12:45:46 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	11/30/2020 5:01:57 AM
Toluene	ND	0.049		mg/Kg	1	11/30/2020 5:01:57 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/30/2020 5:01:57 AM
Xylenes, Total	ND	0.098		mg/Kg	1	11/30/2020 5:01:57 AM
Surr: 1,2-Dichloroethane-d4	90.3	70-130		%Rec	1	11/30/2020 5:01:57 AM
Surr: 4-Bromofluorobenzene	96.3	70-130		%Rec	1	11/30/2020 5:01:57 AM
Surr: Dibromofluoromethane	111	70-130		%Rec	1	11/30/2020 5:01:57 AM
Surr: Toluene-d8	89.0	70-130		%Rec	1	11/30/2020 5:01:57 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/30/2020 5:01:57 AM
Surr: BFB	91.9	70-130		%Rec	1	11/30/2020 5:01:57 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2011C96
02-Dec-20

Client: Etech Environmental
Project: Aspen 32 State Com

Sample ID: MB-56714	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 56714	RunNo: 73666
Prep Date: 11/30/2020	Analysis Date: 11/30/2020	SeqNo: 2596732 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-56714	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 56714	RunNo: 73666
Prep Date: 11/30/2020	Analysis Date: 11/30/2020	SeqNo: 2596733 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 92.1 90 110

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011C96

02-Dec-20

Client: Etech Environmental**Project:** Aspen 32 State Com

Sample ID: 2011C96-010AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: EW4	Batch ID: 56685	RunNo: 73679								
Prep Date: 11/28/2020	Analysis Date: 11/30/2020	SeqNo: 2596889	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.3	46.73	0	81.3	15	184			
Surr: DNOP	3.4		4.673		71.9	30.4	154			

Sample ID: 2011C96-010AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: EW4	Batch ID: 56685	RunNo: 73679								
Prep Date: 11/28/2020	Analysis Date: 11/30/2020	SeqNo: 2596890	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.8	49.07	0	98.7	15	184	24.2	23.9	R
Surr: DNOP	4.5		4.907		90.9	30.4	154	0	0	

Sample ID: LCS-56680	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 56680	RunNo: 73679								
Prep Date: 11/28/2020	Analysis Date: 11/30/2020	SeqNo: 2596910	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3		5.000		107	30.4	154			

Sample ID: LCS-56683	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 56683	RunNo: 73679								
Prep Date: 11/28/2020	Analysis Date: 11/30/2020	SeqNo: 2596912	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	70	130			
Surr: DNOP	5.3		5.000		106	30.4	154			

Sample ID: LCS-56685	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 56685	RunNo: 73679								
Prep Date: 11/28/2020	Analysis Date: 11/30/2020	SeqNo: 2596913	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	70	130			
Surr: DNOP	4.7		5.000		93.6	30.4	154			

Sample ID: MB-56680	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 56680	RunNo: 73679								
Prep Date: 11/28/2020	Analysis Date: 11/30/2020	SeqNo: 2596914	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.9		10.00		98.9	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011C96

02-Dec-20

Client: Etech Environmental**Project:** Aspen 32 State Com

Sample ID: MB-56683	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 56683		RunNo: 73679							
Prep Date: 11/28/2020	Analysis Date: 11/30/2020		SeqNo: 2596916		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		104	30.4	154			

Sample ID: MB-56685	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 56685		RunNo: 73679							
Prep Date: 11/28/2020	Analysis Date: 11/30/2020		SeqNo: 2596917		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.2		10.00		91.9	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011C96

02-Dec-20

Client: Etech Environmental**Project:** Aspen 32 State Com

Sample ID: mb-56681	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 56681	RunNo: 73649								
Prep Date: 11/28/2020	Analysis Date: 11/29/2020	SeqNo: 2595647	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.1	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		109	70	130			
Surr: Toluene-d8	0.48		0.5000		95.1	70	130			

Sample ID: lcs-56681	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 56681	RunNo: 73649								
Prep Date: 11/28/2020	Analysis Date: 11/29/2020	SeqNo: 2595649	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	108	80	120			
Toluene	1.0	0.050	1.000	0	99.7	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.1	80	120			
Xylenes, Total	2.8	0.10	3.000	0	95.0	80	120			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.0	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.47		0.5000		93.3	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2011C96

02-Dec-20

Client: Etech Environmental**Project:** Aspen 32 State Com

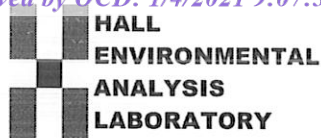
Sample ID: mb-56681	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 56681	RunNo: 73649								
Prep Date: 11/28/2020	Analysis Date: 11/29/2020	SeqNo: 2595868	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	510		500.0		101	70	130			

Sample ID: lcs-56681	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 56681	RunNo: 73649								
Prep Date: 11/28/2020	Analysis Date: 11/29/2020	SeqNo: 2595869	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	82.5	70	130			
Surr: BFB	490		500.0		97.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



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

Sample Log-In Check List

Client Name: Etech Environmental

Work Order Number: 2011C96

RcptNo: 1

Received By: Andy Freeman

11/28/2020

Completed By: Erin Melendrez

11/30/2020 8:40:19 AM

Reviewed By: *DF 11/28/2020*

Logged in and Labelled by df 11/28/2020

Chain of Custody1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐2. How was the sample delivered? FedExLog In3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐5. Sample(s) in proper container(s)? Yes ☒ No ☐6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐13. Is it clear what analyses were requested? Yes ☒ No ☐14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

of preserved bottles checked for pH: *df 11/28/2020*

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good				

Chain-of-Custody Record

Client: Grizzly / E-Tech

Mailing Address: Bill to Etech c/o Joel

Phone #:

email or Fax#: pm@etechnv.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: 5 Day

☐ Standard ☐ Rush

Project Name: Aspen 32 State Comm

Project #: 11985

Project Manager: Joel Lowry

Sampler:

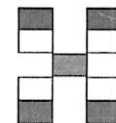
On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF): 1.9 + 0.1 = 2.0 °C (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
11/24/20		Soil	WW-1	1	ice	2611C96-1
11/24/20		Soil	WW-2	1	ice	-2
11/24/20		Soil	NW-1	1	ice	-3
11/24/20		Soil	NW-2	1	ice	-4
11/24/20		Soil	EW-1	1	ice	-5
11/24/20		Soil	EW-2	1	ice	-6
11/24/20		Soil	EW-3	1	ice	-7
11/25/20		Soil	WW-3	1	ice	-8
11/25/20		Soil	SW-1	1	ice	-9
11/25/20		Soil	EW-4	1	ice	-10

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
			<u>Adammings</u>		11/25/20	1515
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11/29/20	1900	<u>Adammings</u>	<u>Chad</u>		11/28/2020	1030



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)										
x	x					x													
x	x					x													
x	x					x													
x	x					x													
x	x					x													
x	x					x													
x	x					x													
x	x					x													
x	x					x													
x	x					x													

Remarks:



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

December 02, 2020

LANCE CRENSHAW

Etech Environmental & Safety Solutions

P.O. Box 301

Lovington, NM 88260

RE: ASPEN 32

Enclosed are the results of analyses for samples received by the laboratory on 12/01/20 16:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Etech Environmental & Safety Solutions
 LANCE CRENSHAW
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received: 12/01/2020
 Reported: 12/02/2020
 Project Name: ASPEN 32
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 12/01/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: EW 2B (H003144-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	12/02/2020	ND	416	104	400	0.00		

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

**ARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Rush

Page 4 of 4

[illegible]

Appendix D

Photographic Log

Photographic Log

Photo Number: 1	
Photo Direction: Southwest	
Photo Description: Excavation	

Photo Number: 2	
Photo Direction: West	
Photo Description: Excavation	

Photographic Log

Photo Number: 3	
Photo Direction: Northwest	
Photo Description: Excavation	

Photo Number: 4	
Photo Direction: North-Northwest	
Photo Description: Liner Installation	

Photographic Log

Photo Number: 5	 12/3/20, 10:02 AM +32.7755,-104.2062 United States
Photo Direction: West	
Photo Description: Liner Installation	

Photo Number: 6	 12/9/20, 1:26 PM +32.775155,-104.206048 NM, Artesia, Illinois Camp Rd
Photo Direction: North-Northwest	
Photo Description: Backfilled Excavation	

Photographic Log

Photo Number: 7	 12/9/20, 1:26 PM +32.775262,-104.205744 NM,Artesia,Illinois Camp Rd
Photo Direction: West	
Photo Description: Backfilled Excavation	

Photo Number: 8	 12/9/20, 1:26 PM +32.775262,-104.205744 NM,Artesia,Illinois Camp Rd
Photo Direction: Northwest	
Photo Description: Backfilled Excavation	

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 13509

CONDITIONS

Operator: Grizzly Operating, LLC 5847 San Felipe, Suite 3000 Houston, TX 77057	OGRID: 258350
	Action Number: 13509
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	12/16/2022