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	nAPP2227023993
District RP	
Facility ID	
Application ID	

Release Notification

Remediation plan approved with conditions - see Remediation Plan page 5

Responsible Party

Responsible Party: SIMCOE, LLC	OGRID: 329736
Contact Name: Sabre Beebe	Contact Telephone (970) 852-5172
Contact email: sabre.beebe@ikavenergy.com	Incident # *(assigned by OCD)* nAPP2227023993
Contact mailing address: 1199 Main Ste., Suite 101, Durango, CO 81301	

Location of Release Source

Latitude 36.730380 Longitude -108.160973

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Gallegos Canyon Unit 500	Site Type: Active Well
Date Release Discovered: 09/12/2022	API# *(if applicable) 30-045-28414*

Unit Letter	Section	Township	Range	County
C	13	29N	13W	San Juan County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name: Dugan Production Corp.*)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) Approx. 8 bbl	Volume Recovered (bbls) Approx. 0 bbl
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: On September 12, 2022 during site visit IKAV personnel found that the well head had leaked ~8 bbls of produced water to the ground. The produced water had traveled ~42 feet across the well pad. There was no liquids to be recovered. Calculation utilized to determine amount of release is Horizontal Square Footage x Vertical Depth in Feet x Liquid Capacity of Soil Factor = Volume Released

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2227023993
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release? Volume of release is greater than 25 bbls.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Notice provided by calling District III main office (505) 334-6178 and speaking with John Garcia 01/31/2022 @ 2:53 PM. Return call from Nelson Velez at 3:02 PM. Informed Mr. Velez of all information known about release as reported by Field Personnel at that time.

Initial Response

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

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

If all the actions described above have not been undertaken, explain why: Soil sampling performed by Contract Vendor and attached are the analytics of the soils samples. Sampling map attached.

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: _Sabre Beebe_____ Title: Environmental Coordinator_____

Signature: _____ Date: November 14, 2022

email: sabre.beebe@ikavenergy.com Telephone: 970-852-8172

OCD Only

Received by: Jocelyn Harimon Date: 11/14/2022

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	30 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☒ Yes ☐ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within 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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature:_____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2227023993
District RP	
Facility ID	
Application ID	

Remediation Plan

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

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete 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: Sabre Beebe Title: Environmental Coordinator

Signature: _____ Date: November 14, 2022

email:sabre.beebe@ikavenergy.com Telephone: 970-852-5172

OCD Only

Received by: Jocelyn Harimon Date: 11/14/2022

☐ Approved ☐ Approved with Attached Conditions of Approval See text box below ☐ Denied ☐ Deferral Approved

Signature: Nelson Velez Date: 11/21/2022

Remediation plan approved with the addition of the following conditions:

1. Delineate horizontal perimeter of impacted area with sampling points having ten (10) feet spacing
2. Delineate vertical extent within impacted perimeter with a minimum of two (2) grab samples (e.g. - near well head & terminal end)
3. Provide sampling depths in lab sample IDs

Final closure report required to include the following;

1. Provide supporting documentation for those items on page 3 of C-141
2. Provide separate scaled site map showing vertical and horizontal delineation points
3. Provide proof of impacted volume removed
4. Closure report deadline is February 21, 2023.

11/4/2022

RE: **Release#** nAPP2227023993 Gallegos Canyon Unit 500 **release. API# 05-045-28414 UL C Sec. 13, TWP 29N, R13W latitude 36.730380, Longitude -108.160973**

BACKGROUND:

This event was discovered on September 12, 2022, during routine site visit by IKAV personnel. Upon arrival on location personnel discovered the wellhead had flowed produced water into a wet area on the well pad. All fluids were contained on the well pad surface. The Technician shut in the location and isolated the equipment. The release was estimated at 8 bbls of fluid outside of process equipment. There was no free-standing fluids to recover. Fluids had no odor and did not demonstrate any sheen.

REMEDIATION:

Stained soils:

There were no hydrocarbons released therefore no stained soils.

Produced water impacts:

Initial response included mapping, measurement for estimated volume and initial soil sampling. The remediation plan is to remove impacted soils and dispose of them properly. Removed soils will be transported to an approved disposal facility. Confirmation sampling will be conducted with 3-pt composite sample every 200 square feet. Initial sample results are elevated above the Table 1 standard for < 50 feet ground water.

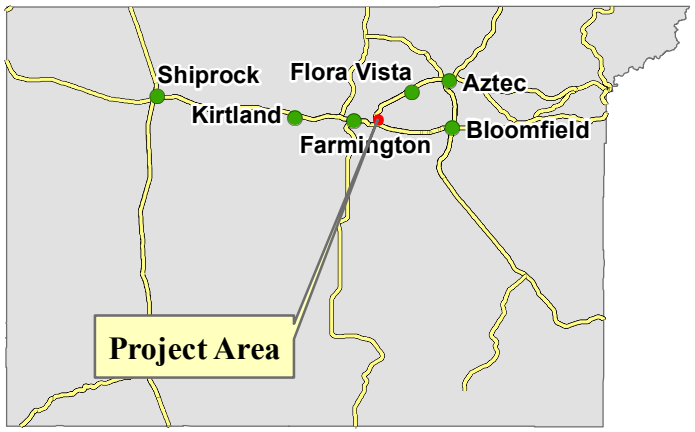
SAMPLING:

Confirmation sampling will be conducted within the area, preserved on ice and transported to an accredited lab where sample(s) will be processed for constituents of concern which would be Chlorides as the initial samples demonstrate no hydrocarbon presence. Sampling will consist of a 3-point composite sample taken at the base of the excavation every 200 square feet. These samples unless denied by NMOCD will be processed by Chlorides only.

SUMMARY:

Simcoe, LLC has selected manual removal and hauling remediation for this location. Material removal will be performed to the extent practical and safe while maintaining the integrity of equipment and production pipelines. Composite samples will be taken at the base of the excavation area as depicted and processed by an accredited lab for the Table 1 constituent of concern which is identified as Chlorides. If at any time during this work the situation becomes unsafe and/or the equipment or piping integrity becomes a concern the work will be stopped, and the situation re-evaluated.

Should there be any questions or concerns to address prior to approval of this plan please do not hesitate to contact IKAV (970) 769-9523 or sabre.beebe@ikavenergy.com



San Juan County, New Mexico

GALLEGOS CANYON UNIT #500

Point of Release

SS01

SS02

GALLEGOS CANYON UNIT #102

SS03

Feet

0 50 100

N

Notes: All samples collected 9/12/2022. SS01 collected as a 5-point composite sample. SS03 collected as a background sample.

Legend

- Oil & Gas Wells
- Point of Release
- Soil Sample
- Wet Area (9/12/2022)

Cottonwood CONSULTING

Mapping by: E. Millar, 9/19/2022
Coordinate System:
NAD 1983 UTM Zone 13 N

Location: Sec 13 T29N R13W NMPM

GCU #500
Project Map
Simcoe LLC

Cottonwood CONSULTING

Soil Sampling Results
Gallegos Canyon Unit #500
Simcoe LLC

Parameter	SS01 9/12/2022 Wet area	SS02 9/12/2022 Wet area	SS03 9/12/2022 Background	Units
Depth	0-4	4-10	0-16	inches bgs
Field, PID	0.1	0.1	0.4	ppm
Chloride	5,400	2,110	<10.1	mg/kg
Benzene	<0.050	<0.050	-	mg/kg
Toluene	<0.050	<0.050	-	mg/kg
Ethylbenzene	<0.050	<0.050	-	mg/kg
Total Xylenes	<0.150	<0.150	-	mg/kg
Total BTEX	<0.300	<0.300	-	mg/kg
TPH (GRO)	<10.0	<10.0	-	mg/kg
TPH (DRO)	<10.0	<10.0	-	mg/kg
TPH (EXT DRO)	<10.0	<10.0	-	mg/kg

Notes: SS01 collected as a 5-point composite sample.
PID - Photoionization Detector
BTEX - Benzene, Toluene, Ethylbenzene, & Total Xylenes
TPH - Total Petroleum Hydrocarbons
GRO - Gasoline Range Organics
DRO - Diesel Range Organics
EXT - Extended
ppm - parts per million
bgs - below ground surface
mg/kg - milligrams per kilogram

75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
970.247.4227 Fax
www.greenanalytical.com

26 September 2022

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302

RE: BTEX/TPH, Cl

Enclosed are the results of analyses for samples received by the laboratory on 09/12/22 16:25. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

If you need any further assistance, please feel free to contact me.

Sincerely,

Jeremy D Allen
Laboratory Director

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: T104704514-22-15

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: T104704398-22-15

GREEN Analytical Laboratories

jeremy.allen@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting	Project: BTEX/TPH, Cl	
PO Box 1653	Project Name / Number: GCU 500	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/26/22 13:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SS01	2209135-01	Solid	09/12/22 13:10	09/12/22 16:25	
SS02	2209135-02	Solid	09/12/22 13:30	09/12/22 16:25	
SS03	2209135-03	Solid	09/12/22 13:00	09/12/22 16:25	

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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www.GreenAnalytical.com

Cottonwood Consulting	Project: BTEX/TPH, Cl	
PO Box 1653	Project Name / Number: GCU 500	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/26/22 13:32

SS01

2209135-01 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
% Dry Solids	**89.5**			%	1	09/19/22 16:45	EPA160.3/1684		JDA
Soluble (DI Water Extraction)									
Chloride	**5400**	223	12.4	mg/kg dry	200	09/23/22 23:33	EPA300.0		AES

Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**

Volatile Organic Compounds by EPA Method 8021									
Benzene*	<0.050	0.050	0.004	mg/kg	50	09/17/22 03:43	8021B		JH/
Toluene*	<0.050	0.050	0.006	mg/kg	50	09/17/22 03:43	8021B		JH/
Ethylbenzene*	<0.050	0.050	0.006	mg/kg	50	09/17/22 03:43	8021B		JH/
Total Xylenes*	<0.150	0.150	0.014	mg/kg	50	09/17/22 03:43	8021B		JH/
Total BTEX	<0.300	0.300	0.030	mg/kg	50	09/17/22 03:43	8021B		JH/
Surrogate: 4-Bromofluorobenzene (PID)			*106 %*	*69.9-140*		*09/17/22 03:43*	*8021B*		JH/
Petroleum Hydrocarbons by GC FID									
GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	09/15/22 22:48	8015B		CK
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	09/15/22 22:48	8015B		CK
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	09/15/22 22:48	8015B		CK
Surrogate: 1-Chlorooctane			*96.8 %*	*45.3-161*		*09/15/22 22:48*	*8015B*		CK
Surrogate: 1-Chlorooctadecane			*115 %*	*46.3-178*		*09/15/22 22:48*	*8015B*		CK

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

GREEN ANALYTICAL LABORATORIES

jeremy.allen@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting	Project: BTEX/TPH, Cl	
PO Box 1653	Project Name / Number: GCU 500	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/26/22 13:32

SS02

2209135-02 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
% Dry Solids	**92.1**			%	1	09/19/22 16:45	EPA160.3/1684		JDA
Soluble (DI Water Extraction)									
Chloride	**2110**	10.9	0.603	mg/kg dry	10	09/23/22 16:55	EPA300.0		AES
Subcontracted -- **Cardinal Laboratories 101 East Marland Hobbs, NM 88240**									
Volatile Organic Compounds by EPA Method 8021									
Benzene*	<0.050	0.050	0.004	mg/kg	50	09/17/22 03:59	8021B		JH/
Toluene*	<0.050	0.050	0.006	mg/kg	50	09/17/22 03:59	8021B		JH/
Ethylbenzene*	<0.050	0.050	0.006	mg/kg	50	09/17/22 03:59	8021B		JH/
Total Xylenes*	<0.150	0.150	0.014	mg/kg	50	09/17/22 03:59	8021B		JH/
Total BTEX	<0.300	0.300	0.030	mg/kg	50	09/17/22 03:59	8021B		JH/
Surrogate: 4-Bromofluorobenzene (PID)			*107 %*	*69.9-140*		*09/17/22 03:59*	*8021B*		JH/
Petroleum Hydrocarbons by GC FID									
GRO C6-C10*	<10.0	10.0	6.25	mg/kg	1	09/15/22 23:10	8015B		CK
DRO >C10-C28*	<10.0	10.0	4.26	mg/kg	1	09/15/22 23:10	8015B		CK
EXT DRO >C28-C36	<10.0	10.0	4.26	mg/kg	1	09/15/22 23:10	8015B		CK
Surrogate: 1-Chlorooctane			*90.7 %*	*45.3-161*		*09/15/22 23:10*	*8015B*		CK
Surrogate: 1-Chlorooctadecane			*108 %*	*46.3-178*		*09/15/22 23:10*	*8015B*		CK

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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jeremy.allen@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Cottonwood Consulting	Project: BTEX/TPH, Cl	
PO Box 1653	Project Name / Number: GCU 500	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/26/22 13:32

SS03

2209135-03 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
% Dry Solids	**98.9**			%	1	09/19/22 16:45	EPA160.3/1684		JDA
Soluble (DI Water Extraction)									
Chloride	<10.1	10.1	0.562	mg/kg dry	10	09/23/22 17:16	EPA300.0		AES

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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jeremy.allen@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

Cottonwood Consulting	Project: BTEX/TPH, Cl	
PO Box 1653	Project Name / Number: GCU 500	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/26/22 13:32

Soluble (DI Water Extraction) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B222605 - IC- Ion Chromatograph										
Blank (B222605-BLK1)				Prepared: 09/21/22 Analyzed: 09/23/22						
Chloride	ND	10.0	mg/kg wet							
LCS (B222605-BS1)				Prepared: 09/21/22 Analyzed: 09/23/22						
Chloride	255	10.0	mg/kg wet	250		102	85-115			
LCS Dup (B222605-BSD1)				Prepared: 09/21/22 Analyzed: 09/23/22						
Chloride	255	10.0	mg/kg wet	250		102	85-115	0.0627	20	

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2091532 - Volatiles										
Blank (2091532-BLK1)				Prepared: 09/15/22 Analyzed: 09/17/22						
Surrogate: 4-Bromofluorobenzene (PID)	*0.0539*		mg/kg	*0.0500*		*108*	*69.9-140*			
Benzene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
LCS (2091532-BS1)				Prepared: 09/15/22 Analyzed: 09/17/22						
Surrogate: 4-Bromofluorobenzene (PID)	*0.0527*		mg/kg	*0.0500*		*105*	*69.9-140*			
Benzene	1.81	0.050	mg/kg	2.00		90.5	83.4-122			
Ethylbenzene	1.83	0.050	mg/kg	2.00		91.6	84.2-121			
m,p-Xylene	3.82	0.100	mg/kg	4.00		95.6	89.9-126			
o-Xylene	1.91	0.050	mg/kg	2.00		95.5	84.3-123			
Toluene	1.88	0.050	mg/kg	2.00		94.0	84.2-126			
Total Xylenes	5.73	0.150	mg/kg	6.00		95.5	89.1-124			
LCS Dup (2091532-BSD1)				Prepared: 09/15/22 Analyzed: 09/17/22						
Surrogate: 4-Bromofluorobenzene (PID)	*0.0523*		mg/kg	*0.0500*		*105*	*69.9-140*			
Benzene	1.92	0.050	mg/kg	2.00		95.9	83.4-122	5.78	12.6	
Ethylbenzene	1.94	0.050	mg/kg	2.00		96.8	84.2-121	5.57	13.9	
m,p-Xylene	4.03	0.100	mg/kg	4.00		101	89.9-126	5.28	13.6	

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

GREEN GAL Analytical Laboratories
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www.GreenAnalytical.com

Cottonwood Consulting	Project: BTEX/TPH, Cl	
PO Box 1653	Project Name / Number: GCU 500	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/26/22 13:32

Volatile Organic Compounds by EPA Method 8021 - Quality Control (Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2091532 - Volatiles (Continued)										
LCS Dup (2091532-BSD1) (Continued)			Prepared: 09/15/22 Analyzed: 09/17/22							
o-Xylene	1.99	0.050	mg/kg	2.00		99.6	84.3-123	4.24	14.1	
Toluene	1.99	0.050	mg/kg	2.00		99.7	84.2-126	5.80	13.3	
Total Xylenes	6.02	0.150	mg/kg	6.00		100	89.1-124	4.94	13.4	

Petroleum Hydrocarbons by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2091526 - General Prep - Organics										
Blank (2091526-BLK1)			Prepared & Analyzed: 09/15/22							
Surrogate: 1-Chlorooctadecane	*58.9*		mg/kg	*50.0*		*118*	*46.3-178*			
Surrogate: 1-Chlorooctane	*50.8*		mg/kg	*50.0*		*102*	*45.3-161*			
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
GRO C6-C10	ND	10.0	mg/kg							
LCS (2091526-BS1)			Prepared & Analyzed: 09/15/22							
Surrogate: 1-Chlorooctadecane	*67.6*		mg/kg	*50.0*		*135*	*46.3-178*			
Surrogate: 1-Chlorooctane	*53.8*		mg/kg	*50.0*		*108*	*45.3-161*			
DRO >C10-C28	209	10.0	mg/kg	200		105	74.9-127			
GRO C6-C10	200	10.0	mg/kg	200		99.9	76.8-124			
Total TPH C6-C28	409	10.0	mg/kg	400		102	77.5-124			
LCS Dup (2091526-BSD1)			Prepared & Analyzed: 09/15/22							
Surrogate: 1-Chlorooctadecane	*69.0*		mg/kg	*50.0*		*138*	*46.3-178*			
Surrogate: 1-Chlorooctane	*54.9*		mg/kg	*50.0*		*110*	*45.3-161*			
DRO >C10-C28	201	10.0	mg/kg	200		100	74.9-127	4.18	18.6	
GRO C6-C10	194	10.0	mg/kg	200		97.2	76.8-124	2.78	17.2	
Total TPH C6-C28	395	10.0	mg/kg	400		98.8	77.5-124	3.50	17.6	

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Cottonwood Consulting	Project: BTEX/TPH, Cl	
PO Box 1653	Project Name / Number: GCU 500	**Reported:**
Durango CO, 81302	Project Manager: Kyle Siesser	09/26/22 13:32

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
	*Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

Green Analytical Laboratories

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Green Analytical Laboratories
(970) 247-4220
Fax: (970) 247-4227
service@greenanalytical.com or dzufelt@greenanalytical.com
75 Suttle St Durango, CO 81303

Company Name: Cottonwood Consulting LLC
Project Manager: Kyle Siesser
Address: PO Box 1653
City: Durango State: CO Zip: 81302
Phone #: (970) 764-7356 Email: ksiesser@cottonwoodconsulting.com
Additional Report To:
Project Name: GCU 500
Project Number:
Sampler Name (Print): Emma Millar / Kelsey O'Brien

Bill to (if different):
P.O. #:
Company:
Attn:
Address:
City:
State: Zip:
Phone #:
Fax or Email:

FOR LAB USE ONLY Lab I.D.	Sample Name or Location	Collected Date	Collected Time	Matrix: GROUNDWATER	SURFACEWATER	WASTEWATER	PRODUCEDWATER	SOIL	OTHER :	# of containers: No preservation (general)	HNO_3	HCl	H_2SO_4	Other:	Other:	ANALYSIS REQUEST: BTEX	TPH	Chloride
2209-135																		
-01	SS01	9/12/22	1310					X		3						X	X	X
-02	SS02	↓	1330					X		3						X	X	X
-03	SS03	↓	1300					X		1								X

Relinquished By:	Date: 9/12/22 Time: 1625	Received By:
Relinquished By:	Date: Time:	Received By:
Relinquished By:	Date: Time:	Received By:

ADDITIONAL REMARKS:

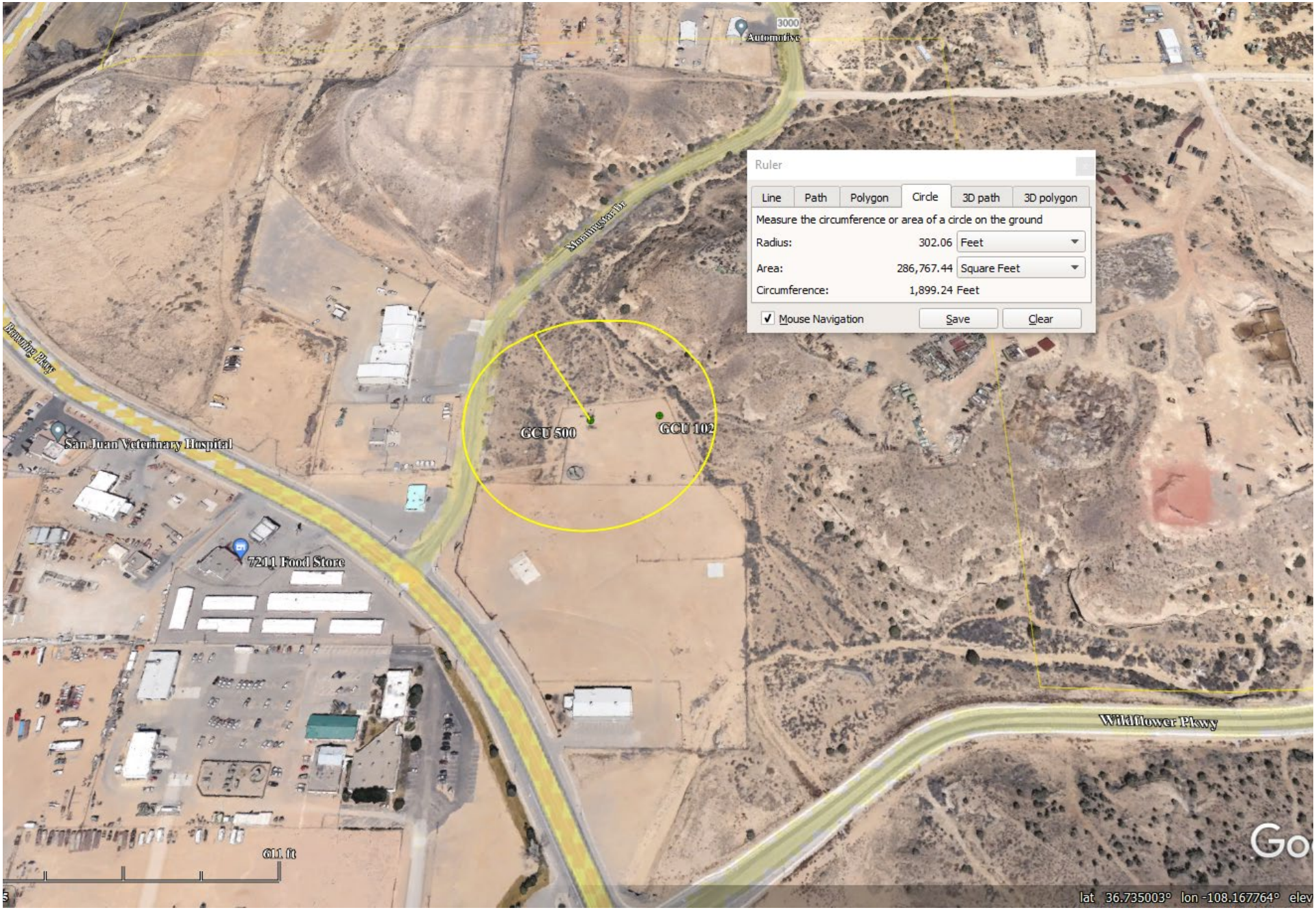
Report to State? (Circle) Yes (No)

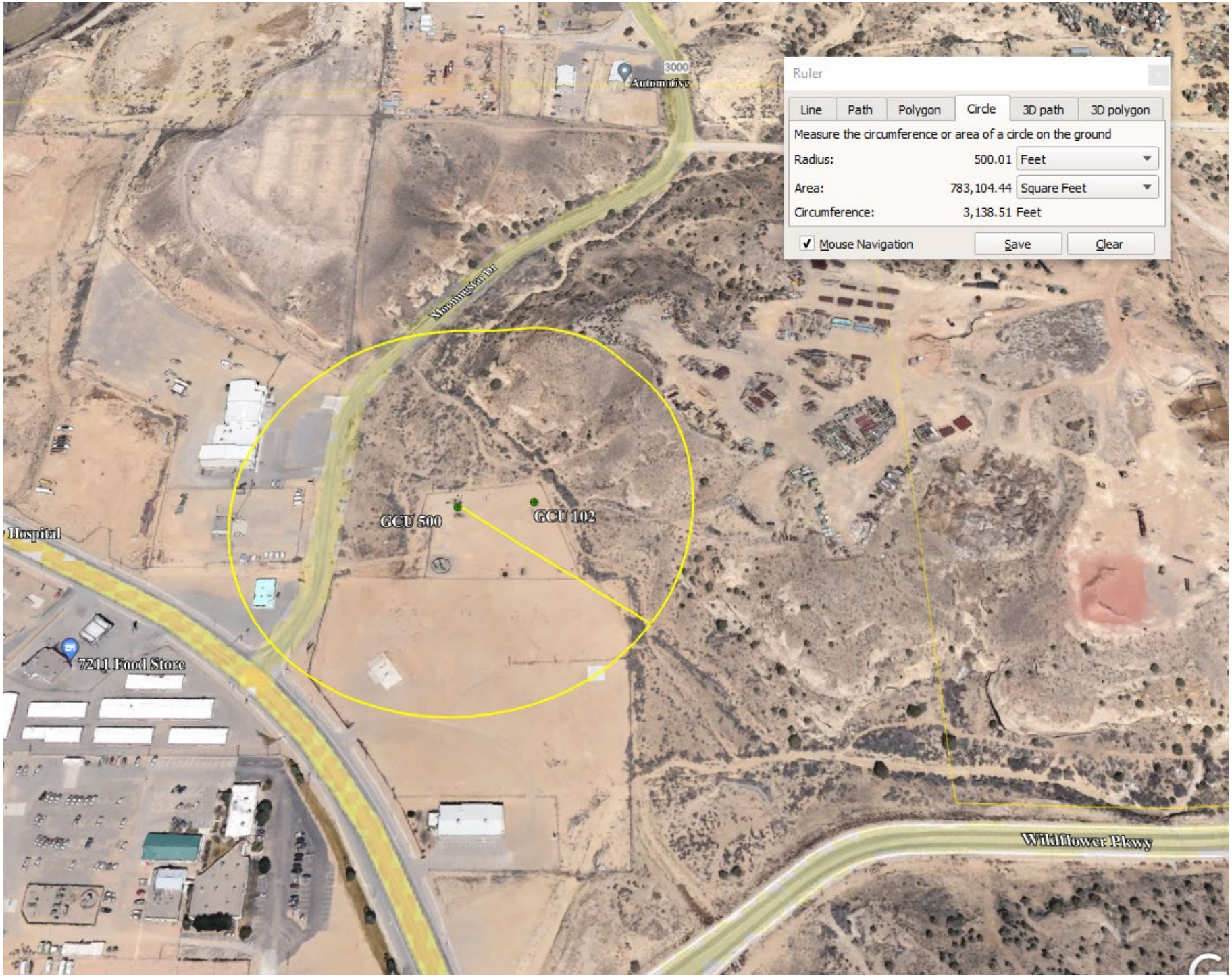
Delivered By: (Circle One)
(Sampler) - UPS - FedEx - Kangaroo - Other:

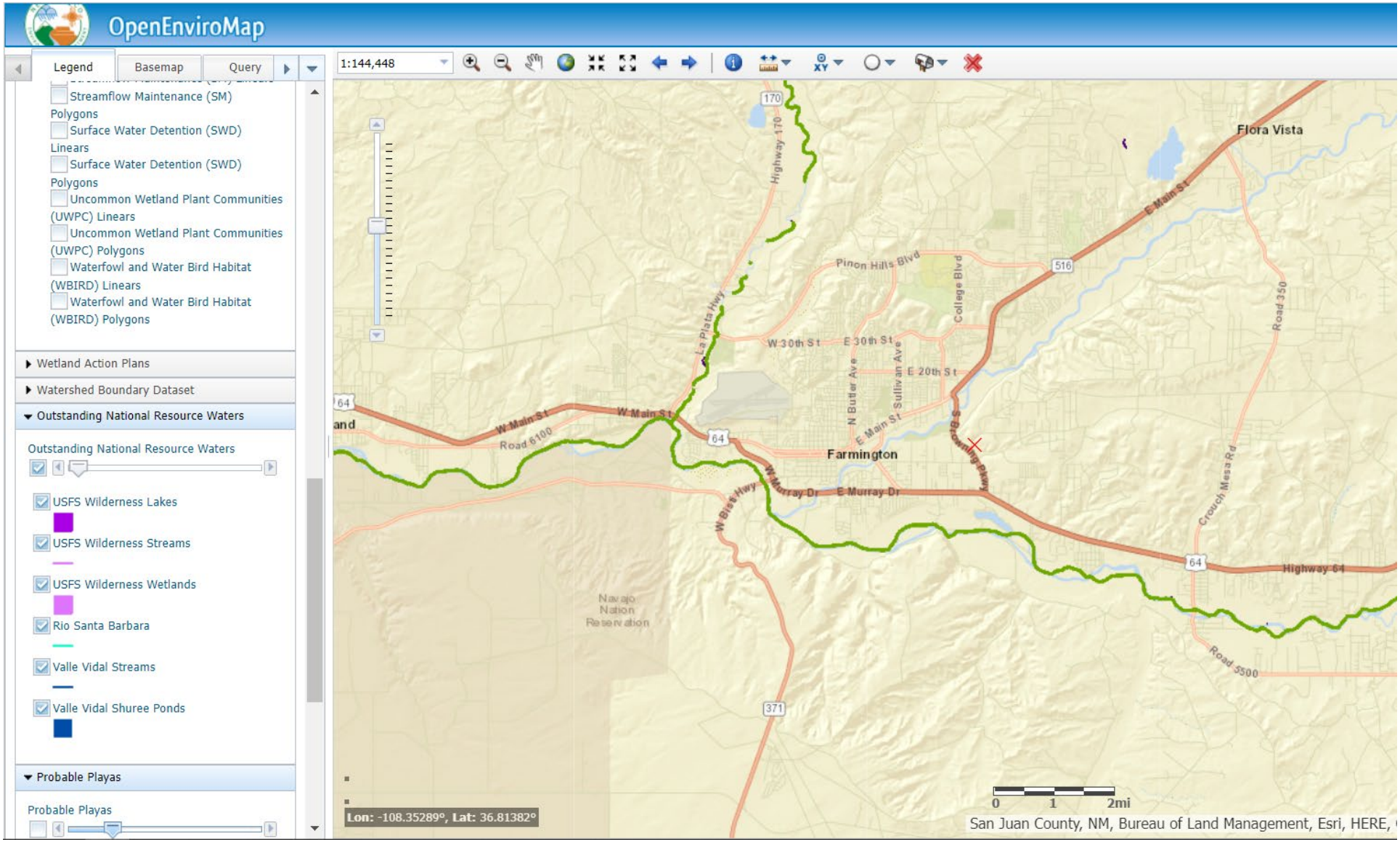
Temperature at reciept: 2.2 °C CHECKED BY: VJW

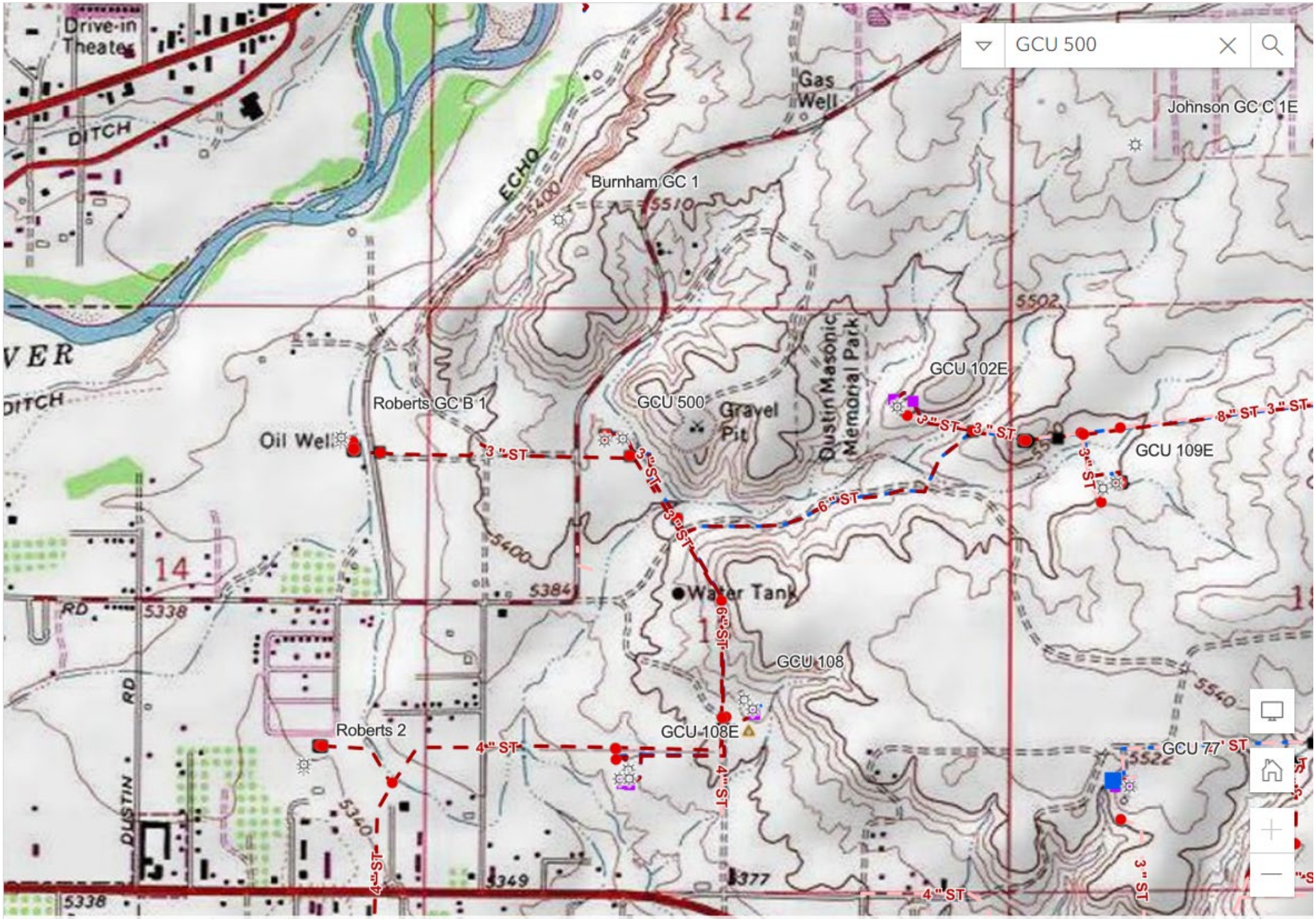
on ICE Laser #2

† GAL cannot always accept verbal changes. Please fax or email written change requests.
* Chain of Custody must be signed in "Reliquished By:" as an acceptance of services and all applicable charges.


Ruler
Line
Path
Polygon
Circle
3D path
3D polygon
Measure the circumference or area of a circle on the ground
Radius: 302.06 Feet
Area: 286,767.44 Square Feet
Circumference: 1,899.24 Feet
Mouse Navigation
Save
Clear
GCU 500
GCU 102
San Juan Veterinary Hospital
7211 Food Store
Wildflower Pkwy
Browning Pkwy
Morningstar Dr
611 ft
lat 36.735003° lon -108.167764° elev


Ruler
Line
Path
Polygon
Circle
3D path
3D polygon
Measure the circumference or area of a circle on the ground
Radius: 500.01 Feet
Area: 783,104.44 Square Feet
Circumference: 3,138.51 Feet
Mouse Navigation
Save
Clear
3000
Automotive
Manhingster Dr
GCU 500
GCU 102
Hospital
7211 Food Store
Wildflower Pkwy


OpenEnviroMap
Legend
Basemap
Query
1:144,448
Streamflow Maintenance (SM) Polygons
Surface Water Detention (SWD) Linears
Surface Water Detention (SWD) Polygons
Uncommon Wetland Plant Communities (UWPC) Linears
Uncommon Wetland Plant Communities (UWPC) Polygons
Waterfowl and Water Bird Habitat (WBIRD) Linears
Waterfowl and Water Bird Habitat (WBIRD) Polygons
Wetland Action Plans
Watershed Boundary Dataset
Outstanding National Resource Waters
Outstanding National Resource Waters
USFS Wilderness Lakes
USFS Wilderness Streams
USFS Wilderness Wetlands
Rio Santa Barbara
Valle Vidal Streams
Valle Vidal Shuree Ponds
Probable Playas
Probable Playas
Flora Vista
Farmington
Navajo Nation Reservation
Pinon Hills Blvd
W Main St
E Main St
W Murray Dr
E Murray Dr
Highway 64
Road 6100
Road 5500
Road 350
Crouch Mesa Rd
College Blvd
N Butler Ave
Sullivan Ave
W 30th St
E 30th St
E 20th St
La Plata Hwy
W Bisti Hwy
Highway 170
170
516
64
371
0 1 2mi
Lon: -108.35289°, Lat: 36.81382°
San Juan County, NM, Bureau of Land Management, Esri, HERE,


GCU 500
Drive-in Theater
DITCH
ECHO
Gas Well
Johnson GC C 1E
Burnham GC 1
5400
5510
5502
Dustin Masonic Memorial Park
GCU 102E
Roberts GC B 1
GCU 500
Gravel Pit
Oil Well
3" ST
8" ST
GCU 109E
6" ST
14
5384
Water Tank
RD
5338
GCU 108
5540
Roberts 2
GCU-108E
4" ST
GCU 7
5522
DUSTIN
5340
5349
5377

SITING AND HYDRO-GEOLOGICAL REPORT FOR GALLEGOS CANYON UNIT 102

Siting Criteria 19.15.17.10 NMAC

Depth to groundwater at the site is estimated to be greater than 100 feet. This estimation is based on data from Stone and others (1983), and depth to groundwater data obtained from water wells permitted by the New Mexico State Engineer's Office (OSE, Figure 1). Local topography and proximity to adjacent water features are also considered. A topographic map of the site is provided as Figure 2 and demonstrates that the below grade tank (BGT) is not within 300 feet of any continuously flowing watercourse or within 200 feet of any other significant watercourse, lakebed, sinkhole or playa lake as measured from the ordinary high water mark. Figure 3 demonstrates that the BGT is not within 300 feet of a permanent residence, school, hospital, institution or church. Figure 4 demonstrates, based on a search of the OSE database and USGS topographic maps, that there are no freshwater wells or springs within 1000 feet of the BGT. Figure 5 demonstrates, based on a search of the OSE database and USGS topographic maps, that the BGT is within a municipal boundary or a defined municipal freshwater well field. Figure 6 demonstrates that the BGT is not within 500 feet of a wetland. Figure 7 demonstrates that the BGT is not in an area overlying a subsurface mine. The BGT is not located in an unstable area. Figure 8 demonstrates that the BGT is not within the mapped FEMA 100-year floodplain.

Local Geology and Hydrology

This particular site is located on Ojo Alamo Sandstone west of Crouch Mesa between the Animas and San Juan rivers. The site is located on a sandstone outcrop approximately 3294 feet from the Animas River and 100 feet higher in elevation. Although the BGT site is within municipal boundaries it is located within an isolated area, hundreds of feet from any structure or well therefore creating no imminent threat to local groundwater, human safety, and welfare.

Regional Geology and Hydrology

The San Juan Basin is situated in the Navajo section of the Colorado Plateau and is characterized by broad open valleys, mesas, buttes and hogbacks. Away from major valleys and canyons topographic relief is generally low. Native vegetation is sparse and shrubby. Drainage is mainly by the San Juan River, the only permanent stream in the Navajo Section of the Colorado Plateau. The San Juan River is a tributary of the Colorado River. Major tributaries include the Animas, Chaco and La Plata Rivers. Flow of the San Juan River across the basin is regulated by the Navajo Dam, located about 30 miles northeast of Farmington, New Mexico. The climate is arid to semiarid with an average annual precipitation of 8 to 10 inches. Soils within the basin consist of weathered parent rock derived from predominantly physical means mostly from eolian depositional system with fluvial having a lesser impact.

Cretaceous and Tertiary sandstones, as well as Quaternary Alluvial deposits, serve as the primary aquifers in the San Juan Basin (Stone et al., 1983). In most of the proposed area, the Nacimiento Formation lies at the surface and grades into the Animas Formation/Ojo Alamo Sandstone to the west. The Ojo Alamo Sandstone consists of sandstone and conglomeritic sandstone and overlies the Kirtland Shale. The thickness of the Ojo Alamo ranges from 72 to 313 feet (Stone et al.,

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1983). The predominant aquifer within the Ojo Alamo Sandstone occurs from near the surface to over 200 feet in depth. The aquifer is widely used as a domestic and stock water source.

References

Circular 154—Guidebook to coal geology of northwest New Mexico By E. C. Beaumont, J. W. Shomaker, W. J. Stone, and others, 1976

Stone, et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico, Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p

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Table I Closure Criteria for Soils Impacted by a Release			
Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/l TDS	Constituent	Method*	Limit**
≤ 50 feet	Chloride***	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg
51 feet-100 feet	Chloride***	EPA 300.0 or SM4500 Cl B	10,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg
>100 feet	Chloride***	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

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 158336

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 158336
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation plan approved with the addition of the following conditions: 1. Delineate horizontal perimeter of impacted area with sampling points having ten (10) feet spacing 2. Delineate vertical extent within impacted perimeter with a minimum of two (2) grab samples (e.g. - near well head & terminal end) 3. Provide sampling depths in lab sample IDs Final closure report required to include the following; 1. Provide supporting documentation for those items on page 3 of C-141 2. Provide separate scaled site map showing vertical and horizontal delineation points 3. Provide proof of impacted volume removed 4. Closure report deadline is February 21, 2023.	11/21/2022