

Incident ID	nAPP2222951347
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?	- >100* (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	nAPPP2222951347
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: Amy Barnhill

Title: Water Advisor

Signature:



Date: 10-19-22

email: ABarnhill@chevron.com

Telephone: 432-687-7108

OCD Only

Received by: Jocelyn Harimon

Date: 10/24/2022

Don Dunbar
PO Box 5336
San Angelo, TX 76902-5336
713-504-2873
don.dunbar@en-closure.com

en-closure

September 26, 2022
Preliminary Site Assessment Plan
36% HCl impact on the Chevron Carlsbad School Lands (32.22567, -103.724320)
P, Section 12, T24S, R31E, Eddy County, New Mexico
Incident # nAPP2222951347

The following is a proposed site assessment plan to address the acid tanker leak on the Carlsbad School Land staging pad. The proposed assessment will provide vertical and horizontal delineation of the associated pH and Chlorides from the release to the shallow soil. The data from the assessment will be used to prepare a remediation plan that will be presented for approval.

Release incident: On Sunday, August 7, 2022, a contracted Acid Tanker parked in secondary containment on the above referenced staging pad developed a leak which resulted in the release of approximately 10 bbls/ 420 gal were released to the pad surface. The pad was newly constructed and does not appear on current maps.

The estimated volume is based on the tanker capacity of 107 bbls/ 4494 gals and post release volume of 38 bbls/ 1596 gals measured in the tanker. Approximately 59 bbls/ 2478 gal of the released material was captured in secondary containment and the remaining 10 bbls/ 420 gal were released to the pad surface. The spill was confined to the pad and near surface soils 0-0.5 feet below ground surface (bgs).

Emergency response measures were undertaken. The free liquids were recovered using a vacuum truck and placed into an empty chemical tanker. The impacted area was then neutralized to a pH of 6 and approximately 30 cubic yards of neutralized soil was excavated and placed in a roll off boxes for transport to J& L Landfarm (Permit #NM-01-0023). Photo documentation of the pH screening is attached as Figures 2 and 3. The bills of lading for the soil transport and disposal are attached.

Assessment Plan: The affected area appears to be approximately 30 x 30 feet based on the location of the containment pads of the Acid Tanker and NexTier Pump. NexTier proposes to assess an area of approximately 80 feet by 70 feet on 10 foot- grid spacings. This would provide assessment coverage extending 20 feet beyond the visible impact. The proposed sampling grid is attached.

The assessment will consist of a series of 56 geoprobe borings. Each boring will be installed in the center of each 10 x 10 grid. Each boring will be advanced to a depth of 4 feet below ground surface. Soil samples will be collected continuously. Select intervals (0.0-0.5', 1.5-2.0' and 3.5-4.0') will be field screened and preserved for laboratory analysis.

Field screening: Field screening will include chlorides titration and field measurements of pH.

Laboratory Analysis: Laboratory Analysis will be performed at Cardinal Laboratories in Hobbs for Chlorides using method SM 4500CL-B and pH using method SW846-9040B. Sample analysis will be performed incrementally by depth interval. All the surface soil samples (0.0-0.5' bgs) will be analyzed on a 48 hour turn around. These results will be screened against OCD cleanup criteria for chlorides. If there are sampling points that exceed the clean-up criteria; their subsequent midlevel samples (1.5- 2.0' bgs) will be analyzed on a 48 hour turn around. If there are mid-level interval exceedances, the samples from 3.5 -4.0 from the locations with exceedances will be analyzed on a 48 hour turn around. This will NexTier to analyze the initial samples and any subsequent vertical and horizontal samples required to complete delineation within the laboratory method hold time.

Screening and Cleanup Standards: The spill was limited to the pad. There were no surface or groundwater receptors (as described in the C-141 Site Assessment form) observed in the area around the location. Water well data from the USGS, State Engineer, and from the closest assessment boring indicate that ground water is likely

Chevron Carlsbad Municipal Schools NM
Acid Release Site Assessment Plan

deeper than 100 feet below grade, however, there is no current depth to groundwater data available within 1.25 miles of the site.

Chevron provided the following USGS well data.

Well	Lat	Long	DTW	Distance from Spill
USGS1	32°16'48.00"N	103°48'19.20"W	138'	6.04 miles
USGS2	32°16'11.90"N	103°45'1.20"W	250'	3.40 miles
USGS3	32°13'34.00"N	103°49'49.00"W	367'	6.16 miles
USGS4	32°13'14.10"N	103°48'23.40"W	56'	4.80 miles
USGS5	32°12'3.00"N	103°51'19.80"W	423"	7.80 miles
USGS6	32°10'38.20"N	103°46'53.00"W	474	4.66 Miles

Additionally, Chevron provided data from a boring made in advance of construction of the Sand Dunes Frac Pond. The boring was advanced to 85' bgs but did not encounter groundwater in the boring.

TetraTech -

Sand Dunes Frac Pond

Boring B-1	32°13'39.54"N	103°45'15.52.00W	>85'	1.8 miles
------------	---------------	------------------	------	-----------

The following wells were located within the New Mexico Engineer's Office Database for the subject Township 24S and Range 31E and contained location and depth to water information.

C-2464	32.24775	103.75117	205	2.17 miles
C-4388	32.2064944	103.752775	868	1.86 miles
C-4576	32.20935	103.75111	850	2.08 miles

Screening will be initially performed using a Chlorides concentration of 600 mg/kg. If the initial analytical results show that there are a limited number of samples exceeding this standard, NexTier plans to perform targeted excavation around the exceedances. If there are a significant number of exceedances of the 600 mg/kg chlorides criteria, NexTier will install a boring and establish the depth to groundwater and then re-evaluate the clean-up standard.

A detailed remediation proposal which will include the field screening and analytical results presented in tables and on the grid maps will be submitted for approval upon completion of the assessment plan and determination of the target clean up goals.

Please contact me at 713-504-2873 if you have any questions about this plan.

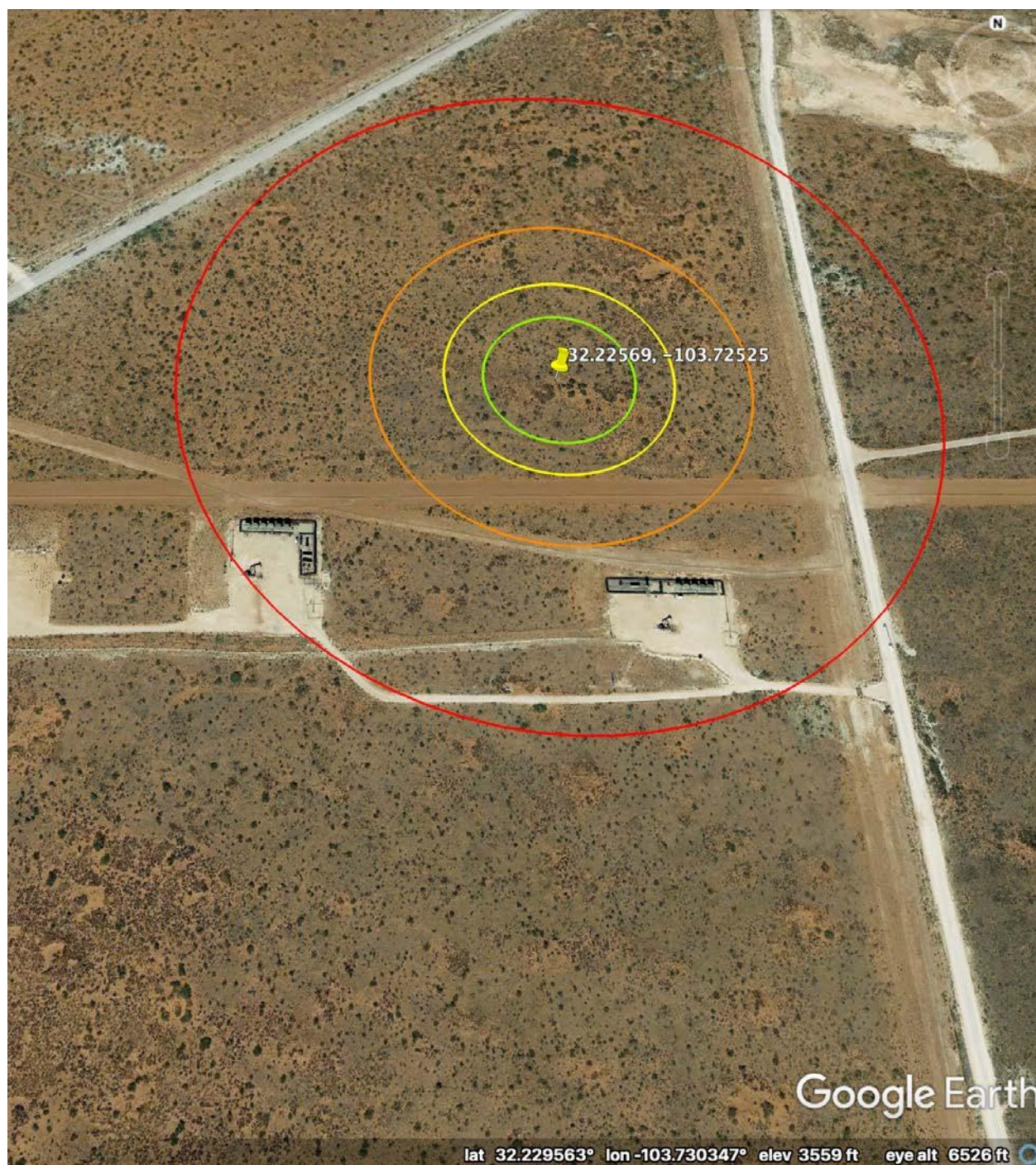


Don Dunbar, P.G. Manager

Chevron Carlsbad Municipal Schools NM
Acid Release Site Assessment Plan

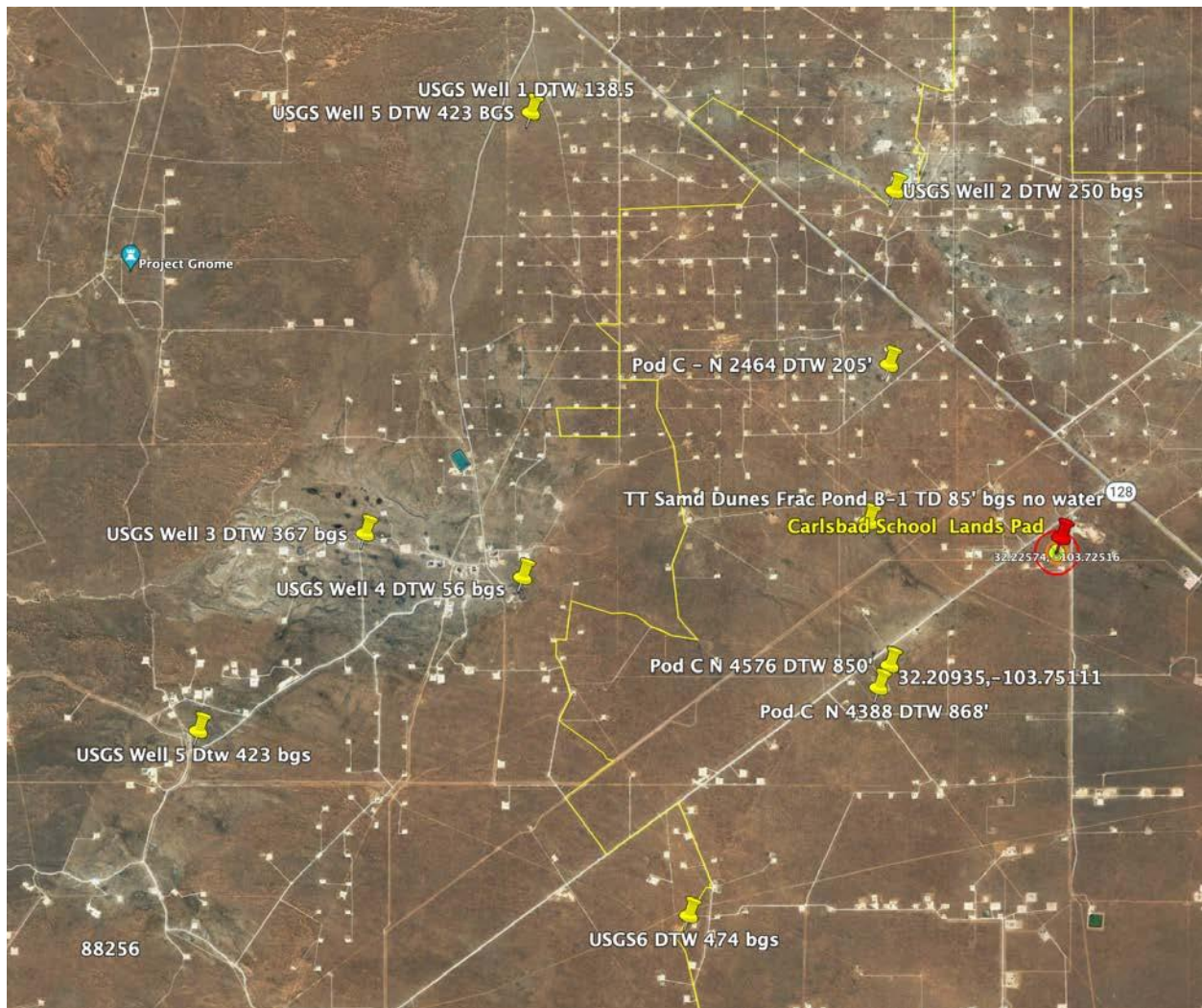
What is the shallowest depth to groundwater beneath the area affected by the release? <i>Data from the State Engineer's office and an EDR Database Search show the closest water wells are within 1.5 to 2 miles and have a depth to water >100'</i>	<u>>100*</u> (ft bgs)
Did this release impact groundwater or surface water? <i>Spill contained to the surface and near surface soil <0.5 bgs</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? <i>Lateral extents of release confined to pad – no water course observed</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? <i>No lake beds, sink holes, or playas observed within search radius</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? <i>No occupied residence, school, hospital, institution, or church has been observed within the search radius</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? <i>No domestic freshwater wells identified within 500 feet of pad</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? <i>No fresh water wells or springs were observed</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland? <i>No wetlands observed within 300 of spill</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine? <i>Extent of spill is confined to pad</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology? <i>No surficial karsting observed</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain? <i>The extent of the spill is in an area described by FEMA as minimal Flood Hazard</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site? <i>The spill is confined to the pad</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Chevron Carlsbad Municipal Schools NM
Acid Release Site Assessment Plan



Google Earth Image – at spill location. Top of image is north. Red Circle 1000' radius, Orange Circle 500' radius, Yellow Circle 300'radius and Green Circle is 200' Radius from spill coordinates.

Chevron Carlsbad Municipal Schools NM
Acid Release Site Assessment Plan



Locations of Water Wells that have been identified and reported depths to water.

Chevron Carlsbad Municipal Schools NM
Acid Release Site Assessment Plan



Figure 1 – Acid released from tanker rupture

Chevron Carlsbad Municipal Schools NM
Acid Release Site Assessment Plan



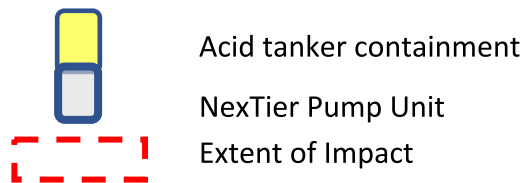
Figures 2 & 3 – Soil pH measurement from excavated material



Chevron Carlsbad Municipal Schools NM
Acid Release Site Assessment Plan

Proposed Sample Grid

50	51	52	53	54	55	56
43	44	45	46	47	48	49
36	37	38	39	40	41	42
29	30	31	32	33	34	35
22	23	24	25	26	27	28
15	16	17	18	19	20	21
8	9	10	11	12	13	14
1	2	3	4	5	6	7



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 152766

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 152766
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. If evidence of depth to ground water within a ½ mile radius of the site cannot be provided, impacted soils will need to meet Table 1 Closure Criteria for ground water at a depth of 50 feet or less. Please make sure all groundwater data is included in closure report summary. Soil samples will need to meet Table 1 Closure Criteria for proven depth to water determination. Closure samples should be representative of no more than 200 ft2, unless a variance has been approved. The samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Please make sure the edges/sidewalls are delineated to 600 mg/kg for chlorides and 100 mg/kg for TPH, defining the edge of the release.	1/23/2023