

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	
District RP	
Facility ID	
Application ID	

Release Notification

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) NRM2032858637
Contact mailing address: 1199 Main Ste., Suite 101, Durango, CO 81301	

Location of Release Source

Latitude 36.721295 Longitude -107.669461
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Gallegos Canyon Unit 13 SWD #001	Site Type: Salt Water Disposal Well - flowline
Date Release Discovered: 10/22/2020	API# (if applicable) 30-045-28601

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

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

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) Approx. 13.7 bbl	Volume Recovered (bbls) Approx. 0 bbl
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Release of produced water and condensate caused from a flow-line integrity failure. BP Confirmed a reportable release of produced water associated with a flow-line repair on 10/22/2020. BP reported the findings via email and requested guidance on the release in the attached,. The accompanying documentation demonstrates no significant impact to groundwater (demonstrated to be >100' deep) with minimal lateral extents (4' x 6' base of excavation).

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? .	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: 	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Sabre Beebe</u>	Title: <u>Environmental Coordinator</u>
Signature: <u>Sabre Beebe</u>	Date: <u>March 29, 2023</u>
email: <u>sabre.beebe@ikavenergy.com</u>	Telephone: <u>970-852-5172</u>
<u>OCD Only</u> Received by: _____ Date: _____	

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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input checked="" type="checkbox"/> Yes <input 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

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

Printed Name: Sabre Beebe Title: Environmental Coordinator

Signature: Sabre Beebe Date: March 29, 2023

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

OCD Only

Received by: _____ Date: _____

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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: Sabre Beebe Date: March 29, 2023
email: sabre.beebe@ikavenergy.com Telephone: 970-852-5172

OCD Only

Received by: Jocelyn Harimon Date: 03/29/2023

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

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Closure

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

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

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

Printed Name: Sabre Beebe Title: Environmental Coordinator

Signature: Sabre Beebe Date: March 1, 2023

email: sabre.beebe@ikavenergy.com Telephone: 970-852-5271

OCD Only

Received by: Jocelyn Harimon Date: 03/29/2023

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: Nelson Velez Date: 03/30/2023

Printed Name: Nelson Velez Title: Environmental Specialist – Adv



**Gallegos Canyon Unit 013-1 SWD Variance Request per 19.15.14
API 30-045-28601 Incident# NRM2032858637**

February 28, 2023

HISTORY:

BP confirmed a reportable release of produced water associated with a flowline repair on 10/22/20. BP reported the findings via email and requested guidance of the release in the attached. The accompanying documentation demonstrates no significant impact to groundwater (demonstrated to be >100' deep) with minimal lateral extents (4'x'6 base of excavation). Calculation of the volume was 13.7 bbls.

During a flowline repair beginning on 10/22/2020, the excavation was sampled to determine lateral and vertical extent.

Samples were collected on 10/23/2020, from the release point at the sidewalls and at the base of the excavation. The excavated soil was stockpiled on site and sampled to determine if offsite disposal was necessary.

The stockpile material was hauled off site and disposed of at a NMOCD approved facility; attached is a C-138 documenting the disposal.

The sample results from 10/23/2020 are attached. The sidewalls are below the reclamation requirements for chlorides with a result of 590 ppm at 3.5 feet in-depth. The base of excavation at 4.5 feet in-depth resulted in chlorides being 1990 ppm. The spoil pile from the excavation resulted in 1330 ppm chlorides.

Depth to ground water beneath the affected area was determined to be greater than 100 feet below grade surface.

VARIANCE REQUEST:

Simcoe, LLC is requesting a variance in regard to the reclamation threshold of 600 mg/kg of chlorides and on further remediation on this location for the following reasons:

1. Equipment safety and protection
 - a. The location is a multiple well location. There are two active gas wells in addition to the GCU 13-1 SWD injection well. The GCU 108 and GCU 501 are also located on this same disturbance.
 - b. In the area of the impacts there is 2 three-inch water lines, 1 three-inch gas line and two electrical cables all at risk of damage/destruction during any further excavation. Delineation excavation was carried out with extreme caution and expansion of delineation holes determined to be too high of a risk.
 - c. Damage to security fencing has high potential with further excavation.
2. Public health, safety and environment risk is minimal as the closest domestic inhabitant is greater than 1147 feet to the east and 100 feet higher in elevation.



3. This location is in an area that is primarily an industrial area and will most likely will continue to be developed as industrial in the future.
4. Ground water has been established at greater than 100 feet below grade surface at the location (see site characterization documents below).
5. The chloride levels of sample results (attached) are below the Table 1 closure standards. If this Chloride levels in the upper five feet of the soils are below the reclamation threshold. Samples SS20 at a depth of 14 feet had chloride results of 652 ppm, SS16 at a depth of 10 feet had chloride results of 965, and SS17 at a depth of 12 feet had chloride results of 759 ppm. All below the Table 1 threshold for soils below 4 feet. Table 1 for this location given that ground water is greater than 100 feet would have a threshold of 20,000 mg/kg. In a situation where this location was outside the city limits the values of the samples would be more than adequate for closure.
6. The impacted area resides within the area required for normal operations and will not be reclaimed until such time that the three wells on location are plugged and abandoned.
7. Given that the top 4 feet of the area is below the 600 mg/kg this chloride levels at 14 feet below grade present no risk of adversely affecting vegetation. Average root zone in this area is at or less than 12 inches.
8. Any additional vertical delineation will be performed at such time that the well is plugged, all equipment decommissioned, and reclamation is performed.
9. Location has a cut and fill which during final reclamation will require removal of all imported materials estimated at six inches or greater in depth. This material will be exported and disposed of properly. The entire original disturbance is required to be returned to near natural contour to the extent that is practicable. Revegetation of the entire disturbance is required at final reclamation prior to release.
10. During final reclamation activities any evidence of impacts are investigated by sampling and addressed in accordance with all regulations. Therefore, Simcoe, LLC is confident that the impacts will be most effectively addressed at such time that the well is plugged and the location reclaimed.
11. Safety concerns listed in item 1 are non-existent upon completion of the plugging and abandonment of the wellbore.
12. Reclamation requirements do not apply, as the area impacted by the leak is currently and will remain within the area of the well pad to be utilized for ongoing oil and gas operations of the three wells on the pad.
13. Surface geology units in the area are the Kirtland Shale, both upper and lower shale member. 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.

Simcoe, LLC is requesting variance to remediation/reclamation requirements as stated below:

Extent delineation to maximum depth of 17 feet.

1. During initial discovery which was during a pipeline repair demonstrated that the impacts at 4.5 feet were below the Table 1 threshold.
2. Follow up core sampling at depths of 6, 8 and 10 feet were below the Table 1 threshold.



3. Additional delineation sampling performed in January of 2023 were all in compliance with the reclamation threshold in the top 4 feet. Two samples at depths of 10, 12, and 14 feet below grade surface were just slightly above the 600 ppm threshold for reclamation, but below the Table 1 threshold for determination of water greater than 100 feet below grade surface; which would be 20,000..

Depth to ground water determination greater than 100 feet utilizing BP America's C-144 BGT siting documentation compiled and submitted to NMOCD.

1. Ground water determination is greater than 100 feet.
2. Location is not within 300 feet of a continuously flowing water course.
3. Location is not within 200 feet of a significant water course, lakebed, sinkhole, or playa lake.
4. Location is not within 1000 feet of a permanent residence, school, hospital, institution or church.
5. Location is not within 500 horizontal feet of a private, domestic freshwater well or spring or 1000 horizontal feet of other freshwater well or spring.
6. Location is within a incorporated municipal boundary or defined municipal freshwater well field.
7. Location is not within 500 feet of a wetland.
8. Locations is not within the area of an overlying subsurface mine.
9. Location is not within an unstable area.
10. Location is not within a 100-year floodplain.



2023 Sampling Event Documents

From: [Velez, Nelson, EMNRD](#)
To: [Sabre Beebe](#)
Subject: RE: [EXTERNAL] GCU 13-1 additional sampling NRM2032858637
Date: Wednesday, January 11, 2023 9:15:07 AM

My apologies, you are approved for chloride analysis only.

Nelson Velez • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov *NOTE NEW EMAIL ADDRESS*
<http://www.emnrd.state.nm.us/OCD/>



From: Sabre Beebe <sabre.beebe@ikavenergy.com>
Sent: Wednesday, January 11, 2023 9:13 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Subject: RE: [EXTERNAL] GCU 13-1 additional sampling NRM2032858637

Nelson good morning,
Thank you for the response. Will you please clarify for me if it is approved or denied to perform sampling for chloride only on this project? Thank you



IKAV Energy Inc.
Sabre Beebe
Field Environmental Coordinator
Office: (970) 852-5172
Mobile: (970)-769-9523
E-Mail: sabre.beebe@ikavenergy.com

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From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Wednesday, January 11, 2023 8:48 AM
To: Sabre Beebe <sabre.beebe@ikavenergy.com>
Subject: RE: [EXTERNAL] GCU 13-1 additional sampling NRM2032858637

Good morning Sabre,

Thank you for the notice. If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards

Nelson Velez • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov *NOTE NEW EMAIL ADDRESS*
<http://www.emnrd.state.nm.us/OCD/>



From: Sabre Beebe <sabre.beebe@ikavenergy.com>
Sent: Wednesday, January 11, 2023 7:49 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Subject: [EXTERNAL] GCU 13-1 additional sampling NRM2032858637

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Mr. Velez,

This email is notification that core sampling is scheduled for January 17, 2023 to begin at 9:00 am. This sampling is intended for delineation of remaining chlorides for the impacts in relation to the pipeline leak that occurred historically. Simcoe is requesting that the samples be analyzed for chlorides only as the previously sampling was below standards on other constituents. Please reach out if there are any questions or concerns with the above stated notification and request.

Thank you



IKAV Energy Inc.

Sabre Beebe

Field Environmental Coordinator

Office: (970) 852-5172

Mobile: (970)-769-9523

E-Mail: sabre.beebe@ikavenergy.com

Confidentiality notice:

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Soil Sampling Results
Gallegos Canyon Unit 13 SWD #001
Simcoe LLC

Parameter	SS01 Sidewalls @3.5'	SS02 Base @4.5'	SS03 Spoils Pile	SS@6'	SS@8'	SS@10'	Units
	10/23/2020	10/23/2020	10/23/2020	6/15/2021	6/15/2021	6/15/2021	
	Excavation area	Excavation area	Spoils Pile	Excavation area	Excavation area	Excavation area	
Depth	42	54	-	72	96	120	inches bgs
Chloride	590	1,990	1,330	630	2,100	3,100	mg/kg
Benzene	<0.025	0.167	<0.025	-	-	-	mg/kg
Total BTEX	0.187	<0.150	<0.150	-	-	-	mg/kg
TPH (GRO)	<20	<10	<10	-	-	-	mg/kg
TPH (DRO)	<25	49.5	50.1	-	-	-	mg/kg
TPH (EXT DRO)	<50	<10	<10	-	-	-	mg/kg
Total TPH	<95	49.5	50.1	-	-	-	mg/kg

Notes:

Soil samples collected 12/23/2020 and 6/15/2021 collected by Simcoe staff

BTEX - Benzene, Toluene, Ethylbenzene, & Total Xylenes

TPH - Total Petroleum Hydrocarbons

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

EXT - Extended

bgs - below ground surface

mg/kg - milligrams per kilogram

Values reported below the laboratory detection limit are considered zero in Total TPH calculations.



Soil Sampling Results (continued)
Gallegos Canyon Unit 13 SWD #001
Simcoe LLC

Parameter	SS04@0-6"	SS05@0-6"	SS06@0-6"	SS07@0-6"	SS08@6'	SS09@10'	Units
	1/20/2023	1/20/2023	1/20/2023	1/20/2023	1/20/2023	1/20/2023	
	NW Delineation	SW Delineation	NE Delineation	SE Delineation	West Pothole	West Pothole	
Depth	0-6	0-6	0-6	0-6	72	120	inches bgs
Chloride	<11.2	<10.8	<10.9	25.7	<10.7	<10.7	mg/kg
Benzene	-	-	-	-	-	-	mg/kg
Total BTEX	-	-	-	-	-	-	mg/kg
TPH (GRO)	-	-	-	-	-	-	mg/kg
TPH (DRO)	-	-	-	-	-	-	mg/kg
TPH (EXT DRO)	-	-	-	-	-	-	mg/kg
Total TPH	-	-	-	-	-	-	mg/kg

Notes:

Soil samples collected 12/23/2020 and 6/15/2021 collected by Simcoe staff

BTEX - Benzene, Toluene, Ethylbenzene, & Total Xylenes

TPH - Total Petroleum Hydrocarbons

GRO - Gasoline Range Organics

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EXT - Extended

bgs - below ground surface

mg/kg - milligrams per kilogram

Values reported below the laboratory detection limit are considered zero in Total TPH calculations.



Soil Sampling Results (continued)
Gallegos Canyon Unit 13 SWD #001
Simcoe LLC

Parameter	SS10@17'	SS11@16'	SS12@5'	SS13@10'	SS14@13'	SS15@5'	Units
	1/20/2023	1/20/2023	1/20/2023	1/20/2023	1/20/2023	1/20/2023	
	West Pothole	Center Pothole	East Pothole	East Pothole	East Pothole	South Pothole	
Depth	204	192	60	120	156	60	inches bgs
Chloride	<10.6	598	<10.6	<10.5	<10.6	109	mg/kg
Benzene	-	-	-	-	-	-	mg/kg
Total BTEX	-	-	-	-	-	-	mg/kg
TPH (GRO)	-	-	-	-	-	-	mg/kg
TPH (DRO)	-	-	-	-	-	-	mg/kg
TPH (EXT DRO)	-	-	-	-	-	-	mg/kg
Total TPH	-	-	-	-	-	-	mg/kg

Notes:

Soil samples collected 12/23/2020 and 6/15/2021 collected by Simcoe staff

BTEX - Benzene, Toluene, Ethylbenzene, & Total Xylenes

TPH - Total Petroleum Hydrocarbons

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

EXT - Extended

bgs - below ground surface

mg/kg - milligrams per kilogram

Values reported below the laboratory detection limit are considered zero in Total TPH calculations.



Soil Sampling Results (continued)
Gallegos Canyon Unit 13 SWD #001
Simcoe LLC

Parameter	SS16@10'	SS17@12'	SS18@5'	SS19@10'	SS20@14'	Units
	1/20/2023	1/20/2023	1/20/2023	1/20/2023	1/20/2023	
	South Pothole	South Pothole	North Pothole	North Pothole	North Pothole	
Depth	120	144	60	120	168	inches bgs
Chloride	963	759	<10.4	<10.7	652	mg/kg
Benzene	-	-	-	-	-	mg/kg
Total BTEX	-	-	-	-	-	mg/kg
TPH (GRO)	-	-	-	-	-	mg/kg
TPH (DRO)	-	-	-	-	-	mg/kg
TPH (EXT DRO)	-	-	-	-	-	mg/kg
Total TPH	-	-	-	-	-	mg/kg

Notes:

Soil samples collected 12/23/2020 and 6/15/2021 collected by Simcoe staff

BTEX - Benzene, Toluene, Ethylbenzene, & Total Xylenes

TPH - Total Petroleum Hydrocarbons

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

EXT - Extended

bgs - below ground surface

mg/kg - milligrams per kilogram

Values reported below the laboratory detection limit are considered zero in Total TPH calculations.



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01 February 2023

Kyle Siesser
Cottonwood Consulting
PO Box 1653
Durango, CO 81302
RE: Misc.

Enclosed are the results of analyses for samples received by the laboratory on 01/20/23 15:50. 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,

A handwritten signature in blue ink, reading 'Jeremy D. Allen', is written in a cursive style.

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: T104704514-23-16

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



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PO Box 1653
Durango CO, 81302

Project: Misc.
Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SS04 @ 0-6"	2301133-01	Solid	01/20/23 09:30	01/20/23 15:50	
SS05 @ 0-6"	2301133-02	Solid	01/20/23 09:40	01/20/23 15:50	
SS06 @ 0-6"	2301133-03	Solid	01/20/23 09:50	01/20/23 15:50	
SS07 @ 0-6"	2301133-04	Solid	01/20/23 10:00	01/20/23 15:50	
SS08 @ 6'	2301133-05	Solid	01/20/23 10:05	01/20/23 15:50	
SS09 @ 10'	2301133-06	Solid	01/20/23 10:10	01/20/23 15:50	
SS10 @ 17'	2301133-07	Solid	01/20/23 10:15	01/20/23 15:50	
SS11 @ 16'	2301133-08	Solid	01/20/23 10:30	01/20/23 15:50	
SS12 @ 5'	2301133-09	Solid	01/20/23 10:35	01/20/23 15:50	
SS13 @ 10'	2301133-10	Solid	01/20/23 10:40	01/20/23 15:50	
SS14 @ 13'	2301133-11	Solid	01/20/23 10:45	01/20/23 15:50	
SS15 @ 5'	2301133-12	Solid	01/20/23 11:15	01/20/23 15:50	
SS16 @ 10'	2301133-13	Solid	01/20/23 11:20	01/20/23 15:50	
SS17 @ 12'	2301133-14	Solid	01/20/23 11:25	01/20/23 15:50	
SS18 @ 5'	2301133-15	Solid	01/20/23 12:55	01/20/23 15:50	
SS19 @ 10'	2301133-16	Solid	01/20/23 13:00	01/20/23 15:50	
SS20 @ 14'	2301133-17	Solid	01/20/23 13:05	01/20/23 15:50	

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Jeremy D Allen, Laboratory Director

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Page 2 of 23 2301133 GAL FINAL 02 01 23 1227 02/01/23 12:27:31



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Project: Misc.
Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS04 @ 0-6"**2301133-01 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

% Dry Solids	89.5			%	1	01/27/23 12:00	EPA160.3/1684		KRW
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Soluble (DI Water Extraction)

Chloride	<11.2	11.2	0.621	mg/kg dry	10	01/26/23 16:10	EPA300.0		AES
----------	-------	------	-------	-----------	----	----------------	----------	--	-----

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A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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Project: Misc.
Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS05 @ 0-6"

2301133-02 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

% Dry Solids	92.4			%	1	01/27/23 12:00	EPA160.3/1684		KRW
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Soluble (DI Water Extraction)

Chloride	<10.8	10.8	0.601	mg/kg dry	10	01/26/23 17:12	EPA300.0		AES
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Page 4 of 23 2301133 GAL FINAL 02 01 23 1227 02/01/23 12:27:31



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Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS06 @ 0-6"**2301133-03 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

% Dry Solids	92.1			%	1	01/27/23 12:00	EPA160.3/1684		KRW
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Soluble (DI Water Extraction)

Chloride	<10.9	10.9	0.603	mg/kg dry	10	01/26/23 17:33	EPA300.0		AES
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Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS07 @ 0-6"

2301133-04 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

% Dry Solids	92.4			%	1	01/27/23 12:00	EPA160.3/1684		KRW
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Soluble (DI Water Extraction)

Chloride	25.7	10.8	0.601	mg/kg dry	10	01/26/23 17:54	EPA300.0		AES
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Project: Misc.
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Reported:
02/01/23 12:27

SS08 @ 6'**2301133-05 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

% Dry Solids	93.5			%	1	01/27/23 12:00	EPA160.3/1684		KRW
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Soluble (DI Water Extraction)

Chloride	<10.7	10.7	0.594	mg/kg dry	10	01/26/23 18:15	EPA300.0		AES
----------	-------	------	-------	-----------	----	----------------	----------	--	-----

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Project: Misc.
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Reported:
02/01/23 12:27

SS09 @ 10'**2301133-06 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

% Dry Solids	93.7			%	1	01/27/23 12:00	EPA160.3/1684		KRW
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Soluble (DI Water Extraction)

Chloride	<10.7	10.7	0.592	mg/kg dry	10	01/26/23 19:18	EPA300.0		AES
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Project: Misc.
Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS10 @ 17'**2301133-07 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

% Dry Solids	94.3			%	1	01/27/23 12:00	EPA160.3/1684		KRW
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Soluble (DI Water Extraction)

Chloride	<10.6	10.6	0.589	mg/kg dry	10	01/26/23 19:39	EPA300.0		AES
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Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS11 @ 16'**2301133-08 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

% Dry Solids	93.0			%	1	01/27/23 12:00	EPA160.3/1684		KRW
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Soluble (DI Water Extraction)

Chloride	598	10.8	0.597	mg/kg dry	10	01/26/23 20:00	EPA300.0		AES
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A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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Project: Misc.
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Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS12 @ 5'**2301133-09 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

% Dry Solids	94.5			%	1	01/27/23 12:00	EPA160.3/1684		KRW
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Soluble (DI Water Extraction)

Chloride	<10.6	10.6	0.588	mg/kg dry	10	01/26/23 20:21	EPA300.0		AES
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Project: Misc.
Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS13 @ 10'**2301133-10 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

% Dry Solids	95.0			%	1	01/27/23 12:00	EPA160.3/1684		KRW
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Soluble (DI Water Extraction)

Chloride	<10.5	10.5	0.584	mg/kg dry	10	01/26/23 20:42	EPA300.0		AES
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Jeremy D Allen, Laboratory Director

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Project: Misc.
Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS14 @ 13'**2301133-11 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

% Dry Solids	94.6			%	1	01/27/23 12:00	EPA160.3/1684		KRW
--------------	------	--	--	---	---	----------------	---------------	--	-----

Soluble (DI Water Extraction)

Chloride	<10.6	10.6	0.587	mg/kg dry	10	01/26/23 21:03	EPA300.0		AES
----------	-------	------	-------	-----------	----	----------------	----------	--	-----

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Jeremy D Allen, Laboratory Director

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Project: Misc.
Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS15 @ 5'**2301133-12 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

% Dry Solids	96.1			%	1	01/27/23 12:00	EPA160.3/1684		KRW
--------------	------	--	--	---	---	----------------	---------------	--	-----

Soluble (DI Water Extraction)

Chloride	109	10.4	0.578	mg/kg dry	10	01/26/23 21:24	EPA300.0		AES
----------	-----	------	-------	-----------	----	----------------	----------	--	-----

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Jeremy D Allen, Laboratory Director

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Project: Misc.
Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS16 @ 10'**2301133-13 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

% Dry Solids	92.4			%	1	01/27/23 12:00	EPA160.3/1684		KRW
--------------	------	--	--	---	---	----------------	---------------	--	-----

Soluble (DI Water Extraction)

Chloride	963	10.8	0.601	mg/kg dry	10	01/30/23 12:34	EPA300.0		AES
----------	-----	------	-------	-----------	----	----------------	----------	--	-----

Green Analytical Laboratories

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Jeremy D Allen, Laboratory Director

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Project: Misc.
Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS17 @ 12'**2301133-14 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

% Dry Solids	94.8			%	1	01/27/23 12:00	EPA160.3/1684		KRW
--------------	------	--	--	---	---	----------------	---------------	--	-----

Soluble (DI Water Extraction)

Chloride	759	10.6	0.586	mg/kg dry	10	01/30/23 13:36	EPA300.0		AES
----------	-----	------	-------	-----------	----	----------------	----------	--	-----

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, 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 within thirty days after completion of the applicable service.



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

www.GreenAnalytical.com

Cottonwood Consulting
PO Box 1653
Durango CO, 81302

Project: Misc.
Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS18 @ 5'**2301133-15 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

% Dry Solids	96.2			%	1	01/27/23 12:00	EPA160.3/1684		KRW
--------------	------	--	--	---	---	----------------	---------------	--	-----

Soluble (DI Water Extraction)

Chloride	<10.4	10.4	0.577	mg/kg dry	10	01/30/23 13:57	EPA300.0		AES
----------	-------	------	-------	-----------	----	----------------	----------	--	-----

Green Analytical Laboratories

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Jeremy D Allen, Laboratory Director

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Project: Misc.
Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS19 @ 10'**2301133-16 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

% Dry Solids	93.4			%	1	01/27/23 12:00	EPA160.3/1684		KRW
--------------	------	--	--	---	---	----------------	---------------	--	-----

Soluble (DI Water Extraction)

Chloride	<10.7	10.7	0.594	mg/kg dry	10	01/30/23 14:18	EPA300.0		AES
----------	-------	------	-------	-----------	----	----------------	----------	--	-----

Green Analytical Laboratories

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Jeremy D Allen, Laboratory Director

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PO Box 1653
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Project: Misc.
Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

SS20 @ 14'**2301133-17 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

% Dry Solids	96.1			%	1	01/27/23 12:00	EPA160.3/1684		KRW
--------------	------	--	--	---	---	----------------	---------------	--	-----

Soluble (DI Water Extraction)

Chloride	652	10.4	0.578	mg/kg dry	10	01/30/23 15:21	EPA300.0		AES
----------	-----	------	-------	-----------	----	----------------	----------	--	-----

Green Analytical Laboratories

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Jeremy D Allen, Laboratory Director

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PO Box 1653
Durango CO, 81302

Project: Misc.
Project Name / Number: GCU 13-1
Project Manager: Kyle Siesser

Reported:
02/01/23 12:27

Soluble (DI Water Extraction) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B230163 - IC- Ion Chromatograph

Blank (B230163-BLK1)

Prepared: 01/23/23 Analyzed: 01/26/23

Chloride	ND	10.0	mg/kg wet
----------	----	------	-----------

LCS (B230163-BS1)

Prepared: 01/23/23 Analyzed: 01/26/23

Chloride	247	10.0	mg/kg wet	250	98.9	85-115
----------	-----	------	-----------	-----	------	--------

LCS Dup (B230163-BSD1)

Prepared: 01/23/23 Analyzed: 01/26/23

Chloride	248	10.0	mg/kg wet	250	99.2	85-115	0.323	20
----------	-----	------	-----------	-----	------	--------	-------	----

Batch B230198 - IC- Ion Chromatograph

Blank (B230198-BLK1)

Prepared: 01/27/23 Analyzed: 01/30/23

Chloride	ND	10.0	mg/kg wet
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LCS (B230198-BS1)

Prepared: 01/27/23 Analyzed: 01/30/23

Chloride	245	10.0	mg/kg wet	250	97.9	85-115
----------	-----	------	-----------	-----	------	--------

LCS Dup (B230198-BSD1)

Prepared: 01/27/23 Analyzed: 01/30/23

Chloride	245	10.0	mg/kg wet	250	97.9	85-115	0.00817	20
----------	-----	------	-----------	-----	------	--------	---------	----

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

Jeremy D Allen, Laboratory Director

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(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				Bill to (if different):				ANALYSIS REQUEST											
Project Manager: Kyle Siesser				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Chloride</div> <div style="text-align: center;">X</div> </div>											
Address: PO Box 1653				Company:															
City: Durango State: CO Zip: 81302				Attn:															
Phone #: 970-764-7356 Email: ksiesser@cottonwoodconsulting.com				Address:															
Additional Report To:				City:															
Project Name: GCU 13-1				State: Zip:															
Project Number:				Phone #:															
Sampler Name (Print): Kelsey O'Brien / Joseph LaFountaine				Fax or Email:															
FOR LAB USE ONLY																			
Lab I.D.		Sample Name or Location		Collected		Matrix (check one)										# of containers			
				Date	Time	GROUNDWATER	SURFACEWATER	WASTEWATER	PRODUCEDWATER	SOIL	OTHER:	No preservation (general)	HNO ₃	HCl	H ₂ SO ₄	Other:	Other:		
2301-133																			
01 SS04@ 0-6"				11/13/23	0930					X									
02 SS05@ 0-6"				1/20/23	0940														
03 SS06@ 0-6"					0950														
04 SS07@ 0-6"					1000														
05 SS08@ 6'					1005														
06 SS09@ 10'					1010														
07 SS10@ 17'					1015														
08 SS11@ 16'					1030														
09 SS12@ 5'					1035														
10 SS13@ 10'					1040														

PLEASE NOTE: GAL'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 the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by GAL within 30 days after completion. In no event shall GAL 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 services hereunder by GAL, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:		Date: 1/20/23		Received By:		ADDITIONAL REMARKS:		Report to State? (Circle)	
Kelsey O'Brien		1550		[Signature]				Yes <input type="radio"/> No <input checked="" type="radio"/>	
Relinquished By:		Date:		Received By:					
		Time:							
Relinquished By:		Date:		Received By:					
		Time:							
Delivered By: (Circle One)				Temperature at receipt:		CHECKED BY:			
<input checked="" type="radio"/> Sampler <input type="radio"/> UPS - FedEx - Kangaroo - Other:				5.9°C		MRN		Laser #2 on ice	

† GAL cannot always accept verbal changes. Please fax or email written change requests.

* Chain of Custody must be signed in "Relinquished By:" as an acceptance of services and all applicable charges.

(970) 247-4220
Fax: (970) 247-4227

service@greenanalytical.com or dzufelt@greenanalytical.com
75 Suttle St Durango, CO 81303

[illegible]

PLEASE NOTE: GAL'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 the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by GAL within 30 days after completion. In no event shall GAL 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 services hereunder by GAL, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: 		Date: 11/23/23 Time: 1550		Received By: 		Report to State? (Circle) Yes <input type="radio"/> No <input checked="" type="radio"/>	
Relinquished By: 		Date: Time:		Received By: 		ADDITIONAL REMARKS: 	
Relinquished By: 		Date: Time:		Received By: 			
Delivered By: (Circle One) <input checked="" type="radio"/> Sampler <input type="radio"/> UPS - FedEx - Kangaroo - Other:				Temperature at receipt: 5.9°C		CHECKED BY: 	
Laser #2 on ice							

* Chain of Custody must be signed in "Relinquished By:" as an acceptance of services and all applicable charges.



SAMPLE CONDITION RECEIPT FORM

Client Name: Cottonwood ConsultingWork Order # 2301-133Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ ClientCustody Seals on Box/Cooler Present: ☐ Yes ☒ NoSeals Intact: ☐ Yes ☐ NoThermometer Used: #2 Samples on ice, cooling process has begun: ☒ Yes ☐ NoType of Ice: ☒ Wet ☐ Blue ☐ NoneCooler Temp: Observed Temp: 5.9 °C Correction Factor: 0 °C Final Temp: 5.9 °C

*Temp should be above freezing to 6°C

Date/Initials of person
examining contents: MPN 4/20/23Labeled by initials: _____
(if different than above)

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name and Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4.
Samples arrived within hold time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Dissolved Testing Needed:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	11.
Field Filtered: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
-Includes Date/Time/ID		
Matrix:	WT <input checked="" type="checkbox"/> SL <input type="checkbox"/> OT	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/Resolution:

Person Contacted: _____

Date/Time: _____

Comments/Resolution: _____



GCU 13 SWD #001
Photographic Log
Simcoe LLC

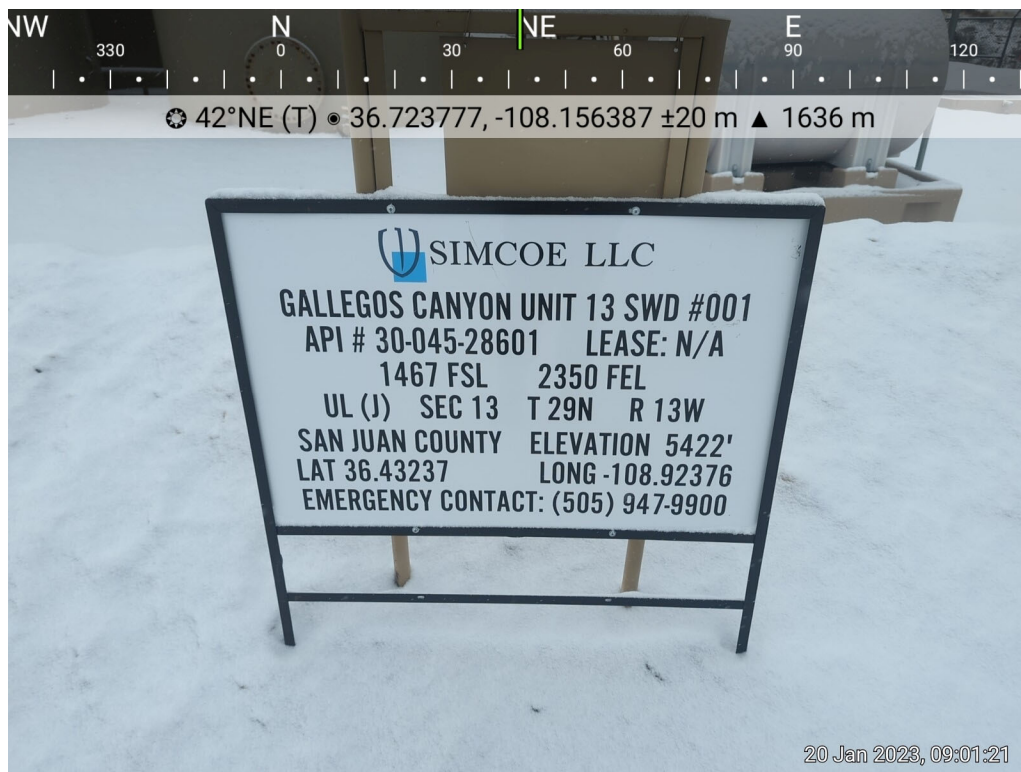


Photo 1: GCU 13 SWD #001 well sign, 1/20/2023.



Photo 2: SS08@6', SS09@10' and SS10@17' collected from west pothole, 1/20/2023.



GCU 13 SWD #001
Photographic Log
Simcoe LLC



Photo 3: SS11@16' collected from center pothole, 1/20/2023.



Photo 4: SS12@5', SS13@10' and SS14@13' collected from east pothole, 1/20/2023.



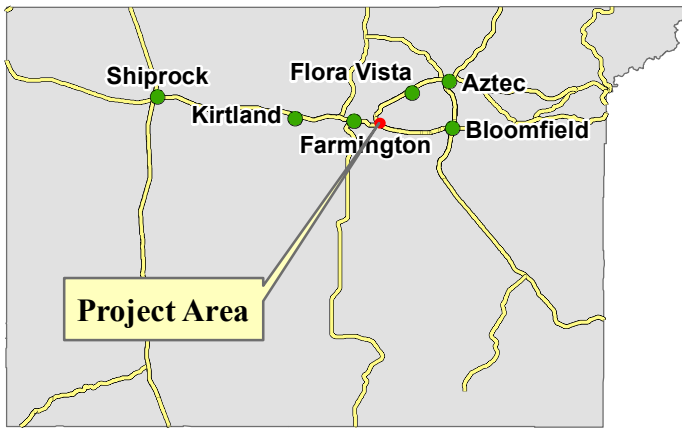
GCU 13 SWD #001
Photographic Log
Simcoe LLC



Photo 5: SS15@5', SS16@10' and SS17@12' collected from south pothole, 1/20/2023.



Photo 6: SS18@5', SS19@10' and SS20@14' collected from north pothole, 1/20/2023.



San Juan County, New Mexico



Notes: All samples collected 1/20/2023. SS04@0-6", SS05@0-6", SS06@0-6" and SS07@0-6" are 5-point composite samples.

Legend

- Soil Sample
- Electric line
- Flowline
- ☀ Oil & Gas Wells

Cottonwood
CONSULTING

Mapping by: K. O'Brien, 2/6/2023
Coordinate System:
NAD 1983 UTM Zone 13 N

Location: Sec 13 T29N R13W NMPM

GCU 13 SWD #001
Project Map
Simcoe LLC



2020 C-141 Documents

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	NRM2032858637
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Simcoe LLC operated by BP America Production Co	OGRID: 329736	INITIAL & FINAL
Contact Name: Steve Moskal	Contact Telephone: (505) 330-9179	
Contact email: steven.moskal@bpx.com	Incident # <i>(assigned by OCD)</i>	
Contact mailing address: 1199 Main St., Suite 101, Durango CO, 81301		

Location of Release Source

Latitude: 36.721295° Longitude: -107.669461°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: GALLEGOS CANYON UNIT 13 SWD #001	Site Type: Salt Water Disposal Well - Flowline
Date Release Discovered: October 22, 2020	API#: 30-045-28601

Unit Letter	Section	Township	Range	County
J	13	T29N	13W	San Juan

NOT ACCEPTED

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

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls): 13.7	Volume Recovered (bbls): 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls):	Volume Recovered (bbls):
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:

Release of condensate and produced water caused from a flowline integrity failure.

BP confirmed a reportable release of produced water associated with a flowline repair on 10/22/20. BP reported the findings via email and requested guidance of the release in the attached. The accompanying documentation demonstrates no significant impact to groundwater (demonstrated to be >100' deep) with minimal lateral extents (4'x'6 base of excavation).

<p>Was this a major release as defined by 19.15.29.7(A) NMAC?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>If YES, for what reason(s) does the responsible party consider this a major release?</p>
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?</p>	

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

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

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

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

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

Printed Name: Steve Moskal Title: Environmental Coordinator

Signature: 

Date: 11/10/2020

email: steven.moskal@bpx.com Telephone: (505) 330-9179

OCD Only

Received by: Ramona Marcus Date: 11/23/2020

Incident ID	NRM2032858637
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?	<u>>100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input checked="" type="checkbox"/> Yes <input 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	NRM2032858637
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: Steve Moskal Title: Environmental CoordinatorSignature: Date: 11/10/2020email: steven.moskal@bpx.comTelephone: (505) 330-9179**OCD Only**Received by: Ramona MarcusDate: 11/23/2020

Incident ID	NRM2032858637
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: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

Incident ID	NRM2032858637
District RP	
Facility ID	
Application ID	

Closure

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

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 OCD 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: Steve Moskal Title: Environmental Coordinator

Signature: 

Date: 11/10/2020

email: steven.moskal@bpx.com

Telephone: (505) 330-9179

OCD Only

Received by: Ramona Marcus Date: 11/23/2020

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____



Site Characterization Documents





GALLEGOS CANYON UNIT 13 SWD #001

API 30-045-28601

J-13-29N-13W

Excavation: 36.723454°, -108.156466°

Legend

-  200' Buffer
-  300' Buffer
-  Excavation Base
-  Sidewalls



GALLEGOS CANYON UNIT 13 SWD #001

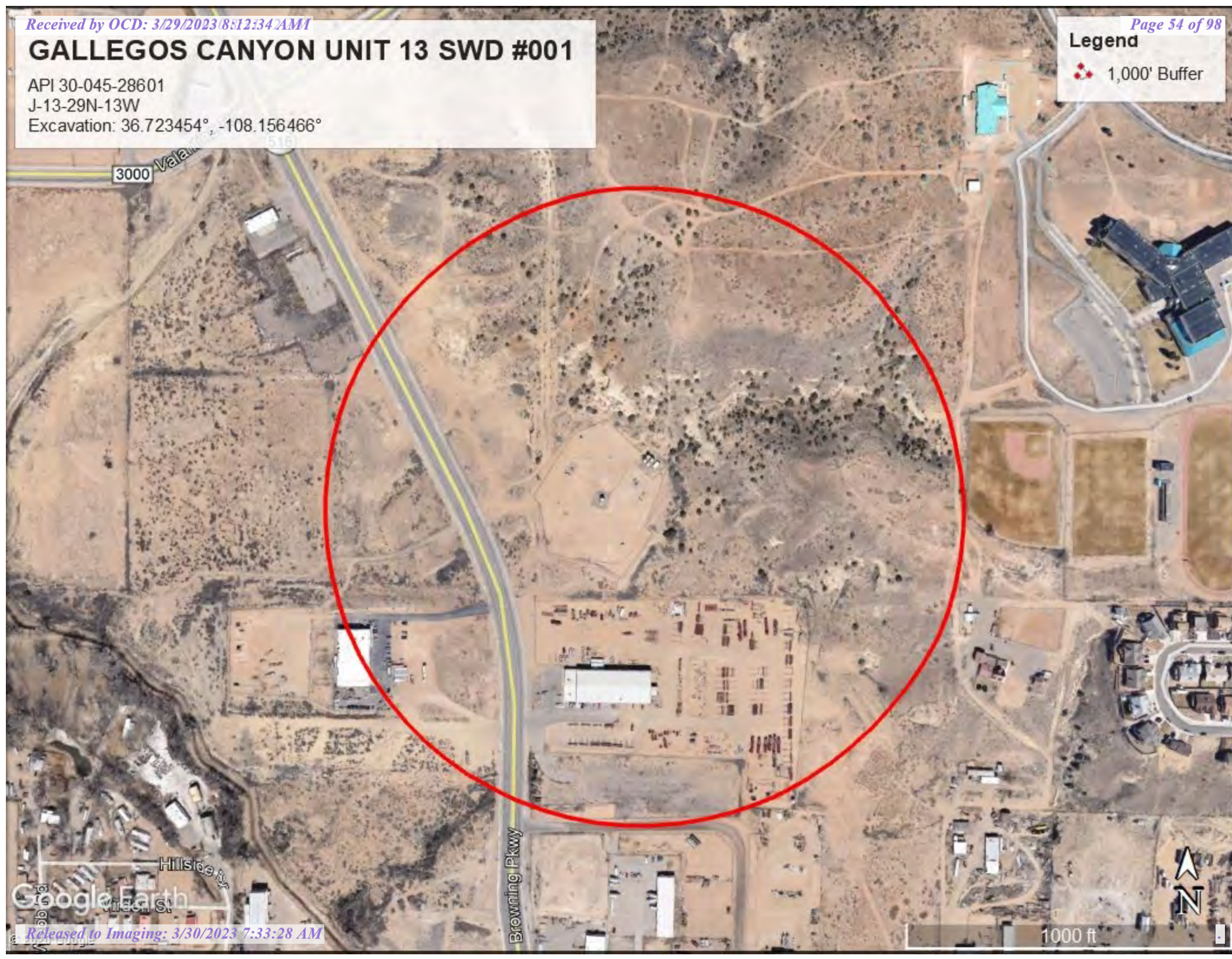
API 30-045-28601

J-13-29N-13W

Excavation: 36.723454°, -108.156466°

Legend

1,000' Buffer



SITING AND HYDRO-GEOLOGICAL REPORT FOR GALLEGOS CANYON UNIT 13 SWD 001

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.

The BGT subject to the attached application for a permit under 19.15.17 NMAC (New Mexico Administrative Code) was in existence prior to promulgation of 19.15.17 NMAC. A review of the best available data and a visual inspection of the siting criteria of 19.15.17 NMAC specific to the BGT in question demonstrate that the BGT does not appear to pose an imminent threat to public health and the environment.

Local Geology and Hydrology

This particular site is located within the Ojo Alamo Sandstone southwest of Crouch Mesa between the Animas and San Juan rivers. The site is located at the base of the mesa approximately 1 mile away from the Animas and San Juan rivers and 120 feet lower in elevation. Although the BGT site is located within the municipal boundary ordinance, the tank is isolated and stable therefore creating no imminent threat to local groundwater or human health, 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

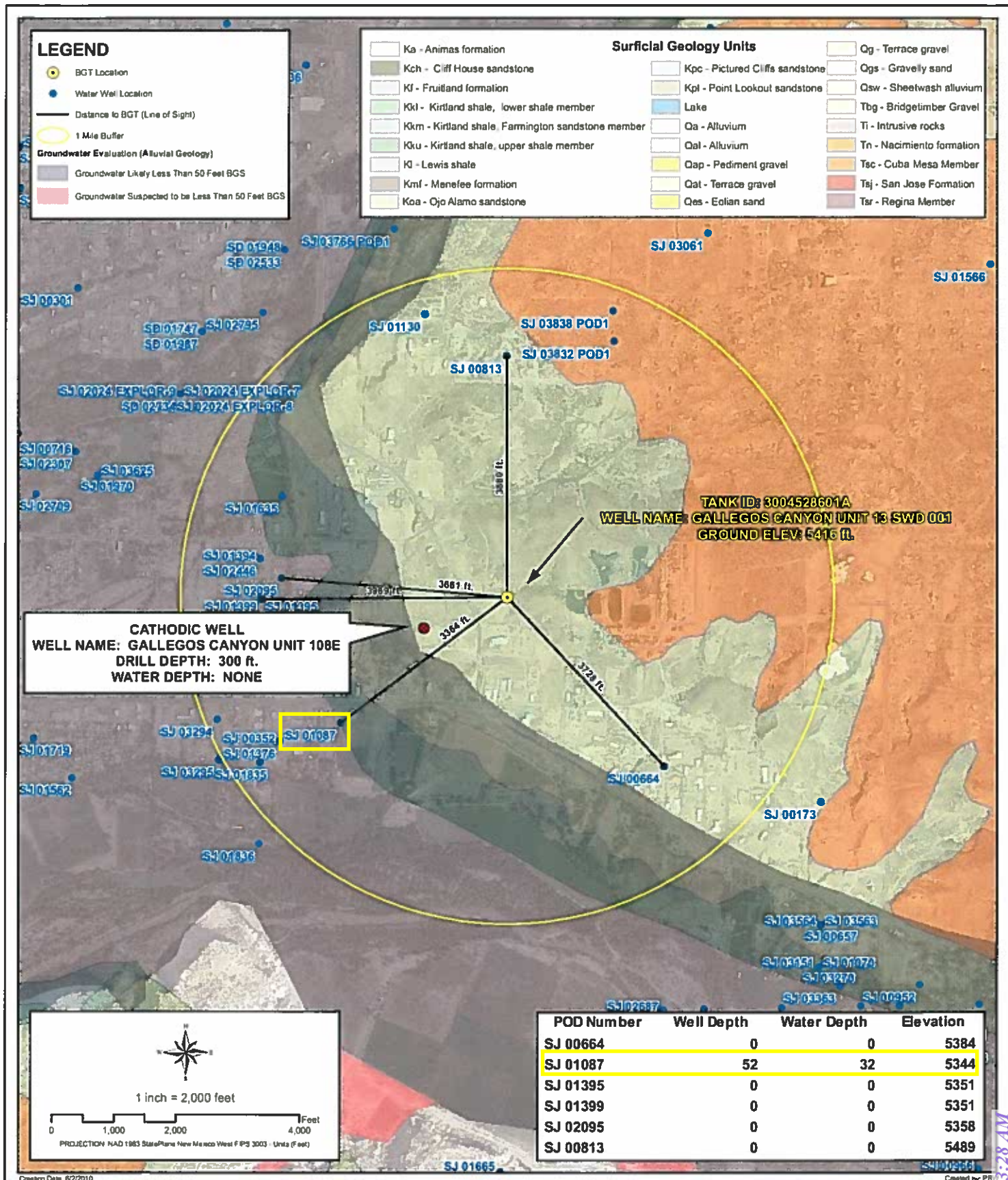
of weathered parent rock derived from predominantly physical means mostly from eolian depositional system with fluvial having a lesser impact.

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., 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



GROUNDWATER LESS THAN 50 FT.

WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001

API NUMBER: 3004528601 TANK ID: 3004528601A

SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

FIGURE

1



New Mexico Office of the State Engineer

Water Right Summary


[get image list](#)

WR File Number: SJ 01087 **Subbasin:** SJM2 **Cross Reference:** -
Primary Purpose: IRR IRRIGATION
Primary Status: DCL DECLARATION
Total Acres: 3 **Subfile:** - **Header:** -
Total Diversion: 9 **Cause/Case:** -
Owner: RAYMOND W. NEIDIGH

Documents on File

Trn #	Doc	File/Act	Status			From/ To	Acres	Diversion	Consumptive
			1	2	Transaction Desc.				
get images	223042	DCL 1979-11-13	DCL	PRC	SJ 01087	T	3	9	

Current Points of Diversion

POD Number	Well Tag	Source	Q			X	Y	Other Location Desc
			64	Q16	Q4Sec			
SJ 01087	Shallow	1	1	1	24 29N 13W	217280	4068292*	

An () after northing value indicates UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	Shallow
04/08/1981	DCL	3	9	SJ 01087	

Place of Use

Q	Q	Q16	Q4Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64											
1	1	1	24	29N	13W	3	9		IRR	12/31/1964	DCL	
3	1	1	24	29N	13W	0	0		IRR	12/31/1964	DCL	SEE PREVIOUS SCREEN FOR ACRES & DIV

Source

Acres	Diversion	CU	Use	Priority	Source Description
3	9		IRR	04/08/1981	GW

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.


10/30/20 1:30 PM

WATER RIGHT
SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

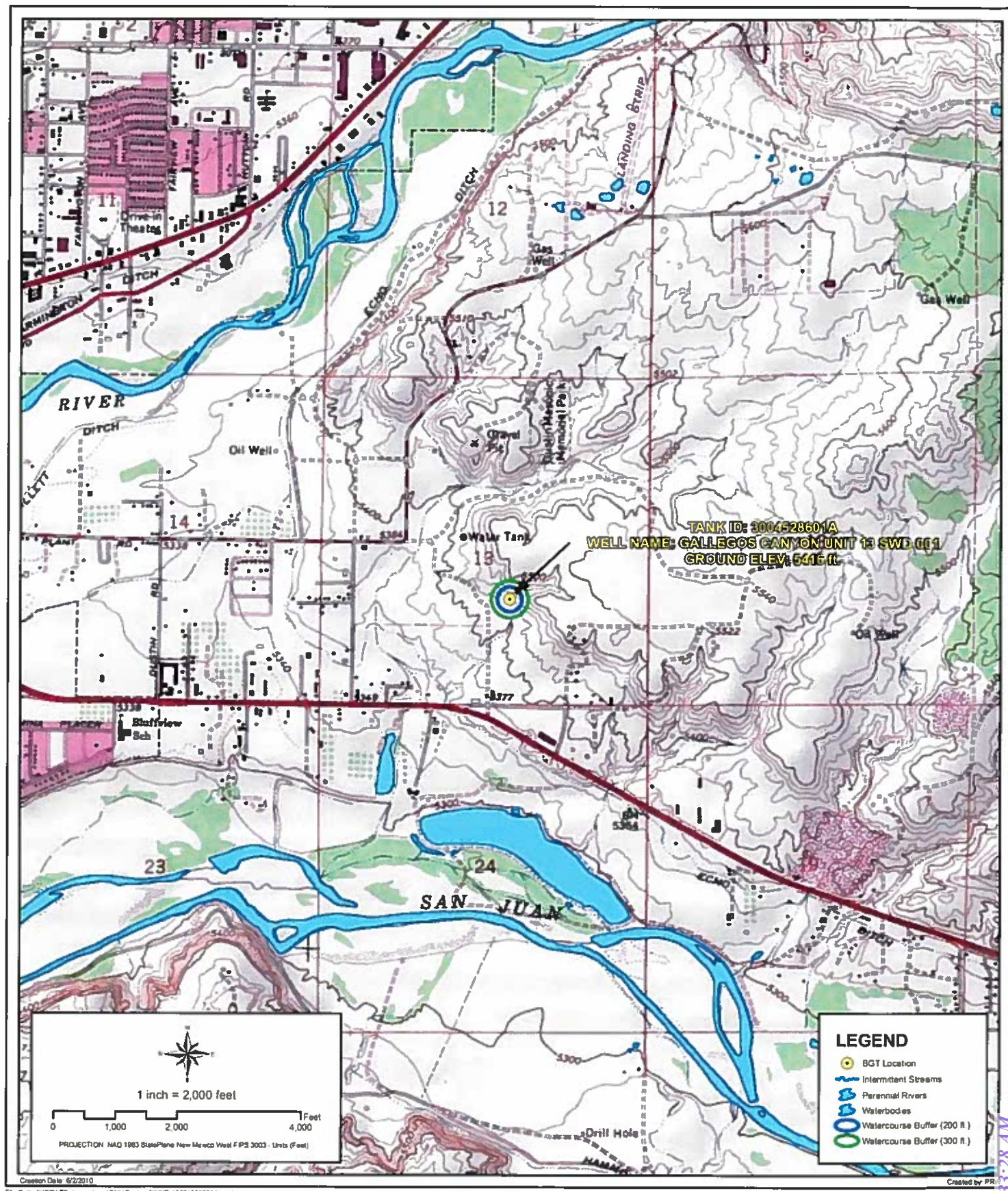
		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	SJ 01087	1	1	1	24	29N	13W	217280	4068292* 
x									
Driller License:		Driller Company:							
Driller Name:		UNKNOWN							
Drill Start Date:		Drill Finish Date:		04/08/1981		Plug Date:			
Log File Date:		PCW Rcv Date:				Source: Shallow			
Pump Type:		Pipe Discharge Size:				Estimated Yield:			
Casing Size:		Depth Well:		52 feet		Depth Water:		32 feet	
x									

*UTM location was derived from PLSS - see Help

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.

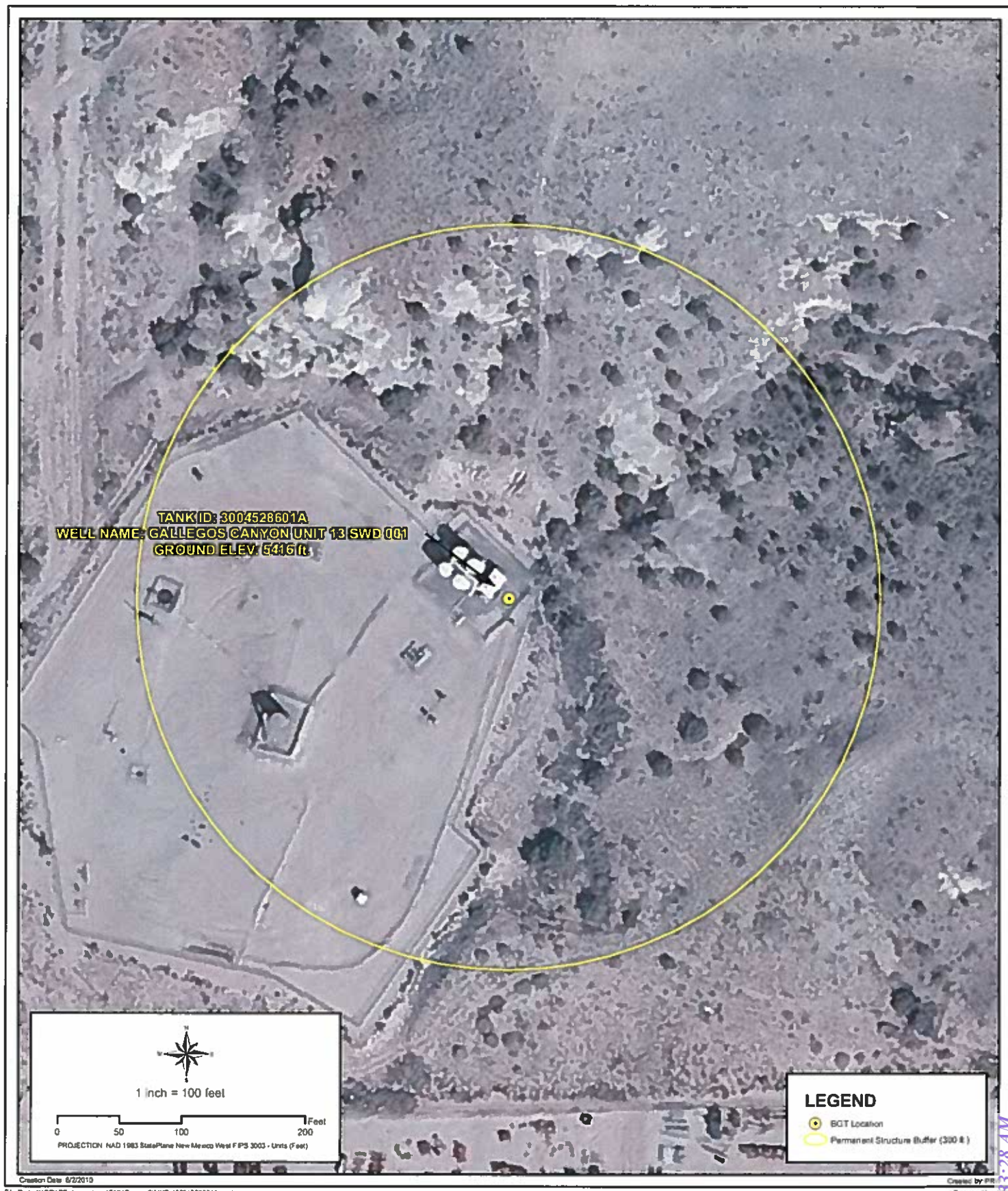
11/2/20 12:32 PM

POINT OF DIVERSION SUMMARY



PROXIMITY TO WATERCOURSES
WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001
API NUMBER: 3004528601 TANK ID: 3004528601A
SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

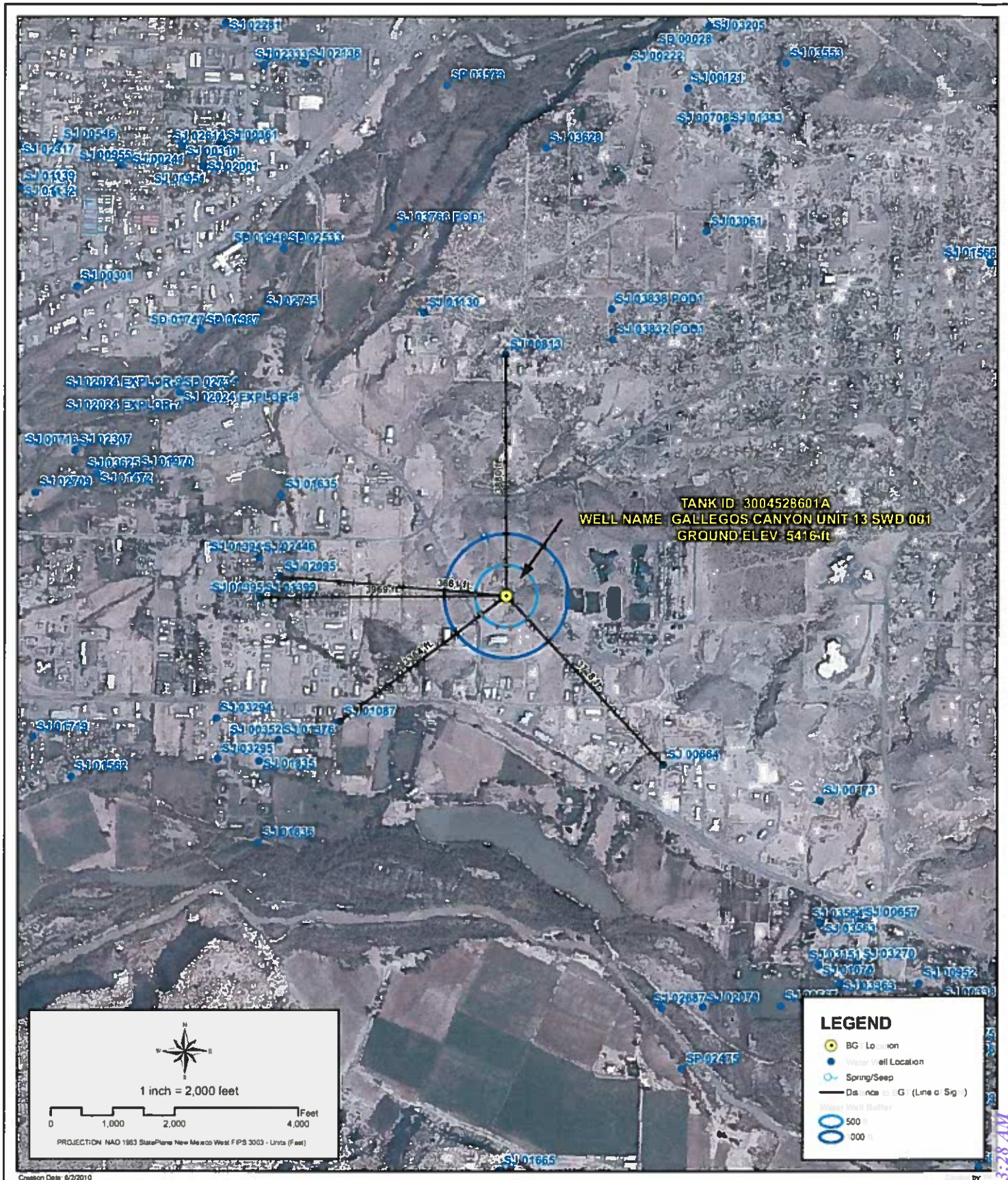
FIGURE
2



PROXIMITY TO PERMANENT STRUCTURE

WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001
API NUMBER: 3004528601 TANK ID: 3004528601A
SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

FIGURE
3



Creation Date: 8/2/2010
File Path: X:\BPLTE_Inspection\FAR\Sector_6\MapData\3004528601A.mxd



PROXIMITY TO WATER WELLS

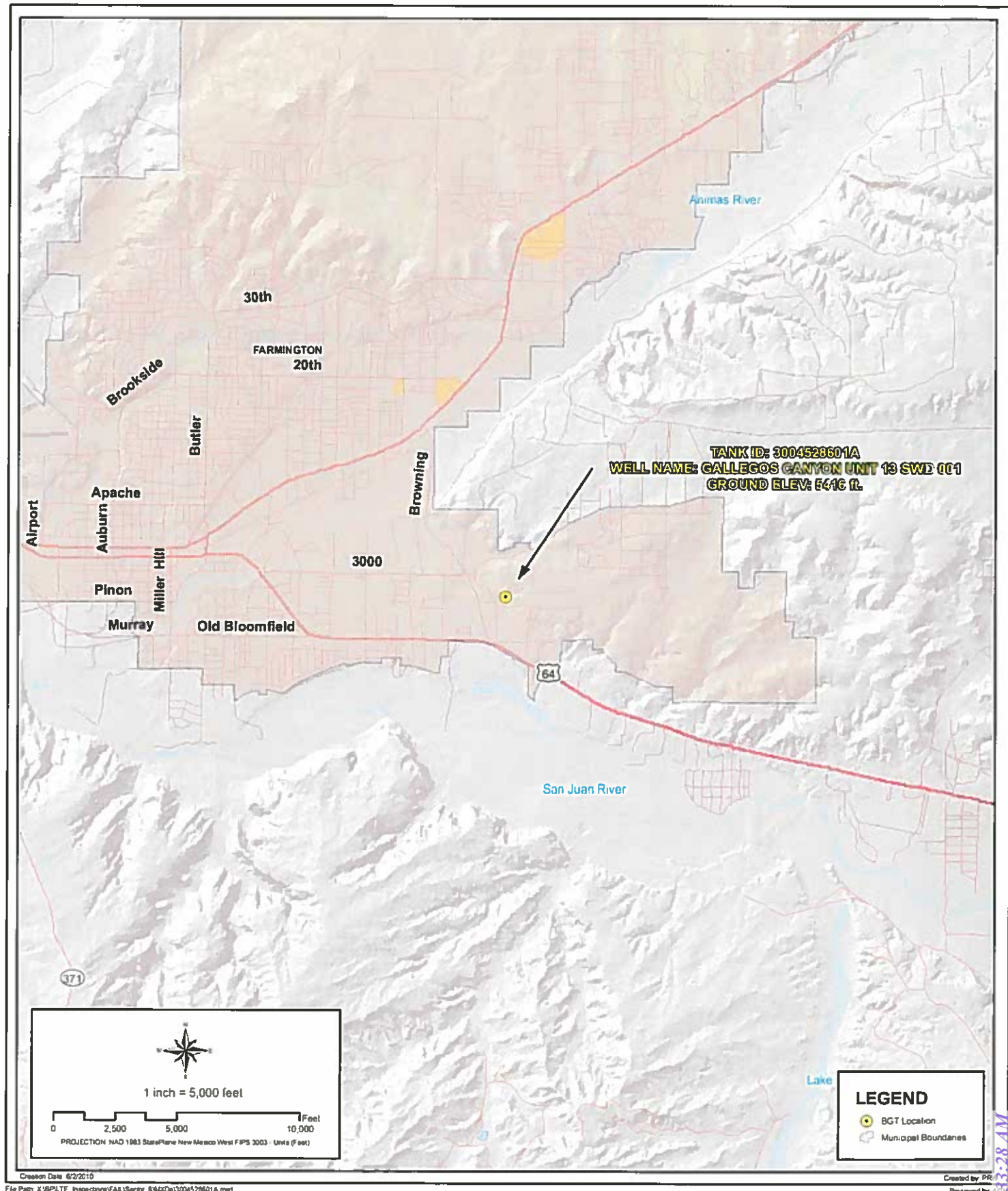
WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001

API NUMBER: 3004528601 TANK ID: 3004528601A

SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

FIGURE

4



Creation Date: 6/2/2010
 File Path: X:\BPLTE_Inspection\FAR\Sector_01\02Da3204528601A.mxd

Created by: PR
 Reviewed by:



PROXIMITY TO MUNICIPAL BOUNDARY

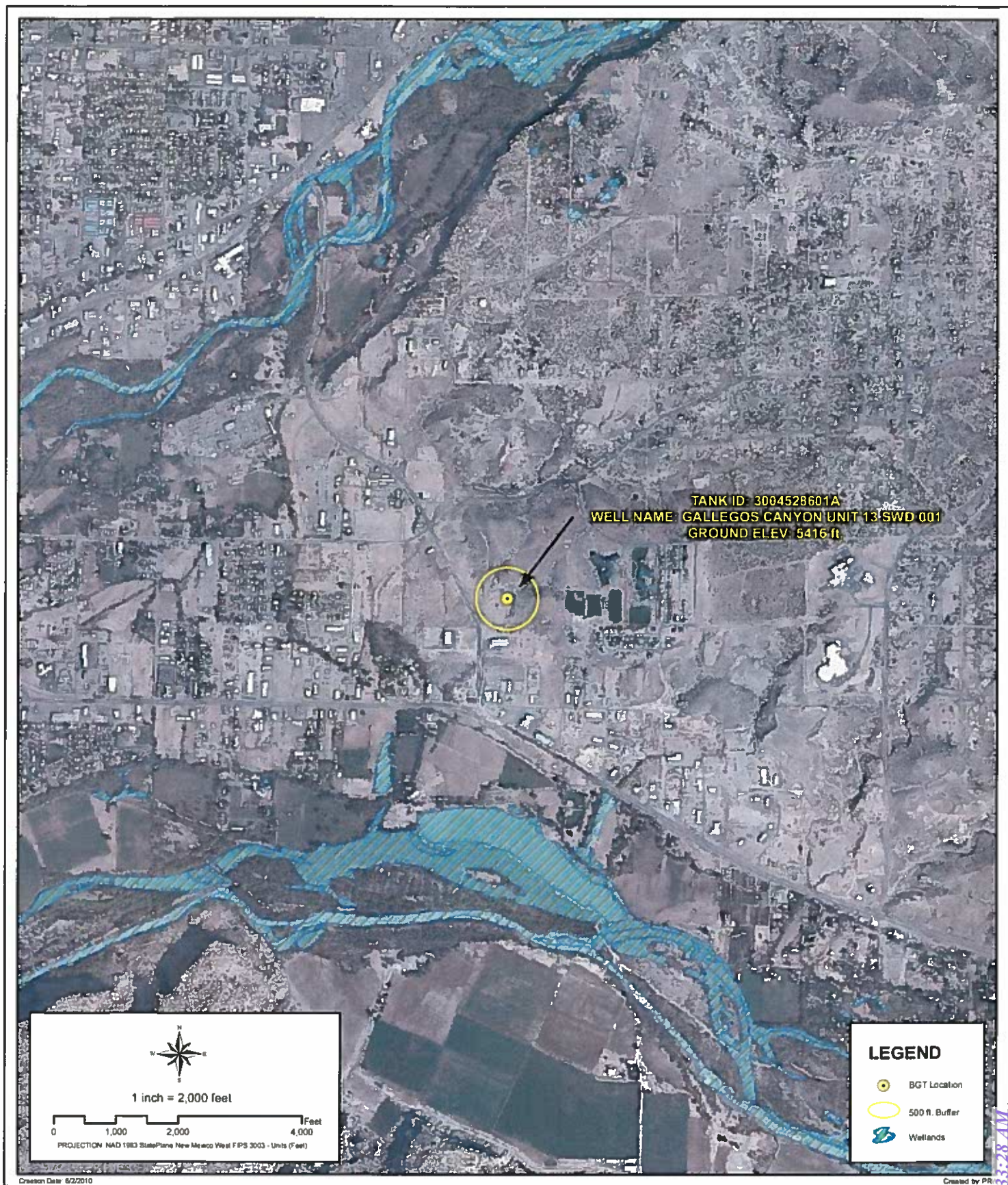
WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001

API NUMBER: 3004528601 TANK ID: 3004528601A

SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

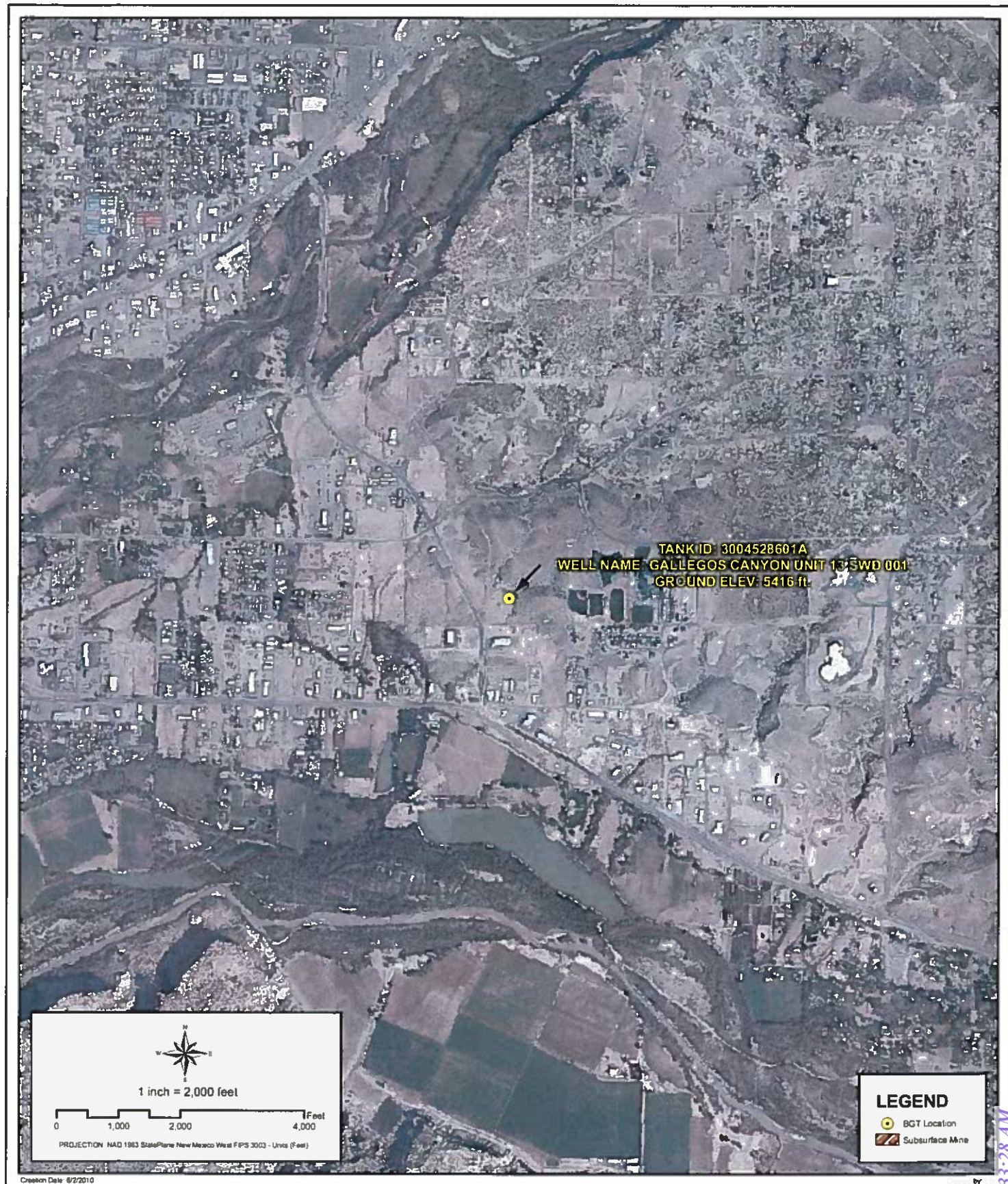
FIGURE

5



PROXIMITY TO WETLANDS
WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001
API NUMBER: 3004528601 TANK ID: 3004528601A
SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

FIGURE 6



File Path: X:\BP\ITE_Inspectors\FAILSector_6\MDX\3004528601A.mxd



PROXIMITY TO SUBSURFACE MINES

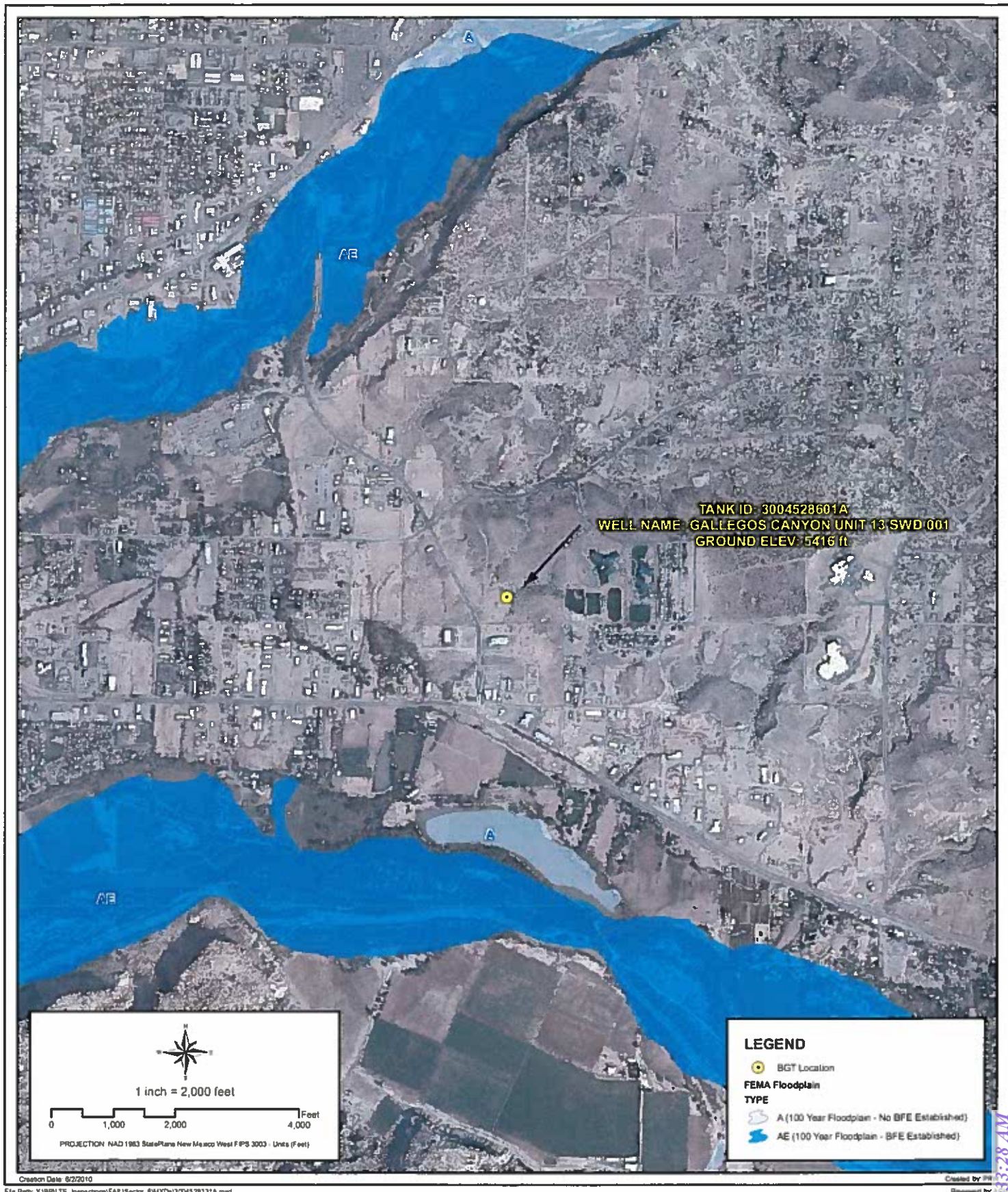
WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001

API NUMBER: 3004528601 TANK ID: 3004528601A

SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M.NM23

FIGURE

7



PROXIMITY TO FLOODPLAIN
WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001
API NUMBER: 3004528601 TANK ID: 3004528601A
SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

FIGURE
8

SOUTHERN SAN JUAN BASIN (SSJB)

Figure Citation List

March 2010

Figure 1: Groundwater Less Than 50 ft.

Layers:

Water Wells: **iWaters Database: NMOSE/ISC (Dec. 2009)**

New Mexico Office of the State Engineer (OSE) /ISC iWaters database. (Data updated: 12/2009. Data received: 03/09/2010). Data available from:
http://www.ose.state.nm.us/waters_db_index.html.

Cathodic Wells: **Tierra Corrosion Control, Inc. (Aug. 2008)**

Tierra Corrosion Control, Inc. 1700 Schofield Ln. Farmington, NM 87401. Driller's Data Log. (Data collected: All data are associated with cathodic protection wells installed at BP facilities between 2008-2009. Data received: 05/06/2010).

Hydrogeological Evaluation: **Wright Water Engineers, Inc. (2008)**

Evaluation completed by Wright Water Engineers, Inc. Durango Office. Data created using digital statewide geology at 1:500,000 from USGS in combination with 10m Digital Elevation Model (DEM) from NRCS. (Data compiled: 2008.)

Results: Spatial Polygons representing "Groundwater likely to be less than 50 ft." and "Groundwater suspected to be less than 50 ft.".

Surficial Geology: **USGS (1963/1987)**

Data digitized and rectified by Geospatial Consultants. (Data digitized: 03/23/ 2010). Original hard copy maps sourced from United States Geological Survey (USGS). Data available from:
<http://pubs.er.usgs.gov/>.

Geology, Structure and Uranium Deposits of the Shiprock Quadrangle, New Mexico and Arizona. 1:250,000. I - 345. Compiled by Robert B. O'Sullivan and Helen M. Beikman. 1963.

Geologic Map of the Aztec 1 x 2 Quadrangle, Northwestern New Mexico and Southern Colorado. 1:250,000. I - 1730. Compiled by Kim Manley, Glenn R. Scott, and Reinhard A. Wobus. 1987.

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:
NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Figure 2: Proximity to Watercourses**Layers:****Perennial Streams:****NHD, USGS (2010)**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital Representation of USGS 24k Topographic map series with field updates as required. Data available from: <http://nhd.usgs.gov/>.

Intermittent Streams:**NHD, USGS (2010)**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital Representation of USGS 24k Topographic map series with field updates as required. Data available from: <http://nhd.usgs.gov/>.

Water Bodies:**NHD, USGS (2010)**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital representation of USGS 24k Topographic map series with field updates as required. Data available from: <http://nhd.usgs.gov/>.

USGS Topographic Maps:**USGS (2007)**

USGS 24k Topographic map series. 1:24000. Maps are seamless, scanned images of USGS paper topographic maps. Data available from: <http://store.usgs.gov>.

Figure 3: Proximity to Permanent Structure**Layers:****Aerial Imagery:****Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name: NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Figure 4: Proximity to Water Wells**Layers:**

Water Wells: **iWaters Database: NMOSE/ISC (Dec. 2009)**

New Mexico Office of the State Engineer (OSE) /ISC iWaters database. (Data updated: 12/2009. Data received: 03/09/2010). Data available from:
http://www.ose.state.nm.us/waters_db_index.html

Springs/Seeps: **NHD, USGS (2010)**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital representation of USGS 24k Topographic map series with field updates as required. Data available from:
<http://nhd.usgs.gov/>

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:
 NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Figure 5: Proximity to Municipal Boundary**Layers:**

Municipal Boundary: **San Juan County, New Mexico (2010)**

Data provided by San Juan County GIS Division. (Data received: 03/25/2010).

Shaded Relief: **NED, USGS (1999)**

National Elevation Dataset (NED). U.S. Geological Survey, EROS Data Center. (Data created: 1999. Data downloaded: April, 2010). Resolution: 10 meter (1/3 arc-second). Data available from: <http://ned.usgs.gov/>.

StreetMap North America: **Tele Atlas North America, Inc., ESRI (2008)**

Data derived from Tele Atlas Dynamap/Transportation North America, version 5.2. (Data updated: annually. Data series issue: 2008).

Figure 6: Proximity to Wetlands**Layers:**

Wetlands: **NWI (2010)**

National Wetlands Inventory (NWI). U.S Fish and Wildlife Service. (Data last updated: 09/25/2009. Data received: 03/21/2010). Data available from: <http://www.fws.gov/wetlands/>.

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:

NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Figure 7: Proximity to Subsurface Mine**Layers:**

Subsurface Mine: **NM Mining and Minerals Division (2010)**

New Mexico Mining and Minerals Division. (Data received: 03/12/2010). Contact: Susan Lucas Kamat, Geologist. Provided PLSS NM locations (Sections) for the two subsurface mines located in San Juan and Rio Arriba counties.

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:

NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Figure 8: Proximity to FEMA Floodplain

Layers:

FEMA Floodplain:

FEMA (varying years)

Data digitized and rectified by Wright Water Engineers, Inc. (Data digitized: August 2008).

Digitized from hard copy Flood Insurance Rate Maps (FIRMs) (varying years) of San Juan County.

Aerial Imagery:

Conoco (Summer 2009)

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery.

Projected coordinate system name:

NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.




Provided as tiled .tiff images and indexed using polygon index layer.



2020 Soil Sample Results

GALLEGOS CANYON UNIT 13 SWD #001
PI 30-045-28601
-13-29N-13W
xcavation: 36.723454°, -108.156466°

Legend

-  Excavation Base
-  GCU 13 SWD # 001 Well Head
-  Sidewalls



Released to Imaging: 3/30/2023 7:33:28 AM

Received by OCD: 3/29/2023 8:12:34 AM

Summary of Laboratory Analysis
Results in mg/Kg

GCU 13 SWD #001 Waterline
Pipeline Release
11/3/2020

Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8015 MRO	Method 8021 Benzene	Method 8021 BTEX	Method 300.0 Chloride
NMOCD Guidelines				100	100		10 ppm	50 ppm	600 ppm
10/23/2020	9:37AM	SS01 Sidewalls @ 3.5'	3.5	<20.0	<25.0	<50.0	<0.025	0.187	590
10/23/2020	9:40AM	SS02 Base @ 4.5'	4.5	<10.0	49.5	<10.0	0.167	<0.150	1990
10/23/2020	9:45AM	SS03 Spoils Pile	Surface	<10.0	50.1	<10.0	<0.025	<0.150	1330

During a flowline repair beginning on 10/22/2020, the excavation was sampled to determine lateral and vertical extents. Samples were collected on 10/23/2020, from the release point at the sidewalls and at the base of the excavation. The excavated soil was stockpiled on site and sampled to determine if off site disposal was necessary. The stockpile material was hauled off site and disposed of at a NMOCD approved facility; attached is a C-138 documenting the disposal.



Excavation sample points; Red – Sidewalls; Orange – Base
Left hand of photo is north end of excavation.



Excavation sample points; Red – Sidewalls; Orange – Base
Left hand of photo is west end of excavation.

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

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:

Simcoe LLC operated by BP America Production Co. 1199 Main Street, Suite 101, Durango, CO 81301

2. Originating Site:

Gallegos Canyon Unit 13 SWD #001
Don Buller will approve.

3. Location of Material (Street Address, City, State or ULSTR):

J-13-29N-13W

4. Source and Description of Waste: Hydrocarbon and chloride impacted soil associated with flowline remediation.

Estimated Volume 10 yd³/ bbls Known Volume (to be entered by the operator at the end of the haul) 10 yd³/ bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

Steve Moskal

BP America Production Company

I, Steve Moskal, representative or authorized agent for BP America Production Company do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other Laboratory Analysis provided.

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

Steve Moskal

BP America Production Company

I, Steve Moskal, representative for BP America Production Company authorize IEI/JFJ to complete the required testing/sign the Generator Waste Testing Certification.

I, Betty Pinder, representative for IEI do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:

Kelley

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **JFJ Landfarm/Industrial Ecosystems, Inc. *Permit#: NM01-0010B**

Address of Facility: **# 49 CR 3150 Aztec, NM 87410**

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED**

☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME:

Roger Tongley

TITLE:

Team Coord

DATE:

11/3/20

SIGNATURE:

[Signature]

TELEPHONE NO.:

505 632 1782

Surface Waste Management Facility Authorized Agent

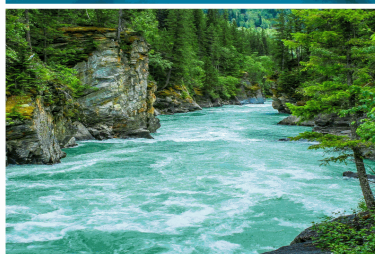
11/2

Report to:

Steve Moskal

PO Box 22024

Tulsa, OK 74121-2024



5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

BP America Production Co.

Project Name: GCU 13-1

Work Order: E010119

Job Number: 03143-0424

Received: 10/23/2020

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/29/20

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM009792018-1 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557-19-2 for data reported.

Date Reported: 10/29/20

Steve Moskal
PO Box 22024
Tulsa, OK 74121-2024



Project Name: GCU 13-1
Workorder: E010119
Date Received: 10/23/2020 10:07:00AM

Steve Moskal,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/23/2020 10:07:00AM, under the Project Name: GCU 13-1.

The analytical test results summarized in this report with the Project Name: GCU 13-1 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Lopez
Laboratory Administrator
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Sample Summary

BP America Production Co.	Project Name:	GCU 13-1	Reported:
PO Box 22024	Project Number:	03143-0424	
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	10/29/20 15:16

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01 Sidewalls @3.5'	E010119-01A	Soil	10/23/20	10/23/20	Glass Jar, 4 oz.
SS02 Base @4.5'	E010119-02A	Soil	10/23/20	10/23/20	Glass Jar, 4 oz.
SS03 Spoils	E010119-03A	Soil	10/23/20	10/23/20	Glass Jar, 4 oz.



Sample Data

BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 13-1 Project Number: 03143-0424 Project Manager: Steve Moskal	Reported: 10/29/2020 3:16:29PM
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SS01 Sidewalls @3.5'

E010119-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2044001
Benzene	ND	0.0250	1	10/26/20	10/28/20	
Toluene	ND	0.0250	1	10/26/20	10/28/20	
Ethylbenzene	ND	0.0250	1	10/26/20	10/28/20	
p,m-Xylene	ND	0.0500	1	10/26/20	10/28/20	
o-Xylene	ND	0.0250	1	10/26/20	10/28/20	
Total Xylenes	ND	0.0250	1	10/26/20	10/28/20	
Surrogate: 1,2-Dichloroethane-d4	98.8 %	70-130		10/26/20	10/28/20	
Surrogate: Toluene-d8	109 %	70-130		10/26/20	10/28/20	
Surrogate: Bromofluorobenzene	95.5 %	70-130		10/26/20	10/28/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2044001
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/26/20	10/28/20	
Surrogate: 1,2-Dichloroethane-d4	98.8 %	70-130		10/26/20	10/28/20	
Surrogate: Toluene-d8	109 %	70-130		10/26/20	10/28/20	
Surrogate: Bromofluorobenzene	95.5 %	70-130		10/26/20	10/28/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2044008
Diesel Range Organics (C10-C28)	ND	25.0	1	10/27/20	10/27/20	
Oil Range Organics (C28-C35)	ND	50.0	1	10/27/20	10/27/20	
Surrogate: n-Nonane	84.1 %	50-200		10/27/20	10/27/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2044010
Chloride	590	20.0	1	10/27/20	10/27/20	



Sample Data

BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: GCU 13-1
Project Number: 03143-0424
Project Manager: Steve Moskal

Reported:
10/29/2020 3:16:29PM

SS02 Base @4.5'

E010119-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2044001
Benzene	ND	0.0250	1	10/26/20	10/28/20	
Toluene	0.167	0.0250	1	10/26/20	10/28/20	
Ethylbenzene	ND	0.0250	1	10/26/20	10/28/20	
p,m-Xylene	ND	0.0500	1	10/26/20	10/28/20	
o-Xylene	ND	0.0250	1	10/26/20	10/28/20	
Total Xylenes	ND	0.0250	1	10/26/20	10/28/20	
Surrogate: 1,2-Dichloroethane-d4	98.0 %	70-130		10/26/20	10/28/20	
Surrogate: Toluene-d8	111 %	70-130		10/26/20	10/28/20	
Surrogate: Bromofluorobenzene	96.5 %	70-130		10/26/20	10/28/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2044001
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/26/20	10/28/20	
Surrogate: 1,2-Dichloroethane-d4	98.0 %	70-130		10/26/20	10/28/20	
Surrogate: Toluene-d8	111 %	70-130		10/26/20	10/28/20	
Surrogate: Bromofluorobenzene	96.5 %	70-130		10/26/20	10/28/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2044008
Diesel Range Organics (C10-C28)	49.5	25.0	1	10/27/20	10/27/20	
Oil Range Organics (C28-C35)	ND	50.0	1	10/27/20	10/27/20	
Surrogate: n-Nonane	90.6 %	50-200		10/27/20	10/27/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2044010
Chloride	1990	20.0	1	10/27/20	10/27/20	



Sample Data

BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: GCU 13-1
Project Number: 03143-0424
Project Manager: Steve Moskal

Reported:
10/29/2020 3:16:29PM

SS03 Spoils

E010119-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2044001
Benzene	ND	0.0250	1	10/26/20	10/28/20	
Toluene	ND	0.0250	1	10/26/20	10/28/20	
Ethylbenzene	ND	0.0250	1	10/26/20	10/28/20	
p,m-Xylene	ND	0.0500	1	10/26/20	10/28/20	
o-Xylene	ND	0.0250	1	10/26/20	10/28/20	
Total Xylenes	ND	0.0250	1	10/26/20	10/28/20	
Surrogate: 1,2-Dichloroethane-d4	96.1 %	70-130		10/26/20	10/28/20	
Surrogate: Toluene-d8	110 %	70-130		10/26/20	10/28/20	
Surrogate: Bromofluorobenzene	97.1 %	70-130		10/26/20	10/28/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2044001
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/26/20	10/28/20	
Surrogate: 1,2-Dichloroethane-d4	96.1 %	70-130		10/26/20	10/28/20	
Surrogate: Toluene-d8	110 %	70-130		10/26/20	10/28/20	
Surrogate: Bromofluorobenzene	97.1 %	70-130		10/26/20	10/28/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2044008
Diesel Range Organics (C10-C28)	50.1	25.0	1	10/27/20	10/27/20	
Oil Range Organics (C28-C35)	ND	50.0	1	10/27/20	10/27/20	
Surrogate: n-Nonane	91.9 %	50-200		10/27/20	10/27/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2044010
Chloride	1330	20.0	1	10/27/20	10/27/20	



QC Summary Data

BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 13-1 Project Number: 03143-0424 Project Manager: Steve Moskal	Reported: 10/29/2020 3:16:29PM
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Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2044001-BLK1)

Prepared: 10/26/20 Analyzed: 10/27/20

Benzene	ND	0.0250							
Toluene	ND	0.0250							
Ethylbenzene	ND	0.0250							
p,m-Xylene	ND	0.0500							
o-Xylene	ND	0.0250							
Total Xylenes	ND	0.0250							
Surrogate: 1,2-Dichloroethane-d4	0.500		0.500		100	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			
Surrogate: Bromofluorobenzene	0.495		0.500		98.9	70-130			

LCS (2044001-BS1)

Prepared: 10/26/20 Analyzed: 10/27/20

Benzene	2.24	0.0250	2.50		89.7	70-130			
Toluene	2.35	0.0250	2.50		94.2	70-130			
Ethylbenzene	2.46	0.0250	2.50		98.4	70-130			
p,m-Xylene	4.90	0.0500	5.00		98.0	70-130			
o-Xylene	2.48	0.0250	2.50		99.2	70-130			
Total Xylenes	7.38	0.0250	7.50		98.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.509		0.500		102	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			
Surrogate: Bromofluorobenzene	0.508		0.500		102	70-130			

Matrix Spike (2044001-MS1)

Source: E010117-01 Prepared: 10/26/20 Analyzed: 10/27/20

Benzene	2.31	0.0250	2.50	ND	92.2	48-131			
Toluene	2.37	0.0250	2.50	ND	94.8	48-130			
Ethylbenzene	2.48	0.0250	2.50	ND	99.3	45-135			
p,m-Xylene	4.99	0.0500	5.00	ND	99.7	43-135			
o-Xylene	2.52	0.0250	2.50	ND	101	43-135			
Total Xylenes	7.51	0.0250	7.50	ND	100	43-135			
Surrogate: 1,2-Dichloroethane-d4	0.516		0.500		103	70-130			
Surrogate: Toluene-d8	0.523		0.500		105	70-130			
Surrogate: Bromofluorobenzene	0.510		0.500		102	70-130			

Matrix Spike Dup (2044001-MSD1)

Source: E010117-01 Prepared: 10/26/20 Analyzed: 10/27/20

Benzene	2.23	0.0250	2.50	ND	89.3	48-131	3.22	23	
Toluene	2.31	0.0250	2.50	ND	92.4	48-130	2.63	24	
Ethylbenzene	2.42	0.0250	2.50	ND	97.0	45-135	2.36	27	
p,m-Xylene	4.85	0.0500	5.00	ND	97.0	43-135	2.77	27	
o-Xylene	2.45	0.0250	2.50	ND	97.8	43-135	3.02	27	
Total Xylenes	7.29	0.0250	7.50	ND	97.3	43-135	2.85	27	
Surrogate: 1,2-Dichloroethane-d4	0.511		0.500		102	70-130			
Surrogate: Toluene-d8	0.513		0.500		103	70-130			
Surrogate: Bromofluorobenzene	0.512		0.500		102	70-130			



QC Summary Data

BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 13-1 Project Number: 03143-0424 Project Manager: Steve Moskal	Reported: 10/29/2020 3:16:29PM
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Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2044001-BLK1)

Prepared: 10/26/20 Analyzed: 10/27/20

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1,2-Dichloroethane-d4	0.500		0.500		100	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			
Surrogate: Bromofluorobenzene	0.495		0.500		98.9	70-130			

Matrix Spike (2044001-MS2)

Source: E010117-01 Prepared: 10/26/20 Analyzed: 10/27/20

Gasoline Range Organics (C6-C10)	52.8	20.0	50.0	ND	106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.508		0.500		102	70-130			
Surrogate: Toluene-d8	0.526		0.500		105	70-130			
Surrogate: Bromofluorobenzene	0.497		0.500		99.4	70-130			

Matrix Spike Dup (2044001-MSD2)

Source: E010117-01 Prepared: 10/26/20 Analyzed: 10/27/20

Gasoline Range Organics (C6-C10)	43.9	20.0	50.0	ND	87.9	70-130	18.3	20	
Surrogate: 1,2-Dichloroethane-d4	0.513		0.500		103	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			



QC Summary Data

BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 13-1 Project Number: 03143-0424 Project Manager: Steve Moskal	Reported: 10/29/2020 3:16:29PM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2044008-BLK1)

Prepared: 10/27/20 Analyzed: 10/27/20

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C35)	ND	50.0							
Surrogate: n-Nonane	44.6		50.0		89.3	50-200			

LCS (2044008-BS1)

Prepared: 10/27/20 Analyzed: 10/27/20

Diesel Range Organics (C10-C28)	418	25.0	500		83.6	38-132			
Surrogate: n-Nonane	43.3		50.0		86.5	50-200			

Matrix Spike (2044008-MS1)

Source: E010119-01 Prepared: 10/27/20 Analyzed: 10/27/20

Diesel Range Organics (C10-C28)	473	25.0	500	ND	94.7	38-132			
Surrogate: n-Nonane	48.5		50.0		96.9	50-200			

Matrix Spike Dup (2044008-MSD1)

Source: E010119-01 Prepared: 10/27/20 Analyzed: 10/27/20

Diesel Range Organics (C10-C28)	423	25.0	500	ND	84.6	38-132	11.2	20	
Surrogate: n-Nonane	43.9		50.0		87.9	50-200			



QC Summary Data

BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 13-1 Project Number: 03143-0424 Project Manager: Steve Moskal	Reported: 10/29/2020 3:16:29PM
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Anions by EPA 300.0/9056A

Analyst: NE

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2044010-BLK1)					Prepared: 10/27/20 Analyzed: 10/27/20				
Chloride	ND	20.0							
LCS (2044010-BS1)					Prepared: 10/27/20 Analyzed: 10/27/20				
Chloride	258	20.0	250		103	90-110			
Matrix Spike (2044010-MS1)					Source: E010119-01 Prepared: 10/27/20 Analyzed: 10/27/20				
Chloride	725	20.0	250	590	54.1	80-120			M2
Matrix Spike Dup (2044010-MSD1)					Source: E010119-01 Prepared: 10/27/20 Analyzed: 10/27/20				
Chloride	872	20.0	250	590	113	80-120	18.4	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.
Therefore, hand calculated values may differ slightly.



Definitions and Notes

BP America Production Co.	Project Name:	GCU 13-1	
PO Box 22024	Project Number:	03143-0424	Reported:
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	10/29/20 15:16

- M2Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.
- NDAnalyte NOT DETECTED at or above the reporting limit
- NRNot Reported
- RPDRelative Percent Difference

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Manager: Steve Moskal

	1d
	3d

03143-0424

Page 1 of 1

Use NM spill 2H 2020 PO



Envirotech Analytical Laboratory

Printed: 10/23/2020 3:47:49PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	BP America Production Co.	Date Received:	10/23/20 10:07	Work Order ID:	E010119
Phone:	(505) 330-9179	Date Logged In:	10/23/20 14:52	Logged In By:	Alexa Michaels
Email:	steven.moskal@bpx.com	Due Date:	10/30/20 17:00 (5 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Steve MoskalComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? No

Sample Cooler

7. Was a sample cooler received? No
8. If yes, was cooler received in good condition? NA
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C No

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 18.4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.



Email Communication

Steven Moskal

From: Steven Moskal
Sent: Tuesday, November 3, 2020 3:08 PM
To: Smith, Cory, EMNRD
Cc: Powell, Brandon, EMNRD; Jonathan Divine
Subject: RE: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1
Attachments: GCU 13 SWD 1 Excavation Sampling Doc.pdf

Cory,

Please find the attached document providing a description of brief activities, sampling information and results, siting criteria and soil disposal documentation. AS discussed, the upper four feet of the excavation was backfilled with imported , clean soil. The vertical extent of the chlorides has not been determined.

Please review and provide guidance for closure.

Thank you,

Steve Moskal

Environmental Coordinator

BP America Production Co.

bpx energy - WBU

1199 Main Ave. | Suite 101

Durango | CO | 81301

Direct: 505.330.9179

steven.moskal@bpx.com

bpx energy

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From: Steven Moskal
Sent: Monday, October 26, 2020 4:23 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: RE: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1

Cory,

I will start off with asking for forgiveness, my apologies. The purpose of my call on Friday was to provide notification and obtain permission. Since I was not able to contact you, I made the decision to proceed with sampling as the line was already charged for leak testing and need to be backfilled.

The overall dimensions of the excavation at the surface was 13'x9'x4.5' deep. The pipeline is approximately 4' deep. I collected sidewall samples as a single 4 point composite (N,E, S, W), just above the point of release at 3.5' deep (~160 sq feet in surface area). The base of the excavation measured 6.5'x 4' (~26 sq feet in surface area); I collected a 2 point composite from the base at ~4.5'. I also collected a five point composite from the spoils pile (approx. 18 yards) to determine if the soil needs to be disposed of offsite. I will provide a sampling diagram, photos of the sampling points and lab results.

The released produced water coming into the facility is filtered and separated, the pumped to the injection line where the release point occurred. I do not see a significant risk in the contaminants and made the decision to proceed with sampling. I know this is not typical protocol. The lab results will determine if there is any significant threat.

Steve Moskal

Environmental Coordinator

BP America Production Co.

bpx energy - WBU

1199 Main Ave. | Suite 101

Durango | CO | 81301

Direct: 505.330.9179

steven.moskal@bpx.com



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From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>

Sent: Monday, October 26, 2020 3:17 PM

To: Steven Moskal <Steven.Moskal@BPX.COM>; Jonathan Divine <JONATHAN.DIVINE@BPX.COM>

Cc: Kuehling, Monica, EMNRD <monica.kuehling@state.nm.us>; Lior Azulai <LIOR.AZULAI@BPX.COM>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Julie Best <Julie.Best@bpx.com>

Subject: RE: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1

Steve,

Sorry I missed your phone call on Friday, I did just check my voice mail and I must have missed it. If the release is going to be reportable per your calculations please make sure to fill out a C-141, and provide proper sampling notices for confirmation closure samples per 19.15.29 NMAC.

Cory Smith

Environmental Specialist

Oil Conservation Division

Energy, Minerals, & Natural Resources

1000 Rio Brazos, Aztec, NM 87410

(505)334-6178 ext 115

cory.smith@state.nm.us

From: Steven Moskal <Steven.Moskal@BPX.COM>

Sent: Monday, October 26, 2020 1:16 PM

To: Jonathan Divine <JONATHAN.DIVINE@BPX.COM>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>

Cc: Kuehling, Monica, EMNRD <monica.kuehling@state.nm.us>; Lior Azulai <LIOR.AZULAI@BPX.COM>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Julie Best <Julie.Best@bpx.com>

Subject: RE: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1

Cory,

The water release at the subject site is calculated below:

Depth: 4.5'

Diameter: 6'

Volume of a cone:

$$V = \pi * r^2 (h/3)$$

$$V = (3.14)(6'^2)(4.5'/3)$$

$$V = 169.6 \text{ ft}^3$$

$$\text{Gallon/cubic foot sand} = 3.4 \text{ gal/ft}^3$$

$$169.6 * 3.4 = 578.64 \text{ gal}$$

$$42 \text{ gal/bbl} = \underline{13.72 \text{ bbls}}$$

This will be a reportable release, with the final volume of the release being verified on Thursday, 10/22, once excavated. I had called and left you a voicemail on Friday to discuss.

Samples were collected from the open excavation on Friday, with lab results expected in about 5 business days. There were no hydrocarbons noted in the field observation. The excavation was backfilled following sampling due to the operating pressure of the repaired line. I will get you a C-141 once the final lab results are received in the coming days.

Please contact me with any questions.

Thank you,

Steve Moskal

Environmental Coordinator

BP America Production Co.

bpx energy - WBU

1199 Main Ave. | Suite 101

Durango | CO | 81301

Direct: 505.330.9179
steven.moskal@bpx.com



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From: Jonathan Divine <JONATHAN.DIVINE@BPX.COM>
Sent: Monday, October 26, 2020 12:13 PM
To: Steven Moskal <Steven.Moskal@BPX.COM>
Subject: FW: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1

FYI

JL Divine
Area Manager
West BU, SJS
BPX Energy
Mobile: 505.787.0795
Jonathan.Divine@Bpx.com



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From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Monday, October 26, 2020 9:30 AM
To: Kuehling, Monica, EMNRD <monica.kuehling@state.nm.us>; Jonathan Divine <JONATHAN.DIVINE@BPX.COM>
Cc: Lior Azulai <LIOR.AZULAI@BPX.COM>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Subject: RE: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1

Jonathan,

Was the leak a reportable quantity?

Cory Smith
Environmental Specialist
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Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Kuehling, Monica, EMNRD <monica.kuehling@state.nm.us>
Sent: Friday, October 23, 2020 9:30 AM
To: Jonathan Divine <JONATHAN.DIVINE@bpx.com>
Cc: Lior Azulai <LIOR.AZULAI@bpx.com>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: Re: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1

Hello JL
Awesome- the well is not being plugged - thank you for the update
Monica

Sent from my iPad

On Oct 23, 2020, at 9:00 AM, Jonathan Divine <JONATHAN.DIVINE@bpx.com> wrote:

Hi Monica,

The GCU 13-1 line was repaired yesterday. Steve Moskal has soil samples sent to the lab. The injection well is still shut in.

Thanks

JL Divine
Area Manager
West BU, SJS
BPX Energy
Mobile: 505.787.0795
Jonathan.Divine@Bpx.com
<image001.jpg>

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From: Kuehling, Monica, EMNRD <monica.kuehling@state.nm.us>
Sent: Friday, October 23, 2020 7:37 AM
To: Lior Azulai <LIOR.AZULAI@BPX.COM>; Jonathan Divine <JONATHAN.DIVINE@BPX.COM>
Cc: Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: GCU 107 plugging and GCU 13 SWD #1

Good morning,

I thought I better make sure you have been updated on the GCU 107 plugging. I have not heard from management with BP/Simcoe

Pressure of 4 psi was found on bh after 2 hour shut in before surface plug ran from 120 to surface.

Chad/Drake was instructed to produce bradenhead to flow back tank for 24 hours and then check pressure on bradenhead with a 2 hour shut in. This was to be performed daily for one week.

I do not believe I instructed him to let me know what those readings are.

I want to make sure that you are involved and I would also like to request those readings daily (by text is fine)

Also, I would like an update on what BPs plans are for the 13 1 disposal are. You have had a leak on the production line from that well. The well is shut in. If the decision on the well is a long time in coming you will still need to clean up the spill.

If you have any questions, please let me know.

Monica Kuehling
Deputy Oil and Gas Inspector
New Mexico Oil Conservation Division
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Cell Phone: 505-320-0243

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
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Santa Fe, NM 87505

CONDITIONS

Action 201775

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 201775
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	3/30/2023