



APPROVED

By Olivia Yu at 9:56 am, Sep 15, 2017

August 29, 2017

NMOCD approves of the proposed delineation for 1RP-4796. Confirmation sidewall/edge samples are required to complete horizontal delineation.

Reference No. 074683

Ms. Olivia Yu
Environmental Specialist
New Mexico Oil Conservation Division – District 1
1625 N. French Drive
Hobbs, New Mexico 88240

VIA EMAIL ONLY
Olivia.yu@state.nm.us

Dear Ms. Yu:

**Re: Soil Remediation Work Plan – 1RP 4796
Darr Angell #1 – Groundwater Remediation Site
Unit O, S11, T15S, R37E
Lea County, New Mexico**

On behalf of Plains Pipeline, LP (Plains), GHD Services, Inc. (GHD) is pleased to present this work plan to the New Mexico Oil Conservation Division – District 1 office (NMOCD) to remediate hydrocarbons in soil at the above referenced site (the Site). This work plan is being submitted to address soil impacts from a release of groundwater and crude oil from a remediation system above ground storage tank (AST) that is in operation at the Site.

1. Project Information and Release/Response Actions

The Site is located on privately owned land and is located in Section 11 (Unit O), Township 15 South, Range 37 East, Lea County, New Mexico. The geographical coordinates for the Site are 33.0266° North, and 103.167° West. Figure 1 (Topographic Map) and Figure 2 (Aerial Image) depict the Site's location and details. The depth to groundwater at this location is between 50 and 100 feet below the ground surface (bgs).

According to the NMOCD Form C-141 (attached) the release was discovered on August 16, 2017 at 8:30 a.m. Apparently, the valve that allows recovered fluid to enter the Site's AST head pressure switch apparatus was inadvertently left closed thus causing the switch not to recognize the level of fluid in the AST which allowed the remediation pump system to continue to operate. In addition, the digital air supply controller on the remediation system is speculated to have failed either due to a power surge or lightning strike causing the controllers logic to not close the air supply solenoid which allowed continuous pumping and discharging of fluid by the systems pumps. As a result, the AST was overfilled resulting in a release of approximately 5.0 barrels (bbls) of Phase Separated Hydrocarbons (PSH) and approximately 415 barrels (bbls) of fresh groundwater. Approximately 1 bbl of PSH and 404 bbls of fresh groundwater were contained and recovered from the secondary containment. Estimated fluid overflow out of the containment was 15 barrels of PSH (4 bbls) and fresh groundwater (11 bbls) which impacted approximately 4,200 square feet of pasture land. However, due to recent precipitation events the determined numbers for the fluid overflow and affected pasture land are most likely overestimated.



The release will be evaluated following the NMOCD 1993 document “Guidelines for Remediation of Leaks, Spills and Releases”. Soil assessment action levels determined by these guidelines for the Site were assigned a ranking value of 10. This ranking translated to action levels of 10 milligrams per kilogram (mg/kg) or parts per million (ppm) for benzene; 50 ppm for volatile organic hydrocarbons (VOC), including total BTEX (benzene, toluene, ethylbenzene, xylenes), and 1,000 ppm for total petroleum hydrocarbons (TPH).

2. Proposed Work Plan Activities

The scope of work for this project will involve investigation and characterization of the release, appropriate soil remediation, and site restoration activities. On August 18, 2017, GHD and Gandy Corporation (excavation contractor) field personnel mobilized to the Site to initially excavate visually stained and impacted soil from the determined release area, stockpile excavated soil (presently estimated at 35 cubic yards) on polyvinyl, photo document, and map the excavated area. The soil profile at the Site is very shallow. Adsorbed soil impacts will be analyzed by a certified laboratory for TPH by Method 8015 Modified (GRO+DRO+MRO) and BTEX by EPA Method 8021B.

Based on field observations and activities conducted on August 18, the request of the landowner, and as allowed by the NMOCD, soils exhibiting TPH and/or BTEX concentrations above regulatory levels will be further excavated and also staged on polyvinyl. Field screening will be utilized to evaluate the completeness of the soil remediation activities. An estimated 9 TPH/BTEX confirmation samples are proposed to be collected from the bottom of the excavated area (Figure 3). Furthermore, the Site’s shallow excavation is projected to not exceed 10 inches below ground surface (bgs), therefore, collection of confirmation wall samples is not proposed.

Excavated impacted soils are classified as non-exempt and will be transported for proper disposal to the NMOCD-permitted Gandy Marley Inc. facility in Roswell, New Mexico with proper NMOCD Form C-138 and manifest documentation.

Site restoration will be performed in accommodation to the landowner’s requests. The landowner, Darr Angell, will provide the backfill materials. The construction affected area will be contoured and seeded in accordance to Mr. Angell’s directives.

Upon completion of remediation and restoration, a letter report summarizing activities to date will be submitted. As appropriate, closure of the remediation permit will also be requested from the NMOCD in this report. Furthermore, the letter report will include a Site description, project history, description of field events, a discussion of results, and recommendations. The report will include:

- A scaled site plan showing the locations of the excavated area and other site features (including latitude and longitude coordinates);
- Tabulation of field screening and laboratory analytical test results;
- Copies of waste manifests; and
- Final site photographs.



GHD is prepared to initiate the scope of work immediately, subsequent to Plains and NMOCD approvals, the availability of resources and stakeholder concurrence. A start date and schedule of report submittals will be provided following receipt of subcontractor availability.

If you have any questions or comments with regard to this work plan, please do not hesitate to contact GHD's Midland office at (432) 686-0086. Your timely response to this correspondence is appreciated.

Sincerely,

GHD

A handwritten signature in blue ink, appearing to read "John Ferguson", written over a light blue rectangular background.

John Ferguson
Senior Project Manager

A handwritten signature in blue ink, appearing to read "Thomas C. Larson", written over a light blue rectangular background.

Thomas C. Larson
Midland Operations Manager

JMF/pd

Encl.: C-141

Figure 1 – Site Location Topographic Map

Figure 2 – Site Detail Aerial Image

Figure 3 – Release Area with Proposed Delineation Sample Locations Map

cc: Ms. Camille Bryant, Plains via email only
Mr. Thomas C. Larson via email only

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP	Contact	Camille Bryant
Address	577 US Hwy. 385 N., Seminole, TX 79360	Telephone No.	(575) 441-1099
Facility Name	Darr Angell #1	Facility Type	Groundwater Remediation Site

Surface Owner	Darr Angell	Mineral Owner	
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	11	15S	37E					Lea

Latitude N 33.026° Longitude W 103.167°

NATURE OF RELEASE

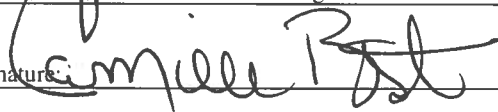
Type of Release	PSH/Water	Volume of Release	420 barrels	Volume Recovered	405 barrels
Source of Release	Groundwater Remediation System Recovery Tank	Date and Hour of Occurrence	8/16/2017 @ 08:00	Date and Hour of Discovery	8/16/2017 @ 08:30
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required				
	If YES, To Whom? Verbal notification to Olivia Yu				
By Whom?	Camille Bryant	Date and Hour	8/16/2017 @ 14:37		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
	If YES, Volume Impacting the Watercourse.				

If a Watercourse was Impacted, Describe Fully.*

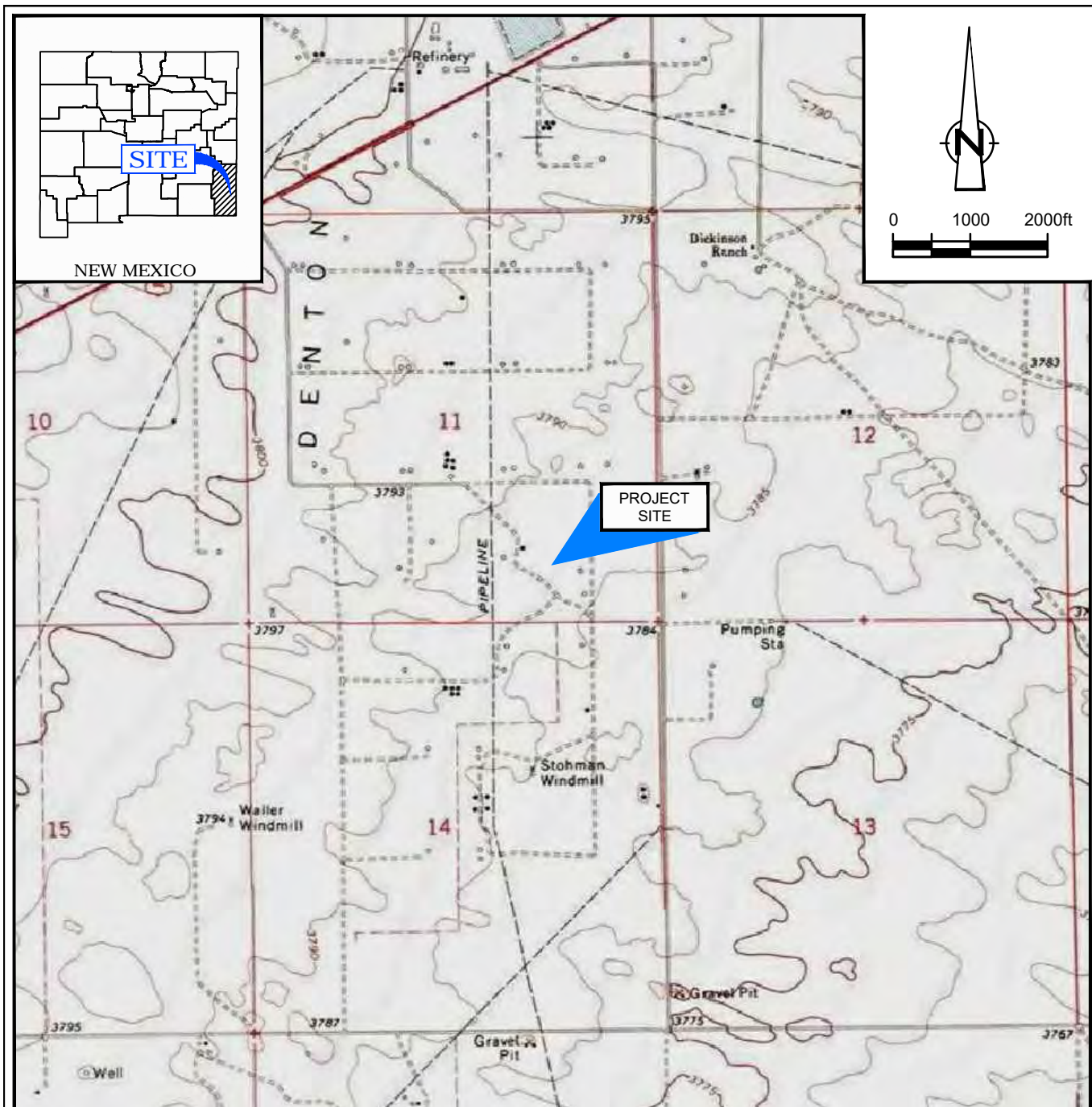
Describe Cause of Problem and Remedial Action Taken.* An electrical system malfunction reset the remediation system causing the recovery pumps to run continuously. The valve on the high level shut off switch on the recovery tank was inadvertently closed and did not shut the system down causing the recovery tank and secondary containment to overfill resulting in a release of approximately 5 barrels of PSH and approximately 415 barrels of groundwater. Approximately 404 barrels of groundwater and 1 barrel of crude oil was recovered from the secondary containment. The remaining released PSH/groundwater mixture impacted approximately 4,200 square feet of pasture land.

Describe Area Affected and Cleanup Action Taken. The impacted area will be remediated as per applicable NMOCD guidelines.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: 		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Camille Bryant		Approved by District Supervisor:	
Title: Remediation Coordinator		Approval Date:	Expiration Date:
E-mail Address: cjbryant@paalp.com		Conditions of Approval:	
Date: 8/23/2017 Phone: (575) 441-1099		Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

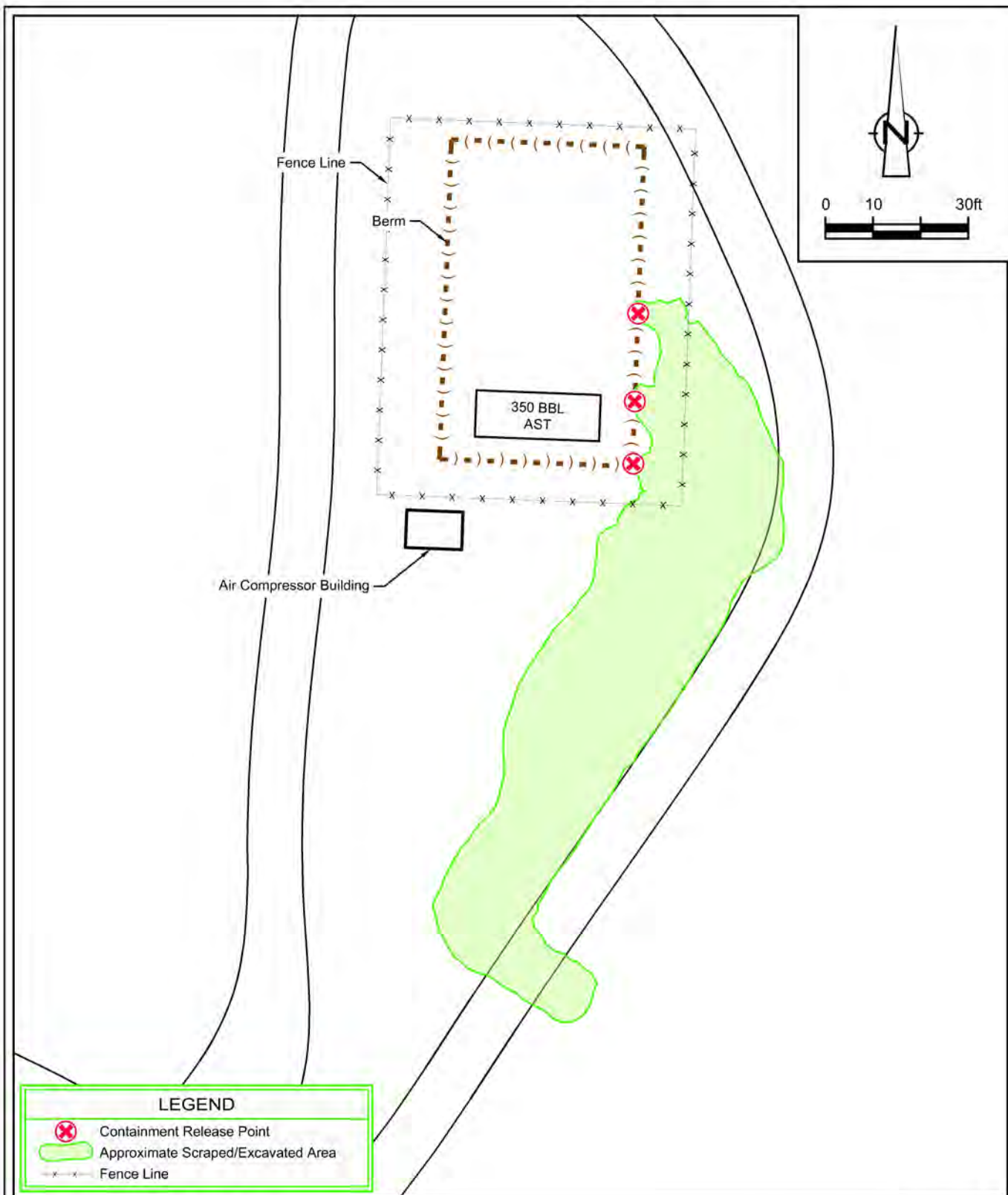


SOURCE: USGS 7.5 MINUTE QUAD
"PRAIRIEVIEW, NEW MEXICO"

LAT/LONG: 33.0266° NORTH, 103.1666° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

Figure 1
SITE LOCATION MAP
DARR ANGELL No.1
LEA COUNTY, NEW MEXICO
Plains Pipeline L.P.

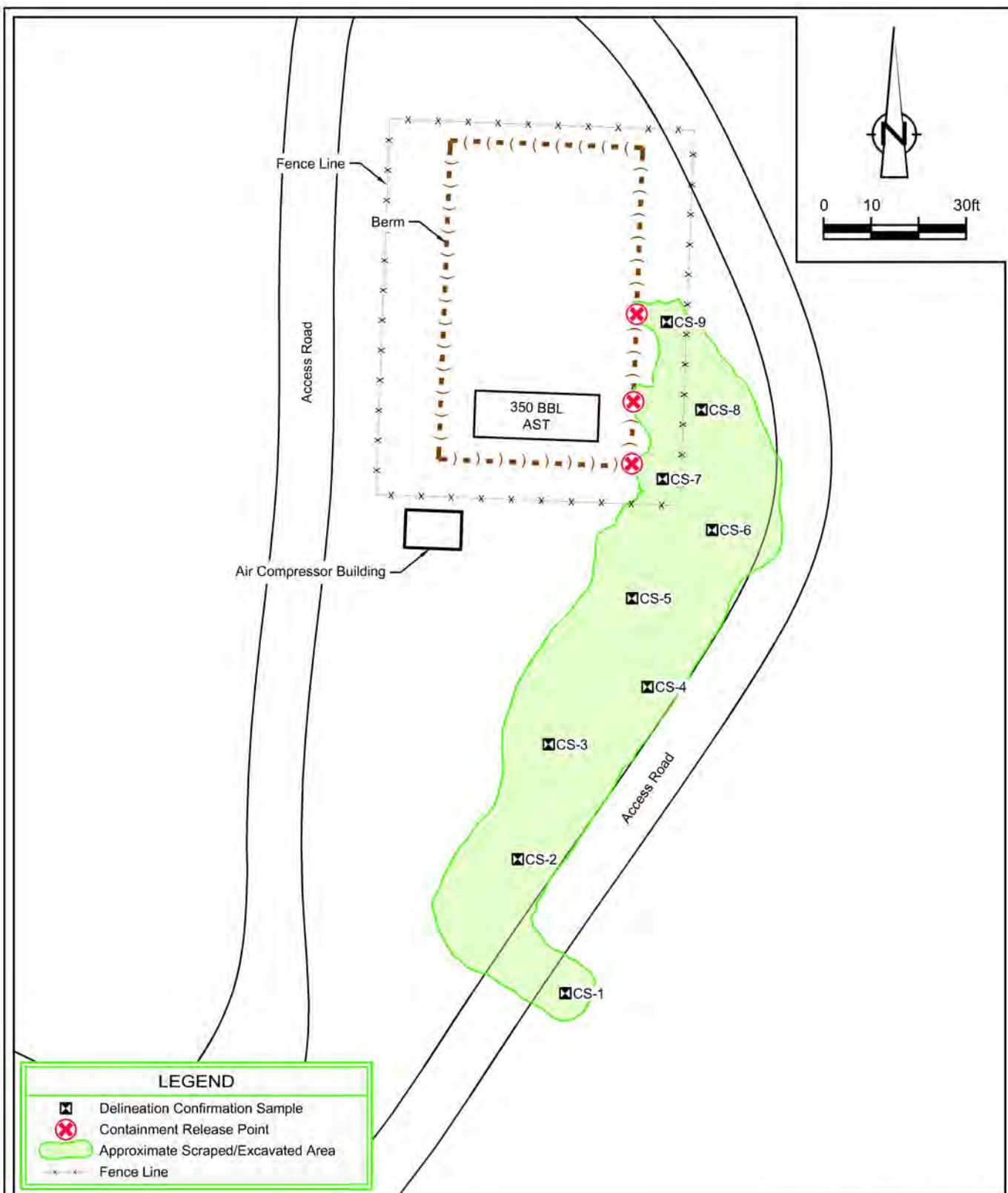




Lat/Long: 33.026481° North, 103.166871° West

Figure 2
 SITE DETAILS MAP
 DARR ANGELL No.1
 LEA COUNTY, NEW MEXICO
Plains Pipeline L.P.





Lat/Long: 33.026481° North, 103.166871° West

Figure 3

SAMPLE LOCATION MAP
DARR ANGELL No.1
LEA COUNTY, NEW MEXICO
Plains Pipeline L.P.

