

Basin Environmental Service Technologies, LLC

Delineation Work Plan



Company: Plains All American Pipeline, LP **Address:** 2530 State Highway 214; Denver City, TX 79323 **Telephone #:** (806)592-2555

Site Name: Maljamar Station **NMOCD Reference#:** N/A

Land Owner: US Bureau of Land Management **Address:** 620 E. Greene St., Carlsbad, NM 88220-6292

Unit Letter: "E" (SW/NW) **Section:** 25 **Township:** 18S **Range:** 31E **County:** Eddy **GPS Coordinates:** 32.719323 N -103.828191 W

Depth to Ground Water: $\approx$ 315' - 320' **Distance to Surface Water Body:** ☐ <200' ☐ 200' - 1,000' ☒ >1,000'

Wellhead Protection Area: <1,000' from Water Source or <200' from Domestic Water Source? ☐ Y ☒ N

NMOCD Ranking Score: 0 **Soil Remediation Levels (mg/kg):** Benzene: 10 BTEX: 50 TPH: ☐ 100 ☐ 1,000 ☒ 5,000 Chloride: ☐ 100 ☐ 500 ☒ 1,000

Date/Time of Release: Unknown **Type of Release:** Crude Oil **Approximate Volume of Release:** Unknown

Background Information:

In March of 2013, Plains Marketing, LP's (Plains) Maljamar Station crude oil pumping station was decommissioned and dismantled. During the removal of the on-site storage tanks, it was discovered that a release (or series of releases) had occurred at some point in the past. The nature, cause, and extent of the release(s) remains undetermined. Visibly stained, heavily impacted soil from underneath the storage tanks and from within the surrounding earthen containment berm was scraped up and stockpiled on-site in anticipation of additional remediation activities to be conducted at a later date.

On August 27, 2014, a representative of the United States Department of the Interior - Bureau of Land Management's (BLM) Carlsbad Field Office visited the former Maljamar Station site and observed that soil remediation activities had yet to be conducted. The BLM representative notified Plains via email that additional soil remediation and subsequent revegetation of the site is required.

At the request of Plains, Basin Environmental Service Technologies, LLC (Basin Environmental), has assumed remediation duties for the Maljamar Station site.

Remediation of contaminated soil to the north, east, and northwest of the former Maljamar Station site was conducted by Basin Environmental in conjunction with the remediation of a pipeline release which occurred on February 8, 2006. Details of soil remediation activities were summarized in the "Closure Request, Caprock to Maljamar 4-Inch (231735)", dated February 27, 2007, and on-file with the NMOCD Artesia District Office and BLM Carlsbad Field Office.

Proposed Activities:

On September 9, 2014, representatives of Basin Environmental, Plains, and the BLM met on-site to determine a path forward to a BLM- and NMOCD-approved closure. Per BLM request, a series of delineation trenches will be advanced to investigate the vertical and horizontal extent of impacted soil. The trenches will be spaced at approximate fifty-foot (50') to seventy-five foot (75') horizontal intervals and extend thirty feet (30') to fifty feet (50') horizontally, in a grid-like pattern, both inside the fence surrounding the former Maljamar Station tank battery and in adjacent pastureland to the west and southwest of the site. The trenches will be advanced at two-foot (2') vertical intervals, and soil samples collected from the floors of the trenches will be field-screened with a photo-ionization detector (PID) and/or chloride field test kit. The trenches will be advanced until field-screens suggest contaminants of concern are below the recommended remediation action levels established for the site by the New Mexico Oil Conservation Division (NMOCD), until a hard caliche layer is encountered, or to a maximum depth of fifteen feet (15'). Selected soil samples will be submitted to Xenco Laboratories in Odessa, Texas, for confirmatory analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX), total petroleum hydrocarbons (TPH), and chloride using Environmental Protection Agency (EPA) Methods SW 846-8021b, SW 846-8015M, and 300.1, respectively.

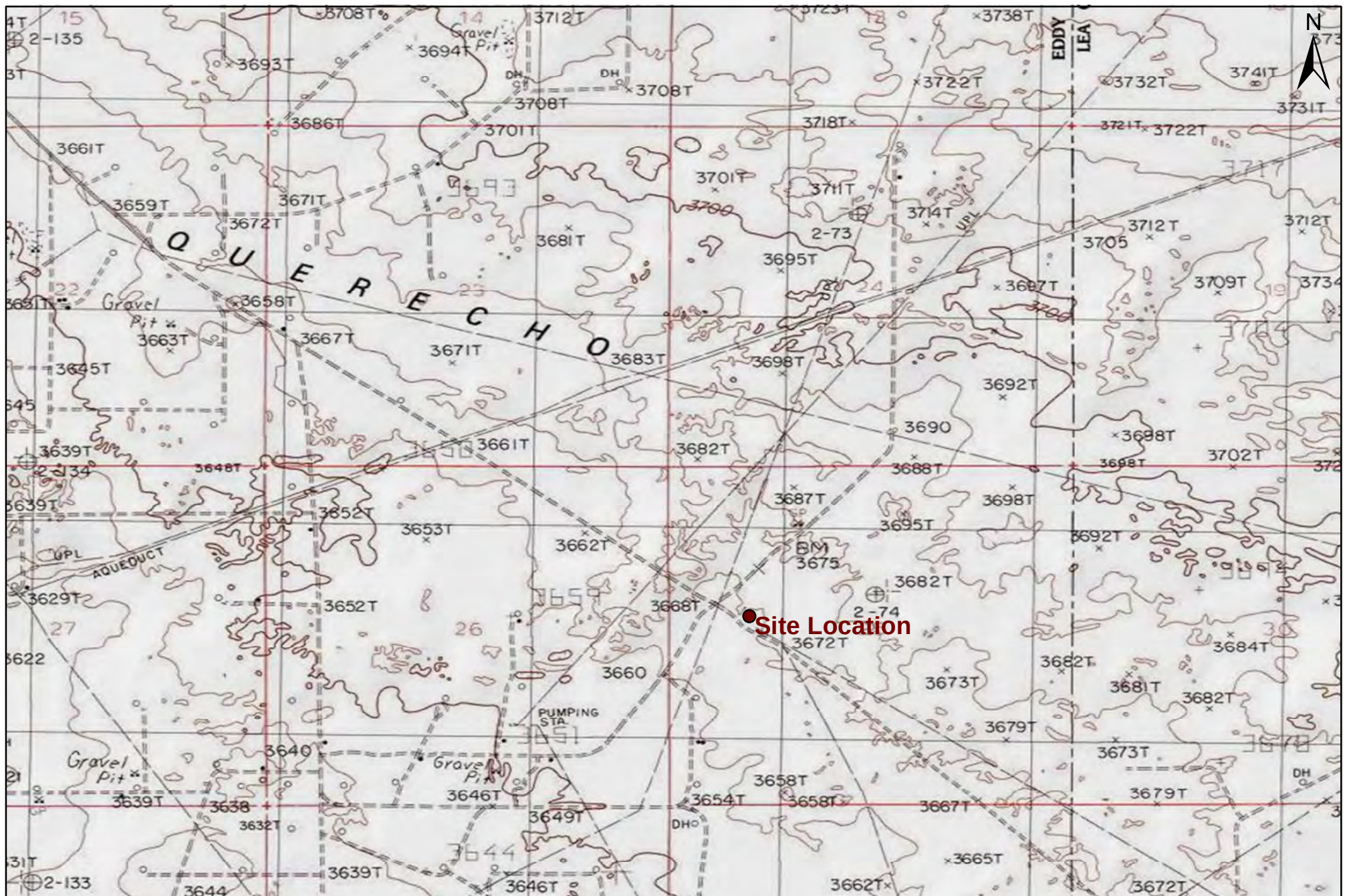
Upon receipt of laboratory analytical results, a "Remediation Summary & Site Closure Proposal" (Work Plan) will be developed, outlining an appropriate soil remediation strategy for the site. The Work Plan will be submitted to both the NMOCD and BLM for review and approval by November 15, 2014.

Attachments:

Attachment #1: Site Location Map

Attachment #2: Proposed Delineation Trench Map

Ben J. Arguijo
Project Manager



1,000 500 0 1,000 2,000

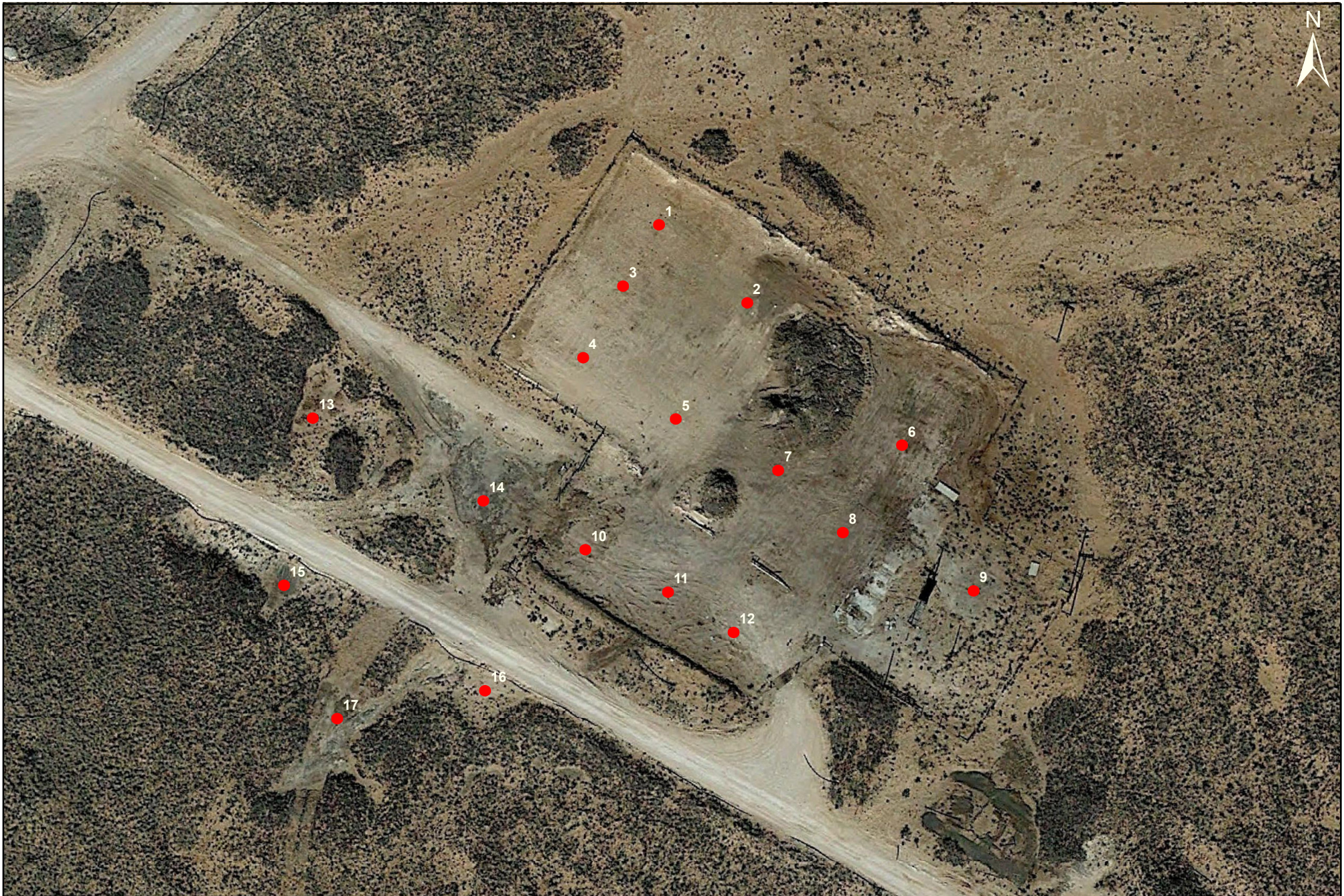
 Distance in Feet

Attachment #1
Site Location Map
Plains Marketing, LP
Maljamar Station
Eddy County, New Mexico



Basin Environmental Service Technologies, LLC
 3100 Plains Hwy.
 Lovington, NM 88260

Drawn By: BJA	Checked By: BRB
September 12, 2014	Scale: 1" = 2,000'



40 20 0 40 80



Distance in Feet

Legend

- Proposed Delineation Trench

Attachment #2
Proposed Delineation Trench Map
Plains Marketing, LP
Maljamar Station
Eddy County, New Mexico



Basin Environmental Service Technologies, LLC
3100 Plains Hwy.
Lovington, NM 88260

Drawn By: BJA

Checked By: BRB

September 16, 2014

Scale: 1" = 80'