

1R - 2637

# WORKPLANS

Date:

9-21-12

**Hansen, Edward J., EMNRD**

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**From:** Ben J. Arguijo <bjarguijo@basinenv.com>  
**Sent:** Tuesday, September 25, 2012 4:01 PM  
**To:** Hansen, Edward J., EMNRD  
**Cc:** Leking, Geoffrey R, EMNRD; 'Jeffrey P Dann'; 'Jason Henry'  
**Subject:** RE: Ground Water Monitoring Well Location Approval (1R-2637) - Plains Chevron Grayburg 6-inch Sec. 6 (Historical) Release Site  
**Attachments:** ChevronGrayburgSec6\_RevisedPMWLocations.pdf

Mr. Hansen,

Attached please find a revised "Proposed Monitor Well Locations" map reflecting the requested change of location for monitor well MW-8.

If you have any questions, comments, or concerns, please do not hesitate to contact me by telephone or e-mail.

Respectfully,  
Ben J. Arguijo

Ben J. Arguijo  
Project Manager  
Basin Environmental  
3100 Plains Hwy.  
P.O. Box 301  
Lovington, NM 88260  
p:(575)396-2378 m:(806)549-9597  
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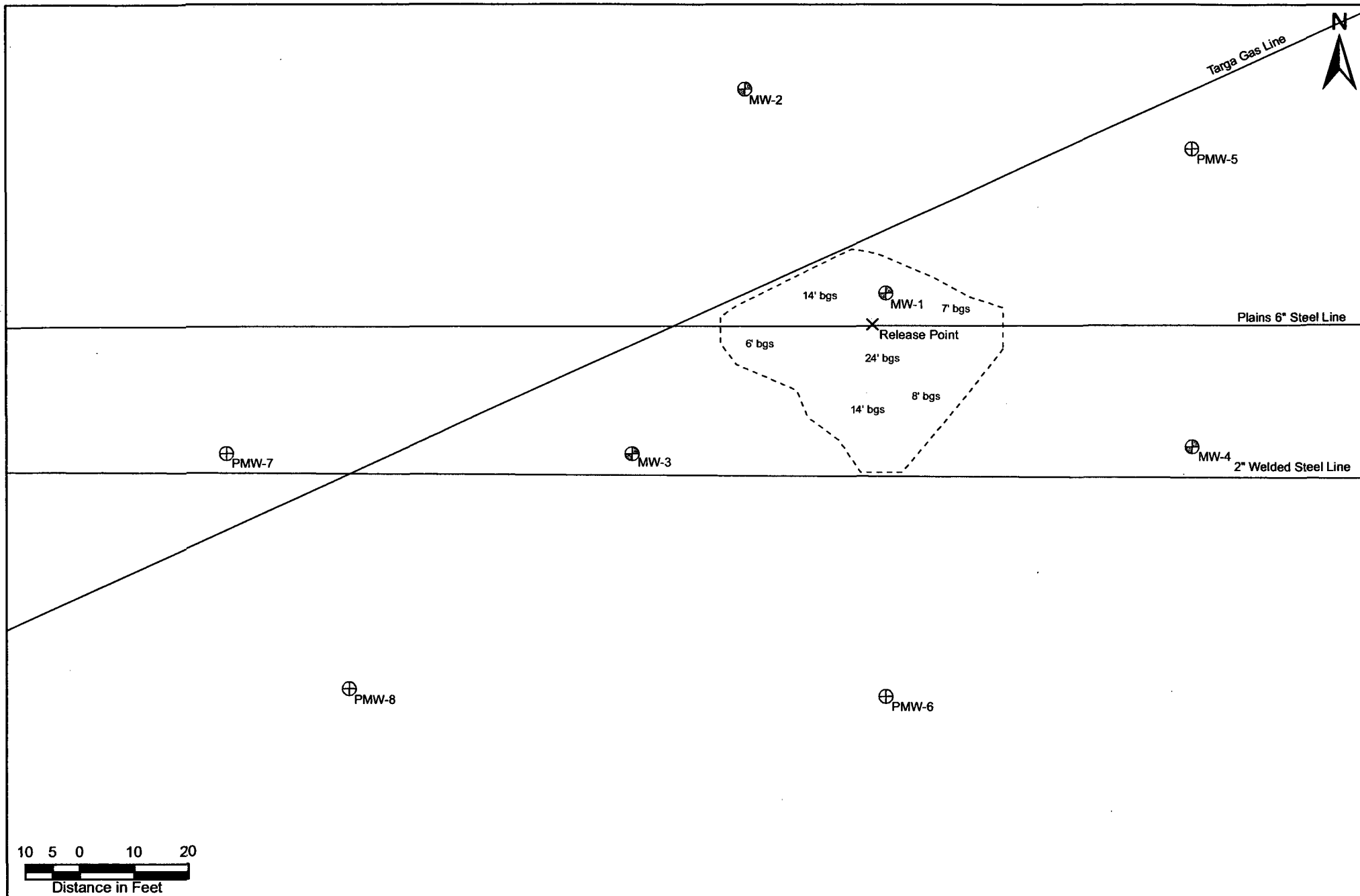
**From:** Hansen, Edward J., EMNRD [<mailto:edwardj.hansen@state.nm.us>]  
**Sent:** Monday, September 24, 2012 2:37 PM  
**To:** 'Jason Henry'  
**Cc:** Leking, Geoffrey R, EMNRD; 'Jeffrey P Dann'; [bjarguijo@basinenv.com](mailto:bjarguijo@basinenv.com)  
**Subject:** Ground Water Monitoring Well Location Approval (1R-2637) - Plains Chevron Grayburg 6-inch Sec. 6 (Historical) Release Site

**RE: Ground Water Gradient Map Report  
for the Plains Marketing, L.P.'s  
Chevron Grayburg 6-inch Sec. 6 (Historical) Release Site  
Unit Letter B, Section 6, T18S, R35E, NMPM, Lea County, New Mexico  
Ground Water Monitoring Well Location Approval (1R-2637)**

Dear Mr. Henry:

The New Mexico Oil Conservation Division (OCD) has received the report for the Chevron Grayburg 6-inch Sec. 6 (Historical) Release Site, dated September 21, 2012 and has conducted a review of the report. The OCD hereby conditionally approves the location of the proposed four "new" groundwater monitoring wells:

Please locate PMW-8 approximately 20 feet to the north to northwest of the current proposed location.



**Legend**

--- Excavation Extent    ⊕ Monitor Well  
 — Pipeline    ⊕ Proposed Monitor Well

**Figure 6**  
**Proposed Monitor Well Locations**  
**Plains Pipeline, LP**  
**Chevron Grayburg 6-Inch Sec. 6 (Historical)**  
**Lea County, New Mexico**  
**SRS #: Chevron Grayburg 6-Inch Historical**  
**NMOCD Ref. #: 1RP-2637**



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

Drawn By: BJA	Checked By: BRB
September 25, 2012	Scale: 1" = 24'

## Hansen, Edward J., EMNRD

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**From:** Ben J. Arguijo <bjarguijo@basinenv.com>  
**Sent:** Friday, September 21, 2012 11:28 AM  
**To:** Hansen, Edward J., EMNRD  
**Cc:** 'Jason Henry'; 'Jeffrey P Dann'; Leking, Geoffrey R, EMNRD  
**Subject:** 1RP-2637 - Plains' Chevron Grayburg 6-inch Sec. 6 (Historical) - GW Gradient Map  
**Attachments:** ChevronGrayburgSec6\_GradientMap08282012.pdf; Buckeye Contours.pdf; Chevron Grayburg\_GW Elevation Table.pdf; ChevronGrayburgSec6\_ProposedMWLocations.pdf

Mr. Hansen,

Per your request below dated 7/24/2012, attached please find a groundwater gradient map for the Chevron Grayburg 6-Inch Sec. 6 (Historical) release site.

Data from three (3) separate gauging events (the most recent of which was used to construct the attached map) suggests that the gradient at the site is not to the southeast, as previously available data (see attached, "Buckeye Contours.pdf") and anecdotal evidence would suggest. Instead, there appears to be a localized anomaly that causes the groundwater to flow to the southwest. The driller, Raymond Straub, and I may have narrowed this "anomaly" down to the Iron Horse Draw, which feeds into the Monument Draw and is located approximately 1.6 miles to the southwest of the site (approximately 215 degrees). One would think that the draw located less than half a mile to the east, as well as surface topography, would have more influence on the gradient at the site, but that does not appear to be the case.

That said, the groundwater elevations across the monitor wells only differ by fractions of an inch (see the attached data table). After consultation with Mr. Jeff Dann and Mr. Jason Henry, it has been determined that more data points will be required to accurately determine the groundwater gradient at the site. To that end, attached please find a "Proposed Monitor Well Locations" map depicting the locations of four (4) additional monitor wells to be installed at the site.

Hard copies of the attached files will be forwarded to you via postal mail, along with a copy of the "Remediation Summary & Soil Closure Request" submitted to Mr. Geoff Leking on 8/27/2012 and approved on 9/4/2012.

If you have any questions, comments, or concerns, please do not hesitate to contact me by telephone or e-mail.

Respectfully,  
Ben J. Arguijo

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**From:** Hansen, Edward J., EMNRD [mailto:edwardj.hansen@state.nm.us]  
**Sent:** Tuesday, July 24, 2012 4:42 PM  
**To:** Jason Henry  
**Cc:** Jeffrey P Dann; 'bjarguijo@basinenv.com'; Leking, Geoffrey R, EMNRD; VonGonten, Glenn, EMNRD  
**Subject:** RE: 1RP-2637 - Plains' Chevron Grayburg 6-inch Sec. 6 (Historical) Release Site - GW impacted notification

**RE: Initial Ground Water Report for the Plains Marketing, L.P.'s  
Chevron Grayburg 6-inch Sec. 6 (Historical) Release Site  
Unit Letter B, Section 6, T18S, R35E, NMPM, Lea County, New Mexico  
Ground Water Case Transfer (1R-2637)**

Dear Mr. Henry:

The New Mexico Oil Conservation Division (OCD) has received the report for the Chevron Grayburg 6-inch Sec. 6 (Historical) Release Site, dated July 23, 2012 and has conducted a review of the report. Since the report indicates that ground water has been impacted by this release, please address all further correspondence regarding ground water at this site to the Environmental Bureau of the OCD Santa Fe Office (c/o Edward J. Hansen) using the OCD case # **1R-2637**. Please submit a ground water gradient map to OCD within 60 days.

Please submit a soil closure report for this site to the OCD District I Office (c/o Geoff Leking) within 30 days.

If you have any questions regarding this matter, please contact me at 505-476-3489.

Edward J. Hansen  
Hydrologist  
Environmental Bureau

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**From:** Jason Henry [<mailto:JHenry@paalp.com>]  
**Sent:** Monday, July 23, 2012 3:56 PM  
**To:** Hansen, Edward J., EMNRD  
**Cc:** Jeffrey P Dann; 'bjarguijo@basinenv.com'; Leking, Geoffrey R, EMNRD  
**Subject:** 1RP-2637 - Plains' Chevron Grayburg 6-inch Sec. 6 (Historical) Release Site - GW impacted notification

Ed,

Please accept this email as notification of impacted groundwater as the result of a crude oil release at the following Plains Pipeline site:

**Chevron Grayburg 6-inch Sec. 6 site (Historical), 1RP-2637 (copy of Initial C-141 attached)**

The groundwater impact was confirmed upon receipt of the analytical data for groundwater samples collected from monitor wells MW-1 and MW-3 that were installed during site investigation activities. I've attached an Analytical Report that provides a summary of the results for the groundwater samples collected from monitor wells MW-1, MW-2, MW-3, and MW-4.

During 2010 and 2011, Plains has conducted the following site activities:

- excavation of impacted soil,
- soil remediation activities,
- placed a synthetic liner in the excavation,
- backfilled the excavated area with remediated soil
- advanced a soil boring in the vicinity of the suspected release location

During 2012, Plains has conducted the following site activities:

- installed four (4) monitor wells (MW-1 – MW-4) at the site
- performed initial groundwater sampling event

The earlier site activities listed above were approved by Mr. Larry Johnson. Upon Mr. Johnson's retirement from the NMOCD, Mr. Geoff Leking took over the regulatory oversight duties for the subject site.

During the remainder of 2012, it is anticipated that the following tasks will be completed:

- surveying of the monitor wells (MW-1 – MW-4)
- submission of a soil closure request report to document the soil remediation activities that were performed at the site

In addition to the laboratory report and the copy of the Initial C141, I've also attached a draft version of a site map which depicts the approximate location of monitor wells MW-1 – MW-4.

Please let me know if you have any questions or need additional information.

Thank you,

Jason Henry  
Plains Pipeline, L.P.  
575-441-1099

TABLE 1

## GROUNDWATER ELEVATION DATA

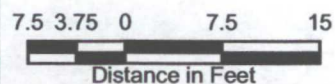
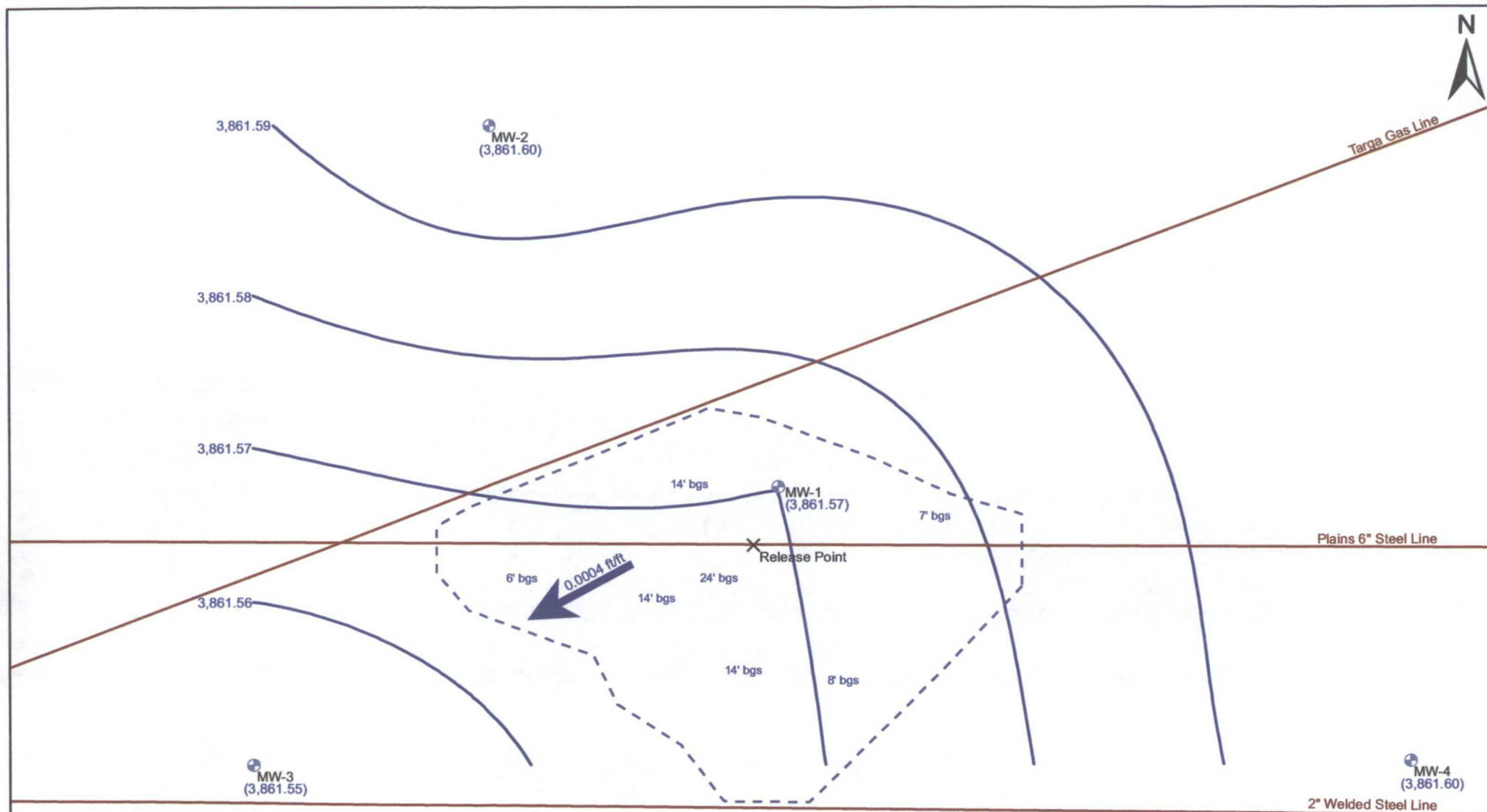
PLAINS PIPELINE, LP  
CHEVRON GRAYBURH 6-INCH SEC. 6 (HISTORICAL)  
LEA COUNTY, NEW MEXICO  
SRS #: CHEVRON GRAYBURG 6-INCH HISTORICAL  
NMOCD REFERENCE #: 1RP-2637

RECEIVED OCD

2017 SEP 24 P 12: 00

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	8/28/2012	3,982.09	-	120.52	-	3,861.57
MW-2	8/28/2012	3,981.21	-	119.61	-	3,861.60
MW-3	8/28/2012	3,982.31	-	120.76	-	3,861.55
MW-4	8/28/2012	3,982.48	-	120.88	-	3,861.60

- = Not applicable



Legend	
	Excavation Extent
	Pipeline
	Groundwater Elevation (ft)
	Groundwater Gradient/Magnitude
	Sample Location
	Monitor Well

**Figure 3**  
**Groundwater Gradient Map (August 2012)**  
**Plains Pipeline, LP**  
**Chevron Grayburg 6-Inch Sec. 6 (Historical)**  
**Lea County, New Mexico**  
**SRS #: Chevron Grayburg 6-Inch Historical**  
**NMOCD Ref. #: 1RP-2637**

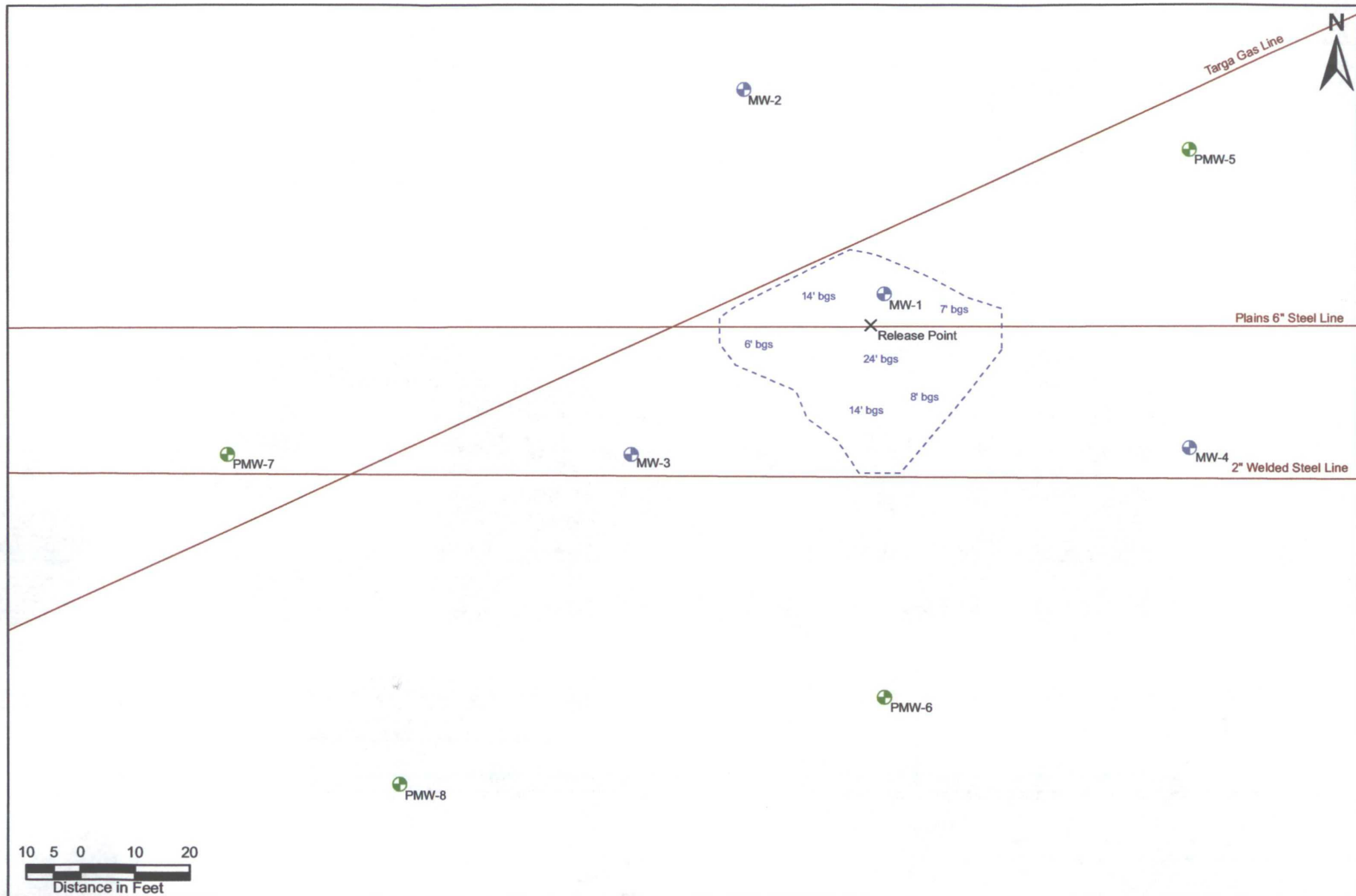


Notes: Groundwater Gradient magnitude measured between monitor wells MW-1 and MW-3.

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Drawn By: BJA	Checked By: BRB
August 29, 2012	Scale: 1" = 15'





**Legend**

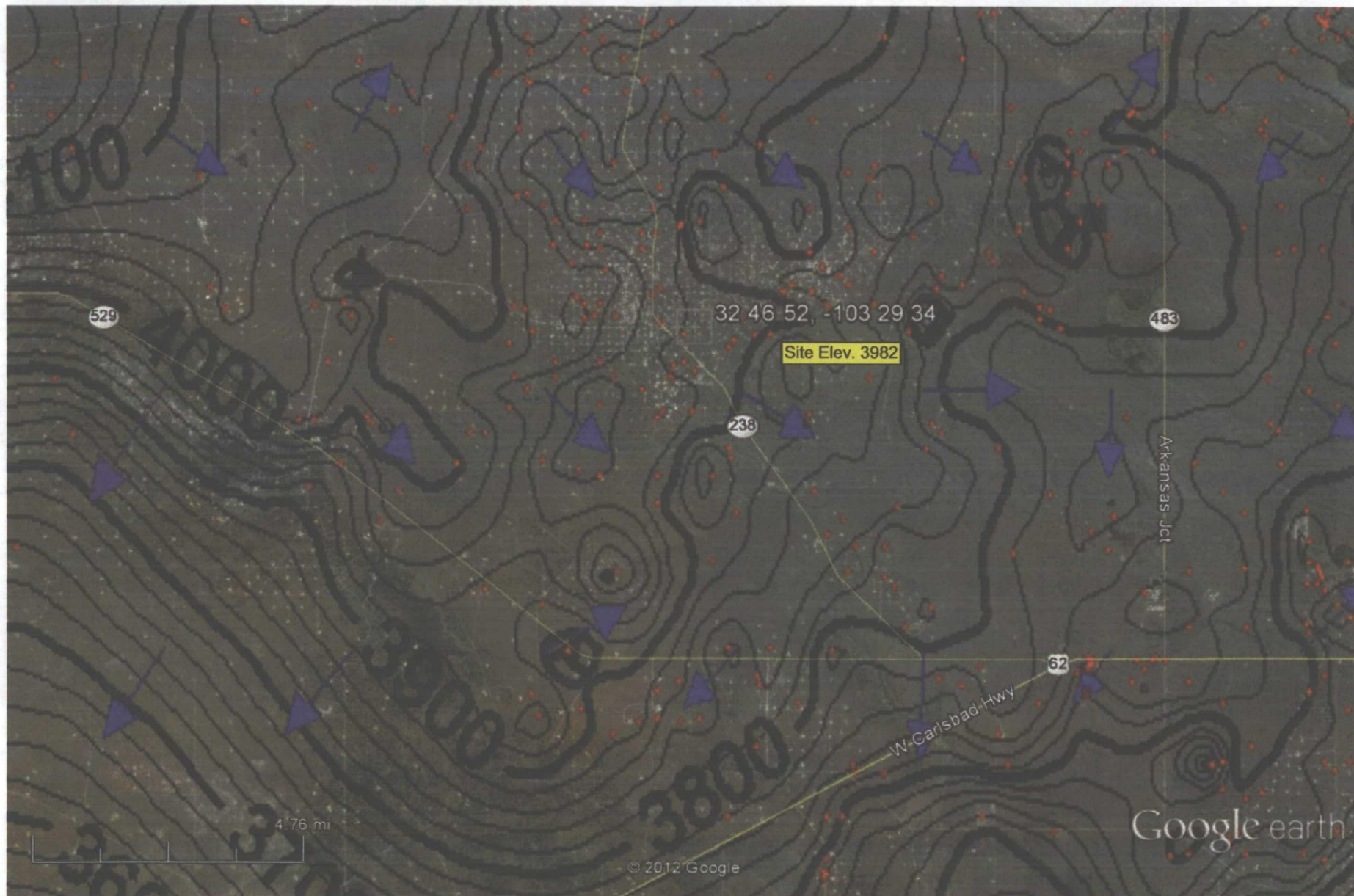
-- -- Excavation Extent    Monitor Well  
 — Pipeline    Proposed Monitor Well

**Figure 6**  
**Proposed Monitor Well Locations**  
 Plains Pipeline, LP  
 Chevron Grayburg 6-Inch Sec. 6 (Historical)  
 Lea County, New Mexico  
 SRS #: Chevron Grayburg 6-Inch Historical  
 NMOCD Ref. #: 1RP-2637



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September 5, 2012	Scale: 1" = 24'



Google earth

C.I. 20 FT.  
Site Elev. 3982

miles  
km

10 20

Static Water Level Based on NMOSE Water Level Data

