1R - 388

Annual GW Mon. REPORTS

DATE:

2008

1R 388

2008
ANNUAL MONITORING REPORT

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Environmental Bureau
Oil Conservation Division

MONUMENT BARBER 10-INCH SOUR

SW ¼ SW ¼ SECTION 32, TOWNSHIP 19 SOUTH, RANGE 37 EAST
LEA COUNTY, NEW MEXICO
PLAINS EMS NUMBER: 2000-10655
NMOCD Reference 1R-0388

Prepared For:

PLAINS MARKETING, L.P.
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January 2009

STATE OF TEXAS
BRITTAN K. BYERLY
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PROFESSIONAL GEOSCIENTIST

Ronald K. Rounsaville
Project Manager

Brittan K. Byerly, P.G.
President

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INTRODUCTION

On behalf of Plains Marketing, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities were assumed by NOVA. The Monument Barber 10-Inch Sour site (the site), which was formerly the responsibility by Enron Oil Trading and Transportation (EOTT), is now the responsibility of Plains. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2008 only. However, historic data tables as well as 2008 laboratory analytical reports are provided on the enclosed data disk. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2008 to assess the levels and extent of dissolved phase constituents and Phase Separated Hydrocarbon (PSH). Each groundwater monitoring event consisted of measuring static water levels in monitor wells, checking for the presence of PSH on the water column, and purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 feet were not sampled.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The legal description of the site is SW/4 of the SW/4, Section 32, Township 19 South, Range 37 East, Lea County, New Mexico. The Monument Barber 10-Inch Sour release was discovered by EOTT employees and reported on August 7, 2000. The Release Notification and Corrective Action Form (C-141) is provided as Appendix A. An estimated 1,600 barrels of crude oil were released and 1,300 barrels were recovered. The release resulted in a surface stain measuring approximately 100 feet in length by eight feet in width. The excavated soil was transported to a NMOCD approved disposal facility. Thirty four soil borings were installed by a previous consultant to characterize the horizontal and vertical crude oil impact.

Four groundwater monitor wells (MW-1 through MW-4) and two PSH recovery wells (RW-1 and RW-2) are currently on-site. Soil remediation activities were conducted by Plains in 2008 and documentation of the results of those activities can be found in the *Remediation Summary and Soil Closure Request Report* for the site dated January 2009.

As indicated on Figures 2A-2D and 3A-3D, there is an off-site third party (Equilon) release located approximately 150 feet upgradient of the site. The historical presence of product in this area is documented by gauging data from upgradient monitor well MW-3. Historic data tables are provided on the enclosed data disk. The NMOCD has been notified of this off-site, up-gradient source area. The NMOCD has stated the Equilon release site, which is up-gradient of the Monument Barber 10-Inch Sour site, is considered a potential contributing source area for the groundwater impact present at the Monument Barber 10-Inch Sour site.

FIELD ACTIVITIES

Groundwater Monitoring

During the 2008 reporting period, measurable PSH or hydrocarbon sheen was not observed in any of the site monitor wells. The 2008 gauging data is provided in Table 1.

Quarterly sampling events for the reporting period were performed according to the following sampling schedule, which was approved by the NMOCD on correspondence dated April 28, 2004.

NMOCD Approved Sampling Schedule	
MW-1	Quarterly
MW-2	Quarterly
MW-3	Quarterly
MW-4	Quarterly
RW-1	Quarterly
RW-2	Quarterly

The site monitor wells were gauged and sampled on February 26, May 7, August 27, and November 22, 2008. During each sampling event, sampled monitor wells were purged a minimum of three well volumes of water or until the wells failed to produce water using a PVC bailer or electric Grundfos pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were collected in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of at a licensed disposal facility.

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during the four quarterly monitoring events, are depicted on Figures 2A through 2D, the Inferred Groundwater Gradient Maps. Groundwater elevation data for 2008 is provided as Table 1. Historic groundwater elevation data beginning at project inception is provided on the enclosed data disk.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0017 feet/foot to the southeast as measured between groundwater monitor well MW-3 and recovery well RW-2. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevation has ranged between 3,536.18 and 3,537.30 feet above mean sea level, in monitor well MW-2 on August 27, 2008 and monitor well MW-3 on December 16, 2008, respectively.

LABORATORY RESULTS

No measurable PSH was reported in any of the site monitor or recovery wells during the 2008 reporting period.

Groundwater samples obtained during the quarterly sampling events of 2008 were delivered to TraceAnalysis, Inc. in Midland, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021B, and Polynuclear Aromatic Hydrocarbons (PAH) concentrations by EPA Method 8270C. Monitoring wells containing measurable amounts of PSH were analyzed for Total Petroleum Hydrocarbons (TPH) concentrations by EPA Method 8015M. A listing of BTEX and TPH constituent concentrations for 2008 are summarized in Table 2 and the PAH constituent concentrations for 2008 are summarized in Table 3. Copies of the laboratory reports generated for 2008 are provided on the enclosed data disk. The quarterly groundwater sample results for BTEX constituent concentrations are depicted on Figures 3A through 3D.

Monitor well MW-1 is sampled on a quarterly schedule and analytical results indicate benzene, toluene, ethylbenzene, and xylene concentrations were below laboratory method detection limits (MDL) and the NMOCD regulatory standards of 0.01 mg/L for benzene, 0.75 mg/L for toluene, 0.75 mg/L for ethylbenzene and 0.62 mg/L for xylene, during all four quarters of 2008. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last eighteen consecutive quarters. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Monitor well MW-2 is sampled on a quarterly schedule and analytical results indicate benzene, toluene, ethylbenzene, and xylene concentrations were below the MDL and the NMOCD regulatory standards. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last seventeen consecutive quarters. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Monitor well MW-3 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 1st and 4th quarters to 0.0029 mg/L during the 2nd quarter of 2008. Benzene concentrations were below NMOCD regulatory standard during all four quarters of the reporting period. Toluene and Ethyl-benzene concentrations were below the MDL and the NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 2nd, 3rd and 4th quarters to 0.0015 mg/L during the 1st quarter of 2008. Xylene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last thirteen consecutive quarters. PAH analysis during the 4th quarter sampling event indicated detectable concentrations above MDLs for naphthalene (0.000404 mg/L), fluorene (0.00124 mg/L), phenanthrene (0.000686 mg/L), 1-methylnaphthalene (0.00146 mg/L), 2-methylnaphthalene (0.000481 mg/L) and dibenzofuran (0.000923 mg/L), which are below the WQCC Drinking Water Standards.

Monitor well MW-4 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards during all four quarters of 2008. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-three consecutive quarters. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Recovery well RW-1 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards during all four quarters of 2008. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last seventeen consecutive quarters. PAH analysis during the 4th quarter sampling event indicated detectable concentrations above MDLs for 1-methylnaphthalene (0.000587 mg/L) and dibenzofuran (0.000864 mg/L), which are below the WQCC Drinking Water Standards.

Recovery well RW-2 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards during all four quarters of 2008. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last thirteen consecutive quarters. PAH analysis

during the 4th quarter sampling event indicated detectable concentrations above MDLs for 1-methylnaphthalene (0.000372 mg/L) and dibenzofuran (0.000633 mg/L), which are below the WQCC Drinking Water Standards.

Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in section 20.6.2.3103 of the New Mexico Administrative Code.

SUMMARY

This report presents the results of groundwater monitoring activities for the 2008 annual monitoring period. Four groundwater monitor wells (MW-1 through MW-4) and two recovery wells (RW-1 and RW-2) are currently on-site. The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0017 feet/foot to the southeast. As discussed above, none of the site monitor wells exhibited measurable PSH or hydrocarbon sheen during the 2008 reporting period.

A review of the laboratory analytical results indicates BTEX and PAH constituent concentrations were below the appropriate NMOCD regulatory standards in all monitor wells and recovery wells during the 2008 reporting period. BTEX concentrations have been below NMOCD regulatory standards for a minimum of thirteen consecutive quarters.

A Soil Closure Request Report dated January 2009, documenting the excavation, sampling and backfilling activities conducted at the site from June 2008 through October 2008, was submitted to the New Mexico Oil Conservation Division (Santa Fe). Plains is awaiting approval from the NMOCD in response to the Soil Closure Request.

ANTICIPATED ACTIONS

As of the end of 2008, Plains had a minimum of thirteen consecutive quarters of groundwater monitoring data below NMOCD guidelines. Plains is requesting approval for termination of groundwater monitoring at this site including plugging and abandoning of the four monitor wells and two recovery wells. Therefore, Plains is requesting NMOCD approval for Final Site Closure (soil and groundwater) for the crude oil leak site known as Monument Barber 10-Inch Sour.

LIMITATIONS

NOVA has prepared this Annual Monitoring Report to the best of its ability. No other warranty, expressed or implied, is made or intended.

NOVA has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. NOVA has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of NOVA and/or Plains.

DISTRIBUTION

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Figures

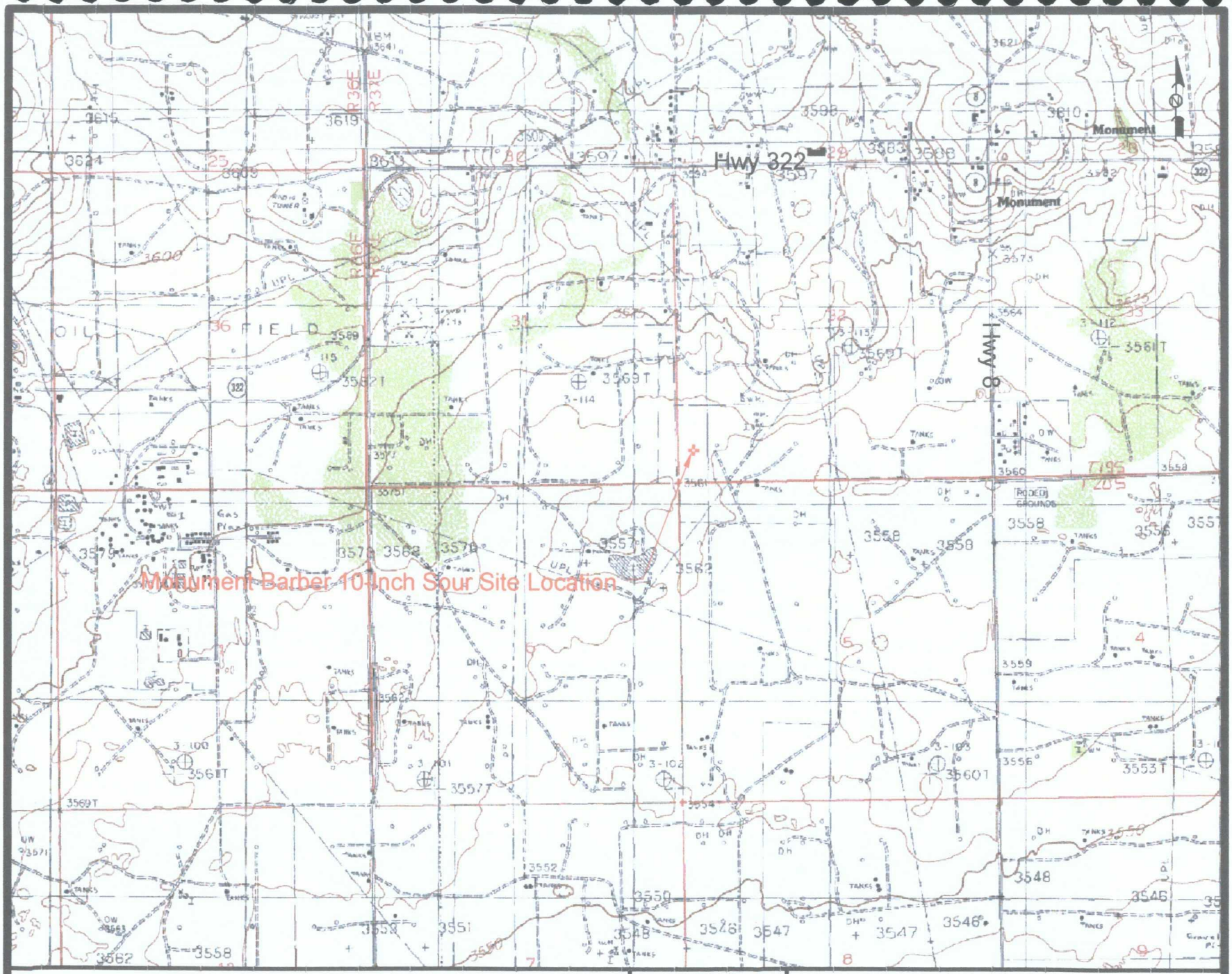


Figure 1
Site Location Map

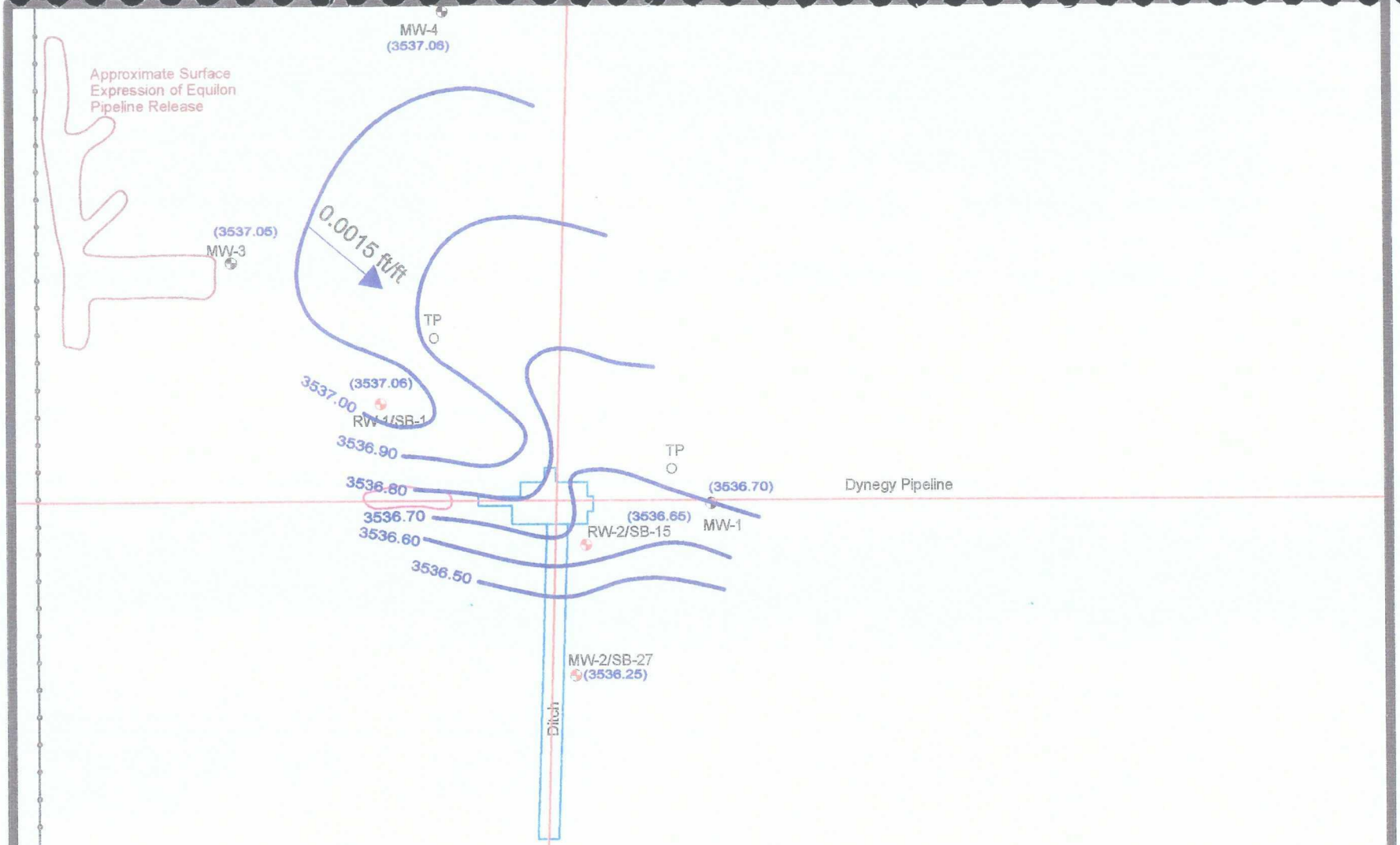
Plains Marketing, L.P.
Monument Barber
10-Inch Sour
Monument, NM

NMOCD Reference # 1R-0338

NOVA Safety and Environmental

NOVA safety and environmental

SW 1/4 SW1/4 Sec 32, T19S R37E		32° 36' 39.4" N 103° 16' 51.0" W
Scale: NTS	Prep By: RKR	Checked By: BKB
January 19, 2009		



NOTE:

- Contour Interval = 0.10'
- Groundwater Gradient Measured Between MW-3 and RW-2

32° 36' 39.4" N 103° 16' 51.0' W
SW 1/4 SW 1/4 Section 32 Township 19 South, Range 37 East

NMOCD Reference # 1R-0338

LEGEND:

- TP Utility Pole
- Monitoring Well Location
- Recovery Well Location
- Soil Boring Location
- Fence
- Extent of Excavation
- Extent of Stockpile
- (3537.20) Groundwater Elevation (feet)
- Groundwater Elevation Contour Line
- 0.001 ft/ft Groundwater Gradient and Magnitude

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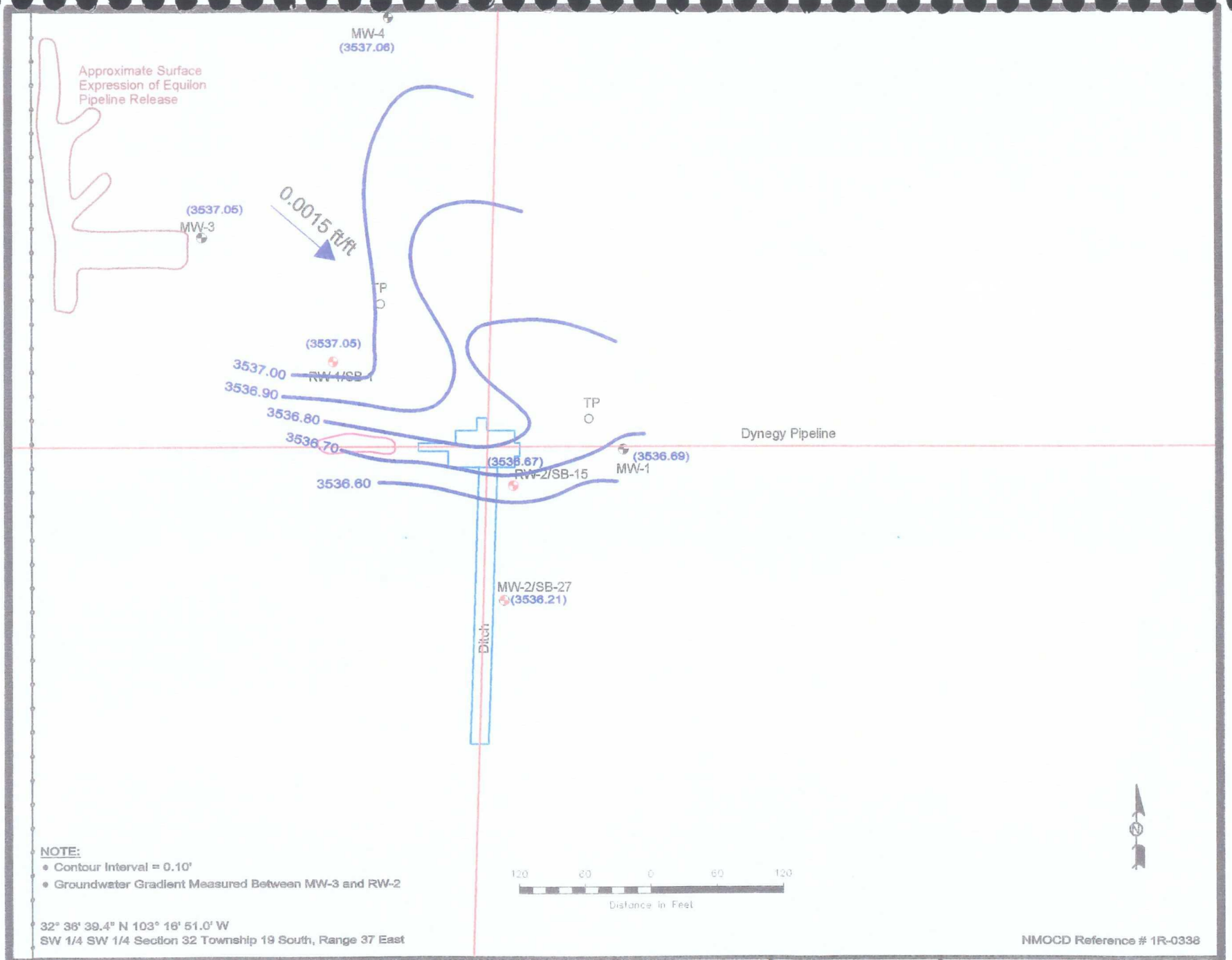
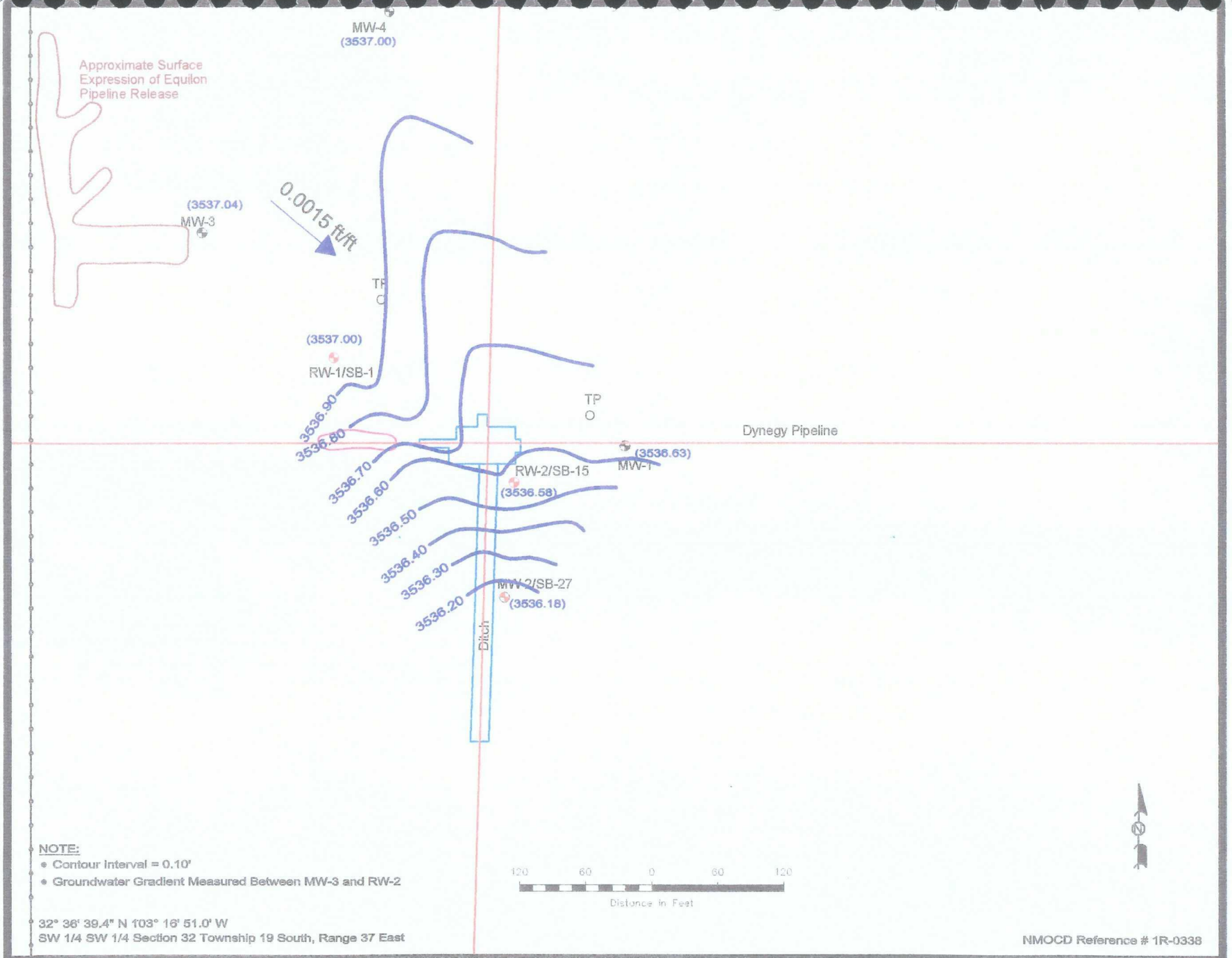
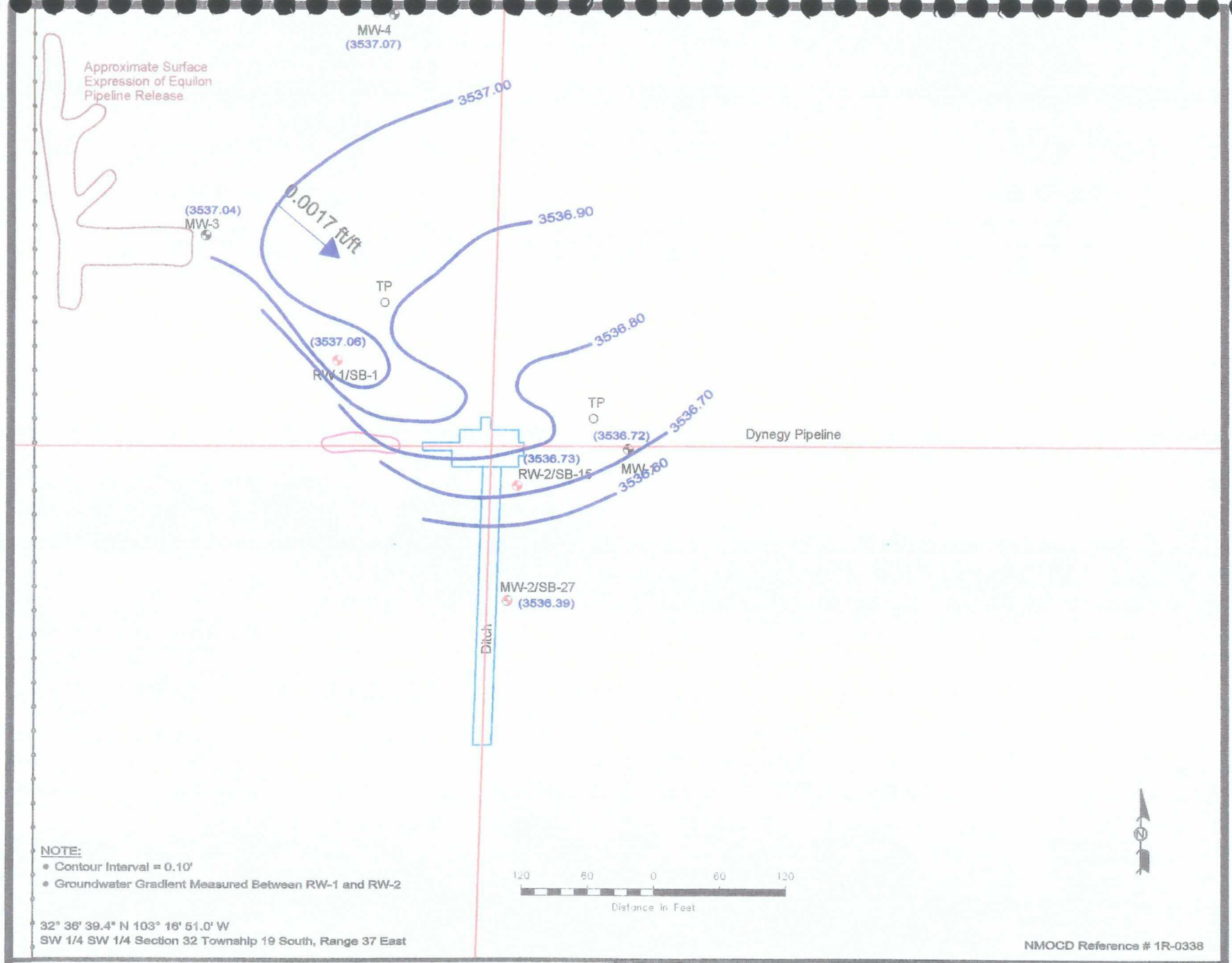
Figure 2A
Inferred Groundwater Gradient Map (02/26/08)
Plains Marketing, L.P.
Monument Barber 10-inch Sour
Monument, NM

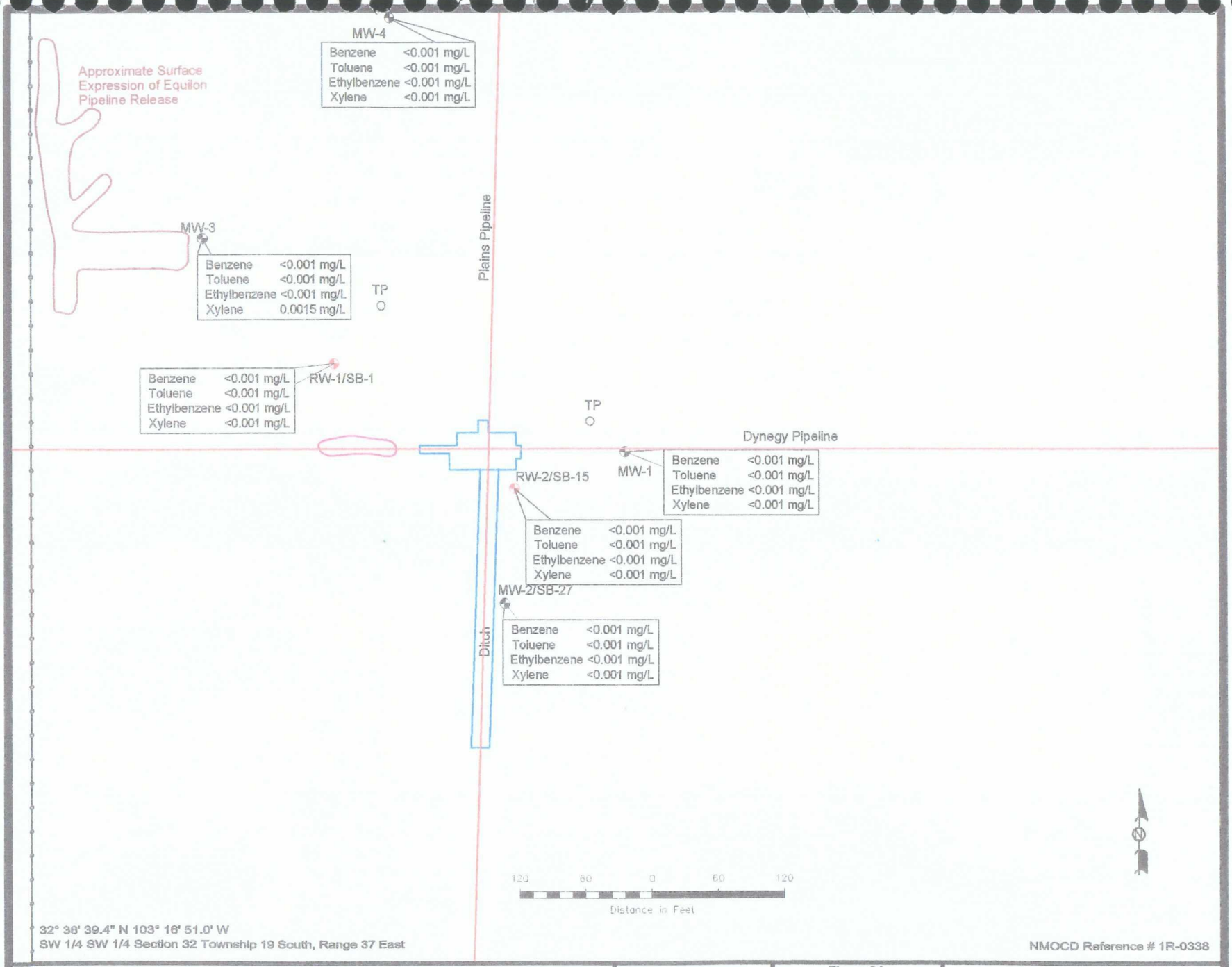
NOVA Safety and Environmental

Scale: 1" = 120'	CAD By: DGC	Checked By: RKR
October7, 2008		


MW-4
(3537.06)
Approximate Surface Expression of Equilon Pipeline Release
(3537.05)
MW-3
0.0015 ft/ft
TP
(3537.05)
RW-1/SB-1
3537.00
3536.90
3536.80
3536.70
3536.60
TP
Dynegy Pipeline
(3536.69)
MW-1
(3536.67)
RW-2/SB-15
MW-2/SB-27
(3536.21)
Ditch
NOTE:
• Contour Interval = 0.10'
• Groundwater Gradient Measured Between MW-3 and RW-2
120 60 0 60 120
Distance in Feet
N
32° 36' 39.4" N 103° 16' 51.0" W
SW 1/4 SW 1/4 Section 32 Township 19 South, Range 37 East
NMOCD Reference # 1R-0338
LEGEND:
TP Utility Pole
Monitoring Well Location
Recovery Well Location
Soil Boring Location
Fence
Extent of Excavation
Extent of Stockpile
(3537.20) Groundwater Elevation (feet)
Groundwater Elevation Contour Line
0.001 ft/ft Groundwater Gradient and Magnitude
NOVA safety and environmental
Figure 2B
Inferred Groundwater Gradient Map (05/07/08)
Plains Marketing, L.P.
Monument Barber 10-Inch Sour
Monument, NM
NOVA Safety and Environmental
Scale: 1" = 120'
CAD By: DGC
Checked By: RKR
October7, 2008


MW-4
(3537.00)
Approximate Surface Expression of Equilon Pipeline Release
(3537.04)
MW-3
0.0015 ft/ft
TP
O
(3537.00)
RW-1/SB-1
3536.90
3536.80
3536.70
3536.60
3536.50
3536.40
3536.30
3536.20
TP
O
Dynegy Pipeline
(3536.63)
MW-1
RW-2/SB-15
(3536.58)
MW-2/SB-27
(3536.18)
Ditch
NOTE:
• Contour Interval = 0.10'
• Groundwater Gradient Measured Between MW-3 and RW-2
120 60 0 60 120
Distance in Feet
N
32° 36' 39.4" N 103° 16' 51.0' W
SW 1/4 SW 1/4 Section 32 Township 19 South, Range 37 East
NMOCD Reference # 1R-0338
LEGEND:
TP Utility Pole
Monitoring Well Location
Recovery Well Location
Soil Boring Location
Fence
Extent of Excavation
Extent of Stockpile
(3537.20) Groundwater Elevation (feet)
Groundwater Elevation Contour Line
Groundwater Gradient and Magnitude
NOVA safety and environmental
Figure 2C
Inferred Groundwater Gradient Map (08/27/08)
Plains Marketing, L.P.
Monument Barber 10-Inch Sour
Monument, NM
NOVA Safety and Environmental
Scale: 1" = 120'
CAD By: DGC
Checked By: RKR
October7, 2008


MW-4
(3537.07)
Approximate Surface
Expression of Equilon
Pipeline Release
3537.00
0.0017 ft/ft
(3537.04)
MW-3
3536.90
TP
3536.80
(3537.06)
RW-1/SB-1
TP
3536.70
(3536.72)
Dynegy Pipeline
(3536.73)
RW-2/SB-15
MW-5
3536.60
MW-2/SB-27
(3536.39)
Ditch
NOTE:
• Contour Interval = 0.10'
• Groundwater Gradient Measured Between RW-1 and RW-2
120 60 0 60 120
Distance in Feet
N
32° 36' 39.4" N 103° 16' 51.0' W
SW 1/4 SW 1/4 Section 32 Township 19 South, Range 37 East
NMOCD Reference # 1R-0338
LEGEND:
TP Utility Pole
Monitoring Well Location
Recovery Well Location
Soil Boring Location
Fence
Extent of Excavation
Extent of Stockpile
(3537.20) Groundwater Elevation (feet)
Groundwater Elevation Contour Line
0.001 ft/ft Groundwater Gradient and Magnitude
NOVA safety and environmental
Figure 2D
Inferred Groundwater Gradient Map (11/22/08)
Plains Marketing, L.P.
Monument Barber 10-Inch Sour
Monument, NM
NOVA Safety and Environmental
Scale: 1" = 120'
CAD By: DGC
Checked By: RKR
December 5, 2008

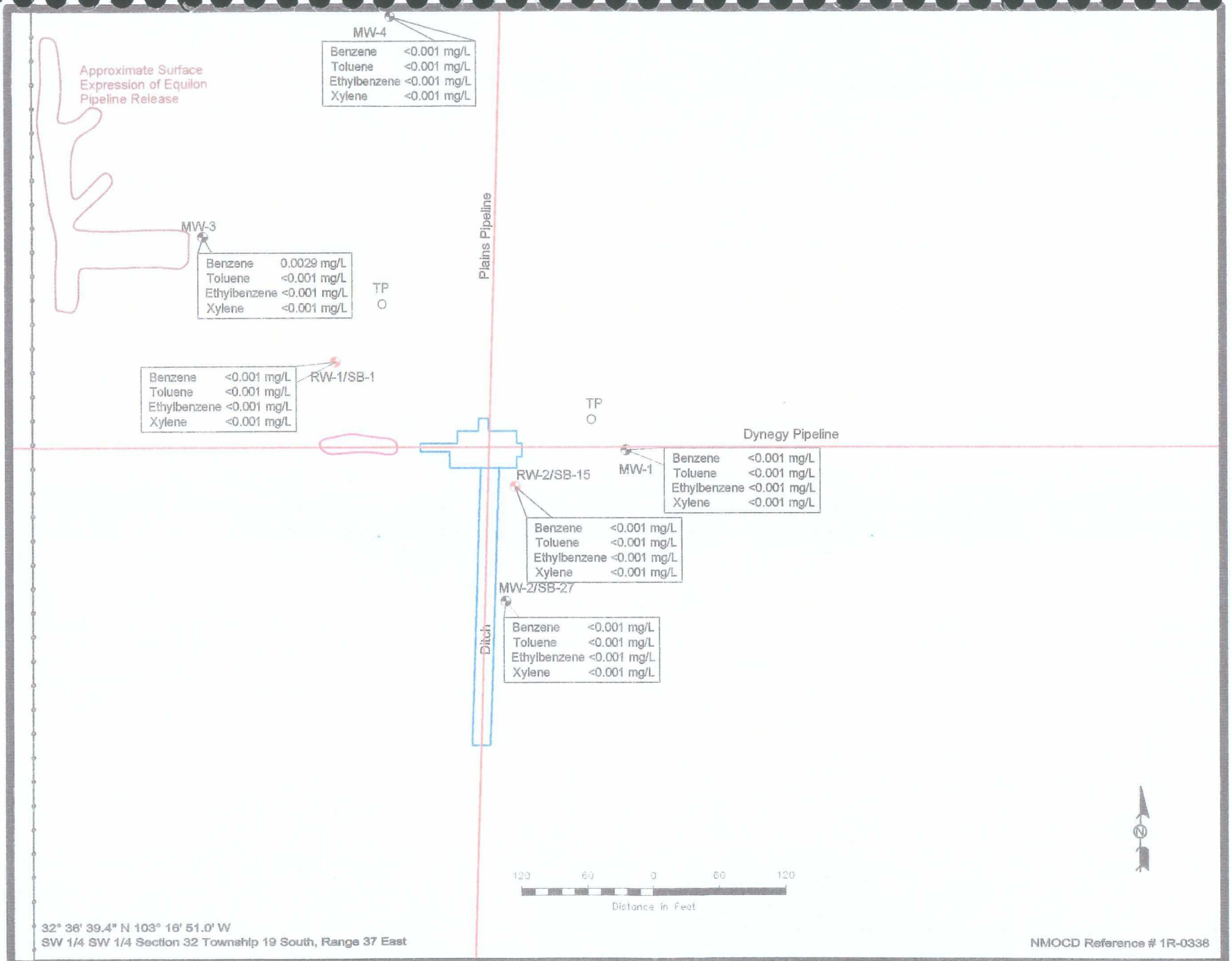


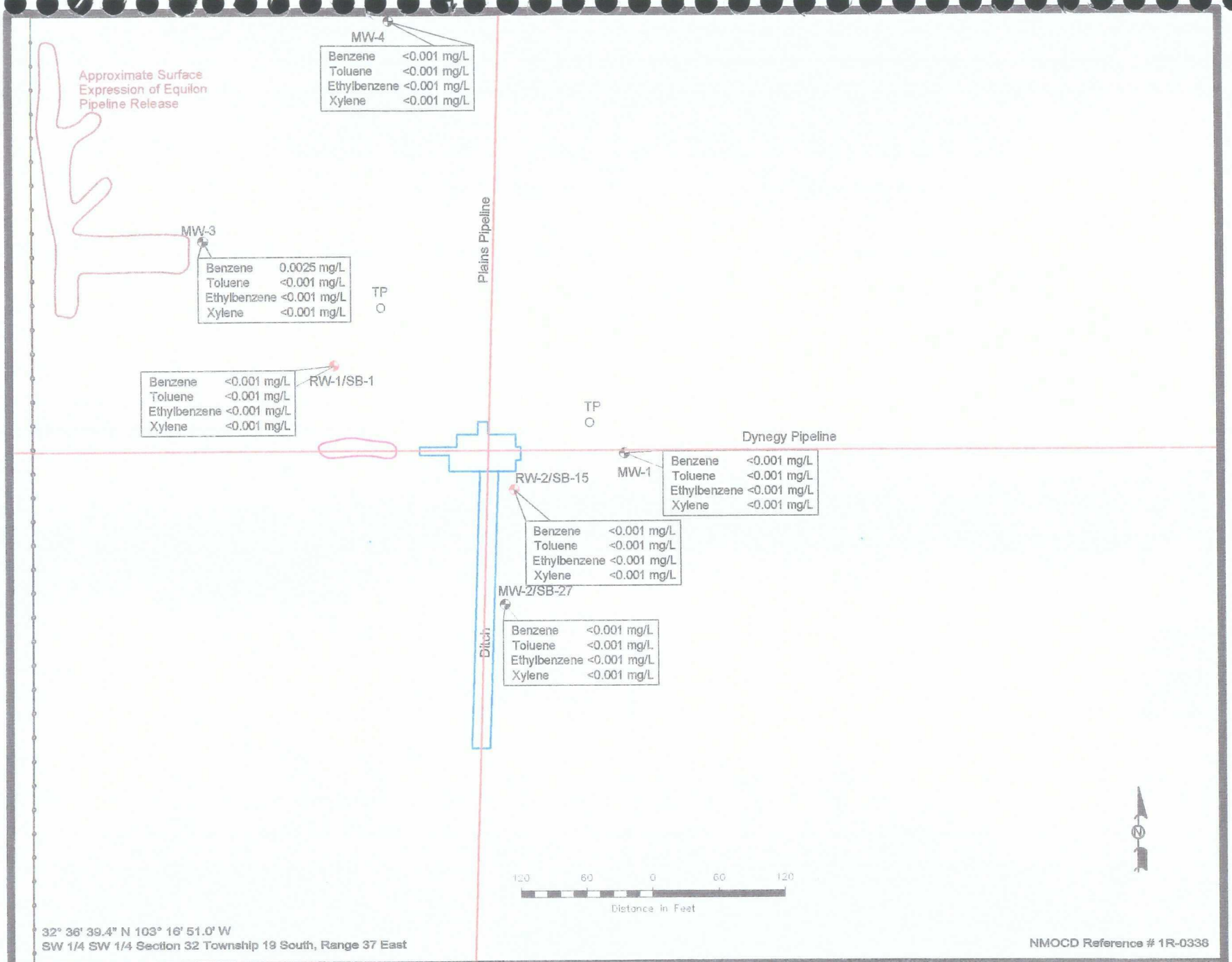
NOVA safety and environmental

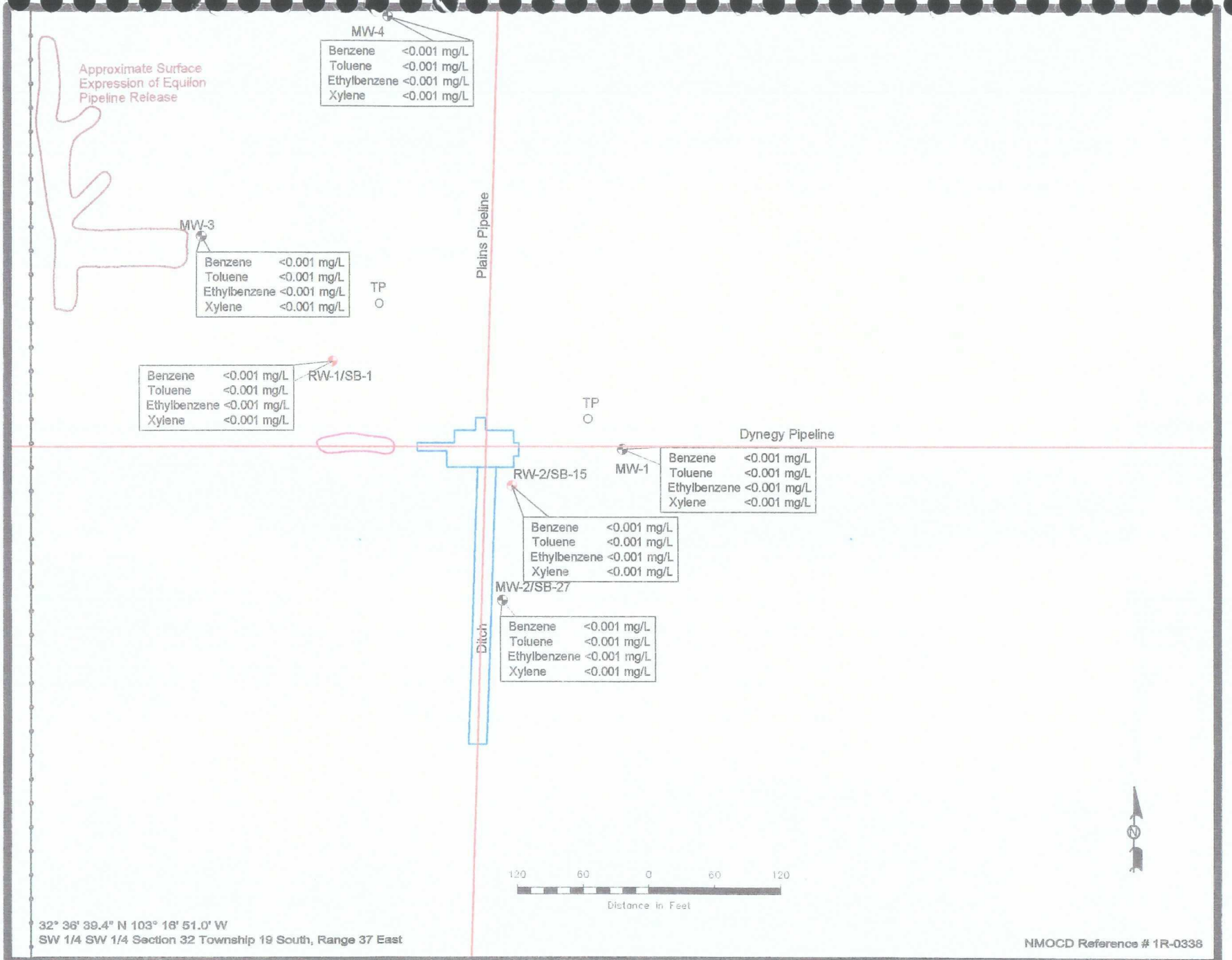
Figure 3A
Groundwater Concentration and Inferred PSH Extent Map (02/26/08)
Plains Marketing, L.P.
Monument Barber 10-Inch Sour
Monument, NM

NOVA Safety and Environmental

Scale: 1" = 120'	CAD By: DGC	Checked By: RKR
Ocotber 7, 2008		


MW-4
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
Approximate Surface Expression of Equilon Pipeline Release
MW-3
Benzene 0.0029 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
TP
Plains Pipeline
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
RW-1/SB-1
TP
Dynegy Pipeline
MW-1
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
RW-2/SB-15
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
MW-2/SB-27
Ditch
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
N
120 60 0 60 120
Distance in Feet
32° 36' 39.4" N 103° 16' 51.0' W
SW 1/4 SW 1/4 Section 32 Township 19 South, Range 37 East
NMOCD Reference # 1R-0338
LEGEND:
TP Utility Pole
Monitoring Well Location
Recovery Well Location
Soil Boring Location
Fence
Extent of Stockpile
<0.001 Constituent Concentration (mg/L)
Equilon Pipeline Release
Extent of Excavation
NS Not Sampled
NOVA safety and environmental
Figure 3B
Groundwater Concentration and Inferred PSH Extent Map (05/07/08)
Plains Marketing, L.P.
Monument Barber 10-Inch Sour
Monument, NM
NOVA Safety and Environmental
Scale: 1" = 120'
CAD By: DGC
Checked By: RKR
Ocotber 7, 2008


MW-4
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
Approximate Surface Expression of Equilon Pipeline Release
MW-3
Benzene 0.0025 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
TP
Plains Pipeline
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
RW-1/SB-1
TP
Dynegy Pipeline
MW-1
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
RW-2/SB-15
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
MW-2/SB-27
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
Ditch
N
120 60 0 60 120
Distance in Feet
32° 36' 39.4" N 103° 16' 51.0' W
SW 1/4 SW 1/4 Section 32 Township 19 South, Range 37 East
NMOCD Reference # 1R-0338
LEGEND:
TP Utility Pole
Monitoring Well Location
Recovery Well Location
Soil Boring Location
Fence
Extent of Stockpile
<0.001 Constituent Concentration (mg/L)
Equilon Pipeline Release
Extent of Excavation
NS Not Sampled
NOVA safety and environmental
Figure 3C
Groundwater Concentration and Inferred PSH Extent Map (08/27/08)
Plains Marketing, L.P.
Monument Barber 10-Inch Sour
Monument, NM
NOVA Safety and Environmental
Scale: 1" = 120'
CAD By: DGC
Checked By: RKR
October 7, 2008


MW-4
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
Approximate Surface Expression of Equilon Pipeline Release
MW-3
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
TP
Plains Pipeline
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
RW-1/SB-1
TP
Dynegy Pipeline
MW-1
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
RW-2/SB-15
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
MW-2/SB-27
Ditch
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
N
120 60 0 60 120
Distance in Feet
32° 36' 39.4" N 103° 16' 51.0' W
SW 1/4 SW 1/4 Section 32 Township 19 South, Range 37 East
NMOCD Reference # 1R-0338
LEGEND:
TP Utility Pole
Monitoring Well Location
Recovery Well Location
Soil Boring Location
Fence
Extent of Stockpile
<0.001 Constituent Concentration (mg/L)
Equilon Pipeline Release
Extent of Excavation
NS Not Sampled
NOVA safety and environmental
Figure 3D
Groundwater Concentration and Inferred PSH Extent Map (11/22/08)
Plains Marketing, L.P.
Monument Barber 10-Inch Sour
Monument, NM
NOVA Safety and Environmental
Scale: 1" = 120'
CAD By: DGC
Checked By: RKR
December 15, 2008

Tables

TABLE 1

GROUNDWATER ELEVATION DATA - 2007 / 2008

PLAINS MARKETING, L.P.
MONUMENT BARBER ESTATE 10" SOUR
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER R1-0338

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 1	*01/04/07*	3,565.64	-	28.80	0.00	3536.84
MW - 1	*02/19/07*	3,565.64	-	28.83	0.00	3536.81
MW - 1	*05/07/07*	3,565.64	-	28.87	0.00	3536.77
MW - 1	*08/08/07*	3,565.64	-	28.88	0.00	3536.76
MW - 1	*11/16/07*	3,565.64	-	28.90	0.00	3536.74
MW - 1	*02/26/08*	3,565.64	-	28.94	0.00	3536.70
MW - 1	*05/07/08*	3,565.64	-	28.95	0.00	3536.69
MW - 1	*08/27/08*	3,565.64	-	29.01	0.00	3536.63
MW - 1	*11/22/08*	3,565.64	-	28.92	0.00	3536.72
MW - 2	*01/04/07*	3,565.58	-	28.86	0.00	3536.72
MW - 2	*02/19/07*	3,565.58	-	29.00	0.00	3536.58
MW - 2	*05/07/07*	3,565.58	-	29.01	0.00	3536.57
MW - 2	*08/08/07*	3,565.58	-	29.11	0.00	3536.47
MW - 2	*11/16/07*	3,565.58	-	29.18	0.00	3536.40
MW - 2	*02/26/08*	3,565.58	-	29.33	0.00	3536.25
MW - 2	*05/07/08*	3,565.58	-	29.37	0.00	3536.21
MW - 2	*08/27/08*	3,565.58	-	29.40	0.00	3536.18
MW - 2	*11/22/08*	3,565.58	-	29.19	0.00	3536.39
MW - 3	*01/04/07*	3,567.44	-	30.30	0.00	3537.14
MW - 3	*02/19/07*	3,567.44	-	30.36	0.00	3537.08
MW - 3	*05/07/07*	3,567.44	-	30.32	0.00	3537.12
MW - 3	*08/08/07*	3,567.44	-	30.33	0.00	3537.11
MW - 3	*11/16/07*	3,567.44	-	30.42	0.00	3537.02
MW - 3	*02/26/08*	3,567.44	-	30.39	0.00	3537.05
MW - 3	*05/07/08*	3,567.44	-	30.39	0.00	3537.05
MW - 3	*08/27/08*	3,567.44	-	30.40	0.00	3537.04
MW - 3	*11/22/08*	3,567.44	-	30.40	0.00	3537.04
MW - 3	12/16/08	3,567.44	-	30.14	0.00	3537.30
MW - 4	*01/04/07*	3,567.27	-	30.88	0.00	3536.39
MW - 4	*02/19/07*	3,567.27	-	30.13	0.00	3537.14
MW - 4	*05/07/07*	3,567.27	-	30.15	0.00	3537.12
MW - 4	*08/08/07*	3,567.27	-	30.19	0.00	3537.08
MW - 4	*11/16/07*	3,567.27	-	30.19	0.00	3537.08
MW - 4	*02/26/08*	3,567.27	-	30.21	0.00	3537.06
MW - 4	*05/06/08*	3,567.27	-	30.21	0.00	3537.06
MW - 4	*08/27/08*	3,567.27	-	30.27	0.00	3537.00
MW - 4	*11/22/08*	3,567.27	-	30.20	0.00	3537.07
RW - 1	*01/04/07*	3,566.48	-	29.29	0.00	3537.19
RW - 1	*02/19/07*	3,566.48	-	29.38	0.00	3537.10
RW - 1	*05/07/07*	3,566.48	-	29.32	0.00	3537.16
RW - 1	*08/08/07*	3,566.48	-	29.41	0.00	3537.07

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PLAINS MARKETING, L.P.
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WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
RW - 1	*11/16/07*	3,566.48	-	29.43	0.00	3537.05
RW - 1	*02/26/08*	3,566.48	-	29.42	0.00	3537.06
RW - 1	*05/07/08*	3,566.48	-	29.43	0.00	3537.05
RW - 1	*08/27/08*	3,566.48	-	29.48	0.00	3537.00
RW - 1	*11/22/08*	3,566.48	-	29.42	0.00	3537.06
RW - 2	*01/04/07*	3,566.09	-	29.06	0.00	3537.03
RW - 2	*02/19/07*	3,566.09	-	29.14	0.00	3536.95
RW - 2	*05/07/07*	3,566.09	-	29.19	0.00	3536.90
RW - 2	*08/08/07*	3,566.09	-	29.28	0.00	3536.81
RW - 2	*11/16/07*	3,566.09	-	29.30	0.00	3536.79
RW - 2	*02/26/08*	3,566.09	-	29.44	0.00	3536.65
RW - 2	*05/07/08*	3,566.09	-	29.42	0.00	3536.67
RW - 2	*08/27/08*	3,566.09	-	29.51	0.00	3536.58
RW - 2	*11/22/08*	3,566.09	-	29.36	0.00	3536.73

Elevations based on the 1929 North American Vertical Datum.

** Complete Historical Tables are provided on the attached CD.*

TABLE 2

CONCENTRATIONS OF BTEX IN GROUNDWATER - 2007 / 2008

PLAINS MARKETING, L.P.
MONUMENT BARBER 10" SOUR
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER R1-0338

Results are reported in mg/L.

SAMPLE LOCATION	SAMPLE DATE	Method: SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD Regulatory Limit		0.01	0.75	0.75	Total XYLENES 0.62	
MW - 1	01/04/07	<0.001	<0.001	<0.001	<0.001	
MW - 1	02/19/07	<0.001	<0.001	<0.001	<0.001	
MW - 1	05/07/07	<0.001	<0.001	<0.001	<0.001	
MW - 1	08/08/07	<0.001	<0.001	<0.001	<0.001	
MW - 1	11/16/07	<0.001	<0.001	<0.001	<0.001	
MW - 1	02/26/08	<0.001	<0.001	<0.001	<0.001	
MW - 1	05/07/08	<0.001	<0.001	<0.001	<0.001	
MW - 1	08/27/08	<0.001	<0.001	<0.001	<0.001	
MW - 1	11/22/08	<0.001	<0.001	<0.001	<0.001	
MW - 2	01/04/07	<0.001	<0.001	<0.001	<0.001	
MW - 2	02/19/07	<0.001	<0.001	<0.001	<0.001	
MW - 2	05/07/07	<0.001	<0.001	<0.001	<0.001	
MW - 2	08/08/07	<0.001	<0.001	<0.001	<0.001	
MW - 2	11/16/07	<0.001	<0.001	<0.001	<0.001	
MW - 2	02/26/08	<0.001	<0.001	<0.001	<0.001	
MW - 2	05/07/08	<0.001	<0.001	<0.001	<0.001	
MW - 2	08/27/08	<0.001	<0.001	<0.001	<0.001	
MW - 2	11/22/08	<0.001	<0.001	<0.001	<0.001	
MW - 3	01/04/07	<0.001	<0.001	<0.001	0.004	
MW - 3	02/19/07	<0.001	<0.001	<0.001	0.005	
MW - 3	05/07/07	<0.001	<0.001	<0.001	0.005	
MW - 3	08/08/07	<0.001	<0.001	<0.001	<0.001	
MW - 3	11/16/07	0.001	<0.001	<0.001	0.0031	
MW - 3	02/26/08	<0.001	<0.001	<0.001	0.0015	
MW - 3	05/07/08	0.0029	<0.001	<0.001	<0.001	
MW - 3	08/27/08	0.0025	<0.001	<0.001	<0.001	
MW - 3	11/22/08	<0.001	<0.001	<0.001	<0.001	
MW - 4	01/04/07	<0.001	<0.001	<0.001	<0.001	
MW - 4	02/19/07	<0.001	<0.001	<0.001	<0.001	
MW - 4	05/07/07	<0.001	<0.001	<0.001	<0.001	
MW - 4	08/08/07	<0.001	<0.001	<0.001	<0.001	
MW - 4	11/16/07	<0.001	<0.001	<0.001	<0.001	
MW - 4	02/26/08	<0.001	<0.001	<0.001	<0.001	
MW - 4	05/07/08	<0.001	<0.001	<0.001	<0.001	
MW - 4	08/27/08	<0.001	<0.001	<0.001	<0.001	
MW - 4	11/22/08	<0.001	<0.001	<0.001	<0.001	
RW - 1	01/04/07	<0.001	<0.001	<0.001	0.002	
RW - 1	02/19/07	<0.001	<0.001	<0.001	<0.001	

TABLE 2

CONCENTRATIONS OF BTEX IN GROUNDWATER - 2007 / 2008

PLAINS MARKETING, L.P.
MONUMENT BARBER 10" SOUR
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER R1-0338

Results are reported in mg/L.

SAMPLE LOCATION	SAMPLE DATE	Method: SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD Regulatory Limit		0.01	0.75	0.75	Total XYLENES 0.62	
RW - 1	05/07/07	<0.001	<0.001	<0.001	<0.001	
RW - 1	08/08/07	<0.001	<0.001	<0.001	<0.001	
RW - 1	11/16/07	<0.001	<0.001	<0.001	<0.001	
RW - 1	02/26/08	<0.001	<0.001	<0.001	<0.001	
RW - 1	05/07/08	<0.001	<0.001	<0.001	<0.001	
RW - 1	08/27/08	<0.001	<0.001	<0.001	<0.001	
RW - 1	11/22/08	<0.001	<0.001	<0.001	<0.001	
RW - 2	01/04/07	0.003	<0.001	<0.001	0.003	
RW - 2	02/19/07	<0.001	<0.001	<0.001	0.001	
RW - 2	05/07/07	<0.001	<0.001	<0.001	0.001	
RW - 2	08/08/07	<0.001	<0.001	<0.001	0.001	
RW - 2	11/16/07	<0.005	<0.005	<0.005	<0.005	
RW - 2	02/26/08	<0.001	<0.001	<0.001	<0.001	
RW - 2	05/07/08	<0.001	<0.001	<0.001	<0.001	
RW - 2	08/27/08	<0.001	<0.001	<0.001	<0.001	
RW - 2	11/20/08	<0.001	<0.001	<0.001	<0.001	

** Complete Historical Tables are provided on the attached CD.*

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER - 2008

PLAINS MARKETING, L.P.
MONUMENT BARBER 10" SOUR
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER R1-0338

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW846-8270C, 3510																	
		Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		—	—	—	0.0001 mg/L	0.0007 mg/L	0.0002 mg/L	—	0.0002 mg/L	0.0002 mg/L	0.0003 mg/L	—	—	0.0004 mg/L	0.03 mg/L	—	—	0.03 mg/L		—
MW-1	11/22/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185
MW-2	11/22/08	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186
MW-3	11/22/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.00124	<0.000183	0.000404	0.000686	<0.000183	0.00146	0.000481	0.000923
MW-4	11/22/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
RW-1	11/22/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.000587	<0.000184	0.000864
RW-2	11/22/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.000372	<0.000183	0.000633

Appendices

Appendix A
Release Notification and Corrective Action
(Form C-141)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-141
Revised March 17, 1999

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	Contact
EOTT Energy Pipeline Limited Partnership	Glenn Waldrop
Address	Telephone No.
P.O. Box 1660, Midland, TX 79702	915/684-3453
Facility Name	Facility Type
Monument 10" Sour (6")	Pipeline

Surface Owner	Mineral Owner	Lease No.
Barber Estate		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	32	19S	37E					Lea

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Sour Crude Oil	1,600 bbls	1,350 bbls
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Pipeline valve flange.	August 8, 2000	August 8, 2000 at 10 AM
Was Immediate Notice Given? ☑ Yes ☐ No ☐ Not Required	If YES, To Whom?	
	Donna Williams – NMOCD, Hobbs District Office	
By Whom?	Date and Hour	
Wayne Brunette	August 8, 2000	
Was a Watercourse Reached? ☐ Yes ☑ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Poly weld broke on the west end of valve flange. Released oil was contained in a bell hole and ditch. Bellhole (35'x45'x10'deep) filled to top and oil flowed into a ditch 100 yards long. Oil was recovered with a vacuum truck.

Describe Area Affected and Cleanup Action Taken.*
Heavily impacted soil, from the ditch only, was excavated and hauled to a landfarm for treatment. Soils in the bellhole could not be excavated due to the presence of pipelines. ETGI has begun delineating the site and will prepare a remediation workplan.

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: Glenn Waldrop

Printed Name: Glenn Waldrop

Title: District Manager

Date: 8/17/00 Phone: 915/684-3453

OIL CONSERVATION DIVISION

Approved by District Supervisor:

Approval Date: Expiration Date:

Conditions of Approval: Attached ☐

Attach Additional Sheets If Necessary

Monument Barber
Monument 10" Sour