1R - 0463

REPORTS

DATE:

2006

1R0463
Report
2006

PLAINS
ALL AMERICAN

March 29, 2007

Mr. Ben Stone
New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Plains All American – Annual Monitoring Report
2 Sites in Lea County, New Mexico

Dear Mr. Stone:

Plains All American is an operator of crude oil pipelines and terminal facilities in the state of New Mexico. Plains All American actively monitors certain historical release sites exhibiting groundwater impacts, consistent with assessments and work plans developed in consultation with the New Mexico Oil Conservation Division (NMOCD). In accordance with the rules and regulations of the NMOCD, Plains All American hereby submits our Annual Monitoring reports for the following sites:

DS Hugh Gathering 1R-0463	Section 26, Township 21 South, Range 37 East, Lea County
Vacuum to Jal Mainline #3 1R-0455	Section 35, Township 21 South, Range 37 East, Lea County

Premier prepared this document and has vouched for its accuracy and completeness, and Plains All American has reviewed the document and interviewed Premier in order to verify the accuracy and completeness of this document. It is based upon these inquiries and reviews that Plains All American submits the enclosed Annual Monitoring Report for the above facility.

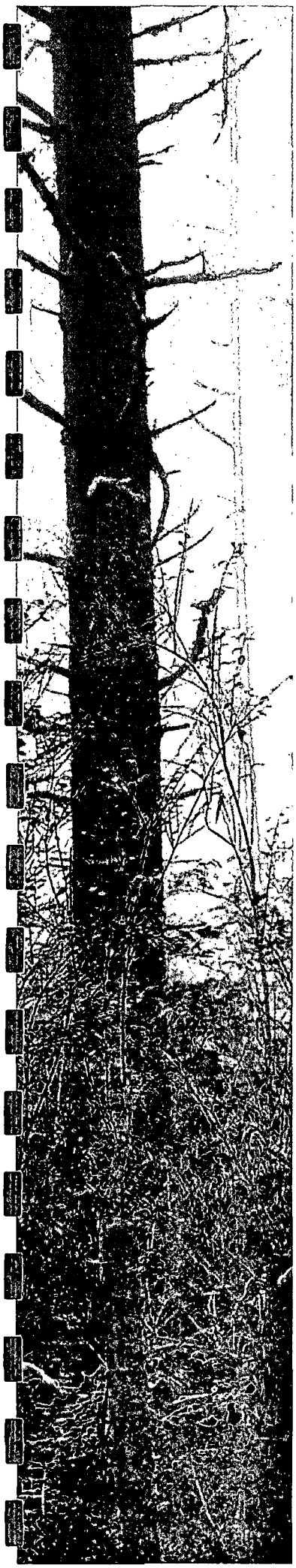
If you have any questions or require further information, please contact me at (432) 557-5865.

Sincerely,

Daniel Bryant
Environmental Specialist
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures



IR0463

Report
2006

2006 ANNUAL REPORT
DS HUGH
PLAINS SRS NO.: 2000-10807
UL-A, SECTION 26, T21S, R37E
Lea County, New Mexico
NMOCD No. IR-0463

PREPARED FOR

PLAINS MARKETING, L.P.

333 CLAY STREET, SUITE 1600
HOUSTON, TEXAS 77002

PREPARED BY

PREMIER ENVIRONMENTAL SERVICES, INC
4800 SUGAR GROVE BLVD., SUITE 420
STAFFORD, TEXAS 77477
281.240.5200

Project No. 205071.00

March 2007

Chan Patel
Senior Project Manager

TABLE OF CONTENTS

DISCLAIMER

Premier has examined and relied upon the file information provided by Plains and Environmental Plus, Inc. (EPI). Premier has not conducted an independent examination of the information contained in the Plains files; furthermore, we assume the genuineness of the documents reviewed and that the information provided in these documents to be true and accurate. Premier has prepared this report using the level of care and professionalism in the industry for similar projects under similar conditions. Premier will not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time this report was prepared. Premier believes the conclusions stated herein are factual, but no guarantee is made or implied.

EXECUTIVE SUMMARY

On November 10, 2000, a 20 barrel release of crude oil occurred from a 4" steel pipeline at the DS Hugh 4" Gathering line Site (Site), EMS No. 2000-10807. This pipeline was formerly owned by EOTT Energy, LLC (EOTT) and is currently owned by Plains Marketing, L.P. (Plains). The Site is located in T21S, R37E, Section 26 of Lea County, New Mexico, approximately 2 miles east of Eunice, New Mexico (Figure 1, Appendix A) or more specifically at latitude 32° 26' 48" N and longitude 103 ° 08' 07" W (Figure 1, Appendix A). Approximately 5 barrels of product were reported as recovered. Reportedly, the impacted area was approximately 200 feet by 15 feet, and product flowed within the pipeline right of way. The leak was repaired and impacted soil was removed and temporarily placed on a plastic liner. A site visit was made by Premier personnel in April 2005. Details can be found in the 2005 Annual Report. Site investigations continued in 2005 and 2006, and are briefly described below.

Site delineation in 2005 included installing five soil borings and collecting soil samples within and adjacent to the flow path of the release. New Mexico Oil Conservation Division (NMOCD) criteria for Total Petroleum Hydrocarbons (TPH), Benzene, Toluene, Ethyl Benzene, and Total Xylenes (BTEX) in soil were exceeded in only two samples. Based on September 2005 findings, and the surface expression of the release, three groundwater monitor wells (MW-1 through MW-3) were installed in December 2005, and soil and groundwater samples collected. TPH concentrations in soil from monitor well MW-1 were above 100 mg/kg down to the first water bearing zone at a depth of 45 feet bgs, and only at 45 ft bgs in monitor well MW-2. There was no soil impact noted at monitor well MW-3, the background monitor well. Groundwater analytical results from monitor wells MW-2 and MW-3 showed BTEX concentrations below NMOCD guidelines. A phase-separated hydrocarbon (PSH) sheen was observed in monitor well MW-1 and was addressed by placing an absorbent sock in the well and changing it bi-weekly.

Soil and groundwater delineation continued through 2006 with a groundwater investigation in March, and additional soil and groundwater investigation in May. A Remediation Plan was submitted to and approved conditionally by the NMOCD in May 2006. The remediation plan was implemented in October 2006 and a closure report submitted in March 2007. These activities are briefly described below; details can be found in the following reports:

- April 13, 2006 Groundwater Delineation Investigation – March 2006 (letter report to Plains)
- May 2006 Remediation Plan
- June 6, 2006 Soil Investigation Results (letter report to Plains)
- March 2007 *Soil Closure Report.*

Figures may be found in Appendix A. Groundwater gauging data for 2006 can be found on Table 1, Appendix B. Analytical results for 2006 are summarized on Table 2, Appendix B. Analytical reports can be found in Appendix C.

During the 1st quarter 2006, the sheen observed in monitor well MW-1 resulted in additional monitor wells being installed to the southeast (MW-4; downgradient) and east (MW-5; cross-gradient), of monitor well MW-1. Soil samples were collected from each borehole and analyzed for TPH, Diesel Range Organics (DRO), Gasoline Range Organics (GRO), and for BTEX. Laboratory results from monitor wells MW-4 and MW-5 soil samples are below NMOCD cleanup guidelines for this Site. Details regarding these results can be found in the April 13, 2006 ***Groundwater Delineation Investigation Results*** letter report. Only benzene was detected in groundwater from monitor well MW-4 at 0.2 mg/l. Toluene and ethylbenzene were below the NMOCD groundwater guidelines. Removal of hydrocarbons from monitor well MW-1 continued using an absorbent sock.

During 2nd quarter 2006, soil borings were installed along the perimeter of the hydrocarbon release flow path (SB-6 through SB-11, Figure 2, Appendix A) as part of the NMOCD approved remediation plan (May 31, 2006 letter). The soil results were below the NMOCD remediation goal of 100 mg/kg. Analytical data from the May 2006 investigation completed delineation of hydrocarbon impact in soil. Monitor wells MW-6 and MW-7 were installed in June to delineate potential dissolved phase hydrocarbons to the south and east of monitor well MW-4. Groundwater samples were collected from all wells except monitor well MW-1 due to sheen. Only benzene was detected in groundwater from monitor well MW-4 at a concentration of 0.41 mg/l, above the 0.01 mg/l standard. There were no other NMOCD groundwater exceedances.

During the 3rd quarter 2006, biweekly gauging/product recovery, and quarterly sampling and analysis of groundwater from monitor wells MW-2 through MW-7 continued. Sheen was continuously observed in monitoring well MW-1 and hydrocarbon was recovered throughout the quarter using absorbent socks. Measurable amounts of PSH were not observed in other on-site monitoring wells. Benzene was detected in groundwater from monitor wells MW-4 and MW-7 located southeast, and hydraulically downgradient of monitor well MW-1 (Table 2, Appendix B). Benzene concentrations in both monitor wells increased compared to previous results, and exceeded the NMOCD remediation criteria of 0.010 mg/l.

Implementation of the May 2006 *Remedial Plan* was initiated during the 4th quarter (October) 2006, in accordance with the Remediation Plan approved by the NMOCD in May 2006. Excavation was initiated in the central portion of the flow path, based on surface expression of hydrocarbon staining and expanded into the two areas where PSH had pooled. Confirmation soil samples verified that excavation of impacted material was complete and a liner was placed at the base of the excavation. Prior to placing the liner, a high central area was graded to create an outward slope for drainage at the base of the excavation. Approximately 1,116 cubic yards of soil was transported to Lea Station land farm for off-site treatment and the remaining 2,684 cubic yards of soil was treated and/or blended on site Composite soil samples collected from the on-site treated soil verify that chemicals of concern (COC) concentrations met remediation goals for use as backfill above the liner. Sidewall soil samples met remediation criteria associated with the site ranking score

and the treated soil met the risk based NMOCD cleanup criteria for soil established for this Site, based on 2006 data.

Biweekly gauging, and sampling and analysis of groundwater from monitor wells MW-2 through MW-7 continued through the 4th quarter 2006. Groundwater analyses from monitor wells MW-2 through MW-7 showed that benzene and xylene concentrations exceeded NMOCD criteria in groundwater from monitor well MW-4. Benzene was also detected in monitor well MW-7, at the NMOCD criteria of 0.011 mg/L, reduced from the 3rd quarter results of 0.0163 mg/L. Monitor well MW-1 was not sampled due to sheen, and hydrocarbon recovery continued using an absorbent sock.

The groundwater flow during 2006 was consistently to the southeast at an approximate gradient across the site of 0.0032 to 0.0037 feet/feet as measured between specified monitoring wells (Figures 3a-3d, Appendix A).

1.0 INTRODUCTION AND SITE HISTORY

Premier Environmental Services, Inc. (Premier) was retained by Plains Marketing, L.P. (Plains) to complete a Site Investigation at the D.S. Hugh Gathering 4" Site (Site) (EMS Nos. 2000-10807).

The leak that occurred at the Site on November 10, 2000, was apparently caused by corrosion of this pipeline. The Site is located in T21S, R37E, Section 26 of Lea County, New Mexico, approximately 2 miles east of Eunice, New Mexico (Figure 1, Appendix A). At the time of the release, the pipeline was owned by EOTT, Inc. The pipeline is now owned by Plains Marketing, L.P. (Plains). The release was reported by EOTT to Ms. Donna Williams at the New Mexico Oil Conservation Division (NMOCD) on November 10, 2000 at 2:25 p.m. Approximately 5 barrels of product was reported as recovered.

The leak was repaired and impacted soil was removed and temporarily placed on a plastic liner. Delineation was completed at the Site in 2005 and 2006 through the collection of soil and groundwater samples from soil borings and groundwater monitor wells. Soil remediation was completed in 2006 based on an NMOCD approved work plan, and documented in the March 2007 ***Soil Closure Report.***

2.0 2006 Activities

Soil and groundwater delineation continued through 2006 with a groundwater investigation in March, and an additional soil and groundwater investigation in May. A Remediation Plan was submitted to and approved with conditions by the NMOCD in May 2006. The remediation plan was implemented in October 2006 and a closure report submitted in March 2007. These activities are briefly described below; details can be found in the following reports:

- April 13, 2006 Groundwater Delineation Investigation – March 2006 (letter report to Plains)
- May 2006 Remediation Plan
- June 6, 2006 Soil Investigation Results (letter report to Plains)
- March 2007 *Soil Closure Report.*

2.1 March 2006 Investigation - (April 13, 2006 Groundwater Delineation Investigation Report)

Because of sheen observed in monitor well MW-1, monitor well MW-4 was installed to the southeast (downgradient) and monitor well MW-5 was installed to the east, southeast of monitor wells MW-1 (cross gradient). Both wells were installed to a depth approximately ten feet below the first groundwater bearing unit contact (55 feet bgs). A southeast hydraulic gradient of 0.0035 ft/ft was calculated between monitor wells MW-3 and MW-4, based on site groundwater data. Groundwater gauging data can be found on Table 1, Appendix B.

Three soil samples were collected from each borehole based on OVM readings, first groundwater bearing unit depth and odor. These samples were analyzed for TPH, DRO and GRO, and for BTEX.

Laboratory results for soil samples collected from the borings associated with monitor wells MW-4 and MW-5 are below NMOCD cleanup guidelines for this Site. Details regarding these results can be found in the April 13, 2006 ***Groundwater Delineation Investigation Results*** letter report.

Concentrations of benzene, toluene, ethylbenzene, and xylene in groundwater samples from monitor wells MW-2, MW-3 and MW-5 were below method detection limits. Benzene was detected in groundwater from monitor well MW-4 at 0.2 mg/l. Concentrations of toluene and ethylbenzene in the groundwater sample from monitor well MW-4 were below the NMOCD groundwater guidelines. Analytical results are summarized on Table 1, Appendix B. Analytical reports can be found in Appendix C.

To delineate potential dissolved phase hydrocarbons to the southeast and east, monitor wells MW-6 and MW-7 were installed east and directly southeast of monitor well MW-4, respectively during the 2nd quarter of 2006. Removal of hydrocarbons from monitor well MW-1 continued, using an absorbent sock.

2.2 2nd Quarter 2006 (June 2006 Soil Investigation Results)

As requested by NMOCD as part of the remediation plan (May 31, 2006 letter), six additional borings and two groundwater wells were installed. In May 2006, soil borings were installed to a depth of 15 feet bgs (SB-6 through SB-11) on the flow path perimeter (Figure 2, Appendix A). Soil boring depths were based on discussions with Mr. Ed Martin (NMOCD) during an April 2006 on-site meeting. Laboratory results showed that TPH and BTEX concentrations were below laboratory detection limits for all soil samples with the exception of soil sample MW6-20' (27.0 mg/kg TPH DRO). The detected concentration of TPH-DRO is below the NMOCD remediation goal of 100 mg/kg. Analytical data from the May 2006 investigation completed delineation of hydrocarbon impact in soil.

Monitor wells MW-6 and MW-7 were installed in positions to delineate potential dissolved phase hydrocarbons to the south and east of monitor well MW-4. The hydraulic gradient as measured between monitor wells MW-3 and MW-7 was 0.0033 feet/foot, with flow to the southeast. Groundwater gauging data can be found on Table 1, Appendix B.

Groundwater was sampled on June 15, 2006 from monitor wells MW-6 and MW-7, as well as monitor wells MW-2 through MW-5. Monitor well MW-1 was not sampled due to sheen. The only constituent detected above the NMOCD standard was in groundwater from monitor well MW-4. Benzene was detected at a concentration of 0.41 mg/l, above the 0.01 mg/l standard. Analytical results are summarized on Table 2, Appendix B. Analytical reports can be found in Appendix C.

2.3 3rd Quarter 2006

In September 2006, (3rd quarter) biweekly gauging/product recovery, and quarterly sampling and analysis of groundwater from monitor wells MW-2 through MW-7 were completed.

The biweekly gauging data showed minimal fluctuation in groundwater elevations during this period. The groundwater flow is to the southeast at an approximate gradient across the site of 0.0032 feet/feet as measured between monitor wells MW-3 and MW-7 (September 12, 2006, Figure 3c, Appendix A). The groundwater gradient and flow direction during the 3rd quarter are consistent with measurements collected during 2005 and earlier 2006. Groundwater gauging data is found on Table 1, Appendix B. Sheen was observed in monitor well MW-1; PSH was recovered throughout the quarter using absorbent socks. Measurable amounts of PSH were not observed in other on-site monitoring wells.

Benzene was detected in groundwater from monitor wells MW-4 and MW-7 located southeast, and hydraulically downgradient of monitor well MW-1 (Table 2, Appendix B). Benzene concentrations in both monitoring wells increased compared to previous results, and exceeded the NMOCD remediation criteria of 0.010 mg/l. Analytical results are summarized on Table 2, Appendix B. Analytical reports are in Appendix C.

2.4 4th Quarter 2006

The Remediation Plan mentioned previously was implemented and completed during the 4th Quarter, in October 2006, and is briefly described below.

Soil Remediation

Details of soil remediation completed in 2006 may be found in the March 2007 ***Soil Closure Report.*** Implementation of the May 2006 *Remedial Plan* was initiated in October 2006, in accordance with the Remediation Plan approved by the NMOCD in May 2006. Excavation was initiated in the central portion of the flow path, based on surface expression of hydrocarbon staining. The total estimated volume of excavated soil was approximately 3,800 cubic yards. The excavation limits are depicted on Figure 4, Appendix A. Approximately 1,116 cubic yards of soil was transported to Lea Station land farm for off-site treatment and the remaining 2,684 cubic yards of soil was treated and/or blended on site. Sidewall soil confirmation samples were collected and verified that excavation of impacted material was complete and results were below NMOCD cleanup standards.

Soil was graded with a high central area, creating an outward slope for drainage, after which a liner was placed at the base of the excavation. Composite soil samples collected from the on-site treated soil verify that COC concentrations met remediation goals for use as backfill. Backfill was placed above the liner and used for site grade. If required, the surface vegetation will be restored by reseeding in late spring or early summer of 2007.

The risk based NMOCD cleanup criteria for soil established for this Site have been met, based on 2006 data. It was recommended in the March 2007 ***Soil Closure Report*** that Plains request regulatory approval for closure of soil issues at this Site, and request a "No Further Action required for soil remediation" letter from the NMOCD.

Groundwater Gauging and Sampling

In December 2006, (4th quarter) biweekly gauging/product recovery, and quarterly sampling and analysis of groundwater from monitor wells MW-2 through MW-7 were completed. The biweekly gauging data showed minimal fluctuation in groundwater elevations during this period. The groundwater flow is to the southeast at an approximate gradient across the site of 0.0037 feet/feet as measured between monitor wells MW-3 and MW-7 (December 6, 2006, Figure 3d, Appendix A). This is consistent with previous quarters. Groundwater gauging data can be found on Table 1, Appendix B.

Groundwater was sampled on December 6, 2006 from monitor wells MW-2 through MW-7. Monitor well MW-1 was not sampled due to sheen. Benzene and xylenes were detected in groundwater from monitor well MW-4 in excess of the NMOCD 0.01 mg/l benzene and the 0.620 mg/l xylene standards. Benzene was also detected in monitor well MW-7, at the NMOCD criteria of 0.011 mg/L, reduced from the 3rd quarter results of 0.0163 mg/L. Analytical results are summarized on Table 2, Appendix B. Analytical reports can be found in Appendix C.

During 2006, there was slightly over 1 gallon of PSH recovered from the site. Additional water volume was recovered to capture dissolved phase hydrocarbons associated with PSH.

2.5 2007 Planned Activities

Ongoing groundwater monitoring and sampling, along with PSH recovery from monitor well MW-1, will continue in 2007. The dissolved phase plume in the groundwater will be closely monitored through the groundwater sampling events planned in 2007. Should concentrations of benzene continue to increase in monitor well MW-7 during the next two quarters, it is suggested that an additional downgradient monitor well be installed to monitor dissolved phase benzene in groundwater.

3.0 CONCLUSIONS

During 2006, biweekly gauging/product recovery, and quarterly sampling and analysis of groundwater from monitor wells MW-2 through MW-7 were completed. Monitor well MW-1 was not sampled due to sheen throughout the year. The only constituent found above the NMOCD standard was benzene, in groundwater from monitor well MW-4. Benzene was also detected in monitor well MW-7 during the 4th quarter, at the NMOCD criteria of 0.011 mg/L, reduced from the 3rd quarter results of 0.0163 mg/L.

Excavation of impacted soil, off-site treatment and on-site treatment completed soil remediation at the site. The base of the excavation was graded to facilitate drainage, and an impermeable liner placed over the graded soil. The excavated area was backfilled with treated, blended soil. The total estimated volume of excavated soil was approximately 3,800 cubic yards. Approximately 1,116 cubic yards of soil was transported for off-site treatment and the remaining 2,684 cubic yards of soil was treated and/or blended on site.

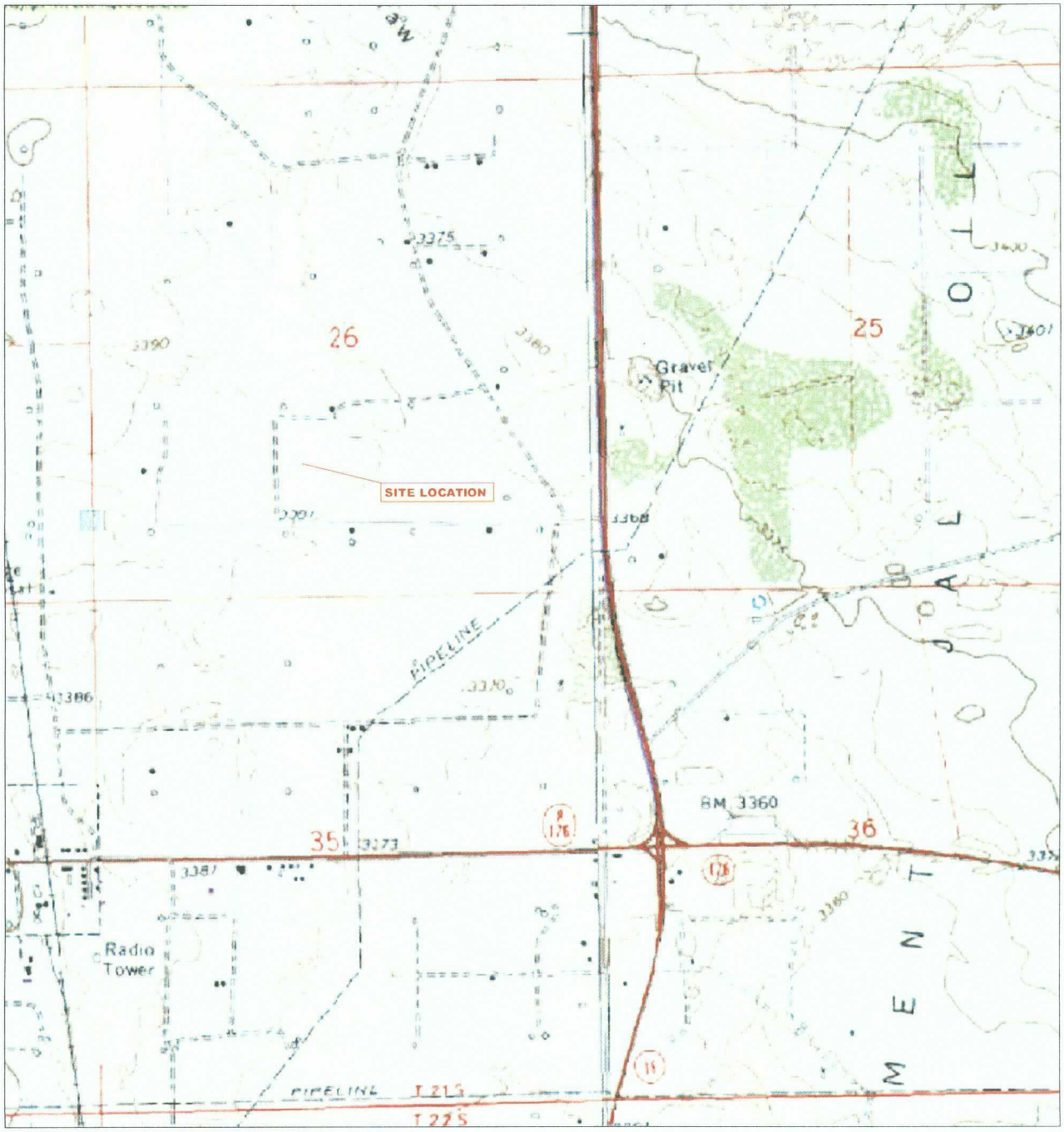
The risk based NMOCD cleanup criteria for soil established for this Site have been met, based on 2006 data. It was recommended in the March 2007 ***Soil Closure Report*** that Plains request regulatory approval for closure of soil issues at this Site, and request a "No Further Action required for soil remediation" letter from the NMOCD.

Ongoing groundwater monitoring and sampling, along with PSH recovery from monitor well MW-1, will continue in 2007. The dissolved phase plume in the groundwater will be closely monitored through the quarterly groundwater sampling events planned in 2007. Should concentrations of benzene continue to increase in monitor well MW-7 during the next two quarters, it is suggested that an additional downgradient be installed to monitor dissolved phase benzene in groundwater

Appendix A

Figures

PREMIER



Eunice Quadrangle
32°26'48"N Latitude & 103°08'07"W Longitude

1/2 1/4 0 1/4 1/2
Distance in Miles

PREMIER
ENVIRONMENTAL SERVICES, INC.

Figure 1
Site Location Map
Plains Marketing L.P.
D.S. Hugh Gathering 4" Line
SRS. No.: 2000-10807
Lea County, New Mexico

PROJ. NO: 205071.00	CK:	DATE: 2/07

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Figure 2
Site Map
Plains Marketing L.P.
D.S. Hugh Gathering 4" Line
SRS. No.: 2000-10807
Lea County, New Mexico

PROJ. NO: 205071.00	CK: WM	DATE: 2/07

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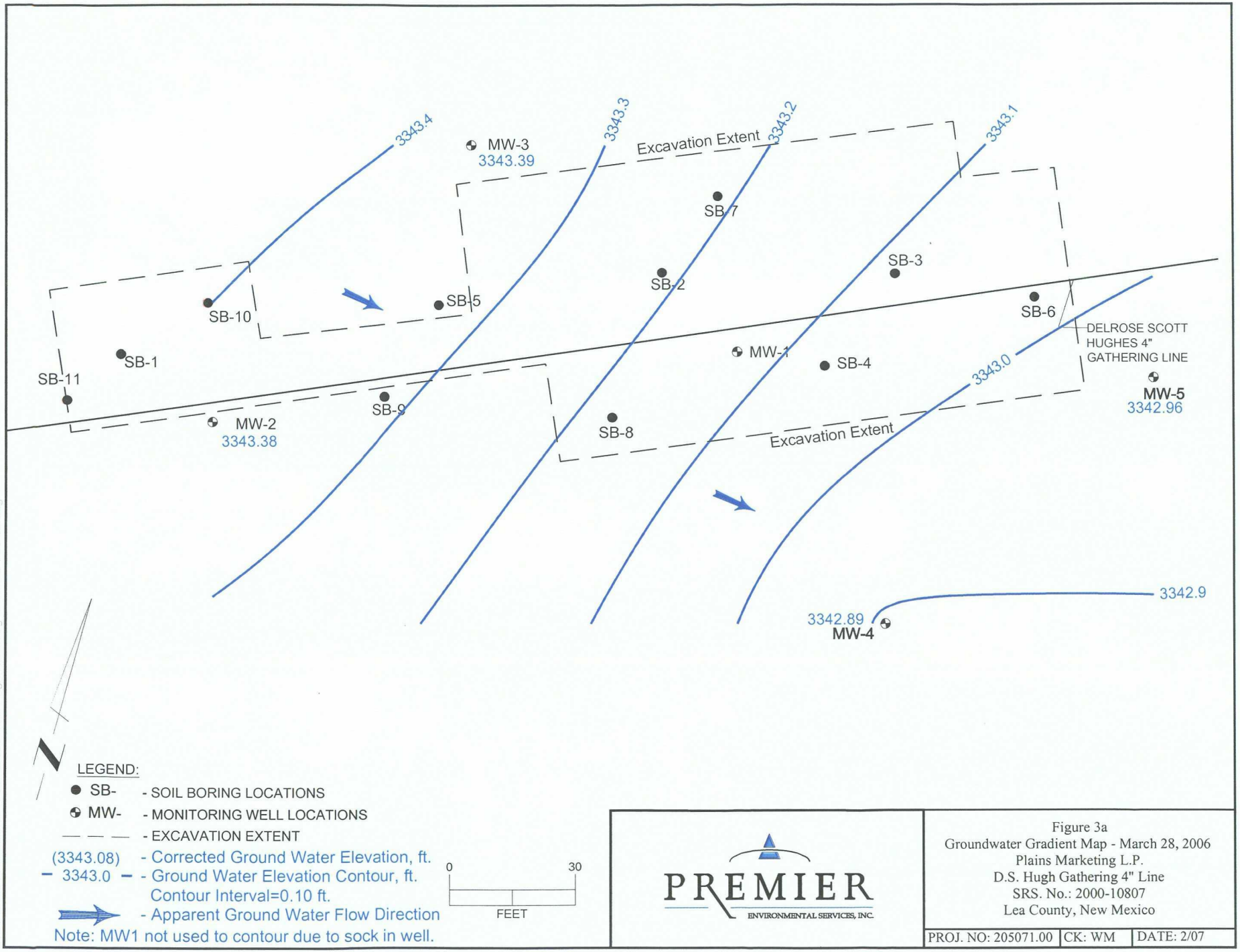

PREMIER ENVIRONMENTAL SERVICES, INC.

Figure 3a
Groundwater Gradient Map - March 28, 2006
Plains Marketing L.P.
D.S. Hugh Gathering 4" Line
SRS. No.: 2000-10807
Lea County, New Mexico

PROJ. NO: 205071.00	CK: WM	DATE: 2/07

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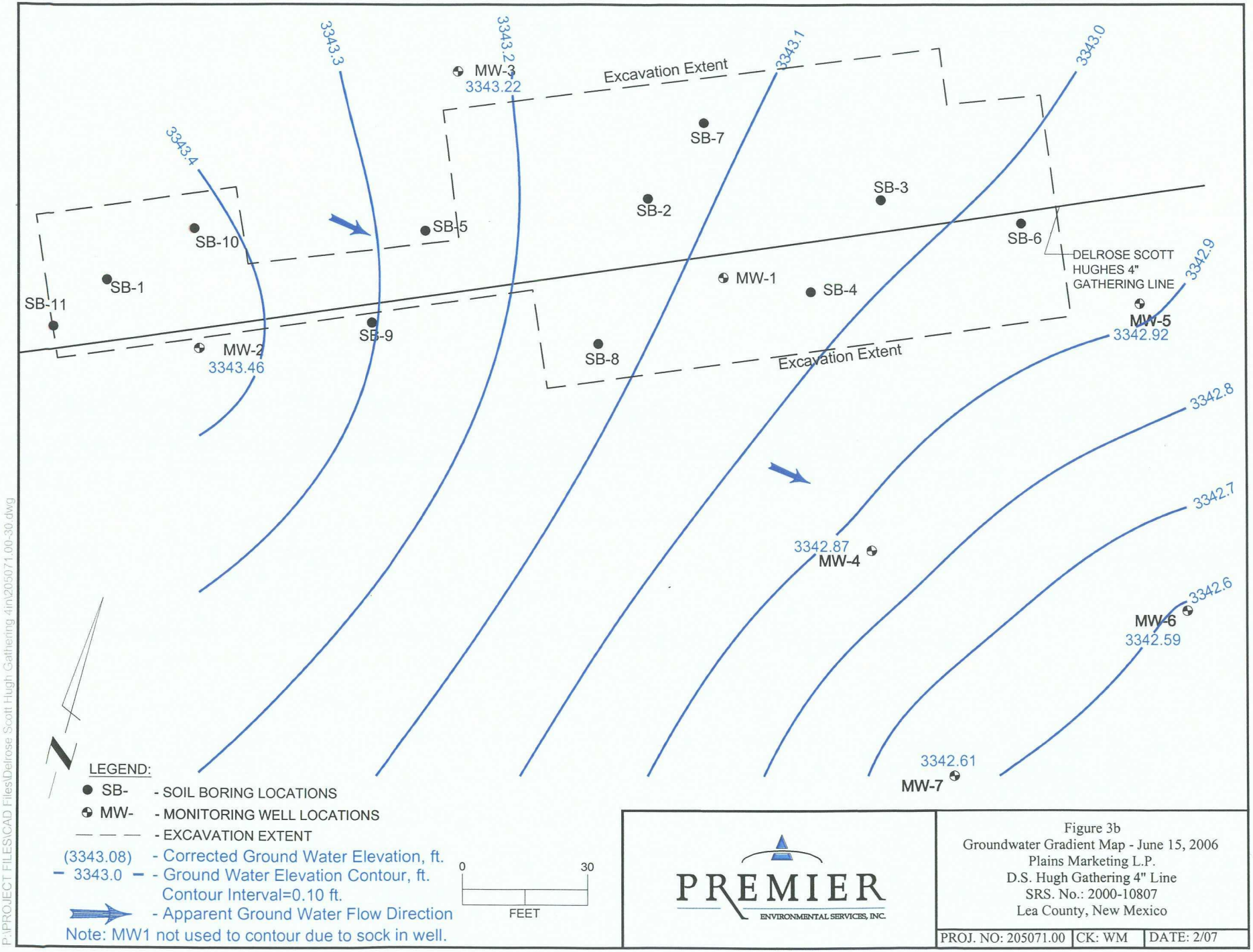
3343.3
3343.2
3343.1
3343.0
3343.4
MW-3
3343.22
Excavation Extent
SB-7
SB-3
SB-2
SB-5
SB-10
SB-6
DELROSE SCOTT
HUGHES 4"
GATHERING LINE
SB-1
SB-11
MW-1
SB-4
3342.9
MW-5
3342.92
SB-9
MW-2
3343.46
SB-8
Excavation Extent
3342.8
3342.7
3342.87
MW-4
3342.6
MW-6
3342.59
3342.61
MW-7
LEGEND:
SB- - SOIL BORING LOCATIONS
MW- - MONITORING WELL LOCATIONS
- EXCAVATION EXTENT
(3343.08) - Corrected Ground Water Elevation, ft.
3343.0 - Ground Water Elevation Contour, ft.
Contour Interval=0.10 ft.
- Apparent Ground Water Flow Direction
Note: MW1 not used to contour due to sock in well.
0
30
FEET
PREMIER
ENVIRONMENTAL SERVICES, INC.
Figure 3b
Groundwater Gradient Map - June 15, 2006
Plains Marketing L.P.
D.S. Hugh Gathering 4" Line
SRS. No.: 2000-10807
Lea County, New Mexico
PROJ. NO: 205071.00
CK: WM
DATE: 2/07
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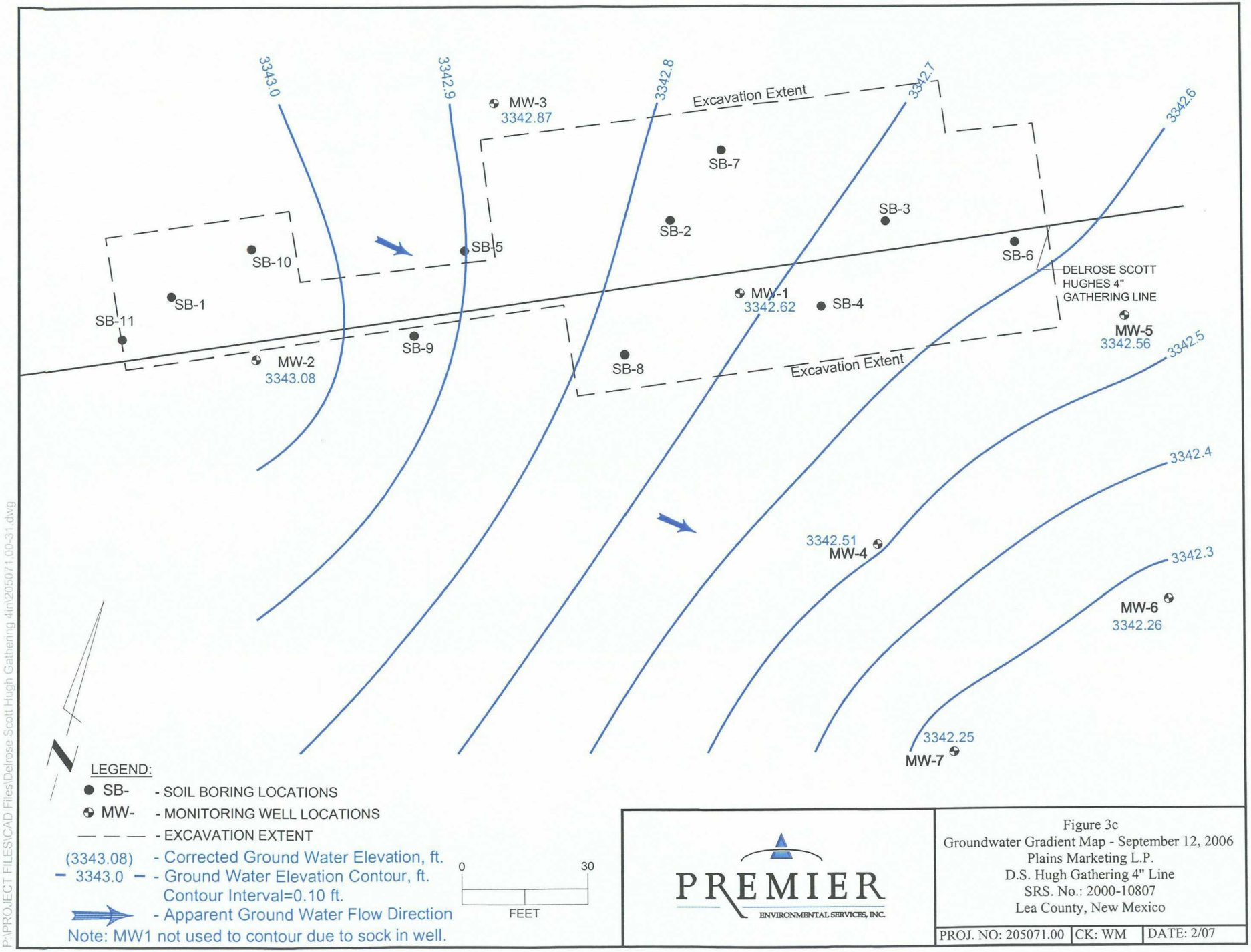
3343.0
3342.9
3342.8
3342.7
3342.6
3342.5
3342.4
3342.3
Excavation Extent
Excavation Extent
MW-3
3342.87
SB-7
SB-3
SB-2
SB-10
SB-5
SB-6
SB-1
SB-11
MW-1
3342.62
SB-4
DELROSE SCOTT
HUGHES 4"
GATHERING LINE
MW-5
3342.56
MW-2
3343.08
SB-9
SB-8
3342.51
MW-4
MW-6
3342.26
3342.25
MW-7
N
LEGEND:
SB- - SOIL BORING LOCATIONS
MW- - MONITORING WELL LOCATIONS
- - - EXCAVATION EXTENT
(3343.08) - Corrected Ground Water Elevation, ft.
3343.0 - Ground Water Elevation Contour, ft.
Contour Interval=0.10 ft.
- Apparent Ground Water Flow Direction
Note: MW1 not used to contour due to sock in well.
0
30
FEET
PREMIER
ENVIRONMENTAL SERVICES, INC.
Figure 3c
Groundwater Gradient Map - September 12, 2006
Plains Marketing L.P.
D.S. Hugh Gathering 4" Line
SRS. No.: 2000-10807
Lea County, New Mexico
PROJ. NO: 205071.00
CK: WM
DATE: 2/07
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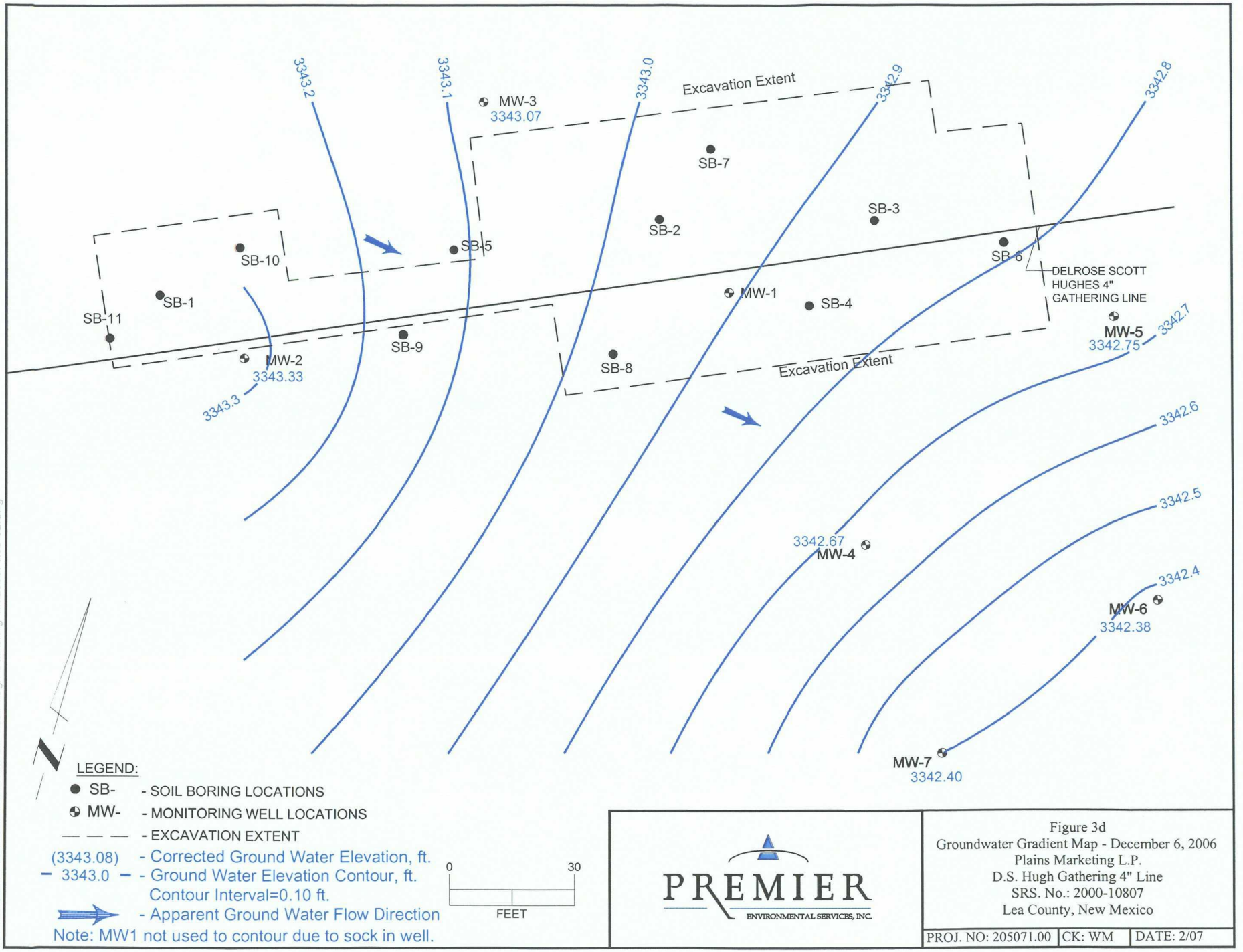

PREMIER ENVIRONMENTAL SERVICES, INC.

Figure 3d
Groundwater Gradient Map - December 6, 2006
Plains Marketing L.P.
D.S. Hugh Gathering 4" Line
SRS. No.: 2000-10807
Lea County, New Mexico

PROJ. NO: 205071.00	CK: WM	DATE: 2/07

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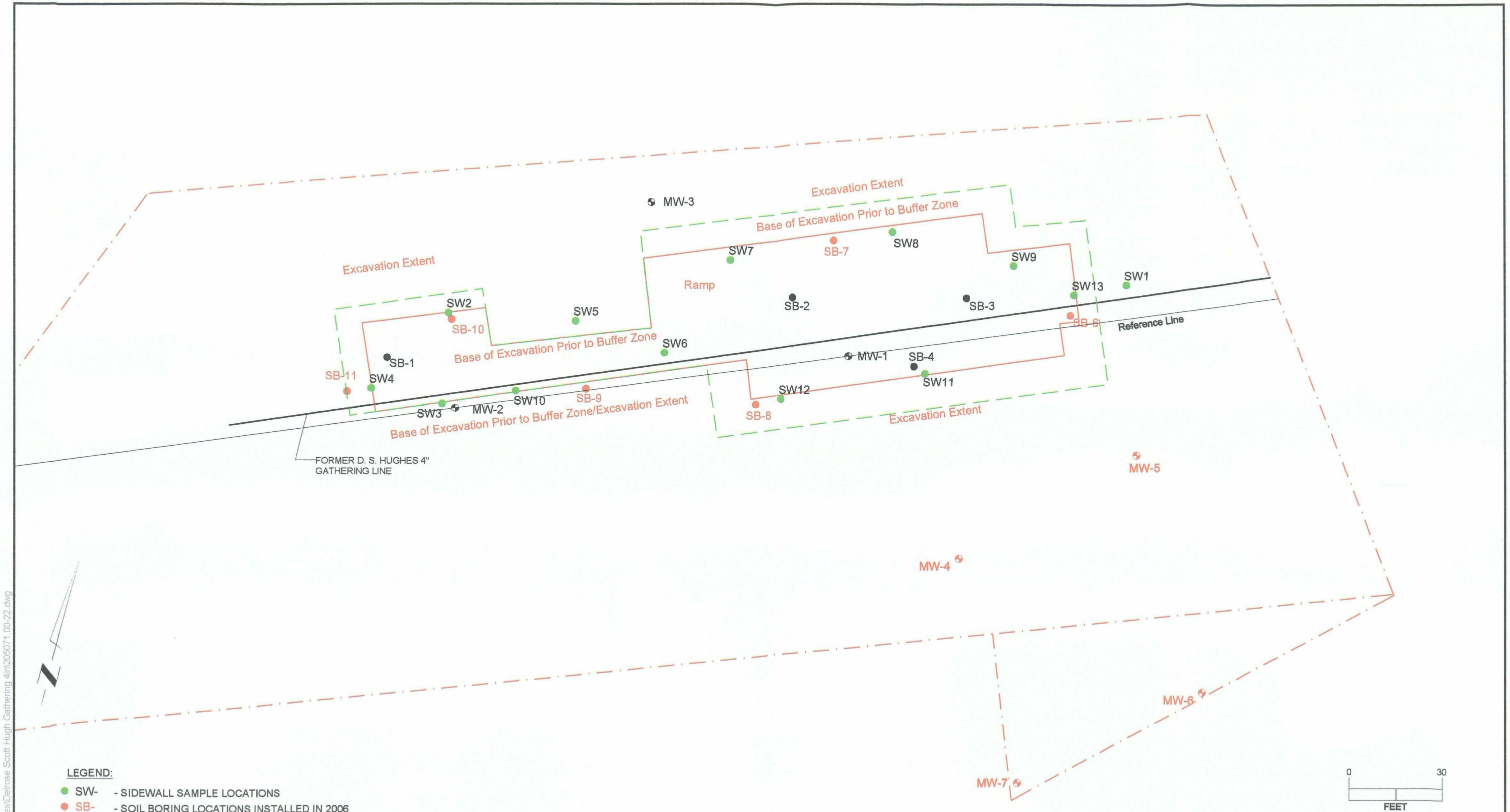

LEGEND:

- SW- - SIDEWALL SAMPLE LOCATIONS
- SB- - SOIL BORING LOCATIONS INSTALLED IN 2006
- MW- - MONITORING WELL LOCATIONS INSTALLED IN 2006
- SB- - SOIL BORING LOCATIONS INSTALLED IN 2005
- MW- - MONITORING WELL LOCATIONS INSTALLED IN 2005
- BASE OF EXCAVATION PRIOR TO BUFFER ZONE
- EXCAVATION EXTENT

NOTE: All sidewall samples distances measured with tape.

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PREMIER ENVIRONMENTAL SERVICES, INC.

Figure 4
Excavation Limits
October 2006
Plains Marketing L.P.
D.S. Hugh Gathering 4" Line
SRS. No.: 2000-10807

PROJ. NO: 205071.00	CK: WM	DATE: 2/07

Appendix B

Tables

Table 1 – 2006 Groundwater Elevation and PSH Gauging Data
Table 2 – 2006 Groundwater Analytical Results

PREMIER

Table 1
Groundwater Elevation Data
Plains Marketing, L.P.
SRS No. 2000-10807
D.S. Hugh Site
Lea County, NM

Well No.	Date Measured	TOC Elevation (Site Datum referenced by GPS)	Depth of Well	Depth to PSH	Depth to Water	PSH Thickness	Recovery Method	PSH Recovered (gallons)	Groundwater Elevation	Well volume Removed
MW-1	12/21/05	3389.00	59.82							
	12/29/05	3389.00		46.16	46.16	0.00	new sock		3342.84	
	01/05/06	3389.00		46.26	46.26	0.00	sock		3342.74	
	02/09/06	3389.00		45.05	45.05	0.00	sock		3343.95	
	02/22/06	3389.00		46.00	46.00	0.00	sock		3343.00	
	03/28/06	3389.00		45.94	45.94	0.00	Flip Sock		3343.06	
	04/13/06	3389.00		45.98	45.98	0.00	sock		3343.02	
	04/25/06	3389.00		45.93	45.93	0.00	sock		3343.07	
	05/03/06	3389.00		45.88	45.88	0.00	sock		3343.12	
	05/11/06	3389.00		45.90	45.90	0.00	sock		3343.10	
	05/24/06	3389.00		45.91	45.91	0.00	sock		3343.09	
	06/07/06	3389.00		45.97	45.97	0.00	sock	0	3343.03	Purged 5 gal
	06/07/06	3389.00		46.10	46.10	0.00	sock	After purging	3342.90	
	06/15/06	3389.00		45.92	45.92	0.00	sock		3343.08	
	06/29/06	3389.00	Light	46.05	46.05	0.00	sock		3342.95	
	07/11/06	3389.00	Light	46.06	46.06	0.00	sock		3342.94	
	07/25/06	3389.00	Light	46.11	46.11	0.00	sock		3342.89	
	08/09/06	3389.00	59.35	46.22	46.22	0.00	sock		3342.78	
	08/22/06	3389.00	Light	46.30	46.30	0.00	new sock	PSH 0 / H2O 10	3342.70	
	08/22/06	3389.00	Light	46.58	46.58	0.00			3342.42	
	09/12/06	3389.00	59.55	46.27	46.57	0.30	new sock		3342.69	
	09/19/06	3389.00		46.36	46.50	0.14		PSH .1 / H2O 9.9	3342.62	
	09/19/06	3389.00		46.73	46.73	0.00	new sock		3342.27	
	10/03/06	3389.00		46.32	46.32	0.00			3342.68	
	10/03/06	3389.00		46.48	46.48	0.00	sock	PSH 0 / H2O 10	3342.52	
	10/17/06	3389.00		46.34	46.34	0.00	Removed Sock		3342.66	
	10/31/06	3389.00		45.93	45.93	0.00	new sock		3343.07	
	11/15/06	3389.00		45.73	45.98	0.25	new sock	PSH .5/ H2O 9.5	3343.23	
	11/15/06	3389.00		45.98	45.98	0.00			3343.02	
	12/06/06	3389.00		44.55	44.80	0.25	new sock		3344.41	
	12/13/06	3389.00		44.51	44.86	0.35	new sock	PSH .5 / H2O 4.5	3344.44	
	12/13/06	3389.00		45.22	45.22	0.00			3343.78	
	12/27/06	3389.00		44.50	44.50	0.00	sock		3344.50	
MW-2	12/21/05	3388.28	59.34		45.23				3343.05	
	12/29/05	3388.28			45.15				3343.13	
	01/05/06	3388.28			45.25				3343.03	
	02/09/06	3388.28			45.02				3343.26	
	02/22/06	3388.28			45.00				3343.28	
	03/28/06	3388.28	59.33		44.90				3343.38	
	04/13/06	3388.28			44.95				3343.33	
	04/25/06	3388.28			44.93				3343.35	
	05/03/06	3388.28			44.88				3343.40	
	05/11/06	3388.38			44.96				3343.42	
	05/24/06	3388.38			44.92				3343.46	
	06/07/06	3388.38			44.91				3343.47	
	06/15/06	3388.38			44.92				3343.46	
	06/29/06	3388.38			45.02				3343.36	
	07/11/06	3388.38			45.05				3343.33	
	07/25/06	3388.38			45.13				3343.25	
	08/09/06	3388.38	59.33		45.19				3343.19	
	08/22/06	3388.38			45.27				3343.11	
	09/12/06	3388.38	59.3		45.30				3343.08	
	09/19/06	3388.38	59.3		45.33				3343.05	
	10/03/06	3388.38	59.3		45.32				3343.06	
	10/17/06	3388.38			45.25				3343.13	
	10/31/06	3388.38			45.61				3342.77	
	11/15/06	3388.38			45.18				3343.20	
	12/06/06	3388.38	59.33		45.05				3343.33	
	12/13/06	3388.38			45.36				3343.02	
	12/27/06	3388.38			44.93				3343.45	
MW-3	12/21/05	3388.62	59.69		45.57				3343.05	
	12/29/05	3388.62			45.52				3343.10	
	01/05/06	3388.62			45.60				3343.02	
	02/09/06	3388.62			45.41				3343.21	
	02/22/06	3388.62			45.33				3343.29	
	03/28/06	3388.62	59.70		45.23				3343.39	
	04/13/06	3388.52			45.31				3343.21	
	04/25/06	3388.52			45.30				3343.22	
	05/03/06	3388.52			45.23				3343.29	
	05/11/06	3388.52			45.36				3343.16	
	05/24/06	3388.52			45.28				3343.24	
	06/07/06	3388.52			45.28				3343.24	
	6/15/006	3388.52			45.30				3343.22	
	06/29/06	3388.52			45.39				3343.13	
	07/11/06	3388.52			45.41				3343.11	
	07/25/06	3388.52			45.50				3343.02	
	08/09/06	3388.52	59.7		45.57				3342.95	
	08/22/06	3388.52			45.63				3342.89	
	09/12/06	3388.52	59.68		45.65				3342.87	
	09/19/06	3388.52	59.68		45.69				3342.83	
	10/03/06	3388.52	59.68		45.67				3342.85	
	10/17/06	3388.52			45.62				3342.90	
	10/31/06	3388.52			45.23				3343.29	

Table 1
Groundwater Elevation Data
Plains Marketing, L.P.
SRS No. 2000-10807
D.S. Hugh Site
Lea County, NM

Well No.	Date Measured	TOC Elevation (Site Datum referenced by GPS)	Depth of Well	Depth to PSH	Depth to Water	PSH Thickness	Recovery Method	PSH Recovered (gallons)	Groundwater Elevation	Well volume Removed
	11/15/06	3388.52			45.57				3342.95	
	12/06/06	3388.52	59.62		45.45				3343.07	
	12/13/06	3388.52			45.73				3342.79	
	12/27/06	3388.52			45.28				3343.24	
MW-4	03/21/06	3388.92	59.80		46.12				3342.80	
	03/28/06	3388.92	59.06		46.03				3342.89	
	04/13/06	3388.92			46.08				3342.84	
	04/25/06	3388.92			46.01				3342.91	
	05/03/06	3388.92	59.05		46.01				3342.91	bailed 7 gallons
	05/03/06	3388.92			46.01				3342.91	after sample
	05/11/06	3388.92			46.07				3342.85	
	05/24/06	3388.92			46.05				3342.87	
	06/07/06	3388.92			46.03				3342.89	
	06/15/06	3388.92			46.05				3342.87	
	06/29/06	3388.92			46.15				3342.77	
	07/11/06	3388.92			46.18				3342.74	
	07/25/06	3388.92			46.24				3342.68	
	08/09/06	3388.92	59.01		46.33				3342.59	
	08/22/06	3388.92			46.37				3342.55	
	09/12/06	3388.92	59.01		46.41				3342.51	
	09/19/06	3388.92	59.01		46.46				3342.46	
	10/03/06	3388.92	59.01		46.45				3342.47	
	10/17/06	3388.92			46.38				3342.54	
	10/31/06	3388.92			46.36				3342.56	
	11/15/06	3388.92			46.78				3342.14	
	12/06/06	3388.92	58.92		46.25				3342.67	
	12/13/06	3388.92			46.51				3342.41	
	12/27/06	3388.92			46.08				3342.84	
MW-5	03/21/06	3389.40	59.27		46.50				3342.90	
	03/28/06	3389.40	59.27		46.44				3342.96	
	04/13/06	3389.40			46.48				3342.92	
	04/25/06	3389.40			46.47				3342.93	
	05/03/06	3389.40			46.41				3342.99	
	05/11/06	3389.40			46.47				3342.93	
	05/24/06	3389.40			46.46				3342.94	
	06/07/06	3389.40			46.44				3342.96	
	06/15/06	3389.40			46.48				3342.92	
	06/29/06	3389.40			46.56				3342.84	
	07/11/06	3389.40			46.51				3342.89	
	07/25/06	3389.40			46.63				3342.77	
	08/09/06	3389.40	59.1		46.68				3342.72	
	08/22/06	3389.40			46.77				3342.63	
	09/12/06	3389.40	59.24		46.84				3342.56	
	09/19/06	3389.40	59.24		46.86				3342.54	
	10/03/06	3389.40	59.24		46.85				3342.55	
	10/17/06	3389.40			46.80				3342.60	
	10/31/06	3389.40			46.79				3342.61	
	11/15/06	3389.40			46.35				3343.05	
	12/06/06	3389.40	59.2		46.65				3342.75	
	12/13/06	3389.40			46.71				3342.69	
	12/27/06	3389.40			46.50				3342.90	
MW-6	05/24/06	3989.72			47.12				3942.60	
	06/07/06	3989.72	59.25		47.10				3942.62	
	06/07/06	3989.72			47.15				3942.57	Purged 5 gal
	06/15/06	3989.72			47.13				3942.59	
	06/29/06	3989.72			47.20				3942.52	
	07/11/06	3989.72			47.23				3942.49	
	07/25/06	3989.72			47.28				3942.44	
	08/09/06	3989.72			47.35				3942.37	
	08/22/06	3989.72			47.43				3942.29	
	09/12/06	3989.72	58.1		47.46				3942.26	
	09/19/06	3989.72			47.51				3942.21	
	10/03/06	3989.72			47.51				3942.21	
	10/17/06	3989.72			47.48				3942.24	
	10/31/06	3989.72			47.45				3942.27	
	11-615-06	3989.72			47.00				3942.72	
	12/06/06	3989.72	57.61		47.34				3942.38	
	12/13/06	3989.72			47.50				3942.22	
	12/28/06	3989.72			47.04				3942.68	
MW-7	05/24/06	3989.28			46.67				3942.61	
	06/07/06	3989.28	57.90		46.69				3942.59	
	06/07/06	3989.28			46.77				3942.51	Purged 5 gal
	06/15/06	3989.28			46.67				3942.61	
	06/29/06	3989.28			46.77				3942.51	
	07/11/06	3989.28			46.78				3942.50	
	07/25/06	3989.28			46.84				3942.44	
	08/09/06	3989.28	56.36		46.94				3942.34	
	08/22/06	3989.28			46.98				3942.30	
	09/12/06	3989.28	56.54		47.03				3942.25	
	09/19/06	3989.28			47.07				3942.21	
	10/03/06	3989.28			47.05				3942.23	
	10/17/06	3989.28			47.04				3942.24	
	10/31/06	3989.28			46.98				3942.30	
	11/15/06	3989.28			47.43				3941.85	
	12/06/06	3989.28	56.33		46.88				3942.40	
	12/13/06	3989.28			47.00				3942.28	
	12/27/06	3989.28			46.52				3942.76	

TABLE 2
2006 Groundwater Analytical Results
Plains Marketing L.P.
SRS No. 2000-10807
D. S. Hugh Site
Lea County, New Mexico

Well	Sample ID	Sampling Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	BTEX 8260b mg/L
			NMOCD Remediation Criteria				
			0.01	0.750	0.750	0.620	
MW-1		12/21/2005	NS	NS	NS	NS	Sheen
MW-1		3/28/2006	NS	NS	NS	NS	Sheen
MW-1		6/15/2006	NS	NS	NS	NS	Sheen
MW-1		9/12/2006	NS	NS	NS	NS	Sheen
MW-2	T12186-1	12/21/2005	<0.002	<0.002	<0.002	<0.006	<0.002
MW-2	T13038-1	3/28/2006	<0.00038	<0.00036	<0.00035	<0.00072	<0.00072
MW-2	T13864-1	6/15/2006	<0.00038	<0.00036	<0.00035	<0.00072	<0.00072
MW-2	T14673-1	9/12/2006	<0.00035	<0.00020	<0.00033	<0.00036	<0.00036
MW-2	T15625-1	12/6/2006	<0.00035	<0.00020	<0.00033	<0.00036	<0.00036
MW-3	T12186-2	12/21/2005	<0.002	<0.002	<0.002	<0.006	<0.002
MW-3	T13038-2	3/28/2006	<0.00038	<0.00036	<0.00035	<0.00072	<0.00072
MW-3	T13864-2	6/15/2006	<0.00038	<0.00036	<0.00035	<0.00072	<0.00072
MW-3	T14673-2	9/12/2006	<0.00035	<0.00020	<0.00033	<0.00036	<0.00036
MW-3	T15625-2	12/6/2006	<0.00035	<0.00020	<0.00033	<0.00036	<0.00036
MW-4	T13038-3	3/28/2006	**0.2**[a]	0.0535	0.0384	0.115	0.4069
MW-4	T13864-3	6/15/2006	**0.41**[a]	0.0926	0.144[a]	0.403[a]	1.0496
MW-4	T14673-3	9/12/2006	**0.617**[a]	0.025	0.232[a]	0.208	1.082
MW-4	T15625-3	12/6/2006	**1.25**[a]	0.196	0.581[a]	0.818	
MW-5	T13038-4	3/28/2006	<0.00038	<0.00036	<0.00035	<0.00072	<0.00072
MW-5	T13864-4	6/15/2006	<0.00038	<0.00036	<0.00035	<0.00072	<0.00072
MW-5	T14673-4	9/12/2006	<0.00035	<0.00020	<0.00033	<0.00036	<0.00036
MW-5	T15625-4	12/6/2006	<0.00035	<0.00020	<0.00033	<0.00036	<0.00036
MW-6	T13864-5	6/15/2006	<0.00038	<0.00036	<0.00035	<0.00072	<0.00072
MW-6	T14673-5	9/12/2006	<0.00035	<0.00020	<0.00033	<0.00036	<0.00036
MW-6	T15625-5	12/6/2006	<0.00035	<0.00020	<0.00033	<0.00036	<0.00036
MW-7	T13864-6	6/15/2006	<0.00038	<0.00036	<0.00035	<0.00072	<0.00072
MW-7	T14673-6	9/12/2006	**0.0163**	<0.00020	<0.00033	0.0036	0.0199
MW-7	T15625-6	12/6/2006	**0.011**	<0.00020	<0.00033	0.004	

Data is from Run 2
(a) = Result is from Run #2
Concentration in **Bold** = above NMOCD Remediation Criteria
Note: MW-1 not sampled due to presence of hydrocarbon sheen (NS)

Appendix C

Analytical Reports

Quality Assurance/Quality Control; Chain of Custody Documentation
Available Electronically on CD Only

March 2006 – Groundwater Analytical Results
June 2006 – Groundwater Analytical Results
September 2006 – Groundwater Analytical Results
December 2006 – Groundwater Analytical Results

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