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ANNUAL MONITORING REPORT

YEAR(S):
2008

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2008 ANNUAL REPORT HUGH GATHERING 090402

PLAINS SRS NO.: 2002-10235

UL-P, SECTION 11, T21S, R37E

Lea County, New Mexico

NMOCD No. AP-0041

PREPARED FOR



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March 2009

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March 30, 2009

Mr. Ed Hansen
New Mexico Oil Conservation Division Environmental Bureau
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: 2008 Annual Reports for
Vacuum to Jal 14" Mainline #3
Vacuum to Jal 14" Mainline #5
D S Hugh
Hugh Gathering

Dear Mr. Hansen:

Please find enclosed one copy each of the 2008 Annual Report required to be submitted to the New Mexico Oil Conservation Division (NMOCD). Annual Reports for the year 2008 were prepared by Premier Environmental Services, Inc. (Premier) on behalf of Plains Pipeline, L.P. (Plains) for the following Plains' sites located in Lea County, New Mexico:

- Vacuum to Jal 14" Mainline #3; NMOCD # 1R - 455; Plains SRS # 2003 - 00117
- Vacuum to Jal 14" Mainline #5; NMOCD # 1R - 0464; Plains SRS # 2003 - 00134
- D S Hugh; NMOCD # 1R - 0463; Plains SRS # 2000 - 10807
- Hugh Gathering; NMOCD # AP-0041; Plains SRS # 2002 - 10235

If you have any questions or concerns, please feel free to call us at (281) 240-5200 extension 2703.

Yours very truly,

Chan Patel
Senior Project Manager

Steven M Sellepack
Project Geologist

cc: Larry Johnson (NMOCD Hobbs)
Mr. Jeffrey Dann, P.G. (Plains)
Local Plains Representative (2 copies)
Premier Environmental Services (3 copies)

Attachments

2008 Annual Report - Vacuum to Jal 14" Mainline #3
2008 Annual Report - Vacuum to Jal 14" Mainline #5,
2008 Annual Report - D S Hugh,
2008 Annual Report - Hugh Gathering

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DISCLAIMER

Premier has examined and relied upon the file information provided by Plains. 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

Premier Environmental Services, Inc. (Premier) has prepared this Annual Report on behalf of Plains Pipeline, L.P. (Plains) for the Hugh Gathering (Site), located in Unit Letter P (the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$) of Section 11, T21S, R37E, of Lea County, New Mexico, approximately 3 miles northeast of Eunice, New Mexico. The hydrocarbon impact at the Site is the result of a 50-barrel crude oil release that occurred in May 2002. The leak was apparently caused by corrosion of a 6 inch steel pipeline which was replaced, tested and put back into service.

According to Environmental Plus, Inc. (EPI) documents, the May 2002 release resulted in crude oil impacting two areas, one on either side of New Mexico State Road 18 (NMSR 18), hereafter referred to as the east and west release areas. On the west side of NMSR 18 during June and July 2003, groundwater monitoring wells MW-1 through MW-5 were installed. Phase separated hydrocarbon (PSH) was discovered on the groundwater at monitor wells MW-1, MW-2 and MW-4. In 2004, groundwater monitoring wells MW-6, MW-7, MW-8, MW-9, MW-10, MW-11 and MW-12 were installed to further delineate the horizontal extent of PSH and dissolved phase hydrocarbons.

New Mexico Oil Conservation Division (NMOCD) approved Plains' ***Stage 1 and Stage 2 Abatement Plan*** (Abatement Plan) for the Site. During December 2006, EPI conducted excavation, confirmation soil sampling, treatment of residual soils using MicroBlaze Spill Control® (MicroBlaze), installation of a passive vapor recovery system, clay liner placement, and backfilling of the site on the west side of NMSR 18. Details of these field activities were presented in the ***2006 Annual Report*** and in the ***Soil Closure Report West Side NMSR 18***.

The release on the east side of NMSR 18 was initially delineated with the installation of borings BH1 to BH8 in September 2002, and further delineated by borings BH9 to BH16 in July 2006. To address the hydrocarbon impact on the east side of NMSR 18, a work plan was prepared and submitted on May 2, 2008 to the NMOCD and approved. The work plan was implemented during July through October 2008. Details of these field activities were presented in the ***Soil Closure Report East Side NMSR 18*** dated December 2008 and are summarized in **Section 3.0** of this annual report.

In addition, this annual report presents the data collected at the Site during weekly groundwater gauging and PSH recovery plus four quarterly groundwater sampling events conducted in 2008. The objective of the on-going quarterly groundwater sampling activities at the site is to monitor the affected groundwater. Weekly PSH

recovery activities are conducted to remove residual crude oil from groundwater. This report also summarizes soil remediation activities completed at the site in 2008.

During 2008, groundwater activities were predominantly completed on the west side of NMSR 18. Of all the quarterly groundwater samples collected from monitor wells that did not contain PSH, only monitor wells MW-5 and MW-13 displayed benzene concentrations that were above the NMOCd regulatory levels.

To address the constituents of concern (COCs) in groundwater on the east side of NMSR 18, a ***Groundwater Investigation and Delineation Work Plan*** letter dated February 23, 2009 was submitted to the NMOCd. This work plan proposed the installation of two additional monitor wells on the east side, to delineate the groundwater impact. Pending approval and implementation of this work plan, monitor well MW-13 remains the only well to evaluate the impact to groundwater from the release associated with the east side of NMSR 18.

Based on the field monitoring during 2008, PSH was present in monitor wells MW-1, MW-2, MW-3, MW-4, MW-8, MW-9, and MW-10 with thicknesses ranging from a hydrocarbon sheen or 0.01 feet to 4.07 feet. In 2008, approximately 135 gallons of PSH and 1,638 gallons of dissolved phase fluids were recovered. To address the PSH in groundwater, total fluid removal activities should continue weekly using bailers, electric pumps, and absorbent socks in wells with PSH and/or sheen.

1.0 INTRODUCTION AND SITE HISTORY

1.1 Objectives and Site Background

This report includes a summary of activities completed during 2008 at the Hugh Gathering Site, located in Unit Letter P (the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$) of Section 11, T21S, R37E, of Lea County, New Mexico, approximately three miles northeast of Eunice, New Mexico (**Figure 1, Appendix A**), at latitude 32°29'11.007"N and longitude 103°07'33.864"W. Premier was retained by Plains to complete the delineation investigation, remediation and reporting activities undertaken at the Hugh Gathering Site, SRS No. 2002-10235. The release was initially considered to be less than one barrel (bbl) of crude oil because of the small extent of surface impact; however, during replacement of the line and discovery of more significant soil impacts, EOTT Energy Pipeline (EOTT) upgraded the release to a 50 bbl release. The initial release notification form (**Form No. C-141, Appendix D**) that was prepared by Plains, provided documentation of the release to Mr. Larry Johnson of the NMOCD. The leak was apparently caused by corrosion of a 6 inch steel pipeline which was replaced, tested and put back into service. The crude oil release volume was estimated to be approximately 50 barrel (bbls) with none recovered.

1.2 Previous Environmental Investigations

At the time of the intital release in May 2002, the pipeline was owned by EOTT (the EOTT name changed to Link Energy in October 2003) and as of April 1, 2004, Plains purchased the assets from Link Energy. According to EPI documents, the May 2002 release resulted in crude oil impacting two areas one on either side of NMSR 18 and referenced as the east and west release areas. A surface area measuring approximately 98 feet x 12 feet was initially impacted by the release. Impacted soils to a depth of approximately four feet below ground surface (bgs) were excavated and disposed of in an NMOCD-approved landfarm. Soil and groundwater delineation activities were initiated in September 2002 with the installation of soil borings BH9 to BH16 on the west side, of which BH-10 was converted to a monitor well, MW-1. PSH was detected on the surface of the groundwater from monitor well MW-1 at approximately 60 feet bgs.

On the east side of the release, initial delineation activities were completed with the installation of soil borings BH1 to BH8 in September 2002. The horizontal extent of soil impact on the east side appears to have covered an approximately 55 feet x 10 feet of surface area from the point of release. The vertical extent of soil impact was delineated to approximately 25 feet below ground surface (bgs) and the groundwater was not

believed to be affected. In July 2006, additional delineation was completed on the east side, with the installation of soil borings BH9 through BH14. In soil boring BH13, delineation was achieved at a depth of 46 ft bgs. However, in soil boring BH11 delineation could not be completed as refusal was met at 22 feet and hydrocarbons exceeding regulatory guidelines were present at 20 feet bgs.

1.2.1 West Side Investigations and Remediation

On the west side of NMSR 18 during June and July 2003, with NMOCD approval, groundwater monitor wells MW-1, through MW-5 were installed. Recovery of PSH from groundwater monitoring wells MW-1, MW-2 and MW-4 was initiated on a weekly basis and in August 2003, daily recovery began using a gasoline powered eductor type PSH recovery system.

In 2004, with NMOCD approval, groundwater monitoring wells MW-6 through MW-12, were installed to further delineate the horizontal extent of PSH and dissolved phase hydrocarbons. PSH was observed in groundwater monitoring wells MW-8, MW-9 and MW-10. Dissolved phase hydrocarbons consisting of benzene, toluene, ethylbenzene, and total xylenes (BTEX) and polynuclear aromatic hydrocarbons (PAH) constituents were detected in the 2004 analytical results from groundwater monitoring well MW-5. BTEX and PAH were not detected at or above the respective laboratory method detection limits in 2004 samples from groundwater monitoring wells MW-6, MW-7, MW-11 and MW-12 located on the site periphery. PSH was present in groundwater monitoring wells MW-1, MW-2, MW-3, MW-4, MW-8, MW-9 and MW-10 with thicknesses ranging from 0.25 feet to 11.13 feet.

In May 2005, Plains submitted an Abatement Plan to the NMOCD for approval (prepared by EPI). After a public comment period, the NMOCD subsequently approved implementation of the Abatement Plan in a November 5, 2005 letter to Plains.

Site surveillance continued in 2005 with daily PSH removal and inspections, monthly monitoring of groundwater and PSH levels, and quarterly sampling of groundwater monitoring wells not impacted with PSH. In August 2005, because of declining PSH thicknesses and production rates, PSH recovery was changed from daily deployment of the PSH recovery system to weekly hand bailing of PSH impacted wells and installation of absorbent socks. In 2005, approximately 550 gallons of crude oil were recovered and reintroduced into the Plains pipeline system. The total recovered volume of oil as of December 31, 2005, including the 600 gallons recovered from 2002 through 2004, was approximately 1,150 gallons.

During December 2006, EPI conducted excavation, confirmation soil sampling, treatment of residual soils using MicroBlaze, installation of a passive vapor recovery

system, clay liner placement, and backfilling of the site on the west side of NMSR 18 (the Bryant Property). Details of these field activities were presented in the **2006 Annual Report** and in the **Soil Closure Report West Side NMSR 18**.

1.2.2 East Side Investigations and Remediation

The release on the east side of NMSR18 was initially delineated with the installation of borings BH1 to BH8 in September 2002, and further delineated by borings BH9 to BH16 in July 2006. Soil samples collected from boring BH13 identified hydrocarbon impacted soils to 35 feet bgs. Remediation of the impacted soil on the east side of NMSR 18 was delayed due to access permission from the landowner.

To address the hydrocarbon impact on the east side of NMSR18, a work plan dated May 2, 2008 was prepared and submitted to the NMOCD and approved. The work plan was implemented during July through October 2008. Details of these field activities were presented in the **Soil Closure Report East Side NMSR 18** dated December 2008 and are summarized in **Section 3.0** of this annual report.

2.2 Site Remediation Soil Cleanup Goals

Based on data gathered from previous investigations, guidelines outlined in EPI's **Abatement Plan**, and the November 5, 2005 NMOCD **Remediation Plan** approval letter, the following site-specific remediation standards were established and met based on the excavation activities completed:

- TPH target concentration of 1,000 mg/kg, benzene target concentration of 10 mg/kg and total BTEX target concentration of 50 mg/kg in excavation wall confirmation soil samples from surface to 8 feet bgs.
- TPH target concentration of 100 mg/kg, benzene target concentration of 10 mg/kg and total BTEX target concentration of 50 mg/kg in excavation wall confirmation soil samples from 8 feet bgs to groundwater at 58 feet bgs.
- For the base of the excavation, the NMOCD approved a risk-based closure as an alternative to total removal of soils impacted above the site-specific NMOCD remedial goals. The installation of an engineered barrier to prevent surface water infiltration and migration to groundwater, eliminating the groundwater exposure pathway (vertical transport mechanism) with a compacted clay or 20-mil high density polyethylene liner was required for a risk-based closure.

2.3 Site Remediation Groundwater Cleanup Goals

The remedial goals that remain are the removal of free phase hydrocarbons in groundwater and remediation of dissolved phase hydrocarbons in accordance with the New Mexico Water Quality Control Commission (WQCC) groundwater standards for benzene (10.0 microgram per liter ($\mu\text{g}/\text{L}$)), toluene (750 $\mu\text{g}/\text{L}$), ethylbenzene (750 $\mu\text{g}/\text{L}$) and total xylene (620 $\mu\text{g}/\text{L}$) and a risk-based soil closure for these impacted soils on both the east and west sides of NMSR 18. The WQCC groundwater standards are also referred to as the regulatory limits.

3.0 2008 SOIL REMEDIATION ACTIVITIES

The objectives presented in the approved *Abatement Plan*, (November 5, 2005) to excavate, where possible, contaminated soil in the sidewalls of the excavation and to isolate and control residual COCs in the soils in the base of the excavation to prevent further impact to groundwater, were completed in 2006 for the west side of NMSR 18 and in 2008 for the east side of NMSR 18.

In May 2008, a Work Plan to conduct remediation activities on the east side of NMSR 18 was submitted to the NMOCD and was subsequently approved.

The details of remedial activities completed to date, including the excavation, placement of clay barrier, and backfill activities on the east side of NMSR 18 were presented in the report **Soil Closure Report East Side NMSR 18 Hugh Gathering** submitted to the NMOCD in December 2008. Following is a brief summary of the activities carried out in 2008.

In 2008, Premier supervised the excavation, clay barrier installation, and backfilling activities on the east side of NMSR 18 by a contractor (Hungry Horse). Data collected from the confirmation soil samples indicated that no additional excavation was required to remove the hydrocarbons from the north, south and east walls of the excavation.

Four borings and two passive soil vapor extraction (SVE) wells were installed by Talon in the base of the excavation. The borings were located on each side of the pipeline in the impacted portion of the floor of the excavation. Initially, all six borings were used to treat the affected residual soils. Subsequently, two of the borings were converted into a passive organic vapor ventilation system. The system was made of 18 feet of solid riser and 15 feet of slotted 4 inch Poly vinyl chloride pipe placed into each of the two borings, each with a total depth of 34 feet bgs. Each passive SVE well was mounted with an 8 inch diameter wind turbine permanently affixed to the 4 inch PVC riser three feet above ground surface.

Analytical data from soil boring SV-1 indicated residual hydrocarbon contamination in the base of the excavation in close proximity to the west wall. Visual staining on the west wall and in the base of the excavation within 18 feet of the west wall also indicated the same.

To address residual contamination in the west side wall and base of the excavation, a five percent Micro-Blaze® solution was applied to affected soil. The Micro-Blaze® was placed into the six borings installed in the base of the excavation (to a depth of 15 feet in the hydrocarbon-affected soil) and allowed to flow into the surrounding formation.

To isolate the affected soils in the base of the excavation, a 2-foot thick clay barrier was installed in 6-8 inch lifts and compacted down to 4 to 5 inches using a 36-inch wide, ride on roller compactor. The clay barrier measured approximately 40 feet long by 28 feet wide in the base of the excavation. Water was added to attain the required soil moisture for proper compaction. Each one foot compacted clay layer was tested to 95% Proctor Density and documented by Pettigrew & Associates P.A. (Pettigrew), a qualified engineering firm. The clay barrier was then covered with clean soil. Approximately 960 cubic yards of affected soil was excavated and transported for off-site treatment at Plains' land farm treatment facility. The Site was then backfilled with 1,200 cubic yards of clean overburden soil that was stockpiled on-site during excavation of the ramps. Approximately 772 cubic yards of clean fill was imported to the site to bring the site to original grade. The surface vegetation was restored by reseeding in October 2008.

As part of the approved work plan, one monitor well, MW-13, was installed (by Straub Drilling) to determine if groundwater was affected from the release on the east side of NMSR 18. The location of the well was placed as close to the excavation as practically possible and down gradient of the release point. Details of the installation and laboratory analytical results of the groundwater sample were submitted to the NMOCD in a letter report dated October 8 2008. A summary of the findings is presented in **Section 4.6** below.

4.0 2008 GROUNDWATER ACTIVITIES

4.1 Site Cleanup Goals (Groundwater)

The remediation criteria for groundwater at the Site are discussed in **Section 2.3** with particular emphasis on the BTEX constituents. The remediation criteria for benzene, toluene, ethylbenzene and total xylenes are 0.010 mg/L, 0.750 mg/L, 0.750 mg/L and 0.620 mg/L respectively. In addition to using these concentrations as the target cleanup goals in groundwater at the Site, PSH removal is also an integral part of on-going remediation activities at the Site. PSH removal activities will help alleviate further dissolution of COCs into the groundwater.

4.2 2008 PSH Recovery and Groundwater Monitoring Activities

During 2008, PSH recovery activities included weekly removal of total fluids from PSH- or sheen-impacted wells and placement of absorbent socks in these wells to passively remove PSH. These wells include monitor wells MW-1 through MW-4 and MW-8 through MW-10. These activities were completed exclusively on the monitor wells located on the west side of NMSR 18.

The Site groundwater monitoring activities also included monthly gauging of all monitor wells and quarterly sampling of groundwater from monitor wells not impacted with PSH. This included monitor wells MW-5 through MW-7 and MW-11 and MW-12.

In 2008, the NMOCD also required that all recovery wells, and monitor wells containing PSH or sheen, to be sampled for BTEX, PAH and TPH. To meet this requirement, groundwater samples were collected from the wells with PSH and sheen and submitted for laboratory analysis during the second quarter sampling event for analyses of these parameters.

4.3 Groundwater Gradient

Groundwater levels during 2008 fluctuated very slightly in most of the wells. Water level data from monitor wells MW-5 through MW-7 and MW-11 and MW-12 showed an average fluctuation of 0.32 feet. The groundwater gradient was determined using water level measurements from the groundwater monitor wells not impacted with PSH (i.e., MW-5, MW-6, MW-7, MW-11 and MW-12) and indicated a flow direction to the southeast. The groundwater gradient is contoured for each quarter and the maps are presented in **Figures 3-A, through 3-D, Appendix A**. The groundwater elevation data is presented in **Table 1, Appendix B**. The average groundwater gradient during 2008, was found to be 0.0018 ft/ft, as measured across the site between monitor wells MW-6

to MW-12, and is consistent with the gradient measured in previous years based on historical gauging data (**Table 1, Appendix B**).

4.4 Groundwater Sampling and Analytical Data

Groundwater monitor wells MW-1, MW-2, MW-3, MW-4, MW-8, MW-9 and MW-10 were not sampled during routine quarterly groundwater sampling events in 2008 due to the presence of PSH and/or sheen. Groundwater monitor wells MW-5, MW-6, MW-7, MW-11 and MW-12 were sampled on February 26, May 29, August 18 and November 20, as part of the 2008 quarterly groundwater sampling activities. Prior to collecting groundwater samples from each well, approximately three well volumes of water were purged from each well using dedicated polyvinyl chloride (PVC) bailers. After purging was completed, groundwater samples were collected using dedicated disposable bailers. All samples collected for the first, second and third quarters in 2008 were placed in laboratory provided containers and placed in a cooler with ice and shipped under Chain of Custody to Accutest, Inc. in Houston, Texas for chemical analysis. All purge water was placed in labeled 55-gallon drums and stored on-site. Groundwater samples collected in the fourth quarter were submitted to Trace Analyses Laboratories in Midland, Texas. Groundwater samples were analyzed at the laboratory for quantification of BTEX constituents (**Table 2, Appendix B**).

To meet the requirements of the NMOCD to sample the groundwater at wells with PSH and or sheen, groundwater samples collected during the May 29, 2008 sampling event were also collected from monitor wells MW-1 through MW-4 and MW-8 through MW-10. The samples from these wells were submitted for BTEX, PAH, and TPH analysis.

Monitor well MW-13 located on the east side of NMSR 18 was sampled for groundwater analyses in the 4th Quarter 2008 sampling event.

Laboratory reports for all groundwater samples collected during the 2008 groundwater sampling activities are included in **Appendix C**. Details of each quarterly groundwater sampling event with results are presented below.

4.4.1 1st Quarter Groundwater Results

During 1st quarter 2008, groundwater samples were collected from the five wells without PSH or hydrocarbon sheen and analyzed for BTEX constituents (monitor wells MW-5, MW-6, MW-7, MW-11 and MW-12). Ethylbenzene was detected at a concentration of 0.0031 mg/L and benzene was detected at an estimated concentration (J flagged) of 0.00097 mg/L in monitor well MW-5 (**Figure 4-A, Appendix A**). These concentrations are above the method detection limit but were below the target clean up level. All other parameters for the five wells sampled were reported to be below New Mexico WQCC

groundwater standards. BTEX constituent analytical results for the first quarter were compared to historical analytical data and appeared to be consistent with previous years for all five wells.

4.4.2 2nd Quarter Groundwater Results

Groundwater samples were collected from all monitor wells during the 2nd quarter 2008. Of the five monitor wells without PSH (MW-5, MW-6, MW-7, MW-11 and MW-12) that are sampled quarterly, only monitor well MW-5 indicated a benzene concentration at 0.0573 mg/L, which is above the New Mexico WQCC groundwater standards. Toluene, ethylbenzene and total xylenes were detected in the groundwater sample from monitor well MW-5 at concentrations that exceeded the laboratory method detection limit, but were below the New Mexico WQCC groundwater standards. Toluene was detected in the groundwater sample from monitor well MW-11 at concentrations greater than the laboratory method detection limit, but below the New Mexico WQCC groundwater standards. All other parameters for all wells sampled were reported below the laboratory method detection limit. Benzene was not detected in groundwater from MW-6, MW-7 MW-11 and MW-12 (**Figure 4-B, Appendix A**).

In order to meet NMOCD requirements, groundwater samples were also collected from monitor wells MW-1 through MW-4 and MW-8 through MW-10 that showed PSH or hydrocarbon sheen. As expected, results indicated that benzene concentrations were above New Mexico WQCC groundwater standards for the groundwater samples from monitor wells MW-1, MW-2, MW-3, MW-4, MW-8, MW-9, and MW-10 (see **Table 3** in **Appendix B** for all results). All BTEX constituent concentrations in the groundwater sample collected from monitor well MW-1 indicated exceedances of the regulatory limits. Ethylbenzene and total Xylenes were found to exceed the regulatory limits in monitor well MW-8, while toluene and total Xylenes were found to exceed the regulatory limits in monitor well MW-9.

Groundwater samples from monitor wells MW-1, MW-2, MW-3, MW-4, MW-8, MW-9 and MW-10 were also analyzed for PAHs and TPH during this quarter. The PAH analyses of the dissolved phase hydrocarbons in samples from wells with PSH or hydrocarbon sheen is evaluated for screening purposes only and not for compliance. PAH concentrations for compliance should only be evaluated once the PSH is removed and BTEX concentrations in the dissolved phase plume indicate a stable or reducing dissolved phase plume. As part of the evaluation process, PAH constituents detected (associated with crude oil) are compared directly to the New Mexico WQCC groundwater standards for PAH, specifically the naphthalene and 2-methylnaphthalene standard of 0.03mg/L.

Three PAH compounds were detected in the analyses of the groundwater samples: naphthalene, phenanthrene, and 2-methylnaphthalene. The naphthalene concentrations detected in monitor wells MW-1, MW-4 and MW-8 were above the regulatory standard, while samples from monitor wells MW-2, MW-3, MW-9 and MW-10 were below the regulatory standard, but above the laboratory method detection limit (**Table 3, Appendix B**). 2-methylnaphthalene, detected in the groundwater samples from monitor wells MW-1 and MW-8, was found to exceed the regulatory limits. TPH results showed concentrations in monitor well MW-1 at 1,570 mg/L and MW-8 at 157 mg/L. Remaining wells showed TPH concentrations below 30 mg/L. The TPH results are presented on **Table 4, Appendix B**. TPH does not have any New Mexico WQCC groundwater standards or NMED tap water screening levels.

4.4.3 3rd Quarter Groundwater Results

Groundwater samples collected from the five wells without PSH or hydrocarbon sheen (MW-5, MW-6, MW-7, MW-11 and MW-12), showed benzene concentrations above the regulatory limits for only monitor well MW-5 at 0.0101 mg/L. Other parameters for wells sampled were reported below their respective target cleanup levels (**Figure 4-C, Appendix A**).

4.4.4 4th Quarter Groundwater Results

Groundwater samples were collected from the five wells that did not contain PSH or hydrocarbon sheen and also from monitor well MW-13 installed on the east side of NMSR 18. Benzene concentrations were above regulatory limits in groundwater samples from monitor wells MW-5 and MW-13 at concentrations 0.029 mg/L and 1.51 mg/L respectively. Parameters from all other wells sampled were below the remediation goals (**Figures 4-D, Appendix A**).

4.5 PSH Recovery

According to the EPI data, the total PSH recovery volume as of December 31, 2006, was approximately 1,222 gallons. In 2007, PSH recovery was limited to removal of fluids from monitor well MW-1. In 2007, approximately 28 gallons of PSH were recovered from a total recovered fluid volume of approximately 473 gallons. In 2008, approximately 135 gallons of PSH and 1,638 gallons of dissolved phase fluids were recovered.

4.6 Groundwater Results for Monitor Well MW-13

Monitor well MW-13 was installed downgradient of the release on the east side of NMSR 18 to evaluate the possible impact to groundwater from the release. The well

was sampled for the following parameters to determine the concentrations of the COC in groundwater:

- General Chemistry
- Resource Conservation and Recovery Act (RCRA) Metals
- Additional WQCC Metals
- All compounds listed in U.S. Environmental Protection Agency (EPA) SW-846 Methods: 8260 Volatile Organic Compounds (VOCs) and 8270 Semi Volatile Organic Compounds (SVOCs)

Details of the well installation and analytical results were presented in the ***Well Installation Report*** dated October 8, 2008.

In summary, the only COCs associated with the crude oil release that were detected in the groundwater sample from monitor well MW 13, that are above the NMOCD regulatory limits, are benzene and bis(2-ethylhexyl)phthalate. Bis (2-ethylhexyl) phthalate was detected at 0.081 mg/L, which is above the EPA Primary drinking water regulatory limit of 0.006 mg/L. Monitor well MW-13 was resampled to confirm BTEX constituents. Benzene concentrations ranged from 1.02 to 1.61 mg/L during the initial sampling activities. These concentrations are above the regulatory limit of 0.010 mg/L. Monitor well MW-13 was re-sampled as part of the 4th quarter sampling program and revealed a benzene concentration of 1.51 mg/L.

To address the COCs in groundwater on the east side of NMSR 18, a ***Groundwater Investigation and Delineation Work Plan*** Letter dated February 23, 2009 was submitted to the NMOCD. Pending approval and implementation of this work plan, monitor well MW-13 remains the only well to evaluate the impact to groundwater from the release associated with the east side of NMSR 18.

5.0 CONCLUSIONS

Soil excavation activities conducted at the Site during July through October 2008 were completed in accordance with the NMOCD approved Abatement Plan and Work Plan dated May 8, 2008. These activities included excavation, confirmation sampling, clay barrier installation, treatment of residual soils using MicroBlaze, and backfilling activities on the east side of NMSR 18.

During 2008, groundwater activities were predominantly completed on the west side of NMSR 18, unlike the soil remediation activities that were completed on the east side of NMSR 18. These groundwater activities included, quarterly groundwater sampling, monthly gauging of all wells, and weekly PSH removal. The quarterly groundwater sampling results for monitor wells that did not contain PSH (monitor wells MW-5 and MW-13), displayed benzene concentrations that were above the NMOCD regulatory limits. The benzene concentrations in monitor well MW-5 ranged from 0.00097 mg/L in February 2008 to 0.029 mg/L in November 2008. Toluene, ethylbenzene, and total xylenes were all below regulatory limits.

Monitor well MW-13 located on the east Side of NMSR 18 revealed benzene concentrations of 1.51 mg/L, in November 2008, which was above the regulatory limit. This indicates that the potential COC in groundwater are not delineated on the east side of NMSR 18.

Based on the field monitoring and analytical results of groundwater samples collected and analyzed during 2008, PSH was present in monitor wells MW-1, MW-2, MW-3, MW-4, MW-8, MW-9, and MW-10 with thicknesses ranging from a hydrocarbon sheen or 0.01 feet to 4.07 feet. In 2008, approximately 135 gallons of PSH and 1,638 gallons of dissolved phase fluids were recovered.

6.0 2009 PROPOSED ACTIVITIES

To delineate the extent of dissolved phase hydrocarbons in groundwater on the east side of NMSR,18, two additional wells consisting of one monitor well to the southeast and one monitor well directly east of monitor well MW-13, should be installed as defined in the ***Groundwater Investigation and Delineation Work Plan*** letter dated February 23, 2009. The new wells should be spaced approximately 75-100 feet from MW-13. Hydrologic gradient maps based on site data from the Hugh Gathering Site located on the west side of NMSR 18, indicate a groundwater gradient to the south-southeast across the site. The location of the wells will have to be placed with careful consideration of an oil well and its associated drilling pit located just southeast of the Site.

Premier proposes to continue weekly PSH recovery operations through removal of total fluids using bailers, electric pumps, and absorbent socks in wells with PSH and/or sheen, as necessary with quarterly groundwater sampling to monitor hydrocarbons in groundwater.

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APPENDIX A

Figures

Figure 1 Site Location Map

Figure 2 Site Layout Map

Figure 3-A 1st Quarter 2008 - Groundwater Gradient Map

Figure 3-B 2nd Quarter 2008 - Groundwater Gradient Map

Figure 3-C 3rd Quarter 2008 - Groundwater Gradient Map

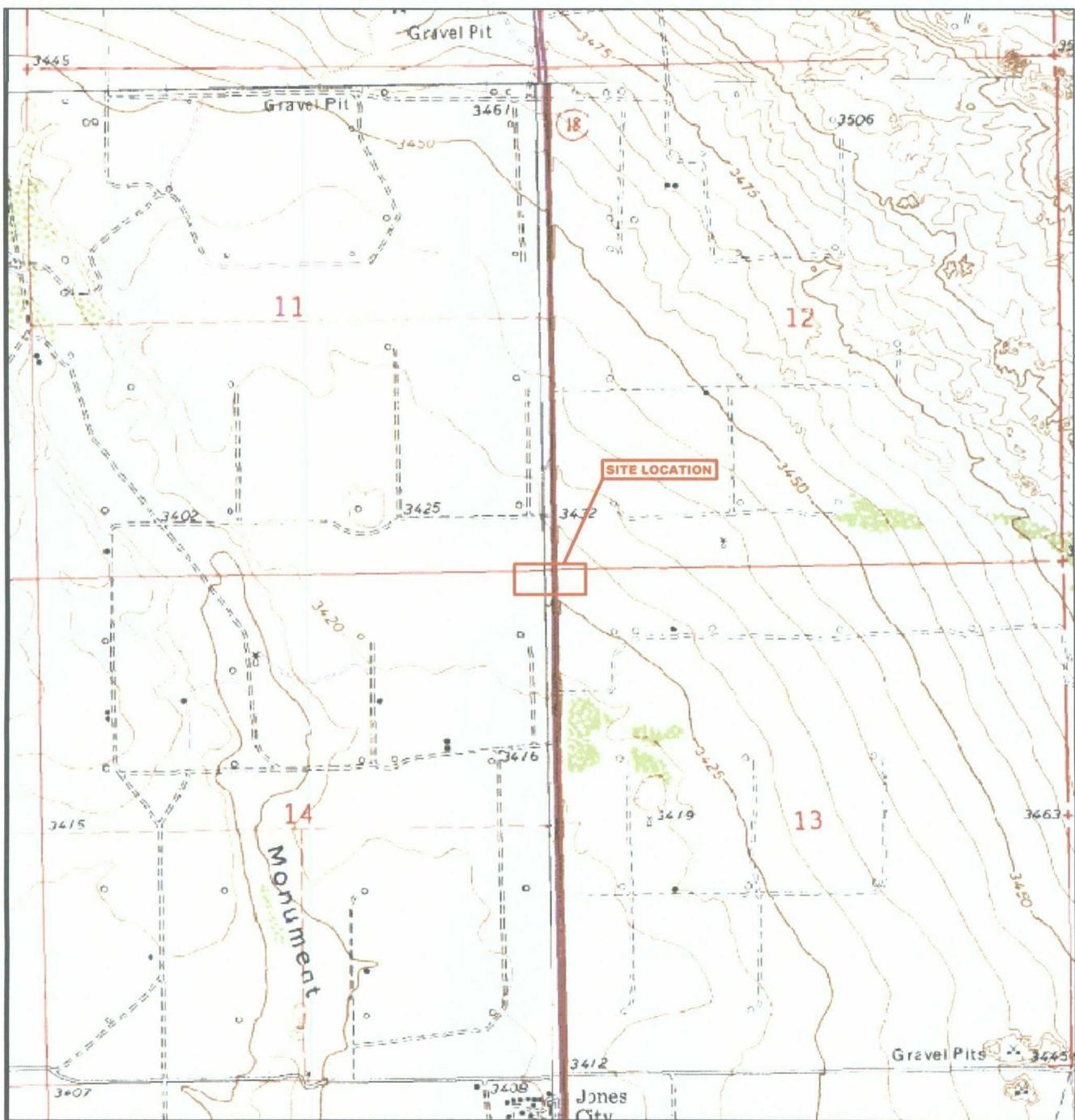
Figure 3-D 4th Quarter 2008 - Groundwater Gradient Map

Figure 4-A 1st Quarter 2008 - Groundwater Analytical Data Map

Figure 4-B 2nd Quarter 2008 - Groundwater Analytical Data Map

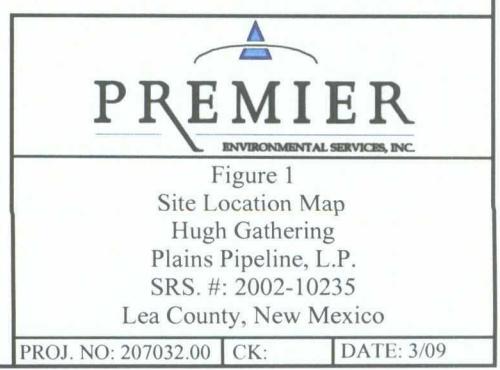
Figure 4-C 3rd Quarter 2008 - Groundwater Analytical Data Map

Figure 4-D 4th Quarter 2008 - Groundwater Analytical Data Map

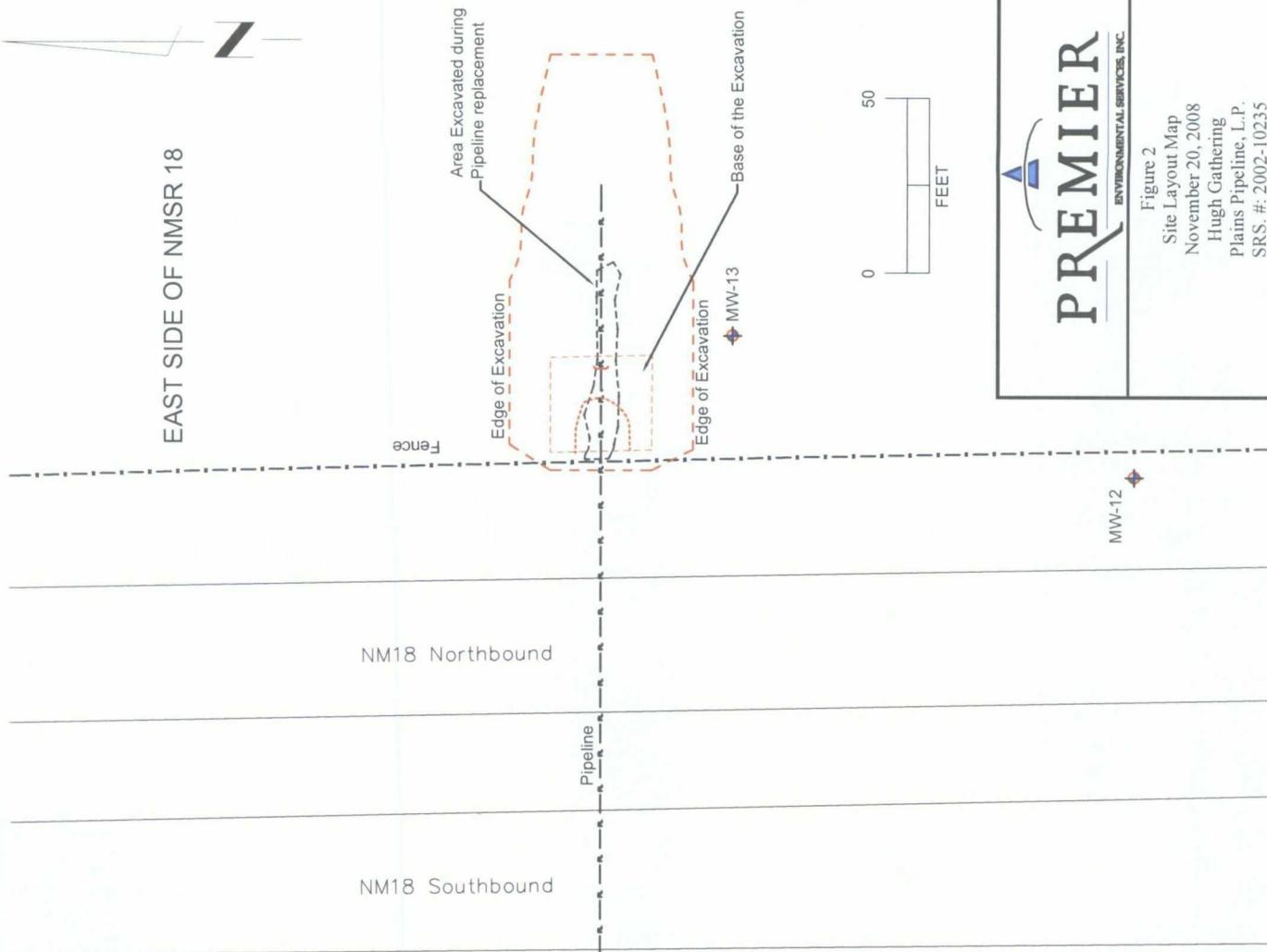


Eunice NE Quadrangle
32°29'11"N Latitude & 103°07'31"W Longitude

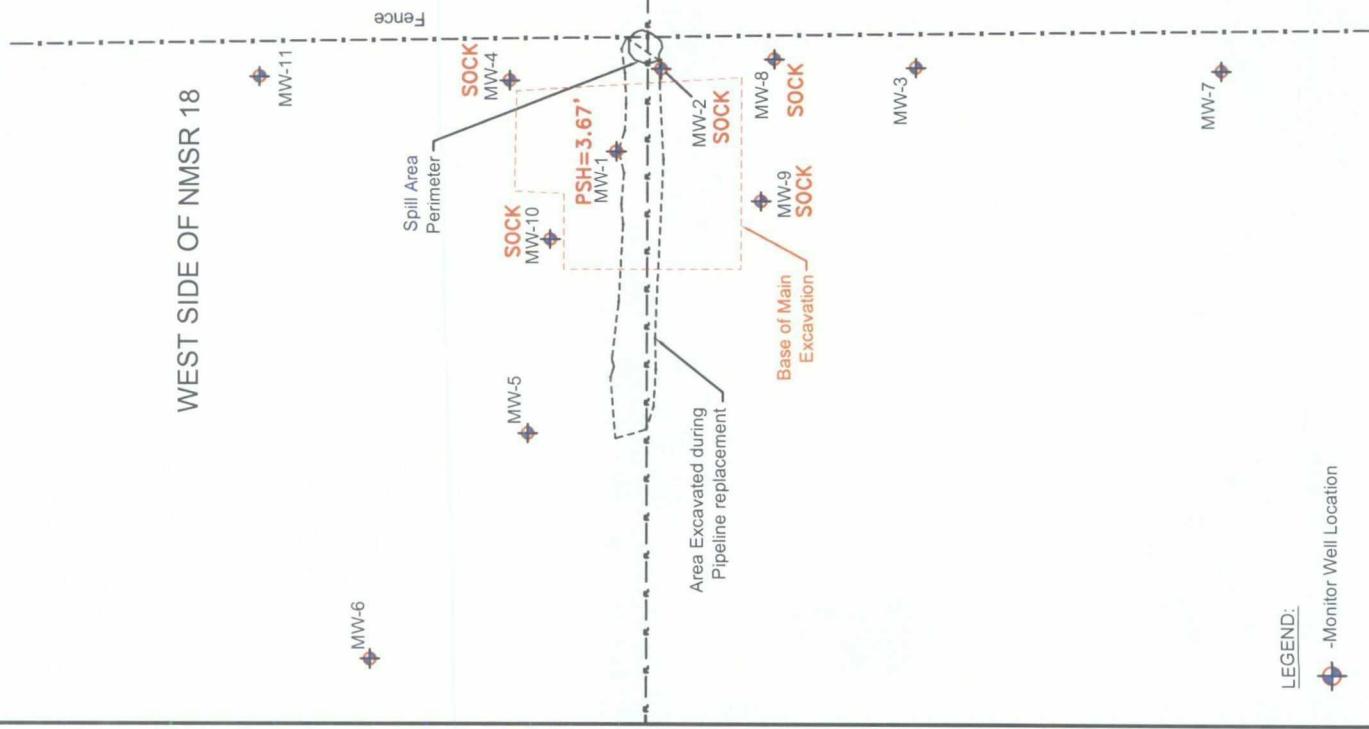
0 1/2 mile 1 mile
Distance in Miles



EAST SIDE OF NMSR 18



WEST SIDE OF NMSR 18

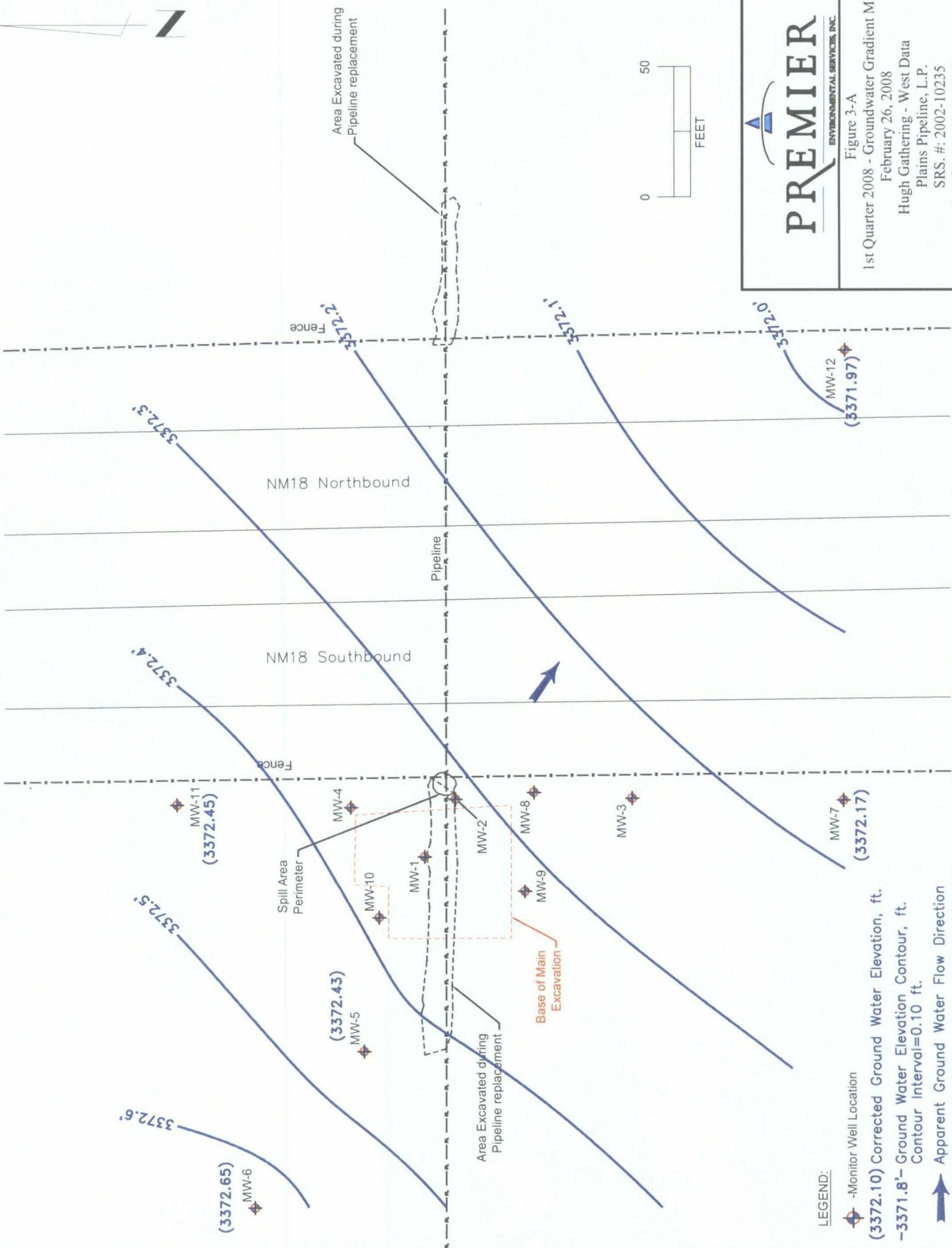


LEGEND:
-Monitor Well Location

Source of Basemap: EPI



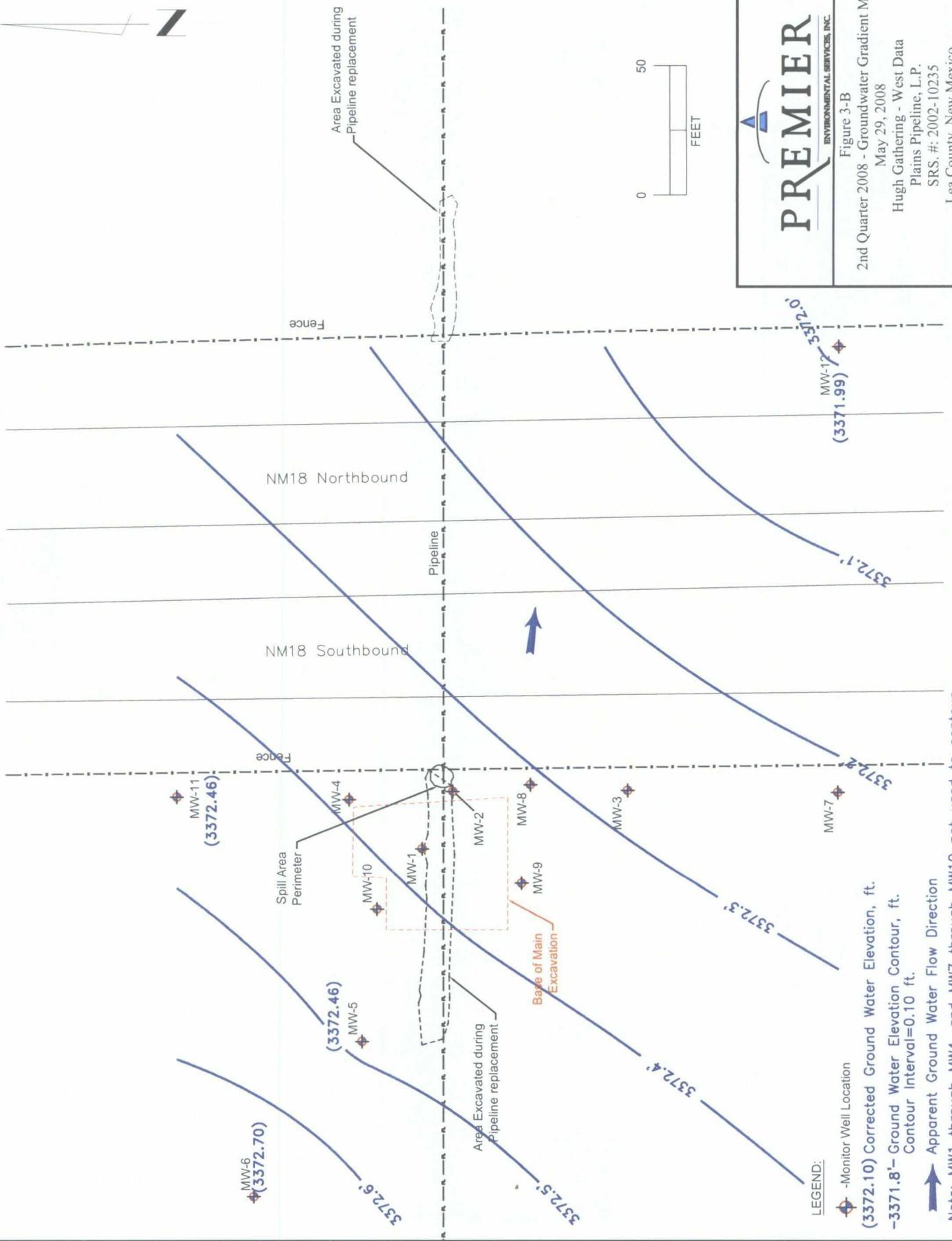
Figure 2
Site Layout Map
November 20, 2008
Hugh Gathering
Plains Pipeline, L.P.
SRS #: 2002-10235
Lea County, New Mexico
PROJ. NO: 207032.00 CK: DATE: 3/09



PREMIER
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Figure 3-A
1st Quarter 2008 - Groundwater Gradient Map
February 26, 2008
Hugh Gathering - West Data
Plains Pipeline, L.P.
SRS #: 2002-10235
Lea County, New Mexico

PROJ. NO: 207032.00 CK: DATE: 3/09

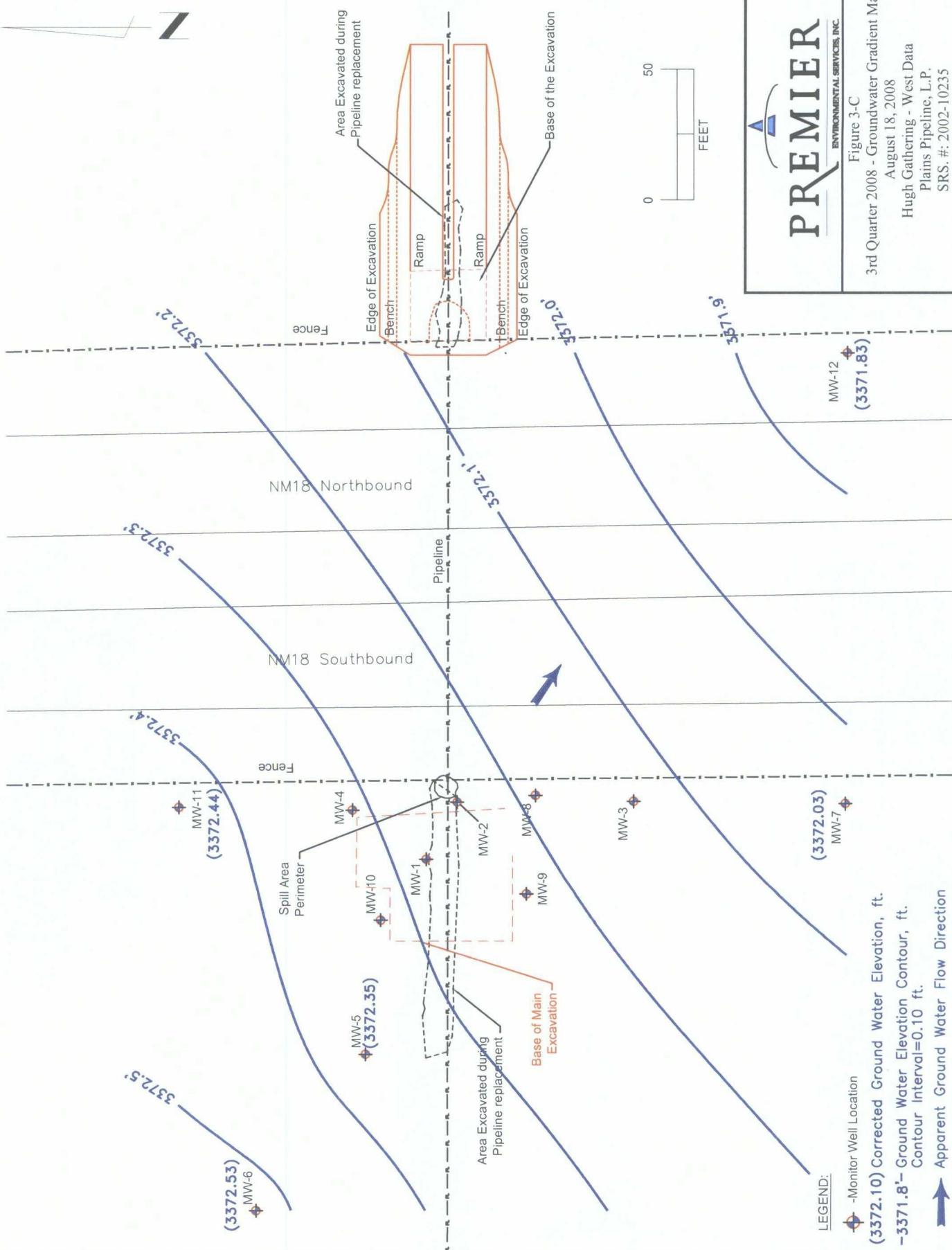


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Figure 3-B
2nd Quarter 2008 - Groundwater Gradient Map
May 29, 2008

Hugh Gathering - West Data
Plains Pipeline, L.P.
SRS #: 2002-1025
Lea County, New Mexico

PROJ. NO: 207032.00 CK: DATE: 3/09



PREMIER
ENVIRONMENTAL SERVICES, INC.

Figure 3-C
3rd Quarter 2008 - Groundwater Gradient Map
August 18, 2008
Hugh Gathering - West Data
Plains Pipeline, L.P.
SRS #: 2002-10235
Lea County, New Mexico
PROJ. NO: 207032.00 CK: DATE: 3/09

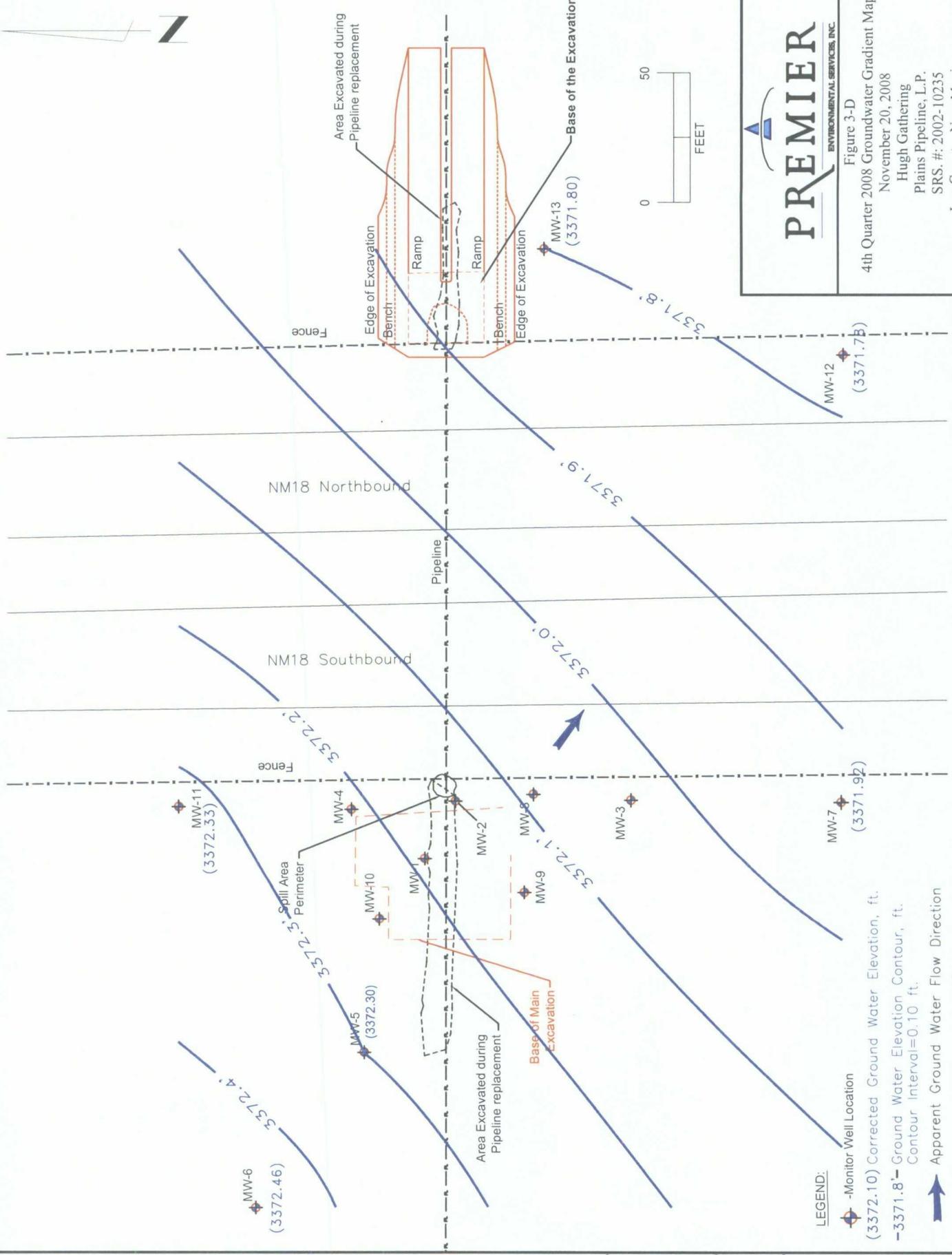


Figure 3-D
4th Quarter 2008 Groundwater Gradient Map
November 20, 2008
Hugh Gathering
Plains Pipeline, L.P.
SRS #: 2002-10235
Lea County, New Mexico
PROJ. NO. 207032.00 CK: DATE: 3/09

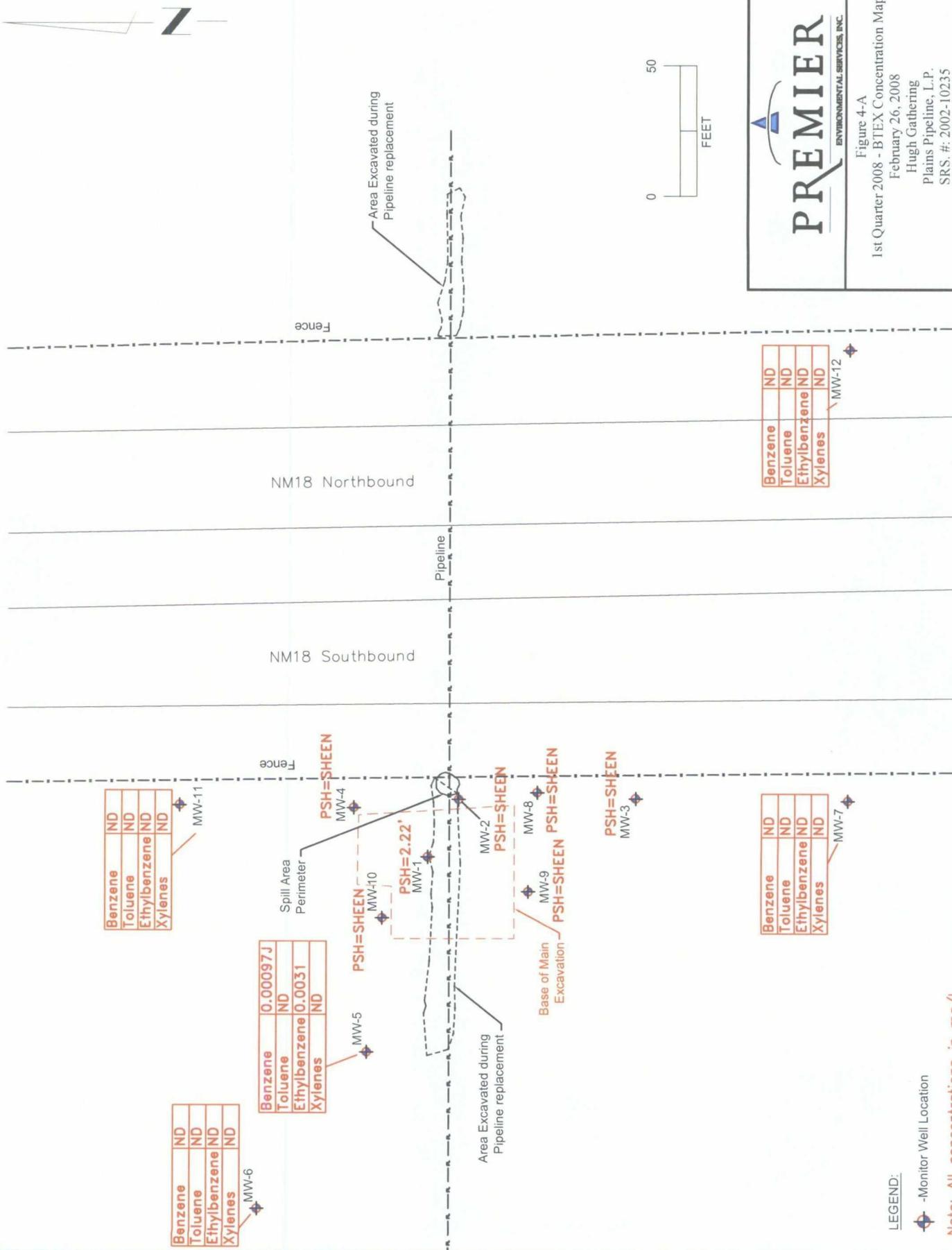


Figure 4-A
1st Quarter 2008 - BTEX Concentration Map
February 26, 2008
Hugh Gathering
Plains Pipeline, L.P.
SRS #: 2002-10235
Lea County, New Mexico

LEGEND:

- Monitor Well Location

Note: All concentrations in mg/L

Source of Basemap: EPI

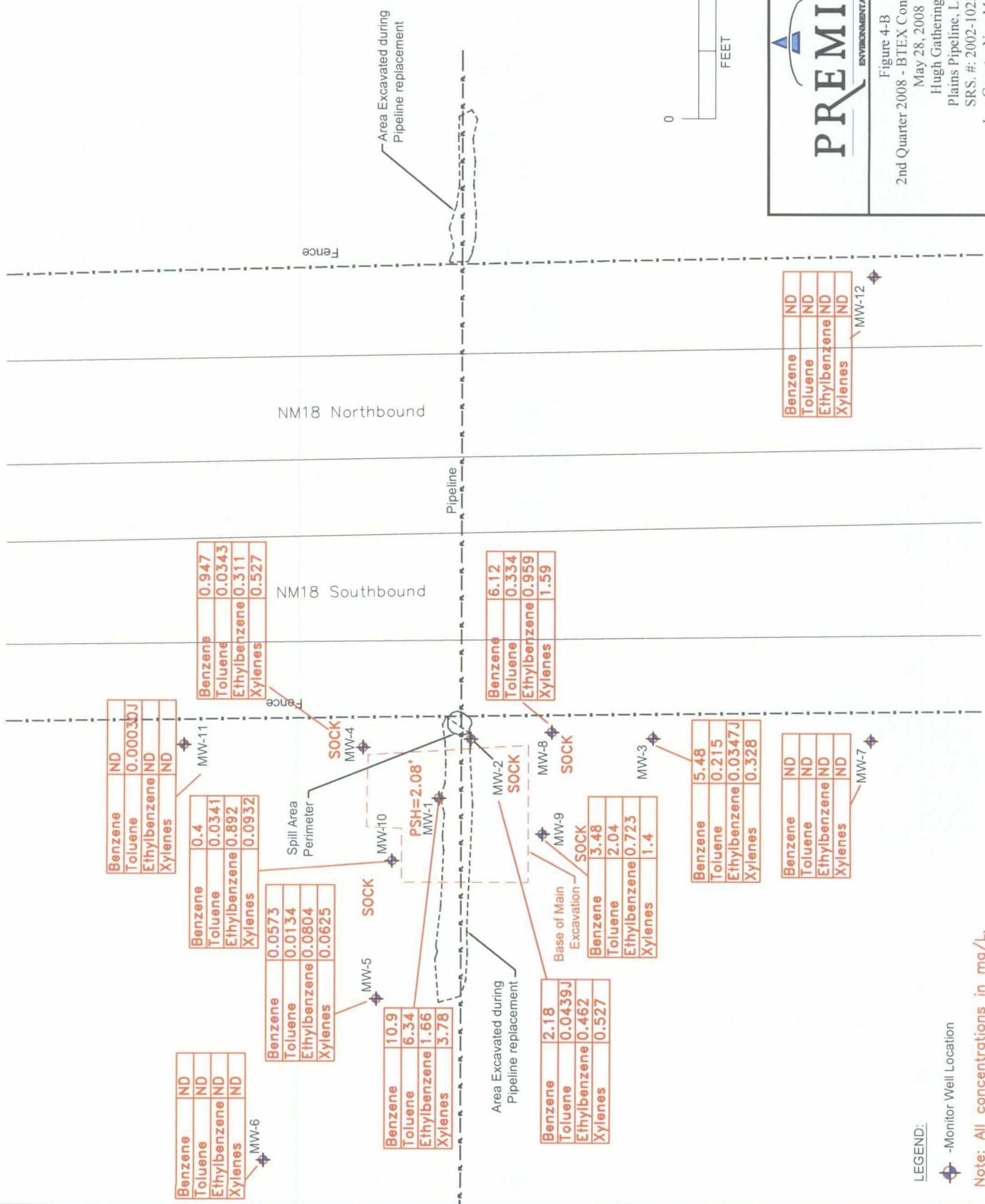


Figure 4-B
2nd Quarter 2008 - BTEX Concentration Map
May 28, 2008
Hugh Gathering
Plains Pipeline, L.P.
SRS #: 2002-10235
Lea County, New Mexico

PROJ. NO.: 207032.00 | CK: DATE: 3/09

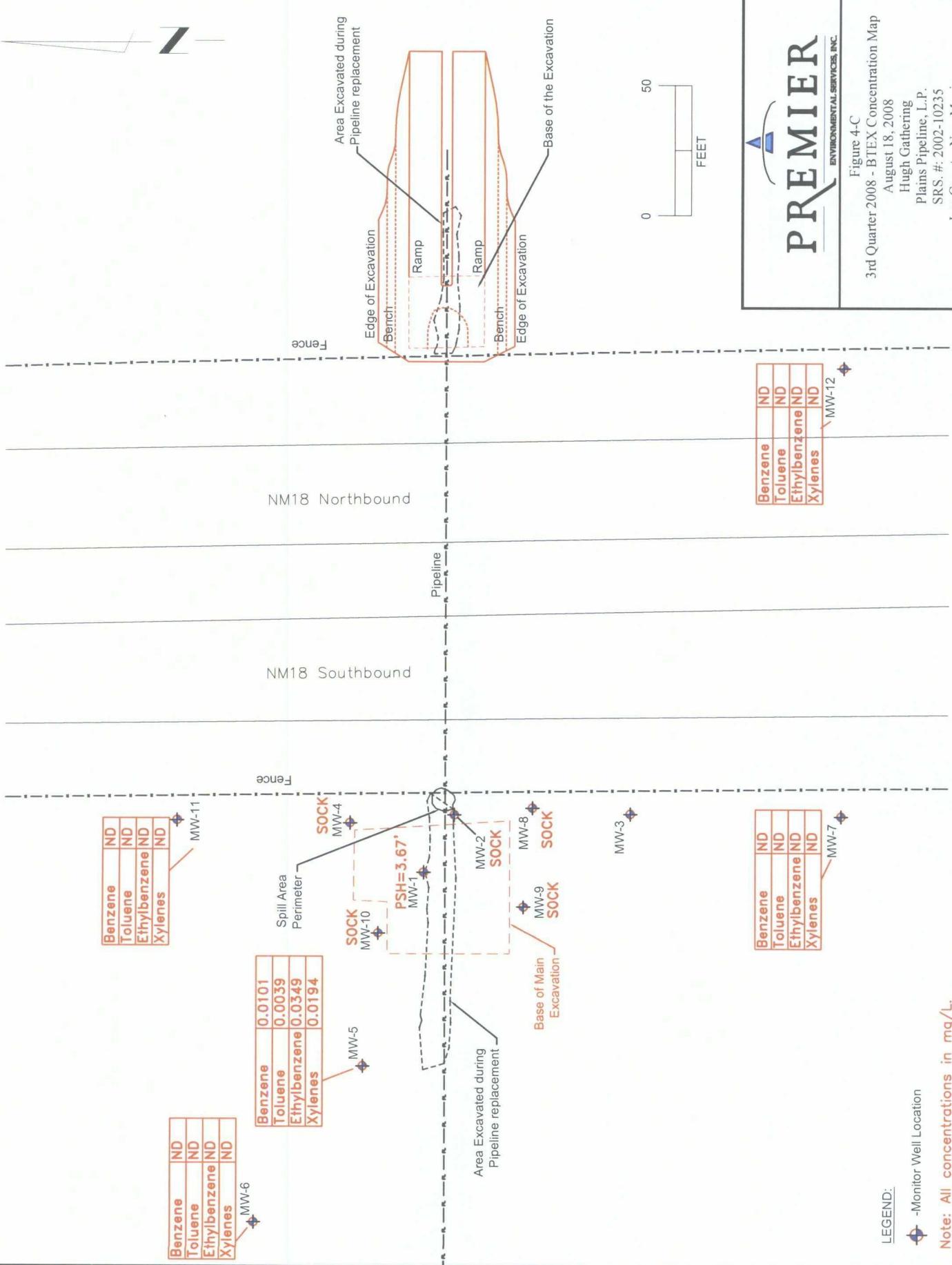
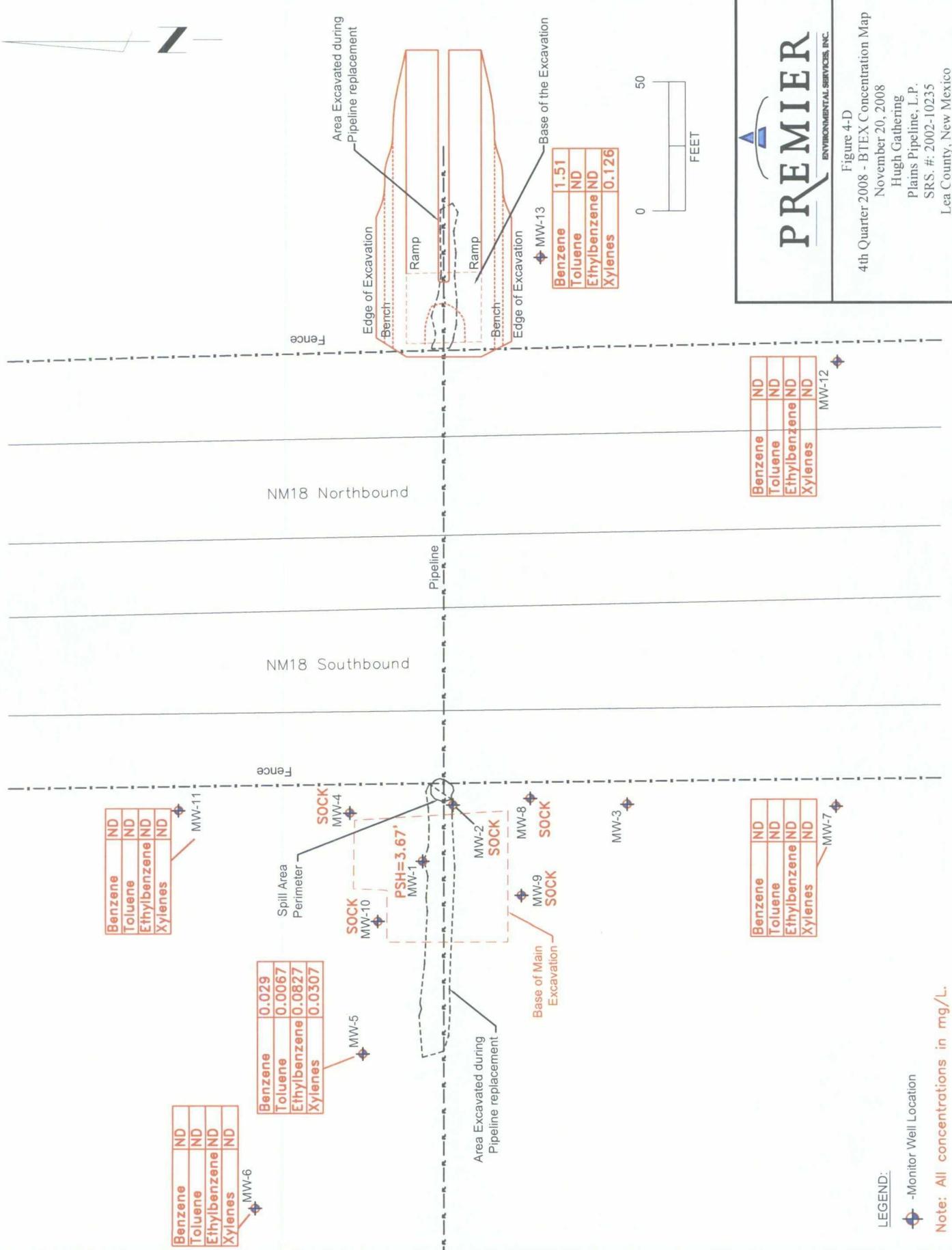


Figure 4-C
3rd Quarter 2008 - BIEX Concentration Map
August 18, 2008
Hugh Gathering
Plains Pipeline, L.P.
SRS #: 2002-10235
Lea County, New Mexico

PROJ. NO: 207032.00 CK: DATE: 3/09



APPENDIX B

Tables

- Table 1 Groundwater Elevation and PSH Recovery Data**
- Table 2 Groundwater Sample Analytical Results**
- Table 3 BTEX in GROUNDWATER SAMPLE ANALYTICAL RESULTS for Wells with PSH**
- Table 4 Groundwater Analytical Results for PAH**
- Table 5 2008 PSH and Dissolved Phase Recovery Data**

TABLE 1
GROUNDWATER ELEVATION AND PSH RECOVERY DATA
 Plains Pipeline, L.P.
 SRS #2002-10235
 Hugh Gathering
 Lea County, New Mexico

Well Number	Date Measured	Top of Casing Elevation (ft)	Total Depth (ft)	Depth to Product (ft)	Depth to Water (ft)	PSH Thickness (ft)	Recovery Method	Recovery		Corrected Groundwater Elevation (ft)
								PSH (gallons)	Water (gallons)	
MW-12	04/02/08	3426.47	65.24	NA	NG	ND	NA	NA	NA	NA
	05/29/08	3426.47	65.24	NA	54.48	ND	NA	Sampled	NA	3371.99
	06/26/08	3426.47	65.24	NA	54.65	ND	NA	NA	NA	3371.82
	07/07/08	3426.47	65.24	NA	54.57	ND	NA	NA	NA	3371.90
	08/18/08	3426.47	64.59	NA	54.64	ND	NA	Sampled	NA	3371.83
	10/15/08	3426.47	64.59	NA	54.68	ND	NA	Sampled	NA	3371.79
	11/20/08	3426.47	64.26	NA	54.69	ND	NA	Sampled	NA	3371.78
	12/21/08	3426.47	64.26	NA	54.70	ND	NA	NA	NA	3371.77
MW 13	09/24/08	3431.13	75.70	NA	59.33	ND	NA	NA	NA	3371.80
	10/15/08	3431.13	75.70	NA	59.33	ND	NA	NA	NA	3371.80
	11/20/08	3431.13	74.60	NA	59.33	ND	NA	Sampled	NA	3371.80
	12/21/08	3431.13	74.60	NA	59.32	ND	NA	NA	NA	3371.81
Tank	03/28/07	NA	5.29	Sheen	5.18	Sheen	NA	NA	NA	NA
	07/19/07	NA	5.29	4.63	4.65	0.02	NA	NA	NA	NA
	12/17/08	NA	5.29	3.14	NA	NA	Before	NA	NA	NA
	12/17/08	NA	5.29	4.50	NA	NA	After	NA	NA	NA

NA: Not Applicable

ND: Not Detected

NG: Not Gauged

TABLE 2
GROUNDWATER SAMPLE ANALYTICAL RESULTS

Plains Pipeline, L.P.
SRS No. 2002-10235
Hugh Gathering
Lea County, New Mexico

Well Number	Sample Date	Sample ID	SW 846-8021B			
			Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
			NMOCD Remediation Criteria			
			0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L
MW 5	03/01/07	T16511-1	0.172^a	0.0062	0.1380	0.0900
MW 5	06/01/07	T17665-2	0.1210	0.0101	0.1030	0.0608
MW 5	09/06/07	T18805-1	0.0477	0.0113	0.0523	0.0335
MW 5	11/13/07	T19776-1	0.0775	0.0285	0.0906	0.0531
MW 5	02/26/08	T21030-1	0.00097 J	<0.00023	0.0031	<0.00055
MW 5	05/29/08	T22388-5	0.05730	0.0134	0.0804	0.0625
MW 5	08/18/08	T23521-1	0.01010	0.0039	0.0349	0.0194
MW 5	11/20/08	180223	0.0290	0.00670	0.0827	0.0307
MW 6	03/01/07	T16511-2	<0.00035	<0.00020	<0.00033	<0.00036
MW 6	06/01/07	T17665-1	<0.00021	<0.00023	<0.00035	<0.00055
MW 6	09/06/07	T18805-2	<0.00021	<0.00023	<0.00035	<0.00055
MW 6	11/13/07	T19776-2	<0.0005	<0.0005	<0.0005	<0.001
MW 6	02/26/08	T21030-2	<0.00021	<0.00023	<0.00035	<0.00055
MW 6	05/29/08	T22388-6	<0.00021	<0.00023	<0.00035	<0.00055
MW 6	08/18/08	T23521-2	<0.0005	<0.0005	<0.0005	<0.001
MW 6	11/20/08	180224	<0.00100	<0.00100	<0.00100	<0.00100
MW 7	03/01/07	T16511-3	<0.00035	<0.00020	<0.00033	<0.00036
MW 7	06/01/07	T17665-3	<0.00021	<0.00023	<0.00035	<0.00055
MW 7	09/06/07	T18805-3	<0.00021	<0.00023	<0.00035	<0.00055
MW 7	11/13/07	T19776-3	<0.0005	<0.0005	<0.0005	<0.001
MW 7	02/26/08	T21030-3	<0.00021	<0.00023	<0.00035	<0.00055
MW 7	05/29/08	T22388-7	<0.00021	<0.00023	<0.00035	<0.00055
MW 7	08/18/08	T23521-3	<0.0005	<0.0005	<0.0005	<0.001
MW 7	11/20/08	180225	<0.00100	<0.00100	<0.00100	<0.00100
MW 11	03/01/07	T16511-4	<0.00035	<0.00020	<0.00033	<0.00036
MW 11	06/01/07	T17665-4	<0.00021	<0.00023	<0.00035	<0.00055
MW 11	09/06/07	T18805-4	<0.00021	<0.00023	<0.00035	<0.00055
MW 11	11/13/07	T19776-4	<0.0005	<0.0005	<0.0005	<0.001
MW 11	02/26/08	T21030-4	<0.00021	<0.00023	<0.00035	<0.00055
MW 11	05/29/08	T22388-11	<0.00021	0.0003 J	<0.00035	<0.00055
MW 11	08/18/08	T23521-4	<0.0005	<0.0005	<0.0005	<0.001
MW 11	11/20/08	180226	<0.00100	<0.00100	<0.00100	<0.00100
MW 12	03/01/07	T16511-5	<0.00035	<0.00020	<0.00033	<0.00036
MW 12	06/01/07	T17665-5	<0.00021	<0.00023	<0.00035	<0.00055
MW 12	09/06/07	T18805-5	<0.00021	<0.00023	<0.00035	<0.00055
MW 12	11/13/07	T19776-5	<0.0005	<0.0005	<0.0005	<0.001
MW 12	02/26/08	T21030-5	<0.00021	<0.00023	<0.00035	<0.00055
MW 12	05/29/08	T22388-12	<0.00021	<0.00023	<0.00035	<0.00055
MW 12	08/18/08	T23521-5	<0.0005	<0.0005	<0.0005	<0.001
MW 12	11/20/08	180227	<0.00100	<0.00100	<0.00100	<0.00100
MW 13	11/20/08	180228	1.51	<0.0100	<0.0100	0.126

^a Result is from Run #2.

Concentration in **Bold** = above NMOCD Criteria

TABLE 3
BTEX GROUNDWATER SAMPLE ANALYTICAL RESULTS for Wells with PSH
 Plains Pipeline, L.P.
 SRS No. 2002-10235
 Hugh Gathering
 Lea County, New Mexico

Well Number	Sample Date	Sample ID	SW 846-8021B			
			Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
			NMOCD Remediation Criteria			
			0.01 mg/L	0.75 mg/L	0.75 mg/L	0.62 mg/L
MW-1	25-May-08	T22388-1	10.90	6.34	1.66	3.78
MW-2	25-May-08	T22388-2	2.18	0.04 J	0.46	0.53
MW-3	25-May-08	T22388-3	5.48	0.22	0.03 J	0.33
MW-4	25-May-08	T22388-4	0.95	0.03	0.31	0.53
MW-8	25-May-08	T22388-8	6.12	0.33	0.96	1.59
MW-9	25-May-08	T22388-9	3.48	2.04	0.72	1.40
MW-10	25-May-08	T22388-10	0.40	0.03	0.09	0.09

^a Result is from Run #2.

Concentration in **Bold** = above NMOCD Criteria

TABLE 4
GROUNDWATER ANALYTICAL RESULTS for
POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs)
 Plains Pipeline, L.P.
 SRS No. 2002-10235
 Hugh Gathering
 Lea County, New Mexico

Monitoring Well	Sample Date	Lab ID	NMOCD Target Level 30 µg/L												TPH (C10-C28)			
			Acenaphthylene	Fluoranthene	Phenanthrene	Pyrene	Benz[a]anthracene	Chrysene	Benz[b]-fluoranthene	Benzof[g,h,i]-perylene	Dibenz[a,h]-anthracene	2-Methylnaphthalene	TPH-GRO (C6-C10)	TPH (C10-C28)				
Other regulatory limits (Tap Water)*			(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-1	2-Mar-06	NA	30**	365	243	1100	1830	1460	183	0.91	29.1	0.91	9.1	0.7**	0.91	0.091	30**	
MW-1	1-Jun-07	NA																
MW-1	25-May-08	T22388-1	2,920	<81	<73	<100	862	<89	<57	<71	<65	<74	<80	<78	<120	<63	<120	3830
MW-2	2-Mar-06	NA																85.3
MW-2	1-Jun-07	NA																1570
MW-2	25-May-08	T22388-2	24.5	<1.6	<1.5	<2.1	3.2 J	<1.8	<1.6	<1.1	<1.4	<1.3	<1.5	<1.6	<1.6	<2.4	<1.3	<2.5
MW-3	2-Mar-06	NA																
MW-3	1-Jun-07	NA																
MW-3	25-May-08	T22388-3	17.3	<1.6	<1.5	<2.1	<1.6	<1.8	<1.6	<1.1	<1.4	<1.3	<1.5	<1.6	<1.6	<2.4	<1.3	<2.5
MW-4	2-Mar-06	NA																
MW-4	1-Jun-07	NA																
MW-4	25-May-08	T22388-4	32.5	<1.6	<1.5	<2.1	4.1 J	<1.8	<1.6	<1.1	<1.4	<1.3	<1.5	<1.6	<1.6	<2.4	<1.3	<2.5
MW-5	2-Mar-06	177440	7.08	<0.05	<0.05	0.060	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MW-5	1-Jun-07	T17665	2.7 J	<2.4	<2.3	<2.3	<2.7	<2.7	<2.9	<3.6	<3.6	<3.2	<2.8	<3.0	<3.0	<2.5	<2.9	<2.7
MW-6	2-Mar-06	177441	0.574	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MW-6	1-Jun-07	T17665	<1.6	<2.4	<2.3	<2.3	<2.7	<2.7	<2.9	<3.6	<3.6	<3.2	<2.8	<3.0	<3.0	<2.5	<2.9	<2.7
MW-7	2-Mar-06	177442	0.649	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MW-7	1-Jun-07	T17665	<1.6	<2.4	<2.3	<2.3	<2.7	<2.7	<2.9	<3.6	<3.6	<3.2	<2.8	<3.0	<3.0	<2.5	<2.9	<2.7
MW-8	2-Mar-06	NA																
MW-8	1-Jun-07	NA																
MW-8	25-May-08	T22388-8	273	<16.0	<15.0	<21.0	68.2	<18.0	<16.0	<11.0	<14.0	<13.0	<15.0	<16.0	<16.0	<24.0	<13.0	<25.0
MW-9	2-Mar-06	NA																
MW-9	1-Jun-07	NA																
MW-9	25-May-08	T22388-9	29	<1.6	<1.5	<2.1	2.1 J	<1.8	<1.6	<1.1	<1.4	<1.3	<1.5	<1.6	<1.6	<2.4	<1.3	<2.5

TABLE 4

**GROUNDWATER ANALYTICAL RESULTS for
POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs)**

Plains Pipeline, L.P.
SRS No. 2002-10235
Hugh Gathering
Lea County, New Mexico

Monitoring Well	Sample Date	Lab ID	TPH (C10-C28)											
			2-Methylnaphthalene	Benzo[g,h,i]-perylene	Dibenz[a,h]-anthracene	Indeno[1,2,3-cd]-pyrene	Benzo[a]-pyrene	Benzo[a]-anthracene	Chrysene	Benzo[b]-fluoranthene	Benzo[j,k]-fluoranthene	Indeno[1,2,3-cd]pyrene	Benzo[a]-perylene	TPH-GRO (C6-C10)
NMOCD Target Level 30 µg/L			(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Other regulatory limits (Tap Water)*	30**		365	243	1100	1830	1460	183	0.91	29.1	9.1	0.7**	0.91	0.091
MW-10	2-Mar-06	NA												
MW-10	1-Jun-07	NA												
MW-10	25-May-08	T22388-10	5.3	<1.6	<1.5	<2.1	1.9 J	<1.8	<1.6	<1.1	<1.4	<1.3	<1.6	<2.4
MW-11	2-Mar-06	177443	0.577	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MW-11	1-Jun-07	T17665	<1.6	<2.4	<2.3	<2.3	<2.7	<2.7	<2.9	<3.6	<3.6	<3.2	<2.8	<3.0
MW-12	2-Mar-06	177461	0.548	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MW-12	1-Jun-07	T17665	<1.6	<2.4	<2.3	<2.3	<2.7	<2.7	<2.9	<3.6	<3.6	<3.2	<2.8	<3.0
NOT SAMPLED DUE TO PSH														

Bold values exceed NMWQCC groundwater standards

All data prior to 2007 collected by EP/

Tap Water* = NMED Tap Water Soil screening levels for residential scenarios.

** = NM Water Quality Standard

NA - Not Available

TABLE 5
2008 PSH and Dissolved Phase Recovery Data
Plains Pipeline, L.P.
SRS #2002-10235
Hugh Gathering
Lea County, New Mexico

Month	Volume of PSH recovered in gallons	Volume of dissolved phase groundwater recovered in gallons
January	8.00	68.00
February	20.00	127.00
March	5.50	69.50
April	11.50	170.50
May	8.00	136.00
June	8.00	132.00
July	10.00	170.00
August	8.00	152.00
September	10.00	133.00
October	15.50	184.50
November	7.50	148.50
December	23.25	146.75
Total Recovery	135.25	1637.75

APPENDIX C

Groundwater Analytical Reports

(Available Electronically on CD Only)

1st Quarter 2008 Analytical Reports– T21042

2nd Quarter 2008 Analytical Reports– T22302

3rd Quarter 2008 Analytical Reports– T23537

4th Quarter 2008 Analytical Reports– 8112007

APPENDIX D

C-141 NMOCD Release Notification Form

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 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 "INFORMATION ONLY NON-REPORTABLE" Initial Report Final Report

Name of Company EOTT Energy Pipeline	Contact Frank Hernandez
Address 5805 East Highway 80 / P.O. Box 1660, Midland, TX 79703	Telephone No. 915.638.3799
Facility Name Linman Line #2002-10235	Facility Type 6" Crude Oil Pipeline

Surface Owner Sec 12: W. McNeill Sec 11: J.A. Bryant	Mineral Owner	Lease No.
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LOCATION OF RELEASE

Unit Letter M P	Section 12 11	Township 21S	Range 37E	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea Lat.: 32°29'11"N Lon.: 103°07'31"W
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NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 50 bbls	Volume Recovered 0 bbls
Source of Release 6" Steel Pipeline	Date and Hour of Occurrence Sometime before 9-4-02	Date and Hour of Discovery 9-4-02 1:00 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Paul Sheeley, Hobbs NMOCD (9-12-02)	
By Whom? Pat McCasland (Environmental Plus, Inc.)	Date and Hour: Initially considered to be <1 bbl. Revised to 50 bbl on 9-12-02. NMOCD notified on 9-12-02 4:00 PM	
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.*

The cause of the release was internal/external corrosion. The line has been replaced. Contaminated soil is stockpiled on a plastic barrier on site awaiting remediation.

Describe Area Affected and Cleanup Action Taken.*

Oily spots less than 3' in diameter were initially observed around the vents of the pipeline conduit that passes under NMSR18. During replacement activities, the soil in the ditch line and around the conduit ends were observed to impacted. The east side Sec 12 Spill Area = ~326 ft² 55' X 10'. The west side Sec 11 Spill Area = ~936 ft² 98'X 12'. Near surface soil will be characterized in accordance with 40 CFR 261 and with NMOCD approval, disposed of in a NMOCD approved facility. The site will be delineated and remediated. Soil within the NMSR18 may also be contaminated in the subsurface.

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: <i>Frank Hernandez</i>	OIL CONSERVATION DIVISION	
Printed Name: Frank Hernandez	Approved by District Supervisor:	
Title: District Environmental Supervisor	Approval Date:	Expiration Date:
Date: September 12, 2002	Phone: 915.638.3799	Conditions of Approval: <input type="checkbox"/> Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

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 - Informational OPERATOR

Initial Report Final Report

Name of Company: Plains Pipeline, L.P.		Contact: Camille Reynolds	
Address PO Box 1660 5805 East Highway 80 Midland, Texas 79702		Telephone No. 505.393.5611	
Facility Name Hugh Gathering 090402 # 2002-10235		Facility Type 6" Steel Pipeline	
Surface Owner: Bryant		Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter P	Section 11	Township T21S	Range R37E	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea
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Latitude: 3229'11.007"N Longitude: 10307'33.864"W

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 50 bbls barrels	Volume Recovered 0 bbls barrels
Source of Release 6" Steel Pipeline	Date and Hour of Occurrence 9-4-02 @ 1:20 PM	Date and Hour of Discovery 9-4-02 @ 1:30 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson	
By Whom? Camille Reynolds	Date and Hour 9-4-02 @ 3:30 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

6" Steel Pipeline The leak was due to internal/external corrosion. Near surface impacted soil was disposed of in an NMOCD approved landfarm.

Describe Area Affected and Cleanup Action Taken.*

100 sqft 10' X 10': Site delineated. Remedial Goals: TPH 8015m = 1000 & 100 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg.

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 groundwater, 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:	OIL CONSERVATION DIVISION		
Printed Name: Camille Reynolds	Approved by District Supervisor:		
E-mail Address: CJReynolds@PAALP.com	Approval Date:	Expiration Date:	
Title: District Environmental Supervisor	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 9/6/2002	Phone: 505.393.5611		

Attach Additional Sheets If Necessary