1R - 156

GENERAL CORRESPONDENCE

YEAR(S):

2007 - 1994

Project Summary: Monument Booster Station (RP-156 still as GPM)
Unit B, Section 33, Township 19 South, Range 37 East

Summary date: January 2007

Project history:

- Investigative activities were initiated in February 1994 for ENRON Operations Company.
- DEFS acquires asset in April 2003.
- Free phase hydrocarbon (FPH) recovery using automatic pumps was initiated in MW-1 & MW-5 in January 1997 (see attached). Pump use discontinued in October 1999 because of poor performance.
- Hydrophobic sock use was discontinued in October 2004 because of inefficiency.
- Wells are sampled semi-annually.

Current Project Status:

- Semi-annual groundwater monitoring continues in the wells shown on the attached figure.
- All dissolved-phase hydrocarbons have attenuated to below the New Mexico Water Quality Control Commission Groundwater Standards inside the property boundaries since February 2000 based upon groundwater monitoring that was initiated in January 1996.

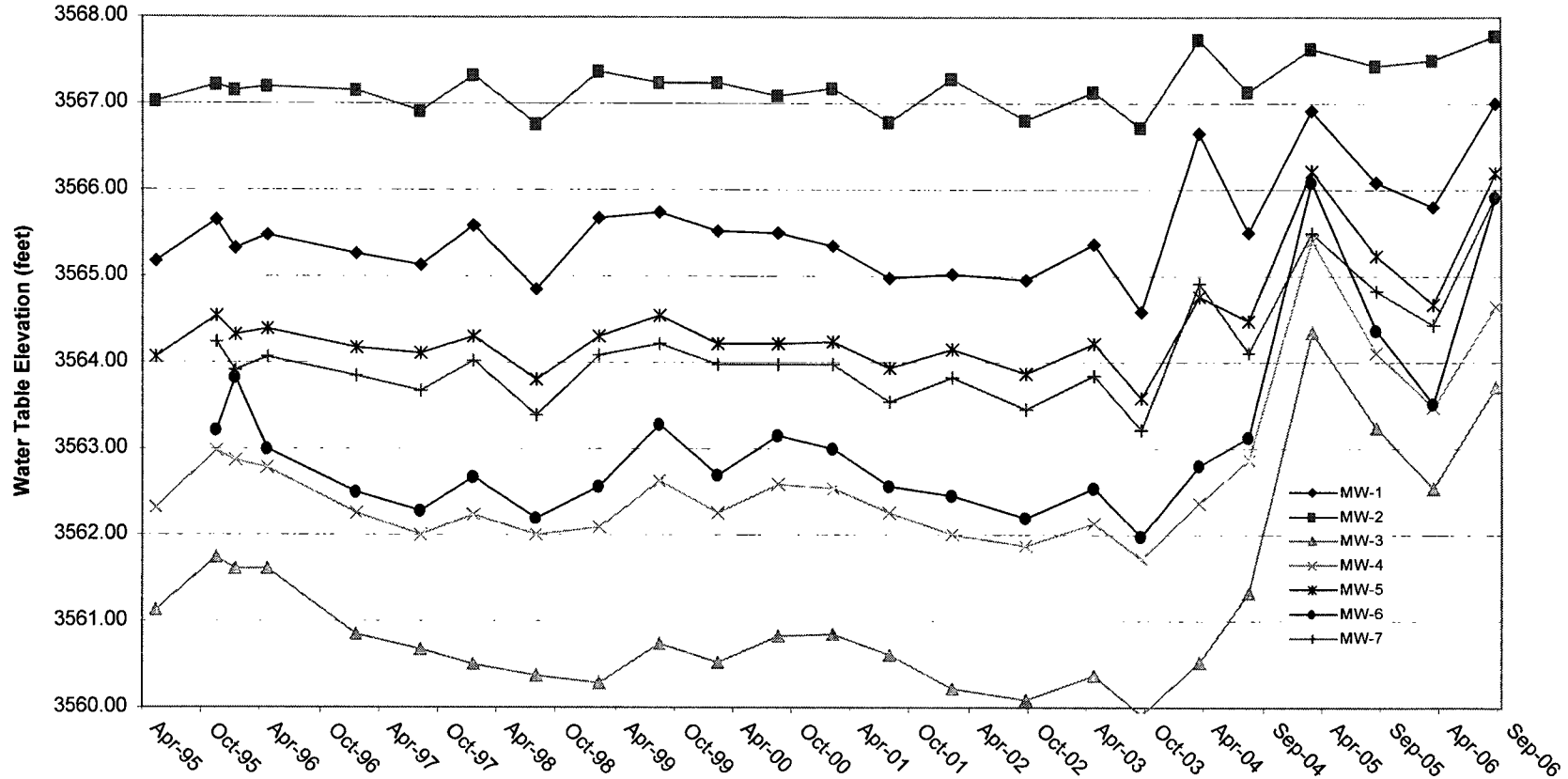

Figure 3 – Monument Booster Hydrographs

Monument Booster Station Groundwater Monitoring

dcp Midstream.

DRAWN BY: MHS

DATE: 1/07

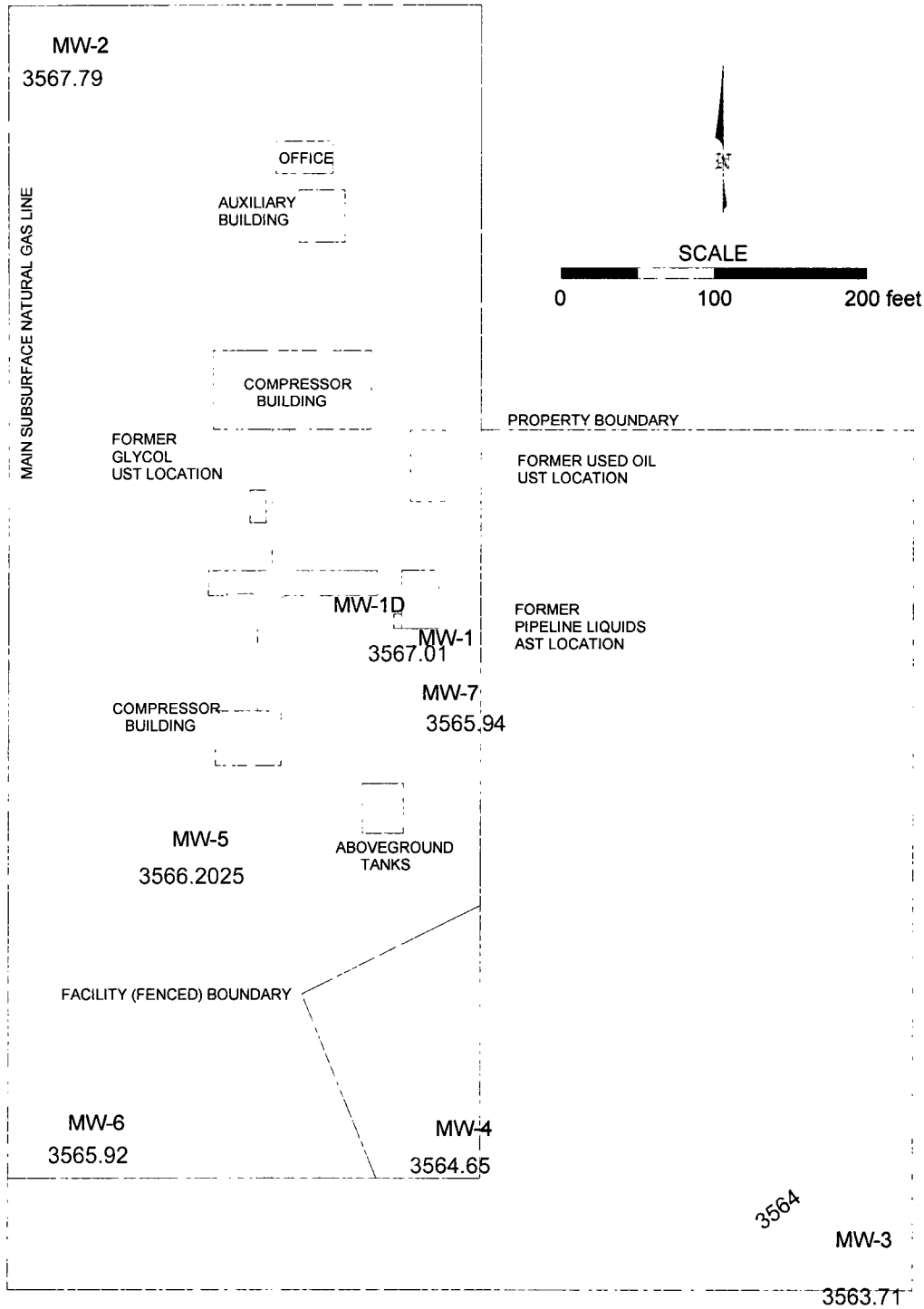

Figure 4 – September 2006 Water Table Elevation Contours

Monument Booster Station Groundwater Monitoring

dcp Midstream

DRAWN BY:	MHS
REVISED:	
DATE:	1/07

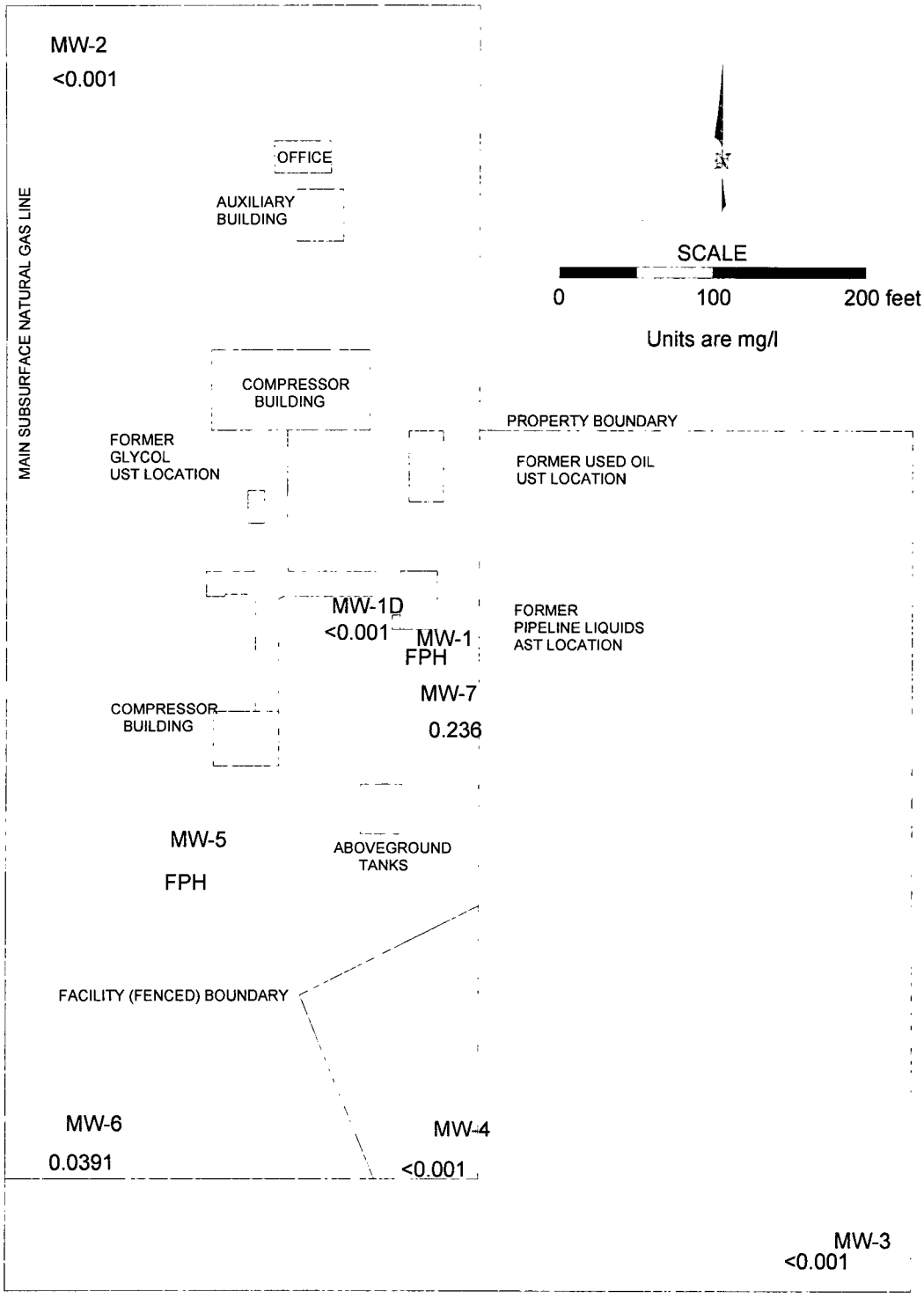

Figure 5 – September 2006 Benzene Distribution

Monument Booster Station Groundwater Monitoring

dcp Midstream

DRAWN BY:	MHS
REVISED:	
DATE:	1/07

OCD DCP Midstream LP. Sites Discussion Meeting
(Stephen Weathers, Daniel Dick, et. al) February 1, 2007

GPM Artesia GP (GW-23)

On 5/26/2006, Stephen Weathers PG 303-605-1718 (swweathers@duke-energy.com) submitted a Flare Pit Soil Remediation & Closure Work plan by Conestoga-Rovers & Assoc. to Mike Bratcher. Upon your approval, DEFS will move forward w/ the closure activities. One hard copy of the work plan will also be mailed next week (OCD Santa Fe never received it).

Stephen Weathers, et al. will present the info. during the 1/31/2007 meeting in Santa Fe.

Lee Compressor Station (GW-227) (Also known as the Gillespie/Feagan)
A-24-T17 S 35 E

Closure work plan dated 9/5/2006 mailed to Ben Stone to complete a site closure.

The work plan was develop. Based on DEFS decision to cancel the discharge plan GW-227 and close the site. The closure plan is submitted to the OCD for approval.

Closure Activities: DEFS will remove all remaining equip. from site. The site will be visually inspected to determine if hydrocarb. impacted soil is present at the site. If no HC impacted soils are encountered, the site will be leveled and reseeded with native grass. If HC impacted soils are encountered, the impact soil will be remediated following NMOCD Guidelines for Remed. of Leaks, Spills, & Releases, 8/1993 and using: Benz (10 ppm), BTEX (50 ppm), and TPH (100 ppm). A PID might be used to screen potential HC impacted soil. If headspace is <= 100 ppm, the PID reading will be used as a substitute to lab analysis for benz./BTEX. If the PID is not used for screening confirm. soil samples will be analyzed for BTEX using EPA 8021B.

HC impact soils that are found to be greater than cleanup criteria will be excavated and properly disposed at an NMOCD approved facility. Confirmation soil samples will then be collected within the base and sidewalls of the excavation to confirm that the HC impacted soils have been removed to below the NMOCD cleanup stds. for this site.

After confirmation soil samples confirm the impacted soils has been removed to below the NMOCD cleanup Stds., the excavation will be backfilled with clean fill mtl. and the area reseeded w/ native grass. A closure report will be completed summarizing all field activities and analytical results. The closure report will also request that no further action will be needed at this site. Upon approval of this work plan, field activities will be scheduled. A 48 hr. notice will be given to the NMOCD Hobbs DO informing them of the start up of the field activities.

LEE GP (GW-2)

Dick Daniel (DIDick@dcpmidstream.com)

Received Q4 2006 GW Monitor Rpt. On 1/30/07 w/ recommendations for certain activities, i.e., free-product recovery in MWs 5 and 15 w/ restart analysis on MW-8 recommended.

Expired DP and OCD msg. to Ruth Lang on 12/21/06: the Lee Compressor Station (GW-227) correspondence dated 12/28/06 indicates that the facility will remain inactive and follow the closure plan to permanently close the facility. Upon receipt of the closure plan info. and verification that contamination exists at the facility with some photos to display what the site currently looks like, the OCD may close the DP?

DUKE LINAM RANCH GP (GW-15)

Third Qtr. 2006 GW Monitoring Report dated January 30, 2007.

GW conditions remain stable. Next monitor event is scheduled for first qtr. 2007. Next annual report for site will be prepared following completion of first qtr. 2007 monitor activities.

On 11/1/2006 Dick Daniel (didick@duke-energy.com) submitted the Annual GW Rpt. 2005-2006. The summary rpt. for Q3 2005 and Q1 2006 GW sampling event. The data indicate that GW conditions remain stable. The next monitor event was performed in 9/2006. The next annual rpt. for the site will be prepared following the completion of the Q1 2007 monitor activities & review & validation of the analytical results. The water tables rose substantially more in MW-1 and 2 than in MW-3, 7 & 9. MW-1 & 2 are located in or adjacent to a natural drainage swale that has been blocked in the S part of site to produce an internally drained condition. The other 3 wells are outside of this area. Unusually high precip in 2004-2005 resulted in more GW mounding beneath the closed drain swale than the rest of the site. The water table in MWs 1 & 2 began to recede after the precip. patterns returned to normal. Water tables in the other 3 wells continue to rise suggesting a more dampened relationship between the precipitation and resulting chgs. in the water table elevations.

MW-7 was not included in the piezometer maps. The level in MW-7 was not included in these maps. Including this well results in a water-table configuration that suggests radial flow from the center of the property. MW-7 has never contained measurable BTEX. This suggests the relatively higher water table in the central part of site is localized so contours should not be carried to the NW. FPH thick measurements for 9/29/2005 (MW-4=0.68 in & MW-6=4.23 in.) and 3/22/2006 (MW-4=0.76 & MW-6=3.69 in.). Only MWs 10 & 10D exceeded BTEX Stds. Any dissolved phase BTEX that emanate from FPH at MW-4 & MW-6 attenuate to below the method reporting limits before migrating to the vicinity of MW-1 (cross gradient) or MW-8 (down gradient). BTEX measured at MW-10 and 10D attenuate to concentrations that are slightly above MW-9 or below the reporting limits (MW-12 & 13) at the interior down gradient wells. The above have remained constant since ~ 6/2001. This indicates that BTEX distribution and attenuating mechanism that controls it are equilibrated.

The affected areas are min. of 1,000 ft. from the nearest down gradient property boundary. Wells containing FPH are in an active gas processing area so the safety risks inherent to restarting FPH collection more than offsets the environmental benefits that would be associated with the activity. The data establishes that dissolved phase releases from the FPH that is present in this area are attenuated approx. 1,000 ft. from the nearest down-gradient property boundary. The next semi-annual GW monitor event is scheduled for the Q3 2006. Contact Michael Stewart PE 303-948-7733 if you have questions.

HOBBS BOOSTER CS (GW-44)

Project Summary: Hobbs Booster Station, (Discharge Plan GW-044)
(Units C and D, Section 4, Township 19 South, Range 38 East)

Summary date: October 10, 2006

Project history:

DEFS inherited Hobbs Booster Station (Former Gas Plant) when it acquired the assets of GPM. Site investigation activities began in July 1999. Plume delineation was completed in June 2003.

Two remediation systems are present at the site. An air sparge system was installed in January 2004 to control cross-gradient off site migration of dissolved phase hydrocarbons. It has operated on a near continual basis except for a couple of periods when it was under repair, and the groundwater data verifies that it is controlling off-site migration.

A free phase hydrocarbon (FPH) collection system became operational in January 2005 in the center of the site. It has operated on a regular schedule except for a couple of brief periods when it was down for repairs. The system has effectively remove FPH since it was started. The system is inspected and maintained on a regular basis DEFS is currently evaluating the potential of adding vacuum to the system to increase the production rate and capture zone of each well.

Current Project Status:

The hydrocarbon plume has been delineated to below the method detection limits. There is no evidence of plume expansion. Operation of the air sparge system is necessary to control dissolved-phase hydrocarbon releases to the south. FPH collection will continue indefinitely.

Detection level Groundwater monitoring continues at the site on a quarterly basis. Operation of the air sparge and the FPH collection system will continue indefinitely.

On 12/17/06 Michael Stewart & Steve Weathers notified OCD that Trident Environmental will conduct quarterly monitor well gauging & GW sampling and the following: SWLs in MW, RW and temp. wells using an oil/water interface problem; Collect GW samples for BTEX w/ QA/QC; Purge water disposed at NMOCD approved facility. Project site location: 1625 W. Marland, Hobbs (C&D 4-19S-36E). Sampling will begin on 12/20/06.

On 10/30/06, Stephen Weathers 303-605-1718 (swweathers@duke-energy.com) submitted additional vacuum enhancement testing for the free phase hydrocarbon extraction system located at C&D 4-19S-38E. DEFS would like to complete this test early next week. Upon completion of the field activities DEFS will complete an assessment report summarizing the results of the test.

The AEC 10/30/06 summary of initial assessment activities & recom. for further evaluation of adding vacuum enhancement to the free phase hydrocarbon extraction system. Depth (BTOC) is about 50 feet. The above SWL indicate that recent heavy rains have not affected the water table in a fashion similar to 2004 precip. This fact is important because the WT historically declined at a rate of about 1 ft/yr. this trend should continue to expose more of the screened interval in these wells to make them available to vacuum effects.

FPH thickness ranges from about 0.43 in. to 10.63 in. in TW-C, OW-25W & 50W, OW-100W, OW-25S, OW-50S, OW-25 E & OW-25 N. There is a gravel interval at about 34 to 64 feet BGL.

On 10/23/2006, Stephen Weathers 4-303-605-1718 (swweathers@duke-energy.com) submitted an electronic copy of the 2005-2006 Annual GW Monitor Rpt. along w/ a cover letter.

The report is missing & OCD should request another copy.

DUKE APEX CS (GW-163)

old conoco

Trisha Elizondo (ARCADIS) (Trisha.elizondo@arcadis-us.com)

On 1/17/07, notification that ARCADIS will be conducting mo. Product recovery and PCA Junction on 1/22-23/07. Routine product recovery is on-going at site through hand-bailing. MWs at 2 locations will be surveyed to help w/ GW flow & potentiometric surface.

DUKE HOBBS GP (GW-175)

old conoco
Stephen Weathers (SWWeathers@dcpmidstream.com)

Project Summary: Hobbs Gas Plant
Unit G, Section 36 Township 18 South, Range 36 East

Summary date: October 10, 2006

Project history:

DEFS acquired the Hobbs Gas Plant in March of 2004. Ground water monitoring wells (6 wells) were installed at the site during the due diligence phase of the acquisition. Benzene was identified above the WQCC standards in one of the groundwater monitoring wells.

Current Project Status:

Groundwater monitoring continues at the site on a quarterly basis.

On 1/29/07, 4Q 2006 GW monitor rpt. submitted. Two MWs exhibit elevated benzene levels. SE and E-central portions of site adjacent to process equip. Qtly sampling continues. Results of Q1 2007 sampling will be reported in A1 2007 GW monitor report. Potentiometric surface maps for site in future reports can be expected.

Remediation Sites

C-line Release Site (1RP-401-0)

Project Summary: C-line Release site (1RP-401-0)
(Unit O, Section 31, Township 19 South, Range 37 East)

Summary date: October 10, 2006

Project history: Pipeline Release

Duke Energy Field Services C-Line Pipeline Release occurred in May of 2002. The release occurred on New Mexico State Land. Environmental Plus, Inc. was contracted to complete the soil remediation. Approximately 3,868 cubic yards of impacted soil was excavated. 2,707 cubic yards of impacted soils was properly disposed and the remaining impacted soil was blended/shredded until below cleanup standards and placed back into the excavation. During the soil remediation, groundwater was determined to be impacted with hydrocarbons. The groundwater characterization activities began in fourth quarter 2002. A total of 9 groundwater monitor wells were installed. Active free phase hydrocarbon (FPH) removal initiated in November 2003. A soil vapor extraction system was installed in October 2004. The system was expanded to include a second well in June 2005. No FPH has been measured since March 2006 even after the SVE system was turned off (but remains at the site) in June 2006.

Current Project Status:

All FPH has been removed as discussed above. The hydrocarbon plume has been delineated. There is no evidence of plume expansion, and, in fact, the plume may actually be contracting.

Groundwater monitoring continues at the site on a quarterly basis. Site monitoring could be decreased to semi-annual.

Received Q3 2006 GW monitor rpt. from Stephen Weathers on 12/18/06.

Eldridge Ranch (AP-33)

Stephen Weathers (SWWeathers@dcpmidstream.com)

Project Summary: Eldridge Ranch, (Abatement Plan AP-33)
(Unit P, Section 21, Township 19 South, Range 37 East)

Summary date: October 10, 2006

Project history: Pipeline Release

DEFS initiated investigative activities in June 2002 following notification by NMOCD. Site characterization activities were largely completed by the fourth quarter of 2003. The boundaries of detectable hydrocarbons have been delineated.

DEFS submitted the Stage 1 Abatement Site Investigation Report (ASIR) on February 11, 2004 to the New Mexico Oil Conservation Division (OCD). In the ASIR, DEFS committed to continuing two activities (groundwater monitoring and free phase hydrocarbon (FPH) removal) independent of the ASIR review timeframe. The OCD has not commented on the ASIR. Groundwater monitoring and FPH removal activities continue on a regular basis.

Current Project Status:

FPH recovery has been attempted at the site with limited results. The FPH at the site is generally limited in thickness to less than one foot. In addition, the FPH appears to be relatively immobile based upon the inability of the automatic collection systems to collect the liquids.

The hydrocarbon plume has been delineated to below the method detection limits. There is no evidence of plume expansion; however, concentrations the interior of the plume appears to exhibit nominal increases and decrease in response to seasonal precipitation.

Groundwater monitoring continues at the site on a quarterly basis. Site monitoring could be decreased to semi-annual without jeopardizing environmental impacts. FPH removal continues as site conditions warrant.

On 1/26/07, received Q4 2006 GW monitor rpt. for AP-33 near Monument NM. Some conclusions: FPH mobility appears to be limited based on historic bail down/recovery tests and failure to reappear; FPH thick is less than 0.8 ft. in six wells and less than 0.1 ft in 2 of 6 wells. FPH is relatively immobile at thick less than 1 ft. FH continues to decline in MW-EE from max. thick. of 0.83 ft. in 9/2005. FPH thick in other wells (excepting MW-CC) also exhibit decreasing trends. Benzene horiz. distrib. remain unchanged over duration of project. The benz level in the former house well continues to remain below NM WQCC GW std. Summer 2006 rains did not create a spike in levels at MWs like the heavy 2004-2005 rains. No evidence of plume expansion exists ; thus, natural attenuation stabilizes and removes hydrocarbs as they migrate away from area.

AEC recommends that Q1 2007 monitoring be completed and data reviewed to evaluate changes in GW flow patterns in S-central part of study area.

On 12/22/06, received Q3 2006 GW monitor report conclusions: FPH remains in 4 wells in W-central part of study area. FPH thick decrease in 3 of 4 wells. FPH present to N in MW-EE at 0.35 ft. FPH continues to decline from max thick of 0.83 ft. in 9/2005. FPH was not measured anywhwere else within study area. FPH mobility appears to be limited based on historic bail down/recovery tests and its failure to reappear in previously affected wells to S. Benz distrib. unchg. over duration of project. Temporal benz distrib. - see charts.

On 10/24/06, Stephen Weathers 303-605-1718 (swweathers@duke-energy.com) submitted GW monitor rpt. for Q2 2006. The former NMG-148C Study Area was combined with the Eldridge Ranch Study Area beginning w/ the Q1 2006. The areas were combined after estab. that hydrocarb plume orig. from NMG-148C had migrated into the Eldridge Ranch Study Area before it attenuated. The combined sites will be treated as a single entity in all subsequent sample events. Activities are governed under AP-33. DEFS submitted the Stage 1 Abatement Site Investigation Rpt. (ASIR) on 2/11/2004 to the OCD. In that rpt., DEFS is committed to continuing 2 activities independ. of the ASIR review timeframe. The activities include GW monitor. & free phase hydrocarb. (FPH) removal when practicable.

GW Monitor activities were completed on 6/19 and 20, 2006 abiding by the OCD approved SAP. SWLs, FPH tick measurements, and GW sampling were completed (see report). The conclusions were: The interpretations are grouped accord. to GW flow, product thick and GW chemistry. 6/2006: data from newly installed MW-28-31 continues to indicate that GW flow beneath the northern part of the Huston property is southward rather than toward the SE.

The WT continues to decline at a uniform rate across the site from a high in 12/2004. The vertical gradient measured between MWs 1s & 1d has not varied substantially over the duration of the project.

Conclusions are: FPH is present in 5 MWs in the w-central part of the study area. The FPH mobility appears to be limited based upon historic bail down/recovery tests & its failure to reappear in previously affected wells to the S. FPH was also present to the N in MW-EE at 0.35 ft. FPH has now declined from a max. thick of 0.83 ft. in 9/2005. FPH was not measured anywhere else within the study area. The Benz distribution has remained essentially unchg. over the duration of the project. MWs 28, 30 & 31 installed in 3/2006 did not contain detectable concentrations of BTEX constituents when they were sampled a second time. MW-29 has detected BTEX. The northernmost NMG-148C plume and moves south. The pattern indicates that the areal extent of the dissolved phase plume assoc. w/ NMG release is not expanding.

The concern. in MW-e & MW-1 located in the S part of this area continue to decline. Samples from the other 4 wells (MW-M, O, Q & M) produced concentrations that were at or slightly higher than the 3/2006 values. This indicates that the S part of the dissolved phase plume in this area appears to be contracting to the N while the remainder of the plume in this area remains constant. None of the data indicates that the plume is expanding.

Benz time concent. for the wells located immed. adjacent to MW-1 or on the Eldridge property (irrigation wells, house well) are shown in Fig. 9. The concentrations in MW-1 and the irrig. well leveled out after an apprec. 1-yr decline. The concent. in the house well has remained consistent over the past 3 sample events. The pattern does not indicate that the dissolved phase plume is expanding in this area. Wells MW-A, 4 & 5 located N of the Huston-Eldridge boundary, remained relatively consistent.

All of the above relationships indicate that natural attenuation is stabilizing & removing hydrocarbs as they migrate away form the src. areas. There is no evidence of plume expansion.

Recommendations:

AEC recommends that a Q3 monitoring be completed and evaluated. The monitor freq. should then be decreased from qtly. to semi-annual if the data results do not vary appreciably. The potential for FPH removal will be evaluated based upon info. gathered during the Q3 monitor event. Recommendations on FPH will be provided as necessary separate from the monitor report. Michael Stewart PE (303-948-7733).

J-4-2 Release Site

Project Summary: J-4-2 Release Site
Unit C, Section 27 Township 19 South, Range 35 East

Summary date: October 10, 2006

Project history: Pipeline Leak

The release at this site was discovered in August 2005. EPI completed a limited soil cleanup and preliminary groundwater investigations between August 2005 and the first quarter of 2006.

A work plan proposing additional site characterization activities was submitted to the NMOCD. The site activities were completed in September 2006 and a report is currently being generated.

Current Project Status:

Preliminary evaluation of the data indicates that the groundwater plume has been defined beyond the limit of detectable concentrations. Additional activities will be proposed as necessary in the pending investigative report.

On 12/28/06, Stephen Weathers e-mailed a AEC Consultants site investigation rpt. (12/26/07). Water table elevations rose by 0.45 to 1 ft. FPH thickness in MW-2 declined from 0.57 to 0.15 between 2/06 and 9/06. Probably due to high precip. summer 2006. I~ 0.006 toward SE. Head at MW-2 slightly higher than at other wells. K~ 90 ft/day based on pump test. n! 0.15. Estimated GW velocity !3.6 ft/day or 1,310 ft/yr. All develop. and purge water was disposed of at the Linam Ranch facility by EPI. All cuttings generated during the drilling process will be stockpiled

and sampled and then disposed of in an appropriate fashion. Unaffected cuttings will be spread thin.

Final field activity completed was to measure physical properties of saturated mtls. Slug tests were completed on all wells that don't contain FPH to estim. saturated K.

Following recommendations from AEC (Michael Stewart 303-948-7733):

A passive bailer should be installed in MW-2 to attempt to remove mobile FPH. GW monitoring should be completed 3 more times on a qtly. basis to compile a data base based upon 4 seasons of measurements; Qtly repts should be generated based upon the results of the 4th qtr. 2006 and Q1 2007 monitor events; A comprehensive report will be compiled follow. completion of Q2 2007 monitor episode. This report. include recom. of both long-term monitor and , if necessary, implementation of active remediation; Additional charact. activities & active remediation activities will not be completed during this time interval unless data indicates hydrocarb. plume is expanding; the next GW monitor event is scheduled fro the Q4 2006.

On 12/20/06, John Furgerson (jmfergerson@grandecom.net) sent msg. that Trident Environ. a subcontractor of Duke's will be conducting monitor well gauging & GW sampling at 1300 MST Thursday, Dec. 21, 2006. They will measure SWLs in all MWs using an oil/water interface probe; purge non-product MW/RWs. Collect GW samples for BTEX; ship samples using COC protocol; and purge water will be disposed at a NMOCD approved facility.

X-line Site (1RP-400)

Project Summary: X line Release Site (1RP-400)
Unit B, Section 7 Township 15 South, Range 34 East

Summary date: October 10, 2006

Project history: Pipeline Release

The release at this site was discovered in January 2002. EPI completed soil cleanup and preliminary groundwater investigations the first quarter of 2002. A preliminary groundwater investigation was completed in May 2002.

The following remediation components were installed at the site:

· A free phase hydrocarbon (FPH) removal system was installed in MW-8 in July 2003. The system continued to function until the mobile FPH was removed.

· An air sparge (AS) system became operational in June 2003. The system was operated until hydrocarbon concentrations in the wells (except for the FPH collection well) were all measured below the method detection limits.

· A soil vapor extraction (SVE) system was also installed in June 2003. The SVE system operated regularly until August 2006. No FPH was present in the extraction well in September 2006.

Quarterly monitoring is completed at the site. The last monitoring episode was conducted in September 2006.

Current Project Status:

A report detailing the September 2006 activities at this site will be prepared when the analytical data is received and verified.

DEFS will evaluate the feasibility of initiating air sparge in the FPH recovery well to complete source recovery provided no additional FPH is measured in the well.

Received 4th qtr 2006 GW monitor report for pipeline release on January 30, 2007.

Received Q3 2006 GW monitor report from Stephen Weathers 303-605-1718)) for pipeline release on 12/18/06. X-Line pipeline release on the Etcheverry Ranch at 33 deg 02 min 11 sec, 103 deg 32 min 48 sec. MWs 1 through 8 sampled. SWLs reassured. Unfiltered samples were collected for BTEX. MW-8 is not included in hydrograph because casing elev. has not been established (see report for conclusions, etc.).

On 9/8/2006, Stephen Weathers (swweathers@duke-energy.com) sent Ben Stone the Q2 2006 GW monitor report located on the Etcheverry Ranch near Lovington, NM.

The report is missing and OCD needs another copy.

RR Ext, (AP-55)

Project Summary: RR Ext, (Abatement Plan AP-55)
Unit C, Section 19 Township 20 South, Range 37 East

Summary date: October 10, 2006

Project history:

DEFS initiated cleanup activities after a December 13, 2005 release. The spill was remediated, and a temporary well was drilled to groundwater during the first quarter of 2006. A sample from the well contained dissolved-phase hydrocarbons.

The NMOCD assigned the site an abatement plan number based upon the groundwater sample. A Stage 1 Abatement Plan Proposal was submitted to the NMOCD on or about May 26, 2006.

Current Project Status:

DEFS is waiting for approval for the Stage 1 Abatement Plan Proposal. DEFS will initiate the required activities following receipt of that approval

PCA Junction

Trisha Elizondo (ARCADIS) (Trisha.elizondo@arcadis-us.com)

On 1/17/07, notification that ARCADIS will be conducting mo. Product recovery and PCA Junction on 1/22-23/07. Routine product recovery is on going at site through hand bailing. MWs at 2 locations will be surveyed to help w/ GW flow & potentiometric surface.

Monument Booster Station (Gas Compression Facility)

Q3 2006 GW Monitor activities completed on 9/20/06 & submitted 1/30/07. Next monitor event Q1 2007. Next annual rpt. Prepared following completion of Q1 2007.
No measurable free-product was detected in any MWs. However, in the submittal is shows MWs 1 and 5 have free product at 1.6 and 0.55 inches? No BTEX detected in down-gradient boundary wells MW-3 and 4. No BTEX in up gradient MWs 1D and 2. MW-6 showed anomalously high levels of BEX. Will keep in mind next sample event for continuing trend.

On 11/1/2006, Daniel Dick 303-605-1893 (didick@duke-energy.com) submitted Annual GW Monitor Rpt. 2005-2006. A copy of the summary report for Q3 2005 and Q1 2006 GW sampling effort. Data indicates that the GW conditions remain stable. The next monitor episode was performed 9/2006. The next annual report for the site will be prepared following the completion of the Q1 2007 monitor activities & review & validation of he analytical results. FPH thick measurements on 3/16/06 for period since passive FPH collectors were removed at MW-1 (0.37 in.) and MW-5 (0.39). FPH thick may be declining in MW-1 and is stable at MW-5. None of the BTEX constituents were detected in downgrade boundary wells MW-3 and MW-4. BTEX was also not detected in upgrade wells MW-1D & 2. Hydrocarbs were detected in MW-7, but benz was only constituent above WQCC Stds. No sample has exceeded the WQCC Stds for TEX. Only MW-7 samples have exceeded for benz. Since 2/2000. Benz detection sporadic in all wells except MW-7 since 2/2000. BTX concentrations in MW-7 continue to fluctuate.

Further src. control activities should be postponed given the decreasing product thick in MW-1. The Next semi-annual gw monitor event is scheduled for Q3 2006. Reporting will continue on an annual basis unless unusual conditions warrant notification after the Q3 sampling event.

Attachment: DCP Midstream LP Related Facilities

Application No.	Application Type	Order No. (ex., GW-##)	Applicant	Facility	Environmental Permit Status	Rcvd	Order	Exp	legal	County	Reviewer	District	IssuingOff	Notes	Cleanup Status
pENV000GW0 0154	Discharge Plan Permit	143	DCP MIDSTREAM L.P.	DUKE CAL-MON CS	A	03/29/1993	05/14/1993	05/14/2008	J-35-23 S-31 E	Eddy	Chavez	Artesia	Santa Fe		
pENV000GW0 0242	Discharge Plan Permit	227	DCP MIDSTREAM L.P.	LG&E HADSON GILLESPIE/F EAGAN CS	1		12/28/1995	12/28/2005	A-24-17 S-35 E	Lea	Chavez	Hobbs	Santa Fe		
pENV000GW0 0331	Discharge Plan Permit	316	DCP MIDSTREAM L.P.	DUKE PAIGE CS	A	08/17/1999	01/06/2000	01/06/2005	O-4-21 S-32 E	Lea	Chavez	Hobbs	Santa Fe		
pENV000GW0 0326	Discharge Plan Permit	311	DCP MIDSTREAM L.P.	RAPTOR COTTON DRAW	A	01/15/1999	01/06/2000	01/06/2005	C-18-25 S-32 E	Lea	Chavez	Hobbs	Santa Fe		
pENV000GW0 0187	Discharge Plan Permit	176	DCP MIDSTREAM L.P.	DUKE BOOTLEG CS	A	10/27/1994	01/20/1995	01/20/2005	J-18-22 S-33 E	Lea	Chavez	Hobbs	Santa Fe		
pENV000GW0 0163	Discharge Plan Permit	152	DCP MIDSTREAM L.P.	DUKE WHITE CITY C.S.	C		12/13/1993		-10-24 S-26 E	Eddy	Chavez	Artesia	Santa Fe	Site is shut down-Llano to submit closure	
pENV000GW0 0228	Discharge Plan Permit	213	DCP MIDSTREAM L.P.	DUKE STRATA CS	A	07/18/1995	08/30/1995	08/30/2000	A-22-23 S-34 E	Lea	Chavez	Hobbs	Santa Fe	closure requested need picture and TPH analysis	
pENV000GW0 0156	Discharge Plan Permit	145	DCP MIDSTREAM L.P.	DUKE ZIA GAS PLANT & ZIA BOOSTER STATION	A		07/06/1993	07/06/2008	A-19-19 S-32 E	Lea	Chavez	Hobbs	Santa Fe	3 below grade tanks registered	
pENV000GW0 0303	Discharge Plan Permit	288	DCP MIDSTREAM L.P.	DUKE PARDUE CS	A	10/06/1997	11/24/1997	11/24/2007	J-10-23 S-28 E	Eddy	Chavez	Artesia	Santa Fe	need $400 fee + sign-off	
pENV000GW0 0178	Discharge Plan Permit	167	DCP MIDSTREAM L.P.	DUKE P & P Malaga CS	A	05/19/1994	07/25/1994	07/25/2004	G-3-24 S-28 E	Eddy	Chavez	Artesia	Santa Fe	need sign-offs	
pENV000GW0 0173	Discharge Plan Permit	162	DCP MIDSTREAM L.P.	DUKE ANTELOPE RIDGE GP	A	01/21/1994	04/04/1994	03/23/2004	O-15-23 S-34 E	Lea	Chavez	Hobbs	Santa Fe	rec DP App + $100 issued PN and Draft DP 1/23/04	
pENV000GW0 0171	Discharge Plan Permit	160	DCP MIDSTREAM L.P.	DUKE BRIGHTM FED CS	C	11/29/1993	01/14/1994		C-21-19 S-33 E	Lea	Chavez	Hobbs	Santa Fe	DP terminated 1/22/04	
pENV000GW0 0161	Discharge Plan Permit	150	DCP MIDSTREAM L.P.	DUKE PURE GOLD "28" CS	A		11/22/1993	11/22/2003	D-28-23 S-31 E	Lea	Chavez	Hobbs	Santa Fe	Rec DP application + $100 issued PN 1/23/04 & Draft DP	
pENV000GW0 0311	Discharge Plan Permit	296	DCP MIDSTREAM L.P.	DUKE CEDAR CANYON CS	A	03/23/1998	07/15/1998	07/15/2008	P-9-24 S-29 E	Eddy	Chavez	Artesia	Santa Fe		
pENV000GW0 0252	Discharge Plan Permit	237	DCP MIDSTREAM L.P.	DUKE PECOS DIAMOND GP	A	02/05/1996	03/29/1996	03/29/2011	G-3-18 S-27 E	Eddy	Chavez	Artesia	Santa Fe		1 below grade tank registered

pENV000GW0 0254	Discharge Plan Permit	239	DCP MIDSTREAM L.P.	Duke QUINN CS	A	03/08/1996	08/09/1996	08/09/2011	L-16-31 N-9 W	San Juan	Chavez	Aztec	Santa Fe	DP w/ filing fee process, renewed, issued with letter mailed out 10/23/2006. Received $1700 fee 10/26/06. Signed DP received 1-11 07 Ok.	
pENV000GW0 0088	Discharge Plan Permit	77	DCP MIDSTREAM L.P.	Duke MIDDLE MESA CS	A	04/10/1991	11/14/1991	11/14/2006	M-10-31 N-7 W	San Juan	Chavez	Aztec	Santa Fe		
pENV000GW0 0002	Discharge Plan Permit	2	DCP MIDSTREAM L.P.	LEE GP	A	11/13/1995	03/16/1981	03/16/2011	N-30-17 S-35 E	Lea	Chavez	Hobbs	Santa Fe		
pENV000GW0 0009	Discharge Plan Permit	9	DCP MIDSTREAM L.P.	EUNICE CS	C	10/06/1988	10/11/1983		-5-21 S-36 E	Lea	Chavez	Hobbs	Santa Fe	GW-009 vacated and merged into GW-16 OCT 8, 1993	
pENV000GW0 0016	Discharge Plan Permit	15	DCP MIDSTREAM L.P.	DUKE LINAM RANCH GP	A	05/17/1989	04/25/1984	04/25/2009	-6-19 S-37 E	Lea	Chavez	Hobbs	Santa Fe	1 below grade concrete tank registered	
pENV000GW0 0017	Discharge Plan Permit	16	DCP MIDSTREAM L.P.	DUKE EUNICE GP	A	04/13/1989	04/25/1984	04/25/2009	H-5-21 S-36 E	Lea	Chavez	Hobbs	Santa Fe	10 below grade tanks + 1 sulphur pit registered	
pENV000GW0 0024	Discharge Plan Permit	23	DCP MIDSTREAM L.P.	GPM ARTESIA GP	A	01/17/1995	07/01/1985	07/01/2010	-7-18 S-28 E	Eddy	Chavez	Artesia	Santa Fe	call&E-mail 1/07/2000 120 day notice. Late flat fee notice sent 1/11/02. Flat fee received 1/29/02.	1 classifier, 5 sumps, 1 sulphur pit, 2 below grade tanks registered (Flare Pit Soil Remediation & Closure Workplan)
pENV000GW0 0025	Discharge Plan Permit	24	DCP MIDSTREAM L.P.	DUKE AVALON GP	I	06/15/1990	09/18/1985	09/18/2005	J-9-21 S-27 E	Eddy	Chavez	Artesia	Santa Fe	Notice of late flat fee sent 1/11/2002.	
pENV000GW0 0044	Discharge Plan Permit	42	DCP MIDSTREAM L.P.	GPM INDIAN HILLS GP	I		07/20/1987		L-13-21 S-25 E	Eddy	Chavez	Artesia	Santa Fe	Letter from Duke, dated 12/10/01, notifying site is inactive.	
pENV000GW0 0149	Discharge Plan Permit	138	DCP MIDSTREAM L.P.	DUKE TRACHTA CS	C		04/30/1993		-14-23 S-28 E	Eddy	Chavez	Artesia	Santa Fe	Facility is inactive	

pENV000GW0 0079	Discharge Plan Permit	69	DCP MIDSTREAM L.P.	DUKE CARLSBAD GP	A	12/28/2006	04/29/1992	04/29/2012	G-10-23 S-28 E	Eddy	Chavez	Artesia	Santa Fe	Public Notice prepared 1/15/02. Request for additional information sent 1/2/02. Received $100 filing fee & renewal on 12/28/06.	4 sumps registered
pENV000GW0 0189	Discharge Plan Permit	178	DCP MIDSTREAM L.P.	DUKE WON TON CS	C		03/21/1995	03/21/2005	I-10-17 S-37 E	Lea	Chavez	Hobbs	Santa Fe	1 below grade tank registered	
pENV000GW0 0138	Discharge Plan Permit	127	DCP MIDSTREAM L.P.	DUKE MAGNUM C.S.(BURTO N FLATS GP)	A	08/10/1992	02/03/1993	02/03/2008	G-9-20 S-29 E	Eddy	Chavez	Artesia	Santa Fe	1 below grade tank registered as sump	
pENV000GW0 0139	Discharge Plan Permit	128	DCP MIDSTREAM L.P.	DUKE PAIGE CS	A	08/11/1992	11/19/1992	11/20/2007	O-4-21 S-32 E	Lea	Chavez	Hobbs	Santa Fe	6 mo. Renewal notice sent 7/10/02; renewal application received	
pENV000GW0 0148	Discharge Plan Permit	137	DCP MIDSTREAM L.P.	DUKE CARRASCO CS	A		04/28/1993	04/28/2008	F-14-23 S-28 E	Eddy	Chavez	Artesia	Santa Fe	1 skid sump registered	
pENV000GW0 0150	Discharge Plan Permit	139	DCP MIDSTREAM L.P.	DUKE CP-1 CS	C		04/28/1993		I-15-23 S-28 E	Eddy	Chavez	Artesia	Santa Fe	Site Inactive, requested closure workplan 1/10/03, WP approved, Closure Approved 10/15/2003	
pENV000GW0 0153	Discharge Plan Permit	142	DCP MIDSTREAM L.P.	DUKE SAND DUNES CS	A	03/26/1993	05/17/1993	05/17/2008	P-23-23 S-31 E	Eddy	Chavez	Artesia	Santa Fe	1 below grade tank registered	
pENV000GW0 0155	Discharge Plan Permit	144	DCP MIDSTREAM L.P.	DUKE NORTH (WESTALL) CS	A	05/05/1993	08/19/1993	08/19/2008	E-35-22 S-28 E	Eddy	Chavez	Artesia	Santa Fe	Renewal application dated 4/3/03 - renewal on hold pending legal determination	1 below grade tank registered
pENV000GW0 0179	Discharge Plan Permit	168	DCP MIDSTREAM L.P.	DUKE SOUTH FEAGAN CS	C	07/06/1994	12/28/1994	12/27/2004	N-31-19 S-25 E	Eddy	Chavez	Artesia	Santa Fe	Late filing fee and flat fee notice sent 1/11/02. Flat fee received 1/29/02.	
pENV000GW0 0188	Discharge Plan Permit	177	DCP MIDSTREAM L.P.	DUKE MALJAMAR CS	C		03/21/1995	03/21/2005	I-20-17 S-33 E	Lea	Chavez	Hobbs	Santa Fe		
pENV000GW0 0046	Discharge Plan Permit	44	DCP MIDSTREAM L.P.	HOBBS BOOSTER CS	A		12/23/1987	12/23/2007	-4-19 S-38 E	Lea	Chavez	Hobbs	Santa Fe	renewal notice sent 7/10/02	

pENV000GW0 0270	Discharge Plan Permit	255	DCP MIDSTREAM L.P.	Duke BUENA VISTA CS	A	07/15/1996	09/05/1996	09/05/2011	B-13-30 N-9 W	San Juan	Chavez	Aztec	Santa Fe	DP renewed, issued with letter mailed out 10/23/2006. Received $1700 on 10/26/2006. Signed DP received on 1/11/2007. Ok.	
pENV000GW0 0273	Discharge Plan Permit	258	DCP MIDSTREAM L.P.	Duke CEDAR HILL CS	A	07/30/1996	09/30/1996	09/30/2011	-29-32 N-10 W	San Juan	Chavez	Aztec	Santa Fe	DP renewed, issued with letter mailed out 10/23/2006. Permit fee of $1700 received on 10/26/2006. Signed DP received on 1/11/07. Ok.	
pENV000GW0 0292	Discharge Plan Permit	277	DCP MIDSTREAM L.P.	CSI - BIG EDDY LATERAL#1 CS	A		02/17/1997	02/17/2007	A-19-21 S-28 E	Eddy	Chavez	Artesia	Santa Fe	Taken over by Duke Energy. Received DP renewal letter dated 10/19/2006 w/ $100 filing fee. Mailed out final permit 9/16/06. Awaiting $1700 Compressor Station fee.	1 below grade tank registered
pENV000GW0 0174	Discharge Plan Permit	163	DCP MIDSTREAM L.P.	DUKE APEX CS	A		04/29/1999	04/29/2004	C-36-18 S-36 E	Lea	Chavez	Hobbs	Santa Fe	request GW info and DP renewal by 12/01/04	
pENV000GW0 0186	Discharge Plan Permit	175	DCP MIDSTREAM L.P.	DUKE HOBBS GP	A		01/09/1995	01/09/2005	G-36-18 S-36 E	Lea	Chavez	Hobbs	Santa Fe	Request DP renewal and GW info BY 12/01/04	
	1RP-401-0		DCP MIDSTREAM L.P.	C-line Release Site (1RP-401-0)					O-31-19 S-37 E	Lea	?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	
	AP-33		DCP MIDSTREAM L.P.	Eldridge Ranch					P-21-19 S-37 E	Lea	?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	
			DCP MIDSTREAM L.P.	J-4-2 Pipeline Release Site					C-27-19 S-35 E		?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	
	1RP-400		DCP MIDSTREAM L.P.	X-line Pipeline Site (1RP-400)					B-7-15 S-34 E		?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	

	AP-55		DCP MIDSTREAM L.P.	RR Ext. (AP-55)					C-19-20 S-37 E		?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	
	2R-043		DCP MIDSTREAM L.P.	PCA Junction					11-20 S-30 E		?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	
	1R-156		DCP MIDSTREAM L.P.	Monument Booster Station					B-33-19 S-37 E (32.6238 -103.2550)		?	Hobbs	Santa Fe	Meeting w/ company 2/1/07	

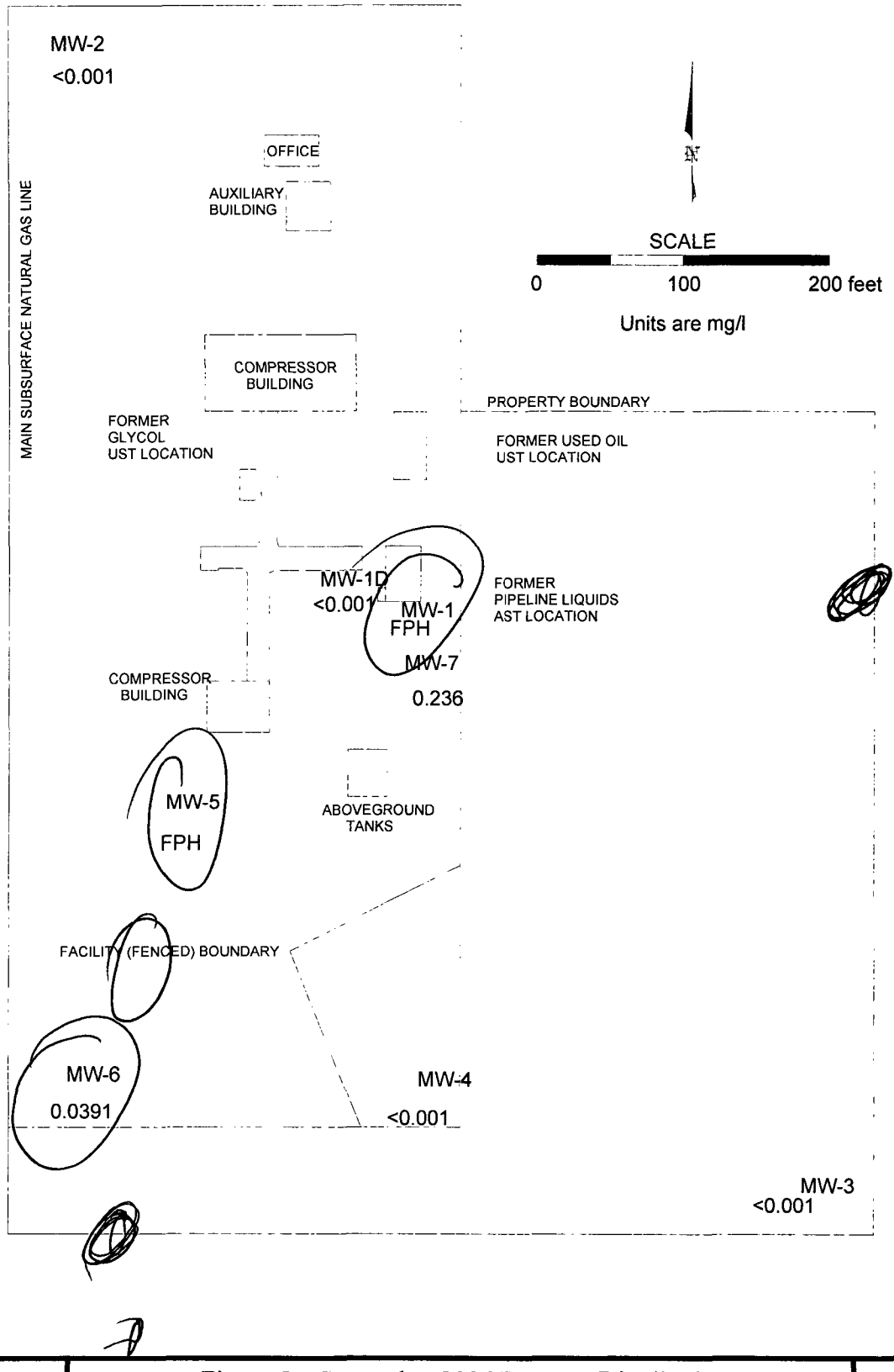

Figure 5 – September 2006 Benzene Distribution
Monument Booster Station Groundwater Monitoring

dcp Midstream

DRAWN BY:	MHS
REVISED:	
DATE:	1/07

Chavez, Carl J, EMNRD

From: Dick, Daniel I [DIDick@dcpmidstream.com]
Sent: Tuesday, January 30, 2007 1:44 PM
To: Chavez, Carl J, EMNRD
Cc: Ward, Lynn C
Subject: Monument Booster Station - Q3 2006 Groundwater Monitoring Report

Mr. Chavez –

Please find attached the above referenced report and cover letter. Copies have been sent via mail to Larry Johnson with the OCD District 1 office as well.

Sincerely,

Daniel Dick
DCP Midstream
Environmental Assurance
370, 17th Street, Suite 2500
Denver, CO 80120
Ph: 303-605-1893
Fx: 303-605-1957

370 17th Street, Suite 2500
Denver, Colorado 80202
303-605-1893 – main
303-605-1957 – fax

January 30, 2007

Mr. Carl Chavez, CHMM
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

RE: Third Quarter 2006 Groundwater Monitoring Report for the Monument Booster Station, Lea County, New Mexico Unit B Section 33, Township 19 South, Range 37 East

Dear Mr. Chavez:

DCP Midstream, LP (DCP) is pleased to submit for your review one electronic (PDF) copy of the Third Quarter 2006 Groundwater Monitoring Report for the Monument Booster Station located in Lea County, New Mexico (Unit B Section 33, Township 19 South, Range 37 East).

Groundwater monitoring activities were completed on September 20, 2006. The data indicate that the groundwater conditions remain stable. The next monitoring even is scheduled for the first quarter 2007. The next annual report for the site will be prepared following the completion of the first quarter 2007 monitoring activities and review and validation of the analytical results.

If you have any questions regarding this report, please call me at 303-605-1893.

Sincerely
Duke Energy Field Services, LP

Daniel Dick
Environmental Specialist

Enclosure

cc: Larry Johnson – OCD District Office Hobbs
Lynn Ward – DEFS Midland
Environmental Files

AEC AMERICAN ENVIRONMENTAL CONSULTING, LLC

January 30, 2007

Mr. Daniel Dick
Duke Energy Field Services, LP
370 Seventeenth Street, Suite 2500
Denver, Colorado 80202

Subject: Summary of the Third Quarter 2006 Groundwater Monitoring Event
Monument Booster Station, Lea County, New Mexico
Unit B, Section 33, Township 19 South, Range 37 East

Dear Daniel:

This letter summarizes the activities completed and data generated during the third quarter groundwater sampling event conducted September 20, 2006 at the DCP Midstream, LP (DCP, formerly known as Duke Energy Field Services) Monument Booster Station in Lea County New Mexico. The activities completed during the semiannual monitoring episode included the measurement of fluid levels in all monitoring wells and the sampling of all wells that did not contain measurable free phase hydrocarbons (FPH).

The facility is located in New Mexico Oil Conservation Division (OCD) designated Unit B, Section 33, Township 19 South, Range 37 East (Figure 1). The coordinates are 32.6238 degrees north 103.2550 degrees west. The facility is an active gas compression station.

The eight monitoring well locations are shown on Figure 2. Construction information is included in Table 1. Wells MW-1 and MW-5 have both historically contained free-phase hydrocarbons (FPH). The corrected groundwater elevations are shown on Table 2. The water-table elevations for the wells containing FPH were estimated using the following formula:

$GWE_{corr} = MGWE + (FPHT*PD)$: where

- MGWE is the actual measured groundwater elevation;
- FPHT is the measured free-phase hydrocarbon thickness; and
- PD is the free phase hydrocarbon density (assumed 0.76).

Hydrographs for select wells throughout the study area are included in Figure 3. The hydrographs show that the water table rose following the heavy summer 2006 rains back to the March 2005 levels. A water-table contour map generated by the program Surfer with the kriging option is included as Figures 4. The groundwater flow maintained its historic direction toward the south-southeast. This flow direction mimics the surface water runoff pattern and remains unchanged from prior measurement episodes.

The FPH thickness measurements for the period since the passive FPH collectors were removed are summarized below:

Well	3/4/2005	9/21/2005	3/16/2006	9/20/06
MW-1	1.41	0.60	0.37	1.60
MW-5	0.17	0.31	0.39	0.55

The analytical results for the September 20, 2006 monitoring episode are summarized in Table 3. The laboratory report is attached. The quality control data can be summarized as follows:

- There were no BTEX detections in the trip blank;
- None of the surrogates were out of range;
- The relative percentage difference (RPD) values for the MW-6 duplicates were 3.1 and 8.4 percent for benzene and ethylbenzene respectively, and they were 132 percent for xylenes. These values are acceptable given the relatively low concentrations that were measured.
- The matrix spike and matrix spike duplicate results were all within limits.

The above information establishes that the data is suitable for all intended uses.

The September 2006 benzene concentrations are plotted on Figure 5. None of the BTEX constituents were detected in down-gradient boundary wells MW-3 and MW-4. BTEX was also not detected in upgradient wells MW-2 or in MW-1D.

The benzene, ethylbenzene and xylene concentrations that were measured in MW-6 in September 2006 are anomalously high relative to historical values (Table 4). Resampling was not necessary because the well is not near a down-gradient facility property boundary (Figure 5). The spike may be a result of either field or laboratory contamination. Additional investigation maybe necessary if this trend continues.

The next semi-annual groundwater-monitoring episode is scheduled for the first quarter of 2007. Do not hesitate to contact me if you have any questions or comments on this report or any other aspects of the project.

Sincerely,
AMERICAN ENVIRONMENTAL CONSULTING, LLC

Michael H. Stewart

Michael H. Stewart, PE
Principal Engineer

MHS/tbm

attachment

TABLES

Table 1 – Monument Booster Well Construction Summary

Well	Well Elevation (Top of Casing) (feet)	Installation Date	Well Depth (TOC) (feet)	Well Diameter (inches)
MW-1	3,591.15	2/94	37.00	4
MW-1D	3,591.31	5/05	36.25	2
MW-2	3,596.30	2/94	43.25	4
MW-3	3,583.86	5/05	35.65	4
MW-4	3,588.77	5/05	38.95	4
MW-5	3,592.16	5/05	37.00	4
MW-6	3,587.93	11/05	38.45	4
MW-7	3,589.40	11/05	38.45	4

Table 2 – Monument Booster Summary of Water Table Elevations

Well	5/16/95	11/21/95	1/18/96	4/24/96	1/22/97	8/11/97	1/23/98	8/3/98	2/10/99	8/17/99	2/17/00	8/23/00	2/8/01	7/30/01	2/13/02
MW-1	3565.17	3565.65	3565.32	3565.47	3565.27	3565.14	3565.59	3564.84	3565.67	3565.75	3565.53	3565.49	3565.34	3564.97	3565.03
MW-2	3567.02	3567.21	3567.15	3567.20	3567.15	3566.92	3567.32	3566.76	3567.37	3567.24	3567.23	3567.08	3567.18	3566.78	3567.29
MW-3	3561.14	3561.74	3561.61	3561.61	3560.84	3560.68	3560.49	3560.37	3560.29	3560.73	3560.53	3560.83	3560.85	3560.61	3560.22
MW-4	3562.32	3562.98	3562.87	3562.79	3562.27	3562.00	3562.23	3562.00	3562.09	3562.63	3562.27	3562.58	3562.54	3562.27	3562.01
MW-5	3564.06	3564.54	3564.33	3564.40	3564.18	3564.10	3564.30	3563.80	3564.30	3564.55	3564.21	3564.21	3564.25	3563.94	3564.15
MW-6		3563.22	3563.82	3562.99	3562.49	3562.29	3562.68	3562.20	3562.57	3563.28	3562.69	3563.15	3562.99	3562.57	3562.45
MW-7		3564.24	3563.92	3564.07	3563.84	3563.67	3564.02	3563.39	3564.08	3564.21	3563.97	3563.98	3563.97	3563.55	3563.82

Well	9/27/02	4/25/03	9/18/03	3/16/04	8/17/04	3/4/05	9/21/05	3/16/06	9/20/06
MW-1	3564.95	3565.36	3564.59	3566.65	3565.51	3566.92	3566.08	3565.81	3567.01
MW-2	3566.81	3567.14	3566.71	3567.75	3567.13	3567.63	3567.44	3567.51	3567.79
MW-3	3560.09	3560.37	3559.92	3560.52	3561.33	3564.34	3563.24	3562.55	3563.71
MW-4	3561.87	3562.13	3561.72	3562.36	3562.87	3565.42	3564.11	3563.47	3564.65
MW-5	3563.88	3564.21	3563.58	3564.76	3564.47	3566.23	3565.23	3564.68	3566.20
MW-6	3562.19	3562.54	3561.98	3562.81	3563.14	3566.08	3564.38	3563.53	3565.92
MW-7	3563.45	3563.84	3563.22	3564.92	3564.11	3565.51	3564.83	3564.44	3565.94

Units are feet
Blank cells denote wells not yet installed

Table 3 – Monument Booster September 20, 2006 Sampling Results

Well	Benzene	Toluene	Ethylbenzene	Xylenes
NMWQCC	0.01	0.75	0.75	0.62
MW-1D	<0.001	<0.001	<0.001	<0.001
MW-2	<0.001	<0.001	<0.001	<0.001
MW-3	<0.001	<0.001	<0.001	<0.001
MW-4	<0.001	<0.001	<0.001	0.0043
MW-6	**0.0397**	<0.001	0.0275	0.0066
MW-6 Dup	**0.0385**	<0.001	0.0299	0.0322
MW-7	**0.236**	<0.001	0.176	0.187
Trip Blank	<0.001	<0.001	<0.001	<0.001

NMWQCC: New Mexico Water Quality Control Commission groundwater standards.
All units mg/l

Table 4 - Monument Booster Summary of Historical Results for Benzene

Sample Date	MW-1d	MW-2	MW-3	MW-4	MW-6	MW-7
05/16/95	**0.018**	<0.001	<0.001	<0.001		
11/15/95	0.003		<0.001		0.003	**0.465**
01/18/96	0.004	<0.001	<0.001	0.003	0.002	**1.13**
04/24/96	<0.001	<0.001	<0.001	<0.002	<0.001	**0.585**
01/22/97	0.001	<0.001	<0.001	0.002	0.001	**0.896**
08/11/97	<0.001	<0.001	<0.001	0.001	<0.001	**0.317**
01/23/98	<0.001	<0.001	<0.001	<0.001	<0.001	**0.876**
08/03/98	<0.001	<0.001	0.007	<0.001	<0.001	**0.094**
02/10/99	<0.001	<0.001	<0.005	<0.001	<0.001	**0.597**
08/17/99	<0.001	**0.017**	**0.043**	<0.001	0.002	**0.705**
02/18/00	0.002	<0.001	**0.021**	<0.005	<0.001	**0.573**
08/23/00	<0.005	<0.001	0.006	<0.005	<0.001	**0.546**
02/09/01	<0.001	<0.001	0.004	0.002	<0.001	**0.355**
07/30/01	<0.001	<0.001	0.002	<0.001	<0.001	**0.017**
02/13/02	<0.001	<0.001	0.002		<0.001	**0.228**
09/27/02	<0.001	<0.001	<0.005		<0.005	**0.015**
04/25/03	<0.005	<0.001	<0.005	<0.001	<0.001	**0.157**
09/18/03	0.002	0.002	0.002	<0.001	0.002	**0.018**
03/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	**0.125**
08/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	**0.237**
03/04/05	<0.001	<0.001	<0.001	<0.001	0.0061	**0.125/0.121**
09/21/05	<0.001	<0.001	<0.001	<0.001	<0.001	**0.15/0.148**
03/16/06	<0.001	<0.001	<0.001	<0.001	<0.001	**0.191**
09/20/06	<0.001	<0.001	<0.001	<0.001	**0.0391**	**0.236**

All units mg/l
Highlighted values exceed New Mexico Water Quality Control Commission Standard of 0.01 mg/l
Blank cells note samples for wells that were either not install or not sampled

Table 5 - Monument Booster Summary of Historical Results for Toluene

Sample Date	MW-1D	MW-2	MW-3	MW-4	MW-6	MW-7
05/16/95	0.015	<0.001	<0.001	<0.001		
11/15/95	0.002	0.006	<0.001	0.006	0.001	0.205
01/18/96	0.003	<0.001	<0.001	<0.001	<0.001	0.476
04/24/96	<0.001	<0.001	<0.001	<0.002	<0.001	0.251
01/22/97	0.001	<0.001	<0.001	<0.001	<0.001	0.240
08/11/97	<0.001	<0.001	<0.001	<0.001	<0.001	0.155
01/23/98	<0.001	<0.001	<0.001	<0.001	<0.001	0.486
08/03/98	<0.001	<0.001	<0.001	<0.001	<0.001	0.064
02/10/99	<0.001	<0.001	<0.005	<0.001	<0.001	0.440
08/17/99	<0.001	0.002	<0.005	<0.001	<0.001	0.060
02/18/00	0.003	<0.001	<0.005	<0.005	0.004	0.490
08/23/00	<0.005	<0.001	<0.005	<0.005	0.004	0.484
02/08/01	<0.001	<0.001	0.001	<0.001	<0.001	0.424
07/30/01	<0.001	<0.001	<0.001	<0.001	<0.001	0.058
02/13/02	<0.001	<0.001	<0.001		<0.001	0.094
09/27/02	<0.001	<0.001	<0.005		<0.005	0.017
04/25/03	<0.005	<0.001	<0.005	<0.001	<0.001	0.192
09/18/03	<0.001	<0.001	<0.001	<0.001	<0.001	0.023
03/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	0.108
08/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	0.081
03/04/05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
09/21/05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
03/16/06	<0.001	<0.001	<0.001	<0.001	<0.001	0.0032
09/20/06	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

All units mg/l

None of the reported values exceed the New Mexico Water Quality Control Commission Standard of 0.75 mg/l

Blank cells note samples for wells that were either not install or not sampled

Table 6 - Monument Booster Summary of Historical Results for Ethylbenzene

Sample Date	MW-1D	MW-2	MW-3	MW-4	MW-6	MW-7
05/16/95	0.006	<0.001	<0.001	<0.001		
11/15/95	<0.001	0.002	<0.001	0.002	<0.001	<0.001
01/18/96	<0.001	<0.001	<0.001	<0.001	<0.001	0.003
04/24/96	<0.001	<0.001	<0.001	<0.002	<0.001	<0.002
01/22/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005
08/11/97	<0.001	<0.001	<0.001	<0.001	<0.001	0.020
01/23/98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005
08/03/98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005
02/10/99	<0.001	<0.001	<0.005	<0.001	<0.001	<0.005
08/17/99	<0.001	0.013	<0.005	<0.001	<0.001	<0.005
02/18/00	<0.001	<0.001	<0.005	<0.005	<0.001	<0.005
08/23/00	<0.005	<0.001	<0.005	<0.005	<0.001	0.006
02/09/01	<0.001	<0.001	0.002	<0.001	<0.001	<0.005
07/30/01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005
02/13/02	<0.001	<0.001	<0.001		<0.001	<0.005
09/27/02	<0.001	<0.001	<0.005		<0.005	<0.005
04/25/03	<0.005	<0.001	<0.005	<0.001	<0.001	<0.005
09/18/03	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
03/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	<0.010
08/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020
03/04/05	<0.001	<0.001	<0.001	<0.001	0.0032	0.0467/0.0453
09/21/05	<0.001	<0.001	<0.001	<0.001	<0.001	0.0794/0.0789
03/16/06	<0.001	<0.001	<0.001	<0.001	<0.001	0.0733
09/20/06	<0.001	<0.001	<0.001	<0.001	0.0287	0.176

All units mg/l

None of the reported values exceed the New Mexico Water Quality Control Commission Standard of 0.75 mg/l

Blank cells note samples for wells that were either not install or not sampled

Table 7 - Monument Booster Summary of Historical Results for Total Xylenes

Sample Date	MW-1D	MW-2	MW-3	MW-4	MW-6	MW-7
05/16/95	0.016	<0.001	<0.001	<0.001		
11/15/95	0.001	0.009*	<0.001	0.010*	0.003	0.163
01/18/96	0.009	<0.001	<0.001	<0.001	<0.001	0.365
04/24/96	<0.001	<0.001	<0.001	<0.002	<0.001	0.013
01/22/97	<0.001	<0.001	<0.001	<0.001	<0.001	0.330
08/11/97	<0.001	<0.001	<0.001	<0.001	0.001	0.049
01/23/98	<0.001	<0.001	<0.001	<0.001	<0.001	0.181
08/03/98	<0.001	<0.001	<0.001	<0.001	<0.001	0.007
02/10/99	<0.001	<0.001	<0.005	<0.001	0.014	0.120
08/17/99	<0.001	0.003	<0.005	0.001	0.012	0.556
02/17/00	0.001	<0.001	<0.005	<0.005	0.006	0.226
08/23/00	<0.005	<0.001	<0.005	<0.005	0.011	0.177
02/08/01	0.001	<0.001	0.005	0.002	0.011	0.052
07/30/01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005
02/13/02	<0.001	<0.001	<0.001		<0.001	0.050
09/27/02	<0.001	<0.001	<0.005		<0.005	<0.005
04/25/03	<0.005	<0.001	<0.005	<0.001	<0.001	0.020
09/18/03	<0.001	<0.001	<0.001	<0.001	0.001	0.004
03/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	0.033
08/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020
03/04/05	<0.001	<0.001	<0.001	<0.001	<0.001	0.0202
09/21/05	<0.001	<0.001	<0.001	<0.001	<0.001	0.0248
03/16/06	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
09/20/06	<0.001	<0.001	<0.001	0.0043	0.0194	0.187

All units mg/l

None of the reported values exceed the New Mexico Water Quality Control Commission Standard of 0.62 mg/l

Blank cells note samples for wells that were either not install or not sampled

FIGURES

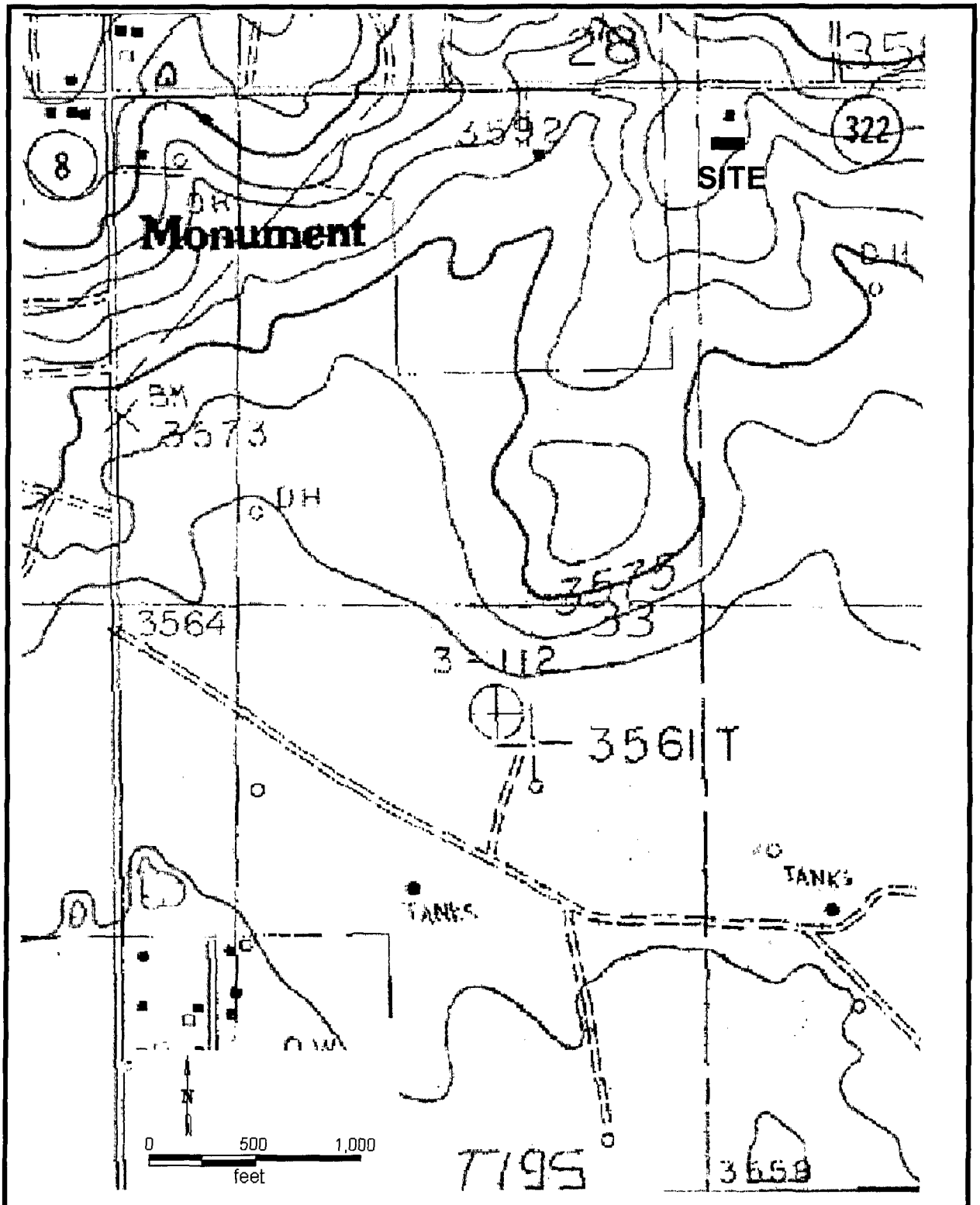

Figure 1 – Facility Location

Monument Booster Station Groundwater Monitoring

dcp Midstream.

DRAWN BY:	MHS
REVISED:	
DATE:	1/07

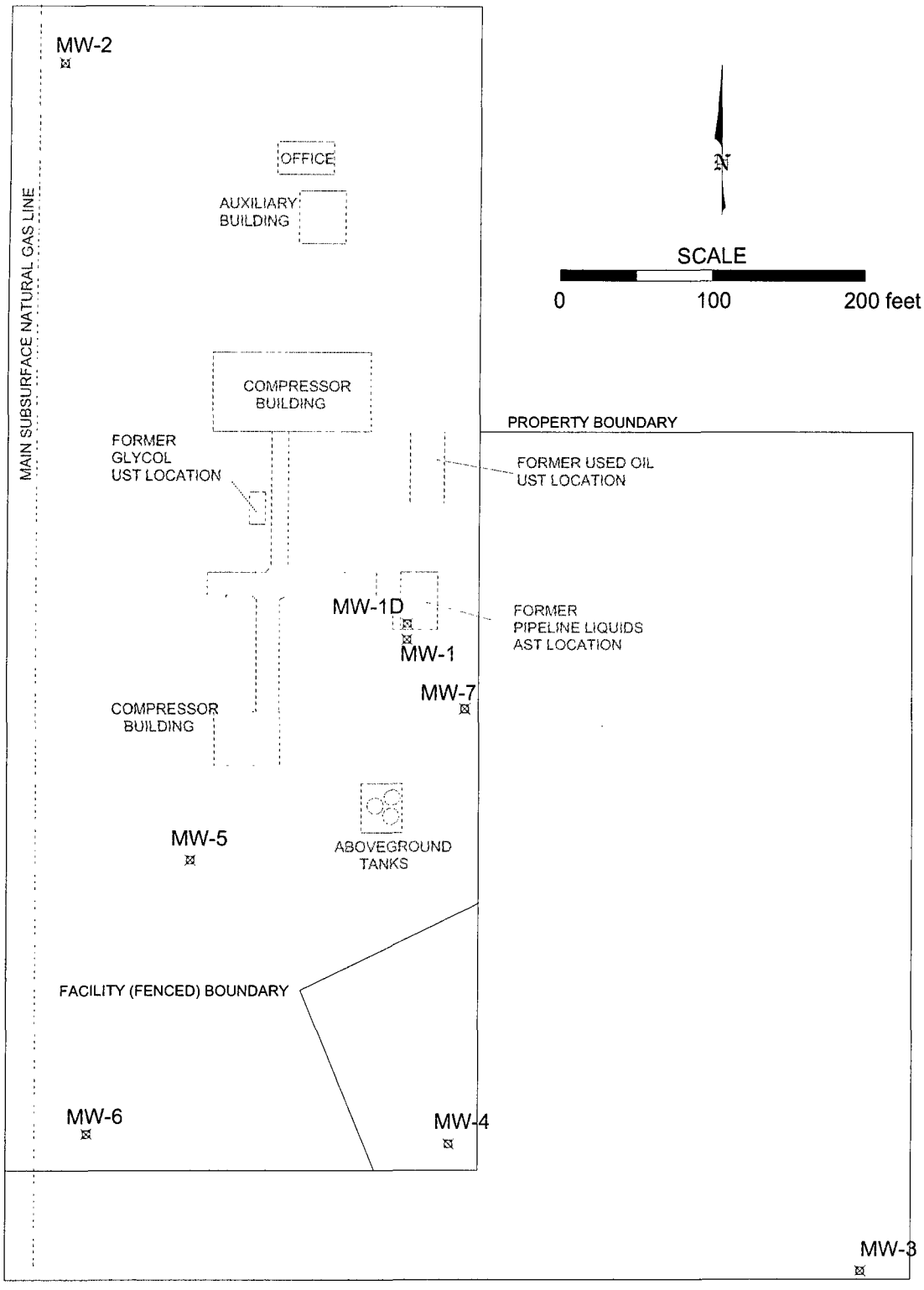

Figure 2 – Monitor Well Locations

Monument Booster Station Groundwater Monitoring

dcp Midstream.

DRAWN BY:	MHS
REVISED:	
DATE:	1/07

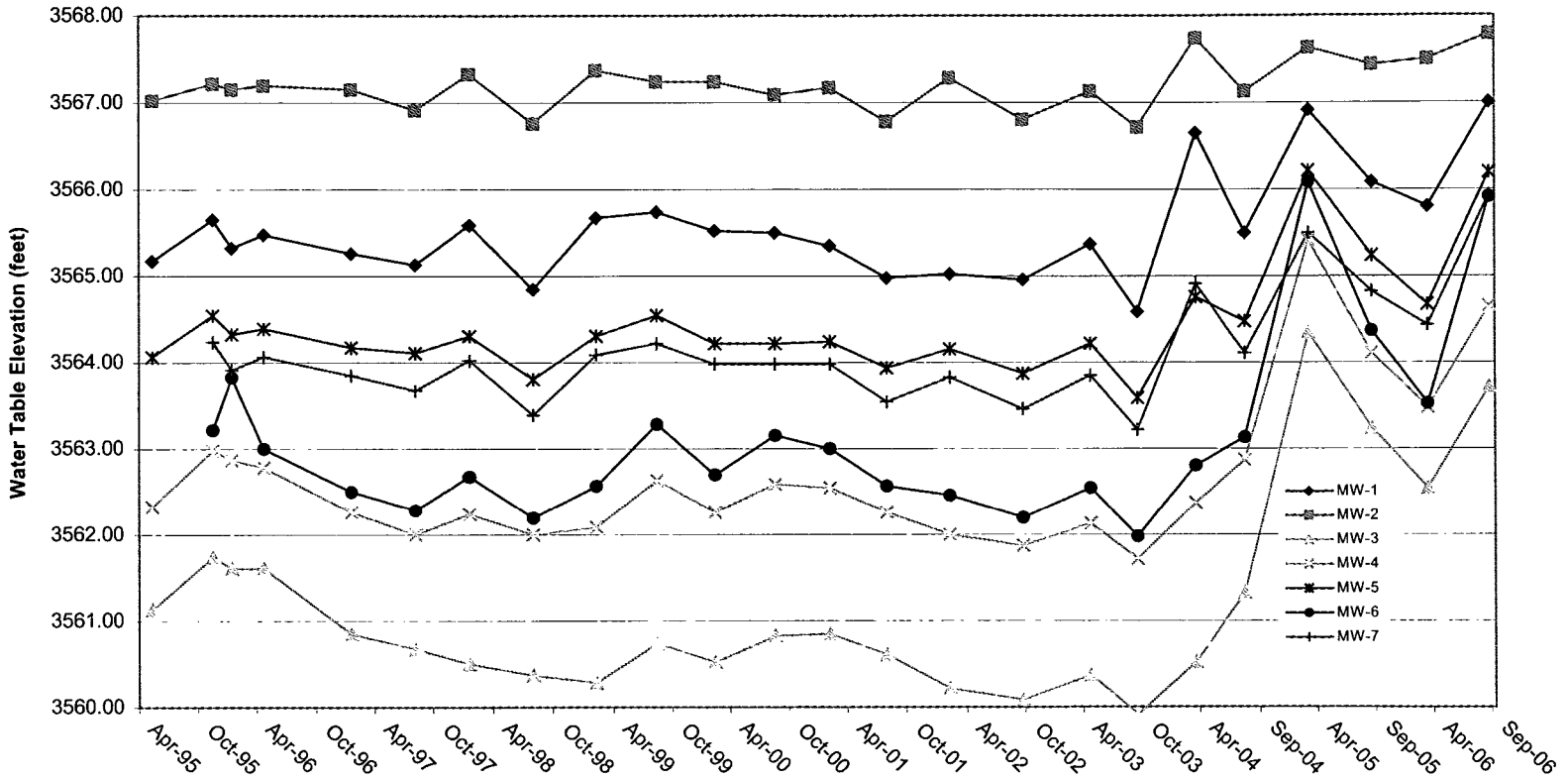

Figure 3 – Monument Booster Hydrographs

Monument Booster Station Groundwater Monitoring

dcp Midstream

DRAWN BY: MHS

DATE: 1/07

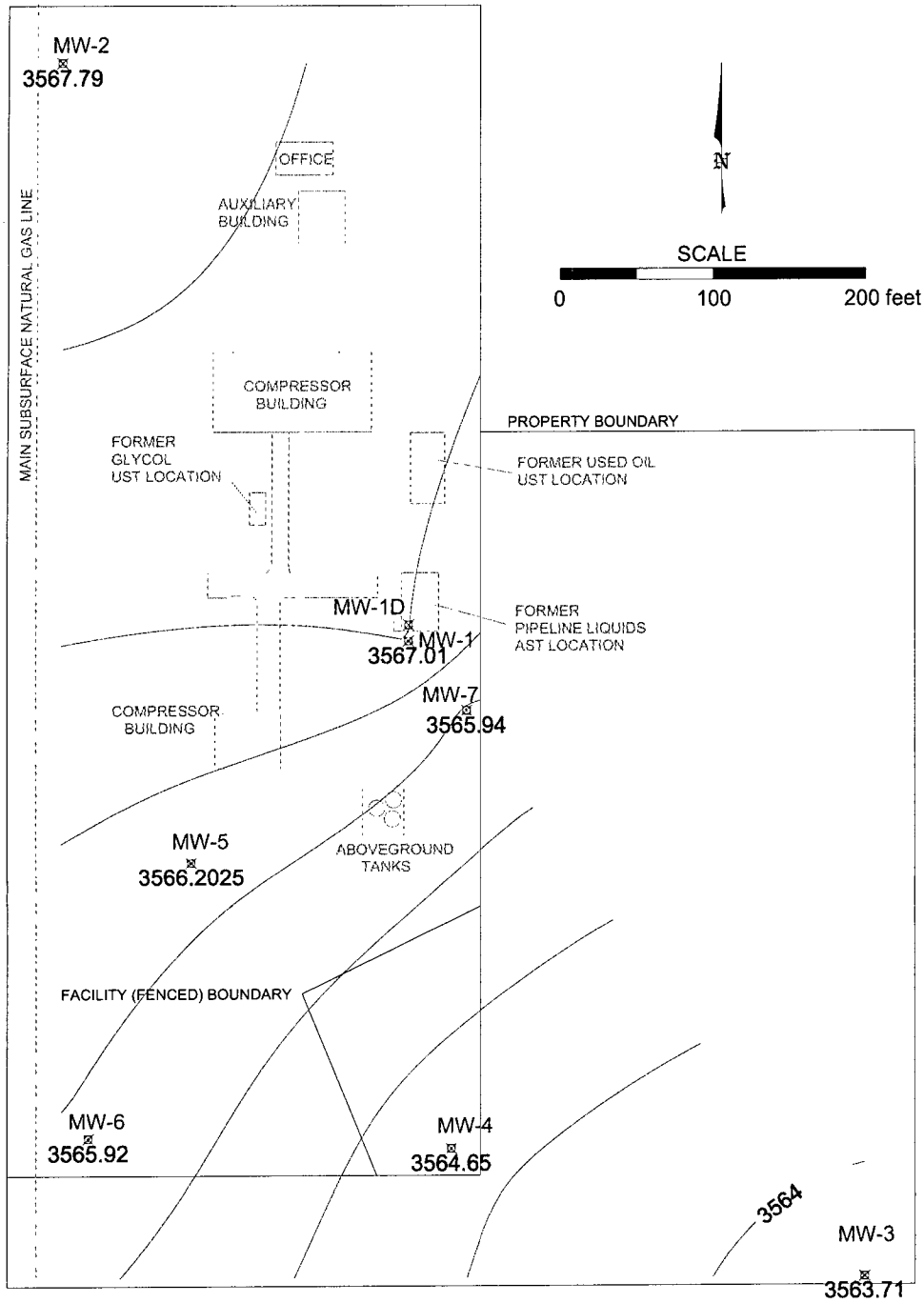

Figure 4 – September 2006 Water Table Elevation Contours

Monument Booster Station Groundwater Monitoring

dcp Midstream.

DRAWN BY:	MHS
REVISED:	
DATE:	1/07

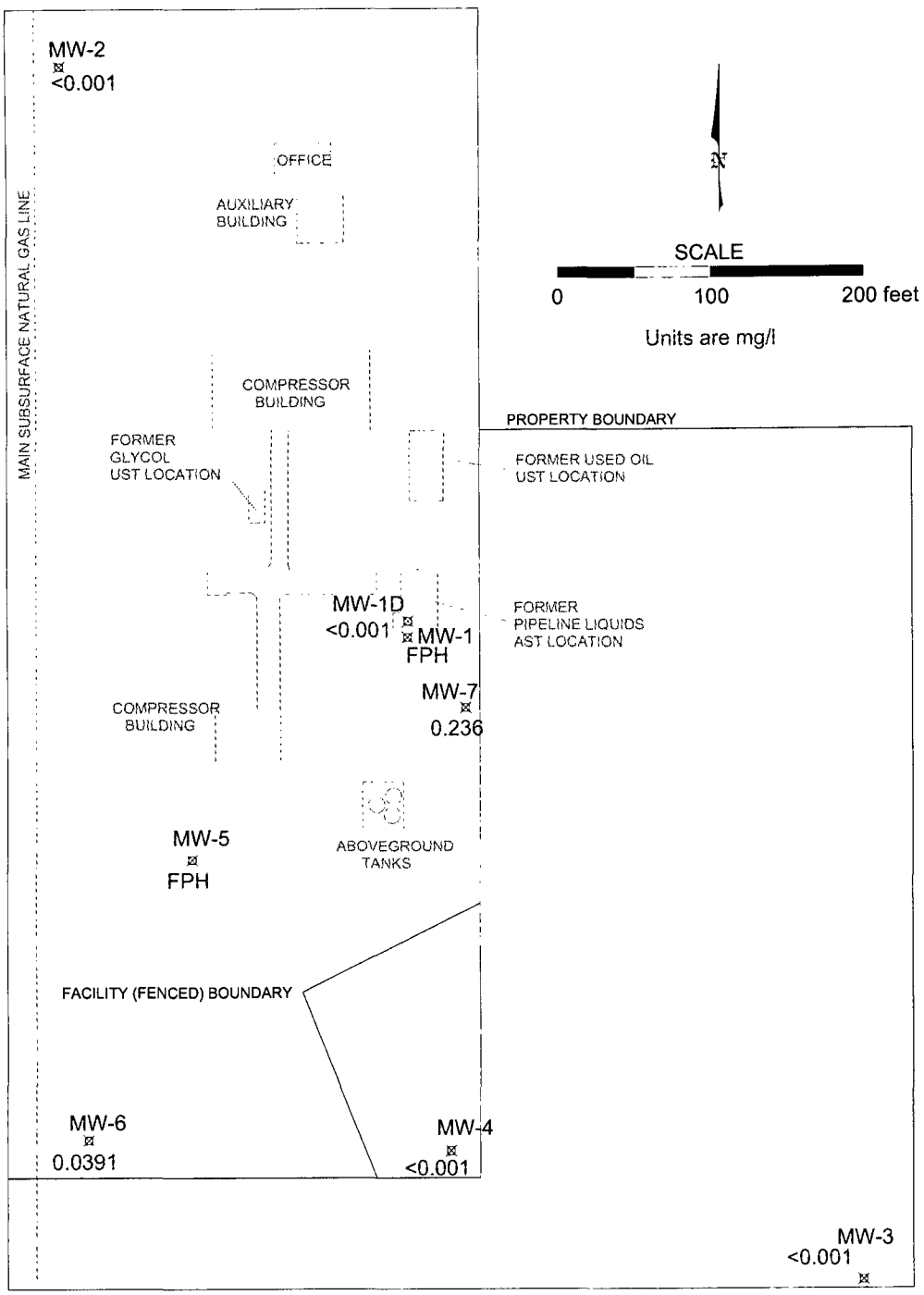

Figure 5 – September 2006 Benzene Distribution

Monument Booster Station Groundwater Monitoring

dcp Midstream.

DRAWN BY:	MHS
REVISED:	
DATE:	1/07

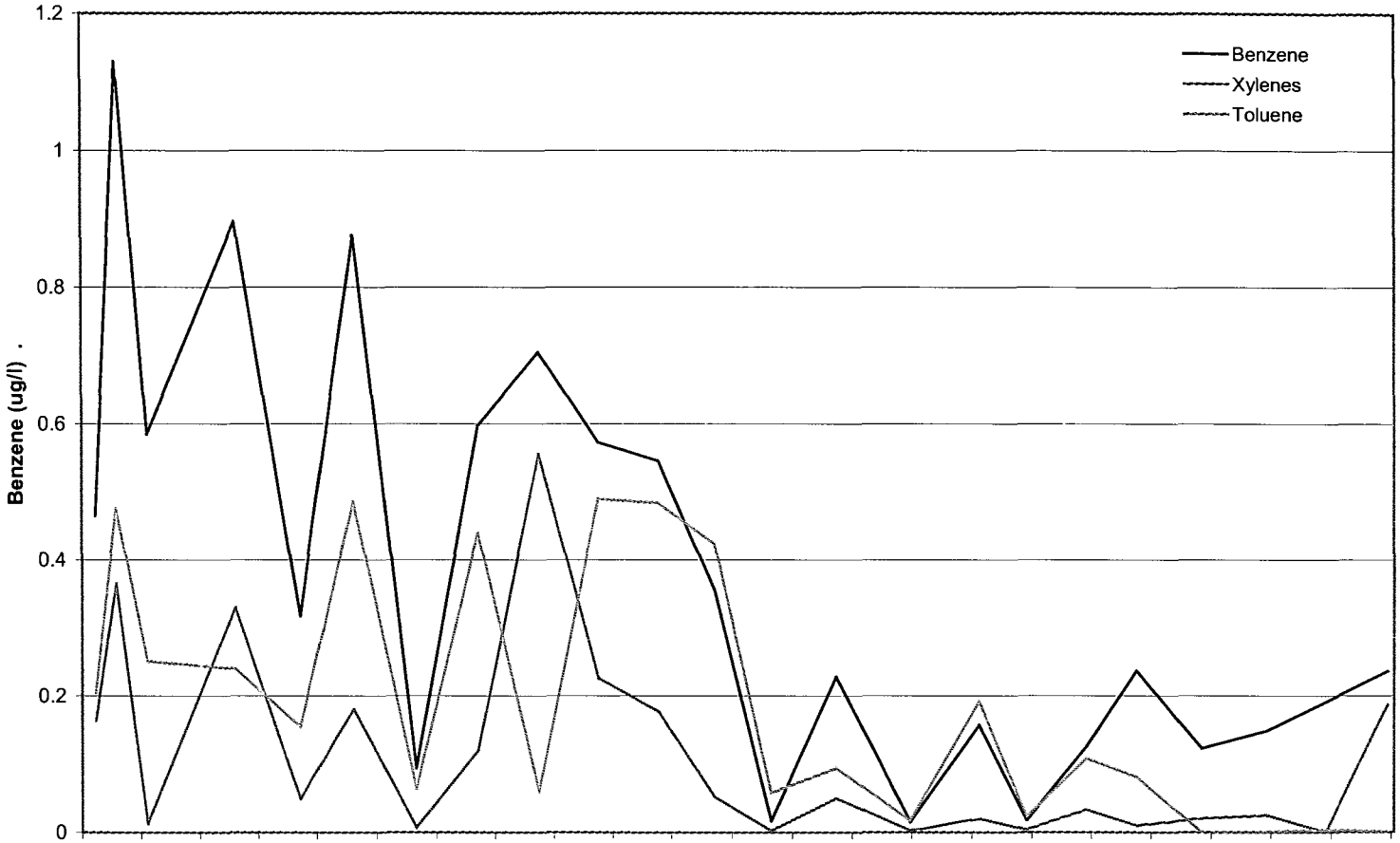

Figure 6 – MW-7 Constituent Concentrations

Monument Booster Station Groundwater Monitoring

DCP Midstream

DRAWN BY: MHS

DATE: 1/07

SEPTEMBER 2006 FIELD SAMPLING DATA AND

LABORATORY ANALYTICAL REPORTS

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-1**
SITE NAME: Monument Booster
DATE: 9/20/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☐ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☐ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☐ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 37.00 Feet
DEPTH TO WATER: 25.34 Feet
HEIGHT OF WATER COLUMN: 11.66 Feet
WELL DIAMETER: 4.0 Inch

22.8 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
0:00 :Total Time (hr:min)			**0** :Total Vol (gal)			**#DIV/0!** :Flow Rate (gal/min)	

SAMPLE NO.: Collected Sample No.: 060920

ANALYSES: BTEX (8021-B)

COMMENTS: DID NOT SAMPLE DUE TO FREE PHASE HYDROCARBONS IN WELL!

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-1d**
SITE NAME: Monument Booster
DATE: 9/20/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 36.30 Feet
DEPTH TO WATER: 23.96 Feet
HEIGHT OF WATER COLUMN: 12.34 Feet
WELL DIAMETER: 2.0 Inch

6.0 Minimum Gallons to purge 3 well volumes (Water Column Height x 0.49)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
16:57	0.0	-	-	-	-	-	Began Hand Bailing!
17:00	2.0	21.6	0.78	7.44	-	-	
17:04	4.0	21.3	0.76	7.38	-	-	
17:09	6.2	21.4	0.76	7.37	-	-	
0:12	:Total Time (hr:min)		**6.2**	:Total Vol (gal)		**0.51**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060920 1715
ANALYSES: BTEX (8021-B)
COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-2**
SITE NAME: Monument Booster
DATE: 9/20/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☑ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 43.30 Feet
DEPTH TO WATER: 28.51 Feet
HEIGHT OF WATER COLUMN: 14.79 Feet
WELL DIAMETER: 4.0 Inch

29.0 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
13:38	0.0	-	-	-	-	-	Began Hand Bailing!
13:46	10.0	21.8	3.95	7.17	-	-	
13:57	20.0	21.8	3.95	7.17	-	-	
14:07	30.0	21.9	3.99	7.17	-	-	
0:29 :Total Time (hr:min)			**30** :Total Vol (gal)			**1.03** :Flow Rate (gal/min)	

SAMPLE NO.: Collected Sample No.: 060920 1410

ANALYSES: BTEX (8021-B)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-3**
SITE NAME: Monument Booster
DATE: 9/20/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☑ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 35.70 Feet
DEPTH TO WATER: 20.15 Feet
HEIGHT OF WATER COLUMN: 15.55 Feet
WELL DIAMETER: 4.0 Inch

30.5 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
12:50	0.0	-	-	-	-	-	Began Hand Bailing!
12:58	11.0	22.7	1.28	7.18	-	-	
13:08	22.0	22.9	1.29	7.18	-	-	
13:19	33.0	22.5	1.30	7.16	-	-	
0:29	:Total Time (hr:min)		**33**	:Total Vol (gal)		**1.13**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060920 1320
ANALYSES: BTEX (8021-B)
COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-4**
SITE NAME: Monument Booster
DATE: 9/20/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☑ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 38.90 Feet
DEPTH TO WATER: 24.12 Feet
HEIGHT OF WATER COLUMN: 14.78 Feet
WELL DIAMETER: 4.0 Inch

28.9 Minimum Gallons to *purge 3 well volumes* (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
15:17	0.0	-	-	-	-	-	Began Hand Bailing!
15:24	10.0	22.2	1.26	7.01	-	-	
15:35	20.0	20.7	1.25	7.14	-	-	
15:44	29.0	20.4	1.22	7.17	-	-	
0:27 :Total Time (hr:min)			**29** :Total Vol (gal)			**1.07** :Flow Rate (gal/min)	

SAMPLE NO.: Collected Sample No.: 060920 1550

ANALYSES: BTEX (8021-B)

COMMENTS: Collected MS/MSD Samples!

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-5**
SITE NAME: Monument Booster
DATE: 9/20/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 37.00 Feet
DEPTH TO WATER: 26.37 Feet
HEIGHT OF WATER COLUMN: 10.63 Feet
WELL DIAMETER: 4.0 Inch

20.8 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
0:00	:Total Time (hr:min)		**0**	:Total Vol (gal)		**#DIV/0!**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060920 1620

ANALYSES:

COMMENTS: DID NOT SAMPLE DUE TO FREE PHASE HYDROCARBON IN WELL!

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-6**
SITE NAME: Monument Booster
DATE: 9/20/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☑ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 38.50 Feet
DEPTH TO WATER: 22.01 Feet
HEIGHT OF WATER COLUMN: 16.49 Feet
WELL DIAMETER: 4.0 Inch

32.3 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
14:24	0.0	-	-	-	-	-	Began Hand Bailing!
14:33	11.0	23.9	1.48	6.99	-	-	
14:44	22.0	22.8	1.52	6.96	-	-	
14:56	33.0	22.5	1.54	7.00	-	-	
0:32	:Total Time (hr:min)		**33**	:Total Vol (gal)		**1.03**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060920 1500

ANALYSES: BTEX (8021-B)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-7**
SITE NAME: Monument Booster
DATE: 9/20/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 36.40 Feet
DEPTH TO WATER: 23.46 Feet
HEIGHT OF WATER COLUMN: 12.94 Feet
WELL DIAMETER: 4.0 Inch

25.3 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
16:07	0.0	-	-	-	-	-	Began Hand Bailing!
16:14	9.0	20.8	1.24	6.87	-	-	
16:23	18.0	20.5	1.20	6.88	-	-	
16:33	27.0	20.4	1.19	6.89	-	-	

0:26 :Total Time (hr:min) **27** :Total Vol (gal) **1.03** :Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060920 1640

ANALYSES: BTEX (8021-B)

COMMENTS: Collected Duplicate Sample No.: 0609201800 for BTEX (8021-B)

Analytical and Quality Control Report

Mike Stewart
American Environmental Consulting
6885 South Marshall Street
Suite 3
Littleton, CO, 80128

Report Date: September 28, 2006

Work Order: 6092516

Project Location: Lea County, NM
Project Name: DEFS-Monument Booster Station
Project Number: DEFS-Monument Booster Station

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
104377	MW-3 (0609201320)	water	2006-09-20	13:20	2006-09-25
104378	MW-2 (0609201410)	water	2006-09-20	14:10	2006-09-25
104379	MW-6 (0609201500)	water	2006-09-20	15:00	2006-09-25
104380	MW-4 (0609201550)	water	2006-09-20	15:50	2006-09-25
104381	MW-7 (0609201640)	water	2006-09-20	16:40	2006-09-25
104382	MW-1d (0609201715)	water	2006-09-20	17:15	2006-09-25
104383	Duplicate (0609201800)	water	2006-09-20	18:00	2006-09-25
104384	Trip Blank	water	2006-09-20	00:00	2006-09-25

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Blair Leftwich

Dr. Blair Leftwich, Director

Analytical Report

Sample: 104377 - MW-3 (0609201320)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	30383	Date Analyzed:	2006-09-25	Analyzed By:	LO
Prep Batch:	26489	Sample Preparation:	2006-09-25	Prepared By:	LO

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.100	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0825	mg/L	1	0.100	82	70 - 130

Sample: 104378 - MW-2 (0609201410)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	30383	Date Analyzed:	2006-09-25	Analyzed By:	LO
Prep Batch:	26489	Sample Preparation:	2006-09-25	Prepared By:	LO

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0948	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0803	mg/L	1	0.100	80	70 - 130

Sample: 104379 - MW-6 (0609201500)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	30383	Date Analyzed:	2006-09-25	Analyzed By:	LO
Prep Batch:	26489	Sample Preparation:	2006-09-25	Prepared By:	LO

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		**0.0397**		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		**0.0275**		mg/L	1	0.00100
Xylene		**0.00660**		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0899	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0966	mg/L	1	0.100	97	70 - 130

Sample: 104380 - MW-4 (0609201550)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	30408	Date Analyzed:	2006-09-25	Analyzed By:	LO
Prep Batch:	26489	Sample Preparation:	2006-09-25	Prepared By:	LO

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		**0.00430**	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0975	mg/L	1	0.100	98	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0835	mg/L	1	0.100	84	70 - 130

Sample: 104381 - MW-7 (0609201640)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	30383	Date Analyzed:	2006-09-25	Analyzed By:	LO
Prep Batch:	26489	Sample Preparation:	2006-09-25	Prepared By:	LO

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.236**	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		**0.176**	mg/L	1	0.00100
Xylene		**0.187**	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.104	mg/L	1	0.100	104	70 - 130
4-Bromofluorobenzene (4-BFB)		0.108	mg/L	1	0.100	108	70 - 130

Sample: 104382 - MW-1d (0609201715)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	30383	Date Analyzed:	2006-09-25	Analyzed By:	LO
Prep Batch:	26489	Sample Preparation:	2006-09-25	Prepared By:	LO

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100

continued . . .

sample 104382 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0952	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0827	mg/L	1	0.100	83	70 - 130

Sample: 104383 - Duplicate (0609201800)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	30408	Date Analyzed:	2006-09-25	Analyzed By:	LO
Prep Batch:	26489	Sample Preparation:	2006-09-25	Prepared By:	LO

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.0385**	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		**0.0299**	mg/L	1	0.00100
Xylene		**0.0322**	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0872	mg/L	1	0.100	87	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0888	mg/L	1	0.100	89	70 - 130

Sample: 104384 - Trip Blank

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	30408	Date Analyzed:	2006-09-25	Analyzed By:	LO
Prep Batch:	26489	Sample Preparation:	2006-09-25	Prepared By:	LO

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0942	mg/L	1	0.100	94	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0826	mg/L	1	0.100	83	70 - 130

Method Blank (1) QC Batch: 30383

QC Batch: 30383 | Date Analyzed: 2006-09-25 | Analyzed By: LO
Prep Batch: 26489 | QC Preparation: 2006-09-25 | Prepared By: LO

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000200	mg/L	0.001
Toluene		0.000400	mg/L	0.001
Ethylbenzene		0.000200	mg/L	0.001
Xylene		0.00200	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0989	mg/L	1	0.100	99	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0853	mg/L	1	0.100	85	70 - 130

Method Blank (1) QC Batch: 30408

QC Batch: 30408 | Date Analyzed: 2006-09-25 | Analyzed By: LO
Prep Batch: 26489 | QC Preparation: 2006-09-25 | Prepared By: LO

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000200	mg/L	0.001
Toluene		0.000400	mg/L	0.001
Ethylbenzene		0.000200	mg/L	0.001
Xylene		0.00200	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0951	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0820	mg/L	1	0.100	82	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 30383 | Date Analyzed: 2006-09-25 | Analyzed By: LO
Prep Batch: 26489 | QC Preparation: 2006-09-25 | Prepared By: LO

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.104	mg/L	1	0.100	<0.000200	104	70 - 130
Toluene	0.103	mg/L	1	0.100	<0.000100	103	70 - 130
Ethylbenzene	0.104	mg/L	1	0.100	<0.000200	104	70 - 130
Xylene	0.321	mg/L	1	0.300	<0.000400	107	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.105	mg/L	1	0.100	<0.000200	104	70 - 130	1	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Toluene	0.104	mg/L	1	0.100	<0.000100	103	70 - 130	1	20
Ethylbenzene	0.104	mg/L	1	0.100	<0.000200	104	70 - 130	0	20
Xylene	0.319	mg/L	1	0.300	<0.000400	107	70 - 130	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0989	0.0982	mg/L	1	0.100	99	98	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0974	0.0961	mg/L	1	0.100	97	96	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 30408 | Date Analyzed: 2006-09-25 | Analyzed By: LO
Prep Batch: 26489 | QC Preparation: 2006-09-25 | Prepared By: LO

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0994	mg/L	1	0.100	<0.000200	99	70 - 130
Toluene	0.0989	mg/L	1	0.100	<0.000100	99	70 - 130
Ethylbenzene	0.0990	mg/L	1	0.100	<0.000200	99	70 - 130
Xylene	0.305	mg/L	1	0.300	<0.000400	102	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.103	mg/L	1	0.100	<0.000200	99	70 - 130	4	20
Toluene	0.102	mg/L	1	0.100	<0.000100	99	70 - 130	3	20
Ethylbenzene	0.102	mg/L	1	0.100	<0.000200	99	70 - 130	3	20
Xylene	0.312	mg/L	1	0.300	<0.000400	102	70 - 130	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0946	0.0946	mg/L	1	0.100	95	95	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0939	0.0946	mg/L	1	0.100	94	95	70 - 130

Matrix Spike (MS-1) Spiked Sample: 104369

QC Batch: 30383 | Date Analyzed: 2006-09-25 | Analyzed By: LO
Prep Batch: 26489 | QC Preparation: 2006-09-25 | Prepared By: LO

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0969	mg/L	1	0.100	<0.000200	97	70 - 130
Toluene	0.0961	mg/L	1	0.100	<0.000100	96	70 - 130
Ethylbenzene	0.0970	mg/L	1	0.100	<0.000200	97	70 - 130
Xylene	0.299	mg/L	1	0.300	<0.000400	100	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.103	mg/L	1	0.100	<0.000200	103	70 - 130	6	20
Toluene	0.101	mg/L	1	0.100	<0.000100	101	70 - 130	5	20
Ethylbenzene	0.103	mg/L	1	0.100	<0.000200	103	70 - 130	6	20
Xylene	0.314	mg/L	1	0.300	<0.000400	105	70 - 130	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0971	0.0978	mg/L	1	0.1	97	98	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0950	0.0956	mg/L	1	0.1	95	96	70 - 130

Matrix Spike (MS-1) Spiked Sample: 104380

QC Batch: 30408 Date Analyzed: 2006-09-25 Analyzed By: LO
Prep Batch: 26489 QC Preparation: 2006-09-25 Prepared By: LO

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.104	mg/L	1	0.100	<0.000200	104	70 - 130
Toluene	0.102	mg/L	1	0.100	0.0002	102	70 - 130
Ethylbenzene	0.104	mg/L	1	0.100	0.0008	103	70 - 130
Xylene	0.323	mg/L	1	0.300	0.0008	107	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.101	mg/L	1	0.100	<0.000200	101	70 - 130	3	20
Toluene	0.0999	mg/L	1	0.100	0.0002	100	70 - 130	2	20
Ethylbenzene	0.102	mg/L	1	0.100	0.0008	101	70 - 130	2	20
Xylene	0.318	mg/L	1	0.300	0.0008	104	70 - 130	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0997	0.0968	mg/L	1	0.1	100	97	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0962	0.0957	mg/L	1	0.1	96	96	70 - 130

Standard (ICV-1)

QC Batch: 30383 Date Analyzed: 2006-09-25 Analyzed By: LO

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.103	103	85 - 115	2006-09-25
Toluene		mg/L	0.100	0.102	102	85 - 115	2006-09-25
Ethylbenzene		mg/L	0.100	0.102	102	85 - 115	2006-09-25
Xylene		mg/L	0.300	0.314	105	85 - 115	2006-09-25

Standard (CCV-1)

QC Batch: 30383 Date Analyzed: 2006-09-25 Analyzed By: LO

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.102	102	85 - 115	2006-09-25
Toluene		mg/L	0.100	0.101	101	85 - 115	2006-09-25
Ethylbenzene		mg/L	0.100	0.100	100	85 - 115	2006-09-25
Xylene		mg/L	0.300	0.309	103	85 - 115	2006-09-25

Standard (ICV-1)

QC Batch: 30408 Date Analyzed: 2006-09-25 Analyzed By: LO

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.104	104	85 - 115	2006-09-25
Toluene		mg/L	0.100	0.103	103	85 - 115	2006-09-25
Ethylbenzene		mg/L	0.100	0.102	102	85 - 115	2006-09-25
Xylene		mg/L	0.300	0.315	105	85 - 115	2006-09-25

Standard (CCV-1)

QC Batch: 30408 Date Analyzed: 2006-09-25 Analyzed By: LO

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.102	102	85 - 115	2006-09-25
Toluene		mg/L	0.100	0.100	100	85 - 115	2006-09-25
Ethylbenzene		mg/L	0.100	0.100	100	85 - 115	2006-09-25
Xylene		mg/L	0.300	0.309	103	85 - 115	2006-09-25

Work Order: 6092516
DEFS-Monument Booster Station

Report Date: September 28, 2006
DEFS-Monument Booster Station

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 6092516

Company Name: American Environmental Consulting
Phone #: 303-948-7733
Address: (Street, City, Zip) 6885 South Marshall, Suite 3, Littleton, CO 80128
Fax #: 303-948-7793
Contact Person: Mike Stewart
E-mail:
Invoice to: DEFS
(If different from above) Attn: Daniel Dick
Project #:
Project Name: DEFS - Monument Booster Station
Project Location (including state): Lea County, New Mexico
Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
104377	MW-3 (0609201320)	2	40ml	✓				✓				✓		9/20/06	1320
78	MW-2 (0609201410)	2	40ml	✓				✓				✓		9/20/06	1410
79	MW-6 (0609201500)	2	40ml	✓				✓				✓		9/20/06	1500
80	MW-4 (0609201550)	~~3~~ 2	40ml	✓				✓				✓		9/20/06	1550
81	MW-7 (0609201640)	2	40ml	✓				✓				✓		9/20/06	1640
82	MW-1d (0609201715)	2	40ml	✓				✓				✓		9/20/06	1715
83	Duplicate (0609201800)	2	40ml	✓				✓				✓		9/20/06	1800
84	Trip Blank	1	40ml	✓				✓				✓			

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / ~~8260B / 624~~	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content					MS/MSD		Turn Around Time if different from standard	Hold
	✓																				✓			

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	9/25/06	1140			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:
			[signature]	9.25.06	11:40

LAB USE ONLY
Intact: Y / N
Headspace: Y / N
Temp: 4 °C
Log-In-Review: [signature]

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Courier - UPS

...nstitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

Chavez, Carl J, EMNRD

From: Dick, Daniel I [didick@duke-energy.com]
Sent: Wednesday, November 01, 2006 11:21 AM
To: Chavez, Carl J, EMNRD
Subject: Monument Booster Annual Groundwater Monitoring Report 2005-2006

Mr. Chavez –

Please accept the above referenced report for your review. Copy has been sent to Larry Johnson with the OCD District 1 as well.

Sincerely,

Daniel Dick
Duke Energy Field Services
Environmental Assurance
370, 17th Street, Suite 2500
Denver, CO 80120
Ph: 303-605-1893
Fx: 303-605-1957

Duke Energy® Field Services

370 17th Street, Suite 2500
Denver, Colorado 80202
303-605-1893 – main
303-605-1957 – fax

November 1, 2006

Mr. Carl Chavez, CHMM
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

RE: Annual Summary of 2005-2006 Groundwater Monitoring Results for the Monument Booster Station, Lea County, New Mexico
Unit B Section 33, Township 19 South, Range 37 East

Dear Mr. Chavez:

Duke Energy Field Services, LP (DEFS) is pleased to submit for your review one electronic (PDF) copy of the summary report for the third quarter 2005 and first quarter 2006 groundwater sampling effort at the Monument Booster Station located in Lea County, New Mexico (Unit B Section 33, Township 19 South, Range 37 East).

The data indicate that the groundwater conditions remain stable. The next monitoring episode was performed in September 2006. The next annual report for the site will be prepared following the completion of the first quarter 2007 monitoring activities and review and validation of the analytical results.

If you have any questions regarding this report, please call me at 303-605-1893.

Sincerely
Duke Energy Field Services, LP

Daniel Dick
Environmental Specialist

Enclosure

cc: Larry Johnson – OCD District Office Hobbs
Lynn Ward – DEFS Midland
Environmental Files

AEC AMERICAN ENVIRONMENTAL CONSULTING, LLC

October 13, 2006

Mr. Daniel Dick
Duke Energy Field Services, LP
370 Seventeenth Street, Suite 2500
Denver, Colorado 80202

Subject: Annual Summary of 2005-2006 Groundwater Monitoring Results
Monument Booster Station, Lea County, New Mexico
Unit B, Section 33, Township 19 South, Range 37 East

Dear Daniel:

This letter summarizes the activities completed and data generated during the semi-annual groundwater-sampling episodes conducted September 21, 2005 and March 16, 2006 at the Duke Energy Field Services, LP (DEFS) Monument Booster Station in Lea County New Mexico. The activities completed during the two semiannual monitoring episodes included the measurement of fluid levels in all monitoring wells and the sampling of all wells that did not contain measurable free phase hydrocarbons (FPH).

The facility is located in New Mexico Oil Conservation Division (OCD) designated Unit B, Section 33, Township 19 South, Range 37 East (Figure 1). The coordinates are 32.6238 degrees north 103.2550 degrees west. The facility is an active gas compression station.

The eight monitoring well locations are shown on Figure 2. Construction information is included in Table 1. Wells MW-1 and MW-5 have both historically contained free-phase hydrocarbons (FPH). The corrected groundwater elevations are shown on Table 2. The water-table elevations for the wells containing FPH were estimated using the following formula:

$GWE_{corr} = MGWE + (FPHT*PD)$: where

- MGWE is the actual measured groundwater elevation;
- FPHT is the measured free-phase hydrocarbon thickness; and
- PD is the free phase hydrocarbon density (assumed 0.76).

This correction provides an accurate estimate of the water table elevation if FPH was not present in the well.

Hydrographs for select wells throughout the study area are included on Figure 3. The hydrographs show that the water table has declined from the highs that were measured after the unusually-heavy precipitation in the late fall of 2004 and winter of 2005. The exception is MW-2, in the northwest corner of the property, where the elevations remained essentially constant.

Water-table contour maps that are based upon the September 2005 and March 2006 corrected values as generated by the program Surfer using their kriging option are included as Figures 4 and 5 respectively. The groundwater flow maintained its historic direction toward the south-southeast. This flow direction mimics the surface water runoff pattern and remains unchanged from prior measurement episodes.

The FPH thickness measurements for the period since the passive FPH collectors were removed are summarized below:

Well	3/4/2005	9/21/2005	3/16/2006
MW-1	1.41	0.60	0.37
MW-5	0.17	0.31	0.39

Examination of the above table indicates that the FPH thickness may be declining in MW-1 while remaining stable in MW-5.

The analytical results for the September 2005 and March 2006 monitoring episodes are summarized in Table 3. The two laboratory reports are attached. The quality control data can be summarized as follows:

- There were no BTEX detections in the trip blank;
- The duplicate values for the September 2005 monitoring episode were under 15 percent relative percentage difference (RPD) for benzene and ethylbenzene, and they were 25 percent for toluene. These values are acceptable given the relatively low concentrations that were measured. There was insufficient glassware to collect a duplicate sample for March 2006.
- The only surrogate out of range was in the original MW-7, and the exceedance was only 3 percent over the limit (i.e. 124 % versus the 121% limit; and
- The matrix spike and matrix spike duplicate results were all within limits. Matrix spike duplicates were not run on the September 2005 sample even though it was specified in the chain-of-custody.

The above information establishes that the data is suitable for all intended uses.

None of the BTEX constituents were detected in down-gradient boundary wells MW-3 and MW-4 (Figure 6). BTEX was also not detected in upgradient wells MW-2 or in MW-1D.

Hydrocarbon constituents were detected in MW-7; however, the only constituent measured at concentrations above the New Mexico Water Quality Control Commission groundwater standards was benzene.

The historical data for all wells is summarized in Table 4 for benzene, Table 5 for toluene, Table 6 for ethylbenzene and Table 7 for total xylenes. Examination of these tables indicates the following:

- No sample has exceeded the New Mexico Water Quality Control Commission groundwater standards for toluene, ethylbenzene or total xylenes.
- Only the samples from MW-7 have exceeded the New Mexico Water Quality Control Commission groundwater standard for benzene since February 2000.
- Benzene detections since February 2000 in all wells except MW-7 have been sporadic and just above the method detection limit.
- The benzene, toluene and xylene concentrations in MW-7 continue to fluctuate (Figure 7). The concentrations remain within the lower values of their historic ranges.

Further source control activities should be postponed given the decreasing thicknesses measured in MW-1.

The next semi-annual groundwater-monitoring episode is scheduled for the third quarter of 2006. Reporting will continue on an annual basis unless unusual conditions warrant notification after the third-quarter sampling episode.

Do not hesitate to contact me if you have any questions or comments on this report or any other aspects of the projects.

Sincerely,
AMERICAN ENVIRONMENTAL CONSULTING, LLC

Michael H. Stewart

Michael H. Stewart, PE
Principal Engineer

MHS/tbm

attachment

TABLES

Table 1 – Monument Booster Well Construction Summary

Well	Well Elevation (Top of Casing) (feet)	Installation Date	Well Depth (TOC) (feet)	Well Diameter (inches)
MW-1	3,591.15	2/94	37.00	4
MW-1D	3,591.31	5/05	36.25	2
MW-2	3,596.30	2/94	43.25	4
MW-3	3,583.86	5/05	35.65	4
MW-4	3,588.77	5/05	38.95	4
MW-5	3,592.16	5/05	37.00	4
MW-6	3,587.93	11/05	38.45	4
MW-7	3,589.40	11/05	38.45	4

Table 2 – Monument Booster Summary of Water Table Elevations

Well	5/16/95	11/21/95	1/18/96	4/24/96	1/22/97	8/11/97	1/23/98	8/3/98	2/10/99	8/17/99	2/17/00	8/23/00	2/8/01	7/30/01	2/13/02
MW-1	3565.17	3565.65	3565.32	3565.47	3565.27	3565.14	3565.59	3564.84	3565.67	3565.75	3565.53	3565.49	3565.34	3564.97	3565.03
MW-2	3567.02	3567.21	3567.15	3567.20	3567.15	3566.92	3567.32	3566.76	3567.37	3567.24	3567.23	3567.08	3567.18	3566.78	3567.29
MW-3	3561.14	3561.74	3561.61	3561.61	3560.84	3560.68	3560.49	3560.37	3560.29	3560.73	3560.53	3560.83	3560.85	3560.61	3560.22
MW-4	3562.32	3562.98	3562.87	3562.79	3562.27	3562.00	3562.23	3562.00	3562.09	3562.63	3562.27	3562.58	3562.54	3562.27	3562.01
MW-5	3564.06	3564.54	3564.33	3564.40	3564.18	3564.10	3564.30	3563.80	3564.30	3564.55	3564.21	3564.21	3564.25	3563.94	3564.15
MW-6		3563.22	3563.82	3562.99	3562.49	3562.29	3562.68	3562.20	3562.57	3563.28	3562.69	3563.15	3562.99	3562.57	3562.45
MW-7		3564.24	3563.92	3564.07	3563.84	3563.67	3564.02	3563.39	3564.08	3564.21	3563.97	3563.98	3563.97	3563.55	3563.82

Well	9/27/02	4/25/03	9/18/03	3/16/04	8/17/04	3/4/05	9/21/05	3/16/06
MW-1	3564.95	3565.36	3564.59	3566.65	3565.51	3566.92	3566.08	3565.81
MW-2	3566.81	3567.14	3566.71	3567.75	3567.13	3567.63	3567.44	3567.51
MW-3	3560.09	3560.37	3559.92	3560.52	3561.33	3564.34	3563.24	3562.55
MW-4	3561.87	3562.13	3561.72	3562.36	3562.87	3565.42	3564.11	3563.47
MW-5	3563.88	3564.21	3563.58	3564.76	3564.47	3566.23	3565.23	3564.68
MW-6	3562.19	3562.54	3561.98	3562.81	3563.14	3566.08	3564.38	3563.53
MW-7	3563.45	3563.84	3563.22	3564.92	3564.11	3565.51	3564.83	3564.44

Blank cells denote wells not yet installed

Table 3 – Monument Booster September 2005 and March 2006 Sampling Results

September 2005

Well	Benzene	Toluene	Ethylbenzene	Xylenes
NMWQCC	0.01	0.75	0.75	0.62
MW-1D	<0.001	<0.001	<0.001	<0.001
MW-2	<0.001	<0.001	<0.001	<0.001
MW-3	<0.001	<0.001	<0.001	<0.001
MW-4	<0.001	<0.001	<0.001	<0.001
MW-6	<0.001	<0.001	<0.001	<0.001
MW-7	**0.15**	<0.001	0.0794	0.0217
MW-7 Dup	**0.148**	<0.001	0.0789	0.0278
Trip	<0.001	<0.001	<0.001	<0.001

March 2006

Well	Benzene	Toluene	Ethylbenzene	Xylenes
NMWQCC	0.01	0.75	0.75	0.62
MW-1D	<0.001	<0.001	<0.001	<0.001
MW-2	<0.001	<0.001	<0.001	<0.001
MW-3	<0.001	<0.001	<0.001	<0.001
MW-4	<0.001	<0.001	<0.001	<0.001
MW-6	<0.001	<0.001	<0.001	<0.001
MW-7	**0.191**	0.0032	0.0733	<0.001
Trip	<0.001	<0.001	<0.001	<0.001

NMWQCC: New Mexico Water Quality Control Commission groundwater standards.
All units mg/l

Table 4 - Monument Booster Summary of Historical Results for Benzene

Sample Date	MW-1d	MW-2	MW-3	MW-4	MW-6	MW-7
05/16/95	**0.018**	<0.001	<0.001	<0.001		
11/15/95	0.003		<0.001		0.003	**0.465**
01/18/96	0.004	<0.001	<0.001	0.003	0.002	**1.13**
04/24/96	<0.001	<0.001	<0.001	<0.002	<0.001	**0.585**
01/22/97	0.001	<0.001	<0.001	0.002	0.001	**0.896**
08/11/97	<0.001	<0.001	<0.001	0.001	<0.001	**0.317**
01/23/98	<0.001	<0.001	<0.001	<0.001	<0.001	**0.876**
08/03/98	<0.001	<0.001	0.007	<0.001	<0.001	**0.094**
02/10/99	<0.001	<0.001	<0.005	<0.001	<0.001	**0.597**
08/17/99	<0.001	**0.017**	**0.043**	<0.001	0.002	**0.705**
02/18/00	0.002	<0.001	**0.021**	<0.005	<0.001	**0.573**
08/23/00	<0.005	<0.001	0.006	<0.005	<0.001	**0.546**
02/09/01	<0.001	<0.001	0.004	0.002	<0.001	**0.355**
07/30/01	<0.001	<0.001	0.002	<0.001	<0.001	**0.017**
02/13/02	<0.001	<0.001	0.002		<0.001	**0.228**
09/27/02	<0.001	<0.001	<0.005		<0.005	**0.015**
04/25/03	<0.005	<0.001	<0.005	<0.001	<0.001	**0.157**
09/18/03	0.002	0.002	0.002	<0.001	0.002	**0.018**
03/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	**0.125**
08/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	**0.237**
03/04/05	<0.001	<0.001	<0.001	<0.001	0.0061	**0.125/0.121**
09/21/05	<0.001	<0.001	<0.001	<0.001	<0.001	**0.15/0.148**
03/16/06	<0.001	<0.001	<0.001	<0.001	<0.001	**0.191**

All units mg/l
Highlighted values exceed New Mexico Water Quality Control Commission Standard of 0.010 mg/l
Blank cells note samples for wells that were either not install or not sampled

Table 5 - Monument Booster Summary of Historical Results for Toluene

Sample Date	MW-1D	MW-2	MW-3	MW-4	MW-6	MW-7
05/16/95	0.015	<0.001	<0.001	<0.001		
11/15/95	0.002	0.006	<0.001	0.006	0.001	0.205
01/18/96	0.003	<0.001	<0.001	<0.001	<0.001	0.476
04/24/96	<0.001	<0.001	<0.001	<0.002	<0.001	0.251
01/22/97	0.001	<0.001	<0.001	<0.001	<0.001	0.240
08/11/97	<0.001	<0.001	<0.001	<0.001	<0.001	0.155
01/23/98	<0.001	<0.001	<0.001	<0.001	<0.001	0.486
08/03/98	<0.001	<0.001	<0.001	<0.001	<0.001	0.064
02/10/99	<0.001	<0.001	<0.005	<0.001	<0.001	0.440
08/17/99	<0.001	0.002	<0.005	<0.001	<0.001	0.060
02/18/00	0.003	<0.001	<0.005	<0.005	0.004	0.490
08/23/00	<0.005	<0.001	<0.005	<0.005	0.004	0.484
02/08/01	<0.001	<0.001	0.001	<0.001	<0.001	0.424
07/30/01	<0.001	<0.001	<0.001	<0.001	<0.001	0.058
02/13/02	<0.001	<0.001	<0.001		<0.001	0.094
09/27/02	<0.001	<0.001	<0.005		<0.005	0.017
04/25/03	<0.005	<0.001	<0.005	<0.001	<0.001	0.192
09/18/03	<0.001	<0.001	<0.001	<0.001	<0.001	0.023
03/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	0.108
08/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	0.081
03/04/05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001/<0.001
09/21/05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001/<0.001
03/16/06	<0.001	<0.001	<0.001	<0.001	<0.001	0.0032

All units mg/l

None of the reported values exceed the New Mexico Water Quality Control Commission Standard of 0.75 mg/l

Blank cells note samples for wells that were either not install or not sampled

Table 6 - Monument Booster Summary of Historical Results for Ethylbenzene

Sample Date	MW-1D	MW-2	MW-3	MW-4	MW-6	MW-7
05/16/95	0.006	<0.001	<0.001	<0.001		
11/15/95	<0.001	0.002	<0.001	0.002	<0.001	<0.001
01/18/96	<0.001	<0.001	<0.001	<0.001	<0.001	0.003
04/24/96	<0.001	<0.001	<0.001	<0.002	<0.001	<0.002
01/22/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005
08/11/97	<0.001	<0.001	<0.001	<0.001	<0.001	0.020
01/23/98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005
08/03/98	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005
02/10/99	<0.001	<0.001	<0.005	<0.001	<0.001	<0.005
08/17/99	<0.001	0.013	<0.005	<0.001	<0.001	<0.005
02/18/00	<0.001	<0.001	<0.005	<0.005	<0.001	<0.005
08/23/00	<0.005	<0.001	<0.005	<0.005	<0.001	0.006
02/09/01	<0.001	<0.001	0.002	<0.001	<0.001	<0.005
07/30/01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005
02/13/02	<0.001	<0.001	<0.001		<0.001	<0.005
09/27/02	<0.001	<0.001	<0.005		<0.005	<0.005
04/25/03	<0.005	<0.001	<0.005	<0.001	<0.001	<0.005
09/18/03	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
03/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	<0.010
08/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020
03/04/05	<0.001	<0.001	<0.001	<0.001	0.0032	0.0467/0.0453
09/21/05	<0.001	<0.001	<0.001	<0.001	<0.001	0.0794/0.0789
03/16/06	<0.001	<0.001	<0.001	<0.001	<0.001	0.0733

All units mg/l

None of the reported values exceed the New Mexico Water Quality Control Commission Standard of 0.75 mg/l

Blank cells note samples for wells that were either not install or not sampled

Table 7 - Monument Booster Summary of Historical Results for Total Xylenes

Sample Date	MW-1D	MW-2	MW-3	MW-4	MW-6	MW-7
05/16/95	0.016	<0.001	<0.001	<0.001		
11/15/95	0.001	0.009*	<0.001	0.010*	0.003	0.163
01/18/96	0.009	<0.001	<0.001	<0.001	<0.001	0.365
04/24/96	<0.001	<0.001	<0.001	<0.002	<0.001	0.013
01/22/97	<0.001	<0.001	<0.001	<0.001	<0.001	0.330
08/11/97	<0.001	<0.001	<0.001	<0.001	0.001	0.049
01/23/98	<0.001	<0.001	<0.001	<0.001	<0.001	0.181
08/03/98	<0.001	<0.001	<0.001	<0.001	<0.001	0.007
02/10/99	<0.001	<0.001	<0.005	<0.001	0.014	0.120
08/17/99	<0.001	0.003	<0.005	0.001	0.012	0.556
02/17/00	0.001	<0.001	<0.005	<0.005	0.006	0.226
08/23/00	<0.005	<0.001	<0.005	<0.005	0.011	0.177
02/08/01	0.001	<0.001	0.005	0.002	0.011	0.052
07/30/01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005
02/13/02	<0.001	<0.001	<0.001		<0.001	0.050
09/27/02	<0.001	<0.001	<0.005		<0.005	<0.005
04/25/03	<0.005	<0.001	<0.005	<0.001	<0.001	0.020
09/18/03	<0.001	<0.001	<0.001	<0.001	0.001	0.004
03/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	0.033
08/17/04	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020
03/04/05	<0.001	<0.001	<0.001	<0.001	<0.001	0.021/0.0195
09/21/05	<0.001	<0.001	<0.001	<0.001	<0.001	0.0217/0.0278
03/16/06	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

All units mg/l

None of the reported values exceed the New Mexico Water Quality Control Commission Standard of 0.62 mg/l

Blank cells note samples for wells that were either not install or not sampled

FIGURES

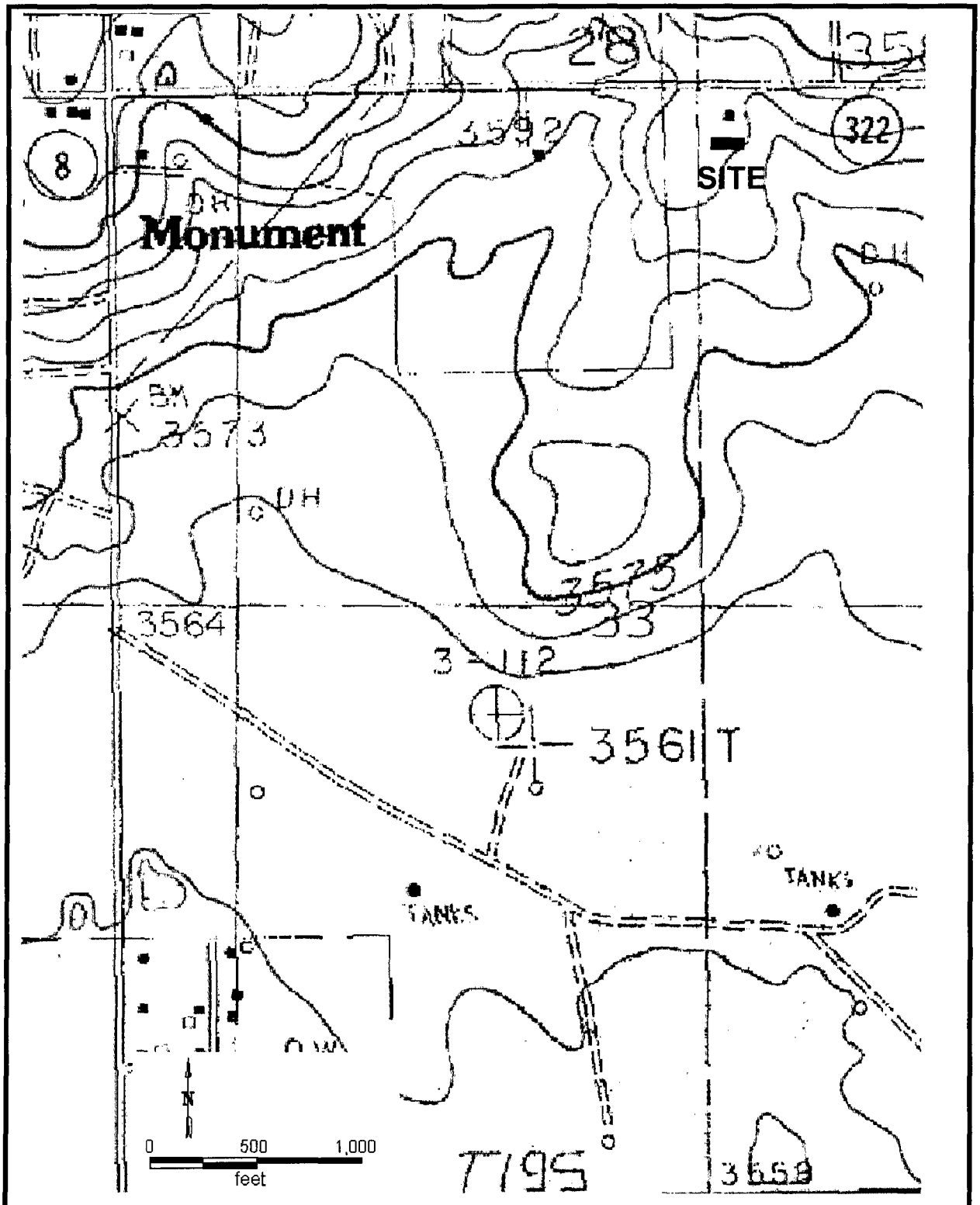

Figure 1 – Facility Location

Monument Booster Station Groundwater Monitoring

Duke Energy Field Services

DRAWN BY: MHS
REVISED:
DATE: 6/05

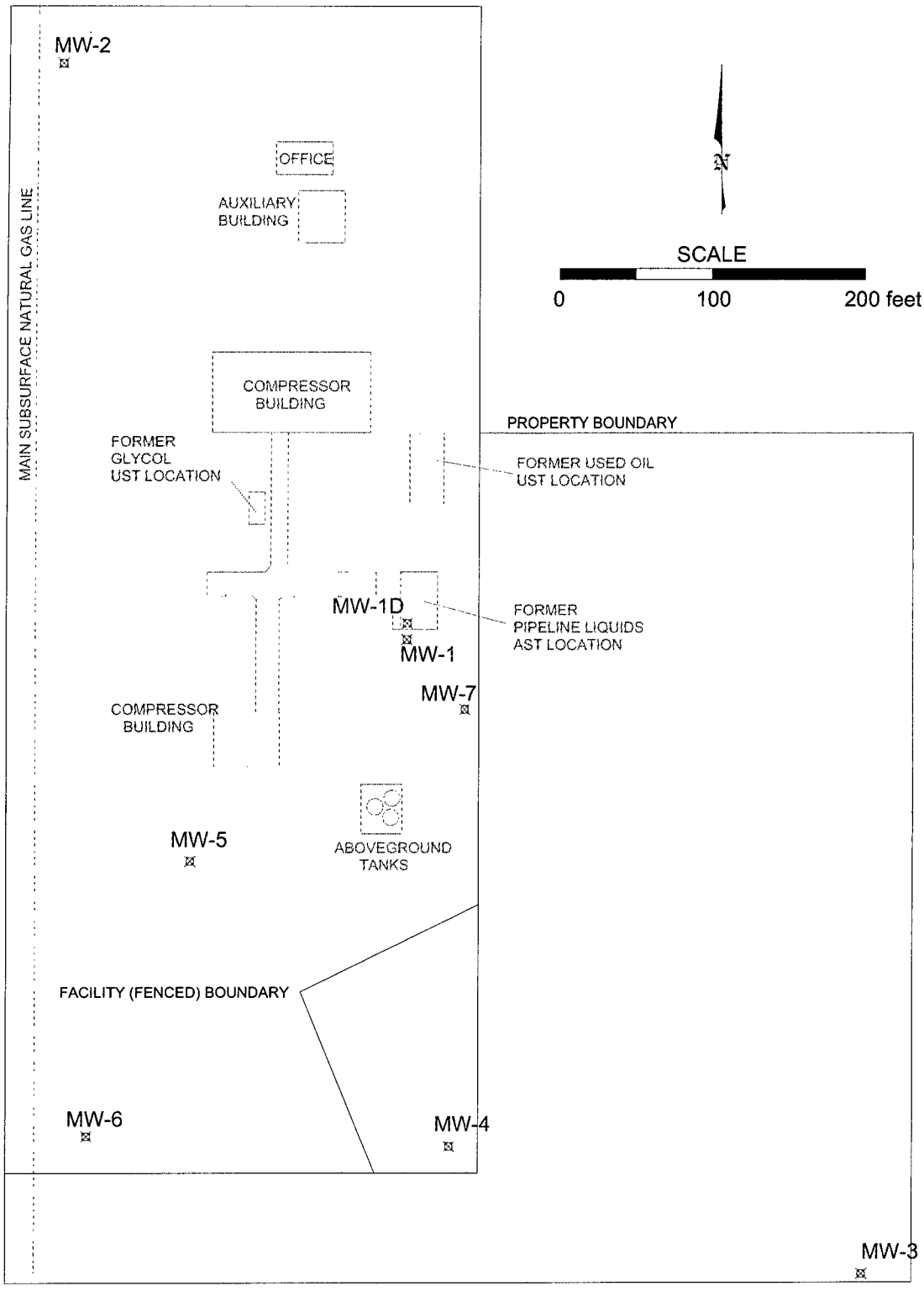

Figure 2 – Monitor Well Locations

Monument Booster Station Groundwater Monitoring

Duke Energy Field Services

DRAWN BY:	MHS
REVISED:	
DATE:	6/05

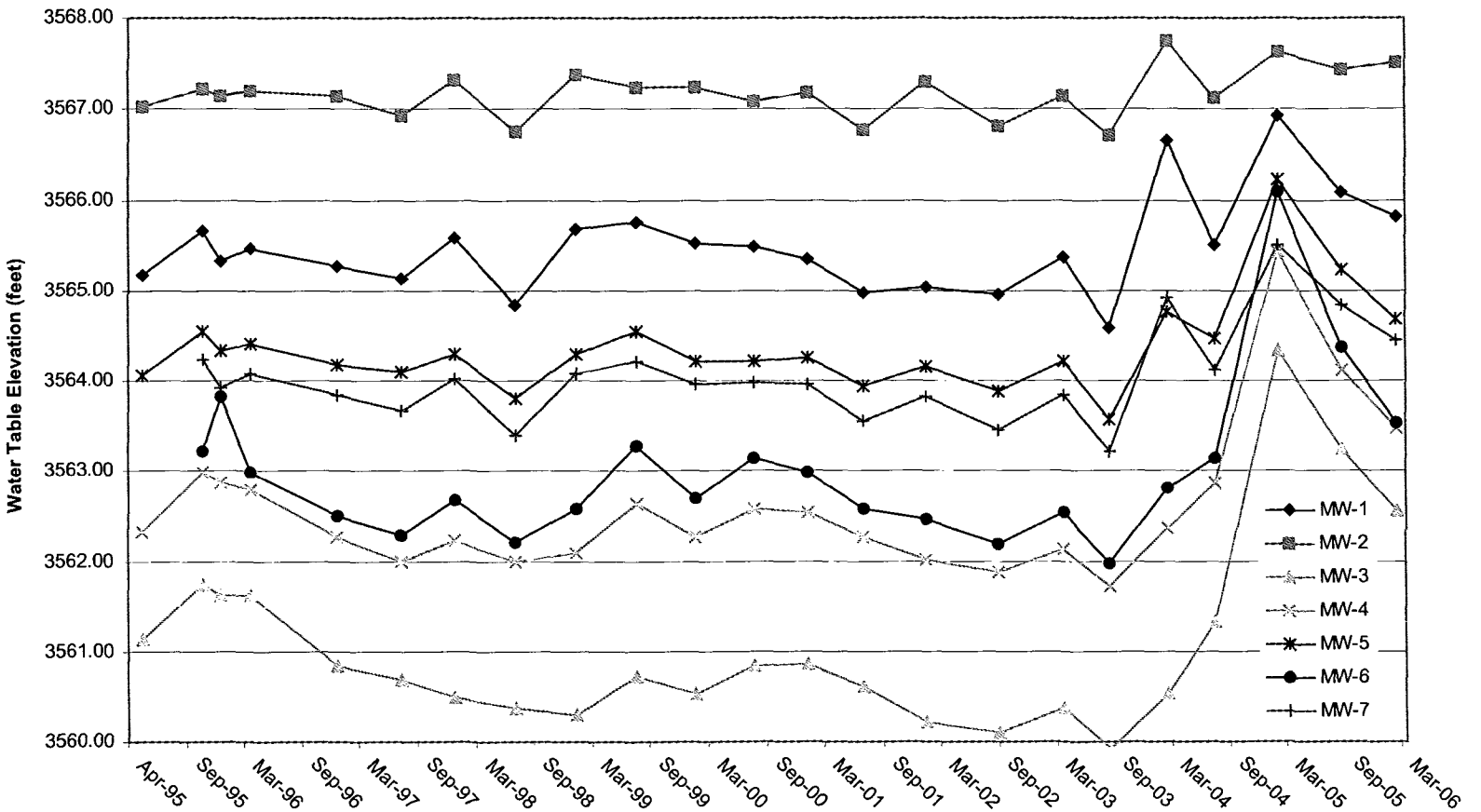

Figure 3 – Monument Booster Hydrographs

Monument Booster Station Groundwater Monitoring

Duke Energy Field Services

DRAWN BY: MHS

DATE: 6/06

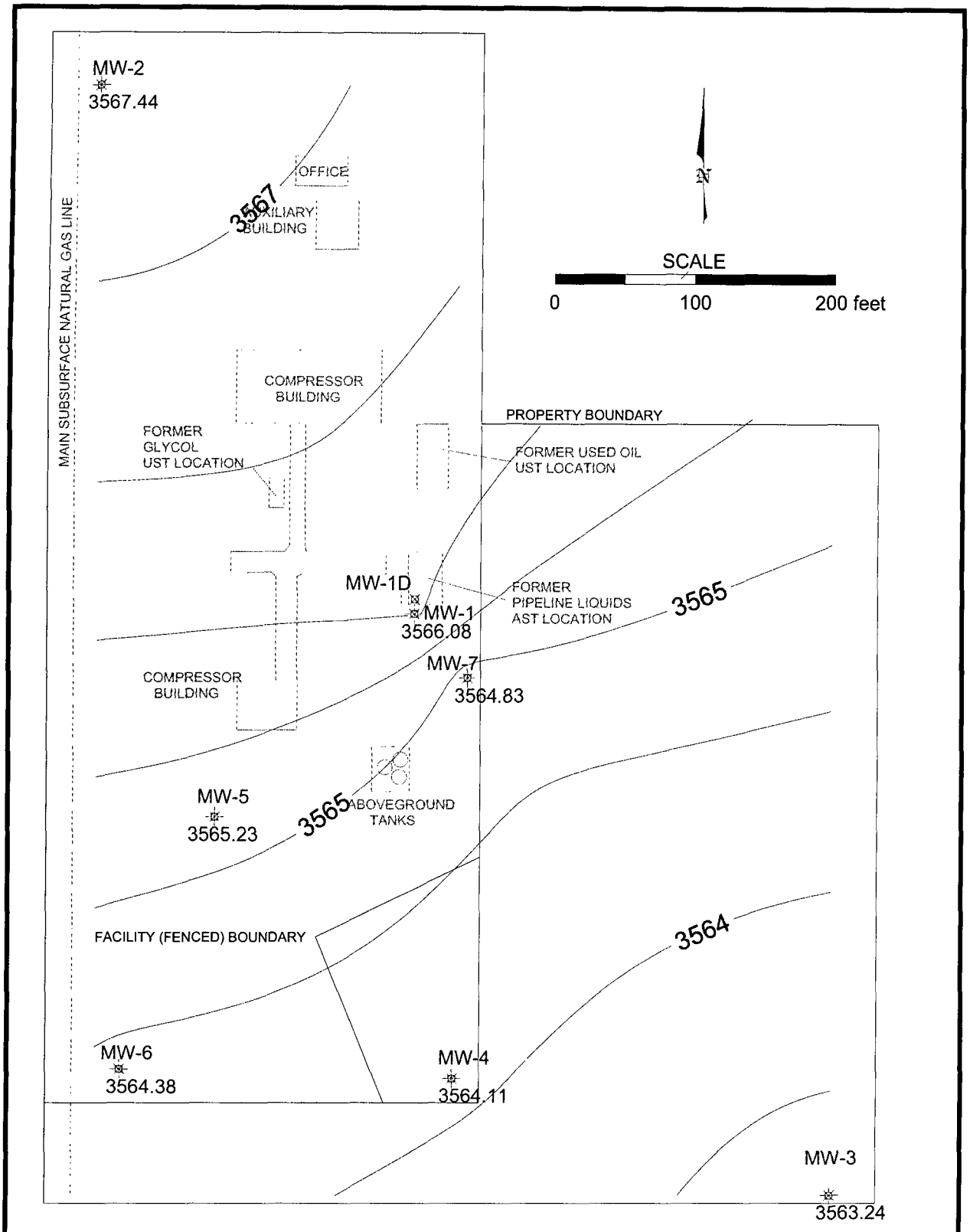

Figure 4 – September 2005 Water Table Elevation Contours

Monument Booster Station Groundwater Monitoring

Duke Energy Field Services

DRAWN BY:	MHS
REVISED:	
DATE:	6/06

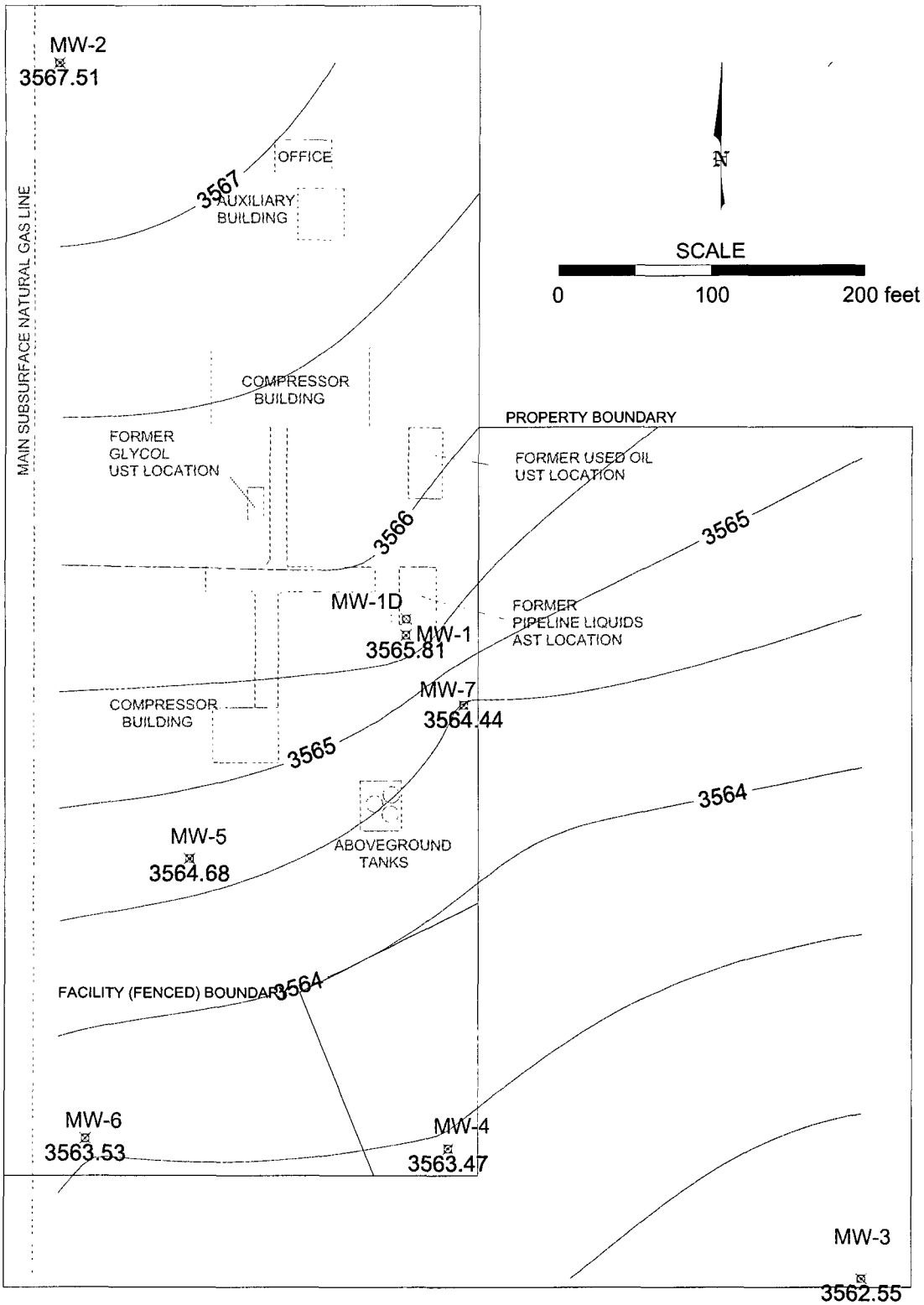

Figure 5 – March 2006 Water Table Elevation Contours

Monument Booster Station Groundwater Monitoring

Duke Energy Field Services

DRAWN BY:	MHS
REVISED:	
DATE:	6/06

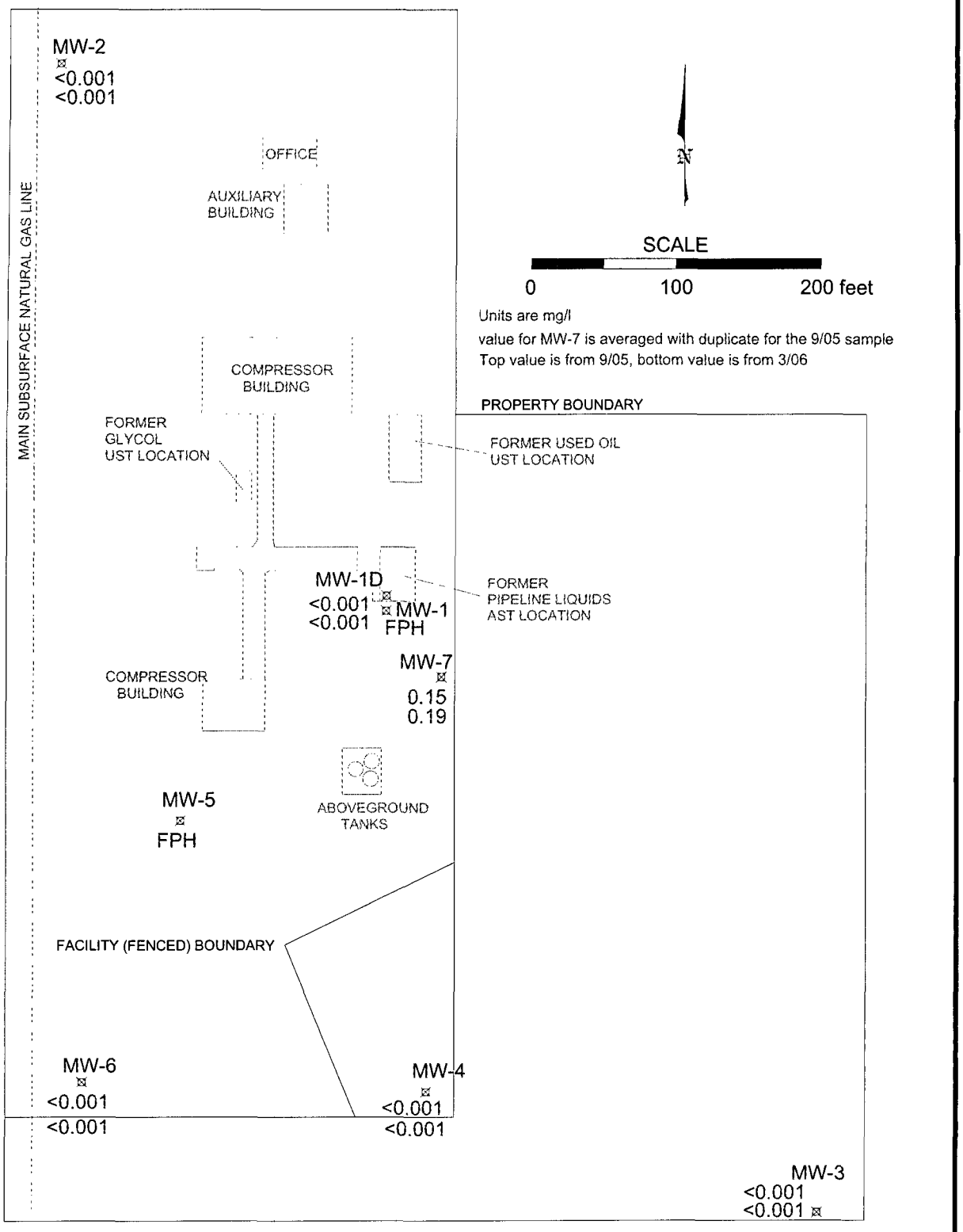

Figure 6 – September 2005 and March 2006 Benzene Distribution

Monument Booster Station Groundwater Monitoring

Duke Energy Field Services

DRAWN BY:	MHS
REVISED:	
DATE:	6/06

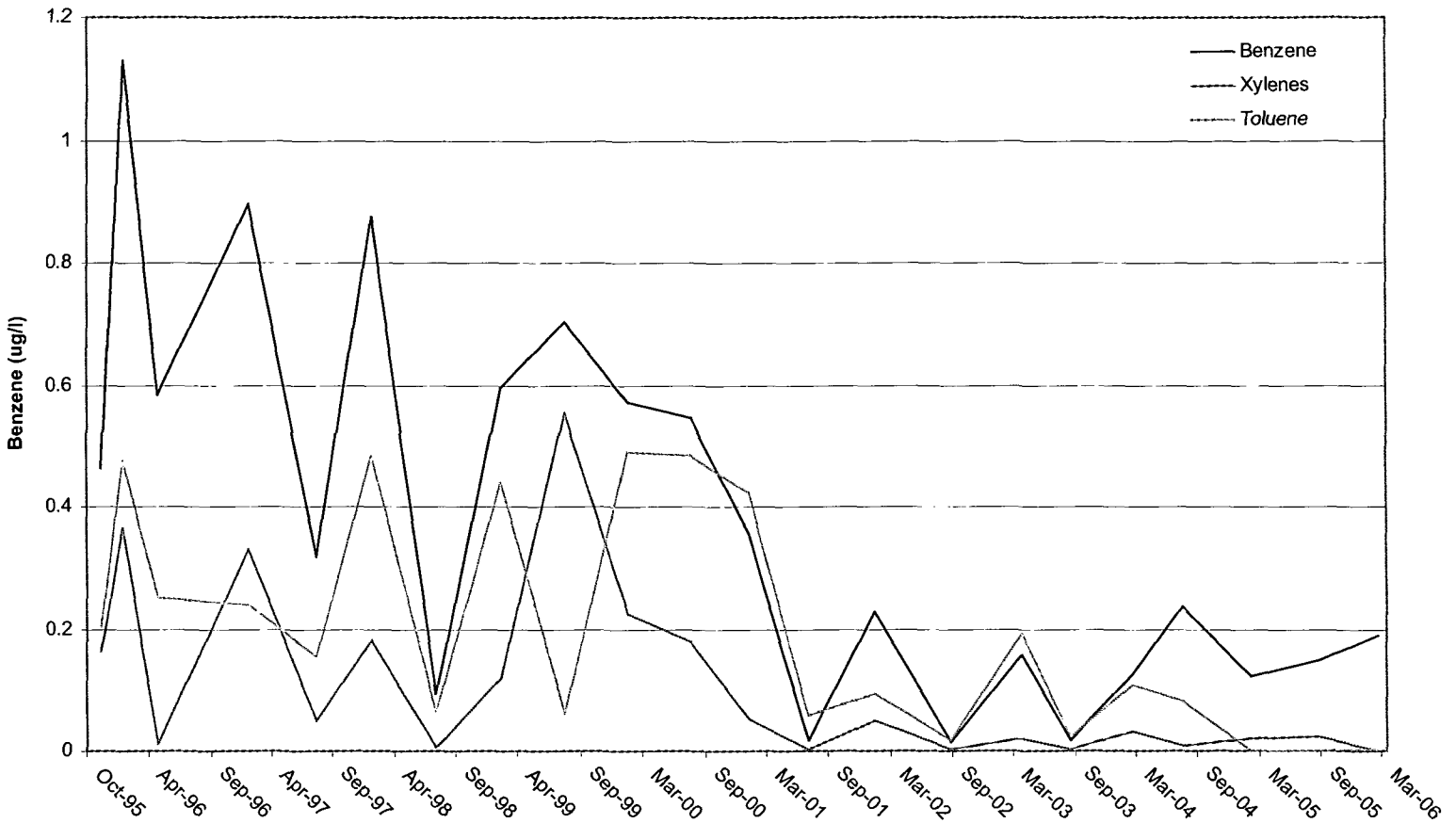

Figure 7 – MW-7 Constituent Concentrations

Monument Booster Station Groundwater Monitoring

Duke Energy Field Services

DRAWN BY: MHS

DATE: 6/06

FIELD SAMPLING DATA AND

LABORATORY ANALYTICAL REPORTS

SEPTEMBER 2005 FIELD SAMPLING DATA AND

LABORATORY ANALYTICAL REPORTS

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-1**
SITE NAME: Monument Booster
DATE: 9/21/2005
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☐ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☐ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☐ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 37.00 Feet
DEPTH TO WATER: 25.52 Feet
HEIGHT OF WATER COLUMN: 11.48 Feet
WELL DIAMETER: 4.0 Inch

22.5 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
0:00 :Total Time (hr:min)			**0** :Total Vol (gal)			**#DIV/0!** :Flow Rate (gal/min)	

SAMPLE NO.: Collected Sample No.: 050921

ANALYSES: BTEX (8021-B)

COMMENTS: DID NOT SAMPLE DUE TO FREE PHASE HYDROCARBONS IN WELL!

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-1d**
SITE NAME: Monument Booster
DATE: 9/21/2005
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 36.25 Feet
DEPTH TO WATER: 24.52 Feet
HEIGHT OF WATER COLUMN: 11.73 Feet
WELL DIAMETER: 2.0 Inch

5.7 Minimum Gallons to purge 3 well volumes (Water Column Height x 0.49)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
12:38	0	-	-	-	-	-	Began Hand Bailing!
12:43	2.1	21.4	2.53	7.3	-	-	
12:48	4.2	21.2	2.25	7.2	-	-	
12:54	6.3	21.1	2.75	7.3	-	-	
0:16	:Total Time (hr:min)		**6.3**	:Total Vol (gal)		**0.39**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 050921 1300
ANALYSES: BTEX (8021-B)
COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-2**
SITE NAME: Monument Booster
DATE: 9/21/2005
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☑ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 43.30 Feet
DEPTH TO WATER: 28.86 Feet
HEIGHT OF WATER COLUMN: 14.44 Feet
WELL DIAMETER: 4.0 Inch

28.3 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
9:07	0	-	-	-	-	-	Began Hand Bailing!
9:15	10	20.6	1.91	7.1	-	-	
9:24	20	20.7	1.92	7.1	-	-	
9:34	30	20.6	1.91	7.1	-	-	
0:27 :Total Time (hr:min)			**30** :Total Vol (gal)			**1.11** :Flow Rate (gal/min)	

SAMPLE NO.: Collected Sample No.: 050921 0935

ANALYSES: BTEX (8021-B)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-3**
SITE NAME: Monument Booster
DATE: 9/21/2005
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☑ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 35.70 Feet
DEPTH TO WATER: 20.62 Feet
HEIGHT OF WATER COLUMN: 15.08 Feet
WELL DIAMETER: 4.0 Inch

29.5 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
8:04	0	-	-	-	-	-	Began Hand Bailing!
8:12	10	20.0	0.93	7.10	-	-	
8:20	20	20.7	1.16	7.10	-	-	
8:29	30	20.9	2.49	7.10	-	-	
8:38	40	20.9	1.13	7.10	-	-	
0:34	:Total Time (hr:min)		**40**	:Total Vol (gal)		**1.17**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 050921 0845

ANALYSES: BTEX (8021-B)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-4**
SITE NAME: Monument Booster
DATE: 9/21/2005
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☑ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 38.90 Feet
DEPTH TO WATER: 24.66 Feet
HEIGHT OF WATER COLUMN: 14.24 Feet
WELL DIAMETER: 4.0 Inch

27.9 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
10:48	0	-	-	-	-	-	Began Hand Bailing!
10:56	10	20.4	1.14	7.1	-	-	
11;05	20	20.5	1.15	7.2	-	-	
11:18	29	20.6	1.16	7.1	-	-	

0:30 :Total Time (hr:min) **29** :Total Vol (gal) **0.96** :Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 050921 1125

ANALYSES: BTEX (8021-B)

COMMENTS: Collected MS/MSD Samples!

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-5**
SITE NAME: Monument Booster
DATE: 9/21/2005
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 37.00 Feet
DEPTH TO WATER: 27.16 Feet
HEIGHT OF WATER COLUMN: 9.84 Feet
WELL DIAMETER: 4.0 Inch

19.3 Minimum Gallons to purge 3 well volumes *(Water Column Height x 1.96)*

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
0:00	:Total Time (hr:min)		**0**	:Total Vol (gal)		**#DIV/0!**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 050921 1620

ANALYSES:

COMMENTS: DID NOT SAMPLE DUE TO FREE PHASE HYDROCARBON IN WELL!

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-6**
SITE NAME: Monument Booster
DATE: 9/21/2005
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☑ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 38.50 Feet
DEPTH TO WATER: 23.55 Feet
HEIGHT OF WATER COLUMN: 14.95 Feet
WELL DIAMETER: 4.0 Inch

29.3 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
9:54	0	-	-	-	-	-	Began Hand Bailing!
10:02	11	20.7	2.78	6.9	-	-	
10:13	22	20.9	2.04	7.0	-	-	
10:24	33	20.9	2.93	7.0	-	-	
0:30	:Total Time (hr:min)		**33**	:Total Vol (gal)		**1.10**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 050921 1030

ANALYSES: BTEX (8021-B)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-7**
SITE NAME: Monument Booster
DATE: 9/21/2005
PROJECT NO. F-113
SAMPLER: J. Fergerson

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 36.40 Feet
DEPTH TO WATER: 24.57 Feet
HEIGHT OF WATER COLUMN: 11.83 Feet
WELL DIAMETER: 4.0 Inch

23.2 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
11:50	0	-	-	-	-	-	Began Hand Bailing!
11:57	8	20.3	2.86	6.9	-	-	
12:06	16	20.2	2.80	6.9	-	-	
12:15	24	20.0	2.23	6.9	-	-	
0:25	:Total Time (hr:min)		**24**	:Total Vol (gal)		**0.96**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 050921 1220

ANALYSES: BTEX (8021-B)

COMMENTS: Collected Duplicate Sample No.: 0509211400 for BTEX (8021-B)

Analytical and Quality Control Report

Mike Stewart
American Environmental Consulting
6885 South Marshall Street
Suite 3
Littleton, CO, 80128

Report Date: March 21, 2006

Work Order: 6032016

Project Location: Monument Booster Station
Project Name: Duke Energy Field Services
Project Number: Duke Energy Field Services

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
86319	MW-3 (0603161455)	water	2006-03-16	14:55	2006-03-20
86320	MW-1D (0603161540)	water	2006-03-16	15:40	2006-03-20
86321	MW-2 (0603161545)	water	2006-03-16	15:45	2006-03-20
86322	MW-7 (0603161620)	water	2006-03-16	16:20	2006-03-20
86323	MW-4 (0603161635)	water	2006-03-16	16:35	2006-03-20
86324	MW-6 (0603161700)	water	2006-03-16	17:00	2006-03-20
86325	Trip Blank	water	2006-03-16	00:00	2006-03-20

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Blair Leftwich

Dr. Blair Leftwich, Director

Analytical Report

Sample: 86319 - MW-3 (0603161455)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.113	mg/L	1	0.100	113	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.0927	mg/L	1	0.100	93	70.6 - 129.2

Sample: 86320 - MW-1D (0603161540)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0992	mg/L	1	0.100	99	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.0872	mg/L	1	0.100	87	70.6 - 129.2

Sample: 86321 - MW-2 (0603161545)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.102	mg/L	1	0.100	102	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.0886	mg/L	1	0.100	89	70.6 - 129.2

Sample: 86322 - MW-7 (0603161620)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.191**	mg/L	1	0.00100
Toluene		**0.00320**	mg/L	1	0.00100
Ethylbenzene		**0.0783**	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.106	mg/L	1	0.100	106	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.129	mg/L	1	0.100	129	70.6 - 129.2

Sample: 86323 - MW-4 (0603161635)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.105	mg/L	1	0.100	105	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.0952	mg/L	1	0.100	95	70.6 - 129.2

Sample: 86324 - MW-6 (0603161700)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100

continued ...

sample 86324 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.105	mg/L	1	0.100	105	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.100	mg/L	1	0.100	100	70.6 - 129.2

Sample: 86325 - Trip Blank

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0993	mg/L	1	0.100	99	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.0922	mg/L	1	0.100	92	70.6 - 129.2

Method Blank (1) QC Batch: 25361

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000255	mg/L	0.001
Toluene		<0.000210	mg/L	0.001
Ethylbenzene		<0.000317	mg/L	0.001
Xylene		<0.00181	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.101	mg/L	1	0.100	101	76.1 - 117
4-Bromofluorobenzene (4-BFB)		0.0932	mg/L	1	0.100	93	58.5 - 118

Laboratory Control Spike (LCS-1) QC Batch: 25361

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.103	0.102	mg/L	1	0.100	<0.000255	103	1	80.8 - 112	20
Toluene	0.103	0.102	mg/L	1	0.100	<0.000210	103	1	78 - 114	20
Ethylbenzene	0.106	0.103	mg/L	1	0.100	<0.000317	106	3	78.6 - 116	20
Xylene	0.312	0.310	mg/L	1	0.300	<0.00181	104	1	83.2 - 112	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.103	0.101	mg/L	1	0.100	103	101	79.9 - 117
4-Bromofluorobenzene (4-BFB)	0.107	0.106	mg/L	1	0.100	107	106	79 - 123

Matrix Spike (MS-1) QC Batch: 25361 Spiked Sample: 86321

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.105	0.0997	mg/L	1	0.100	<0.000255	105	5	70.9 - 126	20
Toluene	0.104	0.0992	mg/L	1	0.100	<0.000210	104	5	70.8 - 125	20
Ethylbenzene	0.104	0.0989	mg/L	1	0.100	<0.000317	104	5	74.8 - 125	20
Xylene	0.311	0.298	mg/L	1	0.300	<0.00181	104	4	75.7 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.102	0.100	mg/L	1	0.1	102	100	73.6 - 121
4-Bromofluorobenzene (4-BFB)	0.106	0.104	mg/L	1	0.1	106	104	81.8 - 114

Standard (ICV-1) QC Batch: 25361

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.103	103	85 - 115	2006-03-20
Toluene		mg/L	0.100	0.102	102	85 - 115	2006-03-20
Ethylbenzene		mg/L	0.100	0.102	102	85 - 115	2006-03-20
Xylene		mg/L	0.300	0.308	103	85 - 115	2006-03-20

Standard (CCV-1) QC Batch: 25361

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0978	98	85 - 115	2006-03-20
Toluene		mg/L	0.100	0.0970	97	85 - 115	2006-03-20
Ethylbenzene		mg/L	0.100	0.0995	100	85 - 115	2006-03-20
Xylene		mg/L	0.300	0.294	98	85 - 115	2006-03-20

Page 1 of 1

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 6032016

Company Name: American Environmental Consultants
Phone #: 303-948-7133
Address: (Street, City, Zip) 6885 South Marshall St, Suite 3 Littleton, CO 80128
Fax #: 303-948-7793
e-mail:
Contact Person: Mike Stewart
Invoice to: (If different from above) Duke Energy Field Services Attn: Daniel Dick
Project #:
Project Name: Duke Energy Field Services
Project Location: Monument Booster Station
Sampler Signature: [signature]

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
86319	MW-3 (0603161455)	2		✓				✓				✓		3/16/06	1455
20	MW-1d (0603161540)	2		✓				✓				✓		3/16/06	1540
21	MW-2 (0603161545)	6		✓				✓				✓		3/16/06	1545
22	MW-7 (0603161620)	2		✓				✓				✓		3/16/06	1620
23	MW-4 (0603161635)	2		✓				✓				✓		3/16/06	1635
24	MW-6 (0603161700)	2		✓				✓				✓		3/16/06	1700
25	Trip Blank	2		✓				✓				✓			

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB #	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	TX 1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content			MS/MSD	Turn Around Time if different from standard	Hold
86319		✓																				
20		✓																				
21		✓																		✓		
22		✓																				
23		✓																				
24		✓																				
25																						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	3/17/06	1600	[signature]	3/17/06	1600
[signature]	3/17/06	1900			
			Received at Laboratory by: [signature]	3-20-06	10:00

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review

REMARKS:
☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Carrier # Fedex Greyhound 6 148 319 7626

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

18-145

ORIGINAL COPY

March 2006 FIELD SAMPLING DATA AND

LABORATORY ANALYTICAL REPORTS

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-1**
SITE NAME: Monument Booster
DATE: 3/16/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson/M. Stewart

PURGING METHOD: ☐ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☐ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☐ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 37.00 Feet
DEPTH TO WATER: 25.52 Feet
HEIGHT OF WATER COLUMN: 11.48 Feet
WELL DIAMETER: 4.0 Inch

22.5 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m* S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
0:00	:Total Time (hr:min)		**0**	:Total Vol (gal)		**#DIV/0!**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060316

ANALYSES: BTEX (8021-B)

COMMENTS: DID NOT SAMPLE DUE TO FREE PHASE HYDROCARBONS IN WELL!

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-1d**
SITE NAME: Monument Booster
DATE: 3/16/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson/M. Stewart

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 36.30 Feet
DEPTH TO WATER: 25.33 Feet
HEIGHT OF WATER COLUMN: 10.97 Feet
WELL DIAMETER: 2.0 Inch

5.4 Minimum Gallons to purge 3 well volumes (Water Column Height x 0.49)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
15:14	0.0	-	-	-	-	-	Began Hand Bailing!
15:18	2.0	20.1	0.75	7.50	1.8	-	
15:28	4.0	20.5	0.73	7.42	1.3	-	
15:32	6.0	20.2	0.73	7.37	1.1	-	

0:18 :Total Time (hr:min) **6** :Total Vol (gal) **0.33** :Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060316 1540
ANALYSES: BTEX (8021-B)
COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-2**
SITE NAME: Monument Booster
DATE: 3/16/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson/M. Stewart

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☑ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 43.30 Feet
DEPTH TO WATER: 28.79 Feet
HEIGHT OF WATER COLUMN: 14.51 Feet
WELL DIAMETER: 4.0 Inch

28.4 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	0.0	-	-	-	-	-	Began Hand Bailing!
	10	20.2	3.60	7.32	-	-	
	20	19.7	3.62	7.37	-	-	
	30	19.9	3.71	7.35	-	-	
0:00	:Total Time (hr:min)		**30**	:Total Vol (gal)		**#DIV/0!**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060316 1545

ANALYSES: BTEX (8021-B)

COMMENTS: Collected MS/MSD Samples

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-3**
SITE NAME: Monument Booster
DATE: 3/16/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson/M. Stewart

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☑ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 35.70 Feet
DEPTH TO WATER: 21.31 Feet
HEIGHT OF WATER COLUMN: 14.39 Feet
WELL DIAMETER: 4.0 Inch

28.2 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
14:24	0	-	-	-	-	-	Began Hand Bailing!
14:32	10	20.1	1.24	7.23	1.1	-	
14:41	20	19.7	1.26	7.22	0.8	-	
14:52	30	19.6	1.27	7.17	1.1	-	

0:28 :Total Time (hr:min) **30** :Total Vol (gal) **1.07** :Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060316 1455

ANALYSES: BTEX (8021-B)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-4**
SITE NAME: Monument Booster
DATE: 3/16/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson/M. Stewart

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☑ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 38.90 Feet
DEPTH TO WATER: 25.30 Feet
HEIGHT OF WATER COLUMN: 13.60 Feet
WELL DIAMETER: 4.0 Inch

26.6 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	0	-	-	-	-	-	Began Hand Bailing!
	10	19.1	1.07	7.32	-	-	
	20	18.7	1.10	7.19	-	-	
	30	18.8	1.08	7.22	-	-	
0:00	:Total Time (hr:min)		**30**	:Total Vol (gal)		**#DIV/0!**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060316 1635
ANALYSES: BTEX (8021-B)
COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-5**
SITE NAME: Monument Booster
DATE: 3/16/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson/M. Stewart

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 37.00 Feet
DEPTH TO WATER: 27.16 Feet
HEIGHT OF WATER COLUMN: 9.84 Feet
WELL DIAMETER: 4.0 Inch

19.3 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
0:00 :Total Time (hr:min)			**0** :Total Vol (gal)			**#DIV/0!** :Flow Rate (gal/min)	

SAMPLE NO.: Collected Sample No.: 060316 1620

ANALYSES:

COMMENTS: DID NOT SAMPLE DUE TO FREE PHASE HYDROCARBON IN WELL!

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-6**
SITE NAME: Monument Booster
DATE: 3/16/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson/M. Stewart

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☑ Surface Discharge ☐ Drums ☐ Disposal Facility

TOTAL DEPTH OF WELL: 38.50 Feet
DEPTH TO WATER: 24.40 Feet
HEIGHT OF WATER COLUMN: 14.10 Feet
WELL DIAMETER: 4.0 Inch

27.6 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
16:32	0.0	-	-	-	-	-	Began Hand Bailing!
16:42	9.0	19.4	1.35	7.00	1.4	-	
16:49	18	19.0	1.36	6.98	1.2	-	
16:56	28	.19.2	1.36	6.99	1.4	-	

0:24 :Total Time (hr:min) **28** :Total Vol (gal) **1.16** :Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060316 1700
ANALYSES: BTEX (8021-B)
COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-7**
SITE NAME: Monument Booster
DATE: 3/16/2006
PROJECT NO. F-113
SAMPLER: J. Fergerson/M. Stewart

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 36.40 Feet
DEPTH TO WATER: 24.96 Feet
HEIGHT OF WATER COLUMN: 11.44 Feet
WELL DIAMETER: 4.0 Inch

22.4 Minimum Gallons to purge 3 well volumes (Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
15:51	0.0	-	-	-	-	-	Began Hand Bailing!
15:58	8.0	19.3	1.10	6.97	0.5	-	
16:09	16	19.2	1.09	6.98	0.8	-	
16:18	24	19.2	1.09	6.96	0.9	-	

0:27 :Total Time (hr:min) **24** :Total Vol (gal) **0.89** :Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060316 1620

ANALYSES: BTEX (8021-B)

COMMENTS: _____

Analytical and Quality Control Report

Mike Stewart
American Environmental Consulting
6885 South Marshall Street
Suite 3
Littleton, CO, 80128

Report Date: March 21, 2006

Work Order: 6032016

Project Location: Monument Booster Station
Project Name: Duke Energy Field Services
Project Number: Duke Energy Field Services

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
86319	MW-3 (0603161455)	water	2006-03-16	14:55	2006-03-20
86320	MW-1D (0603161540)	water	2006-03-16	15:40	2006-03-20
86321	MW-2 (0603161545)	water	2006-03-16	15:45	2006-03-20
86322	MW-7 (0603161620)	water	2006-03-16	16:20	2006-03-20
86323	MW-4 (0603161635)	water	2006-03-16	16:35	2006-03-20
86324	MW-6 (0603161700)	water	2006-03-16	17:00	2006-03-20
86325	Trip Blank	water	2006-03-16	00:00	2006-03-20

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Blair Leftwich

Dr. Blair Leftwich, Director

Analytical Report

Sample: 86319 - MW-3 (0603161455)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.113	mg/L	1	0.100	113	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.0927	mg/L	1	0.100	93	70.6 - 129.2

Sample: 86320 - MW-1D (0603161540)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0992	mg/L	1	0.100	99	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.0872	mg/L	1	0.100	87	70.6 - 129.2

Sample: 86321 - MW-2 (0603161545)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.102	mg/L	1	0.100	102	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.0886	mg/L	1	0.100	89	70.6 - 129.2

Sample: 86322 - MW-7 (0603161620)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.191**	mg/L	1	0.00100
Toluene		**0.00320**	mg/L	1	0.00100
Ethylbenzene		**0.0783**	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.106	mg/L	1	0.100	106	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.129	mg/L	1	0.100	129	70.6 - 129.2

Sample: 86323 - MW-4 (0603161635)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.105	mg/L	1	0.100	105	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.0952	mg/L	1	0.100	95	70.6 - 129.2

Sample: 86324 - MW-6 (0603161700)

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100

continued . . .

sample 86324 continued...

Parameter	Flag	RL Result	Units	Dilution	RL
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.105	mg/L	1	0.100	105	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.100	mg/L	1	0.100	100	70.6 - 129.2

Sample: 86325 - Trip Blank

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	25361	Date Analyzed:	2006-03-20	Analyzed By:	KB
Prep Batch:	22278	Sample Preparation:	2006-03-20	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0993	mg/L	1	0.100	99	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.0922	mg/L	1	0.100	92	70.6 - 129.2

Method Blank (1) QC Batch: 25361

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000255	mg/L	0.001
Toluene		<0.000210	mg/L	0.001
Ethylbenzene		<0.000317	mg/L	0.001
Xylene		<0.00181	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.101	mg/L	1	0.100	101	76.1 - 117
4-Bromofluorobenzene (4-BFB)		0.0932	mg/L	1	0.100	93	58.5 - 118

Laboratory Control Spike (LCS-1) QC Batch: 25361

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.103	0.102	mg/L	1	0.100	<0.000255	103	1	80.8 - 112	20
Toluene	0.103	0.102	mg/L	1	0.100	<0.000210	103	1	78 - 114	20
Ethylbenzene	0.106	0.103	mg/L	1	0.100	<0.000317	106	3	78.6 - 116	20
Xylene	0.312	0.310	mg/L	1	0.300	<0.00181	104	1	83.2 - 112	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.103	0.101	mg/L	1	0.100	103	101	79.9 - 117
4-Bromofluorobenzene (4-BFB)	0.107	0.106	mg/L	1	0.100	107	106	79 - 123

Matrix Spike (MS-1) QC Batch: 25361 Spiked Sample: 86321

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.105	0.0997	mg/L	1	0.100	<0.000255	105	5	70.9 - 126	20
Toluene	0.104	0.0992	mg/L	1	0.100	<0.000210	104	5	70.8 - 125	20
Ethylbenzene	0.104	0.0989	mg/L	1	0.100	<0.000317	104	5	74.8 - 125	20
Xylene	0.311	0.298	mg/L	1	0.300	<0.00181	104	4	75.7 - 126	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.102	0.100	mg/L	1	0.1	102	100	73.6 - 121
4-Bromofluorobenzene (4-BFB)	0.106	0.104	mg/L	1	0.1	106	104	81.8 - 114

Standard (ICV-1) QC Batch: 25361

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.103	103	85 - 115	2006-03-20
Toluene		mg/L	0.100	0.102	102	85 - 115	2006-03-20
Ethylbenzene		mg/L	0.100	0.102	102	85 - 115	2006-03-20
Xylene		mg/L	0.300	0.308	103	85 - 115	2006-03-20

Standard (CCV-1) QC Batch: 25361

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0978	98	85 - 115	2006-03-20
Toluene		mg/L	0.100	0.0970	97	85 - 115	2006-03-20
Ethylbenzene		mg/L	0.100	0.0995	100	85 - 115	2006-03-20
Xylene		mg/L	0.300	0.294	98	85 - 115	2006-03-20

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155 McCutcheon,Suite H
El Paso, Texas 79932
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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 603 2016

Company Name: American Environmental Consultants — Phone #: 303-948-7733
Address: (Street, City, Zip) 6885 South Marshall St, Suite 3 Littleton CO 80128 — Fax #: 303-948-7793 — e-mail:
Contact Person: Mike Stewart
Invoice to: (If different from above) Duke Energy Field Services Attn: Daniel Dick
Project #: — Project Name: Duke Energy Field Services
Project Location: Monument Booster Station — Sampler Signature:

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
86319	MW-3 (0603161455)	2		✓				✓				✓		3/16/06	1455
20	MW-1d (0603161540)	2		✓				✓				✓		3/16/06	1540
21	MW-2 (0603161545)	6		✓				✓				✓		3/16/06	1545
22	MW-7 (0603161620)	2		✓				✓				✓		3/16/06	1620
23	MW-4 (0603161635)	2		✓				✓				✓		3/16/06	1635
24	MW-6 (0603161700)	2		✓				✓				✓		3/16/06	1700
25	Trip Blank	2		✓				✓				✓			

	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	TX 1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content		MS/MSD	Turn Around Time if different from standard	Hold
86319		✓																		
20		✓																		
21		✓																	✓	
22		✓																		
23		✓																		
24		✓																		
25																				

Relinquished by: Date: 3/17/06 Time: 1400 — Received by: Date: 3/17/06 Time: 1600
Relinquished by: Date: 3/17/06 Time: 1900 — Received by: Date: Time:
Relinquished by: Date: Time: — Received at Laboratory by: Date: 3/20/06 Time: 10:00

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

ORIGINAL COPY

18-145

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp °
Log-in Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Federal Express @ 148 319 7026

Report Date: March 21, 2006
Duke Energy Field Services

Work Order: 6032016
Duke Energy Field Services

Page Number: 6 of 6
Monument Booster Station

Duke Energy Corporation
Energy Center
P.O. Box 1006
Charlotte, NC 28201-1006

April 9, 2003

William C. Olson
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

RE: Monument Booster Station, Lea County, New Mexico
2002 Annual Groundwater Monitoring Report

Dear Mr. Olsen

Please find enclosed one copy of a letter report regarding Duke Energy Field Service's Monument Booster Station located in Lea County, New Mexico. This annual report documents the activities associated with two semi-annual groundwater sampling events performed on February 13, 2002 and September 27, 2002. The report also summarizes historical data collected since the beginning of the program in May 1995.

Recovery of LNAPL from monitoring wells MW-1 and MW-5 continues to be through the use of absorbent socks. As of December 17, 2002, a total of 157 gallons of LNAPL has been recovered.

Total dissolved BTEX concentrations in monitoring wells MW-1D, MW-2, MW-3, MW-4, and MW-6 continue to be below New Mexico Water Quality Control Commission (WQCC) standards. For the September 27, 2002 sampling event, BTEX concentrations in monitoring well MW-7 were at their lowest levels since monitoring began in 1995 and monitoring well MW-5 was sampled for the first time since 1995 due to the absence of LNAPL. Analytical results indicate that biodegradation processes are occurring and will continue.

If you have any questions regarding the enclosed report please feel free to contact me at 704.875.5228 or by email at tshunsuc@duke-energy.com.

Sincerely,

Tim Hunsucker

Timothy S. Hunsucker

Enclosure

cc: Paul Sheeley, OCD Hobbs District
Lynn Ward, DEFS
Rusty Frishmuth, DEFS
Steve Weathers, DEFS (w/o enclosure)
Gilbert J. Van Deventer, Trident (w/o enclosure)

Olson, William

From: Gilbert J. Van Deventer [SMTP:Gilbert.Vandeventer@trw.com]
Sent: Wednesday, January 31, 2001 8:35 AM
To: Weathers, Steve; Ford, Jack; Olson, Bill; Williams, Donna
Cc: Fergerson, John
Subject: Groundwater Sampling Notification

TRW has scheduled groundwater sampling events for the following sites:

Feb. 5-6, 2001
DEFS-Lee Gas Plant
Semi-annual groundwater sampling event
BTEX: MW3,11,12,13,19,20,&21

Feb. 6-7, 2001
DEFS-Linam Ranch Gas Plant
Semi-annual groundwater sampling event
BTEX, SO4, NO3, DO: MW1,2,3,5,7,8,9,10,11,12,&13

Feb. 8-9, 2001
DEFS-Hobbs Booster Station
First Quarter 2001 groundwater sampling event BTEX: MW1,2,3,5,6,7,14,15,16,&19 (also MW8,9,10,&18 if no product)

Feb. 12, 2001
DEFS-Monument Booster Station
Semi-annual groundwater sampling event
BTEX, SO4, NO3, DO: MW1d,2,3,4,6,&7

Olson, William

From: Gilbert J. Van Deventer [SMTP:Gilbert.Vandeventer@trw.com]
Sent: Tuesday, August 08, 2000 9:46 AM
To: Olson, William; Williams, Donna
Cc: Weathers, Steve; Driver, Mel; Canfield, Tony; Gunter, Vicki F; Gilchrest, Ronnie; Nault, Mark S; Hyde, Greg A; Fergerson, John
Subject: Sceduled groundwater sampling events in Lea County

TRW has scheduled groundwater sampling events for the following facilities:

Lee Gas Plant near Buckeye in Lea County on August 15th-16th. Sample MWs 2, 7, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, & 22 Analytes: BTEX (Annual sampling event)

Linam Ranch Plant west of Hobbs in Lea County on August 17th.
Sample MWs: 1, 2, 3, 5, 7, 8, 9, 10, 10d, 11, 12, & 13
Analytes: BTEX, NO3, SO4, Cl, TDS, Ag, Al, As, Ba, Cd, Cr, Fe, & Mn (Annual sampling event)
Hobbs Booster Station in Hobbs on August 18th Sample MWs: 1, 2, 3, 5, 6, 7, & 9 Analytes: BTEX (Third Quarter sampling event)

Monument Booster Station near Monument on August 22nd.
Sample MWs: 1d, 2, 3, 4, 6, & 7
Analytes: BTEX, NO3, SO4, Cl, TDS, Al, As, B, Cr, F, Fe, & Mn (Annual sampling event)
Work will consist of measuring depth to groundwater and product thickness (if present) in all monitoring wells on site, sampling monitoring wells, and performing operation & maintenance of the groundwater remediation systems in accordance with work plan requirements.

Sample dates for latter sites may vary somewhat dependent on weather conditions and scheduling. The OCD will be notified of schedule changes during the course of field work.

Feel free to call me at (915) 682-0008 if you have any questions or would like to schedule sample splitting or witnessing. While in the field, John Fergerson or I can be reached on our cellular phone at (915) 661-6870.

Gilbert J. Van Deventer, REM
Project Manager / Environmental Engineer
TRW Inc. - Energy & Environmental Integration Services
415 West Wall Street, Suite 1818
Midland, Texas 79701

TRW

FACSIMILE TRANSMISSION

415 W. Wall St., Ste. 1818
Midland, Texas 79701

DATE: April 17, 2000

TO: **Bill Olson** FAX: (505) 827-8177
COMPANY: NMOCD Phone: (505) 827-7154

FROM: **Gil Van Deventer** FAX: (915) 682-0028
COMPANY: TRW Inc. Phone: (915) 682-0008
Energy & Environmental Integration Services

Number of Pages (including cover page): 1

RE: **Notification of Field Activities**
Facility: GPM - Hobbs Booster Station
Address: 1625 W. Marland, Hobbs, Lea County NM 88240

Please consider this fax as notification that GPM and TRW will be conducting monitoring well installation and groundwater sampling activities at the above referenced facility. The work activities will proceed as described in the OCD-approved work plan. Work is scheduled to commence immediately after the health & safety plan is conducted at 8:00 am MST Monday May 8, 2000. Field work for this task will be completed by Friday May 12th assuming things go according to plan.

Please feel free to call me if you have any questions.

GVD

cc: Donna Williams, OCD - Hobbs District Office
Mark Nault, Duke Energy (formerly GPM) Linam Ranch Gas Plant
Mel Driver, Duke Energy (formerly GPM) - Midland, TX
Stan Shavers, Duke Energy (formerly GPM) - Hobbs Booster Station

GPM GAS CORPORATION

3300 N "A" ST. BLDG 7
MIDLAND, TX 79705-5421

P.O. BOX 50020
MIDLAND, TX 79710-0020

December 9, 1999

Mr. William C. Olson
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
Environmental Bureau
2040 S. Pacheco
Santa Fe, New Mexico 87505

Dear Mr. Olson:

Attached is the 1999 Annual Groundwater Monitoring Report for GPM Gas Corporation's Monument Booster Station. The report contains the following recommendations:

1. Continue free product recovery operations since the present system has been effective in recovering free product from MW-1 and MW-5. Since the Xitech system at MW-1 has been successful in reducing product thickness to a minimum it is recommended to replace it with an absorbent sock since recovery volumes have also decreased.

2. Continue the groundwater monitoring program on a semi-annual basis. The next sampling event is scheduled during the first quarter of 2000.

The next sampling event for Monument Booster Station is scheduled for January 2000. The OCD will be notified at least one week in advance of any scheduled activity at the site. If you have any questions or concerns with our recommendations, please advise. I can be reached at (915) 620-4142.

Sincerely,

Mel Driver

Mel Driver, P. E.
Environmental Engineer
New Mexico Region

Attachments

xc: Donna Williams, OCD-Hobbs District
Tony Canfield, GPM-Eunice Plant
Gilbert Van Deventer, TRW-Midland

FACSIMILE TRANSMISSION

415 W. Wall St., Ste. 1818
Midland, Texas 79701

DATE: 08/02/1999

TO: Bill Olson FAX: (505) 827-8177
COMPANY: NMOCD Phone: (505) 827-7154

FROM: Gil Van Deventer FAX: (915) 682-0028
COMPANY: TRW Inc. (Energy & Environmental Systems) Phone: (915) 682-0008

Number of Pages (including cover page): 1

Re: Notification of Scheduled Sampling & Monitoring Activities

TRW has scheduled the dates for Groundwater Sampling Events at the facilities listed below.

Site	Estimated Sampling Date
Navajo - Lea Refinery near Lovington, NM	Aug. 16, 1999
GPM - Lee Plant near Buckeye, NM	Aug. 17-18, 1999
GPM - Linam Ranch Plant near Hobbs, NM	Aug. 19, 1999
GPM - Monument Booster near Monument, NM	Aug. 20, 1999

Generally, work will consist of gauging and sampling monitoring wells on site. Also, operation & maintenance of remediation systems will be performed.

Please call me at 915-682-0008 if you have any questions.

TRW

FACSIMILE TRANSMISSION

415 W. Wall St., Ste. 1818
Midland, Texas 79701

DATE: 2/1/99

TO: Bill Olson FAX: (505) 827-8177

COMPANY: NMOCD Phone: (505) 827-7154

FROM: Gil Van Deventer FAX: (915) 682-0028

COMPANY: TRW Inc. (Midland, Texas) Phone: (915) 682-0008

Number of Pages (including cover page): 1

COMMENTS:

Re: Notification of Field Activities at the following facilities

TRW has scheduled the First Quarter 1999 Groundwater Sampling Events at the following facilities (weather permitting/dates estimated):

GPM - Monument Booster Station near Monument, NM (2/9/99)
GPM - Linam Ranch Plant near Hobbs, NM (2/10/99)
GPM - Lee Plant near Buckeye, NM (2/16/99)
Navajo - Lea Refinery near Lovington, NM (2/17/99)

Work will consist of gauging all monitoring wells on site and sampling monitoring wells in accordance with work plan requirements.

Please call me at 915-682-0008 if you have any questiions.

Thanks,

December 4, 1998

GPM GAS CORPORATION

4044 PENBROOK
ODESSA, TEXAS 79762

NEW MEXICO REGION

Mr. William C. Olson
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
Environmental Bureau
2040 S. Pacheco
Santa Fe, New Mexico 87505

Dear Mr. Olson:

Attached is the 1998 Annual Groundwater Monitoring and Sampling Report for GPM Gas Corporation's Monument Booster Station. The report contains the following recommendations:

1. The sampling and monitoring program should continue on a semi-annual basis.

2. Continue free product recovery operations since the present system has been effective in removing product from MW-1 and MW-5.

The next sampling event for Monument Booster Station is scheduled for January 1999. The OCD will be notified at least one week in advance of any scheduled activity at the site. If you have any questions or concerns with our recommendations, please advise. I can be reached at (915) 368-1142.

Sincerely,

Mel P. Driver

Mel P. Driver
Environmental Engineer, P.E.
New Mexico Region

Attachments

xc: Chris Williams, OCD-Hobbs District
Tony Canfield, GPM-Eunice Plant
Gilbert Van Deventer, TRW-Midland

GPM GAS SERVICES COMPANY
A DIVISION OF PHILLIPS PETROLEUM COMPANY

December 11, 1997

Mr. William C. Olson
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
Environmental Bureau
2040 S. Pacheco
Santa Fe, New Mexico 87505

Dear Mr. Olson:

Attached are the 1997 Annual Groundwater Monitoring and Sampling Reports for GPM Gas Corporation's Lee Gas Plant, Linam Ranch Plant (EOTT tanks), and Monument Booster Station.

The next sampling event for each site is scheduled for January 1998. The OCD will be notified at least one week in advance of any scheduled activity at the sites.

If you have any questions or concerns with the recommendations provided in each report, please advise. I can be reached at (915) 368-1142.

Sincerely,

Mel Driver
Environmental Engineer
New Mexico Region

cc: Jerry Sexton, OCD-Hobbs District
Mark Nault, GPM-Linam Ranch Plant
Tony Canfield, GPM-Eunice Plant
Gilbert Van Deventer, BDM-Midland

BDM INTERNATIONAL, INC.
415 WEST WALL, SUITE 1818
MIDLAND, TX 79701
(915) 682-0008
FAX (915) 682-0028

BDM/MID-GJV-MBS0297-5

February 18, 1997

Mr. Bill Olson
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Commission
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: GROUNDWATER REMEDIATION AND MONITORING MODIFICATIONS
GPM - MONUMENT BOOSTER STATION

Dear Mr. Olson:

Pursuant to our discussion today, the following modifications to your letter dated January 31, 1997 are mutually agreed:

Item 1.) GPM will sample and analyze ground water from all monitor wells on a semi-annual basis for benzene, toluene, ethylbenzene, xylene (BTEX), dissolved oxygen, nitrate, [and] sulfate~~, total aerobic heterotrophic plate count, total hydrocarbon utilizing bacteria~~ using EPA approved methods. Analysis for total aerobic heterotrophic plate count and total hydrocarbon utilizing bacteria may be discontinued.

Item 3.) The annual report will be submitted to the OCD by ~~July 1~~ October 1 of each respective year.

Item 3b.) The annual report will contain a summary of the ~~quarterly~~ semi-annual laboratory analytical results of water quality sampling of the monitor wells as well as the copies of the laboratory analyses and associated quality assurance quality control data.

Sincerely,

Gilbert J. Van Deventer, REM
Project Manager

D:\3100-008\OCDMBS1.LTR

xc: Scott Seeby - GPM, Odessa, TX
Tony Canfield - GPM - Oil Center, NM

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

January 31, 1997

CERTIFIED MAIL
RETURN RECEIPT NO. P-269-269-245

Mr. Scott Seeby
GPM Gas Corporation
4044 Penbrook
Odessa, TX 79762

RE: GROUND WATER MONITORING MODIFICATIONS
MONUMENT BOOSTER STATION

Dear Mr. Seeby:

The New Mexico Oil Conservation Division (OCD) has completed a review of GPM Gas Corporation's (GPM) September 21, 1996 "SECOND QUARTER 1996 SAMPLING EVENT - ANNUAL REPORT, MONUMENT BOOSTER STATION, LEA COUNTY, NEW MEXICO". This document contains the results of GPM's ground water remediation and monitoring activities at the Monument Booster Station. The document also contains a request to change the sampling frequency from quarterly to semi-annual and to submit monitoring data on an annual basis.

The above request to modify the monitoring program is approved with the following conditions:

1. GPM will sample and analyze ground water from all monitor wells on a semi-annual basis for benzene, toluene, ethylbenzene, xylene (BTEX), dissolved oxygen, nitrate, and sulfate~~, total aerobic heterotrophic plate count and total hydrocarbon utilizing bacteria~~ using EPA approved methods.

2. GPM will sample and analyze ground water from all monitor wells on a annual basis for New Mexico Water Quality Control Commission (WQCC) metals using EPA approved methods.

3. The annual report will be submitted to the OCD by ~~August~~ October 1 of each respective year. The annual report will contain:

   a. A description of all activities which occurred during the past calendar year, including conclusions and recommendations.

b. A summary of the ~~quarterly~~ semi-annual laboratory analytic results of water quality sampling of the monitor wells as well as the copies of the laboratory analyses and associated quality assurance quality control data. The results for each monitor well will be presented in tabular form and will show all past and present sampling results.

c. A semi-annual water table elevation map using the water table elevation of the ground water in all monitor wells.

d. If free phase product is present, a product thickness map.

e. Plots of concentration vs. time for relevant contaminants at each monitoring point (ie. benzene, etc.).

f. Plots of water table elevation vs. time for each monitoring point.

4. GPM will notify the OCD at least one week in advance of all scheduled activities such that the OCD has the opportunity to witness the events and/or split samples.

5. All original documents submitted for approval will be submitted to the OCD Santa Fe Office with copies provided to the OCD Hobbs District Office.

Please be advised that OCD approval does not relieve GPM of liability should contamination exist which is outside the scope of work plan, or if the proposed remedial action plan fails to the adequately remediate or monitor contamination at the site. In addition, OCD approval does not relieve GPM of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor
Wayne Price , OCD Hobbs Office
Gil Van Deventer, BDM International, Inc.

FACSIMILE TRANSMISSION

BDM

Date: January 14, 1997
Time: 12:08 PM
Operator: gjv

To: **Company:** New Mexico Energy,Minerals & Natural Resources Department

Attention: Bill Olson

FAX No: 505-827-8177 **Telephone No.:** 505-827-7154

From: Gil Van Deventer GVD
BDM International, Inc.
Engineering Services Division
415 West Wall Street, Suite 1818
Midland, TX 79701

Telephone No.: (915) 682-0008 **FAX No.:**(915) 682-0028

Number of Pages (Including Lead Page): 1

Re: **Notification of Field Activities at the GPM - Monument Booster Station near Monument, NM**

BDM has scheduled the First Quarter 1997 Groundwater Sampling Event at the GPM - Monument Booster Station near Monument, NM for January 24, 1997 (weather permitting).

Work will consist of gauging all monitoring wells on site and sampling the following monitoring wells: MW-1d, MW-2, MW-3, MW-4, MW-6, & MW-7. The samples will be analyzed for BTEX (EPA Method 8020), DO, NO_3 & SO_4 as outlined in the *Second Quarter 1996 Sampling Event - Annual Report* submitted by GPM in September 1996.

GPM and BDM have been in the process of installing a product recovery system (MW-1 & MW-5) and hope to have it completed by January 24, 1997.

Please call me at 915-682-0008 if you have any questiions.

FACSIMILE TRANSMISSION

Date: November 9, 1995
Time: 3:12 pm (CST)
Operator: gjv

To: Company: NMOCD

Attention: Bill Olson

FAX No: 505-827-8177 **Telephone No.:** 505-827-7154

From: Gil Van Deventer
Geoscience Consultants Ltd (GCL)
306 West Wall Street, Suite 818
Midland, TX 79701

Telephone No.: (915) 682-0008 **FAX No.:**(915) 682-0028

Number of Pages (Including Lead Page): 1

Bill:

Just wanted to remind you about the quarterly monitoring and sampling activities that have been scheduled to begin Monday Nov. 13th at the GPM-Monument Booster Station & Linam Ranch Plant.

Work at the GPM-Monument Booster Station will involve installation of the SWAP product recovery system in MW-1 (Monday), installation of 2 additional monitoring wells (Tuesday), and sampling of all monitoring wells on site (Wednesday) as proposed in our workplans and approved in your October 25, letter.

Work at the GPM-Linam Ranch Plant will involve sampling of monitoring wells MW-9 through MW-13 near the EOTT Tanks (Tuesday) as proposed in our workplan and approved in your October 19, letter.

Hope you can be there to witness the activities.

NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. Pacheco
Santa Fe, New Mexico 87505

August 24, 1995

CERTIFIED MAIL
RETURN RECEIPT NO. Z-765-962-399

Mr. Vince Bernard
GPM Gas Services Company
4044 Penbrook
Odessa, TX 79762

RE: GROUND WATER INVESTIGATION REPORT/REMEDIATION PLAN
MONUMENT BOOSTER STATION

Dear Mr. Bernard:

The New Mexico Oil Conservation Division (OCD) has completed a review of GPM Gas Services Company's July 28, 1995 correspondence and July 25, 1995 "SUBSURFACE INVESTIGATION AND PRELIMINARY REMEDIAL RESPONSE FOR THE MONUMENT BOOSTER STATION GAS COMPRESSOR STATION, LEA COUNTY, NEW MEXICO". These documents contain the results of GPM's investigation of the extent of ground water contamination at the Monument Booster Station. The documents also contain GPM's proposed remedial action plan.

The investigation work performed to date is satisfactory and the remedial action plan, as contained in the above referenced documents, is approved with the following conditions:

1. GPM will submit a work plan for the proposed additional monitor well, new recovery well and product recovery system to the OCD by September 29, 1995.

2. The annual report will be submitted to the OCD by October 1, 1996. The report will contain:

   a. A description of all activities which occurred during the year and conclusions and recommendations.

   b. A summary of the quarterly laboratory analytic results of water quality sampling of the monitor wells. The results for each monitor well will be presented in tabular form and will show all past and present sampling results.

   c. A quarterly water table elevation map using the water table elevation of the ground water in all monitor wells.

   d. If free phase product is present, a product thickness map.

3. GPM will notify the OCD at least one week in advance of all scheduled activities such that the OCD has the opportunity to witness the events and/or split samples.

4. All original documents submitted for approval will be submitted to the OCD Santa Fe Office with copies provided to the OCD Hobbs District Office.

Please be advised that OCD approval does not relieve GPM of liability should contamination exist which is outside the scope of work plan, or if the proposed remedial action plan fails to the adequately remediate contamination at the site. In addition, OCD approval does not relieve GPM of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor
Wayne Price , OCD Hobbs Office

Z 765 962 399

Receipt for Certified Mail

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PS Form **3800**, March 1993

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ENRON
OPERATIONS CORP.

P. O. Box 1188 Houston, Texas 77251-1188 (713) 853-6161

VIA CERTIFIED MAIL: P 362 442 889

January 10, 1995

Mr. Roger Anderson
Environmental Engineer
State of New Mexico
Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, New Mexico 87505

Subject: Change of Ownership

Dear Mr. Anderson:

The object of this letter is to advise the New Mexico Oil Conservation Division that effective December 29, 1994, ENRON / Northern Natural Gas Company has completed the sale of the following properties to GPM:

1. Hobbs Gas Plant
2. Hobbs Compressor Station #1
3. Hobbs Compressor Station #2
4. Hobbs Compressor Station #3
5. Hobbs Compressor Station #4
6. Hobbs Compressor Station #5
7. Eddy Compressor Station #1
8. Eddy Compressor Station #2
9. Eddy Compressor Station #3

Because of the change in ownership, GPM has assumed the responsibility for the following items which have been on-going between ENRON and the OCD:

1. **Hobbs Gas Processing Plant**

   Oil/Water Separator - Former Liquid Waste Disposal Area: ENRON submitted drafts of the Remedial Design Report, Construction Specifications, and Drawings for OCD's review.

2. **Hobbs Compressor Station #2**

   On October 7, 1994, OCD reviewed ENRON's report of "SUBSURFACE INVESTIGATION AT HOBBS COMPRESSOR STATION NO.2 AND HOBBS NATURAL GAS PROCESSING PLANT". OCD requested that six items of information be submitted to the OCD by January 31, 1995 (Copy enclosed). OCD's request was faxed to Vince Bernard of GPM on October 11, 1994, who agreed to respond to items #1, 5, and 6. ENRON's response to the remaining items is:

Item #2: The stockpiled soil at Hobbs Compressor Station #2 was disposed of in C. & C. Landfarm in Monument, New Mexico. The landfarm is owned by Jimmy Cooper.

Item #3: The purged groundwater at Hobbs Gas Plant was disposed of in the landfarm at the site. The water from Hobbs C.S. #2 has been arranged to be disposed of at the USPCI facility in Wenoka, Oklahoma. Because of the close of sale on December 28, 1994, the seven drums of water were moved from Hobbs C.S. #2 to ENRON's Eunice plant for temporary storage. USPCI has scheduled to pick the drum during the week of January 16, 1995. The disposal methods for the water were approved by Bill Olson (copy enclosed).

Item #4: The final dimensions of the excavations at Hobbs Compressor Station No. 2 are shown on the enclosed Figure 1.

The name and address of the GPM contact person is:

Vince Bernard, Director
Safety & Environmental Affairs
New Mexico Region
GPM Gas Services Company
4044 Penbrook, Odessa, Texas 79762
Phone: (915) 368-1085
Fax: (915) 368 1170

Should you have any questions, please feel free to call me at (713) 646-7337.

Sincerely,

Akhtar A. Alvi, P.E.
Senior Environmental Engineer
Environmental Affairs Department

CC: Vince Bernard, GPM, W/O Enclosure

BCC. Rick Craig
Bill Janacek
Mike Moran
Tom King
Mike Terraso
Gary Kratville
Frank Smith
Lou Soldano
Chris Kaitson
Bill Kendrick
Beth Apollo

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

October 7, 1994

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-171

Mr. Akhtar A. Alvi
Environmental Affairs Department
ENRON Operations Corp.
P.O. Box 1188
Houston, Texas 77251-1188

RE: SOIL AND GROUND WATER INVESTIGATIONS
HOBBS GAS PLANT AND HOBBS COMPRESSOR STATION #2
LEA COUNTY, NEW MEXICO

Dear Mr. Alvi:

The New Mexico Oil Conservation Division has completed a review of ENRON's August 17, 1994 correspondence and August 10, 1994 "SUBSURFACE INVESTIGATION AT HOBBS COMPRESSOR STATION NO. 2 AND HOBBS NATURAL GAS PROCESSING PLANT". This report contains the results of soil and ground water investigation activities at the ENRON's Hobbs Gas Processing Plant and Hobbs Compressor Station #2.

The investigation activities conducted to date are satisfactory. However, based upon a review of this document the OCD requires that ENRON submit the following information to the OCD by January 31, 1995:

1. The report references previous work performed by Geoscience Consultants Limited (GCL) in February of 1994. Please provide the OCD with GCL's report on the investigation.

2. Please provide the proposed disposal/remediation method for the stockpiled soils at the Hobbs Compressor Station No. 2.

3. Please provide the proposed disposal method for the purged ground water which was generated during the investigations.

4. Please provide the final dimensions of the excavations at the Hobbs Compressor Station No. 2.

5. Please provide a work plan to completely define the extent of ground water contamination related to ENRON's activities at the Hobbs Compressor Station No. 2.

6. Please provide a work plan for installation of permanent monitoring wells around the EOTT tanks at the Hobbs Gas Processing Plant.

Please submit all original documents to the OCD Santa Fe Office and copy the OCD Hobbs Office on all submittals.

If you have any questions in this matter, please feel free to contact me at (505) 827-5885.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor
Wayne Price, OCD Hobbs Office

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☑ Telephone ☐ Personal	Time 1030	Date 12/20/94
Originating Party		**Other Parties**
Bill Olson - Envir. Bureau		Mike Kneese - ENRON

Subject

Hobbs # 2

Discussion

Requested copies of all investigation reports.

Conclusions or Agreements

He will provide

Distribution

Signed Bill Olson

ENRON
Operations Company

11525 West Carlsbad Highway, Hobbs, New Mexico 88240 (505) 393-5109

12-7-94

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, N.M. 87504

Attention: Bill Olsen

Per our conversation and visit on December 6, 1994 on the analytical results of drums being stored at the Hobbs Plant and Hobbs #2, we have dumped the drums at the Hobbs Plant into our land farm, and would like permission to transport the drums from Hobbs #2 to USPCI in Wenoka, Oklahoma. Attached are the sample results of both locations for your records. These samples were tested by Analytical Technologies Inc. both in Albuquerque, N.M. and Phoenix, AZ. for the following criteria. Flash point, pH, RCRA Metals by TCLP 1311, Gas/Diesel 8015 Mod, BTEX/MTBE 8020, Chlorinated Hydrocarbons 601/8010 and Aromatic Hydrocarbons 602/8020. Since the Hobbs Facilities are scheduled to be transferred to GPM on January 1, 1995 I am at your disposal for further assistance on clearing up this matter so please feel free to contact me at (505)393-5109.

Sincerely,

Michael Kneese

Michael Kneese
Environmental Field Technician

12/14/94
Verbally
approved

xc: Dennis Howell
Akhtar Alvi
Lou Soldano
Wayne Price
file

Analytical Technologies, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **411317**

November 14, 1994

ENRON Gas Processing
11525 W. Carlsbad Hwy
Hobbs, NM 88240

Project Name/Number: HOBBS 2 DRUMS / HOBBS 2

Attention: Michael Kneese

On **11/04/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure

Analytical Technologies, Inc.

CLIENT	: ENRON GAS PROCESSING	DATE RECEIVED	: 11/04/94
PROJECT #	: HOBBS 2		
PROJECT NAME	: HOBBS 2 DRUMS	REPORT DATE	: 11/14/94

ATI ID: 411317

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	HOBBS2 DEVELOPE H_2O1	AQUEOUS	11/03/94
02	HOBBS2 DEVELOPE H_2O2	AQUEOUS	11/03/94

---TOTALS---

MATRIX	#SAMPLES
AQUEOUS	2

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED

CLIENT : ENRON GAS PROCESSING ATI I.D.: 411317

PROJECT # : HOBBS 2

PROJECT NAME : HOBBS 2 DRUMS

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	HOBBS2 DEVELOPE H_2O1	AQUEOUS	11/03/94	11/04/94	11/07/94	1
02	HOBBS2 DEVELOPE H_2O2	AQUEOUS	11/03/94	11/04/94	11/07/94	1

PARAMETER	UNITS	01	02
FUEL HYDROCARBONS	MG/L	<1	<1
HYDROCARBON RANGE		-	-
HYDROCARBONS QUANTITATED USING		-	-
SURROGATE:			
O-TERPHENYL (%)		99	100

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

REAGENT BLANK

TEST	: EPA 8015 MODIFIED	ATI I.D.	: 411317
BLANK I.D.	: 110494	MATRIX	: AQUEOUS
CLIENT	: ENRON GAS PROCESSING	DATE EXTRACTED	: 11/04/94
PROJECT #	: HOBBS 2	DATE ANALYZED	: 11/04/94
PROJECT NAME	: HOBBS 2 DRUMS	DILUTION FACTOR	: 1

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<1
HYDROCARBON RANGE		-
HYDROCARBONS QUANTITATED USING		-
SURROGATE:		
O-TERPHENYL (%)		100

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST	: EPA 8015 MODIFIED		
MSMSD #	: 110494	ATI I.D.	: 411317
CLIENT	: ENRON GAS PROCESSING	DATE EXTRACTED	: 11/04/94
PROJECT #	: HOBBS 2	DATE ANALYZED	: 11/04/94
			11/07/94
PROJECT NAME	: HOBBS 2 DRUMS	SAMPLE MATRIX	: AQUEOUS
REF. I.D.	: 110494	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
FUEL HYDROCARBONS	<1	35	31	89	31	89	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX, MTBE (EPA 8020)

CLIENT : ENRON GAS PROCESSING ATI I.D.: 411317

PROJECT # : HOBBS 2

PROJECT NAME : HOBBS 2 DRUMS

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	HOBBS2 DEVELOPE H_2O1	AQUEOUS	11/03/94	NA	11/04/94	1
02	HOBBS2 DEVELOPE H_2O2	AQUEOUS	11/03/94	NA	11/04/94	1

PARAMETER	UNITS	01	02
BENZENE	UG/L	<0.5	<0.5
TOLUENE	UG/L	<0.5	<0.5
ETHYLBENZENE	UG/L	<0.5	<0.5
TOTAL XYLENES	UG/L	<0.5	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5	<2.5
SURROGATE:			
BROMOFLUOROBENZENE (%)		101	103

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

REAGENT BLANK

TEST	: BTEX, MTBE (EPA 8020)	ATI I.D.	: 411317
BLANK I.D.	: 110494	MATRIX	: AQUEOUS
CLIENT	: ENRON GAS PROCESSING	DATE EXTRACTED	: NA
PROJECT #	: HOBBS 2	DATE ANALYZED	: 11/04/94
PROJECT NAME	: HOBBS 2 DRUMS	DILUTION FACTOR	: 1

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		94

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST	: BTEX, MTBE (EPA 8020)		
MSMSD #	: 41130801	ATI I.D.	: 411317
CLIENT	: ENRON GAS PROCESSING	DATE EXTRACTED	: NA
PROJECT #	: HOBBS 2	DATE ANALYZED	: 11/04/94
PROJECT NAME	: HOBBS 2 DRUMS	SAMPLE MATRIX	: AQUEOUS
REF. I.D.	: 41130801	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
BENZENE	<0.5	10	9.2	92	9.0	90	2
TOLUENE	<0.5	10	8.8	88	8.8	88	0
ETHYLBENZENE	<0.5	10	8.8	88	8.6	86	2
TOTAL XYLENES	<0.5	30	29	97	28	93	4
METHYL-t-BUTYL ETHER	<2.5	20	22	110	22	110	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS/AROMATICS (EPA 8010/8020)
CLIENT : ENRON GAS PROCESSING ATI I.D.: 411317
PROJECT # : HOBBS 2
PROJECT NAME : HOBBS 2 DRUMS

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	HOBBS2 DEVELOPE H_2O1	AQUEOUS	11/03/94	NA	11/04/94	1
02	HOBBS2 DEVELOPE H_2O2	AQUEOUS	11/03/94	NA	11/04/94	1

PARAMETER	UNITS	01	02
BENZENE	UG/L	<0.5	<0.5
BROMODICHLOROMETHANE	UG/L	<0.2	<0.2
BROMOFORM	UG/L	<0.5	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5
CHLOROFORM	UG/L	<0.5	<0.5
CHLOROMETHANE	UG/L	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,1-DICHLOROETHANE	UG/L	<0.2	<0.2
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
ETHYLBENZENE	UG/L	<0.5	<0.5
METHYLENE CHLORIDE	UG/L	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.2	<0.2
TETRACHLOROETHENE	UG/L	<0.5	<0.5
TOLUENE	UG/L	<0.5	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2
TRICHLOROETHENE	UG/L	<0.2	<0.2
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5
TOTAL XYLENES	UG/L	<0.5	<0.5
SURROGATES:			
BROMOCHLOROMETHANE (%)		100	104
TRIFLUOROTOLUENE (%)		96	99

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010/8020	ATI I.D.	: 411317
BLANK I.D.	: 110494	MATRIX	: AQUEOUS
CLIENT	: ENRON GAS PROCESSING	DATE EXTRACTED	: NA
PROJECT #	: HOBBS 2	DATE ANALYZED	: 11/04/94
PROJECT NAME	: HOBBS 2 DRUMS	DIL. FACTOR	: 1

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
BROMODICHLOROMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
CHLOROFORM	UG/L	<0.5
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5
1,1-DICHLOROETHANE	UG/L	<0.2
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2
ETHYLBENZENE	UG/L	<0.5
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.2
TETRACHLOROETHENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.2
TRICHLOROFLUOROMETHANE	UG/L	<0.2
VINYL CHLORIDE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATES:		
BROMOCHLOROMETHANE (%)		105
TRIFLUOROTOLUENE (%)		97

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST	: PURGEABLE HALOCARBONS/AROMATICS (EPA 8010/8020)		
MSMSD #	: 41131702	ATI I.D.	: 411317
CLIENT	: ENRON GAS PROCESSING	DATE EXTRACTED	: NA
PROJECT #	: HOBBS 2	DATE ANALYZED	: 11/04/94
PROJECT NAME	: HOBBS 2 DRUMS	SAMPLE MATRIX	: AQUEOUS
REF. I.D.	: 41131702	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
BENZENE	<0.5	10	9.3	93	9.0	90	3
CHLOROBENZENE	<0.5	10	9.1	91	8.7	87	4
1,1-DICHLOROETHENE	<0.2	10	11	110	11	110	0
TOLUENE	<0.5	10	9.4	94	9.2	92	2
TRICHLOROETHENE	<0.2	10	11	110	11	110	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc. 9830 S. 51st Street Suite B-113 Phoenix, AZ 85044 (602) 496-4400

ATI I.D. **411564**

November 17, 1994

Enron Gas Processing Co.
11525 W. Carlsbad Highway
Hobbs, NM 88240

Project Name/Number: Hobbs 2 H_2O/Hobbs 2

Attention: Mike Kneese

On **11/04/94**, Analytical Technologies, Inc., received a request to analyze **aqueous** sample(s). The sample(s) were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (602) 496-4400.

Mary Tyer
Project Manager

MT/jat

Enclosure

ADHS License No. AZ0061
Donald F. Weber, Laboratory Manager

Analytical Technologies, Inc.

CLIENT : ENRON GAS PROCESSING CO. DATE RECEIVED : 11/04/94
PROJECT # : HOBBS 2
PROJECT NAME : HOBBS 2 H20 REPORT DATE : 11/17/94
ATI I.D. : 411564

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	HOBBS 2 DEVELOP H20-1	AQUEOUS	11/03/94
02	HOBBS 2 DEVELOP H2O-2	AQUEOUS	11/03/94

----- TOTALS -----

MATRIX	# SAMPLES
AQUEOUS	2

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 411564

CLIENT : ENRON GAS PROCESSING CO.
PROJECT # : HOBBS 2
PROJECT NAME : HOBBS 2 H20

DATE RECEIVED : 11/04/94
REPORT DATE : 11/17/94

PARAMETER	UNITS	01	02
FLASH POINT (EPA 1010)	DEG. F	134	138
PH (EPA 150.1)	UNITS	7.8	8.0

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : ENRON GAS PROCESSING CO.
PROJECT # : HOBBS 2
PROJECT NAME : HOBBS 2 H20 ATI I.D. : 411564

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
FLASH POINT	FAHREN	41154802	162	164	1	NA	NA	NA
PH	UNITS	41156401	7.8	7.8	0	NA	NA	NA

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 411564

CLIENT : ENRON GAS PROCESSING CO.
PROJECT # : HOBBS 2
PROJECT NAME : HOBBS 2 H20

DATE RECEIVED : 11/04/94
REPORT DATE : 11/17/94

PARAMETER	UNITS	01	02
SILVER (TCLP 1311/6010)	MG/L	<0.05	<0.05
ARSENIC (TCLP 1311/6010)	MG/L	<0.1	<0.1
BARIUM (TCLP 1311/6010)	MG/L	0.79	0.64
CADMIUM (TCLP 1311/6010)	MG/L	<0.05	<0.05
CHROMIUM (TCLP 1311/6010)	MG/L	<0.10	<0.10
MERCURY (TCLP 1311/7470)	MG/L	<0.002	<0.002
LEAD (TCLP 1311/6010)	MG/L	<0.10	<0.10
SELENIUM (TCLP 1311/6010)	MG/L	<0.1	<0.1

Analytical Technologies, Inc.

METALS - QUALITY CONTROL

CLIENT : ENRON GAS PROCESSING CO.
PROJECT # : HOBBS 2
PROJECT NAME : HOBBS 2 H20 ATI I.D. : 411564

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
SILVER (IN TCLP)	MG/L	41156401	<0.05	<0.05	NA	1.77	2.00	88
SILVER (IN TCLP)	MG/L	41152201	<0.05	<0.05	NA	0.80	1.00	80
ARSENIC (IN TCLP)	MG/L	41156401	<0.1	<0.1	NA	1.9	2.0	95
BARIUM (IN TCLP)	MG/L	41156401	0.79	0.81	2	7.69	8.00	86
CADMIUM (IN TCLP)	MG/L	41156401	<0.05	<0.05	NA	1.76	2.00	88
CHROMIUM (IN TCLP)	MG/L	41156401	<0.10	<0.10	NA	1.77	2.00	88
MERCURY (IN TCLP)	MG/L	41156401	<0.002	<0.002	NA	0.049	0.050	98
LEAD (IN TCLP)	MG/L	41156401	<0.10	<0.10	NA	1.79	2.00	90
SELENIUM (IN TCLP)	MG/L	41156401	<0.1	<0.1	NA	1.9	2.0	95

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

ENRON
OPERATIONS CORP.

P. O. Box 1188 Houston, Texas 77251-1188 (713) 853-6161

October 31, 1994

Mr. Roger Anderson
Oil Conservation Division
2040 S. Pacheco Street
Santa Fe, NM 87505

RE: Environmental Remediation
Enron Natural Gas Processing Plant
Hobbs, New Mexico

Dear Mr. Anderson:

Thanks to Bill Olson, Chris Eustice, Dave Davis and you for meeting with Mike Kneese, Jay Snyder (Daniel B. Stephens & Associates, Inc.), and me on October 7, 1994. The objectives of the meeting were to discuss:

1. Why Enron was not able to submit the modified remedial design to the OCD by mid-September, 1994, per Enron's letter of August 17, 1994.

2. The impact of OCD regulations on Enron, regarding GPM's request to Enron that Enron either not submit the remediation design to the OCD or not follow the submission by applying to the New Mexico Air Pollution Control Bureau for an air permit. GPM wants to have the option of negotiating remediation with the OCD and submit GPM's design.

3. The anticipated date of FERC approval of sale between Enron and GPM, and how it was impacting Enron's remediation plan.

The reason Enron was not able to submit the modified remedial design by mid-September, 1994, was that the sale between Enron and GPM was anticipated to be closed on October 1, 1994, *(i.e., two months earlier than the previously anticipated date of December 1, 1994.)* Accordingly, GPM had requested that Enron not submit the design so that GPM would have the option to negotiate remediation with the OCD and submit GPM's design.

The sale did not go through on October 1, 1994. FERC approval is expected during November, 1994, and the sale is anticipated to be closed during December, 1994. Accordingly, Enron requested a meeting with the OCD to discuss the impact of OCD regulations on Enron in light of the delay in the sale and GPM's request that Enron either not submit the design or not follow the submission with an air permit application.

You advised us that *"no action"* was not an option because the contamination at the site had a history of a few years and the OCD would like that action be taken to initiate remediation. You also advised that by November 1, 1994, either Enron and GPM should write a joint letter to commit to a reasonable date to initiate action for remediation after close of the sale or Enron should submit the remediation design to the OCD for review. You stated that the submission of design to the OCD would not mean that Enron could not negotiate changes to the design or that GPM could not negotiate or submit their own design.

Currently, Enron owns the plant and after the sale, GPM will own the plant . To keep remediation responsibility with the respective owner, Enron has decided not to request GPM to submit a joint letter to the OCD, but to submit Enron's design for OCD review. Enclosed are: drafts of the Remedial Design Report, Construction Specifications, and Drawings.

We appreciate your understanding that because of the sale situation, we are not able to make the progress you and we would have liked to make on this remediation project.

Should you have questions, please call me at (713) 646-7337.

Sincerely,

Akhtar A. Alvi, P.E.
Senior Project Engineer
Environmental Affairs Department

AAA/klw

Enclosure

cc (with enclosure): Vince Bernard, GPM, Odessa

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

October 7, 1994

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-171

Mr. Akhtar A. Alvi
Environmental Affairs Department
ENRON Operations Corp.
P.O. Box 1188
Houston, Texas 77251-1188

RE: SOIL AND GROUND WATER INVESTIGATIONS
HOBBS GAS PLANT AND HOBBS COMPRESSOR STATION #2
LEA COUNTY, NEW MEXICO

Dear Mr. Alvi:

The New Mexico Oil Conservation Division has completed a review of ENRON's August 17, 1994 correspondence and August 10, 1994 "SUBSURFACE INVESTIGATION AT HOBBS COMPRESSOR STATION NO. 2 AND HOBBS NATURAL GAS PROCESSING PLANT". This report contains the results of soil and ground water investigation activities at the ENRON's Hobbs Gas Processing Plant and Hobbs Compressor Station #2.

The investigation activities conducted to date are satisfactory. However, based upon a review of this document the OCD requires that ENRON submit the following information to the OCD by January 31, 1995:

1. The report references previous work performed by Geoscience Consultants Limited (GCL) in February of 1994. Please provide the OCD with GCL's report on the investigation.

2. Please provide the proposed disposal/remediation method for the stockpiled soils at the Hobbs Compressor Station No. 2.

3. Please provide the proposed disposal method for the purged ground water which was generated during the investigations.

4. Please provide the final dimensions of the excavations at the Hobbs Compressor Station No. 2.

5. Please provide a work plan to completely define the extent of ground water contamination related to ENRON's activities at the Hobbs Compressor Station No. 2.

6. Please provide a work plan for installation of permanent monitoring wells around the EOTT tanks at the Hobbs Gas Processing Plant.

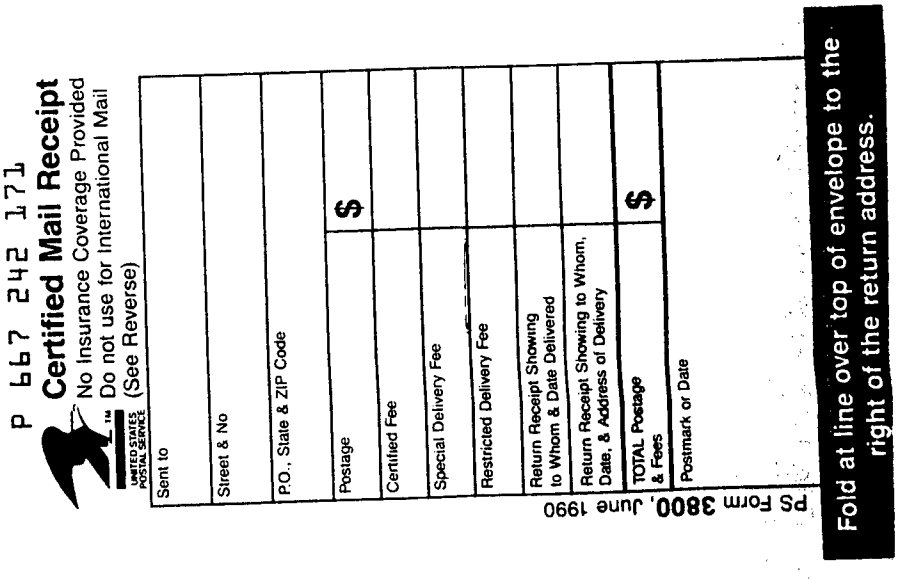
Please submit all original documents to the OCD Santa Fe Office and copy the OCD Hobbs Office on all submittals.

If you have any questions in this matter, please feel free to contact me at (505) 827-5885.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor
Wayne Price, OCD Hobbs Office



ENRON
OPERATIONS CORP.

P. O. Box 1188 Houston, Texas 77251-1188 (713) 853-6161

August 17, 1994

Mr. Roger Anderson
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504-2088

RE: Environmental Investigation & Remediation
Northern Natural Gas Company
Hobbs Gas Plant and Hobbs Compressor Station No. 2
New Mexico

Dear Mr. Anderson:

Thanks to Bill Olson, Chris Eustice and you for meeting with Mike Kneese, Jeff Atwood, Dave Baker (Team Environmental Services, Inc.), and me on August 11, 1994. The objectives of the meeting were:

1. To review the progress of remediation design for the Hobbs Gas Plant project, and;

2. To submit to OCD the report of subsurface investigation at Hobbs Compressor Station No. 2 and EOTT tanks at Hobbs Gas Processing Plant.

As we discussed, Enron's remediation consultant, Daniel B. Stephens & Associates, Inc. (DBS&A), completed the original remediation design based on an air emission rate of less than 10 lb/hr. The objective of the design was to avoid the air permitting process so that we could proceed with remediation early. However, because of the low rate of emission, the design was inefficient and required more capital, operation and maintenance costs than would have been required by an efficient design. Accordingly, we have requested DBS&A to modify the design by increasing the air emission rate, which may require an air permit. Our plan is to submit the modified design to the OCD around mid-September, 1994.

At Hobbs Compressor Station No. 2, the area of actionable contamination may extend beyond the eastern property boundary. Enron's Legal Department has been requested to obtain approval from the property owner to extend the subsurface investigation onto his/her area.

As you know, GPM and Enron have entered into a purchase agreement for the plant and eight compressor stations with an anticipated closing to occur on December 1, 1994. However, depending upon the FERC approval of the sale, there is a possibility that the closing may occur on October 1, 1994. What this means is that after the closing, GPM will be working with the OCD to comply with the regulatory requirements.

We would appreciate your review of the Subsurface Investigation Report which we submitted to you in the meeting on August 11, 1994.

Should you have questions, please call me at (713) 646-7337.

Sincerely,

Akhtar A. Alvi, P.E.
Senior project Engineer
Environmental Affairs Department

AAA/klw

cc (with enclosure/Subsurface Investigation Report): Jeff Atwood
Mike Kneese
Vince Bernard, GPM, Odessa

cc (without enclosure): Darrell Kinder
Gary Kratville
Mike Terraso
Bill Kendrick
Frank Smith
Bob Marley, DBS&A
Jay Snyder, DBS&A

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☐ Telephone ☑ Personal | Time 1300 hrs | Date 8/11/94

Originating Party	Other Parties
Mike Keese, Akhter Alvi, Jeff ENRON	Bill Olson, Roger Anderson Envir. Bureau

Subject

ENRON Hobbs Gas Plant + Hobbs #2 Compressor Investigations

Discussion

ENRON presented DBS & Assoc August 10, 1994 "Subsurface Investigation at Hobbs Compression Station No. 2 and Hobbs Natural Gas Processing Plant"
Reviewed document

Conclusions or Agreements

OCD will provide comment Ltr. to ENRON within 30 days

Distribution

Signed Bill Olson

ENRON
OPERATIONS CORP.

P. O. Box 1188 Houston, Texas 77251-1188 (713) 853-6161

April 18, 1994

Mr. Roger Anderson
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504

Subject: Environmental Investigations & Remediation
Northern Natural Gas Company
Hobbs Gas Plant & Compressor Station #2, New Mexico

Dear Mr. Anderson:

Thanks to Bill Olson, Bobby Myers and you for meeting with Mike Kneese, Jay Snyder (of Daniel B. Stephens & Associates, Inc.), and me on March 29, 1994. The objectives of the meeting were to discuss:

1. The report of Supplemental Environmental Investigation for soil and groundwater contamination around the API separator at Hobbs Gas Plant.

2. The potential remediation technologies for the Hobbs Gas Plant project.

Based on our discussions, the following is a list of the follow-up action items:

1. You have asked us to sample the monitoring wells, MW-1 to MW-8, one time for petroleum aromatic hydrocarbons (PAHs) by EPA Method 8100, metals, and inorganics to comply with the New Mexico Water Quality Control Commission Regulations. Having checked the data we already have, we have prepared the enclosed Table 1 for the required additional testing.

2. We would initiate insitu bioremediation by bioventing (air injection and vapor extraction) for soil contamination and air sparging below the water table for ground water contamination.

3. We would request a review meeting with you when we have designed the bioremediation system. We expect this to happen in the next 6-8 weeks.

4. We are working on doing additional environmental investigations near the EOTT tanks at Hobbs Gas Plant and near the tank excavations at Hobbs Compressor Station #2. Upon completion of these investigations, we would submit the report to you and request a review meeting for the follow-up action.

As you know, GPM and Enron have entered into a purchase agreement for the plant and eight compressor stations with an anticipated closing to occur on December 1, 1994. What it means is that after the closing, GPM will be maintaining and operating the remediation systems to comply with the OCD regulatory requirements.

Should you have questions, please call me at (713) 646-7337.

Sincerely,

Akhtar A. Alvi, P.E.
Senior Project Engineer
Environmental Affairs Dept.

Enclosure

cc: Leonard Hilton - w/o enclosure
Darrell Kinder - "
Gary Kratville - "
Ben Bowman - "
Mike Terraso - "
Bill Kendrick - "
Frank Smith - "
Jeff Atwood - w/enclosure
Mike Kneese - "
Vince Bernard -GPM, Odessa - w/enclosure
Bob Marley - (DBS&A) - w/o enclosure
Jay Snyder - (DBS&A) - "

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Table 1. Summary of Required Analyses
Former Liquid Waste Disposal Pit and Oil/Water Separator
Enron Hobbs Natural Gas Processing Plant

Monitor Well	Organic Analyses	Metals Analyses	Inorganic Analyses
MW-1	PAH (8100)	Arsenic, mercury, selenium, silver	Chloride, sulfate, nitrate, TDS
MW-2	PAH (8100)	Arsenic, mercury, selenium, silver, copper	Chloride, sulfate, nitrate, TDS
MW-3	PAH (8100)	Arsenic, mercury, selenium, silver	Chloride, sulfate, nitrate, TDS
MW-4	PAH (8100)	Copper, iron, manganese, zinc	None
MW-5	Purgeable halocarbons (8010) PAH (8100)	Arsenic, barium, cadmium, chromium, lead, mercury, selenium, copper, iron, manganese, silver, zinc	Chloride, sulfate, nitrate, TDS
MW-6	PAH (8100)	Arsenic, barium, cadmium, chromium, lead, mercury, selenium, copper, iron, manganese, silver, zinc	Chloride, sulfate, nitrate, TDS
MW-7	Purgeable halocarbons (8010) PAH (8100)	Copper, iron, manganese, zinc	None
MW-8	PAH (8100)	Arsenic, barium, mercury, selenium, copper, iron, manganese, silver, zinc	Chloride, sulfate, nitrate, TDS

505 Marquette NW, Ste. 1100 • Albuquerque, NM 87102
(505) 842-0001 • FAX: (505) 842-0595

OIL CONSERVATION DIVISION
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H+GCL
Environmental Scientists and Engineers

February 2, 1994

Mr. Roger Anderson
New Mexico Oil Conservation Division
PO Box 2088
Santa Fe, New Mexico 87504-2088

RE: HOBBS NO. 2 COMPRESSOR STATION

Dear Roger:

On behalf of Enron, H+GCL is pleased to submit this work plan. You should be aware that three underground storage tanks were removed from the above-referenced facility. The removals were witnessed by NMED representatives and NMED agreed with Enron that the tanks and associated piping did not leak. However, site observations suggest that overfilling of these tanks resulted in some localized staining of soil. Enron collected soil samples from the bottom of the excavations and we understand that analyses of these samples showed TPH concentrations below action limits. The location of these samples and the analytical results will be presented to NMOCD in a final report. This report will be submitted to NMOCD after completion of the proposed field activities described below.

We understand that three underground storage tanks were excavated and removed from this facility, one above-ground storage tank was moved, contaminated soil associated with the USTs was excavated and soil impacted by overflows from the AST were also excavated. Two of the USTs were waste oil tanks and the third UST was a glycol tank. The AST stored pipeline condensate.

The excavation around the waste oil and glycol tanks successfully delineated the vertical extent of contamination and the tanks exhibited full integrity. As a result, the NM UST Bureau is not requiring any remedy for these tanks under the UST Regulations. Soil samples obtained from the base of these excavations showed no BTEX nor high levels of TPH. However the lateral extent of contamination could not be established due to nearby structures. Based upon this understanding and the fact that waste oil rarely creates a groundwater contamination problem, do not believe further investigation is required for these UST sites.

The excavation around the above-ground condensate tank also identified the base of stained soil and we understand that samples also indicate "clean soil" at the base of the excavation. Nevertheless, we believe a soil boring and groundwater monitor well (MW-1) is justified immediately down-gradient from the excavation. Natural gas condensate generally exhibits high concentrations of BTEX components, thus, spillage from this tank has the potential to create a groundwater impact. One well with soil samples taken at 5-foot intervals can determine if any contamination exists. Soil samples will be screened for total hydrocarbons using head-space methods. Two samples (the deepest sample in the unsaturated zone and a second sample at the discretion of the on-site geologist) will be analyzed for BTEX and TPH by a qualified laboratory.

Because the compressor station is down-gradient from numerous oil production wells, any contamination observed in a monitor well down-gradient from the former AST location could be a result of off-site contamination. Therefore, we also propose installation of an up-gradient monitor well to quantify the influence of up-gradient sources (MW-2). Soil samples will not be collected from this boring.

If the groundwater sample taken from the well located down-gradient from the AST is "clean" or shows relatively low levels of benzene as expected (e.g., less than 100 ppb), we do not believe additional monitor wells at this location are required. Any small release from this AST would be remediated by natural volatilization and biodegradation through a no-action/monitoring approach. There are few exposure pathways at this site and the risk of leaving any contamination in place is minimal.

If we are surprised by high concentrations of benzene in this well and the up-gradient well exhibits low concentrations of benzene, additional monitor wells further down-gradient would be required to fully justify a no-action/monitoring alternative or to plan an engineered solution to reduce any risks associated with the contamination. Thus, if concentrations significantly higher than 100 ppb are observed, we propose two additional down-gradient wells to define the extent of contamination and prepare a risk-based remedy. These wells will be drilled after receipt of results from MW-1 and MW-2.

MM-1 and MW-2 will be sampled for volatile and semi-volatile hydrocarbons TPH and TDS. Field measurements of specific conductance, dissolved oxygen, pH and temperature would also be obtained.

We will implement this program Wednesday, February 4, 1994. We apologize for the short notice, but we hope the simplicity of this approach will permit rapid review of this work plan. We appreciate your verbal comments regarding our approach. A final letter report that presents all data regarding the environmental investigations involving these tanks and our recommendations for mitigating any contamination will be forwarded to NMOCD after we evaluate the data.

Sincerely,
H+GCL

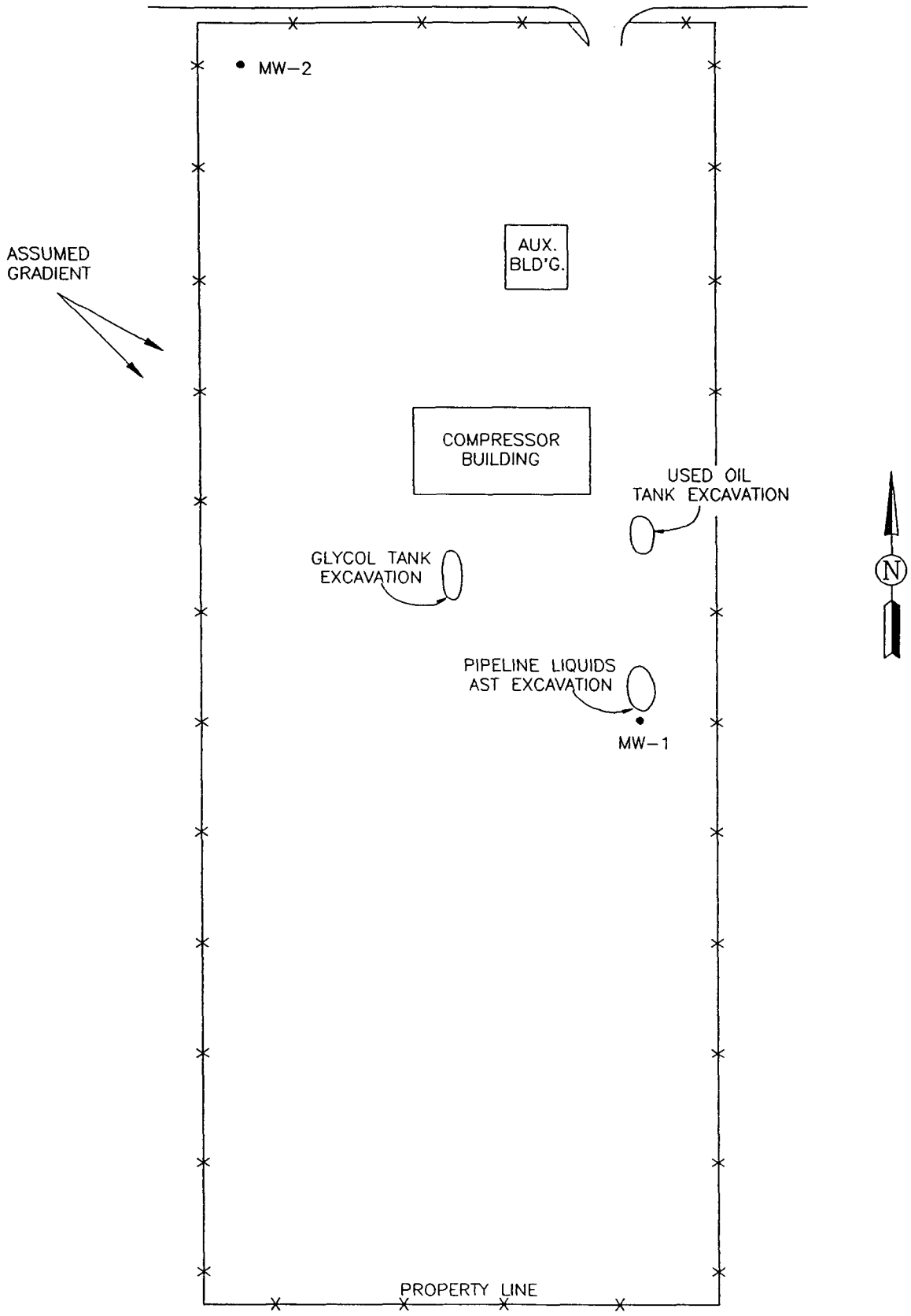
Randall T. Hicks, CPG
Vice President

/54191/ANDERSON.LTR

Attachment

cc: Mark Neese, Enron Hobbs
Bill Kendrick, Enron Houston

H+GCL
Environmental Scientists and Engineers



H+GCL	CLIENT: ENRON	
	DATE: 1/31/94	REV. NO.: 1
	AUTHOR: R.J.H.	DRAWN BY: HCC
	CK'D BY: R.T.H.	FILE: ENRON.DWG

HOBBS No. 2 GATHERING STATION AREA MAP

GPM GAS SERVICES COMPANY
A DIVISION OF PHILLIPS PETROLEUM COMPANY

4044 PENBROOK
ODESSA, TX 79762

July 28, 1995

Mr. William C. Olson - Hydrogeologist
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division - Environmental Bureau
2040 South Pacheco
Santa Fe, New Mexico 87502

RE: Subsurface Investigation and Preliminary Remedial Response for the Monument Booster Station (Formerly ENRON Hobbs Gas Compressor Station #2), Lea County, New Mexico

Dear Mr. Olson:

Attached is a copy of the GCL report entitled *Subsurface Investigation and Preliminary Remedial Response for the Monument Booster Station, Lea County, New Mexico* (dated July 25, 1995). The purpose of the investigation described in this report was to define the areal and vertical extent of hydrocarbon-impacted soil and groundwater conditions at the Monument Booster Gas Compressor Station in order to develop a suitable remedial response.

Based upon the calculation of the average linear velocity of groundwater flow (365 to 730 feet/year), the age of the release (1970s to 1980s), and the documented extent of hydrocarbon impact, our consultant on this project, GCL, concluded that natural processes (intrinsic bioremediation, adsorption, and volatilization) are effectively limiting the migration of dissolved-phase hydrocarbons but, removal of the free product (crude oil) is necessary to effectively eliminate the source of hydrocarbons in the subsurface media. While intrinsic bioremediation is clearly occurring and the rate at which this hydrocarbon removal process appears to be sufficient to contain the plume, additional data will be required over time to evaluate its effectiveness for in situ remediation.

According to GCL, the following remedial response initiatives should be implemented at the Monument Booster Station:

- Removal of product from monitoring well MW-1 should commence as soon as practicable. Initial product recovery operations were conducted by GCL on July 24, 1995 using hand bailing and siphoning (SWAP™) techniques. To date approximately 12 gallons of product have been recovered from MW-1. GPM is currently exploring its options for the most appropriate product removal techniques.

- Installation of an additional recovery well downgradient (southeast) of MW-1 for more effective product recovery operations.

- Installation of a monitoring well near the southwest boundary of the facility to complete delineation of dissolved-phase hydrocarbons beyond those observed in monitoring well MW-5.

- Continued sampling and monitoring of the on-site monitoring wells on a quarterly basis for three more quarters. The primary parameters to be monitored and sampled should include groundwater elevations, BTEX concentrations, dissolved oxygen, and semi-annual analysis of bacteria populations. This additional data will be required over time to evaluate the effectiveness of intrinsic bioremediation in limiting the migration of dissolved-phase hydrocarbons to the on-site boundaries of the facility.

- An annual report should be submitted in September or October 1996 summarizing the results of the year's monitoring and recommending revisions to the proposed response.

- Sampling for dissolved metals, PAHs, and major ions should be discontinued.

GPM Gas Corporation plans to proceed as recommended by GCL. Please take a close look at the preliminary remedial responses proposed in the subsurface investigation report for the Monument Booster Station because we anticipate to propose a similar response (product recovery and monitoring of intrinsic bioremediation) for the flare pit area of the Linam Ranch Plant. We are close to completing the subsurface investigation report for the Linam Ranch Plant (EOTT tanks area), however we must request an extension to August 31, 1995 to allow enough time for a complete review of the conclusions and recommendations. If you have any questions or concerns regarding this project, please advise. I can be reached at (915) 368-1085.

Sincerely,

Vince Bernard
Safety & Environmental Director
New Mexico Region

VBB:mdp
Attachments

cc: Scott Seeby, GPM
Randall T. Hicks, GCL
Gilbert J. Van Deventer, GCL
Maureen Gannon, GCL

Bill Olson

From: Bill Olson
To: Jerry Sexton
Cc: Wayne Price
Subject: GPM Linam Ranch Plant & Monument Booster Station
Date: Friday, March 31, 1995 2:39PM
Priority: High

Attached is a draft approval letter for GPM's recent ground water investigation work plan for the Linam Ranch & Monument Booster Station. Please provide me with any comments in writing by 2:30 pm on 4/4/95. Thanks!

<<File Attachment: INVEST1.APR>>

Bill Olson

From: Jerry Sexton
Date sent: Friday, March 31, 1995 2:57PM
To: Bill Olson
Subject: Registered: Jerry Sexton

Your message
To: Jerry Sexton
Subject: GPM Linam Ranch Plant & Monument Booster Station
Date: Friday, March 31, 1995 2:39PM
was accessed on
Date: Friday, March 31, 1995 2:57PM

Bill Olson

From: POSTOFFICE
To: Bill Olson
Subject: Registered: Wayne Price
Date: Wednesday, April 05, 1995 8:30AM

[013] ***** CONFIRMATION OF REGISTERED MAIL *****
Your message:

TO: Wayne Price DATE: 03-31-95
SUBJECT: GPM Linam Ranch Plant & Monument Booster TIME: 14:48

Was accessed on 04-05-95 08:30