1R - 401

GENERAL CORRESPONDENCE

YEAR(S):

2002 - 2007

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Friday, December 07, 2007 2:39 PM
To: 'Weathers, Stephen W'
Cc: Price, Wayne, EMNRD; Johnson, Larry, EMNRD
Subject: RE: DCP Midstream, LP C-Line Pipeline Release 3rd quarter 2007 Groundwater Report (1RP-401-0)

Mr. Weathers:

The OCD has completed a review of past reports and the most recent October 29, 2007, DCP Midstream letter requesting a reduced sampling frequency from quarterly to semi-annual. The OCD may agree to the proposal on the condition that another MW be installed between MWs 7 and 8 to monitor BTEX down gradient from MW-3. The well shall screen length shall not exceed 15 feet in length. Five feet will provide for GW flux and the remainder of the 10 feet of screen shall be in the aquifer of concern.

The OCD wants to make sure that organic contamination is not escaping the existing monitoring array.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3491
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/index.htm
(Pollution Prevention Guidance is under "Publications")

From: Weathers, Stephen W [mailto:SWWeathers@dcpmidstream.com]
Sent: *Monday, November 05, 2007 8:07 AM*
To: Price, Wayne, EMNRD
Cc: Chavez, Carl J, EMNRD
Subject: DCP Midstream, LP C-Line Pipeline Release 3rd quarter 2007 Groundwater Report (1RP-401-0)

Mr. Price:

Attached you will find the 3rd Quarter 2007 groundwater monitor report along with a cover letter for the DCP C-Line Pipeline Release **(1RP-401-0)** located near Eunice, New Mexico (Unit O, Section 31, T19S R37E).

A hard copy of the report will follow in the mail. Larry Johnson of the Hobbs District Office will be provided a copy of the report on CD per his request.

If you have any questions, please give me a call at 303-605-1718.

Thanks

Stephen Weathers
Sr. Environmental Specialist
DCP Midstream LP

303-605-1718 Office
303-619-3042 Cell

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	I		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-8 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	

pENV000GW0270	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.	
pENV000GW0273	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.	
pENV000GW0292	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
pENV000GW0174	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	
pENV000GW0186	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	

Chavez, Carl J, EMNRD

From: Weathers, Stephen W [SWWeathers@dcpmidstream.com]
Sent: Monday, January 15, 2007 9:36 AM
To: Chavez, Carl J, EMNRD
Subject: DCP Midstream Remediation Projects

Carl

I would like to set up a meeting with you to go over DCP Midstream Remediation Projects. What would your availability be for next week possibly on Thursday (January 25) or Mid Week the following week to meet and discuss the projects?

Daniel Dick and myself would attend as well as Mike Stewart the Environmental Consultant that does most of our groundwater remediation projects in NM.

Thanks

Stephen Weathers
Sr. Environmental Specialist
DCP Midstream
303-605-1718 (Office)
303-619-3042 (Cell)

Effective 1/1/07 my email address has changed to swweathers@dcpmidstream.com

Chavez, Carl J, EMNRD

From: Weathers, Stephen W [swweathers@duke-energy.com]
Sent: Monday, December 18, 2006 10:48 AM
To: Chavez, Carl J, EMNRD
Cc: Ward, Lynn C
Subject: DEFS C-Line Pipeline Release Groundwater Report

Mr. Chavez:

Attached you will find the 3rd Quarter 2006 groundwater monitor report along with a cover letter for the DEFS C-Line Pipeline Release (1RP-401-0) located near Eunice, New Mexico (Unit O, Section 31, T19S R37E).

Larry Johnson of the Hobbs District Office will be provided a copy of the report on CD per his request.

If you have any questions, please give me a call at 303-605-1718.

Thanks

Steve Weathers
Duke Energy Field Services

Duke Energy® Field Services

370 17th Street, Suite 2500
Denver, Colorado 80202
303-595-3331 – main
303-605-1957 – fax

December 18, 2006

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

RE: 3rd Quarter 2006 Groundwater Monitoring Results
DEFS C-Line Pipeline Release (1RP-401-0), Lea County, NM
Unit O Section 31, T19S, R37E

Dear Mr. Chavez:

Duke Energy Field Services, LP (DEFS) is pleased to submit for your review, an electronic copy of the 3rd Quarter 2006 Groundwater Monitoring Results for the DEFS C-Line Pipeline Release Site located in Lea County, New Mexico (Unit O Section 31, T19S, R37E, Latitude 32° 31' 29.7" N Longitude 103° 17' 11.7 W).

If you have any questions regarding the report, please call me at 303-605-1718.

Sincerely

Duke Energy Field Services, LP

Stephen Weathers, PG
Sr. Environmental Specialist

cc: Larry Johnson, OCD Hobbs District Office (Copy on CD)
Lynn Ward, DEFS Midland Office
Environmental Files

AEC AMERICAN ENVIRONMENTAL CONSULTING, LLC

December 14, 2006

Mr. Stephen Weathers
Duke Energy Field Services, LP
370 17th Street, Suite 2500
Denver, CO 80202

Re: Summary of the Third Quarter 2006 Groundwater Monitoring Results for the C-Line 50602 Release Location in Lea County New Mexico
Unit O, Section 31, Township 19 South, Range 37 East (1RP-401-0)

Dear Mr. Weathers:

This report summarizes the third quarter 2006 groundwater monitoring activities completed at the C-Line 50602 release location for Duke Energy Field Services, LP (DEFS). The monitoring activities were completed on September 16, 2006. The site is located in the southwestern quarter of the southeastern quarter (Unit O) of Section 31, Township 19 South, Range 37 East (Figure 1). The approximate coordinates are 32 degrees 31 minutes north, 103 degrees 17 minutes west.

The monitoring system includes the nine groundwater monitoring wells shown on Figure 2. Table 1 summarizes construction information for each well.

GROUNDWATER SAMPLING

Trident Environmental collected groundwater samples on September 16, 2006. The SVE system was turned off on June 26, 2006 to permit free-phase hydrocarbons (FPH) to recover. The system was left turned off after the June sampling event because no FPH were measured.

The depth to water in each well was measured prior to the sampling activities. Well MW-1 contained no FPH for the fifth consecutive quarter. Well MW-4 also contained no FPH for the second consecutive quarter. The calculated groundwater elevations for all monitoring episodes are summarized in Table 2. The FPH thickness values for MW-1 and MW-4 for all monitoring episodes are summarized in Table 3.

The nine wells were purged and sampled using the standard protocols for this site. Purging was completed using disposable bailers until a minimum of three casing volumes of water was removed and the field parameters temperature, pH and conductivity stabilized. The well purging forms are attached. The affected purge water was disposed of at the DEFS Linam Ranch facility.

Unfiltered samples were then collected using the disposable bailers. All samples were placed in an ice-filled chest immediately upon collection and delivered to the analytical laboratory (Environmental Labs of Texas) using standard chain-of-custody protocol. The samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX).

The laboratory analyses for the sampling episode are summarized in the upper part of Table 4. The laboratory report is attached.

The lower part of Table 4 includes the quality assurance/quality control (QA/QC) information. The QA/QC evaluation includes:

- No BTEX constituents were detected in the trip blank.
- All of the individual surrogate spikes were within their control limits.
- The relative percentage difference (RPD) values for the constituents from MW-3 and its duplicate all exhibited good agreement.
- The matrix spike and matrix spike duplicate results from the MW-7 sample were all within the control limits for all four constituents.

The above data indicate that the data is suitable for all uses.

RESULTS AND INTERPRETATIONS

Figure 3 includes hydrographs for the corrected water-table elevations for all site wells. The water table elevations remained relatively consistent in all wells.

Figure 4 shows the September 2006 calculated groundwater contours as generated using the Surfer® program with the kriging option. The water table exhibits a consistent gradient toward the southeast. This pattern reflects the historic trends.

Figure 5 depicts the spatial June 2006 benzene distribution. Benzene was measured at 4.27 mg/l in MW-1 and at an average value of 10.6 mg/l in the two samples from MW-3. MW-1, free of FPH for the first time since September 2004, contained 4.27 mg/l of benzene. The remaining wells did not contain benzene at the method-reporting limit of 0.001 mg/l.

Table 5 summarizes all of the analytical data collected to date. The changes in benzene concentrations are plotted for two wells on Figure 6. The values for MW-1 begin in December 2003 after removal of the FPH was completed. The values for MW-3 begin at the start of the project in November 2002. The benzene concentration in both wells increased for the second consecutive event between June 2006 and September 2006. The concentration in MW-3 continues cyclical variations in the concentrations that began in 2004.

The time-concentration plots MW-2 and MW-5 are on Figure 7. Benzene was not measured in MW-2 and MW-5 at or above the 0.001 mg/l method reporting limit for the fifth consecutive monitoring episode. This trend indicates that the dissolved-phase plume is stable.

Operation of the soil vapor extraction (SVE) remediation system was discontinued on July 5, 2006. The system remains intact, and it could be restarted if additional remediation was found to be necessary.

The next groundwater-monitoring event is scheduled for the fourth quarter 2006. Do not hesitate to contact me if you have any questions or comments on this letter.

Sincerely,
AMERICAN ENVIRONMENTAL CONSULTING, LLC

Michael H. Stewart

Michael H. Stewart, P.E., C.P.G.
Principal Engineer
MHS/tbm

TABLES

Table 1 – Summary of Well Construction Information

Well	Top of Casing Elevation	Ground Elevation	Screen Diameter	Screened Interval	Sand Interval	Total Depth
MW-1	3,541.21	3,538.64	4"	82.5-97.5	81-98	98
MW-2	3,540.91	3,537.70	2"	81-101	77-102	102
MW-3	3,541.41	3,539.30	2"	80-100	78-103	103
MW-4	3,541.40	3,538.51	2"	80-100	78-103	103
MW-5	3,541.45	3,538.69	2"	80-100	78-102	102
MW-6	3,543.98	3,540.94	2"	79-99	75-102	102
MW-7	3,542.42	3,540.20	2"	82.5-97.5	77-98*	98
MW-8	3,540.29	3,538.08	2"	82.5-97.5	81-98	98
MW-9	3,539.62	3,537.33	2"	82.5-97.5	81-98	98

All units in feet except as noted

* Well MW-7 has a natural sand pack from 93 to 98 feet

Table 2 – Summary of Corrected Water Table Elevations

Well	Nov. 02	Feb. 03	Apr. 03	Oct. 03	Jan. 04	Jun. 04	Sep. 04	Dec. 04	Mar. 05	Jun. 05	Sep 05	Dec 05	Mar 06
MW-1	3,452.01	3,451.60	3,451.73	3,451.35	3,451.34	3,451.23	3451.19	3,450.97	3,451.22	3,451.99	3,451.96	3,451.88	3,451.96
MW-2	3,452.11	3,451.97	3,451.96	3,451.87	3,451.84	3,451.73	3451.72	3,451.91	3,452.08	3,452.22	3,452.19	3,452.10	3,452.18
MW-3	3,452.25	3,451.37	3,451.33	3,451.27	3,451.22	3,451.06	3451.01	3,451.24	3,451.37	3,451.51	3,451.58	3,451.46	3,451.52
MW-4	3,451.56	3,451.32	3,451.21	3,451.25	3,451.19	3,451.02	3450.88	3,451.19	3,451.25	3,451.26	3,451.38	3,450.42	3,451.34
MW-5	3,451.39	3,451.21	3,451.09	3,451.20	3,451.11	3,450.86	3450.75	3,451.10	3,451.14	3,451.35	3,451.18	3,451.32	3,451.18
MW-6	3,448.77	3,448.51	3,448.38	3,448.46	3,448.37	3,448.14	3448.03	3,448.91	3,448.64	3,448.62	3,448.44	3,448.50	3,448.26
MW-7	-----	-----	-----	3,450.76	3,450.72	3,450.57	3450.47	3,450.70	3,450.80	3,450.99	3,450.99	3,450.86	3,450.86
MW-8	-----	-----	-----	3,450.35	3,450.22	3,450.03	3449.85	3,450.21	3,450.23	3,450.41	3,450.24	3,450.40	3,450.18
MW-9	-----	-----	-----	3,450.21	3,450.03	3,449.81	3449.67	3,450.13	3,450.11	3,450.38	3,450.04	3,450.25	3,449.99

Well	Jun 06	Sep-06
MW-1	3,451.88	3,451.86
MW-2	3,452.13	3,452.12
MW-3	3,451.45	3,451.43
MW-4	3,451.40	3,451.34
MW-5	3,451.16	3,451.16
MW-6	3,448.28	3,448.27
MW-7	3,450.81	3,450.83
MW-8	3,450.14	3,450.21
MW-9	3,449.92	3,450.02

1) All units in feet.

2) The groundwater elevation values for MW-1 and MW-4 were corrected using the following formula (all values in feet):

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

- MGWE is the actual measured groundwater elevation;
- PT is the measured free-phase hydrocarbon thickness, and
- PD is the free phase hydrocarbon density (assumed 0.7).

Table 3 – C-Line Free Phase Hydrocarbon Thickness Measurements

Date	MW-1	MW-4
11/02/02	3.15	0.00
02/17/03	3.62	0.00
04/16/03	2.92	0.00
10/30/03	3.21	0.00
06/29/04	2.66	0.00
09/28/04	2.16	0.21
12/08/04	0.13	1.18
03/16/05	0.04	3.03
06/06/05	0.02	0.07
09/20/05	0.00	0.16
12/15/05	0.00	0.21
03/21/06	0.00	0.03
06/27/06	0.00	0.00
09/16/06	0.00	0.00

Notes 1) Units are feet

Table 4 – September 16, 2006 Sample Results and QA/QC Evaluation

September 16, 2006 Analytical Results

Well	Benzene	Toluene	Ethylbenzene	Total Xylenes
MW-1	4.27	0.508	0.153	0.323
MW-2	<0.001	<0.001	<0.001	<0.001
MW-3	10.8	3.56	0.304	0.397
MW-3 (duplicate)	10.3	3.40	0.272	0.371
MW-4	0.510	.0415	0.210	1.028
MW-5	<0.001	<0.001	<0.001	<0.001
MW-6	<0.001	<0.001	<0.001	<0.001
MW-7	<0.001	<0.001	<0.001	<0.001
MW-8	<0.001	<0.001	<0.001	<0.001
MW-9	<0.001	<0.001	<0.001	<0.001
Trip Blank	<0.001	<0.001	<0.001	<0.001

Notes: All units mg/l

September 16, 2006 MW-3 Duplicate Sample Evaluation

	Benzene	Toluene	Ethylbenzene	Total Xylenes
MW-3 RPD	4.74%	4.60%	11.11%	6.77%

September 16, 2006 MW-7 Matrix Spike Results

	Benzene	Toluene	Ethylbenzene	p/m Xylenes	o Xylenes
Matrix Spike	84.0	81.4	93.2	82.2	81.2
Matrix Spike Duplicate	95.2	85.2	81.6	88.3	85.6

Percent recovery limits are 80% to 120%

Table 5 - Summary of Analytical Results

Benzene	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
11/15/02		<0.001	0.017	0.114	<0.001	<0.001			
02/18/03		0.29	2.52	1.12	0.328	0.001			
04/17/03		0.175	3.18	0.782	0.128	0.002			
10/28/03		0.018	5.01	0.077	0.164	<0.001	<0.001	<0.001	<0.001
01/29/04		0.0848	6.06	0.320	0.226	0.00382	<0.001	0.00139	<0.001
06/29/04		0.0582	9.84	0.461	0.249	<0.00019	0.000456	0.00248	<0.00019
09/28/04		0.329	11.2	FPH	0.0336	<0.001	<0.001	<0.001	<0.001
12/06/04		0.0355	12.0	FPH	0.0137	<0.001	<0.001	<0.001	<0.001
03/16/05		0.00523	10.9	FPH	0.00371	<0.001	<0.001	<0.001	<0.001
06/06/05		0.0017	8.83	FPH	0.00169	<0.001	0.000695J	0.000955J	<0.001
9/20/05		<0.001	10.75	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
12/15/05	2.14	<0.001	9.57	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
3/21/06	1.32	<0.001	6.55	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
6/26/06	2.17	<0.001	9.67	9.08	<0.001	<0.001	<0.001	<0.001	<0.001
9/16/06	4.27	<0.001	10.55	0.51	<0.001	<0.001	<0.001	<0.001	<0.001

Toluene	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
11/15/02		<0.001	0.005	0.039	<0.001	<0.001			
02/18/03		0.014	0.634	0.436	0.056	<0.001			
04/17/03		0.007	0.513	0.45	0.007	<0.001			
10/28/03		0.001	0.275	0.029	0.048	<0.001	<0.001	<0.001	<0.001
01/29/04		0.0350	0.506	0.169	0.064	0.00140	<0.001	0.00109	<0.001
06/29/04		0.000219J	0.0917	0.0202	0.00172	<0.00014	<0.00014	<0.00014	<0.00014
09/28/04		0.0174	0.0218	FPH	0.00281	<0.001	<0.001	<0.001	<0.001
12/06/04		0.0017	0.0438	FPH	0.00318	<0.001	<0.001	<0.001	<0.001
03/16/05		<0.001	0.013J	FPH	.00038J	<0.001	<0.001	<0.001	<0.001
06/06/05		<0.001	0.056	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
9/20/05		<0.001	0.1355	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
12/15/05	1.37	<0.001	0.414	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
3/21/06	0.931	<0.001	1.575	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
6/26/06	1.42	<0.001	2.93	5.73	<0.001	<0.001	<0.001	<0.001	<0.001
9/16/06	0.508	<0.001	3.48	0.0415	<0.001	<0.001	<0.001	<0.001	<0.001

Notes:
1) All units mg/l
2) Duplicate results averaged
3) "J" qualifiers are not included in summary
4) Wells not installed where blank cells are present
5) FPH free phase hydrocarbons present so no sample collected

Table 5 – Summary of Analytical Results (continued)

Ethylbenzene	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
11/15/02		<0.001	<0.001	0.002	<0.001	<0.001			
02/18/03		0.001	0.021	0.022	0.004	<0.001			
04/17/03		<0.001	0.028	0.029	<0.001	<0.001			
10/28/03		<0.001	0.031	0.002	0.002	<0.001	<0.001	<0.001	<0.001
01/29/04		0.00292	0.0679	0.0203	0.00404	0.00133	<0.001	0.00112	<0.001
06/29/04		0.00534	0.0873	0.352	0.0603	<0.00013	<0.00013	0.000633J	<0.00013
09/28/04		<0.001	0.105	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
12/06/04		<0.001	0.154	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
03/16/05		<0.001	0.150	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
06/06/05		<0.001	0.1535	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
09/20/05		<0.001	0.288	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
12/15/05	0.313	<0.001	0.173	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
3/21/06	0.419	<0.001	0.4085	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
6/26/06	0.534	<0.001	0.0333	1.03	<0.001	<0.001	<0.001	<0.001	<0.001
9/16/06	0.153	<0.001	0.288	0.21	<0.001	<0.001	<0.001	<0.001	<0.001

Xylenes	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
11/15/02		<0.001	<0.001	0.003	<0.001	<0.001			
02/18/03		0.001	0.064	0.032	0.004	<0.001			
04/17/03		<0.001	0.1	0.055	<0.001	<0.001			
10/28/03		<0.001	0.083	0.008	0.004	<0.001	<0.001	<0.001	<0.001
01/29/04		0.00474	0.0849	0.053	0.0074	0.00194	<0.001	0.00217	<0.001
06/29/04		0.001J	0.02404	0.074	0.004	<0.0002	<0.0002	<0.0002	<0.0002
09/28/04		<0.001	0.0213	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
12/06/04		<0.001	0.0237	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
03/16/05		<0.001	0.02842	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
06/06/05		<0.001	0.0502	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
09/20/05		<0.001	0.221	FPH	<0.001	<0.001	<0.001	<0.001	0.00105
12/15/05	1.334	<0.001	0.177	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
3/21/06	1.379	<0.001	0.9015	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
6/26/06	1.722	<0.001	0.414	5.69	<0.001	<0.001	<0.001	<0.001	<0.001
9/16/06	0.323	<0.001	0.384	1.028	<0.001	<0.001	<0.001	<0.001	<0.001

Notes:
1) All units mg/l
2) Duplicate results average
3) "J" qualifiers are not included in summary
4) Wells not installed where blank cells are present
5) FPH free phase hydrocarbons present so no sample collected

FIGURES

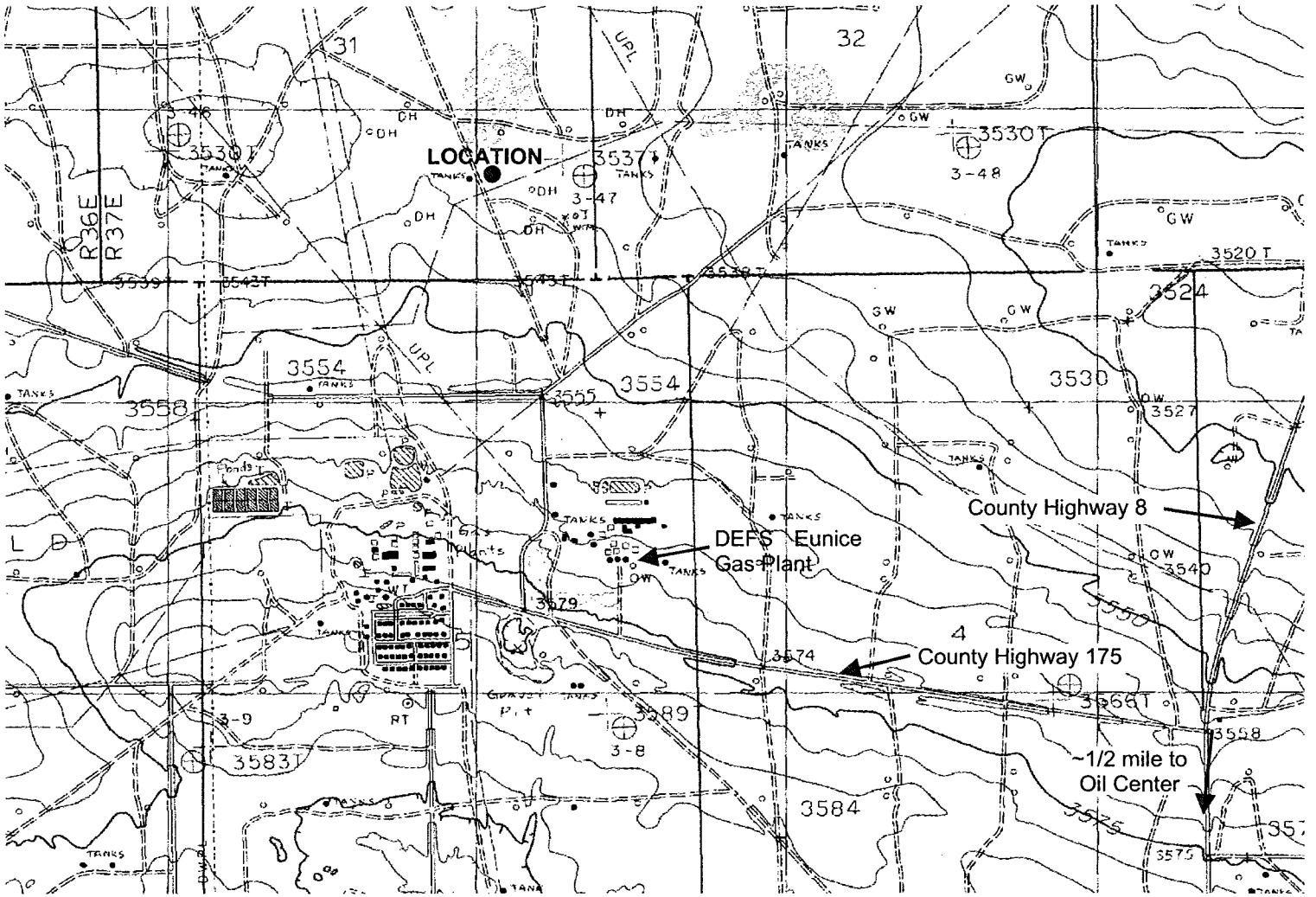


Figure 1 – Site Location and Topography

C-Line Groundwater Monitoring

Duke Energy Field Services

DRAWN BY: MHS

DATE: 5/05

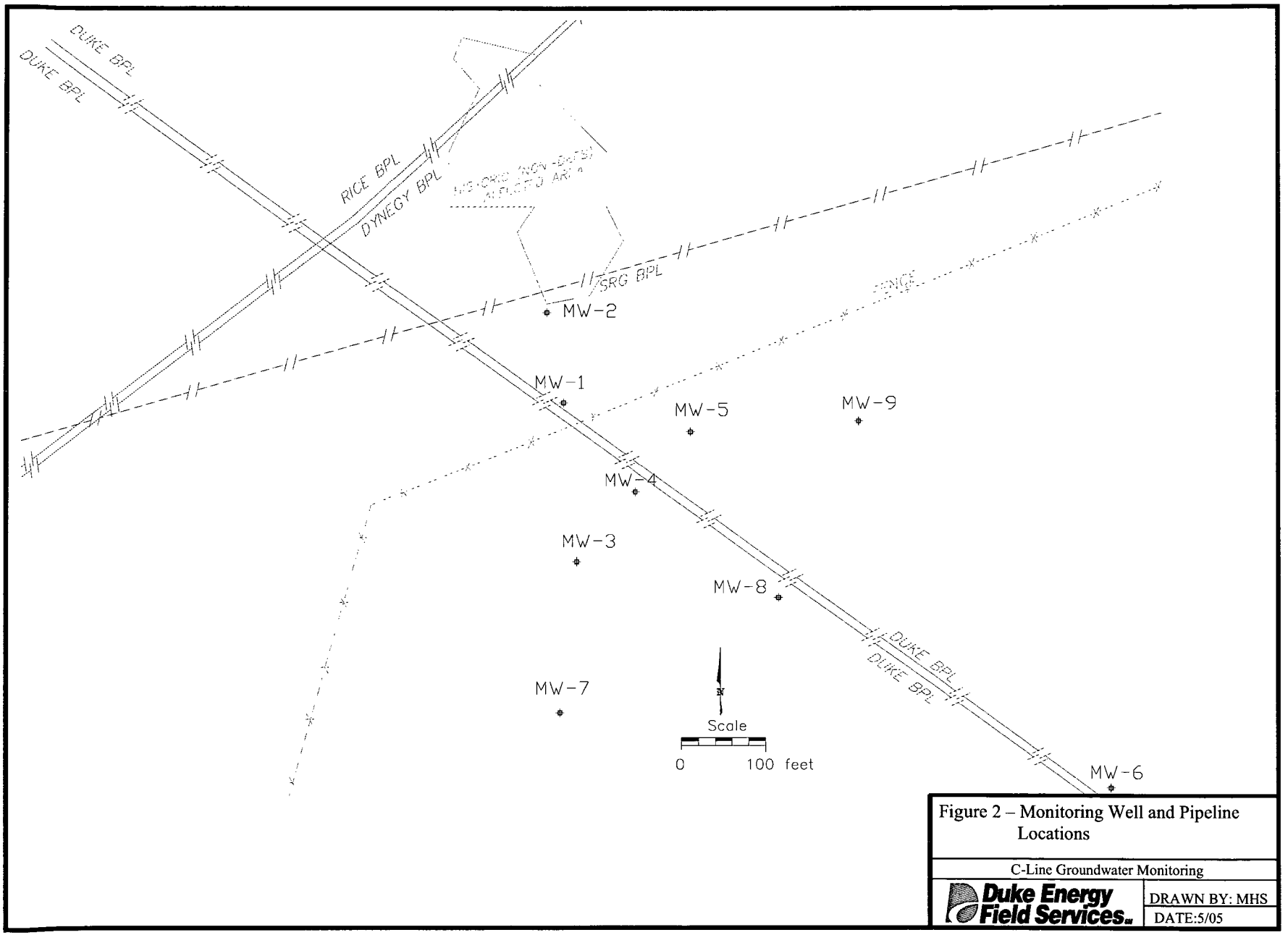


Figure 2 – Monitoring Well and Pipeline Locations

C-Line Groundwater Monitoring

Duke Energy Field Services

DRAWN BY: MHS

DATE:5/05

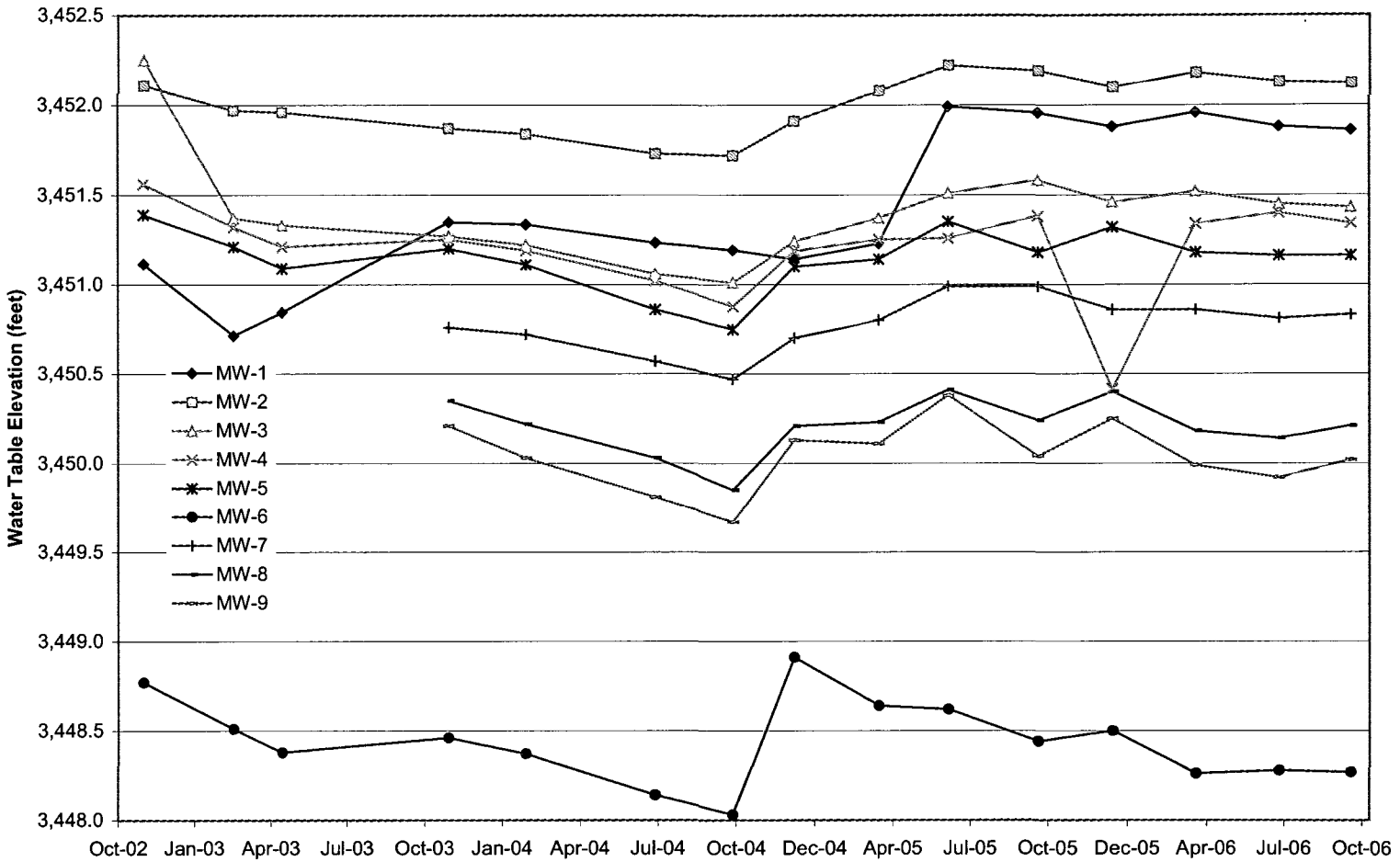


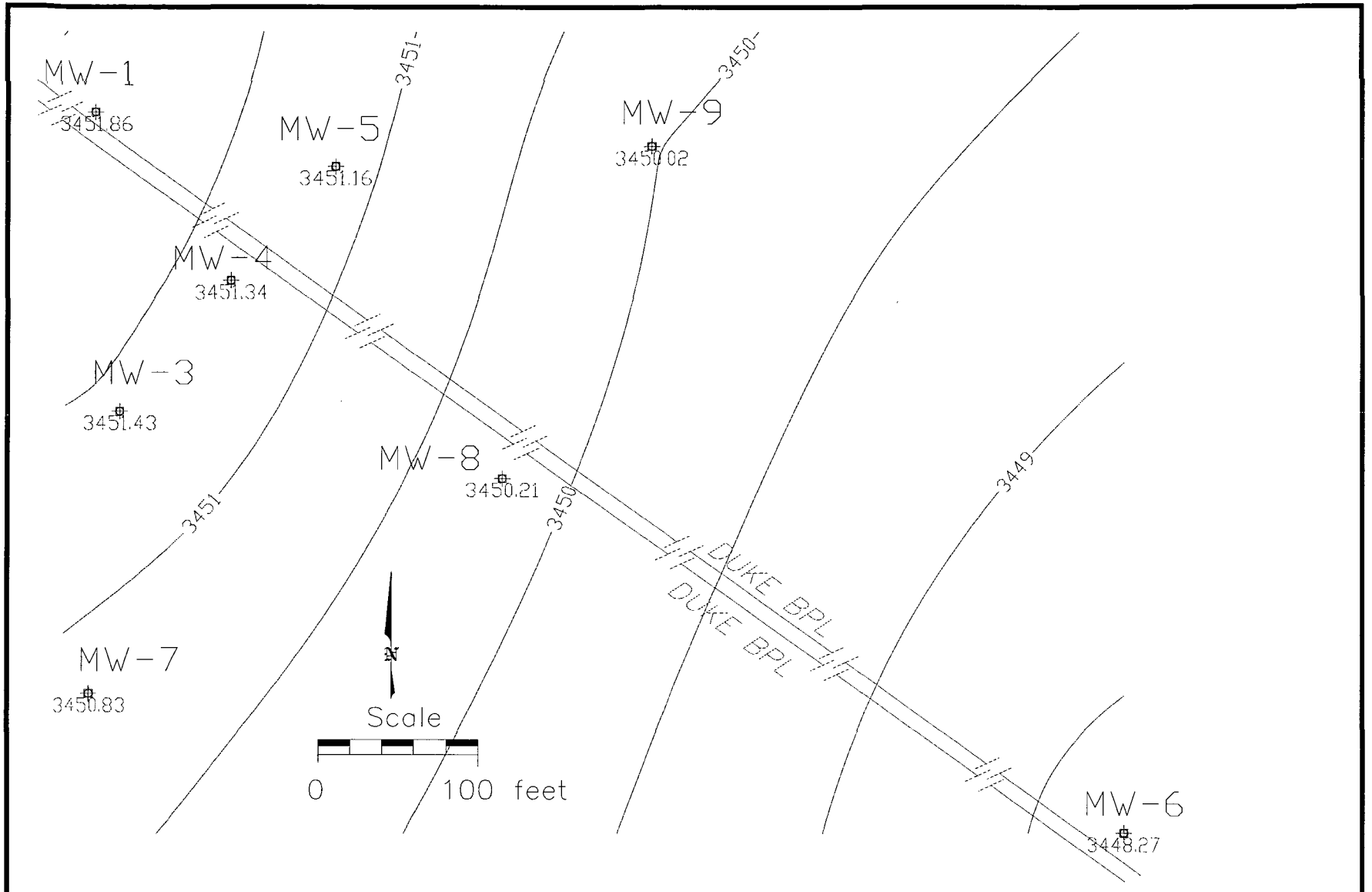
Figure 3 – Monitoring Well Hydrographs

C-Line Groundwater Monitoring

Duke Energy Field Services

DRAWN BY: MHS

DATE: 12/06



Contour interval is 0.5 feet

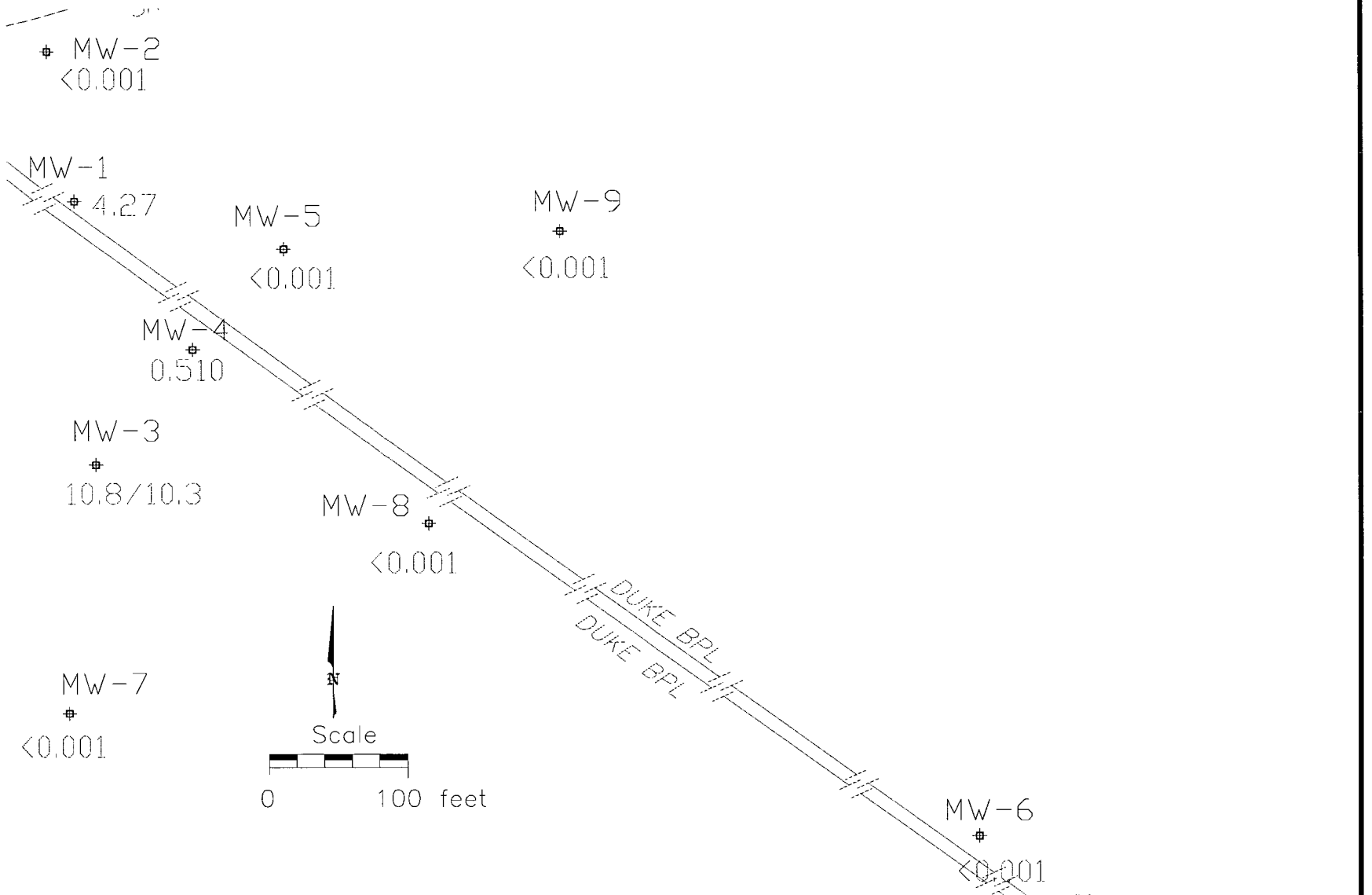
Figure 4 – September 2006 Water Table Elevations (feet)

C-Line Groundwater Monitoring

Duke Energy Field Services

DRAWN BY: MHS

DATE: 12/06



Units are mg/l

Figure 5 – September 2006 Benzene Concentrations

C-Line Groundwater Monitoring

Duke Energy Field Services

DRAWN BY: MHS

DATE: 12/06

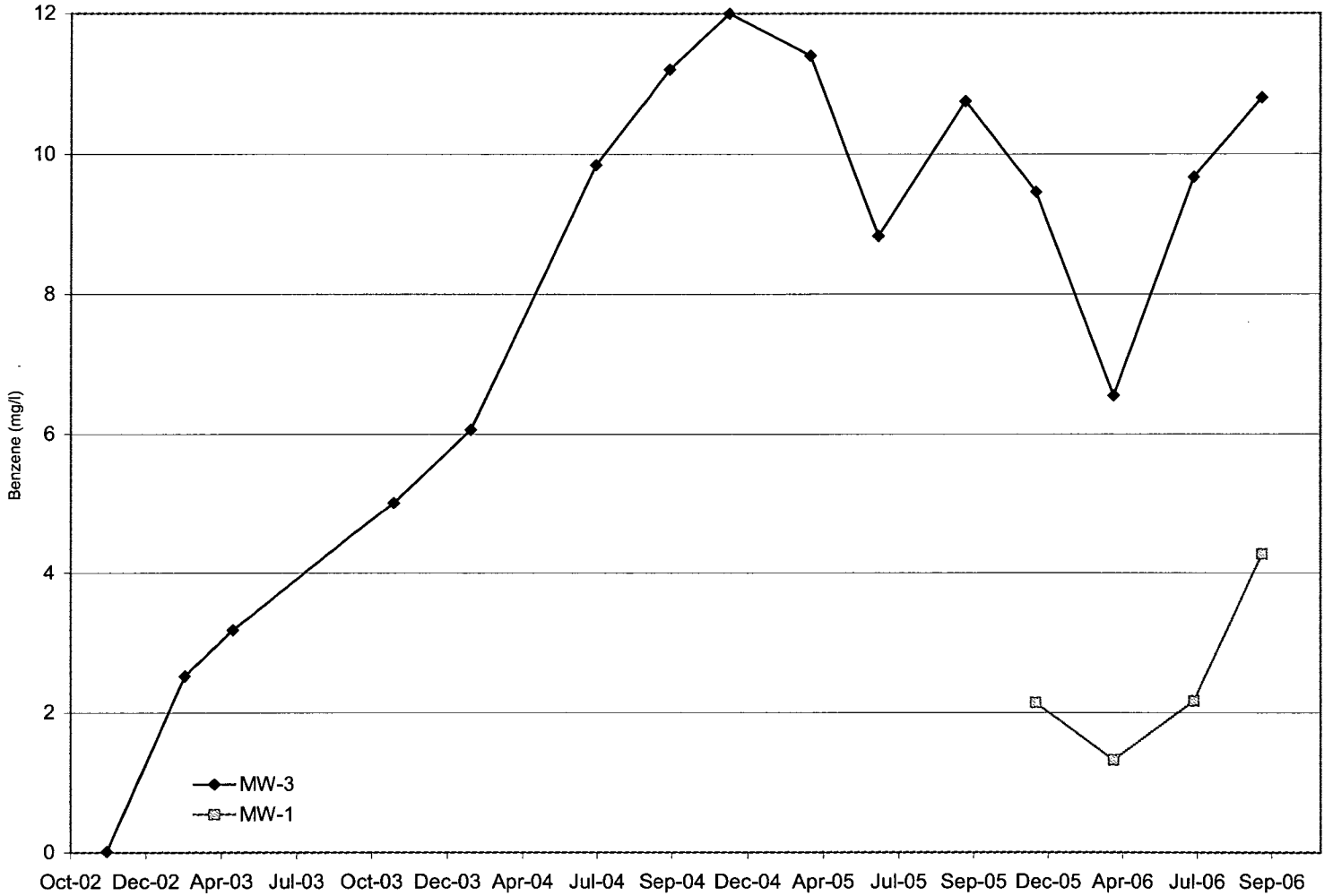


Figure 6 – Benzene Concentrations in MW-1 and MW-3

C-Line Groundwater Monitoring

Duke Energy Field Services

DRAWN BY: MHS

DATE: 12/06

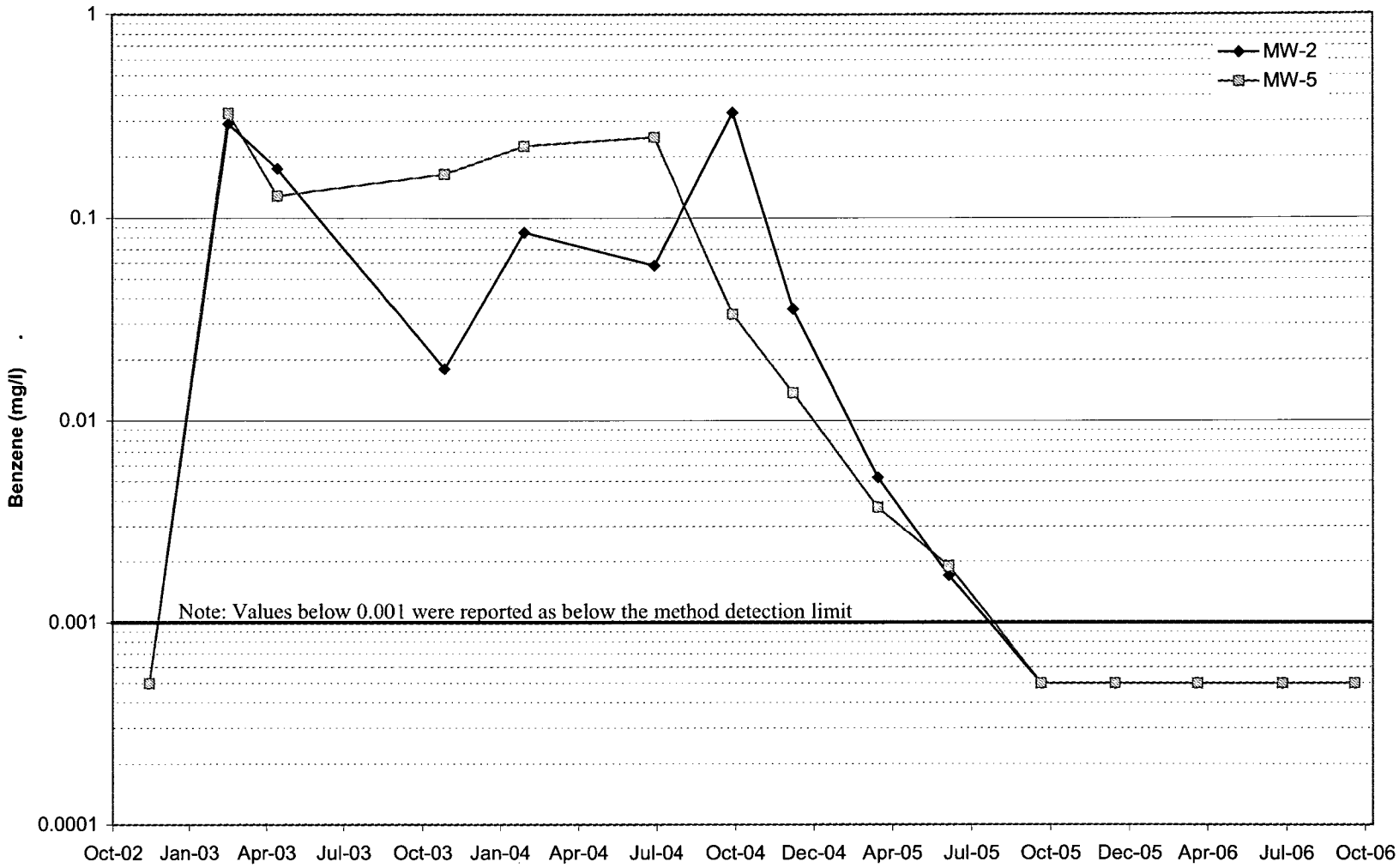


Figure 7 – Benzene Concentrations in MW-2 and MW-5

C-Line Groundwater Monitoring

Duke Energy Field Services

DRAWN BY: MHS

DATE: 12/06

FIELD SAMPLING FORMS
AND
ANALYTICAL LABORATORY REPORT

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-1**
SITE NAME: C Line
DATE: 9/19/2006
PROJECT NO. F-107
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: 99.98 Feet
DEPTH TO WATER: 89.35 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. mS/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
15:25	0.0	-	-	-	-	-	Began Hand Bailing!
15:37	7.0						Did Not Collect Parameter
15:49	14.0						Readings Due to Possibility of
16:01	22.0						Damage to Probes!
0:36	:Total Time (hr:min)		**22**	:Total Vol (gal)		**0.61**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060919 1605

ANALYSES: BTEX (8021-B)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-2**
SITE NAME: C Line
DATE: 9/19/2006
PROJECT NO. F-107
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: 100.94 Feet
DEPTH TO WATER: 88.79 Feet
HEIGHT OF WATER COLUMN: 12.15 Feet
WELL DIAMETER: 2.0 Inch

5.9 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
16:35	0.0	-	-	-	-	-	Begin Hand Bailing
16:41	2.0	22.2	2.73	7.22	-	-	
16:55	4.0	21.5	2.73	7.13	-	-	
17:04	6.0	21.4	2.74	7.14	-	-	
0:29	:Total Time (hr:min)		**6**	:Total Vol (gal)		**0.21**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060919 1710

ANALYSES: BTEX (8021-B)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-3**
SITE NAME: C Line
DATE: 9/19/2006
PROJECT NO. F-107
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: 102.44 Feet
DEPTH TO WATER: 89.98 Feet
HEIGHT OF WATER COLUMN: 12.46 Feet
WELL DIAMETER: 2.0 Inch

6.1 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
9:28	0.0	-	-	-	-	-	Begin Hand Bailing
9:34	2.0	21.6	2.25	7.28	-	-	
9:41	4.0	21.6	2.24	7.31	-	-	
9:48	6.3	21.1	2.24	7.34	-	-	
0:20 :Total Time (hr:min)			**6.3** :Total Vol (gal)			**0.31**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060920 0955

ANALYSES: BTEX (8021-B)

COMMENTS: Collected Duplicate Sample No.: 0609201200 for BTEX (8021-B)

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-4**
SITE NAME: C Line
DATE: 9/19/2006
PROJECT NO. F-107
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: 103.42 Feet
DEPTH TO WATER: 90.06 Feet
HEIGHT OF WATER COLUMN: 13.36 Feet
WELL DIAMETER: 2.0 Inch

6.5 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
10:18	0.0	-	-	-	-	-	Begin Hand Bailing
10:25	2.3	23.0	2.74	7.36	-	-	
10:34	4.6	22.1	2.75	7.39	-	-	
10:41	6.9	21.8	2.74	7.44	-	-	
0:23	:Total Time (hr:min)		**6.9**	:Total Vol (gal)		**0.30**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060920 1050

ANALYSES: BTEX (8021-B)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-5**
SITE NAME: C Line
DATE: 9/19/2006
PROJECT NO. F-107
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: 102.05 Feet
DEPTH TO WATER: 90.29 Feet
HEIGHT OF WATER COLUMN: 11.76 Feet
WELL DIAMETER: 2.0 Inch

5.8 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
18:59	0.0	-	-	-	-	-	Begin Hand Bailing
19:05	2.0	20.5	3.16	7.24	-	-	
19:13	4.0	20.2	3.09	7.26	-	-	
19:20	6.0	20.0	3.04	7.26	-	-	
0:21	:Total Time (hr:min)		**6**	:Total Vol (gal)		**0.28**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060919 1925

ANALYSES: BTEX (8021-B)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-6**
SITE NAME: C Line
DATE: 9/19/2006
PROJECT NO. F-107
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: 103.20 Feet
DEPTH TO WATER: 95.71 Feet
HEIGHT OF WATER COLUMN: 7.49 Feet
WELL DIAMETER: 2.0 Inch

3.7 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
17:30	0.0	-	-	-	-	-	Begin Hand Bailing
17:36	1.3	21.6	>4.00	6.86	-	-	
17:43	2.6	20.9	>4.00	6.88	-	-	
17:49	3.9	20.8	>4.00	6.89	-	-	

0:19 :Total Time (hr:min) **3.9** :Total Vol (gal) **0.20** :Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060919 1755

ANALYSES: BTEX (8021-B)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-7**
SITE NAME: C Line
DATE: 9/19/2006
PROJECT NO. F-107
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: 100.40 Feet
DEPTH TO WATER: 91.59 Feet
HEIGHT OF WATER COLUMN: 8.81 Feet
WELL DIAMETER: 2.0 Inch

4.3 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
8:33	0.0	-	-	-	-	-	Begin Hand Bailing
8:37	1.6	21.2	2.10	7.35	-	-	
8:42	3.2	20.9	2.12	7.40	-	-	
8:49	4.8	20.9	2.12	7.39	-	-	
0:16 :Total Time (hr:min)			**4.8** :Total Vol (gal)			**0.30** :Flow Rate (gal/min)	

SAMPLE NO.: Collected Sample No.: 060920 0855

ANALYSES: BTEX (8021-B)

COMMENTS: Collected MS/MSD Samples!

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-8**
SITE NAME: C Line
DATE: 9/19/2006
PROJECT NO. F-107
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: 100.50 Feet
DEPTH TO WATER: 90.08 Feet
HEIGHT OF WATER COLUMN: 10.42 Feet
WELL DIAMETER: 2.0 Inch

5.1 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
7:49	0.0	-	-	-	-	-	Begin Hand Bailing
7:54	1.7	20.5	2.68	7.22	-	-	
7:59	3.4	20.9	2.67	7.31	-	-	
8:05	5.1	20.8	2.67	7.31	-	-	
0:16	:Total Time (hr:min)		**5.1**	:Total Vol (gal)		**0.32**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060920 0810

ANALYSES: BTEX (8021-B)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: Duke Energy Field Services
WELL ID: **MW-9**
SITE NAME: C Line
DATE: 9/19/2006
PROJECT NO. F-107
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: 100.50 Feet
DEPTH TO WATER: 89.60 Feet
HEIGHT OF WATER COLUMN: 10.90 Feet
WELL DIAMETER: 2.0 Inch

5.3 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
18:10	0.0	-	-	-	-	-	Begin Hand Bailing
18:18	1.8	21.5	2.73	7.32	-	-	
18:25	3.6	21.0	2.75	7.33	-	-	
18:33	5.4	21.0	2.77	7.34	-	-	
0:23 :Total Time (hr:min)			**5.4** :Total Vol (gal)			**0.23**	:Flow Rate (gal/min)

SAMPLE NO.: Collected Sample No.: 060919 1840

ANALYSES: BTEX (8021-B)

COMMENTS: _____

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Michael Stewart

American Envionmental Consultants

6885 South Marshall St., Ste. 3

Littleton, CO 80128

Project: DEFS- C Line

Project Number: None Given

Location: Lea County, NM

Lab Order Number: 6I25008

Report Date: 10/02/06

American Envionmental Consultants
6885 South Marshall St., Ste. 3
Littleton CO, 80128

Project: DEFS- C Line
Project Number: None Given
Project Manager: Michael Stewart

Fax: (303) 948-7793

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
RW-1 (0609191605)	6I25008-01	Water	09/19/06 16:05	09-25-2006 11:15
MW-2 (0609191710)	6I25008-02	Water	09/19/06 17:10	09-25-2006 11:15
MW-6 (0609191755)	6I25008-03	Water	09/19/06 17:55	09-25-2006 11:15
MW-9 (0609191840)	6I25008-04	Water	09/19/06 18:40	09-25-2006 11:15
MW-5 (0609191925)	6I25008-05	Water	09/19/06 19:25	09-25-2006 11:15
MW-8 (0609200810)	6I25008-06	Water	09/20/06 08:10	09-25-2006 11:15
MW-7 (0609200855)	6I25008-07	Water	09/20/06 08:55	09-25-2006 11:15
MW-3 (0609200955)	6I25008-08	Water	09/20/06 09:55	09-25-2006 11:15
MW-4 (0609201050)	6I25008-09	Water	09/20/06 10:50	09-25-2006 11:15
Duplicate (0609201200)	6I25008-10	Water	09/20/06 12:00	09-25-2006 11:15
Trip Blank	6I25008-11	Water	09/20/06 12:00	09-25-2006 11:15

American Envionmental Consultants	Project: DEFS- C Line	Fax: (303) 948-7793
6885 South Marshall St., Ste. 3	Project Number: None Given	
Littleton CO, 80128	Project Manager: Michael Stewart	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
RW-1 (0609191605) (6I25008-01) Water									
Benzene	**4.27**	0.0100	mg/L	10	EI62809	09/28/06	09/28/06	EPA 8021B	
Toluene	**0.508**	0.0100	"	"	"	"	"	"	
Ethylbenzene	**0.153**	0.0100	"	"	"	"	"	"	
Xylene (p/m)	**0.233**	0.0100	"	"	"	"	"	"	
Xylene (o)	**0.0897**	0.0100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*116 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.2 %*	*80-120*		"	"	"	"	
MW-2 (0609191710) (6I25008-02) Water									
Benzene	ND	0.00100	mg/L	1	EI62809	09/28/06	09/28/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*101 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*116 %*	*80-120*		"	"	"	"	
MW-6 (0609191755) (6I25008-03) Water									
Benzene	ND	0.00100	mg/L	1	EI62809	09/28/06	09/28/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*96.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.8 %*	*80-120*		"	"	"	"	
MW-9 (0609191840) (6I25008-04) Water									
Benzene	ND	0.00100	mg/L	1	EI62809	09/28/06	09/28/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*89.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.5 %*	*80-120*		"	"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

American Envionmental Consultants
6885 South Marshall St., Ste. 3
Littleton CO, 80128

Project: DEFS- C Line
Project Number: None Given
Project Manager: Michael Stewart

Fax: (303) 948-7793

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (0609191925) (6I25008-05) Water									
Benzene	ND	0.00100	mg/L	1	EI62809	09/28/06	09/29/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*89.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.0 %*	*80-120*		"	"	"	"	
MW-8 (0609200810) (6I25008-06) Water									
Benzene	ND	0.00100	mg/L	1	EI62809	09/28/06	09/29/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*103 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*	*80-120*		"	"	"	"	
MW-7 (0609200855) (6I25008-07) Water									
Benzene	ND	0.00100	mg/L	1	EI62809	09/28/06	09/29/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*106 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*80-120*		"	"	"	"	
MW-3 (0609200955) (6I25008-08) Water									
Benzene	**10.8**	0.100	mg/L	100	EI62809	09/28/06	09/29/06	EPA 8021B	
Toluene	**3.56**	0.100	"	"	"	"	"	"	
Ethylbenzene	**0.304**	0.100	"	"	"	"	"	"	
Xylene (p/m)	**0.248**	0.100	"	"	"	"	"	"	
Xylene (o)	**0.149**	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*104 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*80-120*		"	"	"	"	

American Envionmental Consultants	Project: DEFS- C Line	Fax: (303) 948-7793
6885 South Marshall St., Ste. 3	Project Number: None Given	
Littleton CO, 80128	Project Manager: Michael Stewart	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (0609201050) (6I25008-09) Water									
Benzene	**0.510**	0.0100	mg/L	10	EI62809	09/28/06	10/02/06	EPA 8021B	
Toluene	**0.415**	0.0100	"	"	"	"	"	"	
Ethylbenzene	**0.210**	0.0100	"	"	"	"	"	"	
Xylene (p/m)	**0.749**	0.0100	"	"	"	"	"	"	
Xylene (o)	**0.279**	0.0100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*98.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*84.5 %*	*80-120*		"	"	"	"	
Duplicate (0609201200) (6I25008-10) Water									
Benzene	**10.3**	0.100	mg/L	100	EI62809	09/28/06	09/29/06	EPA 8021B	
Toluene	**3.40**	0.100	"	"	"	"	"	"	
Ethylbenzene	**0.272**	0.100	"	"	"	"	"	"	
Xylene (p/m)	**0.229**	0.100	"	"	"	"	"	"	
Xylene (o)	**0.142**	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*103 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.5 %*	*80-120*		"	"	"	"	
Trip Blank (6I25008-11) Water									
Benzene	ND	0.00100	mg/L	1	EI62809	09/28/06	09/29/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*87.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.5 %*	*80-120*		"	"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

American Envionmental Consultants
6885 South Marshall St., Ste. 3
Littleton CO, 80128

Project: DEFS- C Line
Project Number: None Given
Project Manager: Michael Stewart

Fax: (303) 948-7793

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI62809 - EPA 5030C (GC)										
Blank (EI62809-BLK1)				Prepared: 09/28/06 Analyzed: 09/29/06						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*32.6*		*ug/l*	*40.0*		*81.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*40.5*		*"*	*40.0*		*101*	*80-120*			
LCS (EI62809-BS1)				Prepared: 09/28/06 Analyzed: 09/29/06						
Benzene	0.0436	0.00100	mg/L	0.0500		87.2	80-120			
Toluene	0.0415	0.00100	"	0.0500		83.0	80-120			
Ethylbenzene	0.0460	0.00100	"	0.0500		92.0	80-120			
Xylene (p/m)	0.0814	0.00100	"	0.100		81.4	80-120			
Xylene (o)	0.0415	0.00100	"	0.0500		83.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	*33.3*		*ug/l*	*40.0*		*83.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*33.7*		*"*	*40.0*		*84.2*	*80-120*			
Calibration Check (EI62809-CCV1)				Prepared: 09/28/06 Analyzed: 09/29/06						
Benzene	55.4		ug/l	50.0		111	80-120			
Toluene	48.7		"	50.0		97.4	80-120			
Ethylbenzene	47.6		"	50.0		95.2	80-120			
Xylene (p/m)	96.3		"	100		96.3	80-120			
Xylene (o)	47.8		"	50.0		95.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	*40.7*		*"*	*40.0*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.3*		*"*	*40.0*		*111*	*80-120*			
Matrix Spike (EI62809-MS1)	**Source: 6I25008-07**			Prepared: 09/28/06 Analyzed: 09/29/06						
Benzene	0.0420	0.00100	mg/L	0.0500	ND	84.0	80-120			
Toluene	0.0407	0.00100	"	0.0500	ND	81.4	80-120			
Ethylbenzene	0.0466	0.00100	"	0.0500	ND	93.2	80-120			
Xylene (p/m)	0.0822	0.00100	"	0.100	ND	82.2	80-120			
Xylene (o)	0.0406	0.00100	"	0.0500	ND	81.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*32.4*		*ug/l*	*40.0*		*81.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*43.4*		*"*	*40.0*		*108*	*80-120*			

American Envionmental Consultants
6885 South Marshall St., Ste. 3
Littleton CO, 80128

Project: DEFS- C Line
Project Number: None Given
Project Manager: Michael Stewart

Fax: (303) 948-7793

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI62809 - EPA 5030C (GC)										
Matrix Spike Dup (EI62809-MSD1)	**Source: 6I25008-07**			Prepared: 09/28/06 Analyzed: 09/30/06						
Benzene	0.0476	0.00100	mg/L	0.0500	ND	95.2	80-120	12.5	20	
Toluene	0.0426	0.00100	"	0.0500	ND	85.2	80-120	4.56	20	
Ethylbenzene	0.0408	0.00100	"	0.0500	ND	81.6	80-120	13.3	20	
Xylene (p/m)	0.0883	0.00100	"	0.100	ND	88.3	80-120	7.16	20	
Xylene (o)	0.0428	0.00100	"	0.0500	ND	85.6	80-120	5.28	20	
Surrogate: a,a,a-Trifluorotoluene	*36.5*		*ug/l*	*40.0*		*91.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*47.4*		*"*	*40.0*		*118*	*80-120*			

American Envionmental Consultants
6885 South Marshall St., Ste. 3
Littleton CO, 80128

Project: DEFS- C Line
Project Number: None Given
Project Manager: Michael Stewart

Fax: (303) 948-7793

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 10/2/2006

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Mike Stewart
Company Name: American Environmental Consulting
Company Address: 6885 South Marshall Suite 3
City/State/Zip: Littleton, CO 80128
Telephone No: 303-948-7733 Fax No: 303-948-7793
Sampler Signature:
e-mail:

Project Name: Duke Energy Field Services
Project #: C Line
Project Loc: Lea County, New Mexico
PO #:
Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only) ORDER #: 6I25008

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	No. of Containers 40mL glass	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge; GW=Groundwater S=Soil/Solid; NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or ~~BTEX 8260~~	RCI	N.O.R.M.					RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
-01	RW-1 (0609191605)			9/19/06	1605	2	✓		✓						GW							✓									✓
-02	MW-2 (0609191710)			9/19/06	1710	2	✓		✓						GW							✓									✓
-03	MW-6 (0609191755)			9/19/06	1755	2	✓		✓						GW							✓									✓
-04	MW-9 (0609191840)			9/19/06	1840	2	✓		✓						GW							✓									✓
-05	MW-5 (0609191925)			9/19/06	1925	2	✓		✓						GW							✓									✓
-06	MW-8 (0609200810)			9/20/06	0810	2	✓		✓						GW							✓									✓
-07	MW-7 (0609200855)			9/20/06	0855	6	✓		✓						GW							✓									✓
-08	MW-3 (0609200955)			9/20/06	0955	2	✓		✓						GW							✓									✓
-09	MW-4 (0609201050)			9/20/06	1050	2	✓		✓						GW							✓									✓
-10	Duplicate (0609201200)			9/20/06	1200	2	✓		✓						GW							✓									✓

Special Instructions: Invoice To: Duke Energy Field Services
Attn: Steve Weathers

Relinquished by:	Date	Time	Received by:	Date	Time
	9/25/06	1115			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Jaime McMurrey	09-25-06	1115

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 2.5 °C

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Mike Stewart
Company Name: American Environmental Consulting
Company Address: 6885 ~~Marshall~~ S. South Marshall Suite 3
City/State/Zip: Littleton, CO 80128
Telephone No: 303-948-7733 Fax No: 303-948-7793
Sampler Signature: [signature]

Project Name: Duke Energy Field Services
Project #: C Line
Project Loc: Lea County, New Mexico
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES
e-mail:

Pg 2 of 2

(lab use only)
ORDER #: 6I25008

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	No. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se (TCLP: / TOTAL:)	Volatiles	Semivolatiles	BTEX 8021B/5030 or ~~BTEX 8260B~~	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
-11	Trip Blank					2	✓		✓						DW								✓				✓

Special Instructions: Invoice To: Duke Energy Field Services
Attn: Steve Weathers

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	9/25/04	1115			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Jeanne McMurrey	Date 09-25-04	Time 1115

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Custody seals on container(s)/ (cooler)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: 2.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: American Environmental

Date/ Time: 09-25-06 @ 1115

Lab ID # : 6I25008

Initials: JMM

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	2.5 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container? (label)	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Chavez, Carl J, EMNRD

From: Weathers, Stephen W [swweathers@duke-energy.com]
Sent: Thursday, October 12, 2006 2:21 PM
To: Chavez, Carl J, EMNRD
Subject: Remediation Project Summaries.

Mr. Chavez

Attached you will find a brief summary of my remediation projects in New Mexico. Once you have had chance to review the projects, I would like to sit down with you at your convenience and discuss them further.

If you have any questions, please give me a call at 303-605-1718 or 303-619-3042.

Thanks

Steve Weathers
Duke Energy Field Services, LP

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.

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 appear 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.

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.

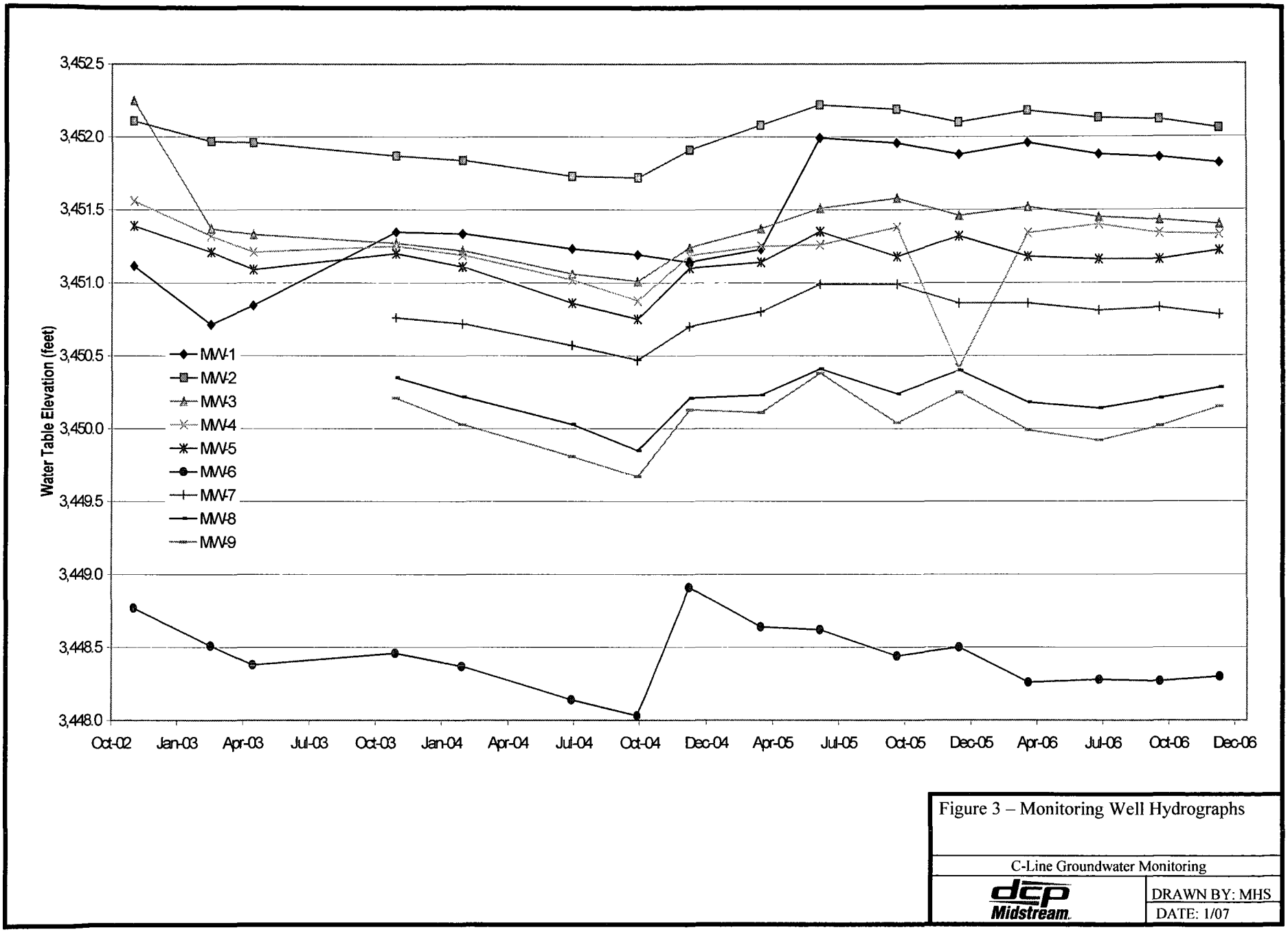


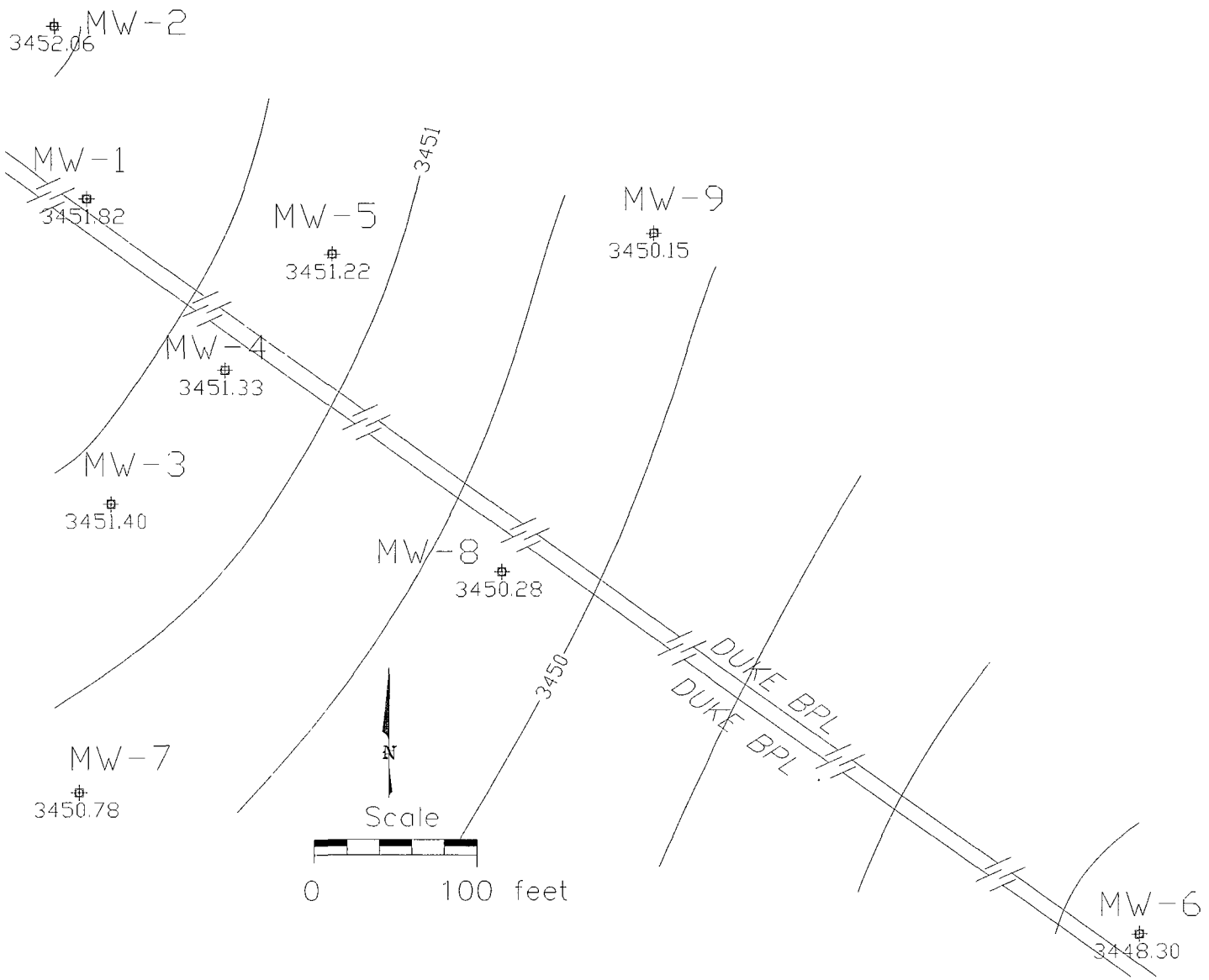
Figure 3 – Monitoring Well Hydrographs

C-Line Groundwater Monitoring

dcp Midstream

DRAWN BY: MHS

DATE: 1/07



Contour interval is 0.5 feet

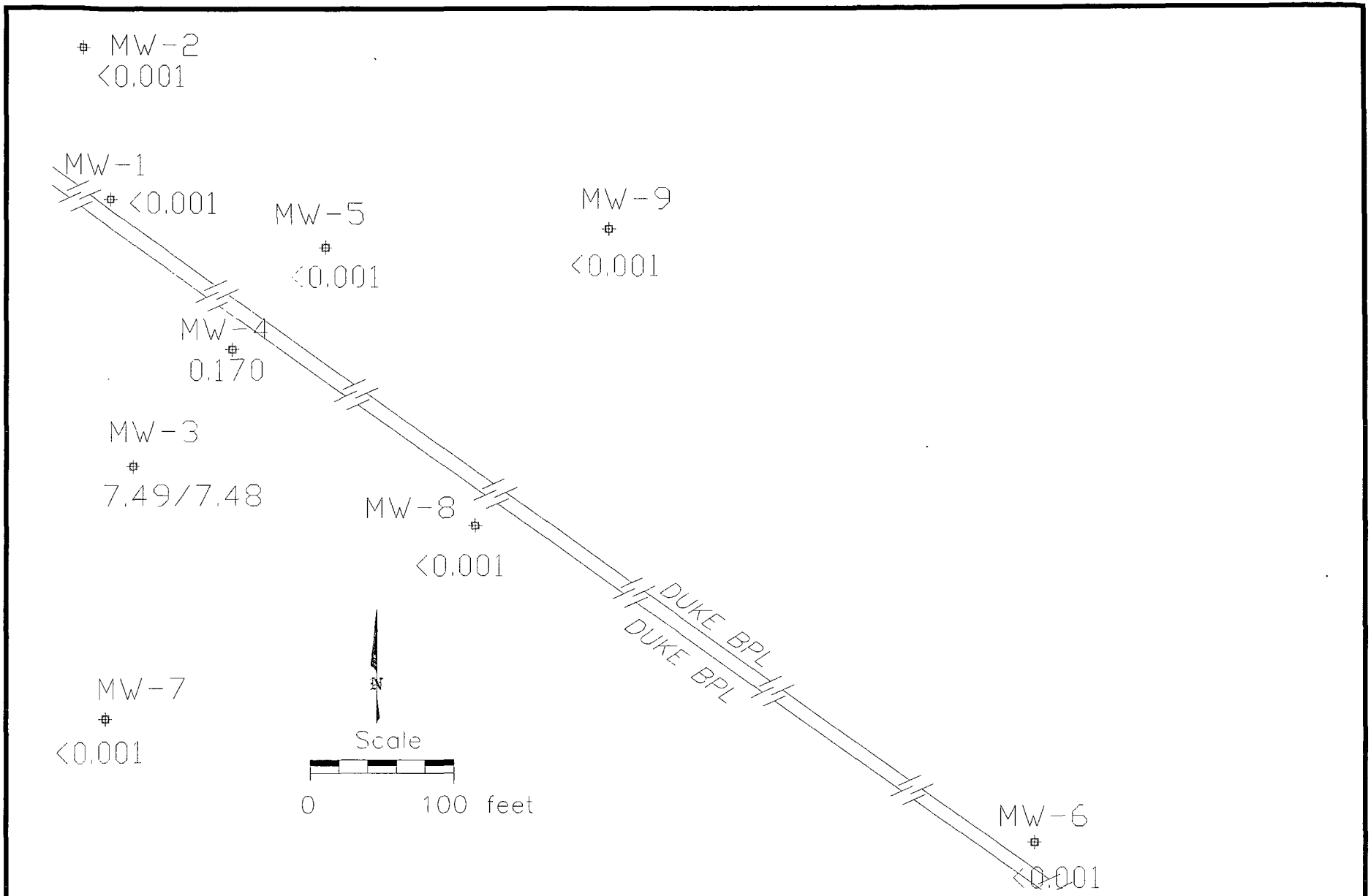
Figure 4 – December 2006 Water Table Elevations (feet)

C-Line Groundwater Monitoring

dcp Midstream.

DRAWN BY: MHS

DATE: 1/07



Units are mg/l

Figure 5 – December 2006 Benzene Concentrations

C-Line Groundwater Monitoring

dcp Midstream

DRAWN BY: MHS

DATE: 1/07

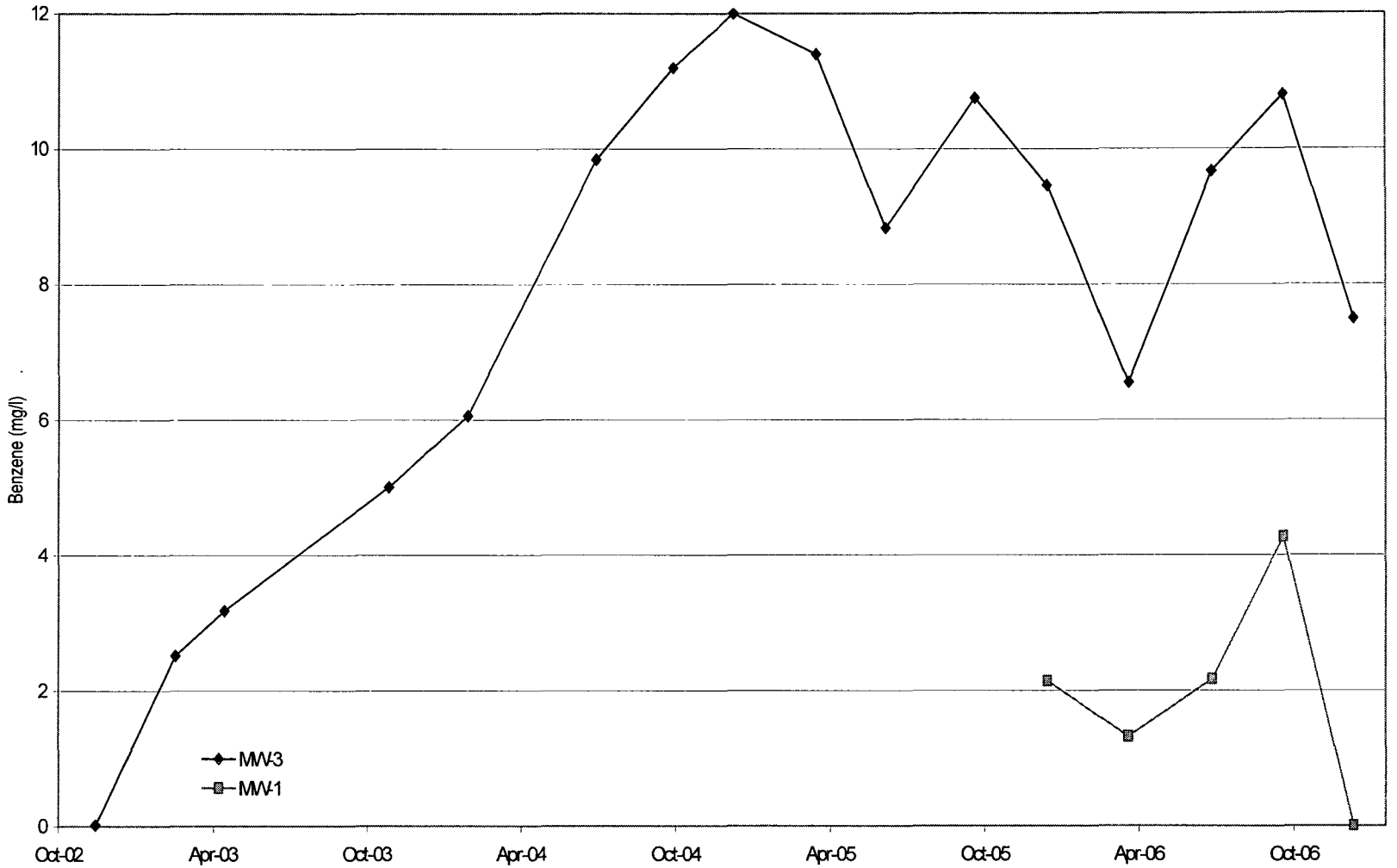


Figure 6 -- Benzene Concentrations in MW-1 and MW-3

C-Line Groundwater Monitoring

dcp Midstream

DRAWN BY: MHS

DATE: 1/07

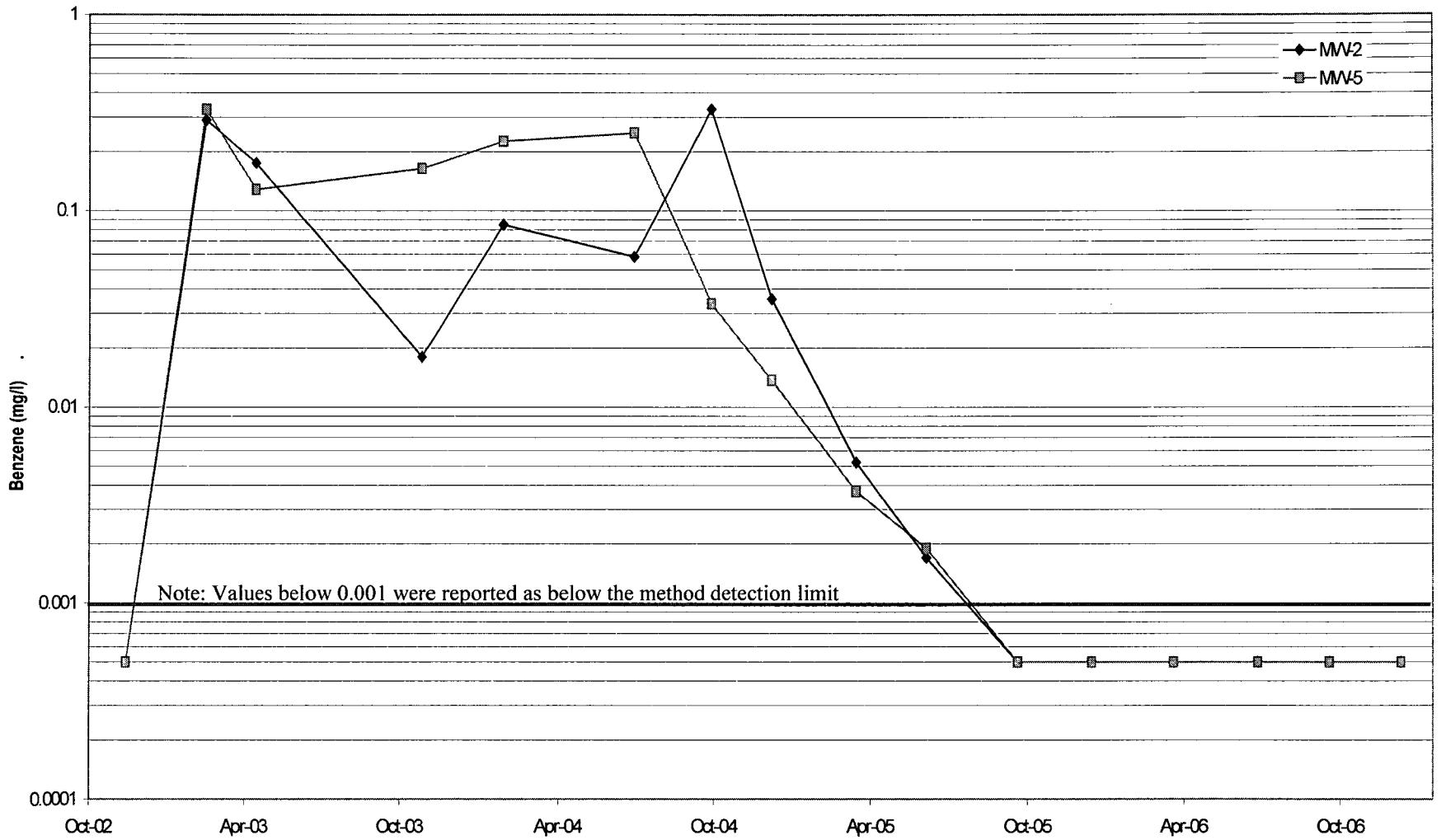


Figure 7 – Benzene Concentrations in MW-2 and MW-5

C-Line Groundwater Monitoring

DCP Midstream

DRAWN BY: MHS

DATE: 1/07

Duke Energy®
Field Services

DUKE ENERGY FIELD SERVICES
370 17th Street
Suite 2500
Denver, CO 80202

303 595 3331

December 10, 2004

Mr. Ed Martin
Environmental Bureau
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

1R-401

RE: DEFS October 2004 Quarterly Groundwater Monitoring Results
C-Line Pipeline Release (50602), Lea County, NM
Unit O Section 31, T19S, R37E

Dear Mr. Martin:

Duke Energy Field Services, LP (DEFS) is pleased to submit for your review, one copy of the DEFS October 2004 Groundwater Monitoring Results for the October, 2004 groundwater sampling event at the DEFS C-Line Pipeline Release Site located in Lea County, New Mexico (Unit O Section 31, T19S, R37E, 32° 32.5' N 103° 15.3' E)

If you have any questions regarding the report, please call me at 303-605-1718.

Sincerely

Duke Energy Field Services, LP

Stephen Weathers, PG
Sr. Environmental Specialist

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

Duke Energy®
Field Services

DUKE ENERGY FIELD SERVICES
370 17th Street
Suite 900
Denver, CO 80202

303 595 3331

August 4, 2004

Mr. Ed Martin
Environmental Bureau
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

1R-401

RE: DEFS June 2004 Quarterly Groundwater Monitoring Results
C-Line Pipeline Release (50602), Lea County, NM
Unit O Section 31, T19S, R37E

Dear Mr. Martin:

Duke Energy Field Services, LP (DEFS) is pleased to submit for your review, one copy of the DEFS June 2004 Groundwater Monitoring Results for the June, 2004 groundwater sampling event at the DEFS C-Line Pipeline Release Site located in Lea County, New Mexico (Unit O Section 31, T19S, R37E, 32° 32.5' N 103° 15.3' E)

If you have any questions regarding the report, please call me at 303-605-1718.

Sincerely

Duke Energy Field Services, LP

Stephen Weathers, PG
Sr. Environmental Specialist

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

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

July 13, 2004

Mr. Stephen Weathers, PG
Duke Energy Field Services
370 17th St.
Suite 2500
Denver, CO 80202

Dear Mr. Weathers:

The New Mexico Oil Conservation Division has received your "DEFS January 2004 Quarterly Groundwater Monitoring Results" for the C-Line Pipeline Release (50602). The NMOCD reference for this site is "1R-0401".

Per our phone conversation of yesterday, please include in your next monitoring report for this site a table showing the decline in phase-separated hydrocarbons on the groundwater.

If you have any questions, contact me at (505) 476-3492 or emartin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

Ed Martin

Edwin E. Martin, Environmental Bureau

cc: Larry Johnson, NMOCD, Hobbs
Michael H. Stewart, PE, Remediacon

Duke Energy®
Field Services

DUKE ENERGY FIELD SERVICES
370 17th Street
Suite 2500
Denver, CO 80202

303 595 3331

March 22, 2004

Mr. Ed Martin
Environmental Bureau
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

1R-401

RE: DEFS January 2004 Quarterly Groundwater Monitoring Results
C-Line Pipeline Release (50602), Lea County, NM
Unit O Section 31, T19S, R37E

Dear Mr. Martin:

Duke Energy Field Services, LP (DEFS) is pleased to submit for your review, one copy of the DEFS January 2004 Groundwater Monitoring Results for the January 29, 2004 groundwater sampling event at the DEFS C-Line Pipeline Release Site located in Lea County, New Mexico (Unit O Section 31, T19S, R37E, 32° 32.5' N 103° 15.3' E)

If you have any questions regarding the report, please call me at 303-605-1718.

Sincerely

Duke Energy Field Services, LP

Stephen Weathers, PG
Sr. Environmental Specialist

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

Duke Energy®
Field Services

DUKE ENERGY FIELD SERVICES
370 17th Street
Suite 900
Denver, CO 80202

303 595 3331

December 23, 2003

Mr. Ed Martin
Environmental Bureau
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

RE: Report on the Site Activities at the DEFS C-Line 50602
Lea County, NM.

Dear Mr. Martin:

Duke Energy Field Services, LP (DEFS) is pleased to submit for your review, one copy of the Report on Site Activities at the C-Line 50602 located in Unit O, Sec 31, T19S, R37E, Lea County, New Mexico.

If you have any questions regarding the report, please call me at 303-605-1718.

Sincerely

Duke Energy Field Services, LP

Stephen Weathers
Sr. Environmental Specialist

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

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

by email to swweathers@duke-energy.com

October 22, 2002

Mr. Steven Weathers
Duke Energy Services, LP
370 17th Street
Denver CO 80202

Re: C-Line Workplan, Lea County, New Mexico

Dear Mr. Weathers:

The New Mexico Oil Conservation Division (OCD) has reviewed Remediacon's "Workplan to Complete Groundwater Characterization Activities at the C-Line 50602, 52102, and 52303 Locations in Lea County, New Mexico for Duke Energy Field Services, LP" submitted on your behalf. This work plan describes delineation of plumes, installation of free product recovery systems, assessment of ground water depths, flows, and gradients, evaluation of attenuation processes, and collection of information about properties of subsurface material. A tentative schedule has also been proposed. This project lies in the SE/4 of SE/4 of Section 31, T19S, R37E, about 6.4 miles SSW of Monument, New Mexico.

OCD approves this work plan with the following conditions.

1. OCD shall be provided with four working days notice prior to sampling.
2. The wells shall be developed after construction using EPA-approved procedures.
3. The report shall include information about the disposition of all wastes generated.

Please be advised that OCD approval does not relieve Duke of liability should the investigation actions fail to adequately define the extent of contamination related to Duke's pipeline, or if contamination exists which is outside the scope of the work plan. In addition, OCD approval does not relieve Duke of responsibility for compliance with any other federal, state or local laws and regulations. Please provide our Hobbs District Office with copies of all project information. If you have any questions, please contact me at 505-476-3493.

Sincerely,

Randolph Bayliss, P.E.
Hydrologist,
Environmental Bureau

Cc: Chris Williams, Larry Johnson