262255
(GWP)
File

Water Quality Monitoring Plan Evaluation
2005 - 2006
West Pasco County Class I Landfill

March 2007

CERTIFICATION

I hereby certify that I have examined the site, and being familiar with the provisions of 62-701, F.A.C., attest that this evaluation has been prepared in accordance with good engineering practices.

Engineer: David R. Rojas

Signature: David R. Rojas

Professional Geologist
Registration Number: PG-2362

State: Florida

Date: 3-23-07

CDM

Contents

Figures

Tables

Section 1
Introduction

1.1 Background

The West Pasco Class I Landfill is located in northwest Pasco County on Hays Road, approximately 2.5 miles north of State Road 52. The Class I Landfill is located adjacent to the Pasco County Resource Recovery facility and the West Pasco Class III Landfill. The Class I Landfill is permitted separately from the Class III Landfill. Although at build out the landfill will consist of 16 ten-acre cells, currently only four cells have been constructed, cells A-1, A-2, A-3 and SW-1. Cell SW-1 is used for the disposal of municipal solid waste (MSW) whenever the MSW cannot be combusted in the resource recovery facility. By-passed MSW is removed from the cell when capacity is available at the resource recovery facility. Cells A-1, A-2, and A-3 are used for the disposal of ash produced from the combustion of MSW at the adjacent resource recovery facility. Cells A-1 and A-2 have received intermediate closure and Cell A-3 is currently open.

Since May 1997, collected leachate has been treated on-site for the removal of total dissolved solids (TDS) prior to being pumped to the cooling towers at the adjacent resource recovery facility for disposal. The TDS, primarily sodium chloride, removed by evaporation from the leachate during the treatment process, are transported off-site for disposal at an approved landfill.

1.2 Water Quality Monitoring Plan

A revised water quality monitoring plan (WQMP) for the West Pasco County Class I Landfill was prepared by CDM as part of the documents associated with the application to construct disposal unit A-3. The revised WQMP was submitted to the Florida Department of Environmental Protection (FDEP) March 29, 2001. This plan was generated as a revision to the Water Quality Monitoring Plan for the Class I Landfill dated 1994 that was approved by the FDEP. The original plan was presented in Section 9.0 of a submittal entitled Engineering Report and Application to Construct Disposal Unit A-2, prepared by Law Environmental, revised January 5, 1995. The primary revisions to the original plan included the addition of new and proposed monitor wells and leachate collection systems. However, the water quality data collected at the Class I Landfill to date, and evaluated in this report, have been produced in association with the approved plan.

1.2.1 Groundwater Sampling and Analysis

Groundwater samples are collected from all background, detection, and compliance monitor wells designated in the WQMP and any future monitor wells to be installed in association with the Class I landfill at this facility. At least one water sample is collected and analyzed from each background well installed. This sample is analyzed for the parameters listed in Chapter 62-701.510(8)a and Chapter 62-701.510(8)d, F.A.C.

Chapter 62-701.510 does not mandate the frequency and analytical requirements of subsequent groundwater samples collected from the background monitor wells. Any new monitor wells installed in association with the Class I landfill will also be analyzed for the parameters listed in Chapter 62-701.518(8)a and Chapter 62-701.510(8)d, F.A.C. for the initial sampling event. Groundwater samples from all of the detection and downgradient compliance wells designated in the WQMP and any future detection and downgradient compliance monitor wells to be installed in association with the Class I landfill at this facility are collected and analyzed on a semi-annual basis. These samples are analyzed for the parameters listed in Chapter 62-701.510(8)a.

The approved plan consists of periodic monitoring of seven surficial aquifer wells (2MW-1, 2MW-2, 2MW-4, 2MW-5, 2MW-6, 2MW-13D, and 2MW-17S) and fourteen Floridan Aquifer wells (4MW-1, 4MW-2, 4MW-4, 4MW-5, 4MW-6, 4MW-11D, 4MW-12D, 4MW-13D, 4MW-14D, 4MW-15AD, 4MW-16D, 2MW-18D, 2MW-19D, and 2MW-20D) which are identified in **Figure 1-1**.

1.2.2 Leachate Sampling and Analysis

Currently, two separate leachate samples are collected and analyzed from the leachate collection system. One of these samples is collected from a lift station receiving leachate from both the primary and secondary leachate collection systems of solid waste cells SW-1 and SW-2. The other sample is collected from a lift station receiving leachate from both the primary and secondary leachate collection systems of disposal cells A-1, A-2, and A-3. These samples are collected by lowering a decontaminated Teflon bailer into the manhole of each of the new lift stations. The leachate samples have historically been, and will continue to be sampled semi-annually and analyzed for the parameters listed in Chapter 62-701.510(8)c. In addition, annually the leachate samples are analyzed for the parameters listed in Chapter 62-701.510(8)d.

1.2.3 Surface Water Sampling and Analysis

There are no surface water discharges or sample monitoring locations designated in association with the facility. However, in the event that a discharge to surface water from the facility should occur, at least one sample will be collected at the point of discharge from the property.

If the discharge is into a flowing body of water located outside the boundary of the facility, a sufficient number of upgradient and downgradient sample locations will be used to allow the effect of the discharge from the landfill to be measured. These samples will be analyzed for the parameters listed in Chapter 62-701.510(8)b.

The revised water quality monitoring plan includes an evaluation of the adequacy of the water quality monitoring frequency and sampling locations; and provides an evaluation of groundwater flow rates. Therefore, discussions regarding these aspects of the water quality monitoring plan are not repeated in this report.

Section 2
Groundwater Quality and Level Data

2.1 Data Tabulation

The last groundwater monitoring plan review for the Class I Landfill, which was submitted to FDEP in March 2005, evaluated data collected from 2003 and 2004. **Tables 2-1 through 2-20** present the results of routine (bi-annual) monitoring conducted during the 2005 -2006 reporting period on the wells identified in the water quality monitoring plan. The routine sampling events conducted during the 2005 - 2006 reporting period were conducted in the first quarter of 2005, third quarter of 2005, first quarter of 2006, and the third quarter of 2006. Water level measurements and water quality data are available from all or part of the reporting period for all the Floridan Aquifer monitor wells and four of the seven surficial aquifer monitor wells. Three of the surficial aquifer monitor wells (2MW-4, 2MW-5, and 2MW-13) were dry throughout the entire 2005 -2006 reporting period. Therefore, no water level measurements or water quality data are available for these three surficial aquifer monitor wells throughout the 2005 - 2006 monitoring period.

2.2 Sampling Activities and Laboratory Analyses

The Pasco County Environmental Laboratory conducts the required groundwater and leachate sampling and analysis for the West Pasco County Landfill as established in the facility's Water Quality Monitoring Plan (WQMP). All fieldwork and laboratory work done in connection with the WQMP is conducted in accordance with the Standard Operating Procedures (SOPs) referenced in Chapter 62-160, F.A.C., or in accordance with procedures and methods approved by the Florida Department of Health. Chemical analyses that are not performed at the county laboratory are contracted out under an agreement with other state-approved laboratories.

2.3 Graphical Presentations

Figures 2-1 through 2-54 present graphical trends of data for which a monitoring parameter was measured or detected during the 2005 – 2006 reporting period. Each figure presents the detected concentrations of a particular parameter for either the designated detection monitor wells or the compliance/background monitor wells. Graphical presentations were only generated for one of the volatile organic contaminant (VOC) parameters analyzed, benzene. Although several other VOC parameters were detected during the reporting period, only benzene was detected at concentrations exceeding the established groundwater cleanup target level (GCTL). Due to the inability to collect data from the three surficial aquifer monitor wells that were consistently dry throughout the reporting period, no laboratory or field data was graphically presented for these wells.

2.4 Groundwater Quality Interpretation

The groundwater quality results of the sampling activities performed during the 2005 – 2006 reporting period were compared to established criteria including Maximum Contaminant Levels, Secondary Drinking Water Standards, and Groundwater Cleanup Target Levels. Each exceedance of these criteria is summarized and evaluated in the following subsections.

2.4.1 Exceedance of Maximum Contaminant Levels

Maximum contaminant levels (MCLs) for various inorganic compounds are established in Table 1 of Chapter 62-550 of the Florida Administrative Code (F.A.C.). The MCLs for one parameter was exceeded in groundwater monitoring wells sampled at the West Pasco Class I Landfill during the 2005 – 2006 reporting period. This parameter was:

- Nitrate - detected above 10 mg/L in two wells; 2MW-2 and 2MW-17.

Nitrate was detected only slightly above 10 mg/L in monitor wells 2MW-2 (11.3 mg/L) and 2MW-17 (11.2 mg/L) during third quarter of 2005. The concentrations of nitrate detected in these two surficial aquifer monitor wells during the previous sampling event (in the first quarter of 2005) and the following two sampling events (in 2006) were below 10 mg/L. Monitor well 2MW-2 is a background monitor well located in the southeast portion of the site, upgradient of the A-1, A-2, and A-3 ash cells. Monitor well 2MW-17 is a detection well located north of the solid waste cell SW-1.

2.4.2 Exceedance of Secondary Drinking Water Standards

Secondary drinking water standards (SDWSs) for various contaminants are established in Table 4 of Chapter 62-550 F.A.C. The SDWSs for three parameters were exceeded in groundwater monitoring wells sampled at the West Pasco Class I Landfill during the 2005 - 2006 reporting period. These parameters were:

- pH - detected outside the range of 6.5 – 8.5 s.u. in all four of the shallow monitor wells that were sampled; 2MW-1, 2MW-2, 2MW-6, and 2MW-17;
- TDS - detected above 500 mg/L in three wells: 4MW-1, 4MW-5, and 2MW-6; and
- Iron - detected above 0.3 mg/L in two wells: 2MW-1 and 4MW-4.

Of these detections that exceeded the SDWSs during the 2005 – 2006 reporting period, two of the three parameters detected at concentrations exceeding or outside the established range of their SDWSs were detected more than once in at least one well. However, iron was only detected in one of the sampling events during the 2005 – 2006 reporting period in the two wells where it was detected above the established SDWS. The concentration of iron detected in both of the wells during subsequent sampling events was below the SDWS.

In all of the groundwater samples collected from the shallow monitor wells, pH was detected below 6.5 s.u. The pH remained relatively consistent throughout the reporting period for each of the shallow monitor wells except 2MW-2. Although the pH of the groundwater collected from background monitor well 2MW-2 increased from 5.08 s.u. during the 1st quarter of 2006 to 5.98 s.u. during the 3rd quarter of 2006, this increase does not appear to warrant cause for concern. The low pH concentrations observed in the shallow monitor wells are not considered abnormal for the surficial aquifer.

TDS was detected above 500 mg/L in groundwater from monitor well 4MW-1 on all four sampling occasions, but in groundwater from monitor wells 4MW-5 and 2MW-6 only during the 3rd quarter 2005 sampling event. The exceedance of the SDWS for TDS in the Florida Aquifer monitoring well 4MW-1, located upgradient of the Class I landfill, is associated with a known contaminant plume, the source of which is not associated with the Class I landfill. However, the TDS concentrations detected in 4MW-1 have shown a decreasing trend over the 2005 – 2006 monitoring period. There is also a direct relationship between the concentrations of TDS detected and both the measured conductivity and chlorides of the groundwater collected from monitor well 4MW-1 over the monitoring period.

2.4.3 Exceedance of Groundwater Cleanup Target Levels

Groundwater Cleanup Target Levels (GCTLs) for various contaminants are established in Table 1 of Chapter 62-777 F.A.C. The GCTLs for two parameters were exceeded in groundwater monitoring wells sampled at the West Pasco Class I Landfill during the 2005 - 2006 reporting period. These parameters were:

- Ammonia - detected above 2.8 mg/L in the downgradient compliance well 4MW-5; and
- Benzene - detected above 1.0 ug/L in two wells: 2MW-1 and 2MW-6.

The exceedance of the GCTL for ammonia occurred in the Florida Aquifer monitoring well 4MW-5. Ammonia was detected at 6.86 mg/L during the 3rd quarter of 2006. The concentrations of ammonia detected in this well during the three previous sampling events of the 2005 – 2006 reporting period were all below 0.13 mg/L. Therefore, the concentration detected during the 3rd quarter of 2006 is a significant increase and may represent either an analytical error or a developing condition that may warrant further attention and evaluation. However, the absence of elevated concentrations of ammonia in the detection wells located between the landfill cells and monitor well 4MW-5 suggests that the landfill cells are not the source of the elevated concentration detected in 4MW-5.

Benzene was detected above 1.0 ug/L in groundwater from the surficial aquifer background monitor wells 2MW-1 and 2MW-6 during the 3rd quarter of 2005. The results of resampling activities performed on the two wells in December 2005

indicated that although benzene was still detected, it was below the GCTL in both wells. Groundwater samples were not collected from these two wells during the subsequent sampling events performed in 2006 because both wells were dry. The benzene in the surficial aquifer background monitor well 2MW-1, located upgradient of the Class I landfill, is associated with a known contaminant plume, the source of which is not associated with the Class I landfill. Although the source of the benzene detected in 2MW-6 has not been identified, the fact that this well is located on the east side of the site, upgradient of the solid waste cells, would suggest that the source is not associated with the Class I landfill.

2.5 Groundwater Level Interpretation

Water level measurements were collected during the sampling events conducted during the 2005 – 2006 reporting period. These measurements are presented in Tables 2-1 through 2-20 and groundwater elevation maps generated using these measurements are presented as **Figures 2-55 through 2-62.** The water level data collected at each well is presented as feet above the National Geodetic Vertical Datum (NGVD) in the tables and figures associated with this evaluation. Water level measurements were collected at all of the Floridan Aquifer wells and the surficial aquifer wells 2MW-1, 2MW-2, 2MW-6, and 2MW-17. No water level measurements are available for the other three surficial aquifer wells (2MW-4, 2MW-5, and 2MW-13) because these wells were consistently dry throughout the 2005 – 2006 reporting period.

The groundwater elevation maps of the Floridan Aquifer and the surficial aquifer at the West Pasco County Landfill indicate the groundwater flow direction in both aquifers to be to the northwest. This conforms to the regional interpretation of groundwater flow. Based on the relatively consistent spacing of the contours in the groundwater elevation maps generated for the previous groundwater elevation interpretations, the hydraulic gradient (i) in both the Floridan Aquifer and the surficial aquifer appear to be approximately the same as previously calculated, (approximately 1.5 feet per 1,000 feet or 1.5×10^{-3} feet/foot). Based on the results of pumping tests performed in 2001 on two Floridan Aquifer wells at the site, a conservative hydraulic conductivity (K) value of 9.0 feet per day was calculated. Combining these values with the assumption that the effective porosity (n) of the Floridan Aquifer is 15% and using the equation $V = Ki/n$, the groundwater flow velocity (V) in the Floridan Aquifer is approximately 0.1 feet per day or just over 16 feet per 6 months. Although local hydraulic conductivity values have not been determined for the surficial aquifer at the site, it is assumed that they would be significantly lower than the hydraulic conductivity value generated for the Floridan Aquifer. Therefore, the groundwater flow velocity in the surficial aquifer would be expected to be significantly lower than the flow velocity calculated for the Floridan Aquifer.

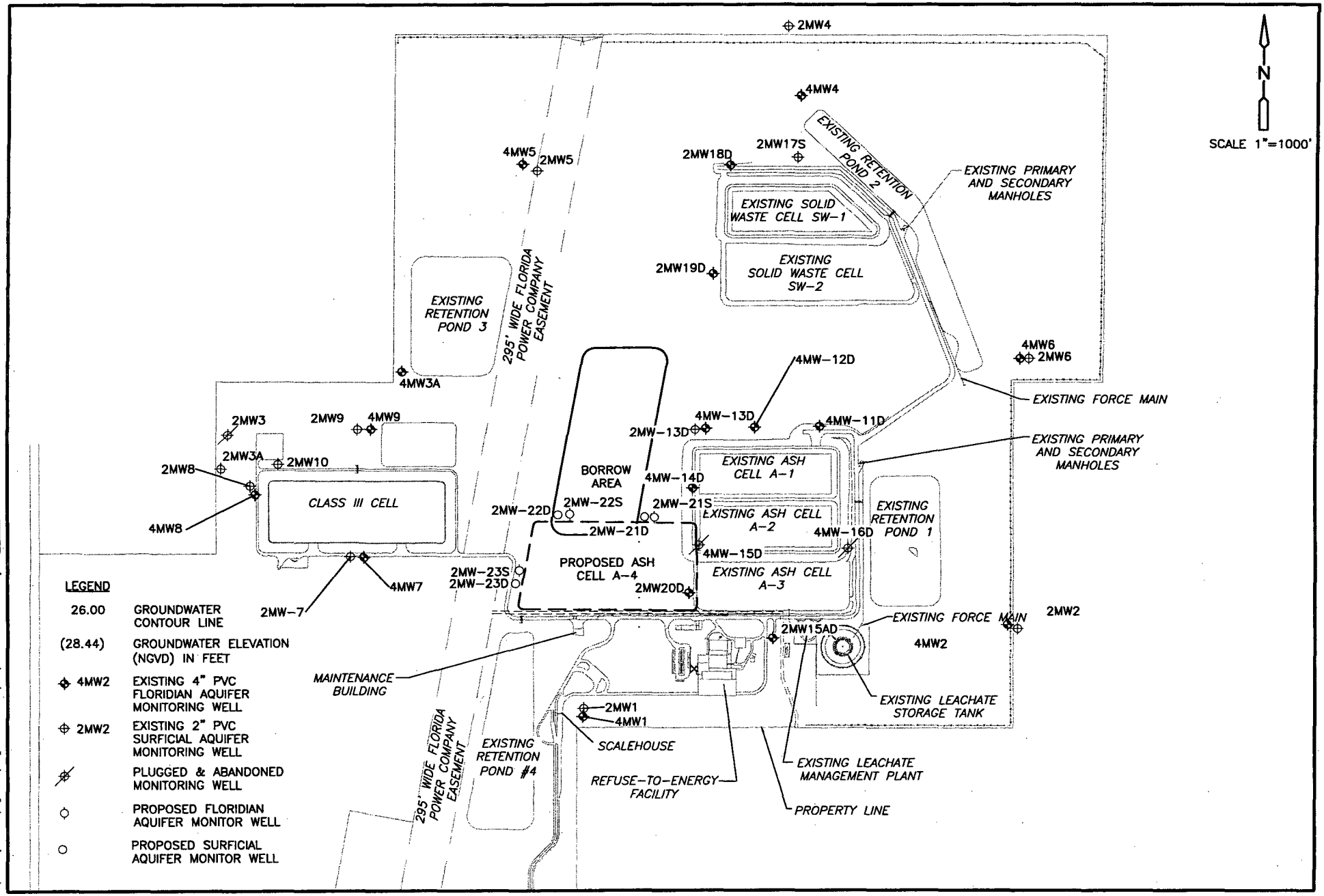
Hydrographs comparing the water level measurements of each of the monitor wells are provided as Figures 2-25 and 2-26. The hydrographs reveal a general decline of

the piezometric surface of the Floridan Aquifer and the water table of the surficial aquifer over the monitoring period from 2005 to 2006. This trend is probably related to the compounding impact of the drought conditions that were present during this period.

2.6 Groundwater Monitoring Plan Review

As noted, three shallow monitor wells (2MW-4, 2MW-5, and 2MW-13) are included in the WQMP; however, these wells have been dry since 1995. As such, it appears that these wells do not provide useful groundwater quality data for the implementation of this plan. Nevertheless, monitoring of these wells should continue, and in the event the water levels in the wells increase, sampling of the wells will be reinstated.

Based on the groundwater quality data collected at the landfill during this monitoring period, the current Groundwater Monitoring Plan appears adequate. However, several wells should be carefully monitored to evaluate anomalously elevated concentrations of particular parameters detected during the 2005 – 2006 reporting period. These include ammonia in 4MW-5 and benzene in 2MW-1 and 2MW-6.



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CDM

West Pasco Landfill And
Resource Recovery Facility
Pasco County Board Of County Commissioners
Utilities Services Branch, Pasco County, Florida

Figure - 1-1
Monitor Wells at the West
Pasco County Landfill

Figure 2-1: Detection Wells - Conductivity

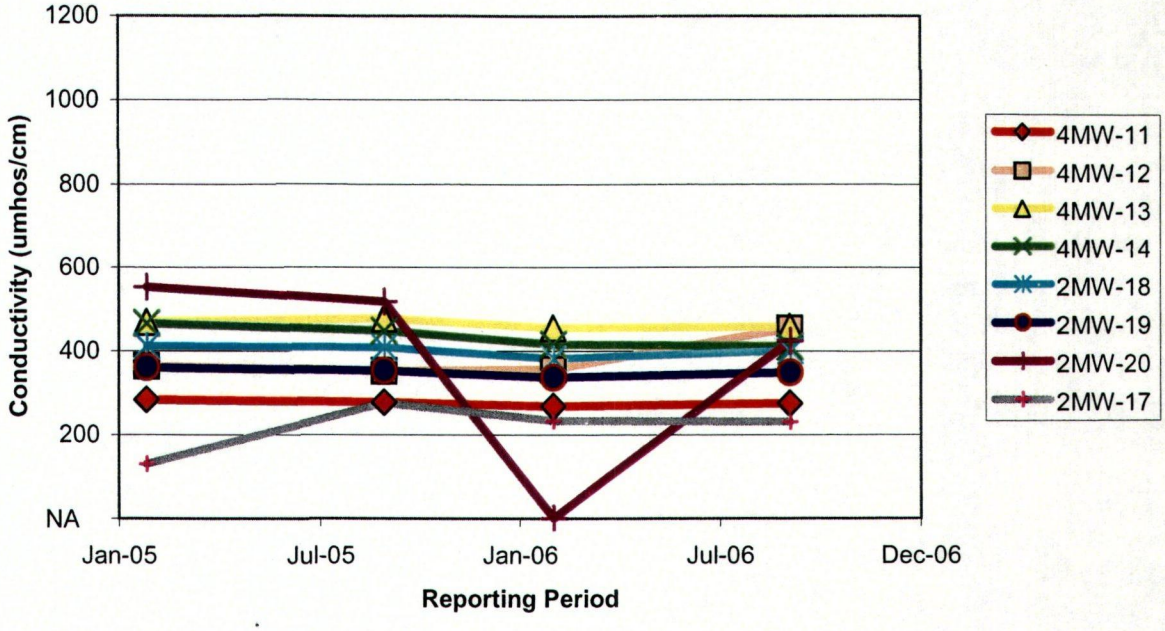
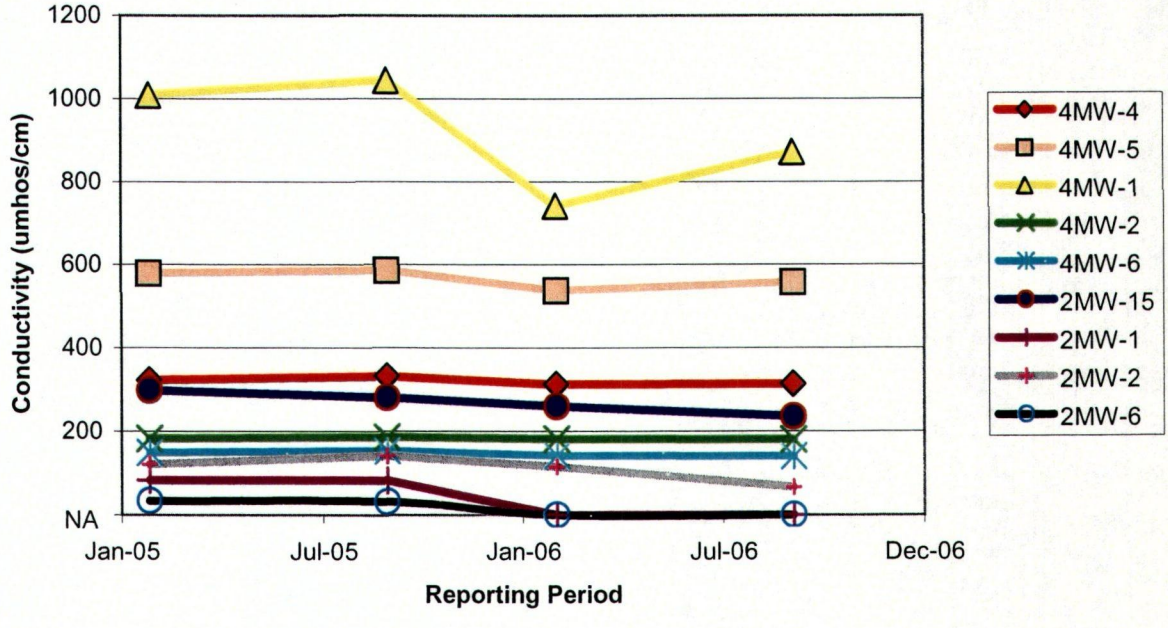


Figure 2-2: Downgradient & Background Wells - Conductivity



Notes: 1. NA represents "Not Analyzed" due to dry well conditions

Figure 2-3: Detection Wells - pH

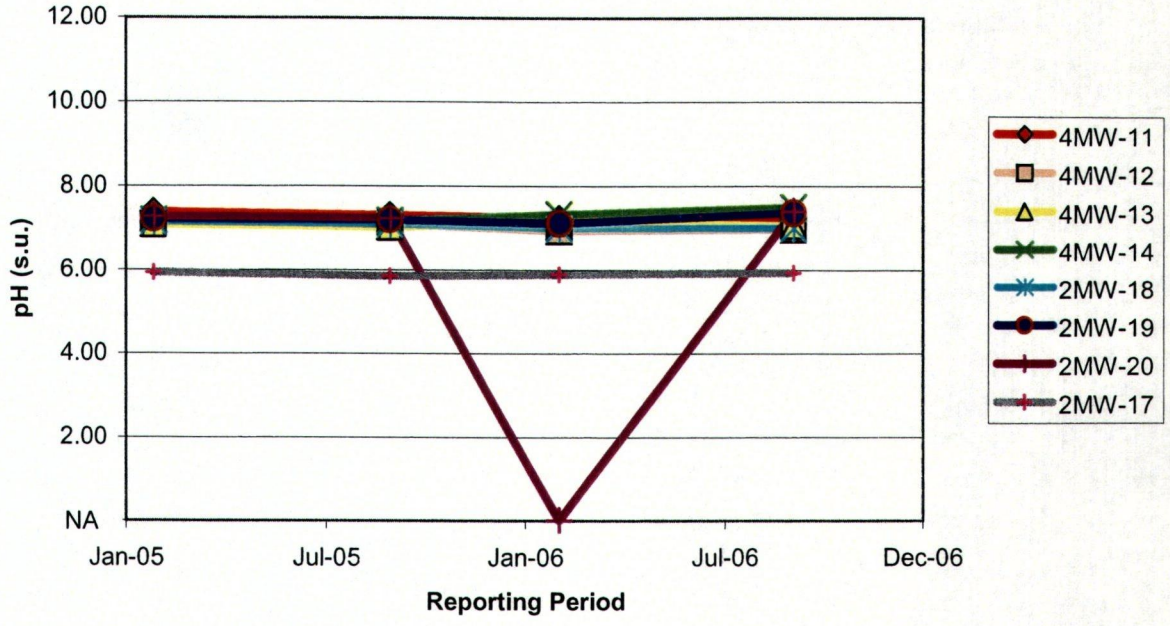
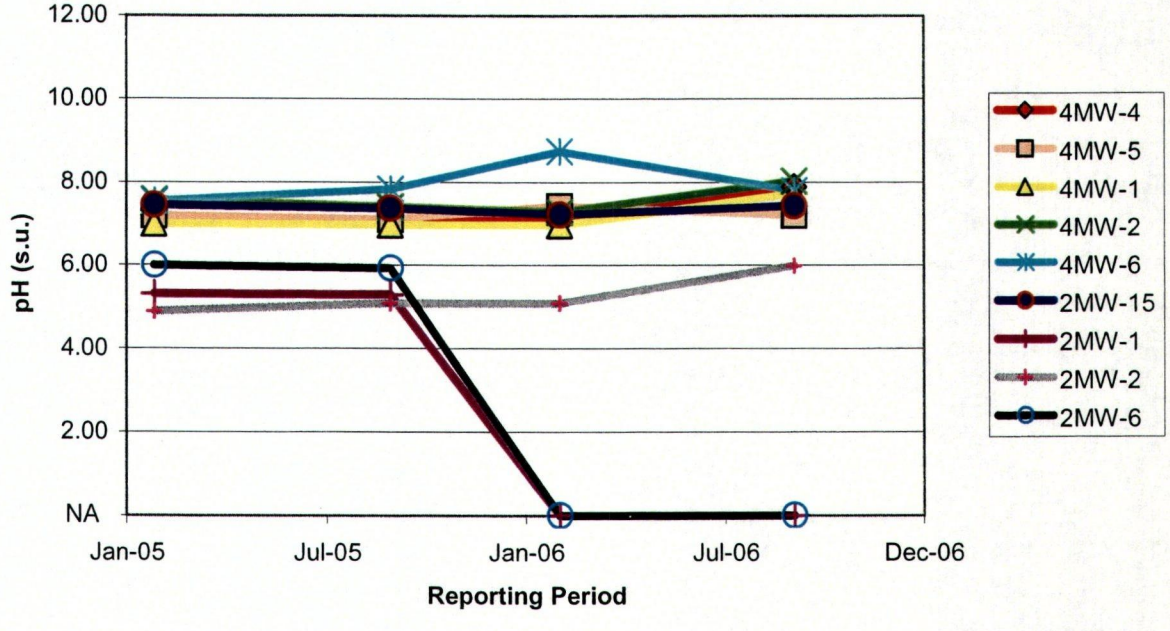
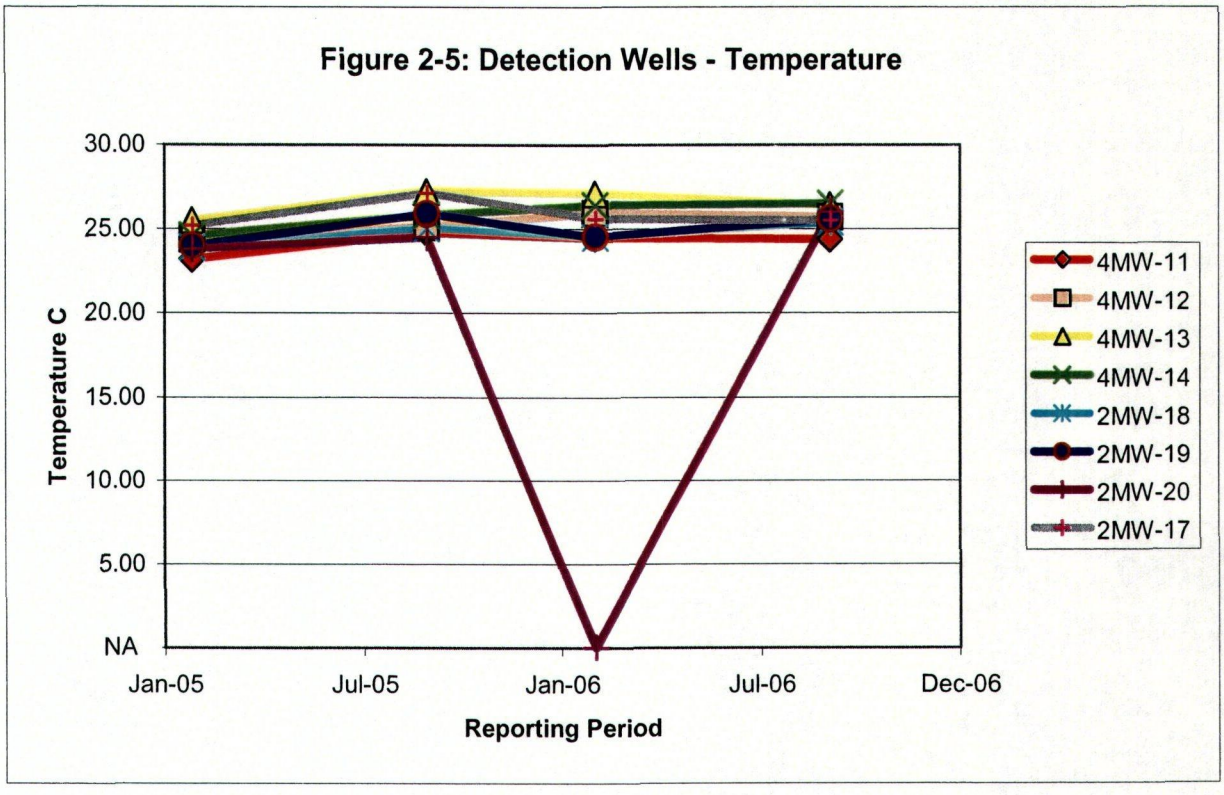
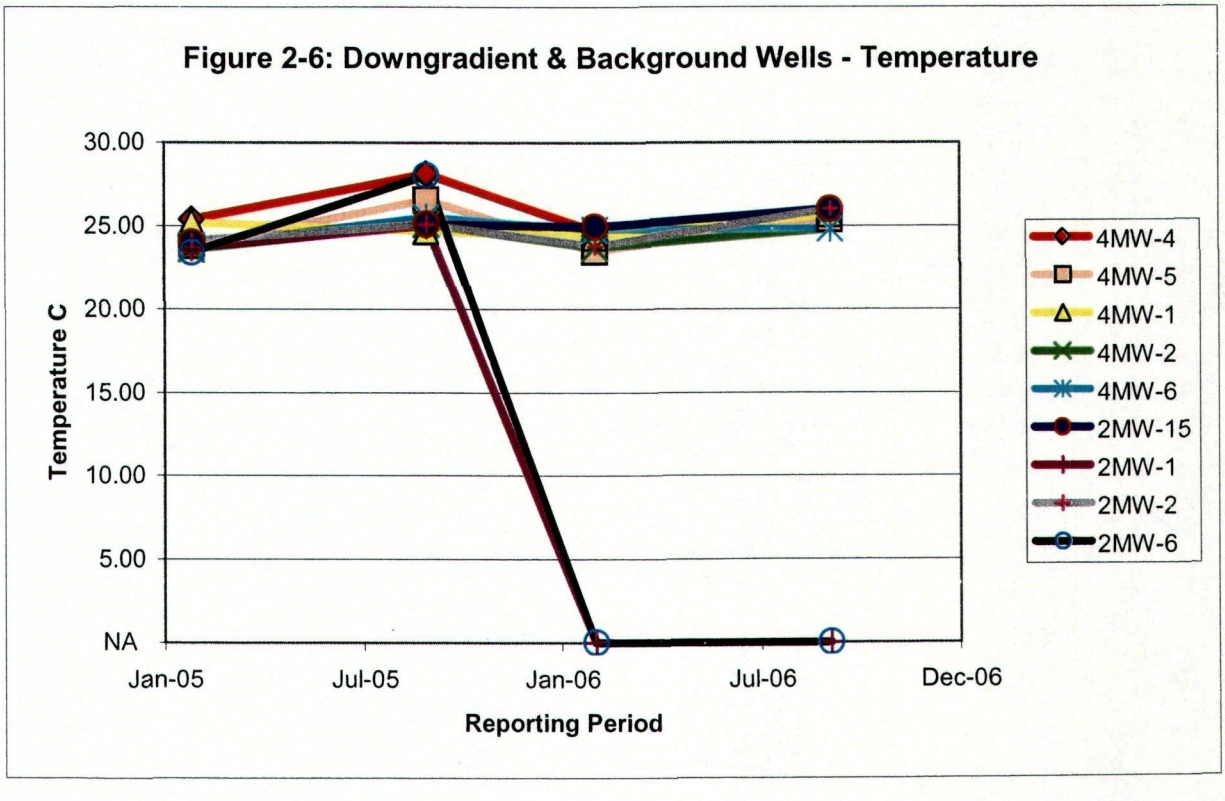


Figure 2-4: Downgradient & Background Wells - pH



Notes: 1. NA represents "Not Analyzed" due to dry well conditions





Notes: 1. NA represents "Not Analyzed" due to dry well conditions

Figure 2-7: Detection Wells - Dissolved Oxygen

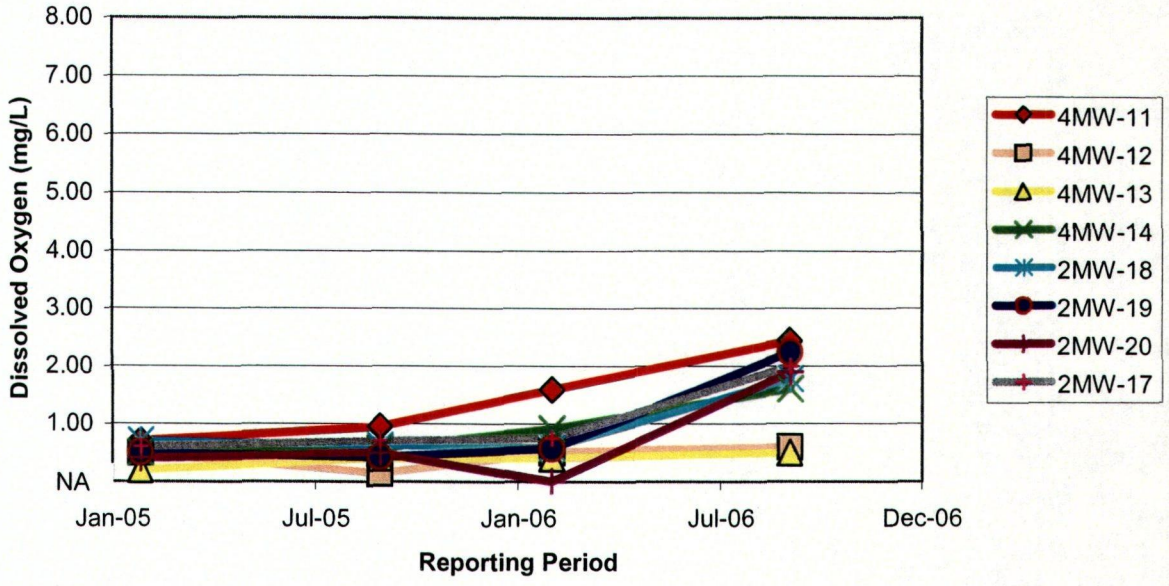
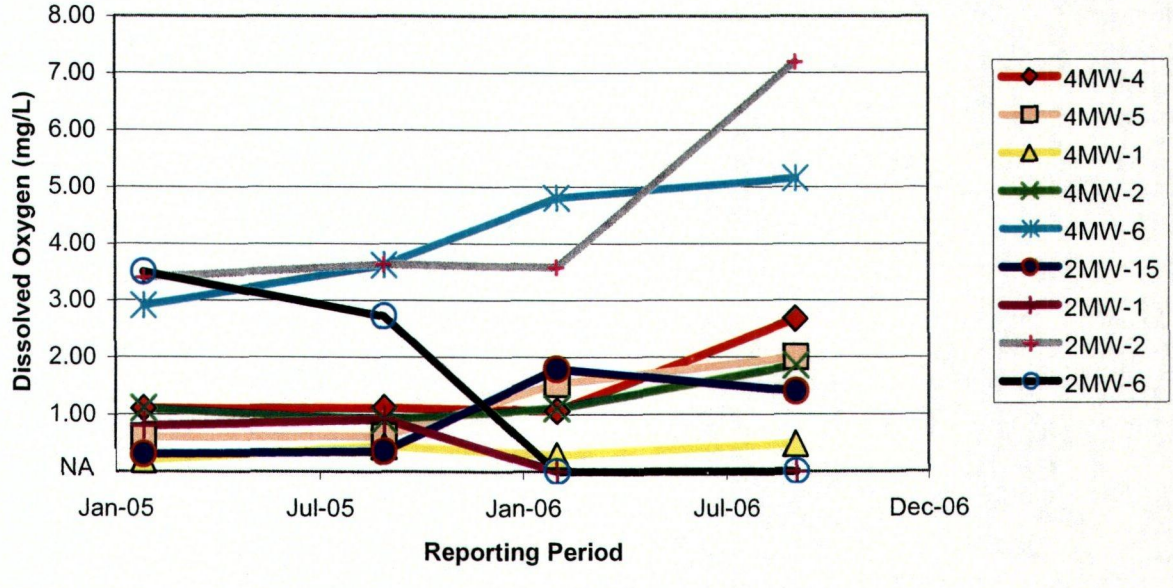


Figure 2-8: Downgradient & Background Wells - Dissolved Oxygen



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-9: Detection Wells - Turbidity

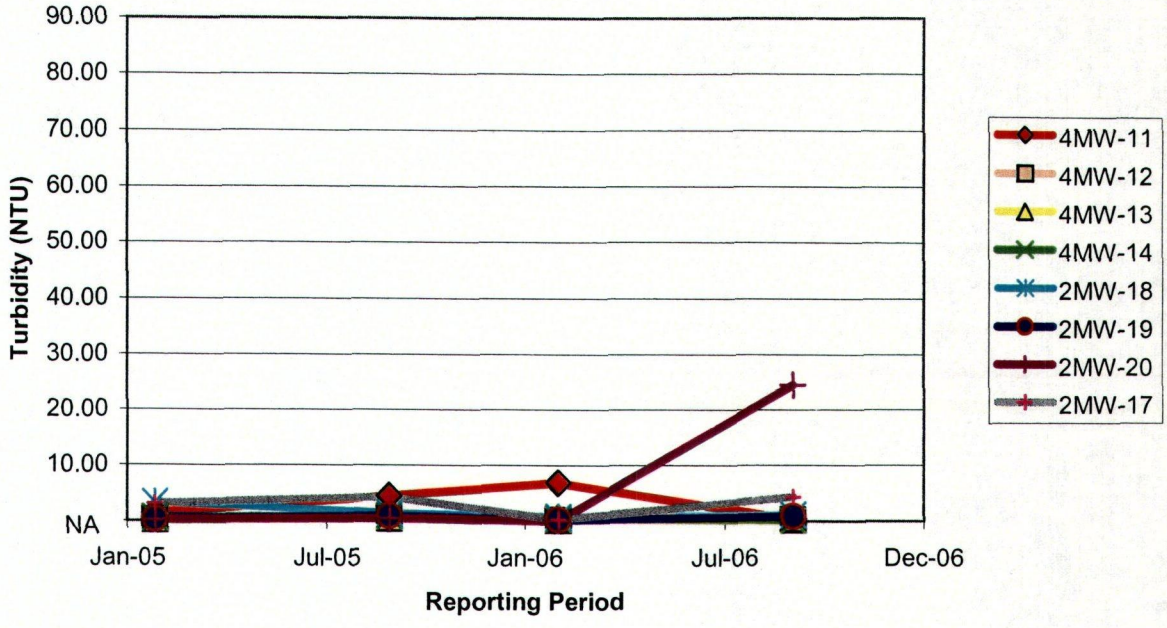
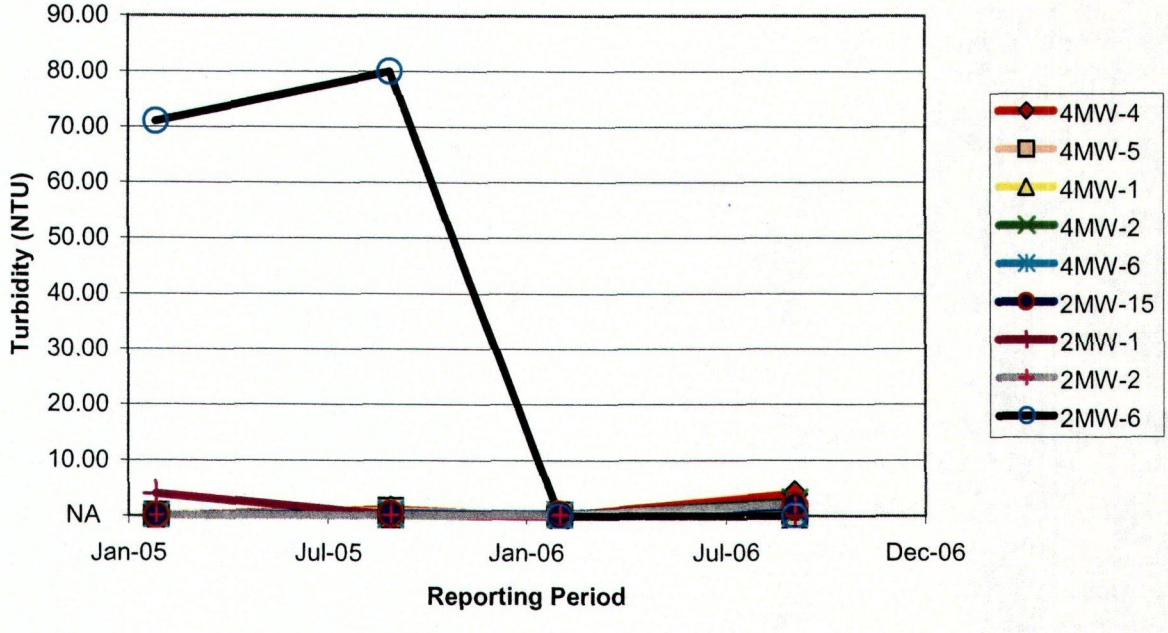


Figure 2-10: Downgradient & Background Wells - Turbidity



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-11: Detection Wells - Total Ammonia

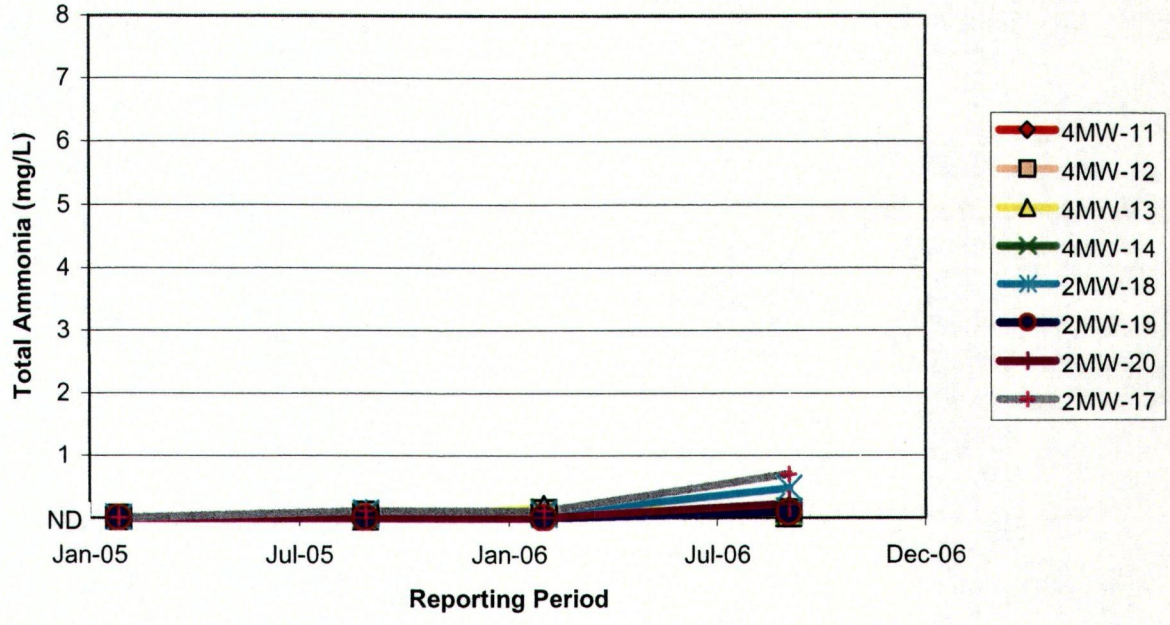
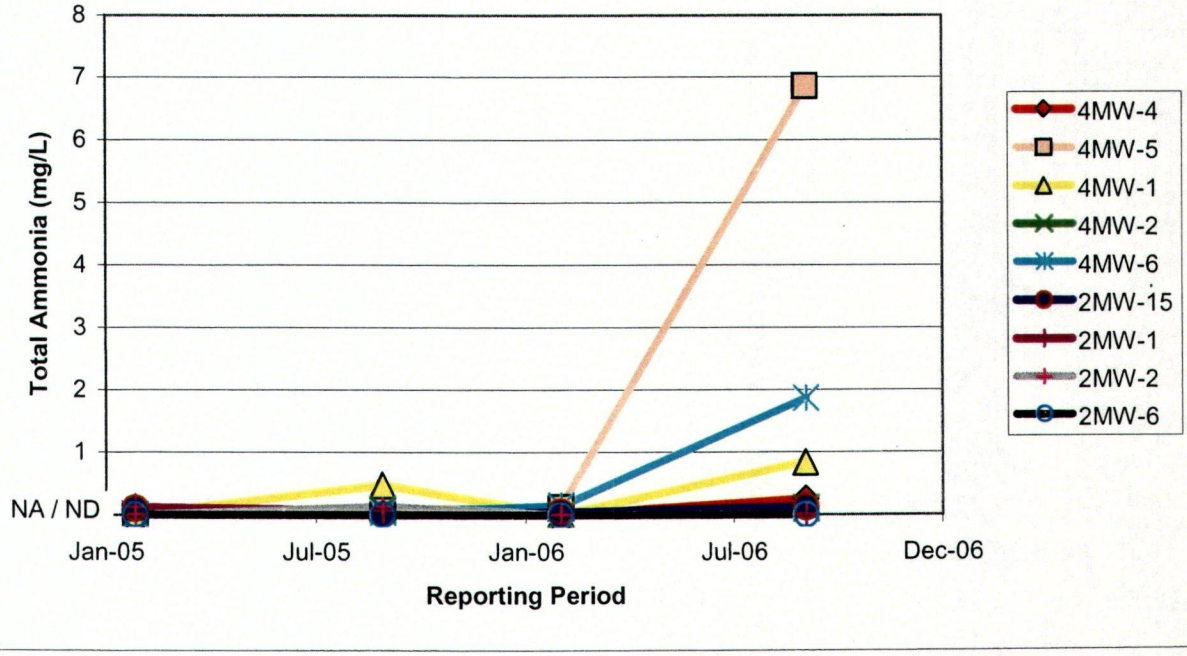


Figure 2-12: Downgradient & Background Wells - Total Ammonia



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-13: Detection Wells - Chlorides

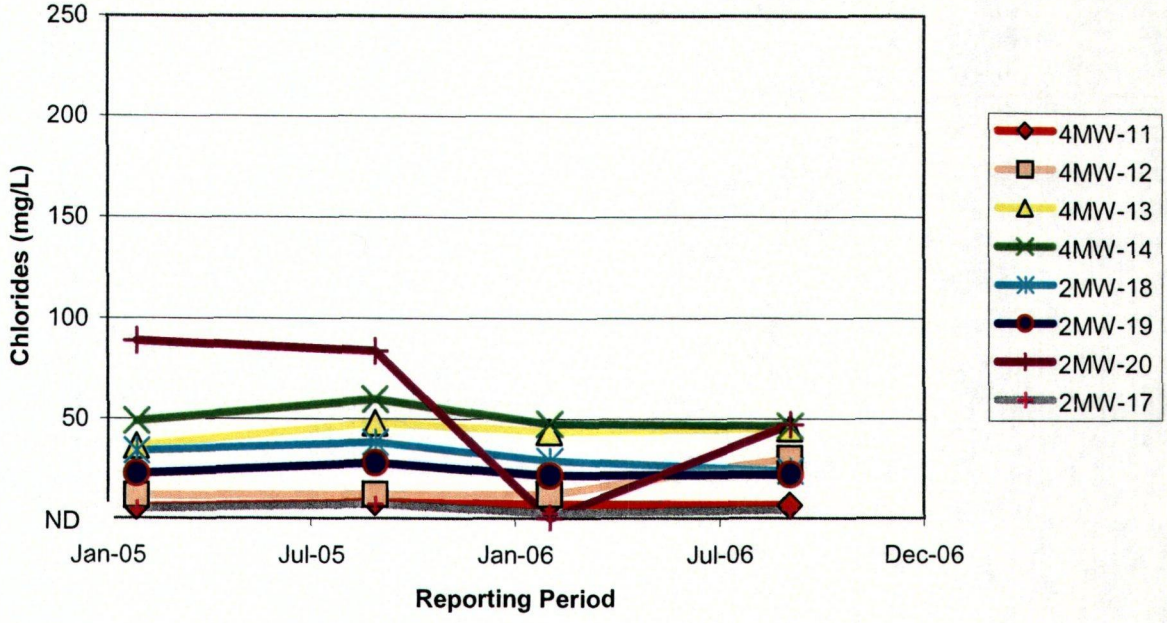
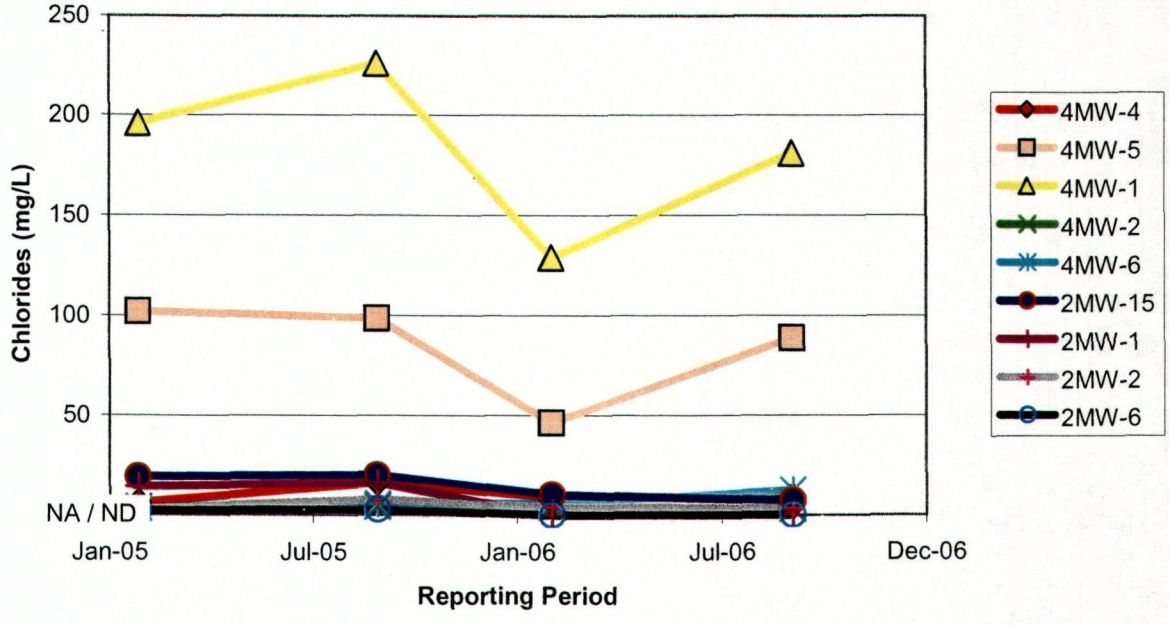


Figure 2-14: Downgradient & Background Wells - Chlorides



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-15: Detection Wells - Iron

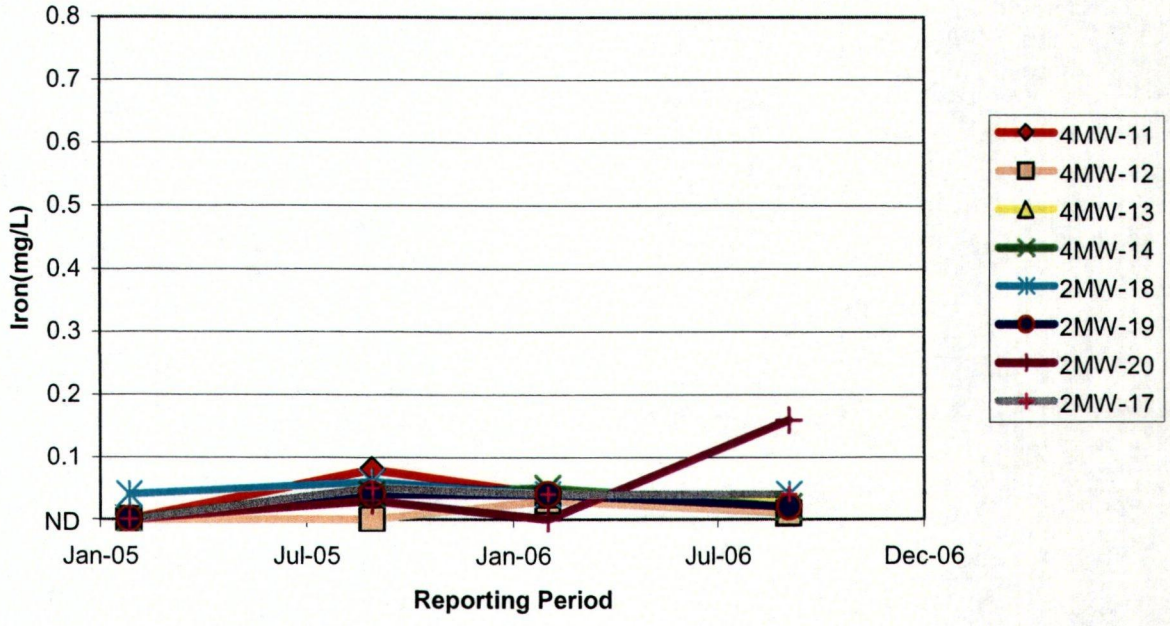
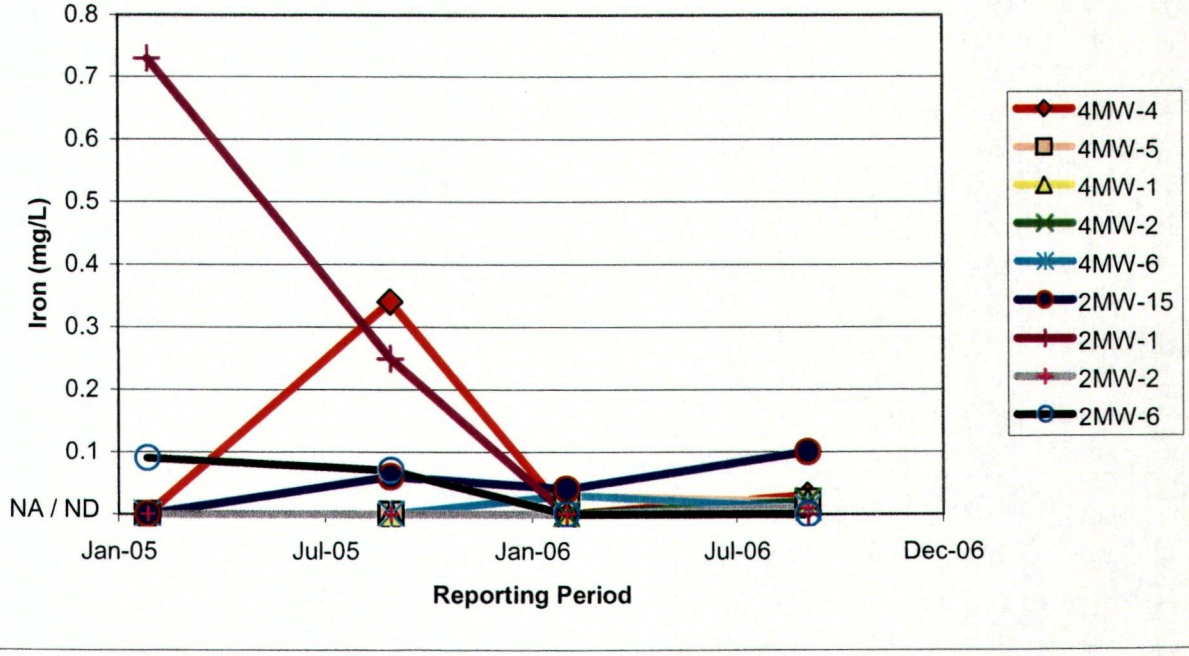


Figure 2-16: Downgradient & Background Wells - Iron



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-17: Detection Wells - Mercury

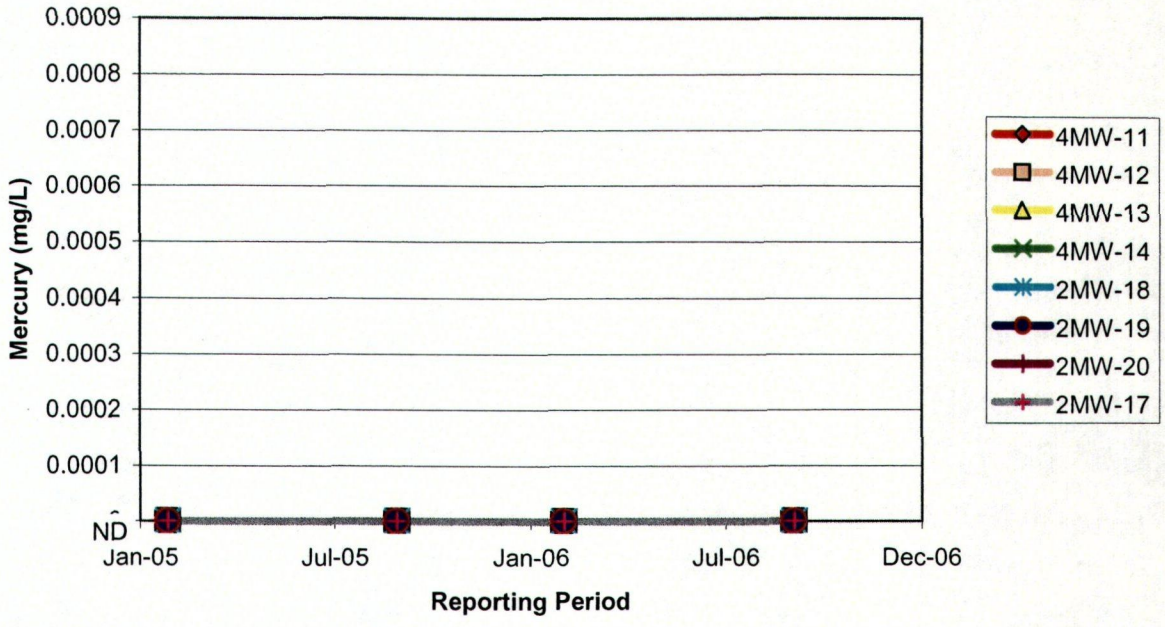
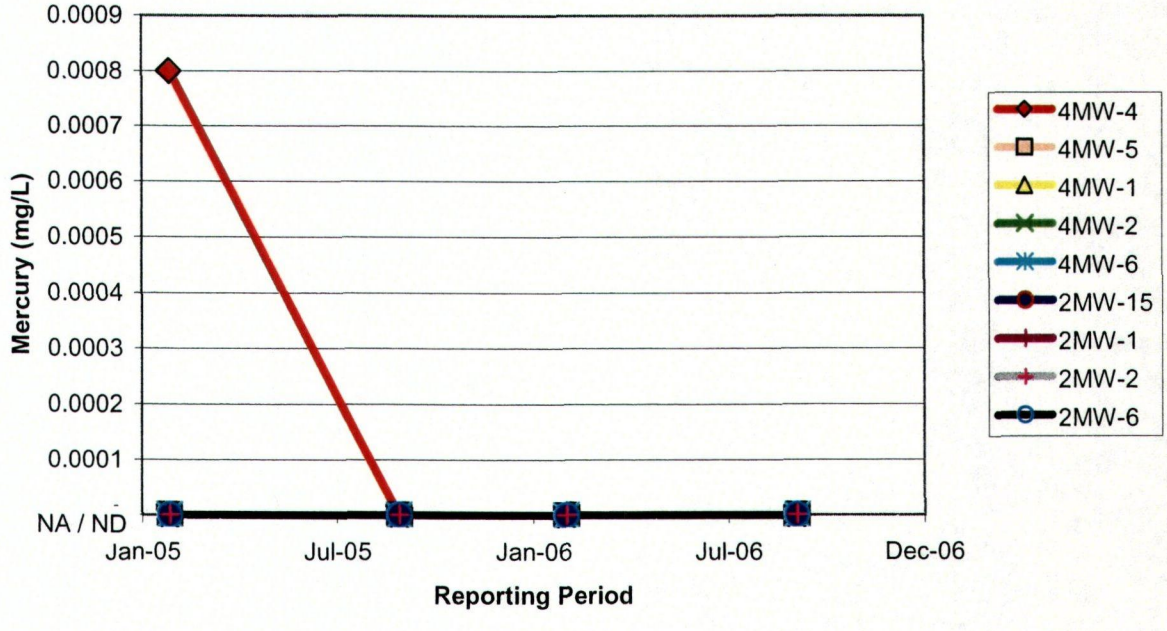


Figure 2-18: Downgradient & Background Wells - Mercury



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-19: Detection Wells - Nitrate

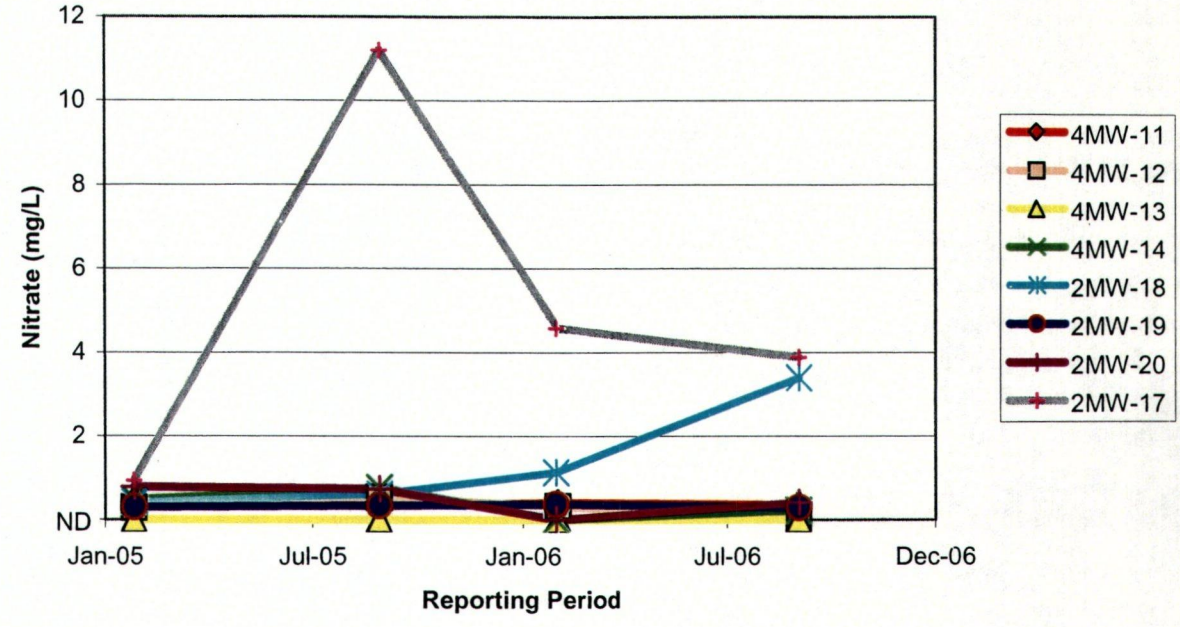
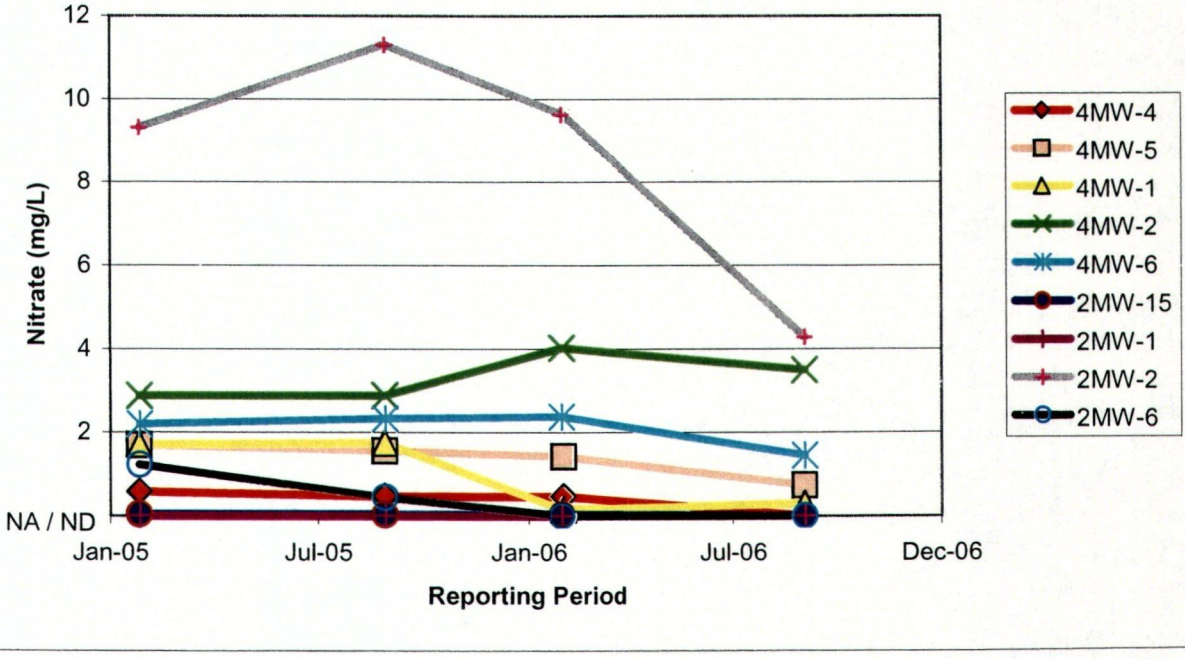


Figure 2-20: Downgradient & Background Wells - Nitrate



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-21: Detection Wells - Sodium

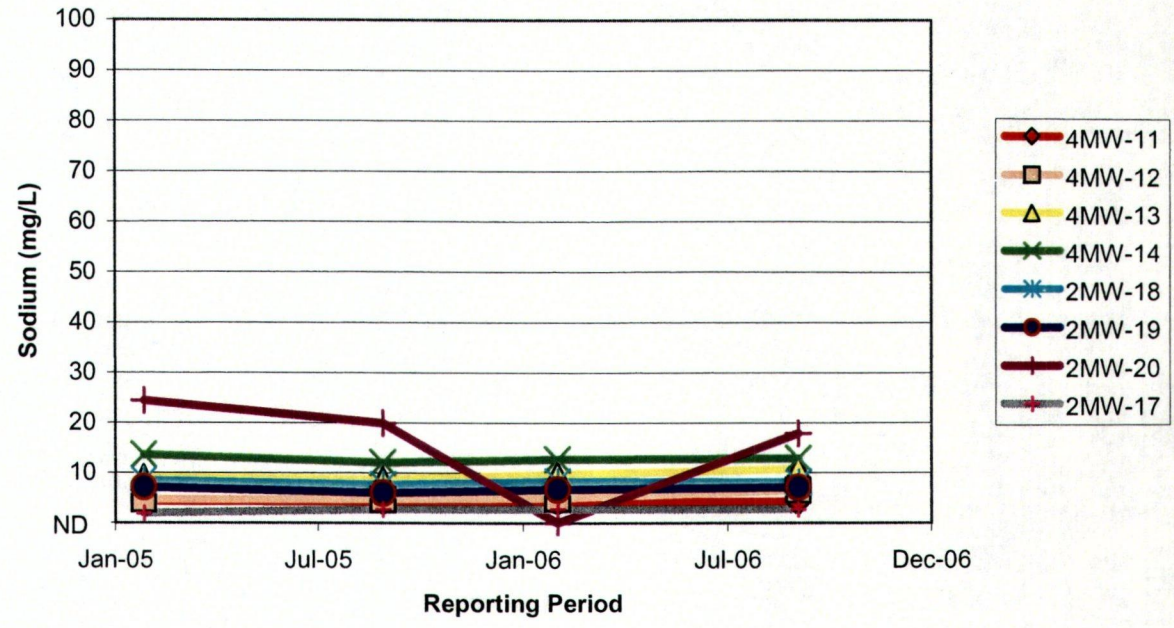
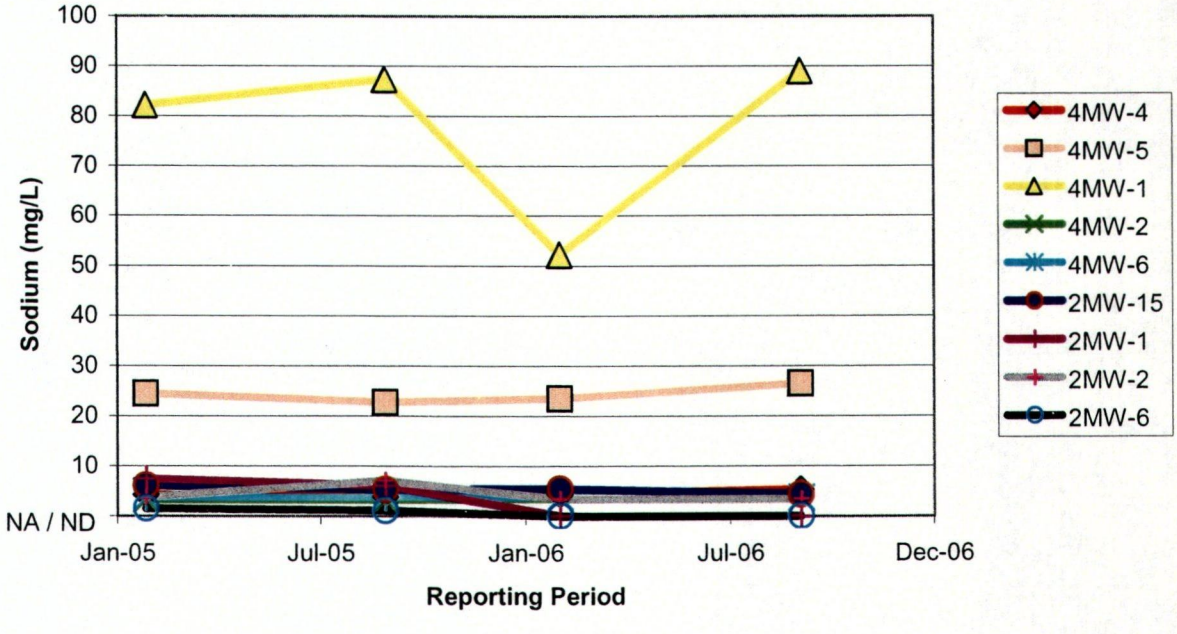


Figure 2-22: Downgradient & Background Wells - Sodium



Notes: 1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-23: Detection Wells - TDS

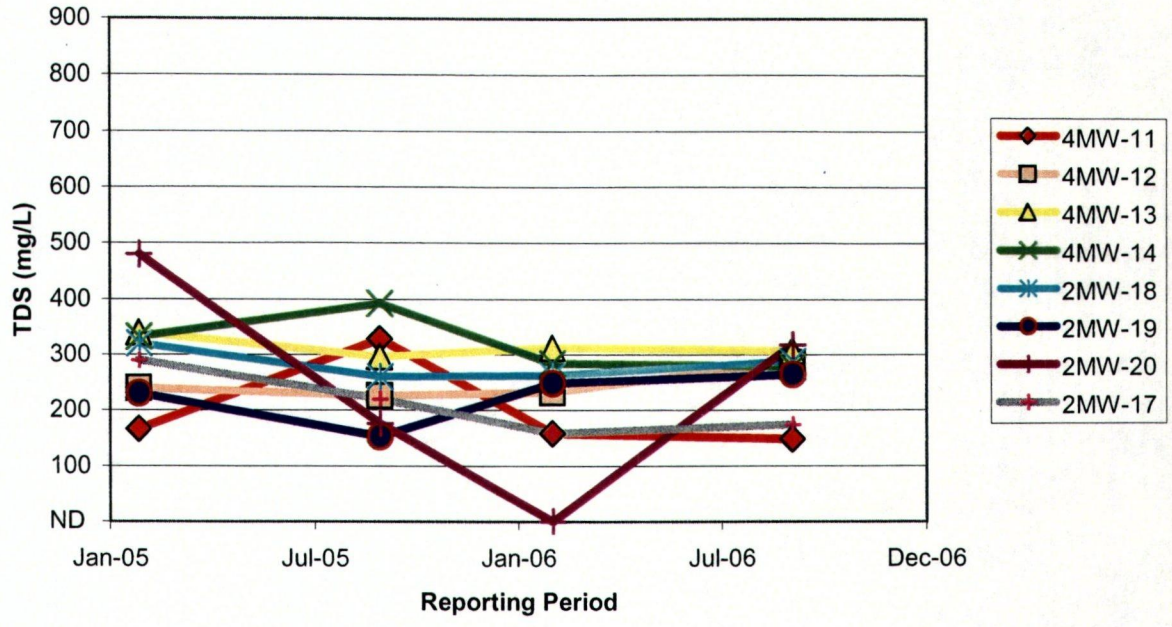
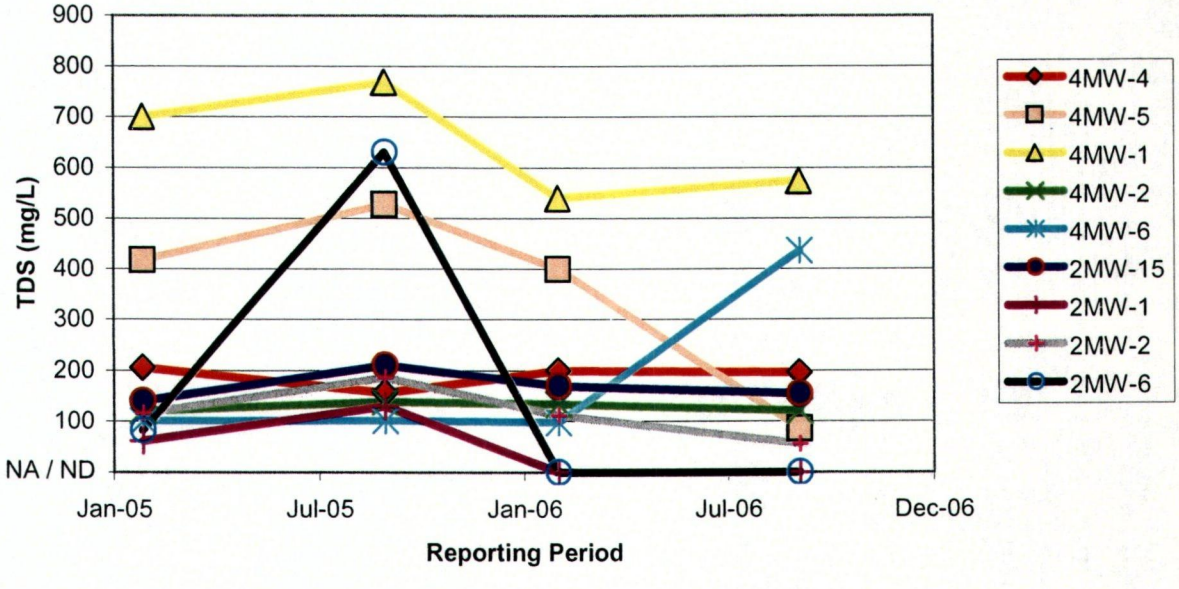


Figure 2-24: Downgradient & Background Wells - TDS



Notes: 1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-25: Detection Wells - Water Level

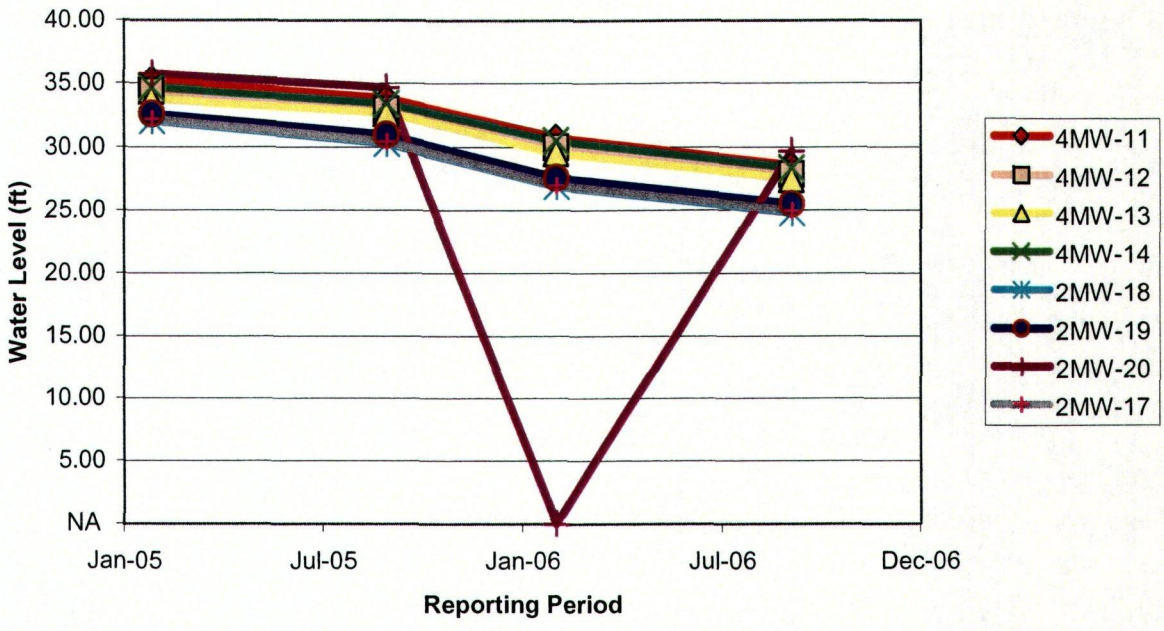
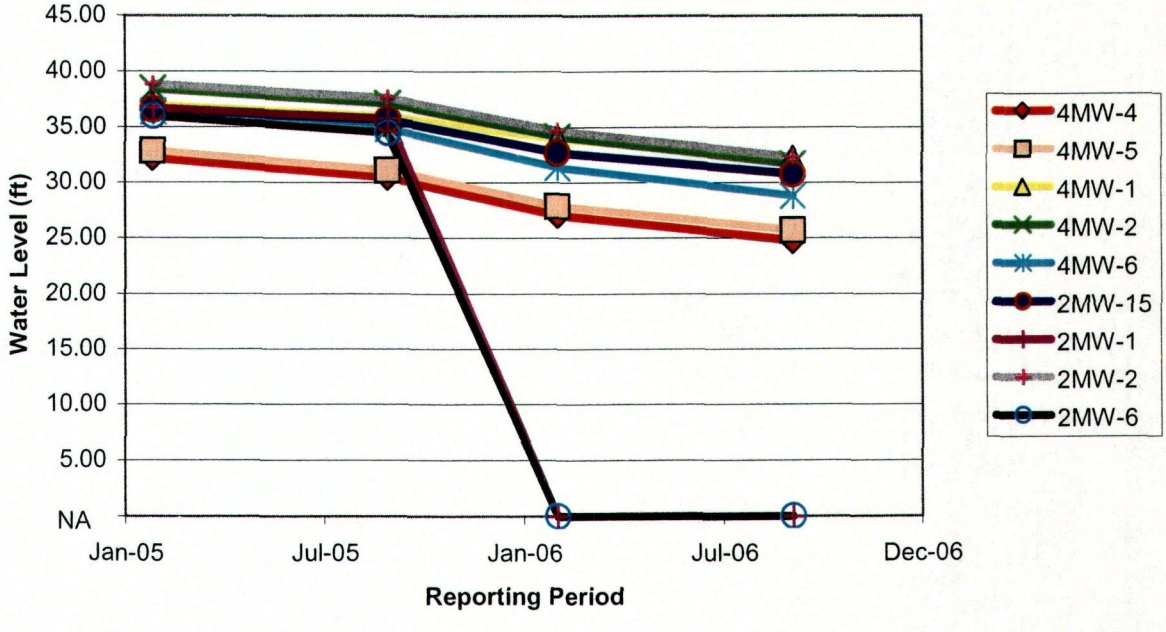


Figure 2-26: Downgradient & Background Wells - Water Level



Notes: 1. NA represents "Not Analyzed" due to dry well conditions

Figure 2-27: Detection Wells - Arsenic

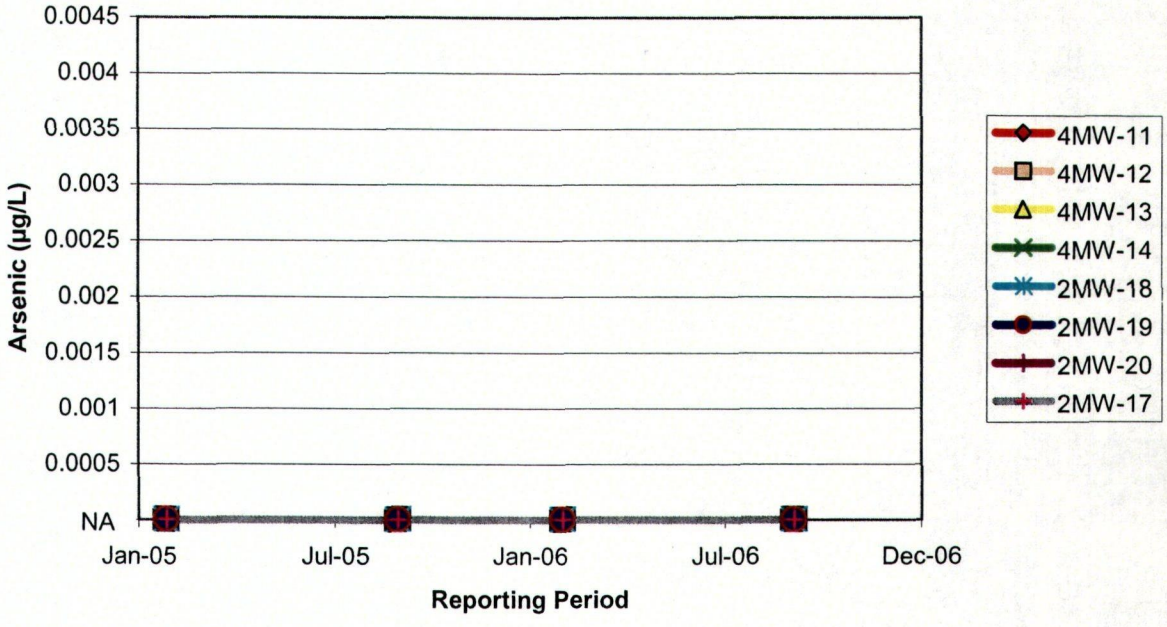
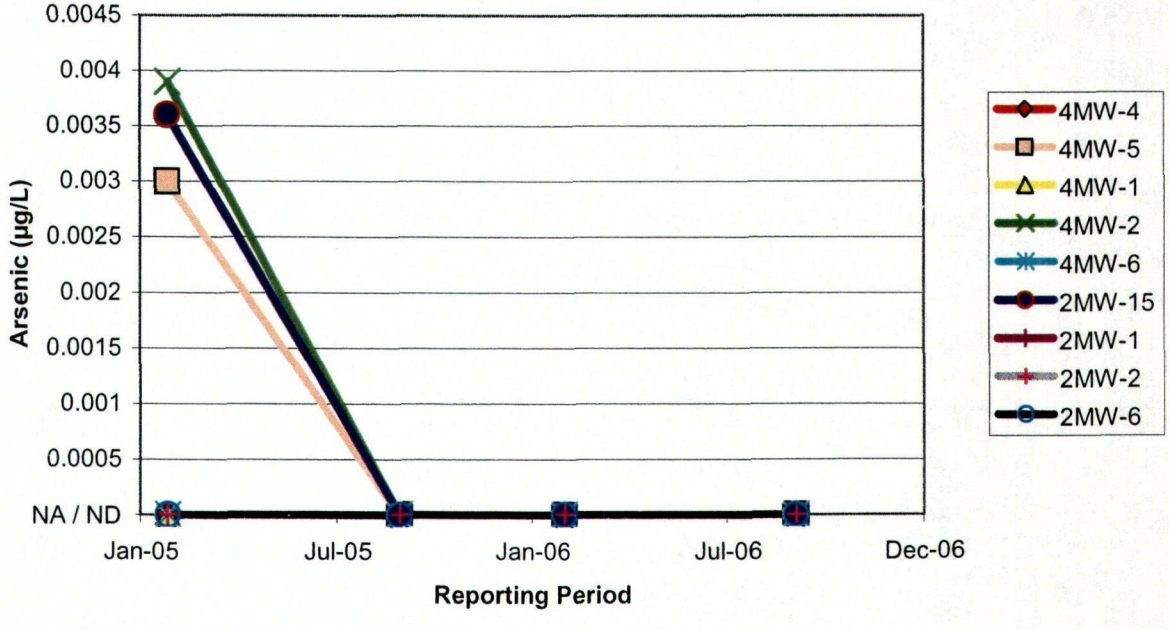


Figure 2-28: Downgradient & Background Wells - Arsenic



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-29: Detection Wells - Barium

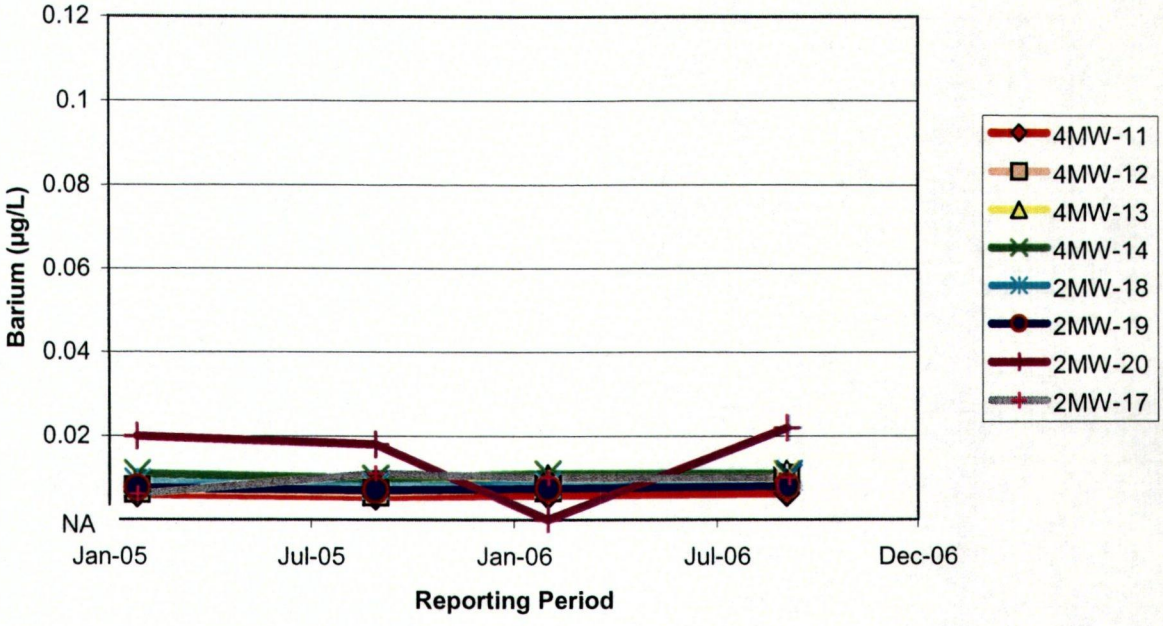
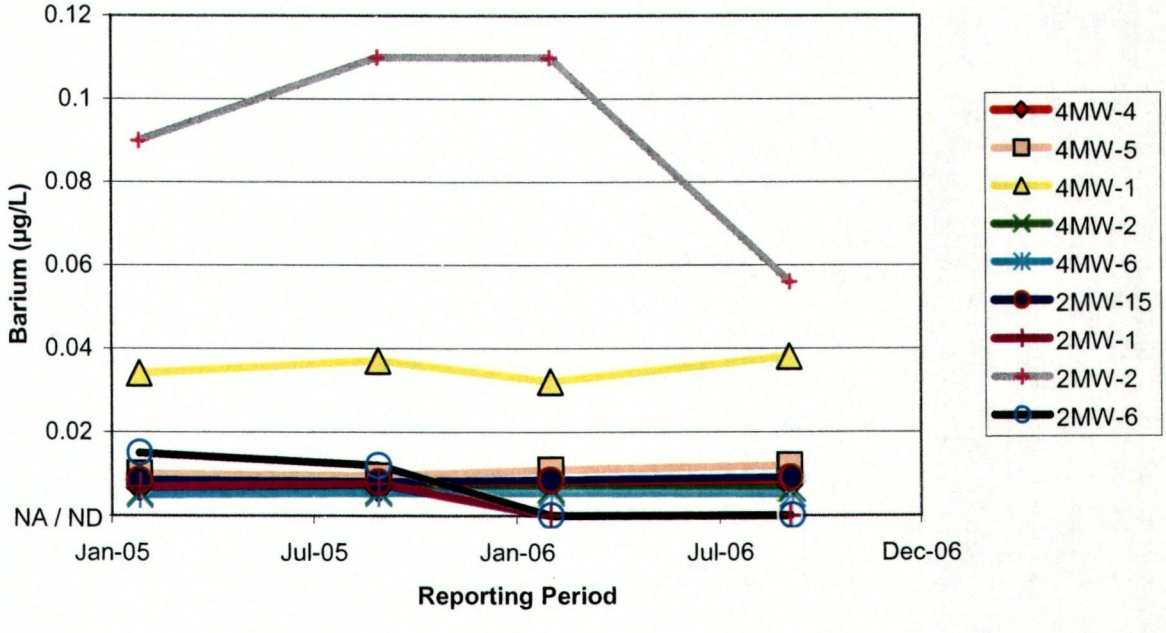


Figure 2-30: Downgradient & Background Wells - Barium



Notes: 1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-31: Detection Wells - Beryllium

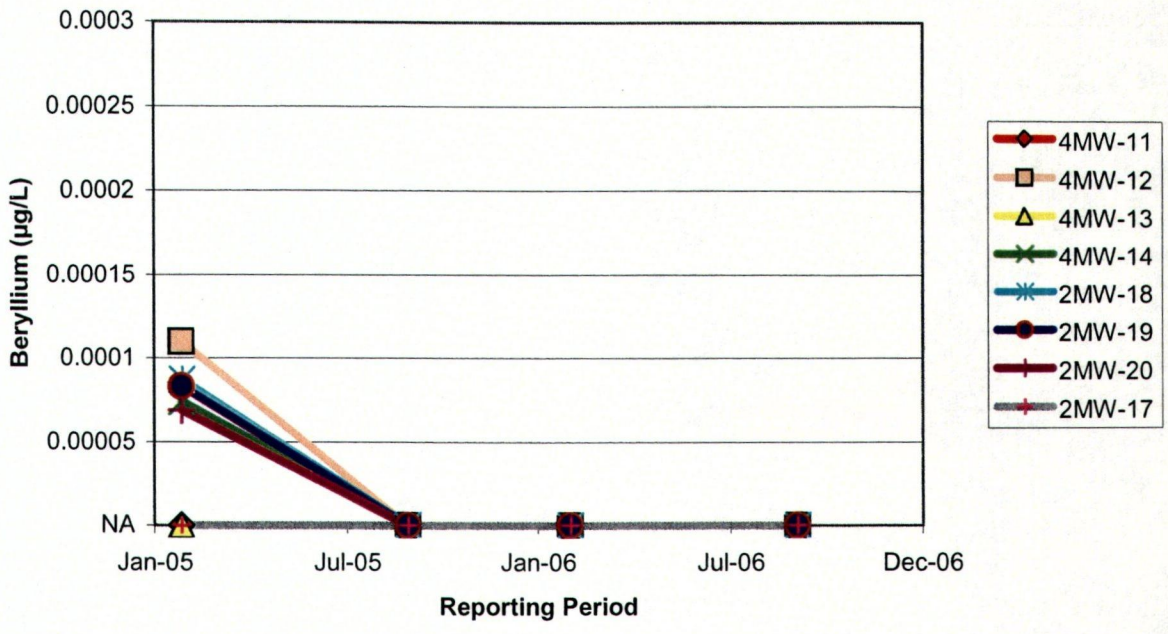
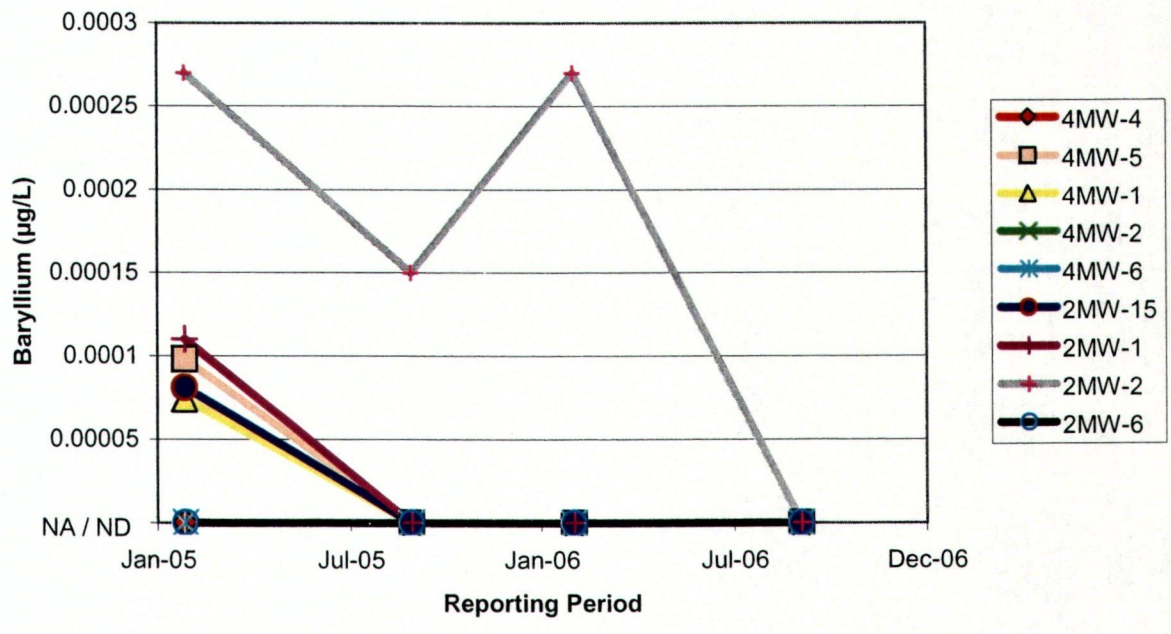


Figure 2-32: Downgradient & Background Wells - Beryllium



Notes: 1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-33: Detection Wells - Cadmium

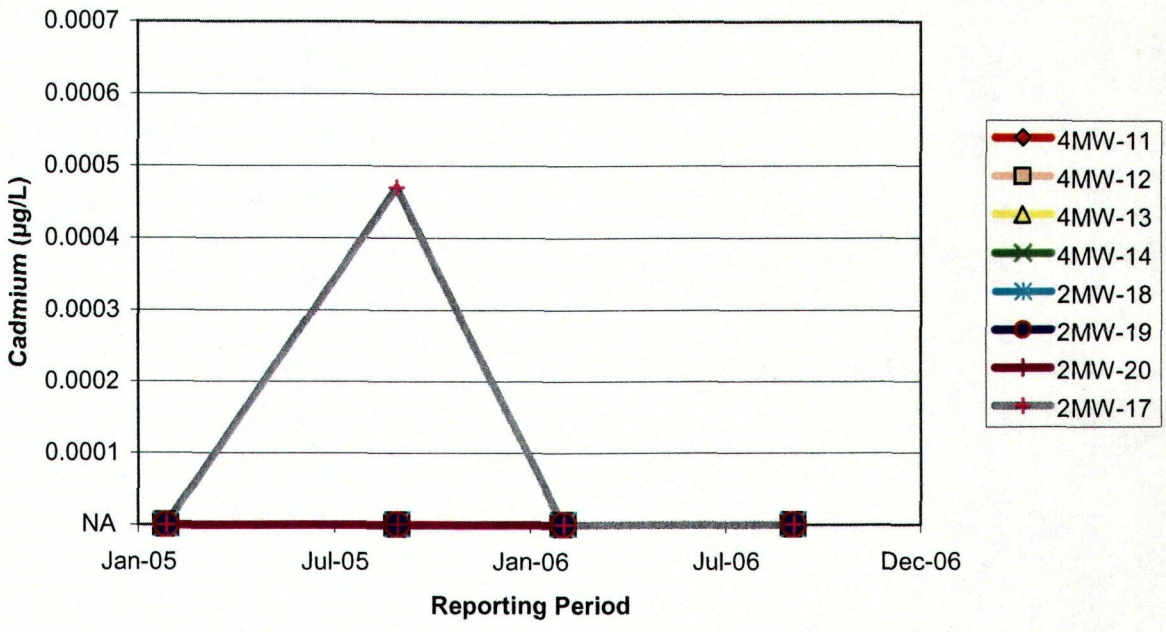
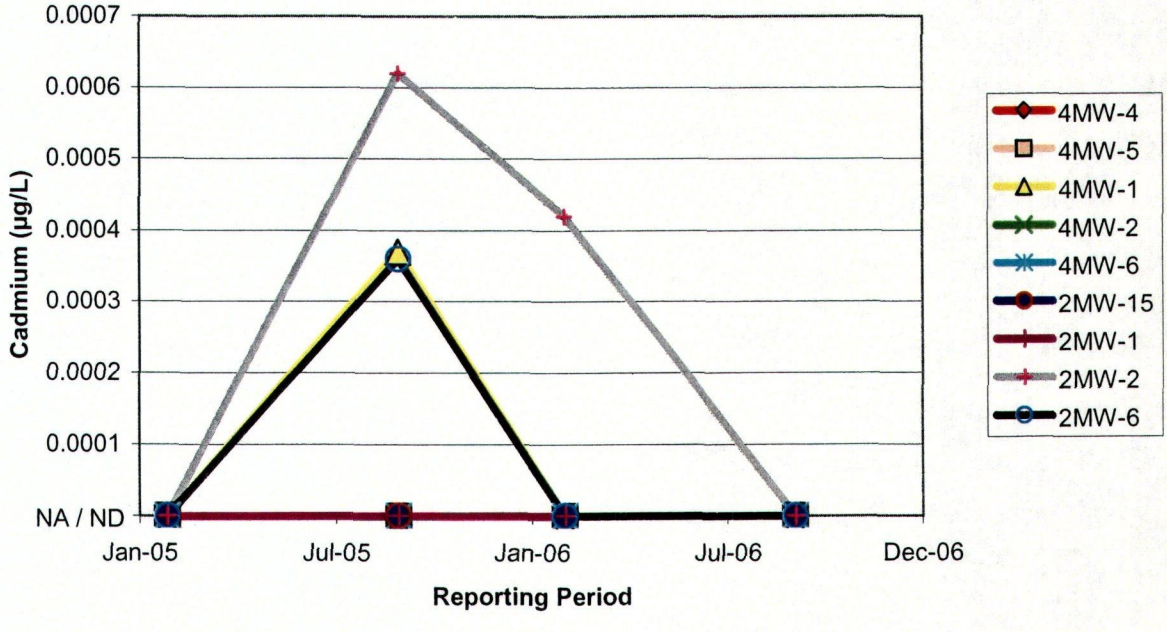


Figure 2-34: Downgradient & Background Wells - Cadmium



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-35: Detection Wells - Chromium

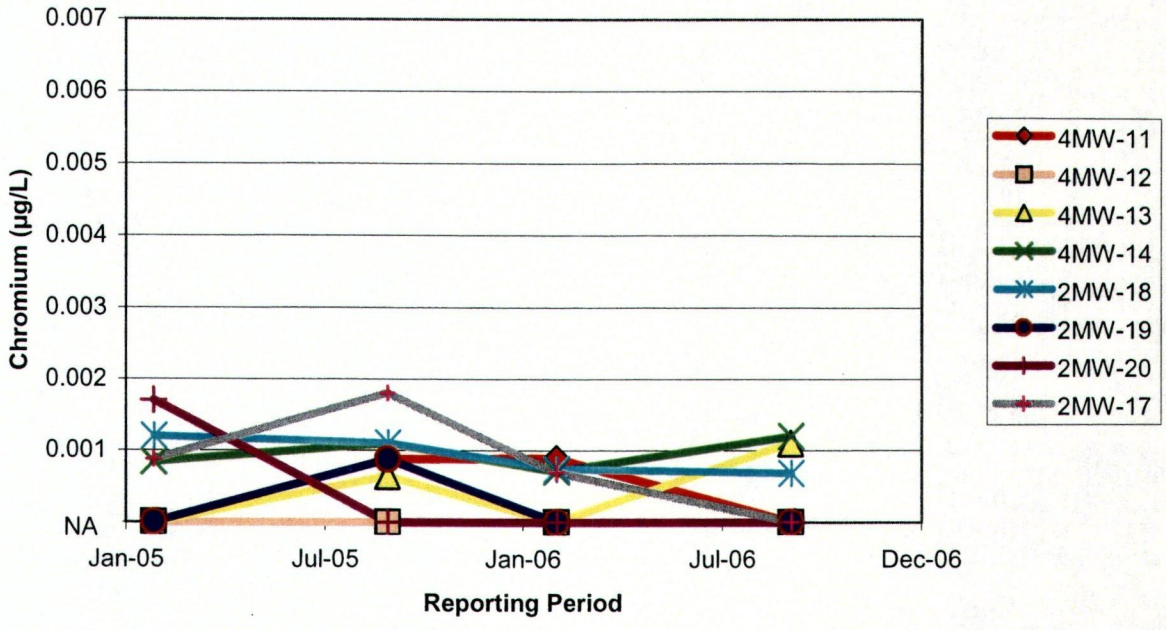
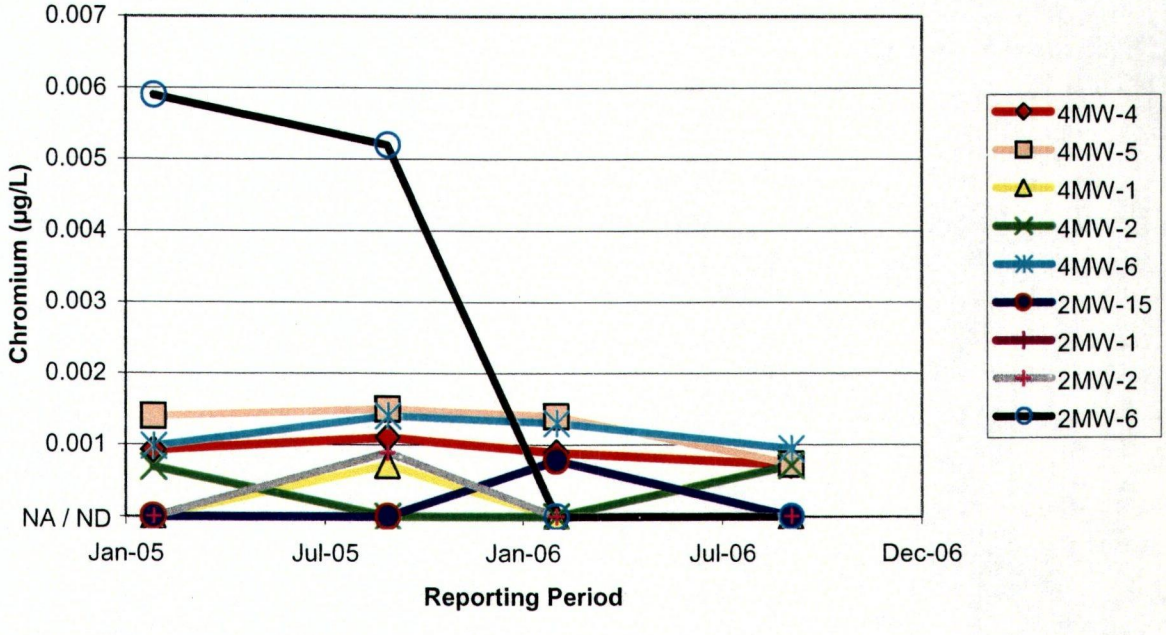


Figure 2-36: Downgradient & Background Wells - Chromium



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-37: Detection Wells - Cobalt

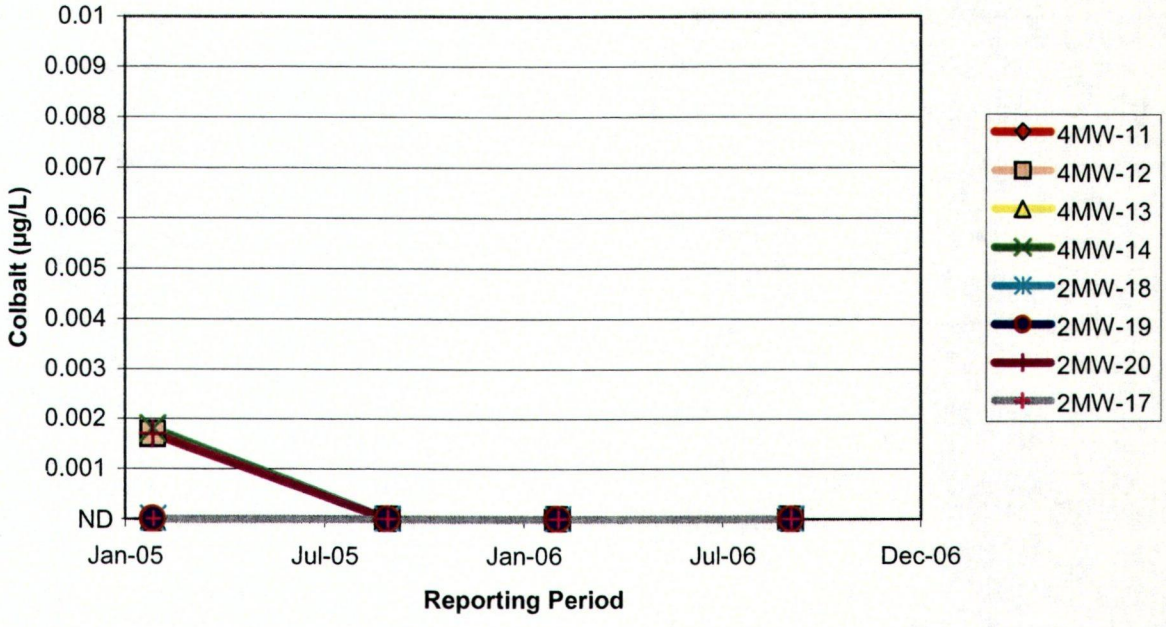
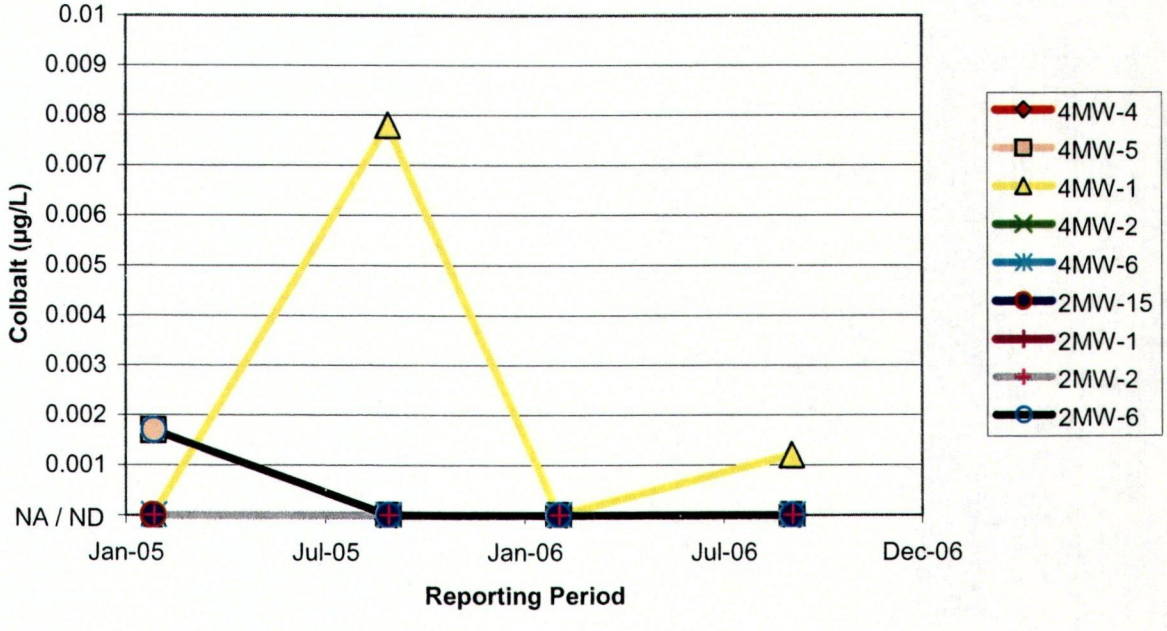


Figure 2-38: Downgradient & Background Wells - Cobalt



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-39: Detection Wells - Copper

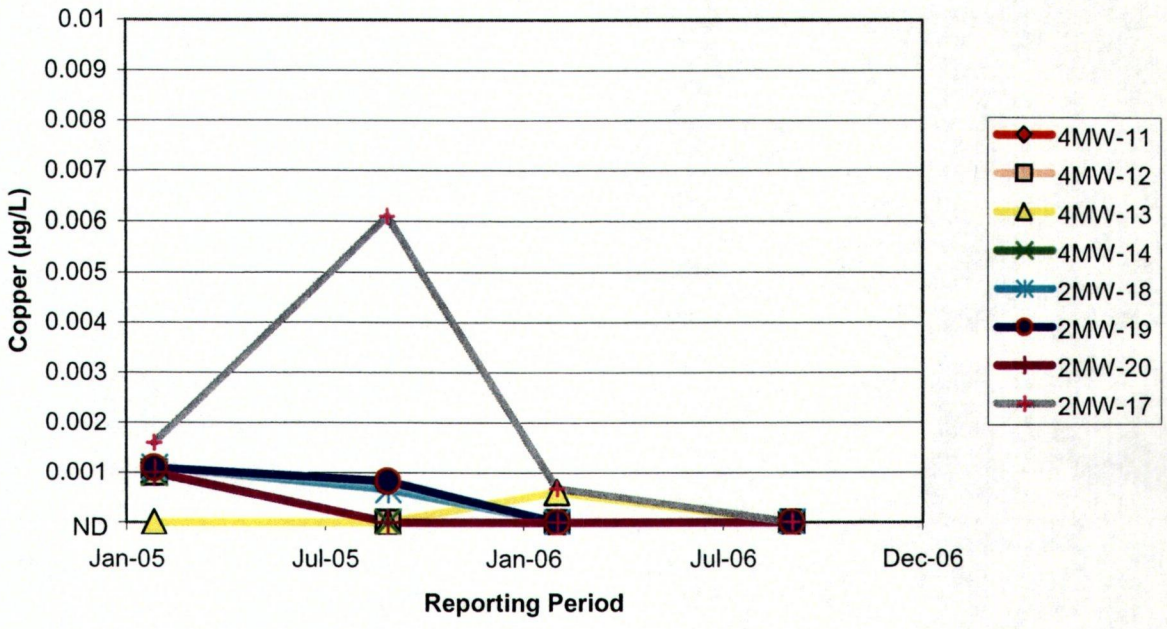
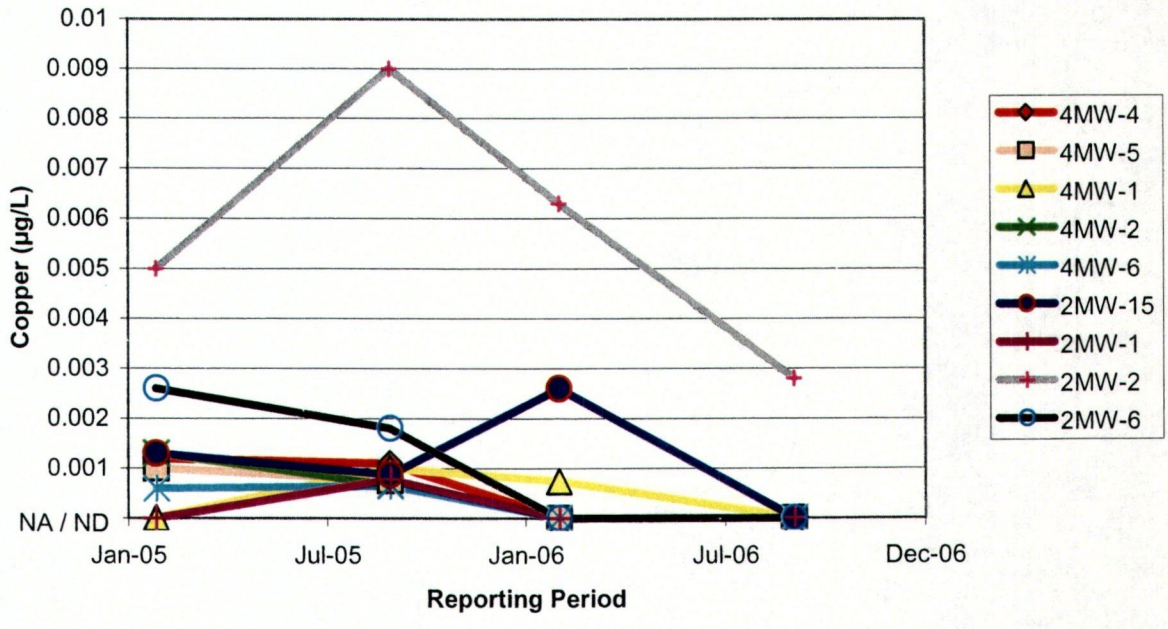


Figure 2-40: Downgradient & Background Wells - Copper



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-41: Detection Wells - Lead

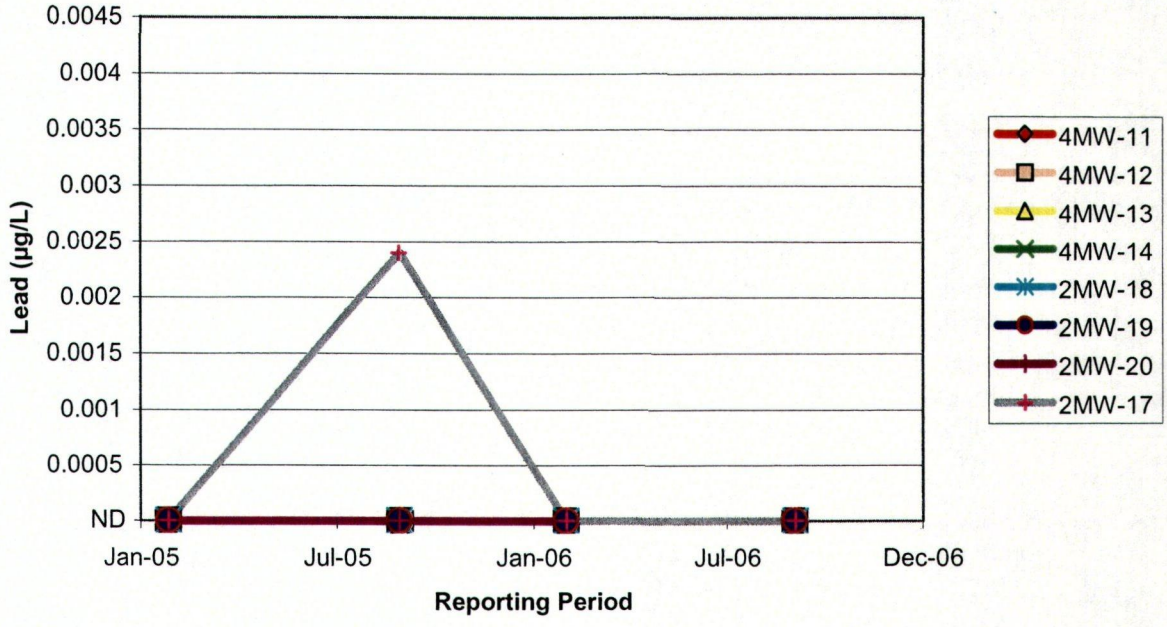
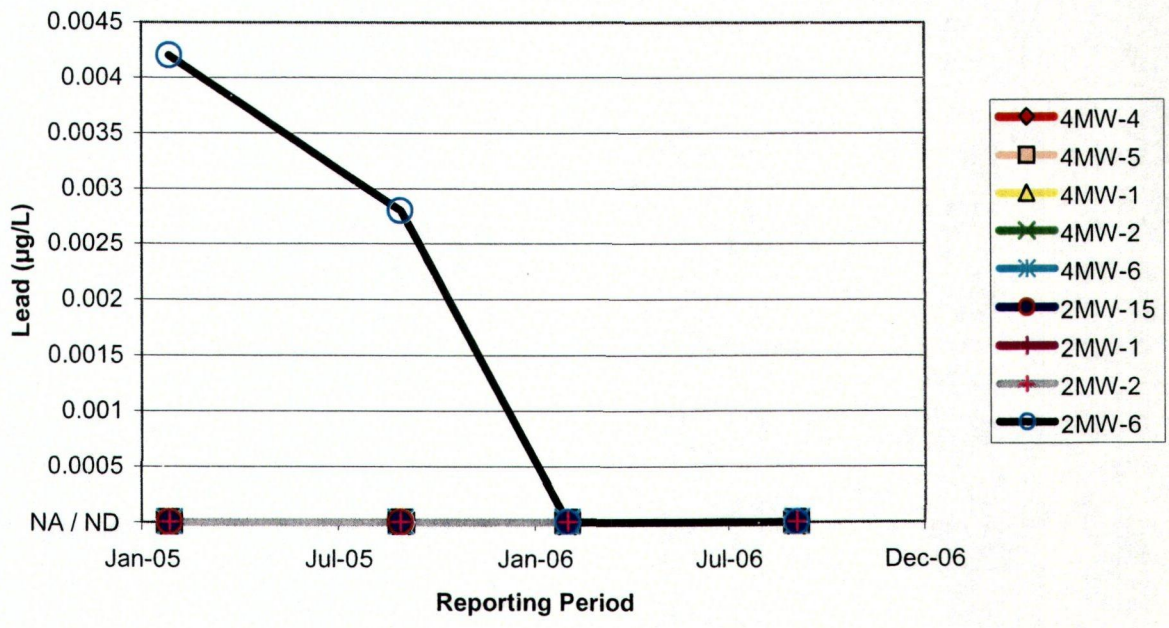


Figure 2-42: Downgradient & Background Wells - Lead



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-43: Detection Wells - Nickel

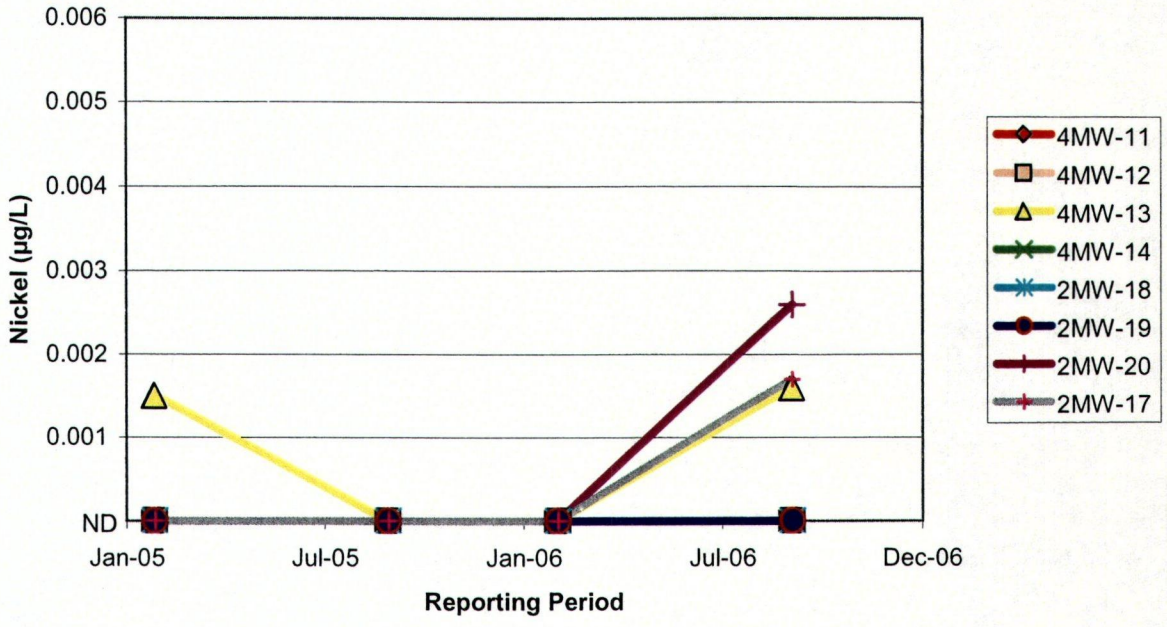
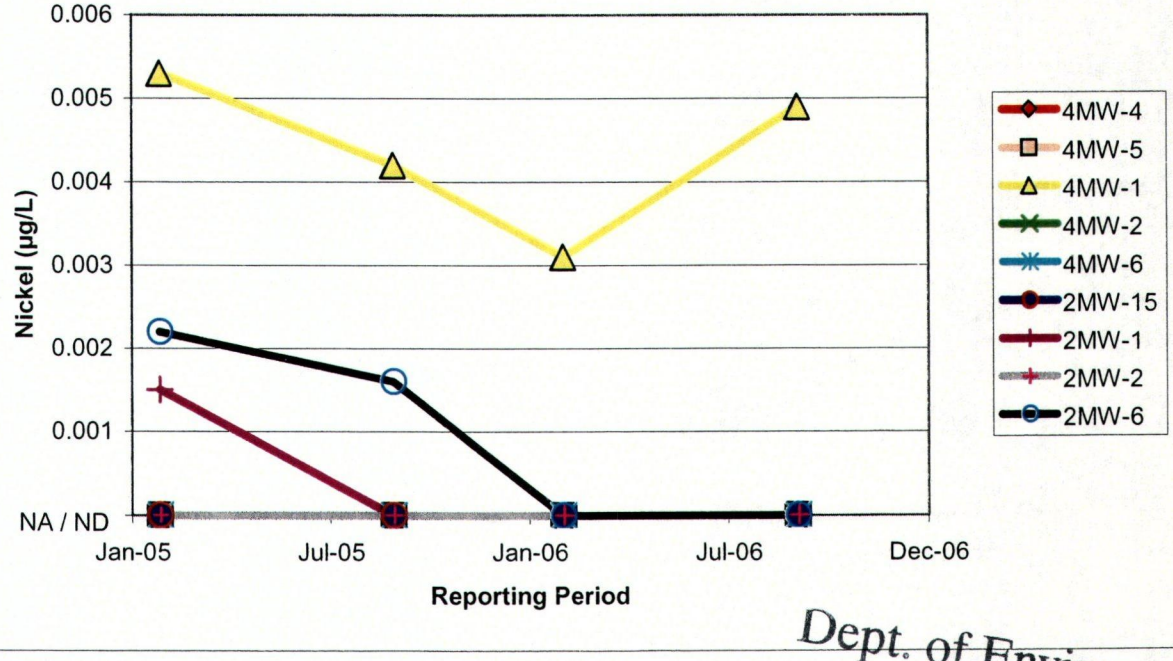


Figure 2-44: Downgradient & Background Wells - Nickel



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-45: Detection Wells - Selenium

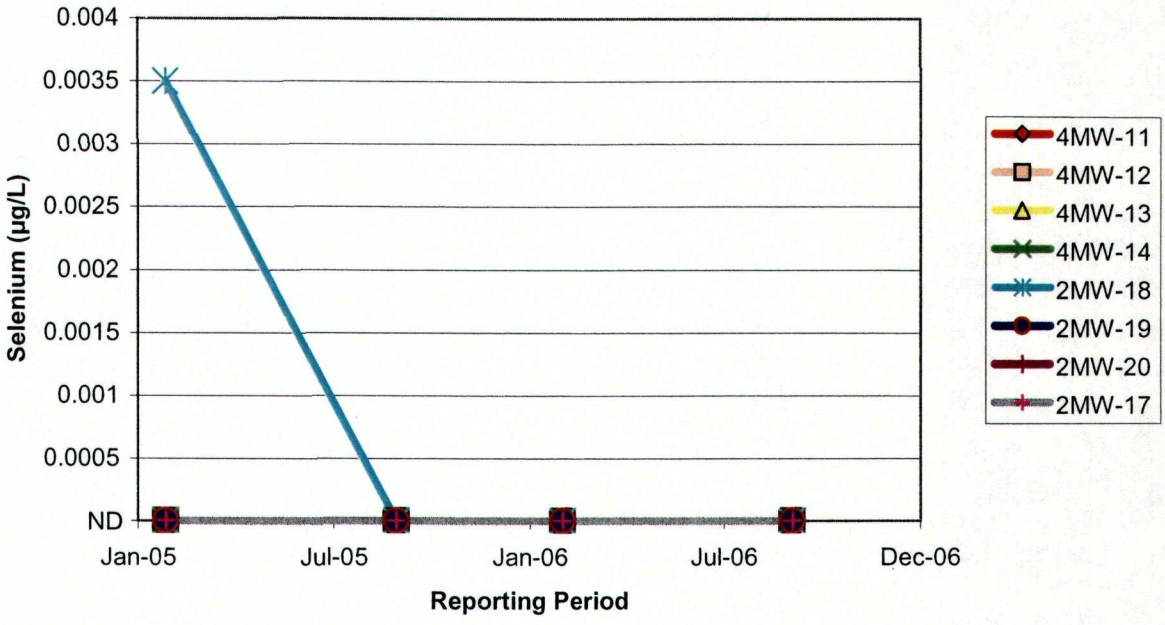
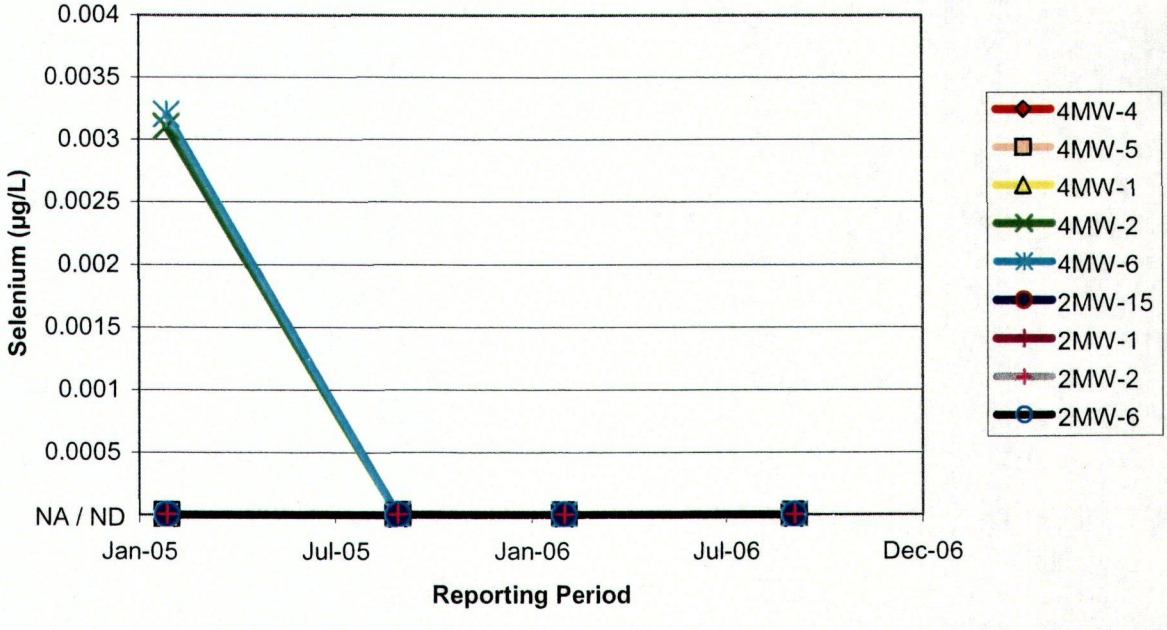


Figure 2-46: Downgradient & Background Wells - Selenium



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-47: Detection Wells - Silver

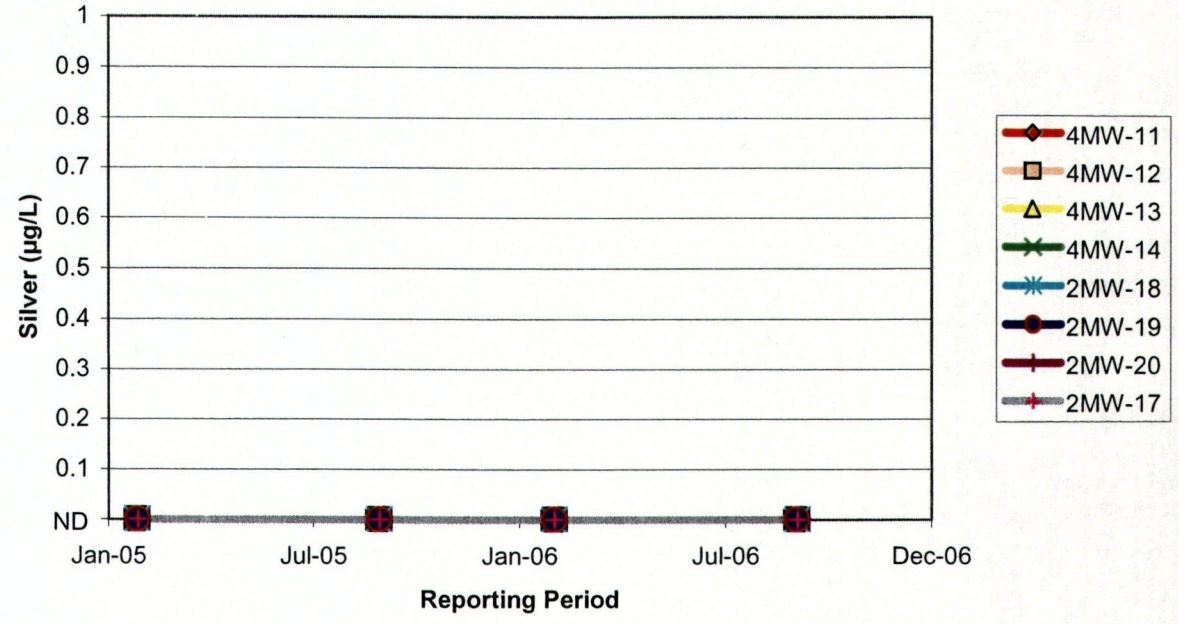
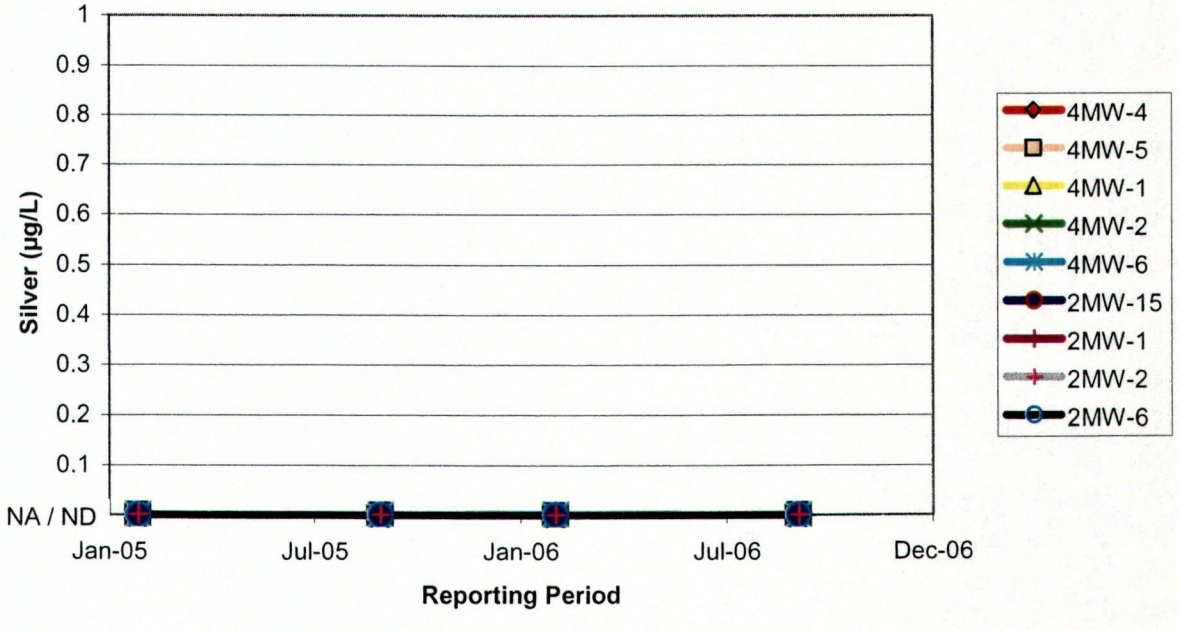


Figure 2-48: Downgradient & Background Wells - Silver



Notes: 1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-49: Detection Wells - Vanadium

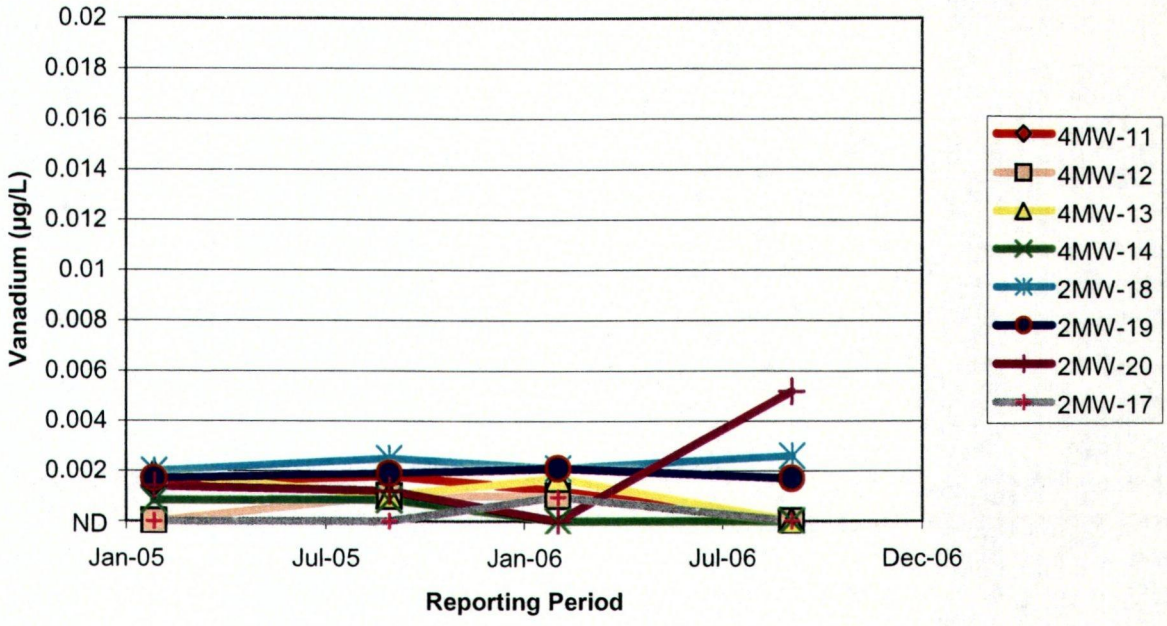
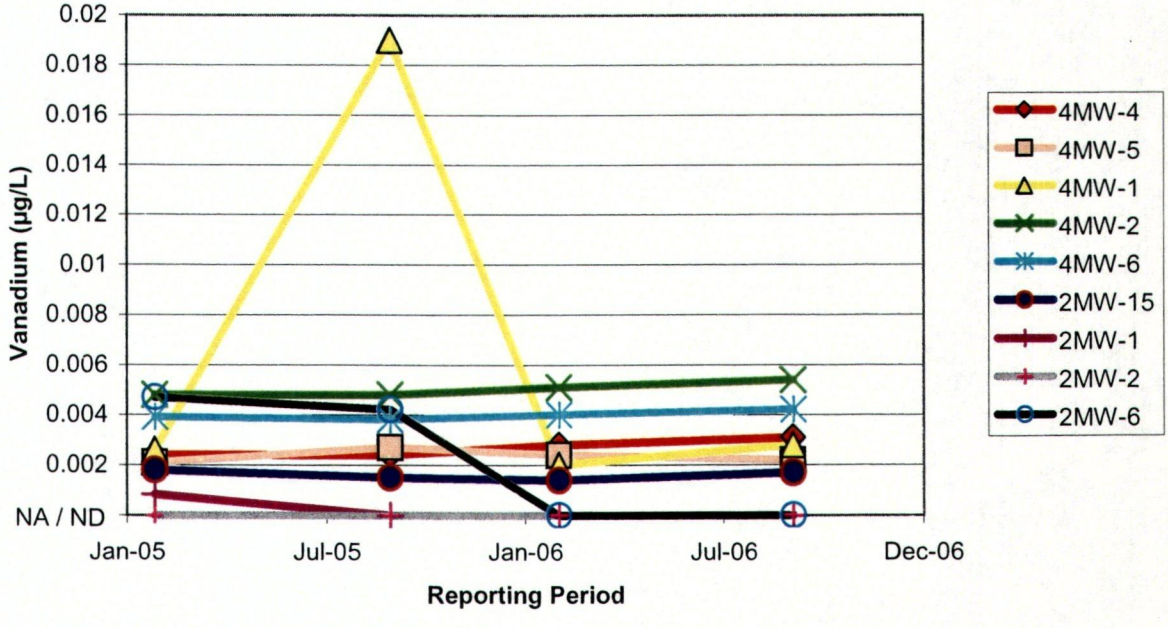


Figure 2-50: Downgradient & Background Wells - Vanadium



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-51: Detection Wells - Zinc

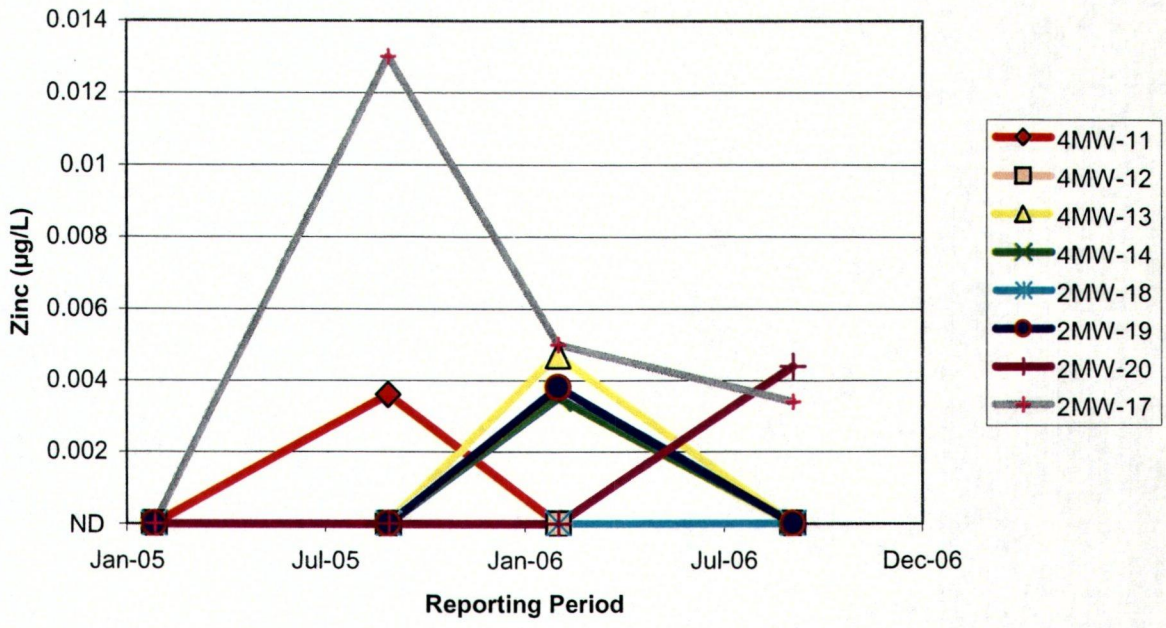
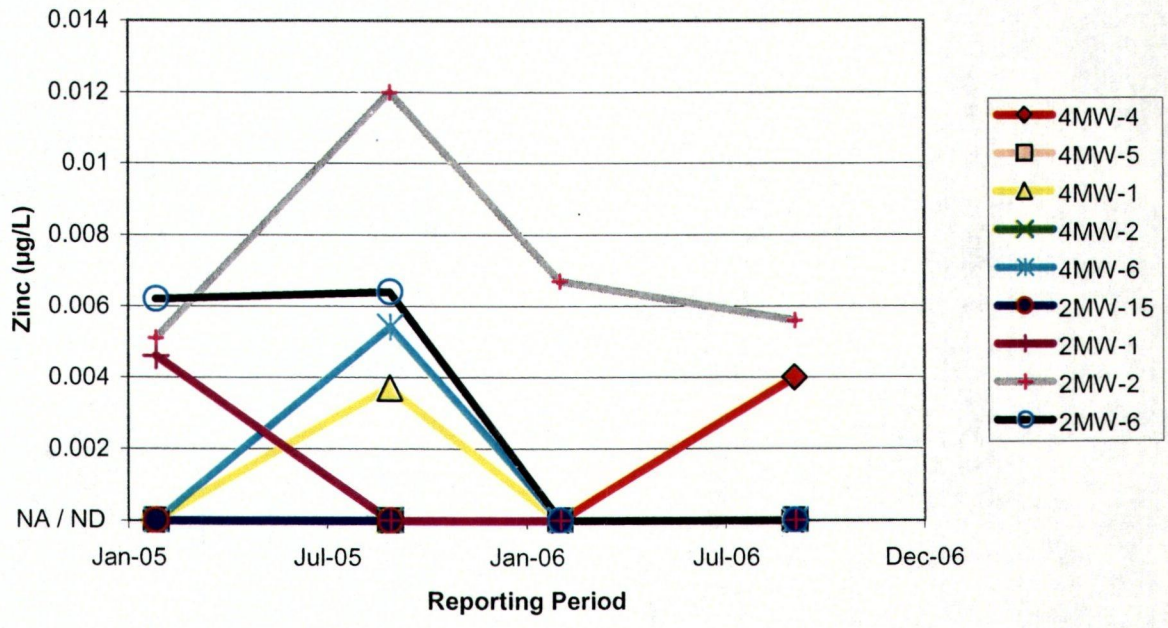


Figure 2-52: Downgradient & Background Wells - Zinc



Notes:
1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL

Figure 2-53: Detection Wells - Benzene

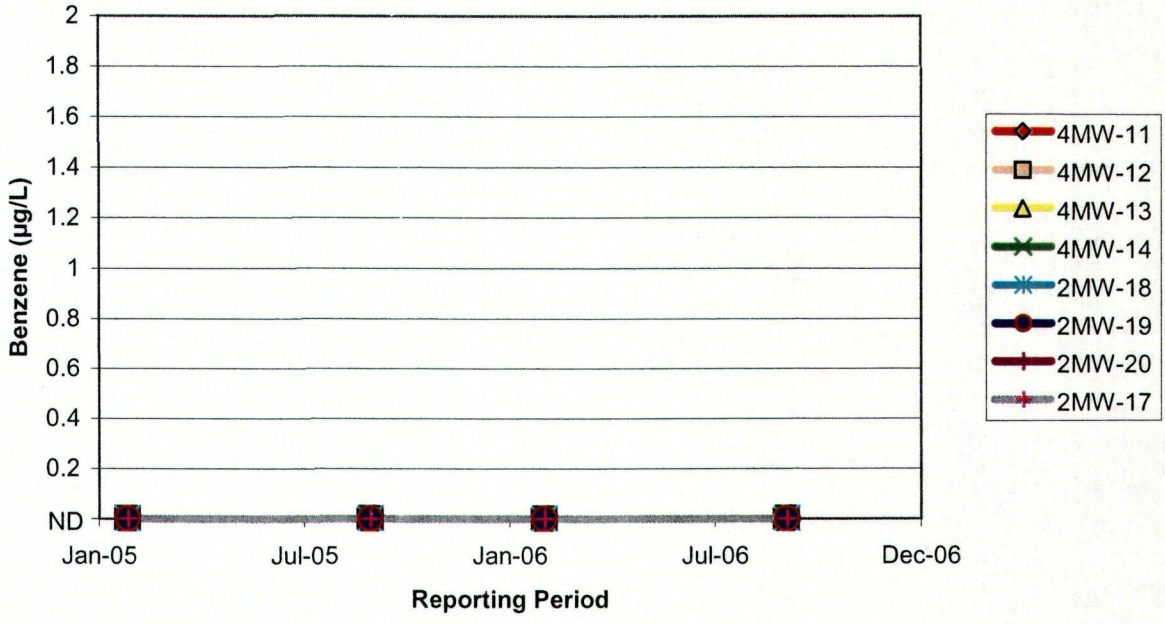
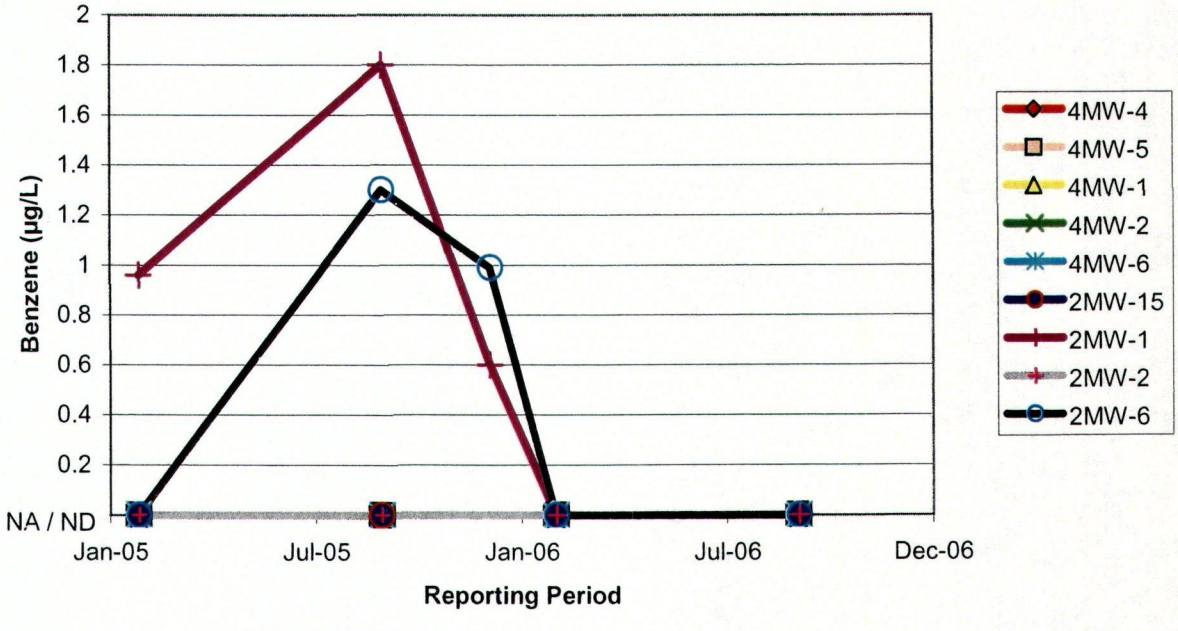
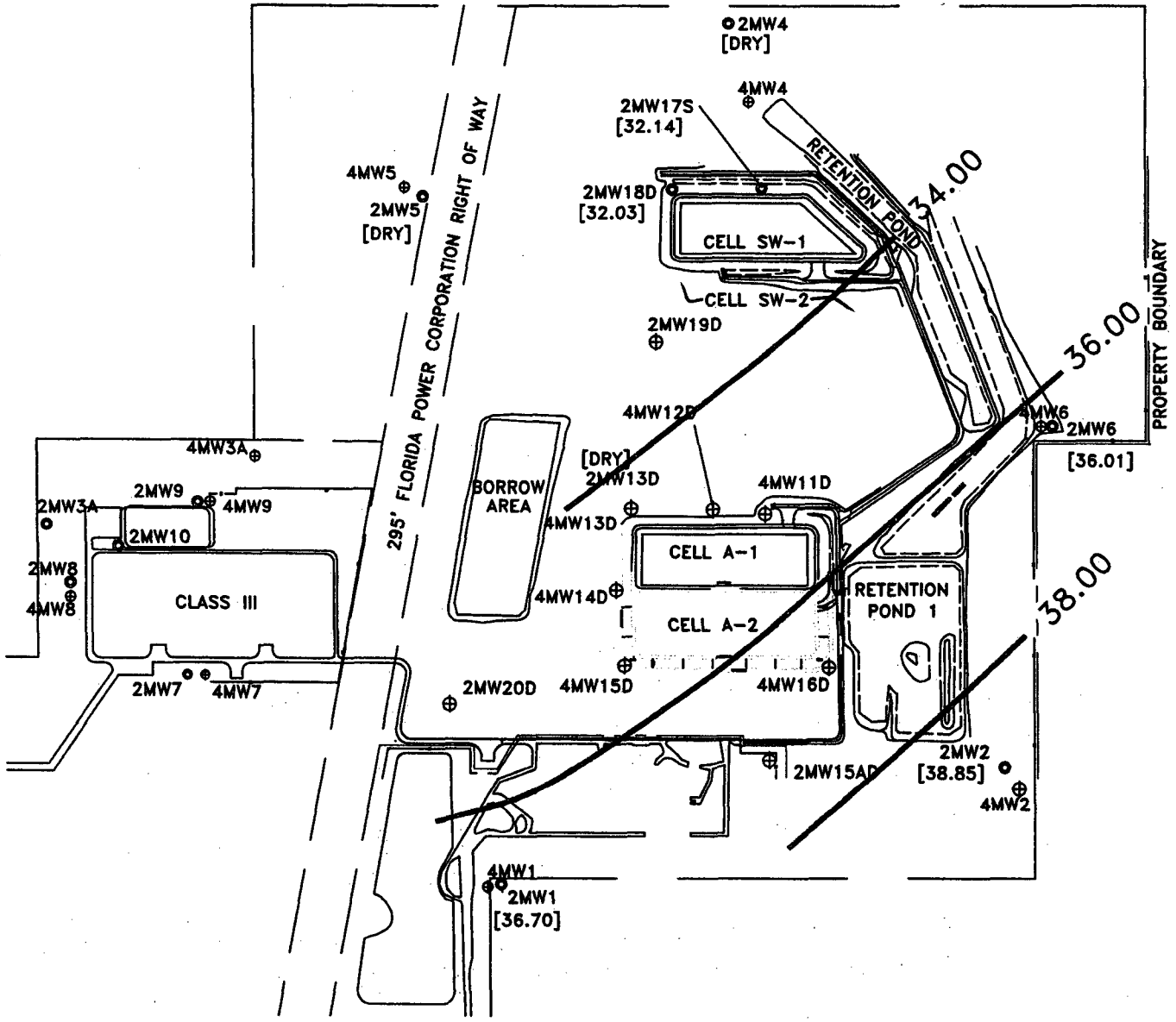


Figure 2-54: Downgradient & Background Wells - Benzene



Notes: 1. NA represents "Not Analyzed" due to dry well conditions
2. ND represents "Not Detected" ie, below the MDL



EXPLANATION

4MW2
⊕ FLORIDAN AQUIFER MONITORING WELL

2MW2
◎ SURFICIAL AQUIFER MONITORING WELL

(4MW)
4" PVC WELL

(2MW)
2" PVC WELL

[36.07]
GROUNDWATER ELEVATION
(IN FEET, NGVD)

-37.00-
GROUNDWATER CONTOUR LINE

0 1000
Scale In Feet

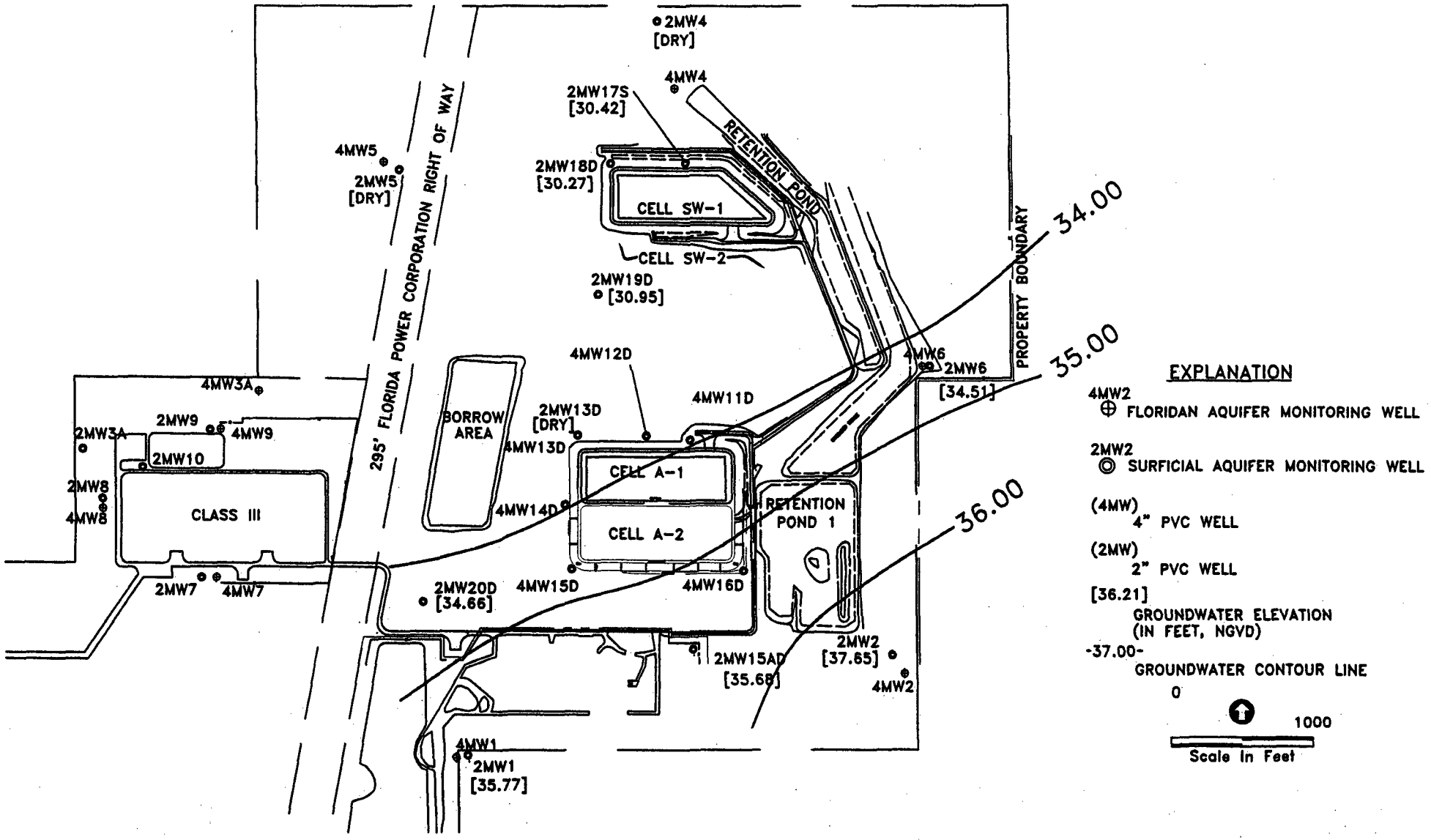
Prepared/Date: JT 02/28/05
Checked/Date: 3/1/05
FL Reg. No. 1398

PASCO COUNTY RESOURCE RECOVERY FACILITY
PASCO COUNTY
BOARD OF COUNTY COMMISSIONERS
UTILITY SERVICES BRANCH
PASCO COUNTY, FLORIDA

MACTEC

GROUNDWATER MONITORING
SURFICIAL AQUIFER WATER TABLE
YEAR 2005, QUARTER I
FEBRUARY 2005
Project 6515-04-0147

Figure 2-55

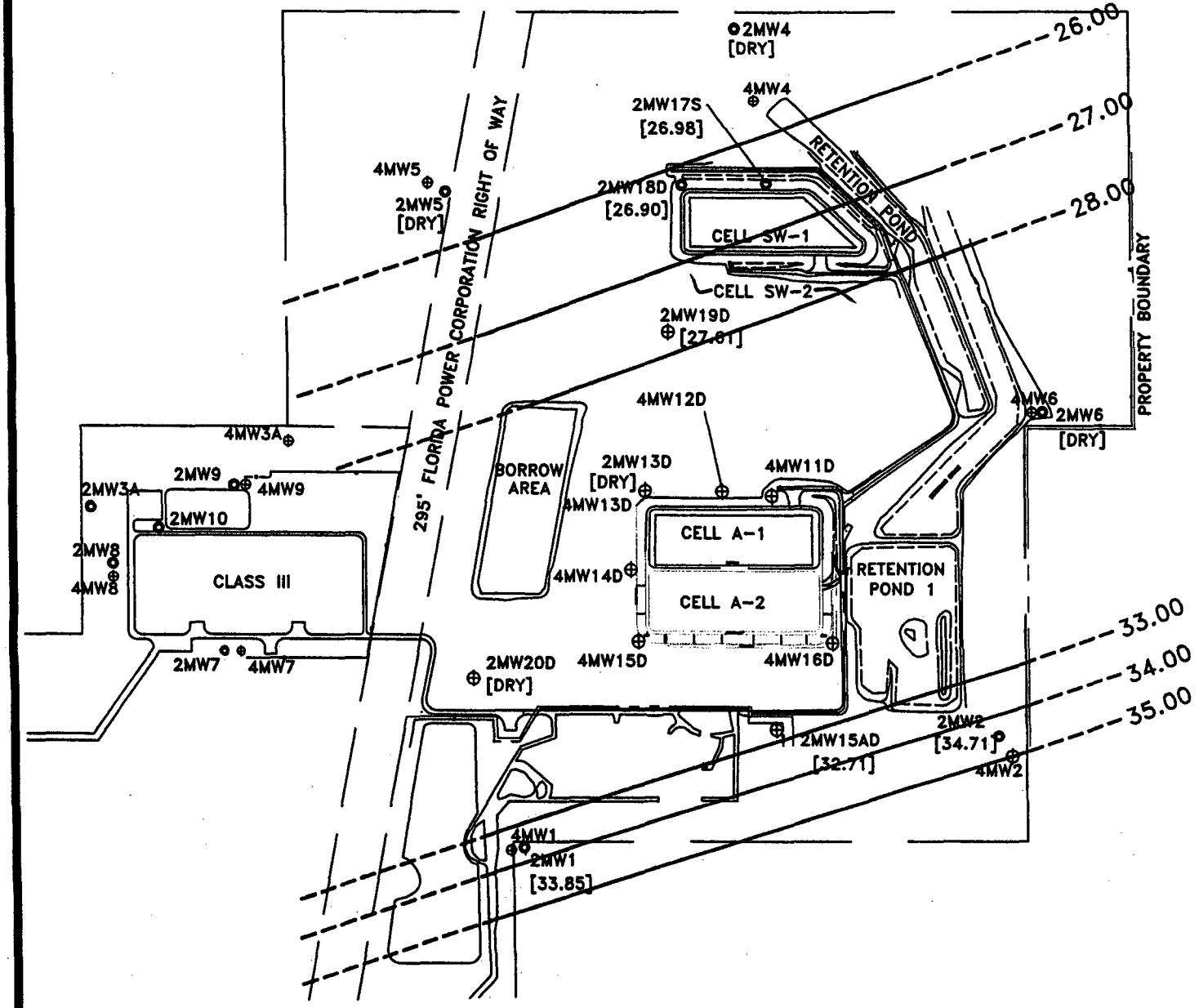


Prepared/Date: JT 11/11/05
Checked/Date: CJM 11/18/05

PASCO COUNTY RESOURCE RECOVERY FACILITY
PASCO COUNTY
BOARD OF COUNTY COMMISSIONERS
UTILITY SERVICES BRANCH
PASCO COUNTY, FLORIDA

MACTEC

GROUNDWATER MONITORING
SURFICIAL AQUIFER WATER TABLE
SURFACE MAP – 2" MW's
QUARTER III/SEPTEMEBR 28, 2005
Project 6515-04-0147 **Figure 2-56**



EXPLANATION

4MW2
⊕ FLORIDAN AQUIFER MONITORING WELL

2MW2
◎ SURFICIAL AQUIFER MONITORING WELL

(4MW)
4" PVC WELL

(2MW)
2" PVC WELL

[36.21]
GROUNDWATER ELEVATION
(IN FEET, NGVD)

-36.00-
GROUNDWATER CONTOUR LINE

1 FEET – CONTOUR INTERVAL

0 1000
Scale In Feet

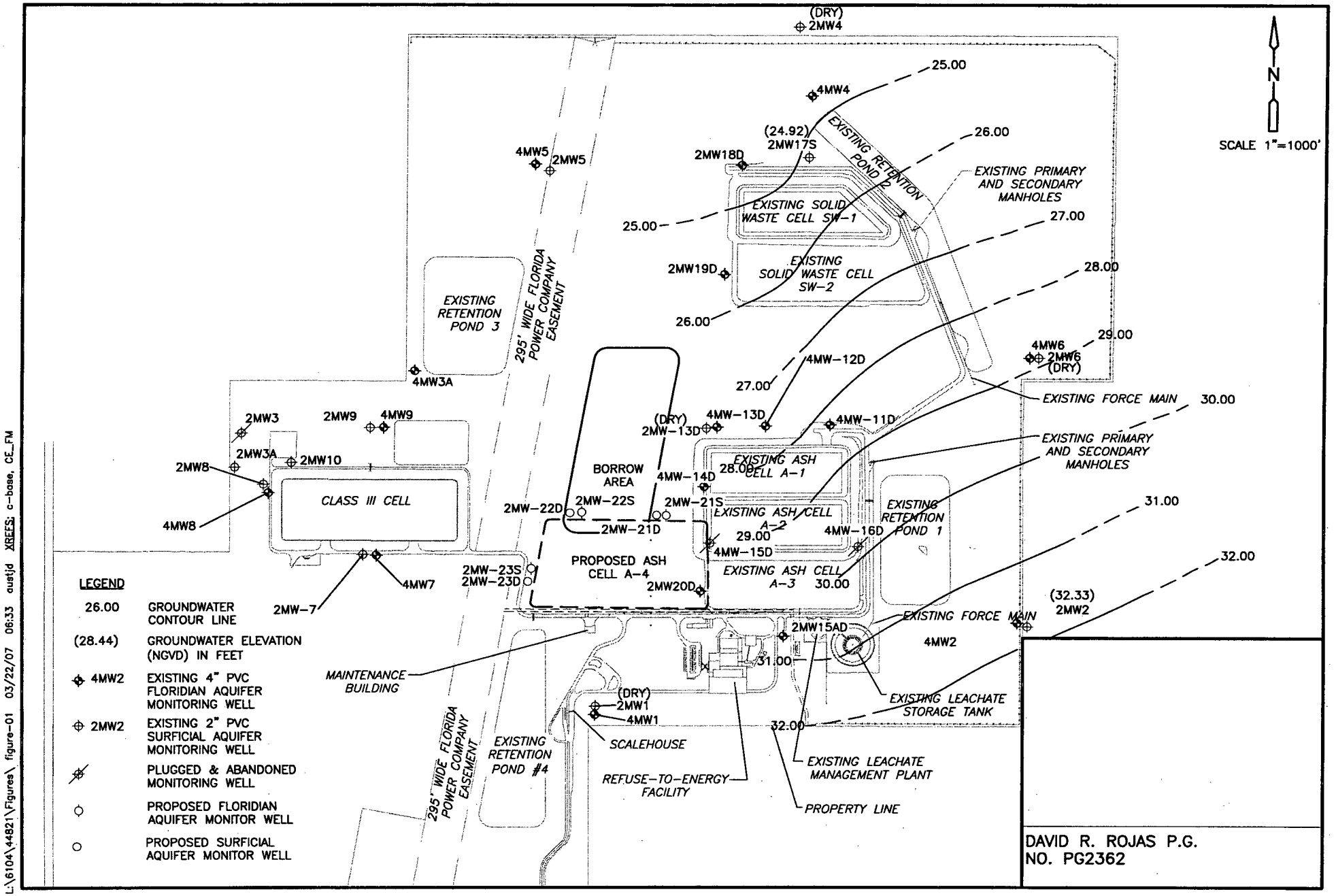
Prepared/Date: JT 06/06/06
Checked/Date: CJM 6/12/6

PASCO COUNTY RESOURCE RECOVERY FACILITY
PASCO COUNTY
BOARD OF COUNTY COMMISSIONERS
UTILITY SERVICES BRANCH
PASCO COUNTY, FLORIDA

MACTEC

GROUNDWATER MONITORING
SURFICIAL AQUIFER WATER TABLE
YEAR 2006, QUARTER I
FEBUARY 2006
Project 6515-04-0147

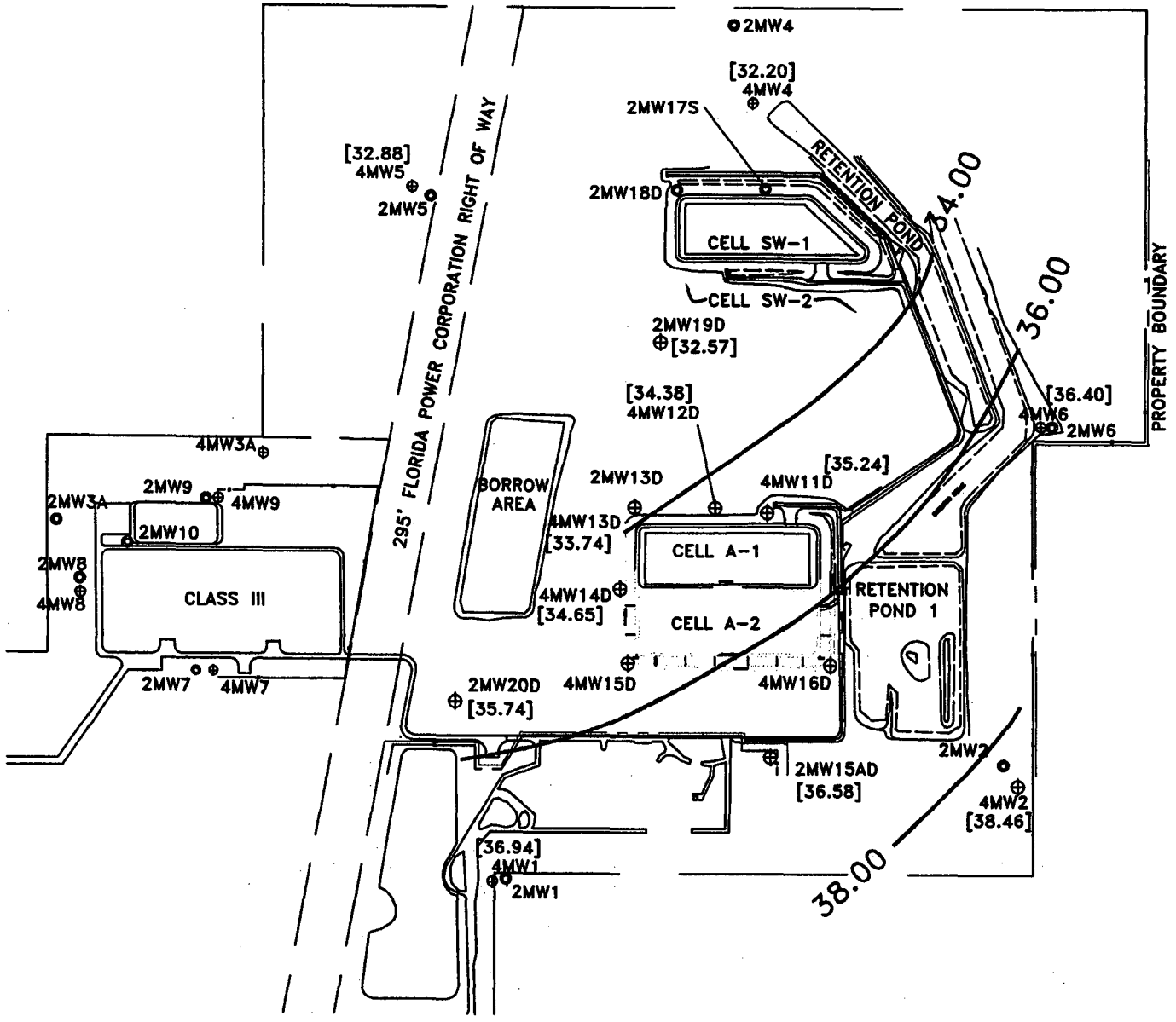
Figure 2-57



CDM

West Pasco Landfill And
Resource Recovery Facility
Pasco County Board Of County Commissioners
Utilities Services Branch, Pasco County, Florida

Figure 2-58
Surficial Aquifer Watertable
Based On Water Level Measurements
Obtained By Pasco County On
October 2, 2006



EXPLANATION

4MW2
⊕ FLORIDAN AQUIFER MONITORING WELL

2MW2
◎ SURFICIAL AQUIFER MONITORING WELL

(4MW)
4" PVC WELL

(2MW)
2" PVC WELL

[36.21]
GROUNDWATER ELEVATION
(IN FEET, NGVD)

-36.00-
GROUNDWATER CONTOUR LINE

0 1000
Scale In Feet

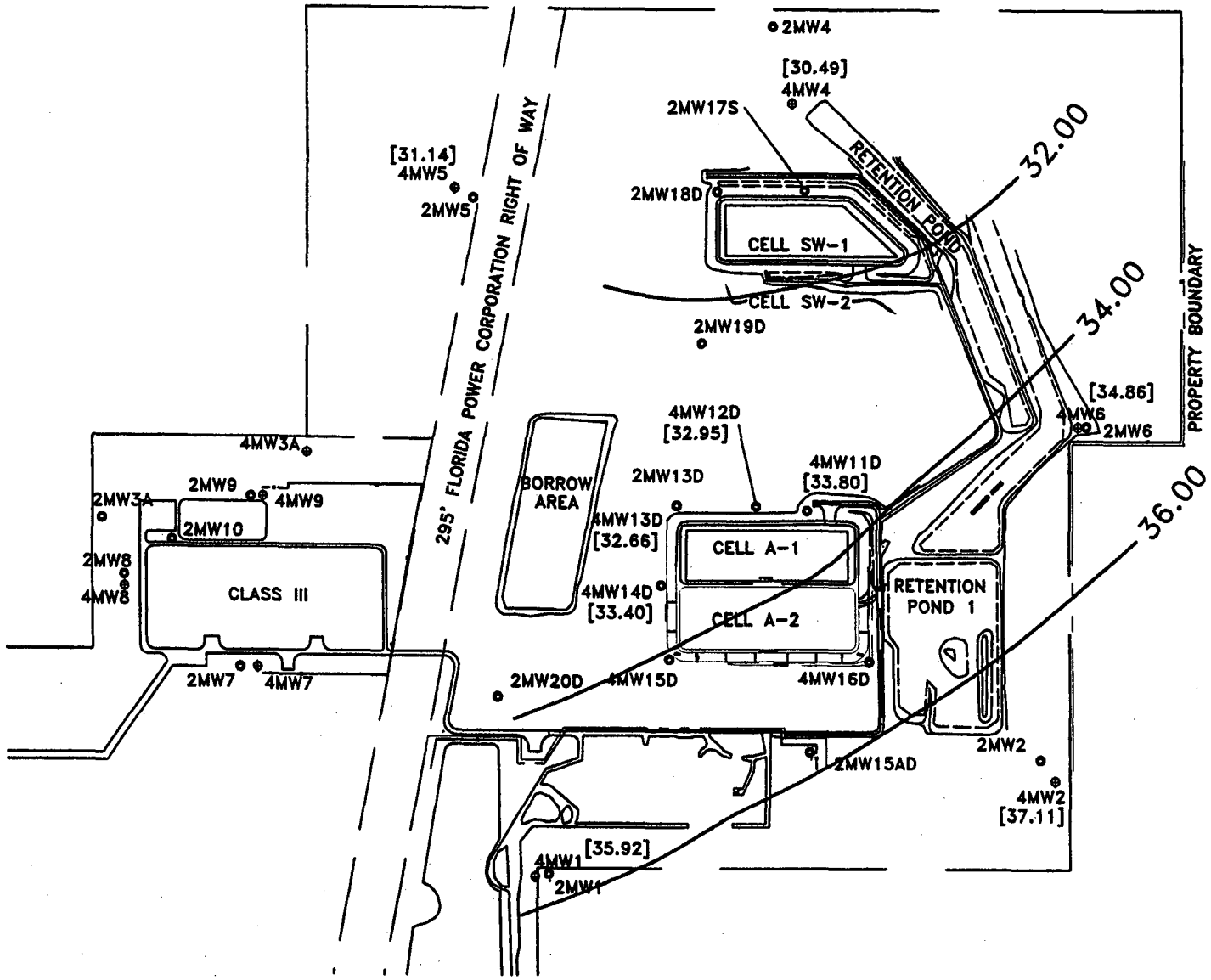
Prepared/Date: JT 02/28/05
Checked/Date: 3/1/05
FL Reg No. 1393

PASCO COUNTY RESOURCE RECOVERY FACILITY
PASCO COUNTY
BOARD OF COUNTY COMMISSIONERS
UTILITY SERVICES BRANCH
PASCO COUNTY, FLORIDA

MACTEC

GROUNDWATER MONITORING
FLORIDAN AQUIFER
PIEZOMETRIC SURFACE
YEAR 2005, QUARTER I, FEB. 2005
Project 6515-04-0147

Figure 2-59



EXPLANATION

4MW2 ⊕ FLORIDAN AQUIFER MONITORING WELL

2MW2 ◎ SURFICIAL AQUIFER MONITORING WELL

(4MW) 4" PVC WELL

(2MW) 2" PVC WELL

[36.21] GROUNDWATER ELEVATION (IN FEET, NGVD)

-37.00- GROUNDWATER CONTOUR LINE

0 1000

Scale In Feet

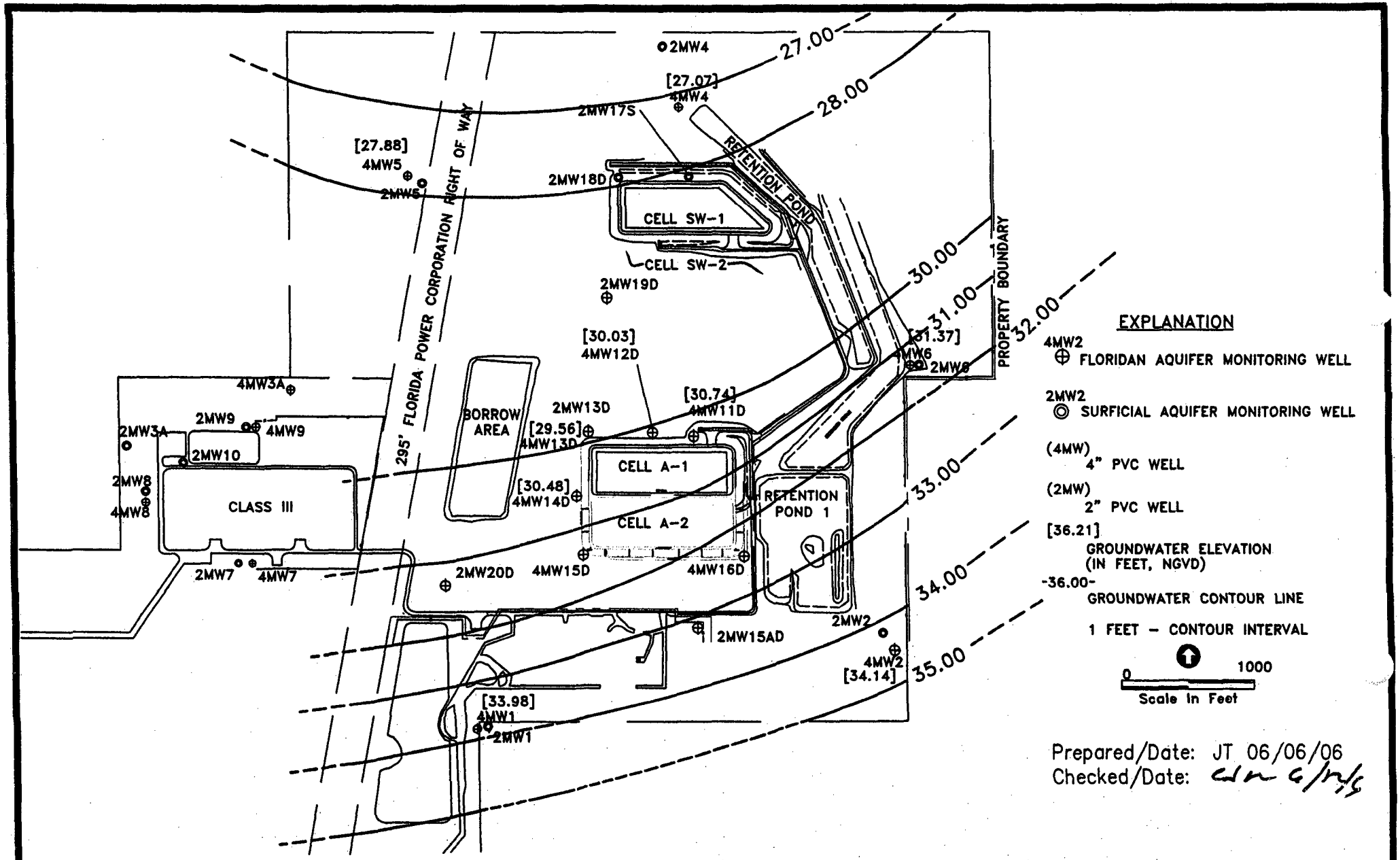
Prepared/Date: JT 11/11/05

Checked/Date: CJr 11/18/05

PASCO COUNTY RESOURCE RECOVERY FACILITY
PASCO COUNTY
BOARD OF COUNTY COMMISSIONERS
UTILITY SERVICES BRANCH
PASCO COUNTY, FLORIDA

MACTEC

GROUNDWATER MONITORING
FLORIDAN AQUIFER POTENTIOMETERIC
SURFACE MAP – 4" MW's
QUARTER III/SEPTEMEBR 28, 2005
Project 6515-04-0147 **Figure 2-60**



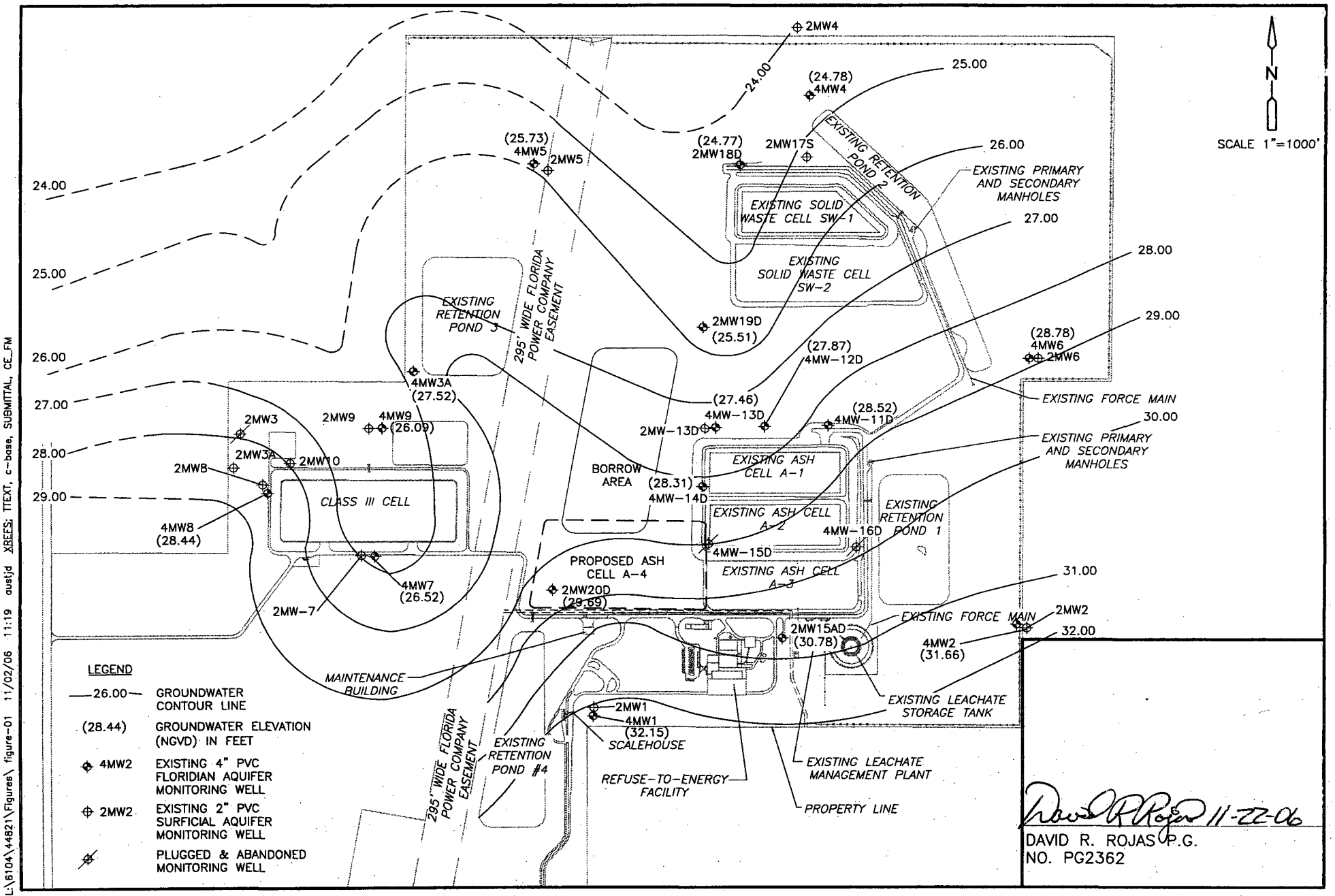
Prepared/Date: JT 06/06/06
Checked/Date: clm 6/19/06

PASCO COUNTY RESOURCE RECOVERY FACILITY
PASCO COUNTY
BOARD OF COUNTY COMMISSIONERS
UTILITY SERVICES BRANCH
PASCO COUNTY, FLORIDA

MACTEC

GROUNDWATER MONITORING
FLORIDAN AQUIFER
YEAR 2006, QUARTER I
FEBUARY 2006
Project 6515-04-0147

Figure 2-61



West Pasco Class III Landfill And Resource Recovery Facility
Pasco County Board Of County Commissioners
Utilities Services Branch, Pasco County, Florida

CDM

Figure 2-62
Florida Aquifer Groundwater Contours Based On Water Level Measurements Obtained By Pasco County On October 2, 2006

Table 2-1
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 2MW-1

Test Site ID #: 4051A16506 **Well Name: 2MW-1** Classification of Groundwater: Surficial

		2005			2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Resample July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	83	82	NA	DRY	DRY
pH	s.u.	5.31	5.28	NA	DRY	DRY
temperature	° C	23.70	25.04	NA	DRY	DRY
dissolved oxygen	mg/l	0.80	0.91	NA	DRY	DRY
turbidity	NTU	4.00	0.20	NA	DRY	DRY
total ammonia	mg/l	0.12	0.07	NA	DRY	DRY
chlorides	mg/l	14.2	16.1	NA	DRY	DRY
iron	mg/l	0.73	0.25	NA	DRY	DRY
mercury	mg/l	ND	ND	NA	DRY	DRY
nitrate	mg/l	ND	ND	NA	DRY	DRY
sodium	mg/l	7.4	6.1	NA	DRY	DRY
TDS	mg/l	62	130	NA	DRY	DRY
Water Level	feet	36.70	35.77	NA	DRY	DRY
arsenic	mg/l	ND	ND	NA	DRY	DRY
barium	mg/l	0.0068	0.0076	NA	DRY	DRY
beryllium	mg/l	0.00011	ND	NA	DRY	DRY
cadmium	mg/l	ND	ND	NA	DRY	DRY
chromium	mg/l	0.00064	0.00070	NA	DRY	DRY
cobalt	mg/l	ND	ND	NA	DRY	DRY
copper	mg/l	ND	0.00077	NA	DRY	DRY
lead	mg/l	ND	ND	NA	DRY	DRY
nickel	mg/l	0.0015	ND	NA	DRY	DRY
selenium	mg/l	ND	ND	NA	DRY	DRY
silver	mg/l	ND	ND	NA	DRY	DRY
vanadium	mg/l	0.00083	ND	NA	DRY	DRY
zinc	mg/l	0.0046	ND	NA	DRY	DRY
antimony	mg/l	ND	ND	NA	DRY	DRY
thallium	mg/l	0.00018	ND	NA	DRY	DRY
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	NA	DRY	DRY
Ethylene Dibromide	ug/l	ND	ND	NA	DRY	DRY
acetone	ug/l	ND	ND	NA	DRY	DRY
acrylonitrile	ug/l	ND	ND	NA	DRY	DRY
benzene	ug/l	0.96	1.80	0.60	DRY	DRY
bromochloromethane	ug/l	ND	ND	NA	DRY	DRY
bromodichloromethane	ug/l	ND	ND	NA	DRY	DRY
bromoform	ug/l	ND	ND	NA	DRY	DRY
bromomethane	ug/l	ND	ND	NA	DRY	DRY
2-Butanone	ug/l	ND	ND	NA	DRY	DRY
carbon disulfide	ug/l	ND	ND	NA	DRY	DRY
carbon tetrachloride	ug/l	ND	ND	NA	DRY	DRY
chlorobenzene	ug/l	ND	ND	NA	DRY	DRY
chloroethane	ug/l	ND	ND	NA	DRY	DRY
chloroform	ug/l	ND	ND	NA	DRY	DRY
chloromethane	ug/l	ND	ND	NA	DRY	DRY
dibromochloromethane	ug/l	ND	ND	NA	DRY	DRY
dibromomethane	ug/l	ND	ND	NA	DRY	DRY
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	NA	DRY	DRY
1,2-dichlorobenzene	ug/l	ND	ND	NA	DRY	DRY
1,4-dichlorobenzene	ug/l	ND	ND	NA	DRY	DRY
1,1-Dichloroethane	ug/l	ND	ND	NA	DRY	DRY
1,2-Dichloroethane	ug/l	ND	ND	NA	DRY	DRY
1,1-Dichloroethene	ug/l	ND	ND	NA	DRY	DRY
cis-1,2-Dichloroethene	ug/l	ND	ND	NA	DRY	DRY
trans-1,2-Dichloroethene	ug/l	ND	ND	NA	DRY	DRY
1,2-Dichloropropane	ug/l	ND	ND	NA	DRY	DRY
cis-1,3-Dichloropropene	ug/l	ND	ND	NA	DRY	DRY
trans-1,3-Dichloropropene	ug/l	ND	ND	NA	DRY	DRY
Ethylbenzene	ug/l	0.84	0.62	NA	DRY	DRY
2-Hexanone	ug/l	ND	ND	NA	DRY	DRY
iodomethane	ug/l	ND	ND	NA	DRY	DRY
4-Methyl-2-pentanone	ug/l	ND	ND	NA	DRY	DRY
Methylene chloride	ug/l	ND	ND	NA	DRY	DRY
Styrene	ug/l	ND	ND	NA	DRY	DRY
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	NA	DRY	DRY
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	NA	DRY	DRY
Tetrachloroethene	ug/l	ND	ND	NA	DRY	DRY
Toluene	ug/l	4.0	5.2	NA	DRY	DRY
1,1,1-Trichloroethane	ug/l	ND	ND	NA	DRY	DRY
1,1,2-Trichloroethane	ug/l	ND	ND	NA	DRY	DRY
Trichloroethene	ug/l	ND	ND	NA	DRY	DRY
Trichloroflouromethane	ug/l	ND	ND	NA	DRY	DRY
1,2,3-Trichloropropane	ug/l	ND	ND	NA	DRY	DRY
Vinyl acetate	ug/l	ND	ND	NA	DRY	DRY
Vinyl chloride	ug/l	ND	ND	NA	DRY	DRY
Xylenes, Total	ug/l	3.2	3.4	NA	DRY	DRY

Table 2-2
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 2MW-2

Test Site ID #: 4051A16507 **Well Name: 2MW-2** Classification of Groundwater: Surficial

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	121	141	115	67
pH	s.u.	4.88	5.08	5.08	5.98
temperature	° C	24.10	25.11	23.77	26.00
dissolved oxygen	mg/l	3.40	3.63	3.58	7.20
turbidity	NTU	0.08	0.10	0.23	2.00
total ammonia	mg/l	ND	0.13	ND	0.73
chlorides	mg/l	3.05	7.89	3.71	3.27
iron	mg/l	ND	ND	ND	0.01
mercury	mg/l	ND	ND	ND	ND
nitrate	mg/l	9.32	11.30	9.63	4.29
sodium	mg/l	3.81	7.03	3.42	3.41
TDS	mg/l	116	186	112	56
Water Level	feet	38.85	37.65	34.71	32.33
arsenic	mg/l	ND	ND	ND	ND
barium	mg/l	0.09	0.11	0.11	0.056
beryllium	mg/l	0.00027	0.00015	0.00027	ND
cadmium	mg/l	ND	0.00062	0.00042	ND
chromium	mg/l	ND	0.00089	ND	ND
cobalt	mg/l	ND	ND	ND	ND
copper	mg/l	0.005	0.009	0.0063	0.0028
lead	mg/l	ND	ND	ND	ND
nickel	mg/l	ND	ND	ND	ND
selenium	mg/l	ND	ND	ND	ND
silver	mg/l	ND	ND	ND	ND
vanadium	mg/l	ND	ND	ND	ND
zinc	mg/l	0.0051	0.012	0.0067	0.0056
antimony	mg/l	ND	ND	ND	0.00041
thallium	mg/l	0.0003	ND	ND	ND
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	ND
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	ND	ND	ND	ND
chloromethane	ug/l	ND	ND	ND	ND
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
Iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichloroflouromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	ND	ND	ND	ND

Table 2-3
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 2MW-4

Test Site ID #: 4051A16508 **Well Name: 2MW-4** Classification of Groundwater: Surficial

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	DRY	DRY	DRY	DRY
pH	s.u.	DRY	DRY	DRY	DRY
temperature	° C	DRY	DRY	DRY	DRY
dissolved oxygen	mg/l	DRY	DRY	DRY	DRY
turbidity	NTU	DRY	DRY	DRY	DRY
total ammonia	mg/l	DRY	DRY	DRY	DRY
chlorides	mg/l	DRY	DRY	DRY	DRY
iron	mg/l	DRY	DRY	DRY	DRY
mercury	mg/l	DRY	DRY	DRY	DRY
nitrate	mg/l	DRY	DRY	DRY	DRY
sodium	mg/l	DRY	DRY	DRY	DRY
TDS	mg/l	DRY	DRY	DRY	DRY
Water Level	feet	DRY	DRY	DRY	DRY

Table 2-4
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 2MW-5

Test Site ID #: 4051A16509 **Well Name: 2MW-5** Classification of Groundwater: Surficial

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	DRY	DRY	DRY	DRY
pH	s.u.	DRY	DRY	DRY	DRY
temperature	°C	DRY	DRY	DRY	DRY
dissolved oxygen	mg/l	DRY	DRY	DRY	DRY
turbidity	NTU	DRY	DRY	DRY	DRY
total ammonia	mg/l	DRY	DRY	DRY	DRY
chlorides	mg/l	DRY	DRY	DRY	DRY
iron	mg/l	DRY	DRY	DRY	DRY
mercury	mg/l	DRY	DRY	DRY	DRY
nitrate	mg/l	DRY	DRY	DRY	DRY
sodium	mg/l	DRY	DRY	DRY	DRY
TDS	mg/l	DRY	DRY	DRY	DRY
Water Level	feet	DRY	DRY	DRY	DRY

Table 2-5
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 2MW-6

Test Site ID #: 4051A16510 **Well Name: 2MW-6** Classification of Groundwater: Surficial

		2005			2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Resample July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	34	32	NA	DRY	DRY
pH	s.u.	5.99	5.92	NA	DRY	DRY
temperature	°C	23.40	28.03	NA	DRY	DRY
dissolved oxygen	mg/l	3.50	2.72	NA	DRY	DRY
turbidity	NTU	71.00	80.00	NA	DRY	DRY
total ammonia	mg/l	ND	ND	NA	DRY	DRY
chlorides	mg/l	2.07	2.74	NA	DRY	DRY
iron	mg/l	0.09	0.07	NA	DRY	DRY
mercury	mg/l	ND	ND	NA	DRY	DRY
nitrate	mg/l	1.22	0.45	NA	DRY	DRY
sodium	mg/l	1.53	1.08	NA	DRY	DRY
TDS	mg/l	82	630	NA	DRY	DRY
Water Level	feet	36.01	34.51	NA	DRY	DRY
arsenic	mg/l	ND	ND	NA	DRY	DRY
barium	mg/l	0.015	0.012	NA	DRY	DRY
beryllium	mg/l	ND	ND	NA	DRY	DRY
cadmium	mg/l	ND	0.00036	NA	DRY	DRY
chromium	mg/l	0.0059	0.0052	NA	DRY	DRY
cobalt	mg/l	0.0017	ND	NA	DRY	DRY
copper	mg/l	0.0026	0.0018	NA	DRY	DRY
lead	mg/l	0.0042	0.0028	NA	DRY	DRY
nickel	mg/l	0.0022	0.0016	NA	DRY	DRY
selenium	mg/l	ND	ND	NA	DRY	DRY
silver	mg/l	ND	ND	NA	DRY	DRY
vanadium	mg/l	0.0047	0.0042	NA	DRY	DRY
zinc	mg/l	0.0062	0.0064	NA	DRY	DRY
antimony	mg/l	0.00089	ND	NA	DRY	DRY
thallium	mg/l	ND	0.00016	NA	DRY	DRY
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	NA	DRY	DRY
Ethylene Dibromide	ug/l	ND	ND	NA	DRY	DRY
acetone	ug/l	ND	ND	NA	DRY	DRY
acrylonitrile	ug/l	ND	ND	NA	DRY	DRY
benzene	ug/l	ND	1.3	0.99	DRY	DRY
bromochloromethane	ug/l	ND	ND	NA	DRY	DRY
bromodichloromethane	ug/l	ND	ND	NA	DRY	DRY
bromoform	ug/l	ND	ND	NA	DRY	DRY
bromomethane	ug/l	ND	ND	NA	DRY	DRY
2-Butanone	ug/l	ND	ND	NA	DRY	DRY
carbon disulfide	ug/l	ND	ND	NA	DRY	DRY
carbon tetrachloride	ug/l	ND	ND	NA	DRY	DRY
chlorobenzene	ug/l	ND	ND	NA	DRY	DRY
chloroethane	ug/l	ND	ND	NA	DRY	DRY
chloroform	ug/l	ND	ND	NA	DRY	DRY
chloromethane	ug/l	ND	ND	NA	DRY	DRY
dibromochloromethane	ug/l	ND	ND	NA	DRY	DRY
dibromomethane	ug/l	ND	ND	NA	DRY	DRY
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	NA	DRY	DRY
1,2-dichlorobenzene	ug/l	ND	ND	NA	DRY	DRY
1,4-dichlorobenzene	ug/l	ND	ND	NA	DRY	DRY
1,1-Dichloroethane	ug/l	ND	ND	NA	DRY	DRY
1,2-Dichloroethane	ug/l	ND	ND	NA	DRY	DRY
1,1-Dichloroethene	ug/l	ND	ND	NA	DRY	DRY
cis-1,2-Dichloroethene	ug/l	ND	ND	NA	DRY	DRY
trans-1,2-Dichloroethene	ug/l	ND	ND	NA	DRY	DRY
1,2-Dichloropropane	ug/l	ND	ND	NA	DRY	DRY
cis-1,3-Dichloropropene	ug/l	ND	ND	NA	DRY	DRY
trans-1,3-Dichloropropene	ug/l	ND	ND	NA	DRY	DRY
Ethylbenzene	ug/l	0.50	0.74	NA	DRY	DRY
2-Hexanone	ug/l	ND	ND	NA	DRY	DRY
Iodomethane	ug/l	ND	ND	NA	DRY	DRY
4-Methyl-2-pentanone	ug/l	ND	ND	NA	DRY	DRY
Methylene chloride	ug/l	ND	ND	NA	DRY	DRY
Styrene	ug/l	ND	ND	NA	DRY	DRY
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	NA	DRY	DRY
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	NA	DRY	DRY
Tetrachloroethene	ug/l	ND	ND	NA	DRY	DRY
Toluene	ug/l	2.8	6.3	NA	DRY	DRY
1,1,1-Trichloroethane	ug/l	ND	ND	NA	DRY	DRY
1,1,2-Trichloroethane	ug/l	ND	ND	NA	DRY	DRY
Trichloroethene	ug/l	ND	ND	NA	DRY	DRY
Trichlorofluoromethane	ug/l	ND	ND	NA	DRY	DRY
1,2,3-Trichloropropane	ug/l	ND	ND	NA	DRY	DRY
Vinyl acetate	ug/l	ND	ND	NA	DRY	DRY
Vinyl chloride	ug/l	ND	ND	NA	DRY	DRY
Xylenes, Total	ug/l	2.6	4.2	NA	DRY	DRY

Table 2-6
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 2MW-13D

Test Site ID #: **Well Name: 2MW-13D** Classification of Groundwater: Surficial

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	DRY	DRY	DRY	DRY
pH	s.u.	DRY	DRY	DRY	DRY
temperature	°C	DRY	DRY	DRY	DRY
dissolved oxygen	mg/l	DRY	DRY	DRY	DRY
turbidity	NTU	DRY	DRY	DRY	DRY
total ammonia	mg/l	DRY	DRY	DRY	DRY
chlorides	mg/l	DRY	DRY	DRY	DRY
iron	mg/l	DRY	DRY	DRY	DRY
mercury	mg/l	DRY	DRY	DRY	DRY
nitrate	mg/l	DRY	DRY	DRY	DRY
sodium	mg/l	DRY	DRY	DRY	DRY
TDS	mg/l	DRY	DRY	DRY	DRY
Water Level	feet	DRY	DRY	DRY	DRY

Table 2-7
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 2MW-17S

Test Site ID #: **Well Name: 2MW-17S** Classification of Groundwater: Surficial

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	130	276	234	231
pH	s.u.	5.93	5.85	5.89	5.93
temperature	°C	25.20	27.11	25.60	25.50
dissolved oxygen	mg/l	0.60	0.70	0.75	2.00
turbidity	NTU	3.10	4.37	0.30	4.36
total ammonia	mg/l	ND	0.11	0.11	0.70
chlorides	mg/l	4.69	7.00	2.53	4.07
iron	mg/l	ND	0.05	0.04	0.04
mercury	mg/l	ND	ND	ND	ND
nitrate	mg/l	0.93	11.20	4.58	3.89
sodium	mg/l	1.89	2.70	2.76	2.70
TDS	mg/l	290	220	158	174
Water Level	feet	32.14	30.42	26.98	24.92
arsenic	mg/l	ND	ND	ND	ND
barium	mg/l	0.006	0.011	0.010	0.010
beryllium	mg/l	ND	ND	ND	ND
cadmium	mg/l	ND	0.00047	ND	ND
chromium	mg/l	0.00088	0.0018	0.00069	ND
cobalt	mg/l	ND	ND	ND	ND
copper	mg/l	0.0016	0.0061	0.00068	ND
lead	mg/l	ND	0.0024	ND	ND
nickel	mg/l	ND	ND	ND	0.0017
selenium	mg/l	ND	ND	ND	ND
silver	mg/l	ND	ND	ND	ND
vanadium	mg/l	ND	ND	0.00096	ND
zinc	mg/l	ND	0.013	0.0050	0.0034
antimony	mg/l	ND	ND	ND	ND
thallium	mg/l	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	ND
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	ND	ND	ND	ND
chloromethane	ug/l	ND	ND	ND	3.5
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichloroflouromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	ND	ND	ND	ND

Table 2-8
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 4MW-1

Test Site ID #: 4051A16511 **Well Name: 4MW-1** Classification of Groundwater: Floridan

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	1009	1044	741	872
pH	s.u.	6.99	6.97	6.96	7.74
temperature	°C	25.20	24.68	24.31	25.70
dissolved oxygen	mg/l	0.20	0.44	0.28	0.48
turbidity	NTU	0.10	0.10	0.12	1.65
total ammonia	mg/l	ND	0.47	ND	0.83
chlorides	mg/l	196	226	129	181
iron	mg/l	ND	ND	ND	0.02
mercury	mg/l	ND	ND	ND	ND
nitrate	mg/l	1.70	1.74	0.16	0.29
sodium	mg/l	82.2	87.3	52.2	89.0
TDS	mg/l	700	768	540	574
Water Level	feet	36.94	35.92	33.98	32.15
arsenic	mg/l	ND	ND	ND	ND
barium	mg/l	0.034	0.037	0.032	0.038
beryllium	mg/l	0.000074	ND	ND	ND
cadmium	mg/l	ND	0.00037	ND	ND
chromium	mg/l	ND	0.00072	ND	ND
cobalt	mg/l	ND	0.0078	ND	0.0012
copper	mg/l	ND	0.001	0.00074	ND
lead	mg/l	ND	ND	ND	ND
nickel	mg/l	0.0053	0.0042	0.0031	0.0049
selenium	mg/l	ND	ND	ND	ND
silver	mg/l	ND	ND	ND	ND
vanadium	mg/l	0.0026	0.019	0.0020	0.0028
zinc	mg/l	ND	0.0037	ND	ND
antimony	mg/l	0.00097	ND	ND	ND
thallium	mg/l	ND	0.00016	0.00022	0.00032
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	ND
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	2.2	2.4	ND	ND
chloromethane	ug/l	ND	ND	ND	ND
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichloroflouromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	ND	ND	ND	ND

Table 2-9
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 4MW-2

Test Site ID #: 4051A16512 **Well Name: 4MW-2** Classification of Groundwater: Floridan

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	182	186	181	180
pH	s.u.	7.57	7.40	7.27	8.03
temperature	°C	23.60	25.10	23.70	24.80
dissolved oxygen	mg/l	1.10	0.90	1.10	1.85
turbidity	NTU	0.05	0.10	0.11	2.41
total ammonia	mg/l	ND	0.09	ND	0.10
chlorides	mg/l	3.62	4.48	4.04	3.11
iron	mg/l	ND	ND	ND	0.02
mercury	mg/l	ND	ND	ND	ND
nitrate	mg/l	2.87	2.88	4.02	3.49
sodium	mg/l	3.30	3.24	3.52	3.67
TDS	mg/l	120	138	134	120
Water Level	feet	38.46	37.11	34.14	31.66
arsenic	mg/l	0.0039	ND	ND	ND
barium	mg/l	0.0055	0.0058	0.0063	0.0064
beryllium	mg/l	ND	ND	ND	ND
cadmium	mg/l	ND	ND	ND	ND
chromium	mg/l	0.00069	ND	ND	0.00071
cobalt	mg/l	ND	ND	ND	ND
copper	mg/l	0.0013	0.00065	ND	ND
lead	mg/l	ND	ND	ND	ND
nickel	mg/l	ND	ND	ND	ND
selenium	mg/l	0.0031	ND	ND	ND
silver	mg/l	ND	ND	ND	ND
vanadium	mg/l	0.0048	0.0048	0.0051	0.0054
zinc	mg/l	ND	ND	ND	ND
antimony	mg/l	ND	ND	ND	ND
thallium	mg/l	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	ND
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	ND	ND	ND	ND
chloromethane	ug/l	ND	ND	ND	ND
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichlorofluoromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	ND	ND	ND	ND

Table 2-10
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 4MW-4

Test Site ID #: 4051A16513 **Well Name: 4MW-4** Classification of Groundwater: Floridan

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	322	332	312	314
pH	s.u.	7.19	7.10	7.04	7.89
temperature	°C	25.40	28.11	24.68	26.00
dissolved oxygen	mg/l	1.10	1.11	1.06	2.67
turbidity	NTU	0.07	1.09	0.05	3.93
total ammonia	mg/l	ND	0.05	ND	0.25
chlorides	mg/l	5.97	16.30	8.96	9.05
iron	mg/l	ND	0.34	ND	0.03
mercury	mg/l	0.0008	ND	ND	ND
nitrate	mg/l	0.58	0.47	0.47	ND
sodium	mg/l	4.24	3.84	4.47	5.30
TDS	mg/l	206	156	200	196
Water Level	feet	32.20	30.49	27.07	24.78
arsenic	mg/l	ND	ND	ND	ND
barium	mg/l	0.0066	0.0064	0.0075	0.0074
beryllium	mg/l	ND	ND	ND	ND
cadmium	mg/l	ND	ND	ND	ND
chromium	mg/l	0.00093	0.0011	0.00089	0.00072
cobalt	mg/l	ND	ND	ND	ND
copper	mg/l	0.0012	0.0011	ND	ND
lead	mg/l	ND	ND	ND	ND
nickel	mg/l	ND	ND	ND	ND
selenium	mg/l	ND	ND	ND	ND
silver	mg/l	ND	ND	ND	ND
vanadium	mg/l	0.0024	0.0024	0.0028	0.0031
zinc	mg/l	ND	ND	ND	0.0040
antimony	mg/l	ND	ND	ND	ND
thallium	mg/l	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	3.3
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	ND	ND	ND	ND
chloromethane	ug/l	ND	ND	ND	ND
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichloroflouromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	ND	ND	ND	ND

Table 2-11
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 4MW-5

Test Site ID #: 4051A16514 **Well Name: 4MW-5** Classification of Groundwater: Floridan

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	579	586	537	558
pH	s.u.	7.19	7.10	7.42	7.20
temperature	°C	23.80	26.57	23.47	25.40
dissolved oxygen	mg/l	0.60	0.62	1.53	2.00
turbidity	NTU	0.03	0.92	0.21	0.25
total ammonia	mg/l	ND	0.09	0.12	6.86
chlorides	mg/l	102	98.6	46.4	88.9
iron	mg/l	ND	ND	0.03	0.02
mercury	mg/l	ND	ND	ND	ND
nitrate	mg/l	1.69	1.56	1.43	0.74
sodium	mg/l	24.5	22.7	23.5	26.5
TDS	mg/l	418	528	400	86
Water Level	feet	32.88	31.14	27.88	25.73
arsenic	mg/l	0.003	ND	ND	ND
barium	mg/l	0.010	0.0095	0.011	0.012
beryllium	mg/l	0.000098	ND	ND	ND
cadmium	mg/l	ND	ND	ND	ND
chromium	mg/l	0.0014	0.0015	0.0014	0.00073
cobalt	mg/l	0.0017	ND	ND	ND
copper	mg/l	0.001	0.00076	ND	ND
lead	mg/l	ND	ND	ND	ND
nickel	mg/l	ND	ND	ND	ND
selenium	mg/l	ND	ND	ND	ND
silver	mg/l	ND	ND	ND	ND
vanadium	mg/l	0.0021	0.0027	0.0024	0.0022
zinc	mg/l	ND	ND	ND	ND
antimony	mg/l	ND	ND	ND	ND
thallium	mg/l	ND	0.00015	ND	ND
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	ND
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	ND	ND	ND	ND
chloromethane	ug/l	ND	ND	ND	ND
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
Iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichlorofloуromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	ND	ND	ND	ND

Table 2-12
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 4MW-6

Test Site ID #: 4051A16515 **Well Name: 4MW-6** Classification of Groundwater: Floridan

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	148	153	141	140
pH	s.u.	7.54	7.83	8.74	7.80
temperature	°C	23.80	25.51	24.76	24.80
dissolved oxygen	mg/l	2.90	3.62	4.80	5.15
turbidity	NTU	0.02	0.50	0.17	0.40
total ammonia	mg/l	ND	0.04	0.14	1.86
chlorides	mg/l	3.22	5.35	5.69	12.30
iron	mg/l	ND	ND	0.03	0.01
mercury	mg/l	ND	ND	ND	ND
nitrate	mg/l	2.19	2.32	2.37	1.44
sodium	mg/l	3.69	3.71	3.81	3.71
TDS	mg/l	100	101	98	436
Water Level	feet	36.40	34.86	31.37	28.78
arsenic	mg/l	ND	ND	ND	ND
barium	mg/l	0.0049	0.0053	0.0054	0.0051
beryllium	mg/l	ND	ND	ND	ND
cadmium	mg/l	ND	ND	ND	ND
chromium	mg/l	0.00098	0.0014	0.0013	0.00094
cobalt	mg/l	ND	ND	ND	ND
copper	mg/l	0.00059	0.00064	ND	ND
lead	mg/l	ND	ND	ND	ND
nickel	mg/l	ND	ND	ND	ND
selenium	mg/l	0.0032	ND	ND	ND
silver	mg/l	ND	ND	0.0011	ND
vanadium	mg/l	0.0039	0.0038	0.004	0.0042
zinc	mg/l	ND	0.0054	ND	ND
antimony	mg/l	ND	ND	ND	ND
thallium	mg/l	ND	0.00018	0.00014	ND
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	ND
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	ND	ND	ND	ND
chloromethane	ug/l	ND	ND	ND	ND
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichloroflouromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	ND	ND	ND	ND

Table 2-13
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 4MW-11D

Test Site ID #: **Well Name: 4MW-11D** Classification of Groundwater: Floridan

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	284	278	268	275
pH	s.u.	7.39	7.31	7.24	7.17
temperature	° C	23.20	24.78	24.48	24.40
dissolved oxygen	mg/l	0.70	0.95	1.59	2.44
turbidity	NTU	1.40	4.50	6.90	0.31
total ammonia	mg/l	ND	0.05	0.09	0.12
chlorides	mg/l	5.61	7.77	6.95	6.30
iron	mg/l	ND	0.08	0.04	0.01
mercury	mg/l	ND	ND	ND	ND
nitrate	mg/l	0.44	0.33	0.41	0.35
sodium	mg/l	4.36	4.22	4.24	4.24
TDS	mg/l	166	328	158	148
Water Level	feet	35.24	33.80	30.74	28.52
arsenic	mg/l	ND	ND	ND	ND
barium	mg/l	0.006	0.0055	0.0059	0.0063
beryllium	mg/l	ND	ND	ND	ND
cadmium	mg/l	ND	ND	ND	ND
chromium	mg/l	ND	0.00088	0.00089	ND
cobalt	mg/l	ND	ND	ND	ND
copper	mg/l	0.001	ND	ND	ND
lead	mg/l	ND	ND	ND	ND
nickel	mg/l	ND	ND	ND	ND
selenium	mg/l	ND	ND	ND	ND
silver	mg/l	ND	ND	ND	ND
vanadium	mg/l	0.0015	0.0018	0.0012	ND
zinc	mg/l	ND	0.0036	ND	ND
antimony	mg/l	ND	ND	ND	ND
thallium	mg/l	ND	0.00015	ND	ND
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	ND
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	ND	ND	ND	ND
chloromethane	ug/l	ND	ND	ND	ND
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichloroflouromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	ND	ND	ND	ND

Table 2-14
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 4MW-12D

Test Site ID #: **Well Name: 4MW-12D** Classification of Groundwater: Floridan

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	365	353	357	454
pH	s.u.	7.15	7.10	6.94	6.98
temperature	° C	24.40	25.13	25.93	25.70
dissolved oxygen	mg/l	0.50	0.14	0.51	0.60
turbidity	NTU	0.10	0.50	0.20	0.26
total ammonia	mg/l	ND	0.06	0.09	0.09
chlorides	mg/l	11.4	11.9	12.0	30.0
iron	mg/l	ND	ND	0.03	0.01
mercury	mg/l	ND	ND	ND	ND
nitrate	mg/l	0.28	0.53	0.32	ND
sodium	mg/l	4.72	4.71	4.87	6.52
TDS	mg/l	240	226	232	286
Water Level	feet	34.38	32.95	30.03	27.87
arsenic	mg/l	ND	ND	ND	ND
barium	mg/l	0.0071	0.0064	0.0075	0.010
beryllium	mg/l	0.00011	ND	ND	ND
cadmium	mg/l	ND	ND	ND	ND
chromium	mg/l	ND	ND	ND	ND
cobalt	mg/l	0.0017	ND	ND	ND
copper	mg/l	0.0010	ND	ND	ND
lead	mg/l	ND	ND	ND	ND
nickel	mg/l	ND	ND	ND	ND
selenium	mg/l	ND	ND	ND	ND
silver	mg/l	ND	ND	ND	ND
vanadium	mg/l	ND	0.0010	0.0010	ND
zinc	mg/l	ND	ND	ND	ND
antimony	mg/l	ND	0.00063	ND	ND
thallium	mg/l	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	ND
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	ND	ND	ND	ND
chloromethane	ug/l	ND	ND	ND	ND
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
Iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichloroflouromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	ND	ND	ND	ND

Table 2-15
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 4MW-13D

Test Site ID #: **Well Name: 4MW-13D** Classification of Groundwater: Floridan

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	469	477	455	458
pH	s.u.	7.09	7.03	7.14	7.07
temperature	° C	25.50	27.20	27.08	26.40
dissolved oxygen	mg/l	0.20	0.41	0.40	0.50
turbidity	NTU	0.09	0.52	0.75	0.41
total ammonia	mg/l	ND	ND	0.15	0.07
chlorides	mg/l	36.3	47.8	43.5	45.1
iron	mg/l	ND	0.05	0.04	0.03
mercury	mg/l	ND	ND	ND	ND
nitrate	mg/l	ND	ND	ND	ND
sodium	mg/l	9.01	8.65	9.65	10.7
TDS	mg/l	340	296	312	306
Water Level	feet	33.74	32.66	29.56	27.46
arsenic	mg/l	ND	ND	ND	ND
barium	mg/l	0.0087	0.0089	0.010	0.011
beryllium	mg/l	ND	ND	ND	ND
cadmium	mg/l	ND	ND	ND	ND
chromium	mg/l	ND	0.00064	ND	0.0011
cobalt	mg/l	ND	ND	ND	ND
copper	mg/l	ND	ND	0.00061	ND
lead	mg/l	ND	ND	ND	ND
nickel	mg/l	0.0015	ND	ND	0.0016
selenium	mg/l	ND	ND	ND	ND
silver	mg/l	ND	ND	ND	ND
vanadium	mg/l	0.0019	0.0010	0.0017	ND
zinc	mg/l	ND	ND	0.0047	ND
antimony	mg/l	ND	ND	ND	ND
thallium	mg/l	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	ND
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	ND	ND	ND	ND
chloromethane	ug/l	ND	ND	ND	ND
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichloroflouromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	ND	ND	ND	ND

Table 2-16
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 4MW-14D

Test Site ID #: **Well Name: 4MW-14D** Classification of Groundwater: Floridan

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	466	448	416	411
pH	s.u.	7.19	7.18	7.33	7.49
temperature	° C	24.60	25.81	26.40	26.50
dissolved oxygen	mg/l	0.50	0.57	0.91	1.60
turbidity	NTU	0.50	0.80	0.45	0.10
total ammonia	mg/l	ND	0.06	0.08	0.10
chlorides	mg/l	48.9	59.6	47.4	46.2
iron	mg/l	ND	0.04	0.05	0.02
mercury	mg/l	ND	ND	ND	ND
nitrate	mg/l	0.48	0.76	ND	0.22
sodium	mg/l	13.6	12.0	12.7	12.9
TDS	mg/l	332	392	284	278
Water Level	feet	34.65	33.40	30.48	28.31
arsenic	mg/l	ND	ND	ND	ND
barium	mg/l	0.011	0.0098	0.011	0.011
beryllium	mg/l	0.000074	ND	ND	ND
cadmium	mg/l	ND	ND	ND	ND
chromium	mg/l	0.00084	0.0011	0.00071	0.0012
cobalt	mg/l	0.0018	ND	ND	ND
copper	mg/l	0.00099	ND	ND	ND
lead	mg/l	ND	ND	ND	ND
nickel	mg/l	ND	ND	ND	ND
selenium	mg/l	ND	ND	ND	ND
silver	mg/l	ND	ND	ND	ND
vanadium	mg/l	0.00082	0.00085	ND	ND
zinc	mg/l	ND	ND	0.0035	ND
antimony	mg/l	ND	ND	ND	ND
thallium	mg/l	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	ND
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	ND	ND	ND	ND
chloromethane	ug/l	ND	ND	ND	ND
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
Iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichloroflouromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	ND	ND	ND	ND

Table 2-17
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 2MW-15D

Test Site ID #: **Well Name: 2MW-15D** Classification of Groundwater: Floridan

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	298	281	260	235
pH	s.u.	7.45	7.37	7.21	7.43
temperature	°C	24.00	25.11	24.94	26.00
dissolved oxygen	mg/l	0.30	0.35	1.79	1.40
turbidity	NTU	0.04	0.34	0.35	1.78
total ammonia	mg/l	0.1	ND	0.04	0.12
chlorides	mg/l	19.1	20.0	10.1	7.26
iron	mg/l	ND	0.06	0.04	0.10
mercury	mg/l	ND	ND	ND	ND
nitrate	mg/l	0.04	0.03	0.03	<0.02
sodium	mg/l	6.08	5.28	5.39	4.36
TDS	mg/l	140	210	170	154
Water Level	feet	36.58	35.68	32.71	30.78
arsenic	mg/l	0.0036	ND	ND	ND
barium	mg/l	0.0085	0.008	0.0085	0.0090
beryllium	mg/l	0.000081	ND	ND	ND
cadmium	mg/l	ND	ND	ND	ND
chromium	mg/l	ND	ND	0.00078	ND
cobalt	mg/l	ND	ND	ND	ND
copper	mg/l	0.0013	0.00087	0.0026	ND
lead	mg/l	ND	ND	ND	ND
nickel	mg/l	ND	ND	ND	ND
selenium	mg/l	ND	ND	ND	ND
silver	mg/l	ND	ND	ND	ND
vanadium	mg/l	0.0018	0.0015	0.0014	0.0017
zinc	mg/l	ND	ND	ND	ND
antimony	mg/l	ND	ND	ND	ND
thallium	mg/l	0.00028	ND	ND	ND
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	ND
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	ND	ND	ND	ND
chloromethane	ug/l	ND	ND	ND	ND
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichlorofluoromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	ND	ND	ND	ND

Table 2-18
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 2MW-18D

Test Site ID #: **Well Name: 2MW-18D** Classification of Groundwater: Surficial

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	412	408	382	401
pH	s.u.	7.16	7.09	6.99	7.01
temperature	°C	23.90	25.02	24.50	25.40
dissolved oxygen	mg/l	0.70	0.62	0.59	1.78
turbidity	NTU	3.30	1.42	0.75	1.11
total ammonia	mg/l	ND	0.08	0.06	0.47
chlorides	mg/l	33.8	38.0	28.7	23.5
iron	mg/l	0.04	0.06	0.04	0.04
mercury	mg/l	ND	ND	ND	ND
nitrate	mg/l	0.41	0.60	1.13	3.39
sodium	mg/l	8.49	7.64	8.30	8.13
TDS	mg/l	320	260	262	288
Water Level	feet	32.03	30.27	26.90	24.77
arsenic	mg/l	ND	ND	ND	ND
barium	mg/l	0.0089	0.008	0.0085	0.010
beryllium	mg/l	0.000087	ND	ND	ND
cadmium	mg/l	ND	ND	ND	ND
chromium	mg/l	0.0012	0.0011	0.00074	0.00068
cobalt	mg/l	ND	ND	ND	ND
copper	mg/l	0.0011	0.00065	ND	ND
lead	mg/l	ND	ND	ND	ND
nickel	mg/l	ND	ND	ND	ND
selenium	mg/l	0.0035	ND	ND	ND
silver	mg/l	ND	ND	ND	ND
vanadium	mg/l	0.0020	0.0025	0.0021	0.0026
zinc	mg/l	ND	ND	ND	ND
antimony	mg/l	ND	ND	ND	ND
thallium	mg/l	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	2.7
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	ND	ND	ND	ND
chloromethane	ug/l	ND	ND	ND	ND
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
Iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichloroflouromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	ND	ND	ND	ND

Table 2-19
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 2MW-19D

Test Site ID #: **Well Name: 2MW-19D** Classification of Groundwater: Floridan

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	361	353	337	349
pH	s.u.	7.23	7.20	7.12	7.37
temperature	°C	24.00	25.88	24.52	25.60
dissolved oxygen	mg/l	0.50	0.42	0.57	2.24
turbidity	NTU	0.30	0.94	0.25	0.82
total ammonia	mg/l	ND	ND	ND	0.09
chlorides	mg/l	22.3	27.8	21.4	21.9
iron	mg/l	ND	0.04	0.04	0.02
mercury	mg/l	ND	ND	ND	ND
nitrate	mg/l	0.30	0.34	0.37	0.29
sodium	mg/l	7.09	5.97	6.67	7.04
TDS	mg/l	230	152	248	264
Water Level	feet	32.57	30.95	27.61	25.51
arsenic	mg/l	ND	ND	ND	ND
barium	mg/l	0.0075	0.007	0.0074	0.0079
beryllium	mg/l	0.000083	ND	ND	ND
cadmium	mg/l	ND	ND	ND	ND
chromium	mg/l	ND	0.00088	ND	ND
cobalt	mg/l	ND	ND	ND	ND
copper	mg/l	0.0011	0.00083	ND	ND
lead	mg/l	ND	ND	ND	ND
nickel	mg/l	ND	ND	ND	ND
selenium	mg/l	ND	ND	ND	ND
silver	mg/l	ND	ND	ND	ND
vanadium	mg/l	0.0017	0.0019	0.0021	0.0017
zinc	mg/l	ND	ND	0.0038	ND
antimony	mg/l	0.0010	ND	ND	ND
thallium	mg/l	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	ND	ND
Ethylene Dibromide	ug/l	ND	ND	ND	ND
acetone	ug/l	ND	ND	ND	ND
acrylonitrile	ug/l	ND	ND	ND	ND
benzene	ug/l	ND	ND	ND	ND
bromochloromethane	ug/l	ND	ND	ND	ND
bromodichloromethane	ug/l	ND	ND	ND	ND
bromoform	ug/l	ND	ND	ND	ND
bromomethane	ug/l	ND	ND	ND	ND
2-Butanone	ug/l	ND	ND	ND	ND
carbon disulfide	ug/l	ND	ND	ND	ND
carbon tetrachloride	ug/l	ND	ND	ND	ND
chlorobenzene	ug/l	ND	ND	ND	ND
chloroethane	ug/l	ND	ND	ND	ND
chloroform	ug/l	ND	ND	ND	ND
chloromethane	ug/l	ND	ND	ND	ND
dibromochloromethane	ug/l	ND	ND	ND	ND
dibromomethane	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	ND	ND
1,2-dichlorobenzene	ug/l	ND	ND	ND	ND
1,4-dichlorobenzene	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND
2-Hexanone	ug/l	ND	ND	ND	ND
iodomethane	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/l	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND
Tetrachloroethene	ug/l	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND
Trichloroethene	ug/l	ND	ND	ND	ND
Trichloroflouromethane	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	ug/l	ND	ND	ND	ND
Vinyl acetate	ug/l	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND
Xylenes, Total	ug/l	0.37	ND	ND	ND

Table 2-20
Summary of Field Parameters and Analytical Results 2005-2006 Monitor Well: 2MW-20D

Test Site ID #: **Well Name: 2MW-20D** Classification of Groundwater: Floridan

		2005		2006	
parameter	*units*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
conductivity	umhos/cm	553	518	DRY	424
pH	s.u.	7.28	7.24	DRY	7.41
temperature	°C	23.80	24.51	DRY	26.00
dissolved oxygen	mg/l	0.40	0.49	DRY	1.90
turbidity	NTU	0.20	0.51	DRY	24.50
total ammonia	mg/l	ND	ND	DRY	0.22
chlorides	mg/l	88.9	83.8	DRY	47.0
iron	mg/l	ND	0.03	DRY	0.16
mercury	mg/l	ND	ND	DRY	ND
nitrate	mg/l	0.78	0.74	DRY	0.41
sodium	mg/l	24.4	19.9	DRY	17.9
TDS	mg/l	480	176	DRY	318
Water Level	feet	35.74	34.66	DRY	29.69
arsenic	mg/l	ND	ND	DRY	ND
barium	mg/l	0.020	0.018	DRY	0.022
beryllium	mg/l	0.000069	ND	DRY	ND
cadmium	mg/l	ND	ND	DRY	ND
chromium	mg/l	ND	0.00076	DRY	0.0082
cobalt	mg/l	0.0017	ND	DRY	ND
copper	mg/l	0.0010	ND	DRY	ND
lead	mg/l	ND	ND	DRY	ND
nickel	mg/l	ND	ND	DRY	0.0026
selenium	mg/l	ND	ND	DRY	ND
silver	mg/l	ND	ND	DRY	ND
vanadium	mg/l	0.0014	0.0012	DRY	0.0052
zinc	mg/l	ND	ND	DRY	0.0044
antimony	mg/l	ND	ND	DRY	ND
thallium	mg/l	ND	ND	DRY	0.00018
1,2-Dibromo-3-chloropropane	ug/l	ND	ND	DRY	ND
Ethylene Dibromide	ug/l	ND	ND	DRY	ND
acetone	ug/l	ND	ND	DRY	ND
acrylonitrile	ug/l	ND	ND	DRY	ND
benzene	ug/l	ND	ND	DRY	ND
bromochloromethane	ug/l	ND	ND	DRY	ND
bromodichloromethane	ug/l	ND	ND	DRY	ND
bromoform	ug/l	ND	ND	DRY	ND
bromomethane	ug/l	ND	ND	DRY	ND
2-Butanone	ug/l	ND	ND	DRY	ND
carbon disulfide	ug/l	ND	ND	DRY	ND
carbon tetrachloride	ug/l	ND	ND	DRY	ND
chlorobenzene	ug/l	ND	ND	DRY	ND
chloroethane	ug/l	ND	ND	DRY	ND
chloroform	ug/l	ND	ND	DRY	ND
chloromethane	ug/l	ND	ND	DRY	ND
dibromochloromethane	ug/l	ND	ND	DRY	ND
dibromomethane	ug/l	ND	ND	DRY	ND
trans-1,4-Dichloro-2-butene	ug/l	ND	ND	DRY	ND
1,2-dichlorobenzene	ug/l	ND	ND	DRY	ND
1,4-dichlorobenzene	ug/l	ND	ND	DRY	ND
1,1-Dichloroethane	ug/l	ND	ND	DRY	ND
1,2-Dichloroethane	ug/l	ND	ND	DRY	ND
1,1-Dichloroethene	ug/l	ND	ND	DRY	ND
cis-1,2-Dichloroethene	ug/l	ND	ND	DRY	ND
trans-1,2-Dichloroethene	ug/l	ND	ND	DRY	ND
1,2-Dichloropropane	ug/l	ND	ND	DRY	ND
cis-1,3-Dichloropropene	ug/l	ND	ND	DRY	ND
trans-1,3-Dichloropropene	ug/l	ND	ND	DRY	ND
Ethylbenzene	ug/l	ND	ND	DRY	ND
2-Hexanone	ug/l	ND	ND	DRY	ND
iodomethane	ug/l	ND	ND	DRY	ND
4-Methyl-2-pentanone	ug/l	ND	ND	DRY	ND
Methylene chloride	ug/l	ND	ND	DRY	ND
Styrene	ug/l	ND	ND	DRY	ND
1,1,1,2-Tetrachloroethane	ug/l	ND	ND	DRY	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	DRY	ND
Tetrachloroethene	ug/l	ND	ND	DRY	ND
Toluene	ug/l	ND	ND	DRY	ND
1,1,1-Trichloroethane	ug/l	ND	ND	DRY	ND
1,1,2-Trichloroethane	ug/l	ND	ND	DRY	ND
Trichloroethene	ug/l	ND	ND	DRY	ND
Trichloroflouromethane	ug/l	ND	ND	DRY	ND
1,2,3-Trichloropropane	ug/l	ND	ND	DRY	ND
Vinyl acetate	ug/l	ND	ND	DRY	ND
Vinyl chloride	ug/l	ND	ND	DRY	ND
Xylenes, Total	ug/l	ND	ND	DRY	ND