

GW - 20

REPORTS

YEAR(S):

10 + ~~1~~ 3

2004-2003



10601 Lomas Blvd. NE, Suite 106
Albuquerque, NM 87106
Office 505.237.8440
Fax 505.237.8656

December 13, 2004

Mr. Wayne Price
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

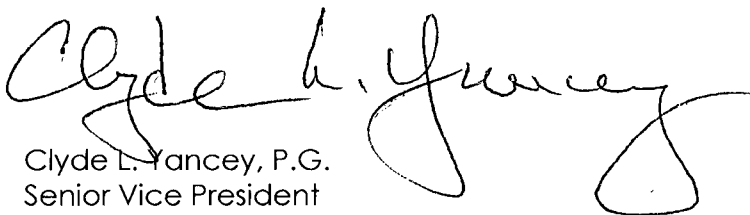
**RE: Groundwater Extraction Well Report
Maljamar Gas Plant
Maljamar, New Mexico**

Dear Mr. Price:

On behalf of ConocoPhillips, Maxim Technologies (Maxim) is submitting the above referenced report for your review and concurrence. If you have any questions, please call either myself or Charlie Durrett in the Midland, TX office.

We appreciate your review and wish you and your family a Happy Holiday Season.

Sincerely,
MAXIM TECHNOLOGIES



Clyde L. Yancey, P.G.
Senior Vice President

Attachment

cc w/out Attachment:
Neal Goates, ConocoPhillips
Charlie Durrett, Maxim



1703 Industrial Ave.
Midland, Texas 79701
432-686-8081
432-686-8085 fax

December 9, 2004

Mr. Neal Goates
ConocoPhillips, Inc.
Risk Management & Remediation
600 North Dairy Ashford
Houston, TX 77079

RE: GROUNDWATER EXTRACTION WELL REPORT
Maljamar Gas Plant
Maljamar, New Mexico

INTRODUCTION

Maxim Technologies (Maxim) is submitting this report on the operation of a new groundwater extraction well installed at the Maljamar Gas Plant site (previously owned by ConocoPhillips, now owned by Frontier Energy). The gas plant is located in Lea County, New Mexico (Sec 21, T17S, R32E; Figure 1). This report includes a brief review of previous site activities, groundwater sampling data collected in May, 2004, and aquifer data collected during four months operation of the groundwater extraction well including updated output from the groundwater flow model for the site. As part of this report, Maxim also proposes a path forward plan for continued operation of the groundwater extraction well and enhancing the recovery of condensate.

BACKGROUND

During previous investigative and remedial activities at the Maljamar Gas Plant, 12 soil borings were drilled and sampled, 19 groundwater monitoring wells and two (2) condensate recovery wells were installed, groundwater samples and water level data were collected, surface and borehole geophysical surveys were performed, and an aquifer pumping test was conducted. The following is a summary of those activities:

- A subsurface investigation was performed in June 2000 to assess the potential for impacts to the subsurface underlying two bermed areas where condensate was historically stored and a 15 barrel condensate release occurred February 13, 2000. The assessment consisted of drilling, collecting and analyzing soil samples from twelve (12) soil borings. One monitoring well (MW-1) was installed to a depth of 92 feet below ground surface (fbgs). Data collected from this investigation was

submitted to the New Mexico Oil Conservation Commission (NMOCD) in the August 8, 2000 Subsurface Investigation Report.

- Two (2) groundwater monitoring wells (MW-2 and 3) were installed at the site in September 2000.
- A groundwater investigation was initiated in May 2001 to define groundwater impacts at the Maljamar Gas Plant. Five (5) monitoring wells were installed (MW-4, 5, 7, 8 and 9). All wells installed during this investigation exhibited the presence of petroleum hydrocarbons. The results of this investigation were submitted to the NMOCD in the July 20, 2001 Interim Investigation Groundwater Report.
- Four (4) groundwater monitoring wells (MW-10, 11, 12 and 13) were installed in December 2001 and one (1) groundwater monitoring well (MW-14) was installed in March 2002 at the site.
- A groundwater investigation was performed in September 2002 to further delineate the groundwater flow system to the north, northeast, east, southeast, south, and southwest of the Maljamar Gas Plant and refine the conceptual hydrogeologic model of the area around the gas plant. Six groundwater monitoring wells (MW-15, 16, 17, 18, 19, and 20) were installed during this investigation. The water level elevations collected during this investigation indicated that a well-defined groundwater mound with a relatively uniform gradient field emanates radially away from a point source toward the north, east, and south. To the west, groundwater was not encountered during the March 2002 drilling program. The results of this investigation were submitted to the NMOCD in the November 11, 2002 Interim Groundwater Investigation Report.
- Condensate recovery wells SK-1 and SK-2 were installed at the site in March and December 2002, respectively.
- A magnetometer survey was performed in January 2003 to locate suspected abandoned exploration wells in the area over the groundwater mound that underlies the Maljamar Gas Plant. An early proposed hypothesis for the groundwater mounding conditions observed at the site was that the water flood of the MCA production unit underlying the area of concern had found a short-circuit upward through an abandoned well or annulus of an existing production well. However, no short-circuit pathways due to an abandoned well were discovered during this survey. Casing integrity tests were also performed on all surrounding injection and recovery wells associated with the MCA water flood project.
- A borehole geophysical investigation was initiated in March 2003 to ascertain the subsurface stratigraphy to facilitate free condensate removal and any subsequent groundwater remediation efforts. The study indicated mappable units, exhibiting lateral and vertical correlation properties, were underlying the gas plant.
- An aquifer pumping test was performed at the site in September 2003 to gather hydrogeologic data from the uppermost saturated zone, exhibiting both condensate and chloride impacts, in order to develop a remediation plan. The data were also used to develop a water balance for the uppermost aquifer and an interpretive groundwater flow model to aid in estimating the effects of pumping a proposed well to be sited near wells SK-1 and MW-7.

The results of the aquifer pumping test and the magnetometer and borehole geophysical surveys were submitted to the NMOCD in the Comprehensive Groundwater Report (Maxim, March 2004) for the site. This report also described a three-dimensional conceptual model of the subsurface geologic and hydrogeologic conditions present beneath the Maljamar Gas Plant, and the physical flow system of the two uppermost water-bearing sandstones underlying the site. This model was used as the basis for the installation of groundwater extraction well MW-6.

FIELD METHODOLOGY

Field activities conducted at the Maljamar Gas Plant from March to October 2004 included installing groundwater extraction well MW-6 in March 2004; performing a round of groundwater sampling and analyses in May 2004; installing equipment and performing startup operation of extraction well MW-6 in April and May 2004; and collecting groundwater level and water quality data on a weekly basis during the operation of extraction well MW-6 from May to October 2004. ConocoPhillips personnel performed periodic gauging of the onsite fluid storage tank and disposed of the collected fluids by injecting the tank contents into the ConocoPhillips' MCA Station water flood system.

Health and Safety

Maxim required safety and health procedures appropriate for the level of environmental hazard known to exist at this site. All contractors complied with ConocoPhillips' "Contractors Safety Manual" (revised 2003). Level D Personal Protective Equipment (PPE) was adequate for this activity. Personnel were equipped with respirators with organic vapor cartridges in the event of a sudden release of noxious fumes from the site. For further details, please refer to the site-specific Health and Safety Plan (HASP) prepared on March 29, 2004.

Groundwater Extraction Well Installation

On March 31, 2004, groundwater extraction well MW-6 was installed at the site by Harrison and Cooper Drilling of Lubbock, Texas using a truck-mounted air rotary drilling rig. A 9-7/8-inch drill bit was used to advance the well boring to a total depth of 105 fbs. Samples of the borehole cuttings were collected at 5-foot intervals during drilling. Samples collected from the boring were field screened with a photo-ionization detector (PID) to detect the presence of volatile organic compounds (VOCs) within the headspace atmosphere of bagged soil samples. Each sample was bagged, labeled, and stored at ambient air temperature for approximately 15 minutes. After the waiting period, the bags were penetrated with the tip of the PID and a measurement taken of the organic vapors present within the bag. Soil samples were not collected for laboratory analysis. PID field readings are shown on the Well Boring Log in Appendix A.

After completion of drilling, 6-inch diameter Schedule 40 PVC well casing was installed in the borehole. The well construction consisted of a 5-foot sump section of blank PVC casing installed from 100 to 105 fbgs, 30 feet of 0.01-inch slot PVC screen installed from 70 to 100 fbgs, and blank PVC casing installed from 70 fbgs to approximately three feet above ground surface. The well annulus was filled with 20/40 silica sand from 68 to 105 fbgs. Bentonite gel was placed above the sand to approximately 10 fbgs and hydrated with potable water. Cement grout was used to fill the well annulus from the top of the bentonite to ground surface. The well was completed at the surface with a protective aboveground steel well box set into a concrete pad. Well construction details are shown on the Well Construction Form in Appendix A and summarized in Table 1.

Groundwater Sampling and Analysis

Groundwater samples were collected from the Maljamar Gas Plant monitoring wells on May 5 - 7, 2004. Prior to sampling, 21 wells were sounded for groundwater levels and affected wells were also measured for condensate thickness. Thirteen groundwater monitoring wells, one groundwater extraction well, and one onsite water well were sampled during this event. Wells containing measurable levels of condensate were not sampled. The groundwater samples were collected into appropriate sample containers, placed in a cooler packed with ice, and shipped under chain-of-custody to an approved laboratory for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by Method 8260; semi-volatile compounds-polynuclear aromatic hydrocarbons (PAHs) by Method 8270; calcium, magnesium, sodium and potassium by Method 6010B; chloride and sulfate by Method 300.0A; total dissolved solids (TDS) by Method 160.1; and alkalinity (carbonate, bicarbonate and total) by Method 310.1. One duplicate sample, collected from monitoring well MW-8, was submitted to the laboratory for analysis of BTEX only. The sample collected from extraction well MW-6 was submitted to the laboratory for analysis of chloride only. A summary of the laboratory analytical results from this sampling is presented in Table 2 and the laboratory analytical data is included in Appendix B.

Extraction Well Equipment Installation and Startup

During April and May 2004, equipment required to operate groundwater extraction well MW-6 was installed at the site and the well was connected to existing piping running to an onsite 210-barrel (bbl) fluid storage tank. The installed equipment consisted of a ½-horsepower electric submersible pump set in MW-6, a totalizing flow meter mounted in the discharge piping to measure the extracted fluid volume and rate, an EPG Companies Series 800 electrical control panel to operate the pump, and two EPG "F" Series float switches to control the start and stop of the pump at high and low water levels.

After installation of the extraction well equipment was completed, the well was placed into operation on May 10, 2004. The extraction well was initially pumped at a flow rate of 5 gallons per minute (gpm) and all piping was checked for leaks. The pump was

allowed to cycle on and off to verify proper operation of the float switches and the fluid storage tank was initially gauged for volume.

Groundwater Level and Water Quality Data Collection

Groundwater pumping from MW-6 was started on May 10, 2004 at the Maljamar Gas Plant. To observe the pumping effect on the groundwater, water levels measurements were taken at each of the surrounding monitoring wells on a weekly basis. A round of groundwater levels was taken from all monitoring wells on April 5, 2004 before pumping began. Beginning May 17, 2004, weekly groundwater levels were measured in all monitoring wells and continued until September 8, 2004. A round of water levels was also collected on October 8, 2004.

Groundwater depths were measured using an electronic interface probe capable of detecting both the top of the hydrocarbons, if present, and the hydrocarbon/water interface. The probe was cleaned before and after each use in each monitoring well. Groundwater measurements proceeded from the cleanest wells to the wells containing hydrocarbons. At each monitoring well, the water level and hydrocarbon depth, if present, were measured from the top of casing. The depth of groundwater below the top of casing was subtracted from the elevation of the top of casing to give the elevation of the groundwater at each well. The elevation of hydrocarbons was also determined in this manner at the affected wells, and the hydrocarbon thickness was calculated by subtracting the hydrocarbon depth from the groundwater depth.

Groundwater quality measurements of the MW-6 discharge water were also collected periodically from May to October 2004 using a portable field instrument. Measurement parameters included specific conductivity, salinity, pH and temperature.

Groundwater and hydrocarbon depth measurements and elevations are summarized in Table 3. Groundwater quality measurements are presented in Table 4. Hydrographs plotting the groundwater and hydrocarbon elevations over time are included in Appendix C.

GROUNDWATER DATA ANALYSIS

The following section provides a discussion of the groundwater data collected at the Maljamar Gas Plant from May to October 2004.

Groundwater Quality Evaluation

Groundwater samples collected on May 5-7, 2004 reported detectable concentrations of organic compounds in five of the wells sampled (Table 2). Wells MW-8 and MW-4 reported the only concentrations of organic constituents above New Mexico Water

Quality Control Commission (WQCC) standards with benzene reported at 25 and 0.025 milligrams per liter (mg/L) in MW-8 and MW-4, respectively, and toluene reported at 2.6 mg/L in MW-8.

Inorganic constituents were reported above WQCC standards in 13 of the 15 wells sampled (Table 2). Well MW-12 reported the highest concentrations of inorganic constituents with 68,300 mg/L of chloride, 1,570 mg/L of sulfate, and 116,000 mg/L of TDS. This well also reported the highest concentrations of major cations with 5,510 mg/L of calcium, 1,410 mg/L of magnesium, 172 mg/L of potassium, and 1,270 mg/L of sodium. Alkalinity analysis reported that only bicarbonate alkalinity is present in the site groundwater. Considering the general minerals content of wells outside the area of elevated chloride concentrations, the groundwater is generally calcium bicarbonate in nature.

Groundwater quality parameters for specific conductivity, pH, salinity and temperature collected of the discharge water from extraction well MW-6 are summarized in Table 4. These measurements indicate slightly alkaline saline water with a specific conductivity of approximately 1.70 to 1.79 milliSiemens per centimeter is present in this well.

Groundwater Data Evaluation

Groundwater elevation data collected in the site monitoring wells during the operation of extraction well MW-6 are summarized in Table 3. Hydrographs plotting the groundwater and hydrocarbon elevations over time are included in Appendix C and groundwater elevations for each measurement event are plotted on potentiometric surface maps included in Appendix D.

From May to October 2004, approximately 163,270 gallons of groundwater was recovered from extraction well MW-6 (Table 5). Hydrographs show that during this time frame, groundwater elevations generally declined in all monitoring wells while condensate thickness in the affected wells remained constant. The exception is in well SK-1, where the condensate thickness increased approximately 1.5 feet over time while the groundwater elevation decreased by over four feet. The potentiometric surface maps also indicate the slight overall decrease in groundwater elevations across the site with a general radial flow outward from the center of the groundwater mound in all directions except to the west. The average hydraulic gradient at the site was calculated at 0.0172 feet per foot in April 2004 and 0.0155 feet per foot in September 2004.

Groundwater Modeling Evaluation

The purpose of initial groundwater modeling in the vicinity of Frontier Energy's Maljamar Gas Plant (Maxim, March 2004) was to test the site conceptual model and

guide remedial activities. Initial modeling suggested that a single well screened across shallow sandstone units at the location of well SK-1 (Figure 1) would be capable of pumping approximately 1 to 2 gpm. Recommendations from that study included installation of a six-inch well diameter extraction well. The extraction well was installed and data collected during the period between May 10 and October 8, 2004 is presented above.

Follow on modeling, described here, based on observed pumping rates and water level measurements, is to further refine the conceptual model and enhance the existing remedial program. The calibration parameters developed in the initial model (Table 6) were used as baseline input for current transient simulations. Results of baseline transient modeling runs were compared to observed groundwater conditions and, in subsequent runs, parameters were adjusted to more closely match data collected in the May 10 to October 8, 2004 time period.

Table 6. Summary of calibrated model parameters from initial groundwater modeling (Maxim, March 2004).

Parameter	Value
Hydraulic conductivity	0.28 feet/day
Specific storage	3×10^{-4}
Specific yield	0.05
Leakage into mound	2 gpm

Time step 1 of the baseline transient model (Figure 2) approximates results of the initial calibrated model, and time step 20 (Figure 3) represents initially predicted groundwater conditions after 180 days. Figure 4 summarizes the observed groundwater surface based on field data collected on October 8, 2004.

The groundwater surface derived from field data is more complex than that originally predicted by the model, in part, because simplification is necessary in modeling exercises to accommodate computational restrictions involving multiple variables whose values, in many cases, are poorly known. However, a primary use of groundwater modeling is to highlight those areas where computational and observed values differ.

Note, for example, that time step 20 of the baseline transient model suggests a cone of depression around the extraction well (Figure 3) that transitions smoothly to the declining water table down gradient. In contrast, the groundwater surface generated from field data (Figure 4) displays a prominent irregularity in the area around MW-2. The water level in MW-2 is higher than predicted; suggesting that groundwater in this well may not be in direct communication with groundwater in the extraction well.

This evidence supports earlier conjecture (Maxim, March 2004) that water bearing sandstone units in the subsurface are, at least partially, hydraulically isolated from one another by an interbedded, four-foot thick shale unit. If true, hydraulic isolation would support a theory of groundwater and free-product flow into these sandstone units from deeper hydrostatic levels, as opposed to flow resulting from surface spills or infiltration.

The baseline transient model parameters were modified to include the average pumping rate, over the May 10 to October 8, 2004 time period, of 120 cubic feet per day (0.6 gpm) in the extraction well. Subsequent model runs varied the leakage into the mound until the match between the water table surface from field data (Figure 4) and the model surface was optimal (Figure 5). Modeling indicates that currently, leakage into the mound could be as little as 80 cubic feet per day (0.4 gpm).

Interpretation is complicated by a site wide decline in water levels in monitor wells, revealed in data collected during the last six months. Observed declines are unlikely to be entirely due to pumping at the extraction well. For example, declining water level trends in Monitor Well 14 (Figure 6), located approximately 1,800 feet upgradient of the extraction well, are similar in slope and magnitude to those observed in Monitor Well 2, located less than 500 feet downgradient of the extraction well (Figure 7). Thus, in addition to pumping of water from the extraction well, declining trends could be due to a regional decline in water levels that affects the source of the water to the groundwater mound, or it could be due to the decline of the source itself (for example better capture of any production water floods that may be occurring).

In any case, a primary result of the investigation to date is the verification that relatively small amounts of water can be difficult and time consuming to remove from the subsurface. Evidence to support this statement includes modeling that suggests as little as 0.4 gpm flow is enough to maintain the mound for some period of time. In addition, groundwater pumping from a six inch well, screened across the two primary water bearing units of concern, can only sustain a rate of 0.6 gpm. These lines of evidence indicate that, in any near term time frame, it would take a substantial number of additional extraction wells to deplete groundwater from a mound that may be dissipating on its own. However, up to 8 feet of drawdown in the vicinity of the current extraction well may serve to localize free product and provide for enhanced extraction using product skimmers.

PROPOSED PATH FORWARD

Based on the results of operating the groundwater extraction well from May to October 2004, evaluating the collected data and performing follow on groundwater modeling activities, Maxim proposes to continue operating the existing groundwater extraction well as currently in service and periodically collect groundwater level and extraction volume data. Additional activities will include performing a pilot test to determine the feasibility

Mr. Neal Goates
December 9, 2004
Page 9 of 9

of operating a skimmer system in existing wells to remove accumulated condensate and installing the skimmer system upon completion of the pilot test. Also, another complete groundwater sampling and analysis should be performed to assess current water quality. A detailed scope of work proposal including estimated costs will be forthcoming.

The maintenance of the pumping system, monitoring of the storage tank levels, and transport and disposal of fluids will continue to be coordinated through ConocoPhillips' Business Unit.

Please contact Mr. Greg Pope (432-686-8081), or Mr. Clyde Yancey (505) 237-8440, if you have any questions or require additional information.

Sincerely,
MAXIM TECHNOLOGIES

Greg W. Pope

Greg W. Pope
Senior Hydrogeologist

by CY

Charles Durrett

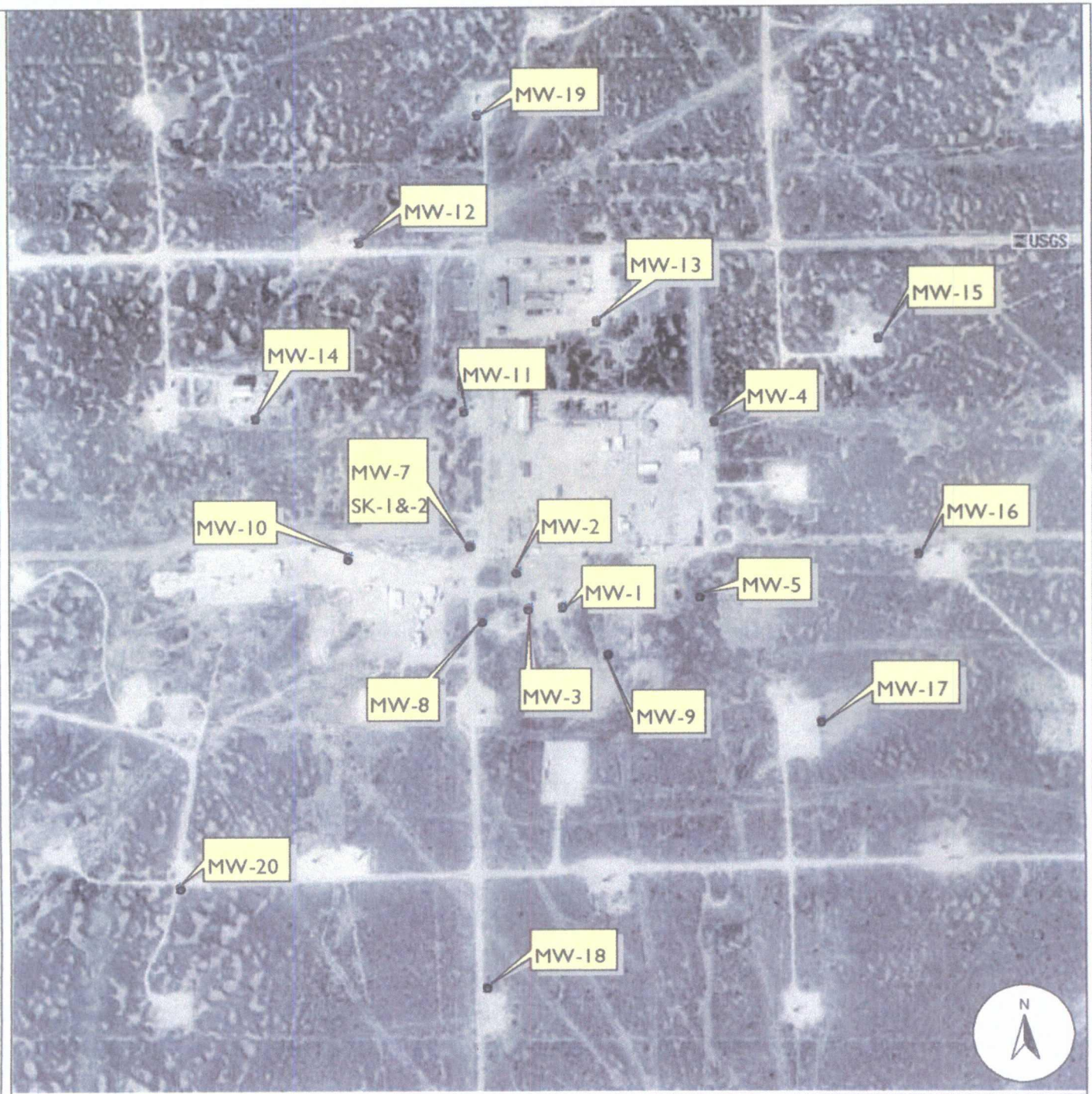
Charles Durrett
Senior Project Manager

by CY

References

- Maxim Technologies, Inc. report entitled "Comprehensive Groundwater Report, Maljamar Gas Plant, Maljamar, New Mexico" to Mr. Wayne Price, New Mexico Oil Conservation Division, dated March 1, 2004.

FIGURES



SOURCES:
 USGS, Dog Lake 7.5 Minute Quadrangle
 (Provisional Edition, 1985)
 USGS, Maljamar 7.5 Minute Quadrangle
 (Provisional Edition, 1985)
 Digital Orthophotos downloaded from Microsoft TerraServer, 2002.
 Well locations surveyed by Basin Surveys, Hobbs, NM.

400 0 400 800 Feet



Maljamar Gas Plant
 Comprehensive Groundwater Report
 Conoco Road,
 Maljamar, Lea County NM

MAXIM
 TECHNOLOGIES INC
 Project Number: 4640019

SITE MAP & WELL LOCATIONS

FIGURE 1

Figure 2. Time Step 1 as Described in Comprehensive Model Report.

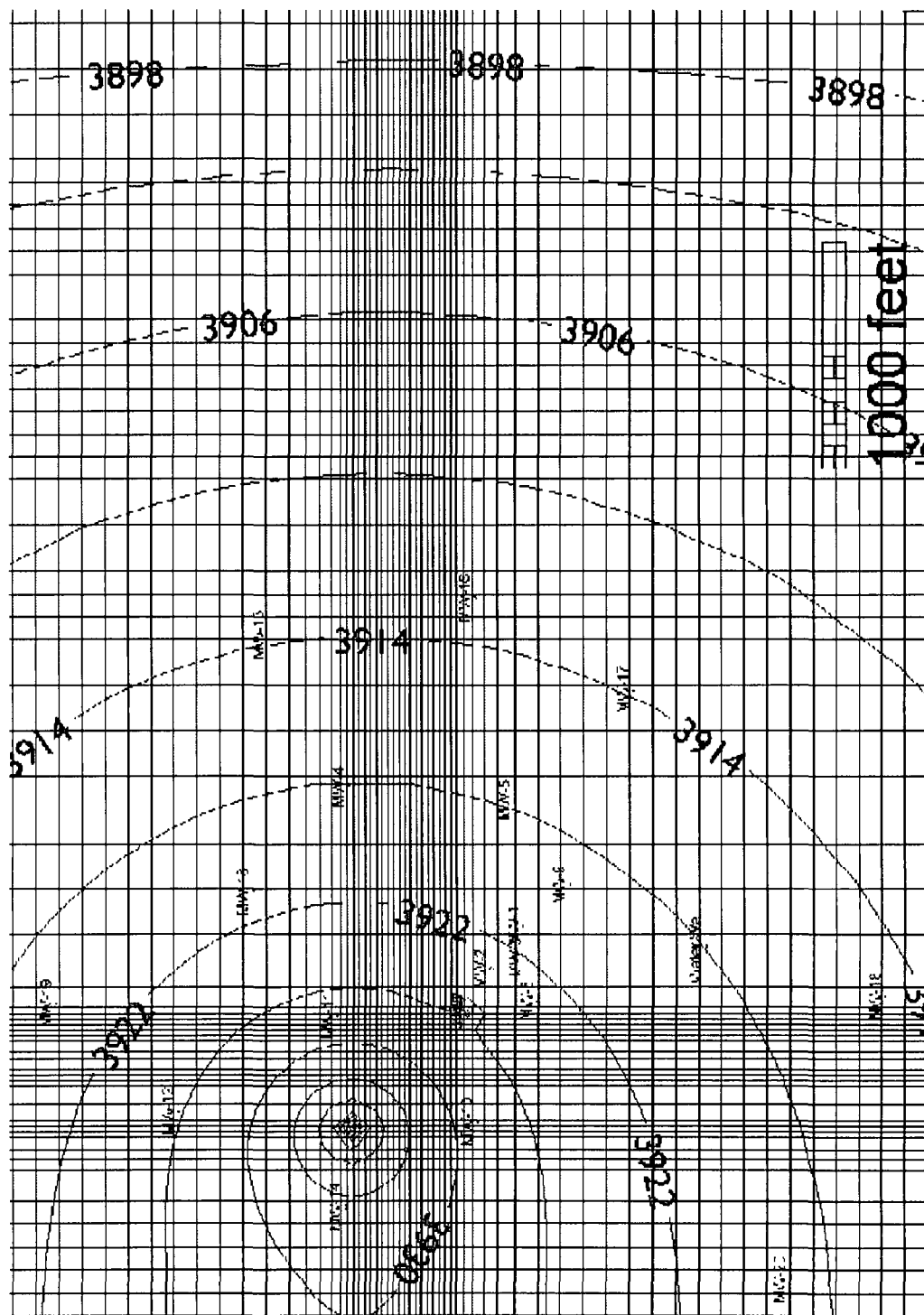


Figure 3. Time Step 20, Predicted Groundwater Surface after 180 Days of Extraction.

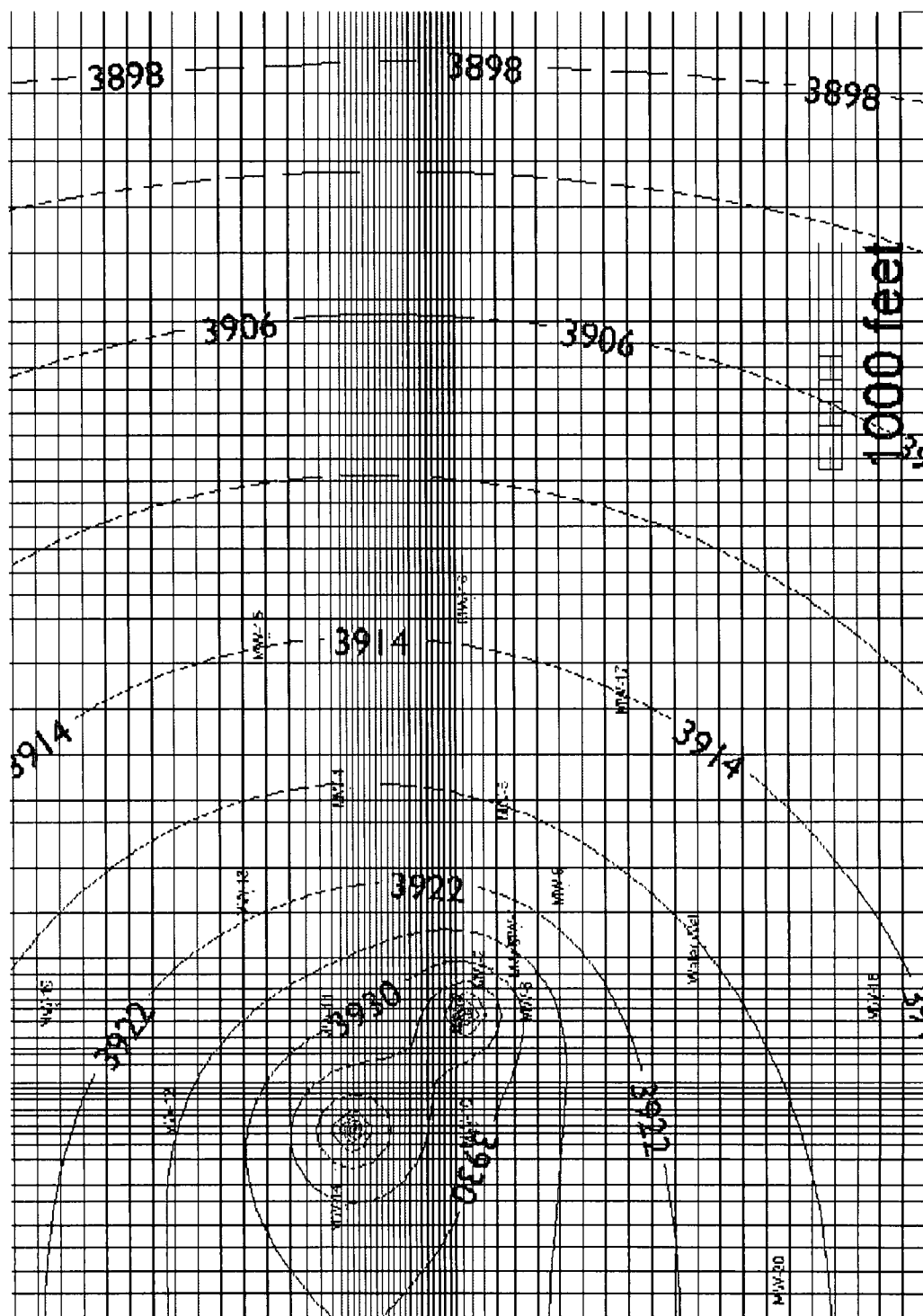


Figure 4. Groundwater Contours of Data Collected October 8, 2004 after 183 days of Extraction Well Pumping.

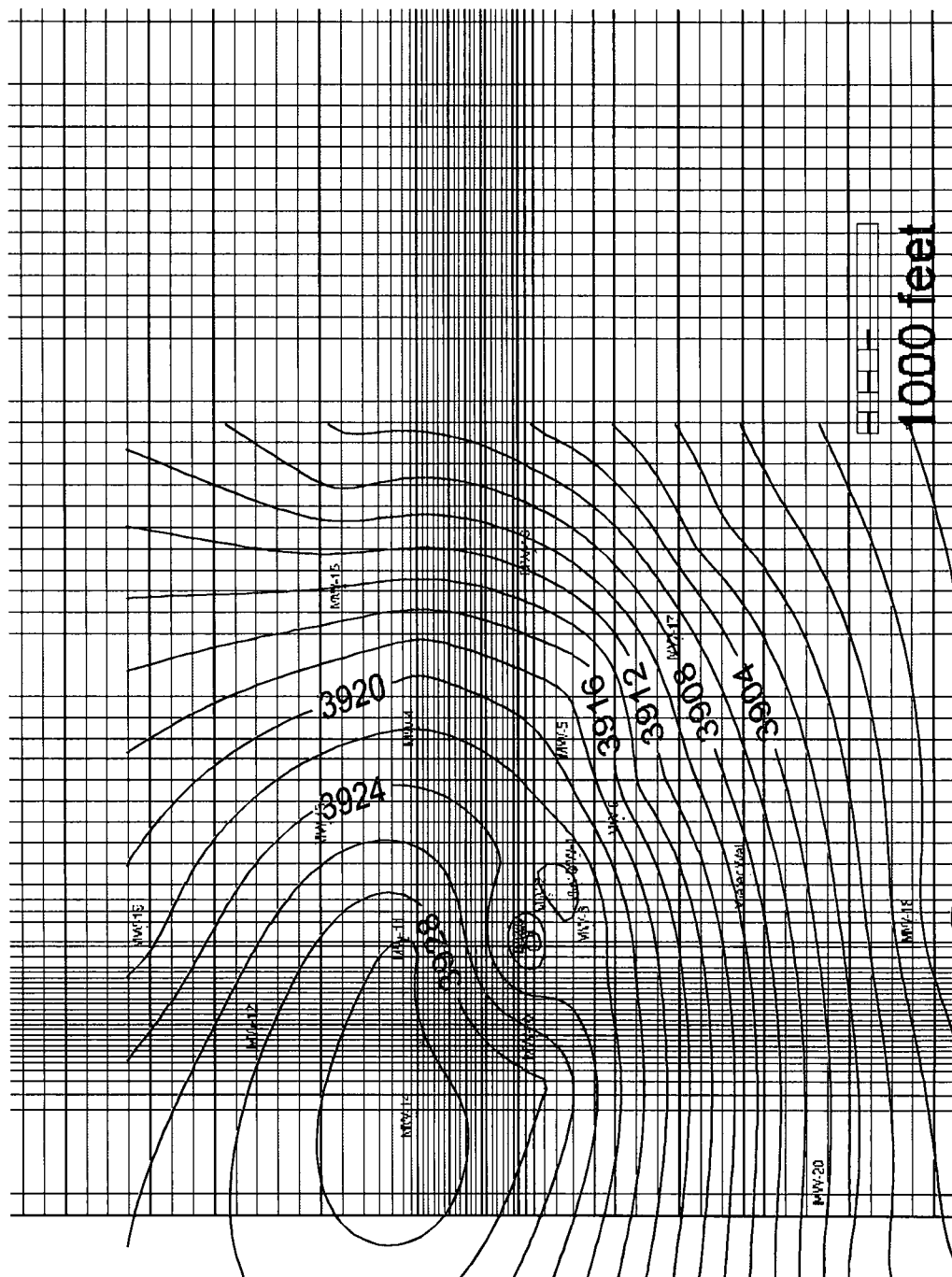


Figure 5. Time Step 20, Predicted Groundwater Surface after 180 Days of 0.6 gpm Extraction and 0.3 gpm Leakage into the Mound.

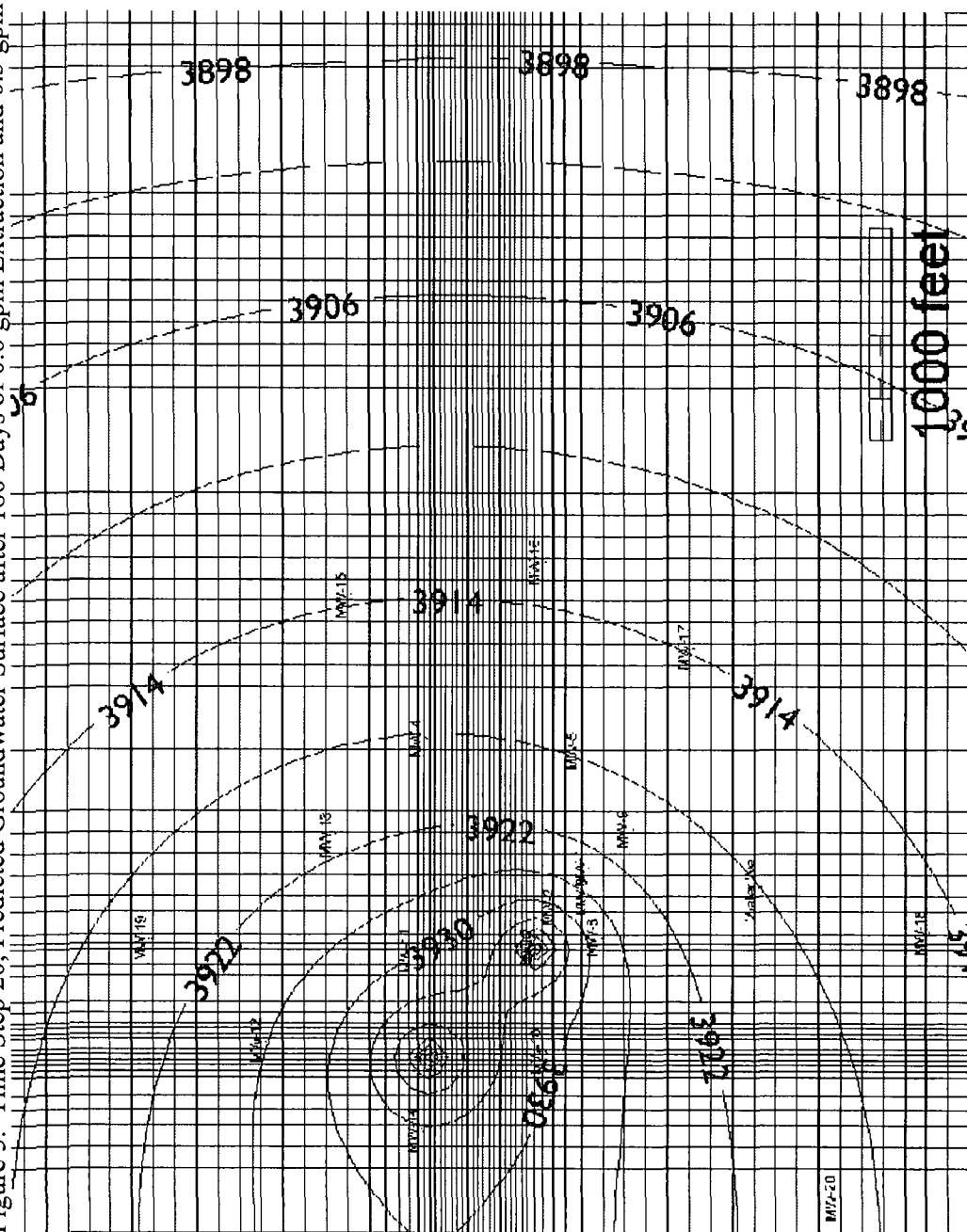


Figure 6. Water level trends in Monitor Well 14.

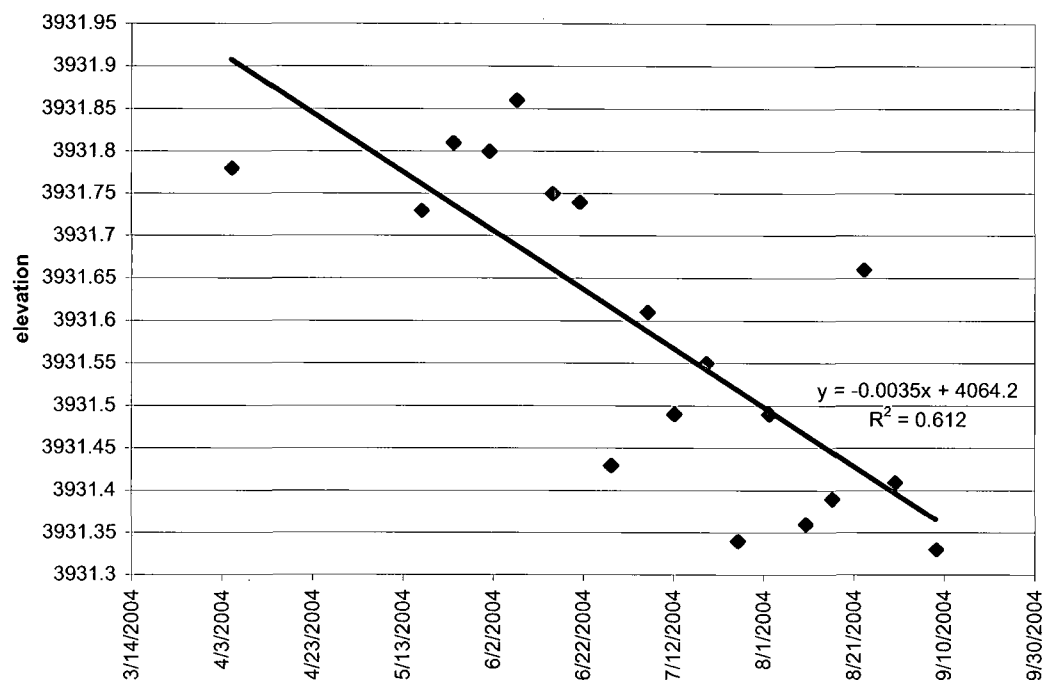
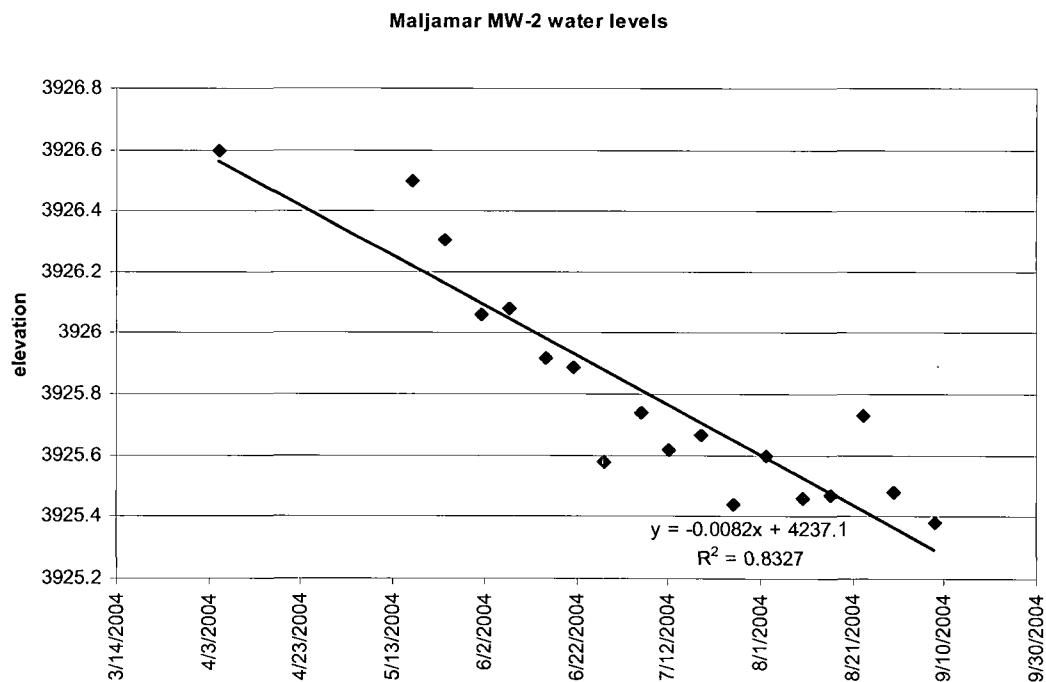


Figure 7. Water level trends in Monitor Well 2.



TABLES

Table 1 - Monitor Well Completion Data, Majlamar Gas Plant

Monitoring Well Number	Location Coordinates			Top of Casing Elevation (fasl)	Depth				Screen Interval* (fbgs)	Casing Diameter (inches)	Well Installation Date
	Northing	Easting			Total (fbgs)	Casing (fbgs)	Water (fbgs)	Condensate (fbgs)			
MW-1	32.81208	-103.77181		4002.24	97	0-72	77.00		72-92	2	6/21/2000
MW-2	32.81250	-103.77244		4005.12	98	0-67	76.32		67-97	2	9/28/2000
MW-3	32.81206	-103.77228		4001.94	98	0-68	76.94		68-98	2	9/28/2000
MW-4	32.81425	-103.76967		4016.20	110	0-80	94.88		80-110	2	5/22/2001
MW-5	32.81217	-103.76989		4009.42	100	0-70	90.20		70-100	2	5/22/2001
MW-6					105	0-105			70-100	6	3/31/2004
MW-7	32.81281	-103.77308		4002.94	100	0-70	81.58	75.38	70-100	2	5/23/2001
MW-8	32.81192	-103.77294		4000.72	100	0-70	76.10		70-100	2	5/23/2001
MW-9	32.81150	-103.77119		4003.11	100	0-70	83.63		70-100	2	5/23/2001
MW-10	32.81269	-103.77478		4000.47	97	0-74	73.39		74-94	2	12/5/2001
MW-11	32.81442	-103.77314		4015.54	120	0-98	83.46		98-118	2	12/4/2001
MW-12	32.81644	-103.77456		4022.71	120	0-99	94.39		99-119	2	12/4/2001
MW-13	32.81547	-103.77128		4031.96	127	0-105	106.68		105-125	2	12/3/2001
MW-14	32.81436	-103.77603		4006.98	120	0-80	75.00		80-100	4	3/20/2002
MW-15	32.81523	-103.76737		4026.75	130	0-99	113.50		99-129	2	9/17/2002
MW-16	32.81264	-103.76686		4017.74	130	0-98	113.50		98-128	2	9/17/2002
MW-17	32.81066	-103.76825		3998.58	100	0-79	97.36		79-99	2	9/17/2002
MW-18	32.80754	-103.77293		3980.46	110	0-87	85.91		87-107	2	9/17/2002
MW-19	32.81796	-103.77289		4037.34	120	0-98	117.23		98-118	2	9/17/2002
MW-20	32.80878	-103.77718		3976.92	120	0-80	75.90		80-100	2	9/18/2002
SK-1	32.81278	-103.77312		4002.94	105	0-85	74.07		85-105	4	3/21/2002
SK-2	32.81275	-103.77312		4002.94	89.5	0-69	72.89		69-89	4	12/18/2002

Notes:

fasl = feet above sea level

fbgs = feet below ground surface

* Screen slot size = 0.01 inches

Table 2 - Water Quality Data

Parameter	WW	MW-4	MW-6	MW-8	MW-8 QA*	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	NM WQ Std
Trace Metals																	
Calcium	206	181		218		1,350	654	5,510	233	452	137	210	480	2,430	2,450	1,320	
Magnesium	65.7	48.4		47.6		297	174	1,410	55.2	140	53.2	54.2	86.6	696	118	520	
Potassium	ND	7.5		ND		44	9.8	172	8.4	9.3	ND	ND	5.6	62.2	55.2	34.7	
Sodium	137	86		33.6		130	114	1,270	68.8	91.9	56.9	79.6	181	130	58.2	777	
Volatile Organic Compounds																	
Benzene	ND	0.025		25	24	ND	ND	ND	ND	0.0014	ND	ND	0.0016	ND	ND	ND	0.01
Ethylbenz	0.0015	0.033		0.47	0.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75
Toluene	ND	ND		2.6	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75
Xylenes (m)	ND	0.043		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.62
Semivolatile Organic Compounds																	
Acenaphth	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Acenaphth	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Anthracene	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(a)h	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(a)h	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0007
Benzo(b)h	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(ghi)h	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo(k)h	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chrysene	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Dibenz(a,h)h	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Fluoranth	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Fluoranth	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Indeno(1,2,3-cd)h	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Naphthalene	ND	ND		0.01		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.03
Phenanthrene	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Pyrene	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Inorganic Analysis																	
Carbonate	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bicarbonate	217	182		205		194	196	80.3	229	196	252	272	229	105	302	103	
Total Alkalinity	217	182		205		194	196	80.3	229	196	252	272	229	105	302	103	
Chloride	477	399	260	391		6,800	1,930	68,300	192	813	204	274	1,010	10,600	133	4,130	250
Sulfate	196	ND		0.84		499	140	1,570	231	383	122	168	317	655	78.3	424	600
Total Dissolved Solids	1,460	1,060		1,080		13,300	3,460	116,000	1,100	2,630	737	1,040	2,690	19,700	625	8,810	1,000

Notes:

mg/L = milligrams per liter

ND = Not detected at or above laboratory detection limits.

* QA = Field duplicate sample analyses for evaluation of laboratory quality assurance/quality control (QA/QC) procedures.

NM WQ Std = New Mexico Water Quality Standard

Trip blank used for sample shipping QA/QC reported non-detect for BTEX concentrations.

Table 3 - Water Level and Condensate Level Information

Date	MW-1					MW-2				
	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Water Elevation	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Water Elevation
4/5/2004	80.22	80.23	3922.02	3922.01	3922.02		80.23		3924.89	
5/17/2004	80.28	81.32	3921.96	3920.92	3921.75		78.62		3926.50	
5/24/2004	80.25	81.30	3921.99	3920.94	3921.78		78.81		3926.31	
6/1/2004	80.30	81.36	3921.94	3920.88	3921.73		79.06		3926.06	
6/7/2004	80.26	81.28	3921.98	3920.96	3921.78		79.04		3926.08	
6/15/2004	80.36	81.43	3921.88	3920.81	3921.67		79.20		3925.92	
6/21/2004	80.39	81.42	3921.85	3920.82	3921.64		79.23		3925.89	
6/28/2004	80.58	81.69	3921.66	3920.55	3921.44		79.54		3925.58	
7/6/2004	80.49	81.59	3921.75	3920.65	3921.53		79.38		3925.74	
7/12/2004	80.57	81.67	3921.67	3920.57	3921.45		79.50		3925.62	
7/19/2004	80.57	81.63	3921.67	3920.61	3921.46		79.45		3925.67	
7/26/2004	80.72	81.82	3921.52	3920.42	3921.30		79.68		3925.44	
8/2/2004	80.63	81.72	3921.61	3920.52	3921.39		79.52		3925.60	
8/10/2004	80.72	81.82	3921.52	3920.42	3921.30		79.66		3925.46	
8/16/2004	80.74	81.83	3921.50	3920.41	3921.28		79.65		3925.47	
8/23/2004	80.57	81.61	3921.67	3920.63	3921.46		79.39		3925.73	
8/30/2004	80.75	81.84	3921.49	3920.40	3921.27		79.64		3925.48	
9/8/2004	80.83	81.91	3921.41	3920.33	3921.19	79.73	79.94	3925.39	3925.18	
10/8/2004	80.87	81.92	3921.37	3920.32	3921.16		79.73		3925.39	
Date	MW-3					MW-4				
	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Water Elevation	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Water Elevation
4/5/2004	79.04	79.10	3922.90	3922.84	3922.89		96.38		3919.82	
5/17/2004	79.08	79.46	3922.86	3922.48	3922.78		96.43		3919.77	
5/24/2004	79.05	79.41	3922.89	3922.53	3922.82		96.37		3919.83	
6/1/2004	79.17	79.58	3922.77	3922.36	3922.69		96.42		3919.78	
6/7/2004	79.12	79.50	3922.82	3922.44	3922.74		96.34		3919.86	
6/15/2004	79.24	79.68	3922.70	3922.26	3922.61		96.45		3919.75	
6/21/2004	79.24	79.65	3922.70	3922.29	3922.62		96.42		3919.78	
6/28/2004	79.53	80.04	3922.41	3921.90	3922.31		96.66		3919.54	
7/6/2004	79.40	79.87	3922.54	3922.07	3922.45		96.54		3919.66	
7/12/2004	79.49	80.00	3922.45	3921.94	3922.35		96.62		3919.58	

7/19/2004	79.46	79.94	3922.48	3922.00	3922.38		96.56		3919.64	
7/26/2004	79.65	80.18	3922.29	3921.76	3922.18		96.73		3919.47	
8/2/2004	79.52	80.01	3922.42	3921.93	3922.32		96.61		3919.59	
8/10/2004	79.59	80.12	3922.35	3921.82	3922.24		96.75		3919.45	
8/16/2004	79.62	80.16	3922.32	3921.78	3922.21		96.69		3919.51	
8/23/2004	79.39	79.82	3922.55	3922.12	3922.46		96.49		3919.71	
8/30/2004	79.62	80.14	3922.32	3921.80	3922.22		96.69		3919.51	
9/8/2004	79.68	80.24	3922.26	3921.70	3922.15		96.74		3919.46	
10/8/2004	79.69	80.19	3922.25	3921.75	3922.15		96.71		3919.49	
MW-5										
	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Wa Elevation	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Water Elevation
4/5/2004	91.82	92.00	3917.60	3917.42	3917.56	71.64	76.05	3931.30	3926.89	3930.42
5/17/2004	91.91	92.10	3917.51	3917.32	3917.47	72.50	87.40	3930.44	3915.54	3927.46
5/24/2004	91.84	92.03	3917.58	3917.39	3917.54	75.30	91.11	3927.64	3911.83	3924.48
6/1/2004	91.91	92.10	3917.51	3917.32	3917.47	73.17	85.60	3929.77	3917.34	3927.28
6/7/2004	91.86	91.99	3917.56	3917.43	3917.53	73.11	85.50	3929.83	3917.44	3927.35
6/15/2004	91.94	92.12	3917.48	3917.30	3917.44	73.18	79.80	3929.76	3923.14	3928.44
6/21/2004	91.95	92.11	3917.47	3917.31	3917.44	73.41	85.15	3929.53	3917.79	3927.18
6/28/2004	92.15	92.33	3917.27	3917.09	3917.23	73.51	84.98	3929.43	3917.96	3927.14
7/6/2004	92.04	92.24	3917.38	3917.18	3917.34	73.52	85.13	3929.42	3917.81	3927.10
7/12/2004	92.12	92.31	3917.30	3917.11	3917.26	73.66	85.16	3929.28	3917.78	3926.98
7/19/2004	92.08	92.27	3917.34	3917.15	3917.30	73.74	85.31	3929.20	3917.63	3926.89
7/26/2004	92.19	92.39	3917.23	3917.03	3917.19	73.76	85.27	3929.18	3917.67	3926.88
8/2/2004	92.13	92.33	3917.29	3917.09	3917.25	73.87	85.43	3929.07	3917.51	3926.76
8/10/2004	92.21	92.40	3917.21	3917.02	3917.17	73.68		3929.26		
8/16/2004	92.22	92.42	3917.20	3917.00	3917.16	73.68	85.06	3929.26	3917.88	3926.98
8/23/2004	92.02	92.15	3917.40	3917.27	3917.37	73.75	85.21	3929.19	3917.73	3926.90
8/30/2004	92.26	92.44	3917.16	3916.98	3917.12	73.93	85.41	3929.01	3917.53	3926.71
9/8/2004	92.24	92.44	3917.18	3916.98	3917.14	73.79	84.70	3929.15	3918.24	3926.97
10/8/2004	92.27	92.43	3917.15	3916.99	3917.12	73.91	84.10	3929.03	3918.84	3926.99
MW-8										
	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Wa Elevation	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Water Elevation
4/5/2004		78.04		3922.68			84.58		3918.53	
5/17/2004		78.08		3922.64		84.65	89.30	3918.46	3913.81	3917.53
5/24/2004		78.07		3922.65		84.57	89.29	3918.54	3913.82	3917.60
MW-9										
	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Wa Elevation	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Water Elevation
4/5/2004		78.04		3922.68			84.58		3918.53	
5/17/2004		78.08		3922.64		84.65	89.30	3918.46	3913.81	3917.53
5/24/2004		78.07		3922.65		84.57	89.29	3918.54	3913.82	3917.60

Date	MW-10					MW-11				
	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Wa Elevation	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Water Elevation
6/1/2004		78.17		3922.55		84.67	89.31	3918.44	3913.80	3917.51
6/7/2004		78.14		3922.58		84.59	89.29	3918.52	3913.82	3917.58
6/15/2004		78.29		3922.43		84.70	89.37	3918.41	3913.74	3917.48
6/21/2004		78.31		3922.41		84.69	89.38	3918.42	3913.73	3917.48
6/28/2004		78.65		3922.07		84.92	89.51	3918.19	3913.60	3917.27
7/6/2004		78.49		3922.23		84.83	89.42	3918.28	3913.69	3917.36
7/12/2004		78.61		3922.11		84.89	89.51	3918.22	3913.60	3917.30
7/19/2004		78.57		3922.15		84.86	89.47	3918.25	3913.64	3917.33
7/26/2004		78.79		3921.93		85.00	89.58	3918.11	3913.53	3917.19
8/2/2004		78.65		3922.07		84.93	89.44	3918.18	3913.67	3917.28
8/10/2004		78.79		3921.93		85.10	89.53	3918.01	3913.58	3917.12
8/16/2004		78.78		3921.94		85.03	89.50	3918.08	3913.61	3917.19
8/23/2004		78.53		3922.19		84.87	89.27	3918.24	3913.84	3917.36
8/30/2004		78.77		3921.95		85.17	89.45	3917.94	3913.66	3917.08
9/8/2004		78.87		3921.85		85.12	89.48	3917.99	3913.63	3917.12
10/8/2004		78.87		3921.85		85.14	89.39	3917.97	3913.72	3917.12

Date	MW-12					MW-13				
	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Water Elevation	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Water Elevation
4/5/2004		94.59		3928.12			108.04		3923.92	
5/17/2004		94.60		3928.11			108.06		3923.90	
5/24/2004		94.51		3928.20			107.97		3923.99	
6/1/2004		94.53		3928.18			107.97		3923.99	
6/7/2004		94.45		3928.26			107.89		3924.07	
6/15/2004		94.56		3928.15			107.99		3923.97	
6/21/2004		94.57		3928.14			107.98		3923.98	
6/28/2004		94.84		3927.87			108.29		3923.67	
7/6/2004		94.70		3928.01			108.12		3923.84	
7/12/2004		94.80		3927.91			108.22		3923.74	
7/19/2004		94.74		3927.97			108.16		3923.80	
7/26/2004		94.92		3927.79			108.34		3923.62	
8/2/2004		94.77		3927.94			108.17		3923.79	
8/10/2004		94.88		3927.83			108.29		3923.67	
8/16/2004		94.86		3927.83			108.27		3923.69	
8/23/2004		94.60		3928.11			108.01		3923.95	
8/30/2004		94.82		3927.89			108.24		3923.72	
9/8/2004		94.89		3927.82			108.31		3923.65	
10/8/2004		94.83		3927.88			108.23		3923.73	
Date	MW-14					MW-15				
	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Water Elevation	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Water Elevation
4/5/2004		75.20		3931.78			119.65		3907.10	
5/17/2004		75.25		3931.73			119.56		3907.19	
5/24/2004		75.17		3931.81			119.63		3907.12	
6/1/2004		75.18		3931.80			119.62		3907.13	
6/7/2004		75.12		3931.86			119.63		3907.12	
6/15/2004		75.23		3931.75			119.66		3907.09	
6/21/2004		75.24		3931.74			119.69		3907.06	
6/28/2004		75.55		3931.43			119.78		3906.97	
7/6/2004		75.37		3931.61			119.77		3906.98	
7/12/2004		75.49		3931.49			119.79		3906.96	
7/19/2004		75.43		3931.55			119.80		3906.95	
7/26/2004		75.64		3931.34			119.86		3906.89	

Date	MW-20				SK-1			
	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water
6/15/2004		86.59		3893.87		116.53		3920.81
6/21/2004		86.60		3893.86		116.63		3920.71
6/28/2004		86.79		3893.67		116.68		3920.66
7/6/2004		86.74		3893.72		116.65		3920.69
7/12/2004		86.77		3893.69		116.66		3920.68
7/19/2004		86.76		3893.70		116.68		3920.66
7/26/2004		86.91		3893.55		116.73		3920.61
8/2/2004		86.81		3893.65		116.71		3920.63
8/10/2004		86.93		3893.53		116.71		3920.63
8/16/2004		86.90		3893.56		116.74		3920.60
8/23/2004		86.63		3893.83		116.69		3920.65
8/30/2004		86.86		3893.60		116.69		3920.65
9/8/2004		86.92		3893.54		116.73		3920.61
10/8/2004		86.87		3893.59		116.78		3920.56
Date	MW-20				SK-2			
	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water
4/5/2004		76.13		3900.79	74.30	76.81	3928.64	3926.13
5/17/2004		76.16		3900.76	78.17	80.67	3924.77	3922.27
5/24/2004		76.11		3900.81	81.68	84.37	3921.26	3918.57
6/1/2004		76.14		3900.78	78.28	80.95	3924.66	3921.99
6/7/2004		76.10		3900.82	78.04	80.72	3924.90	3922.22
6/15/2004		76.17		3900.75	78.03	80.69	3924.91	3922.25
6/21/2004		76.15		3900.77	78.18	80.86	3924.76	3922.08
6/28/2004		76.36		3900.56	78.30	80.95	3924.64	3921.99
7/6/2004		76.24		3900.68	78.34	79.99	3924.60	3922.95
7/12/2004		76.31		3900.61	78.38	81.03	3924.56	3921.91
7/19/2004		76.26		3900.66	78.38	81.16	3924.56	3921.78
7/26/2004		76.41		3900.51	78.56	81.41	3924.38	3921.53
8/2/2004		76.28		3900.64	78.46	81.73	3924.48	3921.21
8/10/2004		76.37		3900.55	77.99	82.15	3924.95	3920.79
8/16/2004		76.32		3900.60	77.77	82.84	3925.17	3920.10
8/23/2004		76.13		3900.79	77.61	83.75	3925.33	3919.19
8/30/2004		76.30		3900.62	77.41	84.42	3925.53	3918.52
9/8/2004		76.02		3900.90	77.00	85.19	3925.94	3917.75
10/8/2004		74.45		3902.47	76.24	86.99	3926.70	3915.95

Date	Depth to Condensate	Depth to Water	Elevation of Condensate	Elevation of Water	Adjusted Water Elevation
4/5/2004					
5/17/2004					
5/24/2004					
6/1/2004	75.48	78.85	3927.46	3924.09	3926.79
6/7/2004	75.29	78.94	3927.65	3924.00	3926.92
6/15/2004	75.38	79.21	3927.56	3923.73	3926.79
6/21/2004	75.45	79.03	3927.49	3923.91	3926.77
6/28/2004	75.62	79.63	3927.32	3923.31	3926.52
7/6/2004	75.59	79.46	3927.35	3923.48	3926.58
7/12/2004	75.68	79.61	3927.26	3923.33	3926.47
7/19/2004	75.74	79.28	3927.20	3923.66	3926.49
7/26/2004	75.83	79.63	3927.11	3923.31	3926.35
8/2/2004	75.79	79.37	3927.15	3923.57	3926.43
8/10/2004	75.85	79.59	3927.09	3923.35	3926.34
8/16/2004	75.90	79.48	3927.04	3923.46	3926.32
8/23/2004	75.83	78.97	3927.11	3923.97	3926.48
8/30/2004	75.96	79.52	3926.98	3923.42	3926.27
9/8/2004	76.01	79.62	3926.93	3923.32	3926.21
10/8/2004	76.10	79.41	3926.84	3923.53	3926.18

Notes:

depth measurements in feet below top of casing
elevations in feet above mean sea level

Table 4 - Extraction Well MW-6, GW Quality Data, May-Oct. 2004

Date	Specific Conductivity (mS/cm)	Salinity (ppt)	pH (units)	Temperature (°C)	Time	Comments
5/17/2004	1.62	0.81	7.93	24.0		
7/12/2004	1.70	0.85	8.23	21.5	10:27	
7/12/2004	1.69	0.84	8.26	21.4	10:29	
7/12/2004	1.69	0.84	8.27	21.3	10:30	
7/12/2004	1.69	0.84	8.26	21.1	10:31	
7/12/2004	1.69	0.84	8.25	21.2	10:33	
7/12/2004	1.71	0.85	8.26	20.9	10:35	
7/12/2004	1.69	0.84	8.23	21.0	10:37	pump off @10:37
7/26/2004	1.71	0.86	8.13	21.7	11:44	pump off @11:49
8/10/2004	1.71	0.85	8.26	23.3	10:13	
8/10/2004	1.71	0.85	8.32	22.4	10:15	
8/10/2004	1.71	0.86	8.39	22.1	10:17	
8/10/2004	1.71	0.86	8.42	21.6	10:18	
8/10/2004	1.72	0.86	8.47	21.7	10:22	
8/10/2004	1.74	0.87	8.38	21.5	10:27	
8/10/2004	1.73	0.86	8.39	21.7	10:29	pump off @ 10:29
8/16/2004	1.75	0.87	8.29	21.0	8:59	
8/16/2004	1.73	0.87	8.35	20.6	9:00	
8/16/2004	1.72	0.86	8.43	20.4	9:03	
8/16/2004	1.69	0.84	8.15	22.0	11:11	
8/16/2004	1.71	0.86	8.35	21.4	11:15	
8/16/2004	1.71	0.85	8.46	21.1	11:20	
8/16/2004	1.73	0.86	8.41	21.3	11:25	pump off @ 11:28
8/23/2004	1.72	0.86	8.31	21.3	8:15	
8/23/2004	1.73	0.86	8.41	21.1	8:20	
8/23/2004	1.75	0.87	8.42	21.2	8:25	pump off @ 08:27
8/30/2004	1.75	0.88	8.33	22.2	9:22	
8/30/2004	1.73	0.87	8.43	21.5	9:26	pump off @ 09:27
9/8/2004	1.72	0.86	8.21	21.4	9:00	
9/8/2004	1.72	0.86	8.47	21.6	9:05	
9/8/2004	1.74	0.87	8.46	21.1	9:10	pump off @ 09:13
10/8/2004	1.75	0.88	8.54	21.3	9:36	
10/8/2004	1.75	0.88	8.69	21.0	9:40	
10/8/2004	1.79	0.90	8.68	21.1	9:45	pump off @ 9:46
10/8/2004	1.75	0.88	8.50	20.9	11:58	
10/8/2004	1.77	0.89	8.67	20.5	12:05	
10/8/2004	1.78	0.89	8.69	20.4	12:10	pump off @ 12:10

Notes:

mS/cm = millisiemens per centimeter

ppt = parts per trillion

°C = degrees Celsius

Table 5 - Extraction Well Recovery Volumes

Date	Time	Flowmeter Reading	Gallons Per Reading	Cumulative Gallons	Gallons Per Pumping Cycle
4/5/2004	14:45	1,506.45			
5/10/2004	10:35	1,770.90	264.45		
5/10/2004	12:28	1,940.00	169.10	433.55	
5/17/2004	14:50	14,792.65	12,852.65	13,286.20	
5/17/2004	17:09	15,045.55	252.90	13,539.10	
5/24/2004	13:51	27,260.85	12,215.30	25,754.40	
6/1/2004	8:07	34,896.40	7,635.55	33,389.95	
6/1/2004	9:41	34,910.00	13.60	33,403.55	
6/1/2004	10:51	35,008.60	98.60	33,502.15	112.20
6/1/2004	12:12	35,040.00	31.40	33,533.55	
6/1/2004	12:31	35,123.25	83.25	33,616.80	83.25
6/1/2004	13:51	35,130.30	7.05	33,623.85	
6/7/2004	8:04	42,007.30	6,877.00	40,500.85	
6/7/2004	9:19	42,080.90	73.60	40,574.45	73.60
6/7/2004	11:06	42,164.65	83.75	40,658.20	83.75
6/15/2004	8:06	51,167.30	9,002.65	49,660.85	
6/15/2004	9:10	51,230.00	62.70	49,723.55	95.65
6/15/2004	9:16	51,260.00	30.00	49,753.55	
6/15/2004	9:52	51,262.95	2.95	49,756.50	
6/15/2004	11:19	51,358.25	95.30	49,851.80	95.30
6/21/2004	8:21	57,670.00	6,311.75	56,163.55	
6/21/2004	8:27	57,710.00	40.00	56,203.55	
6/21/2004	8:56	57,735.65	25.65	56,229.20	
6/21/2004	10:47	57,830.35	94.70	56,323.90	94.70
6/28/2004	8:18	65,189.50	7,359.15	63,683.05	
6/28/2004	10:17	65,282.70	93.20	63,776.25	93.20
6/28/2004	12:28	65,376.90	94.20	63,870.45	94.20
7/6/2004	8:08	73,765.10	8,388.20	72,258.65	
7/6/2004	8:46	73,868.50	103.40	72,362.05	103.40
7/6/2004	13:41	74,044.45	175.95	72,538.00	175.95
7/12/2004	9:07	80,116.10	6,071.65	78,609.65	
7/12/2004	10:37	80,207.95	91.85	78,701.50	91.85
7/12/2004	13:07	80,300.40	92.45	78,793.95	
7/19/2004	8:08	87,253.85	6,953.45	85,747.40	
7/19/2004	8:45	87,358.20	104.35	85,851.75	104.35
7/19/2004	10:59	87,442.75	84.55	85,936.30	84.55
7/26/2004	9:01	94,366.45	6,923.70	92,860.00	
7/26/2004	9:31	94,460.95	94.50	92,954.50	94.50
7/26/2004	11:49	94,554.90	93.95	93,048.45	93.95
8/2/2004	8:05	101,564.60	7,009.70	100,058.15	
8/2/2004	8:45	101,658.50	93.90	100,152.05	93.90
8/2/2004	10:49	101,750.60	92.10	100,244.15	92.10
8/10/2004	8:26	109,577.25	7,826.65	108,070.80	
8/10/2004	10:29	109,668.75	91.50	108,162.30	91.50
8/10/2004	12:44	109,769.50	100.75	108,263.05	100.75
8/16/2004	8:12	115,282.00	5,512.50	113,775.55	
8/16/2004	9:03	115,374.45	92.45	113,868.00	92.45
8/16/2004	11:28	115,466.40	91.95	113,959.95	91.95
8/23/2004	8:27	122,334.20	6,867.80	120,827.75	
8/23/2004	11:13	122,424.30	90.10	120,917.85	90.10
8/23/2004	12:43	122,513.25	88.95	121,006.80	88.95
8/30/2004	8:09	129,069.60	6,556.35	127,563.15	
8/30/2004	9:27	129,150.00	80.40	127,643.55	
8/30/2004	12:03	129,239.55	89.55	127,733.10	89.55
9/8/2004	7:56	137,417.20	8,177.65	135,910.75	
9/8/2004	9:13	137,503.90	86.70	135,997.45	86.70
9/8/2004	12:01	137,587.95	84.05	136,081.50	84.05
10/8/2004	12:10	164,776.80	27,188.85	163,270.35	

APPENDIX A

BORING LOG FOR MW-6

PROJECT NAME: Maxim #2690032

LOCATION: Maljamar Gas Plant, Lea County

MONITORING WELL NO. MW-6

FIELD LOGGED BY: F. Lichnovsky

ELEVATION: GROUND SURFACE (msl): (ft)

GROUNDWATER ELEVATION (msl): 95' bgs (ft)

DRILL TYPE: Truck Mounted Air Rotary

BORE HOLE DIAMETER: 5 (in)

DRILLED BY: Scarborough Drilling

DATE/TIME: HOLE STARTED: 3/31/04

DATE/TIME: COMPLETED: 3/31/04

REMARKS: bgs=Below Ground Surface

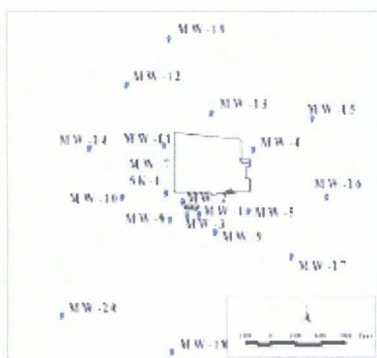
ND=Not Detected, NS=No Sample

msl=mean sea level

FOG=First occurrence of groundwater

SWL=Static Water Level

LOCATION MAP



WELL COMPLETION INFORMATION

Measuring Point Description (msl): Top of Casing

Type of Casing: PVC

Measuring Point Elevation (msl):

Casing Diameter: 4 in.

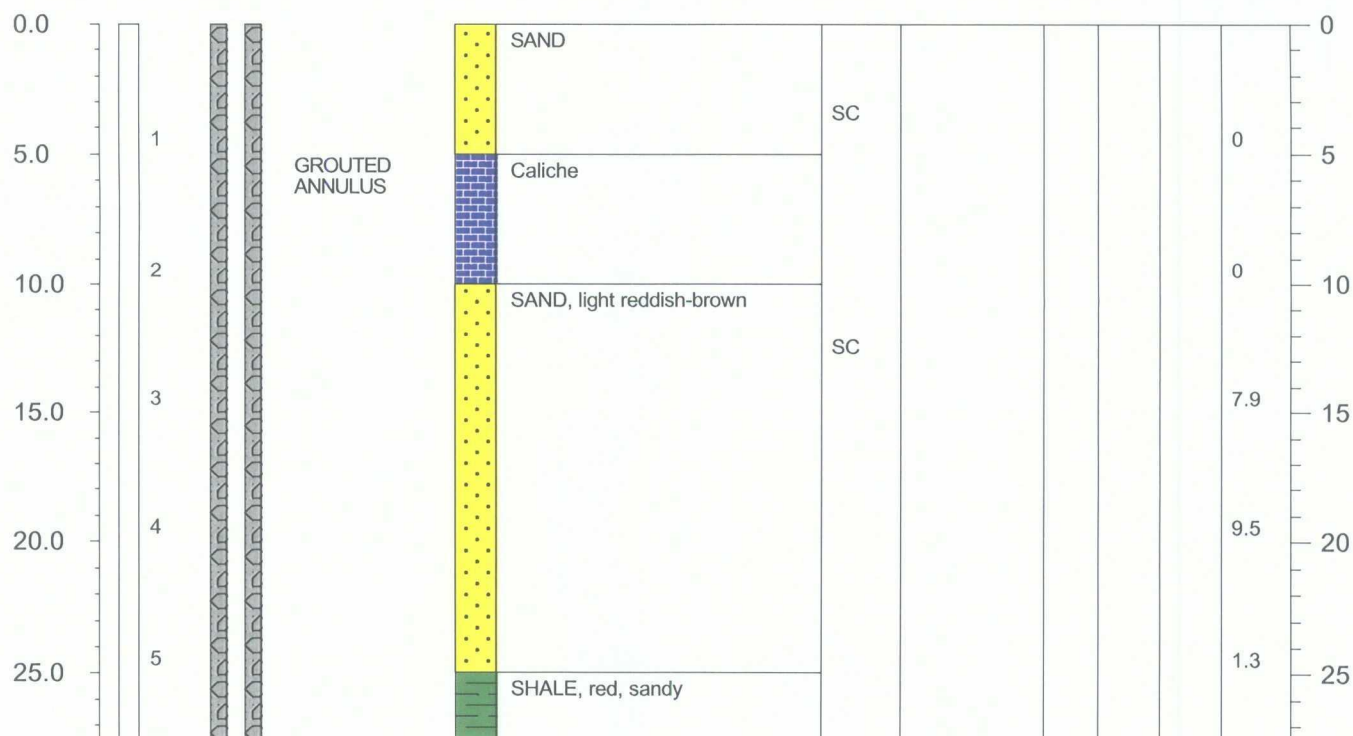
Static Water Level (feet below Top of Casing): 95' bgs

Slot Size: 0.010 in

Well Development: Water Extraction Until Visibly Free of Sediment

Well Cap: Locking Cap

ELEVATION (msl) - ft	SAMPLE INTERVAL/ID #	COMPLETION DIAGRAM	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	BLOW COUNT	ANALYTICAL	TIME	% RECOVERY	PID RESULT (ppm)	DEPTH (bgs) - ft
-------------------------	-------------------------	-----------------------	-----------------------------------	-------------	------------	------------	------	------------	------------------	---------------------



Boring Terminated at 105' bgs

Bulk Sampling

2690032

EXPLORATORY BORING LOG MW-6

PROJECT NAME: Maxim #2690032

LOCATION: Maljamar Gas Plant, Lea County

MONITORING WELL NO. MW-6

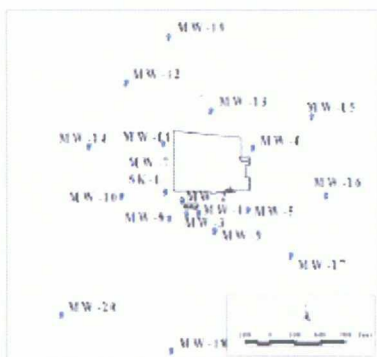
FIELD LOGGED BY: F. Lichnovsky

ELEVATION: GROUND SURFACE (msl): (ft)

GROUNDWATER ELEVATION (msl): 95' bgs (ft)

DRILL TYPE: Truck Mounted Air Rotary

LOCATION MAP



BORE HOLE DIAMETER: 5 (in)

DRILLED BY: Scarborough Drilling

DATE/TIME: HOLE STARTED: 3/31/04

DATE/TIME: COMPLETED: 3/31/04

REMARKS: bgs=Below Ground Surface

ND=Not Detected, NS=No Sample

msl=mean sea level

FOG-First occurrence of groundwater

SWL-Static Water Level

WELL COMPLETION INFORMATION

Measuring Point Description (msl): Top of Casing

Type of Casing: PVC

Measuring Point Elevation (msl):

Casing Diameter: 4 in.

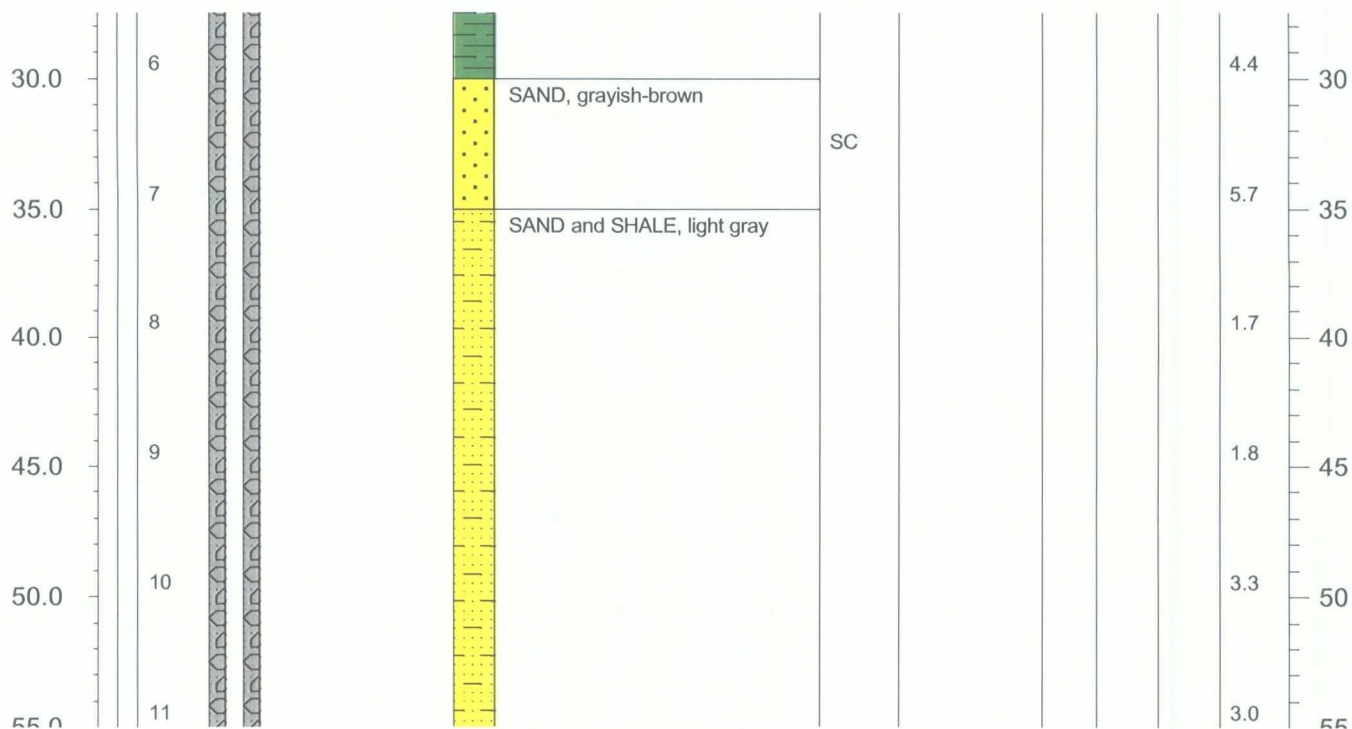
Static Water Level (feet below Top of Casing): 95' bgs

Slot Size: 0.010 in

Well Development: Water Extraction Until Visibly Free of Sediment

Well Cap: Locking Cap

ELEVATION (msl) - ft	SAMPLE INTERVAL/ID #	COMPLETION DIAGRAM	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	BLOW COUNT	ANALYTICAL	TIME	% RECOVERY	PID RESULT (ppm)	DEPTH (bgs) - ft
-------------------------	-------------------------	-----------------------	-----------------------------------	-------------	------------	------------	------	------------	------------------	---------------------



Boring Terminated at 105' bgs

Bulk Sampling

2690032



CYCLOPATORY BORING LOG

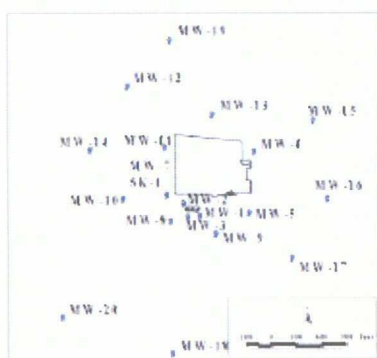
MW-6

PROJECT NAME: Maxim #2690032LOCATION: Maljamar Gas Plant, Lea CountyMONITORING WELL NO. MW-6FIELD LOGGED BY: F. Lichnovsky

ELEVATION: GROUND SURFACE (msl): _____ (ft)

GROUNDWATER ELEVATION (msl): 95' bgs (ft)DRILL TYPE: Truck Mounted Air RotaryBORE HOLE DIAMETER: 5 (in)DRILLED BY: Scarborough DrillingDATE/TIME: HOLE STARTED: 3/31/04DATE/TIME: COMPLETED: 3/31/04REMARKS: bgs=Below Ground SurfaceND=Not Detected, NS=No Samplemsl=mean sea levelFOG=First occurrence of groundwaterSWL=Static Water Level

LOCATION MAP



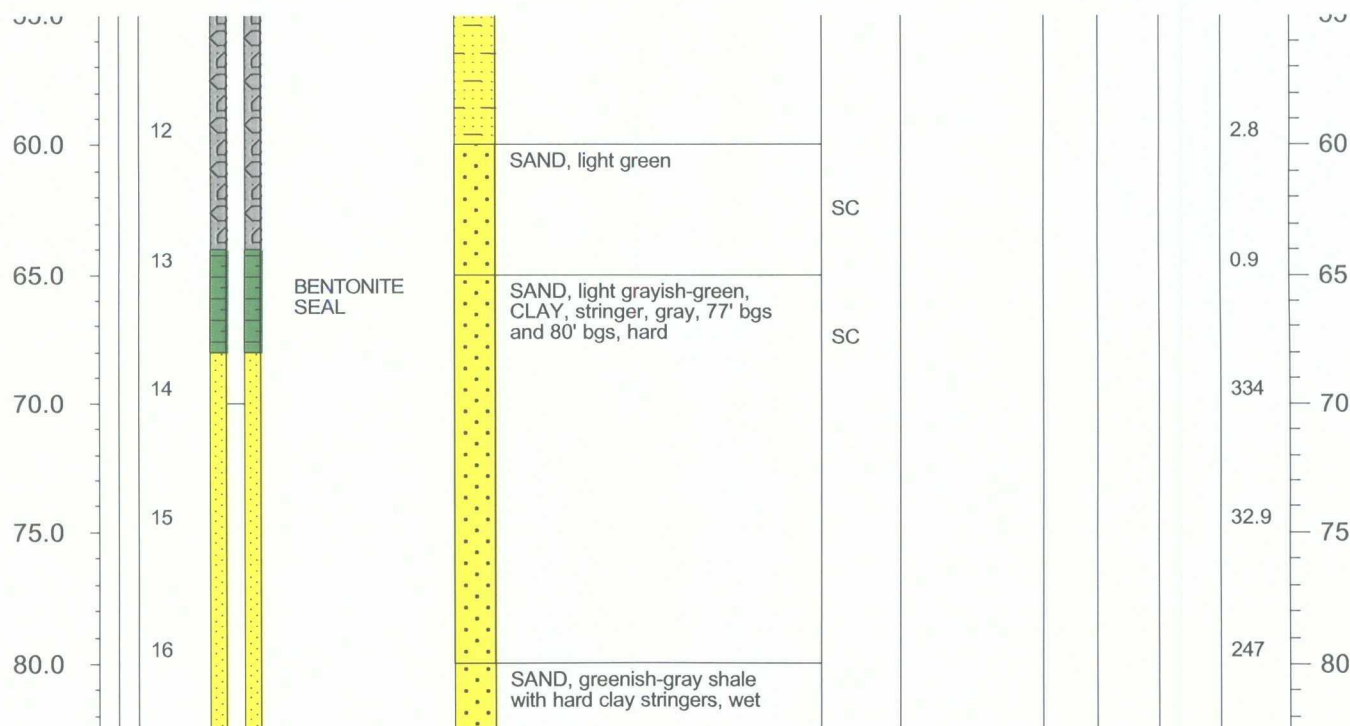
WELL COMPLETION INFORMATION

Measuring Point Description (msl): Top of CasingType of Casing: PVC

Measuring Point Elevation (msl): _____

Casing Diameter: 4 in.Static Water Level (feet below Top of Casing): 95' bgsSlot Size: 0.010 inWell Development: Water Extraction Until Visibly Free of SedimentWell Cap: Locking Cap

ELEVATION (msl) - ft	SAMPLE INTERVAL/ID #	COMPLETION DIAGRAM	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	BLOW COUNT	ANALYTICAL	TIME	% RECOVERY	PID RESULT (ppm)	DEPTH (bgs) - ft
-------------------------	-------------------------	-----------------------	-----------------------------------	-------------	------------	------------	------	------------	------------------	---------------------



Boring Terminated at 105' bgs

Bulk Sampling

2690032



ENVIRONMENTAL LABORATORY BORING LOG

MW-6

PROJECT NAME: Maxim #2690032

LOCATION: Maljamar Gas Plant, Lea County

MONITORING WELL NO. MW-6

FIELD LOGGED BY: F. Lichnovsky

ELEVATION: GROUND SURFACE (msl): (ft)

GROUNDWATER ELEVATION (msl): 95' bgs (ft)

DRILL TYPE: Truck Mounted Air Rotary

BORE HOLE DIAMETER: 5 (in)

DRILLED BY: Scarborough Drilling

DATE/TIME: HOLE STARTED: 3/31/04

DATE/TIME: COMPLETED: 3/31/04

REMARKS: bgs=Below Ground Surface

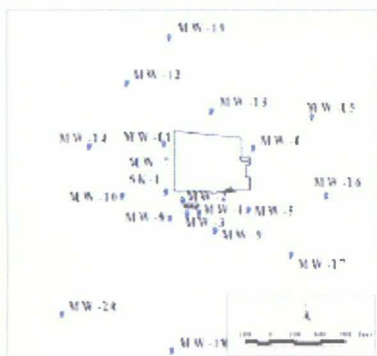
ND=Not Detected, NS=No Sample

msl=mean sea level

FOG-First occurrence of groundwater

SWL-Static Water Level

LOCATION MAP



WELL COMPLETION INFORMATION

Measuring Point Description (msl): Top of Casing

Type of Casing: PVC

Measuring Point Elevation (msl):

Casing Diameter: 4 in.

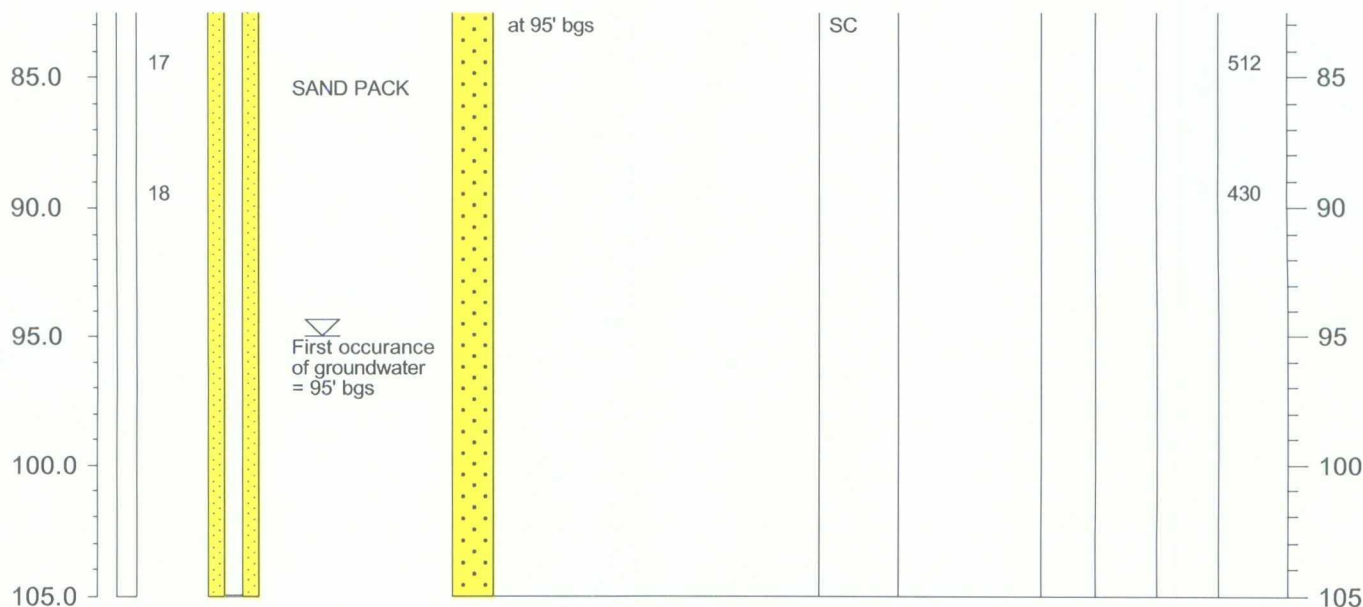
Static Water Level (feet below Top of Casing): 95' bgs

Slot Size: 0.010 in

Well Development: Water Extraction Until Visibly Free of Sediment

Well Cap: Locking Cap

ELEVATION (msl) - ft	SAMPLE INTERVAL/ID #	COMPLETION DIAGRAM	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	BLOW COUNT	ANALYTICAL	TIME	% RECOVERY	PID RESULT (ppm)	DEPTH (bgs) - ft
-------------------------	-------------------------	-----------------------	-----------------------------------	-------------	------------	------------	------	------------	------------------	---------------------



Boring Terminated at 105' bgs

Bulk Sampling

2690032



CYCLOPATORY BOREHOLE LOG

MW-6

APPENDIX B

ANALYTICAL DATA FROM LABORATORY

**Certificate of Analysis**

STL Austin • 14046 Summit Drive, Austin, TX 78728 • Tel 512 244 0855 • Fax 512 244 0160 • www.sthinc.com

ANALYTICAL REPORT

PROJECT NO. MALJAMAR NM

6519 Gas Plant Extraction Well

Lot #: I4D080151

Charles Durrett

Maxim Technologies
1703 W Industrial Ave
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.


Carla M. Butler
Project Manager

April 29, 2004

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

EXECUTIVE SUMMARY - Detection Highlights

I4D080151

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
MALJAMAR EXTRACTION WELL-MW-15 04/05/04 13:40 001				
Calcium	137	5.0	mg/L	SW846 6010B
Magnesium	53.2	5.0	mg/L	SW846 6010B
Sodium	56.9	5.0	mg/L	SW846 6010B
Total Dissolved Solids	737	40.0	mg/L	MCAWW 160.1
Chloride	204	100	mg/L	MCAWW 300.0A
Sulfate	122	50.0	mg/L	MCAWW 300.0A
Bicarbonate	252	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	252	5.0	mg/L	MCAWW 310.1
MALJAMAR EXTRACTION WELL-MW-13 04/05/04 14:50 002				
Calcium	233	5.0	mg/L	SW846 6010B
Magnesium	55.2	5.0	mg/L	SW846 6010B
Potassium	8.4	5.0	mg/L	SW846 6010B
Sodium	68.8	5.0	mg/L	SW846 6010B
Total Dissolved Solids	1100	40.0	mg/L	MCAWW 160.1
Chloride	192	100	mg/L	MCAWW 300.0A
Sulfate	231	50.0	mg/L	MCAWW 300.0A
Bicarbonate	229	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	229	5.0	mg/L	MCAWW 310.1
MALJAMAR EXTRACTION WELL-MW-14 04/05/04 15:40 003				
Calcium	452	5.0	mg/L	SW846 6010B
Magnesium	140	5.0	mg/L	SW846 6010B
Potassium	9.3	5.0	mg/L	SW846 6010B
Sodium	91.9	5.0	mg/L	SW846 6010B
Benzene	1.4	1.0	ug/L	SW846 8260B
Total Dissolved Solids	2630	40.0	mg/L	MCAWW 160.1
Chloride	813	100	mg/L	MCAWW 300.0A
Sulfate	383	50.0	mg/L	MCAWW 300.0A
Bicarbonate	196	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	196	5.0	mg/L	MCAWW 310.1

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

I4D080151

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
MALJAMAR EXTRACTION WELL-MW-19 04/05/04 16:20 004				
Calcium	2450	25.0	mg/L	SW846 6010B
Magnesium	118	5.0	mg/L	SW846 6010B
Potassium	55.2	5.0	mg/L	SW846 6010B
Sodium	58.2	5.0	mg/L	SW846 6010B
Total Dissolved Solids	625	40.0	mg/L	MCAWW 160.1
Chloride	133	100	mg/L	MCAWW 300.0A
Sulfate	78.3	50.0	mg/L	MCAWW 300.0A
Bicarbonate	302	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	302	5.0	mg/L	MCAWW 310.1
MALJAMAR EXTRACTION WELL-MW-16 04/06/04 09:05 005				
Calcium	210	5.0	mg/L	SW846 6010B
Magnesium	54.2	5.0	mg/L	SW846 6010B
Sodium	79.6	5.0	mg/L	SW846 6010B
Total Dissolved Solids	1040	40.0	mg/L	MCAWW 160.1
Chloride	274	100	mg/L	MCAWW 300.0A
Sulfate	168	50.0	mg/L	MCAWW 300.0A
Bicarbonate	272	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	272	5.0	mg/L	MCAWW 310.1
MALJAMAR EXTRACTION WELL-MW-17 04/06/04 09:50 006				
Calcium	480	5.0	mg/L	SW846 6010B
Magnesium	86.6	5.0	mg/L	SW846 6010B
Potassium	5.6	5.0	mg/L	SW846 6010B
Sodium	181	5.0	mg/L	SW846 6010B
Benzene	1.6	1.0	ug/L	SW846 8260B
Total Dissolved Solids	2690	40.0	mg/L	MCAWW 160.1
Chloride	1010	100	mg/L	MCAWW 300.0A
Sulfate	317	50.0	mg/L	MCAWW 300.0A
Bicarbonate	229	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	229	5.0	mg/L	MCAWW 310.1

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

I4D080151

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
MALJAMAR EXTRACTION WELL-MW-11 04/06/04 10:30 007				
Calcium	654	5.0	mg/L	SW846 6010B
Magnesium	174	5.0	mg/L	SW846 6010B
Potassium	9.8	5.0	mg/L	SW846 6010B
Sodium	114	5.0	mg/L	SW846 6010B
Total Dissolved Solids	3460	40.0	mg/L	MCAWW 160.1
Chloride	1930	200	mg/L	MCAWW 300.0A
Sulfate	140	50.0	mg/L	MCAWW 300.0A
Bicarbonate	196	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	196	5.0	mg/L	MCAWW 310.1
MALJAMAR EXTRACTION WELL-MW-4 04/06/04 11:30 008				
Calcium	181	5.0	mg/L	SW846 6010B
Magnesium	48.4	5.0	mg/L	SW846 6010B
Potassium	7.5	5.0	mg/L	SW846 6010B
Sodium	86.0	5.0	mg/L	SW846 6010B
Benzene	25	1.0	ug/L	SW846 8260B
Ethylbenzene	33	1.0	ug/L	SW846 8260B
Xylenes (total)	43	2.0	ug/L	SW846 8260B
Total Dissolved Solids	1060	40.0	mg/L	MCAWW 160.1
Chloride	399	100	mg/L	MCAWW 300.0A
Bicarbonate	182	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	182	5.0	mg/L	MCAWW 310.1
MALJAMAR EXTRACTION WELL-MW-18 04/06/04 13:10 009				
Calcium	2430	25.0	mg/L	SW846 6010B
Magnesium	696	5.0	mg/L	SW846 6010B
Potassium	62.2	5.0	mg/L	SW846 6010B
Sodium	130	5.0	mg/L	SW846 6010B
Total Dissolved Solids	19700	40.0	mg/L	MCAWW 160.1
Chloride	10600	1000	mg/L	MCAWW 300.0A
Sulfate	655	50.0	mg/L	MCAWW 300.0A
Bicarbonate	105	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	105	5.0	mg/L	MCAWW 310.1

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

I4D080151

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
MALJAMAR EXTRACTION WELL-MW-20 04/06/04 14:05 010				
Calcium	1320	25.0	mg/L	SW846 6010B
Magnesium	520	5.0	mg/L	SW846 6010B
Potassium	34.7	5.0	mg/L	SW846 6010B
Sodium	777	25.0	mg/L	SW846 6010B
Total Dissolved	8810	40.0	mg/L	MCAWW 160.1
Solids				
Chloride	4130	1000	mg/L	MCAWW 300.0A
Sulfate	424	50.0	mg/L	MCAWW 300.0A
Bicarbonate	103	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	103	5.0	mg/L	MCAWW 310.1
MALJAMAR EXTRACTION WELL-WW 04/06/04 14:20 011				
Calcium	206	5.0	mg/L	SW846 6010B
Magnesium	65.7	5.0	mg/L	SW846 6010B
Sodium	137	5.0	mg/L	SW846 6010B
Ethylbenzene	1.5	1.0	ug/L	SW846 8260B
Total Dissolved	1460	40.0	mg/L	MCAWW 160.1
Solids				
Chloride	477	100	mg/L	MCAWW 300.0A
Sulfate	196	50.0	mg/L	MCAWW 300.0A
Bicarbonate	217	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	217	5.0	mg/L	MCAWW 310.1
MALJAMAR EXTRACTION WELL-MW-10 04/07/04 08:40 012				
Calcium	1350	25.0	mg/L	SW846 6010B
Magnesium	297	5.0	mg/L	SW846 6010B
Potassium	44.0	5.0	mg/L	SW846 6010B
Sodium	130	5.0	mg/L	SW846 6010B
Total Dissolved	13300	40.0	mg/L	MCAWW 160.1
Solids				
Chloride	6800	1000	mg/L	MCAWW 300.0A
Sulfate	499	50.0	mg/L	MCAWW 300.0A
Bicarbonate	194	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	194	5.0	mg/L	MCAWW 310.1

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

I4D080151

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
MALJAMAR EXTRACTION WELL-MW-12 04/07/04 09:40 013				
Calcium	5510	50.0	mg/L	SW846 6010B
Magnesium	1410	50.0	mg/L	SW846 6010B
Potassium	172	50.0	mg/L	SW846 6010B
Sodium	1270	50.0	mg/L	SW846 6010B
Total Dissolved Solids	116000	40.0	mg/L	MCAWW 160.1
Chloride	68300	5000	mg/L	MCAWW 300.0A
Sulfate	1570	50.0	mg/L	MCAWW 300.0A
Bicarbonate	80.3	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	80.3	5.0	mg/L	MCAWW 310.1
MALJAMAR EXTRACTION WELL-MW-8 04/07/04 10:35 014				
Calcium	218	5.0	mg/L	SW846 6010B
Magnesium	47.6	5.0	mg/L	SW846 6010B
Sodium	33.6	5.0	mg/L	SW846 6010B
Naphthalene	10	9.5	ug/L	SW846 8270C
Benzene	25000	250	ug/L	SW846 8260B
Ethylbenzene	470	250	ug/L	SW846 8260B
Toluene	2600	250	ug/L	SW846 8260B
Total Dissolved Solids	1080	40.0	mg/L	MCAWW 160.1
Chloride	391	100	mg/L	MCAWW 300.0A
Sulfate	0.84	0.50	mg/L	MCAWW 300.0A
Bicarbonate	205	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	205	5.0	mg/L	MCAWW 310.1
MALJAMAR EXTRACTION WELL-DUPLICATE 04/07/04 10:45 015				
Benzene	24000	250	ug/L	SW846 8260B
Ethylbenzene	470	250	ug/L	SW846 8260B
Toluene	2500	250	ug/L	SW846 8260B
MW-6 04/06/04 017				
Chloride	280	100	mg/L	MCAWW 300.0A

ANALYTICAL METHODS SUMMARY

I4D080151

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>
Alkalinity	MCAWW 310.1
Bicarbonate Alkalinity	MCAWW 310.1
Carbonate Alkalinity	MCAWW 310.1
Chloride	MCAWW 300.0A
Filterable Residue (TDS)	MCAWW 160.1
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Sulfate	MCAWW 300.0A
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Volatile Organics by GC/MS	SW846 8260B

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I4D080151

<u>ANALYTICAL METHOD</u>	<u>ANALYST</u>	<u>ANALYST ID</u>
MCAWW 160.1	Robert D. O'Keefe	38036
MCAWW 300.0A	David A. Tocher	800002
MCAWW 310.1	David A. Tocher	800002
SW846 6010B	Hamid Davoudi	038010
SW846 8260B	Ron Guillett	400174
SW846 8270C	Mark Malloy	001515

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY**I4D080151**

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
GDQ4A	001	MALJAMAR EXTRACTION WELL-MW-15	04/05/04	13:40
GDQ4K	002	MALJAMAR EXTRACTION WELL-MW-13	04/05/04	14:50
GDQ4Q	003	MALJAMAR EXTRACTION WELL-MW-14	04/05/04	15:40
GDQ4V	004	MALJAMAR EXTRACTION WELL-MW-19	04/05/04	16:20
GDQ4W	005	MALJAMAR EXTRACTION WELL-MW-16	04/06/04	09:05
GDQ4X	006	MALJAMAR EXTRACTION WELL-MW-17	04/06/04	09:50
GDQ40	007	MALJAMAR EXTRACTION WELL-MW-11	04/06/04	10:30
GDQ41	008	MALJAMAR EXTRACTION WELL-MW-4	04/06/04	11:30
GDQ43	009	MALJAMAR EXTRACTION WELL-MW-18	04/06/04	13:10
GDQ45	010	MALJAMAR EXTRACTION WELL-MW-20	04/06/04	14:05
GDQ46	011	MALJAMAR EXTRACTION WELL-WW	04/06/04	14:20
GDQ47	012	MALJAMAR EXTRACTION WELL-MW-10	04/07/04	08:40
GDQ49	013	MALJAMAR EXTRACTION WELL-MW-12	04/07/04	09:40
GDQ5A	014	MALJAMAR EXTRACTION WELL-MW-8	04/07/04	10:35
GDQ5D	015	MALJAMAR EXTRACTION WELL-DUPLICATE	04/07/04	10:45
GDQ5E	016	TRIP BLANK	04/07/04	11:00
GDQ5G	017	MW-6	04/06/04	

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

QC DATA ASSOCIATION SUMMARY

I4D080151

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091
	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4110541	4110275
	WATER	SW846 8270C		4103489	
	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079
002	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091
	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4110541	4110275
	WATER	SW846 8270C		4103489	
	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079
003	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091
	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4110541	4110275
	WATER	SW846 8270C		4103489	
	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079
004	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091
	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4110541	4110275
	WATER	SW846 8270C		4103489	
	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079
005	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

I4D080151

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
005	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4110541	4110275
	WATER	SW846 8270C		4103489	
	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079
006	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091
	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4110426	4110216
	WATER	SW846 8270C		4103489	
	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079
007	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091
	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4110426	4110216
	WATER	SW846 8270C		4103489	
	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079
008	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091
	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4110426	4110216
	WATER	SW846 8270C		4103489	
	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079
009	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091
	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4110426	4110216
	WATER	SW846 8270C		4103489	

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

I4D080151

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
009	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079
010	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091
	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4112335	4112134
	WATER	SW846 8270C		4103489	
	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079
011	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091
	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4112335	4112134
	WATER	SW846 8270C		4103489	
	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079
012	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091
	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4112335	4112134
	WATER	SW846 8270C		4103489	
	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079
013	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091
	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4114255	4114114
	WATER	SW846 8270C		4103489	
	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079

(Continued on next page)

QC DATA ASSOCIATION SUMMARY**I4D080151****Sample Preparation and Analysis Control Numbers**

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
014	WATER	MCAWW 160.1		4103709	
	WATER	MCAWW 310.1		4105206	
	WATER	MCAWW 300.0A		4114225	4114091
	WATER	MCAWW 300.0A		4114228	4114095
	WATER	SW846 8260B		4112335	4112134
	WATER	SW846 8270C		4103489	
	WATER	SW846 6010B		4102093	4102005
	WATER	MCAWW 310.1		4105208	
	WATER	MCAWW 310.1		4105211	4105079
015	WATER	SW846 8260B		4112335	4112134
016	WATER	SW846 8260B		4112335	4112134
017	WATER	MCAWW 300.0A		4115141	4115046

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-15

GC/MS Volatiles

Lot-Sample #....: I4D080151-001 Work Order #....: GDQ4A1AH Matrix.....: WATER
Date Sampled....: 04/05/04 13:40 Date Received...: 04/08/04
Prep Date.....: 04/16/04 Analysis Date...: 04/16/04
Prep Batch #....: 4110541
Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	88	(75 - 115)
Toluene-d8	102	(90 - 114)
4-Bromofluorobenzene	98	(86 - 117)
Dibromofluoromethane	86	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-15

GC/MS Semivolatiles

Lot-Sample #....: I4D080151-001 Work Order #....: GDQ4A1AN Matrix.....: WATER
 Date Sampled....: 04/05/04 13:40 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/14/04
 Prep Batch #....: 4103489
 Dilution Factor: 0.95 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo(a)anthracene	ND	9.5	ug/L
Benzo(a)pyrene	ND	9.5	ug/L
Benzo(b)fluoranthene	ND	9.5	ug/L
Benzo(ghi)perylene	ND	9.5	ug/L
Benzo(k)fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz(a,h)anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	81	(28 - 120)
2-Fluorobiphenyl	86	(23 - 119)
Terphenyl-d14	96	(10 - 123)
2-Fluorophenol	72	(22 - 121)
Phenol-d5	70	(34 - 117)
2,4,6-Tribromophenol	80	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-15

TOTAL Metals

Lot-Sample #....: I4D080151-001

Matrix.....: WATER

Date Sampled....: 04/05/04 13:40 Date Received...: 04/08/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Prep Batch #....: 4102093						
Calcium	137	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4A1AJ
		Dilution Factor: 1				
Magnesium	53.2	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4A1AK
		Dilution Factor: 1				
Potassium	ND	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4A1AL
		Dilution Factor: 1				
Sodium	56.9	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4A1AM
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-15

General Chemistry

Lot-Sample #....: I4D080151-001 Work Order #....: GDQ4A
 Date Sampled....: 04/05/04 13:40 Date Received...: 04/08/04

Matrix.....: WATER

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	252	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
		Dilution Factor: 1				
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	04/14/04	4105206
		Dilution Factor: 1				
Chloride	204	100	mg/L	MCAWW 300.0A	04/22/04	4114225
		Dilution Factor: 100				
Sulfate	122	50.0	mg/L	MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 100				
Total Alkalinity	252	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	737	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-13

GC/MS Volatiles

Lot-Sample #....: I4D080151-002 Work Order #....: GDQ4K1AH Matrix.....: WATER
Date Sampled....: 04/05/04 14:50 Date Received...: 04/08/04
Prep Date.....: 04/16/04 Analysis Date...: 04/16/04
Prep Batch #....: 4110541
Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	91	(75 - 115)
Toluene-d8	102	(90 - 114)
4-Bromofluorobenzene	98	(86 - 117)
Dibromofluoromethane	86	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-13

GC/MS Semivolatiles

Lot-Sample #....: I4D080151-002 Work Order #....: GDQ4K1AN Matrix.....: WATER
 Date Sampled....: 04/05/04 14:50 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/14/04
 Prep Batch #....: 4103489
 Dilution Factor: 0.98 Method.....: SW846.8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.8	ug/L
Acenaphthylene	ND	9.8	ug/L
Anthracene	ND	9.8	ug/L
Benzo(a)anthracene	ND	9.8	ug/L
Benzo(a)pyrene	ND	9.8	ug/L
Benzo(b)fluoranthene	ND	9.8	ug/L
Benzo(ghi)perylene	ND	9.8	ug/L
Benzo(k)fluoranthene	ND	9.8	ug/L
Chrysene	ND	9.8	ug/L
Dibenz(a,h)anthracene	ND	9.8	ug/L
Fluoranthene	ND	9.8	ug/L
Fluorene	ND	9.8	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.8	ug/L
Naphthalene	ND	9.8	ug/L
Phenanthrene	ND	9.8	ug/L
Pyrene	ND	9.8	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	81	(28 - 120)
2-Fluorobiphenyl	86	(23 - 119)
Terphenyl-d14	94	(10 - 123)
2-Fluorophenol	75	(22 - 121)
Phenol-d5	75	(34 - 117)
2,4,6-Tribromophenol	74	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-13

TOTAL Metals

Lot-Sample #....: I4D080151-002

Matrix.....: WATER

Date Sampled....: 04/05/04 14:50 Date Received...: 04/08/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Prep Batch #....: 4102093						
Calcium	233	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4K1AJ
		Dilution Factor: 1				
Magnesium	55.2	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4K1AK
		Dilution Factor: 1				
Potassium	8.4	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4K1AL
		Dilution Factor: 1				
Sodium	68.8	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4K1AM
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-13

General Chemistry

Lot-Sample #....: I4D080151-002 Work Order #....: GDQ4K Matrix.....: WATER
 Date Sampled....: 04/05/04 14:50 Date Received...: 04/08/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	229	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
		Dilution Factor: 1				
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW 310.1	04/14/04	4105206
		Dilution Factor: 1				
Chloride	192	100	mg/L	MCAWW 300.0A	04/22/04	4114225
		Dilution Factor: 100				
Sulfate	231	50.0	mg/L	MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 100				
Total Alkalinity	229	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	1100	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-14

GC/MS Volatiles

Lot-Sample #....: I4D080151-003 Work Order #....: GDQ4Q1AH Matrix.....: WATER
Date Sampled....: 04/05/04 15:40 Date Received...: 04/08/04
Prep Date.....: 04/16/04 Analysis Date...: 04/16/04
Prep Batch #....: 4110541
Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	1.4	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	90	(75 - 115)
Toluene-d8	104	(90 - 114)
4-Bromofluorobenzene	97	(86 - 117)
Dibromofluoromethane	87	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-14

GC/MS Semivolatiles

Lot-Sample #....: I4D080151-003 Work Order #....: GDQ4Q1AN Matrix.....: WATER
 Date Sampled....: 04/05/04 15:40 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/14/04
 Prep Batch #....: 4103489
 Dilution Factor: 0.95 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo (a) anthracene	ND	9.5	ug/L
Benzo (a) pyrene	ND	9.5	ug/L
Benzo (b) fluoranthene	ND	9.5	ug/L
Benzo (ghi) perylene	ND	9.5	ug/L
Benzo (k) fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz (a, h) anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno (1,2,3-cd) pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	79	(28 - 120)
2-Fluorobiphenyl	85	(23 - 119)
Terphenyl-d14	89	(10 - 123)
2-Fluorophenol	75	(22 - 121)
Phenol-d5	76	(34 - 117)
2,4,6-Tribromophenol	74	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-14

TOTAL Metals

Lot-Sample #...: I4D080151-003

Matrix.....: WATER

Date Sampled...: 04/05/04 15:40 Date Received...: 04/08/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Prep Batch #...: 4102093						
Calcium	452	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4Q1AJ
		Dilution Factor: 1				
Magnesium	140	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4Q1AK
		Dilution Factor: 1				
Potassium	9.3	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4Q1AL
		Dilution Factor: 1				
Sodium	91.9	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4Q1AM
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-14

General Chemistry

Lot-Sample #....: I4D080151-003 Work Order #....: GDQ4Q Matrix.....: WATER
Date Sampled....: 04/05/04 15:40 Date Received...: 04/08/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	196	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
		Dilution Factor: 1				
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW 310.1	04/14/04	4105206
		Dilution Factor: 1				
Chloride	813	100	mg/L	MCAWW 300.0A	04/22/04	4114225
		Dilution Factor: 100				
Sulfate	383	50.0	mg/L	MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 100				
Total Alkalinity	196	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	2630	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-19

GC/MS Volatiles

Lot-Sample #....: I4D080151-004 Work Order #....: GDQ4V1AH Matrix.....: WATER
Date Sampled....: 04/05/04 16:20 Date Received...: 04/08/04
Prep Date.....: 04/16/04 Analysis Date...: 04/17/04
Prep Batch #....: 4110541
Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	93	(75 - 115)
Toluene-d8	102	(90 - 114)
4-Bromofluorobenzene	99	(86 - 117)
Dibromofluoromethane	90	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-19

GC/MS Semivolatiles

Lot-Sample #....: I4D080151-004 Work Order #....: GDQ4V1AN Matrix.....: WATER
 Date Sampled....: 04/05/04 16:20 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/14/04
 Prep Batch #....: 4103489
 Dilution Factor: 0.95 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo (a) anthracene	ND	9.5	ug/L
Benzo (a) pyrene	ND	9.5	ug/L
Benzo (b) fluoranthene	ND	9.5	ug/L
Benzo (ghi) perylene	ND	9.5	ug/L
Benzo (k) fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz (a, h) anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno (1, 2, 3-cd) pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(28 - 120)
2-Fluorobiphenyl	81	(23 - 119)
Terphenyl-d14	85	(10 - 123)
2-Fluorophenol	73	(22 - 121)
Phenol-d5	75	(34 - 117)
2,4,6-Tribromophenol	85	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-19

TOTAL Metals

Lot-Sample #....: I4D080151-004

Matrix.....: WATER

Date Sampled....: 04/05/04 16:20 Date Received...: 04/08/04

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 4102093						
Calcium	2450	25.0	mg/L	SW846 6010B	04/10-04/14/04	GDQ4V1AJ
		Dilution Factor: 5				
Magnesium	118	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4V1AK
		Dilution Factor: 1				
Potassium	55.2	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4V1AL
		Dilution Factor: 1				
Sodium	58.2	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4V1AM
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-19

General Chemistry

Lot-Sample #...: I4D080151-004 Work Order #...: GDQ4V Matrix.....: WATER
 Date Sampled...: 04/05/04 16:20 Date Received...: 04/08/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	302	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
		Dilution Factor: 1				
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	04/14/04	4105206
		Dilution Factor: 1				
Chloride	133	100	mg/L	MCAWW 300.0A	04/22/04	4114225
		Dilution Factor: 100				
Sulfate	78.3	50.0	mg/L	MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 100				
Total Alkalinity	302	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	625	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-16

GC/MS Volatiles

Lot-Sample #....: I4D080151-005 Work Order #....: GDQ4W1AH Matrix.....: WATER
Date Sampled....: 04/06/04 09:05 Date Received...: 04/08/04
Prep Date.....: 04/16/04 Analysis Date...: 04/17/04
Prep Batch #....: 4110541
Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	90	(75 - 115)
Toluene-d8	102	(90 - 114)
4-Bromofluorobenzene	98	(86 - 117)
Dibromofluoromethane	87	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-16

GC/MS Semivolatiles

Lot-Sample #....: I4D080151-005 Work Order #....: GDQ4W1AN Matrix.....: WATER
 Date Sampled....: 04/06/04 09:05 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/14/04
 Prep Batch #....: 4103489
 Dilution Factor: 0.95 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo (a) anthracene	ND	9.5	ug/L
Benzo (a) pyrene	ND	9.5	ug/L
Benzo (b) fluoranthene	ND	9.5	ug/L
Benzo (ghi) perylene	ND	9.5	ug/L
Benzo (k) fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz (a, h) anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno (1, 2, 3-cd) pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	74	(28 - 120)
2-Fluorobiphenyl	81	(23 - 119)
Terphenyl-d14	85	(10 - 123)
2-Fluorophenol	71	(22 - 121)
Phenol-d5	71	(34 - 117)
2,4,6-Tribromophenol	77	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-16

TOTAL Metals

Lot-Sample #...: I4D080151-005

Matrix.....: WATER

Date Sampled...: 04/06/04 09:05 Date Received...: 04/08/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Prep Batch #...: 4102093						
Calcium	210	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4W1AJ
		Dilution Factor: 1				
Magnesium	54.2	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4W1AK
		Dilution Factor: 1				
Potassium	ND	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4W1AL
		Dilution Factor: 1				
Sodium	79.6	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4W1AM
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-16

General Chemistry

Lot-Sample #....: I4D080151-005 Work Order #....: GDQ4W Matrix.....: WATER
 Date Sampled....: 04/06/04 09:05 Date Received...: 04/08/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	272	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
		Dilution Factor: 1				
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	04/14/04	4105206
		Dilution Factor: 1				
Chloride	274	100	mg/L	MCAWW 300.0A	04/22/04	4114225
		Dilution Factor: 100				
Sulfate	168	50.0	mg/L	MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 100				
Total Alkalinity	272	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	1040	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-17

GC/MS Volatiles

Lot-Sample #....: I4D080151-006 Work Order #....: GDQ4X1AH Matrix.....: WATER
Date Sampled....: 04/06/04 09:50 Date Received...: 04/08/04
Prep Date.....: 04/16/04 Analysis Date...: 04/16/04
Prep Batch #....: 4110426
Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	1.6	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	91	(75 - 115)
Toluene-d8	99	(90 - 114)
4-Bromofluorobenzene	97	(86 - 117)
Dibromofluoromethane	96	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-17

GC/MS Semivolatiles

Lot-Sample #....: I4D080151-006 Work Order #....: GDQ4X1AN Matrix.....: WATER
 Date Sampled....: 04/06/04 09:50 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/14/04
 Prep Batch #....: 4103489
 Dilution Factor: 0.95 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo(a)anthracene	ND	9.5	ug/L
Benzo(a)pyrene	ND	9.5	ug/L
Benzo(b)fluoranthene	ND	9.5	ug/L
Benzo(ghi)perylene	ND	9.5	ug/L
Benzo(k)fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz(a,h)anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	85	(28 - 120)
2-Fluorobiphenyl	90	(23 - 119)
Terphenyl-d14	94	(10 - 123)
2-Fluorophenol	79	(22 - 121)
Phenol-d5	83	(34 - 117)
2,4,6-Tribromophenol	92	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-17

TOTAL Metals

Lot-Sample #....: I4D080151-006

Matrix.....: WATER

Date Sampled....: 04/06/04 09:50 Date Received...: 04/08/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Prep Batch #....: 4102093						
Calcium	480	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4X1AJ
		Dilution Factor: 1				
Magnesium	86.6	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4X1AK
		Dilution Factor: 1				
Potassium	5.6	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4X1AL
		Dilution Factor: 1				
Sodium	181	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ4X1AM
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-17

General Chemistry

Lot-Sample #....: I4D080151-006 Work Order #....: GDQ4X Matrix.....: WATER
 Date Sampled....: 04/06/04 09:50 Date Received...: 04/08/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	229	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
		Dilution Factor: 1				
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	04/14/04	4105206
		Dilution Factor: 1				
Chloride	1010	100	mg/L	MCAWW 300.0A	04/22/04	4114225
		Dilution Factor: 100				
Sulfate	317	50.0	mg/L	MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 100				
Total Alkalinity	229	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	2690	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-11

GC/MS Volatiles

Lot-Sample #....: I4D080151-007 Work Order #....: GDQ401AH Matrix.....: WATER
Date Sampled....: 04/06/04 10:30 Date Received...: 04/08/04
Prep Date.....: 04/16/04 Analysis Date...: 04/16/04
Prep Batch #....: 4110426
Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	91	(75 - 115)
Toluene-d8	97	(90 - 114)
4-Bromofluorobenzene	98	(86 - 117)
Dibromofluoromethane	98	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-11

GC/MS Semivolatiles

Lot-Sample #...: I4D080151-007 Work Order #...: GDQ401AN Matrix.....: WATER
 Date Sampled...: 04/06/04 10:30 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/14/04
 Prep Batch #...: 4103489
 Dilution Factor: 0.95 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo (a) anthracene	ND	9.5	ug/L
Benzo (a) pyrene	ND	9.5	ug/L
Benzo (b) fluoranthene	ND	9.5	ug/L
Benzo (ghi) perylene	ND	9.5	ug/L
Benzo (k) fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz (a, h) anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno (1, 2, 3-cd) pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	81	(28 - 120)
2-Fluorobiphenyl	89	(23 - 119)
Terphenyl-d14	94	(10 - 123)
2-Fluorophenol	75	(22 - 121)
Phenol-d5	80	(34 - 117)
2,4,6-Tribromophenol	85	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-11

TOTAL Metals

Lot-Sample #....: I4D080151-007

Matrix.....: WATER

Date Sampled....: 04/06/04 10:30 Date Received...: 04/08/04

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 4102093						
Calcium	654	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ401AJ
		Dilution Factor: 1				
Magnesium	174	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ401AK
		Dilution Factor: 1				
Potassium	9.8	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ401AL
		Dilution Factor: 1				
Sodium	114	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ401AM
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-11

General Chemistry

Lot-Sample #....: I4D080151-007 Work Order #....: GDQ40 Matrix.....: WATER
 Date Sampled...: 04/06/04 10:30 Date Received...: 04/08/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	196	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
		Dilution Factor: 1				
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	04/14/04	4105206
		Dilution Factor: 1				
Chloride	1930	200	mg/L	MCAWW 300.0A	04/22/04	4114225
		Dilution Factor: 200				
Sulfate	140	50.0	mg/L	MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 100				
Total Alkalinity	196	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	3460	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-4

GC/MS Volatiles

Lot-Sample #....: I4D080151-008 Work Order #....: GDQ411AH Matrix.....: WATER
Date Sampled....: 04/06/04 11:30 Date Received...: 04/08/04
Prep Date.....: 04/16/04 Analysis Date...: 04/16/04
Prep Batch #....: 4110426
Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	25	1.0	ug/L
Ethylbenzene	33	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	43	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	91	(75 - 115)
Toluene-d8	100	(90 - 114)
4-Bromofluorobenzene	100	(86 - 117)
Dibromofluoromethane	91	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-4

GC/MS Semivolatiles

Lot-Sample #....: I4D080151-008 Work Order #....: GDQ411AN Matrix.....: WATER
 Date Sampled....: 04/06/04 11:30 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/14/04
 Prep Batch #....: 4103489
 Dilution Factor: 0.98 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.8	ug/L
Acenaphthylene	ND	9.8	ug/L
Anthracene	ND	9.8	ug/L
Benzo (a) anthracene	ND	9.8	ug/L
Benzo (a) pyrene	ND	9.8	ug/L
Benzo (b) fluoranthene	ND	9.8	ug/L
Benzo (ghi) perylene	ND	9.8	ug/L
Benzo (k) fluoranthene	ND	9.8	ug/L
Chrysene	ND	9.8	ug/L
Dibenz (a, h) anthracene	ND	9.8	ug/L
Fluoranthene	ND	9.8	ug/L
Fluorene	ND	9.8	ug/L
Indeno (1, 2, 3-cd) pyrene	ND	9.8	ug/L
Naphthalene	ND	9.8	ug/L
Phenanthrene	ND	9.8	ug/L
Pyrene	ND	9.8	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	83	(28 - 120)
2-Fluorobiphenyl	89	(23 - 119)
Terphenyl-d14	91	(10 - 123)
2-Fluorophenol	79	(22 - 121)
Phenol-d5	83	(34 - 117)
2,4,6-Tribromophenol	96	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-4

TOTAL Metals

Lot-Sample #....: I4D080151-008

Matrix.....: WATER

Date Sampled....: 04/06/04 11:30 Date Received...: 04/08/04

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 4102093						
Calcium	181	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ411AJ
		Dilution Factor: 1				
Magnesium	48.4	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ411AK
		Dilution Factor: 1				
Potassium	7.5	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ411AL
		Dilution Factor: 1				
Sodium	86.0	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ411AM
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-4

General Chemistry

Lot-Sample #...: I4D080151-008 Work Order #...: GDQ41 Matrix.....: WATER
 Date Sampled...: 04/06/04 11:30 Date Received...: 04/08/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	182	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
		Dilution Factor: 1				
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW 310.1	04/14/04	4105206
		Dilution Factor: 1				
Chloride	399	100	mg/L	MCAWW 300.0A	04/22/04	4114225
		Dilution Factor: 100				
Sulfate	ND	0.50	mg/L	MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 1				
Total Alkalinity	182	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	1060	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-18

GC/MS Volatiles

Lot-Sample #....: I4D080151-009 Work Order #....: GDQ431AH Matrix.....: WATER
Date Sampled....: 04/06/04 13:10 Date Received...: 04/08/04
Prep Date.....: 04/16/04 Analysis Date...: 04/16/04
Prep Batch #....: 4110426
Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
1,2-Dichloroethane-d4	93	(75 - 115)
Toluene-d8	100	(90 - 114)
4-Bromofluorobenzene	101	(86 - 117)
Dibromofluoromethane	100	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-18

GC/MS Semivolatiles

Lot-Sample #....: I4D080151-009 Work Order #....: GDQ431AN Matrix.....: WATER
 Date Sampled....: 04/06/04 13:10 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/14/04
 Prep Batch #....: 4103489
 Dilution Factor: 0.95 Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo (a) anthracene	ND	9.5	ug/L
Benzo (a) pyrene	ND	9.5	ug/L
Benzo (b) fluoranthene	ND	9.5	ug/L
Benzo (ghi) perylene	ND	9.5	ug/L
Benzo (k) fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz (a,h) anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno (1,2,3-cd) pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	75	(28 - 120)
2-Fluorobiphenyl	82	(23 - 119)
Terphenyl-d14	88	(10 - 123)
2-Fluorophenol	71	(22 - 121)
Phenol-d5	72	(34 - 117)
2,4,6-Tribromophenol	79	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-18

TOTAL Metals

Lot-Sample #...: I4D080151-009

Matrix.....: WATER

Date Sampled...: 04/06/04 13:10 Date Received...: 04/08/04

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4102093						
Calcium	2430	25.0	mg/L	SW846 6010B	04/10-04/14/04	GDQ431AJ
		Dilution Factor: 5				
Magnesium	696	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ431AK
		Dilution Factor: 1				
Potassium	62.2	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ431AL
		Dilution Factor: 1				
Sodium	130	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ431AM
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-18

General Chemistry

Lot-Sample #....: I4D080151-009 Work Order #....: GDQ43 Matrix.....: WATER
 Date Sampled....: 04/06/04 13:10 Date Received...: 04/08/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	105	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
		Dilution Factor: 1				
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW 310.1	04/14/04	4105206
		Dilution Factor: 1				
Chloride	10600	1000	mg/L	MCAWW 300.0A	04/22/04	4114225
		Dilution Factor: 1000				
Sulfate	655	50.0	mg/L	MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 100				
Total Alkalinity	105	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	19700	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-20

GC/MS Volatiles

Lot-Sample #....: I4D080151-010 Work Order #....: GDQ451AH Matrix.....: WATER
Date Sampled....: 04/06/04 14:05 Date Received...: 04/08/04
Prep Date.....: 04/19/04 Analysis Date...: 04/19/04
Prep Batch #....: 4112335
Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	92	(75 - 115)
Toluene-d8	101	(90 - 114)
4-Bromofluorobenzene	96	(86 - 117)
Dibromofluoromethane	88	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-20

GC/MS Semivolatiles

Lot-Sample #....: I4D080151-010 Work Order #....: GDQ451AN Matrix.....: WATER
 Date Sampled....: 04/06/04 14:05 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/15/04
 Prep Batch #....: 4103489
 Dilution Factor: 0.95 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo (a) anthracene	ND	9.5	ug/L
Benzo (a) pyrene	ND	9.5	ug/L
Benzo (b) fluoranthene	ND	9.5	ug/L
Benzo (ghi) perylene	ND	9.5	ug/L
Benzo (k) fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz (a, h) anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno (1,2,3-cd) pyrene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	74	(28 - 120)
2-Fluorobiphenyl	81	(23 - 119)
Terphenyl-d14	87	(10 - 123)
2-Fluorophenol	71	(22 - 121)
Phenol-d5	73	(34 - 117)
2,4,6-Tribromophenol	76	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-20

TOTAL Metals

Lot-Sample #....: I4D080151-010

Matrix.....: WATER

Date Sampled....: 04/06/04 14:05 Date Received...: 04/08/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Prep Batch #....: 4102093						
Calcium	1320	25.0	mg/L	SW846 6010B	04/10-04/14/04	GDQ451AJ
		Dilution Factor: 5				
Magnesium	520	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ451AK
		Dilution Factor: 1				
Potassium	34.7	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ451AL
		Dilution Factor: 1				
Sodium	777	25.0	mg/L	SW846 6010B	04/10-04/14/04	GDQ451AM
		Dilution Factor: 5				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-20

General Chemistry

Lot-Sample #....: I4D080151-010 Work Order #....: GDQ45 Matrix.....: WATER
 Date Sampled....: 04/06/04 14:05 Date Received...: 04/08/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	103	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
		Dilution Factor: 1				
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW 310.1	04/14/04	4105206
		Dilution Factor: 1				
Chloride	4130	1000	mg/L	MCAWW 300.0A	04/22/04	4114225
		Dilution Factor: 1000				
Sulfate	424	50.0	mg/L	MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 100				
Total Alkalinity	103	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	8810	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-WW

GC/MS Volatiles

Lot-Sample #....: I4D080151-011 Work Order #....: GDQ461AH Matrix.....: WATER
Date Sampled....: 04/06/04 14:20 Date Received...: 04/08/04
Prep Date.....: 04/19/04 Analysis Date...: 04/19/04
Prep Batch #....: 4112335
Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	1.5	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	89	(75 - 115)
Toluene-d8	101	(90 - 114)
4-Bromofluorobenzene	95	(86 - 117)
Dibromofluoromethane	85	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-WW

GC/MS Semivolatiles

Lot-Sample #....: I4D080151-011 Work Order #....: GDQ461AN Matrix.....: WATER
 Date Sampled....: 04/06/04 14:20 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/15/04
 Prep Batch #....: 4103489
 Dilution Factor: 0.98 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.8	ug/L
Acenaphthylene	ND	9.8	ug/L
Anthracene	ND	9.8	ug/L
Benzo (a) anthracene	ND	9.8	ug/L
Benzo (a) pyrene	ND	9.8	ug/L
Benzo (b) fluoranthene	ND	9.8	ug/L
Benzo (ghi) perylene	ND	9.8	ug/L
Benzo (k) fluoranthene	ND	9.8	ug/L
Chrysene	ND	9.8	ug/L
Dibenz (a, h) anthracene	ND	9.8	ug/L
Fluoranthene	ND	9.8	ug/L
Fluorene	ND	9.8	ug/L
Indeno (1, 2, 3-cd) pyrene	ND	9.8	ug/L
Naphthalene	ND	9.8	ug/L
Phenanthrene	ND	9.8	ug/L
Pyrene	ND	9.8	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	84	(28 - 120)
2-Fluorobiphenyl	90	(23 - 119)
Terphenyl-d14	98	(10 - 123)
2-Fluorophenol	80	(22 - 121)
Phenol-d5	76	(34 - 117)
2,4,6-Tribromophenol	95	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-WW

TOTAL Metals

Lot-Sample #...: I4D080151-011

Matrix.....: WATER

Date Sampled...: 04/06/04 14:20 Date Received...: 04/08/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Prep Batch #...: 4102093						
Calcium	206	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ461AJ
		Dilution Factor: 1				
Magnesium	65.7	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ461AK
		Dilution Factor: 1				
Potassium	ND	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ461AL
		Dilution Factor: 1				
Sodium	137	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ461AM
		Dilution Factor: 1				

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	217	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
		Dilution Factor: 1				
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW 310.1	04/14/04	4105206
		Dilution Factor: 1				
Chloride	477	100	mg/L	MCAWW 300.0A	04/22/04	4114225
		Dilution Factor: 100				
Sulfate	196	50.0	mg/L	MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 100				
Total Alkalinity	217	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	1460	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-10

GC/MS Volatiles

Lot-Sample #....: I4D080151-012 Work Order #....: GDQ471AH Matrix.....: WATER
Date Sampled....: 04/07/04 08:40 Date Received...: 04/08/04
Prep Date.....: 04/19/04 Analysis Date...: 04/19/04
Prep Batch #....: 4112335
Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	97	(75 - 115)
Toluene-d8	103	(90 - 114)
4-Bromofluorobenzene	96	(86 - 117)
Dibromofluoromethane	89	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-10

GC/MS Semivolatiles

Lot-Sample #....: I4D080151-012 Work Order #....: GDQ471AN Matrix.....: WATER
 Date Sampled....: 04/07/04 08:40 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/15/04
 Prep Batch #....: 4103489
 Dilution Factor: 0.98 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.8	ug/L
Acenaphthylene	ND	9.8	ug/L
Anthracene	ND	9.8	ug/L
Benzo (a) anthracene	ND	9.8	ug/L
Benzo (a) pyrene	ND	9.8	ug/L
Benzo (b) fluoranthene	ND	9.8	ug/L
Benzo (ghi) perylene	ND	9.8	ug/L
Benzo (k) fluoranthene	ND	9.8	ug/L
Chrysene	ND	9.8	ug/L
Dibenz (a,h) anthracene	ND	9.8	ug/L
Fluoranthene	ND	9.8	ug/L
Fluorene	ND	9.8	ug/L
Indeno (1,2,3-cd) pyrene	ND	9.8	ug/L
Naphthalene	ND	9.8	ug/L
Phenanthrene	ND	9.8	ug/L
Pyrene	ND	9.8	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(28 - 120)
2-Fluorobiphenyl	86	(23 - 119)
Terphenyl-d14	95	(10 - 123)
2-Fluorophenol	72	(22 - 121)
Phenol-d5	48	(34 - 117)
2,4,6-Tribromophenol	85	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-10

TOTAL Metals

Lot-Sample #...: I4D080151-012

Matrix.....: WATER

Date Sampled...: 04/07/04 08:40 Date Received...: 04/08/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Prep Batch #...: 4102093						
Calcium	1350	25.0	mg/L	SW846 6010B	04/10-04/14/04	GDQ471AJ
		Dilution Factor: 5				
Magnesium	297	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ471AK
		Dilution Factor: 1				
Potassium	44.0	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ471AL
		Dilution Factor: 1				
Sodium	130	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ471AM
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-10

General Chemistry

Lot-Sample #....: I4D080151-012 Work Order #....: GDQ47 Matrix.....: WATER
 Date Sampled....: 04/07/04 08:40 Date Received...: 04/08/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	194	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
		Dilution Factor: 1				
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	04/14/04	4105206
		Dilution Factor: 1				
Chloride	6800	1000	mg/L	MCAWW 300.0A	04/22/04	4114225
		Dilution Factor: 1000				
Sulfate	499	50.0	mg/L	MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 100				
Total Alkalinity	194	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	13300	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-12

GC/MS Volatiles

Lot-Sample #....: I4D080151-013 Work Order #....: GDQ492AH Matrix.....: WATER
Date Sampled....: 04/07/04 09:40 Date Received...: 04/08/04
Prep Date.....: 04/21/04 Analysis Date...: 04/21/04
Prep Batch #....: 4114255
Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	123 *	(75 - 115)
Toluene-d8	103	(90 - 114)
4-Bromofluorobenzene	102	(86 - 117)
Dibromofluoromethane	97	(81 - 110)

NOTE (S) :

* Surrogate recovery is outside stated control limits.

Surrogates outside acceptance criteria due to demonstrated matrix effect.

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-12

GC/MS Semivolatiles

Lot-Sample #...: I4D080151-013 Work Order #...: GDQ491AN Matrix.....: WATER
 Date Sampled...: 04/07/04 09:40 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/15/04
 Prep Batch #...: 4103489
 Dilution Factor: 0.98 Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.8	ug/L
Acenaphthylene	ND	9.8	ug/L
Anthracene	ND	9.8	ug/L
Benzo(a)anthracene	ND	9.8	ug/L
Benzo(a)pyrene	ND	9.8	ug/L
Benzo(b)fluoranthene	ND	9.8	ug/L
Benzo(ghi)perylene	ND	9.8	ug/L
Benzo(k)fluoranthene	ND	9.8	ug/L
Chrysene	ND	9.8	ug/L
Dibenz(a,h)anthracene	ND	9.8	ug/L
Fluoranthene	ND	9.8	ug/L
Fluorene	ND	9.8	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.8	ug/L
Naphthalene	ND	9.8	ug/L
Phenanthrene	ND	9.8	ug/L
Pyrene	ND	9.8	ug/L

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Nitrobenzene-d5	83	(28 - 120)
2-Fluorobiphenyl	85	(23 - 119)
Terphenyl-d14	91	(10 - 123)
2-Fluorophenol	83	(22 - 121)
Phenol-d5	86	(34 - 117)
2,4,6-Tribromophenol	88	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-12

TOTAL Metals

Lot-Sample #...: I4D080151-013

Matrix.....: WATER

Date Sampled...: 04/07/04 09:40 Date Received...: 04/08/04

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...	4102093					
Calcium	5510	50.0	mg/L	SW846 6010B	04/10-04/14/04	GDQ491AJ
		Dilution Factor: 10				
Magnesium	1410	50.0	mg/L	SW846 6010B	04/10-04/14/04	GDQ491AK
		Dilution Factor: 10				
Potassium	172	50.0	mg/L	SW846 6010B	04/10-04/14/04	GDQ491AL
		Dilution Factor: 10				
Sodium	1270	50.0	mg/L	SW846 6010B	04/10-04/14/04	GDQ491AM
		Dilution Factor: 10				

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	80.3	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
		Dilution Factor: 1				
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW 310.1	04/14/04	4105206
		Dilution Factor: 1				
Chloride	68300	5000	mg/L	MCAWW 300.0A	04/22-04/23/04	4114225
		Dilution Factor: 5000				
Sulfate	1570	50.0	mg/L	MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 100				
Total Alkalinity	80.3	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	116000	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-8

GC/MS Volatiles

Lot-Sample #....: I4D080151-014 Work Order #....: GDQ5A1AH Matrix.....: WATER
Date Sampled....: 04/07/04 10:35 Date Received...: 04/08/04
Prep Date.....: 04/19/04 Analysis Date...: 04/19/04
Prep Batch #....: 4112335
Dilution Factor: 250 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Benzene	25000	250	ug/L
Ethylbenzene	470	250	ug/L
Toluene	2600	250	ug/L
Xylenes (total)	ND	500	ug/L

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
1,2-Dichloroethane-d4	91	(75 - 115)
Toluene-d8	101	(90 - 114)
4-Bromofluorobenzene	93	(86 - 117)
Dibromofluoromethane	86	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-8

GC/MS Semivolatiles

Lot-Sample #....: I4D080151-014 Work Order #....: GDQ5A1AN Matrix.....: WATER
 Date Sampled....: 04/07/04 10:35 Date Received...: 04/08/04
 Prep Date.....: 04/12/04 Analysis Date...: 04/15/04
 Prep Batch #....: 4103489
 Dilution Factor: 0.95 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo(a)anthracene	ND	9.5	ug/L
Benzo(a)pyrene	ND	9.5	ug/L
Benzo(b)fluoranthene	ND	9.5	ug/L
Benzo(ghi)perylene	ND	9.5	ug/L
Benzo(k)fluoranthene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Dibenz(a,h)anthracene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.5	ug/L
Naphthalene	10	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	89	(28 - 120)
2-Fluorobiphenyl	95	(23 - 119)
Terphenyl-d14	93	(10 - 123)
2-Fluorophenol	88	(22 - 121)
Phenol-d5	80	(34 - 117)
2,4,6-Tribromophenol	99	(33 - 124)

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-8

TOTAL Metals

Lot-Sample #....: I4D080151-014

Matrix.....: WATER

Date Sampled....: 04/07/04 10:35 Date Received...: 04/08/04

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 4102093						
Calcium	218	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ5A1AJ
		Dilution Factor: 1				
Magnesium	47.6	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ5A1AK
		Dilution Factor: 1				
Potassium	ND	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ5A1AL
		Dilution Factor: 1				
Sodium	33.6	5.0	mg/L	SW846 6010B	04/10-04/13/04	GDQ5A1AM
		Dilution Factor: 1				

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-MW-8

General Chemistry

Lot-Sample #...: I4D080151-014 Work Order #...: GDQ5A Matrix.....: WATER
 Date Sampled...: 04/07/04 10:35 Date Received...: 04/08/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	205	5.0	mg/L	MCAWW 310.1	04/14/04	4105208
				Dilution Factor: 1		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	04/14/04	4105206
				Dilution Factor: 1		
Chloride	391	100	mg/L	MCAWW 300.0A	04/22-04/23/04	4114225
				Dilution Factor: 100		
Sulfate	0.84	0.50	mg/L	MCAWW 300.0A	04/22/04	4114228
				Dilution Factor: 1		
Total Alkalinity	205	5.0	mg/L	MCAWW 310.1	04/14/04	4105211
				Dilution Factor: 1		
Total Dissolved Solids	1080	40.0	mg/L	MCAWW 160.1	04/12/04	4103709
				Dilution Factor: 1		

CONOCOPHILLIPS

Client Sample ID: MALJAMAR EXTRACTION WELL-DUPLICATE

GC/MS Volatiles

Lot-Sample #....: I4D080151-015 Work Order #....: GDQ5D1AA Matrix.....: WATER
Date Sampled....: 04/07/04 10:45 Date Received...: 04/08/04
Prep Date.....: 04/19/04 Analysis Date...: 04/19/04
Prep Batch #....: 4112335
Dilution Factor: 250 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Benzene	24000	250	ug/L
Ethylbenzene	470	250	ug/L
Toluene	2500	250	ug/L
Xylenes (total)	ND	500	ug/L

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
1,2-Dichloroethane-d4	89	(75 - 115)
Toluene-d8	99	(90 - 114)
4-Bromofluorobenzene	94	(86 - 117)
Dibromofluoromethane	86	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #....: I4D080151-016 Work Order #....: GDQ5E1AA Matrix.....: WATER
Date Sampled....: 04/07/04 11:00 Date Received...: 04/08/04
Prep Date.....: 04/19/04 Analysis Date...: 04/19/04
Prep Batch #....: 4112335
Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	88	(75 - 115)
Toluene-d8	101	(90 - 114)
4-Bromofluorobenzene	96	(86 - 117)
Dibromofluoromethane	88	(81 - 110)

CONOCOPHILLIPS

Client Sample ID: MW-6

General Chemistry

Lot-Sample #....: I4D080151-017
Date Sampled....: 04/06/04

Work Order #....: GDQ5G
Date Received...: 04/08/04

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Chloride	280	100	mg/L	MCAWW 300.0A	04/23/04	4115141

Dilution Factor: 100

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: I4D080151
MB Lot-Sample #: I4D190000-426

Work Order #...: GEFQA1AA

Matrix.....: WATER

Analysis Date...: 04/16/04

Prep Date.....: 04/16/04

Dilution Factor: 1

Prep Batch #...: 4110426

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
1,2-Dichloroethane-d4	93	(75 - 115)
Toluene-d8	101	(90 - 114)
4-Bromofluorobenzene	97	(86 - 117)
Dibromofluoromethane	97	(81 - 110)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: I4D080151
MB Lot-Sample #: I4D190000-541

Work Order #....: GEF801AA

Matrix.....: WATER

Prep Date.....: 04/16/04

Analysis Date...: 04/16/04

Prep Batch #....: 4110541

Dilution Factor: 1

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
1,2-Dichloroethane-d4	91	(75 - 115)
Toluene-d8	100	(90 - 114)
4-Bromofluorobenzene	98	(86 - 117)
Dibromofluoromethane	86	(81 - 110)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: I4D080151
MB Lot-Sample #: I4D210000-335

Work Order #...: GEKVW1AA

Matrix.....: WATER

Analysis Date...: 04/19/04
Dilution Factor: 1

Prep Date.....: 04/19/04
Prep Batch #...: 4112335

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	87	(75 - 115)
Toluene-d8	100	(90 - 114)
4-Bromofluorobenzene	94	(86 - 117)
Dibromofluoromethane	85	(81 - 110)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: I4D080151
MB Lot-Sample #: I4D230000-255

Work Order #....: GEQ4K1AA

Matrix.....: WATER

Analysis Date...: 04/21/04
Dilution Factor: 1

Prep Date.....: 04/21/04

Prep Batch #....: 4114255

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
1,2-Dichloroethane-d4	90	(75 - 115)
Toluene-d8	101	(90 - 114)
4-Bromofluorobenzene	96	(86 - 117)
Dibromofluoromethane	88	(81 - 110)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: I4D080151
 MB Lot-Sample #: I4D120000-489

Work Order #...: GD1K41AA

Matrix.....: WATER

Analysis Date...: 04/14/04
 Dilution Factor: 1

Prep Date.....: 04/12/04

Prep Batch #...: 4103489

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	10	ug/L	SW846 8270C
Acenaphthylene	ND	10	ug/L	SW846 8270C
Anthracene	ND	10	ug/L	SW846 8270C
Benzo(a)anthracene	ND	10	ug/L	SW846 8270C
Benzo(a)pyrene	ND	10	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	10	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	10	ug/L	SW846 8270C
Chrysene	ND	10	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	10	ug/L	SW846 8270C
Fluoranthene	ND	10	ug/L	SW846 8270C
Fluorene	ND	10	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	SW846 8270C
Naphthalene	ND	10	ug/L	SW846 8270C
Phenanthrene	ND	10	ug/L	SW846 8270C
Pyrene	ND	10	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	83	(28 - 120)
2-Fluorobiphenyl	88	(23 - 119)
Terphenyl-d14	95	(10 - 123)
2-Fluorophenol	79	(22 - 121)
Phenol-d5	82	(34 - 117)
2,4,6-Tribromophenol	82	(33 - 124)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: I4D080151

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: I4D110000-093 Prep Batch #... : 4102093						
Calcium	ND	5.0	mg/L	SW846 6010B	04/10-04/13/04	GD0KX1AA
		Dilution Factor: 1				
Magnesium	ND	5.0	mg/L	SW846 6010B	04/10-04/13/04	GD0KX1AC
		Dilution Factor: 1				
Potassium	ND	5.0	mg/L	SW846 6010B	04/10-04/13/04	GD0KX1AD
		Dilution Factor: 1				
Sodium	ND	5.0	mg/L	SW846 6010B	04/10-04/13/04	GD0KX1AE
		Dilution Factor: 1				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #....: I4D080151

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	ND	Work Order #: GEQ081AA 1.0	mg/L	MB Lot-Sample #: I4D230000-225 MCAWW 300.0A	04/22/04	4114225
		Dilution Factor: 1				
Chloride	ND	Work Order #: GEWG71AA 1.0	mg/L	MB Lot-Sample #: I4D240000-141 MCAWW 300.0A	04/23/04	4115141
		Dilution Factor: 1				
Sulfate	ND	Work Order #: GEQ1F1AA 0.50	mg/L	MB Lot-Sample #: I4D230000-228 MCAWW 300.0A	04/22/04	4114228
		Dilution Factor: 1				
Total Alkalinity	ND	Work Order #: GD4J71AA 5.0	mg/L	MB Lot-Sample #: I4D140000-211 MCAWW 310.1	04/14/04	4105211
		Dilution Factor: 1				
Total Dissolved Solids	ND	Work Order #: GD2AJ1AA 40.0	mg/L	MB Lot-Sample #: I4D120000-709 MCAWW 160.1	04/12/04	4103709
		Dilution Factor: 1				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: I4D080151 Work Order #...: GEFQA1AC-LCS Matrix.....: WATER
 LCS Lot-Sample#: I4D190000-426 GEFQA1AD-LCSD
 Prep Date.....: 04/16/04 Analysis Date...: 04/16/04
 Prep Batch #...: 4110426
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	110	(90 - 124)			SW846 8260B
	109	(90 - 124)	0.50	(0-20)	SW846 8260B
Toluene	99	(79 - 120)			SW846 8260B
	101	(79 - 120)	1.8	(0-20)	SW846 8260B
Chlorobenzene	103	(76 - 114)			SW846 8260B
	106	(76 - 114)	2.5	(0-20)	SW846 8260B
1,1-Dichloroethene	107	(76 - 113)			SW846 8260B
	110	(76 - 113)	2.9	(0-20)	SW846 8260B
Trichloroethene	107	(72 - 118)			SW846 8260B
	110	(72 - 118)	3.0	(0-20)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	89	(75 - 115)
	89	(75 - 115)
Toluene-d8	100	(90 - 114)
	100	(90 - 114)
4-Bromofluorobenzene	100	(86 - 117)
	99	(86 - 117)
Dibromofluoromethane	95	(81 - 110)
	94	(81 - 110)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: I4D080151 Work Order #....: GEF801AC-LCS Matrix.....: WATER
 LCS Lot-Sample#: I4D190000-541 GEF801AD-LCSD
 Prep Date.....: 04/16/04 Analysis Date...: 04/16/04
 Prep Batch #....: 4110541
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	109	(90 - 124)			SW846 8260B
	110	(90 - 124)	0.19	(0-20)	SW846 8260B
Toluene	108	(79 - 120)			SW846 8260B
	111	(79 - 120)	2.5	(0-20)	SW846 8260B
Chlorobenzene	105	(76 - 114)			SW846 8260B
	107	(76 - 114)	2.0	(0-20)	SW846 8260B
1,1-Dichloroethene	97	(76 - 113)			SW846 8260B
	98	(76 - 113)	0.58	(0-20)	SW846 8260B
Trichloroethene	102	(72 - 118)			SW846 8260B
	102	(72 - 118)	0.040	(0-20)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	90	(75 - 115)
	90	(75 - 115)
Toluene-d8	100	(90 - 114)
	105	(90 - 114)
4-Bromofluorobenzene	100	(86 - 117)
	103	(86 - 117)
Dibromofluoromethane	88	(81 - 110)
	89	(81 - 110)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: I4D080151 Work Order #....: GEKVL1AC-LCS Matrix.....: WATER
 LCS Lot-Sample#: I4D210000-335 GEKVL1AD-LCSD
 Prep Date.....: 04/19/04 Analysis Date...: 04/19/04
 Prep Batch #....: 4112335
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	114	(90 - 124)			SW846 8260B
	115	(90 - 124)	0.59	(0-20)	SW846 8260B
Toluene	108	(79 - 120)			SW846 8260B
	105	(79 - 120)	2.6	(0-20)	SW846 8260B
Chlorobenzene	107	(76 - 114)			SW846 8260B
	100	(76 - 114)	6.8	(0-20)	SW846 8260B
1,1-Dichloroethene	99	(76 - 113)			SW846 8260B
	94	(76 - 113)	4.4	(0-20)	SW846 8260B
Trichloroethene	102	(72 - 118)			SW846 8260B
	98	(72 - 118)	3.8	(0-20)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	89	(75 - 115)
	88	(75 - 115)
Toluene-d8	96	(90 - 114)
	100	(90 - 114)
4-Bromofluorobenzene	97	(86 - 117)
	95	(86 - 117)
Dibromofluoromethane	87	(81 - 110)
	88	(81 - 110)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: I4D080151 Work Order #....: GEQ4K1AC-LCS Matrix.....: WATER
 LCS Lot-Sample#: I4D230000-255 GEQ4K1AD-LCSD
 Prep Date.....: 04/21/04 Analysis Date...: 04/21/04
 Prep Batch #....: 4114255
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Chlorobenzene	100	(76 - 114)			SW846 8260B
	105	(76 - 114)	4.3	(0-20)	SW846 8260B
1,1-Dichloroethene	87	(76 - 113)			SW846 8260B
	92	(76 - 113)	5.5	(0-20)	SW846 8260B
Benzene	107	(90 - 124)			SW846 8260B
	115	(90 - 124)	7.5	(0-20)	SW846 8260B
Trichloroethene	97	(72 - 118)			SW846 8260B
	99	(72 - 118)	2.3	(0-20)	SW846 8260B
Toluene	104	(79 - 120)			SW846 8260B
	109	(79 - 120)	5.3	(0-20)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	88	(75 - 115)
	90	(75 - 115)
Toluene-d8	100	(90 - 114)
	102	(90 - 114)
4-Bromofluorobenzene	96	(86 - 117)
	98	(86 - 117)
Dibromofluoromethane	89	(81 - 110)
	88	(81 - 110)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #....: I4D080151 Work Order #....: GD1K41AC-LCS Matrix.....: WATER
 LCS Lot-Sample#: I4D120000-489 GD1K41AD-LCSD
 Prep Date.....: 04/12/04 Analysis Date...: 04/14/04
 Prep Batch #....: 4103489
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	84	(69 - 108)			SW846 8270C
	84	(69 - 108)	0.060	(0-20)	SW846 8270C
Pyrene	83	(67 - 112)			SW846 8270C
	84	(67 - 112)	0.48	(0-20)	SW846 8270C
2-Chlorophenol	76	(58 - 109)			SW846 8270C
	74	(58 - 109)	3.0	(0-20)	SW846 8270C
4-Chloro-3-methylphenol	85	(61 - 121)			SW846 8270C
	86	(61 - 121)	1.5	(0-20)	SW846 8270C
1,4-Dichlorobenzene	67	(65 - 107)			SW846 8270C
	68	(65 - 107)	1.2	(0-20)	SW846 8270C
2,4-Dinitrotoluene	83	(71 - 120)			SW846 8270C
	76	(71 - 120)	9.2	(0-20)	SW846 8270C
4-Nitrophenol	75	(49 - 117)			SW846 8270C
	55 p	(49 - 117)	31	(0-20)	SW846 8270C
N-Nitrosodi-n-propyl- amine	82	(63 - 121)			SW846 8270C
	80	(63 - 121)	1.9	(0-20)	SW846 8270C
Pentachlorophenol	77	(56 - 126)			SW846 8270C
	82	(56 - 126)	6.0	(0-20)	SW846 8270C
Phenol	74	(62 - 111)			SW846 8270C
	72	(62 - 111)	3.5	(0-20)	SW846 8270C
1,2,4-Trichloro- benzene	76	(68 - 107)			SW846 8270C
	74	(68 - 107)	3.3	(0-20)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	80	(28 - 120)
	77	(28 - 120)
2-Fluorobiphenyl	89	(23 - 119)
	88	(23 - 119)
Terphenyl-d14	89	(10 - 123)
	89	(10 - 123)
2-Fluorophenol	74	(22 - 121)
	72	(22 - 121)
Phenol-d5	79	(34 - 117)
	74	(34 - 117)
2,4,6-Tribromophenol	91	(33 - 124)

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: I4D080151 Work Order #...: GD1K41AC-LCS Matrix.....: WATER
LCS Lot-Sample#: I4D120000-489 GD1K41AD-LCSD

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
	99	(33 - 124)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: I4D080151

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: I4D110000-093 Prep Batch #...: 4102093					
Calcium	108	(80 - 120)	SW846 6010B	04/10-04/13/04	GD0KX1AF
		Dilution Factor: 1			
Magnesium	102	(80 - 120)	SW846 6010B	04/10-04/13/04	GD0KX1AG
		Dilution Factor: 1			
Potassium	105	(80 - 120)	SW846 6010B	04/10-04/13/04	GD0KX1AH
		Dilution Factor: 1			
Sodium	104	(80 - 120)	SW846 6010B	04/10-04/13/04	GD0KX1AJ
		Dilution Factor: 1			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: I4D080151

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Alkalinity		WO#:GD4J71AC-LCS/GD4J71AD-LCSD LCS Lot-Sample#: I4D140000-211					
	106	(80 - 120)			MCAWW 310.1	04/14/04	4105211
	107	(80 - 120)	1.6	(0-20)	MCAWW 310.1	04/14/04	4105211

Dilution Factor: 1

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: I4D080151

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Chloride	91	(85 - 106)	MCAWW 300.0A Dilution Factor: 1	Work Order #: GEQ081AC LCS Lot-Sample#: I4D230000-225 04/22/04	4114225
Chloride	93	(85 - 106)	MCAWW 300.0A Dilution Factor: 1	Work Order #: GEWG71AC LCS Lot-Sample#: I4D240000-141 04/23/04	4115141
Sulfate	94	(88 - 107)	MCAWW 300.0A Dilution Factor: 1	Work Order #: GEQ1F1AC LCS Lot-Sample#: I4D230000-228 04/22/04	4114228
Total Dissolved Solids	98	(87 - 113)	MCAWW 160.1 Dilution Factor: 1	Work Order #: GD2AJ1AC LCS Lot-Sample#: I4D120000-709 04/12/04	4103709

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: I4D080151

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Chloride	91	(85 - 106)	Work Order #: GEQ081AC MCAWW 300.0A Dilution Factor: 1	LCS Lot-Sample#: I4D230000-225 04/22/04	4114225
Chloride	93	(85 - 106)	Work Order #: GEWG71AC MCAWW 300.0A Dilution Factor: 1	LCS Lot-Sample#: I4D240000-141 04/23/04	4115141
Sulfate	94	(88 - 107)	Work Order #: GEQ1F1AC MCAWW 300.0A Dilution Factor: 1	LCS Lot-Sample#: I4D230000-228 04/22/04	4114228
Total Dissolved Solids	98	(87 - 113)	Work Order #: GD2AJ1AC MCAWW 160.1 Dilution Factor: 1	LCS Lot-Sample#: I4D120000-709 04/12/04	4103709

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: I4D080151 Work Order #....: GDHE71AC-MS Matrix.....: WATER
 MS Lot-Sample #: I4D030156-013 GDHE71AD-MSD
 Date Sampled....: 04/02/04 14:25 Date Received...: 04/03/04
 Prep Date.....: 04/16/04 Analysis Date...: 04/17/04
 Prep Batch #....: 4110426
 Dilution Factor: 10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	115	(90 - 124)			SW846 8260B
	106	(90 - 124)	1.9	(0-20)	SW846 8260B
Toluene	111	(79 - 120)			SW846 8260B
	105	(79 - 120)	5.4	(0-20)	SW846 8260B
Chlorobenzene	117 a, MSC	(76 - 114)			SW846 8260B
	110	(76 - 114)	6.1	(0-20)	SW846 8260B
1,1-Dichloroethene	117 a, MSC	(76 - 113)			SW846 8260B
	114 a, MSC	(76 - 113)	3.2	(0-20)	SW846 8260B
Trichloroethene	118	(72 - 118)			SW846 8260B
	116	(72 - 118)	2.0	(0-20)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	88	(75 - 115)
	89	(75 - 115)
Toluene-d8	100	(90 - 114)
	100	(90 - 114)
4-Bromofluorobenzene	102	(86 - 117)
	99	(86 - 117)
Dibromofluoromethane	95	(81 - 110)
	94	(81 - 110)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: I4D080151 Work Order #...: GD4G31AD-MS Matrix.....: WATER
 MS Lot-Sample #: I4D140132-001 GD4G31AE-MSD
 Date Sampled...: 04/13/04 08:30 Date Received...: 04/14/04
 Prep Date.....: 04/16/04 Analysis Date...: 04/17/04
 Prep Batch #...: 4110541
 Dilution Factor: 50

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	87 a, MSC	(90 - 124)			SW846 8260B
	82 a, MSC	(90 - 124)	2.1	(0-20)	SW846 8260B
Toluene	108	(79 - 120)			SW846 8260B
	107	(79 - 120)	1.2	(0-20)	SW846 8260B
Chlorobenzene	104	(76 - 114)			SW846 8260B
	104	(76 - 114)	0.61	(0-20)	SW846 8260B
1,1-Dichloroethene	96	(76 - 113)			SW846 8260B
	95	(76 - 113)	0.88	(0-20)	SW846 8260B
Trichloroethene	103	(72 - 118)			SW846 8260B
	100	(72 - 118)	2.7	(0-20)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	88	(75 - 115)
	85	(75 - 115)
Toluene-d8	101	(90 - 114)
	103	(90 - 114)
4-Bromofluorobenzene	98	(86 - 117)
	99	(86 - 117)
Dibromofluoromethane	83	(81 - 110)
	86	(81 - 110)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: I4D080151 Work Order #....: GD7R11AD-MS Matrix.....: WATER
 MS Lot-Sample #: I4D150207-014 GD7R11AE-MSD
 Date Sampled....: 04/14/04 15:25 Date Received...: 04/15/04
 Prep Date.....: 04/21/04 Analysis Date...: 04/22/04
 Prep Batch #....: 4114255
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Chlorobenzene	100	(76 - 114)			SW846 8260B
	100	(76 - 114)	0.58	(0-20)	SW846 8260B
1,1-Dichloroethene	87	(76 - 113)			SW846 8260B
	93	(76 - 113)	7.2	(0-20)	SW846 8260B
Benzene	113	(90 - 124)			SW846 8260B
	127 a, MSC	(90 - 124)	12	(0-20)	SW846 8260B
Trichloroethene	96	(72 - 118)			SW846 8260B
	98	(72 - 118)	2.1	(0-20)	SW846 8260B
Toluene	103	(79 - 120)			SW846 8260B
	104	(79 - 120)	0.81	(0-20)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	89	(75 - 115)
	90	(75 - 115)
Toluene-d8	101	(90 - 114)
	101	(90 - 114)
4-Bromofluorobenzene	97	(86 - 117)
	96	(86 - 117)
Dibromofluoromethane	87	(81 - 110)
	88	(81 - 110)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: I4D080151

Matrix.....: WATER

Date Sampled...: 04/05/04 13:40 Date Received...: 04/08/04

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: I4D080151-001 Prep Batch #...: 4102093						
Calcium	105	(75 - 125)		SW846 6010B	04/10-04/13/04	GDQ4A1AP
	103	(75 - 125)	0.42 (0-20)	SW846 6010B	04/10-04/13/04	GDQ4A1AQ
		Dilution Factor: 1				
Magnesium	102	(75 - 125)		SW846 6010B	04/10-04/13/04	GDQ4A1AR
	102	(75 - 125)	0.14 (0-20)	SW846 6010B	04/10-04/13/04	GDQ4A1AT
		Dilution Factor: 1				
Potassium	114	(75 - 125)		SW846 6010B	04/10-04/13/04	GDQ4A1AU
	115	(75 - 125)	1.0 (0-20)	SW846 6010B	04/10-04/13/04	GDQ4A1AV
		Dilution Factor: 1				
Sodium	93	(75 - 125)		SW846 6010B	04/10-04/13/04	GDQ4A1AW
	95	(75 - 125)	0.93 (0-20)	SW846 6010B	04/10-04/13/04	GDQ4A1AX
		Dilution Factor: 1				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I4D080151

Matrix.....: WATER

Date Sampled...: 04/13/04 16:35 Date Received...: 04/14/04

PARAMETER	PERCENT RECOVERY	RPD	PREPARATION-	PREP
	RECOVERY	LIMITS	ANALYSIS DATE	BATCH #
Chloride		WO#: GDQ4A1CM-MS/GDQ4A1CN-MSD MS Lot-Sample #: I4D080151-001		
	95	(85 - 106)	MCAWW 300.0A	04/22/04 4114225
	90	(85 - 106) 3.0 (0-22)	MCAWW 300.0A	04/22/04 4114225
		Dilution Factor: 1		
Chloride		WO#: GD42H1C5-MS/GD42H1C6-MSD MS Lot-Sample #: I4D140170-012		
	70 N	(85 - 106)	MCAWW 300.0A	04/23/04 4115141
	74 N	(85 - 106) 2.3 (0-22)	MCAWW 300.0A	04/23/04 4115141
		Dilution Factor: 1		
Sulfate		WO#: GDQ4A1CP-MS/GDQ4A1CQ-MSD MS Lot-Sample #: I4D080151-001		
	82 N	(88 - 107)	MCAWW 300.0A	04/22/04 4114228
	79 N	(88 - 107) 2.8 (0-26)	MCAWW 300.0A	04/22/04 4114228
		Dilution Factor: 1		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: I4D080151

Work Order #....: GDQ4A-SMP

Matrix.....: WATER

GDQ4A-DUP

Date Sampled....: 04/05/04 13:40

Date Received...: 04/08/04

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Alkalinity	252	255	mg/L	1.5	(0-20)	SD Lot-Sample #: I4D080151-001 MCAWW 310.1	04/14/04	4105211
Dilution Factor: 1								

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: I4D080151

Work Order #....: GDQ5A-SMP
GDQ5A-DUP

Matrix.....: WATER

Date Sampled....: 04/07/04 10:35

Date Received...: 04/08/04

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u> <u>RESULT</u>	<u>UNITS</u>	<u>RPD</u> <u>RPD</u>	<u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Total Alkalinity						SD Lot-Sample #:	I4D080151-014	
205		201	mg/L	1.8	(0-20)	MCAWW 310.1	04/14/04	4105211

Dilution Factor: 1

Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.1 COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.

EPA 340.2 Fluoride: Preliminary Bellack distillation not performed.

EPA 8151A: Laboratory utilizes alternate extraction solvent.

Iowa OA-1: Benzene, toluene, ethylbenzene and xylenes (BTEX) not analyzed along with Gasoline Range Organics if client does not require BTEX.

EPA TO-12: Samples are not analyzed in duplicate.

EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).

The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).



STL

CHAIN-OF-CUSTODY ADDENDUM

Lot No: I40080151RECEIVED BY: LT

COC NUMBER: _____

DATE/TIME RECEIVED: 4-8-04/0905QUOTE PROFILE: 42065UNPACKED DATE/TIME: 4-8-04/1000CLIENT/PROJECT: Maxim Technologies

SAMPLES LOGGED IN: _____ LOG-IN REVIEWED: _____

Number of Shipping Containers Received
with Chain of Custody 4LT BJVOC AIR / FILTER SAMPLES ☐ YES SEE SECTIONS 1.0, 2.0, & 6.01.0 CONTAINERS EXAMINED UPON RECEIPT: LTContainer Sealed: ☒ YES ☐ NOCustody Seal Signed/Dated: ☒ YES ☐ NOCustody Seal Present: ☒ YES ☐ NOContainers checked for radioactivity: ☐ YES ☐ NO ☒ N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s): _____

2.0 VOC CANISTERS EXAMINED UPON RECEIPT: _____

Canister Valves Closed: ☐ YES ☐ NOSamples Received Match Chain: ☐ YES ☐ NOCanister Valves Capped: ☐ YES ☐ NOSee Additional Comments (Section 5.0 and / or 7.0) ☐ YES ☐ NO

Packing Material Used: (circle)

Chain-of-Custody form properly maintained: ☐ YES ☐ NO

None / Absorbent / Paper / Bubble Wrap

Can Size: ☐ 6L ☐ 15L Other _____3.0 SAMPLE TEMPERATURE UPON RECEIPT: LTIR THERMOMETER #: P-5

The temperature of the container(s) is:

[acceptable tolerance $4^{\circ}\text{C} \pm 2^{\circ}$; (NC, WI: $1-4.4^{\circ}\text{C}$)]

<u>21</u>	<u>20</u>	<u>20</u>	<u>20</u>								

If temperature is outside acceptable tolerance, Project Manager was notified (____ PM). Date: _____ Time: _____

Samples received do not require cooling _____

OK to analyze samples: ☐ YES ☐ NOPRESERVATION OF SAMPLES REQUIRED: ☐ NA ☒ YESVERIFIED BY: LTBase samples are >pH 12: ☐ YES ☐ NOAcid preserved are <pH 2: ☒ YES ☐ NO

Cyanide samples checked

Sulfide samples appear

for sulfides: ☐ YESto be preserved with zinc acetate: ☐ YES ☐ NO

Samples checked for chlorine

Free chlorine present: ☐ YES ☐ NOper specification: ☐ YES

If sample preservation is outside acceptable tolerance, Project Manager was notified (____ PM)

Date: _____ Time: _____ ☐ see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOAs CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

4.0 CONDITION OF BOTTLES/CONTAINERS

VERIFIED BY: LT

Samples received match COC: ☒ YES ☐ NO Bottles received intact: ☒ YES ☐ NO
 See additional discrepancies/comments section: ☒ YES ☐ NO Samples received from USDA restricted area: ☐ YES ☒ NO
 Chain-of-Custody form properly maintained: ☒ YES ☐ NO VOA trip blanks included: 2 x 40 mL ☒ YES ☐ NO ☐ N/A

5.0 ADDITIONAL DISCREPANCIES

Appears on COC		Appears on Label		Comments
Sample ID	Date/Time	Sample ID	Date/Time	
MALJAMAR EXTRACTION WELL MW 11	4-6-04 / 1030	MALJAMAR EXTRACTION WELL MW 11	4-6-04 / 1030	only on 500 mL non-preservative bottle

6.0 SHIPPING DOCUMENTATION:

Air/freight bill is available and attached to COC: ☒ YES ☐ NO Air bill #: _____
 Hand-delivered Carrier: _____ Date: _____ Time: _____

7.0 OTHER COMMENTS:

CORRECTIVE ACTION:

Client's Name: _____ Informed verbally on: _____ By: _____

Client's Name: _____ Informed verbally on: _____ By: _____

Sample(s) processed "as is" comments: _____

Samples(s) on hold until: _____ If released, notify: _____

REVIEW:

Project Management: CMS Date: 4-29-04

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

Chain of Custody Record

STL4149 (1202)

J4D080151

CHAIN OF CUSTODY NUMBER

\$010901-001

SEVERN
TRENT
STL
Severn Trent Laboratories, Inc.

022701

Client	Project Manager	Date	Page
Maxim Technologies	Charles Durrett	03/29/2004	1 of 1
Address	Telephone Number (Area Code)/Fax Number	Lab Location	
1703 W Industrial Ave	(432) 686-8081 / (432) 686-8085	STL Austin	
City	Site Contact		
Midland	Charles Durrett		
Project Number/Name	Carrier/Waybill Number		
6519 Gas Plant Extraction Well			
Contract/Purchase Order/Quote Number			

6519 Gas Plant Extraction Well											
Contract/Purchase Order/Quote Number											
CONTRACT / PURCHASE ORDER # : 6519MAA001 GW Extraction Well											
QUOTE: 42065											
Sample I.D. Number and Description				Date	Time	Sample Type	Containers		Preservative	Condition on Receipt/Comments	
							Volume	Type	No.		
MALJAMAR EXTRACTION WELL- MW-15				4-5-04	1340	WATER	1L	AMBER	• 3	None	200/21/4-8-04
MALJAMAR EXTRACTION WELL- MW-15				4-5-04	1440	WATER	400L	VIAL	• 4	1.1 HCL	
MALJAMAR EXTRACTION WELL- MW-15				4-5-04	1340	WATER	2500L	PLASTIC	• 1	CONC HNO3	
MALJAMAR EXTRACTION WELL- MW-15				4-5-04	1340	WATER	5000L	PLASTIC	• 1	None	
MALJAMAR EXTRACTION WELL- MW-13				4-5-04	1450	WATER	1L	AMBER	• 2	None	
MALJAMAR EXTRACTION WELL- MW-13				4-5-04	1450	WATER	400L	VIAL	• 4	1.1 HCL	Y
MALJAMAR EXTRACTION WELL- MW-13				4-5-04	1450	WATER	2500L	PLASTIC	• 1	CONC HNO3	Y
MALJAMAR EXTRACTION WELL- MW-13				4-5-04	1450	WATER	5000L	PLASTIC	• 1	None	Y Y Y Y Y
MALJAMAR EXTRACTION WELL- MW-14				4-5-04	1540	WATER	1L	AMBER	• 2	None	Y
MALJAMAR EXTRACTION WELL- MW-14				4-5-04	1540	WATER	400L	VIAL	• 4	1.1 HCL	Y
MALJAMAR EXTRACTION WELL- MW-14				4-5-04	1540	WATER	2500L	PLASTIC	• 1	CONC HNO3	Y
MALJAMAR EXTRACTION WELL- MW-14				4-5-04	1540	WATER	5000L	PLASTIC	• 1	None	Y Y Y Y Y
MALJAMAR EXTRACTION WELL- MW-19				4-5-04	1620	WATER	1L	AMBER	• 1	None	Y
MALJAMAR EXTRACTION WELL- MW-19				4-5-04	1620	WATER	400L	VIAL	• 4	1.1 HCL	Y
MALJAMAR EXTRACTION WELL- MW-19				4-5-04	1620	WATER	2500L	PLASTIC	• 1	CONC HNO3	Y
MALJAMAR EXTRACTION WELL- MW-19				4-5-04	1620	WATER	5000L	PLASTIC	• 1	None	Y Y Y Y Y

Special Instructions: 8260 STEB, 8270 PAHS, 80108 Ca, Mg, Na, K; Combine all samples received 4/5 through 4/8/04 into same lot
Could only collect Amber for MW-19. Not enough water & very slow recharge

Possible Hazard Identification	Disposal By Lab	Archive For	Months
☒ Non-Hazard	☒ Return To Client	☒ Specific Requirements (Specify)	
☐ Flammable	☐ Unknown		
☐ Skin Irritant	☐ Poison B		
☐ Other			
Turn Around Time Required	QC Level		
☒ Normal	☐ I	☐ II	☐ III
☐ Rush			
1. Relinquished By	Date	Time	
Bill Pugh	3/30/04	0930	
2. Relinquished By	Date	Time	
G. L. Luba	4/7/04	1409	
3. Relinquished By	Date	Time	
1. Received By	Date	Time	
G. L. Luba	4-1-04	10:30	
2. Received By	Date	Time	
G. L. Luba	4-8-04	0905	
3. Received By	Date	Time	

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

CHAIN OF CUSTODY NUMBER

§010901-002

**SEVERN
TRENT**

022702

Severn Trent Laboratories, Inc.

STL4149 (1202)

Client Maxin Technologies Address 1703 W Industrial Ave City Midland Project Number/Name 6519 Gas Plant Extraction Well		Project Manager Charles Durratt Telephone Number (Area Code)/Fax Number (432) 686-8081 / (432) 686-8085 Site Contact Charles Durratt Carrier/Waybill Number		Date 03/29/2004 Lab Location STL Austin	Page 1 of 5		
CONTRACT / PURCHASE ORDER # 6519MAY001 GW Extraction Well							
Sample I.D. Number and Description	Date	Time	Sample Type	Containers Volume Type No.	Preservative	Condition on Receipt/Comments	Analysis
MALJANAR EXTRACTION WELL- MW-16	4-6-04	9:05	WATER	1L AMBER 2	None	2°/2T/4-8-04	M M H A A A I I I T S S T L L L C C C D 8 8 6 K K K C C S S 2 2 0 1 1 1 L L O 7 6 1 H C T 4 0 0 0 C O L C L 1 0 3 L L L 1 3
MALJANAR EXTRACTION WELL- MW-16	4-6-04	9:06	WATER	40mL VIAL 4	1.1 HCL		X
MALJANAR EXTRACTION WELL- MW-16	4-6-04	9:05	WATER	250mL PLASTIC 1	CONC HNO3		X
MALJANAR EXTRACTION WELL- MW-16	4-6-04	9:05	WATER	500mL PLASTIC 1	None		X X X X X X
MALJANAR EXTRACTION WELL- MW-17	4-6-04	9:50	WATER	1L AMBER 2	None		X
MALJANAR EXTRACTION WELL- MW-17	4-6-04	9:50	WATER	40mL VIAL 4	1.1 HCL		X
MALJANAR EXTRACTION WELL- MW-17	4-6-04	9:50	WATER	250mL PLASTIC 1	CONC HNO3		X
MALJANAR EXTRACTION WELL- MW-17	4-6-04	9:50	WATER	500mL PLASTIC 1	None		X X X X X X
MALJANAR EXTRACTION WELL- MW-11	4-6-04	16:30	WATER	1L AMBER 2	None		X
MALJANAR EXTRACTION WELL- MW-11	4-6-04	10:30	WATER	40mL VIAL 4	1.1 HCL		X
MALJANAR EXTRACTION WELL- MW-11	4-6-04	10:30	WATER	250mL PLASTIC 1	CONC HNO3		X
MALJANAR EXTRACTION WELL- MW-11	4-6-04	16:30	WATER	500mL PLASTIC 1	None	See COC Add.	X X X X X X
MALJANAR EXTRACTION WELL- MW-4	4-6-04	17:30	WATER	1L AMBER 2	None		X
MALJANAR EXTRACTION WELL- MW-4	4-6-04	11:30	WATER	40mL VIAL 4	1.1 HCL		X
MALJANAR EXTRACTION WELL- MW-4	4-6-04	11:30	WATER	250mL PLASTIC 1	CONC HNO3		X
MALJANAR EXTRACTION WELL- MW-4	4-6-04	11:30	WATER	500mL PLASTIC 1	None		X X X X X X

could not fill 2 barrels at MW-17. One is partially full & one is full. Combine all samples received 4/5 through 4/8/04 into same lot

Special Instructions Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months		(A fee may be assessed if samples are retained longer than 3 months)	
Sample Disposal		Project Specific Requirements (Specify)	
1. Relinquished By <i>Bill Durratt</i>	Date 3/30/04	Time 09:30	1. Received By <i>W. P. Zuhlsdorf</i>
2. Relinquished By <i>W. P. Zuhlsdorf</i>	Date 4/7/04	Time 14:00	2. Received By <i>W. P. Zuhlsdorf</i>
3. Relinquished By	Date	Time	3. Received By
			Date 4-1-04
			Time 10:30
			Date 4-8-04
			Time 09:05

Comments

DISTRIBUTION: WHITE - Stays with the Sample. CANARY - Returned to Client with Report. PINK - Field Copy

CHAIN OF CUSTODY NUMBER

0010991-003

Chain of Custody
Record

STL4149 (1202)

Client Maxim Technologies Address 1703 W Industrial Ave City Midland Project Number/Name 6519 Gas Plant Extraction Well	Project Manager Charles Durrett Telephone Number (Area Code)/Fax Number (432) 686-8081 / (432) 686-8085 Site Contact Charles Durrett Carrier/Waybill Number	Date 03/29/2004 Lab Location STL Austin	Page 3 of 5
--	---	--	----------------

CONTRACT / PURCHASE ORDER # : 6519MAX001 GV Extraction Well										QUOTE: 42065										
Sample I.D. Number and Description				Date	Time	Sample Type	Containers			Preservative	Condition on Receipt/Comments				C	L	C	O	L	I
							Volume	Type	No.						L	L	L	L	L	L
MALJANAR EXTRACTION WELL- MW-18				4-6-04	1310	WATER	1L	AMBER	2	None	2 nd RT / 4-8-04				X					
MALJANAR EXTRACTION WELL- MW-18				4-6-04	1310	WATER	400L	VIAL	4	1:1 HCL					X					
MALJANAR EXTRACTION WELL- MW-18				4-6-04	1310	WATER	2500L	PLASTIC	1	CONC HNO3							X			
MALJANAR EXTRACTION WELL- MW-18				4-6-04	1310	WATER	5000L	PLASTIC	1	None							X	X	X	X
MALJANAR EXTRACTION WELL- MW-20				4-6-04	1405	WATER	1L	AMBER	2	None					X					
MALJANAR EXTRACTION WELL- MW-20				4-6-04	1405	WATER	400L	VIAL	4	1:1 HCL							X			
MALJANAR EXTRACTION WELL- MW-20				4-6-04	1405	WATER	2500L	PLASTIC	1	CONC HNO3							X			
MALJANAR EXTRACTION WELL- MW-20				4-6-04	1405	WATER	5000L	PLASTIC	1	None							X	X	X	X
MALJANAR EXTRACTION WELL- MW				4-6-04	1420	WATER	1L	AMBER	2	None							X			
MALJANAR EXTRACTION WELL- MW				4-6-04	1420	WATER	400L	VIAL	4	1:1 HCL							X			
MALJANAR EXTRACTION WELL- MW				4-6-04	1420	WATER	2500L	PLASTIC	1	CONC HNO3										
MALJANAR EXTRACTION WELL- MW				4-6-04	1420	WATER	5000L	PLASTIC	1	None								X	X	X
MALJANAR EXTRACTION WELL- MW-10				4-7-04	840	WATER	1L	AMBER	2	None					X					
MALJANAR EXTRACTION WELL- MW-10				4-7-04	840	WATER	400L	VIAL	4	1:1 HCL							X			
MALJANAR EXTRACTION WELL- MW-10				4-7-04	840	WATER	2500L	PLASTIC	1	CONC HNO3								X		
MALJANAR EXTRACTION WELL- MW-10				4-7-04	840	WATER	5000L	PLASTIC	1	None								X	X	X

8260 BTEX, 8270 PAHS, 6010B Ca, Mg, Na, K; Combine all samples received 4/5 through 4/8/04 into same lot

Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Other	Sample Disposal ☒ Return To Client ☐ Unknown ☐ Level	QC Level ☐ I ☐ II ☐ III	Disposal By Lab ☒ Archive For Months	(A fee may be assessed if samples are retained longer than 3 months)
Typing Around Time Required ☐ Normal ☐ Rush	Relinquished By Bill Durrett	Date 3/30/04	Time 0930	1. Received By F. L. Linder
Relinquished By F. L. Linder	Date 4/7/04	Time 1400	2. Received By F. L. Linder	Date 4-1-04
Relinquished By	Date	Time	3. Received By	Date 4-8-04
Comments				Time 0905

Chain of Custody Record

CHAIN OF CUSTODY NUMBER

9010901-004

**SEVERN
TRENT**

022704

Severn Trent Laboratories, Inc.

STL4149 (1202)

Client Maxin Technologies		Project Manager Charles Durrett		Date 03/29/2004		Page <u>4</u> of <u>5</u>	
Address 1703 W Industrial Ave		Telephone Number (Area Code)/Fax Number (432) 586-8081 / (432) 586-8085		Lab Location STL Austin		Analysis	
City Midland	State TX	Zip Code 79701	Site Contact Charles Durrett		Carrier/Waybill Number		
Project Number/Name 6519 Gas Plant Extraction Well							
Contract/Purchase Order/Quote Number CONTRACT / PURCHASE ORDER # : 6519MAX001 GW Extraction Well							
Sample I.D. Number and Description	Date	Time	Sample Type	Volume	Containers Type No.	Preservative	Condition on Receipt/Comments
MALJANAR EXTRACTION WELL - MW-12	4-7-04	940	WATER	1L	AMBER 2	None	2 nd RT/4-8-04
MALJANAR EXTRACTION WELL - MW-12	4-7-04	946	WATER	40mL	VIAL 4	1:1 HCL	
MALJANAR EXTRACTION WELL - MW-12	4-7-04	940	WATER	250mL	PLASTIC 1	Conc HNO3	
MALJANAR EXTRACTION WELL - MW-12	4-7-04	940	WATER	500mL	PLASTIC 1	None	
MALJANAR EXTRACTION WELL - MW-8	4-7-04	1035	WATER	1L	AMBER 2	None	
MALJANAR EXTRACTION WELL - MW-8	4-7-04	1035	WATER	40mL	VIAL 4	1:1 HCL	
MALJANAR EXTRACTION WELL - MW-8	4-7-04	1035	WATER	250mL	PLASTIC 1	Conc HNO3	
MALJANAR EXTRACTION WELL - MW-8	4-7-04	1035	WATER	500mL	PLASTIC 1	None	
MALJANAR EXTRACTION WELL - MW-8	4-7-04	1045	WATER	1L	AMBER 2	None	
MALJANAR EXTRACTION WELL - MW-8	4-7-04	1045	WATER	40mL	VIAL 4	1:1 HCL	
MALJANAR EXTRACTION WELL - MW-8	4-7-04	1045	WATER	250mL	PLASTIC 1	Conc HNO3	
MALJANAR EXTRACTION WELL - MW-8	4-7-04	1045	WATER	500mL	PLASTIC 1	None	
Special Instructions 8260 BTX, 8270 PAHs, 6010B Ca, Mg, Na, K; Combine all samples received 4/5 through 4/8/04 into same lot							

Possible Hazard Identification		Sample Disposal		Project Specific Requirements (Specify)	
☒ Non-Hazard	☐ Flammable	☐ Skin Irritant	☐ Poison B	☒ Disposal By Lab	☐ Archive For _____ Months
Turn Around Time Required		QC Level		(A fee may be assessed if samples are retained longer than 3 months)	
☒ Normal	☐ Rush	☐ I	☐ II	☐ III	
1. Relinquished By Bill Spartin		Date 3/30/04	Time 0930	1. Received By Kelly E. Henderson	
2. Relinquished By Kelly E. Henderson		Date 4-7-04	Time 1400	2. Received By Shirley	
3. Relinquished By		Date	Time	3. Received By	
Comments					

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

CHAIN OF CUSTODY NUMBER

\$9010901-005

STL4149 (1202)

SEVERN
TRENT

022705

Severn Trent Laboratories, Inc.

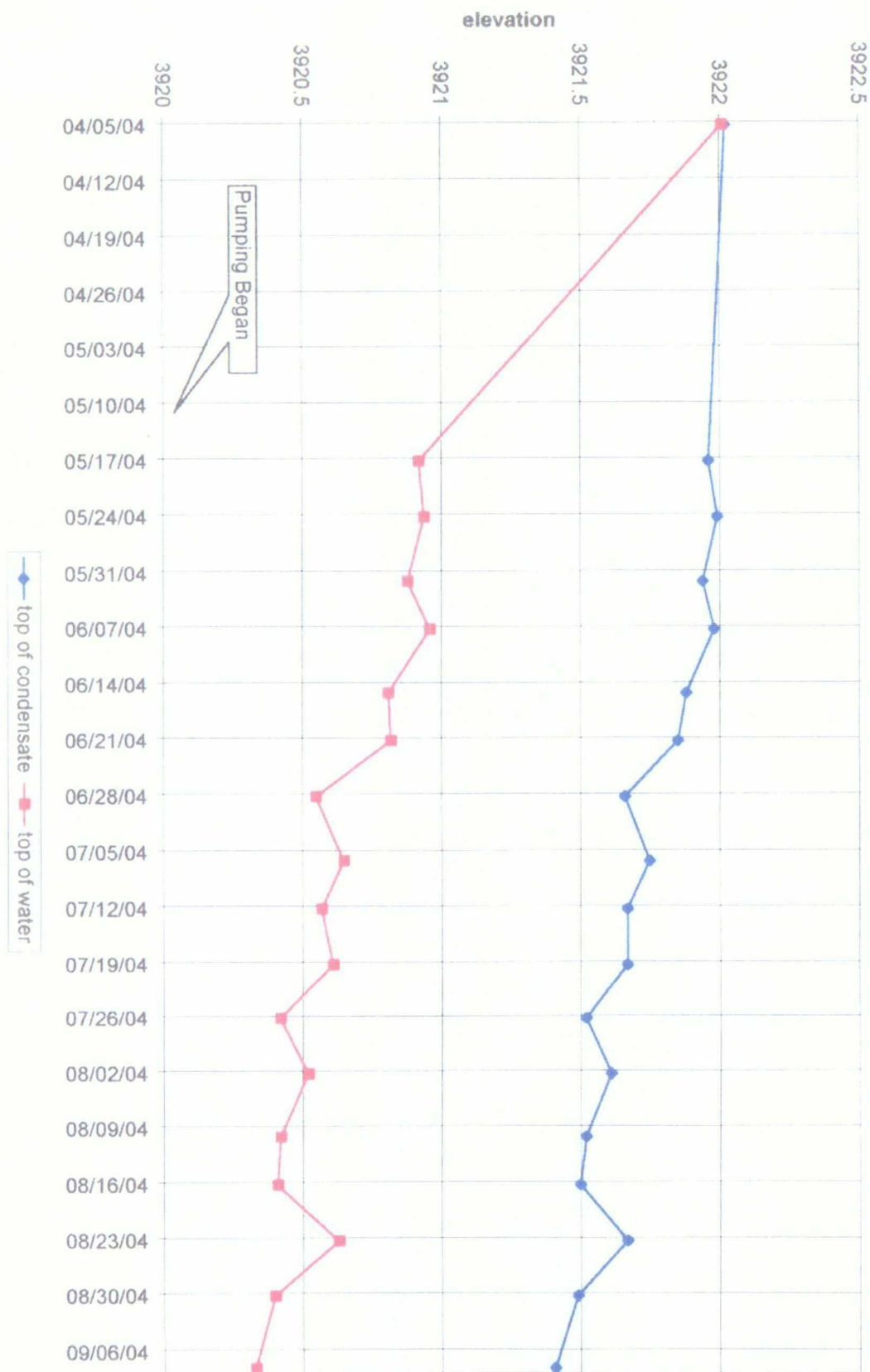
[illegible]

DISTRIBUTION: WHITE - Stays with the Sample: CANARY - Returned to Client with Report: PINK - Field Copy

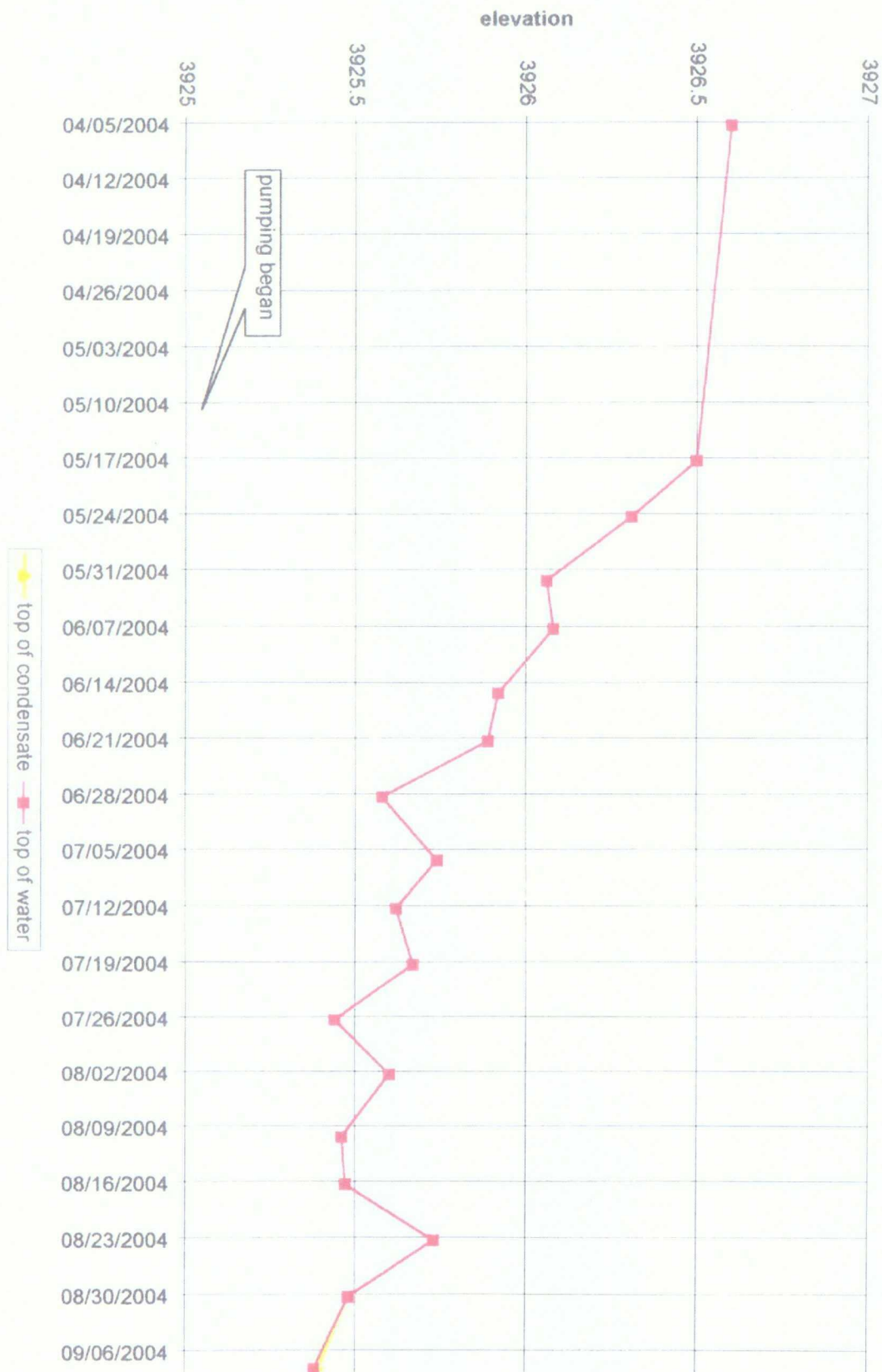
APPENDIX C

HYDROGRAPHS

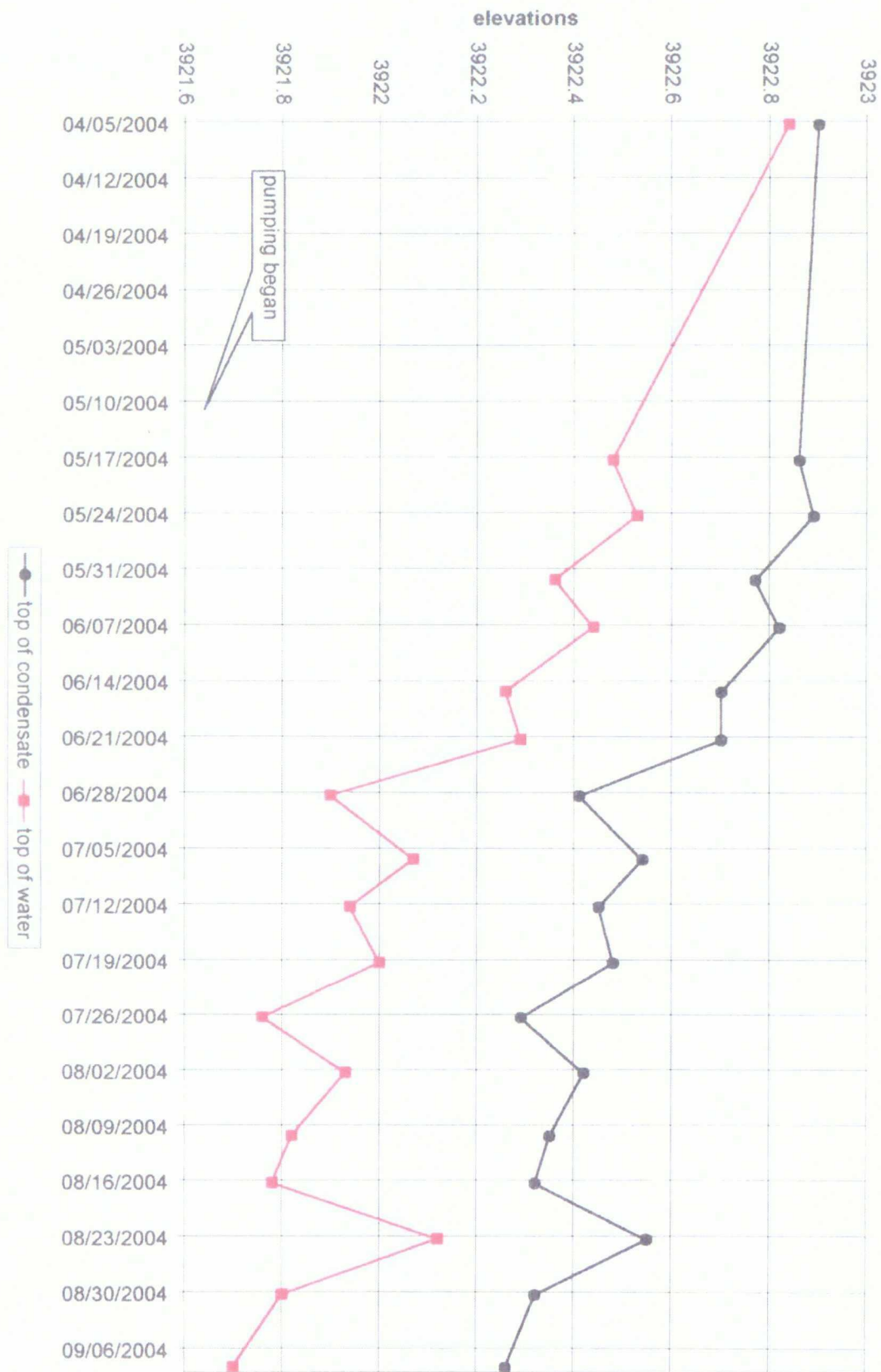
Maljamar MW-1



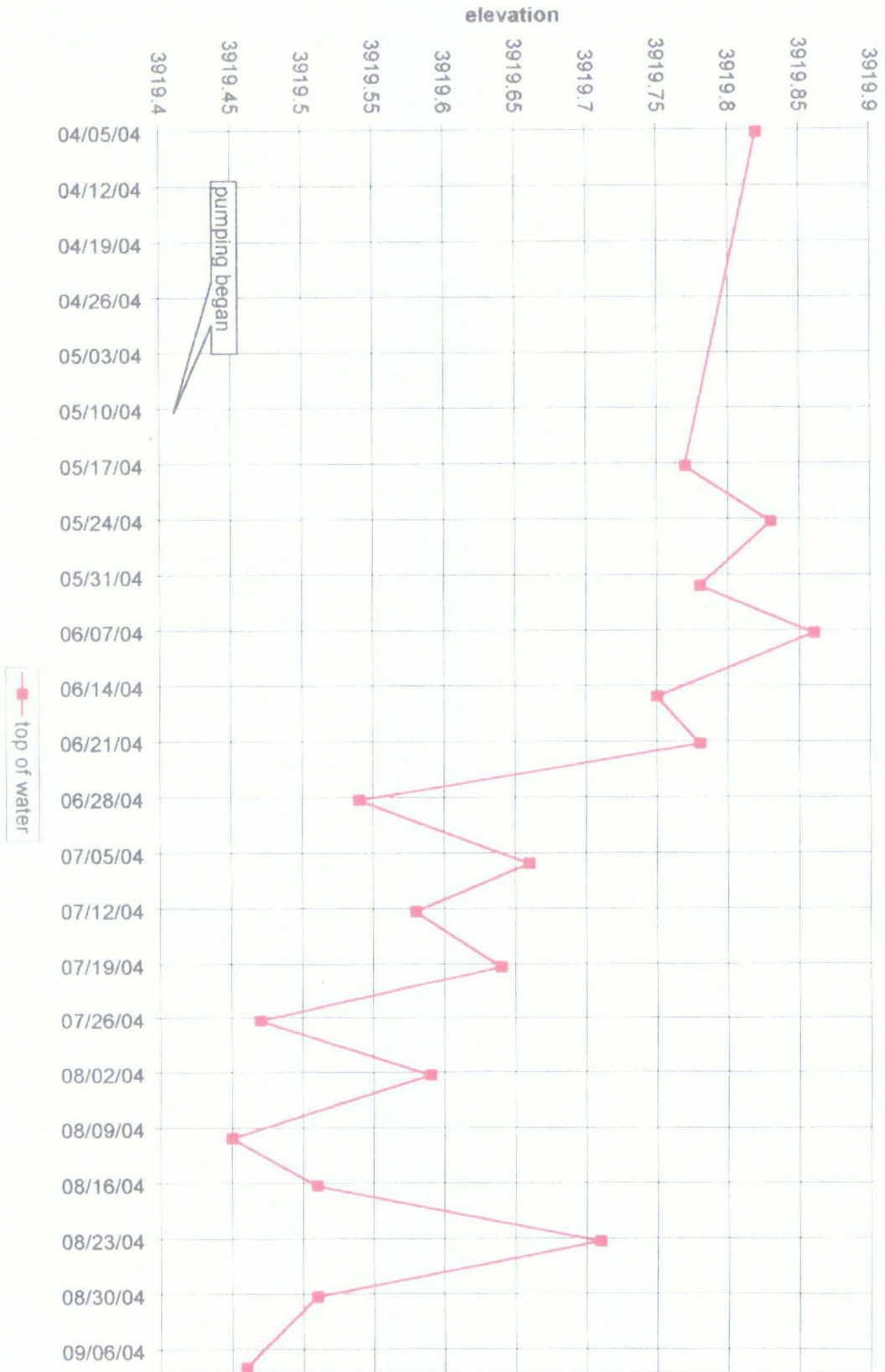
Maljamar MW-2



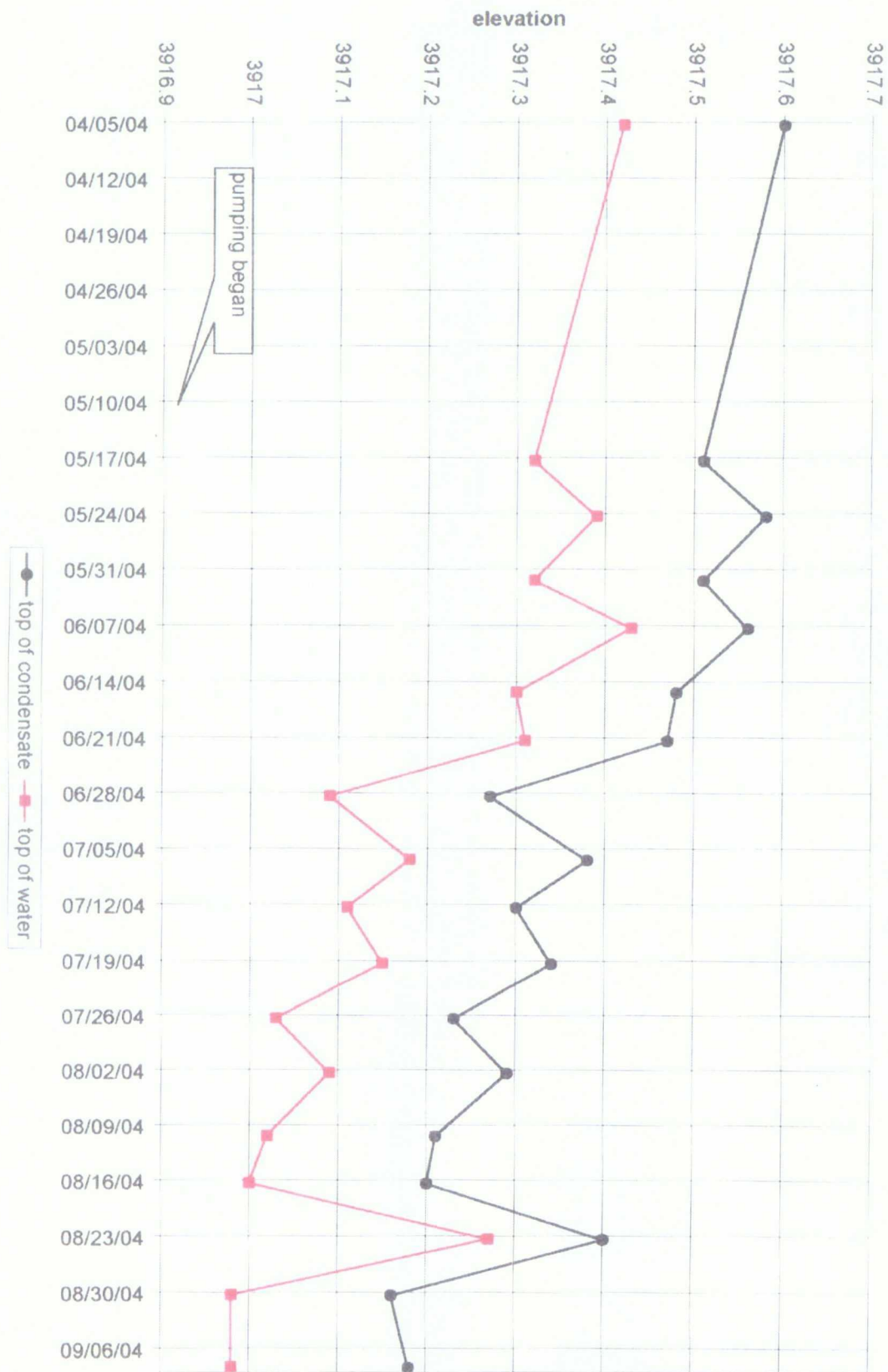
Majamar MW-3



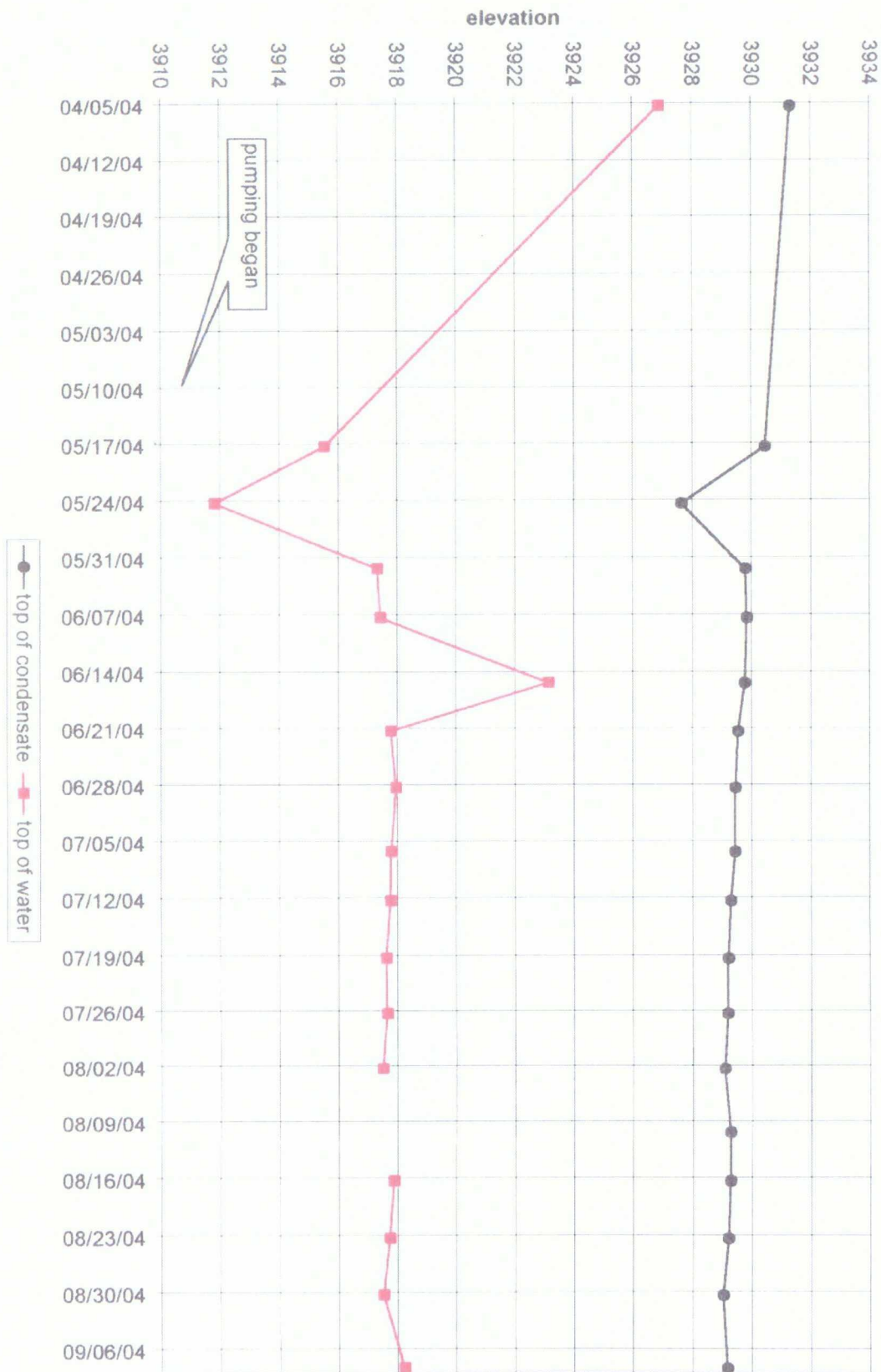
Maljamar MW-4



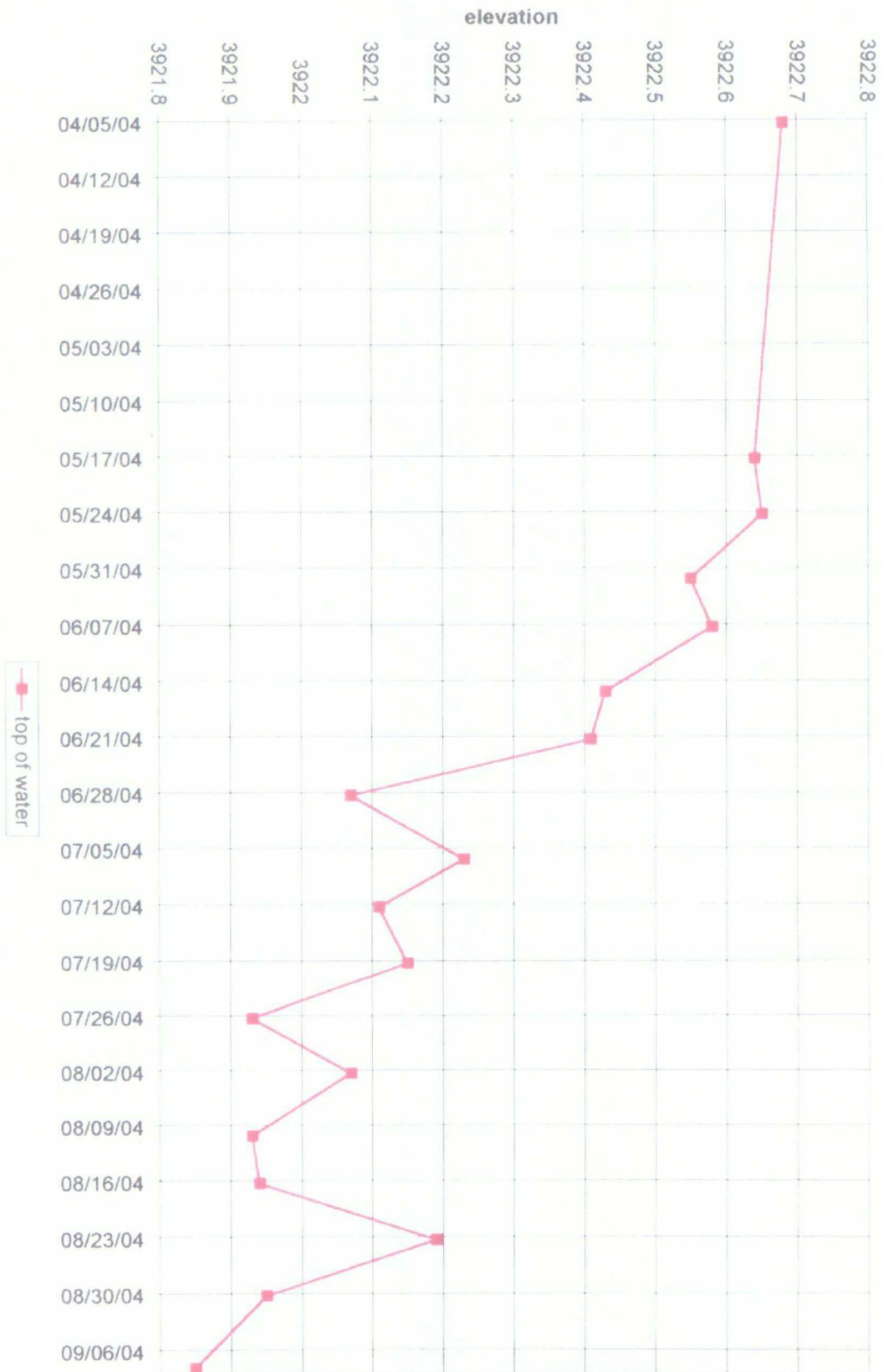
Maljamar MW-5



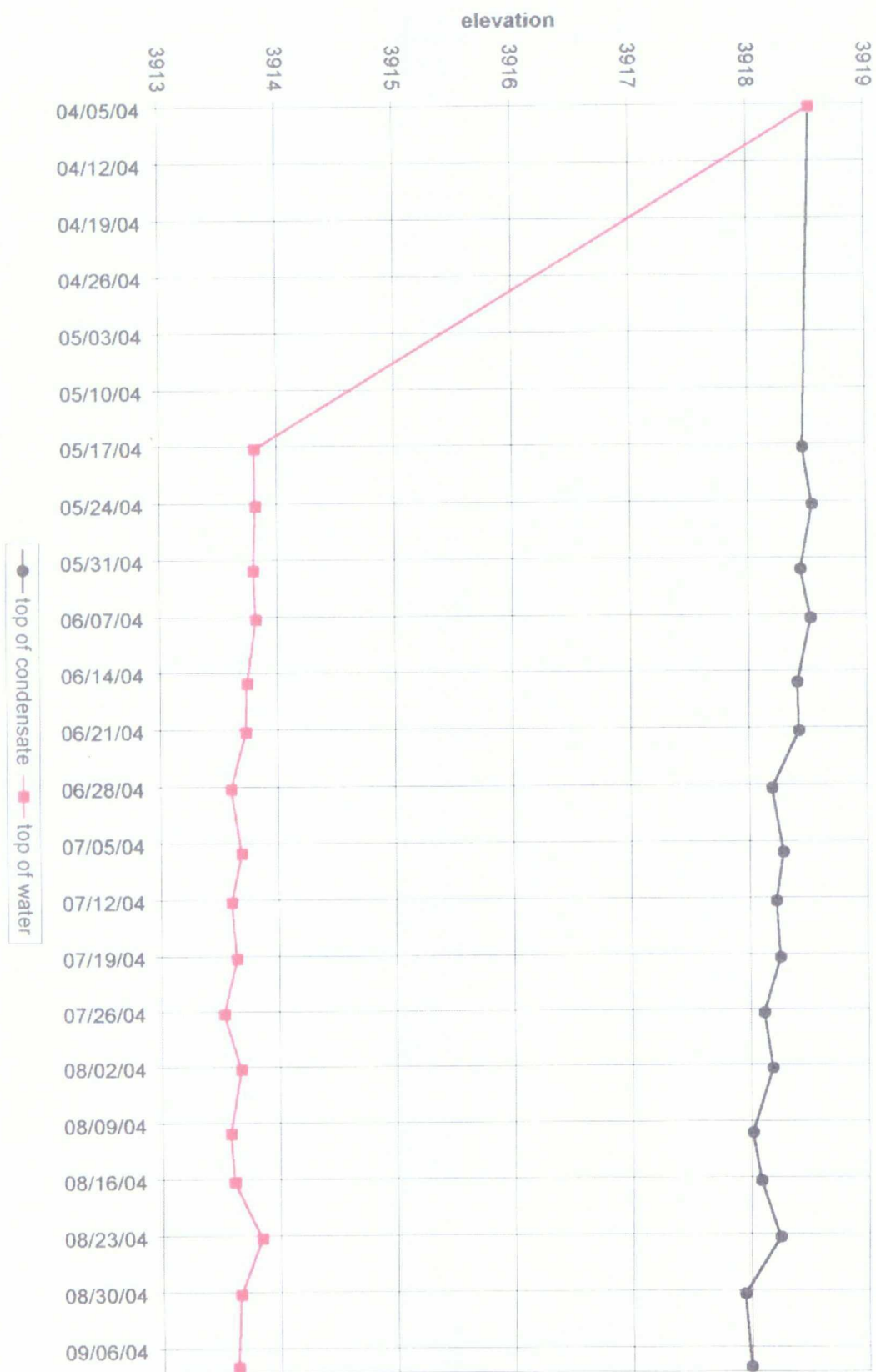
Maljamar MW-7



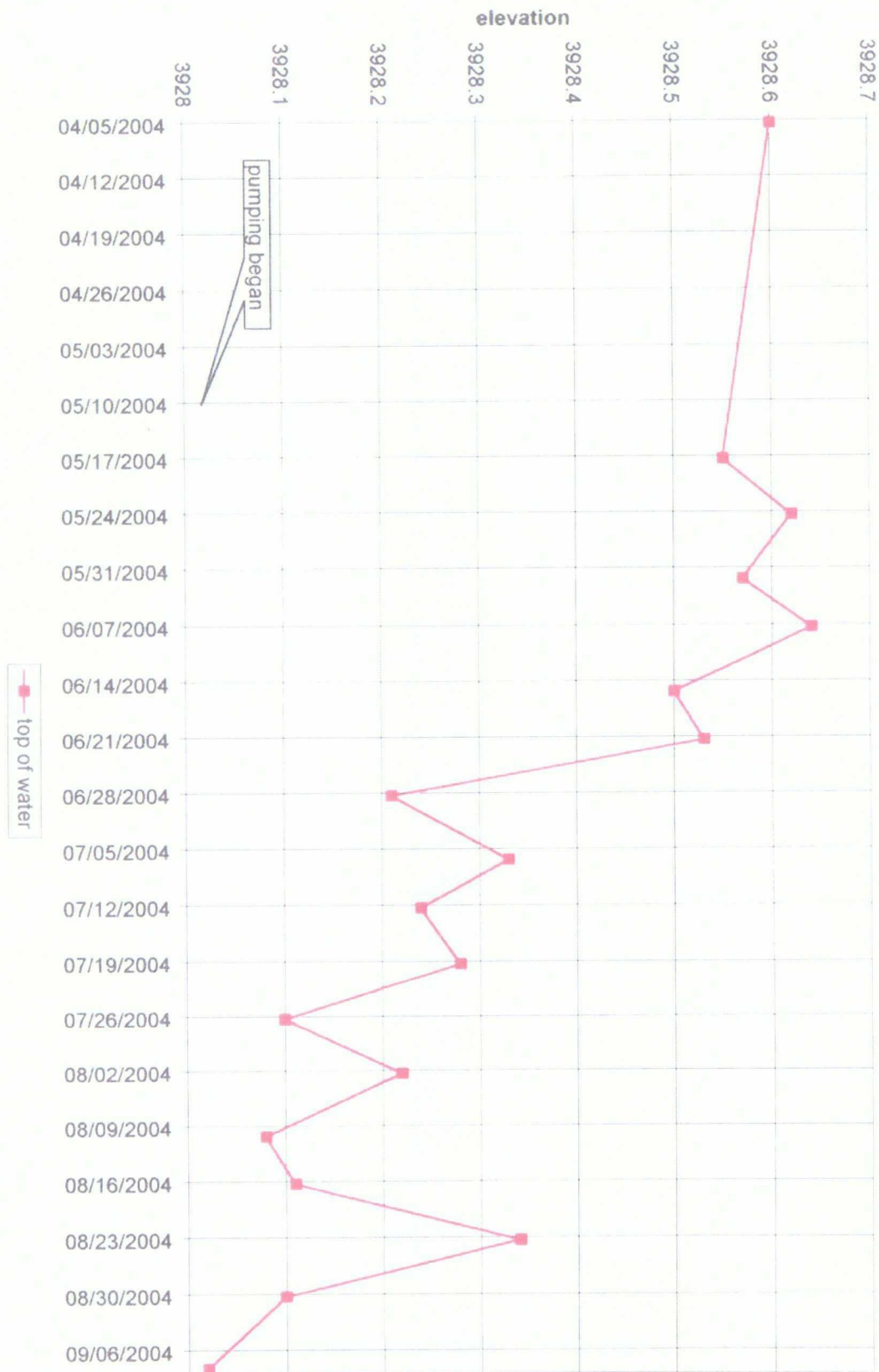
Maljamar MW-8



Maljamar MW-9



Maljamar MW-10



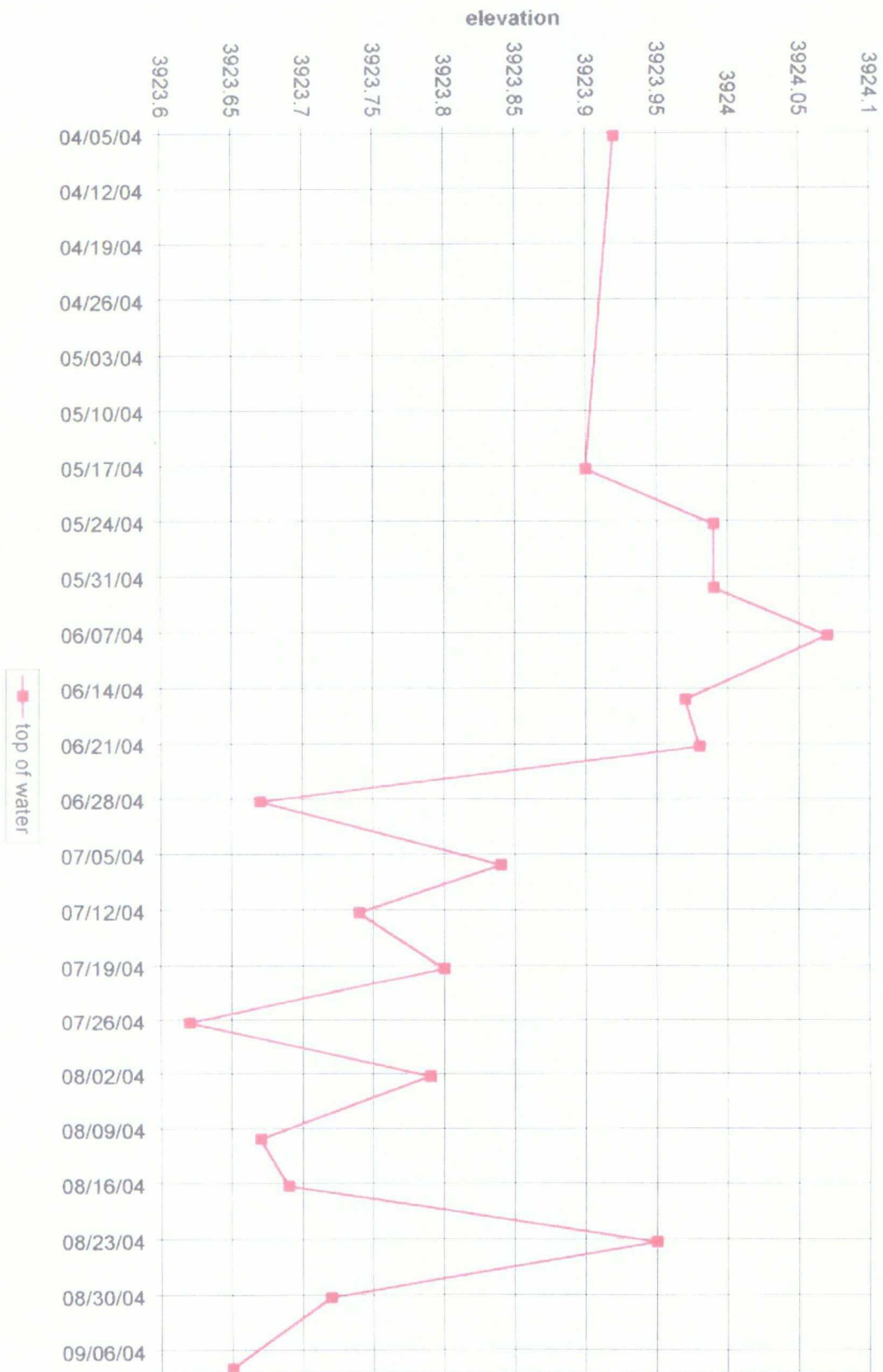
Maljamar MW-11



Majamar MW-12



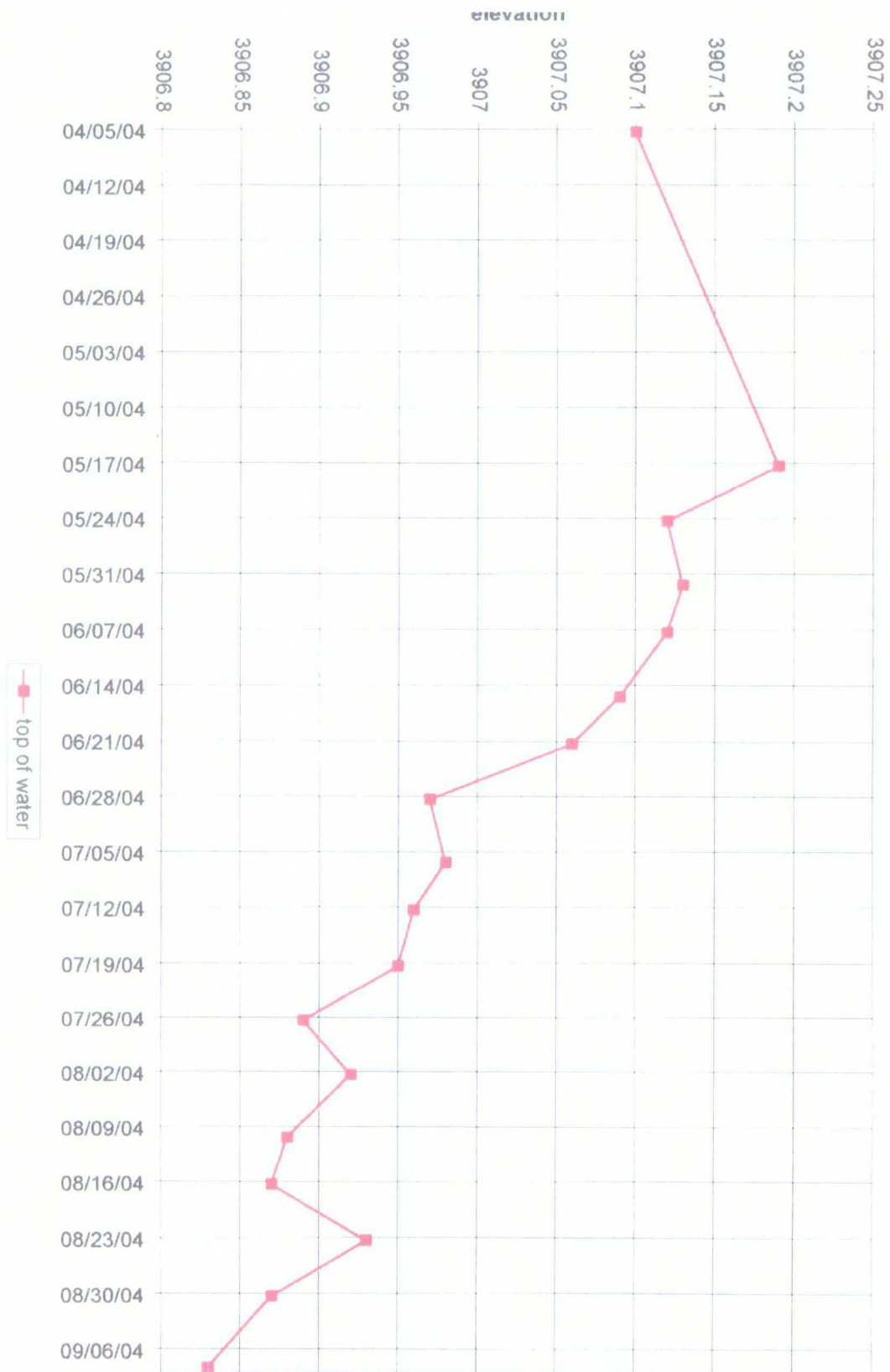
Maljamar MW-13



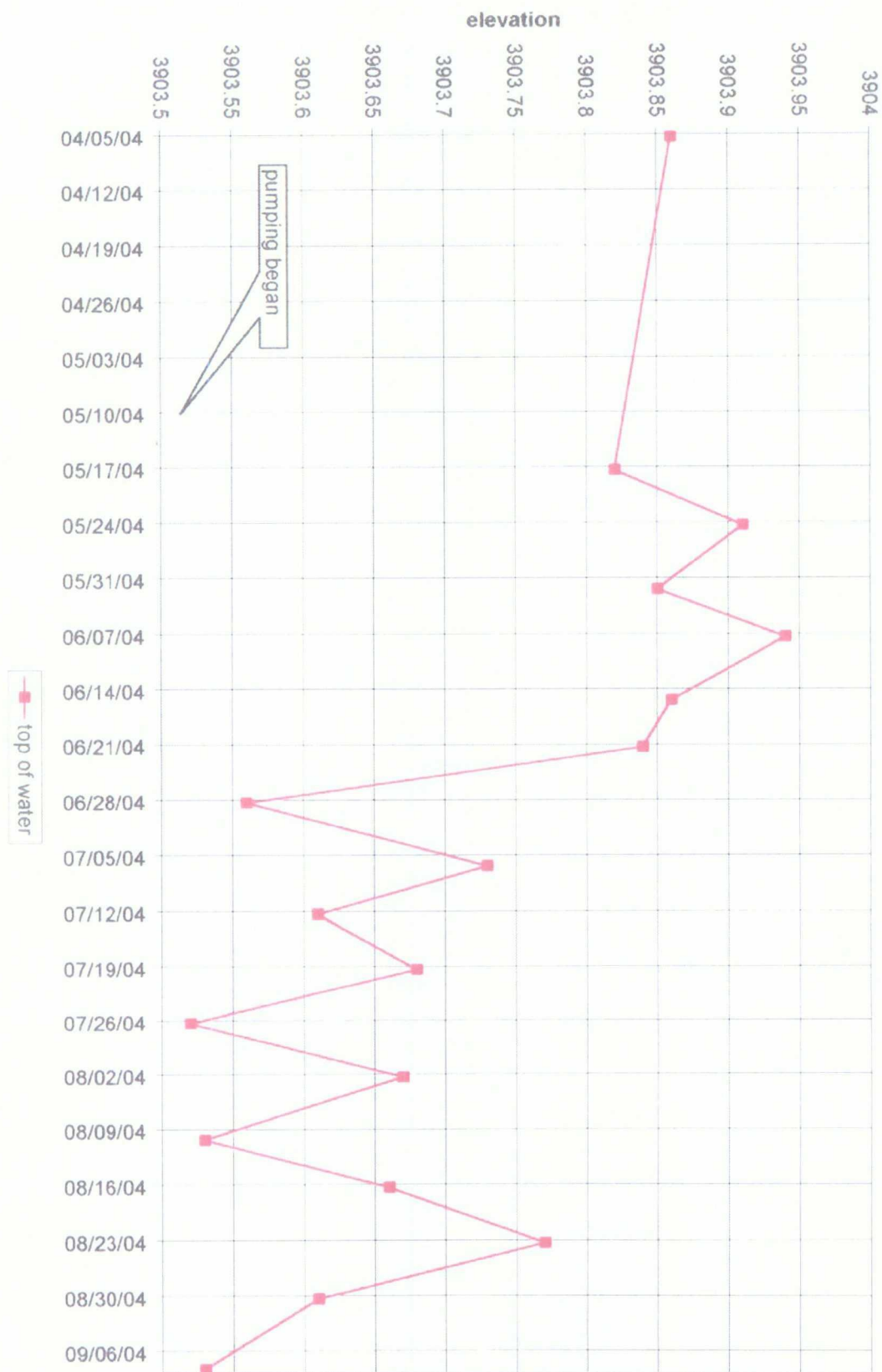
Maljamar MW-14



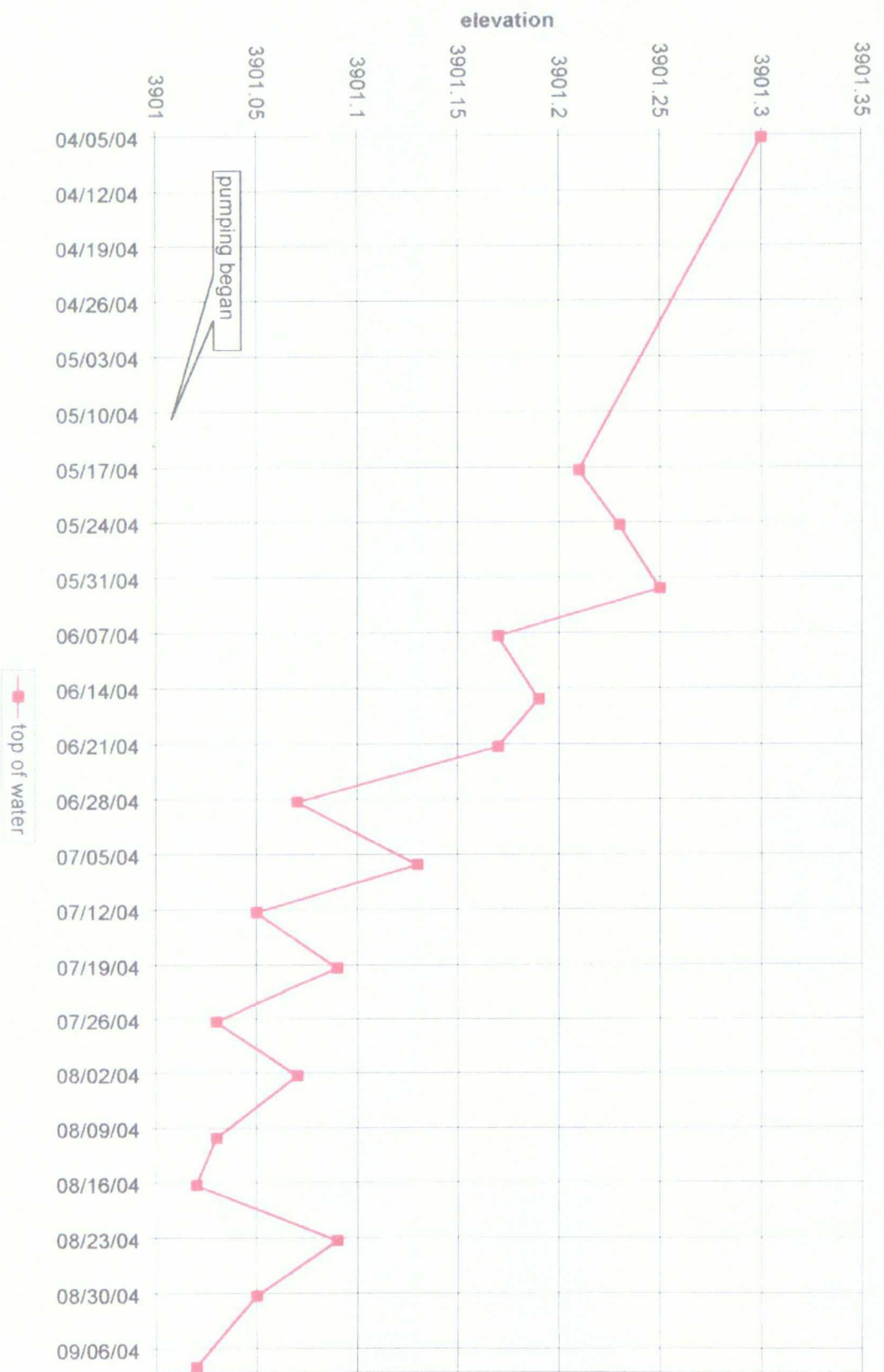
Maljamar MW-15



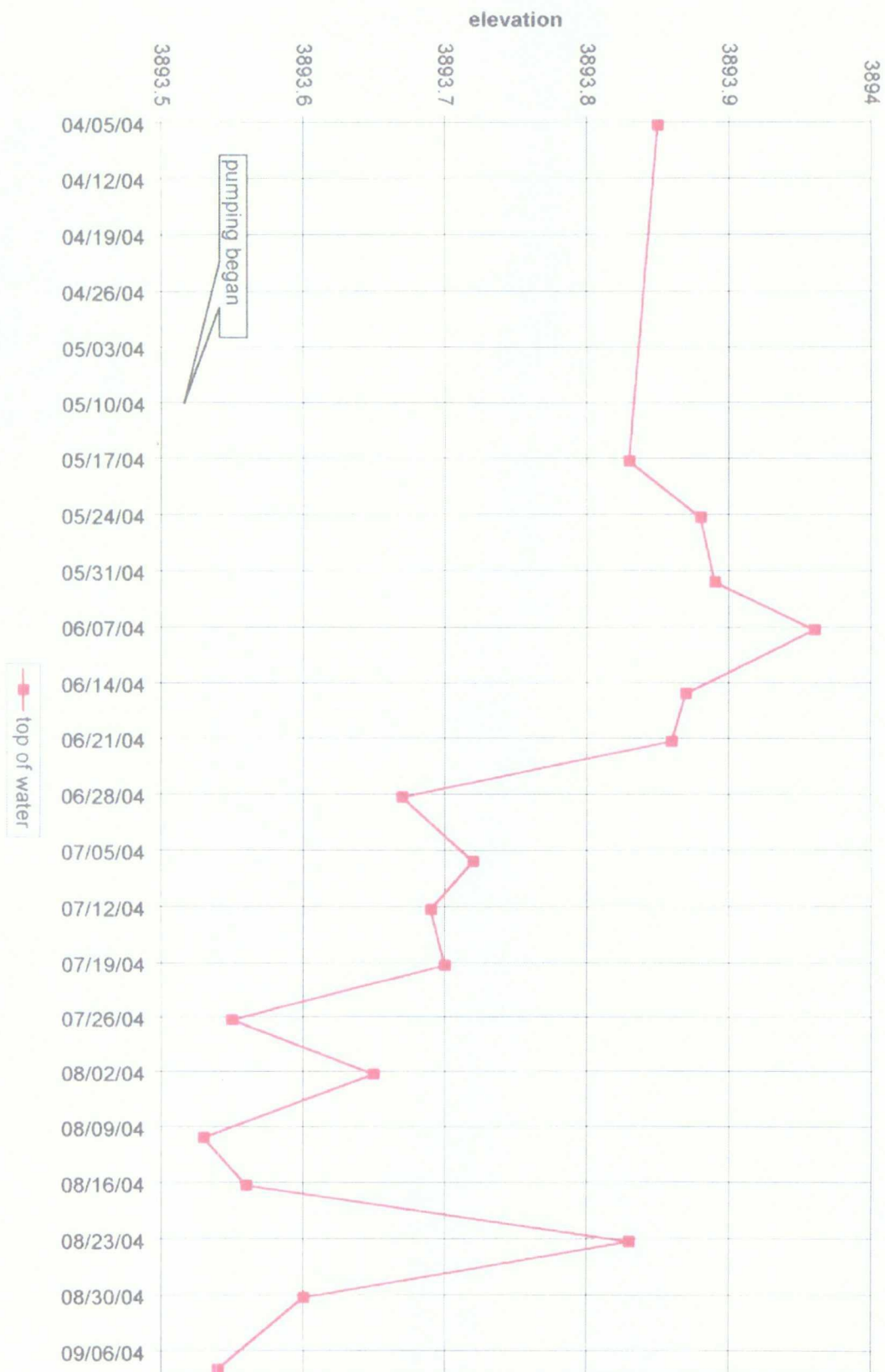
Maljamar MW-16



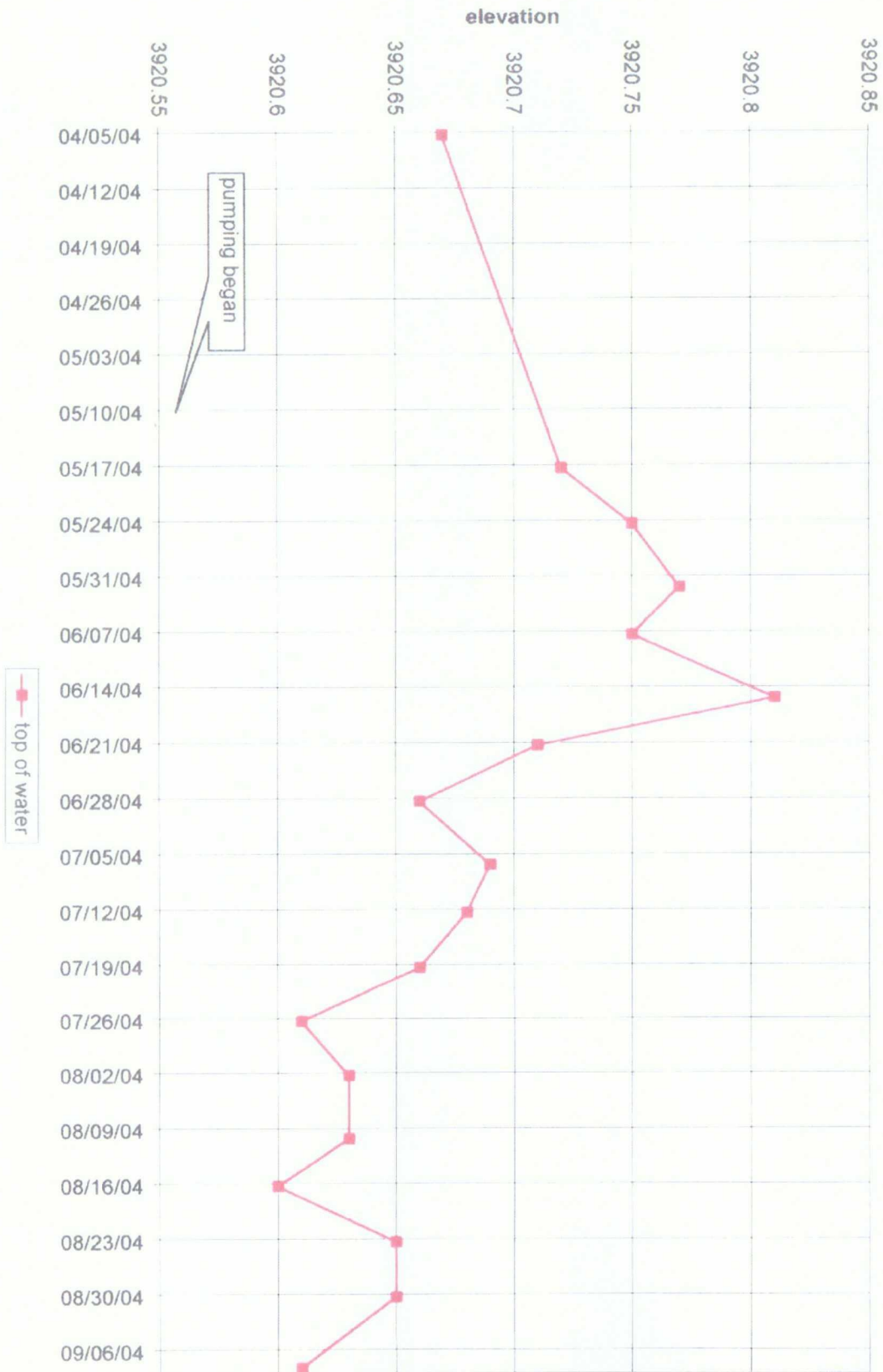
Maijamar MW-17



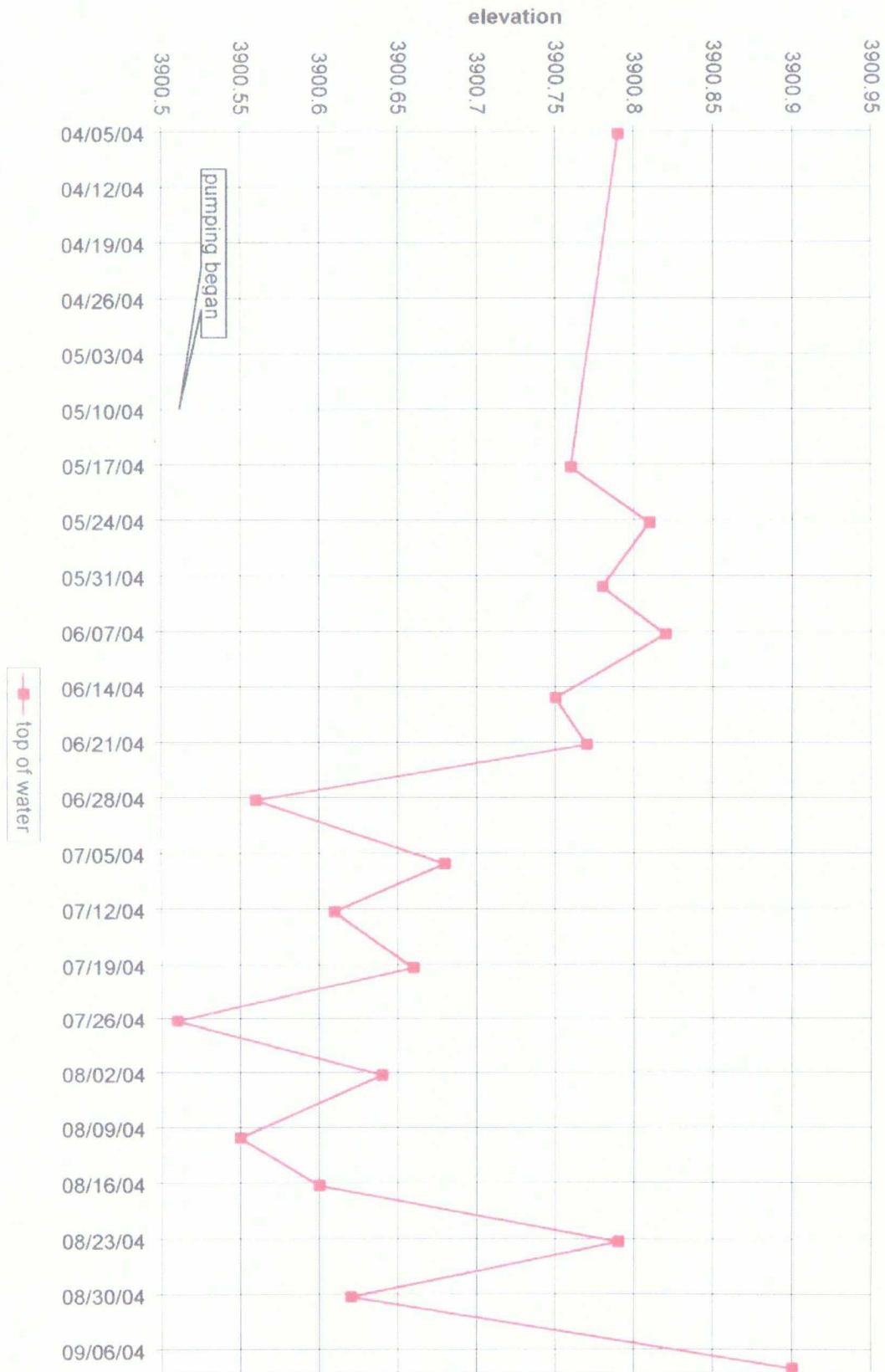
Maljamar MW-18



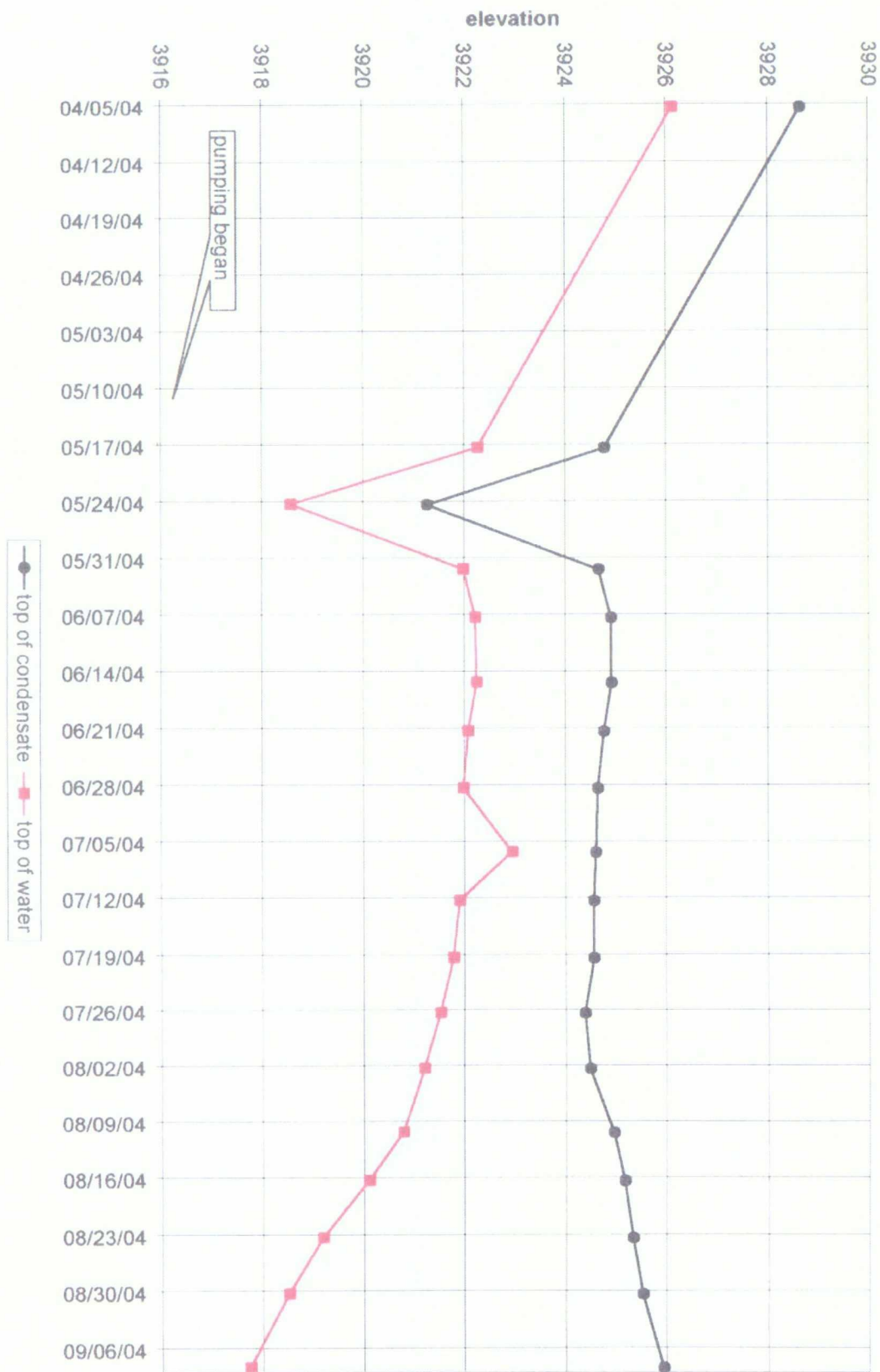
Maijamar MW-19



Maljamar MW-20



Maljamar SK-1



Maljamar SK-2

