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March 15, 2006

Norman Shopay
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Subject: Fourth Quarter 2005 and Annual Performance Monitoring Evaluation
Interim Measures Performance Monitoring Program
PG&E Topock Compressor Station, Needles, California

Dear Mr. Shopay:

Enclosed is the *Performance Monitoring Report for Fourth Quarter 2005 and Annual Performance Evaluation, February 2005 through January 2006* for PG&E's Interim Measures (IM) performance monitoring program for the Topock project. This report presents the Fourth Quarter 2005 (November 2005 through January 2006) performance monitoring results for the IM hydraulic containment system and provides the annual performance evaluation for the 2005 reporting period.

The quarterly and annual performance evaluation report is prepared and submitted in conformance with the IM reporting requirements described in Enclosure A of the Department of Toxic Substances Control's letter dated February 14, 2005.

Please contact me at (805) 546-5243 if you have any questions on the performance monitoring report.

Sincerely,

Julie Eakins for Yvonne Meeks

Enclosure
cc: Kate Burger/DTSC

Performance Monitoring Report for Fourth Quarter 2005 and Annual Performance Evaluation, February 2005 through January 2006

Interim Measures Performance Monitoring Program
PG&E Topock Compressor Station
Needles, California

Prepared for

California Department of Toxic Substances Control

on behalf of

Pacific Gas and Electric Company

March 15, 2006

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Interim Measures Performance Monitoring Program PG&E Topock Compressor Station Needles, California

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This report was prepared under the supervision of a California-certified Engineering Geologist

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Acronyms and Abbreviations

µg/L	micrograms per liter (equivalent to parts per billion [ppb])
cfs	cubic feet per second
Cr(VI)	hexavalent chromium
DTSC	Department of Toxic Substances Control
gpm	gallons per minute
IM	Interim Measure
mg/L	milligrams per liter
mV	millivolts
ORP	oxidation reduction potential
PG&E	Pacific Gas and Electric Company
PMP	Performance Monitoring Program
TDS	total dissolved solids
USBR	United States Bureau of Reclamation

1.0 Introduction

1.1 Interim Measures No.3

Pacific Gas and Electric Company (PG&E) is implementing an Interim Measure (IM) to address chromium concentrations in groundwater at the Topock Compressor Station near Needles, California. The IM consists of groundwater extraction for hydraulic control of the plume boundaries in the Colorado River floodplain, and management of extracted groundwater. The groundwater extraction, treatment, and injection systems, collectively, are referred to as Interim Measure Number 3 (IM No. 3). Currently, the IM No. 3 facilities include a groundwater extraction system (four extraction wells: TW-2D, TW-3D, TW-2S, and PE-1), conveyance piping, a groundwater treatment plant, and an injection well field for the discharge of the treated groundwater. Figure 1-1 shows the location of the IM No. 3 extraction, conveyance, treatment, and injection facilities.

In a letter dated February 14, 2005, the California Department of Toxic of Substances Control (DTSC) established the criteria for evaluating the performance of the IM (DTSC 2005). As defined by DTSC, the performance standard for this IM is to "establish and maintain a net landward hydraulic gradient, both horizontally and vertically, that ensures that hexavalent chromium (Cr[VI]) concentrations at or greater than 20 micrograms per liter (µg/L) in the floodplain are contained for removal and treatment" (DTSC 2005, Enclosure A). The DTSC directive also defined the monitoring and reporting requirements for the IM. A draft *Performance Monitoring Plan for Interim Measures in the Floodplain Area* (CH2M HILL 2005a) was submitted to DTSC on April 15, 2005 (herein referred to as the Performance Monitoring Plan). The site monitoring, data evaluation, reporting, and response actions required under the February 2005 DTSC directive are collectively referred to as the IM Performance Monitoring Program (PMP) for the floodplain area.

This combined quarterly and annual report has been prepared in compliance with DTSC's requirements and documents the monitoring activities and performance evaluation of the IM hydraulic containment system. The fourth quarterly reporting period covers monitoring activities from November 1, 2005 through January 31, 2006, while the annual reporting period covers monitoring activities from February 1, 2005 through January 31, 2006. The next monthly report for the February 2006 reporting period will be submitted on March 15, 2006 in conjunction with this report. The next quarterly performance report will be submitted on May 30, 2006.

1.2 Performance Monitoring Program

Figure 1-2 shows the locations of wells used for the IM extraction, performance monitoring, and hydraulic gradient calculation. The performance monitoring wells are defined as:

- **Floodplain Wells** (monitoring wells on the Colorado River floodplain): MW-22, MW-27 cluster (3 wells), MW-28 cluster (2 wells), MW-29, MW-30 cluster (2 wells), MW-32 cluster

(2 wells), MW-33 cluster (4 wells), MW-34 cluster (3 wells), MW-36 cluster (6 wells), MW-39 cluster (6 wells), MW-42 cluster (3 wells), and MW-43 cluster (3 wells).

- **Intermediate Wells** (monitoring wells located immediately north, west, and southwest of the floodplain): MW-12, MW-19, MW-20 cluster (3 wells), MW-21, MW-26, MW-31 cluster (2 wells), MW-35 cluster (2 wells).
- **Interior Wells** (monitoring wells located upgradient of IM pumping): MW-10, MW-25.

Three extraction wells (TW-2D, TW-3D and TW-2S) are located on the MW-20 bench (Figure 1-1). In March 2005, extraction well PE-1 was installed on the floodplain approximately 450 feet east of extraction well TW-2D (Figure 1-1). Construction of the conveyance piping and power supply to PE-1 was completed in January 2006. Testing and commissioning of PE-1 began on January 25, 2006, with full-time operation of the well beginning on January 26, 2006.

The wells screened in the unconsolidated alluvial fan and fluvial deposits, which comprise the Alluvial Aquifer, have been separated into three depth intervals to present groundwater quality and groundwater level data. The depth intervals of the Alluvial Aquifer—designated upper, middle, and lower—are based on grouping the monitoring wells screened at common elevations and do not represent distinct hydrostratigraphic units or separate aquifer zones. The subdivision of the aquifer into three depth intervals is an appropriate construct for presenting and evaluating groundwater quality data in the floodplain. The three-interval concept is also useful for presenting and evaluating lateral gradients while minimizing effects of vertical gradients and observing the influence of pumping from partially-penetrating wells. It should be noted, however, that these divisions do not correspond to any distinct lithostratigraphic layers within the aquifer. The floodplain aquifer is considered to be hydraulically undivided.

1.3 Report Objectives

In support of the IM performance evaluation, this combined quarterly and annual evaluation report presents documentation for the following:

- Quarterly performance monitoring results for November 2005 through January 2006, and status of the extraction and treatment system (Section 2.0).
- Extraction system operations for the annual reporting period (Section 3.0).
- A capture zone analysis for the annual reporting period (Section 4.0).
- An evaluation of groundwater quality data (Section 5.0).
- Conclusions and status of IM operations (Section 6.0).

2.0 Quarterly Performance Evaluation for November 2005 through January 2006

2.1 Extraction System Operations

Between November 2005 and January 2006 (considered fourth quarter 2005), 14,019,626 gallons of groundwater were extracted and treated by the IM No. 3 system. During the reporting period, two new extraction wells, TW-3D and PE-1, were constructed, commissioned and brought into service. Pumping operations during this reporting period are summarized below:

- Extraction well TW-2D was operated at the maximum pump capacity (approximately 90 gallons per minute [gpm]) from November 1, 2005 to December 20, 2005.
- Extraction well TW-3D was commissioned and brought into full-time service on December 20. Extraction Wells TW-3D and TW-2D were operated at a combined target pump rate of 135 gpm from December 20, 2005 to January 25, 2006.
- Extraction well PE-1 was commissioned on January 25, 2006 and brought into full-time service on January 26, 2006. Extraction Wells TW-3D and PE-1 were operated at a combined target pump rate of 135 gpm from January 26 to January 31, 2006.

Table 2-1 summarizes the pumping information during the quarterly reporting period. The average pumping rate for the IM system during the quarter, including system downtime and operation of TW-2D and TW-2S, was 105.8 gpm. The average monthly pumping rates were 80.9 gpm (November 2005), 111.5 gpm (December 2005), and 124.3 gpm (January 2006) during the quarterly reporting period.

Table 2-2 summarizes the analytical results of groundwater samples collected from extraction wells from February 2005 through January 2006. Future monitoring of the extraction well(s) water quality will be completed at the frequency required by the Waste Discharge Requirements issued for the IM No.3 treatment facility.

Appendix A includes a chronology of modifications to extraction well operations from February 1, 2005 through January 31, 2006.

2.2 Cr(VI) Distribution and Trends in Floodplain Area

Figure 2-1 presents the average Cr(VI) results in plan view from November 2005 through January 2006 for floodplain wells in the upper, middle, and lower depth intervals of the Alluvial Aquifer. Average groundwater Cr(VI) concentration contours of 50 µg/L and 20 µg/L are depicted along with the number of sampling events that occurred at each well.

Locations of cross-sections are shown on Figure 1-2. Figure 2-2 presents the floodplain cross-section A, with average Cr(VI) concentrations from November 2005 through January 2006.

Average groundwater Cr(VI) concentration contours are shown along with the number of sampling events that occurred at each well. The quarterly average Cr(VI) concentrations in samples collected from the MW-36 cluster have declined relative to the concentrations measured during the previous quarter (see Table B-1).

Figure 2-3 presents an additional north-south oriented floodplain cross-section B, where average groundwater Cr(VI) concentration contours from November 2005 through January 2006 are shown along with the number of sampling events that occurred at each well. During the quarterly reporting period, Cr(VI) was detected at concentrations ranging from 5.5 µg/L to 6.6 µg/L in well MW-33-150 and 6.5 µg/L to 7.6 µg/L in well MW-33-210 (Table B-1). These concentrations are similar to the August through October 2005 sampling results.

Hexavalent chromium concentration trend graphs and hydrographs for floodplain wells that have consistently shown Cr(VI) concentrations above the analytical reporting limit are presented in Appendix B Figures B-1 through B-11. For the current quarter, Cr(VI) concentrations at wells MW-33-90, MW-36-90, MW-36-100, and the MW-39 cluster (MW-39-60, -70, -80, -100) were stable to slightly declining relative to the previous quarter. Cr(VI) at MW-33-150 and MW-33-210 increased slightly, but remained below 20 µg/L. At MW-34-100, concentrations continued to rise, although concentrations did drop 34 µg/L during the last sampling event. At MW-39-50, concentrations remained below the reporting limit for the second consecutive quarter.

2.3 Other Water Quality Data for Floodplain Wells

Common water quality parameters (temperature, pH, oxidation-reduction potential (ORP), dissolved oxygen, and specific conductance) were measured in the field during well purging and groundwater sampling, as outlined in *Sampling and Analysis Field Procedures Manual, PG&E Topock Program* (CH2M HILL 2005b). The field water quality data measured from November 2005 through January 2006 are presented in Tables B-1 and B-2 (Appendix B). Table B-1 also presents the groundwater elevations collected during the same period. Due to the density differences in groundwater caused by salinity variations, the groundwater elevations measured in the wells have been adjusted, or normalized, to a freshwater equivalent.

Table C-1 (Appendix C) presents Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006. Table C-2 presents the results of the general chemistry and stable isotope analyses for select monitoring wells in the IM performance monitoring area and river locations during sampling events from March 2004 through January 2006. Figure 1-2 shows the locations of the monitoring wells sampled for the performance monitoring parameters. Wells are sampled for specific chemical parameters in order to monitor the performance and effects of IM pumping on groundwater chemistry in the floodplain area. Water samples were analyzed for total dissolved solids (TDS), chloride, sulfate, nitrate, bromide, calcium, potassium, magnesium, sodium, boron, alkalinity, deuterium, and oxygen-18.

There were 14 floodplain wells sampled for chemical performance monitoring parameters over the period of March 2004 through January 2006. While some parameters were steady in the majority of these wells (nitrate, bromide, boron), there were a few key trends. Well

MW-30-50 became non-detect in nitrate, apparently the result of reducing water from shallow depths being pulled down to this well depth (Table C-2). Many general chemical parameters decreased in the MW-20 well cluster and MW-31-60 over the annual reporting period, including TDS, chloride, sulfate, calcium, and sodium (Table C-2). This is probably the result of the onset of downward hydraulic gradients by IM pumping (blending shallow interior floodplain water with lower concentrations of these analytes with deep water). Shallow depth wells MW-27-20, MW-32-20, and MW-32-35 saw an increase in some of these same parameters over the reporting period, but in this case it is interpreted as natural variation because some values were nearly as great or greater in years past. Little change was evident in shallow interior wells (MW-25, MW-26), or river samples (R-27, R-28). Further assessment of the performance monitoring wells will continue to be conducted as additional monitoring data are collected.

2.4 Hydraulic Gradients and River Levels During Quarterly Period

During the reporting period, water levels were recorded at intervals of 30 minutes with pressure transducers in 48 wells and two river monitoring stations (I-3 and RRB). The data are typically continuous, with only short interruptions for sampling or maintenance. The location of the wells monitored are shown on Figure 1-2 and listed in Section 1.2.

The monthly average and the minimum and maximum daily average groundwater and river elevations have been calculated from the pressure transducer data for the quarterly reporting period (November 2005 through January 2006) and are summarized in Appendix D, Table D-1. Although well PE-1 began pumping on January 25, affecting groundwater levels in nearby wells, groundwater elevations for the last week of January have a negligible effect on the quarterly average groundwater elevations so these data are included in the quarterly averages. Groundwater elevation hydrographs (annual reporting period) for all wells with transducers are included in Appendix D. The elevation of the Colorado River measured at the river gauge (I-3, Figure 1-2) is also shown on the hydrographs.

Reported groundwater elevations (or hydraulic heads) are adjusted for temperature and for salinity differences between wells (i.e., adjusted to a common freshwater equivalent), as described in the Performance Monitoring Plan. Average monthly groundwater and river elevations, contour maps of groundwater elevations, and hydraulic gradients between key monitoring wells are reported in each of the monthly performance monitoring reports. These groundwater contour maps for the upper, middle, and lower depth intervals for November and December 2005, and January 2006 are also provided in this report as follows:

- January 2006: Appendix D, Figures D-2A through D-2C
- December 2005: Appendix D, Figures D-2D through D-2F
- November 2005: Appendix D, Figures D-2G through D-2I

A review of the groundwater level contours on these figures shows that all floodplain monitoring wells where Cr(VI) was detected at greater than 20 µg/L were within the capture zone of the pumping well(s) during each month of this reporting period (November 2005 through January 2006). That is, the inferred groundwater flow lines from the floodplain

wells with Cr(VI) greater than 20 µg/L are oriented towards the TW-2D and TW-3D extraction wells.

Average quarterly groundwater elevations (November 2005 through January 2006, inclusive) for the deep wells are presented and contoured in plan view on Figure 2-4 and presented and contoured in floodplain cross-section A (Figure 2-5). Hydraulic gradients are calculated each month between the following well/gradient pairs:

- MW-31-135 and MW-33-150 (northern gradient pair)
- MW-20-130 and MW-34-80 (central gradient pair)
- MW-20-130 and MW-42-65 (southern gradient pair)

The average hydraulic gradients between key gradient well pairs in November 2005, December 2005, and January 2006 are summarized in Table 2-3. The mean landward hydraulic gradients of the central and southern gradient pairs were up to greater than four times the required minimum gradient of 0.001 feet/foot during monthly reporting periods of the fourth quarter. Landward gradients at the northern gradient pair were about two times greater than the minimum gradient throughout the reporting period.

Figure 2-6 presents, in graphical form, the measured hydraulic gradients and monthly average pumping rates and river levels throughout the quarterly period. River levels were at their lowest stage of the year during this quarterly reporting period. However, increased pumping rates resulted in strong landward well pair gradients each month. Landward gradients measured during January 2006 increased relative to November and December 2005, a reflection of rebounding river levels and an increase in extraction rates after December 20, 2005.

2.5 Projected River Levels during the Next Quarter

Colorado River stage near the Topock Compressor Station is measured at the I-3 location and is directly influenced by releases from Davis Dam and, to a lesser degree, from Lake Havasu elevations, both of which are controlled by the U.S. Bureau of Reclamation (USBR). Total releases from Davis Dam follow a predictable annual cycle, with the largest monthly releases typically in early spring (April and May) and smallest monthly releases in winter (December and January). Superimposed on this annual cycle, 24-hour releases often fluctuate on a diurnal cycle. Releases within a given 24-hour period often fluctuate over a wider range of flows than that of monthly average flows over an entire year.

The corresponding river stage at the I-3 station fluctuates in a similar pattern. The monthly average stage at I-3 typically peaks in the early summer and reaches its low point in the winter. Following Davis Dam releases, river stage also fluctuates on a diurnal cycle, though greatly attenuated. The magnitude of the daily river stage fluctuations is less than the magnitude of the monthly average river stage fluctuations over a typical year.

Figure 2-7 shows river stage measured at I-3 superimposed on the projected I-3 river levels based on actual Davis Dam discharge and Lake Havasu levels. This graph shows that the formula used to calculate I-3 levels provides a very good estimate of the actual levels at I-3 over a wide range of river levels. These data are summarized in Table 2-4. The future projections shown on this graph are based on USBR long-range projections of Davis Dam

releases and Lake Havasu levels. Current projections show that the water levels will increase during the next quarterly reporting period, and into the summer months, followed by a slow decline during the fall. Once again, the lowest water levels this year are expected to occur in December 2006. February 2006 average water levels are projected to be slightly more (0.1 ft) than January. Water levels are projected to rebound approximately 1.5 feet in March 2006. By April 2006, average water levels are projected to reach their maximum of the year (nearly three feet higher than January). There is more uncertainty in these projections at longer times in the future, since water demand is based on climatic factors.

2.6 Quarterly Evaluation Summary

The groundwater elevation and hydraulic gradient data for November 2005, December 2005, and January 2006 performance monitoring indicate that the minimum landward gradient target of 0.001 feet/foot was met during the quarterly reporting period. As summarized in Table 2-3, the landward gradients during these months were generally two to greater than four times the required minimum magnitude in all well pairs. The IM pumping was sufficient to meet the minimum gradient targets during each of the three months of the fourth quarter 2005.

The existing gradient well pairs are adequate to define the capture of the plume while pumping from extraction wells TW-2D and/or TW-3D. With the commencement of pumping from PE-1 in late January 2006, these gradient well pairs will be re-evaluated. Installation of new IM monitoring wells in March 2006 will provide additional monitoring wells so that new or additional gradient pairs can be selected to demonstrate landward gradients with two pumping centers. Although none of the designated well pairs during this quarterly reporting period were aligned directly with the hydraulic gradients, the only effect due to the slight misalignments would be an underestimate of the true gradient induced from pumping.

A total of 14,019,626 gallons of groundwater were extracted and treated from the IM system from November 2005 to January 2006. The average pumping rate for the IM extraction system, including downtime, during the quarterly reporting period was 105.8 gpm. This is the highest average pumping rate achieved over a quarter to date.

Hexavalent chromium continues to be detected in the deep floodplain monitoring well MW-34-100. The Cr(VI) concentrations in this well have shown a generally increasing trend since it was installed in February 2005 (Figure B-2). This increasing trend is in contrast to nearly all other floodplain wells, which show decreasing or stable trends. It should be noted that landward gradients have been present at MW-34-100 since it was installed. The increasing trend in chromium concentration at this well is therefore not an indication of chromium migration to the east. The hydraulic monitoring data and gradients measured this quarter indicate that the current IM pumping is inducing landward groundwater flow in the aquifer interval that is monitored at MW-34-100. Pumping from PE-1, which started on January 26, 2006, will further increase landward gradients in the vicinity of MW-34-100.

Overall, the Cr(VI) concentrations in the floodplain are stable or decreasing. For the current quarter, Cr(VI) concentrations at wells MW-33-90, MW-36-90, MW-36-100, and the MW-39 cluster (MW-39-60, 70, 80, 100) were stable to slightly declining relative to the previous

quarter. MW-39-50 remained non-detect this quarter as was observed late last quarter. Concentrations of Cr(VI) have remained stable at wells MW-33-90, MW-33-150, and MW-33-210, and increased slightly at MW-39-70 and MW-39-100. The exception to these trends is well MW-34-100, in which concentrations are increasing. It is anticipated that, with continued pumping from well TW-2D and the continuation of pumping from TW-3D and PE-1 (started in January 2006), Cr(VI) concentrations in well MW-34-100 will ultimately show the same declining trends observed in the MW-39 and MW-36 well clusters.

Based on the hydraulic and chemical performance monitoring data and evaluation presented in this report, the IM performance standard has been met for the Fourth Quarter 2005 reporting period. Performance monitoring of the IM hydraulic containment system will continue in accordance with the Performance Monitoring Plan and as directed by the DTSC.

3.0 Extraction System Operations for Annual Reporting Period

3.1 Extraction Facilities and Operations

A total of 42,894,711 gallons of groundwater were extracted from February 1, 2005 through January 31, 2006. Table 3-1 summarizes the pumping rates and extracted volumes of groundwater over the annual reporting period.

Appendix A includes a chronology of modifications to extraction well operations from February 1, 2005 through January 31, 2006. Key modifications to the extraction well system include the following:

- Extracted groundwater was managed at the IM-2 facility until July 16, 2005, when the IM No. 3 facility began start-up operations. Since July 17, extracted groundwater has been treated at the IM No. 3 facility.
- Extraction Well TW-3D was installed in October 2005 to provide greater pumping capacity in the deep portion of the aquifer. Piping and power supply to connect TW-3D to the IM No. 3 facility were completed in December 2005. TW-3D was commissioned and brought into full-time service on December 20, 2005.
- Extraction Well PE-1 was installed in March 2005 to target chromium present in the vicinity of MW-34-100. Piping and power supply to connect PE-1 to the IM No. 3 facility were completed in January 2006 after obtaining agency approvals for construction in the floodplain. PE-1 was commissioned and brought into full-time service on January 26, 2006.

3.2 Extracted Groundwater Quality and Trends

Figure 3-1 presents the sampling results for Cr(VI) and TDS from extraction well TW-2D over the annual reporting period. Cr(VI) concentrations decreased by 2,000 µg/L during 2005. TW-3D was brought into service in late December in conjunction with TW-3D, so there are samples from both TW-2D and TW-3D in January 2006. Cr(VI) concentrations dropped to just over 2,000 µg/L in TW-2D in January, but concentrations in TW-3D were similar to previous TW-2D results. TDS has remained relatively steady, but increased in January 2006 after TW-3D was brought online. Table 3-2 shows the analytical results from extraction wells TW-2D, TW-3D, and PE-1 over the annual reporting period. Very little variation in the concentrations of other analytes is evident in the extraction wells over time.

4.0 Capture Zone Analysis for Annual Reporting Period

4.1 Monthly Average Gradients

Monthly landward gradients achieved in the three well pairs (MW-31-135/MW-33-150, MW-20-130/MW-34-80, and MW-20-130/MW-42-65) over the 2005 annual reporting period are summarized in Table 4-1. The IM target of 0.001 feet/foot was met every month over this annual period. Figure 4-1 presents these gradients in graphical form, along with river stage and average monthly pumping rates. The northern well pair had the lowest measured gradients each month; however, the axis of the northern well pair is not closely aligned with the gradient generated by pumping on the MW-20 bench. The magnitude of the gradient measured in the northern well pair is therefore an underestimate of the true gradient. Landward gradients were strong in the central and southern well pairs throughout the annual period, ranging from two to greater than four times the target of 0.001 feet/foot. Although the range in river levels was greater than five feet during this annual period, strong landward gradients were measured each month due to high rates of extraction.

4.2 Annual Average Gradients

Groundwater contour maps presenting the annual averages of data in the upper, middle, and lower depth aquifer intervals are shown in Figures 4-2 through 4-4. These same data are presented in floodplain cross-section A in Figure 4-5. The limits of the Cr(VI) as of January 2006 are also included on these figures. The net annual landward gradients present in these maps are strong, as previously observed during monthly reporting periods. A review of the annual average groundwater level contours on these figures shows that all floodplain monitoring wells where Cr(VI) was detected at greater than 20 µg/L were within the capture zone of the IM extraction system. Appendix D, Table D-2 presents the annual average, annual average minimum and maximum groundwater elevations. Measurement dates used for annual averages are also summarized here. Several IM wells were installed early in the annual reporting period (March 2005), so a complete year of data is unavailable from these locations.

4.3 Analysis and Evaluation of Capture Zone

The temporal variation in magnitude and direction of horizontal hydraulic gradients in the lower aquifer was assessed using quarterly average water levels and triangulation with linear interpretation for two well triads (MW-20-130/MW-34-80/MW-42-65, and MW-20-130/MW-34-80/MW-33-150). This analysis shows that strong landward gradients were achieved each quarter of the annual reporting period, and that there was very little variation in the direction of the landward gradients during each quarterly reporting period

(Figure 4-6). These gradients are not the same as those calculated between well pairs (Table 4-1) because they are calculated net gradients within each well triad.

Particle tracking was conducted to calculate the direction and distance that groundwater would be likely to flow from selected starting points in the floodplain during the 2005 annual reporting period. Particle starting locations were established near MW-34, MW-27 and newly installed wells MW-44 and MW-46. The groundwater levels from a set of nine wells completed in the lower depth zone of the aquifer were used to calculate average gradients for each 2-week interval throughout the annual reporting period. Wells used in this analysis included MW-20-130, MW-27-085, MW-28-090, MW-31-135, MW-33-150, MW-34-100, MW-36-100, MW-39-100, MW-43-075, and TW2D. A contouring program (Surfer 8 by Golden Software) was used to interpolate the water levels between the wells onto a grid computed by kriging. Grid spacing was 17 feet by 15 feet.

For these analyses, the water level in the aquifer near TW-2D was estimated based on a correlation coefficient developed from water levels measured in MW-20-100 and TW-2D during aquifer testing at TW-2S. It would not be appropriate to use the water levels measured inside the casing of the pumping well, which are significantly lower than the water levels in the surrounding aquifer due to well inefficiency.

The interpolated water level grids produced by Surfer were used as input to a particle tracking program (FEMPATH-X which is a part of the MicroFEM modeling package). The program was run in transient mode with two-week time steps. The hydraulic conductivity distribution that is currently used in layer 4 (the lower fluvial layer) of the Topock groundwater flow model, combined with the interpolated measured groundwater levels was used to calculate the rate and direction of particle movement at any location. For this analysis, it was assumed that there was no vertical flow and all particles moved horizontally through the lower depth interval of the aquifer. An effective transport porosity of 0.12 (12 percent) was used in these calculations. This effective transport porosity value was calculated based on breakthrough of low TDS water at the observation wells near the IW-2 injection well.

Calculated particle tracks from selected deep floodplain wells are presented in Figure 4-7. These particle tracks represent the movement of a groundwater molecule based on two-week average gradients during the 2005 annual reporting period. Tick marks show each two weeks of movement. The distance traveled ranged from about 35 feet for the particle starting near new well MW-46 to about 375 feet for the particle starting near MW-27. The difference in particle velocity at different locations is a function of differences in gradient and hydraulic conductivity. Although the particle starting near MW-27 appears to be heading west instead of northwest, the flowline carrying this particle would eventually warp to the north and the particle would be captured by TW-2D.

It should be recognized that this analysis makes no use of the groundwater model to simulate gradients. The gradients are based on measured water levels in the wells. The analysis uses the hydraulic conductivity values from the model, which are considered the most accurate estimates of the hydraulic conductivity available.

5.0 Evaluation of Groundwater Quality Data

5.1 Cr(VI) Distribution and Trends for Annual Reporting Period

Figure 5-1 presents the Cr(VI) concentration results in the floodplain wells from January 2006 in the upper, middle, and lower depth intervals of the Alluvial Aquifer. Figure 5-2 presents the same data from March 2005 sampling. The limits of the 50 µg/L and 20 µg/L Cr(VI) concentration contours have remained fairly consistent from March 2005 to January 2006. However, Cr(VI) concentrations have decreased inside the groundwater plume over the same time period. In the middle depth interval, Cr(VI) concentrations decreased in MW-39-60 from 1,450 µg/L in March 2005 to 20.4 µg/L in January 2006. In the lower depth interval, Cr(VI) concentrations in samples from MW-36-90 and MW-36-100 decreased from approximately 1,400 µg/L in March 2005 to less than 300 µg/L in January 2006.

Figure 5-3 presents Cr(VI) trend plots for selected wells in the floodplain that have had detections during the monitoring period. Eight out of 11 monitoring wells with Cr(VI) detections (MW-33-90, MW-36-90, MW-36-100, MW-39-50, MW-39-60, MW-39-70, MW-39-80, and MW-39-100) showed declining Cr(VI) concentrations during the past twelve months of monitoring. The Cr(VI) concentrations at wells MW-33-150 and MW-33-210, have increased slightly, while those in MW-34-100 have increased steadily since that well's installation in February 2005 (Appendix B). However, results from the last sampling event at MW-34-100 saw a 34 µg/L decline in Cr(VI) concentrations (Appendix B). Hydraulic gradients have been consistently landward for all three of these wells, indicating that the increases are not being caused by eastward plume migration.

5.2 Groundwater Geochemistry in IM Extraction Area

Figure 5-4 shows the mean concentrations and distributions of Cr(VI), ORP, nitrate and TDS from February 2005 through January 2006. ORP values less than -90 mV have been highlighted green, and an approximate division between reducing and non-reducing conditions has been drawn for each depth interval. When ORP is less than -90 mV, both Cr(VI) and nitrate are generally non-detect. Reducing conditions are prevalent throughout the shallow and mid-depth floodplain wells. Wells screened in alluvial deposits show non-reducing conditions in most areas of the site. The exception is in a few deep alluvial wells (CW-3D, MW-41D, and OW-3D). Alluvial materials in this aquifer generally contain low amounts of organic carbon and are considerably older than the fluvial deposits. Fluvial deposits typically contain more organic carbon at the time of deposition than alluvial deposits, and the shallow fluvial wells in the floodplain have measurable dissolved organic carbon. Over geologic time scales (tens and hundreds of thousands of years), organic carbon that is present at deposition can be gradually depleted until not enough remains to support a reducing environment. Microbial communities in geologically recent floodplain deposits thrive off the still-present organic carbon and act to catalyze the reduction of Cr(VI) to trivalent chromium (Cr[III]), which is insoluble and consequently removed from

groundwater. Older (deeper) fluvial deposits with depleted organic carbon do not support the reducing communities and deeper groundwater in those areas is less reducing as a result.

An apparent exception to the reducing conditions in shallow wells is well MW-28-25, which sometimes displays non-reducing ORP values, even though its historical average indicates reducing conditions. This well also has very low TDS relative to other wells, so the ORP at this location may be sometimes affected by oxygenated river water. All mid-depth wells east of the MW-39 cluster have ORP less than -90 mV and either trace or non-detect concentrations of Cr(VI). The limits of reducing conditions are further east in deep wells on the floodplain than the shallow and middle depth wells. Well MW-34-100 is the only well east of the deep MW-36 cluster wells that has detectable Cr(VI). This may be attributable to a lower amount of dissolved organic carbon at MW-34-100 than other wells, preventing the onset of reducing conditions seen elsewhere.

TDS is variable within each depth interval. The two natural sources of salts in floodplain wells appear to be shallow sediments associated with dredge spoils and deep fluvial materials with older groundwater.

Figure 5-5 shows the same data as Figure 5-4 along flood plain cross-section A. Again locations with ORP less than -90 mV are non-detect in Cr(VI) and nitrate, and the greatest TDS is measured in deep wells.

Figure 5-6 shows the results of stable isotopes of oxygen and deuterium in floodplain wells grouped into three categories (river, non-industrial, and industrial signatures) using data collected during the annual reporting period. This same plot is provided with wells within each category identified in Figure C-1 (Appendix C). The points that plot to the upper right in this plot are considered heavier in isotopic signature (i.e., enriched in heavy isotopes) while the points that plot to the lower left are considered lighter in isotopic signature. In this plot it is apparent that the lighter signatures are dominated by river samples (with some wells showing similar signature) whereas the heaviest signatures are found in selected floodplain wells. This heavy isotope signature can be interpreted as the result of concentration during industrial use as cooling water, although not all of the heavy signatures are associated with elevated Cr(VI) concentrations. Interpretations using stable isotopes are problematic due to overlap of signatures from different water sources and multiple mixing or reaction scenarios that could be used to explain observed data. One interpretation that may be used is that the heavy-signature wells with low or non-detectable chromium (MW-42 cluster and MW-39-40) may represent areas where the Cr(VI) in plume water has been removed by reducing conditions in the shallow and medium depths of the floodplain.

There is significant overlap in isotopic signature between native groundwater ("Non-Industrial Signature" group on Figure 5-6) and the "Industrial Signature" group. This overlap makes it problematic to use stable isotope data alone for separation of the wells into distinct groups. Non-plume wells with heavy isotope signatures in this overlapping area included MW-17 and the Tayloe well (the latter located about six miles upgradient of the site), wells clearly not in the flowpath of industrial water sources.

In addition, it is noted that fluvial wells containing elevated Cr(VI) but with a lighter isotopic signature (MW-36-100, MW-34-100) do not plot in the zone with the Industrial Isotopic Signature. These well samples likely represent a mixture of plume source water and river water.

Analysis of stable isotope data provides some insight to the source water for certain site wells but does not appear to provide a reliable method for distinguishing wells that may be affected by the discharge of cooling water from some other wells that are clearly not so affected.

The effects of IM pumping on the isotopic signature of floodplain wells have been plotted on Figure 5-7 by using a simple two-end member system of river water (represented by R-27 and R-28 samples) and industrial signature water (represented by the MW-20 wells). It is evident that isotopic signature in most industrial signature wells has become more similar to river water since IM pumping began. This is a result of the continuous landward gradient created by IM pumping. For example, well MW-30-50 increased in river signature by approximately 40% over this period, and has become non-detect in both Cr(VI) and nitrate during this time.

Groundwater quality data for performance monitoring wells from March 2004 through January 2006 are presented in Appendix C. Table C-1 shows groundwater indicator parameters and selected general chemistry results for wells in the vicinity of IM pumping. Table C-2 presents chemical performance monitoring results. Figure C-2 presents time series plots of Cr(VI) and ORP in wells along floodplain section A. Figure C-3 presents time series plots of specific conductance and Colorado River elevation (I-3) from the same time period. There is a recurring trend of temporarily high specific conductance (salinity) during or shortly after low river stages. Specific conductance generally drops to usual concentrations once river levels rebound. An exception to this trend is the mid-depth MW-39 wells, which have shown consistently increasing specific conductance since IM pumping began. This is believed to be the result of IM extraction pulling highly saline water in the shallow floodplain (typified by MW-30-30) downward to these deeper wells.

6.0 Conclusions and Status of IM Operations

6.1 Attainment of Performance Standard

The groundwater elevation and hydraulic gradient data for performance monitoring indicate that the minimum landward gradient target of 0.001 feet/foot was met during the annual reporting period. As summarized in Table 4-1 and Figure 4-1, the landward gradients during the annual period were up to greater than four times the required minimum magnitude in the central and southern well pairs. Gradients measured in the northern well pair were lower, but still well above the target each month. The IM pumping was sufficient to meet the minimum gradient targets during each of the 12 months of the 2005 annual reporting period.

The existing gradient well pairs are adequate to define the capture of the plume while pumping from extraction wells TW-2D and TW-3D. Although none of the designated well pairs are aligned directly with the hydraulic gradient, the only effect due to the slight misalignments would be an underestimate of the true gradient induced from pumping.

A total of 42,894,711 gallons of groundwater were extracted and treated from the IM system during the 2005 annual reporting period. The average pumping rate for the IM extraction system, including downtime, during the annual reporting period was 82 gpm.

Hexavalent chromium continues to be detected in the deep floodplain monitoring well MW-34-100. The Cr(VI) concentrations in this well have shown a generally increasing trend since it was installed in February 2005 (Figure 5-3). This increasing trend is in contrast to nearly all other floodplain wells, which show decreasing or stable trends. It should be noted that landward gradients have been present at MW-34-100 since it was installed. The increasing trend in chromium concentration at this well is therefore not an indication of chromium migration to the east. The hydraulic monitoring data and gradients measured since MW-34-100 was installed indicate that the current IM pumping is inducing landward groundwater flow in the aquifer interval that is monitored at MW-34-100. The aquifer materials in the screened interval of MW-34-100 contain a higher fraction of fine silt and clay than the materials in other nearby wells MW-34-80 and MW-36-100. Groundwater moves slower in zones of finer-grained aquifer material. This may result in chromium concentrations in MW-34-100 being slower to respond to pumping than wells in other, more permeable zones of the aquifer.

Overall, the Cr(VI) concentrations in the floodplain are stable or decreasing. As noted in Section 5.1, 8 out of 11 monitoring wells with Cr(VI) detections (MW-33-90, MW-36-90, MW-36-100, MW-39-50, MW-39-60, MW-39-70, MW-39-80, and MW-39-100) are showing declining Cr(VI) concentrations during the past twelve months of monitoring. The Cr(VI) concentrations detected at wells MW-33-150 and MW-33-210 have increased slightly, while MW-34-100 has increased during the annual reporting period. However, it is anticipated that, with continued pumping from well TW-3D and PE-1, Cr(VI) concentrations in well

MW-34-100 will change and could even increase in the short-term, but will ultimately show the same declining trends observed in the MW-39 and MW-36 well clusters.

6.2 Gradient Control Well Pairs for Performance Monitoring

On January 26, 2006 startup of well PE-1 occurred, and it is currently in operation with TW-3D with the goal of maintaining a pumping rate of 135 gpm. Pumping from PE-1 and the formation of two pumping centers on the floodplain makes a re-evaluation of gradient well pairs necessary.

Per the DTSC letter of February 14, 2005 (DTSC 2005), the successful performance of the IM pumping is measured by achieving a minimum landward gradient of 0.001 feet per foot in a set of three gradient control well pairs centered on the TW-2 pumping location. Gradient control wells are all completed in the deep portion of the aquifer, where Cr(VI) concentrations are most prevalent. Now that PE-1 well is online, it has created a second, smaller cone of depression in the floodplain. To continue to assess IM performance based on gradient control wells, new gradient control well pairs will be needed that are appropriately located to measure the gradients in the vicinity of PE-1.

Ideally, well pairs should be oriented in a line perpendicular to the groundwater level contours to more accurately measure the gradient. Well pairs not aligned perpendicular to the contours will indicate a smaller than actual gradient, and therefore provide a more conservative measure of IM success.

As shown on Figure 6-1, two new wells and two existing wells are proposed to measure the gradient associated with pumping at PE-1. A new well (MW-45, Site B) will be installed approximately 15 feet from PE-1 to provide the central gradient control well for all three well pairs associated with PE-1. A new well (MW-44, Site A) will be installed approximately 170 feet north of PE-1 to provide the northern gradient control pair (with new well MW-45). Ideally, MW-44 would be located in the vegetated area further to the east to align the well pair with the gradient. However, this would involve significant cutting of riparian vegetation and could significantly delay the approval of the project. Consequently, the location for MW-44 is a compromise that is intended to achieve adequate measurement of the gradient without damaging sensitive habitat.

A third well (MW-46, Site C) is proposed for a location approximately 480 feet east of the TW-2D pumping center (Figure 6-1) to provide additional hydraulic gradient control for performance monitoring. The MW-46 location is selected to supplement the existing performance monitoring wells at the MW-28 cluster. Well MW-28-90, screened at the top of the lower depth interval, is currently the only well used for the deeper gradient control in this area. Accordingly, a deeper monitoring well in this area is proposed to provide additional performance data for gradient control in the lower depth interval.

Existing wells MW-34-100 and MW-27-85 paired with the new MW-45 well will provide central and southern gradient control well pairs for measuring gradients associated with pumping at PE-1. These two well pairs are aligned with the projected groundwater gradients.

With PE-1 pumping, the existing northern and southern gradient control well pairs associated with TW-2 will still be usable. These well pairs comprise MW-33-150/MW-31-135 and MW-42-65/MW-20-130. The northern and southern TW-2 well pairs are slightly off-axis to the gradient because they include wells at the MW-20 and MW-31 locations which are not very close to the pumping center. When well TW-3D begins pumping, consideration should be given to using well TW-2D as the central gradient control well for both MW-33-150 and MW-42-65. This would provide a more accurate measure of the hydraulic gradient around the TW-3D pumping center because the well pairs would be better aligned with the gradient.

6.3 Extraction System Operations

As per DTSC direction, PG&E will continue to operate both TW-3D and PE-1 at a target combined pumping rate of 135 gpm, except for periods when planned and unplanned downtime occur. Treated groundwater will be discharged into the IM No. 3 injection wells in accordance with Waste Discharge Requirements Order No. R7-2004-0103. Brine generated as a byproduct of the treatment process will continue to be transported offsite for treatment and disposal.

PG&E will balance the pumping rates between TW-3D and PE-1 to maintain the target pumping rate and maintain appropriate hydraulic gradients across the Alluvial Aquifer. If, at any time, hydraulic data indicate that PE-1 pumping has the potential to draw higher concentrations of chromium away from the capture zone of TW-3D, PG&E will request authorization from DTSC to increase the pumping rate at TW-3D and decrease the rate at PE-1. TW-2D will serve as a backup extraction well to TW-3D and PE-1.

6.4 Performance Monitoring Program

Reporting of the IM extraction and monitoring activities will continue as described in the PMP. The PMP will be revised in early summer 2006 to include new monitoring wells installed in March and April 2006, and re-evaluate gradient well pairs and reporting requirements. The next status report will be a monthly performance monitoring report submitted on March 15, 2006 covering the February 2006 reporting period. The next quarterly report, covering the February, March and April reporting periods will be submitted May 30, 2006.

Current USBR projections show that the average Davis Dam release for February 2006 (10,100 cubic feet per second [cfs]) will be greater than in January 2006 (9,166 cfs). Based on February 13, 2006 USBR projections, it is anticipated that the Colorado River level at the I-3 gage location in February 2006 will increase (0.1 feet) compared to levels in January 2006. Future adjustments in pumping rates from the IM extraction system will be proposed based on expected river levels, observed groundwater gradients, potential system modifications, and other relevant factors.

7.0 References

California Department of Toxic Substances Control (DTSC). 2005. Letter to PG&E. "Criteria for Evaluating Performance Requirements of Interim Measure to Hydraulic Control of Chromium Plume in Floodplain". February 14.

CH2M HILL. 2005a. *Draft Performance Monitoring Plan for Interim Measures in the Floodplain Area. PG&E Topock Compressor Station, Needles, California.* April 15.

CH2M HILL. 2005b. *Topock Program Sampling, Analysis, and Field Procedures Manual, Revision 1, PG&E Topock Compressor Station.* March 31.

Tables

TABLE 2-1
Pumping Rate and Extracted Volume from November 2005 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

Extraction Well	November 2005 to January 2006[a]		Project To Date[b]
	Average Quarterly Pumping Rate[c] (gpm)	Volume Pumped (gal)	Cumulative Volume Pumped (gal)
TW-2S		0	994,438
TW-2D		8,379,818	52,875,356
TW-3D		5,297,928	5,297,928
PE-1		341,880	341,880
Total	105.8	14,019,626	59,509,602
Volume Pumped from the MW-20 Well Cluster			1,527,724
Total Volume Pumped (gal)			61,037,326
Total Volume Pumped (ac-ft)			187.3

gpm: gallons per minute.
gal: gallons.
ac-ft: acre-feet.

[a] Pumping information during the quarterly period is based on readings collected between November 1, 2005 at 12:00 a.m. and January 31, 2006 at 11:59 p.m. (31 days).
[b] Interim Measure groundwater extraction at the Topock site was initiated in March 2004.
[c] The "Average Quarterly Pumping Rate" is the overall average during the quarterly period, including system downtime based on flow meter readings.

TABLE 2-2
Analytical Results for Extraction Wells, August 2005 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

Well ID	Sample Date	Unfiltered Total Chromium mg/L	Hexavalent Chromium mg/L	Total Dissolved Solids mg/L
TW-2D	08-Aug-05	4.06	4.27	5980 J
TW-2D	11-Aug-05	4.83	4.21 J	6060
TW-2D	16-Aug-05	4.75	4.22	6170
TW-2D	18-Aug-05	3.96	3.88	5950
TW-2D	22-Aug-05	4.11	4.10	6000
TW-2D	25-Aug-05	3.74	4.27	6200
TW-2D	16-Sep-05	3.91	3.92	6090 J
TW-2D	21-Sep-05	4.15	3.99	6360
TW-2D	28-Sep-05	5.57	4.02	6250
TW-2D	05-Oct-05	3.79	3.96	6040
TW-2D	12-Oct-05	4.24	3.60	5950
TW-2D	19-Oct-05	3.68	3.79	6080
TW-2D	25-Oct-05	3.27	3.90	5880
TW-2D	02-Nov-05	3.63	3.75	5950
TW-2D	07-Dec-05	3.67	3.60	5840
TW-2D	18-Jan-06	1.98 LF	2.18	6930
TW-3D	18-Jan-06	4.72 LF	4.33	5090

Notes:

mg/L = concentration in milligrams per liter (mg/L)
LF = lab filtered
J = concentration or reporting limit estimated by laboratory or data validation.
(---) = data not collected.

Analytical results from inactive extraction wells are presented in Table B-2.

The analytical results from August through December 2005 for TW-2D were obtained from a sample point (SC-100B) on the influent conveyance system at the IM3 treatment system.

TABLE 2-3

Calculated Hydraulic Gradients for Well Pairs by Month for Quarterly Reporting Period

2005 Annual Performance Monitoring Report

PG&E Topock Compressor Station

Well Pair[1]	Reporting Period	Mean Landward Hydraulic Gradient[2] (feet/foot)	Measurement Interval 2005-2006
Northern Gradient Pair			
MW-31-135 / MW-33-150	November	0.0016	November-1 through November-30
	December	0.0020	December-1 through December-31
	January	0.0024	January-1 through January 24
Central Gradient Pair			
MW-20-130 / MW-34-80	November	0.0026	November-1 through November-30
	December	0.0028	December-1 through December-31
	January	0.0043	January-1 through January 24
Southern Gradient Pair			
MW-20-130 / MW-42-65	November	0.0029	November-1 through November-30
	December	0.0034	December-1 through December-31
	January	0.0043	January-1 through January 24

Notes:

1. Refer to Figure 2-1 for location of well pairs
2. For IM pumping, the target landward gradient for the selected well pairs is 0.001 feet/foot
3. Commissioning and Pumping from PE-1 began on 1/25/06, so January 2006 monthly average does not reflect remainder of the month.

TABLE 2-4

Predicted and Actual Monthly Average Davis Dam Discharge and Colorado River Elevation at I-3

2005 Annual Performance Monitoring Report

PG&E Topock Compressor Station

Month	Davis Dam Release			Colorado River Elevation at I-3		
	Projected (cfs)	Actual (cfs)	Difference (cfs)	Predicted (ft AMSL)	Actual (ft AMSL)	Difference (feet)
April 2004	17,400	17,354	-46	456.4	456.2	-0.2
May 2004	17,100	16,788	-312	456.3	456.3	-0.1
June 2004	15,800	16,869	1,069	455.8	456.6	0.7
July 2004	14,000	14,951	951	455.2	455.9	0.7
August 2004	12,100	12,000	-100	454.5	454.9	0.4
September 2004	11,200	10,979	-221	454.2	454.6	0.4
October 2004	8,600	7,538	-1,062	453.2	453.5	0.3
November 2004	9,500	8,075	-1,425	453.6	453.4	-0.2
December 2004	6,200	8,090	1,890	452.4	453.3	0.9
January 2005	8,800	4,900	-3,900	453.4	452.4	-1.0
February 2005	8,000	4,820	-3,180	453.1	452.6	-0.5
March 2005	15,600	7,110	-8,490	455.8	452.9	-2.9
April 2005	16,700	16,306	-394	455.9	456.0	0.1
May 2005	16,700	15,579	-1,121	456.2	456.1	-0.1
June 2005	14,600	15,223	623	455.8	456.1	0.3
July 2005	15,400	15,612	212	456.0	456.0	0.0
August 2005	11,700	11,544	-156	454.6	454.8	0.2
September 2005	12,400	12,335	-65	454.6	NA	NA
October 2005	12,300	11,201	-1,099	454.5	454.3	-0.2
November 2005	10,900	10,216	-684	454.3	454.3	0
December 2005	6,900	6,745	-155	452.8	452.7	-0.1
January 2006	8,400	9,166	766	453.0	453.6	0.6
February 2006	10,100	----	----	453.7	----	----

NOTES:

NA = I-3 transducer data unavailable for month of September 2005 due to damage by debris.

Projected Davis Dam releases, updated monthly, are reported by the US Department of Interior, Bureau of Reclamation at http://www.usbr.gov/lc/region/g4000/24mo.pdf; listed projections for April 2004 through July 2004 are from April 2004, and the remainder were from the beginning of each respective month.

Colorado River levels at I-3 are predicted from a linear regression between historical dam releases and measured river levels at I-3 (updated monthly).

cfs = cubic feet per second; ft AMSL = feet above mean sea level

TABLE 3-1
Pumping Rate and Extracted Volume Annual Reporting Period
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

Reporting Period	Target Pump Rate[1] (gpm)	Actual Monthly Pump Rate[2] (gpm)	Individual Extraction Well Operations					Total Volume (gallons)
			MW-120-130 (gpm)	TW-2S (gallons)	TW-2D (gallons)	TW-3D (gallons)	PE-1 (gallons)	
Feb-05	70 to >80	74	98,575	0	2,884,900	---	---	2,983,475
Mar-05	70 to >80	78	203,272	0	3,281,830	---	---	3,485,102
Apr-05	70	69	0	0	2,986,200	---	---	2,986,200
May-05	70	69	0	0	3,070,419	---	---	3,070,419
Jun-05	70	65	0	108,000	2,707,543	---	---	2,815,543
Jul-05	70	69	0	0	3,100,312	---	---	3,100,312
Aug-05	70	69	0	147,455	2,939,314	---	---	3,086,769
Sep-05	70 to 90	77	0	151,704	3,160,171	---	---	3,311,875
Oct-05	90	90	0	100,921	3,934,469	---	---	4,035,390
Nov-05	90	81	0	0	3,495,002	---	---	3,495,002
Dec-05	90 to 135	111	0	0	2,989,136	1,987,161	---	4,976,297
Jan-06	135	124	0	0	1,895,680	3,310,767	341,880	5,548,327
Totals for Annual Period		**82**	**301,847**	**508,080**	**36,444,976**	**5,297,928**	**341,880**	**42,894,711**

Notes:
gpm: gallons per minute

[1]The target pumping rates during the reporting period varied as follows:

(a) Between February 16, through March 15, 2005 DTSC directed that PG&E increase the pumping rate to the maximum capacity of the IM-2 batch Treatment Plant in response to the detection of Cr(IV) in MW-34-100 after installation. The DTSC approved the request to reduce the target pump rate back to 70 gpm based on recognited of increased releases from Davis Dam and allow for temporary water storage tanks to be removed and allow IM-3 construction on the MW-20 Bench to resume.

(b) TW-2S June 23 and 25, 2005 while replacing a failed pump in TW-2D.

(c) TW-2S and TW-2D were operated both simulateously and individually during August and September 2005 as part of IM-3 facility commissioning activities. The pumping rate from TW-2D was increased to approximately 90 gpm on September 15, 2005 after completing flow testing.

(d) TW-3D was commissioned and brought into full-time operations on December 20, 2005, increasing the combined target pump rate to 135 gpm by operating TW-2D and TW-3D simultaneously.

(d) PE-1 was commissioned and brought into full-time operations on January 26, 2005, maintaining a combined target pump rate of 135 gpm by operating TW-3D and PE-1 simultaneously. TW-2D was taken offline.

[2]The average monthly pump rate shown is based on calendar days to the nearest gallon per minute. During IM-2 operations, average pump rates presented in monthly reports may vary slightly as measurements were based on manual readings collected each day. IM-3 readings are electronically recorded so that recorded volumes represent daily totals between 12:00 am and 11:59 pm.

TABLE 4-1
Calculated Hydraulic Gradients for Well Pairs by Month for Annual Reporting Period
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

Well Pair[1]	Reporting Period	Mean Landward Hydraulic Gradient[2] (feet/foot)	Measurement Interval 2005-2006
Northern Gradient Pair			
MW-31-135 / MW-33-150	March	0.0022	Mar-4 through Mar-31
	April	0.0023	Apr-1 through Apr-30
	May	0.0020	May-1 through May-31
	June	0.0016	June-1 through June-30
	July	0.0021[5]	July-1 (12:00 AM through 5:35 AM)
	July	0.0014[5]	July-19 to July-20
	August	0.0013	August-1 through August-31
	September	0.0015	September-1 through September-30
	October	0.0017	October-1 through October 31
	November	0.0016	November-1 through November-30
	December	0.0020	December-1 through December-31
	January	0.0024[6]	January-1 through December-24
Central Gradient Pair			
MW-20-130 / MW-34-80	February	0.0018[7]	Feb-1 through Feb-20
	March	0.0031[7]	Mar-17 through Mar-31
	April	0.0038	Apr-1 through Apr-30
	May	0.0033	May-1 through May-27
	June	0.0032	June-2 through June-30
	July	0.0033	July-1 through July-31
	August	0.0025[8]	August-1 through August-15
	September	0.0027	September-1 through September-30
	October	0.0028	October-1 through October 31
	November	0.0026	November-1 through November-30
	December	0.0028	December-1 through December-31
	January	0.0043[6]	January-1 through December-24
Southern Gradient Pair			
MW-20-130 / MW-42-65	March	0.0035[7]	Mar-17 through Mar-31
	April	0.0041	Apr-1 through Apr-30
	May	0.0034	May-1 through May-27
	June	0.0032[9]	June-15 through June-30

TABLE 4-1

Calculated Hydraulic Gradients for Well Pairs by Month for Annual Reporting Period

2005 Annual Performance Monitoring Report

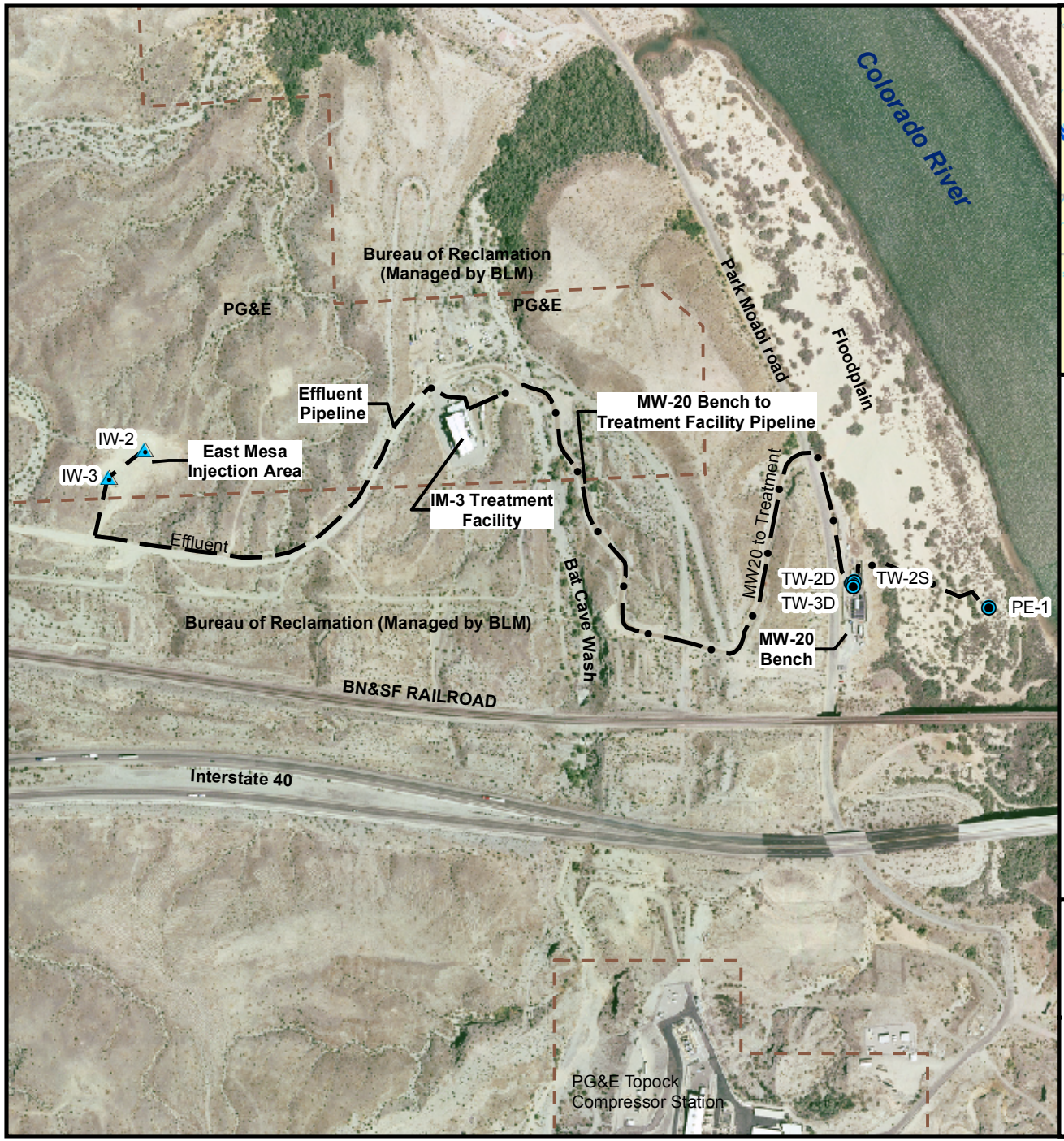
PG&E Topock Compressor Station

Well Pair[1]	Reporting Period	Mean Landward Hydraulic Gradient[2] (feet/foot)	Measurement Interval 2005-2006
Southern Gradient Pair			
MW-20-130 / MW-42-65	July	0.0033	July-1 through July-31
	August	0.0025	August-1 through August-31
	September	0.0027	September-1 through September-30
	October	0.0033	October-1 through October 31
	November	0.0029	November-1 through November-30
	December	0.0034	December-1 through December-31
	January	0.0043[6]	January-1 through December-24

Notes:

1. Refer to Figure 2-1 for location of well pairs
2. For IM pumping, the target landward gradient for the selected well pairs is 0.001 feet/foot
3. Hydraulic gradients are reported for the monitoring periods where pressure transducer data were collected.
4. Transducers were installed in wells MW-42-65 and MW-33-150 on March 1 and March 4, respectively.
5. MW-33-150 transducer data unavailable from July-1 at 5:35 AM through July-31 due to two separate transducer failures. Value shown is average gradient between MW-33-150 and MW-31-135 using five manual water level data points at MW-33-150 and transducer data from MW-31-135 from July-19 through July-20. To verify the July full-month average gradient at the northern well pair, the average gradient was also calculated using transducer data from MW-31-135 and MW-33-210 (the deeper well in the MW-33 cluster). The average gradient between MW-31-135 and MW-33-210 from July-1 through July-31 was 0.0021 feet/foot.
6. Commissioning and Pumping from PE-1 began on 1/25/06, so January 2006 monthly average does not reflect remainder of the month.
7. Well MW-20-130 was used for groundwater extraction from Feb. 20 to March 16 (data during this period not used in mean calculation).
8. MW-34-80 transducer data unavailable from August 16-31, 2005 due to transducer failure
9. MW-42-65 data unavailable from June-1 through June-15 due to transducer malfunction.

Figures



N

0 550 1,100 Feet

1 inch equals 550 feet

LEGEND

- PG&E Property Line
- Existing IM Extraction Well
- Existing IM Injection Well
- Treatment Facility Pipeline

Notes: Location map shows Interim Measures No.3 wells as of of November 2005.
Aerial photography taken May 2005.

FIGURE 1-1
LOCATIONS OF IM NO. 3 GROUNDWATER EXTRACTION, CONVEYANCE, AND TREATMENT FACILITIES

2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
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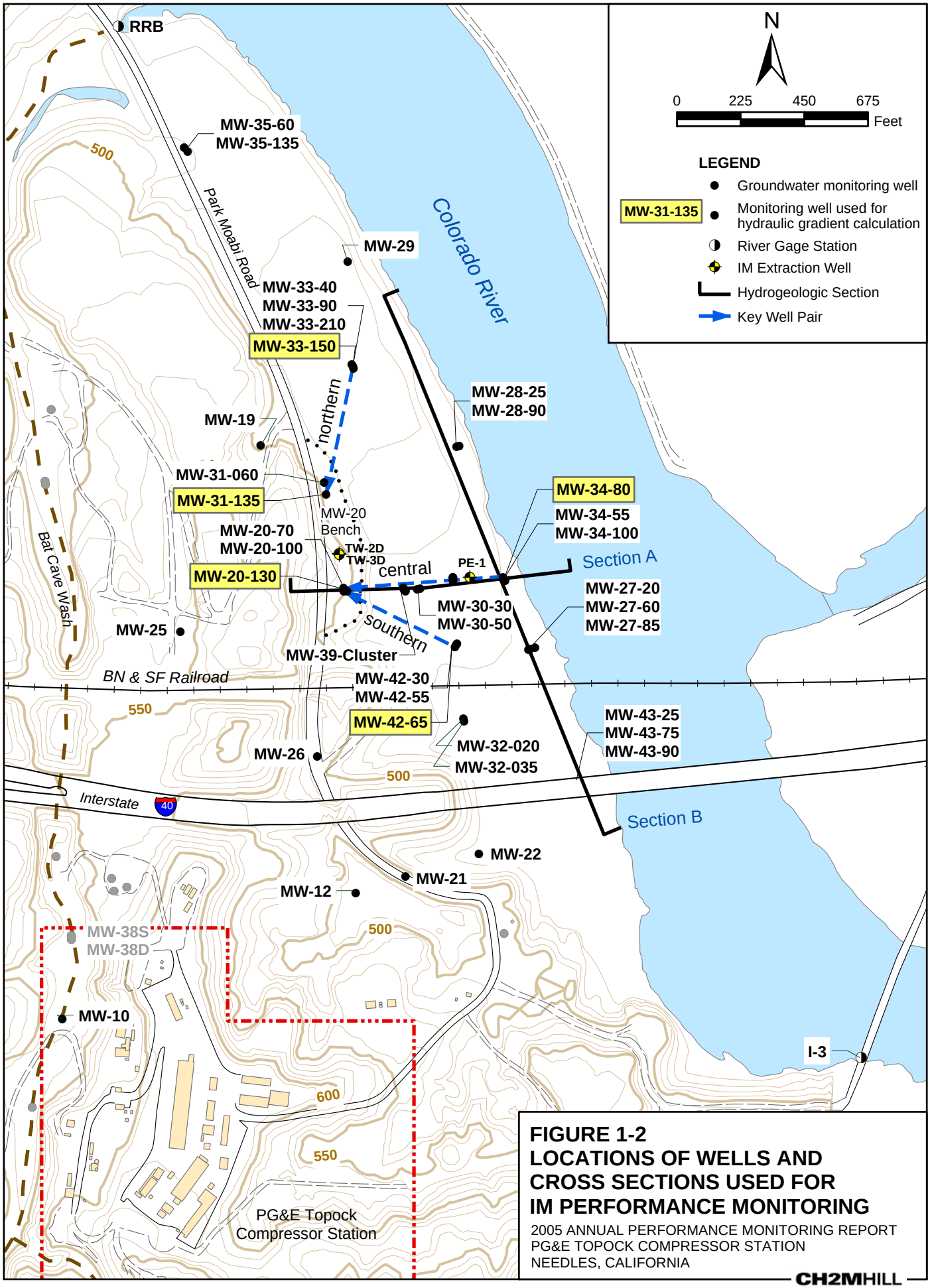

FIGURE 1-2
LOCATIONS OF WELLS AND CROSS SECTIONS USED FOR IM PERFORMANCE MONITORING

2005 ANNUAL PERFORMANCE MONITORING REPORT
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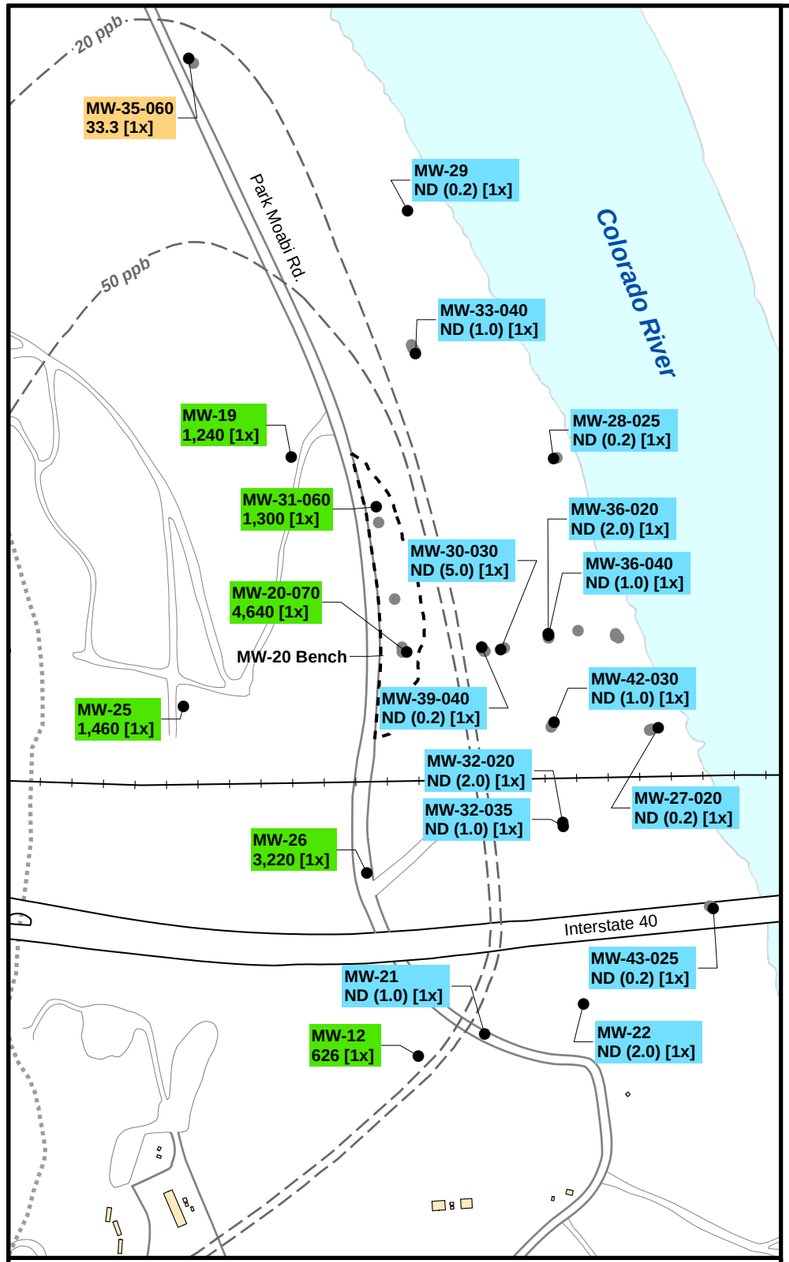
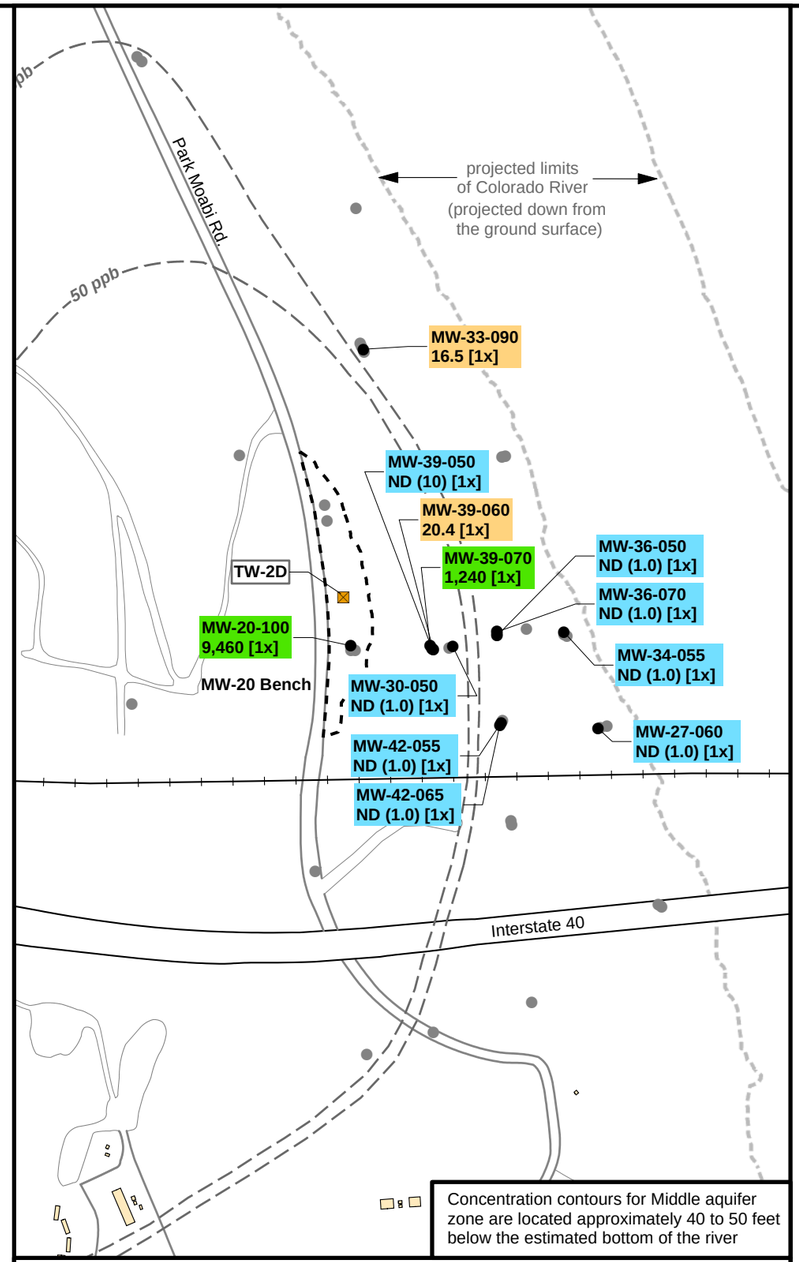
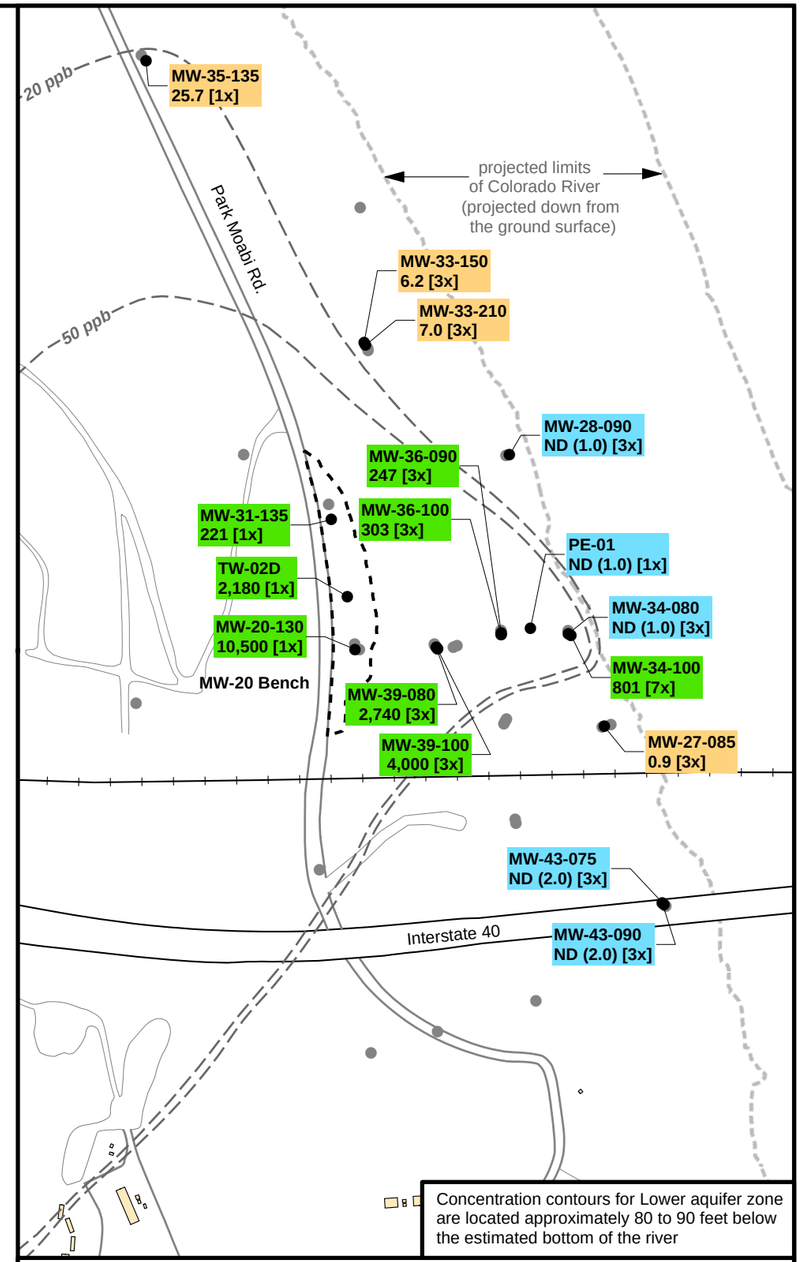


Shallow Wells (Upper Depth Interval)



Intermediate Wells (Middle Depth Interval)



Deep Wells (Lower Depth Interval)

ND (1) Not detected at listed reporting limit (ppb)

41 Less than 50 ppb

3,810 Greater than 50 ppb

— 50 — - Inferred Cr(VI) concentration contour

MW-12 626 [1x] Brackets [1x] indicate number of sampling events during the quarterly reporting period

Average Hexavalent Chromium [Cr (VI)] Concentrations
November 2005 - January 2006 Sampling Events

Concentrations in micrograms per liter (µg/L) equivalent to parts per billon (ppb).

N

0 400 800 Feet

1 inch equals 400 feet

FIGURE 2-1
CR(VI) CONCENTRATIONS IN ALLUVIAL AQUIFER NOVEMBER 2005 - JANUARY 2006

2005 ANNUAL PERFORMANCE MONITORING REPORT
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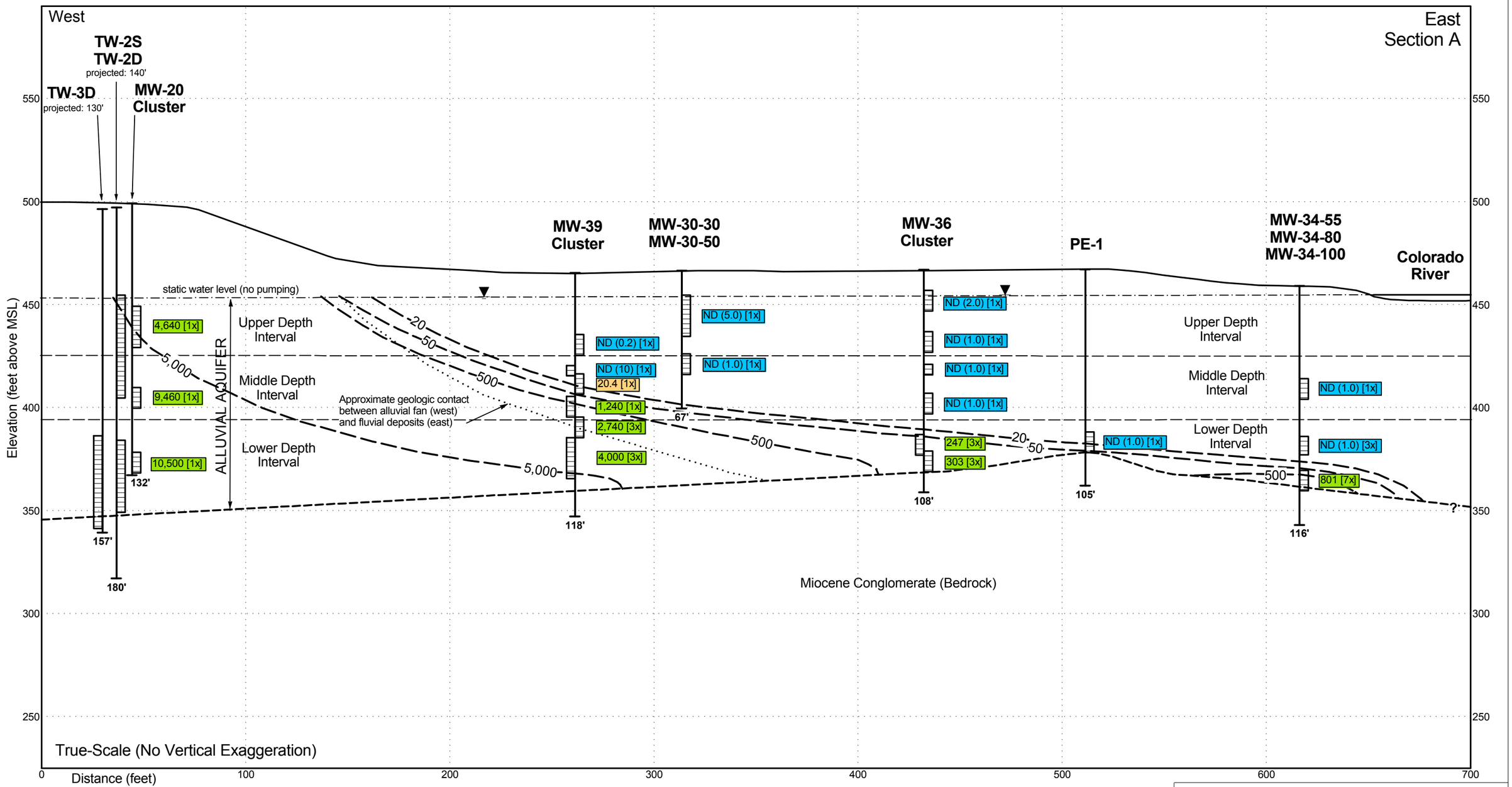

water level

well screen

10.1 [7x]

boring depth (feet) 103

Quarterly Average Cr(VI) concentration in micrograms per liter (ug/L), equivalent to parts per billion (ppb). Brackets indicate number of sampling events during the quarterly reporting period.

— — 50 — —
Inferred Cr(VI) Contour

Hexavalent Chromium [Cr(VI)] Concentrations, Averaged for November 2005 - January 2006 Sampling Events

ND(5)	Not detected at listed reporting limit (ppb)
10.1	Less than 50 ppb
1,257	Greater than 50 ppb

Note: Results plotted are averages from the maximum primary or duplicate sample for monitoring events during the reporting period; see Tables B-1 and B-2 for complete results

FIGURE 2-2
CR(VI) CONCENTRATIONS
FLOODPLAIN CROSS-SECTION A
NOVEMBER 2005 THROUGH JANUARY 2006

2005 ANNUAL PERFORMANCE MONITORING REPORT
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North

South
Section B

MW-33 wells
projected 200' onto line of section

MW-33-40
MW-33-90
MW-33-150
MW-33-210

Cross-Section Parallel to the Colorado River

BN & SF
Railroad

I-40
Bridge

MW-28-25
MW-28-90
projected: 40'

MW-34-55
MW-34-80
MW-34-100

MW-27-20
MW-27-60
MW-27-85

MW-43-25
MW-43-75
MW-43-90

water table

Upper Depth Interval

Middle Depth Interval

Lower Depth Interval

ALLUVIAL AQUIFER

Oldest Alluvium (Toa)

ND (1.0) [1x]
16.5 [1x]
6.2 [3x]
7.0 [3x]
ND (0.2) [1x]
ND (1.0) [3x]
ND (1.0) [1x]
ND (1.0) [3x]
ND (0.2) [1x]
ND (1.0) [1x]
0.9 [3x]
ND (0.2) [1x]
ND (2.0) [3x]
ND (2.0) [3x]
801 [7x]

20
50
500

Approximate geologic contact
between alluvial fan
and fluvial deposits

237'
148'
116'
107'
97'

Miocene Conglomerate (Bedrock)

Elevation (feet above MSL)

560 540 520 500 480 460 440 420 400 380 360 340 320 300 280 260 240

-200 0 200 400 600 800 1,000 1,200 1,400 1,600 1,800

Distance (feet)

water level
well screen
boring depth (feet) 103

10.1 [7x]

Quarterly Average Cr(VI) concentration in micrograms per liter (ug/L), equivalent to parts per billion (ppb). Brackets indicate number of sampling events during the quarterly reporting period.

— — 50 — —
Inferred Cr(VI) Contour

Hexavalent Chromium [Cr(VI)] Concentrations, Averaged for November 2005 - January 2006 Sampling Events

ND(5)	Not detected at listed reporting limit (ppb)
10.1	Less than 50 ppb
1,257	Greater than 50 ppb

Note: Results plotted are averages from the maximum primary or duplicate samples for monitoring events during the reporting period;
see Tables B-1 and B-2 for complete results

FIGURE 2-3
CR(VI) CONCENTRATIONS
FLOODPLAIN CROSS-SECTION B
NOVEMBER 2005 THROUGH JANUARY 2006

2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
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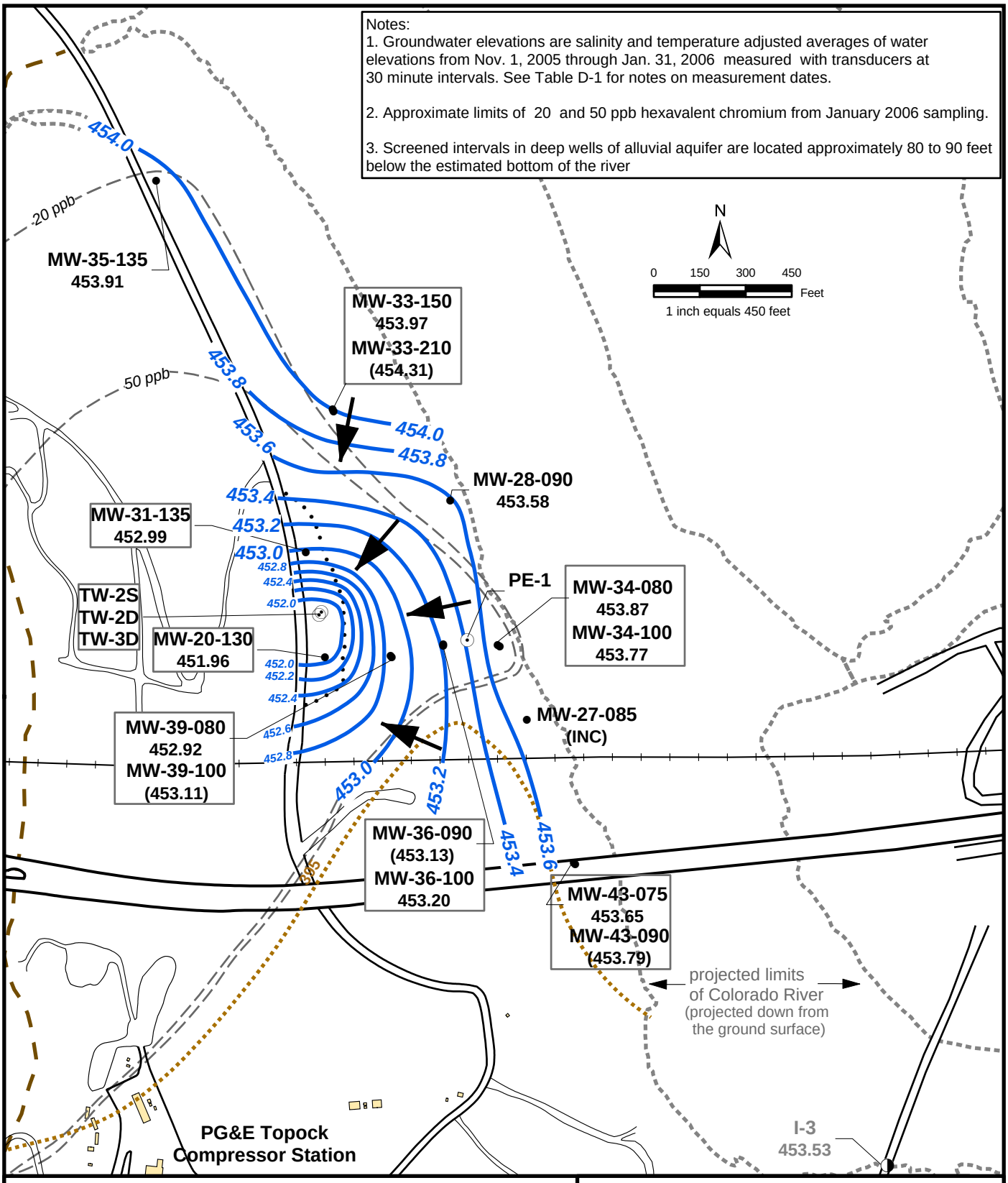

FIGURE 2-4
AVERAGE GROUNDWATER ELEVATIONS, DEEP WELLS NOVEMBER 2005 THROUGH JANUARY 2006

2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
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West

East
Section A

TW-2S
TW-2D
projected: 140'

TW-3D
projected: 130'

MW-20-70
MW-20-100
MW-20-130

MW-39-40
MW-39-50
MW-39-60
MW-39-70
MW-39-80
MW-39-100

MW-30-30*
MW-30-50

MW-36-20
MW-36-40*
MW-36-50
MW-36-70
MW-36-90*
MW-36-100

PE-1

MW-34-55
MW-34-80
MW-34-100

Colorado River
453.71

Elevation (feet above MSL)

550
500
450
400
350
300
250

452.8
452.6
452.4
452.2
452.0

452.83
452.51
451.96
132'
157'
180'

453.26
453.23
452.97
452.81
452.92
453.11
118'

453.81
453.36
67'

453.41
453.66
453.41
453.42
453.13
453.20
108'

105'

453.64
453.78
453.77
116'

453.6

20
50

453.2
453.4

?

Miocene Conglomerate (Bedrock)

True-Scale (No Vertical Exaggeration)

0 Distance (feet) 100 200 300 400 500 600 700

Notes:
Results show average groundwater elevations for Novemeber 1, 2005 through January, 2006 measured with transducers at 30 minute intervals.
Groundwater elevations adjusted for salinity and temperature.

Wells MW-30-30*, MW-36-40*, and MW-36-90* excluded from contouring.

PE-1 commissioning and pumping began on 1/25/06.
River elevation (R-20) is the calculated average river level based upon the river gradient between RRB and I-3.
Data subject to review.

Legend:

MW-30-50
Inferred water table
well screen
453.66
103 boring depth (feet)

20
Inferred hexavalent chromium contour (ppb) January, 2006

Annual average groundwater head (ft MSL)

453.5
Groundwater head contour

453.5
Inferred groundwater head contour

FIGURE 2-5
AVERAGE GROUNDWATER ELEVATIONS FOR WELLS ON FLOODPLAIN CROSS-SECTION A NOVEMBER 2005, THROUGH JANUARY 2006
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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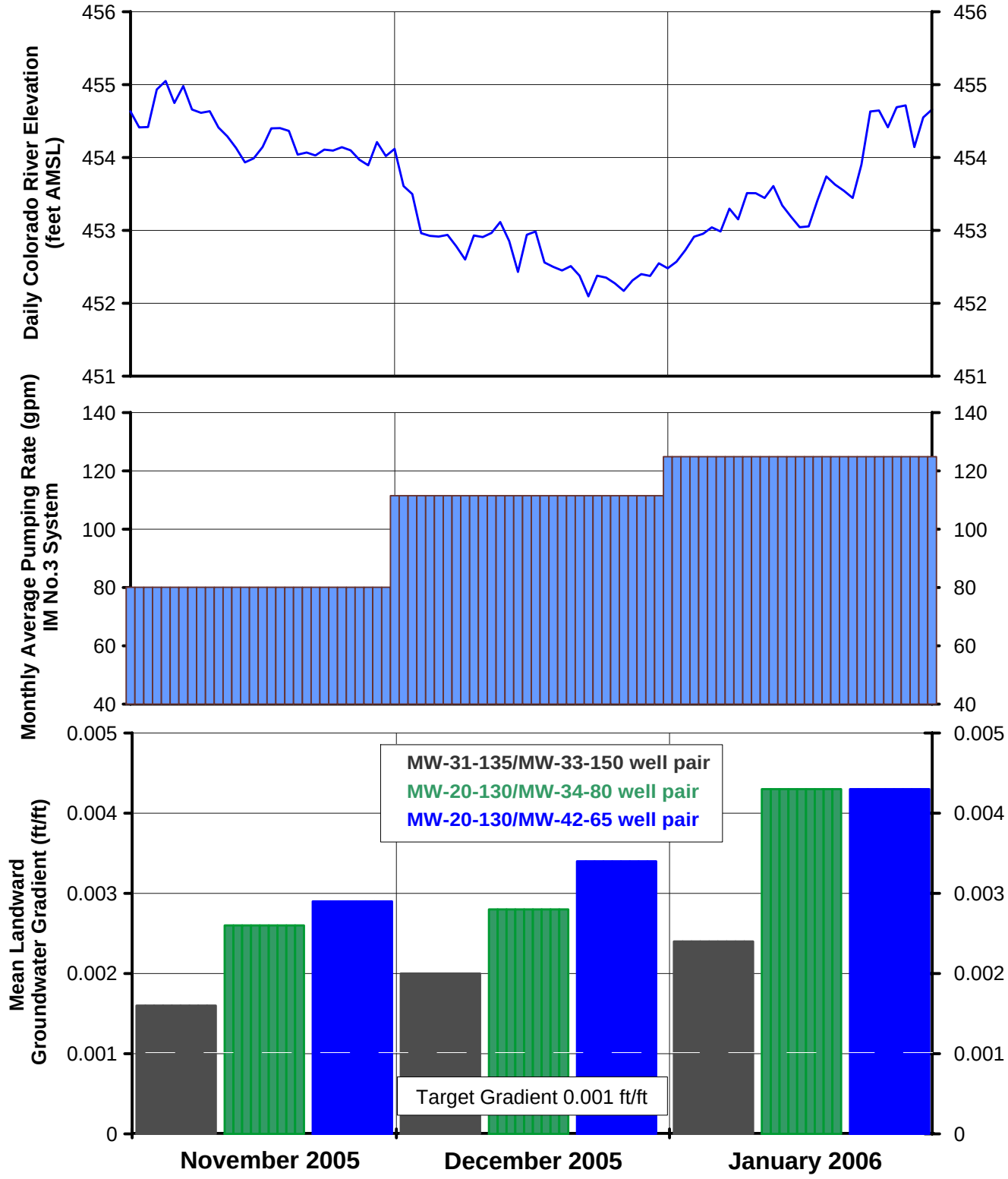

Notes:

1) For IM pumping, the target landward gradient for well pairs is 0.001 feet/foot.
2) Refer to Table 2-1 and Section 2.1 for discussion of pumping data.
3) Pumping rate plotted is the the combined rate of extraction wells in operation each month.
4) Refer to Table 2-4 and section 2.4 for discussion of gradient data.

FIGURE 2-6
MEASURED HYDRAULIC GRADIENTS, RIVER ELEVATION, AND PUMPING RATE NOVEMBER 2005 THROUGH JANUARY 2006
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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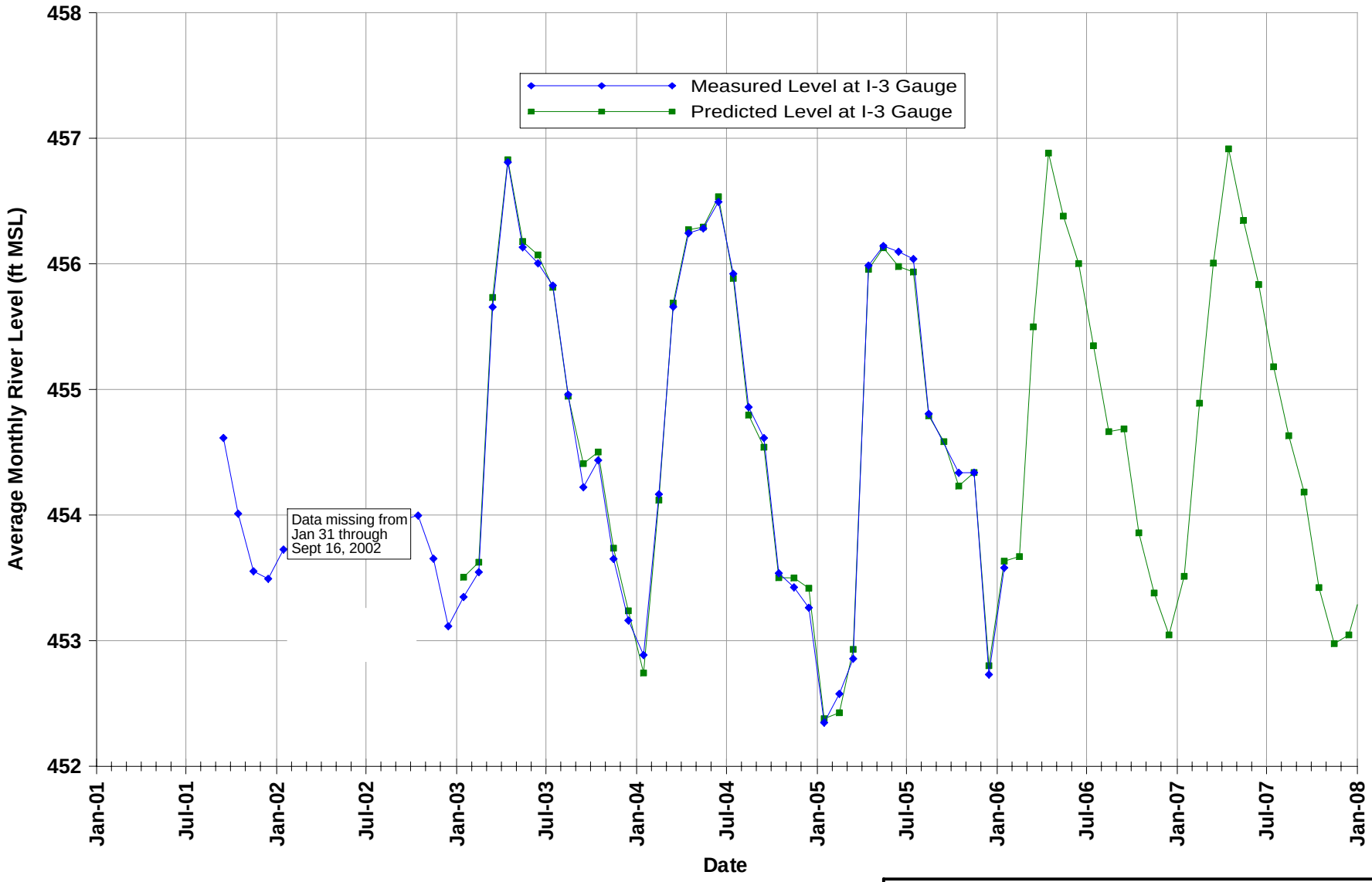

Projected river level is calculated based on monthly averages of Davis Dam release and stage in Lake Havasu as of February 14, 2006. Measured data through January 31, 2006.

FIGURE 2-7
PAST AND PREDICTED FUTURE RIVER LEVELS AT TOPOCK COMPRESSOR STATION
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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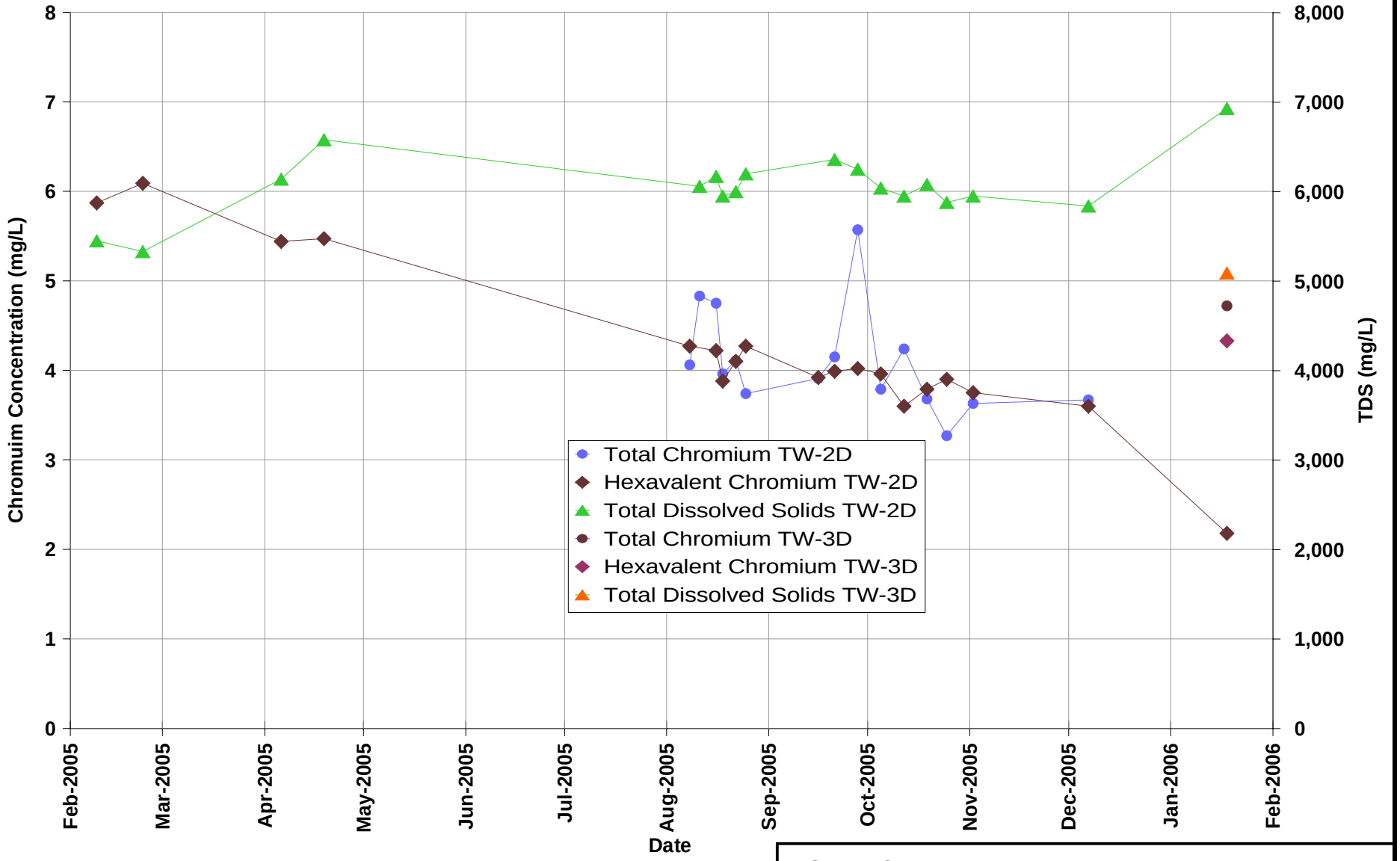

Notes:
Pumping from TW-3D began on 12/20/2005.

FIGURE 3-1
Cr(VI) AND TDS CONCENTRATIONS IN EXTRACTION WELL TW-2D OVER ANNUAL REPORTING PERIOD
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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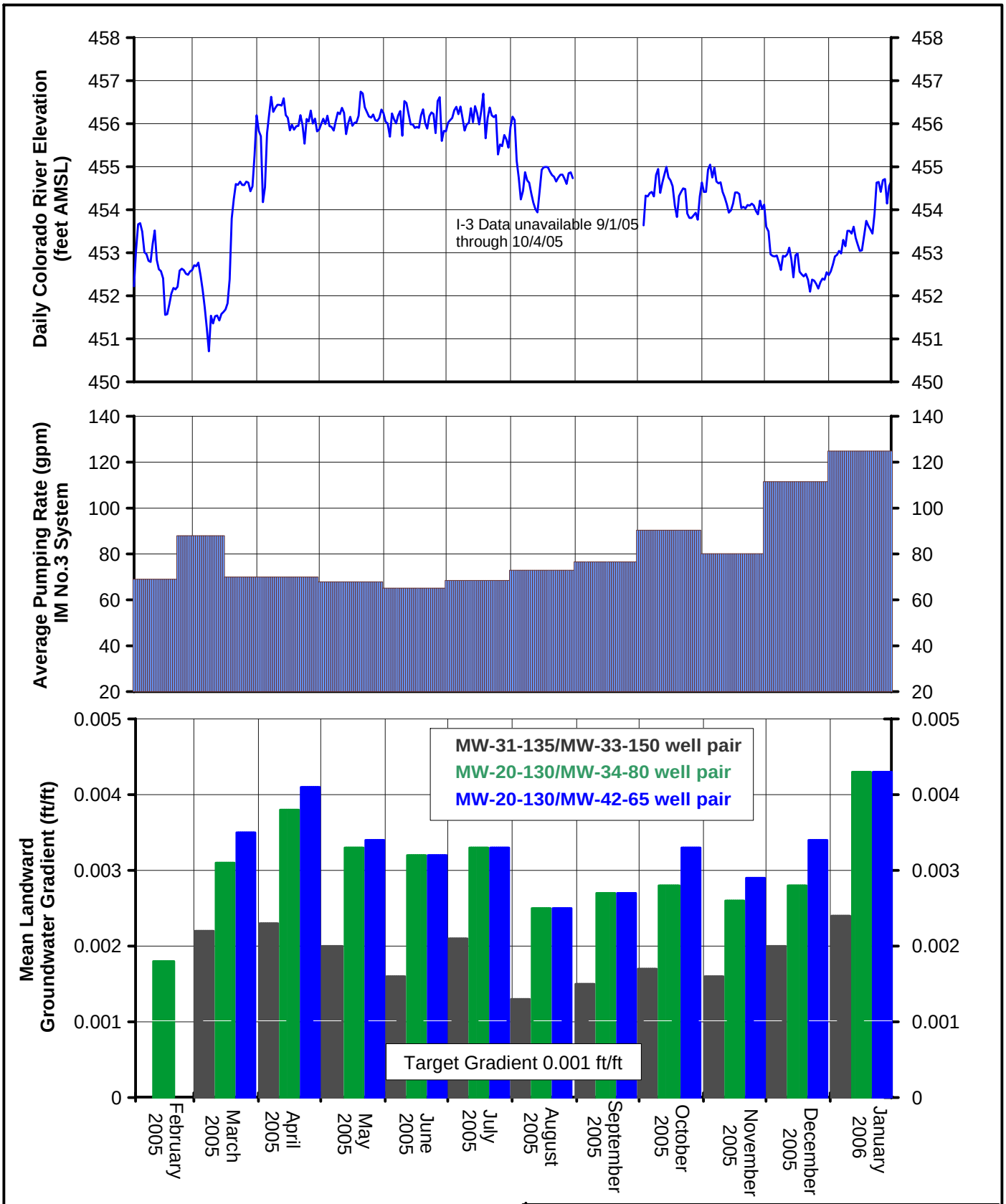

Notes:

1) For IM pumping, the target landward gradient for well pairs is 0.001 feet/foot.
2) Refer to Table 3-1 and Section 3.1 for discussion of pumping data.
3) Pumping rate plotted is the the combined rate of extraction wells in operation each month.
4) Refer to Table 4-1 and Section 4.1 or discussion of gradient data.

FIGURE 4-1
MEASURED HYDRAULIC GRADIENTS, RIVER ELEVATION AND PUMPING RATE ANNUAL REPORTING PERIOD
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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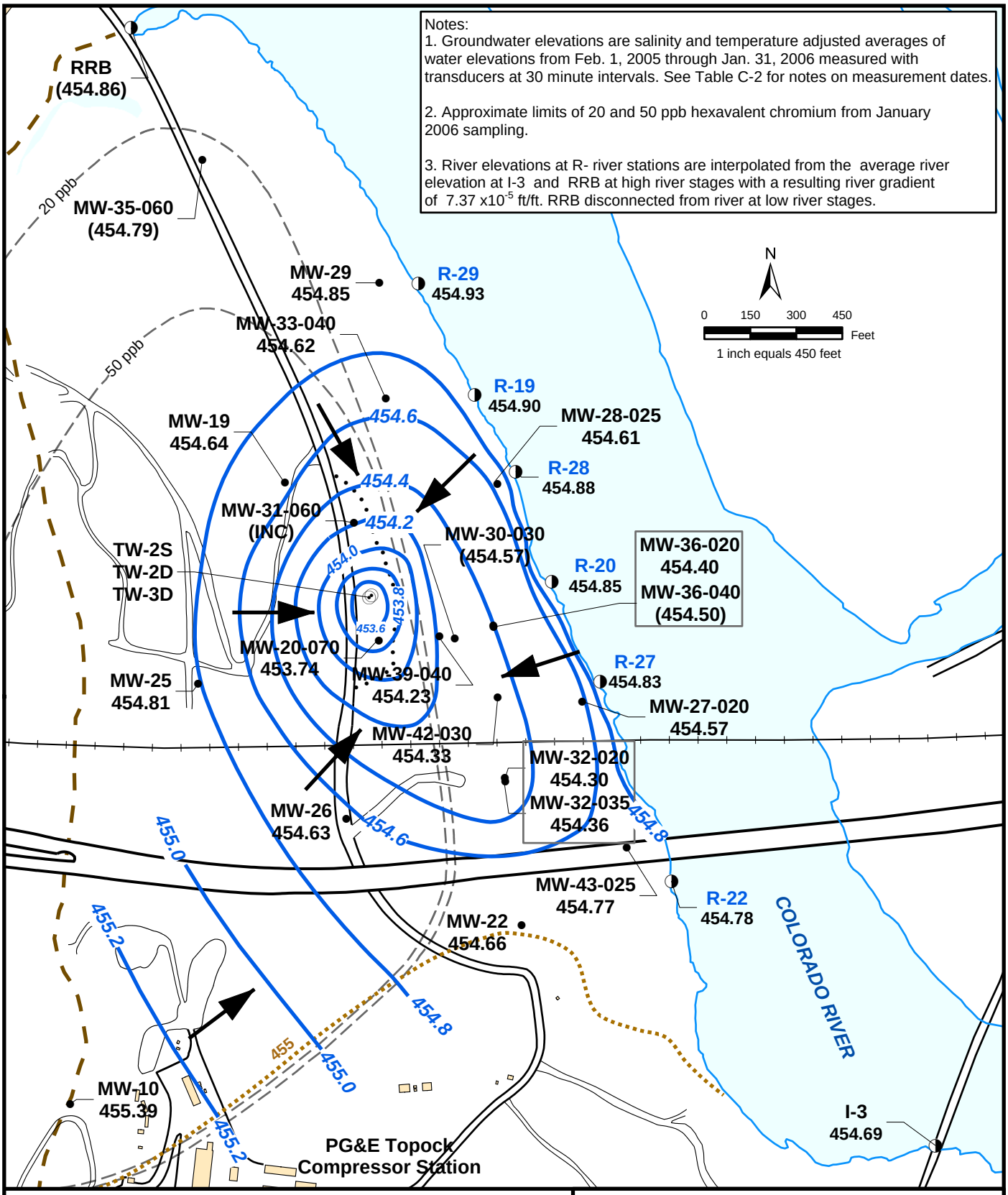

FIGURE 4-2
AVERAGE GROUNDWATER ELEVATIONS SHALLOW WELLS AND RIVER ELEVATIONS FOR ANNUAL REPORTING PERIOD

2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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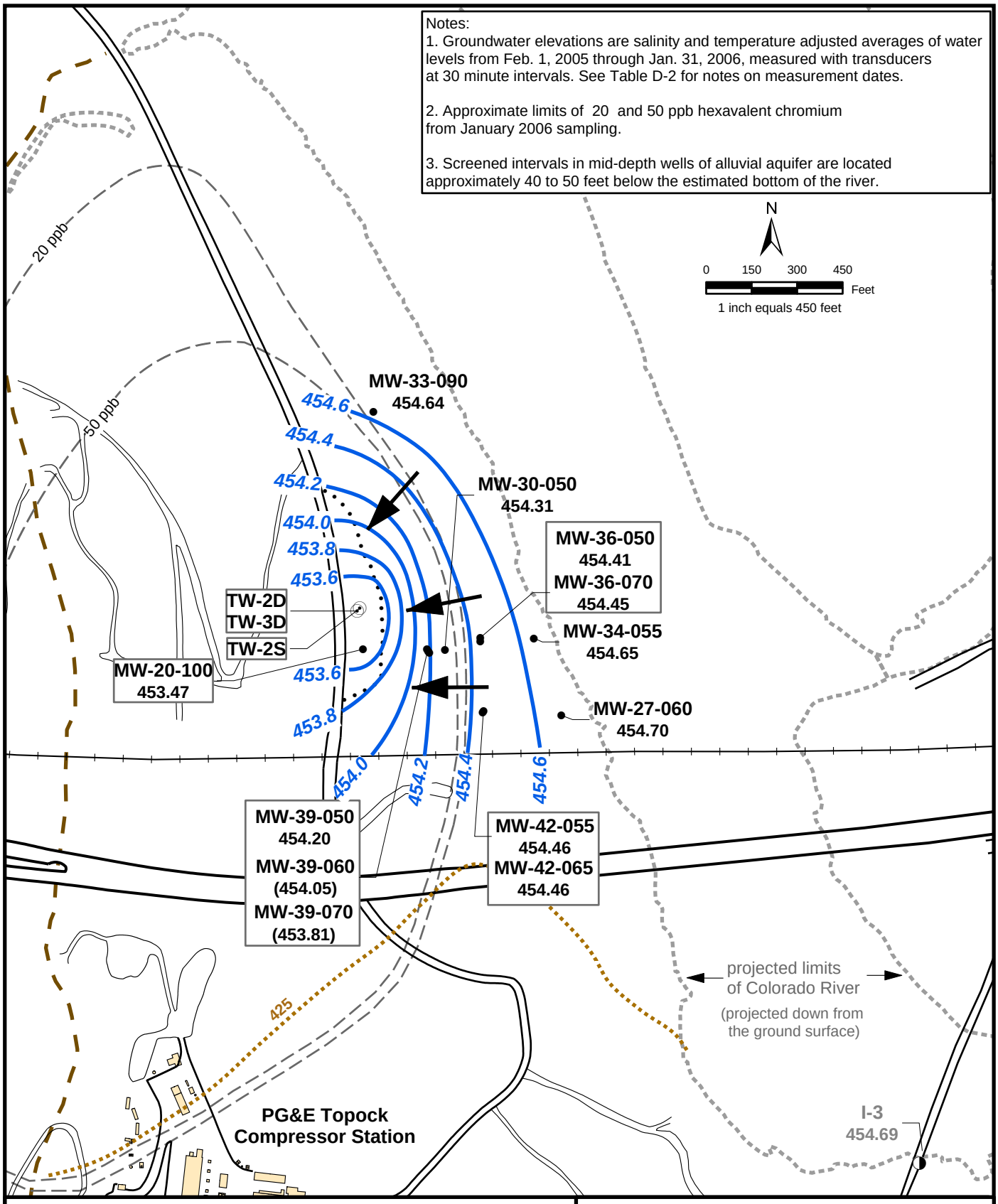

FIGURE 4-3
AVERAGE GROUNDWATER ELEVATIONS MID-DEPTH WELLS ANNUAL REPORTING PERIOD

2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
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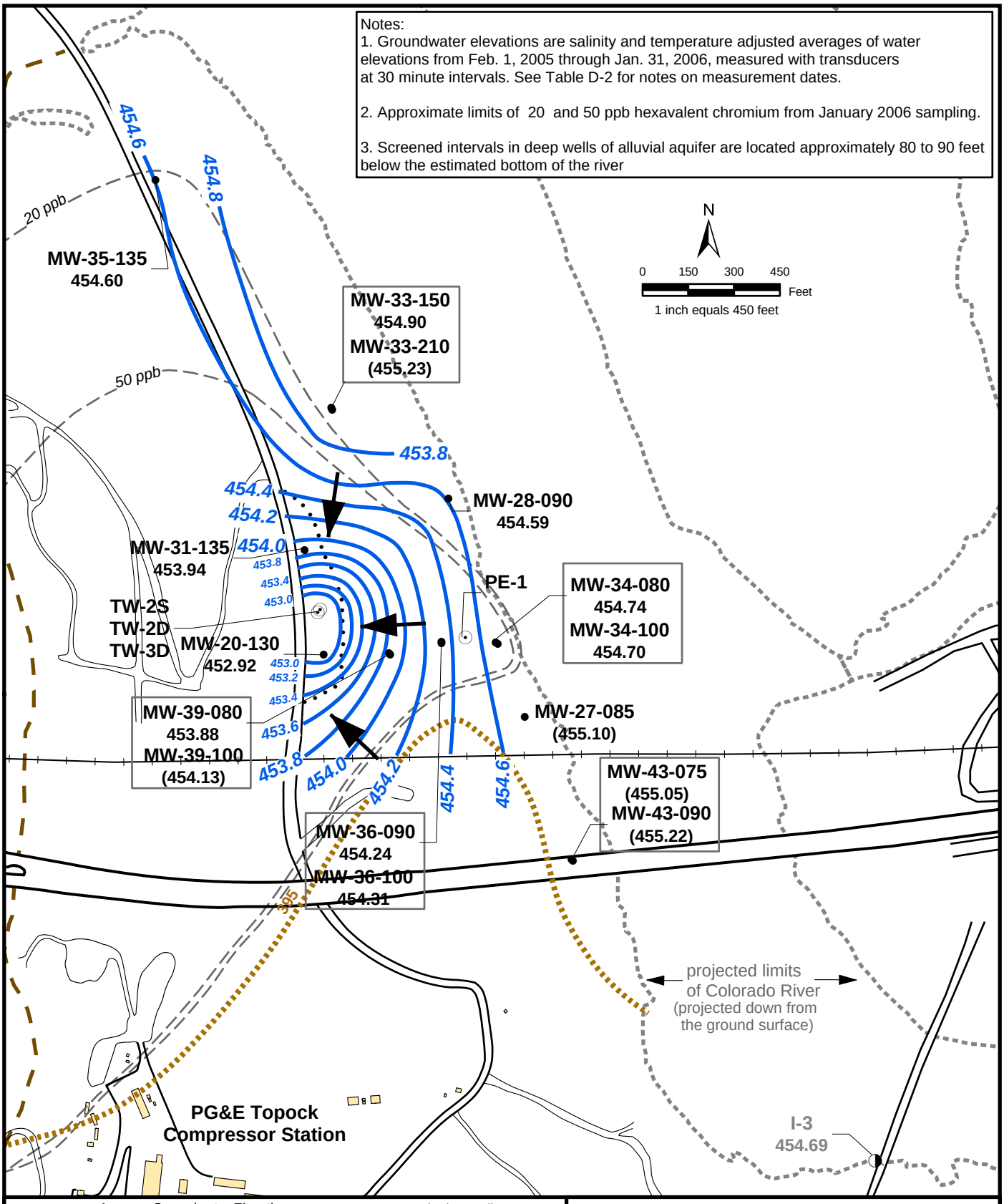

FIGURE 4-4
AVERAGE GROUNDWATER ELEVATIONS DEEP WELLS ANNUAL REPORTING PERIOD

2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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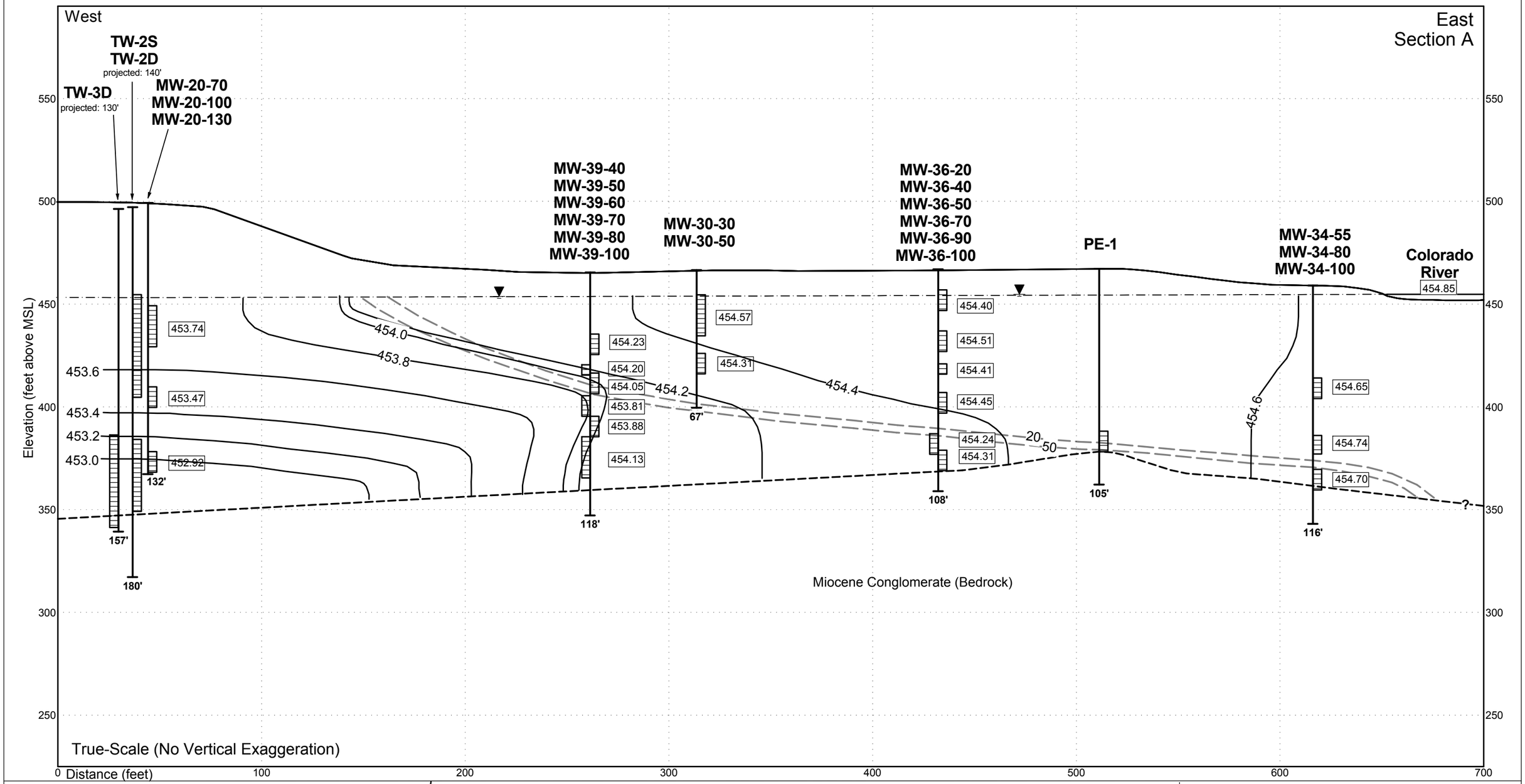

Notes:
Results show average groundwater elevations for February 1, 2005 through January 31, 2006 measured with transducers at 30 minute intervals.
Groundwater elevations adjusted for salinity and temperature.

PE-1 pumping began on 1/26/06.
River elevation (R-20) is the calculated average river level based upon the river gradient between RRB and I-3.
Data subject to review.

Legend:

MW-30-50
Inferred water table
well screen
453.66
103 boring depth (feet)

20
Inferred hexavalent chromium contour (ppb) January, 2006

Annual average groundwater head (ft MSL)

453.5
Groundwater head contour

453.5
Inferred groundwater head contour

FIGURE 4-5
AVERAGE GROUNDWATER ELEVATIONS FOR WELLS ON FLOODPLAIN CROSS-SECTION A ANNUAL REPORTING PERIOD
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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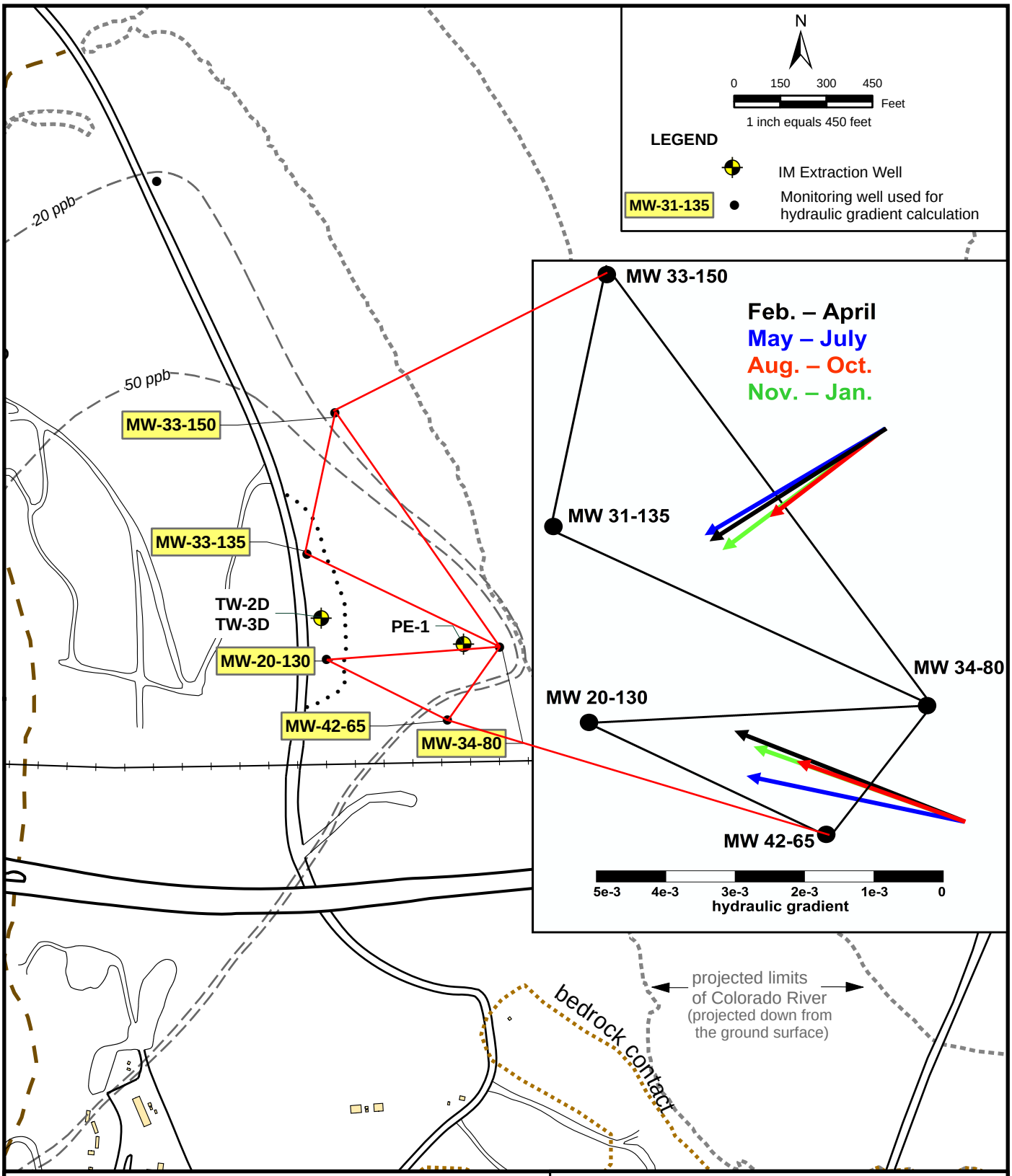

Notes:
1. Direction and magnitude of hydraulic gradient for each well triad (MW 20-130, MW 34-80, MW 42-65 and MW 31-135, MW 34-80, MW-33-150) were calculated using triangulation with linear interpretation and average head values for each quaterly reporting period.

2. Approximate limits of 20 and 50 ppb hexavalent chromium from January 2006 sampling.

3. Screened intervals in deep wells of alluvial aquifer are located approximately 80 to 90 feet below the estimated bottom of the river

FIGURE 4-6
MAGNITUDE AND DIRECTION OF HYDRAULIC GRADIENTS IN LOWER DEPTH INTERVAL DURING ANNUAL PERIOD

2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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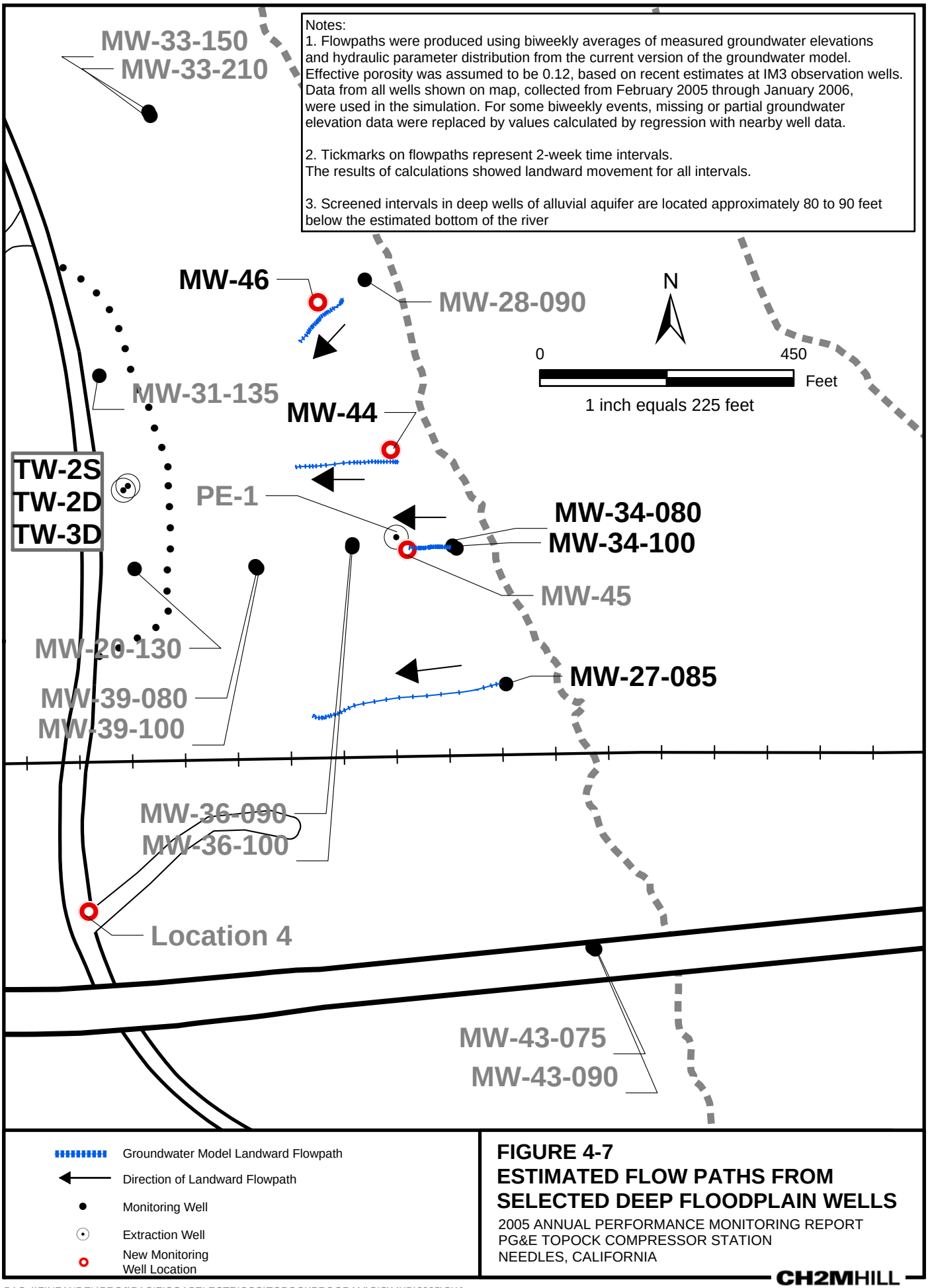

FIGURE 4-7
ESTIMATED FLOW PATHS FROM SELECTED DEEP FLOODPLAIN WELLS

2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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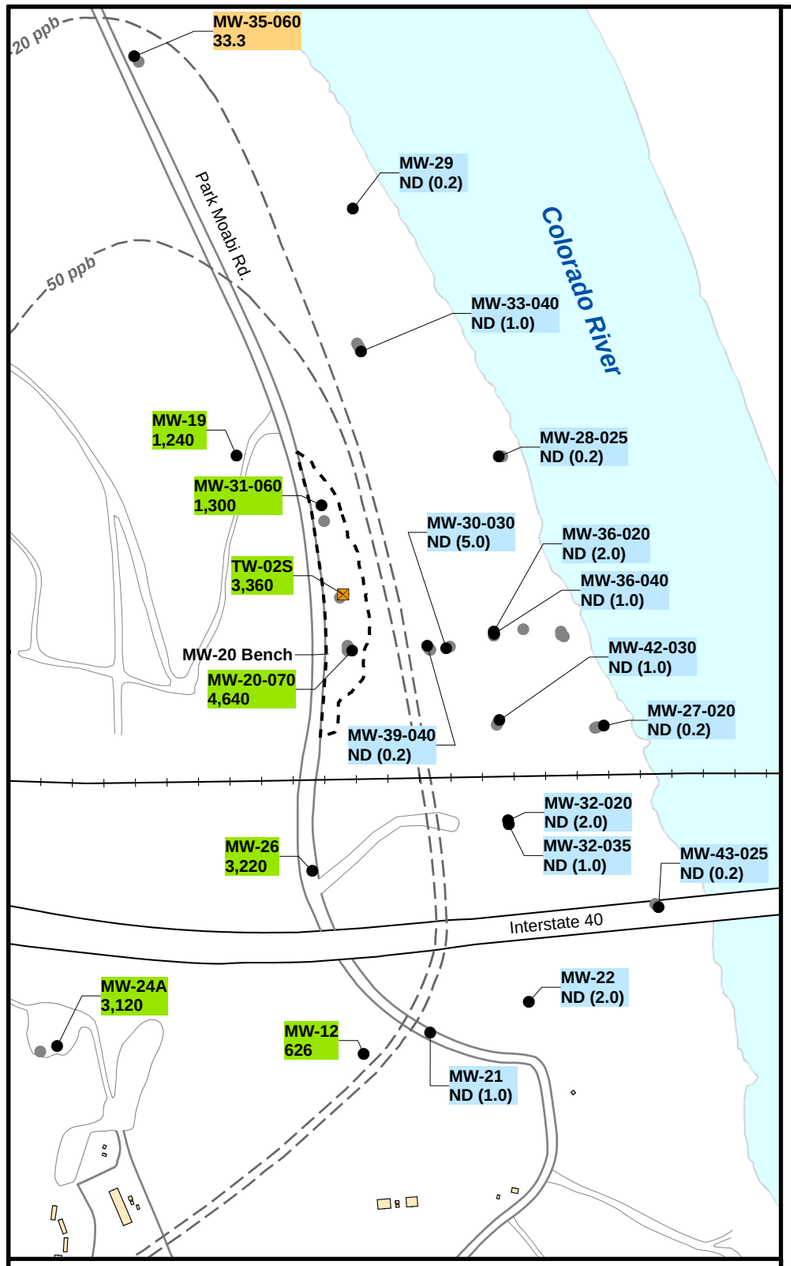
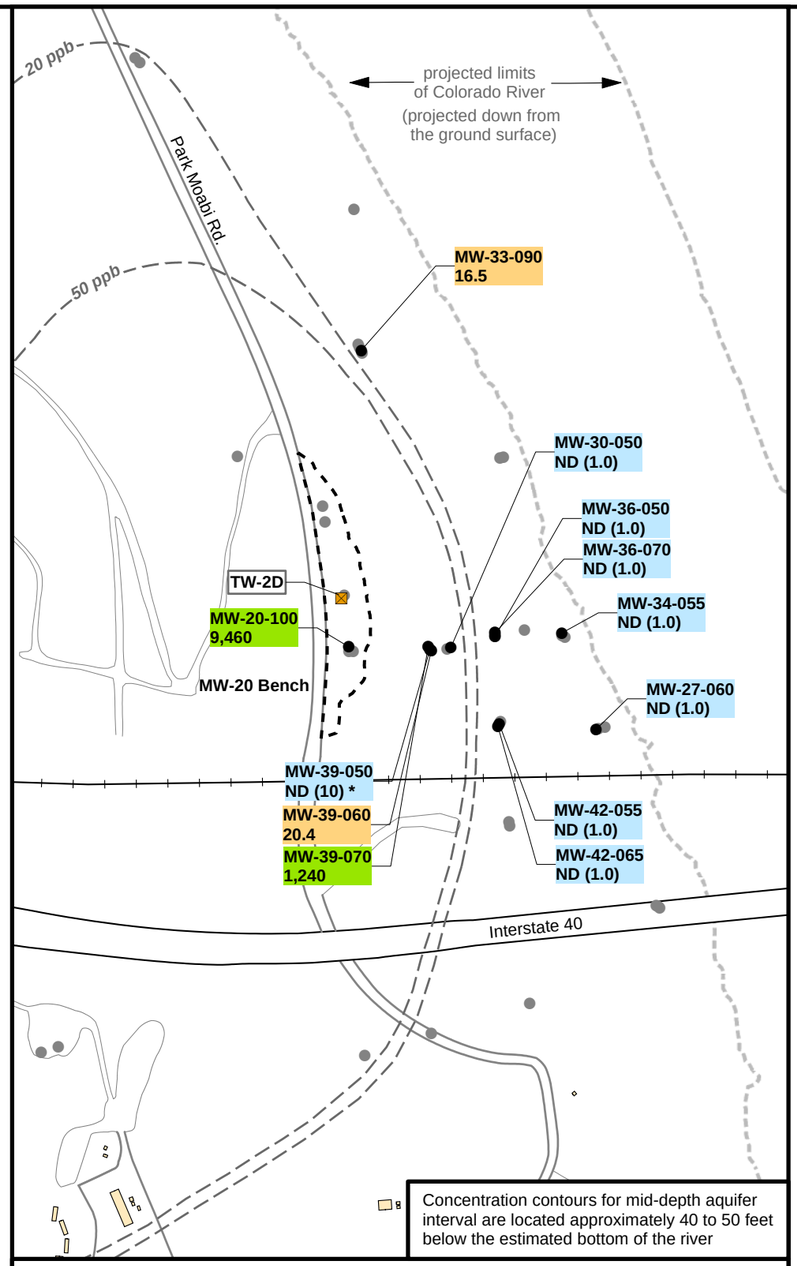
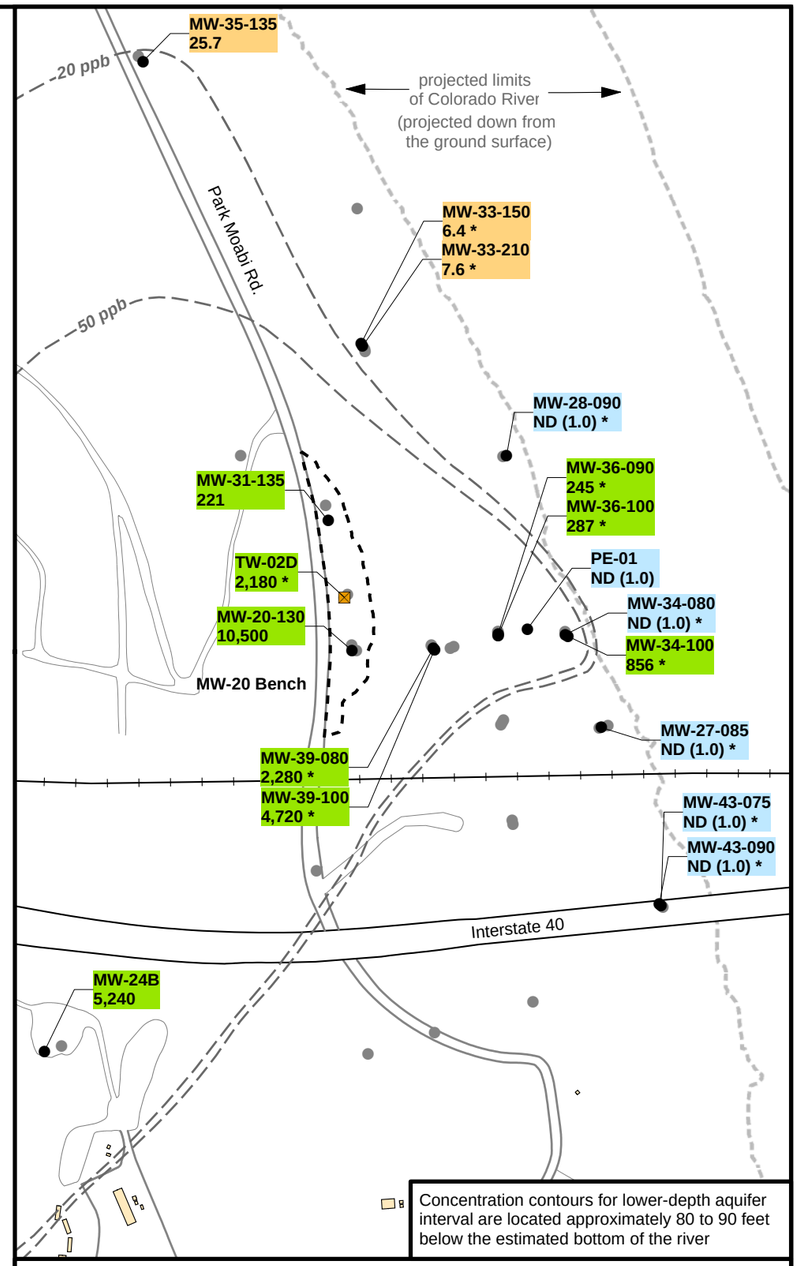


Shallow Wells (Upper Depth Interval)



Intermediate Wells (Middle Depth Interval)



Deep Wells (Lower Depth Interval)

ND (1) Not detected at listed reporting limit (ppb)

41 Less than 50 ppb

3,810 Greater than 50 ppb

— · 50 — · Inferred Cr(VI) concentration contour

Notes:
All results marked * are from the January 2006 monthly sampling event. All other results are from October or December 2005 sampling events.

See Tables B-1 and B-2 for data and dates of sampling.

Hexavalent Chromium Concentrations in Groundwater
January 2006 Sampling Event

Concentrations in micrograms per liter (µg/L)
equivalent to parts per billon (ppb)
ND = not detected at listed reporting limit.

N

0 400 800 Feet

1 inch equals 400 feet

FIGURE 5-1
CR(VI) CONCENTRATIONS IN ALLUVIAL AQUIFER, JANUARY 2006

2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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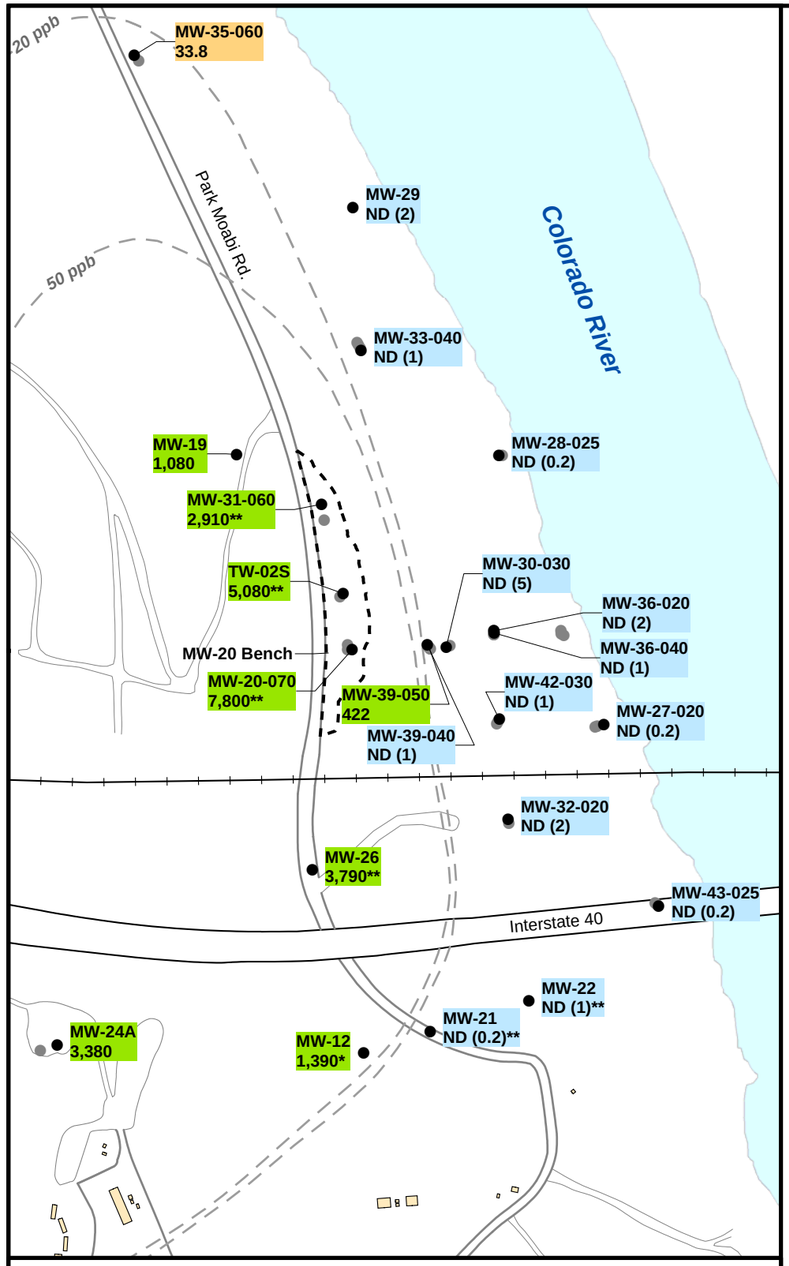
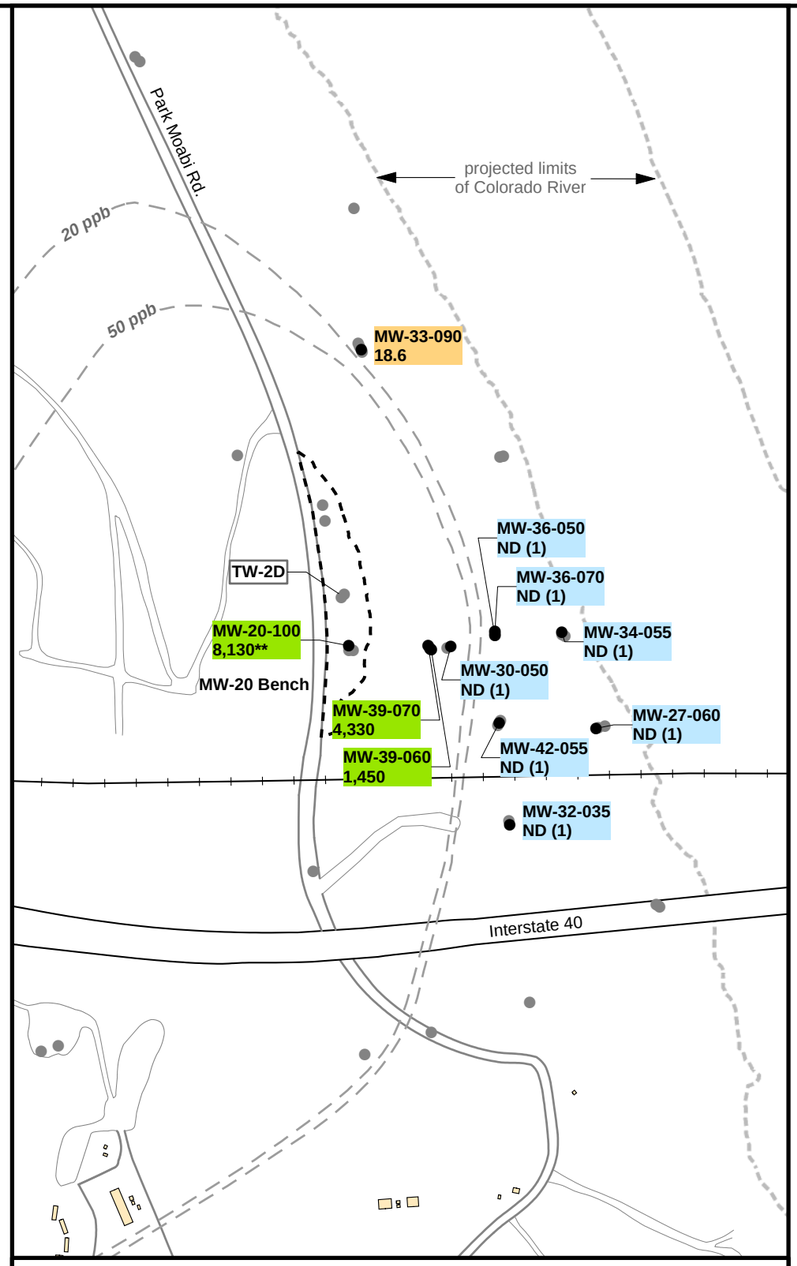
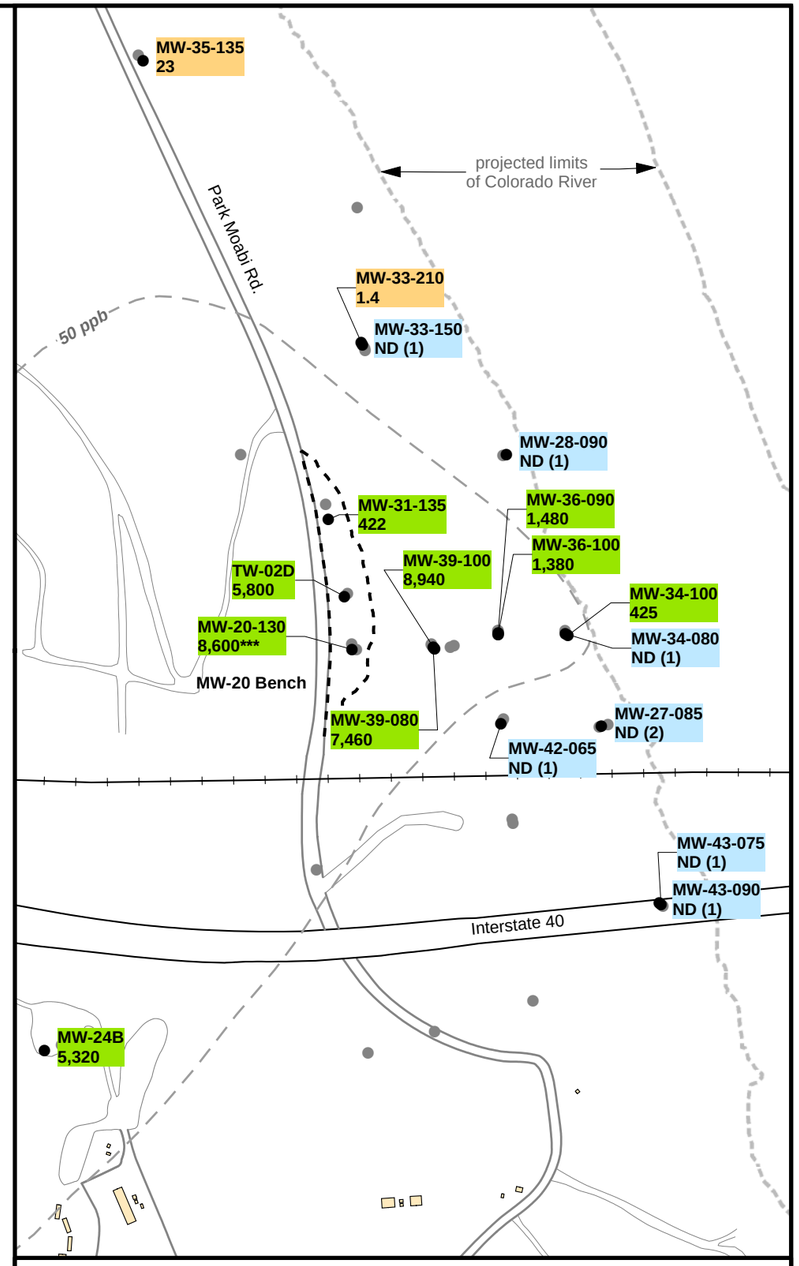


UPPER ZONE ALLUVIAL AQUIFER



MIDDLE ZONE ALLUVIAL AQUIFER



LOWER ZONE ALLUVIAL AQUIFER

ND (1) Not detected at listed reporting limit (ppb)

41 Less than 50 ppb

3,810 Greater than 50 ppb

Notes:
Results listed are from March 2005 sampling events.
Results marked * are from September 2004 sampling events.
Results marked ** are from December 2004 sampling events.
Results marked *** are from January 2005 sampling events.

Hexavalent Chromium Concentrations in Groundwater
March 2005 Sampling Events

Concentrations in micrograms per liter (µg/L)
equivalent to parts per billon (ppb)
ND = not detected at listed reporting limit.

N

0 400 800 Feet

1 inch equals 400 feet

FIGURE 5-2
HEXAVALENT CHROMIUM CONCENTRATIONS IN ALLUVIAL AQUIFER, MARCH 2005
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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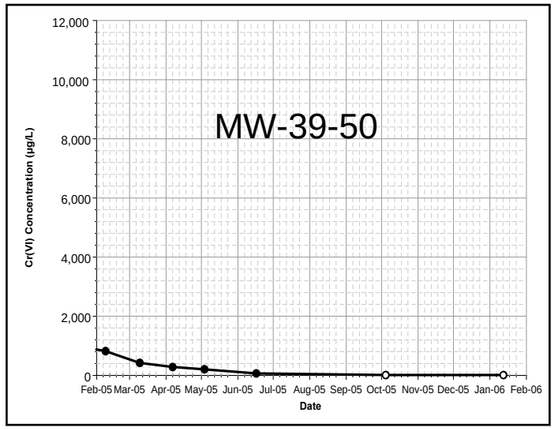

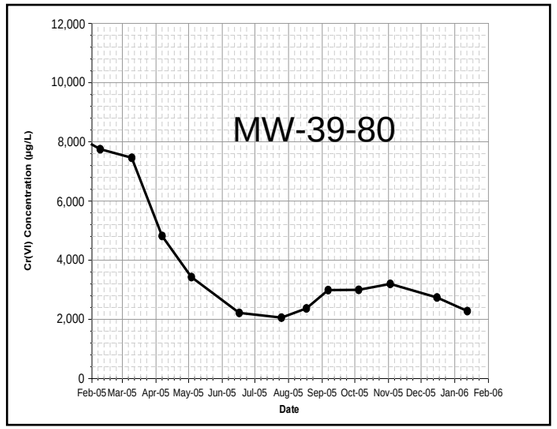

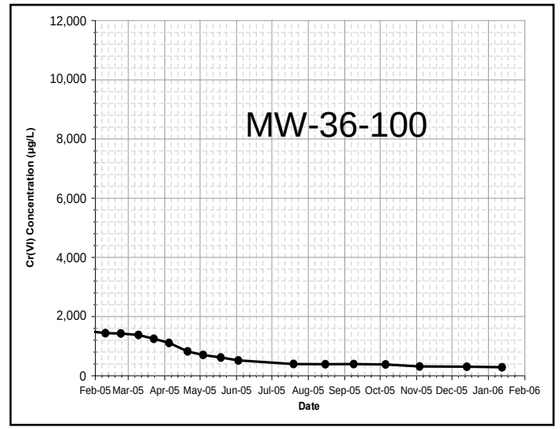

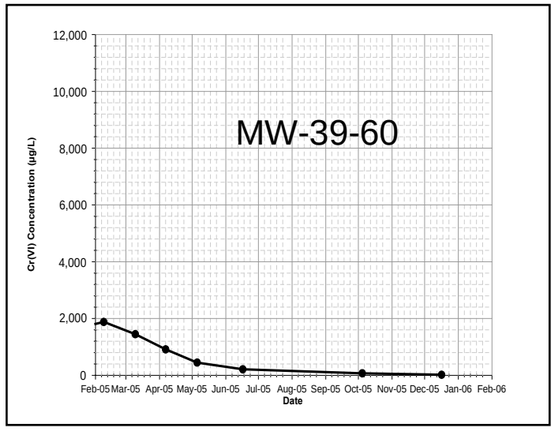

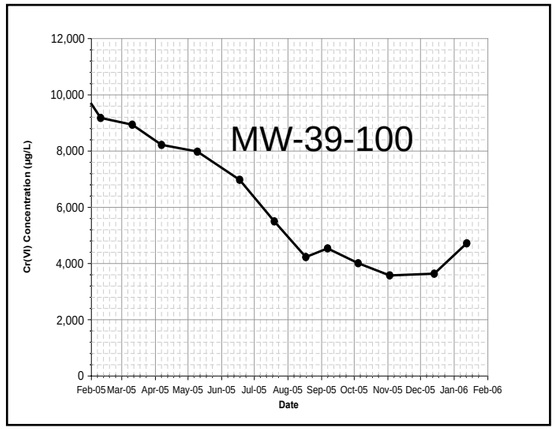

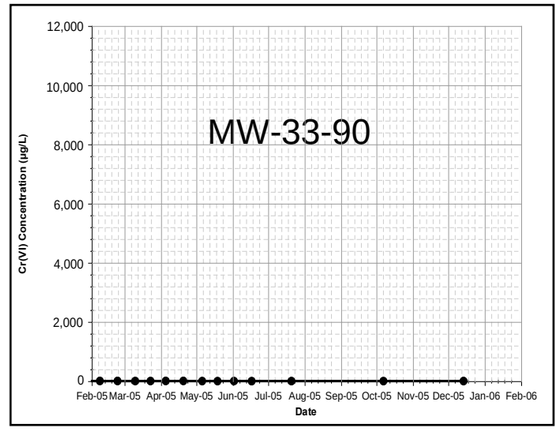

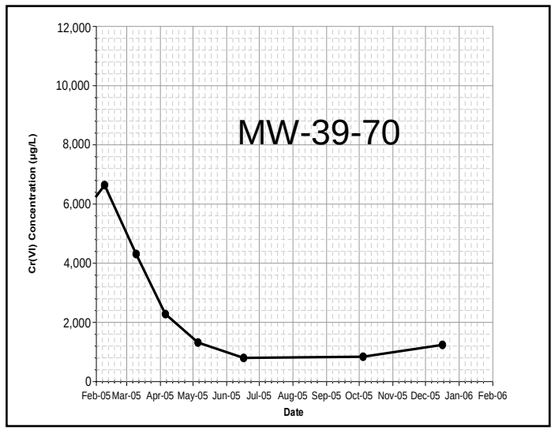

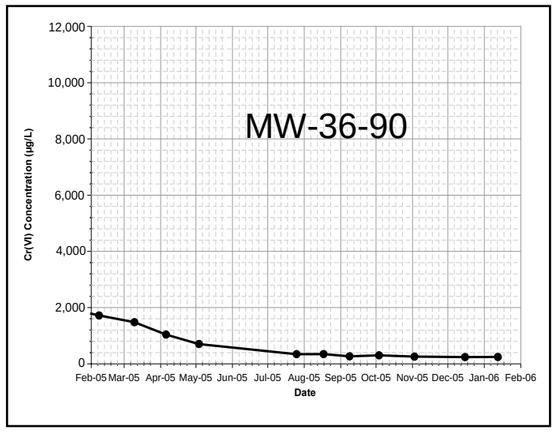

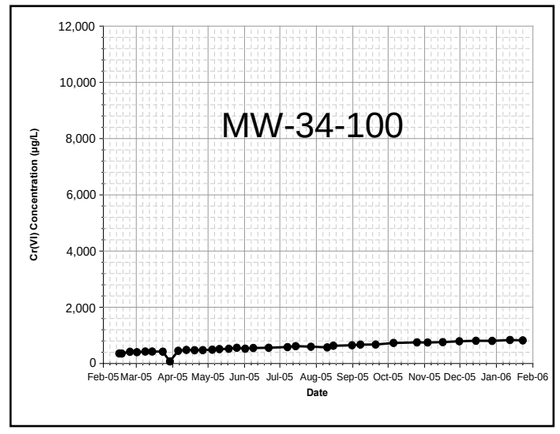

FIGURE 5-3
CR(VI) CONCENTRATION TRENDS IN PERFORMANCE MONITORING FLOODPLAIN WELLS
2005 ANNUAL PERFORMANCE EVALUATION REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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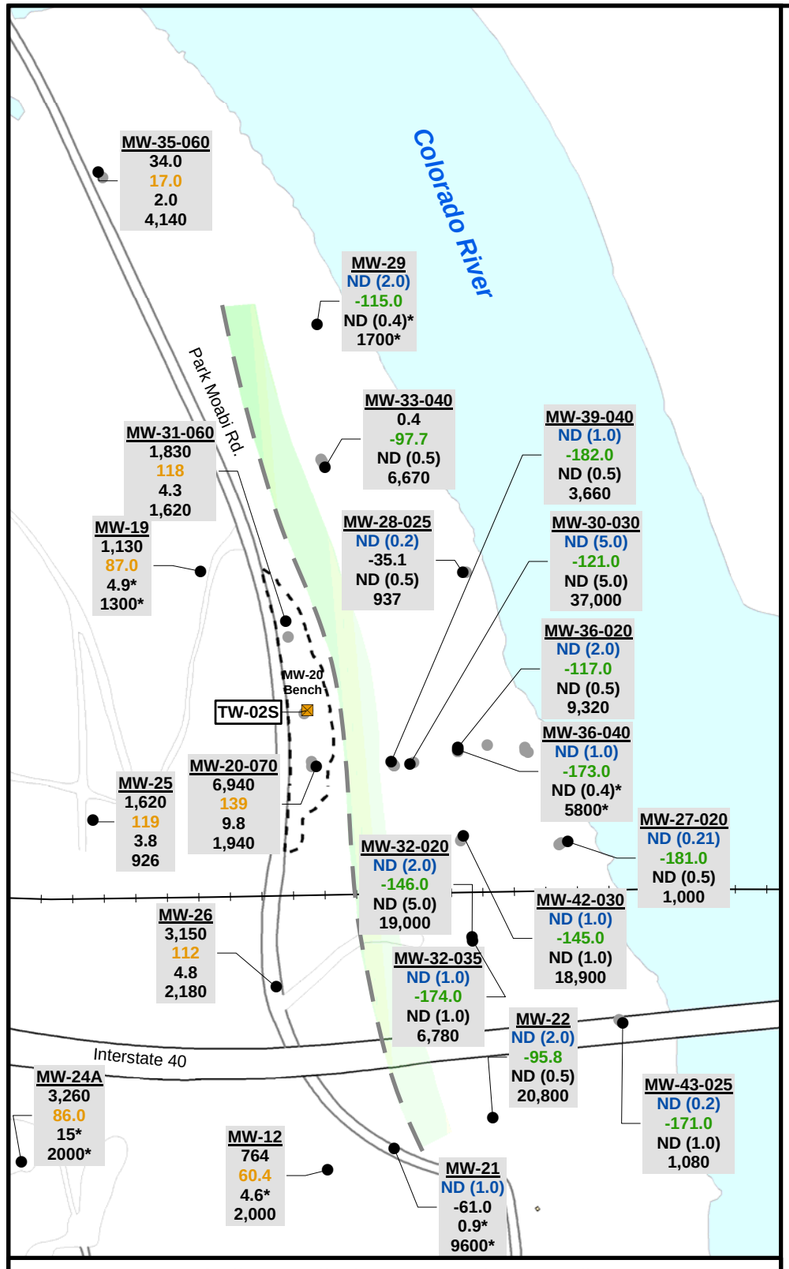
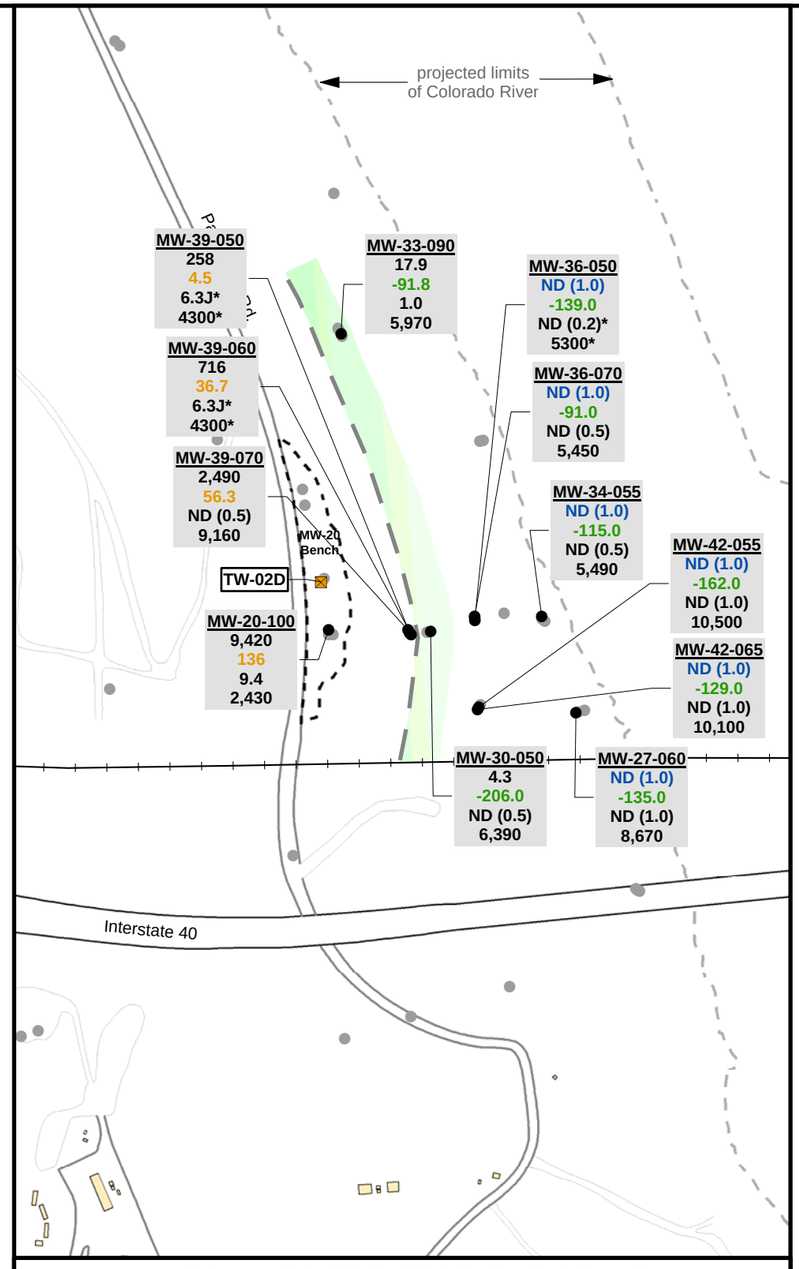
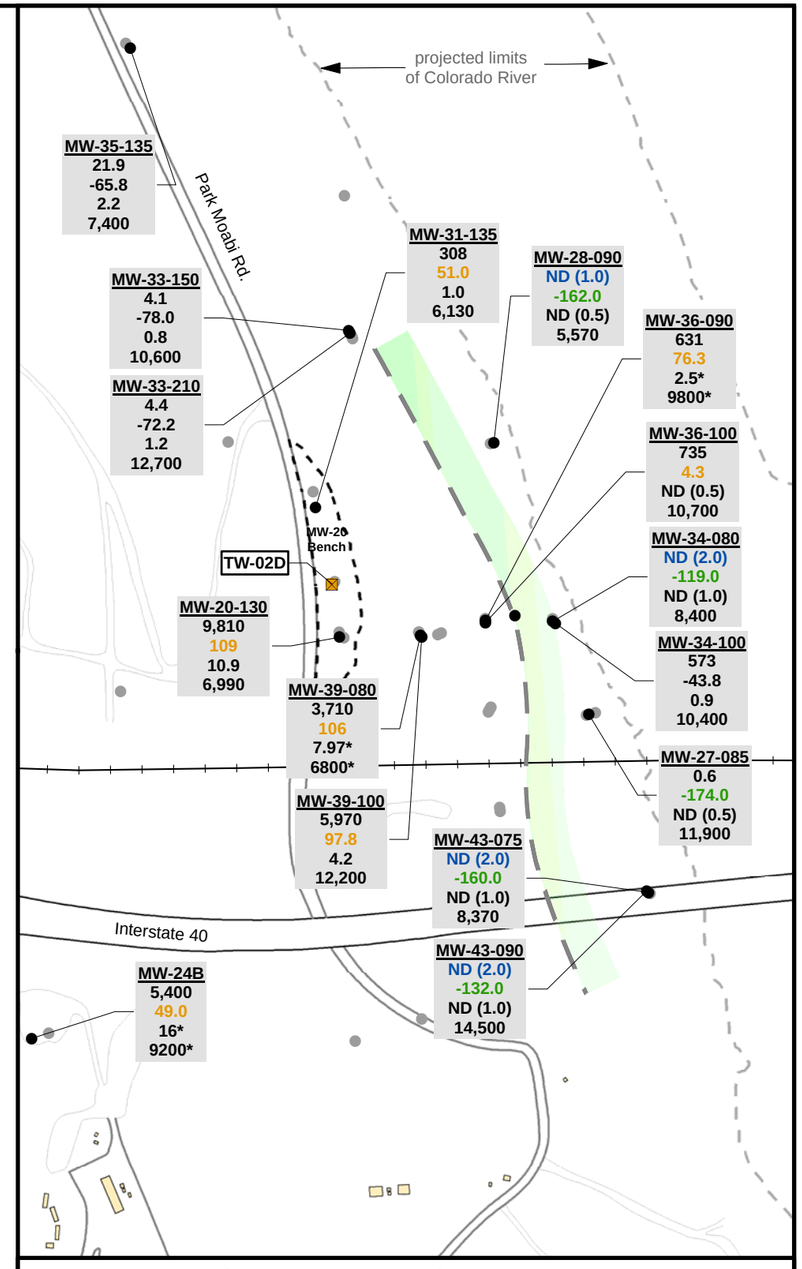


Shallow Wells (Upper Depth Interval)



Intermediate Wells (Middle Depth Interval)



Deep Wells (Lower Depth Interval)

LEGEND

- ⊠ Extraction Well
- ● Monitoring Well

Notes:
ND = not detected at listed reporting limit

* Results are from pre-February 2005 sampling. MW-28-25, and MW-34-100 not included in delineating limits of reducing groundwater.

MW-22
ND (0.01)
-104
ND (4)
16,950

Average Groundwater Results From February 2005 - January 2006 Sampling
Hexavalent chromium, micrograms per liter (µg/L)
Oxidation reduction potential, millivolts (mV)
Nitrate as N, milligrams per Liter (mg/L)
Total dissolved solids, (mg/L)
ORP values less than -90mV highlighted green. Positive ORP values highlighted gold.

Approximate limit of reducing groundwater (ORP less than -90mV)

N

0 400 800 Feet

1 inch equals 400 feet

FIGURE 5-4
DISTRIBUTION OF CR(VI) AND GEOCHEMICAL INDICATOR PARAMETERS IN FLOODPLAIN, FEBRUARY 2005 - JANUARY 2006
2005 ANNUAL PERFORMANCE REPORT MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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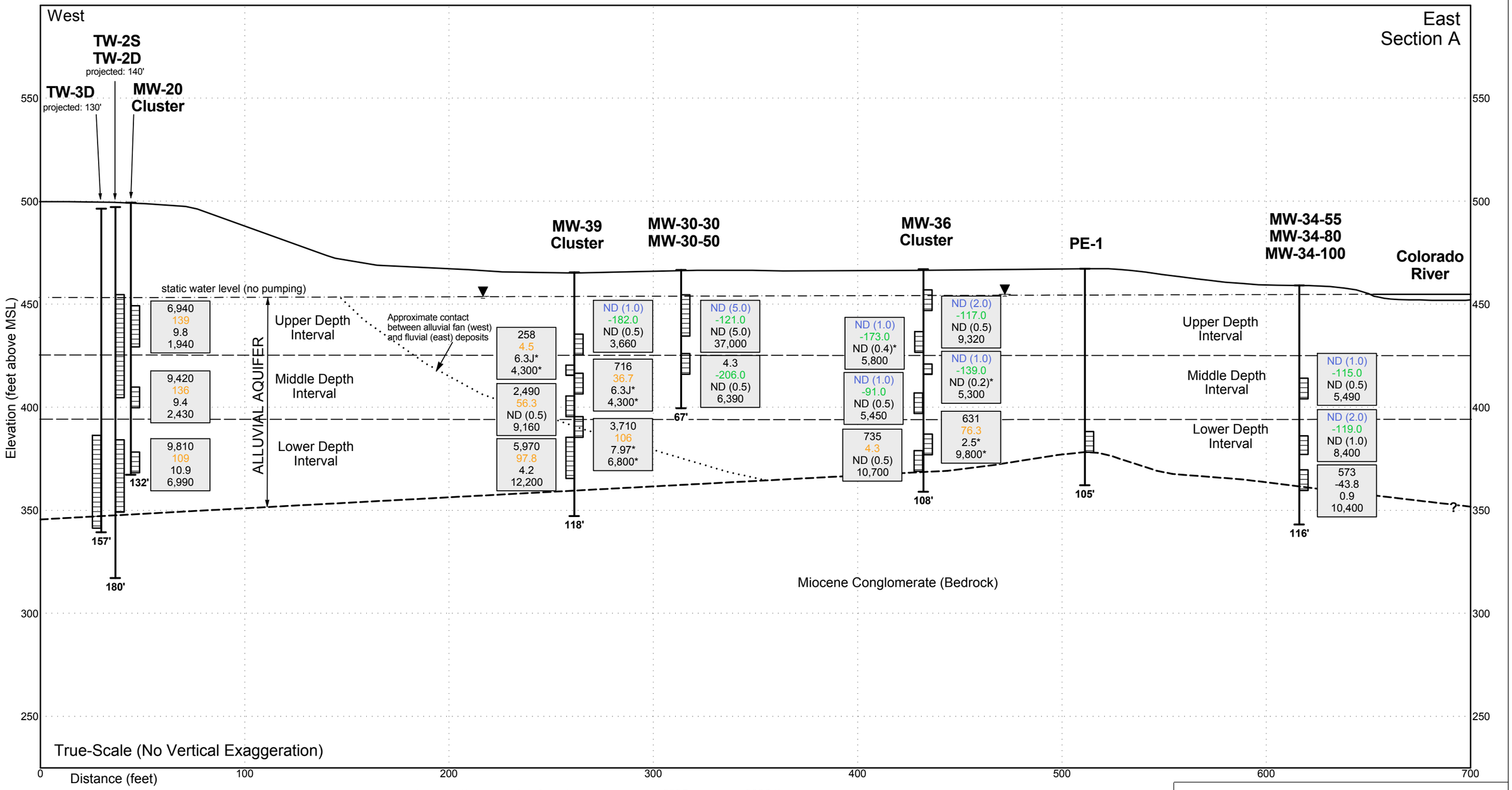
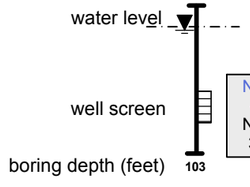


Average Groundwater Results From February 2005 - January 2006 Sampling



Hexavalent chromium, micrograms per liter (ug/L)
Oxidation reduction potential, millivolts (mV)
Nitrate as N, milligrams per liter (mg/L)
Total dissolved solids (mg/L)

ORP values less than -90mV highlighted green.
Positive ORP values highlighted gold.

Note: Results plotted are averages from the maximum primary or duplicate sample for monitoring events during the reporting period;
Results marked * are from pre-February 2005 sampling;
ND = not detected at listed reporting limit;
see Tables B-1 and B-2 for complete results

FIGURE 5-5
DISTRIBUTION OF CR(VI) AND AVERAGE GEOCHEMICAL INDICATOR PARAMETERS FLOODPLAIN CROSS-SECTION A ANNUAL REPORTING PERIOD

2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

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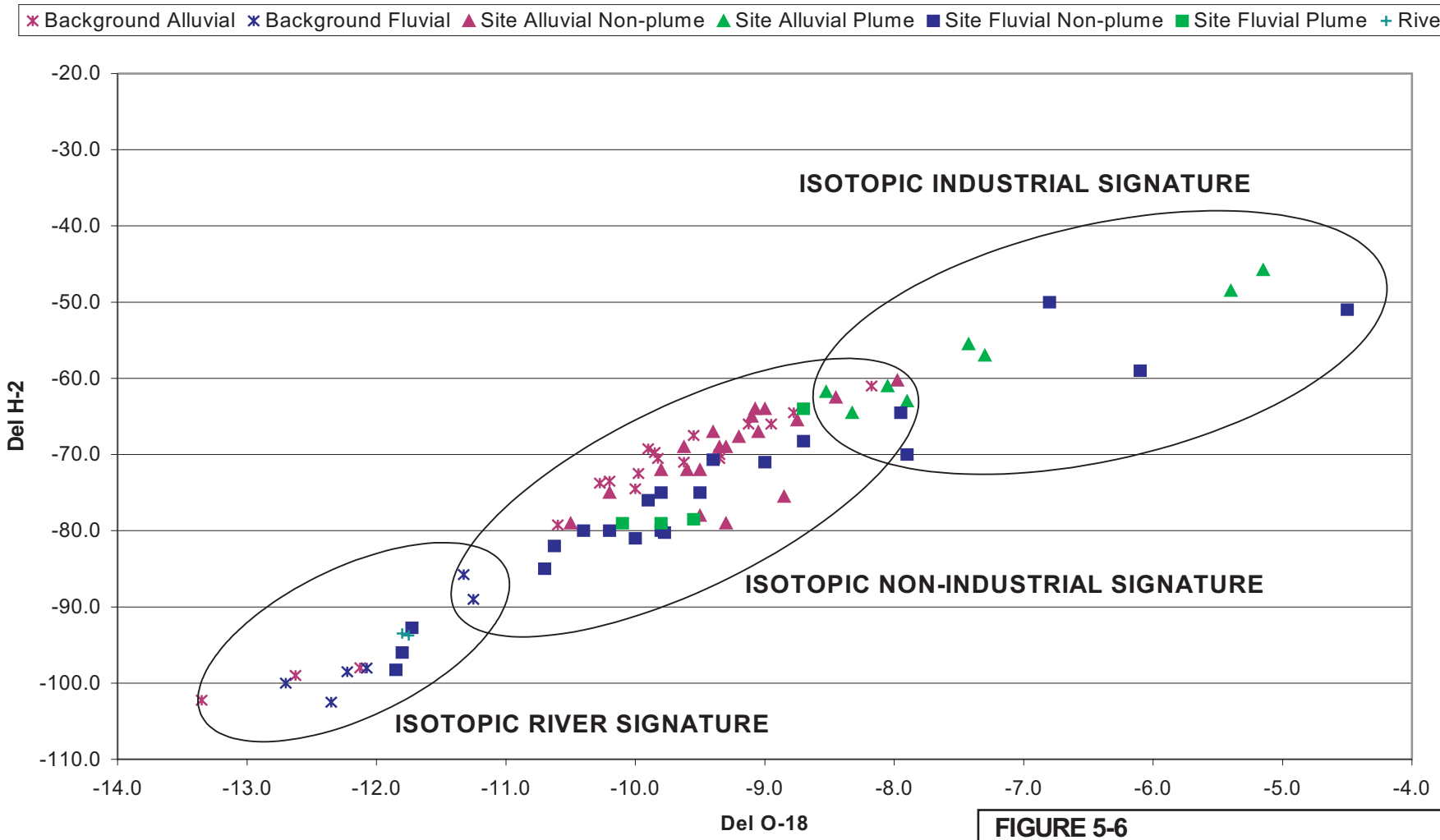

FIGURE 5-6
AVERAGE STABLE ISOTOPES OF OXYGEN AND DEUTERIUM FEBRUARY 2005 THROUGH JANUARY 2006
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG & E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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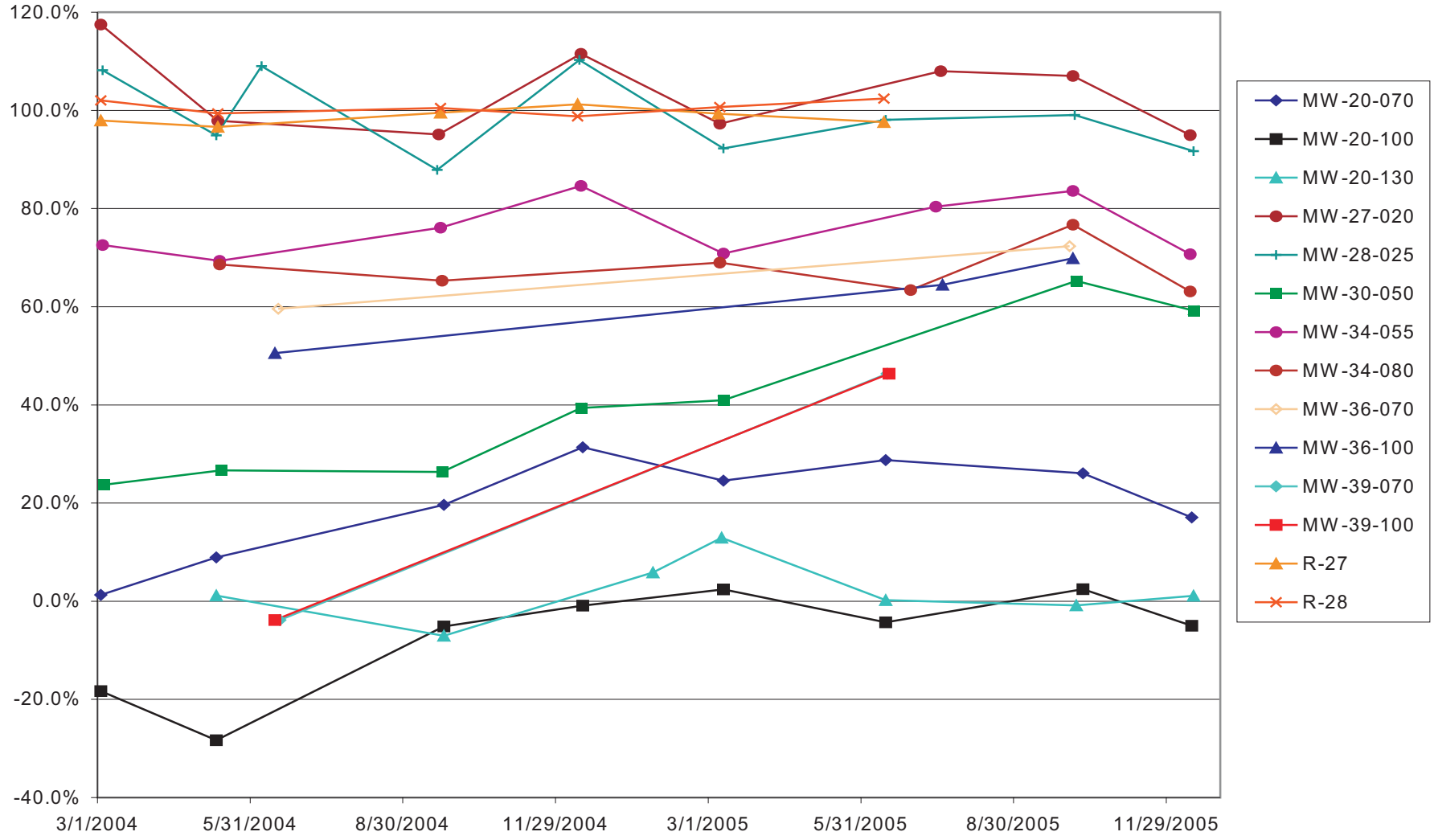

FIGURE 5-7
CALCULATED PERCENTAGE OF RIVER WATER IN SELECT FLOODPLAIN WELLS FROM STABLE ISOTOPES
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG & E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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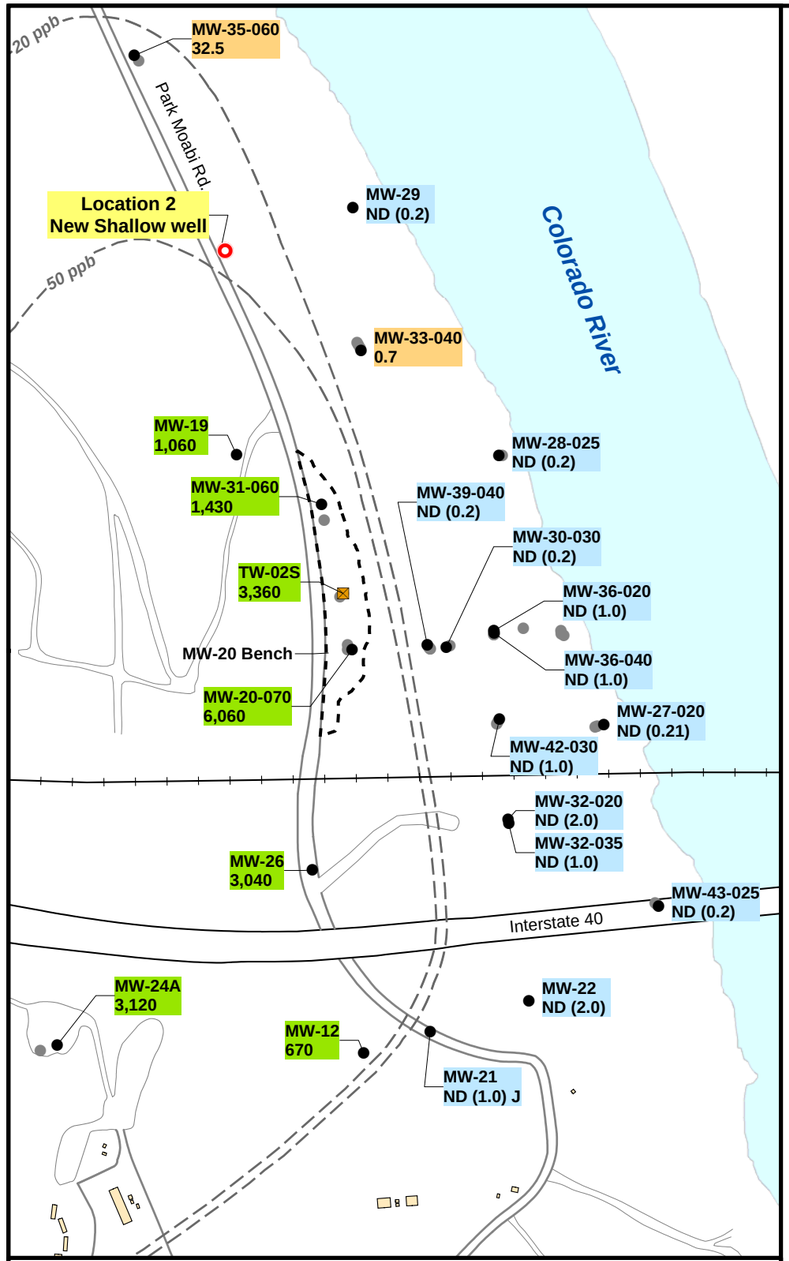
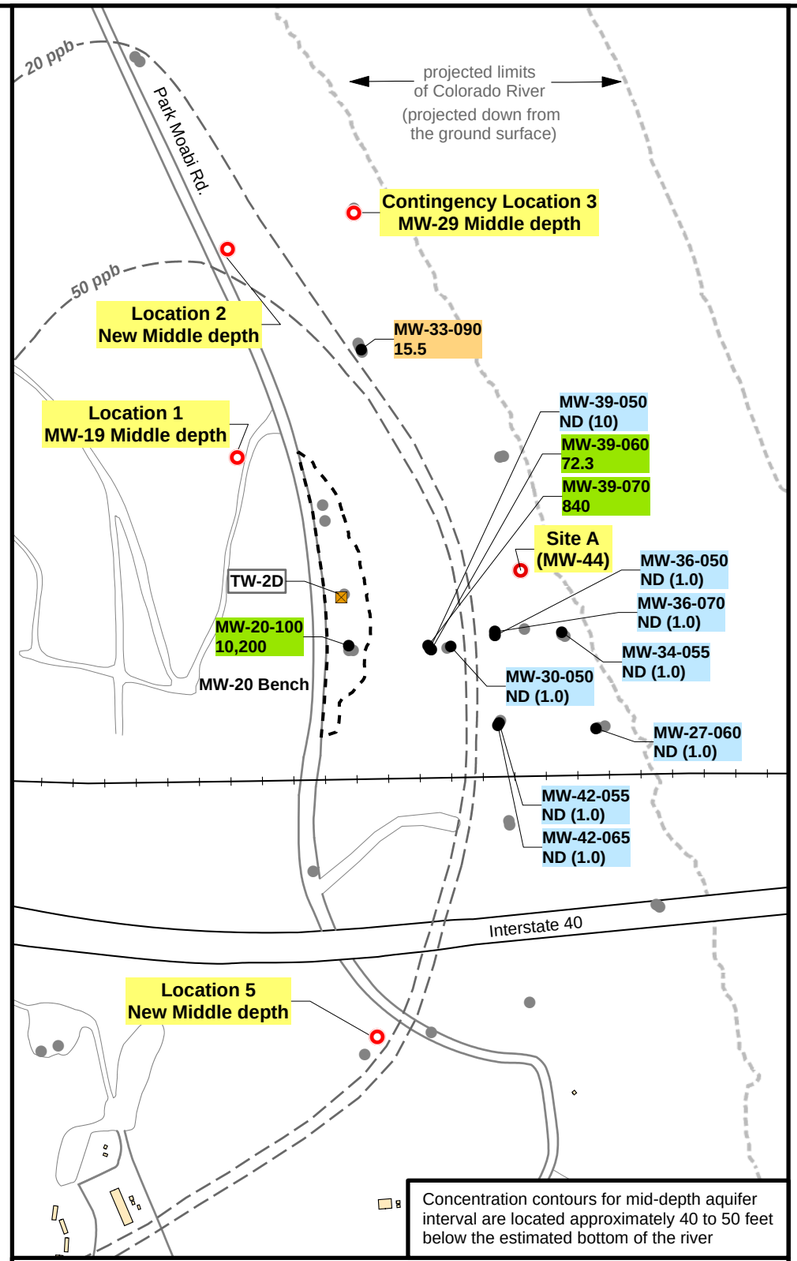
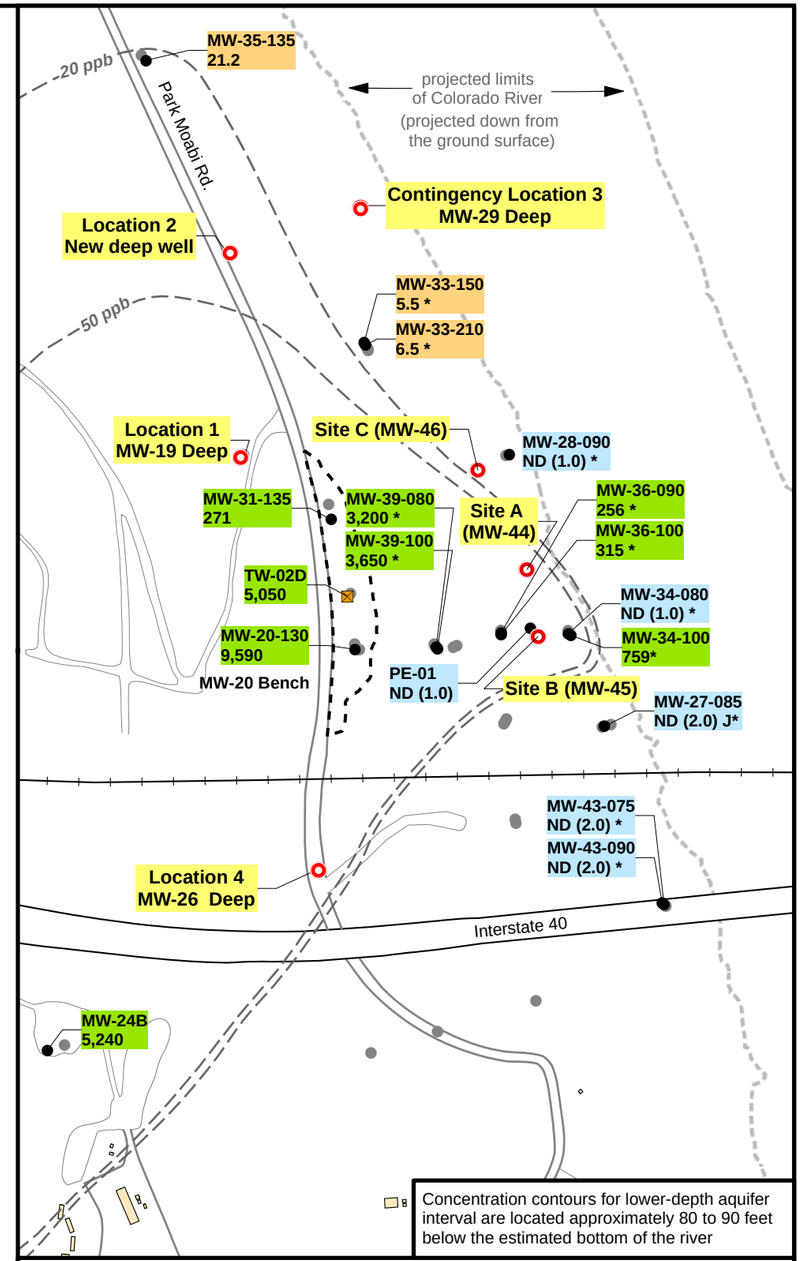


Shallow Wells (Upper Depth Interval)



Intermediate Wells (Middle Depth Interval)



Deep Wells (Lower Depth Interval)

MW-46 — Approved new drilling location

ND (1) — Not detected at listed reporting limit (ppb)

41 — Less than 50 ppb

3,810 — Greater than 50 ppb

— · 50 — · Inferred Cr(VI) concentration contour

Notes:
Results marked * are from the November 2005 sampling event. MW-34-100 data from 11/16/05. All other results are from the October 2005 quarterly sampling event.

Results plotted are from primary samples for monitoring event.

Hexavalent Chromium Concentrations in Groundwater November 2005 Sampling Event

Concentrations in micrograms per liter (µg/L) equivalent to parts per billon (ppb)
ND = not detected at listed reporting limit.

N

0 400 800 Feet

1 inch equals 400 feet

FIGURE 6-1
APPROVED NEW DRILLING LOCATIONS

2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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Appendix A
Summary Information for IM Extraction Operations for Annual Reporting Period

TABLE A-1
Summary of IM Extraction System Modifications and Maintenance - February 2005 to January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

Reporting Period	Extraction System Modifications	Completion Date	Extraction System Maintenance Activities
February-05	DTSC letter to install new extraction well in Colorado River Floodplain	2/16/2005	No extraction well maintenance during month
	Issued Extraction Well Installation Work Plan for PE-1 to DTSC	3/15/2005	
March-05	Completed exploratory borings and installed extraction well PE-1 (floodplain location)	3/2/2005	No extraction well maintenance during month
	Production testing of PE-1	3/5/2005	
April-05	Issued Groundwater Extraction Well PE-1 Installation Report	4/29/2005	No extraction well maintenance during month
May-05	None	---	No extraction well maintenance during month
June-05	None	6/22/2005	Installed New Pumps in TW-2D and TW-3D with capacity to convey water to IM-3
		6/23/2005 - 6/24/2005	Replaced failed pump motor in TW-2D (installed 6/22/2005)
July-05	Begin IM-3 start-up and commissioning	7/17/2005	General adjustments to extraction well system conveyance piping, instrumentation and controls through during start-up and commissioning
	Issued Design Plan for Conveyance Piping and Power Supply for PE-1	7/29/2005	
August-05	None	---	General adjustments to extraction well system conveyance piping, instrumentation and controls through during start-up and commissioning
September-05	DTSC letter to install new extraction well in Colorado River Floodplain	9/16/2005	No extraction well maintenance during month
	Schedule for TW-3D installation submitted to DTSC	9/29/2005	

TABLE A-1
Summary of IM Extraction System Modifications and Maintenance - February 2005 to January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

Reporting Period	Extraction System Modifications	Completion Date	Extraction System Maintenance Activities
October-05	Final Design for Conveyance Piping and Power Supply for PE-1 conditionally approved by DTSC	10/5/2005	Replaced failed pump motor in TW-2D (installed 6/22/2005)
	Issue Extraction Well TW-3D Work Plan to DTSC	10/7/2005	
	Issued Design Plan for Conveyance Piping and Power Supply for TW-3D to DTSC	10/11/2005	
		10/10/2005 & 10/11/2005	Replaced failed pump motor in TW-2D. Operated TW-2S while TW-2D was offline.
	BLM approved design plans for the TW-3D extraction well installation and conveyance piping and power supply	10/13/2005	
	DTSC conditionally approved design plans for the TW-3D extraction well installation and conveyance piping and power supply	10/17/2005	
	Begin TW-3D well installation and pipeline construction		
	Final Design for Conveyance Piping and Power Supply for TW-3D approved by BLM	10/13/2005	
November-05	Ongoing TW-3D construction	---	No extraction well maintenance during month
	Production testing of TW-3D	11/5/2005 & 11/17/2005	
December-05	Final Design Plan for Conveyance Piping and Power Supply for PE-1 approved by BLM	12/9/2005	No extraction well maintenance during month
	Begin PE-1 installation and construction	12/12/2005	
	Complete TW-3D construction	12/19/2005	
	Begin full-time operation of TW-3D	12/20/2005	
	Issue TW-3D well installation report	12/29/2005	
January-06	PE-1 construction and commissioning complete	1/25/2006	No extraction well maintenance during month
	Begin full-time operation of PE-1	1/26/2006	

General Notes

(1) Extracted groundwater was treated to non-hazardous levels at the IM-2 facility from February 2005 through July 16, 2005. Start-up of the IM-3 facility occurred on July 17, 2005. See Table 3-1 for a detailed chronology of pumping operations during the annual evaluation period.

(2) Periods of Extraction well downtime are not provided is this chronology. See monthly monitoring reports for downtime periods.

Appendix B
Chromium Sampling Results for Monitoring Wells in Annual Reporting Period

TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, February 2005 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters			Groundwater and River Elevations at Sampling Time	
				ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Shallow Wells								
MW-27-020	09-Feb-05	ND (0.2)	ND (1.0)	-198	0.1	3,500	453.0	452.8
	08-Mar-05	ND (0.2)	ND (1.0)	-178	0.0	2,180	451.9	451.3
	04-Apr-05	ND (0.2)	ND (1.0)	-194	0.0	2,580	454.7	453.6
	04-May-05	ND (0.2)	ND (1.0)	-176	0.4	1,280	456.1	455.7
	18-Jul-05	ND (0.2)	ND (1.0) FF	-190	1.1	1,040	456.4	456.3
	05-Oct-05	ND (0.21)	ND (1.0) FF	-158	1.8	1,170	454.7	454.4
	14-Dec-05	ND (0.2)	ND (1.0) FF	-171	2.2	1,120	453.2	452.5
MW-28-025	08-Feb-05	ND (0.2)	ND (1.0)	---	---	---	---	452.7
	10-Mar-05	ND (0.2)	ND (1.0)	60	5.6	1,400	451.9	451.8
	04-Apr-05	ND (0.2)	ND (1.0)	-108	0.1	1,590	454.9	454.2
	03-May-05	ND (0.2)	ND (1.0)	-59	0.4	1,280	456.4	456.2
	15-Jun-05	ND (0.2)	ND (1.0)	-54	2.7	1,460	456.2	455.8
	13-Jul-05	ND (0.2)	ND (1.0) FF	19	4.9	1,690	456.6	456.4
	06-Oct-05	ND (0.2)	ND (1.0) FF	-35	2.0	1,300	454.9	454.6
	16-Dec-05	ND (0.2)	ND (1.0) FF	-69	2.5	1,390	453.3	453.1
MW-29	07-Feb-05	ND (1.0)	3.00	-150	0.5	20,100	453.3	452.7
	09-Mar-05	ND (2.0)	ND (1.0)	-127	1.7	32,900	452.8	450.5
	06-Apr-05	ND (1.0)	ND (1.0)	-128	2.0	22,700	454.5	455.4
	05-May-05	ND (0.2)	ND (1.0)	-142	0.1	4,840	455.9	456.1
	15-Jun-05	ND (0.2)	ND (1.0)	-108	3.1	6,580	456.1	456.0
	04-Oct-05	ND (0.2)	ND (1.0) FF	-110	3.2	5,240	455.1	452.9
	12-Dec-05	ND (0.2)	ND (1.0) FF	-40	5.5	4,280	454.0	453.1
MW-30-030	09-Feb-05	ND (5.0)	ND (1.0)	-121	0.2	59,700	453.1	452.4
	10-Mar-05	ND (5.0)	ND (1.0)	-84	4.1	65,900	452.7	451.7
	06-Apr-05	ND (2.0)	ND (1.0)	-143	0.3	38,000	454.4	455.1
	09-May-05	ND (2.0)	ND (1.0)	-131	0.3	47,700	455.4	455.2
	07-Oct-05	ND (0.2)	ND (1.0) FF	-146	2.5	45,000	453.7	454.2
	15-Dec-05	ND (5.0)	ND (1.0) FF	-100	3.0	38,900	453.6	452.2
MW-32-020	07-Feb-05	ND (1.0)	ND (1.0)	-155	0.0	25,900	453.0	452.5
	09-Mar-05	ND (2.0)	ND (1.0)	-161	0.0	29,900	452.3	450.4
	04-Apr-05	ND (1.0)	ND (1.0)	-178	0.0	26,000	453.9	453.7
	09-May-05	ND (1.0)	ND (1.0)	-121	0.2	20,600	455.4	454.9
	17-Jun-05	ND (1.0)	ND (1.0)	-188	2.4	15,500	455.6	455.2
	04-Oct-05	ND (2.0)	ND (1.0) JFF	-115	2.3	36,000	454.4	452.9
	16-Dec-05	ND (2.0)	ND (1.0) FF	-107	2.7	33,900	453.3	452.7
MW-32-035	07-Feb-05	ND (1.0)	ND (1.0)	-175	0.5	10,000	452.9	452.5
	09-Mar-05	ND (1.0)	ND (1.0)	-183	0.1	12,400	451.6	450.4
	04-Apr-05	ND (1.0)	ND (1.0)	-197	0.1	9,800	454.2	453.7
	09-May-05	ND (1.0)	ND (1.0)	-164	0.2	13,600	455.5	455.0
	17-Jun-05	ND (1.0)	ND (1.0)	-202	2.3	12,800	455.7	455.3
	04-Oct-05	ND (1.0)	ND (1.0) FF	-159	2.1	11,600	454.4	452.9
	16-Dec-05	ND (1.0)	ND (1.0) FF	-141	2.4	11,200	453.1	452.7
MW-33-040	07-Feb-05	ND (1.0)	ND (1.0)	-162	0.6	7,540	453.3	452.6

Refer to table footnotes for data qualifier explanation.

TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, February 2005 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters			Groundwater and River Elevations at Sampling Time	
				ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Shallow Wells								
MW-33-040	09-Mar-05	ND (1.0)	ND (1.0)	-125	3.3	7,050	451.9	450.5
	04-Apr-05	ND (0.2)	ND (1.0)	-160	0.7	9,900	454.4	453.9
	05-May-05	ND (0.2)	ND (1.0)	-90	0.6	5,760	455.8	455.6
	17-Jun-05	ND (0.2)	ND (1.0)	-94	5.4	5,460	456.0	456.0
	07-Oct-05	0.68	ND (1.0) FF	---	---	---	454.9	454.1
	12-Dec-05	ND (1.0)	1.70 FF	45	4.8	14,500	453.6	452.7
MW-36-020	07-Feb-05	ND (1.0)	1.40	-62	6.2	31,400	452.9	452.6
	09-Mar-05	ND (2.0)	ND (1.0)	-88	7.6	22,600	451.3	450.6
	05-Apr-05	ND (1.0)	ND (1.0)	-92	5.3	20,000	---	453.8
	03-May-05	ND (1.0)	ND (1.0)	-180	3.5	10,200	456.0	456.2
	03-Oct-05	ND (1.0)	ND (1.0) FF	-165	3.0	13,000	454.3	M
	15-Dec-05	ND (2.0)	ND (1.0) FF	-112	2.4	---	452.7	452.3
MW-36-040	07-Feb-05	ND (1.0)	ND (1.0)	-151	6.6	11,300	452.8	452.5
	08-Mar-05	ND (1.0)	ND (1.0)	-194	5.5	9,000	451.7	451.1
	05-Apr-05	ND (1.0)	ND (1.0)	-162	5.3	11,200	---	453.9
	05-May-05	ND (1.0)	ND (1.0)	-180	2.7	10,300	455.5	455.4
	03-Oct-05	ND (1.0)	ND (1.0) FF	-162	3.8	10,800	454.6	M
	15-Dec-05	ND (1.0)	ND (1.0) FF	-190	2.7	15,400	452.7	452.5
MW-39-040	08-Feb-05	ND (0.2)	ND (1.0)	-160	5.4	7,390	452.7	452.3
	09-Mar-05	ND (1.0)	ND (1.0)	-177	5.0	8,290	451.3	450.5
	05-Apr-05	ND (1.0)	ND (1.0)	-179	5.4	6,200	---	454.3
	05-May-05	ND (0.2)	ND (1.0)	-179	1.8	6,070	455.7	456.1
	16-Jun-05	ND (0.2)	ND (1.0)	-202	2.1	9,600	456.0	455.5
	04-Oct-05	ND (0.2)	ND (1.0) FF	-203	2.9	5,640	454.5	452.9
	16-Dec-05	ND (0.2)	ND (1.0) FF	-177	2.1	5,680	452.7	453.1
MW-42-030	23-Feb-05	ND (1.0)	ND (1.0)	-175	1.5	12,600	452.4	452.5
	16-Mar-05	ND (1.0)	ND (1.0)	-136	1.2	17,800	451.8	451.6
	07-Oct-05	ND (1.0)	ND (1.0) FF	-139	2.9	16,700	454.6	454.7
	15-Dec-05	ND (1.0)	ND (1.0) FF	-129	2.4	14,500	452.6	452.3
MW-43-025	07-Mar-05	ND (0.2)	ND (1.0)	-161	6.1	1,690	451.9	451.7
	15-Mar-05	ND (0.2)	ND (1.0)	-177	4.6	1,660	451.8	451.8
	20-Jun-05	ND (0.2)	ND (1.0)	-174	1.9	1,800	456.3	455.8
	04-Oct-05	ND (0.2)	ND (1.0) FF	-159	2.0	1,220	454.6	452.9
	16-Dec-05	ND (0.2)	ND (1.0) FF	-184	2.5	1,420	453.0	452.7
Middle-Depth Wells								
MW-27-060	23-Feb-05	ND (1.0)	ND (1.0)	-151	1.3	15,200	452.7	452.5
	23-Feb-05 FD	ND (1.0)	ND (1.0)	FD	FD	FD	FD	FD
	01-Mar-05	ND (1.0)	ND (1.0) J	-143	5.1	13,400	452.8	452.5
	08-Mar-05	ND (1.0)	ND (1.0)	-144	1.1	18,000	451.9	451.4
	14-Mar-05	ND (1.0)	ND (1.0)	-158	0.8	20,300	---	451.5
	23-Mar-05	ND (1.0)	ND (1.0)	-124	1.7	12,700	454.2	454.4
	29-Mar-05	ND (1.0)	ND (1.0)	-154	0.3	16,800	454.3	454.1
	05-Apr-05	ND (1.0)	ND (1.0)	-157	0.1	16,700	454.3	453.8

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TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, February 2005 through January 2006
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	Sample Date	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters			Groundwater and River Elevations at Sampling Time	
				ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Middle-Depth Wells								
MW-27-060	12-Apr-05	ND (1.0)	ND (1.0)	-146	0.2	13,800	456.6	456.6
	19-Apr-05	ND (1.0)	ND (1.0)	---	---	---	456.3	456.1
	26-Apr-05	ND (1.0)	ND (1.0)	-111	7.0	22,100	456.6	456.1
	04-May-05	ND (1.0)	ND (1.0)	-114	0.4	14,400	456.2	455.9
	18-Jul-05	ND (1.0)	1.80 FF	-125	2.6	13,500	456.8	456.6
	05-Oct-05	ND (1.0)	ND (1.0) FF	-97	3.2	13,200	454.9	454.6
	15-Dec-05	ND (1.0)	ND (1.0) FF	-134	2.9	10,000	452.8	452.4
MW-30-050	09-Feb-05	ND (10)	1.60 J	-155	0.0	13,300	452.7	452.4
	09-Feb-05 FD	ND (1.0)	11.2 J	FD	FD	FD	FD	FD
	10-Mar-05	ND (1.0)	ND (1.0)	-230	4.7	9,000	451.7	451.6
	06-Apr-05	18.5	15.5	-252	0.5	14,000	454.8	455.2
	06-Apr-05 FD	17.1 J	13.0	FD	FD	FD	FD	FD
	09-May-05	ND (1.0)	ND (1.0)	-100	0.3	14,200	455.4	455.4
	09-May-05 FD	ND (1.0)	ND (1.0)	FD	FD	FD	FD	FD
	07-Oct-05	ND (1.0)	ND (1.0) FF	-236	2.8	12,300	454.5	454.3
	16-Dec-05	ND (1.0)	ND (1.0) FF	-263	2.5	8,840	453.1	453.0
MW-33-090	07-Feb-05	20.2	14.9	-75	0.5	9,320	453.2	452.6
	22-Feb-05	19.0	18.3	10	5.2	8,930	452.6	452.1
	09-Mar-05	18.6	18.2	-101	0.7	13,700	451.8	450.5
	22-Mar-05	18.9	19.2	-92	4.7	14,600	453.7	454.2
	04-Apr-05	21.3	17.2	-98	0.3	13,300	454.4	453.9
	19-Apr-05	20.3	17.9	---	4.0	8,830	455.5	455.1
	19-Apr-05 FD	20.0	18.2	FD	FD	FD	FD	FD
	05-May-05	17.4	16.8	-244	0.3	8,250	455.7	455.3
	18-May-05	15.5	16.3	-141	1.6	17,200	455.8	454.9
	01-Jun-05	17.8	14.0	-53	0.4	12,000	456.3	456.1
	01-Jun-05 FD	16.0	12.7	FD	FD	FD	FD	FD
	16-Jun-05	15.0	14.2	-209	2.1	9,500	455.9	455.2
	16-Jun-05 FD	15.7 J	13.4	FD	FD	FD	FD	FD
	20-Jul-05	16.1	17.3 FF	-23	0.6	8,440	456.5	456.0
	20-Jul-05 FD	16.5	17.3 FF	FD	FD	FD	FD	FD
	06-Oct-05	15.5	13.0 FF	-33	1.9	9,210	454.7	454.0
	13-Dec-05	16.4	21.8 JFF	-43	2.3	9,310	453.7	452.9
	13-Dec-05 FD	16.5	14.0 JFF	FD	FD	FD	FD	FD
MW-34-055	09-Feb-05	ND (1.0)	ND (1.0)	-112	0.0	12,600	453.0	452.6
	10-Mar-05	ND (1.0)	ND (1.0)	-191	5.1	9,000	451.7	451.4
	05-Apr-05	ND (1.0)	ND (1.0)	-110	0.7	12,400	454.1	453.8
	05-May-05	ND (1.0)	ND (1.0)	-99	0.1	8,860	455.5	455.0
	15-Jul-05	ND (1.0)	ND (1.3) FF	-77	3.6	9,180	457.1	456.9
	05-Oct-05	ND (1.0)	ND (1.0) FF	-93	1.7	8,610	454.2	453.5
	14-Dec-05	ND (1.0)	ND (1.0) FF	-124	2.1	6,610	453.2	452.7
MW-36-050	07-Feb-05	ND (1.0)	ND (1.0)	-131	5.6	11,000	452.8	452.5
	08-Mar-05	ND (1.0)	ND (1.0)	-168	5.5	8,800	451.7	451.1
	05-Apr-05	ND (1.0)	ND (1.0)	-129	5.6	9,320	---	453.9

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TABLE B-1
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	Sample Date	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters			Groundwater and River Elevations at Sampling Time	
				ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Middle-Depth Wells								
MW-36-050	05-May-05	ND (1.0)	ND (1.0)	-137	2.1	9,330	455.5	455.2
	03-Oct-05	ND (1.0)	ND (1.0) FF	-133	2.9	7,500	454.6	M
	15-Dec-05	ND (1.0)	ND (1.0) FF	-136	2.8	13,700	452.6	452.5
MW-36-070	07-Feb-05	ND (0.21)	1.20	-60	7.2	18,500	453.0	452.7
	08-Mar-05	ND (1.0)	ND (1.0)	-115	5.2	11,300	451.7	451.2
	05-Apr-05	ND (1.0)	ND (1.0)	-48	5.6	9,990	---	453.8
	03-May-05	ND (1.0)	ND (1.0)	-103	0.0	12,300	455.9	455.8
	03-Oct-05	ND (1.0)	ND (1.0) FF	-112	2.5	7,680	454.5	M
	15-Dec-05	ND (1.0)	ND (1.0) FF	-108	2.3	9,310	452.7	452.3
MW-39-050	08-Feb-05	819	800	76	5.3	14,500	452.7	452.5
	09-Mar-05	422	372	11	5.0	14,400	451.3	450.5
	06-Apr-05	282 J	237	81	4.4	12,400	454.8	455.6
	03-May-05	206	204	56	0.0	14,300	454.2	455.1
	16-Jun-05	66.2	55.4	-44	2.0	15,200	456.0	454.8
	04-Oct-05	ND (10)	4.70 FF	-78	2.6	13,600	454.2	452.9
	12-Jan-06	ND (10)	ND (1.0) FF	-9	2.8	18,300	453.0	453.9
MW-39-060	08-Feb-05	1880	1650	106	5.2	12,900	452.7	452.7
	09-Mar-05	1450	1300	65	4.9	15,200	451.1	450.5
	06-Apr-05	914	1080	84	4.3	12,600	---	455.3
	06-Apr-05 FD	914	907	FD	FD	FD	FD	FD
	05-May-05	450	455	43	2.0	14,600	455.4	455.8
	05-May-05 FD	460	509	FD	FD	FD	FD	FD
	16-Jun-05	213	198	19	1.9	17,600	456.1	454.9
	04-Oct-05	72.3	79.6 JFF	-20	2.2	14,100	454.0	452.9
	16-Dec-05	20.4	20.4 FF	-40	2.3	11,200	452.7	453.2
MW-39-070	08-Feb-05	6640	6800	89	5.5	11,400	452.4	452.4
	09-Mar-05	4310	4010 J	71	5.3	13,800	451.0	450.5
	09-Mar-05 FD	4340	5310 J	FD	FD	FD	FD	FD
	05-Apr-05	2280	2080	61	5.8	11,500	---	454.3
	05-May-05	1320	1270	98	1.9	12,500	455.2	456.3
	16-Jun-05	799	576	22	1.8	16,000	456.1	455.2
	04-Oct-05	840	754 FF	31	2.7	13,800	454.0	452.9
	16-Dec-05	1240	1080 FF	22	2.2	10,000	452.4	453.0
MW-42-055	23-Feb-05	ND (1.0)	ND (1.0)	-188	0.9	13,600	452.5	452.5
	16-Mar-05	ND (1.0)	ND (1.0)	-191	0.5	17,100	451.9	451.6
	07-Oct-05	ND (1.0)	ND (1.0) FF	-126	5.6	18,100	454.8	454.7
	15-Dec-05	ND (1.0)	ND (1.0) FF	-143	2.4	11,100	452.8	452.3
MW-42-065	14-Feb-05	ND (1.0)	ND (1.0)	-201	0.3	22,200	453.1	452.0
	24-Feb-05	ND (1.0)	ND (2.8) J	-119	5.0	20,500	452.8	452.6
	16-Mar-05	ND (1.0)	ND (1.0)	-126	0.6	21,400	452.0	451.5
	07-Oct-05	ND (1.0)	ND (1.0) FF	-121	2.8	17,300	454.9	455.0
	15-Dec-05	ND (1.0)	ND (1.0) FF	-78	2.5	13,200	452.9	452.3

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TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, February 2005 through January 2006
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	Sample Date	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters			Groundwater and River Elevations at Sampling Time	
				ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Deep Wells								
MW-27-085	14-Feb-05	ND (1.0)	ND (1.0)	-519	0.1	26,700	453.8	452.5
	16-Feb-05	ND (2.0)	ND (1.0)	-491	5.2	23,400	452.5	451.5
	23-Feb-05	ND (2.0)	ND (1.0)	-235	1.1	17,700	452.9	452.5
	01-Mar-05	ND (1.0)	ND (1.0) J	-155	4.9	18,600	452.9	452.5
	08-Mar-05	ND (2.0)	ND (1.0)	-152	0.2	22,000	452.1	451.3
	14-Mar-05	ND (1.0)	ND (1.0)	-153	0.9	27,000	452.2	451.6
	23-Mar-05	ND (1.0)	ND (1.0)	-145	1.0	16,100	454.3	454.3
	29-Mar-05	ND (1.0)	ND (1.0)	-167	0.5	19,700	454.5	454.1
	05-Apr-05	ND (1.0)	ND (1.0)	-134	2.0	19,700	454.5	453.9
	12-Apr-05	ND (1.0)	ND (1.0)	-134	0.1	16,900	456.6	456.4
	19-Apr-05	ND (1.0)	ND (1.0)	---	---	---	456.5	456.3
	26-Apr-05	ND (1.0)	ND (1.0)	-138	5.7	18,100	456.1	455.8
	04-May-05	ND (1.0)	ND (1.0)	-128	0.4	18,500	456.5	456.2
	19-May-05	ND (1.0)	ND (1.0)	-131	1.0	19,600	456.5	456.2
	02-Jun-05	ND (1.0)	ND (1.0)	-100	0.9	19,500	456.2	455.5
	19-Jul-05	ND (1.0)	3.00 FF	-106	0.9	19,100	457.0	457.3
	16-Aug-05	ND (1.0)	ND (2.6) FF	-156	1.3	13,700	455.5	455.8
	08-Sep-05	ND (1.0)	ND (1.0) FF	-158	1.7	20,500	455.3	M
	05-Oct-05	ND (1.0)	ND (1.0) FF	-82	2.1	18,100	454.8	454.5
	03-Nov-05	ND (2.0) J	ND (1.0) FF	-150	1.1	23,100	454.5	454.2
	15-Dec-05	1.20 J	6.60 FF	-124	2.8	14,300	452.9	452.5
	12-Jan-06	ND (1.0)	ND (1.0) FF	-91	2.8	22,600	453.4	453.3
MW-28-090	08-Feb-05	ND (1.0)	ND (1.0)	-181	0.0	9,430	453.0	452.6
	22-Feb-05	ND (1.0)	ND (1.0)	-54	5.8	9,300	452.3	452.1
	07-Mar-05	ND (1.0)	ND (1.0)	-190	0.1	12,300	451.8	451.6
	22-Mar-05	ND (1.0)	ND (1.0)	-203	0.2	12,200	453.9	454.1
	04-Apr-05	ND (1.0)	ND (1.0)	-172	0.4	12,600	454.4	454.2
	20-Apr-05	ND (1.0)	ND (1.0)	-93	3.9	9,990	456.4	456.5
	03-May-05	ND (1.0)	ND (1.0)	-208	0.4	10,600	456.1	455.6
	19-May-05	ND (1.0)	ND (1.0)	-147	0.8	9,110	456.4	456.5
	02-Jun-05	ND (1.0)	ND (1.0)	-141	1.0	---	456.2	456.0
	15-Jun-05	ND (1.0)	ND (1.0)	-205	2.5	9,410	455.8	455.4
	01-Jul-05	ND (1.0)	ND (1.0)	-174	1.8	12,700	456.4	456.1
	13-Jul-05	ND (1.0)	ND (1.0) FF	-142	4.3	8,850	456.3	456.0
	18-Aug-05	ND (1.0)	1.10 FF	-178	1.1	9,740	455.9	455.9
	09-Sep-05	ND (1.0)	ND (1.0) FF	-190	1.7	8,190	455.6	M
	06-Oct-05	ND (1.0)	ND (1.0) FF	-138	2.0	9,070	454.9	454.7
	02-Nov-05	ND (1.0)	ND (1.0) FF	-183	1.4	9,720	454.0	453.7
	16-Dec-05	ND (1.0)	ND (1.0) FF	-176	2.5	8,430	453.3	453.2
	10-Jan-06	ND (1.0)	ND (1.0) FF	-140	3.3	11,000	453.6	453.8
MW-33-150	02-Mar-05	ND (1.0)	ND (1.0)	-120	4.6	15,900	453.4	452.7
	02-Mar-05 FD	ND (1.0)	ND (1.0)	FD	FD	FD	FD	FD
	16-Mar-05	ND (1.0)	ND (1.0)	-175	1.6	21,600	452.9	452.0
	17-Jun-05	3.10 J	6.40	-172	3.0	18,300	456.3	456.0

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TABLE B-1
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	Sample Date	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters			Groundwater and River Elevations at Sampling Time	
				ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Deep Wells								
MW-33-150	20-Jul-05	5.20	5.60 FF	-59	0.7	16,100	456.5	456.6
	17-Aug-05	4.00	6.10 FF	-72	1.3	17,000	455.6	455.3
	09-Sep-05	3.90	2.80 FF	-108	1.7	17,000	455.7	M
	06-Oct-05	4.50	3.90 FF	-41	2.0	15,800	454.6	453.5
	06-Oct-05 FD	5.30	4.90 FF	FD	FD	FD	FD	FD
	02-Nov-05	5.50	4.70 FF	-81	1.4	20,800	454.4	453.7
	12-Dec-05	6.60	5.70 FF	21	3.9	19,200	453.7	452.8
	10-Jan-06	6.40	5.00 FF	27	3.7	21,800	453.7	453.6
MW-33-210	24-Feb-05	ND (1.0)	ND (2.1) J	-116	4.9	22,200	453.7	452.6
	16-Mar-05	1.40	ND (1.0)	-103	0.6	25,300	453.0	451.8
	16-Jun-05	5.10 J	1.70 J	-216	2.0	22,400	456.2	454.9
	20-Jul-05	5.60	6.70 FF	-40	0.8	19,200	456.7	456.9
	17-Aug-05	2.50	8.00 FF	-88	1.2	19,900	456.0	455.5
	06-Sep-05	3.50	2.90 FF	-109	1.7	22,600	455.7	M
	06-Oct-05	4.00	4.20 FF	-30	1.8	18,800	454.8	453.7
	02-Nov-05	6.50	5.40 FF	-73	1.4	24,900	454.7	453.8
	12-Dec-05	6.90	5.60 FF	40	3.6	21,900	454.1	452.9
	10-Jan-06	7.60	5.20 FF	13	3.2	24,200	454.0	453.3
MW-34-080	08-Feb-05	ND (1.0)	ND (1.0)	-162	0.0	15,500	452.9	452.3
	16-Feb-05	ND (2.0)	ND (1.0)	-224	5.1	18,000	452.1	451.5
	22-Feb-05	ND (1.0)	ND (1.0)	-95	5.8	14,100	452.4	452.2
	01-Mar-05	ND (1.0)	ND (1.0) J	-127	5.1	13,300	452.7	452.5
	08-Mar-05	ND (1.0) J	ND (1.0)	-84	0.0	17,600	451.4	451.1
	15-Mar-05	ND (1.0)	ND (1.0)	-121	0.6	15,200	---	451.9
	22-Mar-05	ND (1.0)	ND (1.0)	-83	0.2	15,200	453.8	454.3
	29-Mar-05	ND (1.0)	ND (1.0)	-214	0.0	16,800	454.2	454.4
	05-Apr-05	ND (1.0)	ND (1.0)	-207	0.0	17,200	454.2	454.0
	12-Apr-05	ND (1.0)	ND (1.0)	-86	0.1	14,200	455.9	455.6
	19-Apr-05	ND (1.0)	ND (1.0)	4	5.1	13,800	456.1	455.5
	26-Apr-05	ND (1.0)	ND (1.0)	-94	3.5	13,700	455.7	455.0
	04-May-05	ND (1.0)	ND (1.0)	-241	0.3	15,900	455.9	455.0
	18-May-05	ND (1.0)	ND (1.0)	-138	1.3	16,000	456.3	455.7
	01-Jun-05	ND (1.0)	ND (1.0)	-117	0.4	17,800	456.2	455.4
	30-Jun-05	ND (1.0)	ND (1.0)	-61	1.6	18,300	456.0	454.6
	14-Jul-05	ND (1.0)	2.00 FF	-104	1.2	17,900	456.9	455.9
	15-Aug-05	ND (1.0)	2.40 FF	-137	1.5	14,600	455.4	454.7
	07-Sep-05	ND (1.0)	ND (1.0) FF	-148	1.5	17,100	455.9	M
	05-Oct-05	ND (1.0)	ND (1.0) FF	-58	2.2	13,800	454.4	453.1
	03-Nov-05	ND (1.0)	ND (1.0) FF	-117	1.1	16,300	454.9	454.4
	14-Dec-05	ND (1.0)	ND (1.0) FF	-88	2.3	10,400	453.6	453.2
	11-Jan-06	ND (1.0)	ND (1.0) FF	-38	3.1	18,100	453.6	453.3
MW-34-100	14-Feb-05	357	328	-246	0.2	25,000	453.3	452.3
	16-Feb-05	354	294	-159	5.3	20,400	452.4	451.5
	23-Feb-05	417	391	-35	1.4	18,000	452.8	452.5

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	Sample Date	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters			Groundwater and River Elevations at Sampling Time	
				ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Deep Wells								
MW-34-100	01-Mar-05	402	374	-86	5.0	15,700	452.8	452.5
	01-Mar-05 FD	411	332	FD	FD	FD	FD	FD
	08-Mar-05	425 J	490	-60	0.4	19,900	452.0	451.2
	14-Mar-05	426	474	-55	0.7	23,700	452.0	451.2
	23-Mar-05	421	548	-98	0.8	14,600	454.2	454.2
	29-Mar-05	73.9 J	110	-96	0.5	18,100	454.5	454.3
	29-Mar-05 FD	56.7 J	106	FD	FD	FD	FD	FD
	05-Apr-05	452	488	-115	0.3	20,000	454.6	454.3
	05-Apr-05 FD	455	454	FD	FD	FD	FD	FD
	12-Apr-05	482	502	-61	0.2	15,500	456.4	456.0
	12-Apr-05 FD	499	562	FD	FD	FD	FD	FD
	19-Apr-05	473	599	8	6.0	16,200	456.2	455.8
	26-Apr-05	476	573	-45	4.1	21,000	456.1	455.4
	26-Apr-05 FD	480	602	FD	FD	FD	FD	FD
	04-May-05	491	530	-98	0.6	18,700	455.7	454.8
	10-May-05	513	492	21	3.0	15,800	456.8	456.7
	10-May-05 FD	501	552	FD	FD	FD	FD	FD
	18-May-05	524	564	50	3.0	19,000	456.4	456.1
	25-May-05	559	478	-93	1.2	18,700	456.6	456.1
	01-Jun-05	527	609	-59	0.4	20,000	456.0	455.1
	08-Jun-05	552	583	-15	2.3	20,300	456.7	456.3
	21-Jun-05	560	477	-26	1.9	20,500	456.3	455.4
	21-Jun-05 FD	578	480	FD	FD	FD	FD	FD
	07-Jul-05	583	639	-88	3.8	18,800	456.5	455.7
	14-Jul-05	617	701 FF	-26	1.9	20,200	456.9	456.6
	27-Jul-05	597	504 FF	-2	1.1	17,800	456.1	456.5
	10-Aug-05	574	589 FF	-83	1.4	19,700	455.7	455.5
	10-Aug-05 FD	571	597 FF	FD	FD	FD	FD	FD
	15-Aug-05	633	660 FF	-17	1.2	16,600	455.3	455.0
	31-Aug-05	649	693 FF	-42	1.9	16,900	455.7	455.4
	31-Aug-05 FD	658	604 FF	FD	FD	FD	FD	FD
	07-Sep-05	673	868 FF	-60	1.5	19,500	455.5	M
	20-Sep-05	675	891 FF	-28	2.0	14,000	455.9	M
	05-Oct-05	732	732 FF	-13	1.9	15,900	454.6	453.7
	05-Oct-05 FD	708	703 FF	FD	FD	FD	FD	FD
	25-Oct-05	752	628 FF	-29	1.4	20,100	454.2	453.7
	25-Oct-05 FD	752	650 FF	FD	FD	FD	FD	FD
	03-Nov-05	748 J	897 FF	-49	1.1	19,900	454.8	454.3
	16-Nov-05	759	762 FF	-2	4.6	16,100	---	M
	16-Nov-05 FD	763	725 FF	FD	FD	FD	FD	FD
	30-Nov-05	791	797 FF	-55	2.6	19,900	454.3	453.8
	30-Nov-05 FD	802	721 FF	FD	FD	FD	FD	FD
	14-Dec-05	808	751 FF	-26	2.3	12,400	453.3	452.6
	14-Dec-05 FD	811	791 FF	FD	FD	FD	FD	FD
	28-Dec-05	804	824 FF	-28	2.4	19,300	452.7	452.3

Refer to table footnotes for data qualifier explanation.

TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, February 2005 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters			Groundwater and River Elevations at Sampling Time	
				ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Deep Wells								
MW-34-100	12-Jan-06	837	771 FF	104	3.2	21,000	454.0	454.0
	12-Jan-06 FD	856	764 FF	FD	FD	FD	FD	FD
	23-Jan-06	822	716 FF	136	2.6	23,300	454.0	453.8
MW-36-090	07-Feb-05	1720	1610	51	5.4	19,300	452.9	452.5
	09-Mar-05	1480	1380	49	5.1	18,100	451.5	450.5
	05-Apr-05	1040	946	64	5.3	15,100	---	453.8
	03-May-05	705	623	55	0.0	17,600	455.5	455.5
	25-Jul-05	344	343 FF	129	1.1	18,400	455.8	455.7
	17-Aug-05	346	336 FF	152	1.3	16,600	455.3	455.7
	08-Sep-05	267	301 FF	49	1.6	17,500	455.3	M
	03-Oct-05	302	286 FF	174	3.4	12,700	460.7	M
	02-Nov-05	256	247 FF	69	1.4	19,300	453.8	453.9
	15-Dec-05	240	219 FF	34	2.5	18,000	452.5	452.4
	12-Jan-06	245	223 FF	13	2.8	19,500	452.8	453.4
MW-36-100	09-Feb-05	1440	1420	-12	0.0	20,900	452.6	452.5
	22-Feb-05	1430	1230	55	5.2	18,700	452.0	452.1
	22-Feb-05 FD	1390	1250	FD	FD	FD	FD	FD
	09-Mar-05	1380	1200	-20	0.3	22,600	451.1	450.5
	22-Mar-05	1250	1180	-16	0.2	19,900	453.4	454.1
	22-Mar-05 FD	1230	1160	FD	FD	FD	FD	FD
	04-Apr-05	1110	981	-20	0.1	19,600	454.1	453.9
	20-Apr-05	825	844	2	3.1	17,500	455.9	456.4
	03-May-05	705	679	4	0.4	18,700	455.4	455.1
	18-May-05	617	796 J	12	1.5	34,800	455.3	454.7
	18-May-05 FD	620	624 J	FD	FD	FD	FD	FD
	02-Jun-05	518	441	23	2.5	18,800	456.0	455.8
	19-Jul-05	398	635 FF	17	1.0	17,700	456.4	456.6
	15-Aug-05	391	410 FF	-15	1.6	16,800	455.2	454.6
	15-Aug-05 FD	390	392 FF	FD	FD	FD	FD	FD
	08-Sep-05	396 J	380 FF	21	1.7	18,300	455.4	M
	08-Sep-05 FD	397	454 FF	FD	FD	FD	FD	FD
	05-Oct-05	383	370 FF	4	2.8	16,500	454.7	454.2
	03-Nov-05	315	368 FF	-19	1.3	21,100	454.6	454.0
	13-Dec-05	306	333 FF	5	2.2	16,500	453.0	452.8
	12-Jan-06	287	288 FF	28	2.9	21,600	452.8	453.3
MW-39-080	08-Feb-05	7750	8220	99	5.8	14,900	452.6	452.6
	08-Feb-05 FD	7890	7750	FD	FD	FD	FD	FD
	09-Mar-05	7460	7240	82	5.0	16,800	451.1	450.5
	06-Apr-05	4820	4570	88	4.7	13,800	---	455.5
	03-May-05	3430	3510	106	0.4	14,900	454.8	455.0
	16-Jun-05	2220	1930	52	2.0	16,800	456.2	454.6
	25-Jul-05	2060	1990 FF	169	1.2	17,400	455.6	456.1
	17-Aug-05	2370	2460 FF	164	1.3	15,600	454.9	455.8
	06-Sep-05	2990	4880 FF	149	2.0	17,700	454.8	M

Refer to table footnotes for data qualifier explanation.

TABLE B-1
Groundwater Sampling Results for Floodplain Monitoring Wells, February 2005 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters			Groundwater and River Elevations at Sampling Time	
				ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Deep Wells								
MW-39-080	04-Oct-05	3000	2770 FF	76	2.7	15,900	454.0	452.9
	02-Nov-05	3200	3020 FF	148	1.4	17,600	453.7	454.2
	15-Dec-05	2740	2570 FF	78	2.2	15,400	452.5	452.2
	12-Jan-06	2280	2060 FF	58	2.9	18,200	452.4	453.7
MW-39-100	09-Feb-05	9180	9480	33	2.2	22,000	452.5	452.4
	09-Feb-05 FD	9260	9710	FD	FD	FD	FD	FD
	10-Mar-05	8940	8160	28	5.1	24,500	451.5	451.2
	06-Apr-05	8220	8230	54	1.5	---	454.5	455.0
	09-May-05	7980	8490	159	1.8	20,400	455.5	455.7
	09-May-05 FD	7720	8250	FD	FD	FD	FD	FD
	17-Jun-05	6980	6030	14	2.8	19,200	455.0	455.6
	19-Jul-05	5500	5490 FF	80	1.3	18,400	456.2	457.0
	19-Jul-05 FD	5450	5450 FF	FD	FD	FD	FD	FD
	17-Aug-05	4230	4050 FF	170	1.5	18,600	455.3	455.9
	06-Sep-05	4540	6480 FF	134	2.2	21,000	455.1	M
	04-Oct-05	4010	3950 FF	73	2.3	15,900	453.7	452.9
	02-Nov-05	3580	3480 FF	168	1.7	23,000	453.9	454.4
	02-Nov-05 FD	3650	3410 FF	FD	FD	FD	FD	FD
	13-Dec-05	3640	3440 FF	139	3.0	20,100	452.9	452.8
	12-Jan-06	4720	4280 FF	121	3.6	22,900	452.6	453.7
MW-43-075	07-Mar-05	ND (1.0)	ND (1.0)	-150	5.6	15,200	452.2	451.6
	15-Mar-05	ND (1.0)	ND (1.0)	-178	0.5	14,900	452.7	451.7
	20-Jun-05	ND (1.0)	ND (1.0)	-165	1.8	18,100	456.8	456.0
	26-Jul-05	ND (1.0)	ND (1.0) FF	-160	1.1	15,600	456.0	455.5
	16-Aug-05	ND (1.0)	5.40 FF	-168	1.3	13,800	455.6	455.5
	08-Sep-05	ND (1.0)	ND (1.0) FF	-176	1.7	16,400	455.0	M
	04-Oct-05	ND (1.0)	ND (1.0) JFF	-126	2.3	12,900	454.8	452.9
	03-Nov-05	ND (2.0)	ND (1.0) FF	-168	1.4	16,700	454.3	453.9
	16-Dec-05	ND (1.0)	ND (1.0) FF	-179	2.4	15,900	453.1	452.7
	11-Jan-06	ND (1.0)	ND (1.0) FF	-134	3.2	18,400	453.7	453.7
MW-43-090	07-Mar-05	ND (1.0)	ND (1.0)	-185	0.2	21,500	452.5	451.6
	15-Mar-05	ND (1.0)	ND (1.0)	-153	0.5	22,000	452.3	451.6
	15-Mar-05 FD	ND (1.0)	ND (1.0)	FD	FD	FD	FD	FD
	20-Jun-05	ND (1.0)	ND (1.0)	-140	1.8	26,200	457.3	456.4
	20-Jun-05 FD	ND (1.0)	ND (1.0)	FD	FD	FD	FD	FD
	26-Jul-05	ND (2.0)	ND (1.6) FF	-129	2.1	23,800	456.9	456.0
	16-Aug-05	ND (2.0)	ND (5.2) FF	-136	1.3	19,400	455.7	455.3
	08-Sep-05	ND (1.0)	ND (1.0) FF	-152	1.7	23,100	455.3	M
	04-Oct-05	ND (1.0)	ND (1.0) FF	-78	4.8	18,400	454.9	452.9
	03-Nov-05	ND (2.0)	ND (1.0) FF	-127	1.1	27,700	454.3	453.8
	16-Dec-05	ND (1.0)	ND (1.0) FF	-127	2.5	22,300	453.2	452.7
	11-Jan-06	ND (1.0)	ND (1.0) FF	-89	3.3	26,500	454.1	453.8

Refer to table footnotes for data qualifier explanation.

NOTES:

ND = not detected at listed reporting limit (RL)
FD = field duplicate
FF = field filtered
J = concentration or RL estimated by laboratory or data validation
T = data from the downhole transducers to fill groundwater elevation data gaps at some locations
MSL = mean sea level
(---) = data not collected, available, rejected, or field instrumentation malfunctioned
µg/L= micrograms per liter
mV = oxidation-reduction potential (ORP)
µS/cm = microSiemens per centimeter
M = I-3 Transducer damaged

Beginning in July 2005, samples analyzed for total chromium by EPA Method 6010B or 6020 were filtered and preserved in the field after sample collection, as per DTSC's June 30, 2005 letter.

The RLs for certain hexavalent chromium results from Method 7199 analyses have been elevated above the standard RL of 0.2 µg/L due to required sample dilution to accommodate matrix interferences.

Groundwater and river elevations in feet above mean sea level (MSL) rounded to 0.1 foot. River elevations from presssure transducer record at I-3.

TABLE B-2
Groundwater Sampling Results for Other Monitoring Wells in PMP Area, February 2005 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

Well ID	Sample Date	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters		
				ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm
Shallow Wells						
MW-12	10-Mar-05	925	883	34.0	7.04	---
	10-Mar-05 FD	925	841	FD	FD	FD
	06-Apr-05	810	871	56.0	6.34	---
	06-Apr-05 FD	810	868	FD	FD	FD
	13-Jun-05	852	835	60.0	6.97	4060
	16-Sep-05	698	618 FF	---	6.58	3290
	04-Oct-05	660	644 FF	55.0	6.13	3040
	04-Oct-05 FD	670	613 FF	FD	FD	FD
	13-Dec-05	626	602 FF	97.0	6.99	3260
MW-19	07-Mar-05	1080	1010	100	6.67	2200
	14-Jun-05	1150	1140	65.0	6.80	2170
	04-Oct-05	1060	996 FF	30.0	6.87	2150
	12-Dec-05	1240	1270 FF	153	7.68	2140
MW-20-070	10-Mar-05	8280	8630	151	8.77	---
	07-Apr-05	8740	9020	92.0	6.63	3820
	15-Jun-05	6680	6450	152	6.85	3160
	15-Jun-05 FD	7000	7080	FD	FD	FD
	11-Oct-05	6060	5930 FF	151	6.90	3330
	15-Dec-05	4640	4310 FF	149	7.97	3210
MW-21	08-Mar-05	ND (1.0)	ND (1.0)	-86	6.00	11300
	14-Jun-05	ND (1.0)	ND (1.0)	81.0	6.80	12000
	05-Oct-05	ND (1.0) J	ND (1.0) JFF	-149	2.42	11400
	14-Dec-05	ND (1.0)	ND (1.0) FF	-90	5.35	12100
MW-22	10-Mar-05	ND (2.0)	ND (1.0)	-150	4.74	46300
	17-Jun-05	ND (1.0)	ND (1.0)	-57	3.23	33700
	04-Oct-05	ND (2.0)	ND (1.0) JFF	-86	2.51	35500
	16-Dec-05	ND (2.0)	ND (1.0) FF	-90	2.31	31200
MW-24A	07-Mar-05	3390	3180	49.0	3.09	3460
	07-Mar-05 FD	3360	3290	FD	FD	FD
	16-Jun-05	3280	2640	52.0	2.70	3470
	03-Oct-05	3120	2930 FF	157	3.26	3040
	03-Oct-05 FD	3040	2630 FF	FD	FD	FD
MW-25	09-Mar-05	1740	1600	181	8.63	1570
	07-Apr-05	1620	1700	95.0	7.30	---
	14-Jun-05	1730	1670	107	6.90	1620
	14-Jun-05 FD	1760	1660	FD	FD	FD
	04-Oct-05	1540	1470 FF	55.0	6.72	1510
	04-Oct-05 FD	1540	1480 FF	FD	FD	FD
	14-Dec-05	1460	1370 FF	156	7.97	1220
	14-Dec-05 FD	1450	1350 FF	FD	FD	FD
MW-26	08-Mar-05	2990	3160	123	10.0	3450
	08-Mar-05 FD	2990	3050	FD	FD	FD
	13-Jun-05	3370	3140	119	9.16	3820
	04-Oct-05	3040	2990 FF	45.0	8.79	3380
	12-Dec-05	3220	3160 FF	161	9.93	3440

TABLE B-2
Groundwater Sampling Results for Other Monitoring Wells in PMP Area, February 2005 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

Well ID	Sample Date	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters		
				ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm
MW-31-060	09-Mar-05	2700	2550	192	6.87	2860
	07-Apr-05	1910	2030	102	5.25	---
	13-Jun-05	1790	1810	122	8.00	3060
	06-Oct-05	1430	1470 FF	54.0	6.36	2990
	13-Dec-05	1300	1250 FF	119	6.75	2870
MW-35-060	15-Mar-05	33.8	37.5	-18	2.22	6510
	13-Jun-05	33.6	34.1	-8.0	2.47	---
	07-Oct-05	32.5	28.0 FF	-1.0	1.90	7560
	07-Oct-05 FD	35.1 J	32.0 FF	FD	FD	FD
	14-Dec-05	32.5	32.5 FF	95.0	3.97	5800
	14-Dec-05 FD	33.3	28.6 FF	FD	FD	FD
TW-02S	11-Mar-05	4400	4240	90.0	4.83	---
	07-Oct-05	3360	3340 FF	204	8.57	3320
Middle-Depth Wells						
MW-20-100	10-Mar-05	8440	7770	110	0.40	7100
	15-Jun-05	9600	10100	136	3.44	3870
	11-Oct-05	10200	9430 FF	157	1.54	4140
	15-Dec-05	9460	9010 FF	140	3.03	3980
Deep Wells						
MW-20-130	09-Mar-05	8730	8900	126	0.02	12800
	09-Mar-05 FD	8810	8170	FD	FD	FD
	07-Apr-05	8980	8870	99.0	4.89	11000
	15-Jun-05	10800	10300	145	4.66	10600
	07-Oct-05	9590	10700 FF	53.0	2.46	12300
	16-Dec-05	10500	9340 FF	123	3.32	11700
MW-24B	07-Mar-05	5320	4950	-2.0	1.70	14300
	16-Jun-05	5640	5660	-4.0	2.20	13100
	03-Oct-05	5240	4930 FF	153	3.19	14000
MW-31-135	10-Mar-05	422	403	42.0	1.49	12500
	13-Jun-05	318	344	42.0	4.46	14600
	13-Jun-05 FD	318	338	FD	FD	FD
	06-Oct-05	271	251 FF	-4.0	2.02	10100
	14-Dec-05	221	198 FF	124	4.13	7980
MW-35-135	15-Mar-05	23.0	21.4	-108	2.11	10800
	13-Jun-05	17.6	17.6	-138	1.75	15000
	07-Oct-05	21.2	17.8 FF	-55	1.29	10800
	14-Dec-05	25.7	22.8 FF	38.0	3.17	8480
PE-01	01-Mar-05	---	ND (1.0) FF	-89	---	9050
	05-Mar-05	---	293	---	---	---
	21-Mar-05	ND (1.0)	ND (1.0)	-194	0.19	15200
	03-Oct-05	ND (1.0)	ND (1.0) FF	-202	0.77	11600
	13-Dec-05	ND (1.0)	ND (1.0)	-148	2.19	12400
TW-02D	09-Mar-05	5800	5620	---	---	---
	18-Jan-06	2180	1980	---	---	---

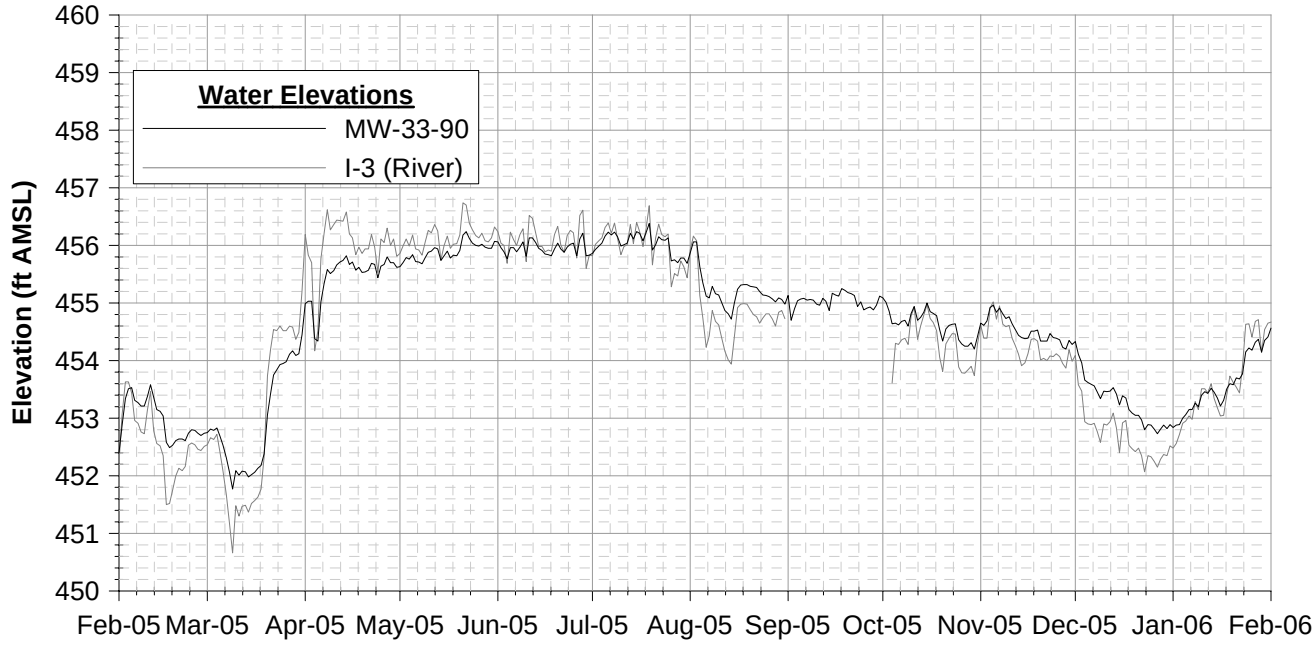
TABLE B-2
Groundwater Sampling Results for Other Monitoring Wells in PMP Area, February 2005 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

NOTES:

Analytical results are validated.
ND = not detected at listed reporting limit (RL)
FD = field duplicate
FF = field filtered
J = concentration or RL estimated by laboratory or data validation
(---) = data not collected, available, or field instrumentation malfunctioned
µg/L= micrograms per liter
mg/L = milligrams per liter
mV = oxidation-reduction potential (ORP)
µS/cm = microSiemens per centimeter

PMP = Interim Measure Performance Monitoring Program

Samples analyzed for total chromium by EPA Method 6010B or 6020 were filtered and preserved in the field after sample collection, as per DTSC's June 30, 2005 letter.



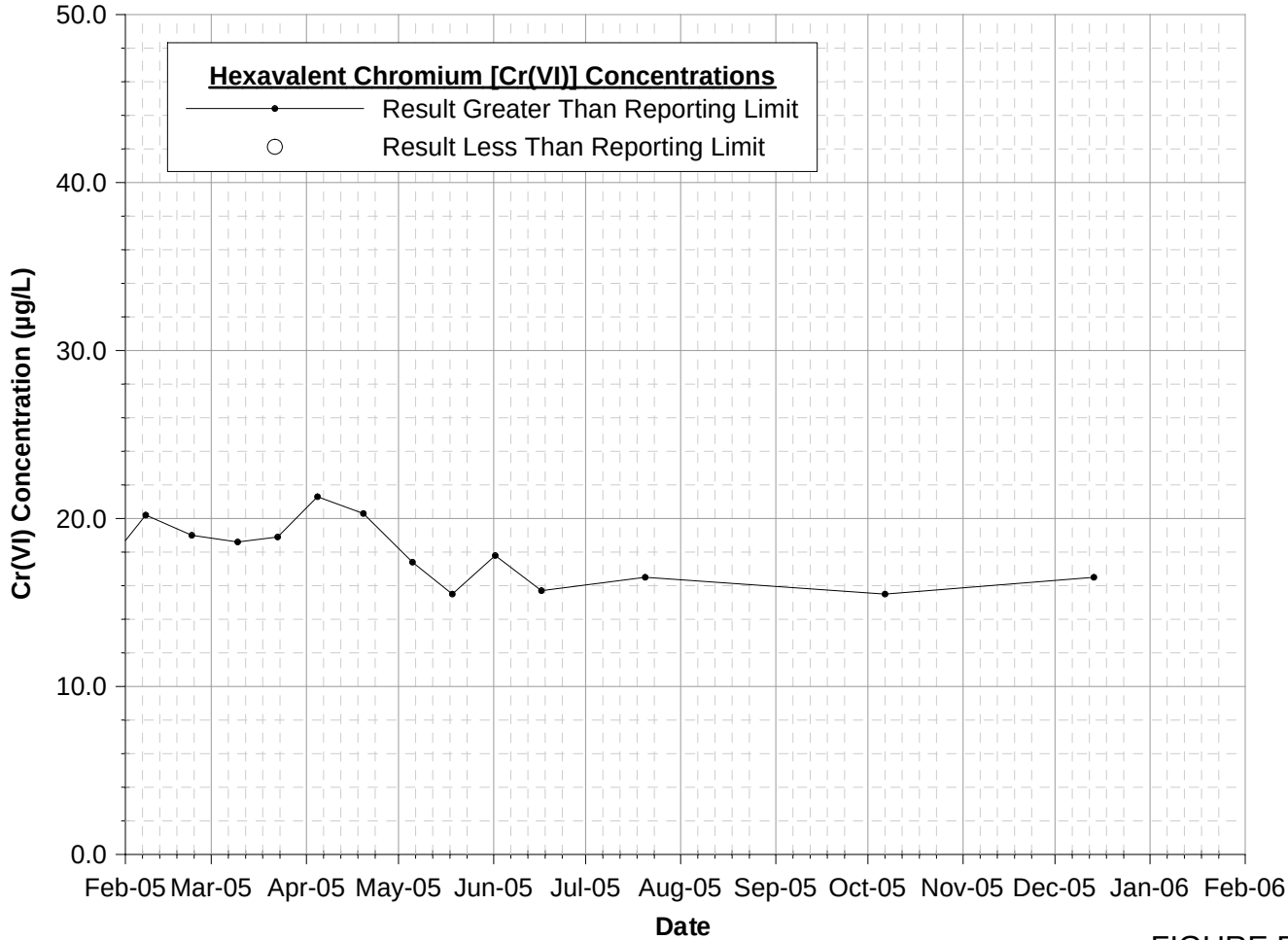


FIGURE B-1
MW-33-90 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 12/13/05
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Notes
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Data subject to review.
3. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
4. I-3 data unavailable 9/1/05 through 10/4/05 due to river damage.

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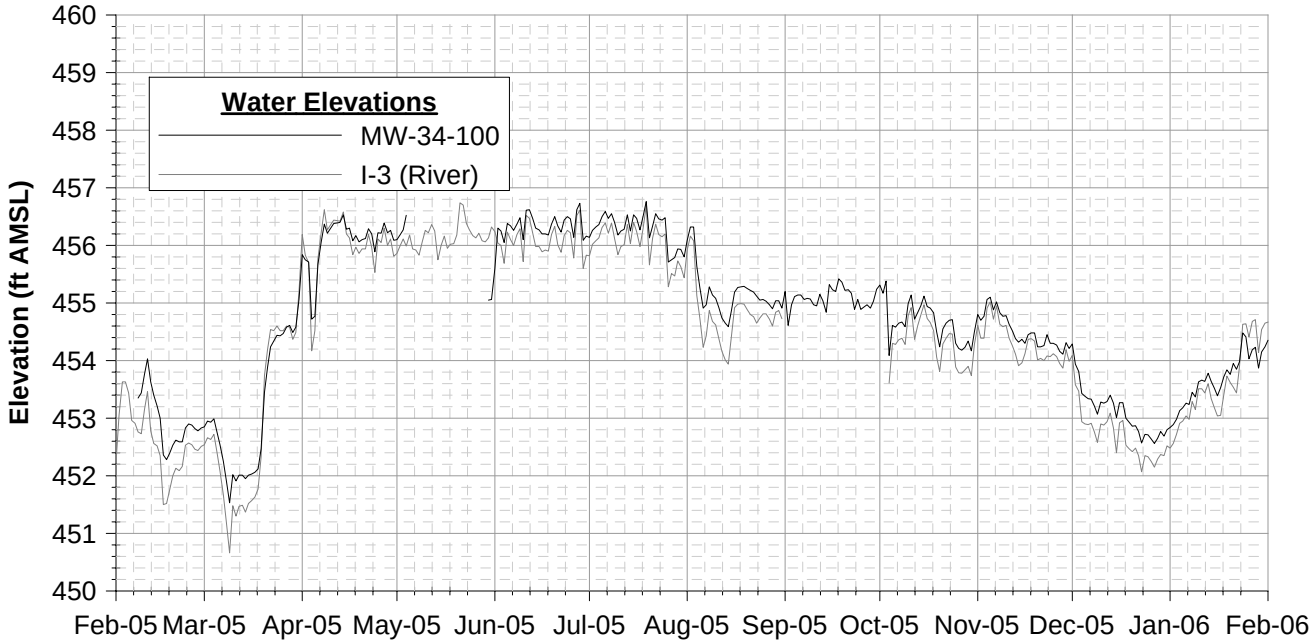


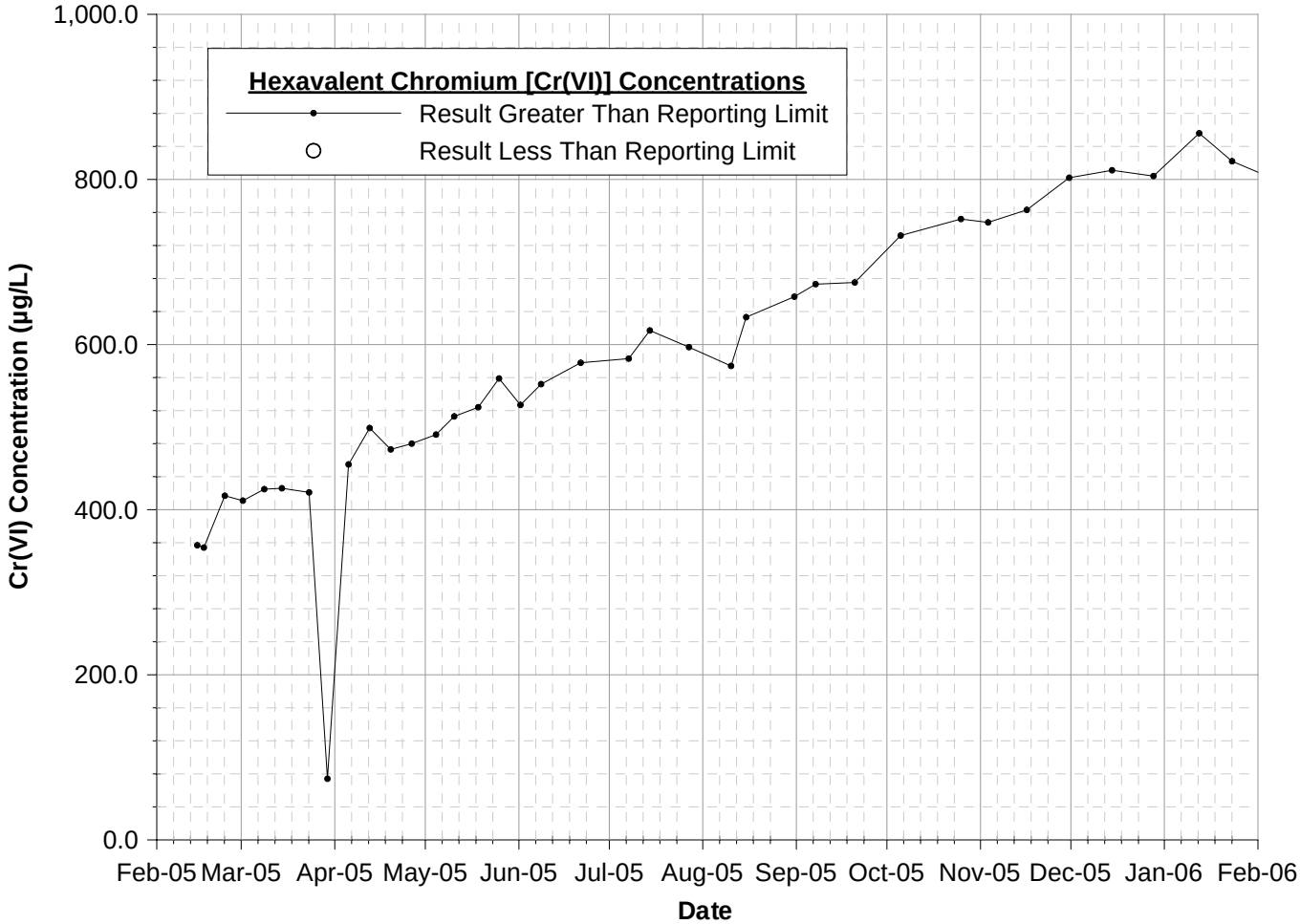
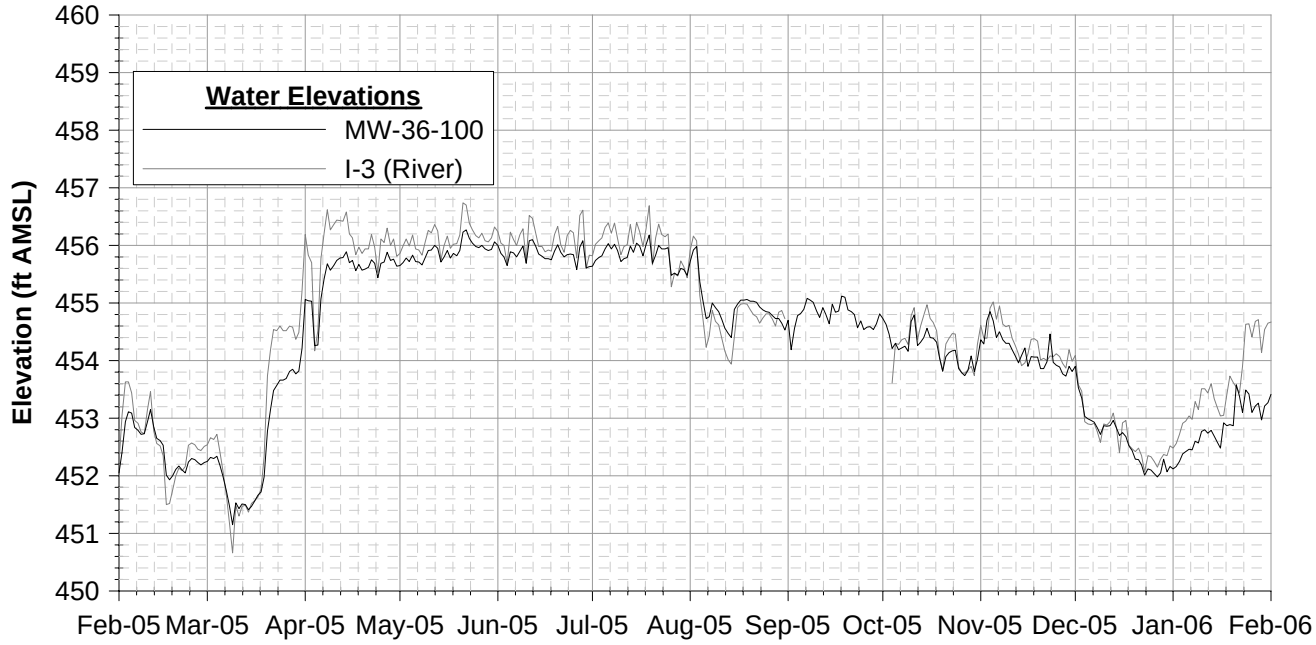


FIGURE B-2
MW-34-100 CR(VI) CONCENTRATION & HYDROGRAPH - THROUGH 1/23/06
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Notes
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. No groundwater elevation data available during May 2005 due to transducer malfunction.
3. Data subject to review.
4. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
5. I-3 data unavailable 9/1/05 through 10/4/05 due to river damage.

CH2MHILL

\\zinfandel\proj\PacificGasElectricCo\TopockProgram\Project_GMP\GMP_Reports\Chemplots\



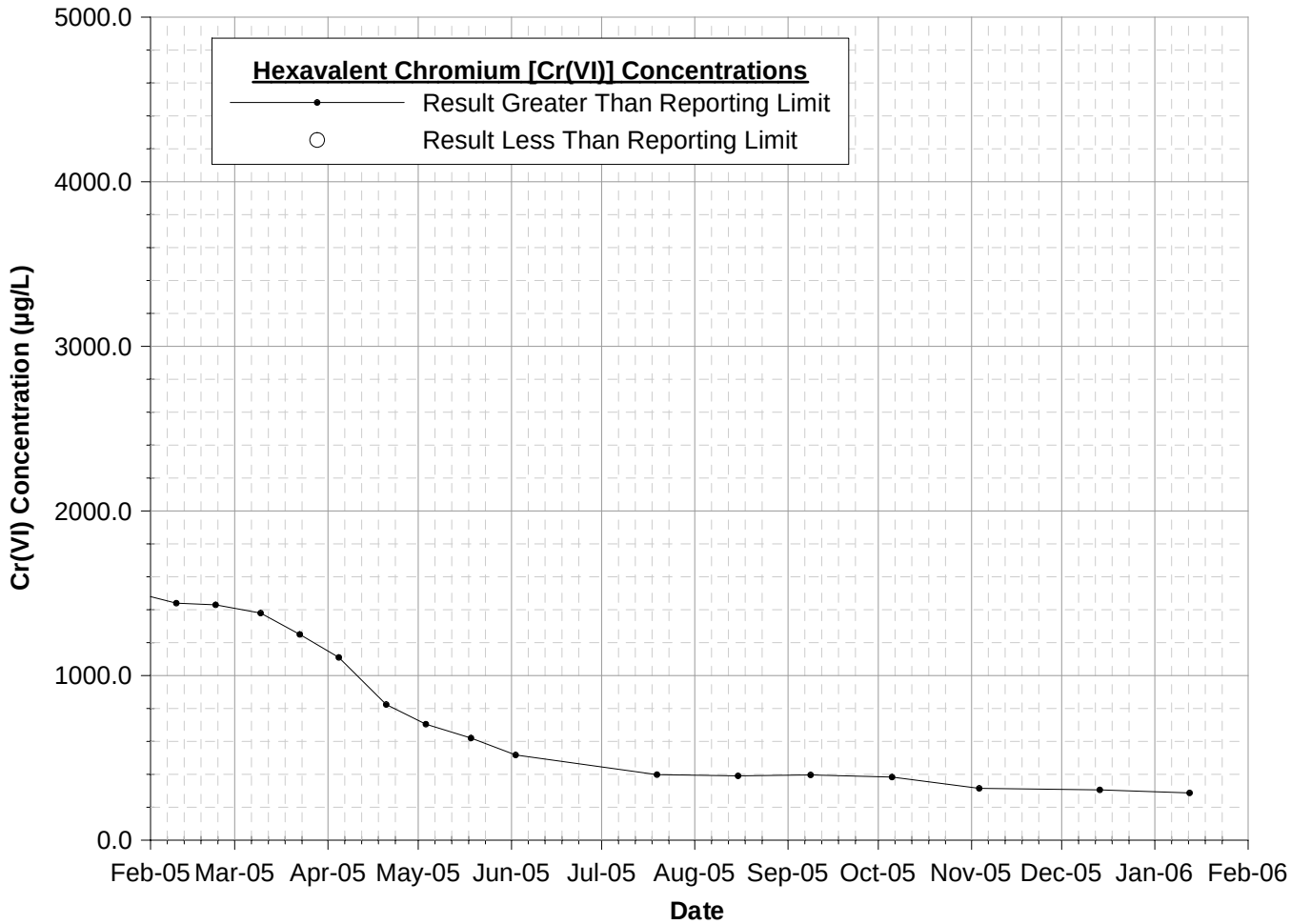
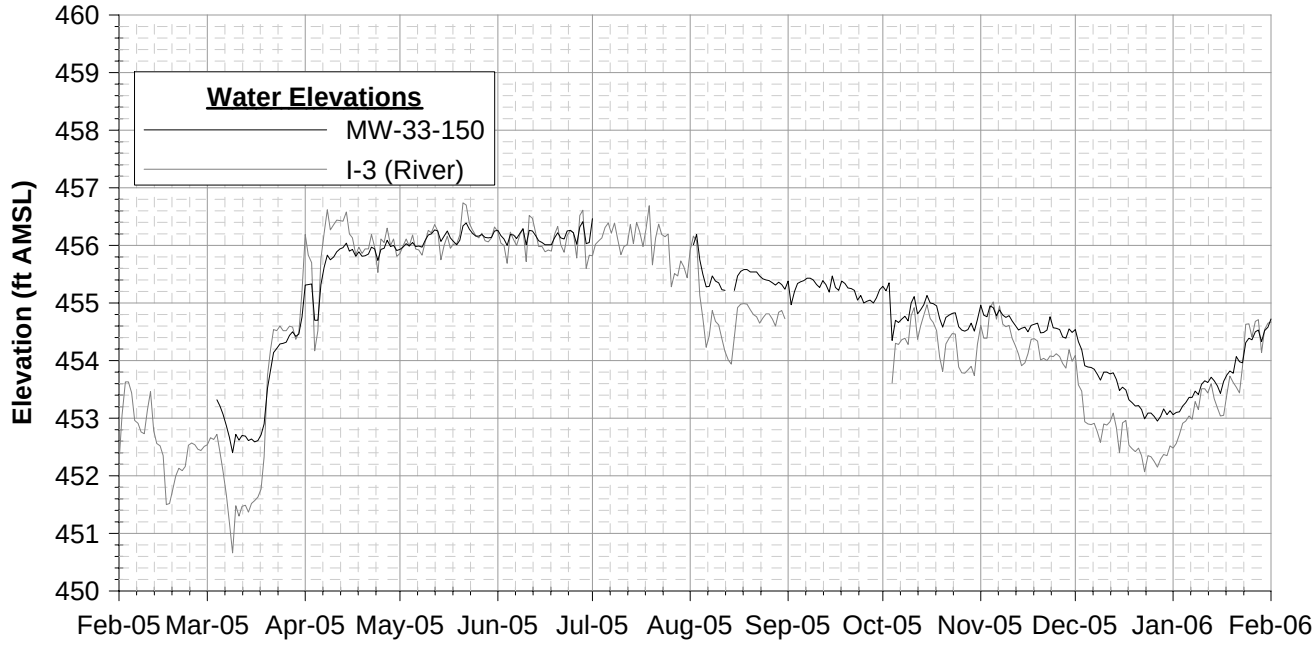


FIGURE B-3
MW-36-100 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 1/12/06
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Notes
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Data subject to review.
3. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
4. I-3 data unavailable 9/1/05 through 10/4/05 due to river damage.

CH2MHILL

\\zinfandel\proj\PacificGasElectricCo\TopockProgram\Project_GMP\GMP_Reports\Chemplots\



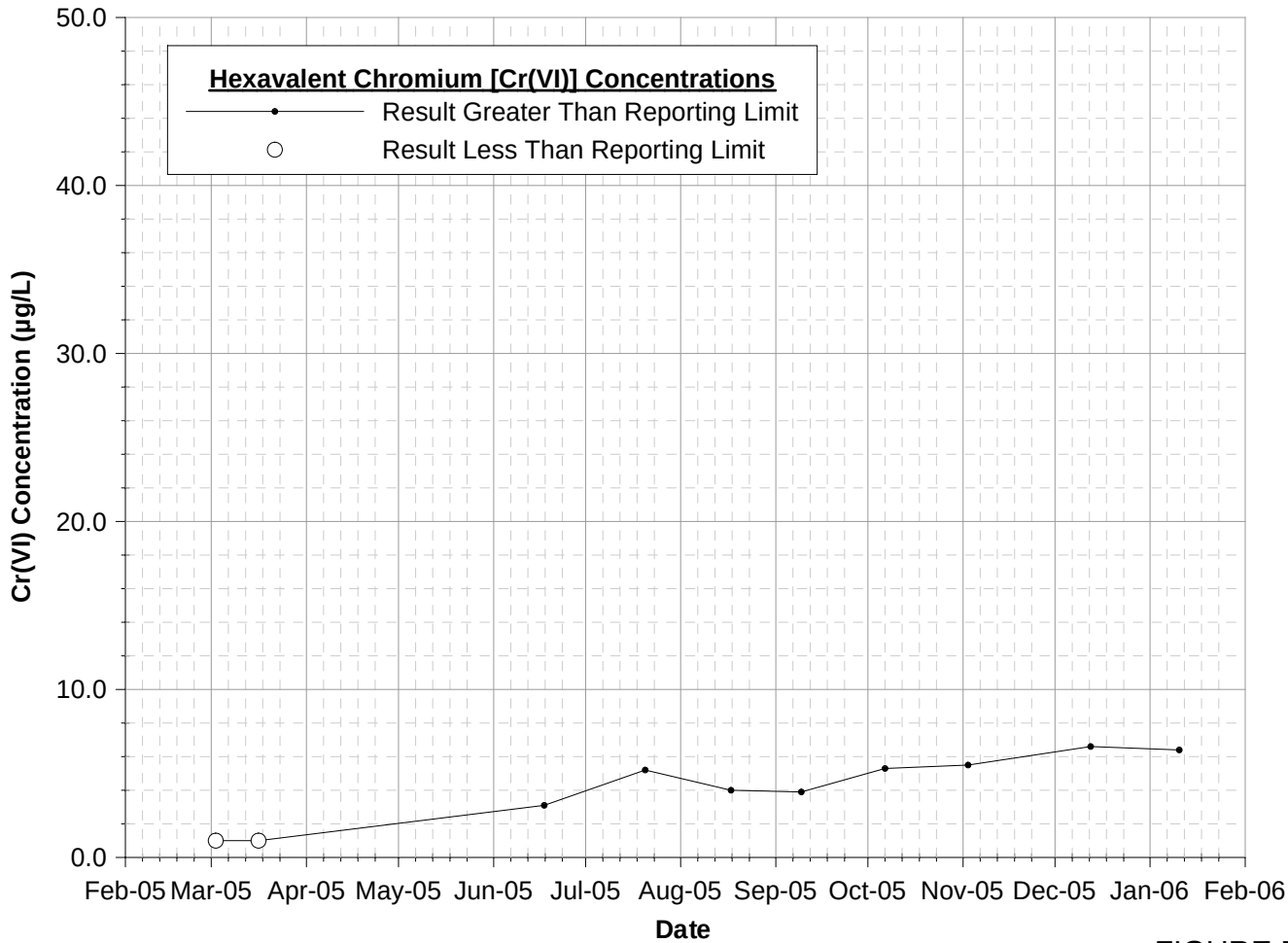
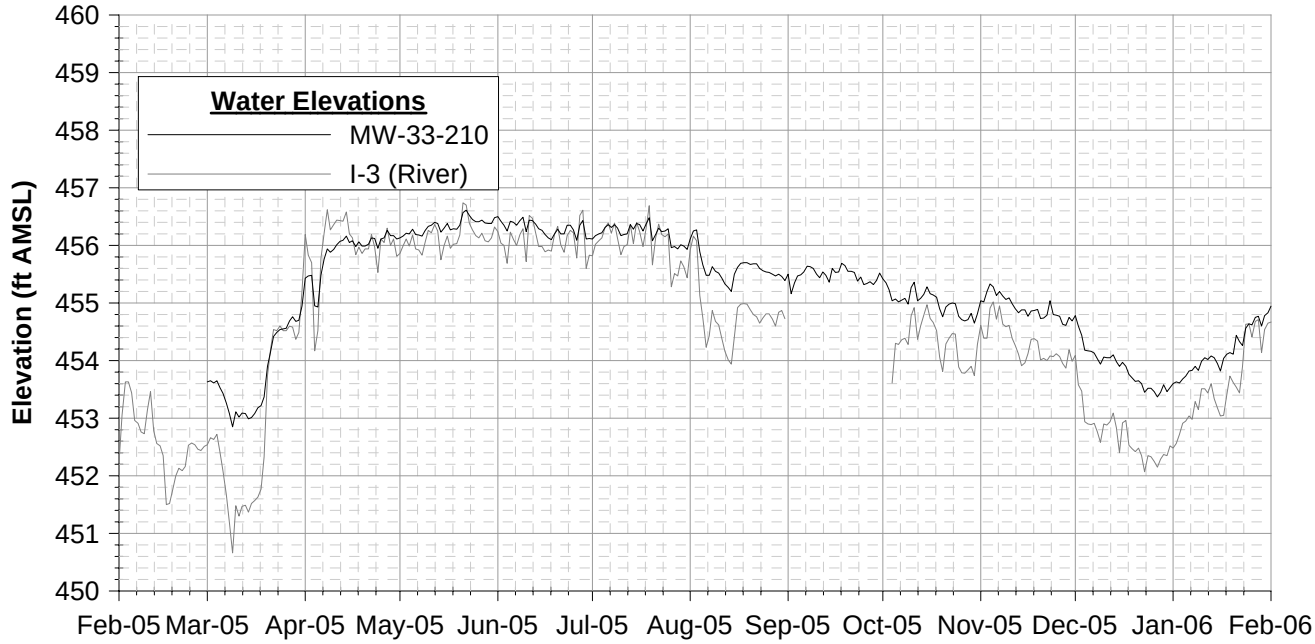


FIGURE B-4
MW-33-150 CR(VI) CONCENTRATION & HYDROGRAPH - THROUGH 1/10/06
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Notes
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Data subject to review.
3. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
4. MW-33-150 transducer data not available during July 2005 due to transducer failure.
5. I-3 data unavailable 9/1/05 through 10/4/05 due to river damage.

CH2MHILL

\\zinfandel\proj\PacificGasElectricCo\TopockProgram\Project_GMP\GMP_Reports\Chemplots\



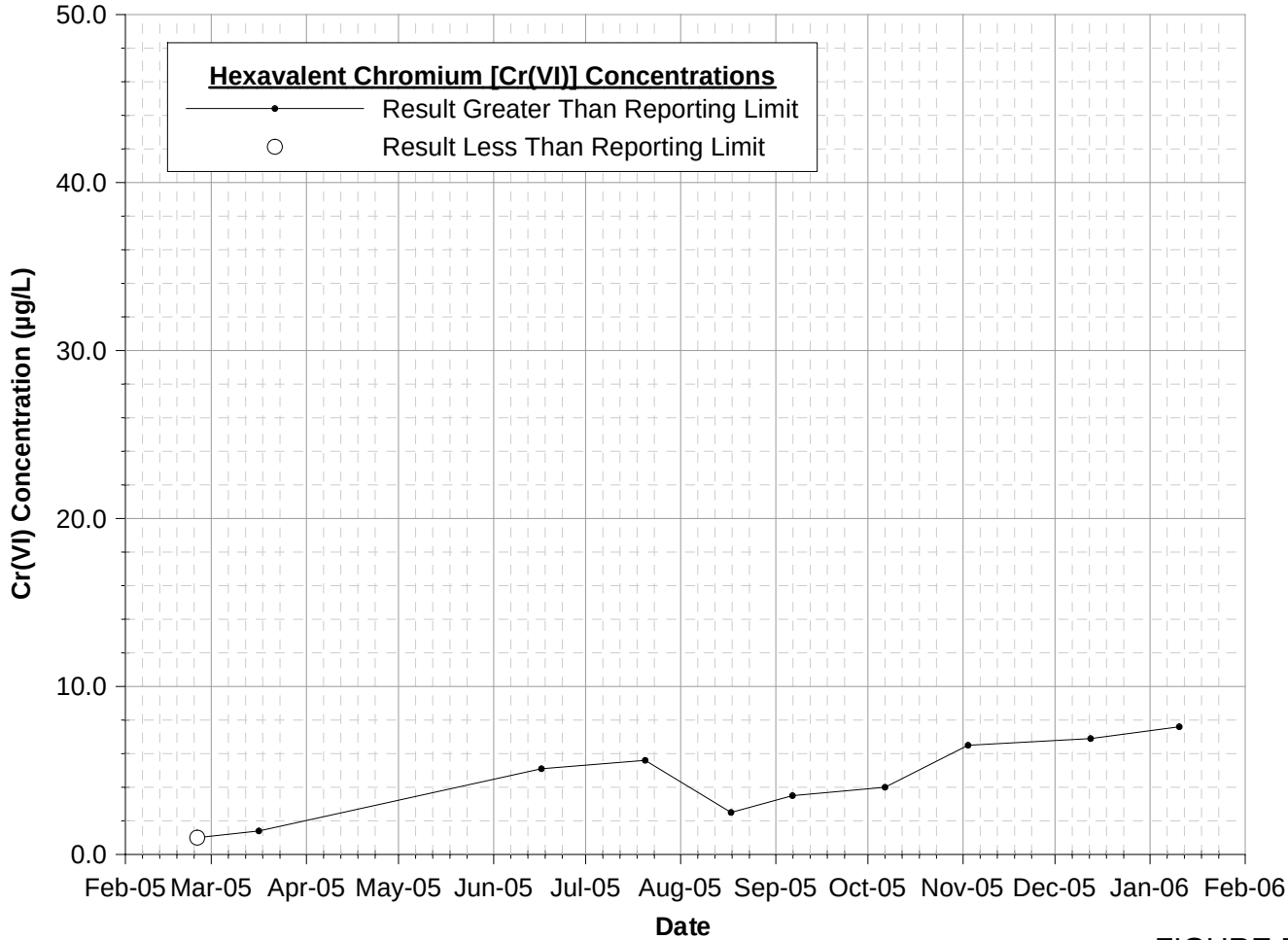
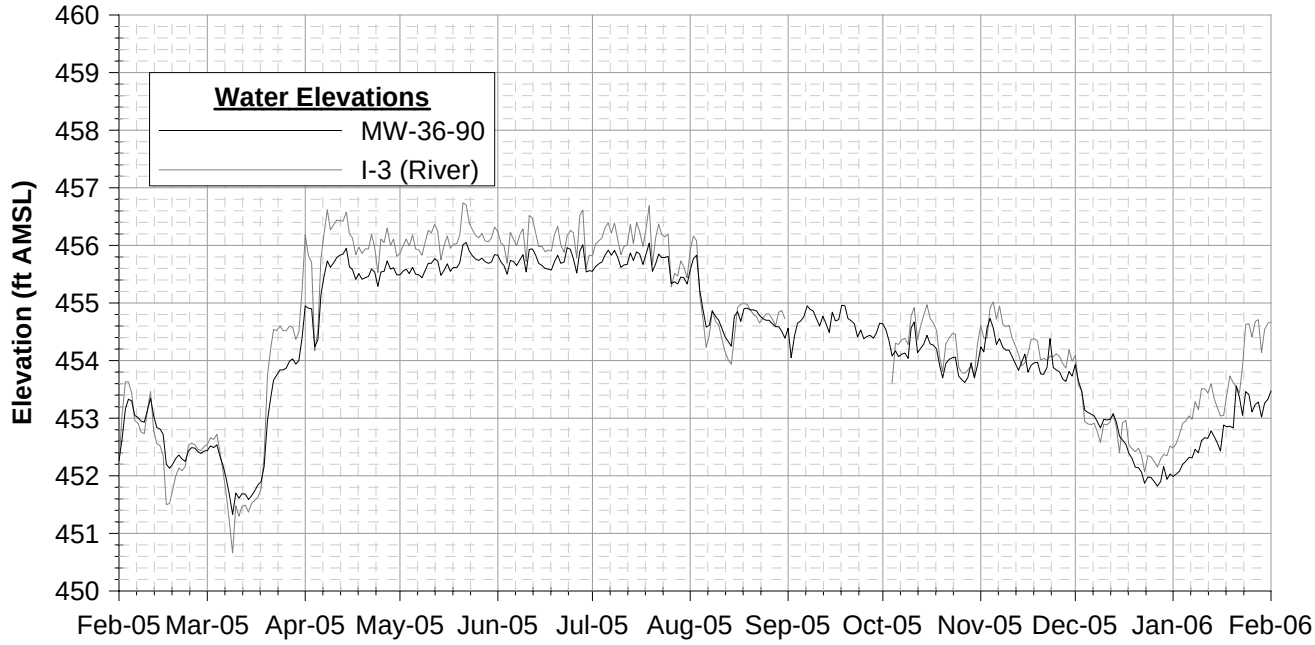


FIGURE B-5
MW-33-210 CR(VI) CONCENTRATION & HYDROGRAPH - THROUGH 1/10/06
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Notes
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Data subject to review.
3. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
4. I-3 data unavailable 9/1/05 through 10/4/05 due to river damage.

CH2MHILL

\\zinfandel\proj\PacificGasElectricCo\TopockProgram\Project_GMP\GMP_Reports\Chemplots\



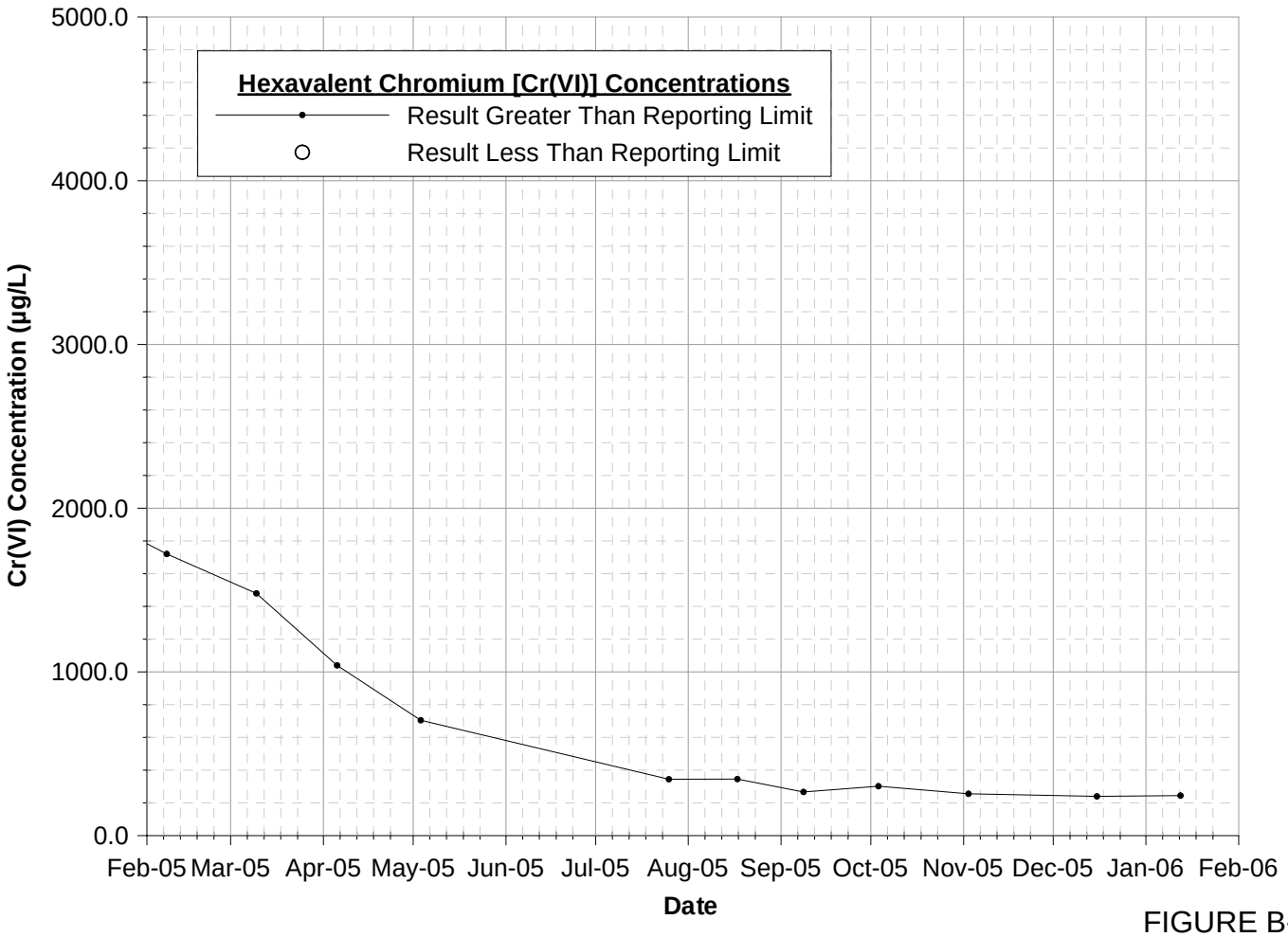


FIGURE B-6
MW-36-90 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 1/12/06
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Notes
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Data subject to review.
3. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
4. I-3 data unavailable 9/1/05 through 10/4/05 due to river damage.

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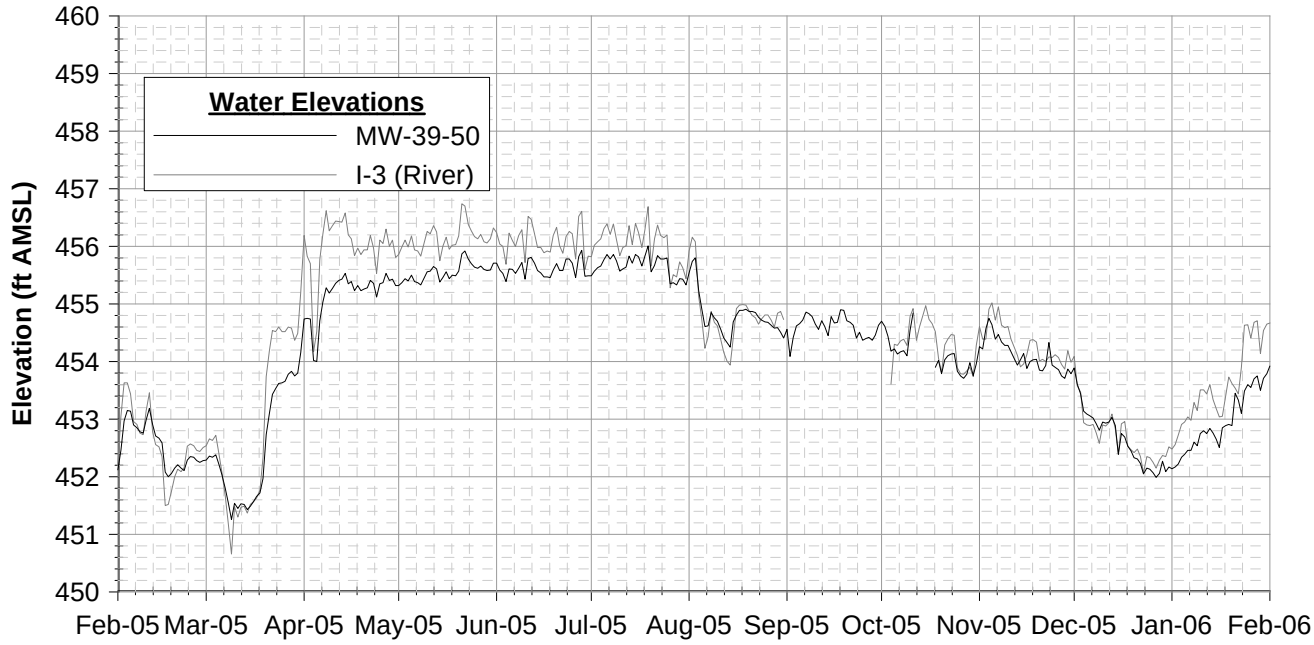

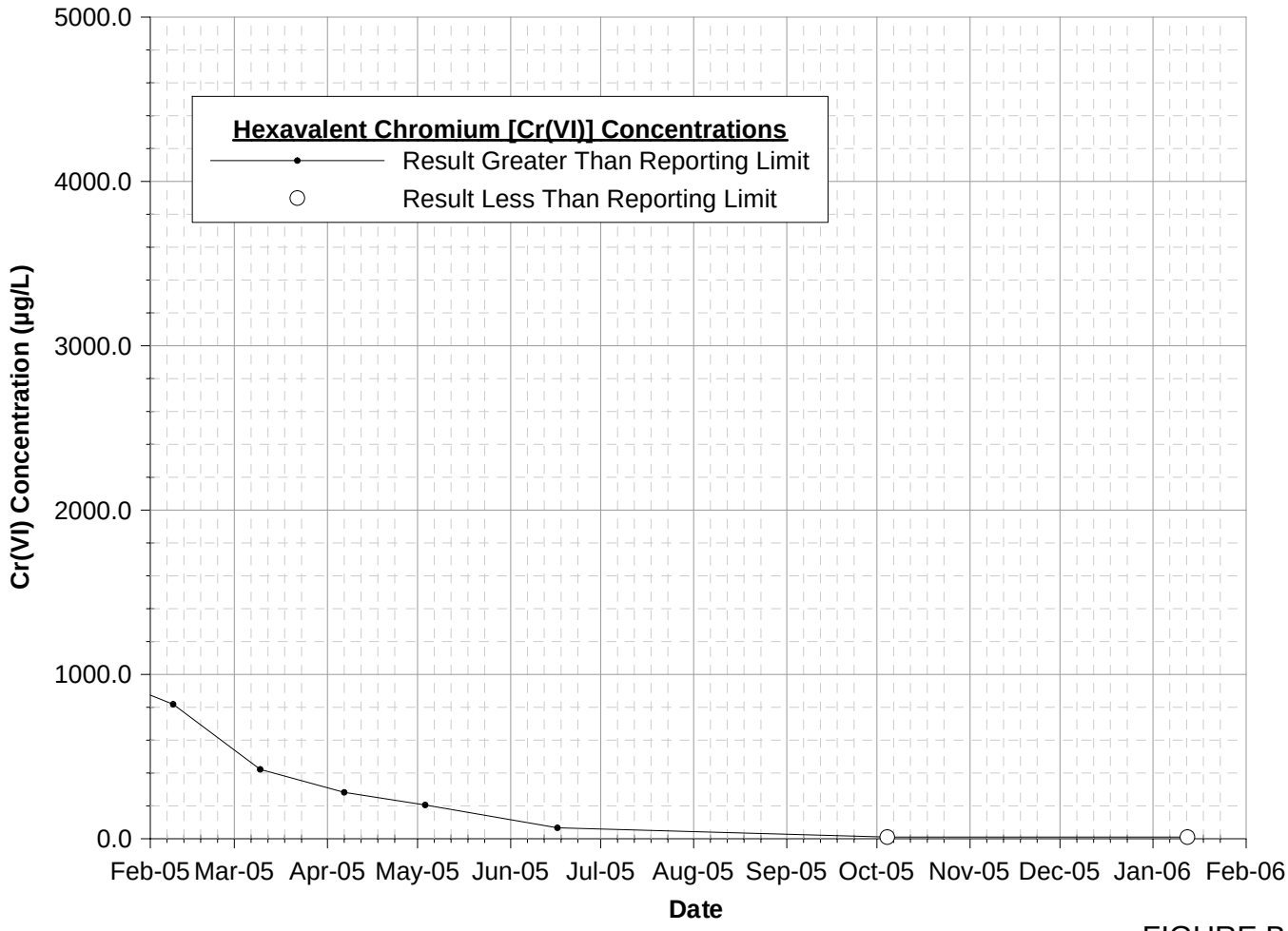

FIGURE B-7
MW-39-50 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 1/12/06
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Notes
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Data subject to review.
3. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
4. I-3 data unavailable 9/1/05 through 10/4/05 due to river damage.
5. MW-39-50 transducer data not available during mid-October 2005 due to transducer failure.

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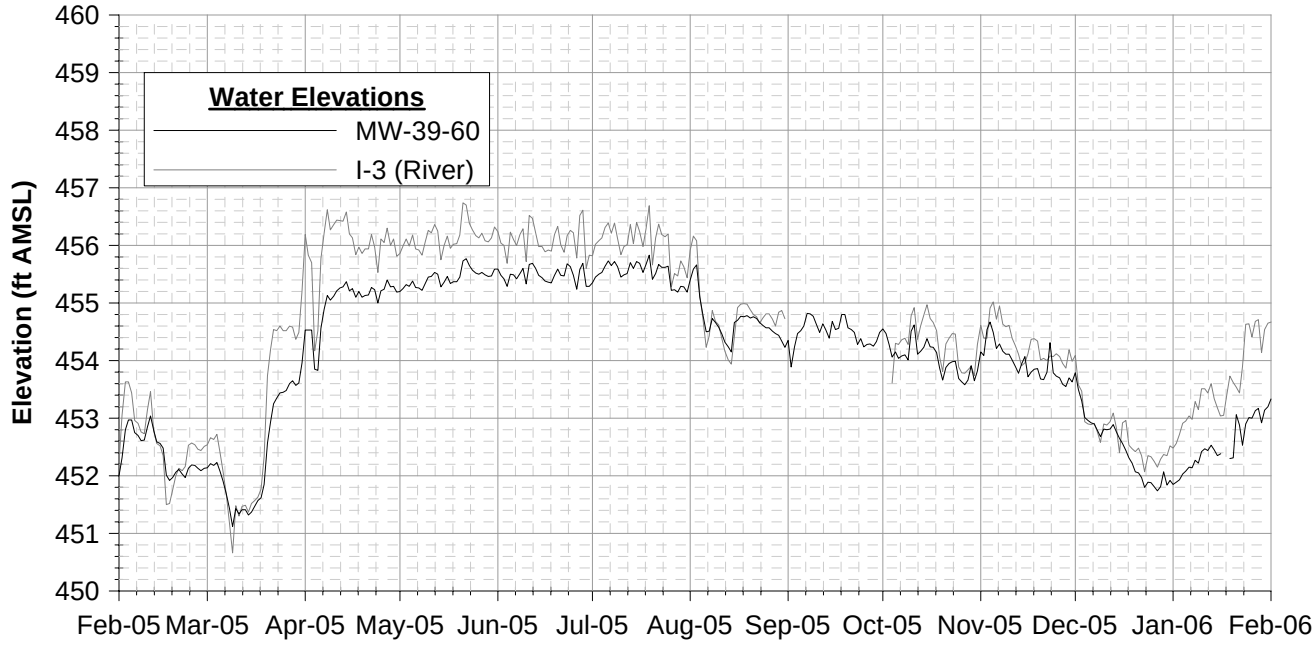
\\zinfandel\proj\PacificGasElectricCo\TopockProgram\Project_GMP\GMP_Reports\Chemplots\



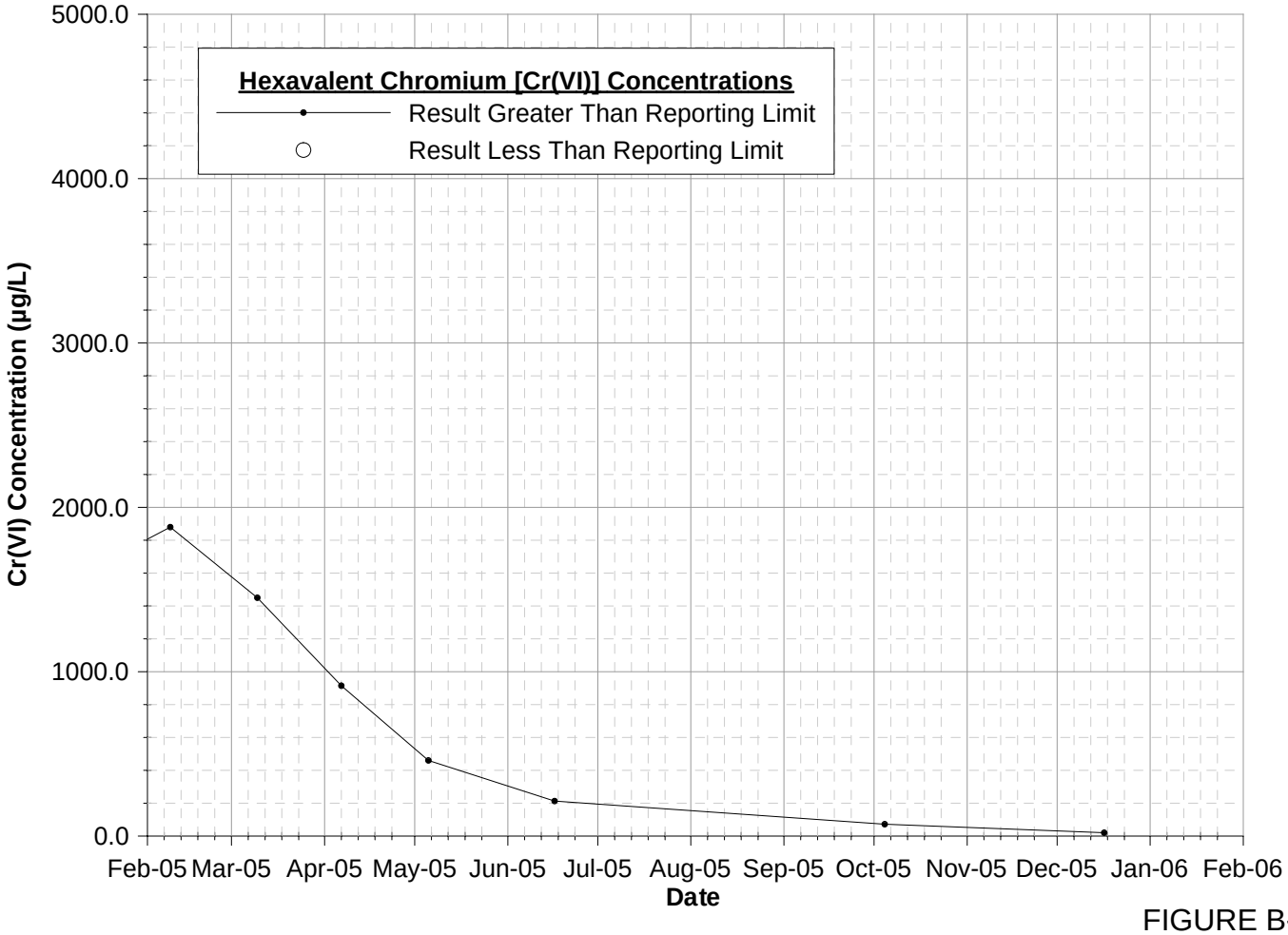


FIGURE B-8
MW-39-60 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 12/16/05
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Notes
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Data subject to review.
3. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
4. I-3 data unavailable 9/1/05 through 10/4/05 due to river damage.

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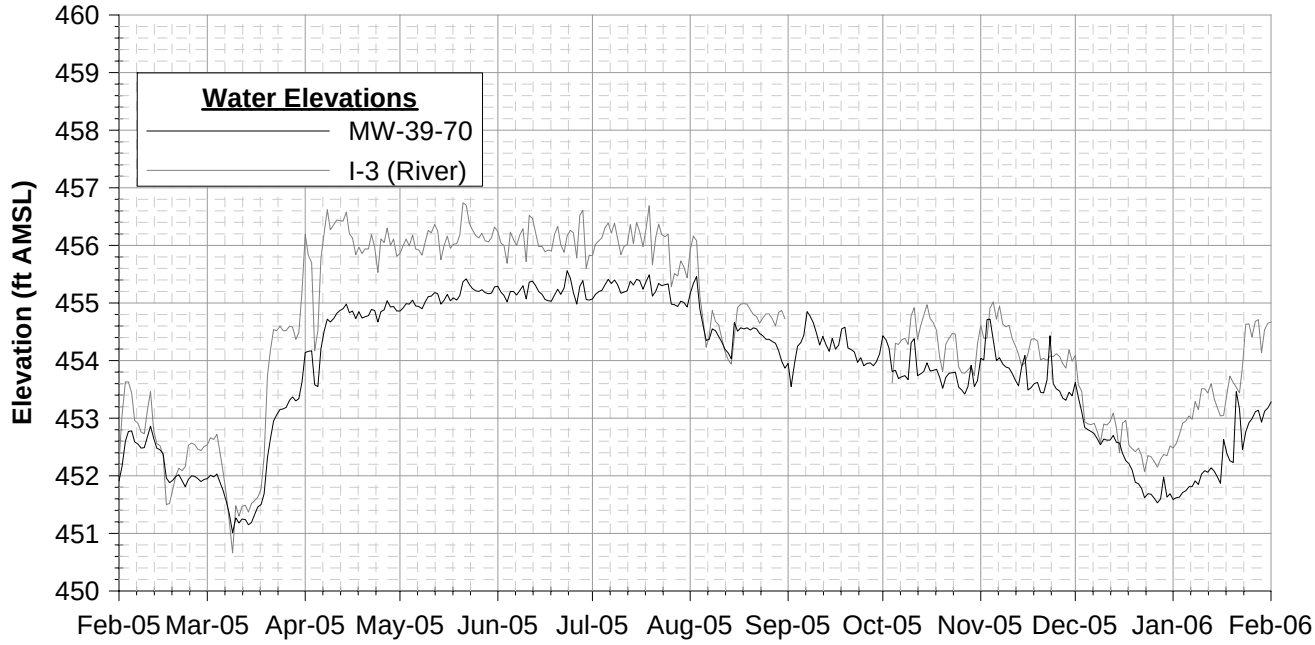

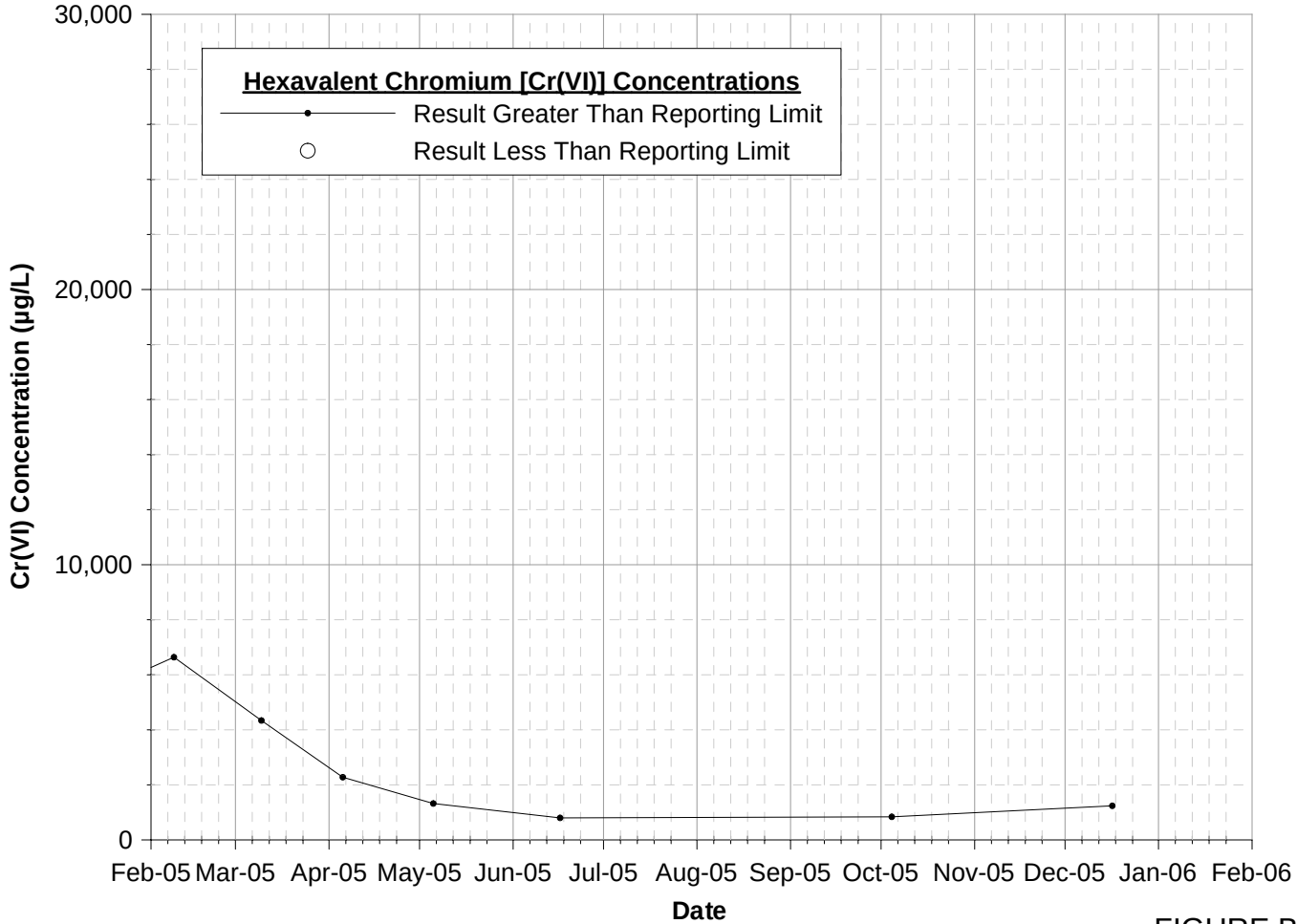

FIGURE B-9
MW-39-70 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 12/16/05
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Notes
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Data subject to review.
3. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
4. I-3 data unavailable 9/1/05 through 10/4/05 due to river damage.

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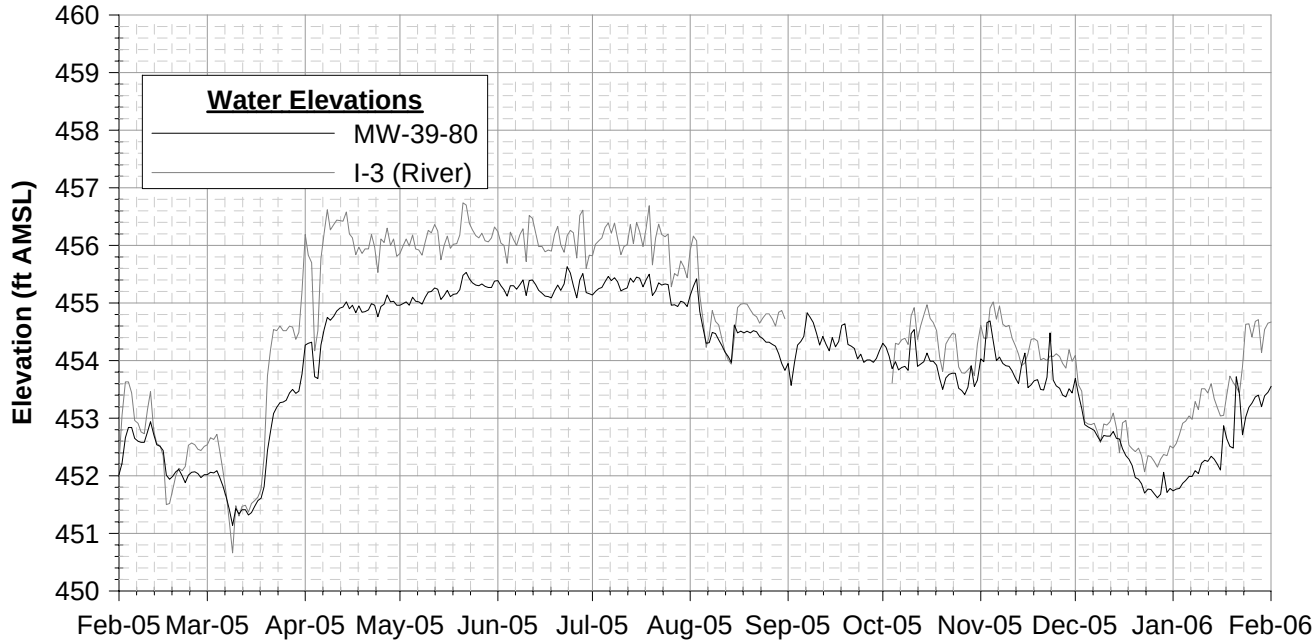
\\zinfandel\proj\PacificGasElectricCo\TopockProgram\Project_GMP\GMP_Reports\Chemplots\



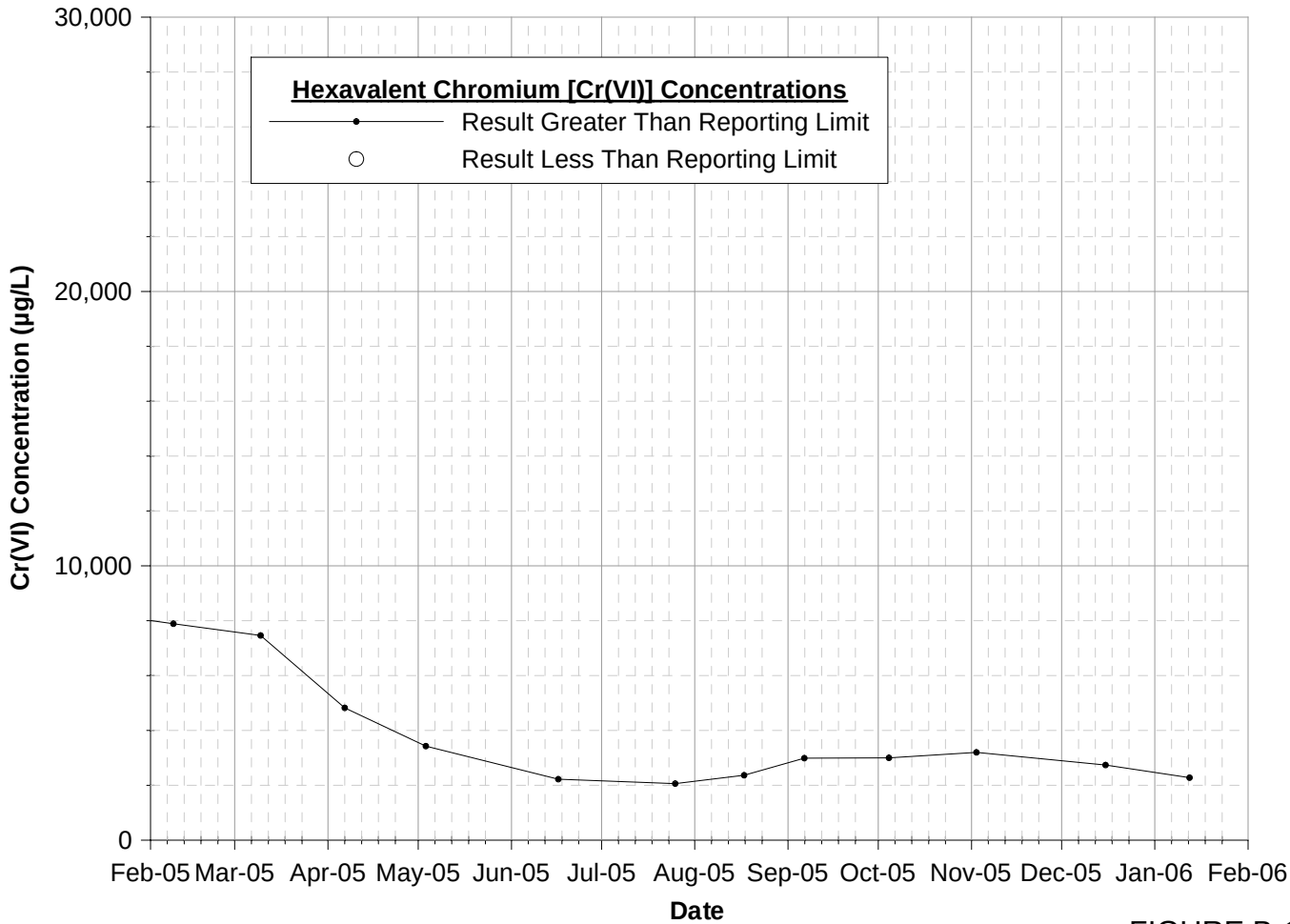


FIGURE B-10
MW-39-80 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 1/12/06
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Notes
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Data subject to review.
3. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
4. I-3 data unavailable 9/1/05 through 10/4/05 due to river damage.

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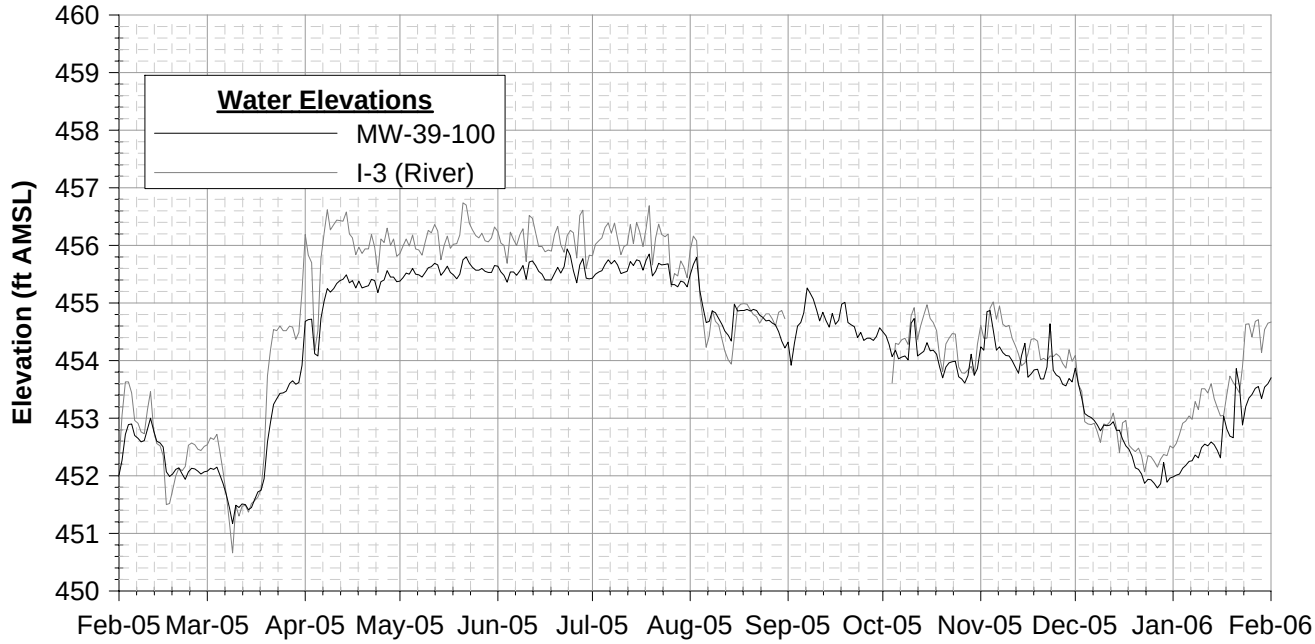

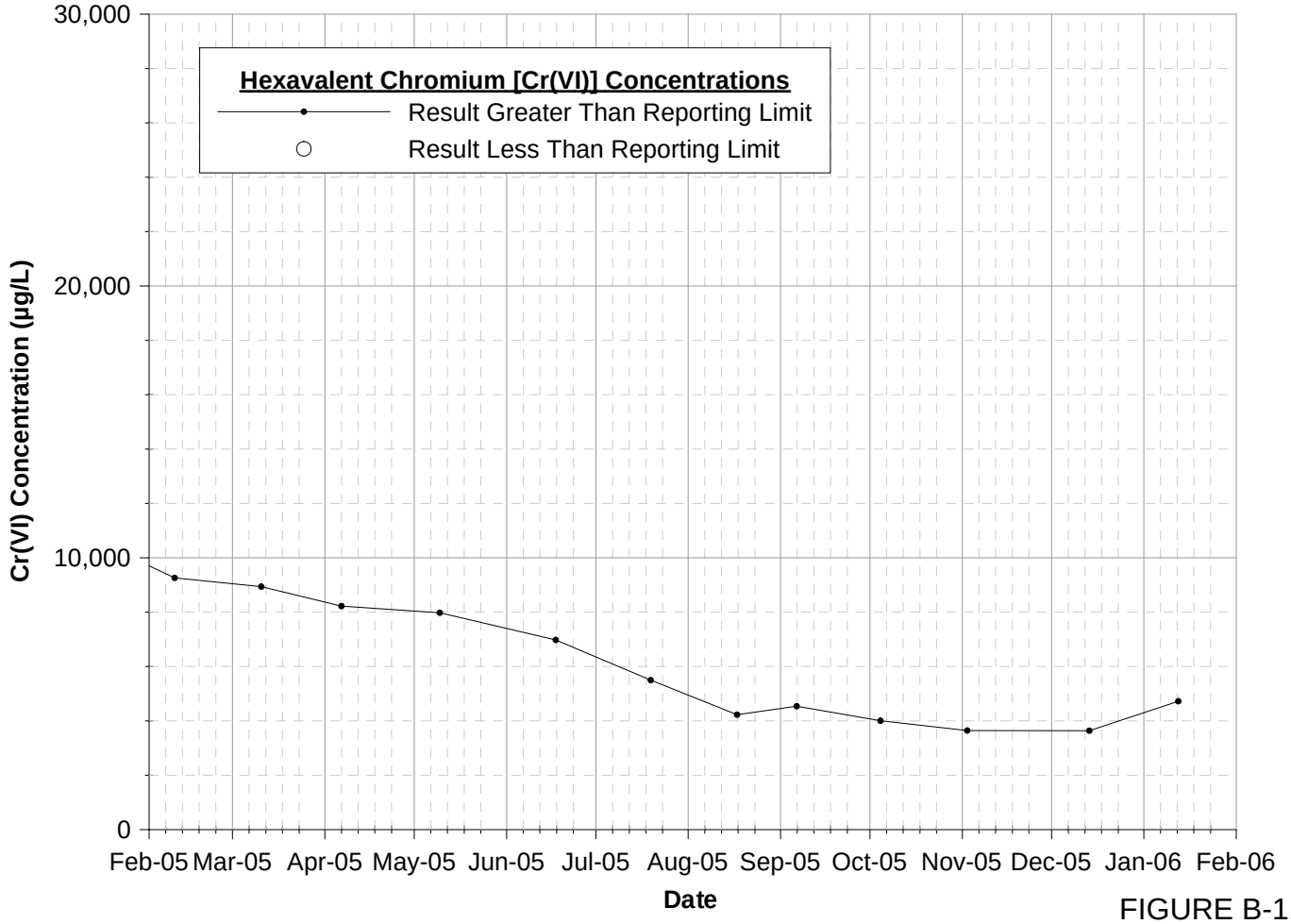

FIGURE B-11
MW-39-100 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 1/12/06
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Notes
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Data subject to review.
3. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
4. I-3 data unavailable 9/1/05 through 10/4/05 due to river damage.

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\\zinfandel\proj\PacificGasElectricCo\TopockProgram\Project_GMP\GMP_Reports\Chemplots\

Appendix C
Groundwater Quality Data for Performance Monitoring Wells

TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Shallow Wells								
MW-12	09-Jun-04	1560	67.0	4.60	2600	0.24	-9.2	-62
	09-Jun-04 FD	1560	---	4.60	2600	---	-9.3	-61
	20-Sep-04	1390	26.0	---	---	0.23	---	---
	10-Mar-05	925	34.0	---	---	---	---	---
	10-Mar-05 FD	925	---	---	---	---	---	---
	06-Apr-05	810	56.0	---	---	---	---	---
	06-Apr-05 FD	810	---	---	---	---	---	---
	13-Jun-05	852	60.0	---	---	0.20	---	---
	16-Sep-05	698	---	---	2000	0.20	---	---
	04-Oct-05	660	55.0	---	---	0.20	---	---
	04-Oct-05 FD	670	---	---	---	---	---	---
	13-Dec-05	626	97.0	---	---	0.16	---	---
MW-19	08-Jun-04	813	68.0	4.90	1300	0.23	-8.6	-65
	20-Sep-04	732	37.0	---	---	0.12	---	---
	17-Dec-04	796	13.0	---	---	---	---	---
	07-Mar-05	1080	100	---	---	0.11	---	---
	14-Jun-05	1150	65.0	---	---	0.10	---	---
	04-Oct-05	1060	30.0	---	---	0.10	---	---
	12-Dec-05	1240	153	---	---	0.10	---	---
MW-20-070	11-Jun-04	12400	35.0	---	---	0.20	---	---
	24-Sep-04	7680	89.0	9.70	2200	0.20	-6.5	-57
	16-Dec-04	7800	150	9.68	2080	0.20	-7.3	-60
	10-Mar-05	8280	151	9.98	1940	0.70	-7.1	-59
	07-Apr-05	8740	92.0	---	---	---	---	---
	15-Jun-05	6680	152	9.79	1980	0.20	-7.0	-60
	15-Jun-05 FD	7000	---	9.81	2050	---	-8.3	-57
	11-Oct-05	6060	151	9.48	1950	0.20	-7.2	-57
	15-Dec-05	4640	149	9.90	1830	0.20	-7.1	-49
MW-21	08-Jun-04	ND (1.0) J	-69	0.90	9600	0.63	-8.9	-69
	14-Jul-04	ND (1.0)	---	---	---	1.00	---	---
	12-Aug-04	ND (1.0)	19.0	---	---	0.78	---	---
	21-Sep-04	ND (1.0)	-128	---	---	0.61	---	---
	17-Dec-04	ND (0.2) J	-97	---	---	---	---	---
	08-Mar-05	ND (1.0)	-86	---	---	0.64	---	---
	14-Jun-05	ND (1.0)	81.0	---	---	0.68	---	---
	05-Oct-05	ND (1.0) J	-149	---	---	0.60	---	---
	14-Dec-05	ND (1.0)	-90	---	---	0.71	---	---
MW-22	07-Jun-04	ND (2.0)	-67.1	ND (4.0)	18000	1.50	-9.8	-76
	23-Sep-04	ND (2.0)	-111	---	---	2.10	---	---
	16-Dec-04	ND (1.0) J	-113	---	---	2.10	---	---
	10-Mar-05	ND (2.0)	-150	---	---	3.00	---	---
	17-Jun-05	ND (1.0)	-57	ND (0.5)	20800	2.20	-9.9	-76
	04-Oct-05	ND (2.0)	-86	---	---	2.27	---	---
	16-Dec-05	ND (2.0)	-90	---	---	1.96	---	---
MW-24A	08-Jun-04	2660	27.0	15.0	2000	0.17	-9.0	-69
	20-Sep-04	2960	63.0	---	---	0.18	---	---

Refer to table footnotes for data qualifier explanation.

TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Shallow Wells								
MW-24A	17-Dec-04	---	118	---	---	---	---	---
	11-Jan-05	3040	111	---	---	0.20	---	---
	07-Mar-05	3390	49.0	---	---	0.17	---	---
	07-Mar-05 FD	3360	---	---	---	---	---	---
	16-Jun-05	3280	52.0	---	---	0.20	---	---
	03-Oct-05	3120	157	---	---	0.20	---	---
	03-Oct-05 FD	3040	---	---	---	---	---	---
MW-25	09-Jun-04	2260	125	---	---	0.09	---	---
	22-Sep-04	1970	75.0	3.93	1000	0.10	-7.6	-58
	09-Mar-05	1740	181	3.64	877	0.07	-8.4	-62
	07-Apr-05	1620	95.0	---	---	---	---	---
	14-Jun-05	1730	107	3.89	942	0.08	-8.6	-61
	14-Jun-05 FD	1760	---	3.94	980	---	-7.2	-59
	04-Oct-05	1540	55.0	3.77	950	0.10	-8.2	-68
	04-Oct-05 FD	1540	---	3.75	910	---	-8.3	-60
	14-Dec-05	1460	156	3.74	838	0.06	-8.4	-55
	14-Dec-05 FD	1450	---	3.75	896	---	-8.4	-50
MW-26	08-Jun-04	3890	91.0	---	2300	0.18	---	---
	08-Jun-04 FD	4000	---	---	2200	---	---	---
	22-Sep-04	3670	92.0	5.65	2300	0.20	-6.7	-59
	16-Dec-04	3790	55.0	5.00	2130	0.20	-8.6	-64
	08-Mar-05	2990	123	4.48	1840	0.17	-8.8	-70
	08-Mar-05 FD	2990	---	4.45	1800	---	-8.7	-70
	13-Jun-05	3370	119	4.90	2130	0.19	-8.2	-65
	04-Oct-05	3040	45.0	4.88	2120	0.20	-7.8	-68
	12-Dec-05	3220	161	4.88	2610	0.20	-8.5	-55
MW-27-020	02-Jun-04	ND (0.2)	-196	---	---	0.00	---	---
	08-Jun-04	ND (0.2)	-139	---	630	0.00	---	---
	17-Jun-04	ND (0.2)	-194	---	---	0.05	---	---
	23-Jun-04	ND (0.2)	-132	---	---	0.05	---	---
	30-Jun-04	ND (0.2)	-187	---	---	0.03	---	---
	07-Jul-04	ND (0.2)	-181	---	---	0.00	---	---
	13-Jul-04	ND (0.2)	-163	---	---	0.00	---	---
	21-Jul-04	ND (0.2)	-195	---	---	0.10	---	---
	27-Jul-04	ND (0.2)	-231	---	---	0.00	---	---
	04-Aug-04	ND (0.2)	-154	---	---	0.05	---	---
	11-Aug-04	ND (0.2)	-153	---	---	0.04	---	---
	19-Aug-04	ND (0.2)	-204	---	---	0.03	---	---
	21-Sep-04	ND (0.2)	-183	ND (0.2)	670	0.00	-12.3	-92
	19-Oct-04	ND (0.2)	-214	---	---	0.06	---	---
	15-Nov-04	ND (0.2) R	-177	---	---	0.10	---	---
	02-Dec-04	ND (0.2)	-179	---	---	0.00	---	---
	15-Dec-04	ND (0.2)	-186	ND (0.5)	692	0.10	-11.9	-101
	10-Jan-05	ND (0.2)	-178	ND (0.2)	---	0.20	---	---
	09-Feb-05	ND (0.2)	-198	---	---	0.20	---	---
	08-Mar-05	ND (0.2)	-178	ND (0.5)	1250	0.10	-12	-102

Refer to table footnotes for data qualifier explanation.

TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Shallow Wells								
MW-27-020	04-Apr-05	ND (0.2)	-194	---	---	0.10	---	---
	04-May-05	ND (0.2)	-176	---	---	0.06	---	---
	18-Jul-05	ND (0.2)	-190	ND (0.5)	---	0.05	-11.9	-98
	05-Oct-05	ND (0.21)	-158	ND (0.5)	742	0.05	-11.8	-102
	14-Dec-05	ND (0.2)	-171	ND (0.5)	1020	0.05	-11.7	-91
MW-28-025	02-Jun-04	ND (0.2)	-137	---	---	0.10	---	---
	07-Jun-04	ND (0.2)	-93.5	ND (0.4)	890	0.10	-12.5	-100
	16-Jun-04	ND (0.2)	-155	---	---	0.10	---	---
	23-Jun-04	ND (0.2)	-73.7	---	---	0.07	---	---
	30-Jun-04	ND (0.2)	-126	---	---	0.07	---	---
	07-Jul-04	ND (0.2)	-72	---	---	0.10	---	---
	13-Jul-04	ND (0.2)	-112	---	---	0.10	---	---
	21-Jul-04	ND (0.2)	-104	---	---	0.10	---	---
	27-Jul-04	ND (0.2)	-160	---	---	0.00	---	---
	04-Aug-04	ND (0.2)	-29.8	---	---	0.11	---	---
	11-Aug-04	ND (0.2)	-37	---	---	0.07	---	---
	19-Aug-04	ND (0.2)	-111	---	---	0.06	---	---
	20-Sep-04	ND (0.2)	---	ND (0.4)	850 J	0.10	-11.7	-89
	19-Oct-04	ND (0.2)	-70	---	---	0.06	---	---
	15-Nov-04	ND (0.2) R	-33	---	---	0.10	---	---
	02-Dec-04	ND (0.2)	-170	---	---	0.10	---	---
	14-Dec-04	ND (0.2)	-43	ND (0.5)	810	---	-12	-99
	11-Jan-05	ND (0.2)	-115	---	---	0.10	---	---
	08-Feb-05	ND (0.2)	---	---	---	---	---	---
	10-Mar-05	ND (0.2)	60.0	ND (0.5)	880	0.10	-12.2	-95
	04-Apr-05	ND (0.2)	-108	---	---	0.10	---	---
	03-May-05	ND (0.2)	-59	---	---	0.06	---	---
	15-Jun-05	ND (0.2)	-54	ND (0.5)	974	0.07	-11.6	-91
	13-Jul-05	ND (0.2)	19.0	---	---	0.10	---	---
	06-Oct-05	ND (0.2)	-35	ND (0.5)	884	0.06	-11.7	-95
	16-Dec-05	ND (0.2)	-69	ND (0.5)	1010	0.10	-11.4	-90
MW-29	09-Jun-04	ND (0.2)	-158	---	1700	0.10	---	---
	13-Jul-04	ND (0.2)	-174	---	---	0.20	---	---
	04-Aug-04	---	-20.1	---	---	0.19	---	---
	11-Aug-04	ND (0.2)	-168	---	---	0.24	---	---
	20-Sep-04	ND (0.2)	-125	---	---	0.10	---	---
	19-Oct-04	ND (0.2)	-203	---	---	0.19	---	---
	15-Nov-04	ND (0.2) R	-184	---	---	0.30	---	---
	02-Dec-04	ND (0.2)	-208	---	---	0.30	---	---
	14-Dec-04	ND (0.2) J	---	---	---	---	---	---
	11-Jan-05	ND (1.0)	-147	---	---	1.00	---	---
	07-Feb-05	ND (1.0)	-150	---	---	---	---	---
	09-Mar-05	ND (2.0)	-127	---	---	---	---	---
	06-Apr-05	ND (1.0)	-128	---	---	1.40	---	---
	05-May-05	ND (0.2)	-142	---	---	0.30	---	---
	15-Jun-05	ND (0.2)	-108	---	---	0.35	---	---
	04-Oct-05	ND (0.2)	-110	---	---	0.27	---	---

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TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
2005 Annual Performance Monitoring Report
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	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Shallow Wells								
MW-29	12-Dec-05	ND (0.2)	-40	---	---	0.22	---	---
MW-30-030	03-Jun-04	ND (5.0)	-185	---	---	2.30	---	---
	09-Jun-04	ND (5.0)	-99.1	---	---	2.40	---	---
	16-Jun-04	ND (5.0)	-183	---	---	2.80	---	---
	24-Jun-04	ND (5.0)	-74	---	---	2.90	---	---
	01-Jul-04	ND (5.0)	-207	---	---	2.50	---	---
	08-Jul-04	ND (5.0)	-129	---	---	2.70	---	---
	14-Jul-04	ND (5.0)	-135	---	---	3.60	---	---
	22-Jul-04	ND (5.0)	-141	---	---	3.00	---	---
	28-Jul-04	ND (5.0)	-185	---	---	2.72	---	---
	04-Aug-04	ND (5.0)	-98.4	---	---	2.73	---	---
	12-Aug-04	ND (5.0)	-97	---	---	3.52	---	---
	19-Aug-04	ND (5.0)	-156	---	---	2.82	---	---
	23-Sep-04	ND (5.0)	-132	ND (200)	42000	3.40	-9.5	-73
	20-Oct-04	ND (5.0)	-126	---	---	3.48	---	---
	16-Nov-04	ND (5.0)	-121	---	---	3.90	---	---
	15-Dec-04	ND (5.0)	-116	ND (5.0)	45500	---	-9.5	-79
	11-Jan-05	ND (5.0)	-118	ND (10)	---	---	---	---
	09-Feb-05	ND (5.0)	-121	---	---	4.00	---	---
	10-Mar-05	ND (5.0)	-84	ND (5.0)	38800	4.00	-9.8	-79
	06-Apr-05	ND (2.0)	-143	---	---	2.40	---	---
	09-May-05	ND (2.0)	-131	---	---	3.10	---	---
	07-Oct-05	ND (0.2)	-146	ND (0.5)	36400	2.90	-8.5	-75
	15-Dec-05	ND (5.0)	-100	ND (1.0)	35700	2.49	-8.7	-59
MW-31-060	08-Jun-04	3510	80.0	---	---	0.19	---	---
	22-Sep-04	3090	85.0	5.45	1700	0.10	-8.0	-61
	16-Nov-04	2920	85.0	---	---	0.10	---	---
	16-Dec-04	2910	5.00	5.36	1640	0.20	-8.7	-64
	09-Mar-05	2700	192	4.94	1540	0.14	-8.6	-63
	07-Apr-05	1910	102	---	---	---	---	---
	13-Jun-05	1790	122	4.12	1660	0.15	-8.2	-65
	06-Oct-05	1430	54.0	4.01	1660	0.10	-8.6	-65
	13-Dec-05	1300	119	4.14	1620	0.14	-8.7	-54
MW-32-020	07-Jun-04	ND (1.0)	-121	---	---	0.40	---	---
	13-Jul-04	ND (1.0)	-143	---	---	0.40	---	---
	11-Aug-04	ND (2.0)	-182	---	---	2.15	---	---
	20-Sep-04	ND (2.0)	-129	ND (0.4)	21000 J	---	-7.3	-63
	19-Oct-04	ND (1.0)	-147	---	---	1.55 †	---	---
	15-Nov-04	ND (1.0) R	-147	---	---	1.80	---	---
	02-Dec-04	ND (1.0)	-145	---	---	1.50	---	---
	14-Dec-04	ND (1.0) J	-161	ND (5.0)	16100	1.80 †	-8.2	-66
	10-Jan-05	ND (1.0)	-157	ND (4.0)	---	1.70	---	---
	07-Feb-05	ND (1.0)	-155	---	---	1.60	---	---
	09-Mar-05	ND (2.0)	-161	ND (0.5)	12500	1.90	-7.2	-65
	04-Apr-05	ND (1.0)	-178	---	---	1.60	---	---
	09-May-05	ND (1.0)	-121	---	---	1.20	---	---

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TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
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PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Shallow Wells								
MW-32-020	17-Jun-05	ND (1.0)	-188	ND (0.5)	10200	0.91	-9.0	-67
	04-Oct-05	ND (2.0)	-115	ND (5.0)	28800	2.30	-7.8	-65
	16-Dec-05	ND (2.0)	-107	ND (1.0)	24600	2.14	-7.8	-61
MW-32-035	08-Jun-04	ND (1.0)	-130	---	---	0.40	---	---
	14-Jul-04	ND (1.0)	-162	---	---	0.40	---	---
	11-Aug-04	ND (1.0)	-140	---	---	0.47	---	---
	21-Sep-04	ND (1.0)	-157	ND (0.2)	4500	0.30	-8.7	-63
	19-Oct-04	ND (1.0)	-190	---	---	---	---	---
	15-Nov-04	ND (1.0) R	-170	---	---	0.40	---	---
	02-Dec-04	ND (1.0)	-159	---	---	0.40	---	---
	15-Dec-04	ND (1.0)	-169	ND (0.5)	4120	---	-8.5	-67
	10-Jan-05	ND (1.0)	-176	ND (0.2)	---	0.40	---	---
	07-Feb-05	ND (1.0)	-175	---	---	0.60	---	---
	09-Mar-05	ND (1.0)	-183	ND (0.5)	3560	0.70	-8.2	-68
	04-Apr-05	ND (1.0)	-197	---	---	0.50	---	---
	09-May-05	ND (1.0)	-164	---	---	0.80	---	---
	17-Jun-05	ND (1.0)	-202	ND (0.5)	7550	0.73	-9.5	-72
	04-Oct-05	ND (1.0)	-159	ND (0.5)	8340	0.66	-8.3	-70
	16-Dec-05	ND (1.0)	-141	ND (1.0)	7660	0.64	-8.8	-63
MW-33-040	09-Jun-04	ND (1.0)	-108	---	2500	0.20	-9.3	-62
	13-Jul-04	ND (0.2)	-77	---	---	0.20	---	---
	11-Aug-04	ND (1.0)	-71	---	---	0.45	---	---
	19-Aug-04	---	-131	ND (0.4)	---	0.47	---	---
	21-Sep-04	ND (1.0)	-127	---	---	0.90	---	---
	20-Oct-04	ND (1.0)	-129	---	---	1.03	---	---
	16-Nov-04	ND (1.0)	-69	---	---	0.90	---	---
	15-Dec-04	ND (0.2) J	-110	---	---	0.60	---	---
	11-Jan-05	ND (1.0)	-174	0.21	---	0.50	---	---
	07-Feb-05	ND (1.0)	-162	---	---	0.40	---	---
	09-Mar-05	ND (1.0)	-125	---	---	0.40	---	---
	04-Apr-05	ND (0.2)	-160	---	---	0.60	---	---
	05-May-05	ND (0.2)	-90	---	---	0.30	---	---
	17-Jun-05	ND (0.2)	-94	ND (0.5)	9680	0.29	-9.4	-67
	07-Oct-05	0.68	---	---	3660	---	---	---
	12-Dec-05	ND (1.0)	45.0	---	---	0.78	---	---
MW-35-060	10-Jun-04	19.7	92.5	1.80	4100	0.40	-10.1	-72
	22-Sep-04	27.5	-22	---	---	0.40	---	---
	13-Dec-04	26.8	-53	---	---	0.40	---	---
	15-Mar-05	33.8	-18	---	---	0.35	---	---
	13-Jun-05	33.6	-8.0	2.00	4140	0.70	-9.5	-72
	07-Oct-05	32.5	-1.0	---	---	0.40	---	---
	07-Oct-05 FD	35.1 J	---	---	---	---	---	---
	14-Dec-05	32.5	95.0	---	---	0.31	---	---
	14-Dec-05 FD	33.3	---	---	---	---	---	---
MW-36-020	15-Jun-04	ND (1.0)	-182	ND (0.4)	6600	0.63	-10.1	-74
	21-Sep-04	ND (1.0)	-179	---	---	1.00	---	---

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TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
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	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Shallow Wells								
MW-36-020	19-Oct-04	ND (2.0)	-128	---	---	---	---	---
	17-Nov-04	ND (1.0)	-152	---	---	1.40	---	---
	17-Nov-04 FD	ND (1.0)	---	---	---	---	---	---
	14-Dec-04	ND (2.0) J	-151	---	---	1.80	---	---
	11-Jan-05	ND (2.0)	-112	ND (10)	---	2.40	---	---
	07-Feb-05	ND (1.0)	-62	---	---	2.00	---	---
	09-Mar-05	ND (2.0)	-88	---	---	1.40	---	---
	05-Apr-05	ND (1.0)	-92	---	---	1.20	---	---
	03-May-05	ND (1.0)	-180	---	---	0.60	---	---
	03-Oct-05	ND (1.0)	-165	ND (0.5)	9320	0.74	-9.8	-75
	15-Dec-05	ND (2.0)	-112	---	---	2.65	---	---
MW-36-040	16-Jun-04	ND (1.0)	-192	ND (0.4)	5800	0.49	-10.1	-74
	21-Sep-04	ND (1.0)	-185	---	---	0.50	---	---
	19-Oct-04	ND (1.0)	11.6	---	---	---	---	---
	17-Nov-04	ND (1.0)	-166	---	---	0.80	---	---
	14-Dec-04	ND (1.0)	-168	---	---	---	---	---
	12-Jan-05	ND (0.2)	-191	---	---	0.50	---	---
	07-Feb-05	ND (1.0)	-151	---	---	0.60	---	---
	08-Mar-05	ND (1.0)	-194	---	---	0.60	---	---
	05-Apr-05	ND (1.0)	-162	---	---	0.60	---	---
	05-May-05	ND (1.0)	-180	---	---	0.60	---	---
	03-Oct-05	ND (1.0)	-162	---	---	0.63	---	---
	15-Dec-05	ND (1.0)	-190	---	---	0.90	---	---
MW-39-040	18-Jun-04	ND (1.0)	-220	ND (0.4) J	3500	0.30	-5.5	-45
	24-Sep-04	ND (1.0)	---	---	---	---	---	---
	20-Oct-04	ND (1.0)	-194	---	---	---	---	---
	17-Nov-04	ND (0.2)	-181	---	---	0.40	---	---
	15-Dec-04	ND (0.2)	-173	---	---	---	---	---
	12-Jan-05	ND (1.0)	-180	ND (0.2)	---	0.20	---	---
	08-Feb-05	ND (0.2)	-160	---	---	0.40	---	---
	09-Mar-05	ND (1.0)	-177	---	---	0.50	---	---
	05-Apr-05	ND (1.0)	-179	---	---	0.30	---	---
	05-May-05	ND (0.2)	-179	---	---	0.30	---	---
	16-Jun-05	ND (0.2)	-202	ND (0.5)	3660	0.50	-6.8	-50
	04-Oct-05	ND (0.2)	-203	---	---	0.30	---	---
	16-Dec-05	ND (0.2)	-177	---	---	0.30	---	---
MW-42-030	23-Feb-05	ND (1.0)	-175	ND (0.5)	9140	0.73	---	---
	16-Mar-05	ND (1.0)	-136	ND (1.0)	37100	1.06	---	---
	07-Oct-05	ND (1.0)	-139	ND (0.5)	10400	1.00	-4.5	-51
	15-Dec-05	ND (1.0)	-129	---	---	0.85	---	---
MW-43-025	07-Mar-05	ND (0.2)	-161	ND (0.2)	935	0.10	---	---
	15-Mar-05	ND (0.2)	-177	ND (1.0)	1220	0.08	---	---
	20-Jun-05	ND (0.2)	-174	ND (0.5)	1080	0.10	-11.8	-96
	04-Oct-05	ND (0.2)	-159	---	---	0.06	---	---
	16-Dec-05	ND (0.2)	-184	---	---	0.10	---	---
TW-02S	09-Jun-04	7190	---	---	2740	---	---	---

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Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
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	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Shallow Wells								
TW-02S	16-Jun-04	---	93.0	---	2450 NV	0.20	---	---
	29-Jul-04	5820	192	---	2200	0.65	---	---
	16-Dec-04	5080	155	---	---	0.20	---	---
	11-Mar-05	4400	90.0	---	---	4.00	---	---
	07-Oct-05	3360	204	---	---	0.17	---	---
Middle-Depth Wells								
MW-20-100	11-Jun-04	3910	8.00	---	---	0.30	---	---
	24-Sep-04	5890	89.0	8.85	3000	0.20	-4.8	-44
	16-Dec-04	8130	126	8.50	2840	0.20	-5.0	-47
	10-Mar-05	8440	110	9.98	2490	0.40	-5.2	-49
	15-Jun-05	9600	136	9.02	2500	0.20	-4.7	-46
	11-Oct-05	10200	157	8.87	2400	0.20	-5.3	-48
	15-Dec-05	9460	140	9.65	2340	0.20	-5.4	-40
MW-27-060	23-Feb-05	ND (1.0)	-151	ND (0.5)	8500	0.88	---	---
	23-Feb-05 FD	ND (1.0)	---	ND (0.5)	8620	---	---	---
	01-Mar-05	ND (1.0)	-143	---	---	0.80	---	---
	08-Mar-05	ND (1.0)	-144	---	---	1.10	---	---
	14-Mar-05	ND (1.0)	-158	ND (1.0)	8860	1.22	---	---
	23-Mar-05	ND (1.0)	-124	---	---	0.73	---	---
	29-Mar-05	ND (1.0)	-154	---	---	1.00	---	---
	05-Apr-05	ND (1.0)	-157	---	---	1.00	---	---
	12-Apr-05	ND (1.0)	-146	---	---	0.80	---	---
	19-Apr-05	ND (1.0)	---	---	---	---	---	---
	26-Apr-05	ND (1.0)	-111	---	---	1.30	---	---
	04-May-05	ND (1.0)	-114	---	---	0.84	---	---
	18-Jul-05	ND (1.0)	-125	ND (0.5)	---	0.78	-10.4	-80
	05-Oct-05	ND (1.0)	-97	---	8530	0.76	---	---
	15-Dec-05	ND (1.0)	-134	---	---	0.56	---	---
MW-30-050	03-Jun-04	1960	13.0	---	---	0.50	---	---
	09-Jun-04	1710	-22.8	---	---	0.60	---	---
	09-Jun-04 FD	1690	---	---	---	---	---	---
	16-Jun-04	1550	79.3	---	---	0.70	---	---
	24-Jun-04	1440	191	---	---	0.56	---	---
	01-Jul-04	1590	-22	---	---	0.60	---	---
	08-Jul-04	---	45.0	---	---	0.60	---	---
	15-Jul-04	1170	50.0	---	---	0.90	---	---
	15-Jul-04 FD	1190	---	---	---	---	---	---
	22-Jul-04	1290	16.0	---	---	0.70	---	---
	28-Jul-04	1150	10.0	---	---	0.55	---	---
	05-Aug-04	883	50.7	---	---	0.65	---	---
	05-Aug-04 FD	893	---	---	---	---	---	---
	12-Aug-04	756	-103	---	---	0.60	---	---
	12-Aug-04 FD	752	---	---	---	---	---	---
	20-Aug-04	729	-83	---	---	0.56	---	---
	23-Sep-04	831	-63	1.58	6600	0.60	-7.3	-58
	23-Sep-04 FD	774	---	1.64	6800	---	-6.7	-58

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	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Middle-Depth Wells								
MW-30-050	21-Oct-04	487	-63	---	---	0.58	---	---
	17-Nov-04	243	-87	---	---	0.60	---	---
	15-Dec-04	29.4	-115	ND (0.5)	6750	0.60	-7.9	-63
	15-Dec-04 FD	26.2	---	ND (0.5)	6690	---	-7.8	-64
	11-Jan-05	ND (10)	-215	0.28	---	0.80	---	---
	11-Jan-05 FD	ND (1.0)	---	0.28	---	---	---	---
	09-Feb-05	ND (10)	-155	---	---	0.80	---	---
	09-Feb-05 FD	ND (1.0)	---	---	---	---	---	---
	10-Mar-05	ND (1.0)	-230	ND (0.5)	6470 J	0.70	-8.3	-68
	06-Apr-05	18.5	-252	---	---	0.80	---	---
	06-Apr-05 FD	17.1 J	---	---	---	---	---	---
	09-May-05	ND (1.0)	-100	---	---	0.80	---	---
	09-May-05 FD	ND (1.0)	---	---	---	---	---	---
	07-Oct-05	ND (1.0)	-236	ND (0.5)	6860	0.70	-9.4	-79
	16-Dec-05	ND (1.0)	-263	ND (0.5)	5850	0.50	-10.5	-65
MW-33-090	03-Jun-04	15.0	-61	---	---	0.50	---	---
	03-Jun-04 FD	15.4	---	---	---	---	---	---
	10-Jun-04	14.1	---	1.00	4800	---	-10	-73
	16-Jun-04	14.0	-106	---	---	0.50	---	---
	24-Jun-04	13.0	---	---	---	0.48	---	---
	24-Jun-04 FD	12.8	---	---	---	---	---	---
	01-Jul-04	14.6	-92	---	---	0.50	---	---
	08-Jul-04	14.2	-47	---	---	0.50	---	---
	08-Jul-04 FD	13.8	---	---	---	---	---	---
	14-Jul-04	14.6	-78	---	---	0.70	---	---
	22-Jul-04	13.7	-69	---	---	0.60	---	---
	28-Jul-04	13.8	-160	---	---	0.46	---	---
	28-Jul-04 FD	14.0	---	---	---	---	---	---
	05-Aug-04	14.3	33.5	---	---	0.56	---	---
	12-Aug-04	14.8	---	---	---	0.53	---	---
	20-Aug-04	14.6	-130	---	---	0.51	---	---
	20-Aug-04 FD	14.4	---	---	---	---	---	---
	26-Aug-04	14.9	-55.1	---	---	0.45	---	---
	08-Sep-04	13.5	-162	---	---	0.47	---	---
	21-Sep-04	14.0	-124	---	---	0.50	---	---
	06-Oct-04	12.0	-190	---	---	0.48	---	---
	20-Oct-04	15.6	-132	---	---	0.46	---	---
	02-Nov-04	17.6	-185	---	---	0.50	---	---
	02-Nov-04 FD	17.4	---	---	---	---	---	---
	16-Nov-04	14.8	-93	---	---	0.70	---	---
	02-Dec-04	15.6	-199	---	---	0.40	---	---
	14-Dec-04	16.0	---	---	---	---	---	---
	29-Dec-04	16.7	-115	---	---	0.90	---	---
	11-Jan-05	18.2	-113	1.10	---	0.50	---	---
	27-Jan-05	17.7	-138	---	---	0.60	---	---
	07-Feb-05	20.2	-75	---	---	0.50	---	---
	22-Feb-05	19.0	10.0	---	---	0.50	---	---

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TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Middle-Depth Wells								
MW-33-090	09-Mar-05	18.6	-101	---	---	---	---	---
	22-Mar-05	18.9	-92	---	---	0.90	---	---
	04-Apr-05	21.3	-98	---	---	0.80	---	---
	19-Apr-05	20.3	---	---	---	0.50	---	---
	19-Apr-05 FD	20.0	---	---	---	---	---	---
	05-May-05	17.4	-244	---	---	0.50	---	---
	18-May-05	15.5	-141	---	---	---	---	---
	01-Jun-05	17.8	-53	---	---	0.70	---	---
	01-Jun-05 FD	16.0	---	---	---	---	---	---
	16-Jun-05	15.0	-209	0.975	5880	0.53	-10	-72
	16-Jun-05 FD	15.7 J	---	0.972	6210	---	-9.8	-72
	20-Jul-05	16.1	-23	---	---	0.47	---	---
	20-Jul-05 FD	16.5	---	---	---	---	---	---
	06-Oct-05	15.5	-33	---	5730	0.51	---	---
	13-Dec-05	16.4	-43	---	---	0.52	---	---
	13-Dec-05 FD	16.5	---	---	---	---	---	---
MW-34-055	02-Jun-04	ND (1.0)	-141	---	---	1.00	---	---
	08-Jun-04	ND (1.0)	-62.6	---	---	0.60	---	---
	17-Jun-04	ND (1.0)	-90	---	---	0.56	---	---
	23-Jun-04	ND (1.0)	28.5	---	---	0.56	---	---
	30-Jun-04	ND (1.0)	-5.4	---	---	0.57	---	---
	07-Jul-04	ND (1.0)	-62	---	---	0.50	---	---
	14-Jul-04	ND (1.0)	-109	---	---	0.50	---	---
	21-Jul-04	ND (1.0)	-82	---	---	0.50	---	---
	27-Jul-04	ND (1.0)	-153	---	---	0.50	---	---
	04-Aug-04	ND (1.0)	-23.7	---	---	0.54	---	---
	11-Aug-04	ND (1.0)	-56	---	---	0.60	---	---
	19-Aug-04	ND (1.0)	-94	---	---	0.49	---	---
	22-Sep-04	ND (1.0)	-94	ND (0.2)	5800	0.50	-11	-82
	20-Oct-04	ND (1.0)	-108	---	---	0.52	---	---
	16-Nov-04	ND (1.0)	-88	---	---	0.50	---	---
	15-Dec-04	ND (0.2) J	-94	ND (0.5)	5860	0.60	-10.9	-83
	12-Jan-05	ND (1.0)	-101	ND (0.2)	---	0.70	---	---
	09-Feb-05	ND (1.0)	-112	---	---	0.70	---	---
	10-Mar-05	ND (1.0)	-191	ND (0.5)	6230	0.40	-10.8	-82
	05-Apr-05	ND (1.0)	-110	---	---	0.70	---	---
	05-May-05	ND (1.0)	-99	---	---	0.50	---	---
	15-Jul-05	ND (1.0)	-77	ND (0.5)	---	0.50	-10.3	-84
	05-Oct-05	ND (1.0)	-93	ND (0.5)	5150	0.47	-10.6	-88
	14-Dec-05	ND (1.0)	-124	ND (0.5)	5100	0.35	-10.8	-74
MW-36-050	17-Jun-04	ND (1.0)	-219	ND (0.4)	5300	0.50	-10	-74
	21-Sep-04	ND (1.0)	-191	---	---	0.40	---	---
	18-Oct-04	---	13.3	---	---	---	---	---
	19-Oct-04	ND (1.0)	---	---	---	---	---	---
	17-Nov-04	ND (1.0)	-147	---	---	0.60	---	---
	14-Dec-04	ND (0.2) J	-151	---	---	---	---	---
	12-Jan-05	ND (1.0)	-163	ND (0.2)	---	0.30	---	---

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TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
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PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Middle-Depth Wells								
MW-36-050	07-Feb-05	ND (1.0)	-131	---	---	0.60	---	---
	08-Mar-05	ND (1.0)	-168	---	---	0.50	---	---
	05-Apr-05	ND (1.0)	-129	---	---	0.50	---	---
	05-May-05	ND (1.0)	-137	---	---	0.50	---	---
	03-Oct-05	ND (1.0)	-133	---	---	0.40	---	---
	15-Dec-05	ND (1.0)	-136	---	---	0.79	---	---
MW-36-070	17-Jun-04	ND (1.0)	-201	ND (0.4)	7600	0.70	-9.8	-71
	22-Sep-04	ND (1.0)	-151	---	---	0.60	---	---
	20-Oct-04	ND (1.0)	-135	---	---	---	---	---
	17-Nov-04	ND (1.0)	-126	---	---	0.70	---	---
	14-Dec-04	ND (0.2) J	-131	---	---	0.50	---	---
	11-Jan-05	ND (1.0)	-130	---	---	0.70	---	---
	07-Feb-05	ND (0.21)	-60	---	---	1.10	---	---
	08-Mar-05	ND (1.0)	-115	---	---	0.60	---	---
	05-Apr-05	ND (1.0)	-48	---	---	0.50	---	---
	03-May-05	ND (1.0)	-103	---	---	0.70	---	---
	03-Oct-05	ND (1.0)	-112	ND (0.5)	5450	0.42	-10.2	-80
	15-Dec-05	ND (1.0)	-108	---	---	0.52	---	---
MW-39-050	18-Jun-04	3480	-40	6.30 J	4300	0.50	-4.9	-44
	24-Sep-04	2960	---	---	---	---	---	---
	20-Oct-04	2630	18.0	---	---	---	---	---
	18-Nov-04	1850	12.0	---	---	0.70	---	---
	15-Dec-04	1470	18.0	---	---	---	---	---
	14-Jan-05	1000	77.0	---	---	0.70	---	---
	08-Feb-05	819	76.0	---	---	0.80	---	---
	09-Mar-05	422	11.0	---	---	0.80	---	---
	06-Apr-05	282 J	81.0	---	---	0.70	---	---
	03-May-05	206	56.0	---	---	0.80	---	---
	16-Jun-05	66.2	-44	---	---	0.90	---	---
	04-Oct-05	ND (10)	-78	---	---	0.80	---	---
	16-Dec-05	---	-57	---	---	0.64	---	---
	12-Jan-06	ND (10)	-9.0	---	---	1.08	---	---
MW-39-060	18-Jun-04	3540	-98	6.30 J	4300	0.40	-4.6	-42
	18-Jun-04 FD	3480	---	6.20 J	4200	---	-4.2	-37
	24-Sep-04	3810	---	---	---	---	---	---
	20-Oct-04	3590	32.0	---	---	---	---	---
	20-Oct-04 FD	3670	---	---	---	---	---	---
	18-Nov-04	3210	31.0	---	---	0.50	---	---
	15-Dec-04	2800	29.0	---	---	---	---	---
	14-Jan-05	1640	95.0	---	---	0.60	---	---
	08-Feb-05	1880	106	---	---	0.70	---	---
	09-Mar-05	1450	65.0	---	---	0.90	---	---
	06-Apr-05	914	84.0	---	---	0.70	---	---
	06-Apr-05 FD	914	---	---	---	---	---	---
	05-May-05	450	43.0	---	---	0.80	---	---
	05-May-05 FD	460	---	---	---	---	---	---

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TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
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	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Middle-Depth Wells								
MW-39-060	16-Jun-05	213	19.0	---	---	1.00	---	---
	04-Oct-05	72.3	-20	---	---	0.80	---	---
	16-Dec-05	20.4	-40	---	---	0.64	---	---
MW-39-070	18-Jun-04	8210	29.0	9.00 J	6100	0.40	-5.0	-44
	24-Sep-04	5590	---	---	---	---	---	---
	21-Oct-04	6410	98.0	---	---	---	---	---
	18-Nov-04	7600	45.0	---	---	0.50	---	---
	15-Dec-04	5040	11.0	---	---	---	---	---
	12-Jan-05	5310	53.0	---	---	0.40	---	---
	08-Feb-05	6640	89.0	---	---	0.60	---	---
	09-Mar-05	4310	71.0	---	---	0.80	---	---
	09-Mar-05 FD	4340	---	---	---	---	---	---
	05-Apr-05	2280	61.0	---	---	0.70	---	---
	05-May-05	1320	98.0	---	---	0.70	---	---
	16-Jun-05	799	22.0	ND (0.5)	9160 J	0.90	-8.7	-64
	04-Oct-05	840	31.0	---	---	0.80	---	---
	16-Dec-05	1240	22.0	---	---	0.56	---	---
MW-42-055	23-Feb-05	ND (1.0)	-188	ND (0.5)	8990	0.79	---	---
	16-Mar-05	ND (1.0)	-191	ND (1.0)	10800	1.01	---	---
	07-Oct-05	ND (1.0)	-126	ND (0.5)	11800	1.10	-6.1	-59
	15-Dec-05	ND (1.0)	-143	---	---	0.63	---	---
MW-42-065	14-Feb-05	ND (1.0)	-201	---	---	1.40	---	---
	24-Feb-05	ND (1.0)	-119	ND (0.5)	10200	1.20	---	---
	16-Mar-05	ND (1.0)	-126	ND (1.0)	8600	1.29	---	---
	07-Oct-05	ND (1.0)	-121	ND (0.5)	11600	1.00	-7.9	-70
	15-Dec-05	ND (1.0)	-78	---	---	0.76	---	---
Deep Wells								
MW-20-130	11-Jun-04	7860	8.00	---	---	0.70	---	---
	24-Sep-04	7380	72.0	9.80	7800	0.60	-4.4	-45
	27-Jan-05	8600	38.0	10.4	7350	---	-5.7	-48
	09-Mar-05	8730	126	10.9	5520	0.74	-5.8	-56
	09-Mar-05 FD	8810	---	10.9	6200	---	-5.4	-51
	07-Apr-05	8980	99.0	---	---	0.60	---	---
	15-Jun-05	10800	145	11.1	7790	0.60	-5.0	-48
	07-Oct-05	9590	53.0	10.9	7330	0.70	-5.0	-47
	16-Dec-05	10500	123	10.7	7860	0.67	-5.8	-43
MW-24B	08-Jun-04	5190	66.0	16.0	9200	0.75	-6.1	-53
	21-Sep-04	5100	42.0	---	---	0.60	---	---
	17-Dec-04	---	104	---	---	---	---	---
	17-Dec-04 FD	4790	---	---	---	---	---	---
	11-Jan-05	5260	105	---	---	0.70	---	---
	07-Mar-05	5320	-2.0	---	---	0.83	---	---
	16-Jun-05	5640	-4.0	---	---	0.80	---	---
	03-Oct-05	5240	153	---	---	0.80	---	---
MW-27-085	14-Feb-05	ND (1.0)	-519	---	---	1.70	---	---

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	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Deep Wells								
MW-27-085	16-Feb-05	ND (2.0)	-491	---	10000	1.40	---	---
	23-Feb-05	ND (2.0)	-235	ND (0.5)	12300	1.05	---	---
	01-Mar-05	ND (1.0)	-155	---	---	1.10	---	---
	08-Mar-05	ND (2.0)	-152	---	---	1.30	---	---
	14-Mar-05	ND (1.0)	-153	ND (0.5)	13000	1.67	---	---
	23-Mar-05	ND (1.0)	-145	---	---	0.95	---	---
	29-Mar-05	ND (1.0)	-167	---	---	1.20	---	---
	05-Apr-05	ND (1.0)	-134	---	---	1.20	---	---
	12-Apr-05	ND (1.0)	-134	---	---	1.00	---	---
	19-Apr-05	ND (1.0)	---	---	---	---	---	---
	26-Apr-05	ND (1.0)	-138	---	---	1.10	---	---
	04-May-05	ND (1.0)	-128	---	---	1.10	---	---
	19-May-05	ND (1.0)	-131	---	---	1.18	---	---
	02-Jun-05	ND (1.0)	-100	---	---	1.20	---	---
	19-Jul-05	ND (1.0)	-106	ND (0.5)	---	1.14	-9.5	-75
	16-Aug-05	ND (1.0)	-156	---	---	0.80	---	---
	08-Sep-05	ND (1.0)	-158	---	---	1.20	---	---
	05-Oct-05	ND (1.0)	-82	---	12300	1.08	---	---
	03-Nov-05	ND (2.0) J	-150	---	---	1.40	---	---
	15-Dec-05	1.20 J	-124	---	---	0.83	---	---
	12-Jan-06	ND (1.0)	-91	---	---	1.36	---	---
MW-28-090	10-Jun-04	ND (1.0)	-184	ND (0.4)	6200	0.00	-10.2	-76
	26-Aug-04	ND (1.0)	-246	---	---	0.53	---	---
	09-Sep-04	ND (1.0)	-321	---	---	0.53	---	---
	20-Sep-04	ND (1.0)	-124	---	---	0.60	---	---
	06-Oct-04	ND (1.0)	-199	---	---	0.55	---	---
	19-Oct-04	ND (1.0)	-193	---	---	0.55	---	---
	02-Nov-04	ND (1.0)	-160	---	---	0.60	---	---
	15-Nov-04	ND (0.2) R	-143	---	---	0.60	---	---
	02-Dec-04	ND (1.0)	-201	---	---	0.50	---	---
	13-Dec-04	ND (0.2) J	-137	ND (0.5) R	5940	0.50	-9.2	-79
	29-Dec-04	ND (1.0)	-175	---	---	0.90	---	---
	11-Jan-05	ND (1.0)	-193	0.43	---	0.80	---	---
	27-Jan-05	ND (1.0)	-203	---	---	0.70	---	---
	08-Feb-05	ND (1.0)	-181	---	---	0.50	---	---
	22-Feb-05	ND (1.0)	-54	---	---	0.50	---	---
	07-Mar-05	ND (1.0)	-190	---	---	---	---	---
	22-Mar-05	ND (1.0)	-203	---	---	0.70	---	---
	04-Apr-05	ND (1.0)	-172	---	---	0.70	---	---
	20-Apr-05	ND (1.0)	-93	---	---	0.60	---	---
	03-May-05	ND (1.0)	-208	---	---	0.60	---	---
	19-May-05	ND (1.0)	-147	---	---	0.53	---	---
	02-Jun-05	ND (1.0)	-141	---	---	---	---	---
	15-Jun-05	ND (1.0)	-205	ND (0.5)	5750	0.52	-9.8	-80
	01-Jul-05	ND (1.0)	-174	---	---	0.70	---	---
	13-Jul-05	ND (1.0)	-142	---	---	0.50	---	---
	18-Aug-05	ND (1.0)	-178	---	---	0.50	---	---

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	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Deep Wells								
MW-28-090	09-Sep-05	ND (1.0)	-190	---	---	0.40	---	---
	06-Oct-05	ND (1.0)	-138	---	5390	0.50	---	---
	02-Nov-05	ND (1.0)	-183	---	---	0.50	---	---
	16-Dec-05	ND (1.0)	-176	---	---	0.50	---	---
	10-Jan-06	ND (1.0)	-140	---	---	0.62	---	---
MW-31-135	10-Jun-04	266	-30	0.70	8100	0.76	-10.1	-78
	23-Sep-04	282	17.0	---	---	0.50	---	---
	14-Dec-04	410 J	-23	---	---	0.80	---	---
	10-Mar-05	422	42.0	---	---	0.72	---	---
	13-Jun-05	318	42.0	0.953	5800 J	0.80	-9.6	-72
	13-Jun-05 FD	318	---	---	---	---	---	---
	06-Oct-05	271	-4.0	---	6450	0.60	---	---
	14-Dec-05	221	124	---	---	0.46	---	---
MW-33-150	02-Mar-05	ND (1.0)	-120	1.03	10300	0.90	---	---
	02-Mar-05 FD	ND (1.0)	---	0.975	10200	---	---	---
	16-Mar-05	ND (1.0)	-175	ND (1.0)	10700	1.33	---	---
	17-Jun-05	3.10 J	-172	0.992	10700	1.09	-10.2	-75
	20-Jul-05	5.20	-59	---	---	0.95	---	---
	17-Aug-05	4.00	-72	---	---	1.00	---	---
	09-Sep-05	3.90	-108	---	---	1.00	---	---
	06-Oct-05	4.50	-41	---	10200	0.92	---	---
	06-Oct-05 FD	5.30	---	---	10600	---	---	---
	02-Nov-05	5.50	-81	---	---	1.30	---	---
	12-Dec-05	6.60	21.0	---	---	1.15	---	---
	10-Jan-06	6.40	27.0	---	---	1.32	---	---
MW-33-210	24-Feb-05	ND (1.0)	-116	1.07	12200	1.30	---	---
	16-Mar-05	1.40	-103	1.19	12500	1.55	---	---
	16-Jun-05	5.10 J	-216	1.26	13600	1.37	-9.3	-79
	20-Jul-05	5.60	-40	---	---	1.15	---	---
	17-Aug-05	2.50	-88	---	---	1.20	---	---
	06-Sep-05	3.50	-109	---	---	1.40	---	---
	06-Oct-05	4.00	-30	---	12400	1.12	---	---
	02-Nov-05	6.50	-73	---	---	1.50	---	---
	12-Dec-05	6.90	40.0	---	---	1.33	---	---
	10-Jan-06	7.60	13.0	---	---	1.48	---	---
MW-34-080	02-Jun-04	ND (2.0)	-81	---	---	0.90	---	---
	08-Jun-04	ND (1.0)	-25.8	---	---	0.80	---	---
	17-Jun-04	ND (1.0)	-121	---	---	0.80	---	---
	17-Jun-04 FD	ND (1.0)	---	---	---	---	---	---
	23-Jun-04	ND (1.0)	-19.6	---	---	0.84	---	---
	30-Jun-04	ND (1.0)	18.4	---	---	0.87	---	---
	30-Jun-04 FD	ND (2.0)	---	---	---	---	---	---
	07-Jul-04	ND (1.0)	-126	---	---	0.80	---	---
	15-Jul-04	ND (1.0)	-74	---	---	1.20	---	---
	15-Jul-04 FD	ND (1.0)	---	---	---	---	---	---
	21-Jul-04	ND (1.0)	-77	---	---	1.10	---	---

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	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Deep Wells								
MW-34-080	21-Jul-04 FD	ND (1.0)	---	---	---	---	---	---
	27-Jul-04	ND (1.0)	-170	---	---	0.80	---	---
	05-Aug-04	ND (1.0)	-31.5	---	---	0.96	---	---
	12-Aug-04	ND (1.0)	-216	---	---	0.90	---	---
	12-Aug-04 FD	ND (1.0)	---	---	---	---	---	---
	20-Aug-04	ND (1.0)	-171	---	---	0.83	---	---
	26-Aug-04	ND (1.0)	-154	---	---	0.73	---	---
	08-Sep-04	ND (1.0)	-194	---	---	0.75	---	---
	23-Sep-04	ND (1.0)	-82	ND (10)	8900	0.80	-9.9	-79
	23-Sep-04 FD	ND (1.0)	---	ND (10)	9900	---	-9.6	-78
	06-Oct-04	ND (1.0)	-194	---	---	0.74	---	---
	20-Oct-04	ND (1.0)	-175	---	---	0.76	---	---
	02-Nov-04	ND (1.0)	-219	---	---	0.80	---	---
	17-Nov-04	ND (1.0)	-209	---	---	0.70	---	---
	17-Nov-04 FD	ND (1.0)	---	---	---	---	---	---
	02-Dec-04	ND (1.0)	-238	---	---	0.60	---	---
	13-Dec-04	ND (1.0)	-174	---	---	0.70	---	---
	29-Dec-04	ND (1.0)	-99	---	---	1.20	---	---
	12-Jan-05	ND (1.0)	-181	ND (0.2)	---	1.00	---	---
	27-Jan-05	ND (1.0)	-134	---	---	0.90	---	---
	08-Feb-05	ND (1.0)	-162	---	---	0.90	---	---
	16-Feb-05	ND (2.0)	-224	---	7640	1.10	---	---
	22-Feb-05	ND (1.0)	-95	---	---	0.80	---	---
	01-Mar-05	ND (1.0)	-127	---	---	0.80	---	---
	08-Mar-05	ND (1.0) J	-84	ND (0.5)	6940	1.00	-10.4	-83
	15-Mar-05	ND (1.0)	-121	ND (1.0)	8980	0.89	---	---
	22-Mar-05	ND (1.0)	-83	---	---	0.90	---	---
	29-Mar-05	ND (1.0)	-214	---	---	1.00	---	---
	05-Apr-05	ND (1.0)	-207	---	---	1.00	---	---
	12-Apr-05	ND (1.0)	-86	---	---	0.80	---	---
	19-Apr-05	ND (1.0)	4.00	---	---	0.80	---	---
	26-Apr-05	ND (1.0)	-94	---	---	0.80	---	---
	04-May-05	ND (1.0)	-241	---	---	0.93	---	---
	18-May-05	ND (1.0)	-138	---	---	0.90	---	---
	01-Jun-05	ND (1.0)	-117	---	---	1.10	---	---
	30-Jun-05	ND (1.0)	-61	ND (0.5)	7840	1.10	-8.4	-82
	14-Jul-05	ND (1.0)	-104	---	---	1.10	---	---
	15-Aug-05	ND (1.0)	-137	---	---	0.80	---	---
	07-Sep-05	ND (1.0)	-148	---	---	1.00	---	---
	05-Oct-05	ND (1.0)	-58	ND (0.5)	10200	0.79	-10.1	-85
	03-Nov-05	ND (1.0)	-117	---	---	1.00	---	---
	14-Dec-05	ND (1.0)	-88	ND (0.5)	8800	0.59	-10.2	-71
	11-Jan-06	ND (1.0)	-38	---	---	1.07	---	---
MW-34-100	14-Feb-05	357	-246	---	---	1.50	---	---
	16-Feb-05	354	-159	---	9750	1.20	---	---
	23-Feb-05	417	-35	0.786	9780	1.07	---	---
	01-Mar-05	402	-86	---	---	0.90	---	---

Refer to table footnotes for data qualifier explanation.

TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Deep Wells								
MW-34-100	01-Mar-05 FD	411	---	---	---	---	---	---
	08-Mar-05	425 J	-60	---	---	1.20	---	---
	14-Mar-05	426	-55	ND (1.0)	10800	1.45	---	---
	23-Mar-05	421	-98	---	---	0.85	---	---
	29-Mar-05	73.9 J	-96	---	---	1.10	---	---
	29-Mar-05 FD	56.7 J	---	---	---	---	---	---
	05-Apr-05	452	-115	---	---	1.20	---	---
	05-Apr-05 FD	455	---	---	---	---	---	---
	12-Apr-05	482	-61	---	---	0.90	---	---
	12-Apr-05 FD	499	---	---	---	---	---	---
	19-Apr-05	473	8.00	---	---	1.00	---	---
	26-Apr-05	476	-45	---	---	1.30	---	---
	26-Apr-05 FD	480	---	---	---	---	---	---
	04-May-05	491	-98	---	---	1.12	---	---
	10-May-05	513	21.0	---	---	0.90	---	---
	10-May-05 FD	501	---	---	---	---	---	---
	18-May-05	524	50.0	---	---	1.10	---	---
	25-May-05	559	-93	---	---	1.11	---	---
	01-Jun-05	527	-59	---	---	1.20	---	---
	08-Jun-05	552	-15	---	---	1.20	---	---
	21-Jun-05	560	-26	1.05	11300	1.20	-9.7	-75
	21-Jun-05 FD	578	---	1.03	10900 J	---	-9.5	-77
	07-Jul-05	583	-88	---	---	1.10	---	---
	14-Jul-05	617	-26	---	---	1.20	---	---
	27-Jul-05	597	-2.0	---	---	1.05	---	---
	10-Aug-05	574	-83	---	---	1.20	---	---
	10-Aug-05 FD	571	---	---	---	---	---	---
	15-Aug-05	633	-17	---	---	1.00	---	---
	31-Aug-05	649	-42	---	---	1.00	---	---
	31-Aug-05 FD	658	---	---	---	---	---	---
	07-Sep-05	673	-60	---	---	1.20	---	---
	20-Sep-05	675	-28	---	---	0.80	---	---
	05-Oct-05	732	-13	1.20	10400	0.94	-9.9	-83
	05-Oct-05 FD	708	---	1.21	10400	---	-9.9	-83
	25-Oct-05	752	-29	---	---	1.20	---	---
	25-Oct-05 FD	752	---	---	---	---	---	---
	03-Nov-05	748 J	-49	---	---	1.20	---	---
	16-Nov-05	759	-2.0	---	---	0.90	---	---
	16-Nov-05 FD	763	---	---	---	---	---	---
	30-Nov-05	791	-55	---	---	1.20	---	---
	30-Nov-05 FD	802	---	---	---	---	---	---
	14-Dec-05	808	-26	---	---	0.71	---	---
	14-Dec-05 FD	811	---	---	---	---	---	---
	28-Dec-05	804	-28	---	---	1.20	---	---
	12-Jan-06	837	104	---	---	1.28	---	---
	12-Jan-06 FD	856	---	---	---	---	---	---
	23-Jan-06	822	136	---	---	1.40	---	---

Refer to table footnotes for data qualifier explanation.

TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Deep Wells								
MW-35-135	10-Jun-04	11.4	14.0	2.00	7600	0.72	-10.8	-84
	23-Sep-04	7.60	-50	---	---	0.50	---	---
	23-Sep-04 FD	7.90	---	---	---	---	---	---
	13-Dec-04	15.6 J	-75	---	---	---	---	---
	13-Dec-04 FD	15.7 J	---	---	---	---	---	---
	15-Mar-05	23.0	-108	---	---	0.61	---	---
	13-Jun-05	17.6	-138	2.19	7400	0.90	-10.5	-79
	07-Oct-05	21.2	-55	---	---	0.60	---	---
	14-Dec-05	25.7	38.0	---	---	0.47	---	---
MW-36-090	15-Jun-04	3270	103	2.50	9800	0.94	-8.9	-63
	23-Sep-04	3370	67.0	---	---	0.89	---	---
	23-Sep-04 FD	3420	---	---	---	---	---	---
	19-Oct-04	3200	16.0	---	---	---	---	---
	17-Nov-04	2770	-27	---	---	---	---	---
	14-Dec-04	2270	-8.0	---	---	---	---	---
	14-Dec-04 FD	2270	---	---	---	---	---	---
	12-Jan-05	1970	-137	---	---	0.70	---	---
	12-Jan-05 FD	1860	---	---	---	---	---	---
	07-Feb-05	1720	51.0	---	---	1.20	---	---
	09-Mar-05	1480	49.0	---	---	---	---	---
	05-Apr-05	1040	64.0	---	---	0.90	---	---
	03-May-05	705	55.0	---	---	1.00	---	---
	25-Jul-05	344	129	---	---	1.10	---	---
	17-Aug-05	346	152	---	---	1.00	---	---
	08-Sep-05	267	49.0	---	---	1.00	---	---
	03-Oct-05	302	174	---	---	0.73	---	---
	02-Nov-05	256	69.0	---	---	1.20	---	---
	15-Dec-05	240	34.0	---	---	1.07	---	---
	12-Jan-06	245	13.0	---	---	1.17	---	---
MW-36-100	15-Jun-04	2800	-85	2.80	9500	0.97	-9.4	-65
	26-Aug-04	2370	-82.2	---	---	0.84	---	---
	26-Aug-04 FD	2370	---	---	---	---	---	---
	09-Sep-04	2330	-109	---	---	0.86	---	---
	09-Sep-04 FD	2260	---	---	---	---	---	---
	23-Sep-04	2710	-50	---	---	0.90	---	---
	06-Oct-04	2750	-78	---	---	0.89	---	---
	06-Oct-04 FD	2680	---	---	---	---	---	---
	21-Oct-04	2640	-55	---	---	0.89	---	---
	21-Oct-04 FD	2620	---	---	---	---	---	---
	02-Nov-04	2490	-36	---	---	1.00	---	---
	17-Nov-04	2150	-16	---	---	0.90	---	---
	02-Dec-04	1860	-67	---	---	0.80	---	---
	02-Dec-04 FD	1750	---	---	---	---	---	---
	14-Dec-04	1790	---	---	---	---	---	---
	29-Dec-04	1690	-40	---	---	---	---	---
	29-Dec-04 FD	1720	---	---	---	---	---	---
	12-Jan-05	1520 ~	-9.0	---	---	1.40	---	---

Refer to table footnotes for data qualifier explanation.

TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Deep Wells								
MW-36-100	12-Jan-05 FD	1550	---	---	---	---	---	---
	27-Jan-05	1500	-33	---	---	1.20	---	---
	27-Jan-05 FD	1420	---	---	---	---	---	---
	09-Feb-05	1440	-12	---	---	1.30	---	---
	22-Feb-05	1430	55.0	---	---	1.10	---	---
	22-Feb-05 FD	1390	---	---	---	---	---	---
	09-Mar-05	1380	-20	---	---	1.40	---	---
	22-Mar-05	1250	-16	---	---	1.20	---	---
	22-Mar-05 FD	1230	---	---	---	---	---	---
	04-Apr-05	1110	-20	---	---	1.20	---	---
	20-Apr-05	825	2.00	---	---	1.00	---	---
	03-May-05	705	4.00	---	---	1.11	---	---
	18-May-05	617	12.0	---	---	2.10	---	---
	18-May-05 FD	620	---	---	---	---	---	---
	02-Jun-05	518	23.0	---	---	1.10	---	---
	19-Jul-05	398	17.0	---	---	1.05	-9.5	-75
	15-Aug-05	391	-15	---	---	1.00	---	---
	15-Aug-05 FD	390	---	---	---	---	---	---
	08-Sep-05	396 J	21.0	---	---	1.10	---	---
	08-Sep-05 FD	397	---	---	---	---	---	---
	05-Oct-05	383	4.00	ND (0.5)	10700	0.97	-9.6	-82
	03-Nov-05	315	-19	---	---	1.30	---	---
	13-Dec-05	306	5.00	---	---	0.97	---	---
	12-Jan-06	287	28.0	---	---	1.30	---	---
MW-39-080	17-Jun-04	10000	-12	8.90	6800	0.60	-5.9	-47
	24-Sep-04	8470	---	---	---	---	---	---
	20-Oct-04	8310	70.0	---	---	---	---	---
	18-Nov-04	9680	90.0	---	---	0.80	---	---
	15-Dec-04	9430	66.0	---	---	---	---	---
	14-Jan-05	8270	163	7.97	---	0.70	---	---
	08-Feb-05	7750	99.0	---	---	0.90	---	---
	08-Feb-05 FD	7890	---	---	---	---	---	---
	09-Mar-05	7460	82.0	---	---	1.00	---	---
	06-Apr-05	4820	88.0	---	---	0.80	---	---
	03-May-05	3430	106	---	---	0.90	---	---
	16-Jun-05	2220	52.0	---	---	1.00	---	---
	25-Jul-05	2060	169	---	---	1.00	---	---
	17-Aug-05	2370	164	---	---	0.90	---	---
	06-Sep-05	2990	149	---	---	1.00	---	---
	04-Oct-05	3000	76.0	---	---	0.90	---	---
	02-Nov-05	3200	148	---	---	1.00	---	---
	15-Dec-05	2740	78.0	---	---	0.91	---	---
	12-Jan-06	2280	58.0	---	---	1.08	---	---
MW-39-100	15-Jun-04	12500	164	9.80	9300	1.00	-6.5	-50
	15-Jun-04 FD	12300	---	9.40	9200	---	-6.2	-49
	23-Sep-04	11600	15.0	---	---	0.80	---	---
	21-Oct-04	11400	32.0	---	---	0.84	---	---

Refer to table footnotes for data qualifier explanation.

TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Deep Wells								
MW-39-100	17-Nov-04	11300	57.0	---	---	0.80	---	---
	17-Nov-04 FD	11300	---	---	---	---	---	---
	15-Dec-04	10900	24.0	---	---	---	---	---
	12-Jan-05	10100 ~	63.0	---	---	1.20	---	---
	27-Jan-05	9930	45.0	---	---	1.20	---	---
	09-Feb-05	9180	33.0	---	---	1.40	---	---
	09-Feb-05 FD	9260	---	---	---	---	---	---
	10-Mar-05	8940	28.0	---	---	1.60	---	---
	06-Apr-05	8220	54.0	---	---	---	---	---
	09-May-05	7980	159	---	---	1.20	---	---
	09-May-05 FD	7720	---	---	---	---	---	---
	17-Jun-05	6980	14.0	4.23	12200 J	1.15	-7.9	-63
	19-Jul-05	5500	80.0	---	---	1.09	---	---
	19-Jul-05 FD	5450	---	---	---	---	---	---
	17-Aug-05	4230	170	---	---	1.10	---	---
	06-Sep-05	4540	134	---	---	1.30	---	---
	04-Oct-05	4010	73.0	---	---	0.93	---	---
	02-Nov-05	3580	168	---	---	1.40	---	---
	02-Nov-05 FD	3650	---	---	---	---	---	---
	13-Dec-05	3640	139	---	---	1.20	---	---
	12-Jan-06	4720	121	---	---	1.39	---	---
MW-43-075	07-Mar-05	ND (1.0)	-150	ND (0.2)	6170	0.90	---	---
	15-Mar-05	ND (1.0)	-178	ND (1.0)	9320	0.87	---	---
	20-Jun-05	ND (1.0)	-165	ND (0.5)	9630	1.10	-10.7	-85
	26-Jul-05	ND (1.0)	-160	---	---	0.91	---	---
	16-Aug-05	ND (1.0)	-168	---	---	0.80	---	---
	08-Sep-05	ND (1.0)	-176	---	---	1.00	---	---
	04-Oct-05	ND (1.0)	-126	---	---	0.74	---	---
	03-Nov-05	ND (2.0)	-168	---	---	1.00	---	---
	16-Dec-05	ND (1.0)	-179	---	---	0.90	---	---
	11-Jan-06	ND (1.0)	-134	---	---	1.09	---	---
MW-43-090	07-Mar-05	ND (1.0)	-185	ND (1.0)	13200	1.30	---	---
	15-Mar-05	ND (1.0)	-153	ND (1.0)	14600	1.33	---	---
	15-Mar-05 FD	ND (1.0)	---	ND (1.0)	14500	---	---	---
	20-Jun-05	ND (1.0)	-140	ND (0.5)	15700	1.60	-9.9	-79
	20-Jun-05 FD	ND (1.0)	---	ND (0.5)	15300	---	-10	-81
	26-Jul-05	ND (2.0)	-129	---	---	1.45	---	---
	16-Aug-05	ND (2.0)	-136	---	---	1.20	---	---
	08-Sep-05	ND (1.0)	-152	---	---	1.40	---	---
	04-Oct-05	ND (1.0)	-78	---	---	0.96	---	---
	03-Nov-05	ND (2.0)	-127	---	---	1.70	---	---
	16-Dec-05	ND (1.0)	-127	---	---	1.30	---	---
	11-Jan-06	ND (1.0)	-89	---	---	1.63	---	---
PE-01	01-Mar-05	---	-89	---	---	---	---	---
	05-Mar-05	---	---	---	6500	---	---	---
	21-Mar-05	ND (1.0)	-194	0.623	8420	0.90	---	---

Refer to table footnotes for data qualifier explanation.

TABLE C-1
Groundwater Indicator Parameters and Selected General Chemistry Results for Wells in IM Area, June 2004 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

	Sample Date	Hexavalent Chromium µg/L	Field ORP mV	Nitrate mg/L	Total Dissolved Solids mg/L	Field Salinity %	Oxygen 18 0/00	Deuterium 0/00
Deep Wells								
PE-01	03-Oct-05	ND (1.0)	-202	---	8240	0.70	-10.1	-79
	13-Dec-05	ND (1.0)	-148	---	---	0.71	---	---
TW-02D	09-Jun-04	7410	---	---	7540	---	---	---
	16-Jun-04	---	71.0	---	7610 NV	0.76	---	---
	28-Jul-04	---	49.0	---	---	0.61	---	---
	29-Jul-04	5850	195	---	7200	0.19	---	---
	16-Dec-04	6280	143	---	---	0.50	---	---
	09-Mar-05	5800	---	---	---	---	---	---
	18-Jan-06	2180	---	---	6930	---	---	---

NOTES:

ND = not detected at listed reporting limit (RL)
FD = field duplicate
J = concentration or RL estimated by laboratory or data validation
R = result exceeded analytical criteria for precision and accuracy; should not be used for project decision-making
NV = not validated
(---) = data not collected, available, rejected, or field instrumentation malfunctioned
µg/L= micrograms per liter
mg/L = milligrams per liter
mV = millivolts
0/00 = differences from global standards in parts per thousand

The RLs for certain hexavalent chromium results from Method 7199 analyses have been elevated above the standard RL of 0.2 µg/L due to required sample dilution to accommodate matrix interferences.

Refer to table footnotes for data qualifier explanation.

TABLE C-2
Chemical Performance Monitoring Results, March 2004 through January 2006
2005 Annual Performance Monitoring Report
PG&E Topock Compressor Station

Location	Sample Date	Total Dissolved Solids	Oxygen 18	Deuterium	Chloride	Sulfate	Nitrate	Bromide	Calcium	Magnesium	Potassium	Sodium	Boron	Alkalinity
Monitoring Wells														
MW-20-70	03-Mar-04	2300	-6.5	-39.0	890	440	9.7	0.6	230	52	11	480	0.3	75
	03-Mar-04 FD	2300	-6.5	-53.0	890	440	9.7	0.6	220	51	11	460	0.3	72
	11-May-04	2100	-5.5	-53.0	800	450	10	ND (0.5)	210	48	9.7	490	0.4	76
	24-Sep-04	2200	-6.5	-57.0	824	402	9.7	ND (1)	180	58.5	12	430	0.2	74
	16-Dec-04	2080	-7.3	-60.0	753	374	9.68	0.604	177 J	52.5	9.05	410	0.497	70
	10-Mar-05	1940	-7.1	-59.0	740	378	9.98	ND (1)	198	55.4	9.89	431	0.412	81.7
	15-Jun-05	1980	-7	-60.0	749	388	9.79	ND (1)	189	55.4	10.5	433	0.414	73.8
	15-Jun-05 FD	2050	-8.3	-57.0	760	392	9.81	ND (1)	204	60.7	11.4	468	0.445	71.3
	11-Oct-05	1950	-7.2	-57.0	737	359	9.48	0.641	198	49.9	14.6	323	0.402	69.9
	15-Dec-05	1830	-7.1	-49.0	645	326	9.9	ND (1)	138	42.3	14.5	267	0.441	77.8
MW-20-100	03-Mar-04	3400	-4.2	-38.0	1300	740	9.6	0.7	170	20	11	1100	1	82
	11-May-04	3600	-2.7	-37.0	1300	700	9.6	0.5	150	18	10	1100	1	81
	24-Sep-04	3000	-4.8	-44.0	1180	621	8.85	ND (1)	140	23	13	860	0.8	100
	16-Dec-04	2840	-5	-47.0	1050	562	8.5	0.654	152	23.4	16.6	772	0.971	90
	10-Mar-05	2490	-5.2	-49.0	466	511	9.98	ND (1)	133	19.8	8.98	712	0.859	84.2
	15-Jun-05	2500	-4.7	-46.0	921	506	9.02	ND (1)	137	21.3	9.06	592	0.713	84
	11-Oct-05	2400	-5.3	-48.0	887	484	8.87	0.731	170	23.7	15.2	500	0.718	82.3
	15-Dec-05	2340	-5.4	-40.0	813	404	9.65	ND (1)	136	21.4	14.8	406	0.709	82.7
MW-20-130	03-Mar-04	11000	-6.6	-60.0	6200	960	6.2	ND (2.5)	400	19	35	3500	1.7	45
	11-May-04	8300	-5	-49.0	3300	1000	9.8	ND (0.5)	280	14	26	2500	1.7	62
	24-Sep-04	7800	-4.4	-45.0	7240	2280	9.8	ND (4)	240	15	33	2400	1.9	66
	27-Jan-05	7350	-5.7	-48.0	3790	1140	10.4	3.16	313	16.1	43.5	2260	2.03	66
	09-Mar-05	5520	-5.8	-56.0	3120	1080	10.9	ND (1)	219	12.1	24.7	2250	1.9	68.9
	09-Mar-05 FD	6200	-5.4	-51.0	3080	1080	10.9	ND (1)	231	12.8	25.4	2390	1.99	68.9
	15-Jun-05	7790	-5	-48.0	3410	1230	11.1	ND (1)	352	23.2	31.3	2980	2.75	68.7
	07-Oct-05	7330	-5	-47.0	3010	1210	10.9	1.04 J	349	13.9	38.4	2070	2.41	72.4
	16-Dec-05	7860	-5.8	-43.0	3260	1000	10.7	ND (2.5)	324	16.3	44.4	1780	1.98	63.2
MW-25	03-Mar-04	970	-7.7	-56.0	300	220	4.2	ND (0.5)	92	18	7.8	230	0.4	140
	14-May-04	1000	-8.9	-59.0	310	210	4.2	ND (0.5)	89	19	8	230	0.4	130
	09-Jun-04	---	---	---	---	---	---	---	108	17.1	---	---	0.376	---

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Location	Sample Date	Total Dissolved Solids	Oxygen 18	Deuterium	Chloride	Sulfate	Nitrate	Bromide	Calcium	Magnesium	Potassium	Sodium	Boron	Alkalinity
Monitoring Wells														
MW-25	22-Sep-04	1000	-7.6	-58.0	296	196	3.93	0.42	81	16.6	7.4	230	ND (0.2)	140
	09-Mar-05	877	-8.4	-62.0	247	169	3.64	ND (0.5)	77.6	16.1	6.24	211	0.441	158
	14-Jun-05	942	-8.6	-61.0	289	183	3.89	ND (0.5)	93.5	20	8.91	253	0.464	137
	14-Jun-05 FD	980	-7.2	-59.0	294	185	3.94	ND (0.5)	100	20.9	9.06	268	0.475	137
	04-Oct-05	950	-8.2	-68.0	252	171	3.77	ND (0.5)	83.3	14.9	9.93	164	0.362	141
	04-Oct-05 FD	910	-8.3	-60.0	251	171	3.75	ND (0.5)	94.6	15.3	10.2	185	0.371	146
	14-Dec-05	838	-8.4	-55.0	224	158	3.74	ND (0.5)	75.5	14.5	9.8	143	0.396	153
	14-Dec-05 FD	896	-8.4	-50.0	219	155	3.75	ND (0.5)	73	14.1	9.71	151	0.382	156
MW-26	03-Mar-04	1900	-6.7	-54.0	770	400	4.6	ND (0.5)	170	40	12	470	0.5	110
	14-May-04	9300 R	-8.4	-60.0	850	480	5.1	ND (0.5)	190	50	14	490	0.6	110
	22-Sep-04	2300	-6.7	-59.0	821	472	5.65	ND (1)	170	46	13	390	0.4	98
	16-Dec-04	2130	-8.6	-64.0	835	388	5	0.578	176	45.7	17.8	466	0.662	100
	08-Mar-05	1840	-8.8	-70.0	756	370	4.48	ND (0.5)	166	41.6	10.7	439	0.557	98.7
	08-Mar-05 FD	1800	-8.7	-70.0	708	338	4.45	ND (0.5)	166	40.9	11.4	438	0.559	96.1
	13-Jun-05	2130	-8.2	-65.0	847	371	4.9	ND (0.5)	178	44.6	14	511	0.663	103
	04-Oct-05	2120	-7.8	-68.0	779	372	4.88	0.601	166	40.4	19.8	352	0.526	109
	12-Dec-05	2610	-8.5	-55.0	788	372	4.88	0.546	162	39.9	20.3	349	0.613	99.7
MW-27-20	03-Mar-04	640	-11.7	-100.0	74	200	ND (0.4)	ND (0.5)	79	26	4	84	ND (0.2)	180
	12-May-04	570	-11.3	-98.0	72	200	ND (0.4)	ND (0.5)	77	25	3.7	87	ND (0.2)	170
	21-Sep-04	670	-12.3	-92.0	77.2	212	ND (0.2)	ND (0.2)	76	26	5	82	ND (0.2)	160
	15-Dec-04	692	-11.9	-101.0	87.2	236	ND (0.5)	ND (0.5)	91.5	32.6	4.61	88.4	ND (0.2)	169
	08-Mar-05	1250	-12	-102.0	190	432	ND (0.5)	ND (0.5)	137	56.6	4.89	195	ND (0.2)	215
	18-Jul-05	---	-11.9	-98.0	81.9	228	ND (0.5)	ND (0.5)	96.1	30.1	4.27	94.8	ND (0.2)	160
	05-Oct-05	742	-11.8	-102.0	91.1	252	ND (0.5)	ND (0.5)	88.6	31.4	5.48	81	ND (0.2)	175
	14-Dec-05	1020	-11.7	-91.0	118	347	ND (0.5)	ND (0.5)	116	41.8	6.96	116	ND (0.2)	216
MW-28-25	04-Mar-04	1000	-11.3	-95.0	220	290	ND (0.4)	ND (0.5)	120	33	3.8	210	0.2	260
	11-May-04	800	-11.3	-95.0	110	270	ND (0.4)	ND (0.5)	110	29	3.9	120	ND (0.2)	240
	07-Jun-04	890	-12.5	-100.0	150	220	ND (0.4)	---	---	---	---	---	---	---
	20-Sep-04	850 J	-11.7	-89.0	99.1	286	ND (0.4)	ND (0.2)	110	30	4.6	120	ND (0.2)	210
	14-Dec-04	810	-12	-99.0	110	310	ND (0.5)	ND (0.5)	122	35.7	4.78	103	ND (0.2) J	202

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Location	Sample Date	Total Dissolved Solids	Oxygen 18	Deuterium	Chloride	Sulfate	Nitrate	Bromide	Calcium	Magnesium	Potassium	Sodium	Boron	Alkalinity
Monitoring Wells														
MW-28-25	10-Mar-05	880	-12.2	-95.0	112	302	ND (0.5)	ND (0.5)	129	36.3	3.5	122	ND (0.2)	204
	15-Jun-05	974	-11.6	-91.0	108	359	ND (0.5)	ND (0.5)	133	38.9	6.54	117	ND (0.2)	221
	06-Oct-05	884	-11.7	-95.0	99.8	300	ND (0.5)	ND (0.5)	123	37	6.61	88.7	ND (0.2)	197
	16-Dec-05	1010	-11.4	-90.0	128	348	ND (0.5)	ND (0.5)	134	41.5	6.46	107	ND (0.2)	212
MW-30-30	04-Mar-04	36000	-9	-76.0	19000	4100	ND (4)	5.2	1000	1000	50	9600	3.6	570
	12-May-04	30000	-7.8	-71.0	14000	3000	ND (4)	ND (50)	1300	800	47	8300	2.8	610
	23-Sep-04	42000	-9.5	-73.0	22000	4500	ND (200)	ND (100)	900	890	76	11000	4.1	570
	15-Dec-04	45500	-9.5	-79.0	19900	4730	ND (5)	8.14	1300	1400	118	6110	7.84	458
	10-Mar-05	38800	-9.8	-79.0	16000	4270	ND (5)	7.91	1590	1600	95.4	13600	4.97	421
	07-Oct-05	36400	-8.5	-75.0	17600	4000	ND (0.5)	ND (10)	1020	842	93.6	7650	5.2	521
	15-Dec-05	35700	-8.7	-59.0	19700	4070	ND (1)	3.13	1060	894	110	8540	6.14	504
MW-30-50	05-Mar-04	6100	-6.4	-58.0	3000	750	1.2	ND (5)	280	120	16	1600	0.9	280
	05-Mar-04 FD	5900	-6.6	-56.0	2900	730	1.2	ND (5)	290	120	15	1600	0.9	280
	14-May-04	6300	-7.7	-54.0	2700	800	3.5	ND (5)	270	100	15	1700	1.2	180
	14-May-04 FD	6500	-7.5	-54.0	2600	800	3.5	ND (5)	270	110	16	1700	1.1	180
	23-Sep-04	6600	-7.3	-58.0	3330	742	1.58	ND (10)	290	100	18	1800	0.9	240
	23-Sep-04 FD	6800	-6.7	-58.0	3220	694	1.64	ND (10)	310	110	19	1900	0.9	240
	15-Dec-04	6750	-7.9	-63.0	3040	716	ND (0.5)	1.14	378	117	36.5	1720	1.39	249
	15-Dec-04 FD	6690	-7.8	-64.0	2920	725	ND (0.5)	1.13	372	114	37.8	1700	1.43	249
	10-Mar-05	6470 J	-8.3	-68.0	4660	672	ND (0.5)	1.03	335	107	16.5	2040	1.15	324
	07-Oct-05	6860	-9.4	-79.0	3060	857	ND (0.5)	0.899 J	438	101	37	1780	1.27	252
	16-Dec-05	5850	-10.5	-65.0	2360	578	ND (0.5)	0.645	265	77.9	32.9	1260	1.19	212
MW-31-60	03-Mar-04	1700	-8.1	-60.0	750	280	6.2	ND (0.5)	160	22	7.9	420	0.4	72
	14-May-04	1900	-9	-59.0	750	260	5.5	ND (0.5)	150	22	7.5	420	0.4	74
	22-Sep-04	1700	-8	-61.0	691	236	5.45	0.46	130	19	7.9	430	ND (0.2)	79
	16-Dec-04	1640	-8.7	-64.0	691	246	5.36	ND (0.5)	118	18.5	9.67	421	0.44	80
	09-Mar-05	1540	-8.6	-63.0	649	210	4.94	ND (0.5)	108	17.3	5.97	424	0.401	76.6
	13-Jun-05	1660	-8.2	-65.0	745	207	4.12	ND (0.5)	121	18.9	6.57	403	0.388	70
	06-Oct-05	1660	-8.6	-65.0	691	206	4.01	ND (0.5)	109	16.5	9.75	308	0.462	77.3
	13-Dec-05	1620	-8.7	-54.0	669	199	4.14	ND (0.5)	87	15.4	9.32	275	0.359	73

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Location	Sample Date	Total Dissolved Solids	Oxygen 18	Deuterium	Chloride	Sulfate	Nitrate	Bromide	Calcium	Magnesium	Potassium	Sodium	Boron	Alkalinity
Monitoring Wells														
MW-32-20	04-Mar-04	6200	-8	-64.0	2900	540	ND (0.4)	ND (5)	520	180	13	1500	1.1	570
	12-May-04	5000	-7.1	-70.0	2100	130	ND (0.4)	ND (5)	510	180	16	1100	0.8	600
	20-Sep-04	21000 J	-7.3	-63.0	10200	3800	ND (0.4)	ND (100)	1100	420	45	4900	3	920
	14-Dec-04	16100	-8.2	-66.0	8890	1990	ND (5)	ND (5)	1140	400	46.8	3500	4.22 J	784
	09-Mar-05	12500	-7.2	-65.0	6930	1660	ND (0.5)	3.51	838	302	36.9	4000	2.76	123
	17-Jun-05	10200	-9	-67.0	4810	690	ND (0.5)	ND (2.5)	566	231	23.3	2620	1.75	676
	04-Oct-05	28800	-7.8	-65.0	14200	2420	ND (5)	6.19	1380 J	613 J	91.1 J	5400 J	4.75 J	733
	16-Dec-05	24600	-7.8	-61.0	12200	2140	ND (1)	3.48	1470	552	90.4	4950	4.16	861
MW-32-35	04-Mar-04	4200	-8	-65.0	1900	470	ND (0.4)	ND (5)	340	99	13	1100	1	310
	12-May-04	4500	-6.9	-64.0	1900	460	ND (0.4)	ND (5)	330	94	12	1100	0.9	320
	21-Sep-04	4500	-8.7	-63.0	2150	422	ND (0.2)	ND (10)	320	89	14	990	0.9	310
	15-Dec-04	4120	-8.5	-67.0	1760	524	ND (0.5)	0.89	351	96.3	24.7 J	954	1.28	276
	09-Mar-05	3560	-8.2	-68.0	1770	465	ND (0.5)	0.845	312	85.5	13	944	1.07	260
	17-Jun-05	7550	-9.5	-72.0	3520	787	ND (0.5)	ND (2.5)	506	120	14.8	2110	1.18	223
	04-Oct-05	8340	-8.3	-70.0	3840	765	ND (0.5)	ND (5)	567	134	29.3	1530	1.26	208
	16-Dec-05	7660	-8.8	-63.0	3510	710	ND (1)	1.02	606	128	30	1580	1.25	219
MW-34-55	04-Mar-04	6700	-9.6	-77.0	3200	850	ND (0.4)	ND (5)	360	97	13	2000	1.2	270
	13-May-04	5700	-10.3	-77.0	2700	770	ND (0.4)	ND (5)	310	77	15	1900	1	270
	08-Jun-04	---	---	---	---	---	---	---	246	68.3	---	---	1.18	---
	22-Sep-04	5800	-11	-82.0	2700	732	ND (0.2)	ND (10)	260	85.2	17	1800	0.9	250
	15-Dec-04	5860	-10.9	-83.0	2390	743	ND (0.5)	0.743	288	69.9	33	1540	1.34	234
	10-Mar-05	6230	-10.8	-82.0	2620	739	ND (0.5)	0.654	366	71.3	29.1	1900	1.19	240
	15-Jul-05	---	-10.3	-84.0	2250	607	ND (0.5)	ND (0.5)	247	52	16.5	1420	1.02	242
	05-Oct-05	5150	-10.6	-88.0	2170	619	ND (0.5)	ND (0.5)	272	59.1	25.8	1230	1.2	232
	14-Dec-05	5100	-10.8	-74.0	2150	552	ND (0.5)	0.588	217	45	27.2	965	0.937	236
MW-34-80	05-Mar-04	8800	-8.9	-75.0	4700	1000	ND (0.4)	ND (5)	280	24	25	2600	1.7	180
	13-May-04	8800	-10.2	-77.0	3900	1000	ND (4)	ND (5)	390	54	27	2800	1.4	270
	13-May-04 FD	9100	-10.2	-76.0	4000	1000	ND (4)	ND (5)	390	53	27	2700	1.5	280
	08-Jun-04	---	---	---	---	---	---	---	396	56.6	---	---	1.72	---
	23-Sep-04	8900	-9.9	-79.0	4050	997	ND (10)	ND (10)	410	76	32	2800	1.4	290

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Location	Sample Date	Total Dissolved Solids	Oxygen 18	Deuterium	Chloride	Sulfate	Nitrate	Bromide	Calcium	Magnesium	Potassium	Sodium	Boron	Alkalinity
Monitoring Wells														
MW-34-80	23-Sep-04 FD	9900	-9.6	-78.0	4170	998	ND (10)	ND (10)	410	84.3	35	2800	1.5	290
	13-Dec-04	---	---	---	---	---	---	---	455	55	40.4	2220	1.63	---
	08-Mar-05	6940	-10.4	-83.0	4180	1040	ND (0.5)	1.01	439	68.1	28	2750	1.65	304
	15-Mar-05	8980	---	---	3920	ND (5)	ND (1)	---	445	65.7	29.7	2990	---	288
	30-Jun-05	7840	-8.4	-82.0	3910	979	ND (0.5)	ND (0.5)	497	76.5	27.7	2670	1.66	302
	05-Oct-05	10200	-10.1	-85.0	3880	1060	ND (0.5)	ND (0.5)	429	72.5	47.4	1660	1.57	302
	14-Dec-05	8800	-10.2	-71.0	3700	880	ND (0.5)	0.854	432	68.3	54.9	1710	1.54	297
Surface Water Stations														
R-27	03-Mar-04	630	-11.4	-86.0	87	250	ND (0.4)	ND (0.5)	77	28	4.4	94	ND (0.2)	140
	12-May-04	590	-11.4	-96.0	84	240	ND (0.4)	ND (0.5)	74	27	4.8	96	ND (0.2)	140
	22-Sep-04	680	-12.1	-98.0	88.4	237	0.38	ND (0.2)	77	29	4.8	99	ND (0.2)	130
	13-Dec-04	632	-11.4	-95.0	84.4	235	ND (0.5) R	ND (0.5)	79.6	31.4	4.95	86.5	ND (0.2) J	125
	07-Mar-05	669	-12.3	-102.0	92.7	244	ND (0.5)	ND (0.5)	82.8	31.3	4.72	108	ND (0.2)	136
	14-Jun-05	686	-11.4	-92.0	90.9	266	ND (0.5)	ND (0.5)	81.9	29.8	6.04	98.9	ND (0.2)	127
	05-Oct-05	678	-11.6	-94.0	85.1	255	ND (0.5)	ND (0.5)	101	36.2	6.56	91.2	ND (0.2)	130
	16-Dec-05	718	-11.7	-87.0	87.9	253	ND (0.5)	ND (0.5)	85.5	29.5	5.99	75.6	ND (0.2)	126
R-28	03-Mar-04	670	-11.3	-90.0	87	250	0.5	ND (0.5)	78	28	4.4	93	ND (0.2)	140
	12-May-04	580	-11.5	-98.0	84	240	ND (0.4)	ND (0.5)	72	26	4.2	92	ND (0.2)	140
	22-Sep-04	680	-12.1	-99.0	104	240	0.38	ND (0.2)	79	30	4.9	99	ND (0.2)	130
	13-Dec-04	652	-11.1	-95.0	84.8	236	ND (0.5) R	ND (0.5)	79.9	31.5	4.93	86	ND (0.2) J	133
	08-Mar-05	651	-12.5	-102.0	90.4	231	ND (12.5)	ND (0.5)	83.7	31.4	5.02	107	ND (0.2)	132
	14-Jun-05	680	-11.6	-95.0	91.2	268	ND (0.5)	ND (0.5)	78.5	28.5	5.08	94.5	ND (0.2)	127
	05-Oct-05	672	-11.6	-94.0	85.5	255	ND (0.5)	ND (0.5)	85.7	30.4	6.3	77	ND (0.2)	122
	16-Dec-05	710	-11.5	-83.0	88.1	254	ND (0.5)	ND (0.5)	87.2	29.8	6.11	76.8	ND (0.2)	126

NOTES:

FD = field duplicate sample
ND =parameter not detected at the listed reporting limit.
J = concentration or reporting estimated by laboratory or data validation
R = result exceeded analytical criteria for precision and accuracy; should not be used for project decision-making
(---) = data not collected or available

Results in milligrams per liter (mg/L), except Oxygen-18 and Deuterium, which are expressed as differences from global standards in parts per thousand.

Alkalinity reported as carbonate (CaCO3). Nitrate reported as Nitrogen (N).

Monitoring wells MW-30-30 and MW-30-50 were not sampled during the June 2005 monitoring event due to floodplain inaccessibility.

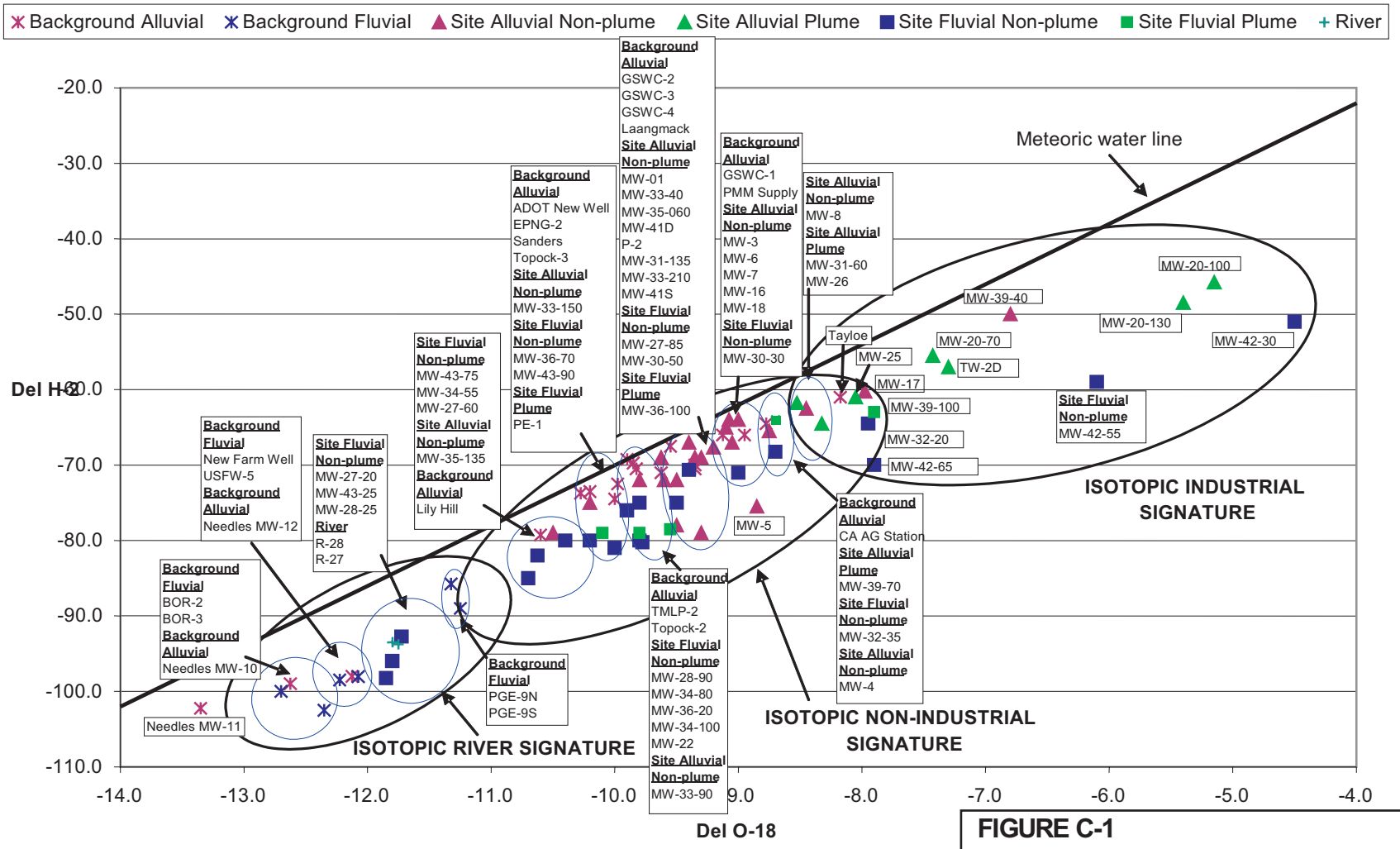

FIGURE C-1
AVERAGE STABLE ISOTOPES OF OXYGEN AND DEUTERIUM FEBRUARY 2005 THROUGH JANUARY 2006

2005 ANNUAL PERFORMANCE MONITORING REPORT
PG & E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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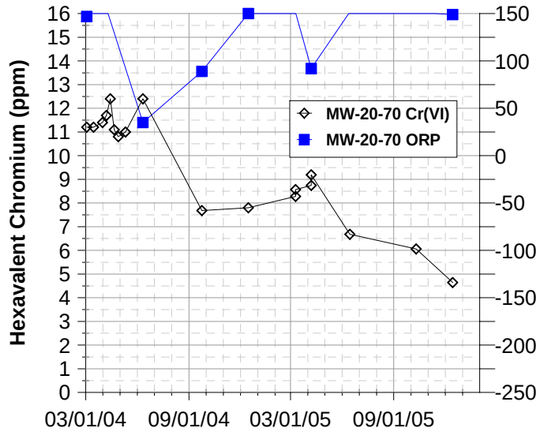

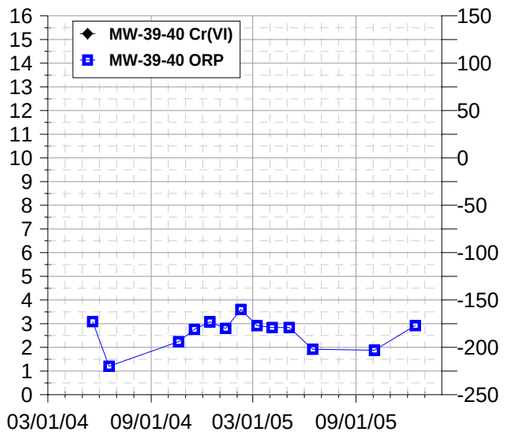

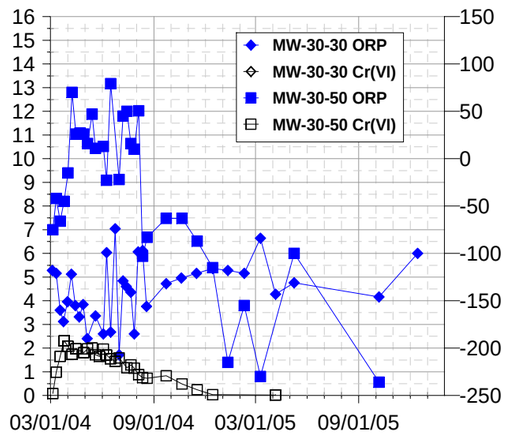

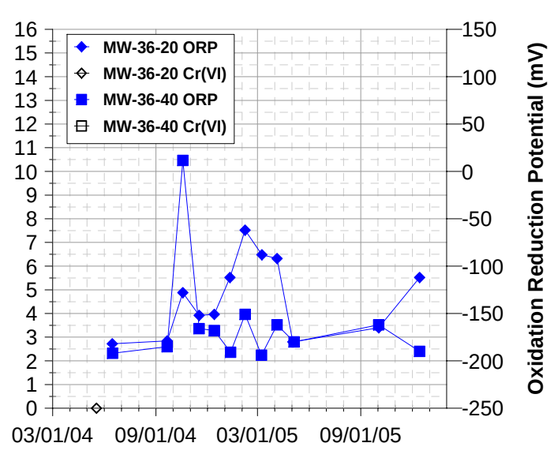

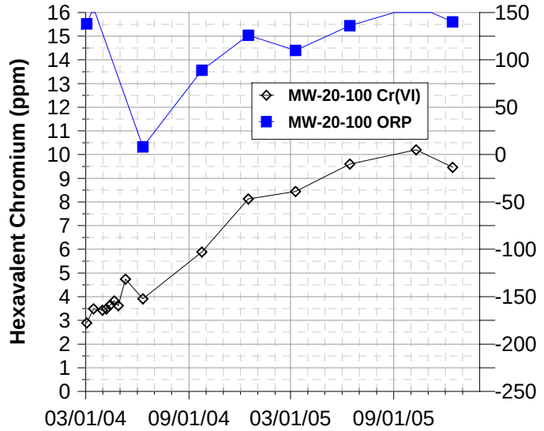

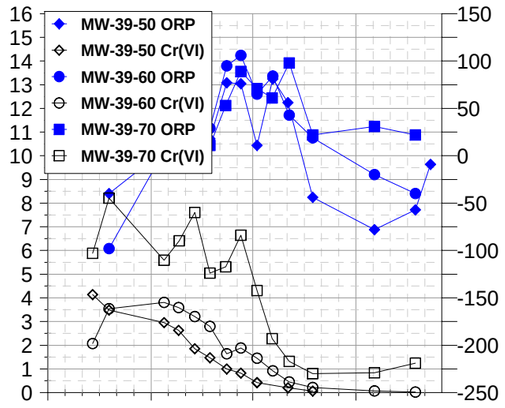

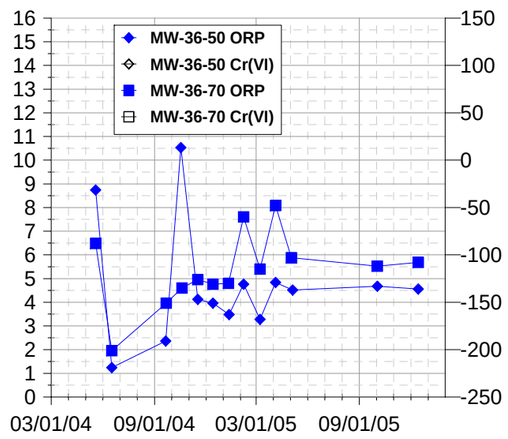

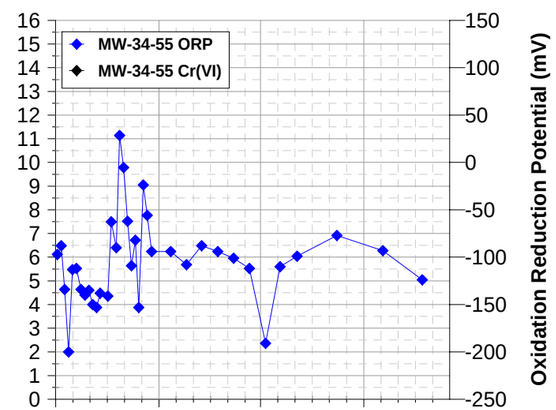

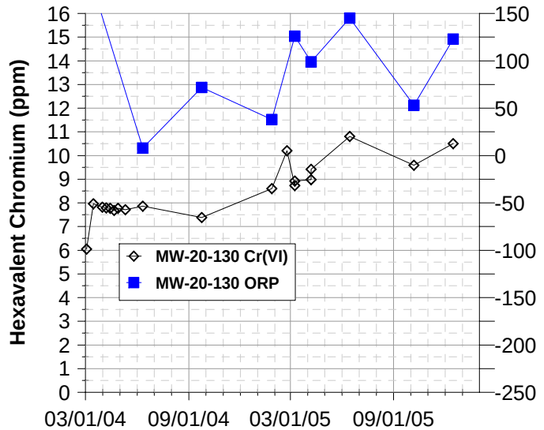

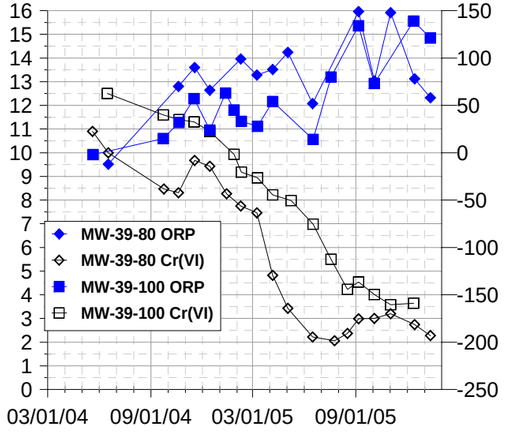

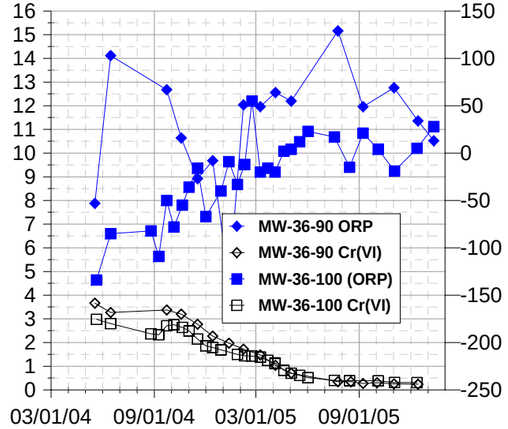

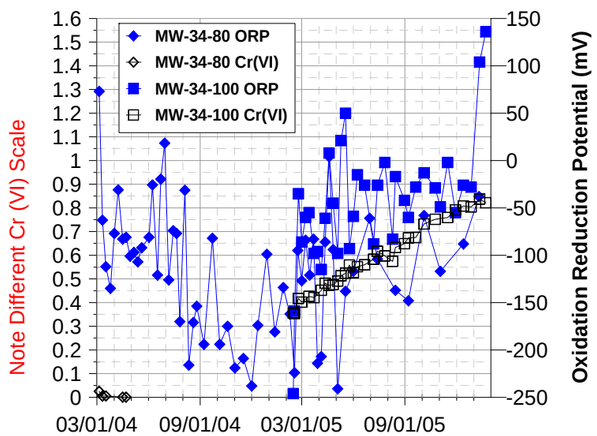

FIGURE C-2
FLOODPLAIN CROSS SECTION A
HEXAVALENT CHROMIUM AND OXIDATION REDUCTION POTENTIAL
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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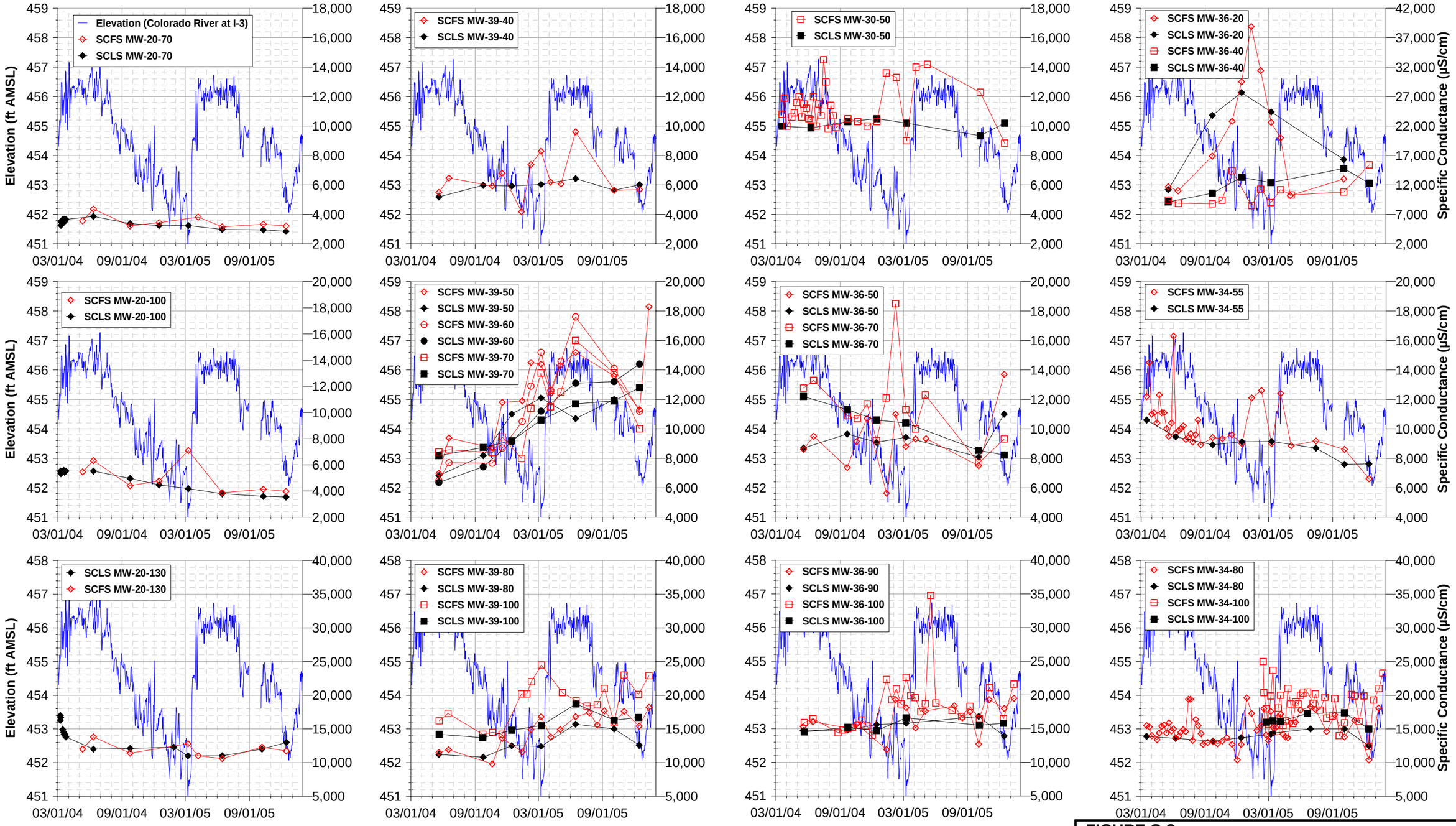

Note: Elevation = Colorado River Elevation at I-3.
SCFS = specific conductance field sample.
SCLS = specific conductance lab sample.

FIGURE C-3
FLOODPLAIN CROSS SECTION A RIVER ELEVATION (I-3) AND SPECIFIC CONDUCTANCE
2005 ANNUAL PERFORMANCE MONITORING REPORT
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NEEDLES, CALIFORNIA

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Appendix D
Hydraulic Monitoring Data for Annual Reporting Period

TABLE D-1
Average, Minimum, and Maximum Groundwater Elevations, November 2005 through January 31, 2006
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

Well	Average (ft AMSL)	Minimum (ft AMSL)	Maximum (ft AMSL)	Aquifer Depth
I-3	453.53	452.97	454.06	River Station
RRB	453.94	453.46	454.43	River Station
MW-10	455.41	455.35	455.47	Upper
MW-19	454.00	453.93	454.07	Upper
MW-20-070	452.83	452.70	452.98	Upper
MW-22	453.96	453.92	454.00	Upper
MW-25	454.50	454.71	454.79	Upper
MW-26	454.27	454.21	454.33	Upper
MW-27-020	453.47	453.32	453.59	Upper
MW-28-025	453.57	453.31	453.81	Upper
MW-29	454.17	454.14	454.20	Upper
MW-30-030	453.81	453.77	453.85	Upper
MW-31-060	453.59	454.22	454.45	Upper
MW-32-020	453.48	453.41	453.54	Upper
MW-32-035	453.52	453.36	453.67	Upper
MW-33-040	453.82	453.65	453.98	Upper
MW-35-060	454.00	453.85	454.14	Upper
MW-36-020	453.41	453.15	453.64	Upper
MW-36-040	453.66	453.34	453.98	Upper
MW-39-040	453.26	453.00	453.52	Upper
MW-42-030	453.38	453.19	453.56	Upper
MW-43-025	453.50	453.21	453.78	Upper
MW-20-100	452.51	452.31	452.82	Middle
MW-27-060	453.60	453.30	453.88	Middle
MW-30-050	453.36	453.08	453.62	Middle
MW-33-090	453.79	453.59	453.98	Middle
MW-34-055	453.64	453.26	453.99	Middle
MW-36-050	453.41	453.12	453.70	Middle
MW-36-070	453.42	453.12	453.71	Middle
MW-39-050	453.23	452.97	453.50	Middle
MW-39-060	452.97	452.71	453.23	Middle
MW-39-070	452.81	452.55	453.12	Middle
MW-42-055	453.46	453.26	453.65	Middle
MW-42-065	453.49	453.29	453.68	Middle
MW-20-130	451.96	451.69	452.41	Lower
MW-27-085	454.36	454.01	454.70	Lower
MW-28-090	453.58	453.21	453.94	Lower
MW-31-135	452.99	452.79	453.25	Lower
MW-33-150	453.97	453.77	454.18	Lower
MW-33-210	454.31	454.14	454.50	Lower
MW-34-080	453.78	453.42	454.12	Lower
MW-34-100	453.77	453.44	454.09	Lower
MW-35-135	453.91	453.81	454.00	Lower
MW-36-090	453.13	452.84	453.43	Lower
MW-36-100	453.20	452.91	453.49	Lower
MW-39-080	452.92	452.66	453.23	Lower
MW-39-100	453.11	452.85	453.42	Lower
MW-43-075	453.65	453.34	453.95	Lower
MW-43-090	453.79	453.48	454.09	Lower

Notes:

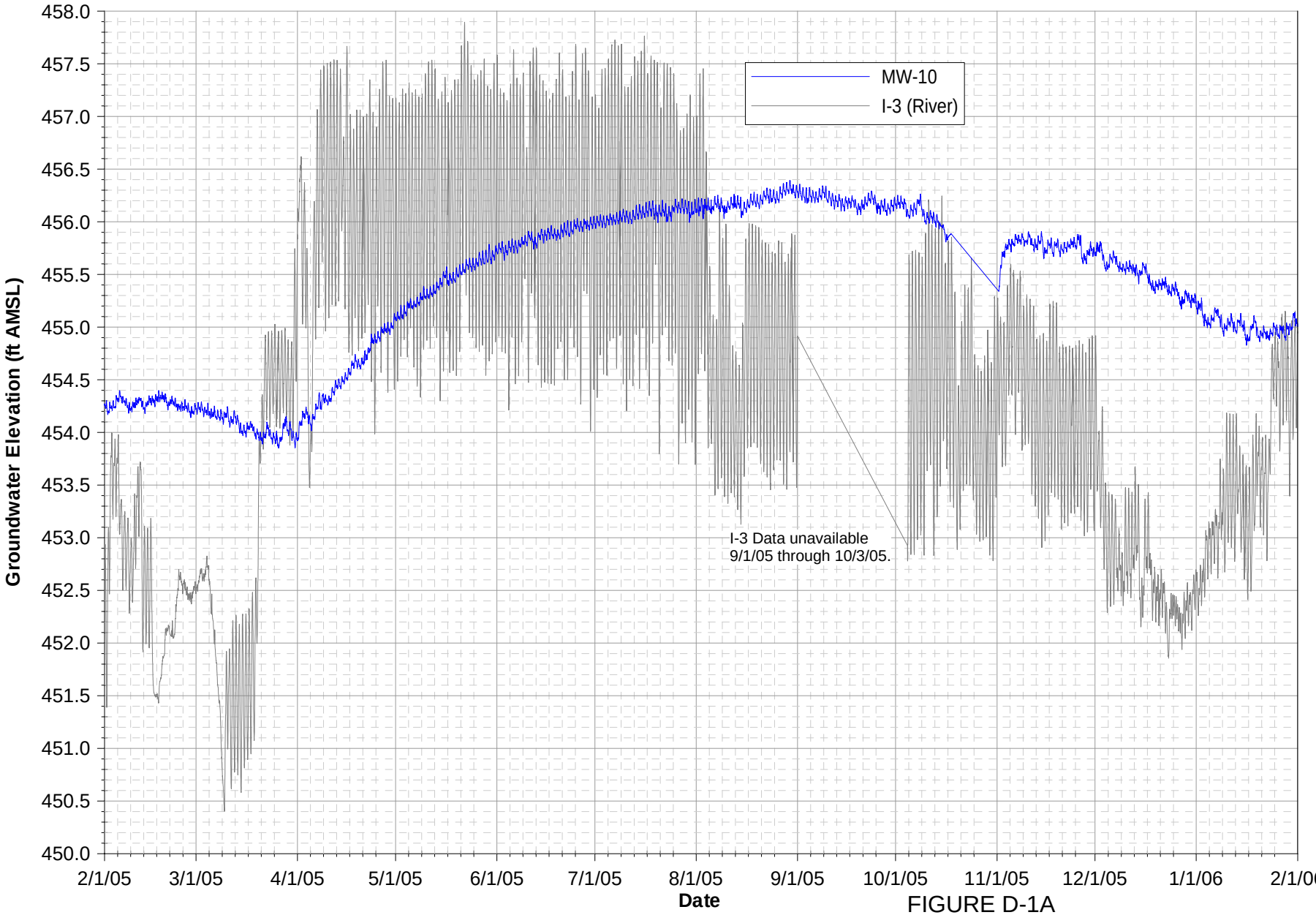
MW-27-20 missing data from 11/17/2005 through 12/14/2005. MW-27-85 missing from 11/17/2005 through 1/18/06.
MW-29 missing data from 1/5/2005 through 1/18/2006.
MW-36-40 missing data from 12/16/2005 through 1/3/2006.

TABLE D-2
Average, Minimum, and Maximum Groundwater Elevations, February 2005 through January 31, 2006
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

Well	Average (ft AMSL)	Minimum (ft AMSL)	Maximum (ft AMSL)	Aquifer Depth	Days Offline
I-3	454.69	453.58	455.37	River	32
RRB	454.86	453.96	455.69	River	19
MW-10	455.39	455.34	455.46	Upper	13
MW-19	454.64	454.54	454.72	Upper	
MW-20-070	453.74	453.61	453.86	Upper	
MW-22	454.66	454.58	454.73	Upper	58
MW-25	454.80	454.77	454.85	Upper	42
MW-26	454.63	454.54	454.73	Upper	
MW-27-020	454.58	454.29	454.84	Upper	27
MW-28-025	454.61	454.19	455.01	Upper	
MW-29	454.85	454.80	454.88	Upper	13
MW-30-030	454.57	454.45	454.69	Upper	
MW-31-060	454.50	454.35	454.61	Upper	106
MW-32-020	454.30	454.19	454.41	Upper	30
MW-32-035	454.36	454.07	454.63	Upper	
MW-33-040	454.62	454.32	454.89	Upper	
MW-35-060	454.79	454.51	455.06	Upper	
MW-36-020	454.40	453.98	454.78	Upper	7
MW-36-040	454.51	453.95	454.99	Upper	18
MW-39-040	454.23	453.79	454.65	Upper	
MW-42-030	454.33	453.99	454.65	Upper	8
MW-43-025	454.80	454.25	455.37	Upper	43
MW-20-100	453.47	453.27	453.73	Middle	
MW-27-060	454.70	454.15	455.21	Middle	12
MW-30-050	454.31	453.84	454.74	Middle	
MW-33-090	454.64	454.29	454.97	Middle	
MW-34-055	454.65	453.99	455.27	Middle	
MW-36-050	454.41	453.88	454.90	Middle	
MW-36-070	454.45	453.92	454.95	Middle	
MW-39-050	454.20	453.77	454.60	Middle	5
MW-39-060	454.05	453.64	454.43	Middle	2
MW-39-070	453.81	453.45	454.18	Middle	
MW-42-055	454.46	454.10	454.80	Middle	8
MW-42-065	454.46	454.11	454.80	Middle	21
MW-20-130	452.92	452.63	453.31	Lower	4
MW-27-085	455.10	454.48	455.65	Lower	74
MW-28-090	454.59	453.94	455.19	Lower	
MW-31-135	453.94	453.70	454.22	Lower	
MW-33-150	454.90	454.55	455.24	Lower	60
MW-33-210	455.23	454.93	455.53	Lower	27
MW-34-080	454.74	454.13	455.33	Lower	15
MW-34-100	454.70	454.14	455.24	Lower	30
MW-35-135	454.60	454.43	454.77	Lower	
MW-36-090	454.24	453.76	454.69	Lower	
MW-36-100	454.31	453.85	454.75	Lower	
MW-39-080	453.88	453.51	454.25	Lower	
MW-39-100	454.13	453.77	454.51	Lower	
MW-43-075	455.06	454.44	455.65	Lower	43
MW-43-090	455.23	454.61	455.82	Lower	43

Notes:

Days offline = days where data was unavailable due to transducer failure or wells that were installed after the reporting period began.



Note: Data subject to review.
MW-10 Data unavailable 10/17/05 through 11/1/05.

FIGURE D-1A
MW-10 HYDROGRAPH

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PG&E TOPOCK COMPRESSOR STATION
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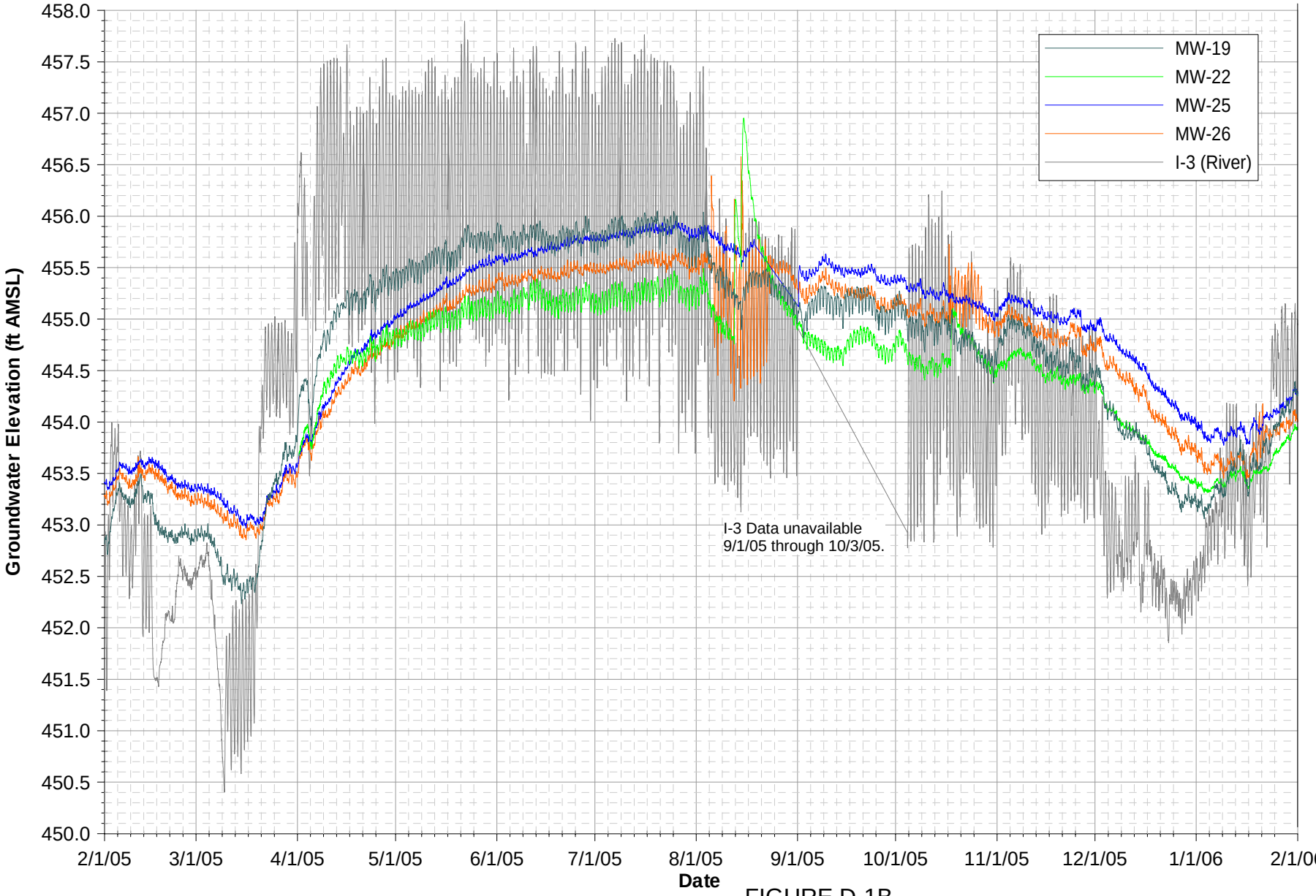

FIGURE D-1B
MW-19, MW-22, MW-25, AND MW-26 HYDROGRAPHS

2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Note: Data subject to review.
MW-22 Data unavailable 2/1/05 through 4/1/05.

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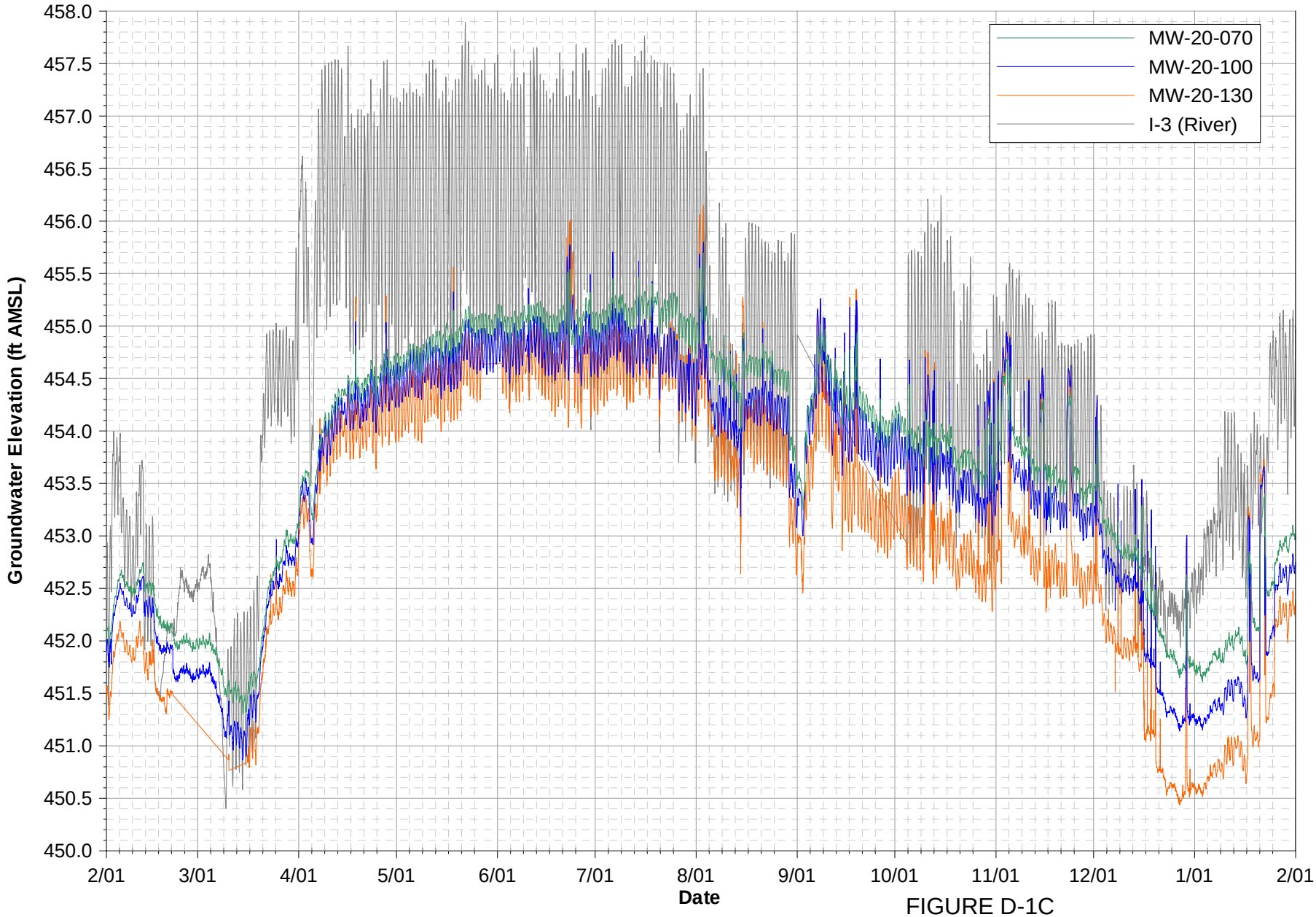

FIGURE D-1C
MW-20 CLUSTER HYDROGRAPHS
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG & E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Note: Data subject to review.
MW-20-130 used as pumping well
February 20, 2005 to March 16, 2005

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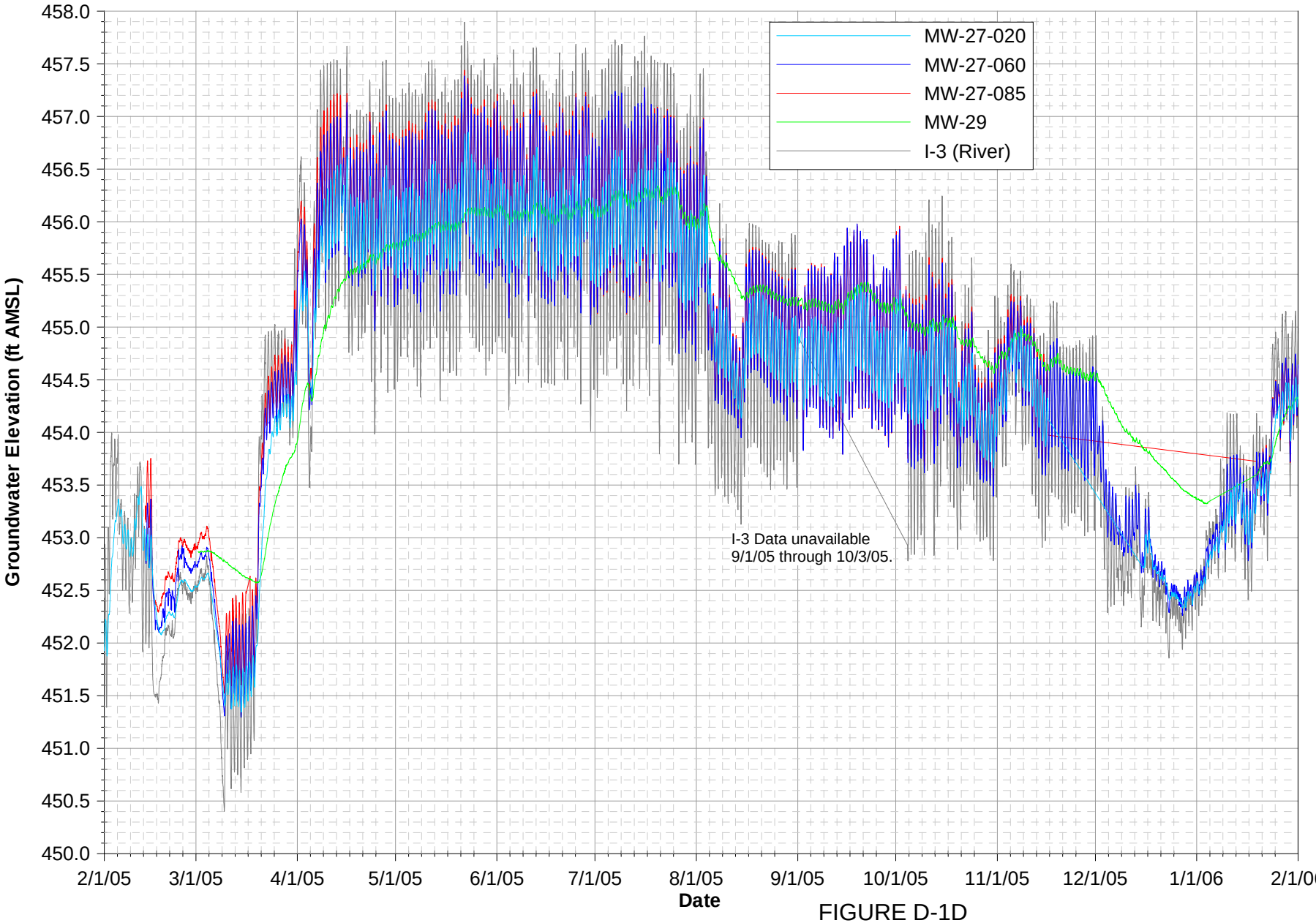


Note: Data subject to review.
MW-27-20 data unavailable 11/16/05 through 12/15/05.
MW-27-85 data unavailable from 11/16/05 through 1/12/06..

FIGURE D-1D
MW-27 CLUSTER AND MW-29 HYDROGRAPHS
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

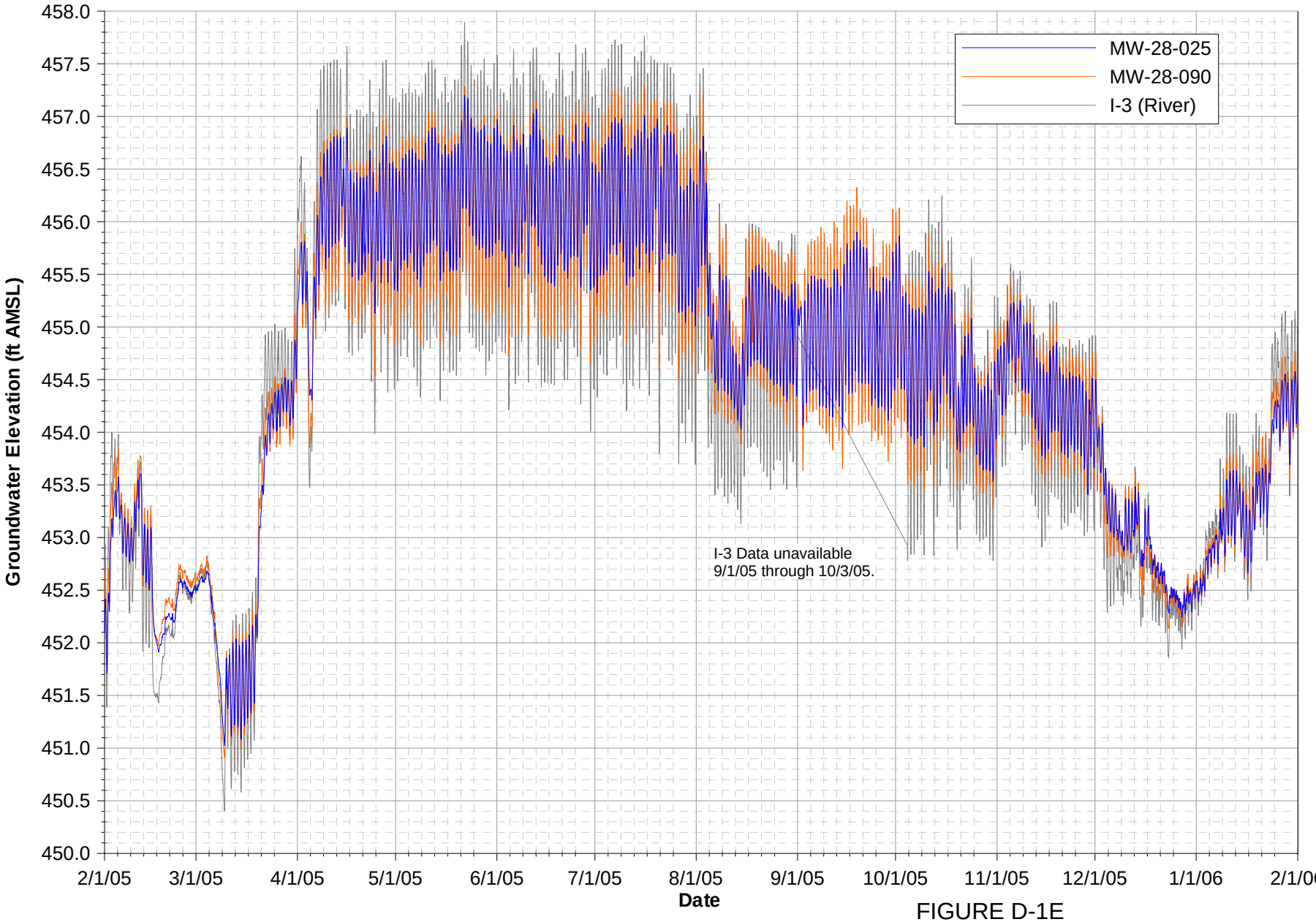
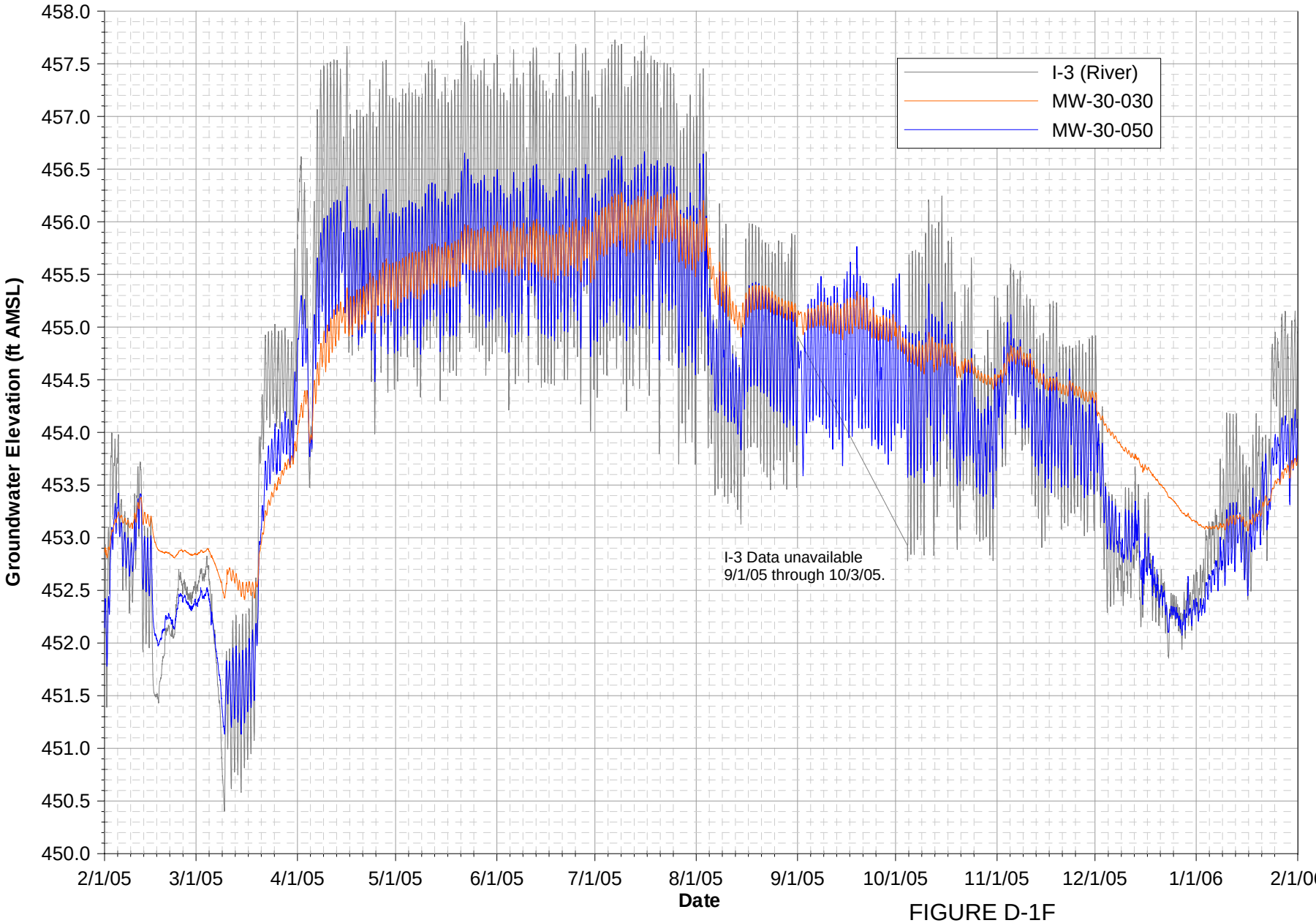


FIGURE D-1E
MW-28 WELL HYDROGRAPHS
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Note: Data subject to review.

CH2MHILL



Note: Data subject to review.

FIGURE D-1F
MW-30 WELL HYDROGRAPHS
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

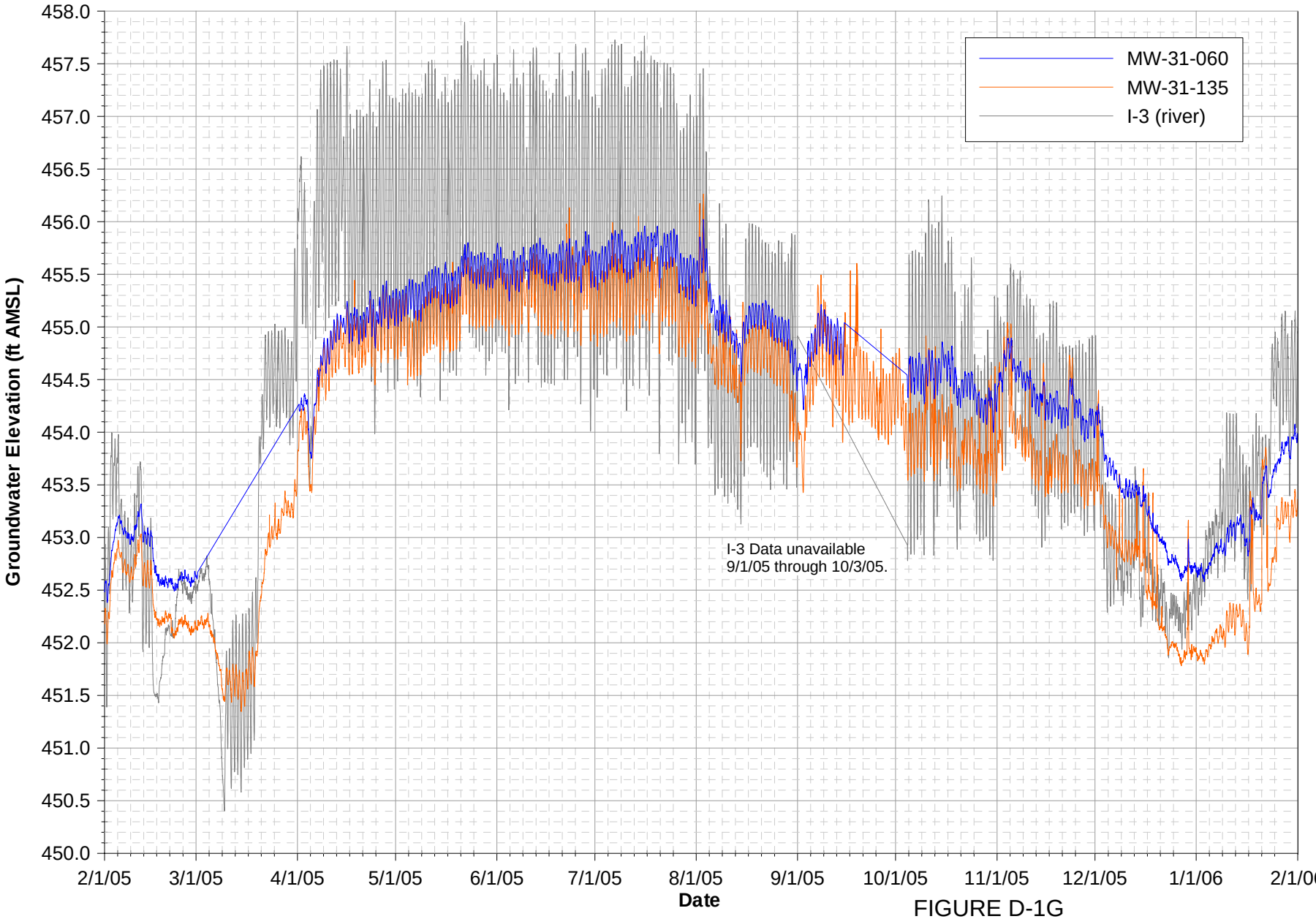


FIGURE D-1G
MW-31 WELL HYDROGRAPHS
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Note: Data subject to review.
MW-31-60 data unavailable 3/1/05 through 4/1/05, and
9/15/05 through 10/4/05.

CH2MHILL

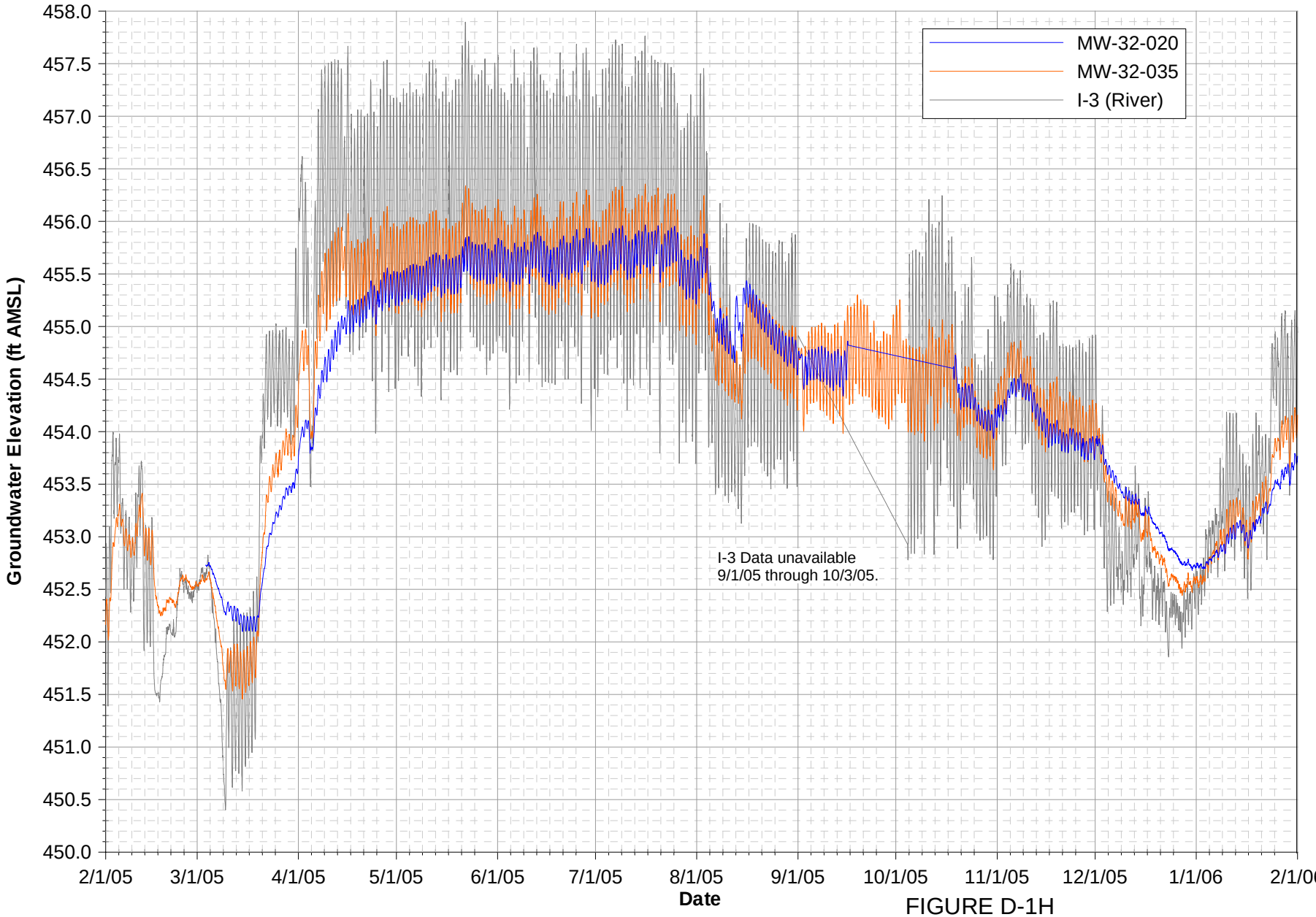
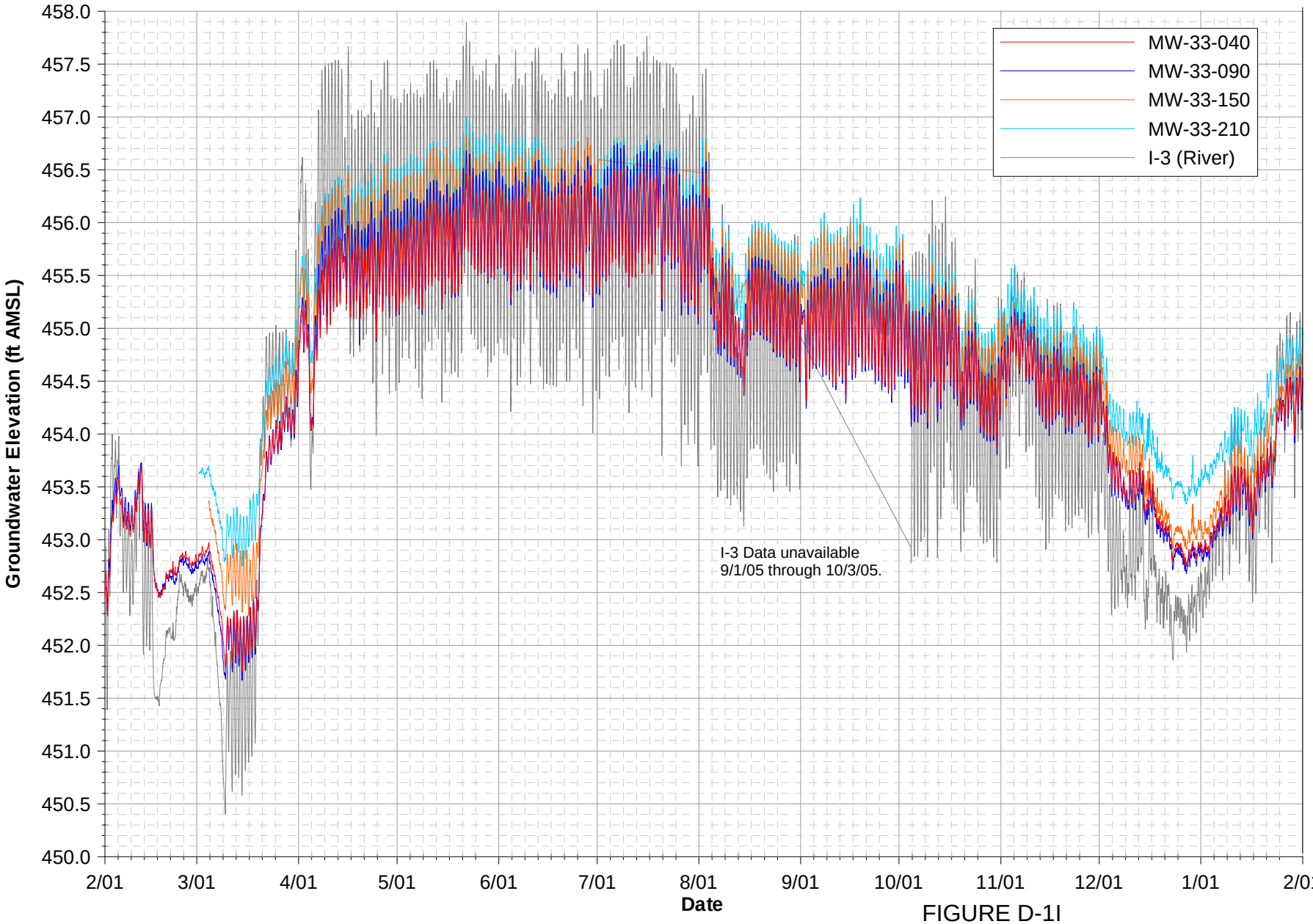


FIGURE D-1H
MW-32 WELL HYDROGRAPHS
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Note: Data subject to review.
MW-32-20 data unavailable 9/16/05
through 10/18/05.

CH2MHILL



Note: Data subject to review.
Wells MW-33-150 and MW-33-210 installed late February 2005, data unavailable from February, 2005.
MW-33-150 data unavailable 7/1/05 through 8/3/05.

FIGURE D-1I
MW-33 CLUSTER HYDROGRAPHS
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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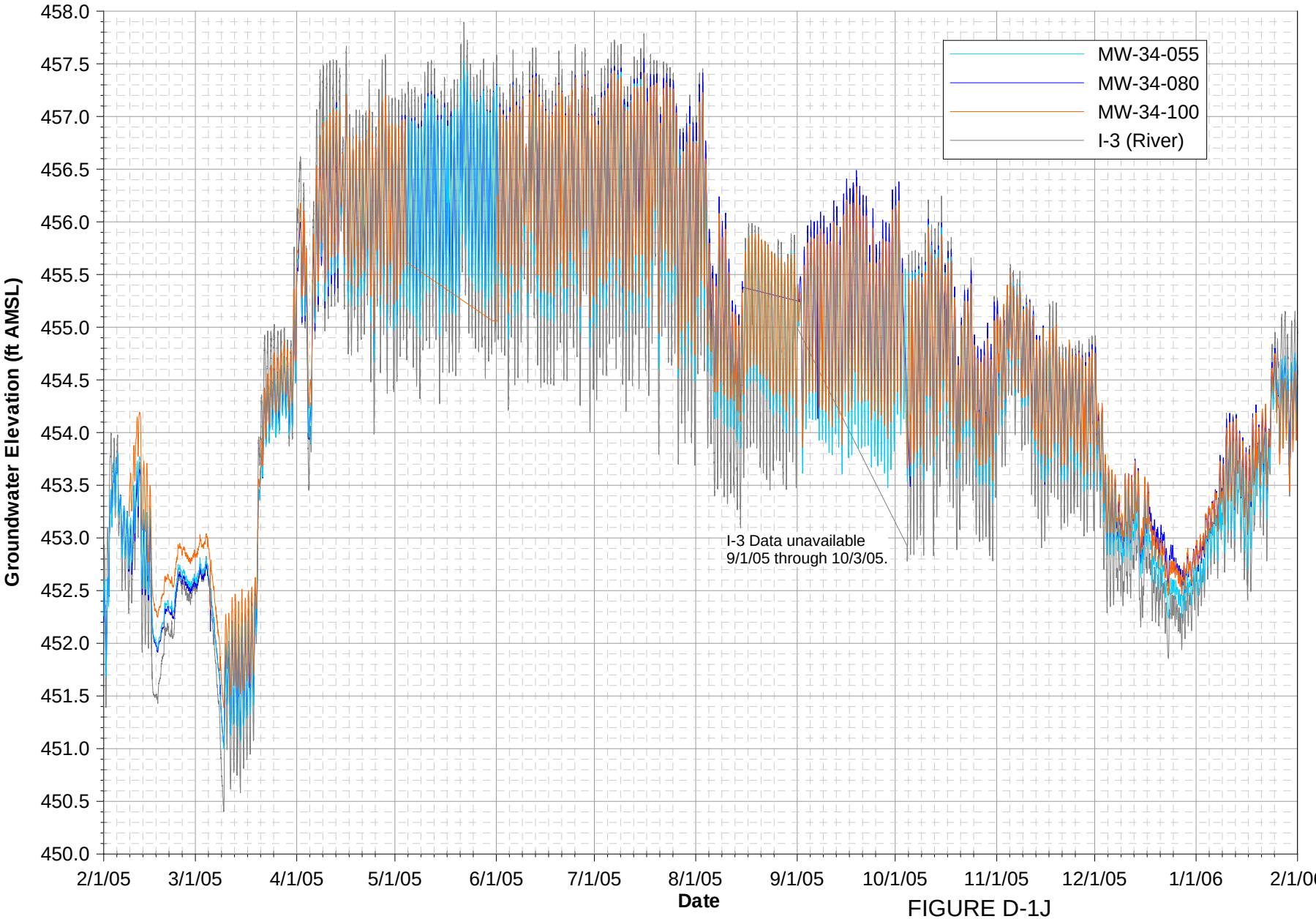

Note: Data subject to review.
MW-34-80 data unavailable 8/13/05 through 9/1/05.
MW-34-100 data unavailable 5/4/05 through 6/1/05.

FIGURE D-1J
MW-34 CLUSTER HYDROGRAPHS
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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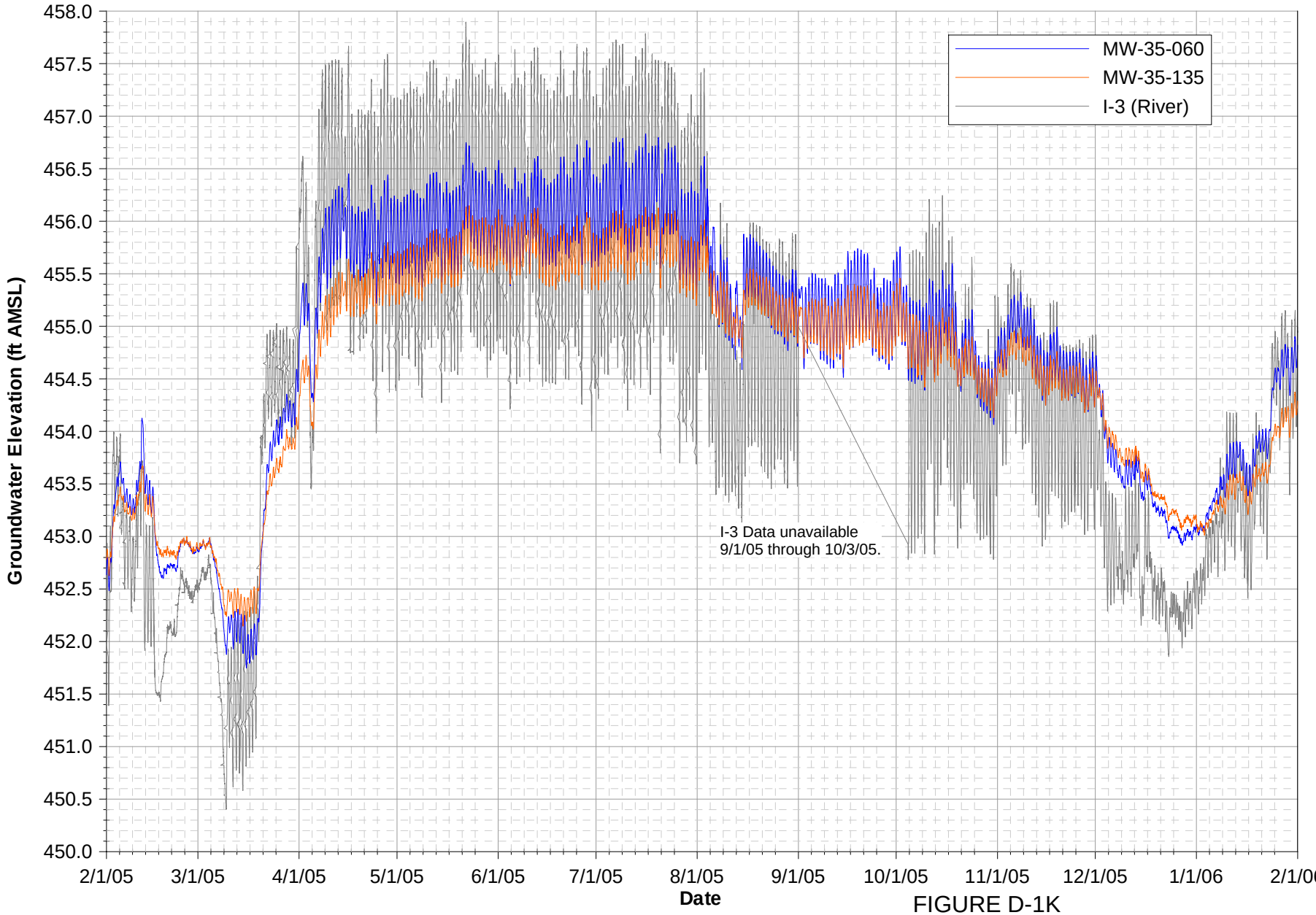

Note: Data subject to review.

FIGURE D-1K
MW-35 WELL HYDROGRAPHS
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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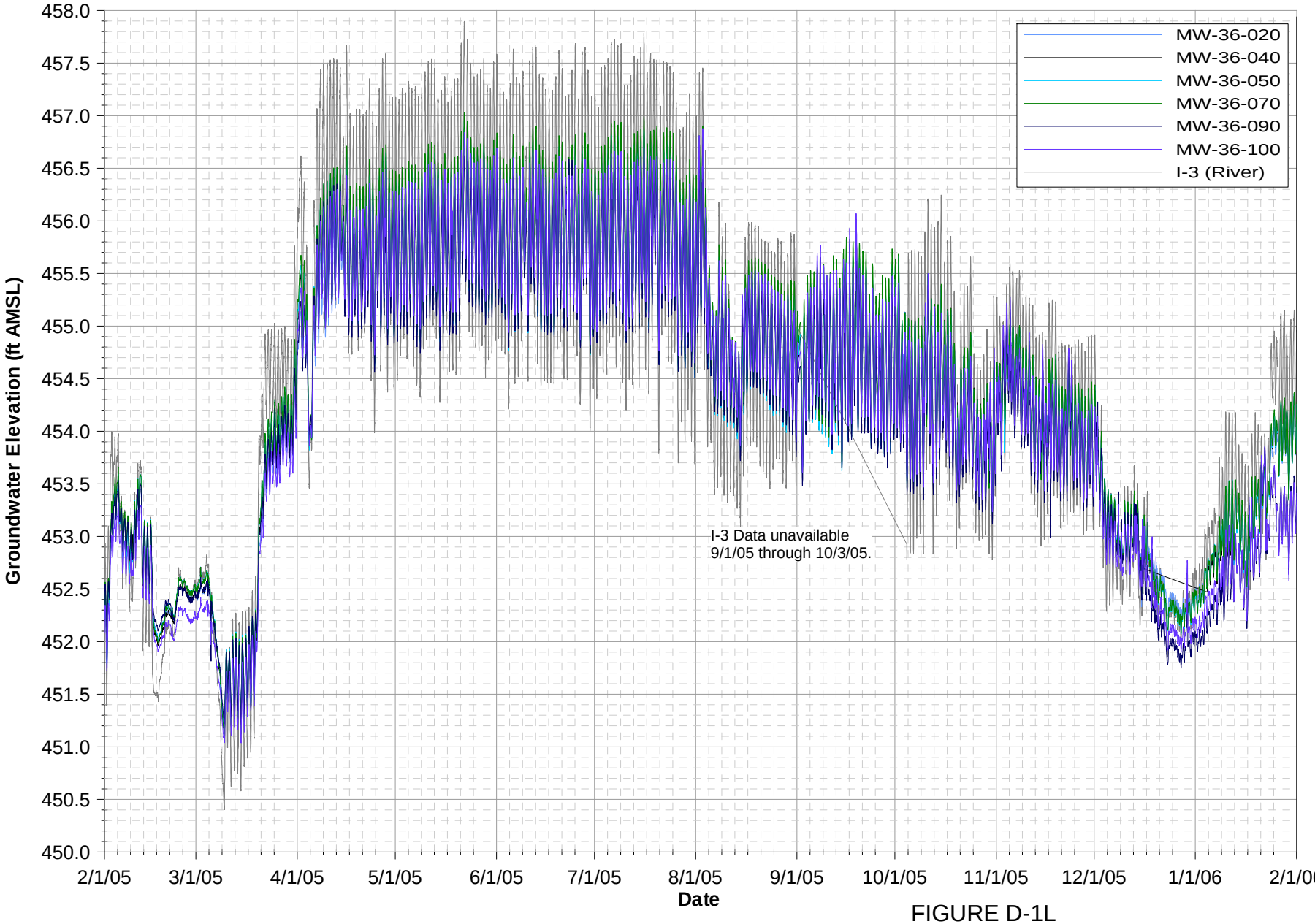

FIGURE D-1L
MW-36 CLUSTER HYDROGRAPHS
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Note: Data subject to review.
MW-36-40 data unavailable 12/16/2005 through 1/3/2006.

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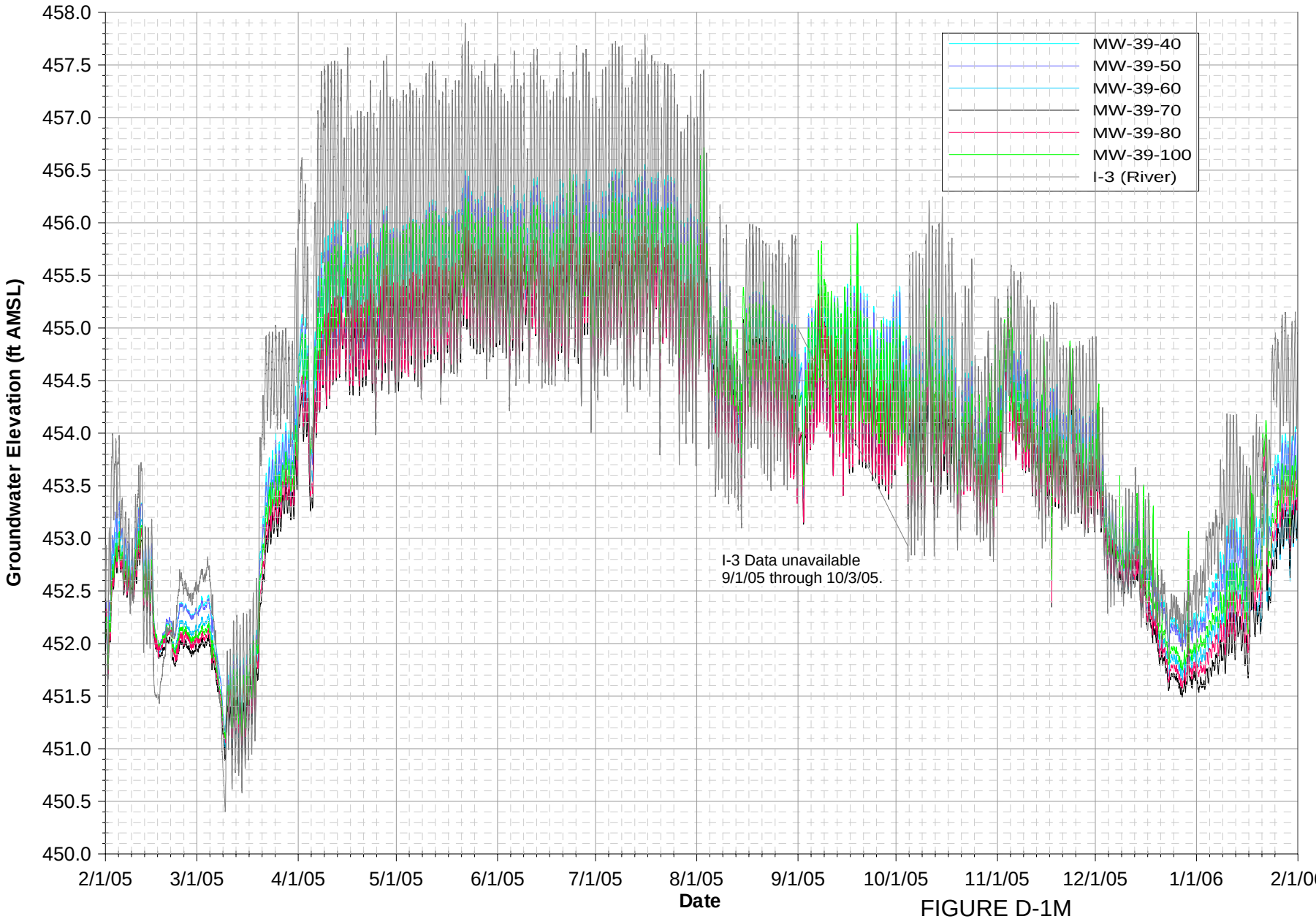

Note: Data subject to review.

FIGURE D-1M
MW-39 CLUSTER HYDROGRAPHS
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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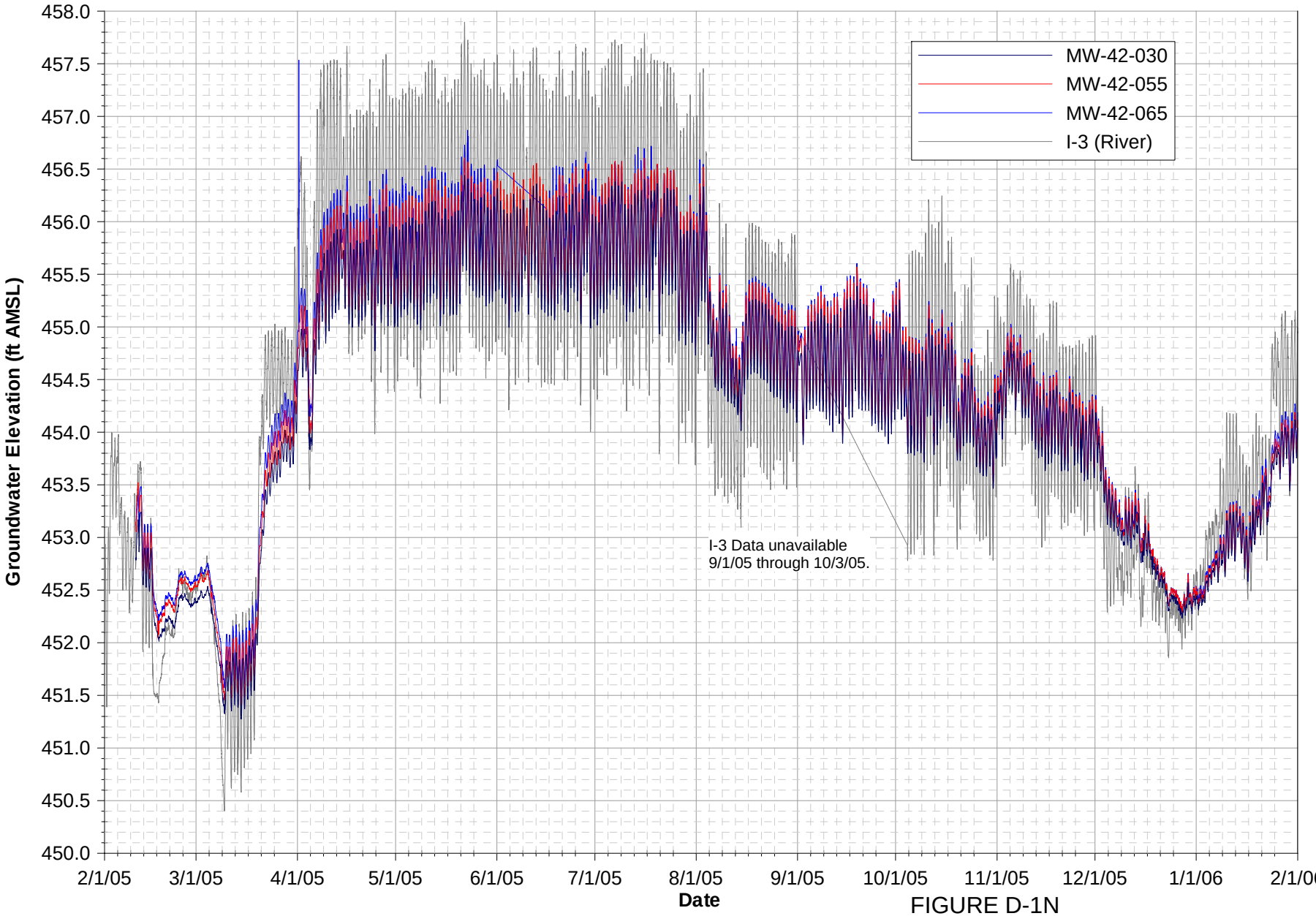

Note: Data subject to review.
MW-42-65 data unavailable 6/1/05 through 6/15/05.

FIGURE D-1N
MW-42 CLUSTER HYDROGRAPHS
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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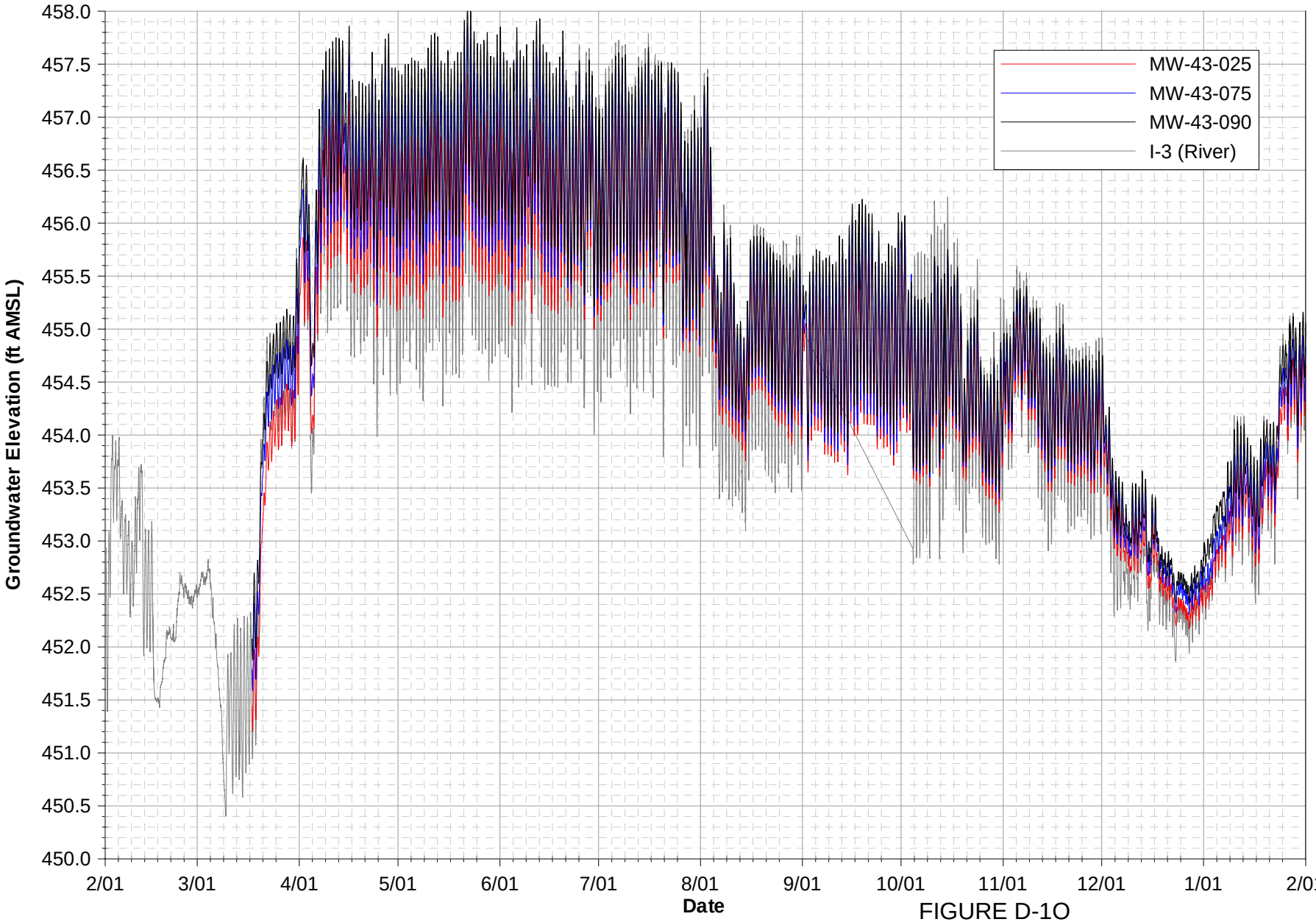

Note: Data subject to review.
MW-43 Wells Installed Mid March 2005.

FIGURE D-1O
MW-43 CLUSTER HYDROGRAPHS
2005 ANNUAL PERFORMANCE MONITORING REPORT
PG & E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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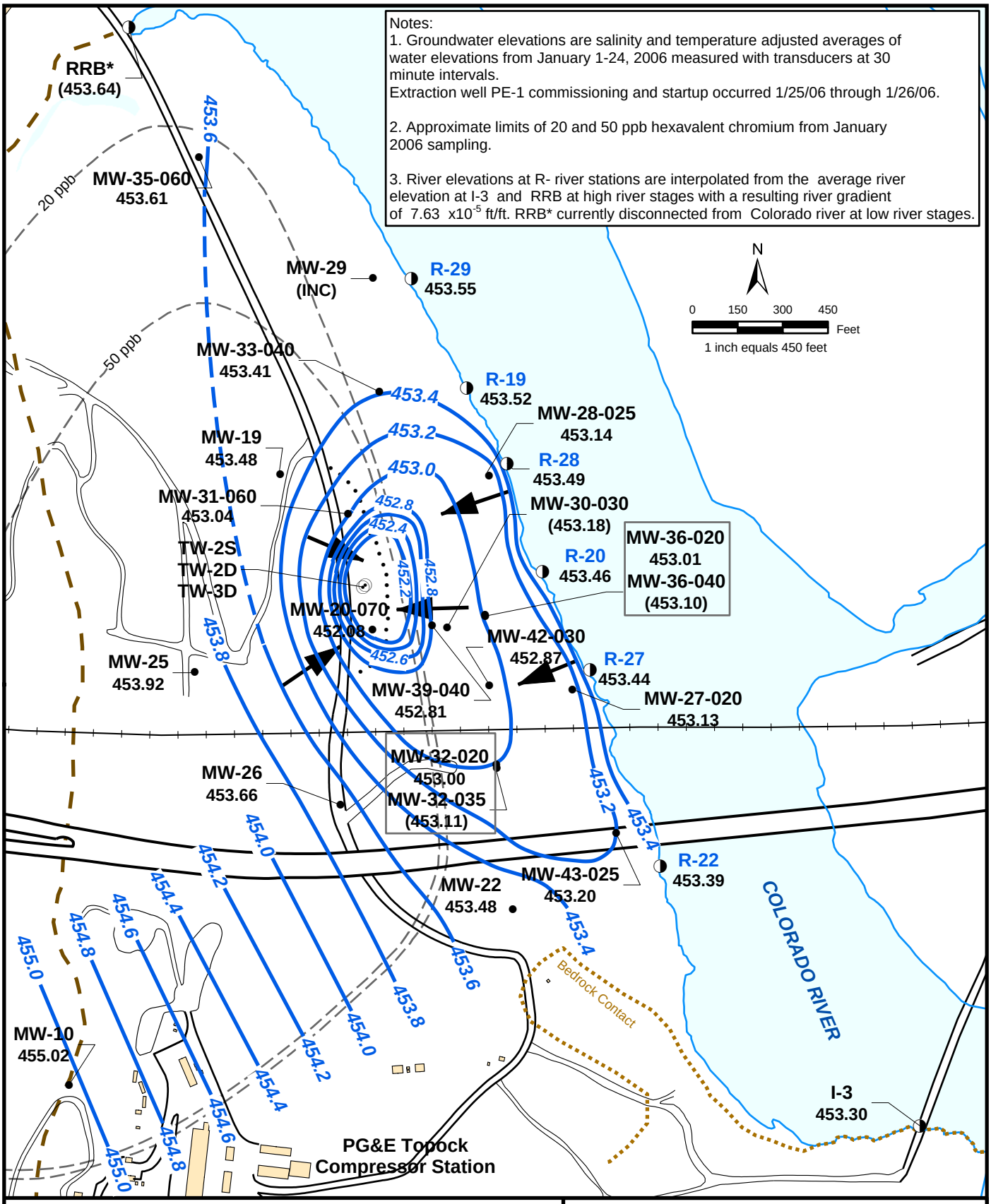

FIGURE D-2A
AVERAGE GROUNDWATER SHALLOW WELLS AND RIVER ELEVATIONS JANUARY 1-24, 2006

2005 ANNUAL PERFORMANCE MONITORING REPORT.
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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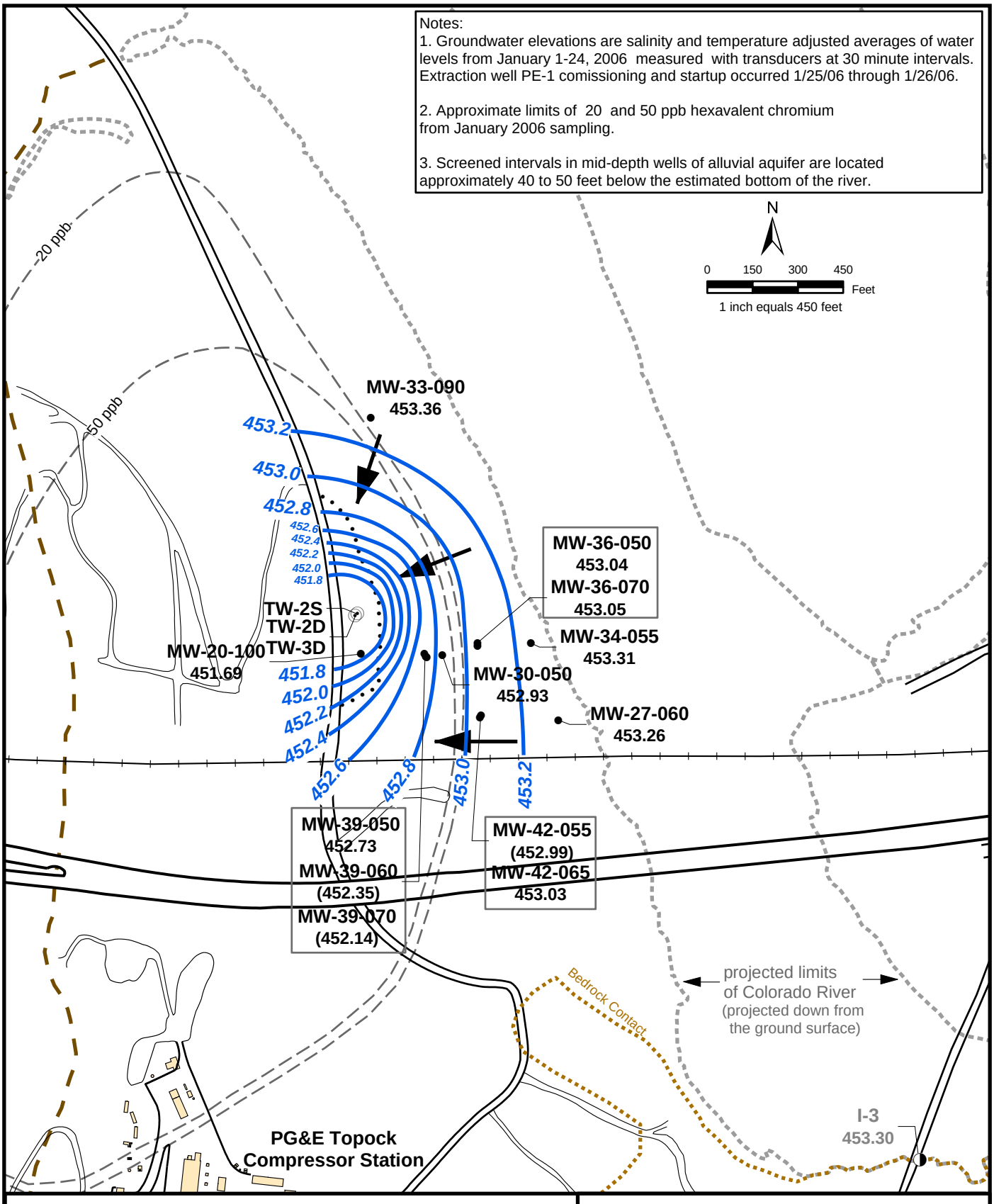

FIGURE D-2B
AVERAGE GROUNDWATER ELEVATIONS MID-DEPTH WELLS JANUARY 1-24, 2006

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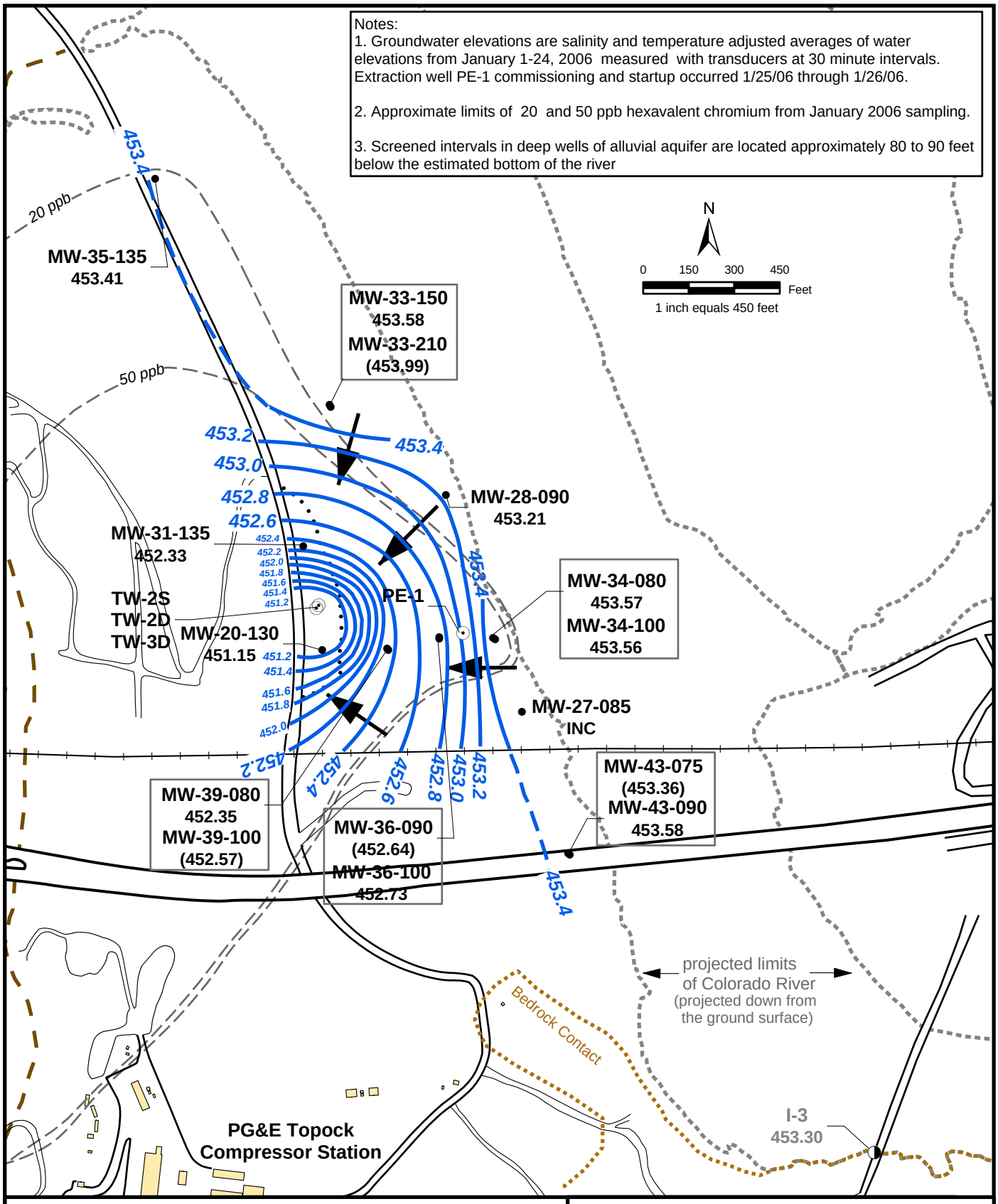

FIGURE D-2C
AVERAGE GROUNDWATER ELEVATIONS DEEP WELLS JANUARY 1-24, 2006

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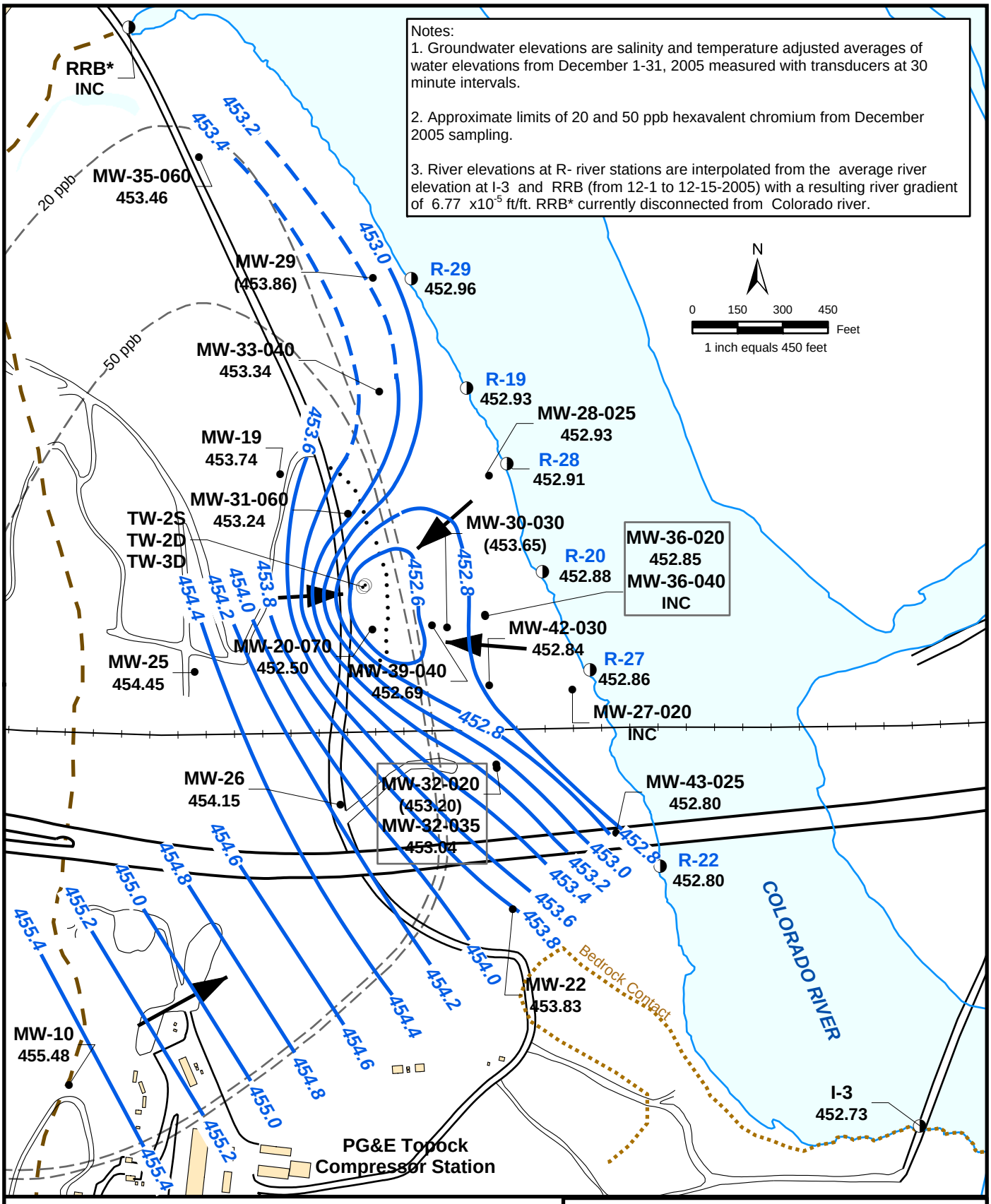

FIGURE D-2D
AVERAGE GROUNDWATER SHALLOW WELLS AND RIVER ELEVATIONS DECEMBER 2005

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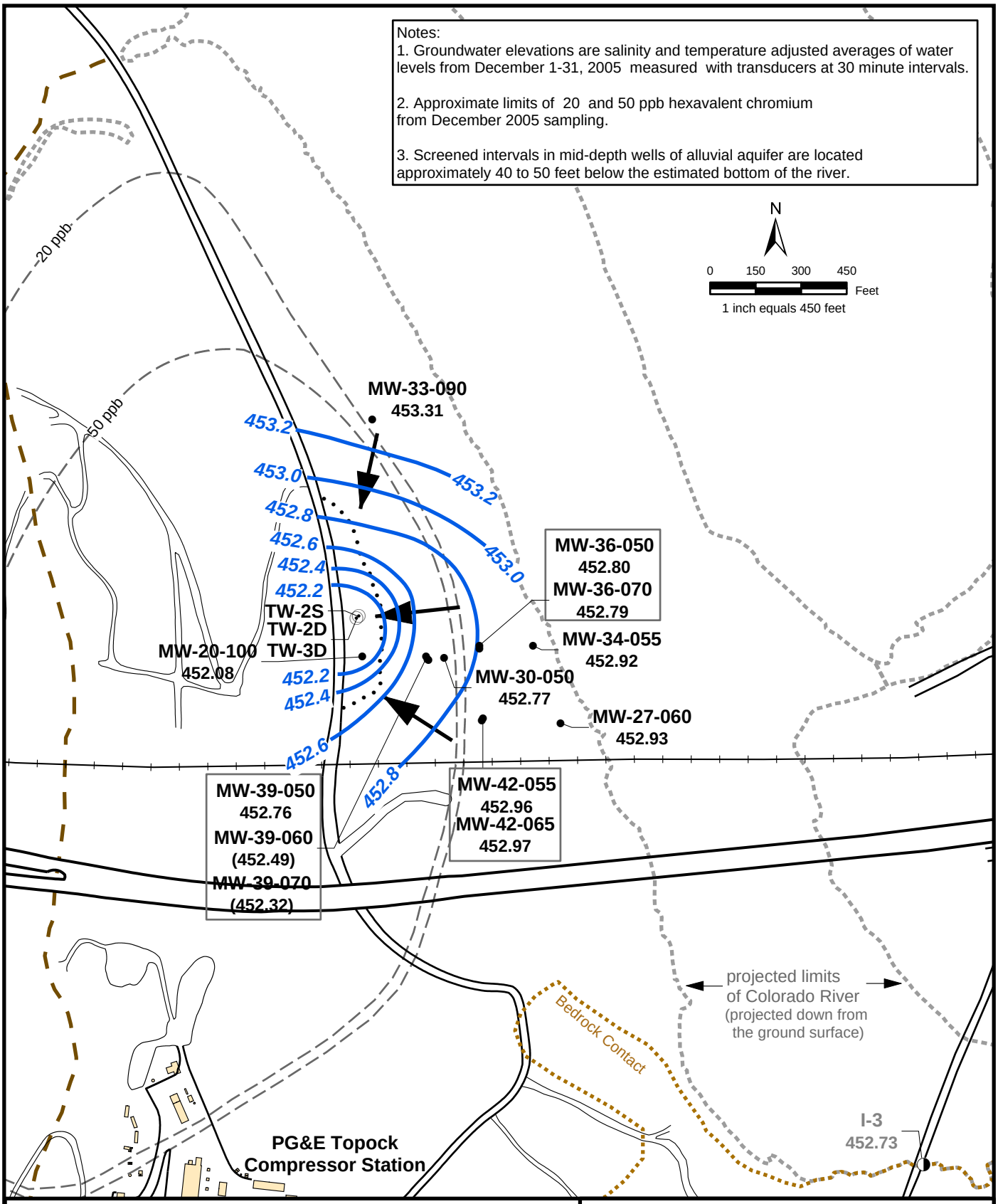

FIGURE D-2E
AVERAGE GROUNDWATER ELEVATIONS MID-DEPTH WELLS DECEMBER 2005

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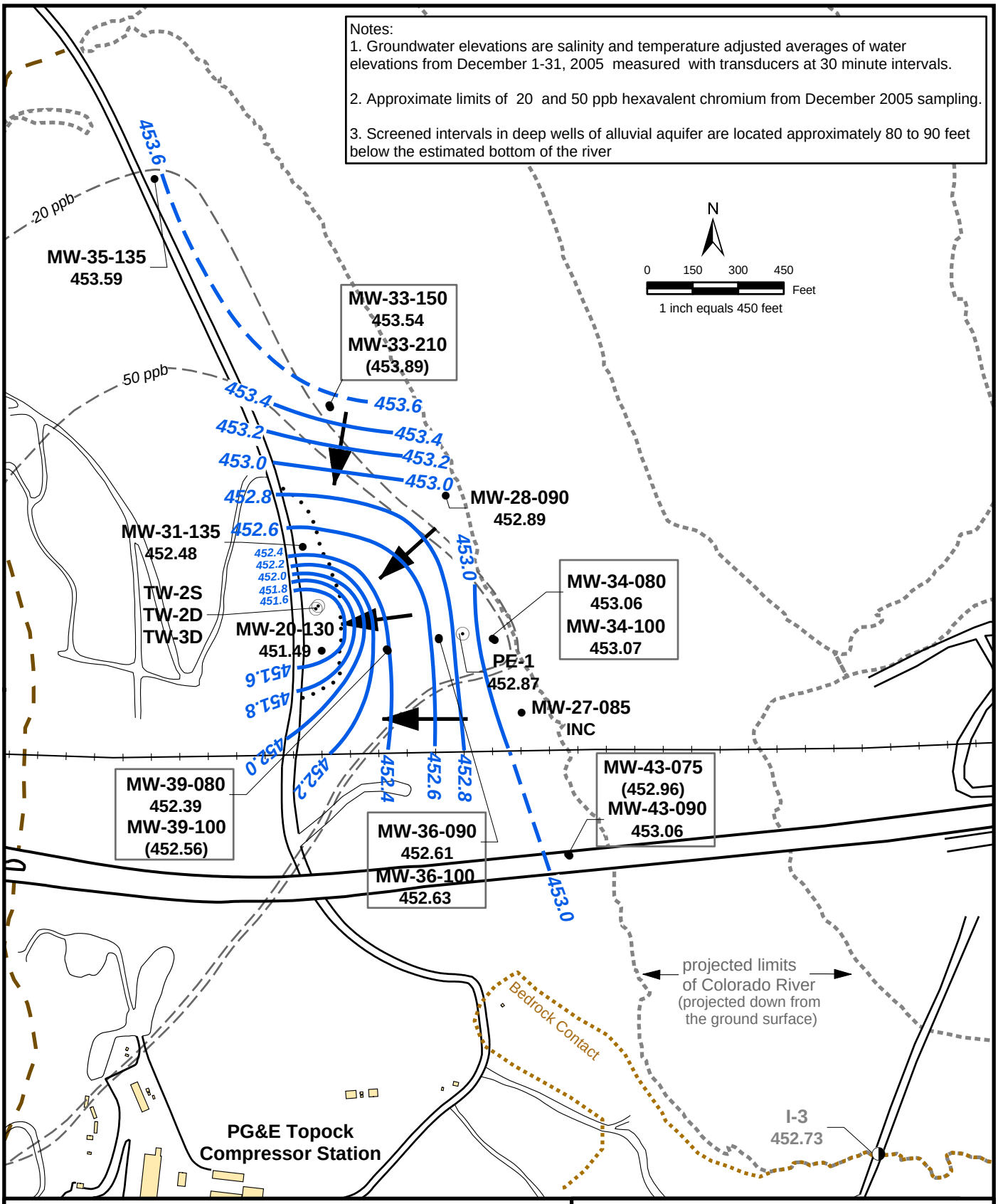

FIGURE D-2F
AVERAGE GROUNDWATER ELEVATIONS DEEP WELLS DECEMBER 2005

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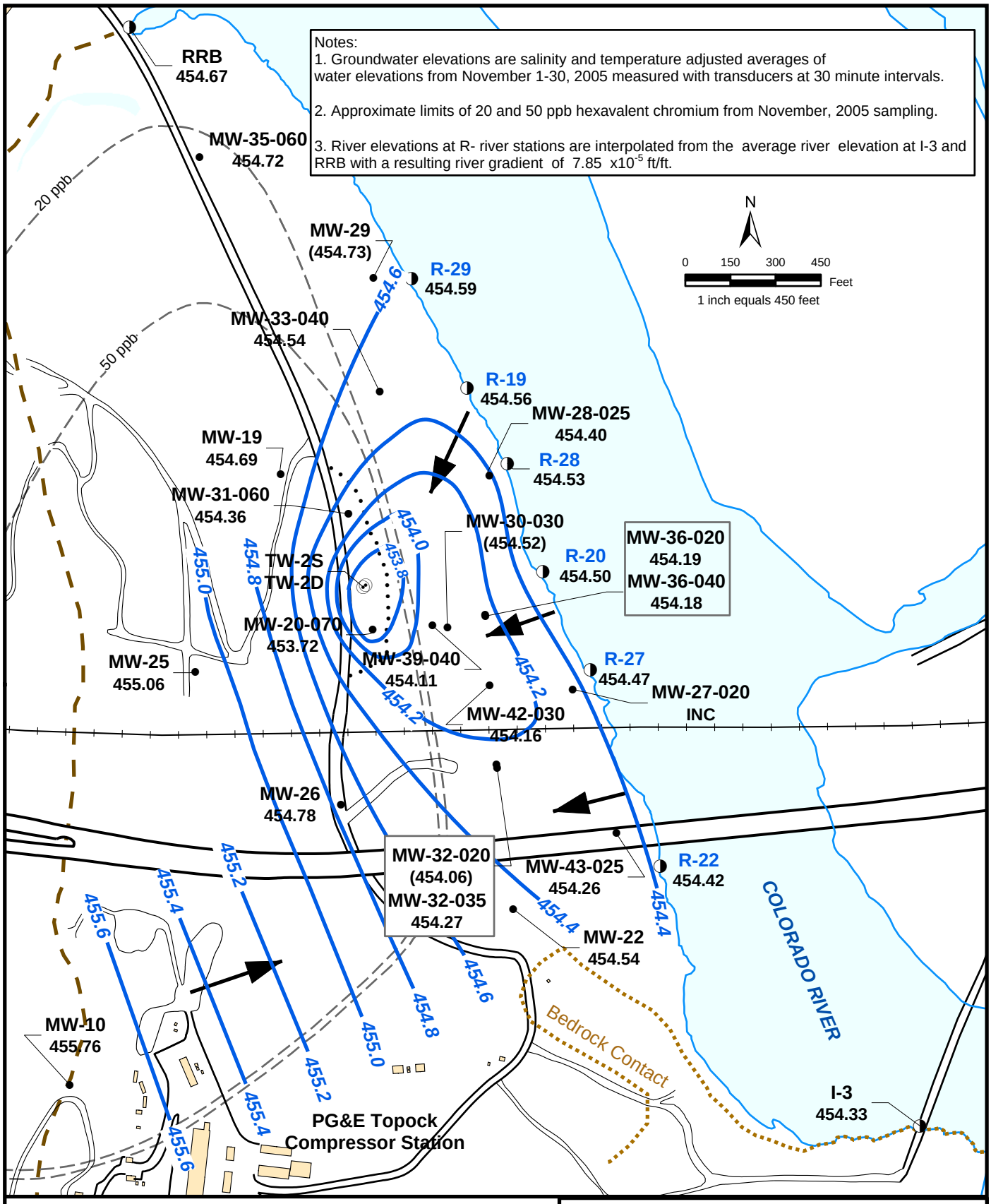

FIGURE D-2G
AVERAGE GROUNDWATER SHALLOW WELLS AND RIVER ELEVATIONS NOVEMBER 2005

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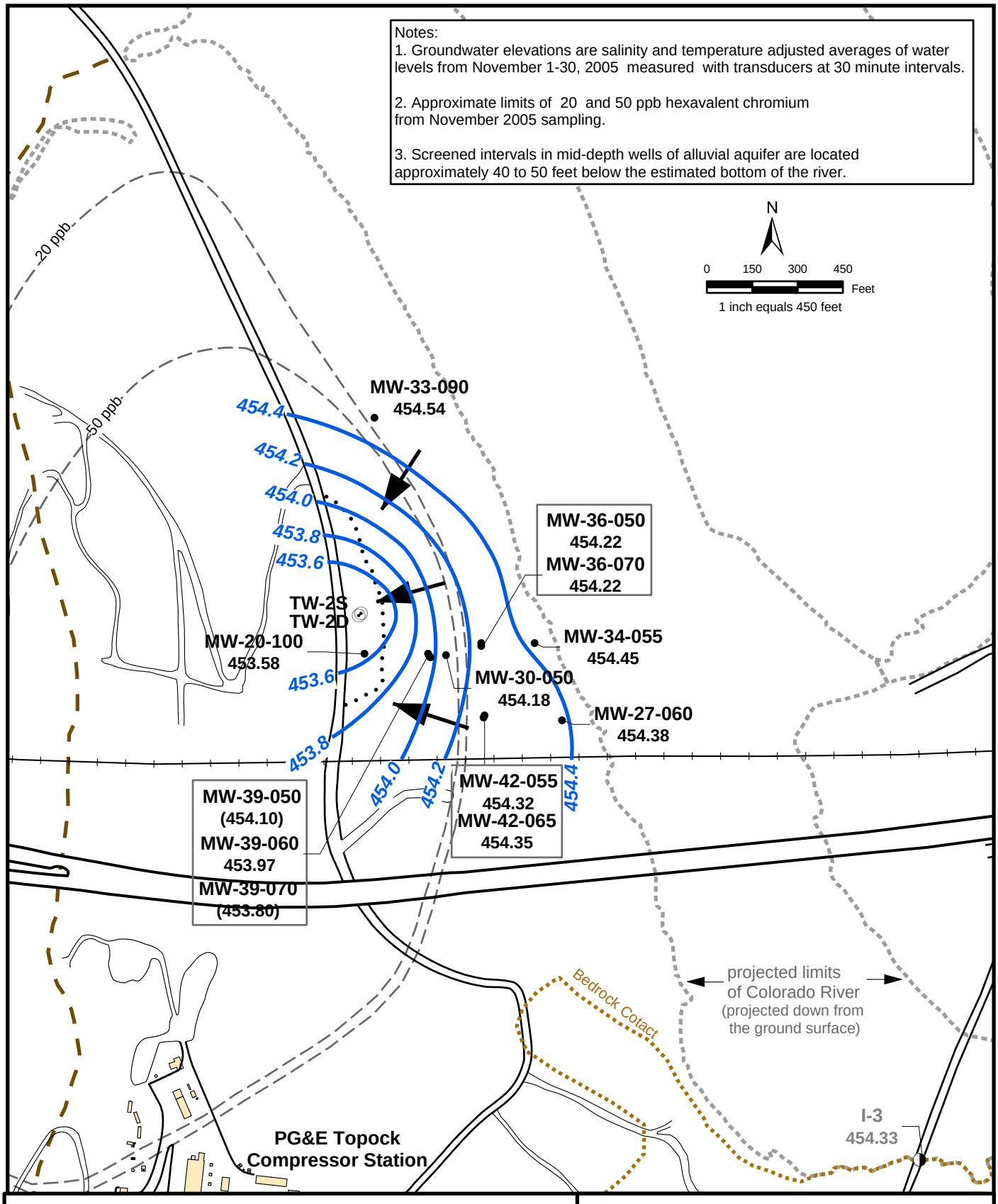

FIGURE D-2H
AVERAGE GROUNDWATER ELEVATIONS MID-DEPTH WELLS NOVEMBER 2005

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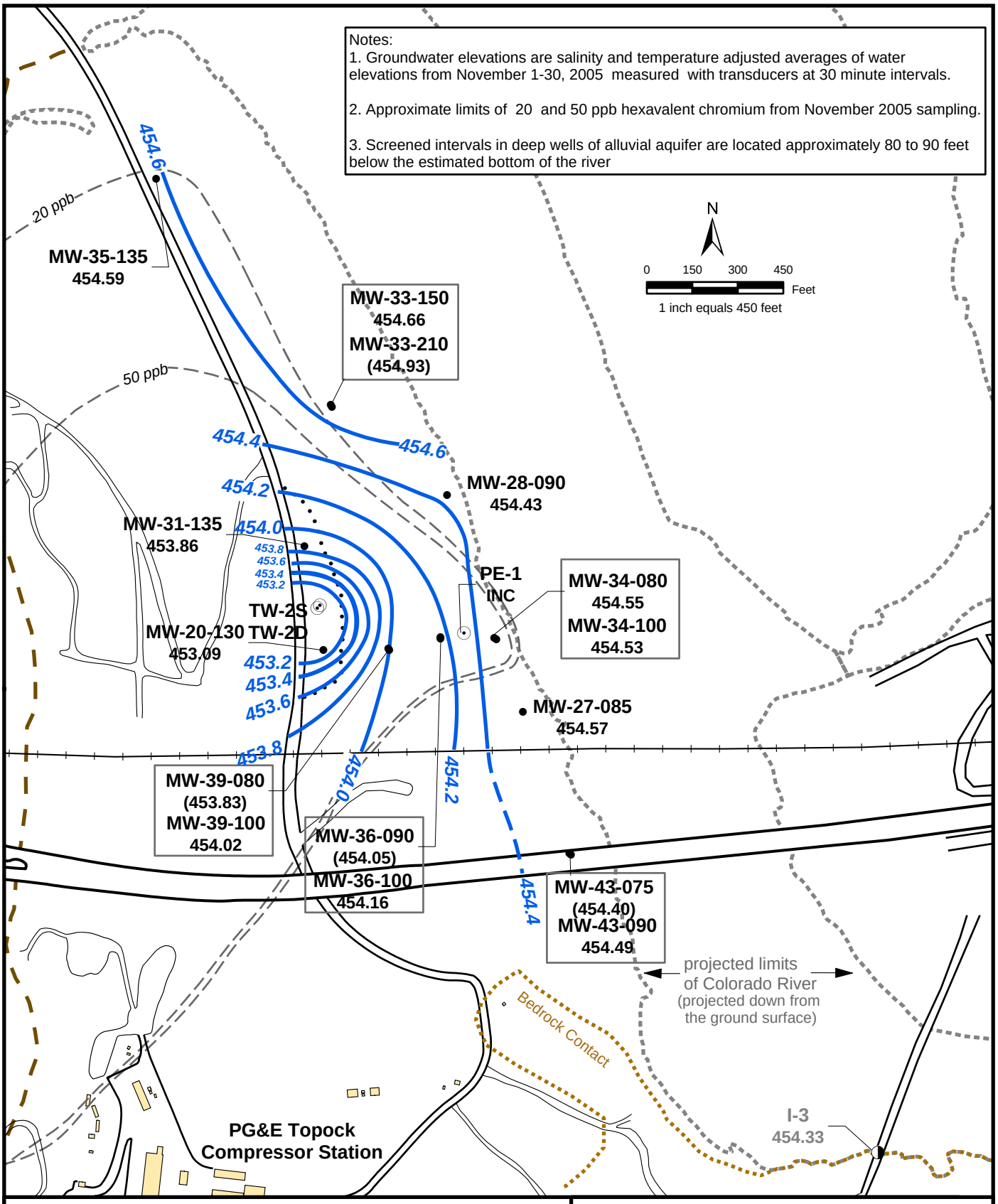

FIGURE D-2I
AVERAGE GROUNDWATER ELEVATIONS DEEP WELLS NOVEMBER 2005

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