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November 30, 2007

Mr. Aaron Yue
Project Manager
California Department of Toxic Substances Control
5796 Corporate Avenue
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Subject: Third Quarter 2007 Performance Monitoring Report
Interim Measures Performance Monitoring Program
PG&E Topock Compressor Station, Needles, California

Dear Mr. Yue:

Enclosed is the *Quarterly Performance Evaluation, August through October 2007* for PG&E's Interim Measures performance monitoring program for the Topock project. This report presents the August, September, and October 2007 performance monitoring results for the Interim Measure and summarizes the operations and performance evaluation for the third quarter 2007 reporting period.

The quarterly performance monitoring report is submitted in conformance with the reporting requirements in DTSC's Interim Measure directive dated February 14, 2005, and includes updates and modifications approved by DTSC in a letter dated October 12, 2007.

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

Sincerely,

A handwritten signature in blue ink that reads 'Yvonne Meeks'.

Enclosure
Interim Measure

Quarterly Performance Monitoring Report and Evaluation, August through October 2007

**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

November 30, 2007

CH2MHILL
155 Grand Ave. Ste. 1000
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Quarterly Performance Monitoring Report and Evaluation, August through October 2007

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

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**On behalf of
Pacific Gas and Electric Company**

November 30, 2007

This report was prepared under the supervision of a
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Acronyms and Abbreviations

µg/L	micrograms per liter (essentially the same as parts per billion [ppb])
cfs	cubic feet per second
Cr(T)	total chromium
Cr(VI)	hexavalent chromium
DTSC	California Department of Toxic Substances Control
gpm	gallons per minute
IM	Interim Measure
IM No. 3	Interim Measure Number 3
PG&E	Pacific Gas and Electric Company
PMP	Performance Monitoring Program
TDS	total dissolved solids
USBR	United States Bureau of Reclamation

SECTION 1.0

Introduction

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. (All figures are located at the end of the report.)

In a letter dated February 14, 2005, the California Department of Toxic Substances Control (DTSC) established the criteria for evaluating the performance of the IM. 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 concentrations at or greater than 20 micrograms per liter [$\mu\text{g/L}$] in the floodplain are contained for removal and treatment” (Enclosure A, DTSC February 14, 2005 letter). A draft *Performance Monitoring Plan for Interim Measures in the Floodplain Area* was submitted to DTSC on April 15 (CH2M HILL, 2005a) (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.

The February 2005 reporting requirements for the PMP were modified by DTSC, via e-mail approval, in August 2007 to discontinue submittals of the monthly performance monitoring reports (the quarterly and annual reporting requirements were unchanged). Additional updates and modifications to the PMP were approved by DTSC in a letter dated October 12, 2007 (DTSC, 2007a).

This quarterly 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 third quarter reporting period covers monitoring activities from August 1 through October 31, 2007.

1.1 Report Organization

This third quarter 2007 monitoring report presents:

- Description of the wells included in the performance monitoring network (Section 2.0).
- Evaluation of performance data, including the extraction system, chromium trends in the floodplain monitoring wells, hydraulic gradients, and river levels during the quarterly period, August through October 2007 (Section 3.0).
- Conclusions (Section 4.0).

Performance Monitoring Network

Figure 2-1 shows the locations of wells used for IM extraction, performance monitoring, and hydraulic gradient measurements. The performance monitoring wells that were in service and used for hydraulic monitoring during the reporting period include:

- **Floodplain Wells** (monitoring wells on the Colorado River floodplain): MW-22, MW-27 cluster (three), MW-28 cluster (two), MW-30-50, MW-32 cluster (two), MW-33 cluster (four), MW-34 cluster (three), MW-36 cluster (six), MW-39 cluster (six), MW-42 cluster (three), MW-43 cluster (three), MW-44 cluster (three), MW-45-95, MW-46 cluster (two), and MW-49 cluster (three).
- **Intermediate Wells** (monitoring wells located immediately north, west, and southwest of the floodplain): MW-19, MW-20 cluster (three), MW-26, MW-31 cluster (two), MW-35 cluster (two), MW-47 cluster (two), MW-50 cluster (two), and MW-51.
- **Interior Wells** (monitoring wells located upgradient of IM pumping): MW-10 and MW-25.

Three extraction wells (TW-2D, TW-3D, and TW-2S) are located on the MW-20 bench (Figure 1-1). In addition, extraction well PE-1 is located on the floodplain approximately 450 feet east of extraction well TW-3D (Figure 1-1). Currently, both extraction wells TW-3D and PE-1 are in full-time operation.

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. These divisions do not correspond to any lithostratigraphic layers within the aquifer. The floodplain aquifer is considered to be hydraulically undivided. 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.

Quarterly Performance Evaluation for August through October 2007

3.1 Extraction System Operations

Pumping data for the IM No. 3 groundwater extraction system for the period of August 1 through October 31, 2007 are presented in Table 3-1 (all Tables presented at end of the report). From August 1 through October 31, 2007 (considered third quarter 2007), 17,751,435 gallons of groundwater were extracted and treated by the IM No. 3 system. This resulted in removal of an estimated 103 kilograms (or 227 pounds) of chromium from the aquifer during the quarter. The average extraction rate, including system downtime, for the IM system during the quarter was 134.0 gpm. A summary of the monthly and quarterly average extraction rates and cumulative volumes by extraction well is provided in Table 3-1.

During third quarter 2007, extraction wells TW-3D and PE-1 operated at a combined target pump rate of 135 gallons per minute (gpm), excluding periods of planned and unplanned downtime. Extraction well TW-2D and TW-2S were also operated for short periods to support groundwater sampling and related field operations. The operational run time percentage for the IM extraction system was over 99 percent during this reporting period. An operations log for the extraction system during the third quarter of 2007, including downtime, is included in Appendix A.

The concentrate (i.e., brine) from the reverse osmosis system was shipped offsite with shipping papers as a Resource Conservation and Recovery Act non-hazardous waste and transported to Liquid Environmental Solutions in Phoenix, Arizona for treatment and disposal. Four containers of solids from the IM No. 3 facility were disposed of at the Kettleman Hills Chemical Waste Management facility during third quarter 2007.

Daily inspections included general facility inspections, flow measurements, and site security monitoring. Daily logs with documentation of inspections are maintained onsite.

Table 3-2 summarizes the analytical results for chromium and total dissolved solids (TDS) in groundwater samples collected from the IM extraction well system during the third quarter 2007 reporting period and prior months. Chromium concentrations have been generally constant at wells TW-3D and PE-1 since May 2007, while TDS had generally decreased in both wells during this period.

3.2 Chromium Sampling Results and Evaluation

During third quarter 2007, groundwater monitoring wells in the floodplain area were sampled for hexavalent chromium [Cr(VI)], total chromium [Cr(T)], and field water quality parameters under semiannual, quarterly, monthly, and biweekly schedules, in accordance with the approved groundwater monitoring plan and DTSC directives. Refer to PG&E's

Topock Groundwater and Surface Water Monitoring Report, First Quarter 2007 (CH2M HILL, 2007a) for description of the 2007 groundwater monitoring activities and sampling frequencies for wells in the performance monitoring area. The sampling frequencies for the site groundwater monitoring wells were updated by DTSC in a letter dated September 28, 2007 (DTSC, 2007b).

The distribution of Cr(VI) in the upper, middle, and lower depth intervals of the Alluvial Aquifer in the performance monitoring area for third quarter 2007 is shown in plan view and cross-section on Figure 3-1. The Cr(VI) concentration contours shown for the Alluvial Aquifer are based on the results from October 2007 groundwater sampling. Overall, the Cr(VI) concentration contours for October 2007 are similar to the Cr(VI) distribution maps issued in the prior IM performance monitoring reports (CH2M HILL, 2007b-c). Figure 3-2 presents the recent Cr(VI) results on a cross-section parallel to the Colorado River (locations of cross-sections shown on Figure 2-1). Tables B-1 and B-2 (Appendix B) provide for the chromium and field parameter sampling results from October 2006 through October 2007 for the wells in the PMP area.

Figure 3-3 presents Cr(VI) concentration trend graphs for selected deep monitoring wells in the floodplain area through the October 2007 sampling. Sampling results are plotted for wells MW-34-100, MW-36-90, MW-36-100, MW-44-115, MW-44-125, and MW-46-175. The locations of the deep wells selected for performance evaluation are shown on Figure 2-1.

The effects of IM No. 3 pumping are evident in the sampling data from wells MW 36-90 and MW-36-100 (Figure 3-3). Since the initiation of IM pumping, the Cr(VI) concentrations at MW-36-90 have decreased. When PE-1 was placed into service, concentrations decreased further and have remained steady at less than 10 µg/L since August 2006. Concentrations in the deeper well MW-36-100 (well screen adjacent to PE-1 well screen) decreased under IM No. 3 pumping, initially increased upon initiation of pumping at PE-1, and now have steadily decreased since January 2007. The concentration trend for MW-34-100 (Figure 3-3) has shown both short-term declines and increases in concentrations since PE-1 pumping commenced. However, since June 2006, concentrations at this well have shown a general downward trend. The Cr(VI) result from September 19, 2007 sampling of MW-34-100 (501 µg/L) is the lowest concentration measured at this well since May 2005. Landward gradients have been present at this location since IM pumping began; therefore, the increase in concentrations measured at MW-34-100 prior to June 2006 does not indicate any movement of the plume toward the river.

Monitoring well clusters MW-44 and MW-46, installed in spring 2006, are located within the Cr(VI) plume (approximately 190 feet and 400 feet north of PE-1). The concentration trend for well MW-44-115 has been generally downward since July 2006. Sampling data from well MW-44-125 show stable concentrations since October 2006. Concentrations in well MW-46-175 decreased from March 2006 until May 2007 but have been generally stable since May 2007. The MW-44 and MW-46 well clusters are within the hydraulic capture of IM pumping (see Section 3.4).

Cr(VI) concentration trend graphs and hydrographs for selected floodplain monitoring wells are presented in Appendix B. In addition to the wells presented on Figure 3-3, declining Cr(VI) concentrations have been observed at the MW-39-70 and MW-39-80 wells (Appendix Table B-1, Figure B-4), reflecting the pumping influence from TW-3D. The

chromium concentrations ($<20 \mu\text{g/L}$) observed in the MW-33 cluster wells remained consistent with previous results during the quarterly reporting period. Stable or decreasing concentrations were observed in the other wells in the floodplain area where Cr(VI) has been detected in prior monitoring (Table B-1).

3.3 Other Water Quality Data for Floodplain Wells

Common water quality parameters (temperature, pH, oxidation-reduction potential, 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 April 2005 through October 2007 are presented in Tables B-1 and B-2 (Appendix B).

Table D-1 in Appendix D presents the results of the general chemistry and stable isotope analyses for 14 PMP monitoring wells and two river stations during sampling events from March 2005 through October 2007. Figure 2-1 shows the locations of the monitoring wells sampled for the performance monitoring parameters. Water samples were analyzed for TDS, chloride, sulfate, nitrate, bromide, calcium, potassium, magnesium, sodium, boron, alkalinity, deuterium, and oxygen-18 to monitor the effects of IM pumping on groundwater chemistry.

3.4 Hydraulic Gradients and River Levels during Quarterly Period

During third quarter 2007 (considered August through October); water levels were recorded with pressure transducers at 30-minute intervals in 61 wells and two river monitoring stations (I-3 and RRB). The data loggers typically run continuously, with only short interruptions for sampling or maintenance. The locations of the wells monitored are shown on Figure 2-1 and are listed in Section 2.0.

Daily average groundwater and river elevations have been calculated from the pressure transducer data for the third quarter 2007 reporting period, and are summarized in Appendix C. Due to the variation in groundwater salinity at the site, the water level measurements need to be adjusted (density-corrected) to equivalent freshwater hydraulic heads prior to calculating groundwater elevations and gradients (Fetter, 1994). The methods and procedures used for adjusting the performance monitoring water level data for salinity and temperature differences are described in the Performance Monitoring Plan.

Average quarterly groundwater elevations (August through October 2007 inclusive) for the upper depth interval and mid-depth wells are presented and contoured in plan view on Figures 3-4 and 3-5. To the west of the TW-3D and PE-1 pumping area, the hydraulic gradient in the upper depth interval is easterly and consistent with the regional gradient outside of the floodplain area.

Average quarterly groundwater elevations (August through October 2007 inclusive) for the deep wells are presented and contoured in plan view on Figure 3-6. The average quarterly groundwater elevations are also presented and contoured in floodplain cross-section A (Figure 3-7). The floodplain cross-section also shows the locations and depths where the

current IM pumping in the deep interval of the Alluvial Aquifer is occurring at TW-3D and PE-1. The landward hydraulic gradients for the deep monitoring wells presented on Figures 3-6 and 3-7 are consistent with the strong landward gradients measured and presented in the 2006 and 2007 monitoring reports (CH2M HILL, 2007b-c).

The hydraulic gradients measured for the August through October 2007, third quarter reporting period present gradients from well pairs selected for performance monitoring with two pumping centers. The following well pairs were approved by DTSC on October 12, 2007 (DTSC, 2007a) to better define gradients induced while pumping from two locations.

- MW-31-135 and MW-33-150 (northern gradient pair)
- MW-45-95 and MW-34-100 (central gradient pair)
- MW-45-95 and MW-27-85 (southern gradient pair)

Table 3-3 presents the average monthly hydraulic gradients that were measured between the gradient well pairs in August, September, and October 2007. For the northern (MW-31-135/MW-33-150) and southern (MW-45-95/ MW-27-85) well pairs, gradients were landward at magnitudes from 2.4 to 4.7 times, respectively, the target gradient of 0.001 feet per foot. For the central well pair (MW-45-95/MW-34-100), the landward gradient averaged more than 10 times the target gradient (0.0118 feet per foot) throughout the reporting period.

Figure 3-8 presents a graphical display of the measured hydraulic gradients and pumping rates and river levels during the third quarter 2007 reporting period. The river levels in August through October 2007 did not vary significantly, and the combined pumping was maintained at a monthly average rate of 134 gpm, resulting in strong landward gradients in the IM capture zone during third quarter 2007.

A review of the groundwater elevation contour maps indicates very strong landward hydraulic gradients within the IM capture zone throughout the floodplain. That is, the inferred groundwater flow lines from the floodplain monitoring wells where Cr(VI) concentrations are greater than 20 µg/L are oriented towards the TW-3D and PE-1 extraction wells within the IM capture zone.

3.5 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 USBR. Total releases from Davis Dam follow a predictable annual cycle, with largest monthly releases typically in spring and early summer and smallest monthly releases in late fall-winter (November and December). Superimposed on this annual cycle is a diurnal cycle determined primarily by daily fluctuations in electric power demand. 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 at I-3 is less than the magnitude of the monthly average river stage fluctuations over a typical year.

Table 3-4 is a summary of the estimated and actual Davis Dam releases and river elevations since April 2004. The actual Davis Dam October 2007 release (10,324 cubic feet per second [cfs]) was essentially the same as the United States Bureau of Reclamation (USBR)-projected release for the October reporting period (10,600 cfs). The projected Colorado River elevation at I-3 (monthly average) is calculated using a multiple regression method that considers both the Davis Dam release and the Lake Havasu level. Current USBR projections show that the average Davis Dam release for November 2007 (9,100 cfs) will be less than October 2007 (10,324 cfs). Based on the regression method results using November 9, 2007 USBR projections for both Davis Dam release and Lake Havasu elevation, it is anticipated that the Colorado River level at the I-3 gage location in November 2007 will decrease 0.4 feet compared to the October 2007 river stage.

Figure 3-9 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. The future projections shown on this graph are based on USBR long-range projections of Davis Dam release and Lake Havasu level. The river stage data and USBR projections indicate the highest river levels of the year typically occur in April, May, and June. Current USBR projections show that the lowest water levels will occur in November through December 2007 and January 2008. Because water demand is based on climatic factors, there is more uncertainty in these projections further into the future.

3.6 Status of Operation and Monitoring

Reporting of the IM extraction and monitoring activities will continue as described in the Performance Monitoring Plan and direction from DTSC. On October 12, 2007, the DTSC approved PG&E's request to discontinue monthly performance monitoring reports. As a result, the next performance monitoring report will be a combined 4th quarter 2007 and Annual Performance Evaluation report. The fourth quarter 2007 section will present operations and performance monitoring data from November 1, 2007 through January 31, 2008. The annual report will include performance monitoring data from February 1, 2007 through January 31, 2008. This report will be submitted by March 15, 2008.

Per DTSC direction, PG&E will continue to operate wells TW-3D and PE-1 at a target combined pumping rate of 135 gpm during the fourth quarter 2007, except for periods when planned and unplanned downtime occurs. Extracted groundwater treated at the IM No. 3 facility will be discharged into the IM No. 3 injection wells in accordance with Waste Discharge Requirements Order No. R7-2006-0060. Brine and solids generated as byproducts of the treatment process will continue to be transported offsite.

PG&E will balance the pumping rates between wells TW-3D and PE-1 to maintain the target pumping rate and maintain the DTSC-specified hydraulic gradients across the Alluvial Aquifer. Well TW-2D will serve as a backup to extraction wells TW-3D and PE-1.

Conclusions

The groundwater elevation and hydraulic gradient data for August, September, and October 2007 performance monitoring indicate that the minimum landward gradient target (0.001 feet/foot) was exceeded throughout the third quarter reporting period. As illustrated in Figure 3-8, the landward gradients measured during August, September, and October 2007 exceeded the required minimum gradient in all well pairs. The current IM pumping was sufficient to meet the minimum gradient target during each of the three months of the third quarter 2007.

A total of 17,751,435 gallons of groundwater was extracted and treated by the IM No. 3 system during the August through October, third quarter 2007 reporting period. An estimated 103 kilograms (or 227 pounds) of chromium were removed and treated by the IM system during this quarter. The average pumping rate for the IM extraction system during third quarter 2007, including system downtime, was 134.0 gpm.

Overall, the Cr(VI) concentrations observed in the floodplain monitoring wells are either stable or decreasing. During third quarter 2007, the groundwater Cr(VI) concentrations at wells MW-34-100, MW-36-100, MW-39-70, MW-39-80, and MW-39-100 declined relative to the previous quarter. Concentrations at wells MW-46-175 and the MW-44 cluster remained stable during the third quarter period. All of these wells are within the IM extraction system capture zone (Figure 3-6).

Chromium concentrations at well MW-34-100 have shown a steady downward trend since July 2006 (Figure 3-3). The recent September 19, 2007 Cr(VI) sampling result of 501 µg/L is the lowest concentration measured since May 2005. Landward gradients have been maintained at this well since IM pumping began, so the concentrations observed at this location do not indicate plume movement towards the east.

Based on the hydraulic and chemical performance monitoring data and evaluation presented in this report, the IM performance standard has been met for the third quarter, August through October 2007 reporting period. Performance monitoring and evaluation of the IM hydraulic containment system will continue in accordance with the Performance Monitoring Plan and as directed by the DTSC.

SECTION 5.0

References

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Tables

TABLE 3-1

Pumping Rate and Extracted Volume for IM System August 2007 through October 2007

Interim Measures Performance Monitoring

PG&E Topock Compressor Station

Extraction Well ID	August 2007		September 2007		October 2007		Project to Date ^a
	Average Pumping Rate ^b (gpm)	Volume Pumped (gal)	Average Pumping Rate ^b (gpm)	Volume Pumped (gal)	Average Pumping Rate ^b (gpm)	Volume Pumped (gal)	Cumulative Volume Pumped (gal)
TW-02S	0.00	0	0.00	0	0.01	531	994,969
TW-02D	0.05	2,164	0.04	1,810	0.07	2,942	53,021,917
TW-03D	100.12	4,469,536	102.61	4,432,824	103.87	4,636,776	95,487,398
PE-01	31.80	1,419,770	31.56	1,363,426	31.85	1,421,656	30,785,856
TOTAL	132.0	5,891,470	134.2	5,798,060	135.8	6,061,905	180,290,140
Volume Pumped from the MW-20 Well Cluster							1,527,724
Total Volume Pumped (gal)							181,817,864
Total Volume Pumped (ac-ft)							558.0

NOTES:

gpm gallons per minute

gal gallons

ac-ft acre-feet

^a Interim measure groundwater extraction at the Topock site was initiated in March 2004.^b The "Average Pumping Rate" is the overall average during the reporting period, including system downtime, based on flow meter readings.

TABLE 3-2

Analytical Results for Extraction Wells, May 2007 through October 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

Well ID	Sample Date	Dissolved Total Chromium µg/L	Hexavalent Chromium µg/L	Total Dissolved Solids mg/L
TW-3D	13-Jun-07	2350	2000	5570
TW-3D	11-Jul-07	2390	2000	5390
TW-3D	08-Aug-07	1800	1930	5130
TW-3D	05-Sep-07	2110	2260	4940
TW-3D	03-Oct-07	1860	2000	5110
* TW-3D/PE-1	02-May-07	1380	1690	5480
PE-1	13-Jun-07	48.1	52.0	4920
PE-1	11-Jul-07	39.7	47.1	4320
PE-1	08-Aug-07	60.7	51.4	4270
PE-1	05-Sep-07	49.2	49.1	4220
PE-1	03-Oct-07	45.4	52.6	4400

NOTES:

µg/L = concentration in micrograms per liter

mg/L = concentration in milligrams per liter

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

Groundwater samples from active extraction wells are taken at sample taps in Valve Vault 1 on the MW-20 Bench.

*

Well specific samples were not collected in April and May 2007. Results are presented from samples that were obtained from a sample point (SC-100B) on the influent conveyance system at the IM3 treatment system. These samples were unfiltered.

TABLE 3-3

Average Hydraulic Gradients Measured at Well Pairs, August through October 2007

*Interim Measures Performance Monitoring**PG&E Topock Compressor Station*

Well Pair ¹	Reporting Period	Mean Landward Hydraulic Gradient ² (feet/foot)	Measurement Dates 2007
Northern Gradient Pair	August	0.0024	August 1 through August 31
MW-31-135 / MW-33-150	September	0.0025	Sept 1 through Sept 30
	October	0.0024	Oct 1 through Oct 31
Central Gradient Pair ³	August	0.0117	August 1 through August 31
MW-45-95 / MW-34-100	September	0.0119	Sept 1 through Sept 30
	October	0.0119	Oct 1 through Oct 31
Southern Gradient Pair ⁴	August	0.0047	August 1 through August 31
MW-45-95 / MW-27-85	September	0.0030	Sept 1 through Sept 30
	October	0.0047	Oct 1 through Oct 31

NOTES:¹ Refer to Figure 2-1 for location of well pairs² For IM pumping, the target landward gradient for the selected well pairs is 0.001 feet/foot³ With approval of DTSC, this well pair replaced MW-20-130 / MW-34-80.⁴ With approval of DTSC, this well pair replaced MW-20-130 / MW-42-65

TABLE 3-4

Predicted and Actual Monthly Average Davis Dam Discharge and Colorado River Elevation
Interim Measures Performance Monitoring
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)
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	453.2	453.6	0.4
February 2006	11,100	10,790	-310	454.1	454.1	0.1
March 2006	13,000	12,429	-571	454.7	454.8	0.2
April 2006	16,600	18,300	1700	456.0	456.1	0.0
May 2006	15,500	16,818	1318	456.0	456.3	0.3
June 2006	16,100	17,547	1447	456.2	456.4	0.2
July 2006	14,700	15,171	-471	455.7	455.8	0.1
August 2006	12,900	12,871	29	454.9	455.1	0.1
September 2006	12,100	12,409	-309	454.7	454.7	0.0
October 2006	11,400	11,150	250	454.1	454.4	0.3
November 2006	8,300	8,222	78	452.9	453.3	0.4
December 2006	8,100	8,823	-723	453.0	453.4	0.4
January 2007	8,600	8,796	-196	453.2	453.6	0.4
February 2007	9,800	11,680	-1,880	453.6	454.3	0.7
March 2007	14,300	14,554	-254	455.1	455.6	0.5
April 2007	17,300	16,818	482	456.4	456.4	0.0
May 2007	16,800	16,199	601	456.5	456.4	-0.1
June 2007	16,000	16,212	-212	456.4	456.4	0.0
July 2007	14,900	14,897	3	455.8	456.0	0.2
August 2007	12,100	12,776	-676	454.7	455.4	0.7
September 2007	12,700	13,050	-350	454.8	455.4	0.5
October 2007	10,600	10,324	276	454.0	454.3	0.3
November 2007	9,100	--	--	453.6	--	--

NOTES:

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

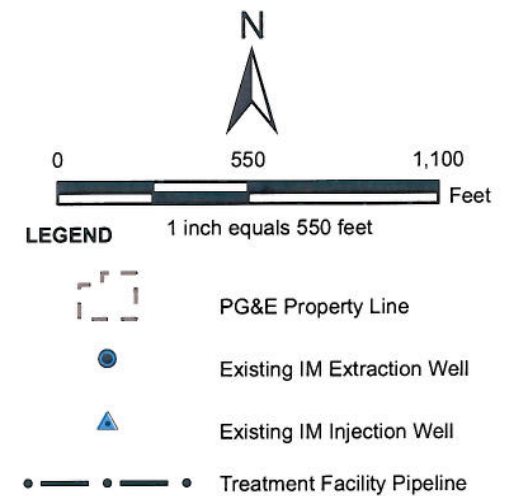
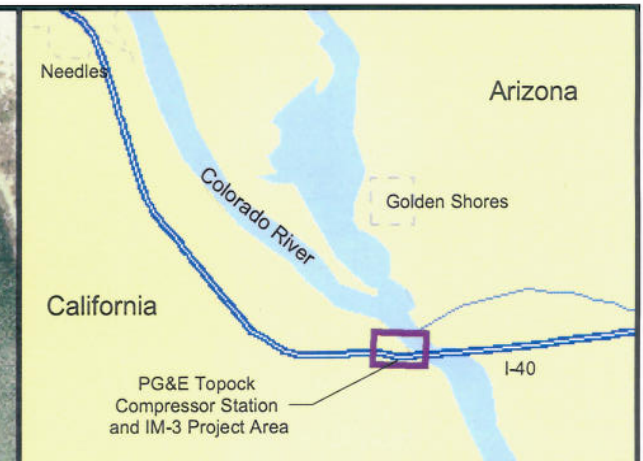
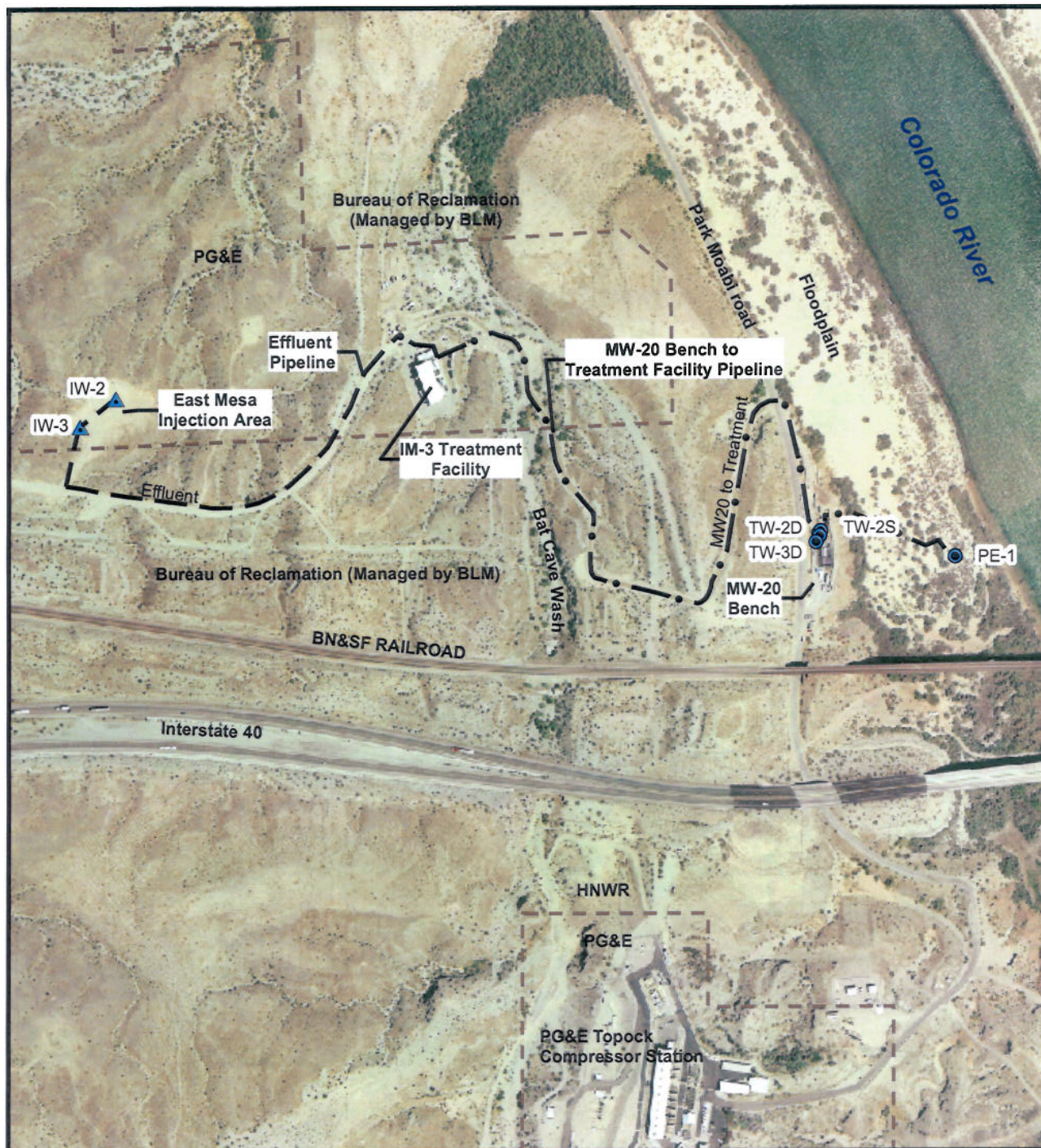
2) Predicted Colorado River elevations (river levels) at I-3 are based upon BOR projections for Davis Dam releases and Lake Havasu elevations from the preceding month, using a multiple regression between historical dam releases and measured river levels at I-3 (updated monthly). This data is reported monthly by the US Department of Interior, at <http://www.usbr.gov/lc/region/g4000/24mo.pdf>

3) The difference in I-3 elevation is the difference between the I-3 elevation predicted, and the actual elevation measured at I-3. The main source of this difference is differences between BOR projections and actual dam releases/Havasu reservoir levels, rather than the multiple regression error.

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

5) I-3 elevation for the month of October 2006 limited to average of data from 10/4/2006 through 10/31/2006.

Figures

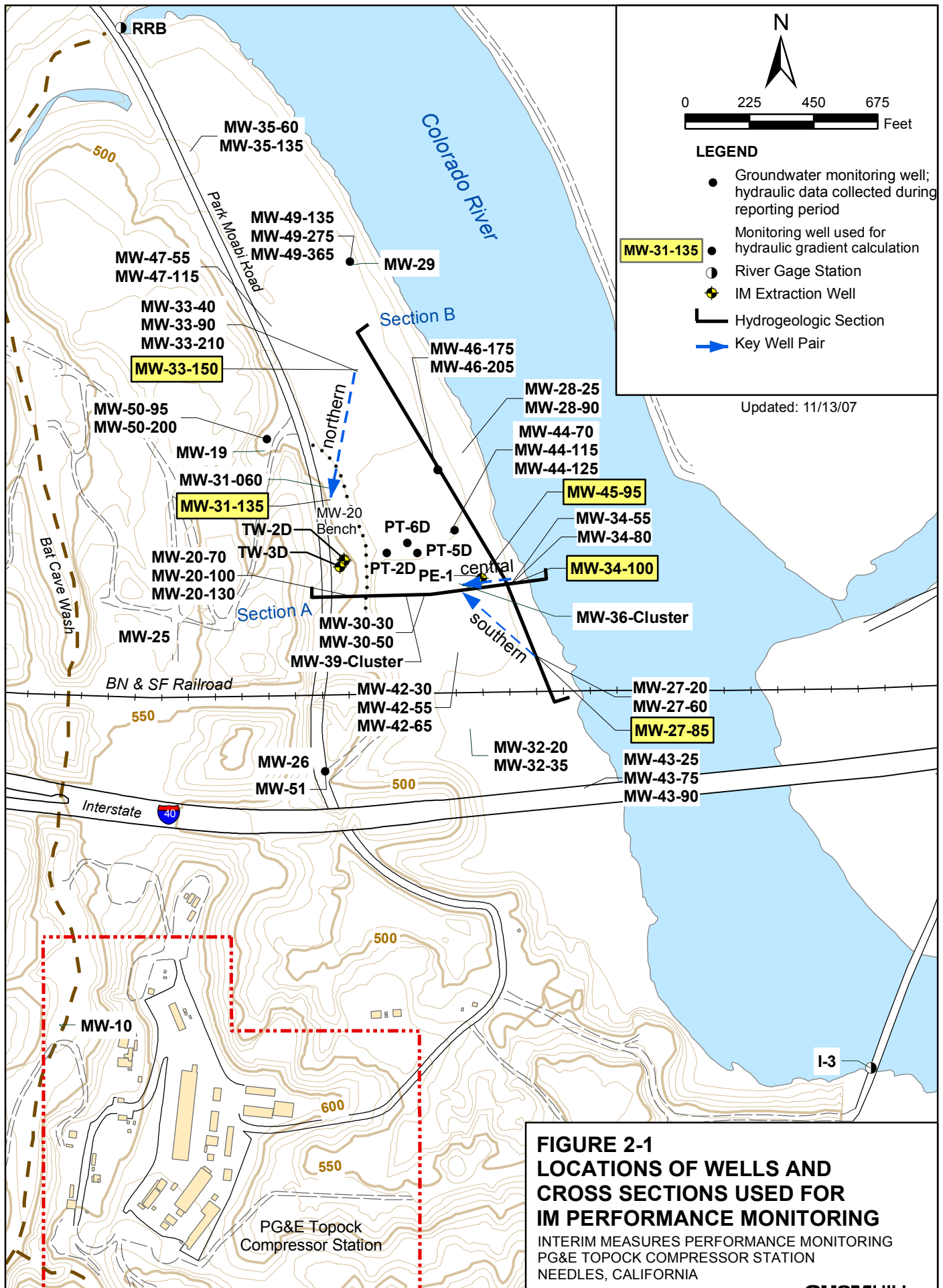


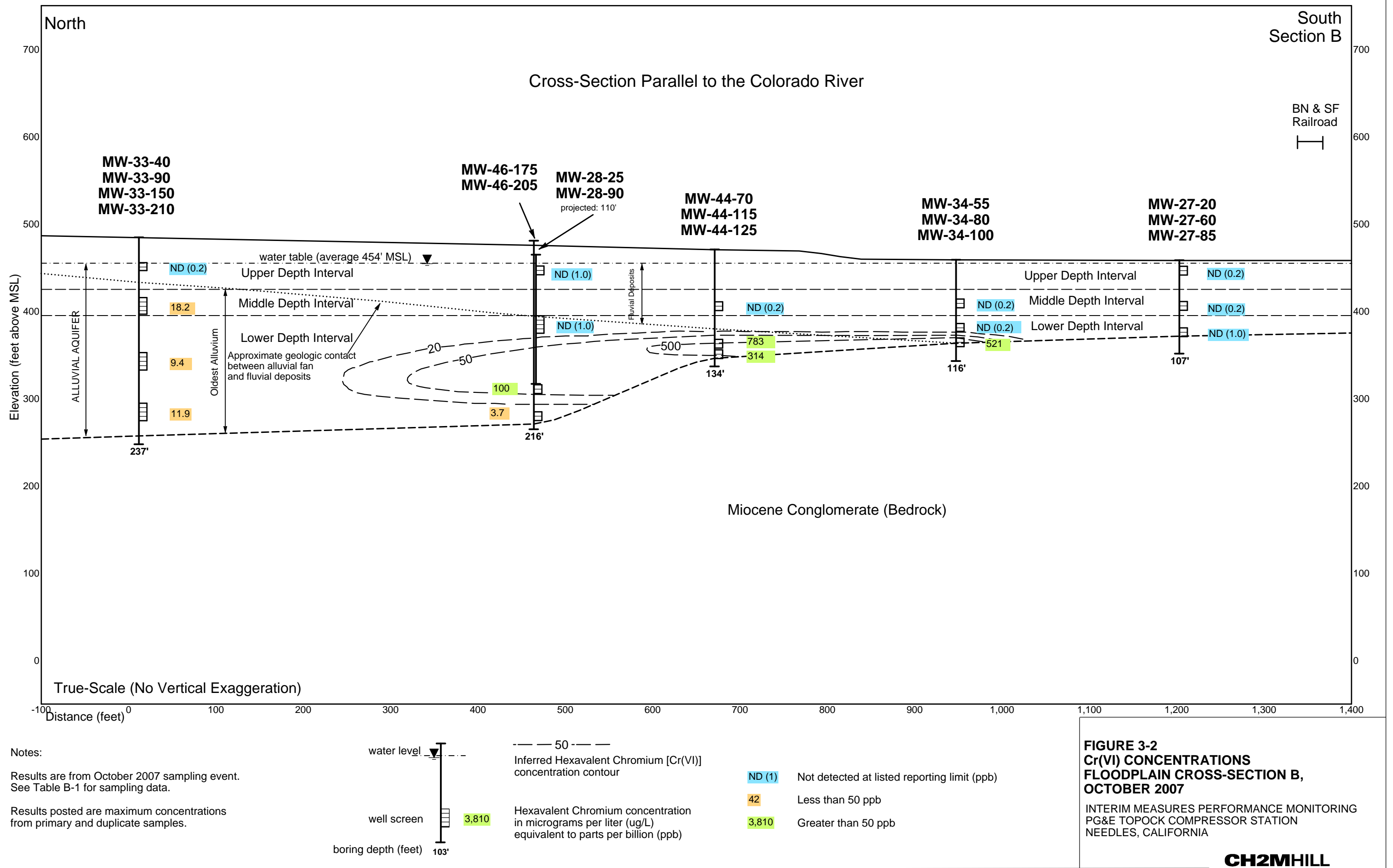
Notes: Location map shows Interim Measures No.3 (IM-3) facilities as of January 2006. Aerial photography taken May 2005.

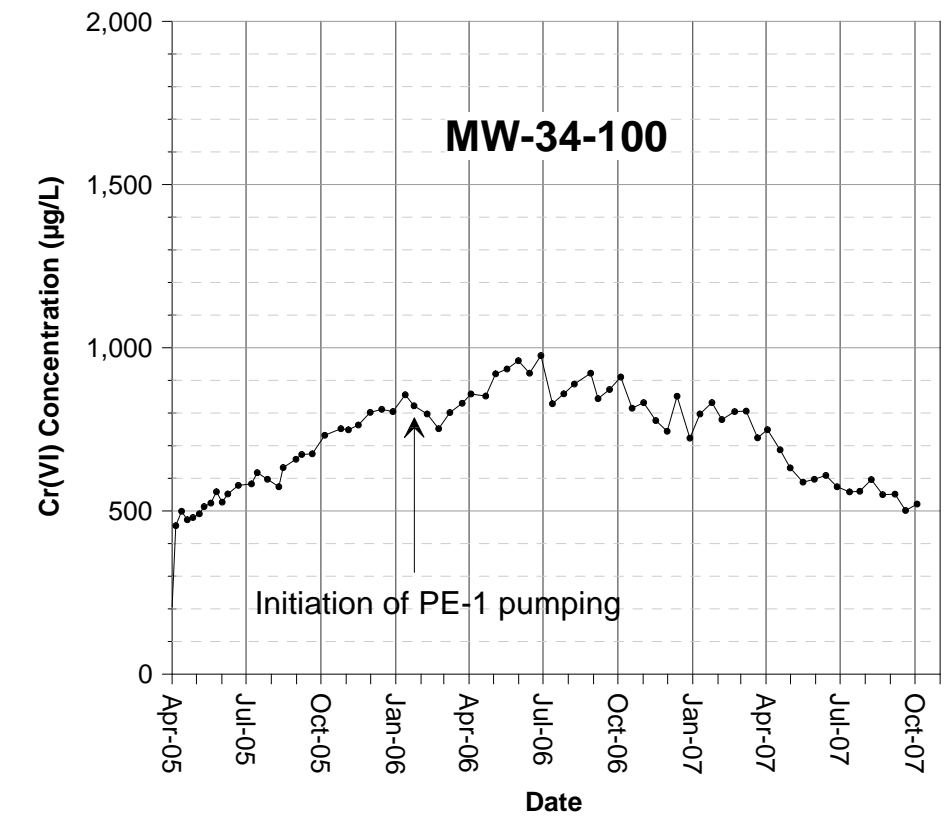
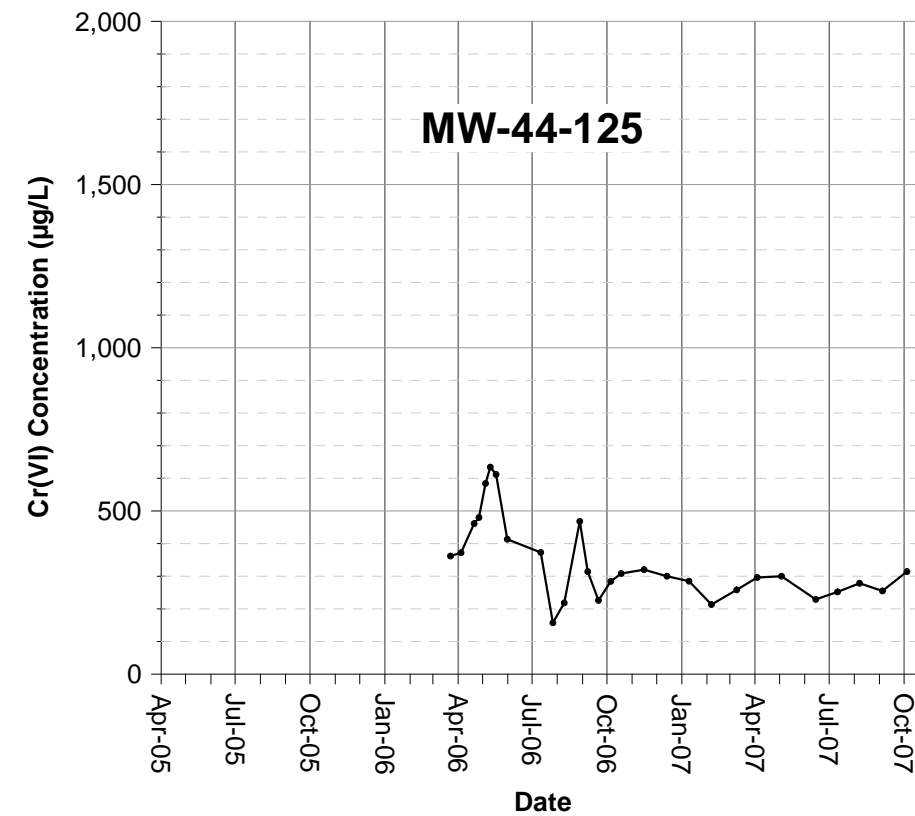
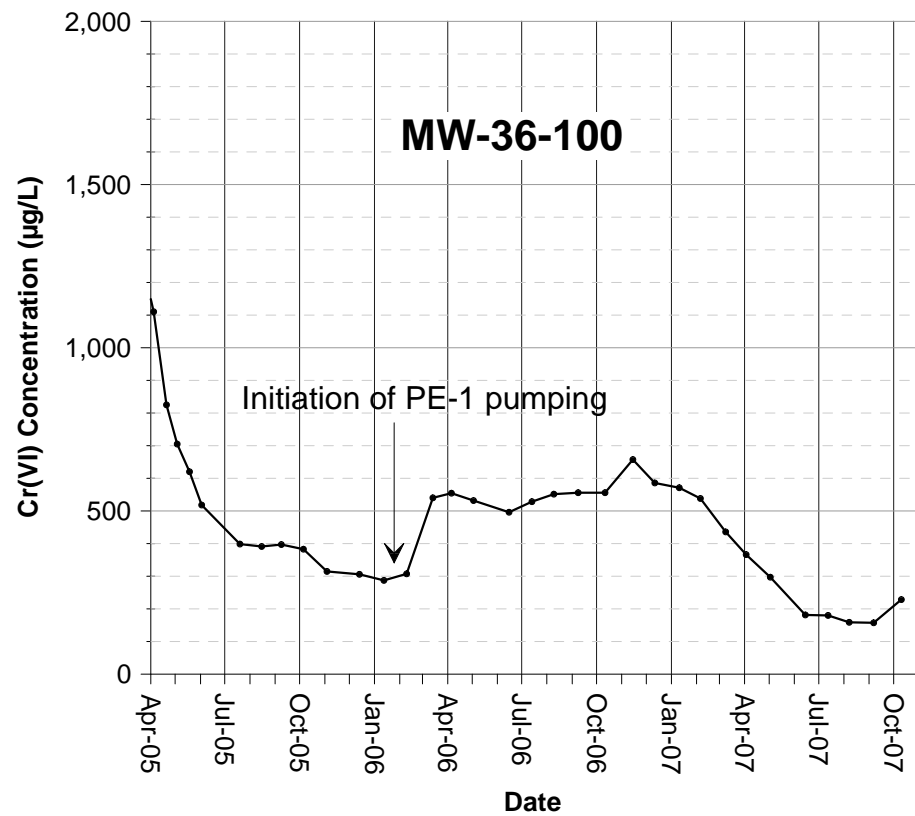
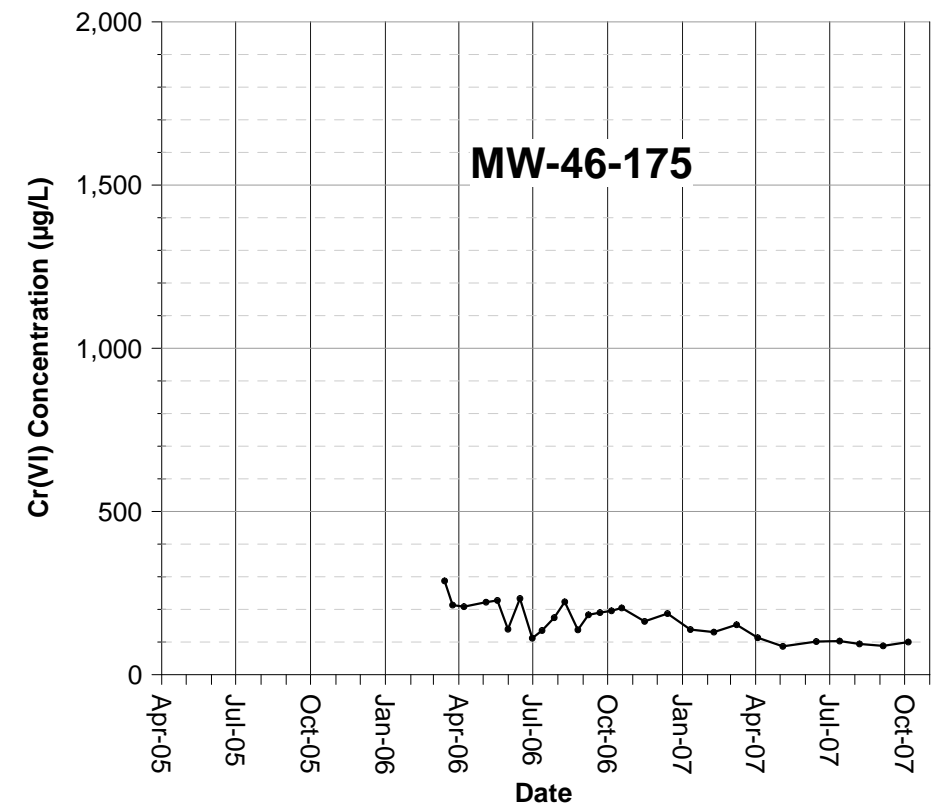
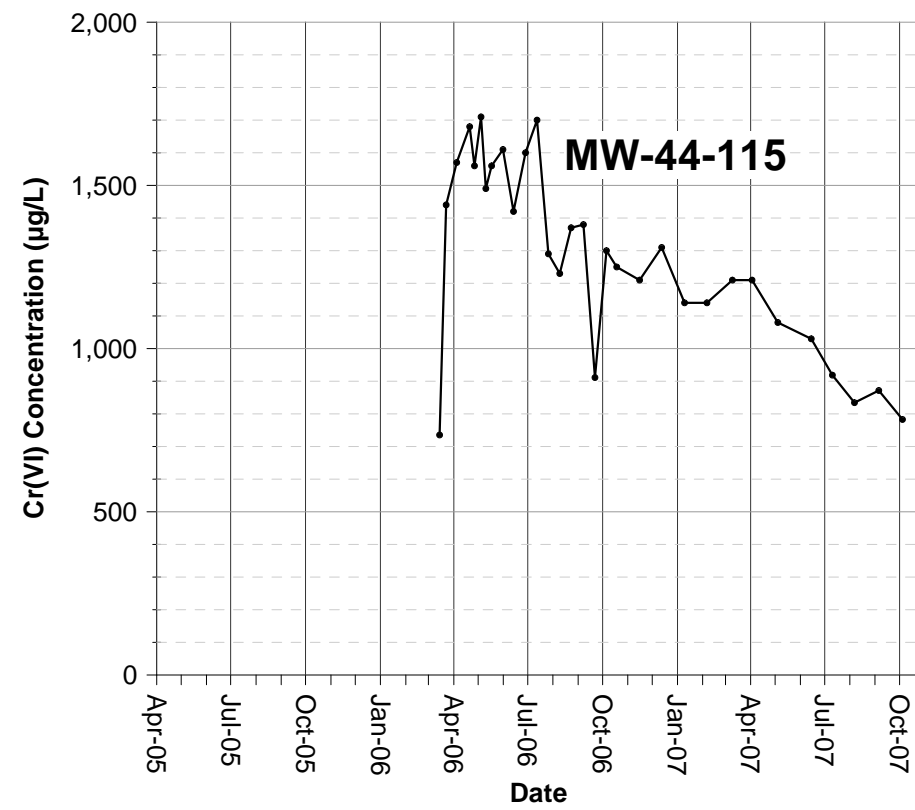
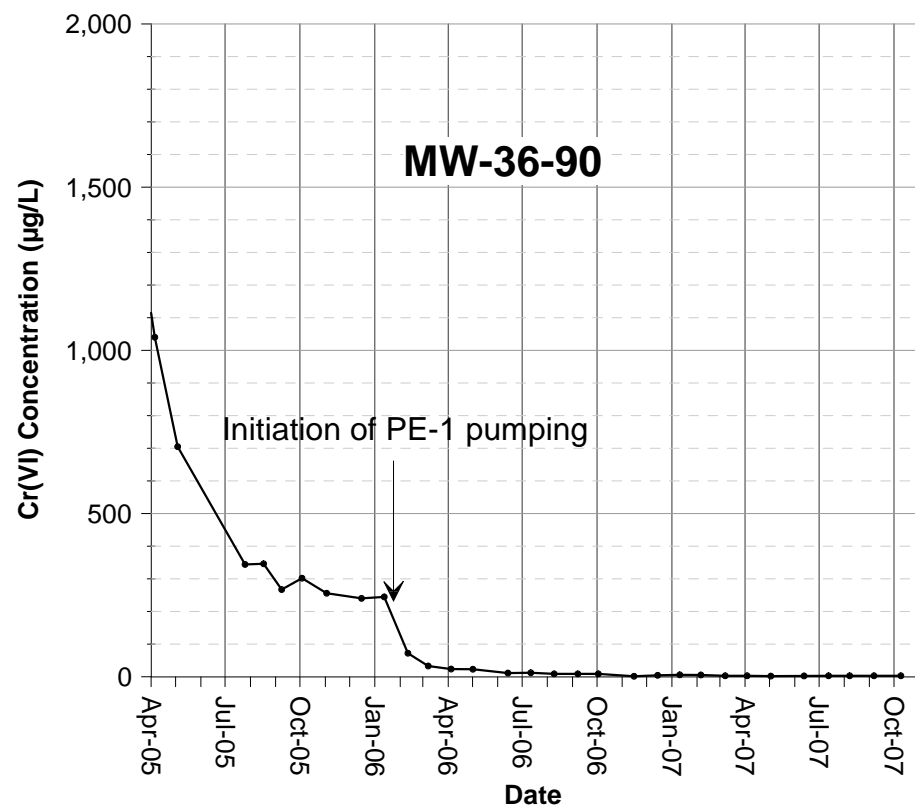
FIGURE 1-1 LOCATIONS OF IM NO. 3 GROUNDWATER EXTRACTION, CONVEYANCE, AND TREATMENT FACILITIES

INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL



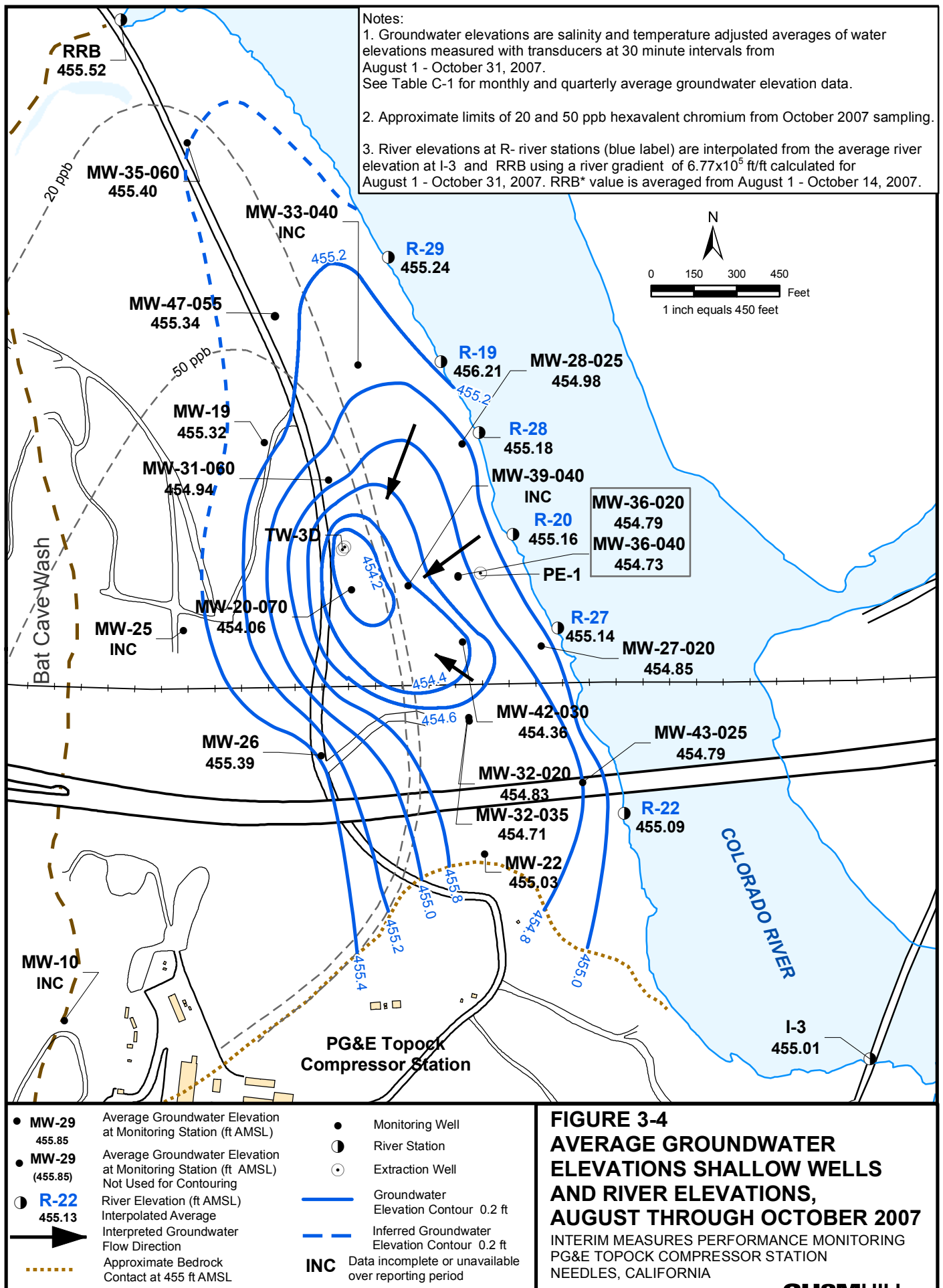




Notes

1. Hexavalent chromium [Cr(VI)] results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
3. MW-36 wells selected to monitor effects of PE-1 pumping on plume west of PE-1. MW-44 wells, MW-46-175, and MW-34-100 selected to monitor concentrations within the plume.

FIGURE 3-3
Cr(VI) CONCENTRATION TRENDS IN
SELECTED PERFORMANCE MONITORING WELLS
APRIL 2005 THROUGH OCTOBER 2007
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



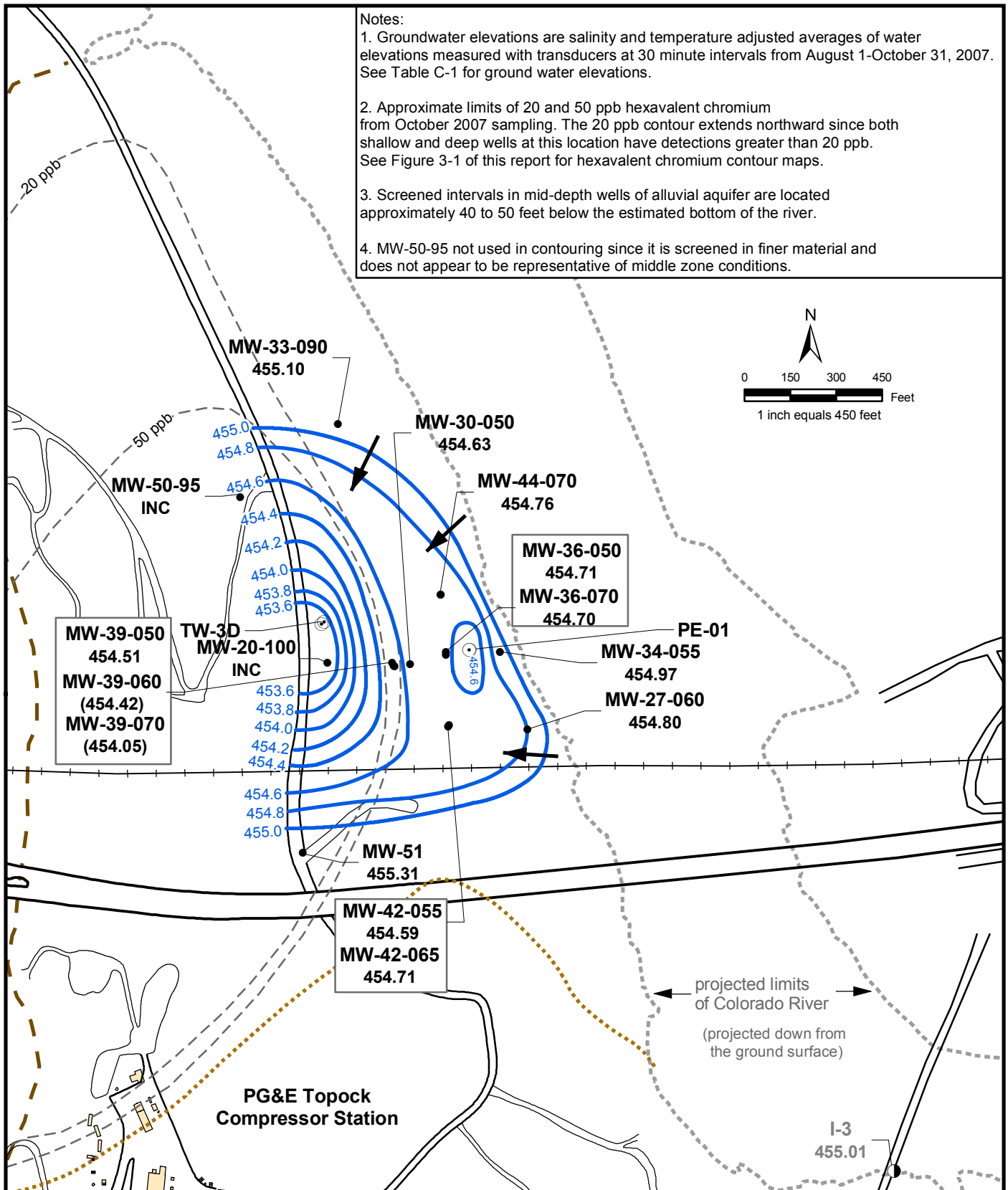
Notes:

1. Groundwater elevations are salinity and temperature adjusted averages of water elevations measured with transducers at 30 minute intervals from August 1-October 31, 2007. See Table C-1 for ground water elevations.

2. Approximate limits of 20 and 50 ppb hexavalent chromium from October 2007 sampling. The 20 ppb contour extends northward since both shallow and deep wells at this location have detections greater than 20 ppb. See Figure 3-1 of this report for hexavalent chromium contour maps.

3. Screened intervals in mid-depth wells of alluvial aquifer are located approximately 40 to 50 feet below the estimated bottom of the river.

4. MW-50-95 not used in contouring since it is screened in finer material and does not appear to be representative of middle zone conditions.



- MW-29
455.85
Average Groundwater Elevation
at Monitoring Station (ft AMSL)
- MW-29
(455.85)
Average Groundwater Elevation
at Monitoring Station (ft AMSL)
Not Used for Contouring
- Bedrock Contact at 425 ft AMSL
- Interpreted Groundwater
Flow Direction

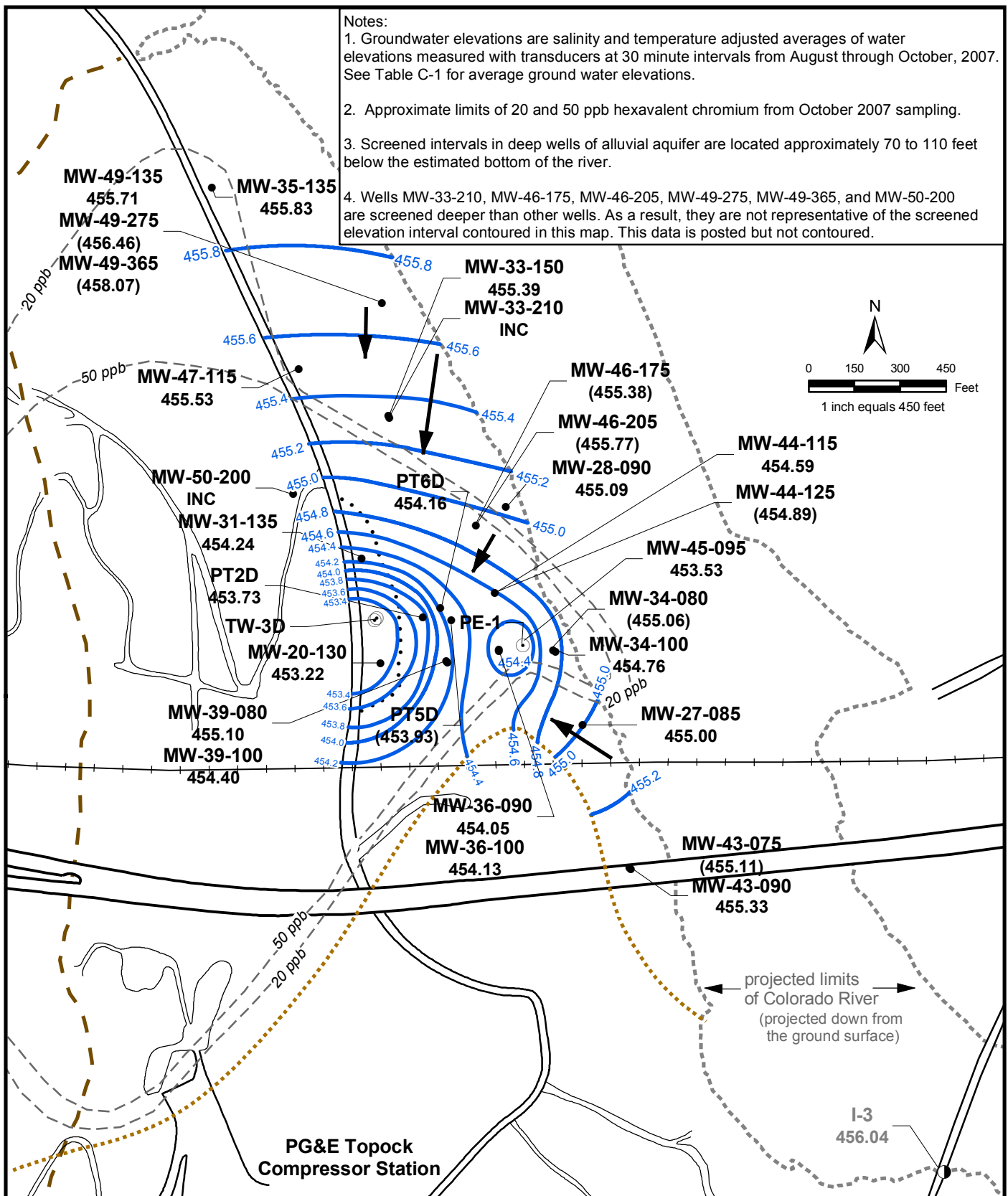
- Monitoring Well
- River Station
- Extraction Well
- Groundwater
Elevation Contour 0.2 ft
- - - Inferred Groundwater
Elevation Contour 0.2 ft

FIGURE 3-5
AVERAGE GROUNDWATER
ELEVATIONS MID-DEPTH WELLS
AUGUST THROUGH OCTOBER 2007
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL

Notes:

1. Groundwater elevations are salinity and temperature adjusted averages of water elevations measured with transducers at 30 minute intervals from August through October, 2007. See Table C-1 for average ground water elevations.
2. Approximate limits of 20 and 50 ppb hexavalent chromium from October 2007 sampling.
3. Screened intervals in deep wells of alluvial aquifer are located approximately 70 to 110 feet below the estimated bottom of the river.
4. Wells MW-33-210, MW-46-175, MW-46-205, MW-49-275, MW-49-365, and MW-50-200 are screened deeper than other wells. As a result, they are not representative of the screened elevation interval contoured in this map. This data is posted but not contoured.



MW-29
● 455.85 Average Groundwater Elevation at Monitoring Station (ft AMSL)

MW-29
● (455.85) Average Groundwater Elevation at Monitoring Station (ft AMSL) Not Used for Contouring

➔ Interpreted Groundwater Flow Direction

..... Bedrock Contact at 395 ft AMSL

● Monitoring Well

○ River Station

○ Extraction Well

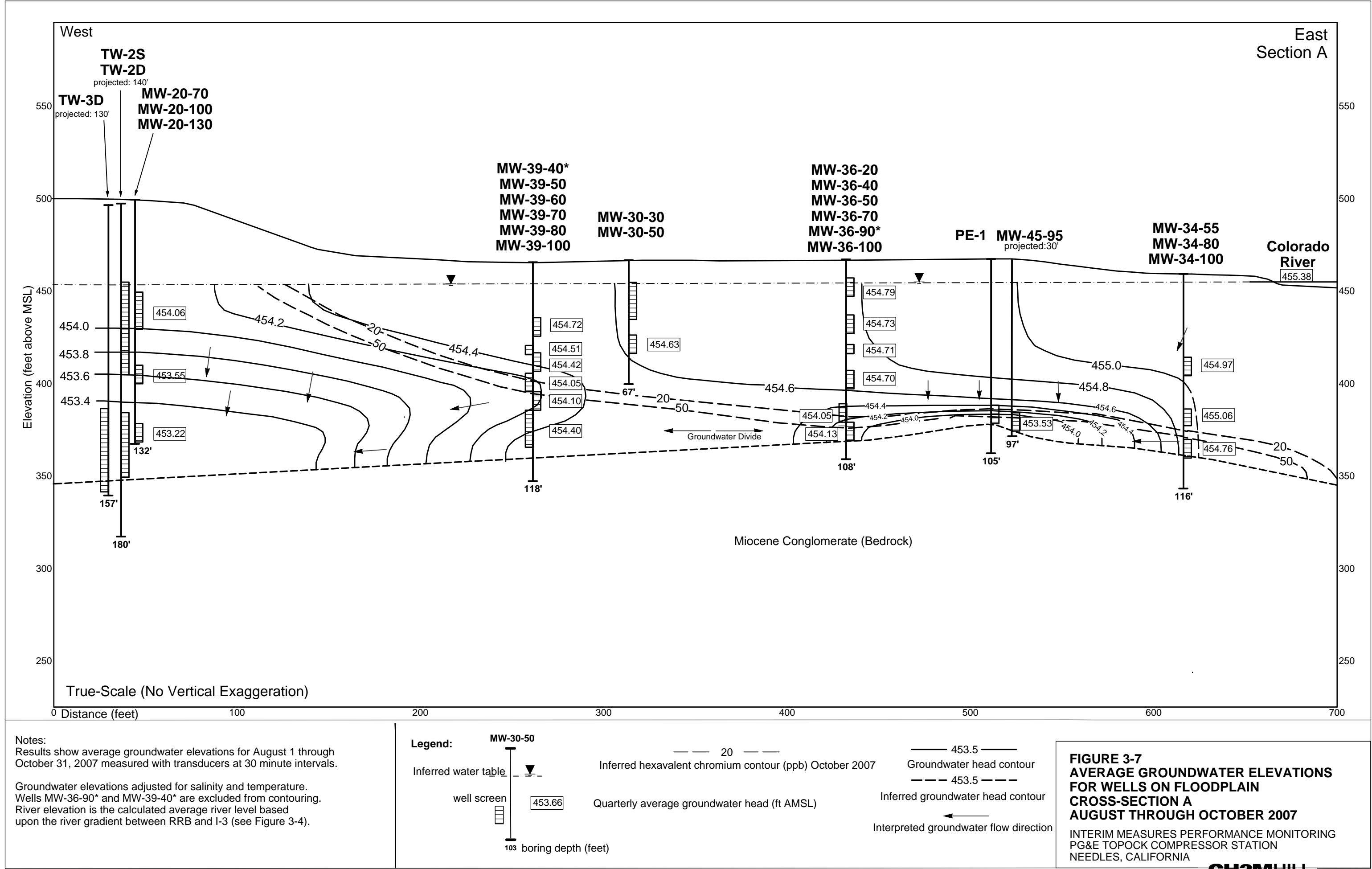
— Groundwater Elevation Contour 0.2 ft

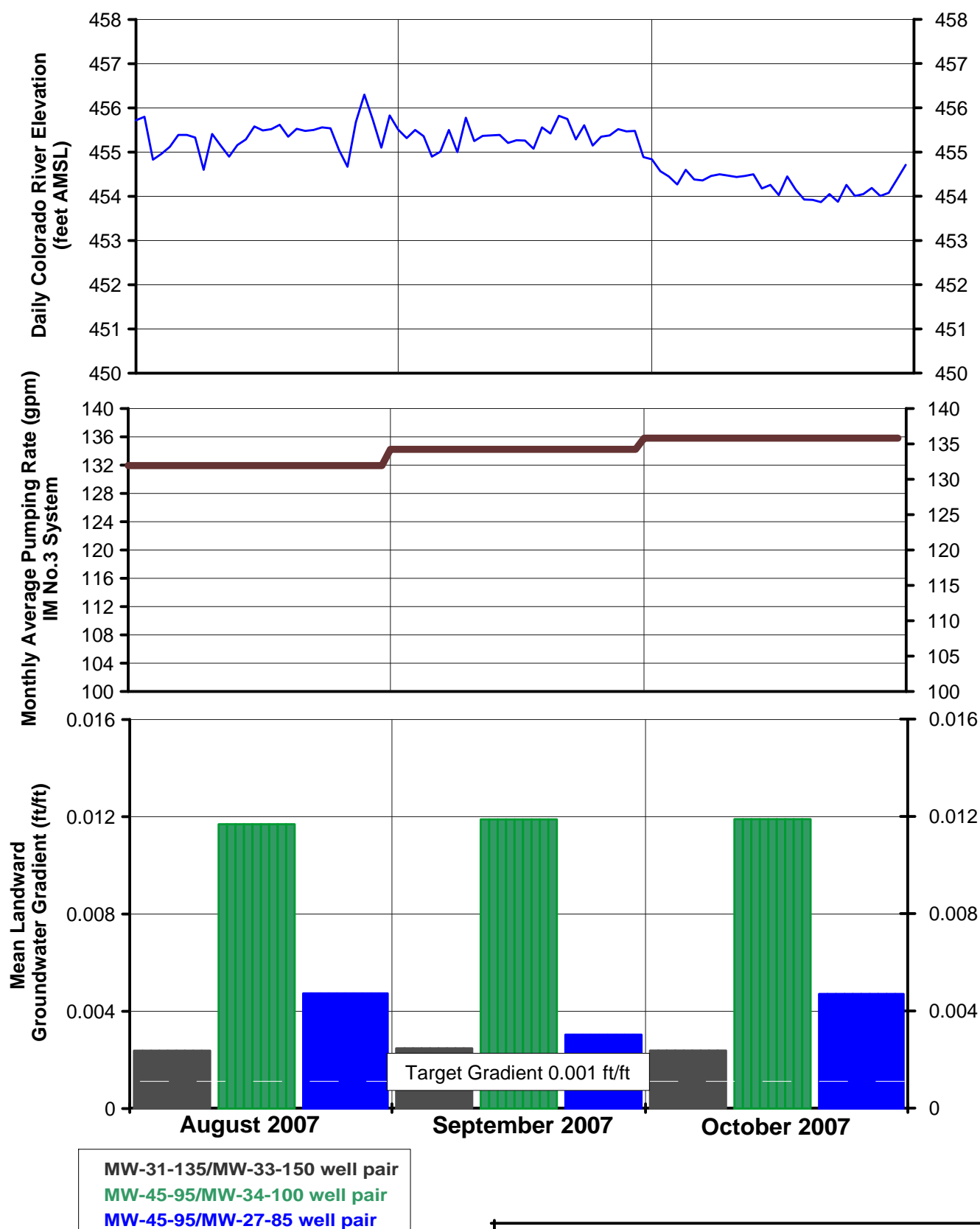
- - - Inferred Groundwater Elevation Contour 0.2 ft

INC Data incomplete for reporting period

FIGURE 3-6
AVERAGE GROUNDWATER ELEVATIONS DEEP WELLS
AUGUST THROUGH OCTOBER 2007
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

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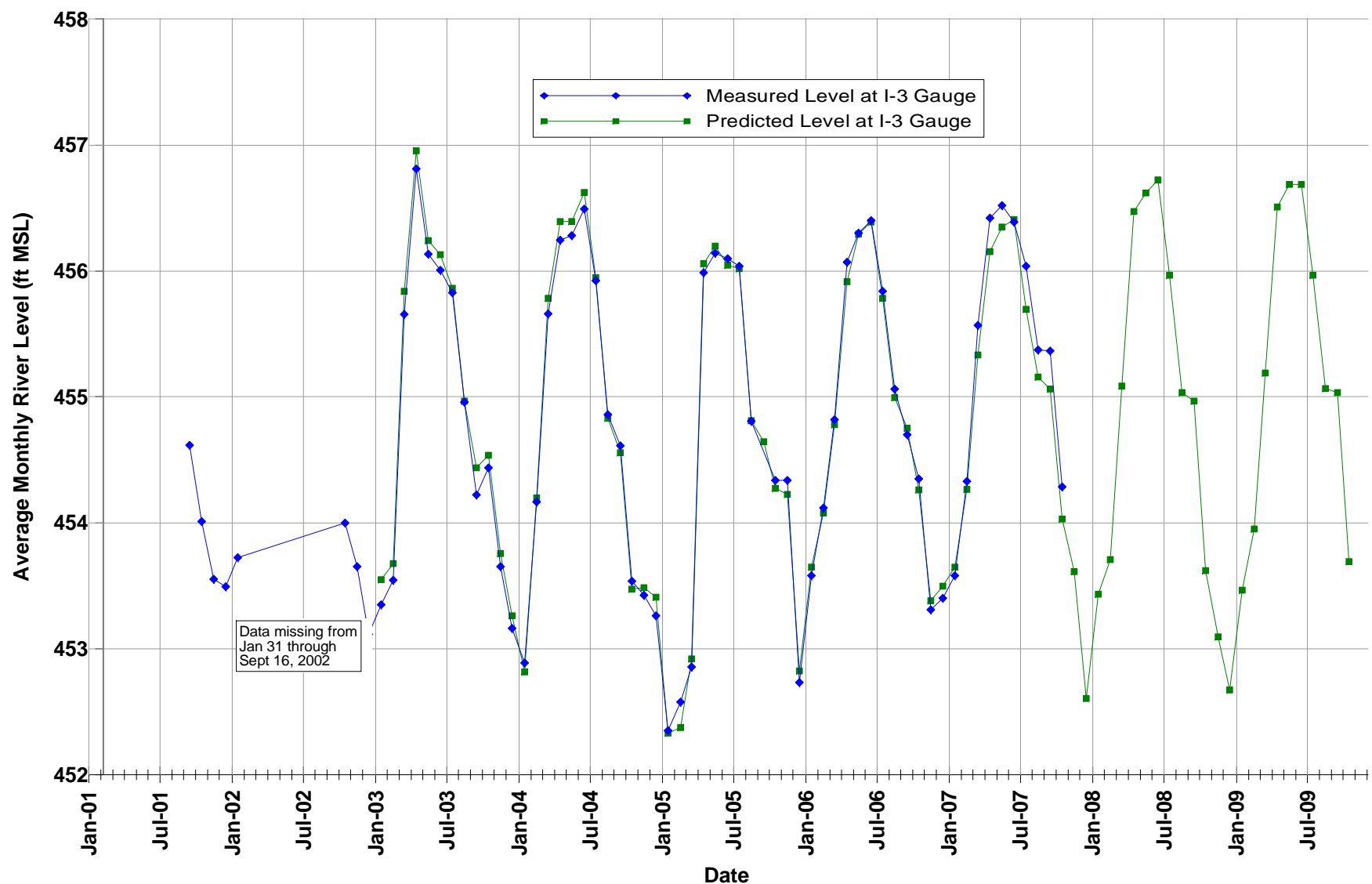


Notes:

- 1) For IM pumping, the target landward gradient for well pairs is 0.001 feet/foot.
- 2) Pumping rate plotted is the combined rate of extraction wells TW-3D and PE-1 in operation each month.
- 3) Refer to Section 3.4 for discussion of gradient data.
- 4) The gradient well pairs presented were approved by DTSC October 12, 2007.

FIGURE 3-8
MEASURED HYDRAULIC GRADIENTS,
RIVER ELEVATION AND PUMPING RATE
AUGUST 2007 THROUGH OCTOBER 2007
 INTERIM MEASURE PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA

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Note:
 Projected river level is calculated based on monthly averages of Davis Dam release and stage in Lake Havasu as of November 9, 2007.
 Measured data through October 31, 2007.
 I-3 data unavailable from September 18 through October 4, 2006
 River projections at I-3 are based upon November 2007 USBR projections.

FIGURE 3-9
PAST AND PREDICTED FUTURE RIVER LEVELS
AT TOPOCK COMPRESSOR STATION

INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA

Appendix A
Extraction System Operations Log for August
through October 2007

Appendix A

Extraction System Operations Log – August through October 2007

PG&E Topock Interim Measures Performance Monitoring Program

During the 3rd Quarter 2007 (August through October), extraction wells TW-3D and PE-1 operated at a target pump rate of at 135 gallons per minute (gpm) excluding periods of planned and unplanned downtime. Extraction wells TW-2D and TW-2S were also operated for short periods to support groundwater sampling and related field operations. The operational run time for the IM groundwater extraction system (combined or individual pumping) was over 99 percent during the 3rd Quarter 2007.

The IM No. 3 facility treated approximately 17,751,435 gallons of extracted groundwater during the 3rd Quarter 2007. The IM No. 3 facility also treated approximately 15,390 gallons of water generated from the groundwater monitoring program and 41,600 gallons of water from IM No. 3 injection well development. Four containers of solids from the IM No. 3 facility were transported offsite during the 3rd Quarter 2007.

Periods of planned and unplanned extraction system down time (that together resulted in less than 1 percent of downtime during the 3rd Quarter 2007) are summarized below. The times shown are in Pacific Standard Time (PST) to be consistent with other data collected (e.g., water level data) at the site.

AUGUST 2007

- **August 12, 2007 (unplanned):** The extraction well system was temporarily offline from 1:45 pm until 1:50 pm after a City of Needles power imbalance. Extraction system downtime was 5 minutes.
- **August 14, 2007 (unplanned):** The extraction well system was temporarily offline from 4:50 am until 4:55 am after a City of Needles power imbalance. Extraction system downtime was 5 minutes.
- **August 15, 2007 (planned):** The extraction well system was temporarily offline from 9:00 am until 11:00 am to remove accumulated solids in a section of process pipe between the chrome reduction tank (T-300) and the first iron oxidation tank (T-301A). The extraction system downtime was 2 hours.
- **August 16, 2007 (unplanned):** The extraction well system was temporarily offline from 12:45 pm until 1:50 pm to repair two small leaks in the treated water pipeline between the IM-3 treatment plant and the injection well field. Both leaks occurred at the flanged ends between the pipe sections and were identified as part of daily pipeline inspections. Approximately 2 gallons of treated water leaked from one location and less than a gallon of treated water leaked from the second location. Both locations are on PG&E property. The wetted soil at each location was hand excavated and returned to the IM-3 facility where it was containerized for offsite disposal. The extraction system downtime was 1 hour and 5 minutes.
- **August 17, 2007 (unplanned):** The extraction well system was temporarily offline from 10:45 am until 10:50 am after a City of Needles power imbalance. Extraction system downtime was 5 minutes.

- **August 20, 2007 (unplanned):** The extraction well system was temporarily offline from 10:00 am until 10:15 am to switch to generator power after a City of Needles power outage. The extraction well system was again offline from 11:00 am until 11:15 am to return operations to the City of Needles power supply from generator power supply. Extraction system downtime was 30 minutes.
- **August 24, 2007 (unplanned):** The extraction well system was temporarily offline from 1:09 pm until 1:14 pm to switch to generator power after a City of Needles power outage. The extraction well system was again offline at 7:04 pm until 7:10 pm to return operations to the City of Needles power supply from generator power supply. Extraction system downtime was 11 minutes.

SEPTEMBER 2007

- **September 19, 2007 (unplanned):** The extraction well system was temporarily offline from 12:30 pm until 12:45 pm after a City of Needles power imbalance. Extraction system downtime was 15 minutes.
- **September 23, 2007 (planned):** The extraction well system was temporarily offline from 9:25 am until 11:36 am to complete plant maintenance activities including cleaning the pipe between the chemical reduction loop and Chrome Reduction Tank (T-300) and polymer system maintenance. Extraction system downtime was 2 hours 11 minutes.
- **September 27, 2007 (planned):** The extraction well system was temporarily offline from 9:15 am until 10:45 am to switch to a cleaned set of microfilter modules. Extraction system downtime was 1 hour 30 minutes.

OCTOBER 2007

- **October 10, 2007 (planned):** The extraction well system was temporarily offline from 9:22 am until 10:00 am to complete general plant maintenance. Extraction system downtime was 38 minutes.
- **October 11, 2007 (unplanned):** The extraction well system was temporarily offline from 4:06 pm until 4:12 pm due to a City of Needles power imbalance. Extraction system downtime was 6 minutes.

Appendix B
Chromium Sampling Results for
Monitoring Wells in Floodplain Area

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, October 2006 through October 2007
Interim Measures Performance Monitoring
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	03-Oct-06	ND (0.2)	ND (1.0)	-176	0.5	1,240	455.0	M
	02-Oct-07	ND (0.2)	2.20	-170	0.2	1,133	454.5	453.6
MW-28-025	11-Oct-06	ND (0.2)	ND (1.0)	-111	1.5	1,860	454.4	453.7
	04-Oct-07	ND (1.0)	ND (1.0)	-61	0.5	1,394	454.8	454.5
MW-29	13-Oct-06	ND (0.2)	ND (1.0)	-56	5.3	4,770	454.9	455.0
	04-Oct-07	ND (1.0)	ND (1.0)	-112	0.5	3,172	455.3	454.3
MW-30-030	10-Oct-06	ND (2.0)	ND (1.0)	-129	1.4	56,500	454.3	453.6
	08-Oct-07	ND (1.0)	ND (1.0) LF	-97	0.5	42,690	454.6	454.1
MW-32-020	02-Oct-06	ND (5.0)	ND (1.0)	-122	0.9	59,800	454.5	M
	11-Dec-06	ND (2.0)	ND (1.0)	-110	1.8	61,300	453.8	455.4
	06-Mar-07	ND (2.0)	ND (1.0)	-84	0.1	39,700	454.5	454.7
	30-Apr-07	ND (2.0)	ND (1.0)	-165	4.6	34,900	456.0	456.0
	01-Oct-07	ND (2.0)	ND (1.0)	-101	0.5	50,258	455.0	454.2
MW-32-035	02-Oct-06	ND (1.0)	ND (1.0)	-162	0.7	20,000	454.5	M
	11-Dec-06	ND (1.0)	ND (1.0)	-149	1.5	23,700	454.2	455.4
	06-Mar-07	ND (1.0)	ND (1.0)	-66	0.0	14,800	454.7	454.7
	30-Apr-07	ND (1.0)	ND (1.0)	-158	3.8	23,500	456.0	456.0
	01-Oct-07	ND (1.0)	1.20	-141	0.2	19,607	454.7	454.1
MW-33-040	06-Oct-06	ND (0.2)	ND (1.0)	167	---	6,710	455.2	455.0
	14-Dec-06	ND (0.2)	1.20	31	2.8	7,080	454.0	453.2
	06-Mar-07	ND (0.2)	ND (1.0)	---	1.7	27,000	454.9	454.7
	02-May-07	ND (0.2)	ND (1.0)	-16	0.6	20,200	456.5	456.5
	05-Oct-07	ND (0.2)	1.10	109	0.6	8,015	455.2	454.6
MW-36-020	02-Oct-06	ND (1.0)	ND (1.0)	-177	1.8	24,000	454.6	M
	03-Oct-07	ND (1.0)	ND (1.0)	-216	0.7	25,659	456.7	453.7
MW-36-040	05-Oct-06	ND (1.0)	ND (1.0)	-194	1.4	16,000	454.2	455.0
	03-Oct-07	ND (1.0)	ND (1.0)	-249	0.3	9,051	454.1	453.6
MW-39-040	05-Oct-06	ND (0.2)	ND (1.0)	-198	1.4	12,500	454.1	454.0
	14-Dec-06	ND (1.0)	ND (1.0)	-174	1.7	13,200	453.4	453.1
	05-Mar-07	ND (1.0)	ND (1.0)	-55	---	8,770	454.5	455.1
	03-May-07	ND (1.0) J	ND (1.0)	-195	2.0	---	456.2	456.8
	08-Oct-07	ND (1.0)	ND (1.0)	-181	0.0	14,900	454.0	453.9
MW-42-030	03-Oct-06	ND (1.0)	ND (1.0)	-160	0.9	19,700	454.4	M
	07-Mar-07	ND (0.2)	ND (1.0)	-109	0.0	14,400	454.2	454.5
	04-Oct-07	ND (1.0)	ND (1.0)	-130	0.1	21,073	453.8	453.6
MW-43-025	02-Oct-06	ND (0.2)	ND (1.0)	-172	0.6	1,310	454.8	M
	06-Mar-07	ND (0.2)	ND (1.0)	-168	0.0	6,410	455.0	454.8
	02-Oct-07	ND (1.0)	ND (1.0)	-166	0.3	1,226	454.8	454.3

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, October 2006 through October 2007
Interim Measures Performance Monitoring
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
Middle Wells								
MW-27-060	02-Oct-07	ND (0.2)	ND (1.0)	-109	0.4	7,542	454.5	453.9
MW-30-050	11-Oct-06	ND (0.2)	ND (1.0)	-113	0.8	8,280	454.4	454.6
	11-Oct-06 FD	ND (0.2)	ND (1.0)	FD	FD	FD	FD	FD
MW-33-090	06-Oct-06	17.3	20.9	110	0.9	12,500	455.2	454.5
	15-Dec-06	17.8 J	13.8	110	1.7	14,600	453.8	453.6
	15-Dec-06 FD	2.30 R	13.5	FD	FD	FD	FD	FD
	12-Mar-07	17.1	18.0	97	0.4	11,600	454.9	454.5
	02-May-07	18.8	16.8	18	0.0	16,000	456.4	456.2
	05-Oct-07	18.2	19.4	206	0.1	9,719	455.1	454.8
MW-34-055	04-Oct-06	ND (0.2)	ND (1.0)	-178	2.2	3,080	455.0	453.9
	03-Oct-07	ND (0.2)	ND (1.0)	-207	0.4	1,116	455.0	454.6
MW-36-050	05-Oct-06	ND (0.2)	ND (1.0)	-165	1.4	4,200	454.9	455.1
	10-Oct-07	ND (0.2)	2.00	-172	0.0	3,810	454.4	454.1
MW-36-070	02-Oct-06	ND (0.2)	ND (1.0)	-122	1.4	5,220	454.5	M
	14-Dec-06	ND (0.2)	ND (1.0) LF	-112	1.8	3,440	453.2	453.3
	07-Mar-07	ND (0.2)	ND (1.0)	-128	0.5	3,000	454.6	454.5
	01-May-07	ND (0.2)	ND (1.0)	-144	1.7	2,530	455.6	455.2
	09-Oct-07	ND (0.2)	ND (1.0)	-150	0.0	1,800	454.0	453.5
MW-39-050	05-Oct-06	ND (0.2)	ND (1.0)	-77	1.4	11,200	454.2	454.2
	08-Oct-07	ND (0.2)	ND (1.0)	-90	0.0	3,780	453.9	453.5
MW-39-060	05-Oct-06	ND (1.0)	ND (1.0)	-54	1.2	11,300	454.1	454.5
	05-Oct-06 FD	ND (2.0)	ND (1.0)	FD	FD	FD	FD	FD
	08-Oct-07	ND (0.2)	ND (1.0)	-83	0.1	5,211	453.6	453.4
MW-39-070	05-Oct-06	112	103	-1	1.2	12,200	453.6	453.9
	14-Dec-06	101	94.0	2	1.8	8,190	453.8	453.2
	05-Mar-07	35.0	37.2	219	---	8,310	453.6	455.1
	03-May-07	10.1 R	10.4	-18	2.1	16,700	455.5	456.6
	07-Jun-07	4.50	4.30 LF	-112	3.3	6,570	454.5	454.7
	08-Oct-07	5.50	6.20	19	0.2	6,159	453.7	453.9
MW-42-055	03-Oct-06	ND (1.0)	ND (1.0)	-126	0.8	19,100	454.4	M
	14-Dec-06	ND (2.0)	ND (1.0)	-132	0.5	16,500	453.7	453.3
	07-Mar-07	ND (0.2)	ND (1.0)	-62	0.0	17,700	454.4	454.5
	07-Mar-07 FD	ND (0.2)	ND (1.0)	FD	FD	FD	FD	FD
	01-May-07	ND (1.0)	ND (1.0)	-139	1.5	14,900	456.0	455.6
	04-Oct-07	ND (1.0)	ND (1.0)	-128	0.1	13,972	454.3	453.8
MW-42-065	03-Oct-06	ND (1.0)	ND (1.0)	-50	0.7	20,400	454.4	M
	14-Dec-06	ND (2.0)	ND (1.0)	-42	0.6	18,300	453.8	453.4
	07-Mar-07	ND (0.2)	ND (1.0)	---	0.0	18,500	454.4	454.5
	01-May-07	ND (1.0)	ND (1.0)	-60	7.7	15,800	456.3	455.7
	03-Oct-07	ND (1.0)	ND (1.0)	-81	0.4	12,290	454.3	453.6
MW-44-070	04-Oct-06	ND (1.0)	ND (1.0)	-181	2.3	8,910	454.0	453.8

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, October 2006 through October 2007
Interim Measures Performance Monitoring
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
Middle Wells									
MW-44-070	14-Dec-06	ND (1.0)	ND (1.0)	-129	1.7	6,730	453.6	453.6	
	09-Mar-07	ND (1.0)	ND (1.0)	-144	0.0	8,700	454.8	455.1	
	03-May-07	ND (0.2)	ND (1.0)	-150	2.4	13,400	456.0	455.5	
	04-Oct-07	ND (0.2)	ND (1.0)	-404	0.2	4,816	454.5	454.0	
MW-52S	13-Mar-07	ND (1.0)	ND (1.0)	-230	0.2	17,600	---	455.4	
	01-May-07	ND (1.0)	ND (1.0)	-234	0.0	10,100	---	455.7	
	05-Jun-07	ND (1.0)	ND (1.0)	-252	1.1	23,100	---	455.3	
	12-Jul-07	ND (1.0)	ND (1.0)	-226	3.1	14,800	---	455.6	
	08-Aug-07	ND (1.0)	ND (1.0)	-173	1.1	11,544	---	455.8	
	05-Sep-07	ND (1.0)	ND (1.0)	-154	0.6	11,800	---	454.7	
Deep Wells									
MW-27-085	13-Oct-06	ND (1.0)	ND (1.0)	-78	1.1	24,100	454.0	454.2	
	16-Nov-06	ND (1.0)	ND (1.0)	-87	1.2	23,400	453.1	452.8	
	11-Dec-06	ND (1.0)	ND (1.0)	-82	1.3	26,700	455.0	455.8	
	10-Jan-07	ND (1.0)	4.40	-61	0.3	18,640	453.6	453.7	
	06-Feb-07	ND (1.0)	ND (1.0)	-47	0.1	23,100	453.6	453.5	
	07-Mar-07	ND (0.2)	ND (1.0)	-80	0.2	---	454.8	454.5	
	03-Apr-07	ND (1.0)	ND (1.0)	-97	2.2	23,100	455.7	455.7	
	01-May-07	ND (1.0)	1.00	-69	0.4	20,800	456.9	456.4	
	13-Jun-07	ND (1.0)	ND (1.0)	-40	0.3	18,800	456.2	455.6	
	11-Jul-07	ND (1.0)	ND (1.0)	-54	0.0	20,100	453.9	455.8	
	08-Aug-07	ND (1.0)	ND (1.0)	-26	0.2	16,800	455.3	454.7	
	08-Aug-07 FD	ND (1.0)	ND (1.0)	FD	FD	FD	FD	FD	
	05-Sep-07	ND (1.0)	ND (1.0)	-37	0.5	18,000	454.8	454.1	
	02-Oct-07	ND (1.0)	ND (1.0)	-53	0.3	16,793	454.6	453.7	
MW-28-090	13-Oct-06	ND (0.2)	ND (1.0)	-156	1.0	9,700	454.8	454.9	
	14-Dec-06	ND (1.0)	ND (1.0)	-160	0.3	7,590	453.7	453.7	
	08-Mar-07	ND (1.0)	ND (1.0)	-154	4.1	6,910	454.7	454.7	
	04-May-07	ND (0.2)	ND (1.0)	-156	0.2	7,492	456.9	456.8	
	04-Oct-07	ND (1.0)	ND (1.0)	-123	0.3	8,091	454.9	454.8	
MW-33-150	06-Oct-06	7.70	5.70	15	0.9	20,500	454.9	454.0	
	13-Dec-06	10.8	9.80	-5	0.4	17,500	454.1	453.8	
	06-Mar-07	6.90	7.00	37	0.0	---	455.0	454.7	
	02-May-07	6.80	6.10	-65	0.9	31,200	456.2	456.0	
	09-Oct-07	8.90	8.30	3	0.1	18,600	454.9	453.7	
	09-Oct-07 FD	9.40	7.90	FD	FD	FD	FD	FD	
MW-33-210	06-Oct-06	10.2	10.0	28	0.9	24,000	455.4	454.2	
	11-Dec-06	11.1	8.00	157	1.2	27,600	455.1	455.9	
	05-Mar-07	11.2	11.0	-2	0.3	---	455.7	455.0	
	02-May-07	9.20	9.30	-52	0.2	23,700	456.6	456.0	
	05-Oct-07	11.9	11.5	-27	0.2	18,138	455.6	455.1	
MW-34-080	04-Oct-06	ND (1.0)	ND (1.0)	-111	2.1	14,400	453.7	453.9	

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, October 2006 through October 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

		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-34-080	16-Nov-06	ND (1.0)	ND (1.0)	-86	1.1	13,200	453.0	452.6
	12-Dec-06	ND (1.0)	ND (1.0)	-23	0.3	15,000	454.5	454.6
	09-Jan-07	ND (1.0)	3.20	-36	0.3	14,300	453.5	453.6
	05-Feb-07	ND (1.0)	ND (1.0)	-51	0.2	10,300	453.6	453.5
	05-Mar-07	ND (1.0)	ND (1.0)	-54	0.2	24,800	455.2	455.1
	02-Apr-07	ND (0.2)	ND (1.0)	-89	0.0	10,800	455.7	455.0
	30-Apr-07	ND (1.0)	1.10	-121	0.1	9,000	456.2	456.0
	13-Jun-07	ND (1.0)	ND (1.0)	-90	0.3	10,120	456.5	455.9
	11-Jul-07	ND (1.0)	ND (1.0)	-79	0.0	14,800	456.1	455.3
	08-Aug-07	ND (1.0)	ND (1.0)	-24	0.2	9,050	455.7	455.5
	06-Sep-07	ND (1.0)	ND (1.0)	-23	0.2	9,600	455.5	455.0
	03-Oct-07	ND (0.2)	ND (1.0)	-63	0.2	8,443	454.9	454.3
MW-34-100	04-Oct-06	910	889	0	2.0	20,700	454.5	453.9
	18-Oct-06	815	920	52	0.8	21,700	453.9	453.9
	01-Nov-06	832	752	33	1.6	20,200	453.9	453.5
	16-Nov-06	777	801	146	1.4	20,500	452.9	453.0
	30-Nov-06	744	712	115	0.9	21,900	452.4	452.2
	12-Dec-06	851	625 J	-16	0.3	21,000	454.1	454.5
	28-Dec-06	723	603	115	---	16,760	453.2	452.7
	09-Jan-07	797	830	52	0.2	---	453.2	453.6
	24-Jan-07	832	817	129	0.3	17,700	453.4	453.3
	05-Feb-07	780	646	-28	0.2	26,800	453.3	453.5
	05-Feb-07 FD	764	634	FD	FD	FD	FD	FD
	21-Feb-07	804	895	37	0.2	39,100	454.5	454.6
	07-Mar-07	806	788	71	0.2	37,800	454.5	454.6
	21-Mar-07	724	642	67	0.0	20,000	455.0	455.5
	02-Apr-07	749	786	9	0.0	22,800	455.1	455.1
	02-Apr-07 FD	720	800	FD	FD	FD	FD	FD
	18-Apr-07	687	641	114	0.0	18,100	456.2	456.4
	30-Apr-07	626	590	22	2.1	12,400	456.0	456.0
	30-Apr-07 FD	632	599	FD	FD	FD	FD	FD
	16-May-07	588	573	55	1.5	38,400	456.3	456.0
	30-May-07	597	656	76	1.9	33,500	456.4	456.0
	13-Jun-07	609	644	127	0.7	17,470	456.4	456.3
	13-Jun-07 FD	608	633	FD	FD	FD	FD	FD
	27-Jun-07	574	536	63	4.4	20,600	456.6	456.6
	12-Jul-07	557	520	45	0.0	25,000	455.9	456.0
	12-Jul-07 FD	558	521	FD	FD	FD	FD	FD
	25-Jul-07	560	627	52	0.0	18,000	455.7	455.5
	08-Aug-07	596	670	-17	0.1	16,070	455.1	454.9
	22-Aug-07	550	490	72	0.0	18,100	455.4	455.3
	06-Sep-07	551	581	112	0.3	17,400	455.2	455.5
	06-Sep-07 FD	546	516	FD	FD	FD	FD	FD
	19-Sep-07	501	603	---	---	---	---	455.3

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, October 2006 through October 2007
Interim Measures Performance Monitoring
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	03-Oct-07		521	609 J	-51	0.2	14,026	454.2	453.8
	03-Oct-07	FD	513	424 J	FD	FD	FD	FD	FD
MW-36-090	02-Oct-06		9.00	8.50	-20	1.0	8,270	453.6	M
	02-Oct-06	FD	8.90	10.8	FD	FD	FD	FD	FD
	15-Nov-06		ND (1.0)	2.40	-64	1.0	11,700	452.4	453.6
	14-Dec-06		3.80 J	5.80 J	-39	1.7	7,250	453.6	453.4
	14-Dec-06	FD	4.00	3.00 J	FD	FD	FD	FD	FD
	10-Jan-07		6.00	9.70	-83	0.2	7,743	452.4	453.7
	05-Feb-07		5.40	4.90	-28	0.2	10,100	452.4	453.5
	07-Mar-07		3.10	3.70	28	0.4	7,470	453.7	454.5
	03-Apr-07		2.90	3.20	-17	2.2	6,970	454.8	455.5
	02-May-07		2.00	1.80	-35	0.0	7,580	455.8	457.0
	02-May-07	FD	1.90	1.80	FD	FD	FD	FD	FD
	12-Jun-07		2.60	2.80	-71	0.2	5,510	455.3	456.1
	12-Jul-07		2.90	3.10	-135	0.0	6,530	454.9	455.5
	07-Aug-07		3.00	3.60	-44	0.1	4,100	454.3	454.4
	06-Sep-07		2.90	3.60	-60	0.2	3,800	454.1	454.4
	09-Oct-07		3.20	2.90	-30	0.1	3,832	453.4	453.5
MW-36-100	11-Oct-06		556	629	17	0.9	16,500	453.8	453.8
	14-Nov-06		657	764	13	1.0	17,900	452.6	453.1
	11-Dec-06		586	513	-64	1.1	21,700	453.8	455.7
	10-Jan-07		571	554	-55	0.3	20,300	452.8	453.7
	05-Feb-07		538	474	-66	0.2	23,800	452.7	453.5
	08-Mar-07		436	454	-62	3.7	15,700	453.8	454.7
	02-Apr-07		366	378	-58	0.0	16,600	454.4	455.3
	02-May-07		297	348	-51	0.0	16,100	455.8	456.8
	14-Jun-07		181	192	-118	0.5	13,950	455.8	456.6
	12-Jul-07		180	219	-67	0.0	17,400	455.1	455.6
	07-Aug-07		159 J	187	-45	0.1	12,720	454.4	454.6
	06-Sep-07		157	184	-141	0.1	13,700	454.2	454.3
10-Oct-07		228	196	-27	0.1	14,740	453.9	454.1	
MW-39-080	05-Oct-06		580	594	76	1.2	19,500	454.3	454.3
	15-Nov-06		339	422	52	0.9	17,600	452.7	453.5
	14-Dec-06		326	272	44	1.7	17,300	453.9	453.2
	10-Jan-07		302	292	---	0.2	13,900	452.7	453.7
	08-Feb-07		286	247	105	0.3	24,600	452.1	452.3
	05-Mar-07		151	144	269	---	10,800	453.9	455.0
	04-Apr-07		112	126	157	0.0	13,400	455.3	456.8
	03-May-07		156	146	59	1.9	25,300	455.5	456.5
	12-Jun-07		83.6	72.7	12	0.3	13,217	455.4	456.4
	12-Jul-07		62.8	56.2	-12	0.0	16,600	454.7	455.0
	08-Aug-07		43.3	45.2	-39	1.1	11,078	455.0	454.2
	06-Sep-07		65.3	65.7	-45	0.1	13,000	454.0	454.0

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, October 2006 through October 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

		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	08-Oct-07	58.6	48.3	-10	0.1	13,529	453.6	453.5
MW-39-100	11-Oct-06	3370	3500	87	1.2	23,100	454.5	454.4
	15-Nov-06	2850	3190	96	2.5	23,000	453.0	453.2
	15-Nov-06 FD	2960	3060	FD	FD	FD	FD	FD
	12-Dec-06	3820	3350	95	0.4	24,200	453.6	454.5
	10-Jan-07	2930	2560	75	0.5	19,570	452.9	453.7
	08-Feb-07	2880	2400	74	0.3	---	452.4	452.3
	12-Mar-07	2850	2770	139	0.7	20,800	455.1	454.5
	04-Apr-07	3190	2990	170	2.7	25,000	455.5	456.9
	03-May-07	2670	2920	102	1.9	---	455.6	456.1
	13-Jun-07	2530	2730	48	0.6	20,490	455.4	455.3
	12-Jul-07	2020	2430	77	0.0	20,800	455.2	455.1
	07-Aug-07	1830	1780	---	0.7	19,340	454.6	454.3
	07-Sep-07	1660	1690	165	0.7	20,900	454.9	456.0
	10-Oct-07	1660	1840	87	0.2	22,110	454.3	454.5
MW-43-075	02-Oct-06	ND (1.0)	ND (1.0)	-128	1.2	17,900	454.3	M
	12-Dec-06	ND (1.0)	ND (1.0)	-109	1.2	17,400	454.7	454.7
	06-Mar-07	ND (1.0)	ND (1.0)	-151	0.0	---	455.4	454.9
	30-Apr-07	ND (1.0)	ND (1.0)	-213	0.0	12,000	457.0	456.4
	02-Oct-07	ND (1.0)	ND (1.0)	-147	0.3	13,587	455.1	454.4
MW-43-090	02-Oct-06	ND (1.0)	ND (1.0)	-108	0.4	23,600	455.3	M
	12-Dec-06	ND (1.0)	ND (1.0)	-85	0.5	25,200	454.9	454.7
	06-Mar-07	ND (1.0)	ND (1.0)	-97	0.0	37,300	455.7	455.0
	30-Apr-07	ND (1.0)	ND (1.0)	-150	1.4	14,000	457.3	456.2
	02-Oct-07	ND (1.0)	ND (1.0)	-79	0.4	18,809	455.6	454.7
MW-44-115	05-Oct-06	1300	1310	3	2.9	18,400	454.7	454.4
	18-Oct-06	1250	1380	23	0.8	18,300	454.1	454.5
	15-Nov-06	1210	1480	19	1.5	14,000	453.1	453.5
	12-Dec-06	1310	1090	116	0.6	18,300	453.8	454.4
	09-Jan-07	1140	1260	-34	0.2	20,400	453.1	453.6
	06-Feb-07	1140	1020	-53	0.2	25,200	453.1	453.5
	09-Mar-07	1210	1340 LF	-33	0.1	---	454.4	455.1
	09-Mar-07 FD	1200	1340	FD	FD	FD	FD	FD
	02-Apr-07	1210	1420	-2	0.0	18,100	454.8	455.2
	04-May-07	1080	1190	-61	0.2	13,366	456.2	456.5
	14-Jun-07	1030	1110	-23	0.2	13,560	455.7	455.9
	10-Jul-07	919	1060	23	3.6	16,300	455.3	455.1
	06-Aug-07	834	924	-72	0.8	12,700	454.5	454.3
	05-Sep-07	872	850	4	0.2	13,300	454.3	453.9
	04-Oct-07	763	866	-72	0.1	12,519	454.4	454.3
	04-Oct-07 FD	783	830	FD	FD	FD	FD	FD
MW-44-125	05-Oct-06	284	280	-97	2.6	18,000	455.1	454.5
	18-Oct-06	304	327	-112	0.8	18,900	454.7	454.6

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TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, October 2006 through October 2007
Interim Measures Performance Monitoring
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-44-125	18-Oct-06	FD	308	272	FD	FD	FD	FD	FD
	15-Nov-06		320	363	-119	1.3	14,200	453.6	453.7
	13-Dec-06		300	321	-67	0.8	14,200	454.1	454.3
	09-Jan-07		285	285	-92	0.2	22,700	453.4	453.6
	09-Jan-07	FD	284	268	FD	FD	FD	FD	FD
	06-Feb-07		213	190	-85	0.2	12,900	453.3	453.5
	09-Mar-07		258	287	-70	0.0	19,100	454.9	455.1
	03-Apr-07		296	272	-118	2.1	15,700	456.2	455.8
	03-May-07		254	326	-76	1.9	25,000	455.9	455.2
	03-May-07	FD	300	309	FD	FD	FD	FD	FD
	14-Jun-07		229	258	-76	0.1	11,520	456.0	455.9
	11-Jul-07		252	283	-94	0.0	17,000	456.3	456.2
	07-Aug-07		278	251	-37	0.1	11,700	455.7	455.8
	04-Sep-07		255	253	-70	0.1	11,200	455.0	454.2
	04-Oct-07		314	347	-15	0.1	12,049	455.0	454.5
MW-45-095A	04-May-07		169	140	-84	0.3	10,337	455.2	456.7
MW-46-175	05-Oct-06		194	192	0	2.8	22,200	454.8	453.9
	05-Oct-06	FD	195	187	FD	FD	FD	FD	FD
	18-Oct-06		204	253	15	0.9	21,900	454.7	454.0
	15-Nov-06		163	147	-118	1.1	17,100	453.8	453.1
	13-Dec-06		187	174	-33	0.3	17,700	454.3	453.9
	10-Jan-07		138	133	-160	0.1	17,450	453.9	453.7
	08-Feb-07		130	108	-91	0.3	19,100	453.4	452.4
	08-Mar-07		153	147	222	0.0	14,100	455.1	455.0
	03-Apr-07		113	95.8	-135	2.0	20,700	455.7	455.5
	04-May-07		86.4	114	-137	0.2	16,514	456.6	456.4
	14-Jun-07		101	109	-136	0.2	16,940	456.6	456.4
	13-Jul-07		103	101	-254	0.0	20,900	456.1	455.8
	06-Aug-07		94.0	98.9	-100	0.1	16,100	455.4	454.5
	04-Sep-07		88.1	94.8	-188	0.1	16,800	455.6	454.7
	05-Oct-07		100	86.7	-96	0.1	16,392	455.4	455.2
MW-46-205	05-Oct-06		2.10	2.30	-96	2.4	27,500	455.2	453.9
	13-Dec-06		3.20	3.00	10	1.0	21,000	454.8	454.0
	08-Mar-07		4.00	5.40	159	0.0	18,100	455.5	454.8
	04-May-07		3.90	3.10	-131	0.1	20,373	456.7	456.4
	05-Oct-07		3.70	4.60	2	0.1	20,051	455.7	454.8
MW-49-135	12-Oct-06		ND (1.0)	ND (1.0)	-200	1.9	21,200	455.4	453.9
	15-Dec-06		ND (1.0)	ND (1.0)	-157	0.3	27,700	454.6	453.3
	09-Mar-07		ND (1.0)	ND (1.0)	-173	0.3	30,500	455.4	455.5
	04-May-07		ND (0.2)	ND (1.0)	-144	0.4	13,491	457.4	457.3
	10-Oct-07		ND (1.0)	2.80	-37	1.3	14,690	455.2	453.6
MW-49-275	12-Oct-06		ND (1.0)	ND (1.0)	-252	1.8	31,100	456.1	453.5
	15-Dec-06		ND (1.0)	ND (1.0)	-213	1.7	30,000	455.4	453.4

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, October 2006 through October 2007
Interim Measures Performance Monitoring
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-49-275	09-Mar-07	ND (1.0)	ND (1.0)	-228	0.2	37,700	456.3	455.2
	04-May-07	ND (0.2)	ND (1.0)	-190	0.2	23,656	457.8	457.4
	09-Oct-07	ND (1.0)	ND (1.0)	-178	0.1	26,890	456.3	454.1
MW-49-365	12-Oct-06	ND (2.0)	ND (1.0)	-275	1.4	47,700	457.6	453.0
	15-Dec-06	ND (2.0)	1.10	-172	1.7	44,400	457.0	453.2
	09-Mar-07	ND (2.0)	ND (1.0)	-237	0.0	42,800	458.0	455.4
	04-May-07	ND (0.2)	ND (1.0)	-184	0.1	37,373	459.2	456.9
	09-Oct-07	ND (2.0)	ND (1.0)	-158	0.1	41,790	458.1	454.6
MW-52D	13-Mar-07	ND (1.0)	ND (1.0)	-306	0.2	16,800	---	454.8
	01-May-07	ND (1.0)	ND (1.0)	-221	0.2	18,600	---	456.4
	05-Jun-07	ND (1.0)	ND (1.0)	-265	0.6	---	---	455.3
	12-Jul-07	ND (1.0)	ND (1.0)	-247	3.1	26,700	---	455.8
	08-Aug-07	ND (1.0)	ND (1.0)	-189	1.2	19,157	---	455.2
	05-Sep-07	ND (1.0)	ND (1.0)	-201	0.3	21,300	---	454.5
MW-52M	13-Mar-07	ND (1.0)	ND (1.0)	-263	0.2	18,500	---	455.1
	01-May-07	ND (1.0)	ND (1.0)	-240	0.0	13,100	---	456.1
	05-Jun-07	ND (1.0)	ND (1.0)	-280	3.4	18,700	---	455.3
	12-Jul-07	ND (1.0)	ND (1.0)	-246	3.0	20,800	---	455.6
	08-Aug-07	ND (1.0)	ND (1.0)	-161	0.6	15,989	---	455.5
	08-Aug-07 FD	ND (1.0)	ND (1.0)	FD	FD	FD	FD	FD
	05-Sep-07	ND (1.0)	ND (1.0)	-171	0.2	16,900	---	454.7
MW-53D	03-Apr-07	ND (1.0)	ND (1.0)	-131	4.9	24,800	---	455.3
	02-May-07	ND (1.0)	1.41	-280	0.0	22,700	---	456.6
	05-Jun-07	ND (1.0)	ND (1.0)	-309	3.3	31,100	---	455.6
	05-Jun-07 FD	ND (1.0)	ND (1.0)	FD	FD	FD	FD	FD
	12-Jul-07	ND (1.0)	ND (1.0)	-270	2.9	33,700	---	455.3
	08-Aug-07	ND (1.0)	ND (1.0)	-237	1.4	25,312	---	454.7
	05-Sep-07	ND (1.0)	ND (1.0)	-200	1.8	27,000	---	455.1
	05-Sep-07 FD	ND (1.0)	ND (1.0)	FD	FD	FD	FD	FD
MW-53M	03-Apr-07	ND (1.0)	ND (1.0)	-339	0.6	13,400	---	455.5
	01-May-07	ND (1.0)	ND (1.0)	-222	0.0	11,300	---	455.2
	05-Jun-07	ND (1.0)	ND (1.0)	-281	1.2	30,500	---	455.6
	12-Jul-07	ND (1.0)	ND (1.0)	-171	3.5	20,100	---	455.1
	08-Aug-07	ND (1.0)	ND (1.0)	-188	6.1	16,339	---	454.7
	05-Sep-07	ND (1.0)	ND (1.0)	-135	2.2	17,300	---	454.9

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, October 2006 through October 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

NOTES:

ND = not detected at listed reporting limit (RL)

FD = field duplicate

LF = lab 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

R = result exceeded analytical criteria for precision and accuracy; should not be used for project decision-making.

May 2007 results from MW-39-070 were rejected due to the sample exceeding holding time limits. This well was re-sampled on June 12, 2007.

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 pressure transducer record at I-3.

TABLE B-2

Groundwater Sampling Results for Other Monitoring Wells in PMP Area, October 2006 through October 2007
Interim Measures Performance Monitoring
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	04-Oct-06		1740	1790	128	5.22	6510
	13-Dec-06		2050	1880	155	6.20	4660
	06-Mar-07		2630	2440	117	6.67	4940
	03-May-07		2620	2880	115	7.28	5600
	04-Oct-07		2830	2700	15.6	5.76	5820
	04-Oct-07	FD	2970	2800	FD	FD	FD
MW-19	02-Oct-06		970	1300	44.0	---	2450
	15-Dec-06		1070 J	1090	76.0	6.64	2360
	06-Mar-07		1040	1030	95.0	7.03	2280
	02-May-07		836	777	109	---	2560
	05-Oct-07		1390	1510	33.9	6.67	2260
MW-20-070	03-Oct-06		3290	3390	117	7.47	3460
	03-Oct-06	FD	3410	3330	FD	FD	FD
	13-Dec-06		3430	3120	203	7.93	2890
	14-Mar-07		2820	2720	152	8.37	2260
	03-May-07		2790	3050	151	8.68	3210
	11-Oct-07		2400	2140	147	9.14	3230
MW-21	03-Oct-06		ND (1.0)	ND (1.0)	-67	6.90	15900
	13-Dec-06		ND (1.0)	ND (1.0)	-68	1.22	13000
	09-Mar-07		ND (1.0)	ND (1.0) LF	11.0	2.04	19700
	01-May-07		ND (1.0)	1.40	---	3.20	12300
	04-Oct-07		ND (5.0)	ND (1.0)	18.0	0.98	15200
MW-22	13-Oct-06		ND (1.0)	ND (1.0)	-105	0.97	42200
	08-Mar-07		ND (1.0)	ND (1.0)	-99	0.25	51300
	10-Oct-07		ND (1.0)	ND (1.0)	-72	0.21	28500
MW-24A	03-Oct-06		4300	4260	101	2.87	3910
	14-Dec-06		3310	4250	76.0	0.33	---
	06-Mar-07		3540	3600	142	0.99	3230
MW-25	03-Oct-06		1140	1150	81.0	6.88	1720
	06-Mar-07		945	951	120	6.84	1350
	02-Oct-07		895	805	33.0	6.67	1320
	02-Oct-07	FD	933	884	FD	FD	FD
MW-26	03-Oct-06		3590	3850	104	---	4140
	12-Mar-07		3440	3540	90.0	4.84	3590
	02-Oct-07		3510	3740	25.0	6.90	3790
MW-31-060	05-Oct-06		773	849	82.0	7.77	3440
	12-Mar-07		626	638	93.0	5.29	2650
	04-Oct-07		726 J	669	94.4	6.10	3040
MW-35-060	12-Oct-06		28.6	29.1	112	1.26	12200
	08-Mar-07		31.3	35.1	176	0.78	5660
	08-Mar-07	FD	30.8	32.7	FD	FD	FD
	01-Oct-07		24.8	21.3	52.2	0.80	7430
	01-Oct-07	FD	24.8	20.6	FD	FD	FD

TABLE B-2

Groundwater Sampling Results for Other Monitoring Wells in PMP Area, October 2006 through October 2007
Interim Measures Performance Monitoring
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-47-055	10-Oct-06	56.9	56.8	6.00	2.83	5300
	14-Dec-06	61.2	82.0	28.0	2.19	3970
	06-Mar-07	54.6	53.0	55.0	3.09	9400
	04-May-07	30.3	31.6	112	2.28	4290
	04-Oct-07	61.9	59.2	50.6	2.50	3880
TW-02S	04-Oct-06	1920	2130	224	6.70	3470
	04-Oct-07	1250	1220	9.00	4.80	4830
Middle Wells						
MW-20-100	03-Oct-06	9520	10300	106	3.46	4340
	13-Dec-06	9610	9220 J	188	2.19	5200
	13-Dec-06 FD	9400	11500 J	FD	FD	FD
	14-Mar-07	9470	9270	153	3.01	2820
	03-May-07	10100	9820	137	3.14	3980
	03-May-07 FD	10000	10500	FD	FD	FD
	10-Oct-07	9000	10700	55.2	4.75	3980
MW-50-095	10-Oct-06	278	277	24.0	2.85	7120
	12-Dec-06	273	262	112	2.40	4590
	07-Mar-07	274	372	108	2.99	5060
	02-May-07	304	264	135	31.4	3390
	04-Oct-07	217	216	68.0	2.00	5320
MW-51	06-Oct-06	4560	4590	119	3.79	13800
	12-Dec-06	4620	5360	129	3.07	10800
	06-Mar-07	4690	5090	252	2.48	---
	01-May-07	4670	5120	94.0	3.65	10300
	05-Oct-07	4500	4340	127	2.20	10600
Deep Wells						
MW-20-130	18-Oct-06	11600	16400	78.0	2.68	19500
	13-Dec-06	12000	10500	181	0.80	---
	13-Dec-06 FD	11800	10700	FD	FD	FD
	08-Mar-07	12800	11900	91.0	1.11	---
	08-Mar-07 FD	14400	12100	FD	FD	FD
	03-May-07	13400	16200	183	2.07	14700
	03-May-07 FD	13500	14800	FD	FD	FD
	05-Oct-07	12200	13000	80.3	1.60	12100
MW-24B	03-Oct-06	6120	5830	85.0	2.72	18700
	14-Dec-06	5520	5060	4.00	0.51	---
	05-Mar-07	5980	6100	10.0	1.40	16400
MW-31-135	05-Oct-06	85.7	81.7	65.0	2.91	13600
	08-Mar-07	51.0	55.2	142	0.60	8730
	08-Mar-07 FD	52.0	54.2	FD	FD	FD
	01-May-07	46.1	47.4	-3.0	2.78	9550
	01-Oct-07	33.2	29.4	14.4	0.80	10000
MW-35-135	12-Oct-06	35.4	34.6	113	1.20	14400
	12-Oct-06 FD	34.0	30.8	FD	FD	FD

TABLE B-2

Groundwater Sampling Results for Other Monitoring Wells in PMP Area, October 2006 through October 2007
Interim Measures Performance Monitoring
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-35-135	08-Mar-07	32.0	39.2	218	0.22	8580
	04-May-07	27.2	26.2	28.0	2.15	---
	04-May-07 FD	27.8	25.2	FD	FD	FD
	01-Oct-07	32.4	28.9	37.6	0.60	9470
MW-47-115	10-Oct-06	ND (3.5)	6.90	-80	1.13	16800
	14-Dec-06	7.90	6.10	-25	0.36	14800
	06-Mar-07	10.6	10.8	-34	0.33	---
	04-May-07	14.1	13.0	126	0.20	13800
	04-Oct-07	11.6	12.2	63.4	0.20	13000
MW-50-200	10-Oct-06	9660	11800	93.0	2.99	28100
	12-Dec-06	10100	9250	123	3.17	20600
	07-Mar-07	12300	14600	114	3.22	25600
	30-Apr-07	10900	12100	65.0	4.75	23700
	04-Oct-07	9430	9780	70.0	4.30	24100
TW-02D	04-Oct-06	872	910	162	4.91	11900
	04-Oct-07	210	228	18.0	1.30	6970
TW-04	09-Oct-06	28.5	26.6	12.0	1.11	24700
	07-Mar-07	35.2	31.1	37.0	0.28	25800
	07-Mar-07 FD	35.5	36.9	FD	FD	FD
	03-Oct-07	33.4	32.2	21.6	0.10	20300
	03-Oct-07 FD	33.6	32.7	FD	FD	FD
TW-05	09-Oct-06	3.60	3.20	60.0	1.12	15800
	04-Oct-07	6.60	7.50	53.0	0.40	16800

NOTES:

Analytical results are validated.

ND = not detected at listed reporting limit (RL)

FD = field duplicate

LF = lab filtered

(---) = 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.

Monitoring wells MW-24A, MW-24B were excluded from the sampling program during the uplands in-situ pilot study.

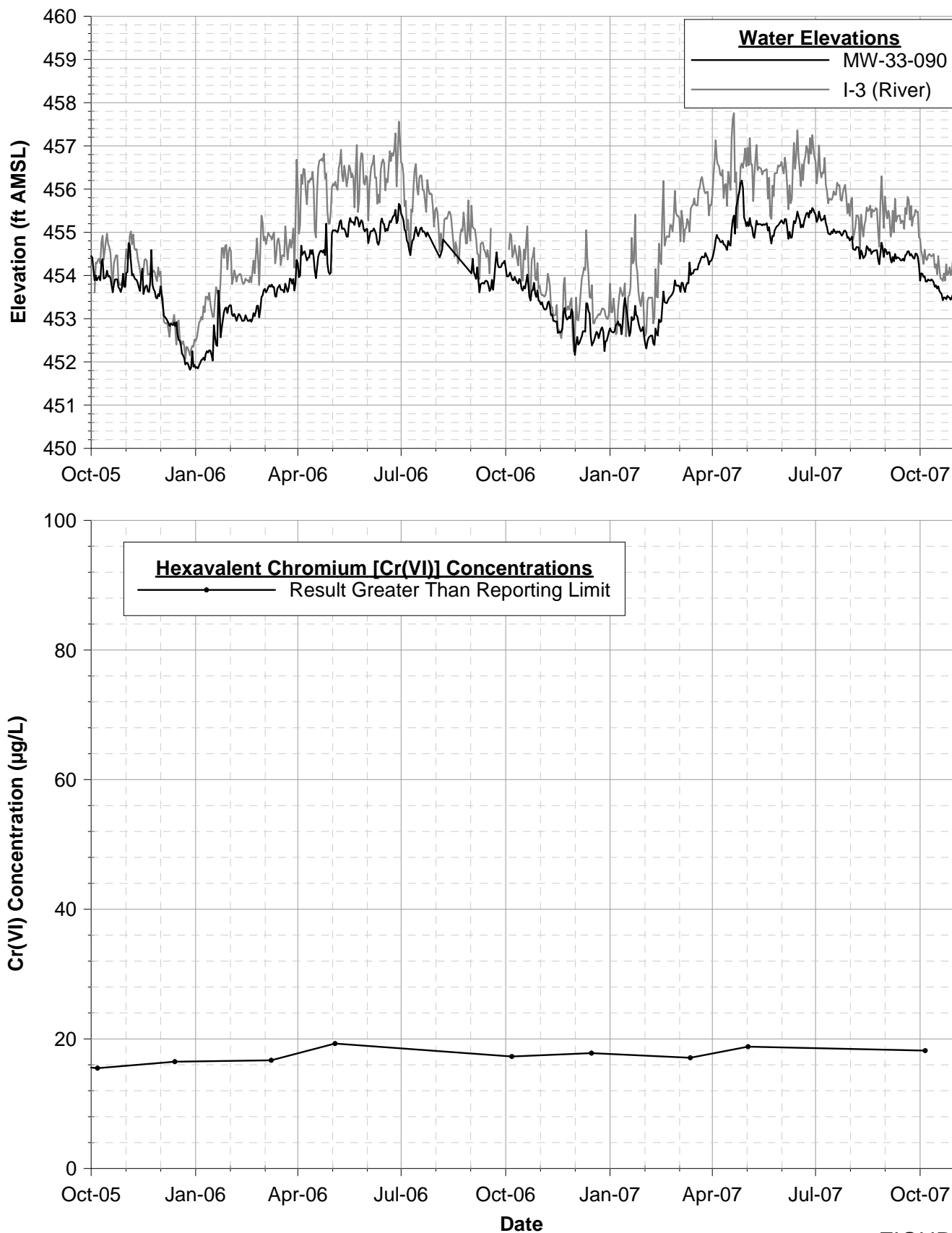


FIGURE B-1
MW-33-90 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 10/31/2007
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA

Notes

1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
3. I-3 data is unavailable from 9/18/2006 through 10/4/2006.

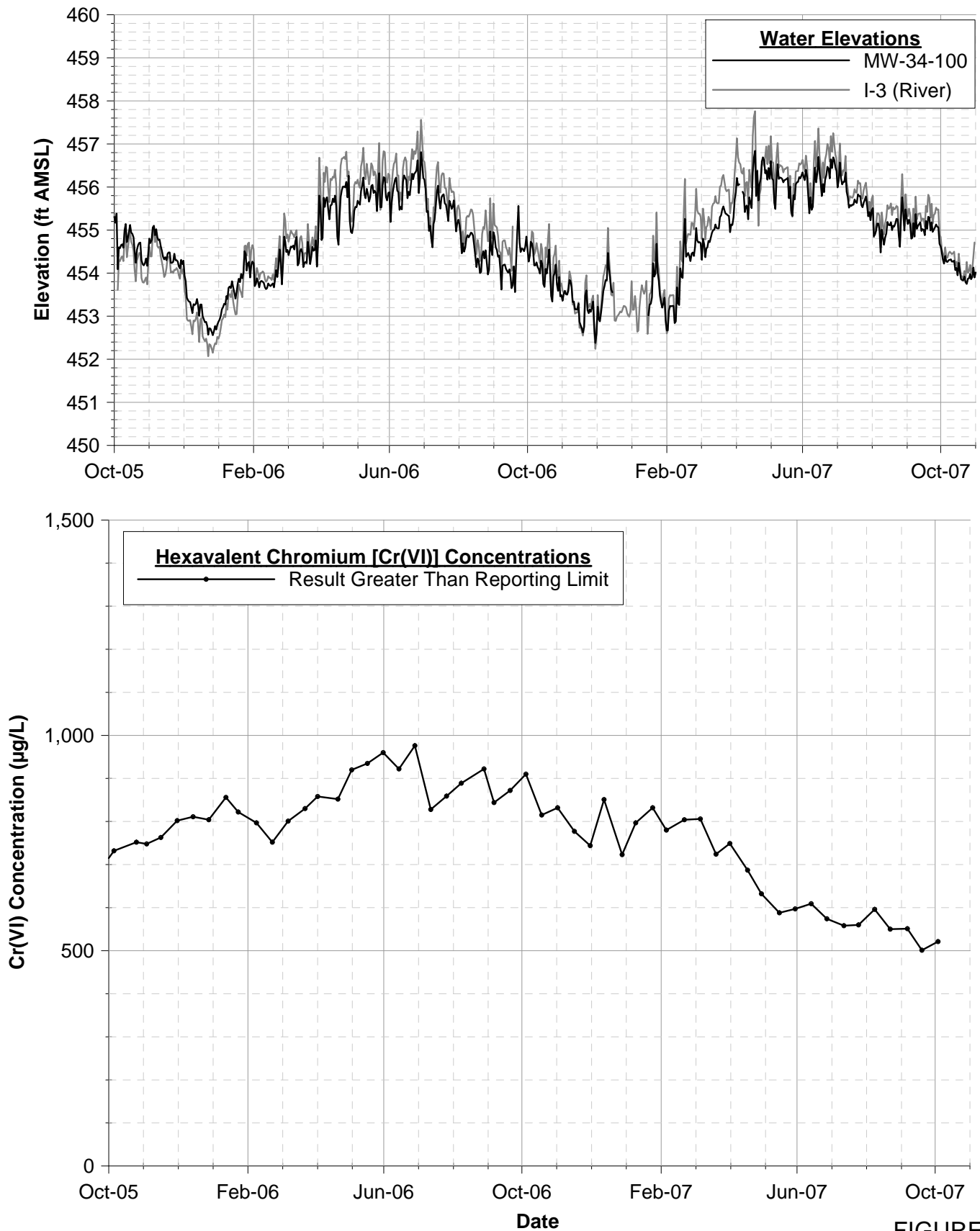


FIGURE B-2
MW-34-100 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 10/31/2007

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. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
3. I-3 data is unavailable from 9/18/2006 through 10/4/2006.
4. MW-34-100 data is unavailable from January 1 through January 15, 2007.

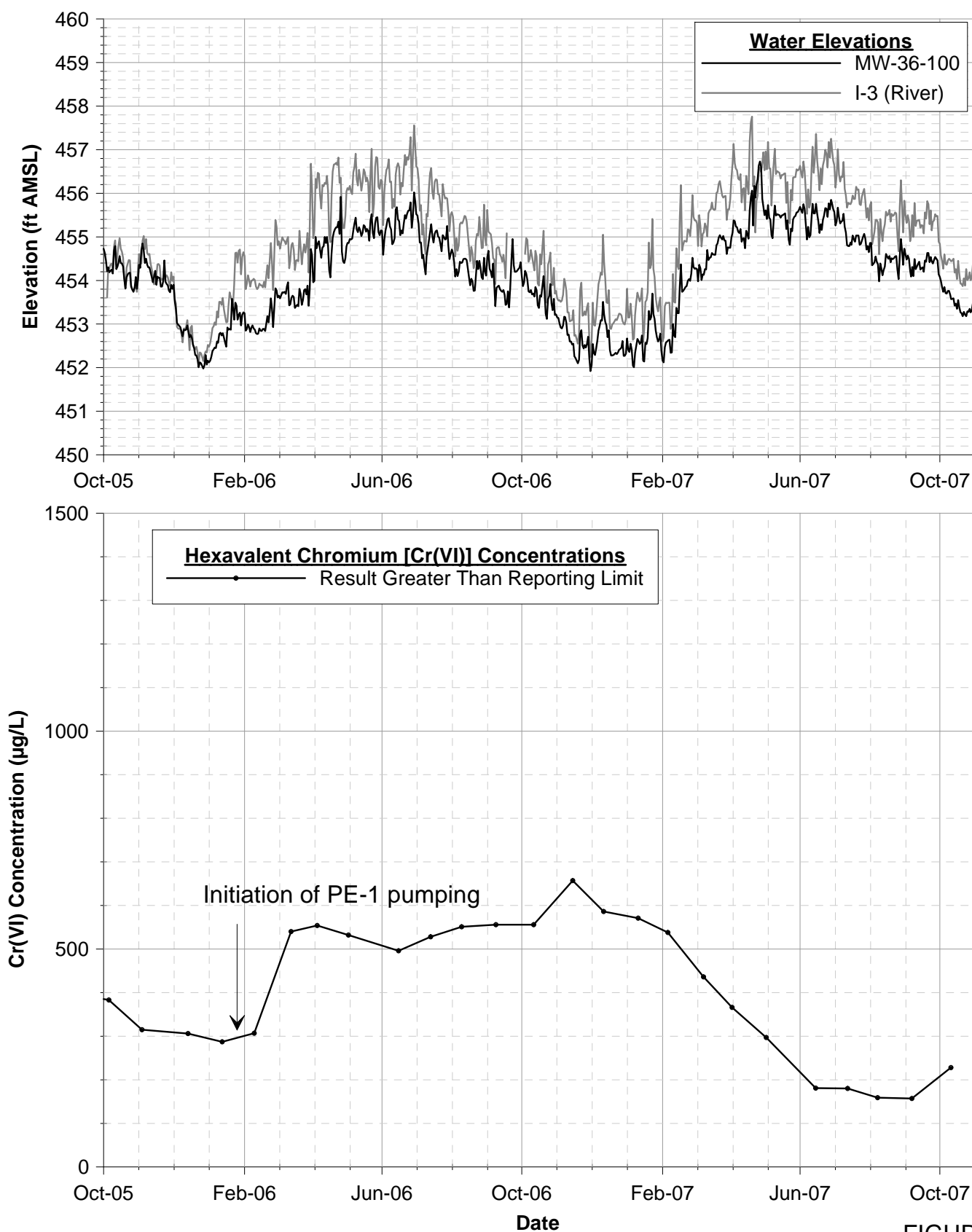


FIGURE B-3
MW-36-100 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 10/31/2007

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. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
3. I-3 data is unavailable from 9/18/2006 through 10/4/2006.

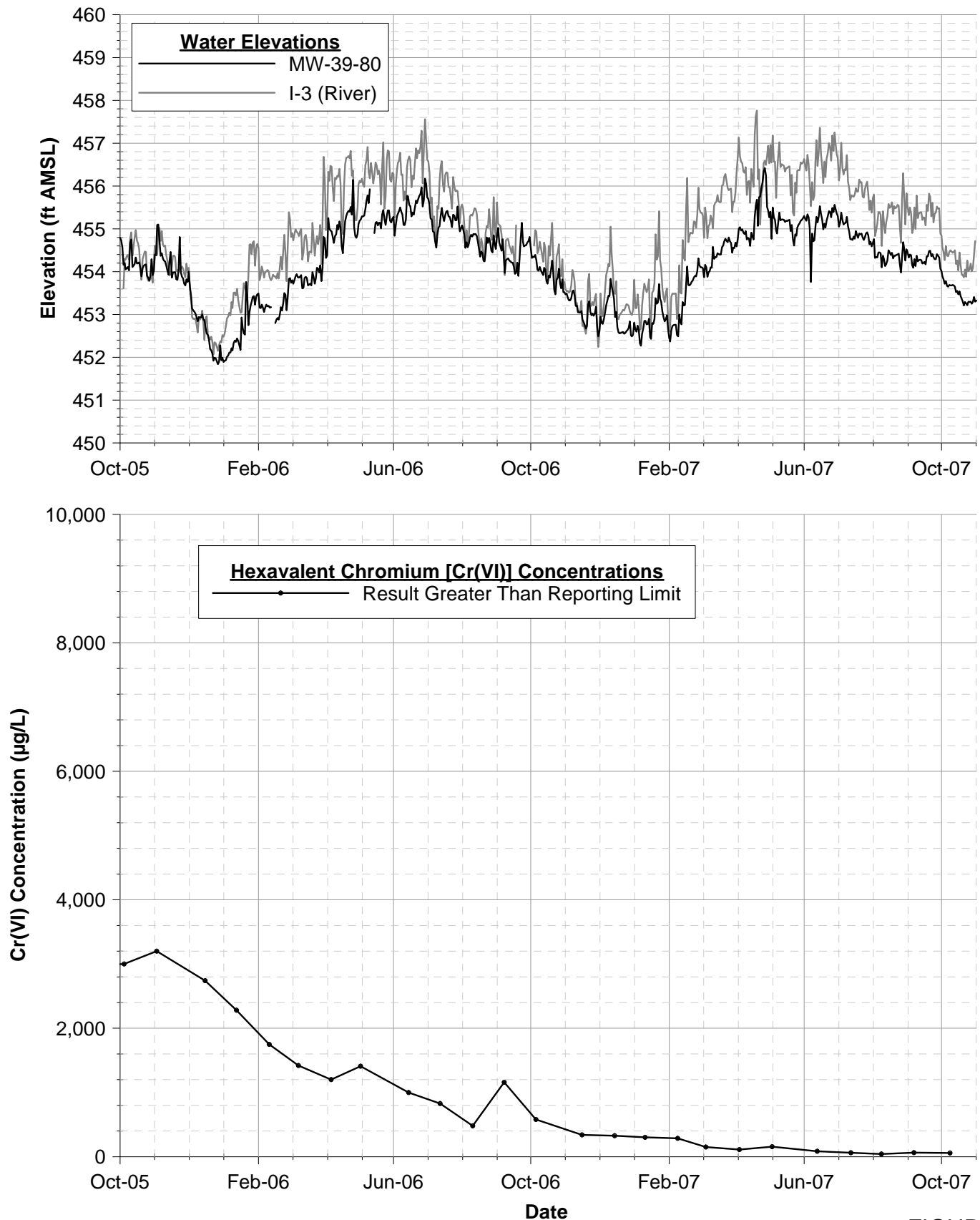


FIGURE B-4
MW-39-80 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 10/31/2007
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA

Notes

1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.

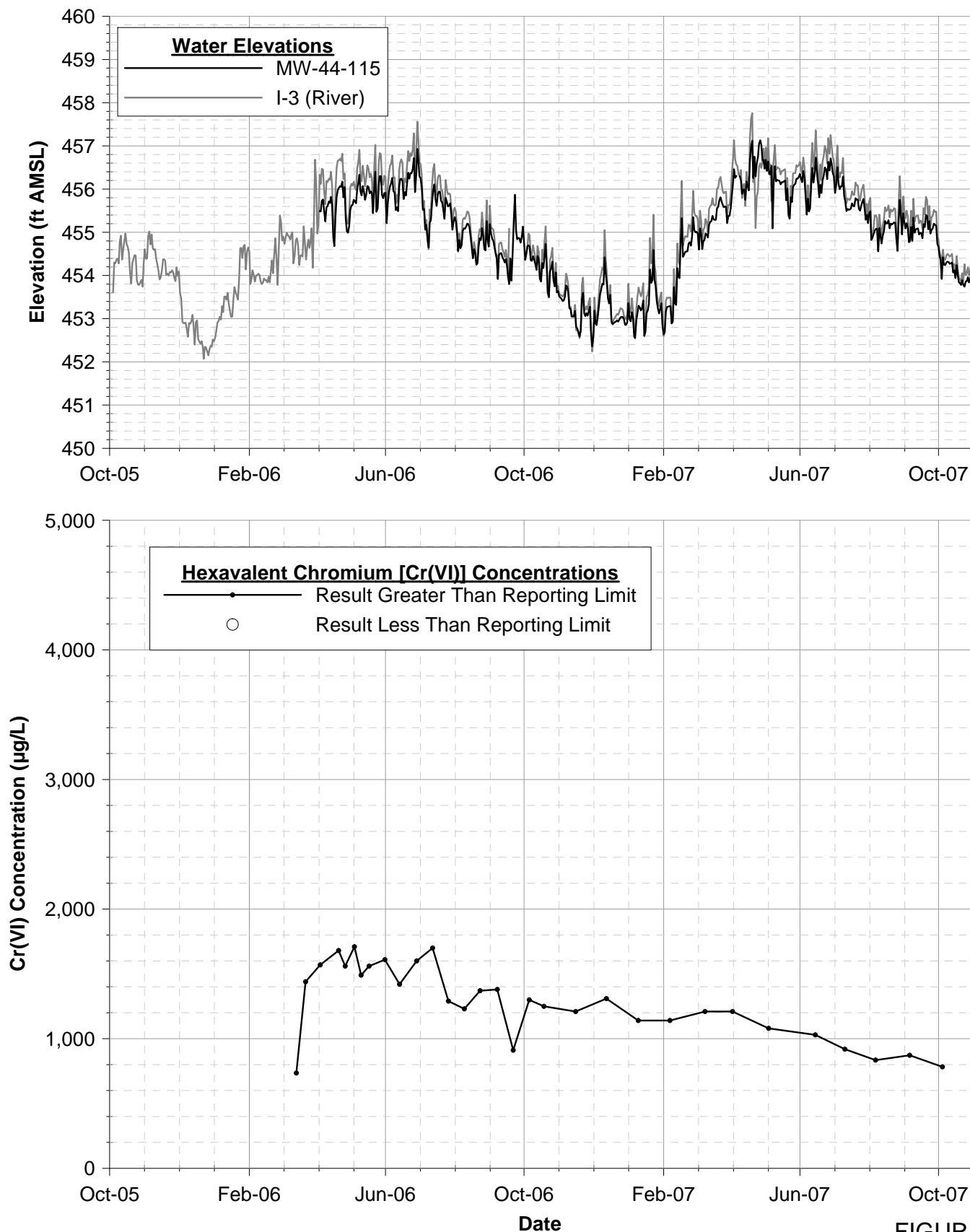


FIGURE B-5
MW-44-115 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 10/31/2007
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA

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.

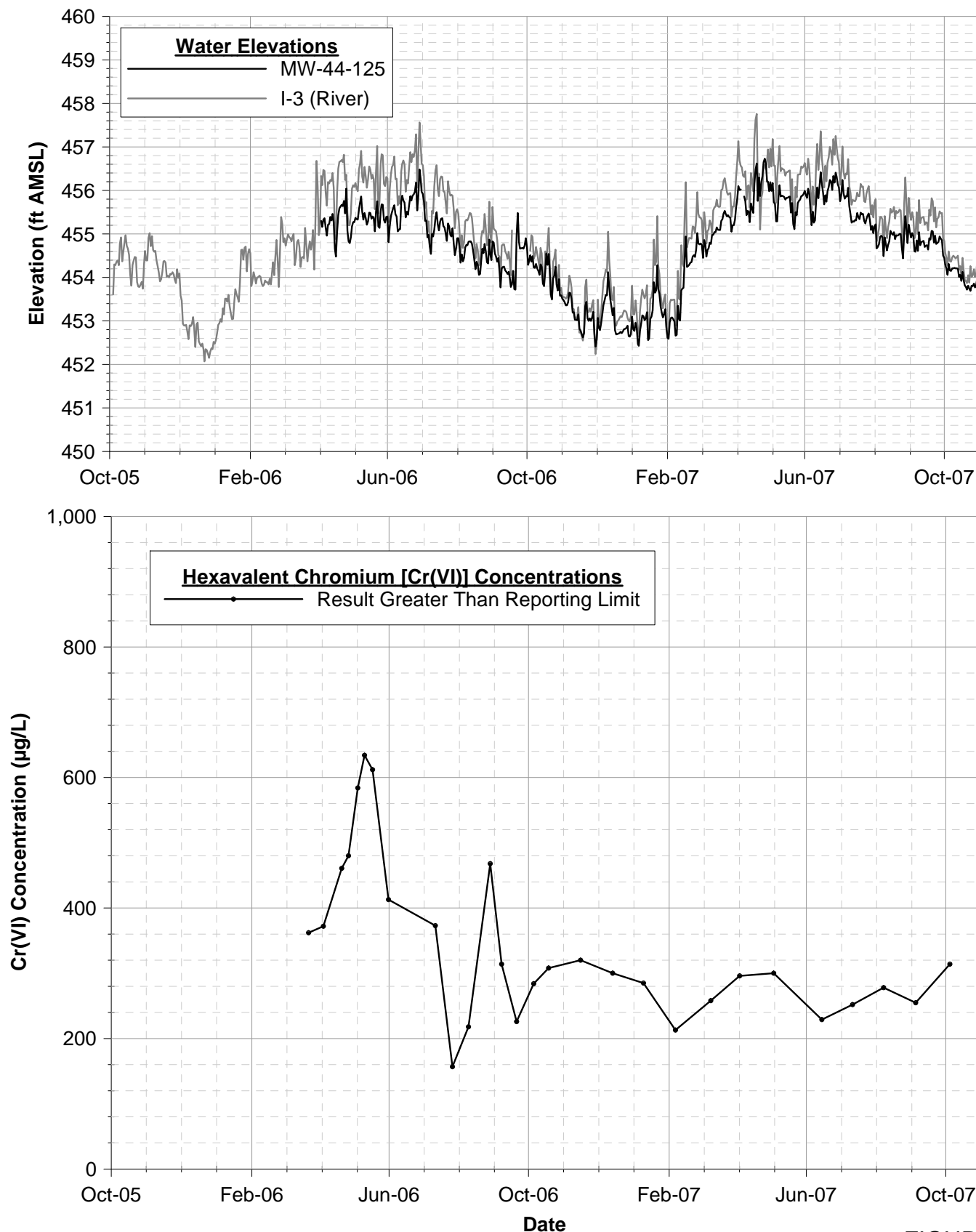


FIGURE B-6
MW-44-125 CR(VI) CONCENTRATION &
HYDROGRAPH - THROUGH 10/31/2007
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA

Notes.

1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
3. Initial sampling results from 3/9/06 are not plotted because the well was not fully developed at this time.
4. Non-detect results from the 6/28/06 sampling event are not shown while these data undergo a more rigorous field QC evaluation.

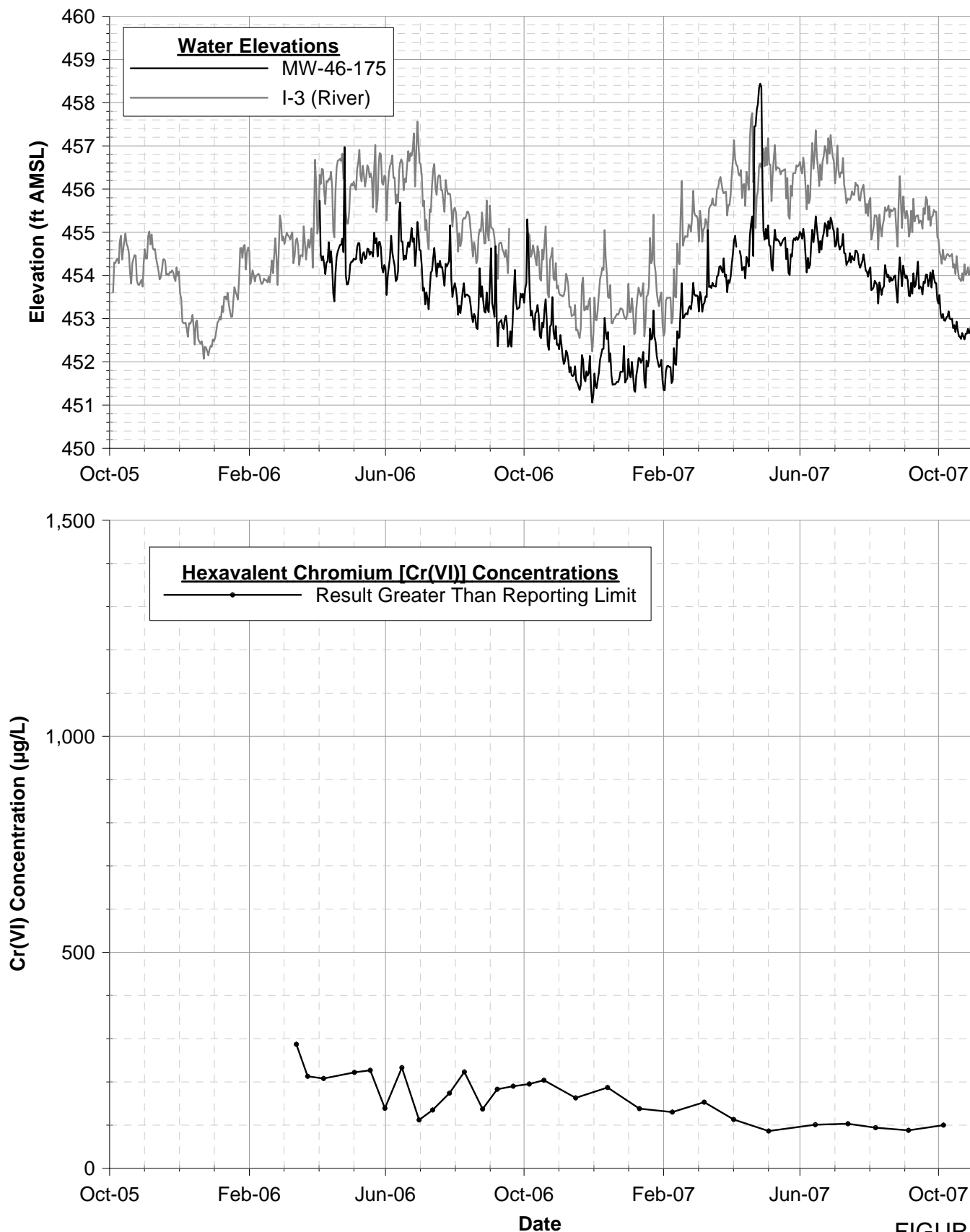


FIGURE B-7
MW-46-175 CR(VI) CONCENTRATION &
HYDROGRAPH - 10/1/2005 - 10/31/2007
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA

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.

Appendix C
Hydraulic Data for Reporting Period

TABLE C-1

Average Monthly and Quarterly Groundwater Elevations, August through October 2007
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

Well ID	Aquifer Zone	August 2007	September 2007	October 2007	Quarter Average	Days in Quarter Average
I-3	River Station	455.38	455.37	454.27	455.00	92
MW-10	Shallow Wells	456.84	456.62	461.52	458.34	92
MW-19	Shallow Wells	455.61	455.47	454.87	455.32	92
MW-20-070	Shallow Wells	454.36	454.20	453.63	454.06	92
MW-20-100	Middle Wells	453.94	453.81	453.14	453.55	52
MW-20-130	Deep Wells	453.56	453.43	452.67	453.22	92
MW-22	Shallow Wells	455.35	455.15	454.59	455.03	92
MW-25	Shallow Wells	456.11	455.41	455.39	455.53	68
MW-26	Shallow Wells	455.63	455.46	455.09	455.39	92
MW-27-020	Shallow Wells	455.19	455.19	454.18	454.85	92
MW-27-060	Middle Wells	455.19	455.12	454.10	454.80	92
MW-27-085	Deep Wells	455.38	455.21	454.41	455.00	92
MW-28-025	Shallow Wells	455.34	455.31	454.29	454.98	92
MW-28-090	Deep Wells	455.45	455.40	454.41	455.09	92
MW-30-050	Middle Wells	455.00	454.89	454.01	454.63	92
MW-31-060	Shallow Wells	455.24	455.12	454.45	454.94	92
MW-31-135	Deep Wells	454.58	454.44	453.72	454.24	92
MW-32-020	Shallow Wells	455.14	455.02	454.34	454.83	92
MW-32-035	Shallow Wells	455.04	454.96	454.13	454.71	92
MW-33-040	Shallow Wells	456.88	461.66	458.21	458.89	92
MW-33-090	Middle Wells	455.42	455.36	454.52	455.10	92
MW-33-150	Deep Wells	455.71	455.62	454.83	455.38	92
MW-33-210	Deep Wells	455.19	455.14	455.00	455.12	61
MW-34-055	Middle Wells	455.39	455.27	454.25	454.97	92
MW-34-080	Deep Wells	455.37	455.43	454.40	455.06	92
MW-34-100	Deep Wells	455.09	455.08	454.11	454.76	92
MW-35-060	Shallow Wells	455.68	455.72	454.81	455.40	92
MW-35-135	Deep Wells	456.13	456.01	455.35	455.83	92
MW-36-020	Shallow Wells	455.14	455.10	454.12	454.79	92
MW-36-040	Shallow Wells	455.07	455.03	454.10	454.73	92
MW-36-050	Middle Wells	455.06	455.02	454.06	454.71	92
MW-36-070	Middle Wells	455.04	455.01	454.05	454.70	92
MW-36-090	Deep Wells	454.39	454.33	453.44	454.05	92
MW-36-100	Deep Wells	454.47	454.40	453.52	454.13	92
MW-39-040	Shallow Wells	454.84	454.79	454.15	454.72	71
MW-39-050	Middle Wells	454.85	454.79	453.90	454.51	92
MW-39-060	Middle Wells	454.76	454.69	453.83	454.42	92
MW-39-070	Middle Wells	454.38	454.31	453.48	454.05	92
MW-39-080	Deep Wells	454.45	454.34	453.52	454.10	92
MW-39-100	Deep Wells	454.70	454.66	453.84	454.40	92
MW-42-030	Shallow Wells	454.69	454.63	453.76	454.36	92
MW-42-055	Middle Wells	454.93	454.87	453.98	454.59	92
MW-42-065	Middle Wells	455.05	455.00	454.10	454.71	92
MW-43-025	Shallow Wells	455.16	455.15	454.07	454.79	92
MW-43-075	Deep Wells	455.48	455.47	454.39	455.11	92
MW-43-090	Deep Wells	455.74	455.69	454.58	455.33	92
MW-44-070	Middle Wells	455.11	455.08	454.11	454.76	92
MW-44-115	Deep Wells	454.92	454.83	454.03	454.59	92

TABLE C-1

Average Monthly and Quarterly Groundwater Elevations, August through October 2007
 Interim Measures Performance Monitoring
 PG&E Topock Compressor Station

Well ID	Aquifer Zone	August 2007	September 2007	October 2007	Quarter Average	Days in Quarter Average
MW-44-125	Deep Wells	455.31	455.01	454.36	454.89	92
MW-45-095a	Deep Wells	453.88	453.85	452.88	453.53	92
MW-46-175	Deep Wells	455.62	455.77	454.77	455.38	92
MW-46-205	Deep Wells	456.09	456.01	455.21	455.77	92
MW-47-055	Shallow Wells	455.65	455.56	454.81	455.34	92
MW-47-115	Deep Wells	455.84	455.72	455.03	455.53	92
MW-49-135	Deep Wells	456.05	455.98	455.11	455.71	92
MW-49-275	Deep Wells	456.77	456.66	455.95	456.46	92
MW-49-365	Deep Wells	458.37	458.26	457.60	458.07	92
MW-50-095	Middle Wells	455.67	455.28	454.69	454.96	56
MW-50-200	Deep Wells	456.00	455.63	455.08	455.33	56
MW-51	Middle Wells	455.57	455.38	454.99	455.31	91
PT2D	Deep Wells	454.05	453.97	453.18	453.73	92
PT5D	Deep Wells	454.28	454.19	453.35	453.93	92
PT6D	Deep Wells	454.47	454.41	453.61	454.16	92
RRB*	River Station	455.67	455.68	454.77	455.51	75

NOTES:

Averages include data collected from August 2007 through October 2007

Averages reported in ft AMSL (feet above mean sea level)

*For RRB, average is from August 1 - October 14, 2007

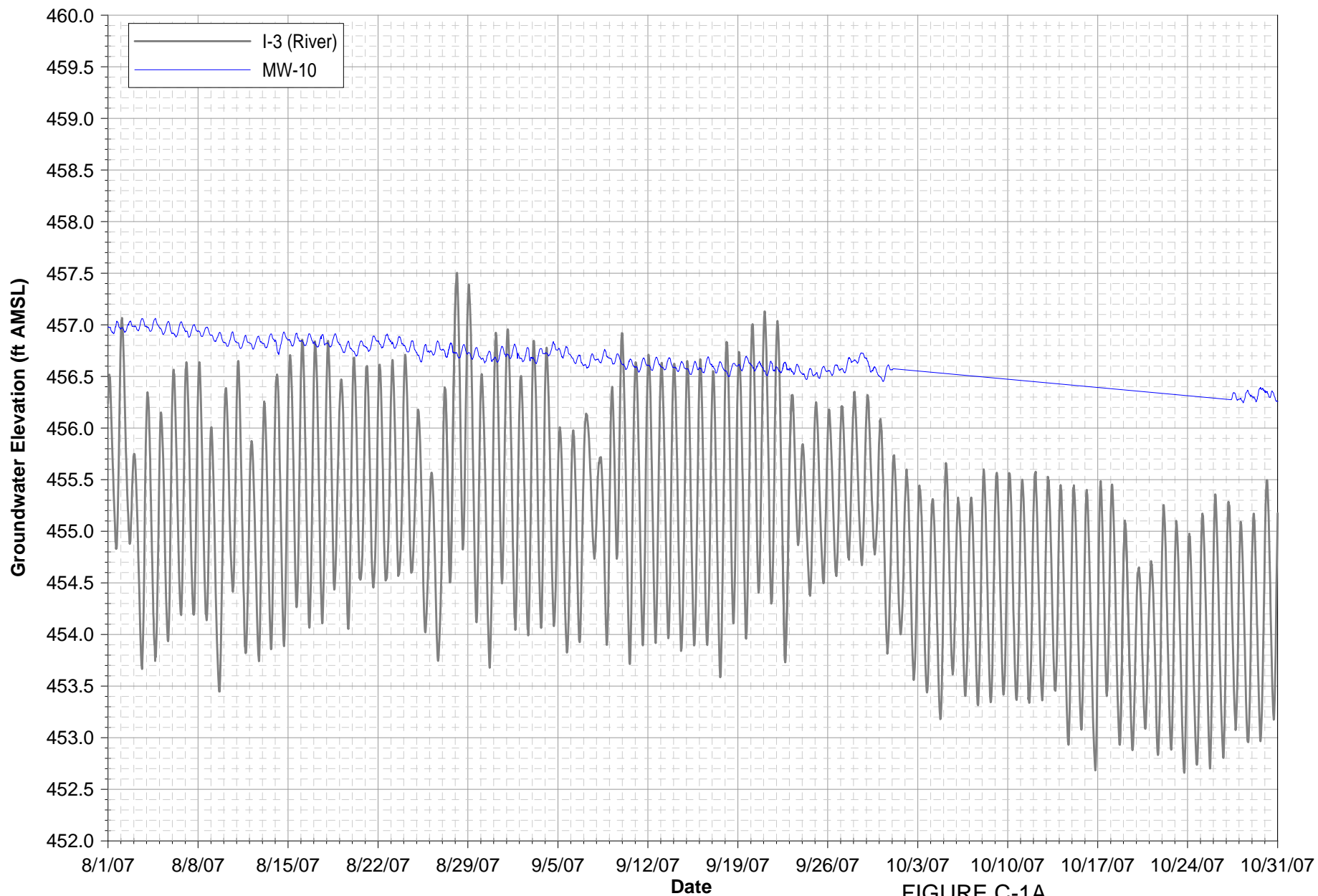
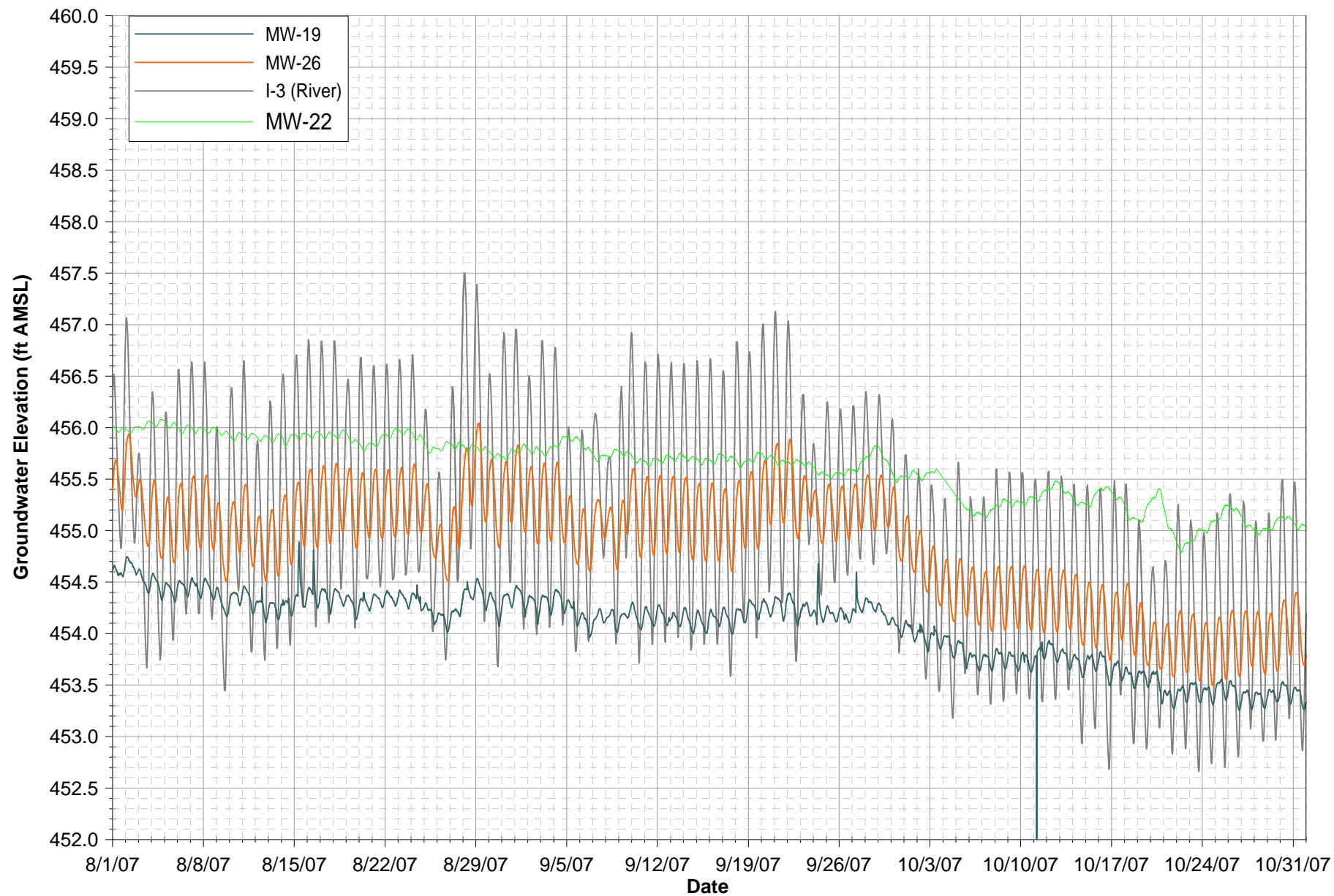


FIGURE C-1A

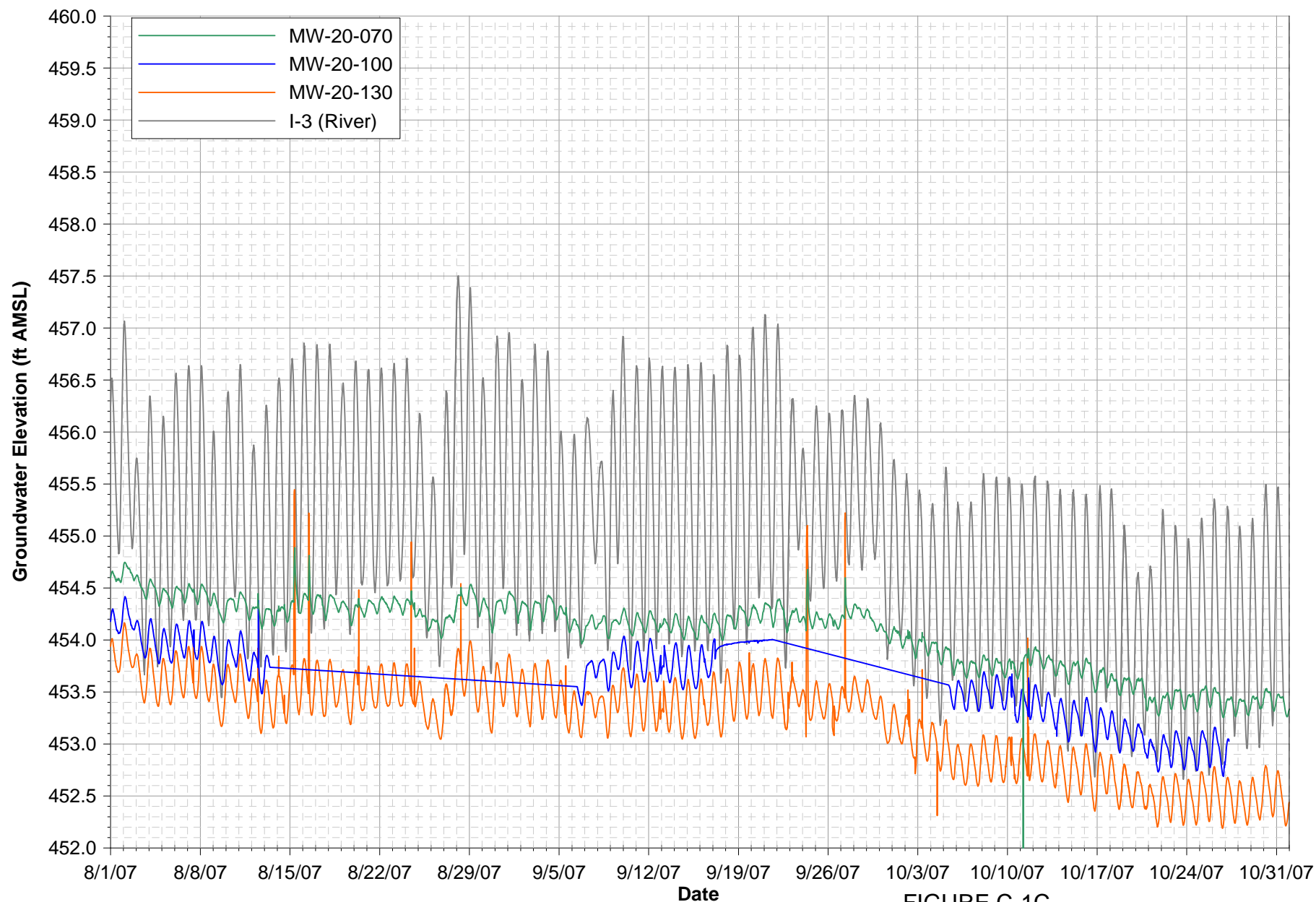
MW-10 HYDROGRAPH

INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



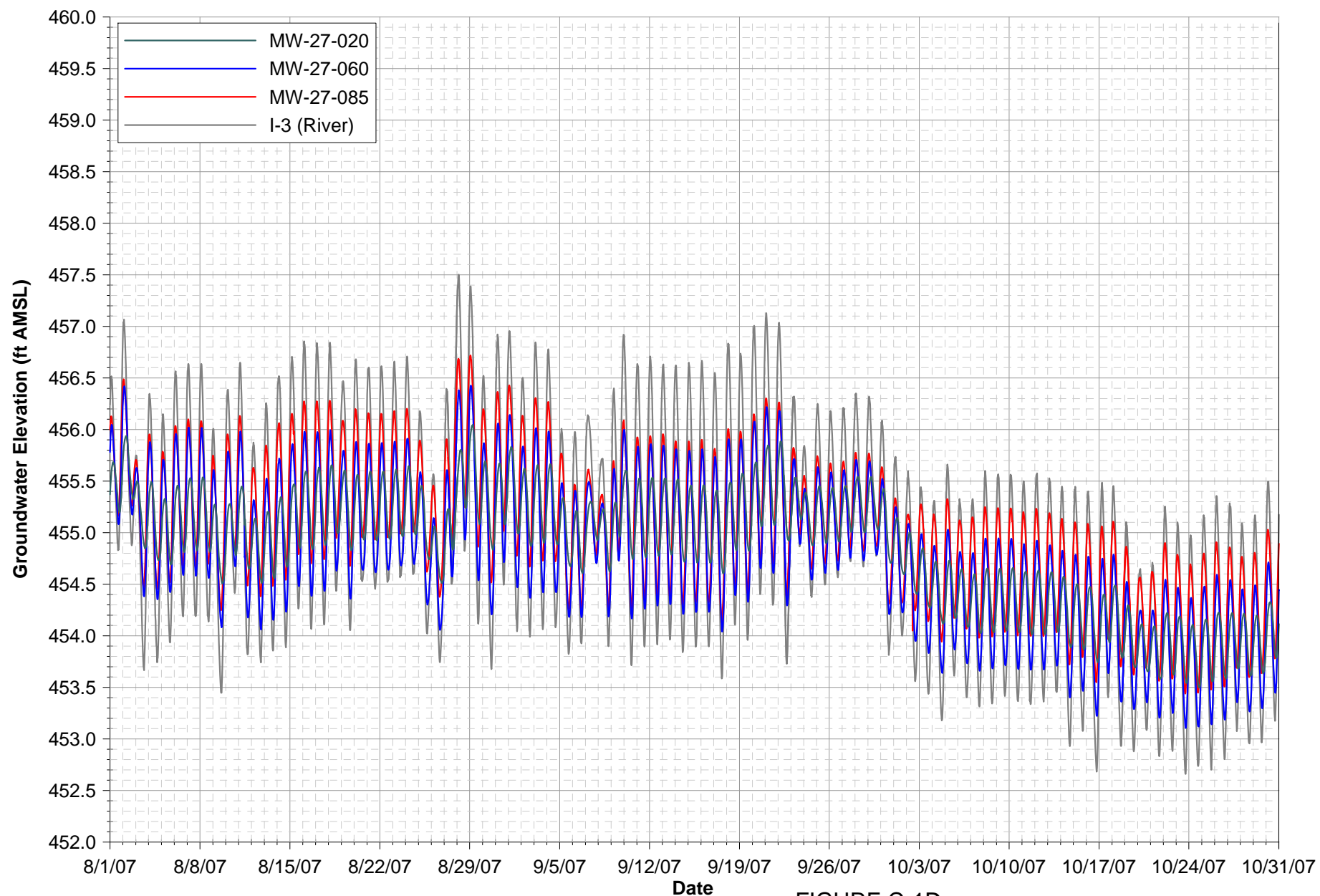
Notes:
Data subject to review.

FIGURE C-1B
MW-19, MW-22, AND MW-26 HYDROGRAPHS
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



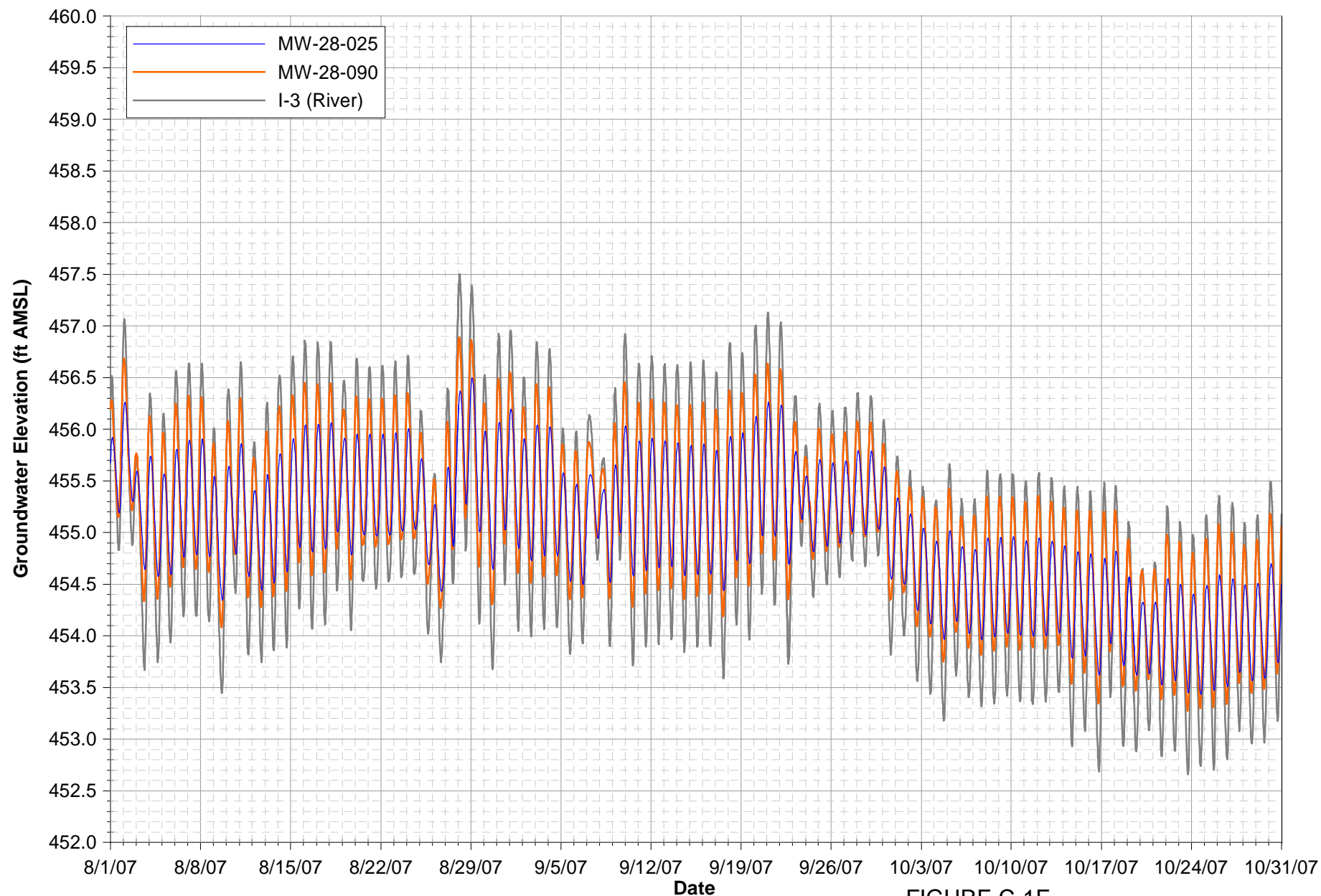
Notes:
Data subject to review.
MW-20-100: data unavailable 8/13-9/6/2007,
9/17-10/5/2007, and after 10/27/2007.

FIGURE C-1C
MW-20 CLUSTER HYDROGRAPHS
INTERIM MEASURES PERFORMANCE MONITORING
PG& E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



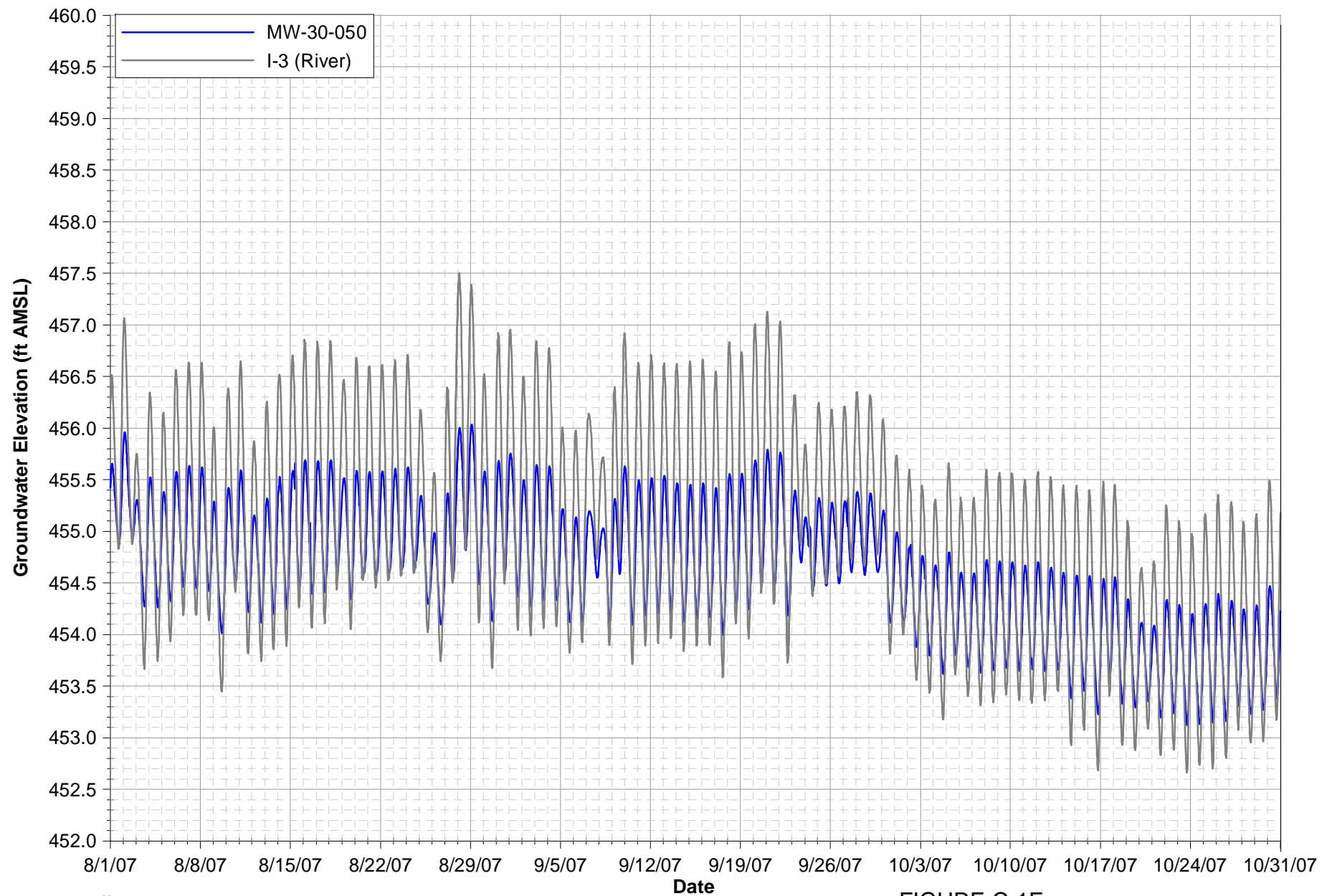
Notes:
Data subject to review.

FIGURE C-1D
MW-27 CLUSTER HYDROGRAPHS
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



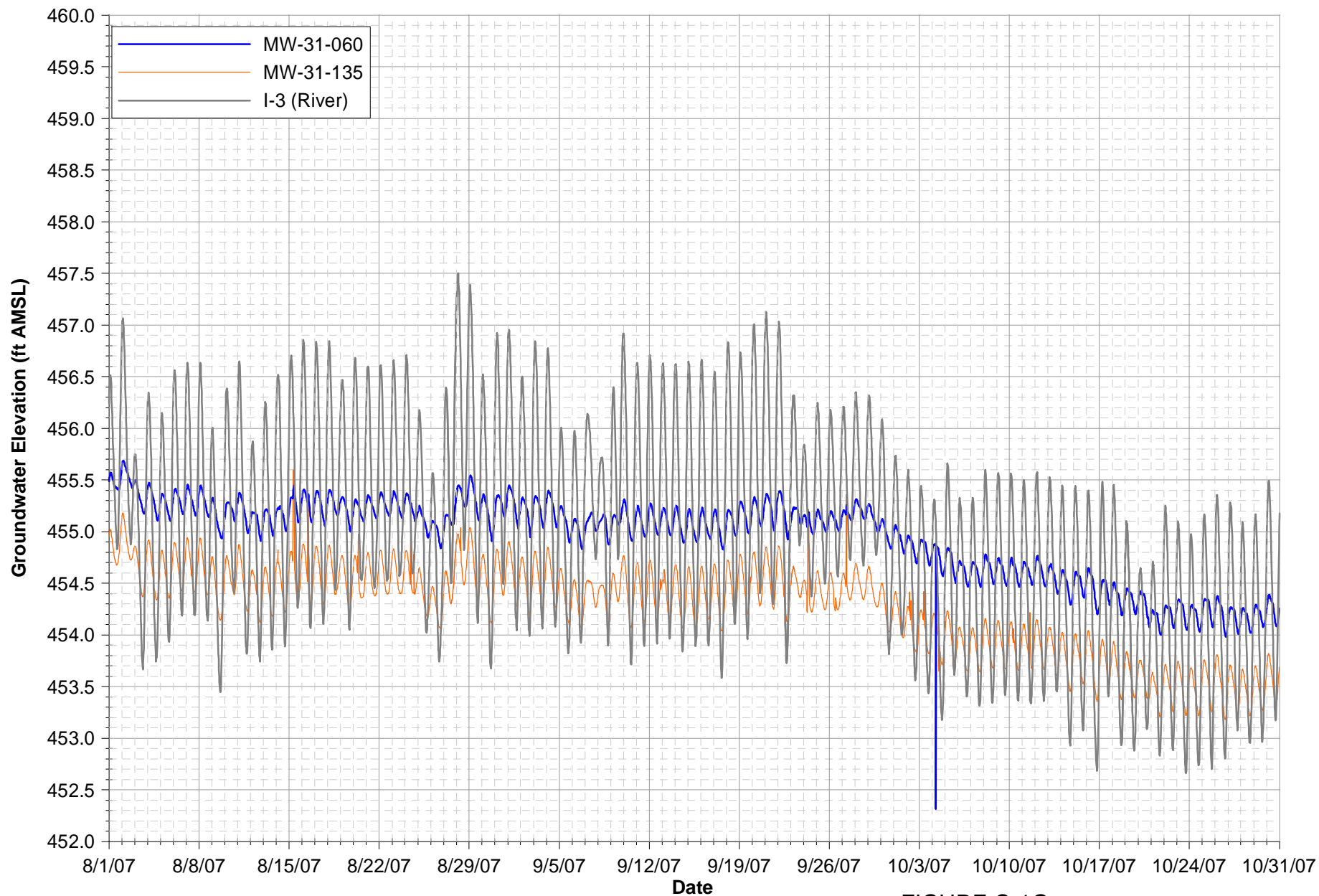
Notes:
Data subject to review.

FIGURE C-1E
MW-28 WELL HYDROGRAPHS
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



Notes:
Data subject to review.

FIGURE C-1F
MW-30-50 WELL HYDROGRAPH
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

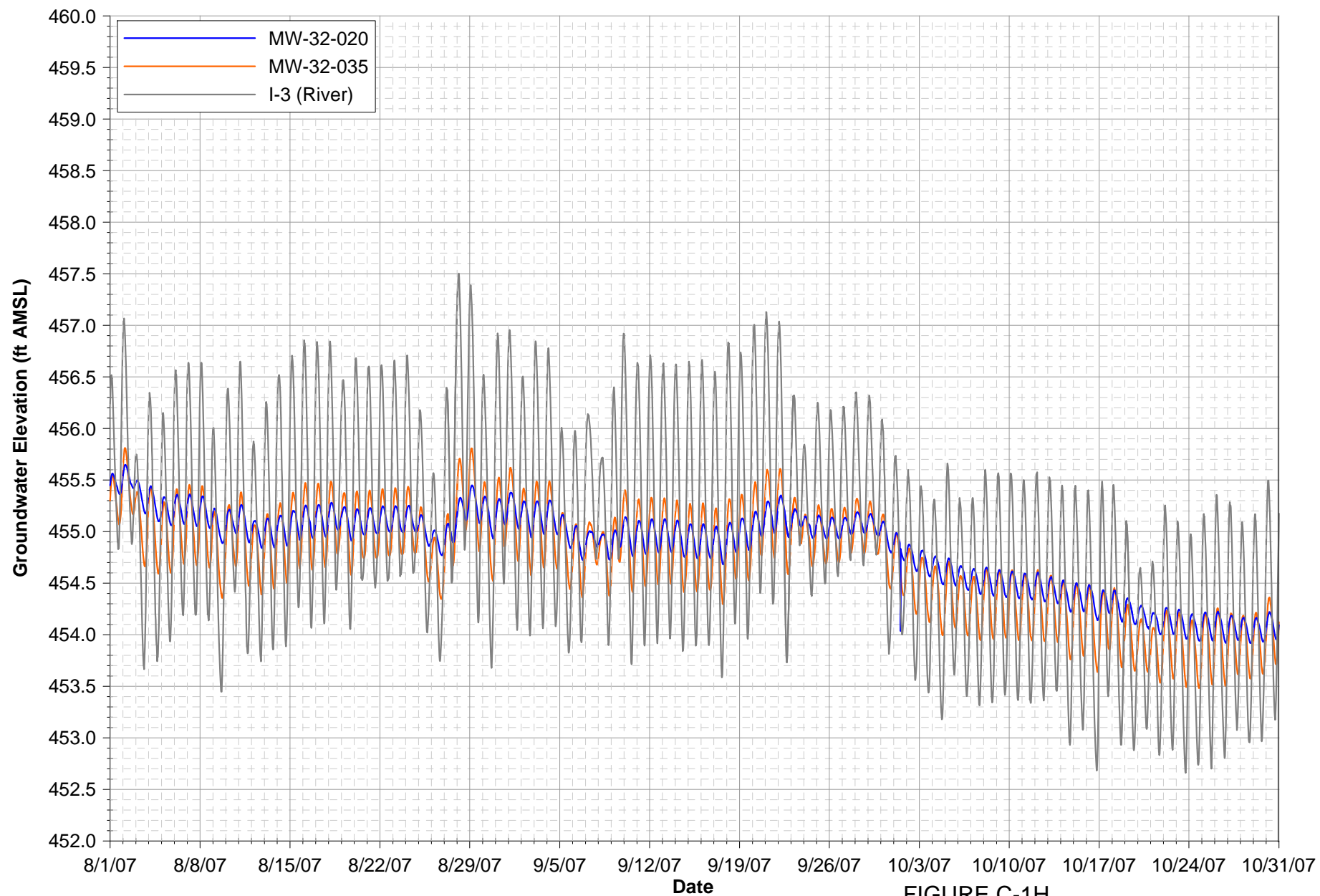


Notes:
Data subject to review.

FIGURE C-1G

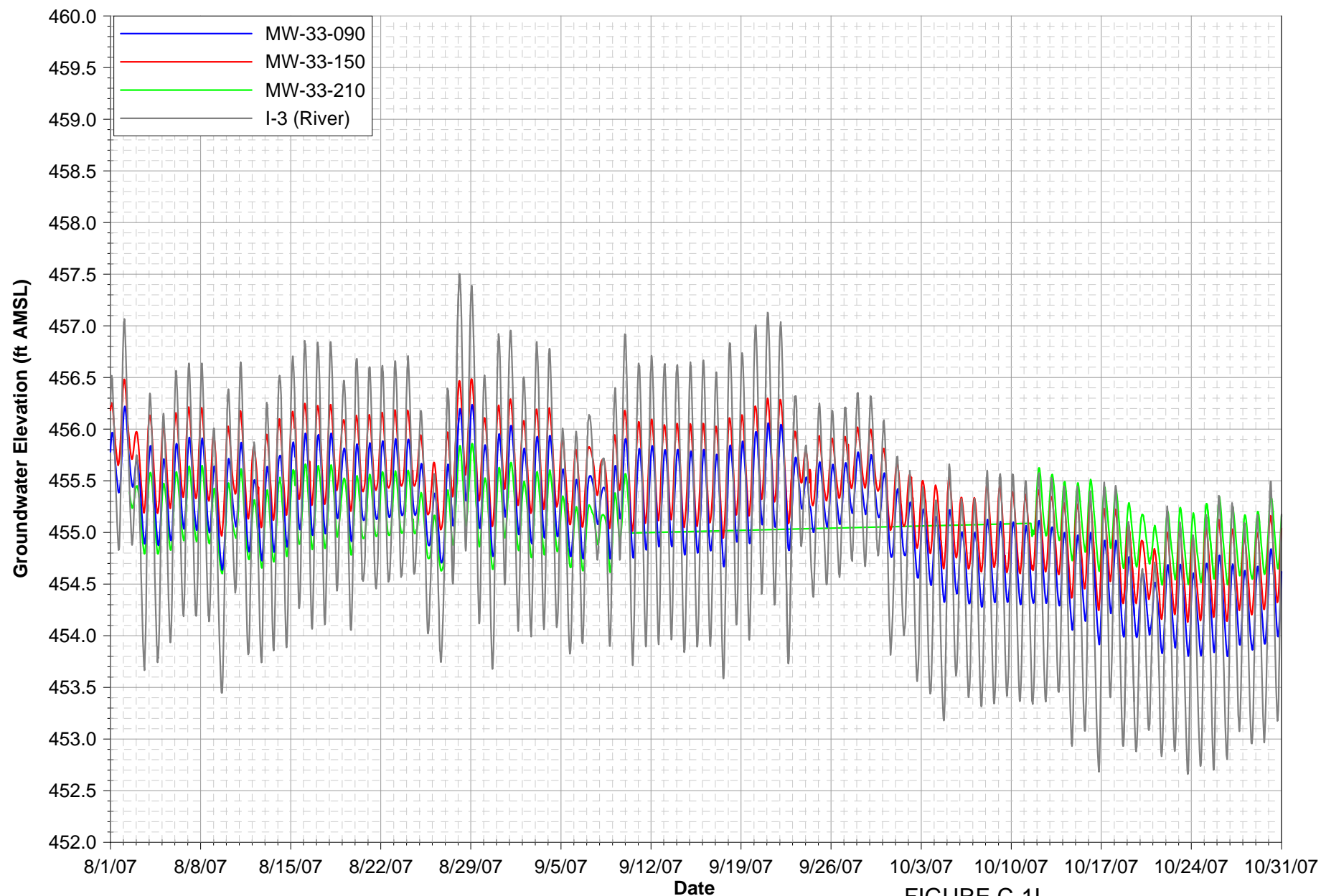
MW-31 WELL HYDROGRAPHS

INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



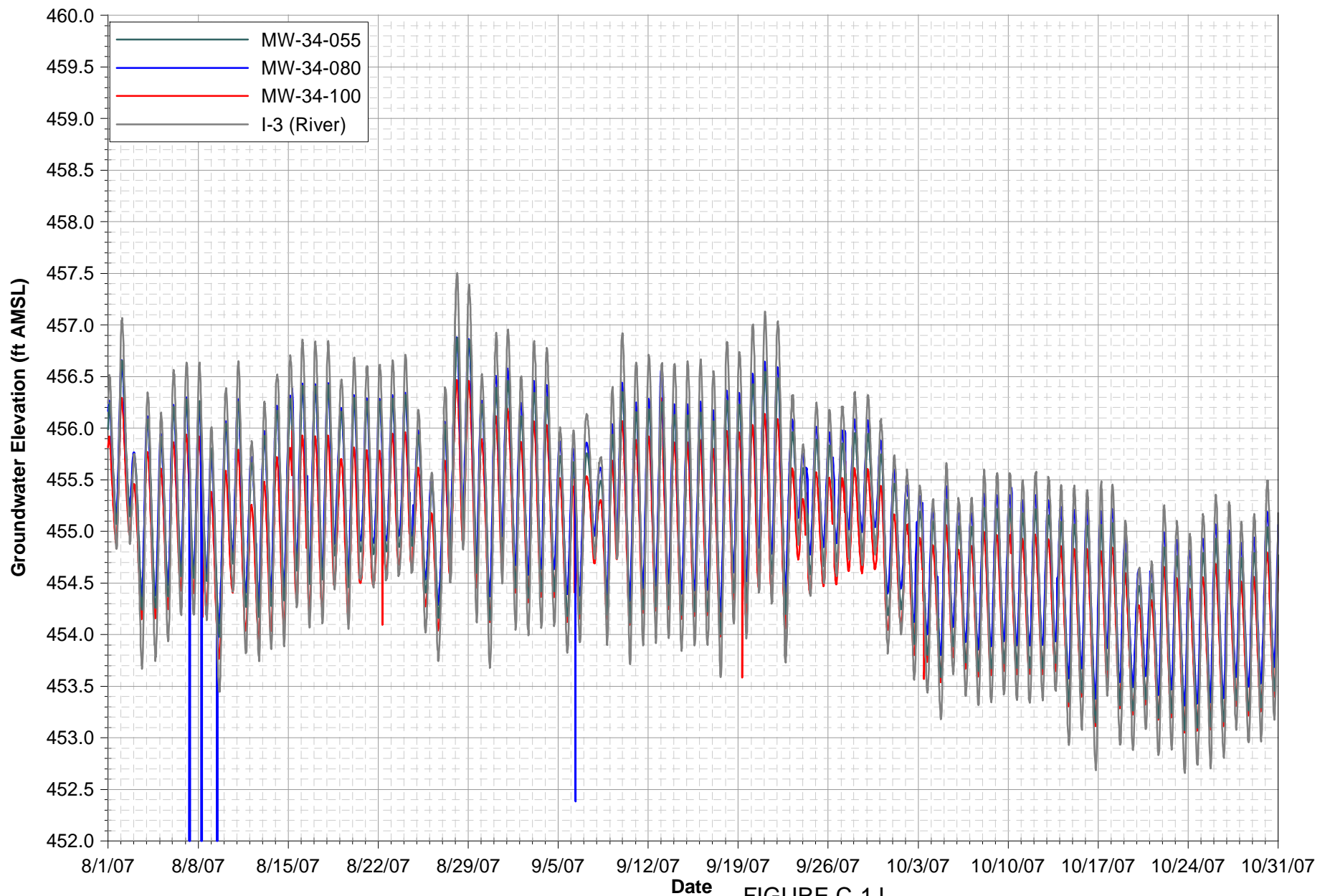
Notes:
Data subject to review.

FIGURE C-1H
MW-32 WELL HYDROGRAPHS
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



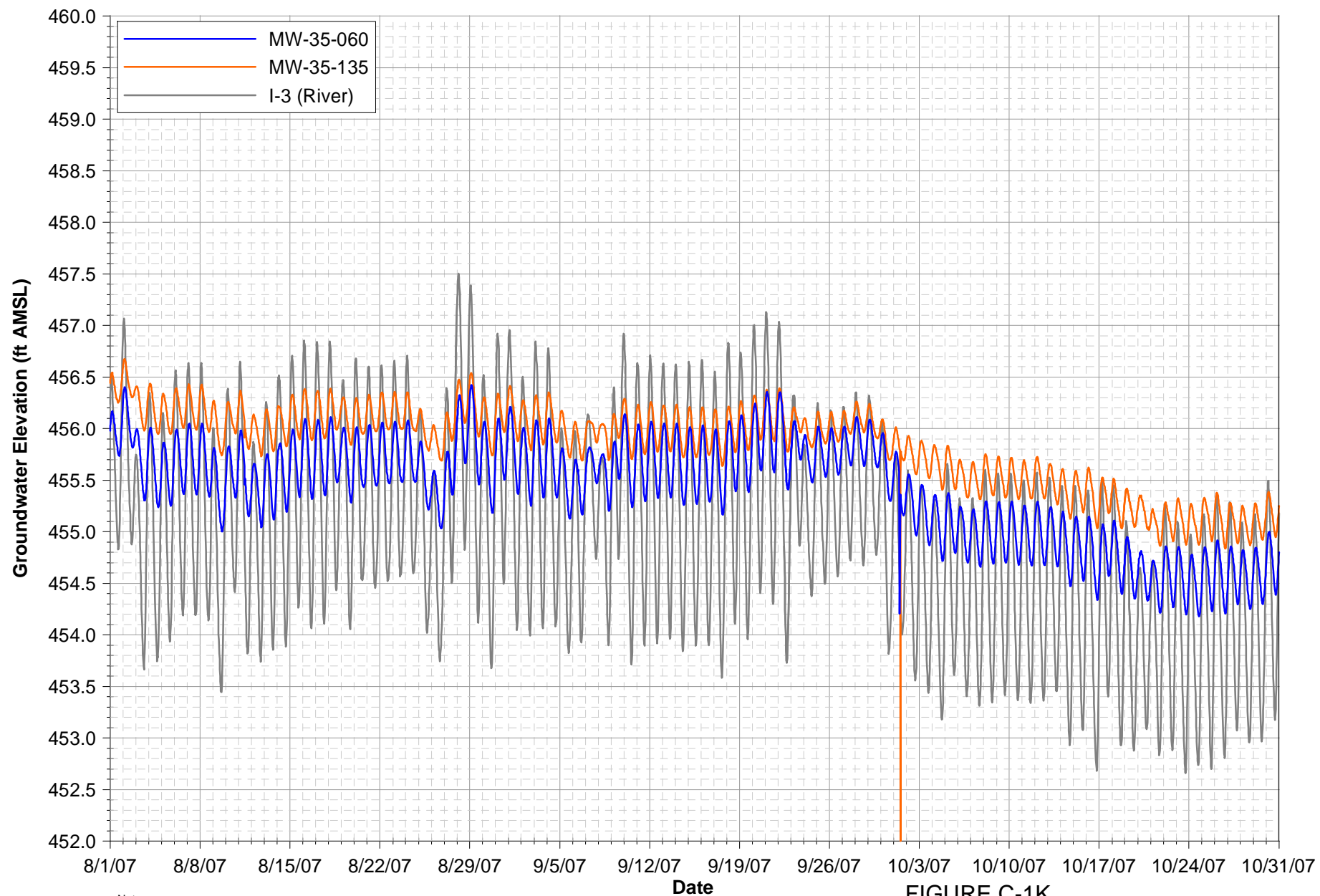
Notes:
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 MW-33-40: no data 8/16 - 10/12/2007.
 MW-33-210: no data 9/11 - 10/11/2007.

FIGURE C-1I
MW-33 CLUSTER HYDROGRAPHS
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



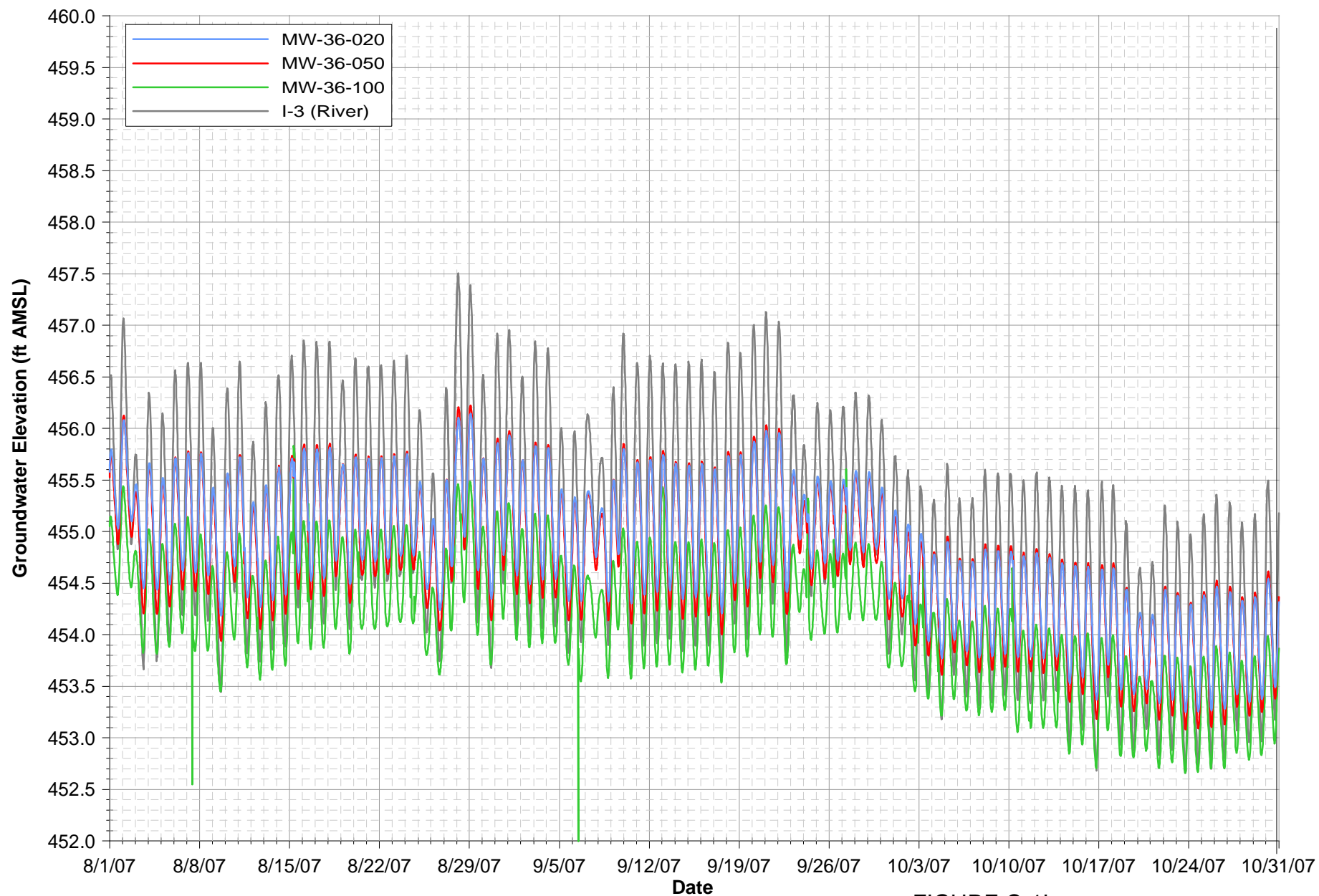
Notes:
Data subject to review.

FIGURE C-1J
MW-34 CLUSTER HYDROGRAPHS
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



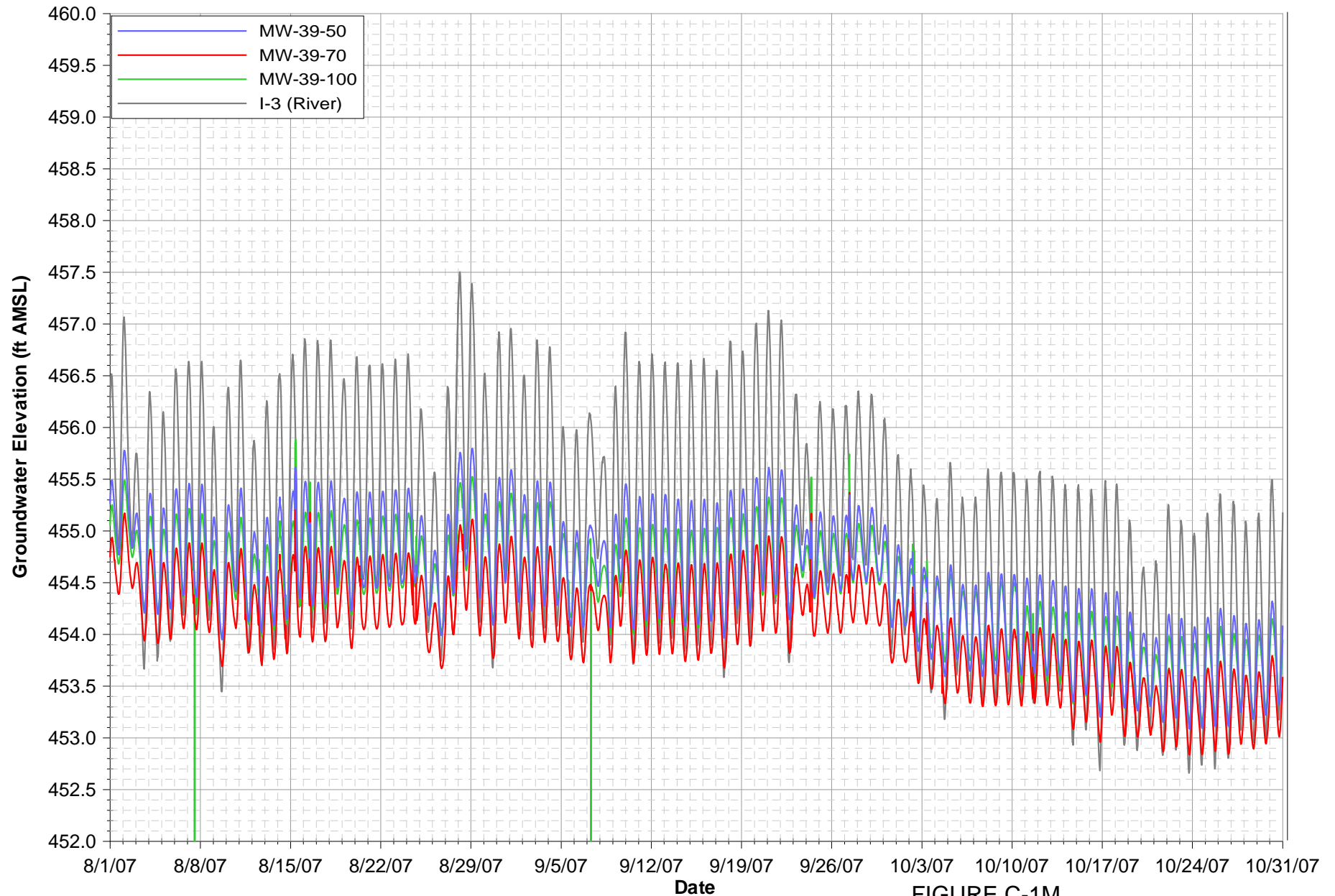
Notes:
Data subject to review.

FIGURE C-1K
MW-35 WELL HYDROGRAPHS
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



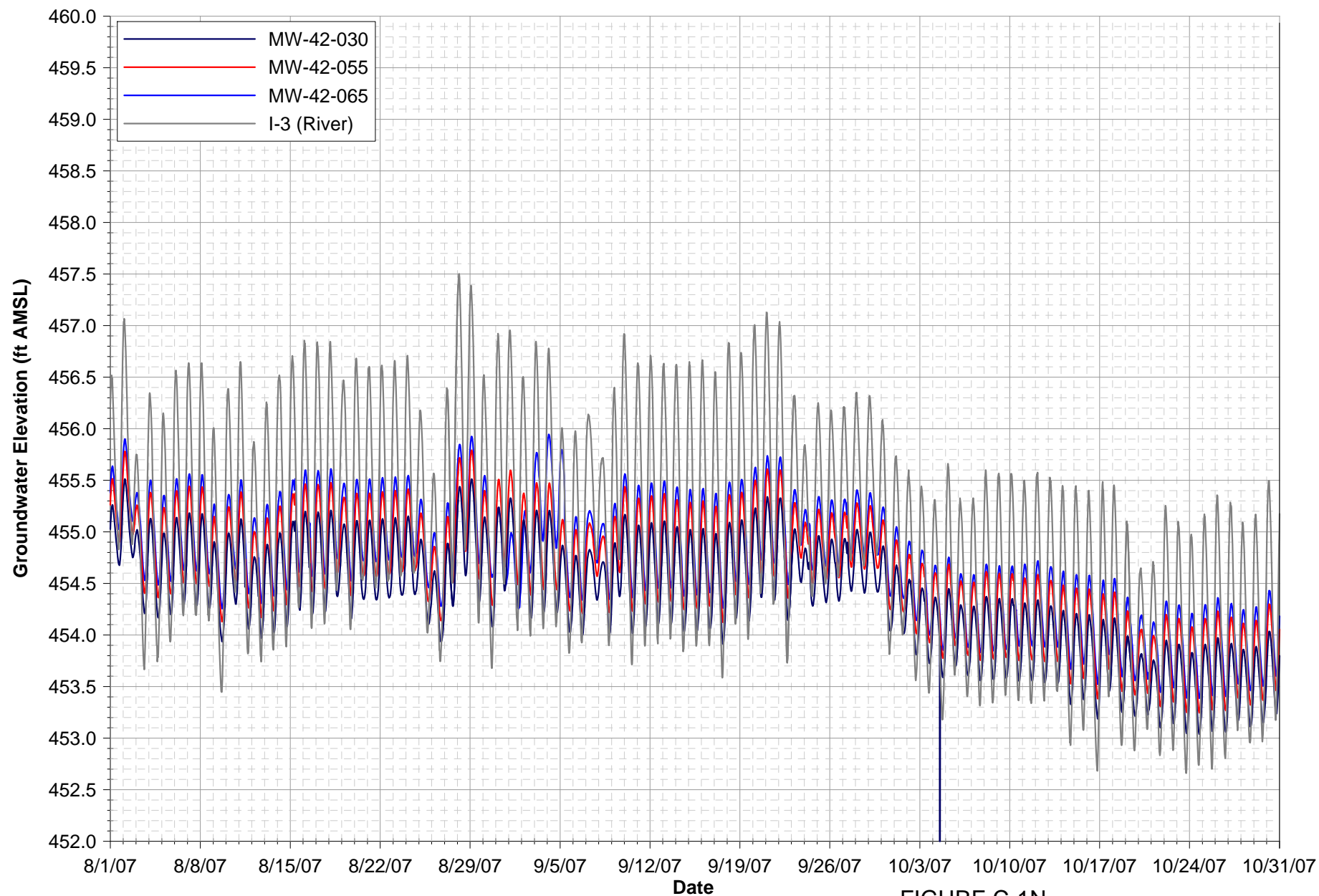
Notes:
Data subject to review.

FIGURE C-1L
MW-36 CLUSTER
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



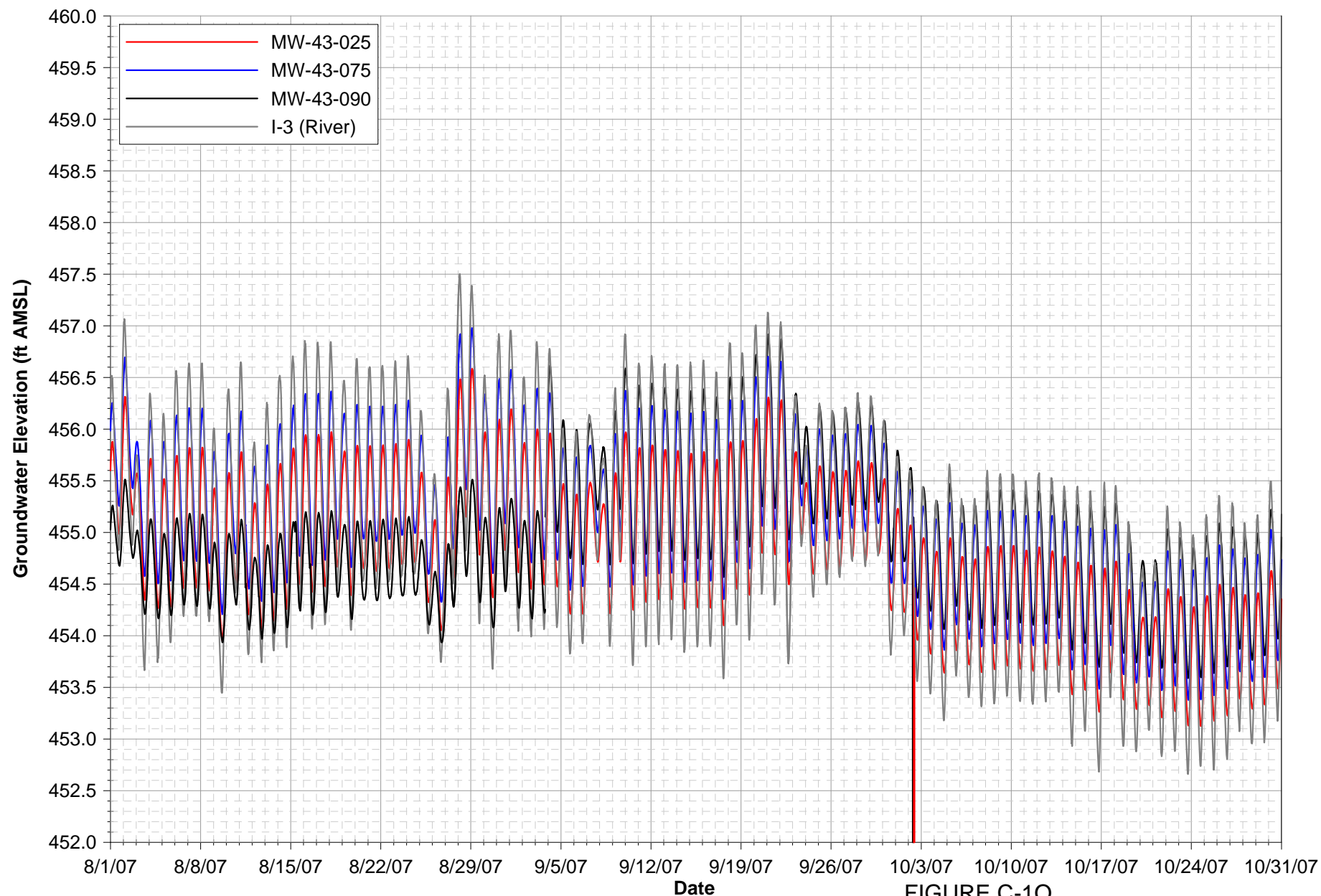
Notes:
Data subject to review.

FIGURE C-1M
MW-39 CLUSTER HYDROGRAPHS
 INTERIM MEASURES PERFORMANCE MONITORING
 PG & E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



Notes:
Data subject to review.

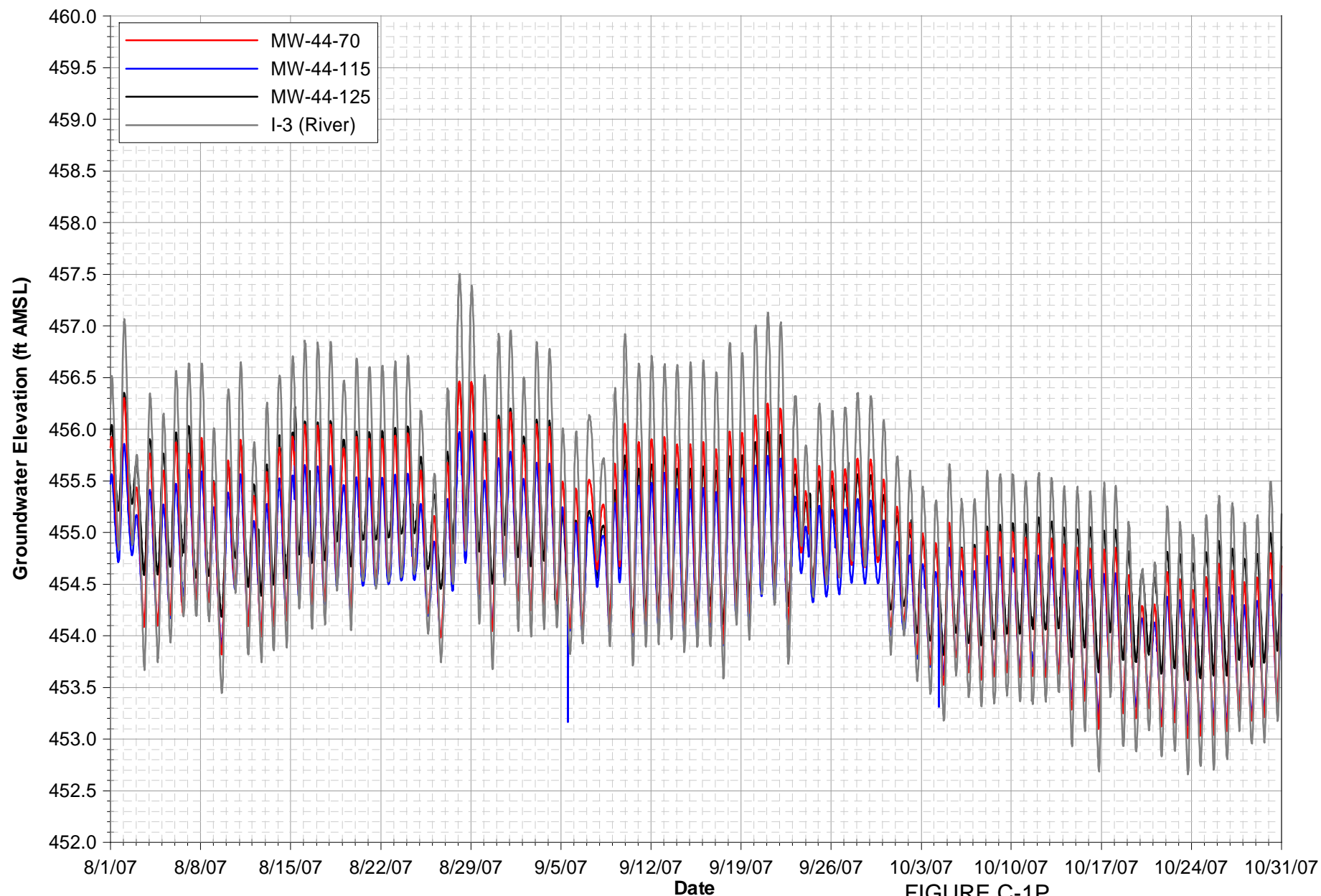
FIGURE C-1N
MW-42 CLUSTER HYDROGRAPHS
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



Notes:
Data subject to review.

FIGURE C-10

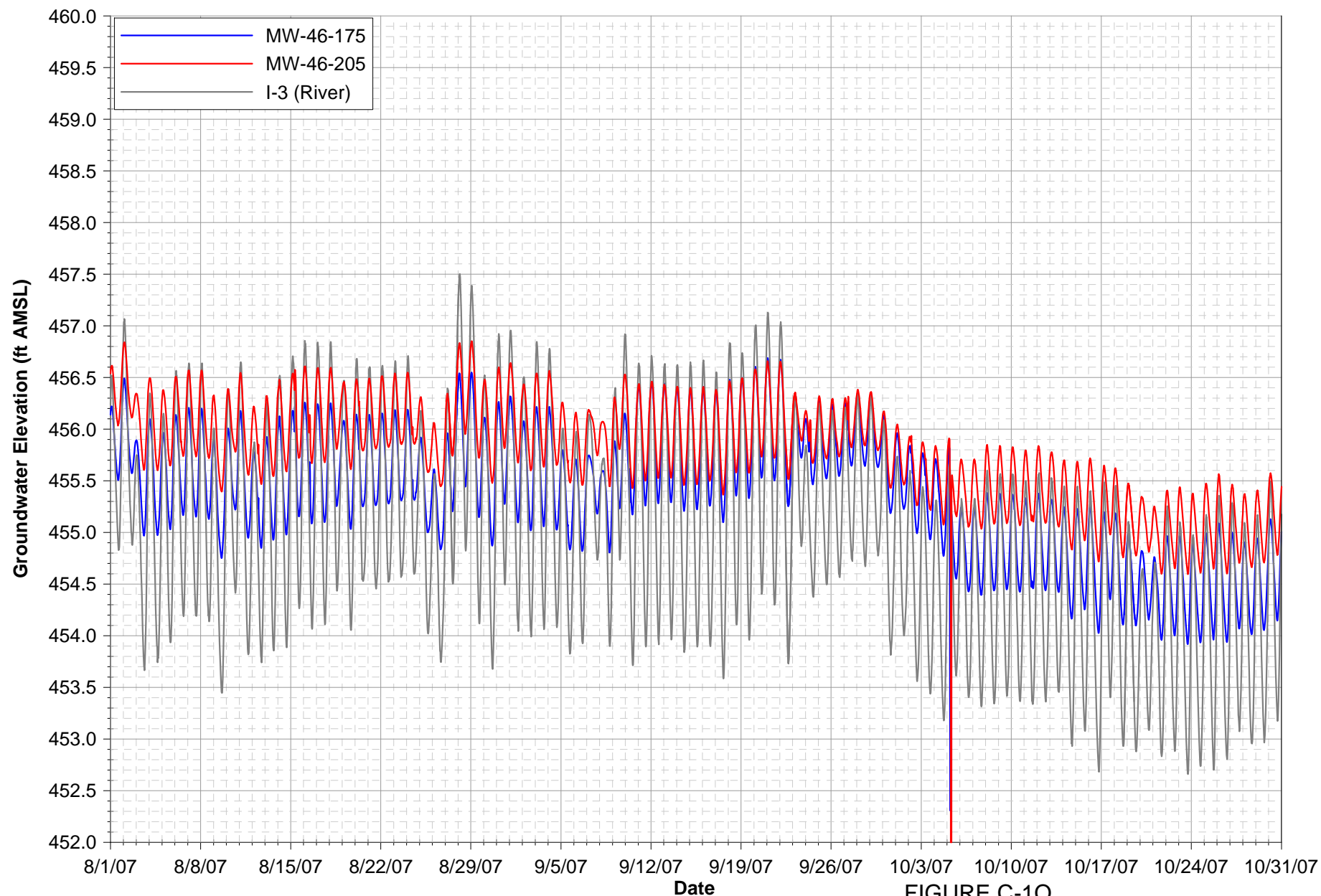
MW-43 CLUSTER HYDROGRAPHS
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



Notes:
Data subject to review.

FIGURE C-1P

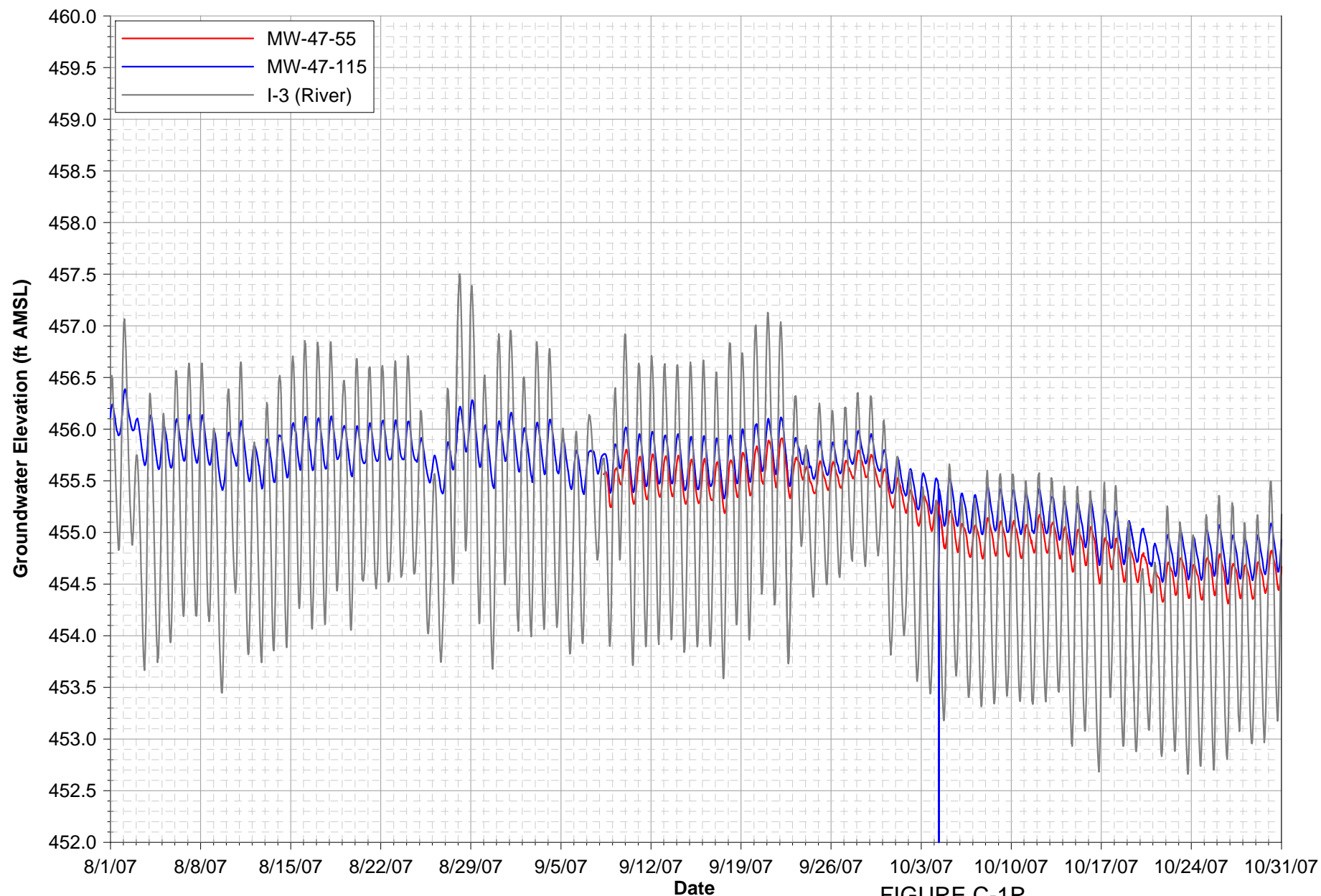
MW-44 CLUSTER HYDROGRAPHS
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



Notes:
Data subject to review.

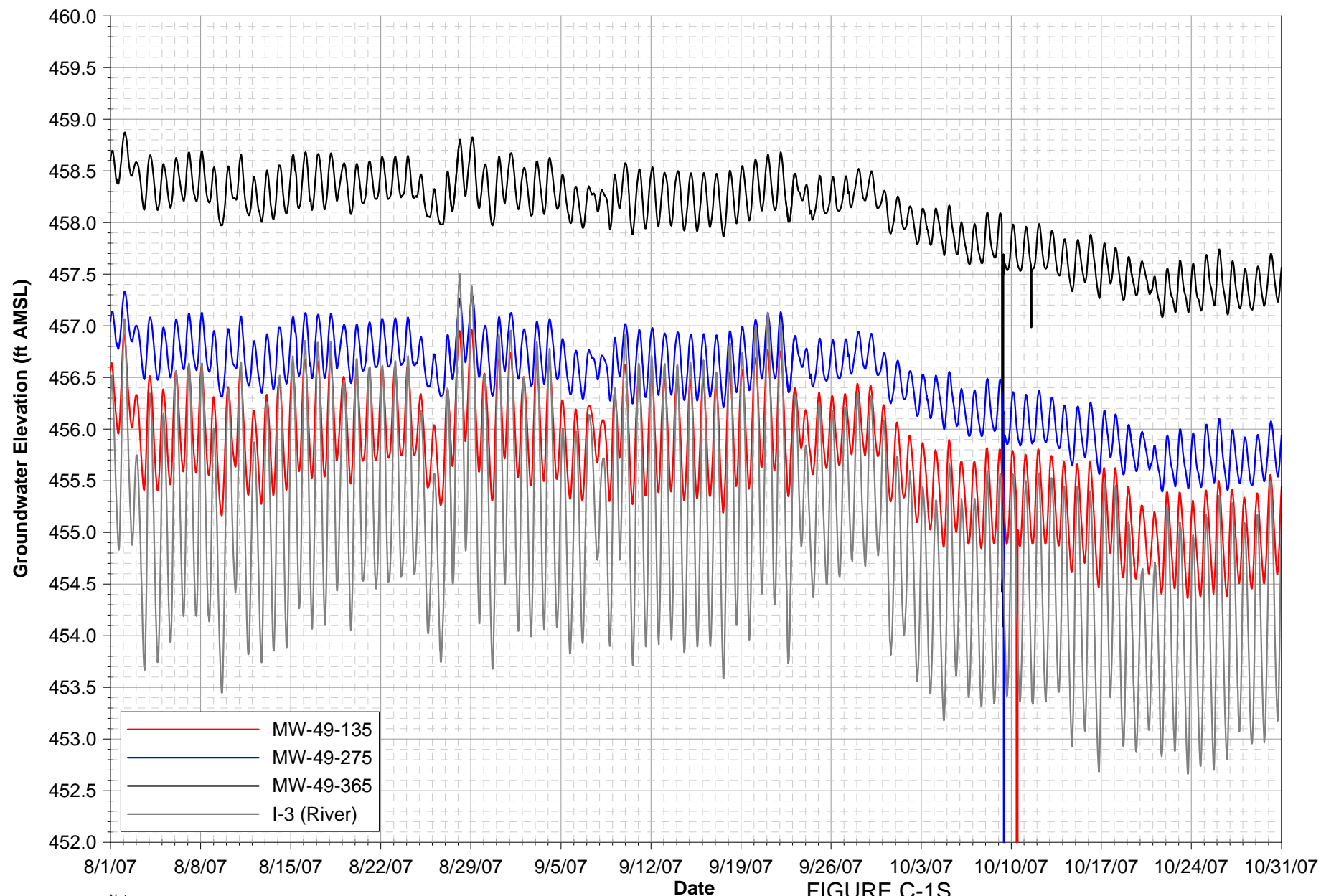
FIGURE C-1Q

MW-46 CLUSTER HYDROGRAPHS
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



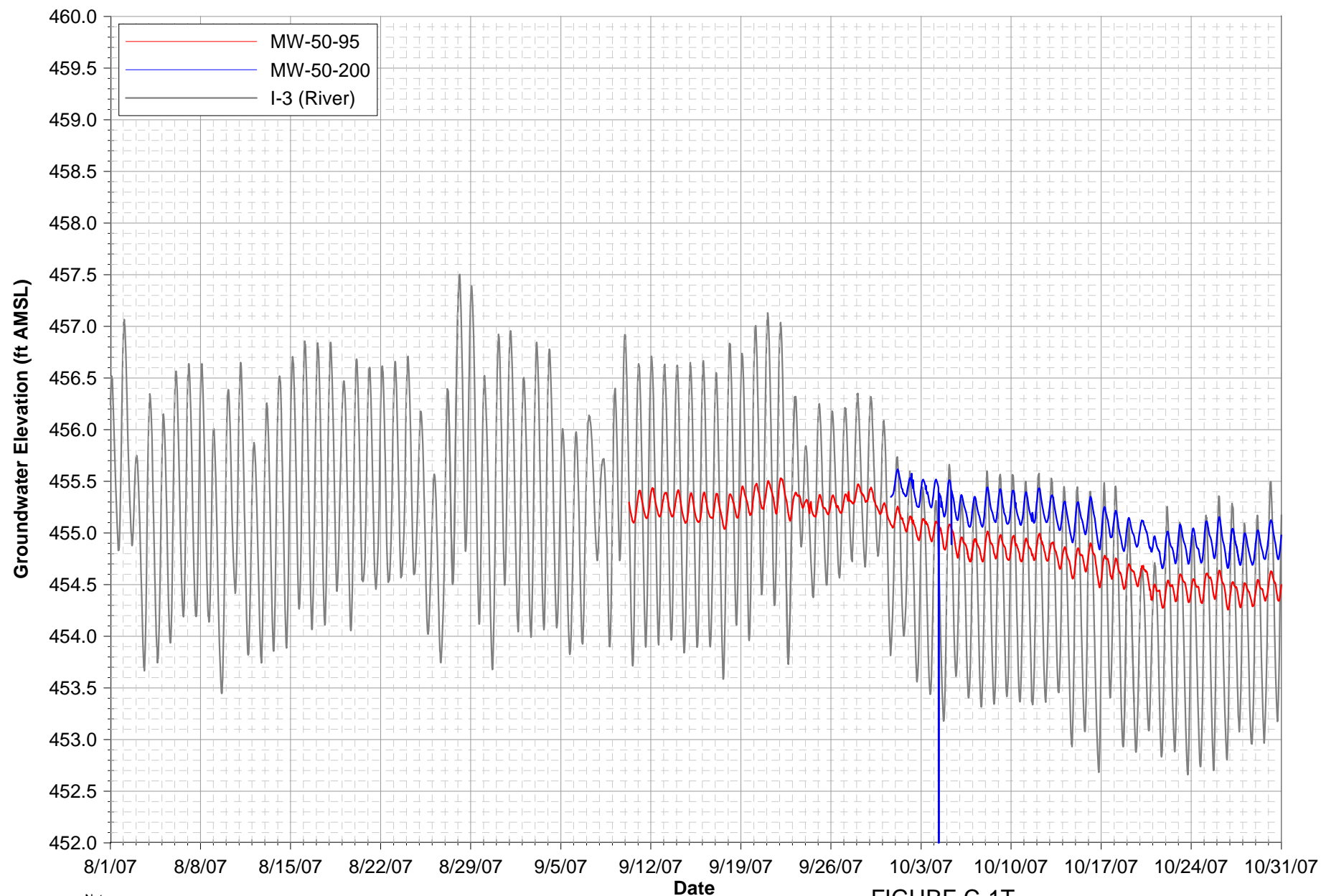
Notes:
Data subject to review.
MW-47-55: no 3rd quarter data
until 9/6/2007.

FIGURE C-1R
MW-47 CLUSTER HYDROGRAPHS
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



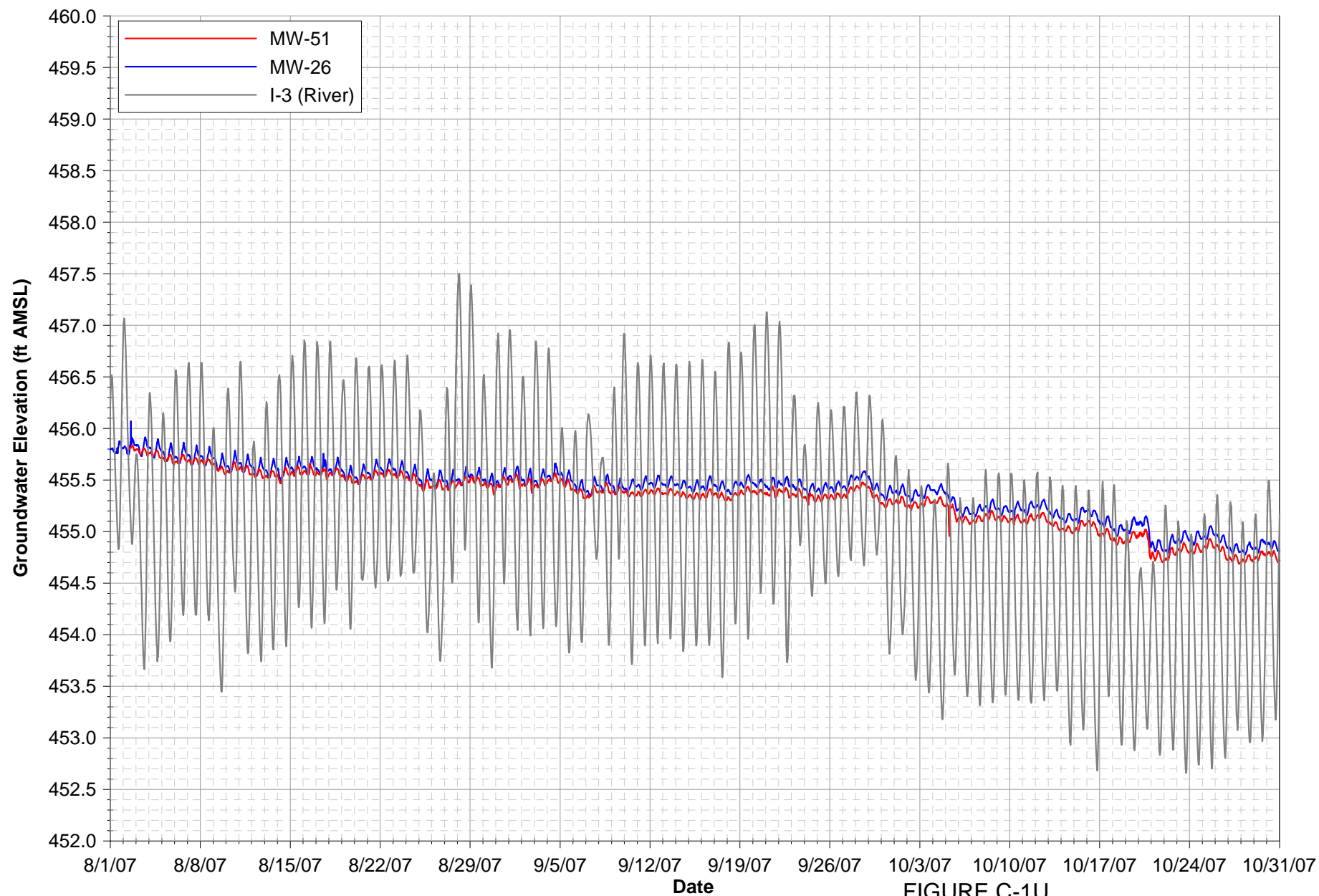
Notes:
Data subject to review.

FIGURE C-1S
MW-49 CLUSTER HYDROGRAPHS
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



Notes:
 Data subject to review.
 MW-50-95: No 3rd quarter data until
 9/10/2007.
 MW-50-200: No 3rd quarter data until
 10/1/2007.

FIGURE C-1T
MW-50 CLUSTER HYDROGRAPHS
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



Notes:
Data subject to review.

FIGURE C-1U
MW-51 & MW-26 HYDROGRAPHS
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

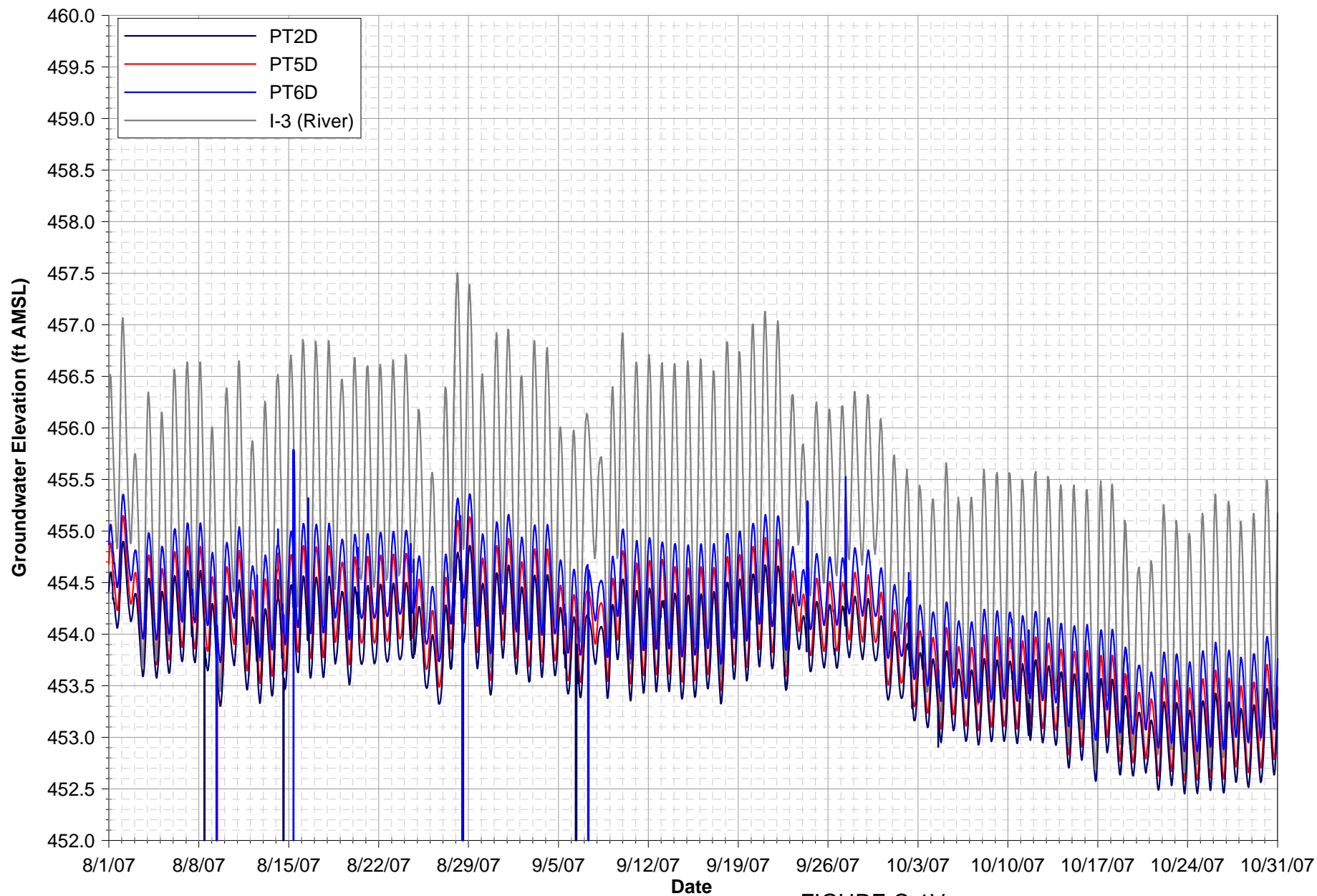
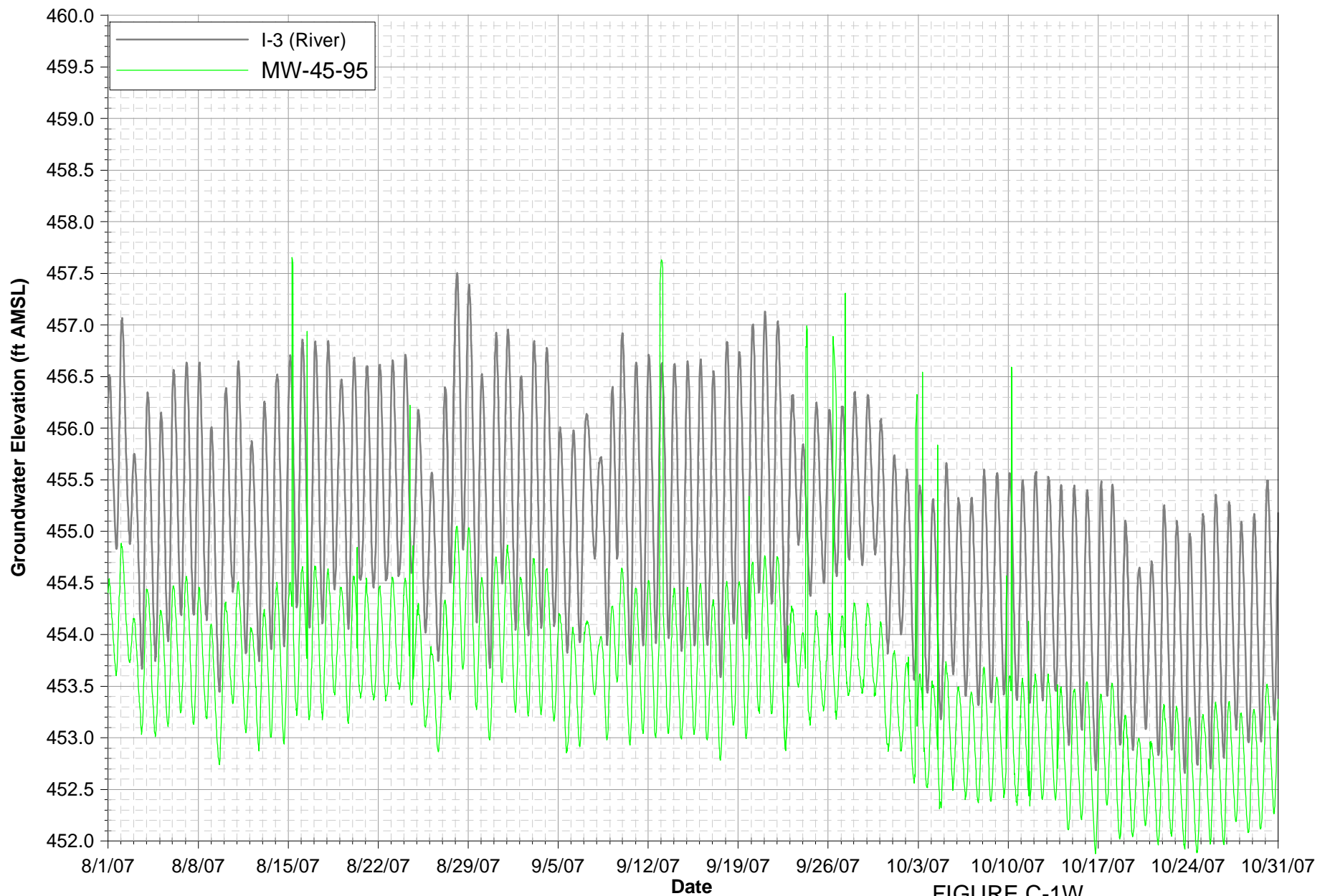


FIGURE C-1V
INSITU PILOT STUDY WELL HYDROGRAPHS
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



Notes:
Data subject to review.

FIGURE C-1W
MW-45-95 HYDROGRAPH
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

Appendix D
Chemical Performance Monitoring
Analytical Results

TABLE D-1

Chemical Performance Monitoring Results, March 2005 through October 2007

Interim Measures Performance Monitoring

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	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
	10-Mar-06	1940	-7.2	-54.0	679	358	10.5	ND (0.5)	161	48.6	9.22	424	0.427	82.2
	05-May-06	1750	-8.2	-55.9	696	376	9.86	0.574	162	49.2	9.55	461	0.476	74.5
	03-Oct-06	1890	-8.1	-60.4	677	357	13	ND (5)	158	47.6	9.82	472	0.535	85
	03-Oct-06 FD	1840	-8.1	-60.5	669	352	12.9	ND (5)	154	45.9	9.51	466	0.515	80
	13-Dec-06	1910	-7.6	-61.2	678	352	12.7	0.699	149	44.3	9.09	458	0.459	77.5
	14-Mar-07	1740	-8.5	-64.3	689	358	13.7	0.641	139	42.2	8.83	451	0.503	80
	03-May-07	1750	-8.4	-66.7	697	344	25.1	ND (1)	139	41.2	8.65	390	0.477	77.5
	11-Oct-07	1820	-8.2	-63.9	699	367	15.6	ND (1)	130	39.1	---	600	---	80
MW-20-100	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
	10-Mar-06	2500	-5.6	-50.3	861	475	9.94	ND (0.5)	171	27	7.75	597	0.803	92.5
	05-May-06	2260	-5.1	-46.4	927	522	9.99	ND (1)	193	32	10.8	577	0.716	82.5
	03-Oct-06	2320	-5.8	-51.5	863	456	13.4	ND (5)	202	34.4	10.9 J	568	0.874	90
	13-Dec-06	1960	-6.2	-54.4	861	459	12.3	0.83	205	32.2	11.4	579	0.889	97.5
	13-Dec-06 FD	2200	-6.2	-54.5	874	457	12.2	0.851	205	32.2	9.55	575	0.881	92.5
	14-Mar-07	2180	-6.8	-57.8	847	477	14.2	0.785	194	31.7	9.9	521	0.715	87.5
	03-May-07	2300	-7.3	-59.2	879	493	23.2	ND (1)	209	36	12 J	559	0.699	87.5
	03-May-07 FD	2330	-6.7	-59.3	888	484	19.7	ND (1)	208	34.6	9.63 J	532	0.686	87.5
	10-Oct-07	2160	-7.2	-57.2	858	468	3.25	ND (1)	---	---	---	---	---	92
MW-20-130	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

TABLE D-1

Chemical Performance Monitoring Results, March 2005 through October 2007

Interim Measures Performance Monitoring

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-20-130	10-Mar-06	8610	-5.5	-48.8	3370	1250	10.6	ND (0.5)	312	18.9	27.7	2730	2.03	74.5
	05-May-06	7700	-5.3	-47.2	3900	1280	8.95	ND (1)	349	20.3	27.7	2810	2.4	69.2
	18-Oct-06	8450	-6.3	-51.4	3680	1100	11.5	ND (5)	358	20.9	28	2870	2.28	70
	13-Dec-06	7890	-6	-54.9	3970	1250	10.6	0.896	335	19.7	27.6	2900	2.31	72.5
	13-Dec-06 FD	8250	-5.9	-54.4	3950	1260	10.5	1.09	328	19.1	27.3	2830	2.24	72.5
	08-Mar-07	8450	-6.5	-57.7	3930	1240	11.3	1.08	353	21.3	27	2760	2.24	70
	08-Mar-07 FD	8510	-6.6	-57.4	3900	1210	11.3	1.06	351	21.3	26.8	2750	2.19	72.5
	03-May-07	8150	-7.7	-60.0	4020	1310	9.8 J	ND (1)	338	22.5	27.8	2550	2.49	75
	03-May-07 FD	8100	-6.9	-60.1	3950	1290	20.4 J	ND (1)	338	21.9	27.3	2550	2.47	72.5
	05-Oct-07	7980	-7	-57.5	3670	1070	11.6	ND (1)	310	19	31	2900	2.4	77
MW-25	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
	09-Mar-06	910	-8.4	-64.1	245	164	3.83	ND (0.5)	76.4	15.6	6.97	210	0.39	170
	03-May-06	907	-9	-59.4	272	172	3.95	ND (0.5)	78	17.3	7.38	222	0.418	150
	03-May-06 FD	924	-9	-61.0	274	173	3.94	ND (0.5)	79.7	17.8	7.53	245	0.431	155
	03-Oct-06	892	-8.9	-62.7	222	158	4.09	ND (0.5)	73.3	15	7.25	206	0.466	163
	06-Mar-07	843	-9	-66.9	221	164	3.95	ND (0.5)	72.9	14.4	6.85	203	0.459	160
	02-Oct-07	796	-9	-65.8	189	155	4.58	ND (1)	66	14	7.9	200	0.49	180
	02-Oct-07 FD	758	-9	-65.7	195	157	4.4	ND (1)	63	13	7.7	220	0.46	190
MW-26	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
	08-Mar-06	2070	-8.6	-60.4	772	324	4.9	ND (0.5)	155	38.1	11.7	434 J	0.621	121
	01-May-06	2130	-8.9	-62.7	927	382	4.87	ND (0.5)	165	42	12.8	555	0.723	121

TABLE D-1

Chemical Performance Monitoring Results, March 2005 through October 2007

Interim Measures Performance Monitoring

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-26	03-Oct-06	2220	-8.8	-63.0	894	370	6.22	ND (2.5)	170	43.9	12.8	510	0.692	105
	12-Mar-07	2280	-9	-67.0	917	387	6.02	0.646	163	41.6	12.9	621	0.622	90
	02-Oct-07	2180	-8.6	-66.3	945	391	7.84	ND (1)	170	42	15	620	0.66	100
MW-27-20	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
	06-Mar-06	664	-12.1	-90.9	89.7	231	ND (0.2)	ND (0.2)	89.1	28.8	4.9	103	ND (0.2)	385
	14-Jun-06	730	-12	-89.8	98.3	272	ND (0.5)	ND (0.5)	91.1	28.5	2.79 J	96.9	ND (0.2)	195
	03-Oct-06	600	-13.1	-96.6	90.8	261	ND (0.5)	ND (0.5)	102	34.5	6.45	113	ND (0.2)	160
	02-Oct-07	802	-12.5	-96.3	102	320	ND (1)	ND (1)	97	34	5.3	150	0.22	170
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
	09-Mar-06	746	-11.5	-93.9	84.4	225	ND (0.5)	ND (0.5)	98.5	27.5	4.15 J	88.5	ND (0.2)	244
	05-May-06	741	-11.4	-90.3	110	302	ND (0.5)	ND (0.5)	117	35.7	5.77	118	ND (0.2)	216
	11-Oct-06	1050	-12.2	-95.0	86.3	247	ND (0.5)	ND (0.5)	133	40.8	5.47	132	ND (0.2)	225
	04-Oct-07	812	-12.1	-98.7	110	307	ND (1)	ND (1)	120	37 J	4.8	150	0.26 J	230
MW-30-30	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
	13-Mar-06	39700 J	-8.8	-70.5	18600	4530	ND (0.5)	ND (50)	1050	892	77.2	11300	4.62	650
	02-May-06	32400	-10.3	-70.7	15400	3300	ND (0.5)	ND (5)	882	828	59.4	10280	3.95	756
	10-Oct-06	29400	-9.4	-68.7	17800	4400	ND (2.5)	ND (2.5)	729	653	55	10200	4.32	550
	08-Oct-07	27400	-9	-73.9	13700	3370	ND (1)	3.88	---	---	---	---	---	800
MW-30-50	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
	09-Mar-06	5380	-9.8	-83.5	2420	651	ND (0.5)	ND (0.5)	226	66.2	14.6	1640	1.18	275

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Chemical Performance Monitoring Results, March 2005 through October 2007

Interim Measures Performance Monitoring

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-30-50	02-May-06	5420	-10.4	-73.6	2380	612	ND (0.5)	3.41	243	70.3	16.4	1750	1.22	261
	11-Oct-06	4170	-10.7	-82.2	1980	468	ND (0.5)	ND (0.5)	171	48.5	14	1370	1.11	290
	11-Oct-06 FD	3930	-11	-82.6	1810	462	ND (0.5)	ND (0.5)	163	46.1	14.1	1340	1.08	298
MW-31-60	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
	15-Mar-06	1560 J	-8.6	-65.6	661	191	4.37	ND (0.5)	106	17.5	7.3	403	0.393	89.3
	15-Mar-06 FD	1640 J	-8.6	-64.9	662	192	4.34	ND (0.5)	101	16.8	6.94	391	0.383	81.9
	01-May-06	1630	-9.6	-63.2	691	209	4.58	ND (0.5)	118	20.1	7.78	467	0.449	79.6
	05-Oct-06	1620	-9.4	-66.3	687	205	5	ND (0.5)	113	20.6	9.6 J	325	0.464	80
	12-Mar-07	1750	-9.3	-69.0	757	222	4.93	ND (0.5)	116	20.3	6.05	454	0.402 J	72.5
	04-Oct-07	1720	-9.4	-69.6	799	208	5.15	ND (1)	150	26	7.3	580	0.64	80
MW-32-20	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
	10-Mar-06	20900	-8.3	-65.5	10600	1970	ND (0.5)	ND (0.5)	1350	530	56.1	6440	3.54	432
	04-May-06	16900	-8.1	-64.9	9430	1380	ND (0.5)	2.35	937	445	46	4780	2.87	218
	02-Oct-06	46200 J	-8.6	-67.1	20200	3190	ND (2.5)	7.3	1870	1070	87	11300	6.34	660
	11-Dec-06	37900	-8	-67.0	17900	3020	ND (5)	7.67	1530	785	81.7	8420	4.98	825
	06-Mar-07	27600	-8.7	-72.7	16200	2210	0.925	5.93	1460	635	64.4	7110	3.92	765
	30-Apr-07	17700	-9.6	-78.1	9820	1310	ND (0.2)	3.78	965	484	51.4	5520	3.02	770
	01-Oct-07	37200	-8.3	-70.1	20600	3160	ND (1)	6.44	1800	1100	93	9900	5.7	700
MW-32-35	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
	10-Mar-06	9230	-8.6	-74.0	4210	1010	ND (0.5)	ND (0.5)	654	129	19.2	2360	1.13	234
	04-May-06	9840	-9.1	-67.8	4960	1130	ND (0.5)	ND (0.5)	693	148	19.5	2800	1.38	218

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Chemical Performance Monitoring Results, March 2005 through October 2007

Interim Measures Performance Monitoring

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-32-35	02-Oct-06	11200	-9.4	-71.4	5430	1050	ND (2.5)	ND (2.5)	839	165	23.9	3260	1.48	290
	11-Dec-06	10400	-9	-70.4	5090	1000	ND (0.5)	1.9	845	173	22.5	2620	1.43	338
	06-Mar-07	12600	-10.2	-75.4	6070	1200	ND (0.5)	2.65	1080	209	23.5	2910	1.35	360
	30-Apr-07	12100	-9.9	-78.7	6610	1280	ND (0.2)	2.6	1250	273	26.2	3280	1.35	475
	01-Oct-07	13700	-8.9	-72.7	6830	1120	ND (1)	2.62	1000	390	29	4000	1.7	490
MW-34-55	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
	08-Mar-06	4850	-10.8	-86.8	2080	593	ND (0.5)	ND (0.5)	256	54.2	13.5	1640	0.956	272
	03-May-06	4320	-11.5	-84.3	2070	500	ND (0.5)	ND (0.5)	198	44.8	11.1	1360	0.846	302
	04-Oct-06	1680 J	-12.2	-94.8	443	230	ND (0.5)	ND (0.5)	37.6	8.08	4.59	536	0.54	368
	03-Oct-07	730	-11.3	-96.6	109	266	ND (1)	ND (1)	15	3.3	3.3	290	0.26	190
MW-34-80	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
	09-Mar-06	7830	-9.9	-86.8	3520	986	ND (0.5)	ND (0.5)	383	65.8	24	2420	1.49	313
	03-May-06	7950	-11.7	-77.6	3700	921	ND (0.5)	ND (0.5)	425	70.3	23.9	2480	1.38	297
	04-Oct-06	7080	-11.3	-81.8	3210	786	ND (0.5)	0.737	341	65.4	21.1	2170	1.31	268
	12-Dec-06	6510	-10.5	-80.9	3190	789	ND (0.5)	0.742	298	62.9	18.9	2040	1.26	288
	05-Mar-07	6360 J	-11.5	-85.8	3300	783	ND (0.5)	0.72	315	68.3	19.4	2020	1.29	205
	30-Apr-07	6390	-11.5	-88.9	3320 J	889 J	ND (0.2)	ND (1)	282	57	18.6	2080	1.33	245
	03-Oct-07	5490	-11.3	-87.8	2630	696	ND (1)	ND (1)	220	53	21	2000	1.2	240
Surface Water Stations														
R-27	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

TABLE D-1

Chemical Performance Monitoring Results, March 2005 through October 2007

Interim Measures Performance Monitoring

PG&E Topock Compressor Station

Location	Sample Date	Total Dissolved Solids	Oxygen 18	Deuterium	Chloride	Sulfate	Nitrate	Bromide	Calcium	Magnesium	Potassium	Sodium	Boron	Alkalinity
Surface Water Stations														
R-27	06-Mar-06	656	-11.8	-92.1	90.6	268	ND (0.5)	ND (0.5)	83.5	29.4	5.44 J	101	ND (0.2)	144
	03-May-06	567	-12.8	-93.9	93.1	267	ND (0.5)	ND (0.5)	87	31.1	3.12 J	106	ND (0.2)	139
	04-Oct-06	752 J	-12.2	-94.9	91.5	261	ND (0.5)	ND (0.5)	82.9	31.5	6.24 J	98.1	ND (0.2)	128
	20-Dec-06	680	-12.7	-98.1	94.5	266	ND (0.5)	ND (0.5)	83.2	30.9	3.64	106	ND (0.2)	138
	13-Mar-07	750 J	-13	-99.5	96.5	267	0.537	ND (0.5)	86.9	31.3	4.73	106	ND (0.2)	130
	08-May-07	715 J	-12.9	-103.6	92.6	269	ND (0.5)	ND (0.5)	84.3	29.8	5.55	100	ND (0.2)	143
	11-Sep-07	650	-12.5	-100.5	89.4	253	0.336	ND (0.2)	74.2	28.9	5.47	86.5	ND (0.2)	132
R-28	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
	06-Mar-06	675	-12.3	-93.4	91	270	ND (0.5)	ND (0.5)	76.6	26.6	5.22 J	91.5	ND (0.2)	146
	03-May-06	586	-13	-92.1	93.4	270	ND (0.5)	ND (0.5)	88.1	31.4	4.04 J	107	ND (0.2)	136
	04-Oct-06	644 J	-12.6	-95.3	90.9	259	ND (0.5)	ND (0.5)	84.2	32.1	6.17 J	96.5	ND (0.2)	133
	20-Dec-06	615	-12.4	-99.6	93.3	262	ND (0.5)	ND (0.5)	85.7	32	4.66	108	ND (0.2)	143
	14-Mar-07	710	-12.8	-100.4	96.7	268	0.534	ND (0.5)	87.9	31	5.71	105	ND (0.2)	133
	09-May-07	690	-13	-102.3	95.8	271	ND (0.5)	ND (0.5)	86.1	30.5	5.92	103	ND (0.2)	143

NOTES:

FD = field duplicate sample

ND =parameter not detected at the listed reporting limit.

J = concentration or reporting limit 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

General chemistry 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).