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May 30, 2008

Mr. Aaron Yue
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5796 Corporate Avenue
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Subject: First Quarter 2008 Performance Monitoring Report
Interim Measures Performance Monitoring Program
PG&E Topock Compressor Station, Needles, California

Dear Mr. Yue:

Enclosed is the *Quarterly Performance Monitoring Report and Evaluation, February through April 2008* for PG&E's Interim Measures (IM) performance monitoring program for the Topock project. This report presents the First Quarter (February through April 2008) performance monitoring results for the Interim Measure (IM) hydraulic containment system and summarizes the operations and performance evaluation for the reporting period. The quarterly performance monitoring report is submitted in conformance with the reporting requirements in DTSC's IM directive dated February 14, 2005, and includes updates and modifications approved by DTSC in a letter dated October 12, 2007.

As approved by DTSC on May 5, 2008, this report also fulfills the requirement for reporting of the offline period of the IM extraction system from April 21 through 28, 2008. The IM extraction system was shutdown for scheduled annual maintenance of the IM No. 3 treatment plant during this time. The IM performance metrics for average landward gradient at all key well pairs were maintained during the month the shutdown occurred, and throughout the February through April reporting period.

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

Sincerely,

Cc: Chris Guerre
Enclosure

Quarterly Performance Monitoring Report and Evaluation, February through April 2008

**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

May 30, 2008

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Quarterly Performance Monitoring Report and Evaluation, February through April 2008

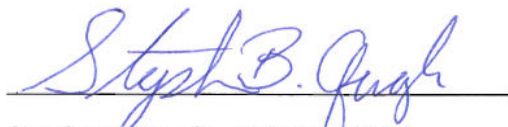
Interim Measures Performance Monitoring Program PG&E Topock Compressor Station Needles, California

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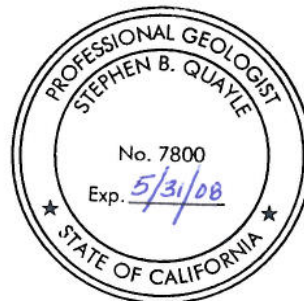
This report was prepared under the supervision of a
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Acronyms and Abbreviations

µg/L	micrograms per liter (essentially the same as parts per billion [ppb])
cfs	cubic feet per second
Cr(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

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

The February 2005 DTSC directive also defined the monitoring and reporting requirements for the IM. The 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 first quarter reporting period covers monitoring activities from February 1 through April 30, 2008.

Following DTSC approval, the IM No. 3 extraction system was shut down between April 21 and April 28, 2008 for planned annual maintenance of the treatment plant. This report fulfills the DTSC requirement for reporting “if the IM3 extraction system is offline for an extended period of time” (DTSC, 2007b). Incorporating the April 2008 IM No. 3 downtime reporting requirement in this quarterly performance monitoring report was approved by DTSC in an e-mail dated May 5, 2008 (DTSC, 2008a).

1.1 Report Organization

This first quarter 2008 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, February through April 2008 (Section 3.0).
- Conclusions (Section 4.0).
- The operations log for the IM No. 3 extraction system for the quarterly reporting period is provided in Appendix A and includes the details of the planned shutdown of the IM No. 3 extraction system during annual treatment system maintenance that occurred between April 21 and April 28, 2008.

2.0 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/active as of April 2008 are defined as:

- **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). Additionally, three pilot test wells installed on the floodplain (PT-2D, PT-5D, and PT-6D) are used to supplement hydraulic monitoring but are not formally part of the PMP.
- **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, as shown in Figure 1-1. In addition, extraction well PE-1 is located on the floodplain approximately 450 feet east of extraction well TW-3D, as shown in 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 in the floodplain area – 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.

3.0 Quarterly Performance Evaluation for February through April 2008

3.1 Extraction System Operations

Pumping data for the IM No. 3 groundwater extraction system for the period of February 1 through April 30, 2008 are presented in Table 3-1. (All tables are presented at end of the report.) From February 1 through April 30, 2008 (considered first quarter 2008), 15,571,041 gallons of groundwater were extracted and treated by the IM No. 3 system. This resulted in removal of an estimated 84.5 kilograms (or 186 pounds) of chromium from the aquifer during the first quarter reporting period. The average extraction rate for the IM system during the quarter, including system downtime, was 120.2 gallons per minute (gpm). The average monthly pumping rates were 133.4 gpm (February 2008), 124.4 gpm (March 2008), and 103.0 gpm (April 2008) during the quarterly reporting period.

During first quarter 2008, extraction wells TW-3D and PE-1 operated at a combined target pump rate of 135 gpm, excluding periods of planned and unplanned downtime. Extraction wells TW-2S and TW-2D were not operated during the first quarter 2008. The operational run time percentage for the IM extraction system was 89 percent during this reporting period. Excluding the planned annual maintenance downtime from April 21 through 28, 2008, the operational run time for the system was 97 percent for the reporting period. An operations log for the extraction system during the first quarter of 2008, including planned and unplanned downtime, is included in Appendix A.

The concentrate (i.e., saline water) 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 first quarter 2008. 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 chromium and total dissolved solids (TDS) analytical results in groundwater samples collected from the IM extraction well system during the first quarter 2008 reporting period and prior months. Chromium concentrations have been gradually decreasing at well PE-1 since January 2008. TDS concentrations have generally decreased slightly at well TW-3D during the reporting period. Future monitoring of the extraction well(s) water quality will be completed at the frequency required by the Waste Discharge Requirements issued for the IM No. 3 treatment facility.

3.2 Cr(VI) Distribution and Trends in the Floodplain Area

During first quarter 2008, groundwater monitoring wells in the floodplain area were sampled for Cr(VI), total chromium, and field water quality parameters under semiannual, quarterly, and monthly 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, 2007c).

The distribution of Cr(VI) in the upper, middle, and lower depth intervals of the Alluvial Aquifer in the performance monitoring area for March 2008 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 March 2008 groundwater sampling data and incorporate Cr(VI) distribution results from prior October–December 2007 sampling. Overall, the Cr(VI) concentration contours for March 2008 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 March 2008 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 in Appendix B present the chromium and field parameter sampling results from April 2007 through April 2008 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 April 2008 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 in 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, as shown in 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 fewer than 10 µg/L since August 2006. Concentrations in the deeper well MW-36-100 (well screen at the same level as the 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, shown in Figure 3-3, has shown both short-term declines and increases in concentrations since PE-1 pumping commenced. However, since July 2006, concentrations at this well have shown a general downward trend. The Cr(VI) result from April 8, 2008 sampling of MW-34-100 (292 µg/L) is the lowest concentration measured at this well since initial sampling in March 2005.

Monitoring well clusters MW-44 and MW-46 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 generally 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). 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).

In addition to the wells presented in Figure 3-3, declining Cr(VI) concentrations have been observed at the MW-39-70 and MW-39-80 wells, as shown in Appendix B, Table B-1, reflecting the pumping influence from TW-3D. The chromium concentrations observed in the MW-33 cluster wells remained consistent with previous results during the quarterly reporting period.

3.3 Hydraulic Gradients and River Levels during Quarterly Period

During first quarter 2008 (considered February through April), water levels were recorded at intervals of 30 minutes with pressure transducers in 62 wells and two river monitoring stations (I-3 and RRB). The data are typically continuous, with only short interruptions for sampling or maintenance. The locations of the wells monitored are shown in 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 first quarter 2008 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. 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. Groundwater elevation hydrographs (for first quarter 2008) for all wells with transducers are included in Appendix C. The Colorado River elevation (I-3 gage station) during the first quarter 2008 is also shown on the hydrographs. Average groundwater elevations for this reporting period include data during the time of the planned IM No. 3 extraction system shut down for maintenance activities (April 21 to 28, 2008).

Average quarterly groundwater elevations (February through April 2008 inclusive) for the upper depth interval and mid-depth wells are presented and contoured in plan view in Figure 3-4 and Figure 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 (February through April 2008 inclusive) for the deep wells are presented and contoured in plan view in Figure 3-6. The average quarterly groundwater elevations are also presented and contoured in floodplain cross-section A, as shown in 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 in Figure 3-6 and Figure 3-7 are consistent with the strong landward gradients measured and presented in the 2006 and 2007 monitoring reports (CH2M HILL, 2007b-c).

Hydraulic gradients were measured during the first quarter period (February through April 2008) for well pairs selected for performance monitoring with two pumping centers (TW-3D

and PE-1). The following well pairs were approved by DTSC on October 12, 2007 (DTSC, 2007a) to define the 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 February, March, and April 2008. 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 2.1 to 5.0 times, respectively, the target gradient of 0.001 feet per foot. For the central well pair (MW-45-95/MW-34-100), the average landward gradient ranged from 0.0074 to 0.0124 (more than 10 times the target gradient) during the reporting period.

Figure 3-8 presents a graphical display of the measured hydraulic gradients and pumping rates and river levels during the first quarter 2008 reporting period. During February through April 2008, the average daily river levels increased up to 4 feet. The monthly average pumping rates for the IM No. 3 system ranged from 133 gpm in February 2008 to 103 gpm in April 2008 (reflecting the planned maintenance system shutdown). For the first quarter 2008 reporting period, consistent average monthly landward gradients above the target gradient were maintained in the selected well pairs.

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.

3.4 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 described in the *Sampling, Analysis, and Field Procedures Manual, Revision 1, PG&E Compressor Station* (CH2M HILL, 2005b). The field water quality data measured from April 2005 through April 2008 are presented in Tables B-1 and B-2 of 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 April 2008. 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.

3.5 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 United States Bureau of Reclamation (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 February 2005. The actual Davis Dam April 2008 release (18,554 cubic feet per second [cfs]) was slightly greater than the USBR-projected release for the April reporting period (17,600 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 May 2008 (17,200 cfs) will be less than April 2008 (18,554 cfs). Based on the regression method results, using May 16, 2008 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 May 2008 will remain the same as the April 2008 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 2008 and January 2009. 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 second quarter 2008. The second quarter 2008 section will present operations and performance monitoring data from May 1, 2008 through July 31, 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 second quarter 2008, 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. Saline water 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 to 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.

4.0 Conclusions

The groundwater elevation and hydraulic gradient data for February, March, and April 2008 performance monitoring indicate that the minimum landward gradient target (0.001 feet/foot) was exceeded throughout the first quarter reporting period. As illustrated in Figure 3-8, the landward gradients measured during February, March, and April 2008 exceeded the required minimum gradient in all compliance well pairs. The current IM pumping was sufficient to meet the minimum gradient target during each of the 3 months of the first quarter 2008. The monthly average landward gradients in the IM capture zone were maintained in April 2008, which included the 7-day shutdown of the IM No. 3 extraction system during scheduled annual treatment system maintenance. The DTSC reporting requirement for reporting when “the IM3 extraction system is offline for an extended period of time” have been fulfilled in this report (DTSC, 2007b, 2008).

A total of 15,571,041 gallons of groundwater was extracted and treated by the IM No. 3 system during the February through April 2008 reporting period. An estimated 84.5 kilograms (or 186 pounds) of chromium were removed and treated by the IM system during this quarter. The average pumping rate for the IM extraction system during first quarter 2008, including system downtime, was 120.2 gpm.

Overall, the Cr(VI) concentrations observed in the floodplain monitoring wells are either stable or decreasing. During first quarter 2008, 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 first quarter period. All of these wells are within the IM extraction system capture zone, as shown in Figure 3-6.

Chromium concentrations at well MW-34-100 have shown a steady downward trend since July 2006, as shown in Figure 3-3. The recent April 8, 2008 Cr(VI) sampling result of 292 µg/L is the lowest concentration measured since initial sampling in 2005.

Based on the hydraulic and chemical performance monitoring data and evaluation presented in this report, the IM performance standard has been met for the first quarter February through April 2008 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.

5.0 References

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- _____. 2008b. E-mail. "PG&E: DTSC Concurrence of analytical method change for hexavalent chromium." January 19.
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- _____. 2007a. *Groundwater and Surface Water Monitoring Report, First Quarter 2007, PG&E Topock Compressor Station, Needles, California*. May 31.
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- _____. 2007c. *Performance Monitoring Report for July 2007 and Quarterly Performance Evaluation, May through July 2007, PG&E Topock Compressor Station, Needles, California*. August 30.

TABLE 3-1

Pumping Rate and Extracted Volume for IM System February through April 2008

Interim Measures Performance Monitoring

PG&E Topock Compressor Station

Extraction Well ID	February 2008		March 2008		April 2008		First Quarter 2008		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)	Average Pumping Rate ^b (gpm)	Volume Pumped (gal)	Cumulative Volume Pumped (gal)
TW-02S	0.00	0	0.00	0	0.00	0	0.00	0	1,000,779
TW-02D	0.00	0	0.00	0	0.00	0	0.00	0	53,058,650
TW-03D	102.09	4,263,341	94.44	4,215,795	78.60	3,395,408	91.71	11,874,545	120,701,618
PE-01	31.28	1,306,246	29.91	1,335,196	24.42	1,055,054	28.54	3,696,496	38,590,008
TOTAL	133.4	5,569,588	124.4	5,550,990	103.0	4,450,463	120.2	15,571,041	213,351,055
Volume Pumped from the MW-20 Well Cluster									1,527,724
Total Volume Pumped (gal)									214,878,779
Total Volume Pumped (ac-ft)									659.4

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, November 2007 through April 2008
 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-Nov-07	1570	1790	4910
TW-3D	12-Dec-07	2040	1800	5660
TW-3D	03-Jan-08	2210	1830	5070
TW-3D	06-Feb-08	1600	1760	5690
TW-3D	05-Mar-08	1740	1810	4730
TW-3D	02-Apr-08	2010	1550	4450
PE-1	13-Nov-07	51.8	49.6	4150
PE-1	12-Dec-07	54.5	47.3	4530
PE-1	03-Jan-08	56.9	48.4	3790
PE-1	06-Feb-08	44.1	42.8	4360
PE-1	05-Mar-08	40.8	39.5	4080
PE-1	02-Apr-08	37.1	29.0	4180

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.

TABLE 3-3

Average Hydraulic Gradients Measured at Well Pairs, February through April 2008

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

Well Pair ^a	Reporting Period	Mean Landward Hydraulic Gradient ^b (feet/foot)	Measurement Dates 2008
Northern Gradient Pair MW-31-135 / MW-33-150	February	0.0025	Feb 1 through Feb 29
	March	0.0023	March 1 through March 31
	April	0.0021	April 1 through April 30
Central Gradient Pair ^c MW-45-95 / MW-34-100	February	0.0124	Feb 1 through Feb 29
	March	0.0111	March 1 through March 31
	April	0.0074	April 1 through April 30
Southern Gradient Pair ^d MW-45-95 / MW-27-85	February	0.0050	Feb 1 through Feb 29
	March	0.0045	March 1 through March 31
	April	0.0032	April 1 through April 30

NOTES:^a Refer to Figure 2-1 for location of well pairs^b For IM pumping, the target landward gradient for the selected well pairs is 0.001 feet/foot^c With approval of DTSC, this well pair replaced MW-20-130 / MW-34-80.^d 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 at I-3
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	0.0
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	8,387	713	453.6	453.6	0.0
December 2007	5,700	6,445	-745	452.3	452.7	0.4
January 2008	9,300	8,900	400	453.5	453.6	0.1
February 2008	10,100	12,463	-2,363	454.5	454.7	0.1
March 2008	15,200	15,837	-637	455.6	455.9	0.3
April 2008	17,600	18,554	-954	456.6	457.0	0.4
May 2008	17,200	--	--	456.6	--	--

NOTES:

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

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>

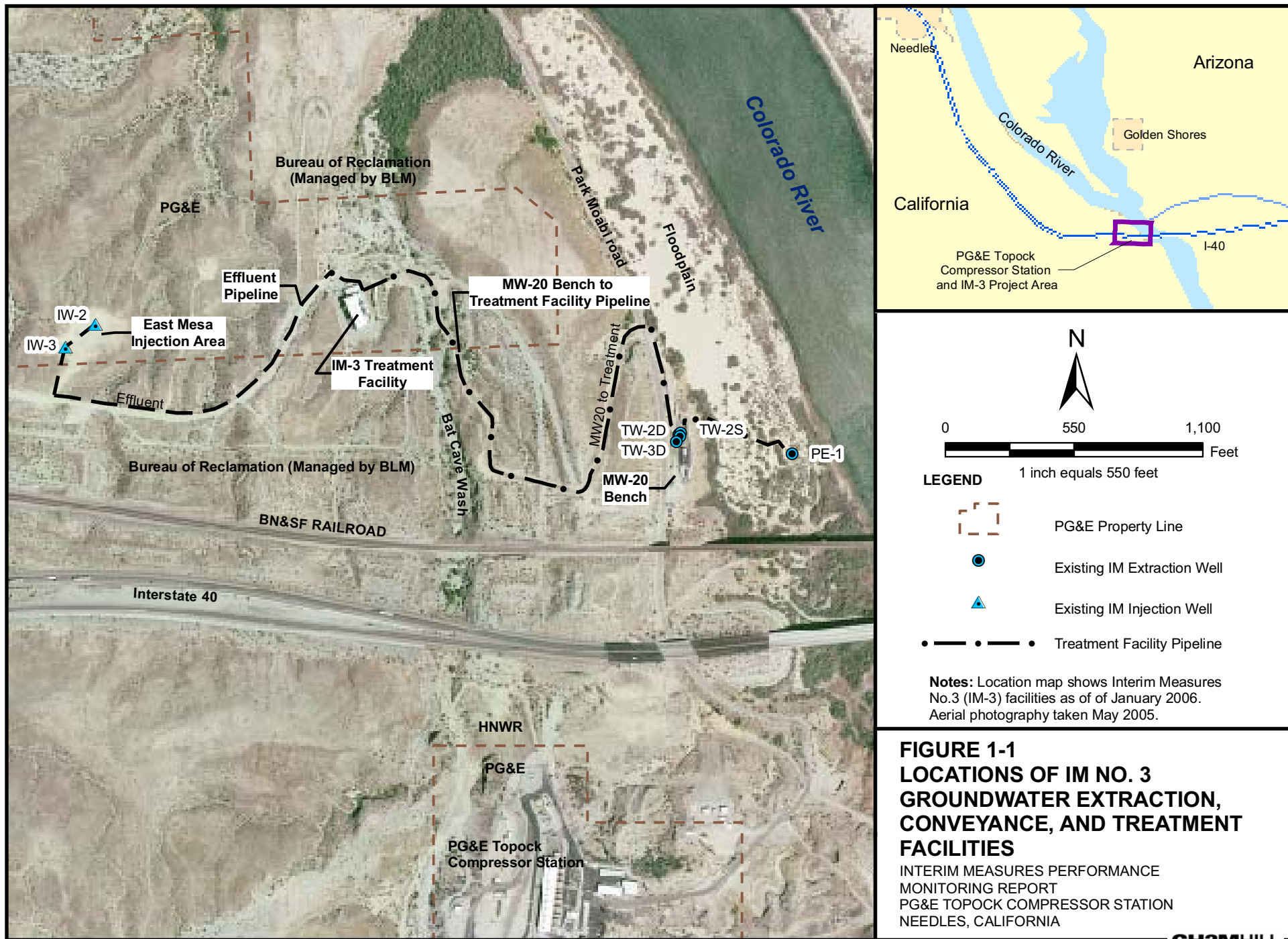
The difference in I-3 elevation is the difference between the I-3 elevation predicted, and the actual elevation measured at I-3.

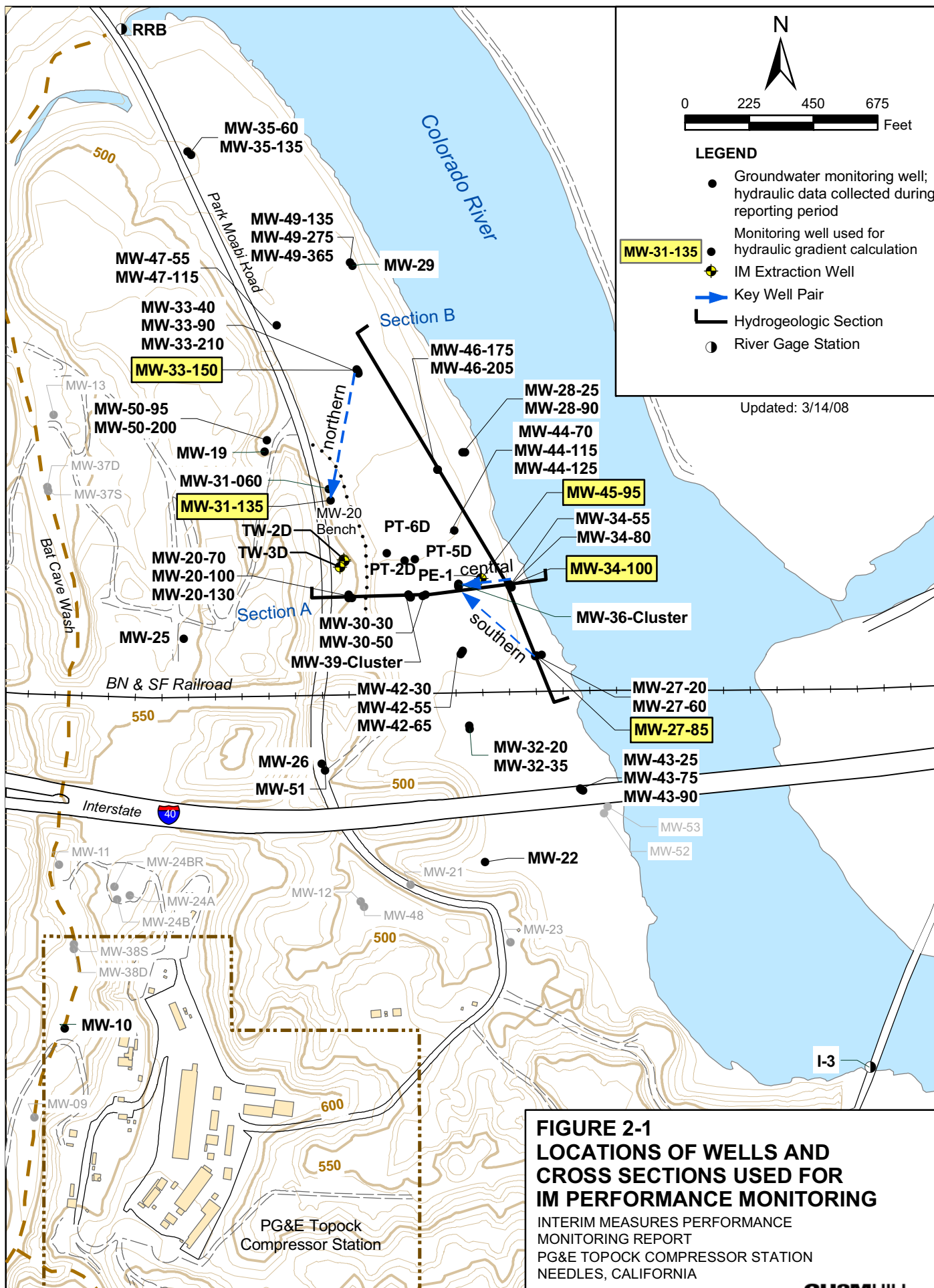
The main source of this difference is differences between BOR projections and actual dam releases/Havasu reservoir levels, rather than the multiple regression error.

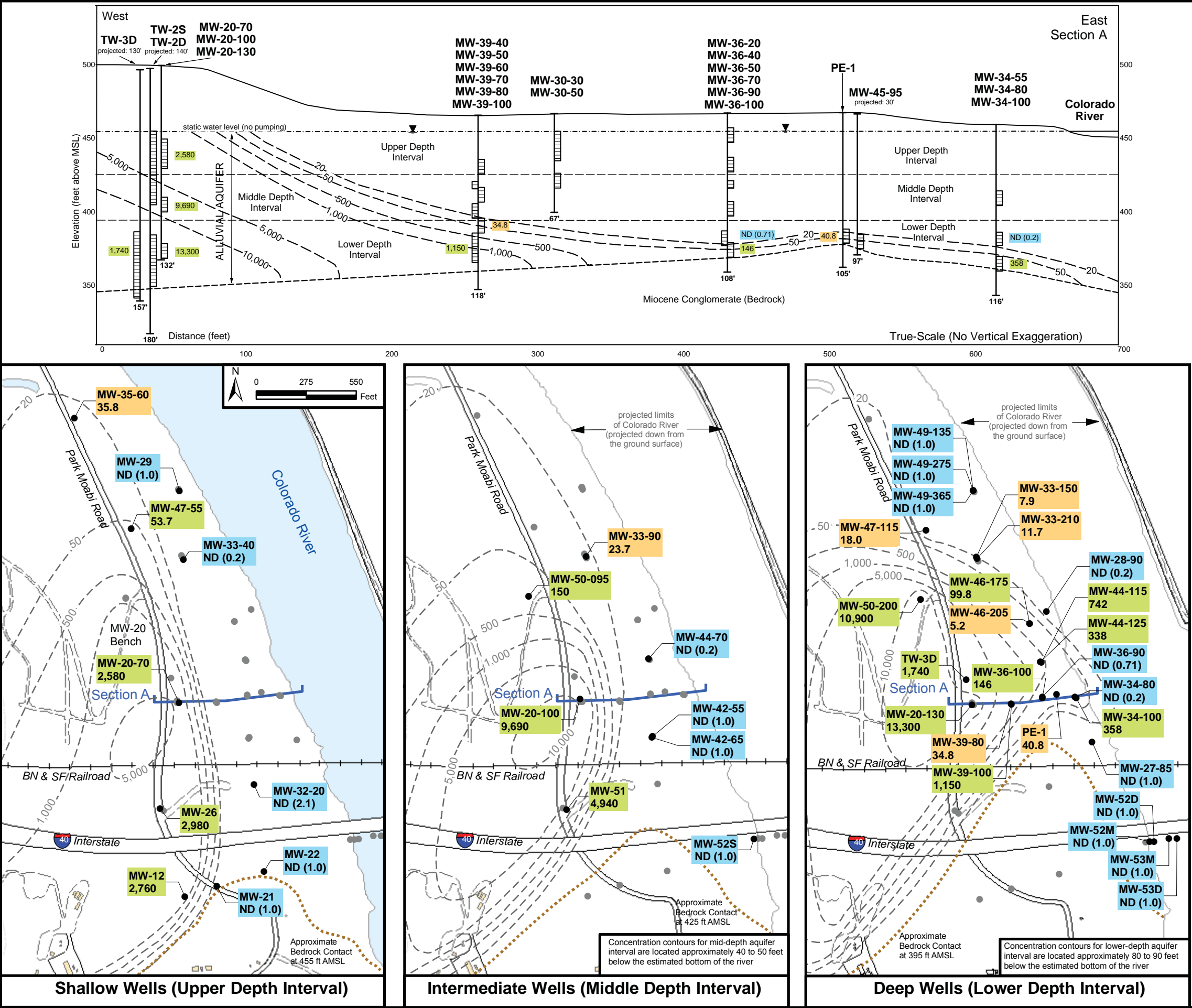
NA = I-3 transducer data unavailable for month of September 2005 due to damage by debris.

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

Figures







LEGEND
Maximum Hexavalent Chromium [Cr(VI)]
Concentrations in Groundwater,
March 2008

Results posted are maximum Cr(VI) concentrations from March 2008 groundwater sampling. Concentrations in micrograms per liter (µg/L) approximately equivalent to parts per billion (ppb).

See Tables B-1 and B-2 for additional sampling data and prior results for wells that were not sampled in February - April 2008 reporting period.

- ND (1)** Not detected at listed reporting limit (ppb)
- 41** Less than 50 ppb
- 3,810** Greater than 50 ppb

-- 50 -- Inferred Cr(VI) concentration contour within aquifer depth interval

The contours depicted for March 2008 reflect the maximum concentration for wells within each depth interval and incorporate Cr(VI) distribution results from prior October - December 2007 sampling (Tables B-1 and B-2).

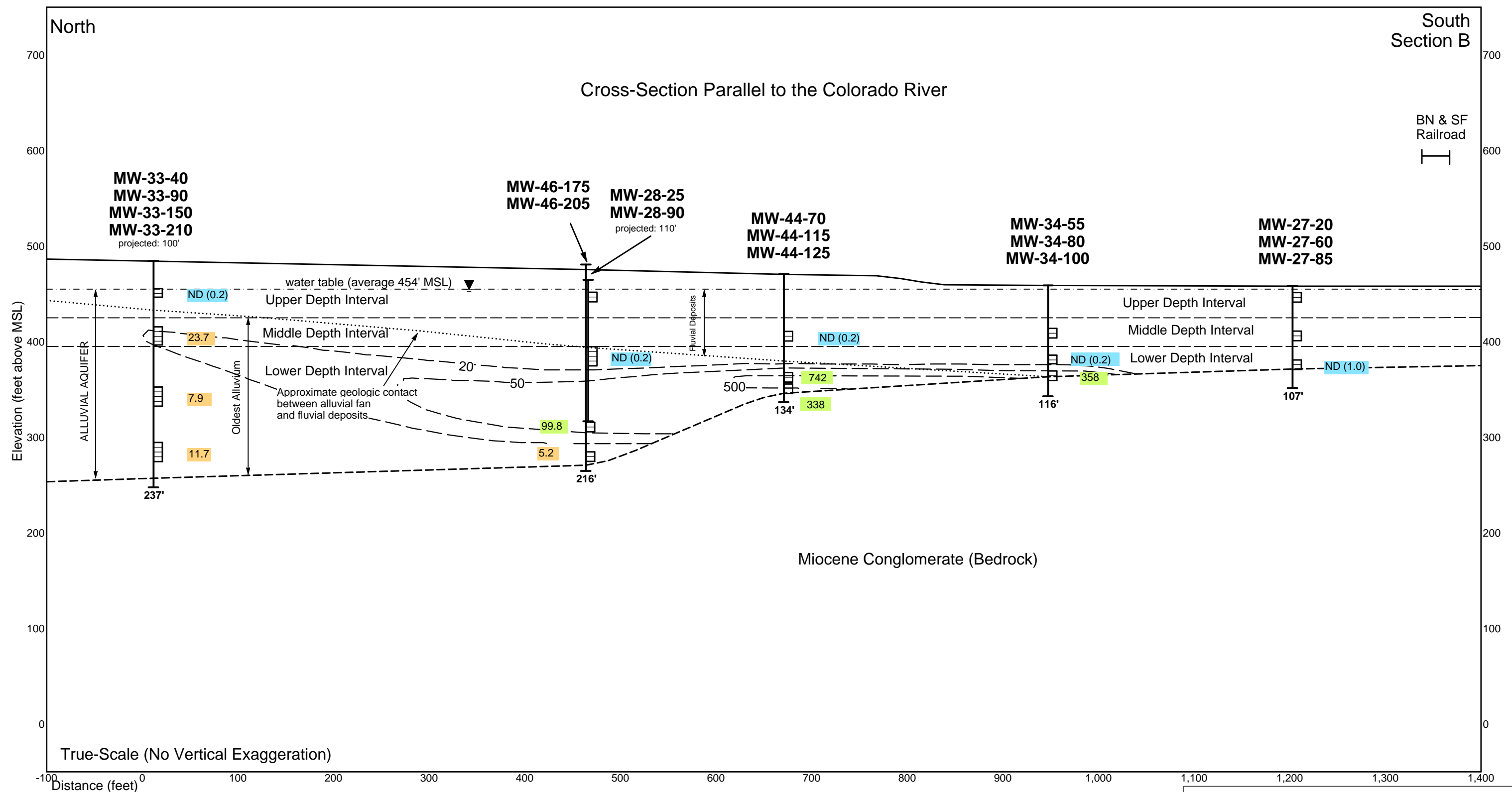
Hydrogeologic Section A showing aquifer depth intervals and Cr(VI) sampling results

NOTES ON CONTOUR MAPS

1. The Cr(VI) contour maps for IM performance monitoring incorporate data from new wells and water quality data trends for the floodplain area. The contour maps provide additional interpretation of plume limits and do not reflect plume migration during performance monitoring.
2. The locations of the Cr(VI) contours shown for depths 80-90 feet below the Colorado River (east and southeast of well clusters MW-34) are estimated based on hydrogeologic and geochemical conditions documented in site investigations. The actual locations of contours beyond well control points in these areas are not certain, but are inferred using available site data (bedrock structure, hydraulic gradients, observed distribution of geochemically reducing conditions and Cr(VI) concentration gradients). There are no data confirming the existence of Cr(VI) under the Colorado River.
3. Extraction wells PE-1 and TW-3D are not included in contouring. These wells draw water from a larger area and do not represent Cr(VI) concentrations at their specific locations.

FIGURE 3-1
MAXIMUM Cr(VI) CONCENTRATIONS
IN ALLUVIAL AQUIFER, MARCH 2008

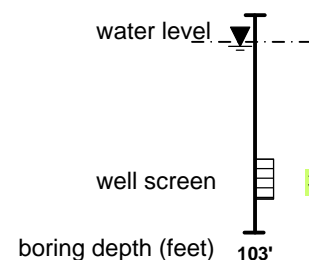
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPECO COMPRESSOR STATION
NEEDLES, CALIFORNIA



Notes:

Results posted are maximum Cr(VI) concentrations from March 2008 groundwater sampling.

See Table B-1 for additional sampling data and prior results for wells on this cross-section that were not sampled in the February - April 2008 reporting period.



--- 50 ---
Inferred Cr(VI) concentration contour

The contours depicted for March 2008 incorporate Cr(VI) distribution results from prior October-December 2007 sampling (Table B-1).

Hexavalent Chromium [Cr(VI)] concentration in micrograms per liter (ug/L), equivalent to parts per billion (ppb).

ND (1.0) Not detected at listed reporting limit (ppb)

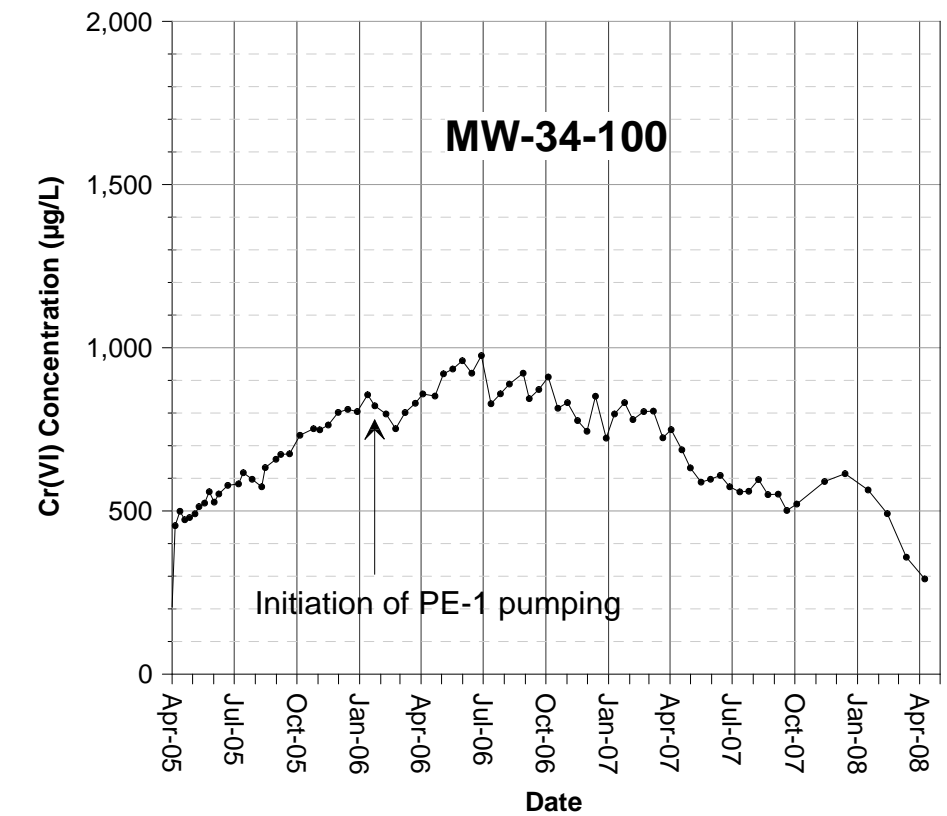
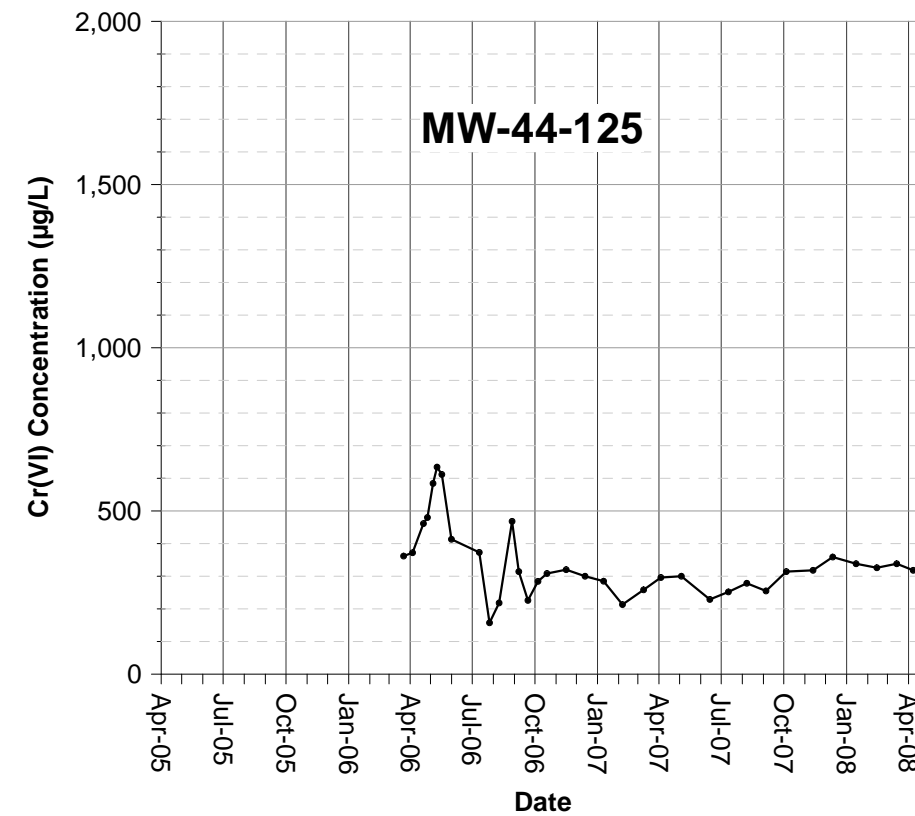
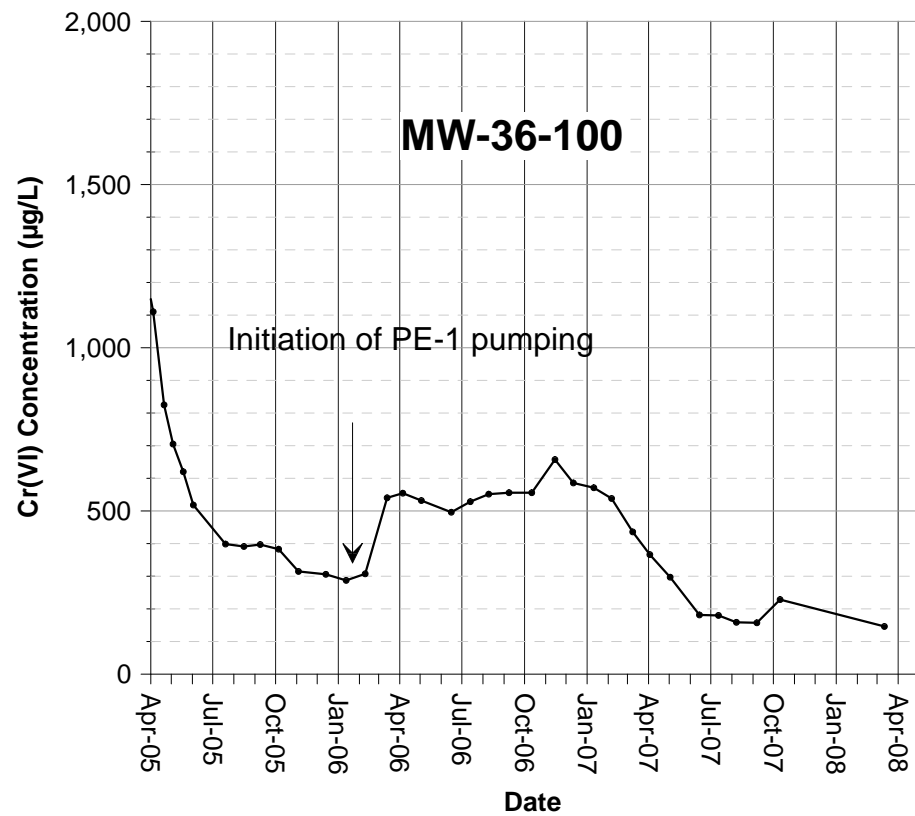
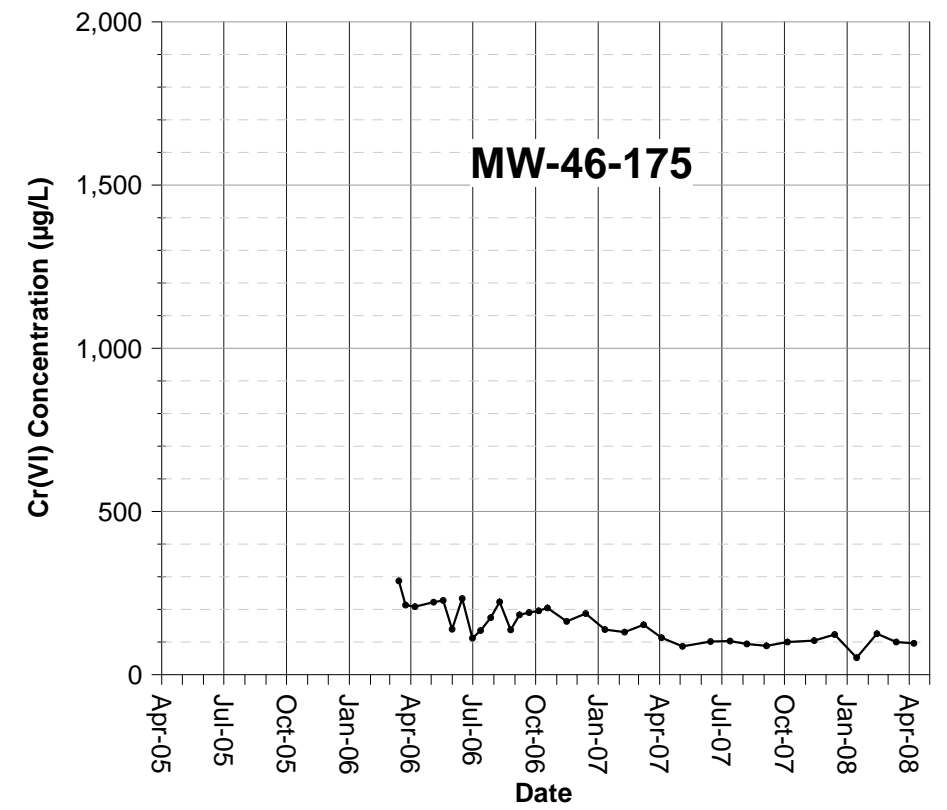
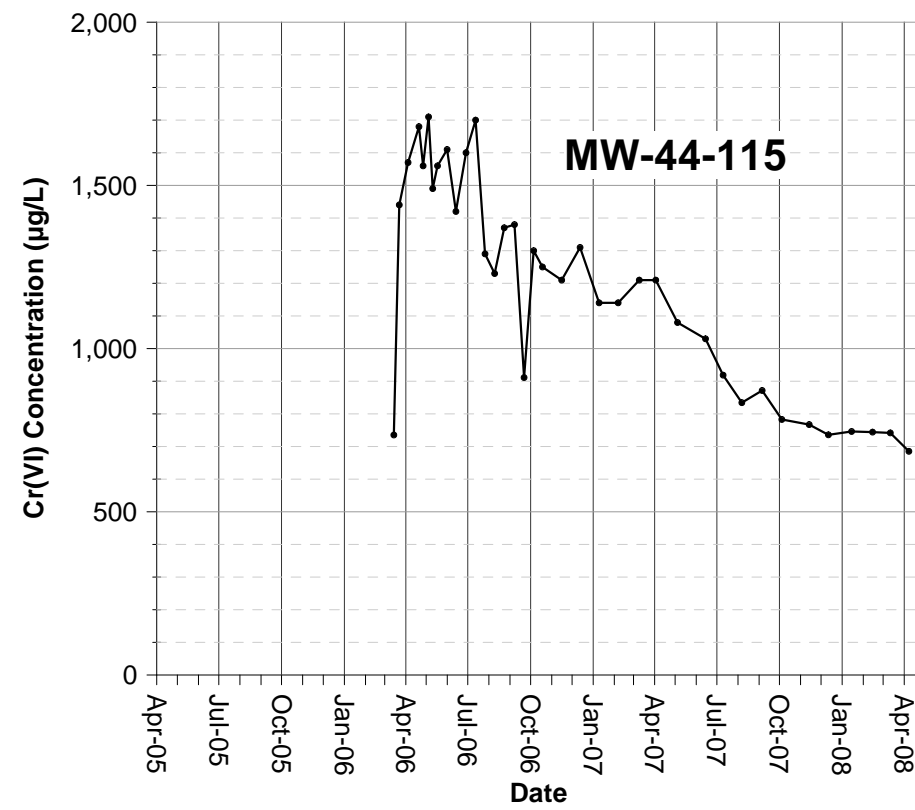
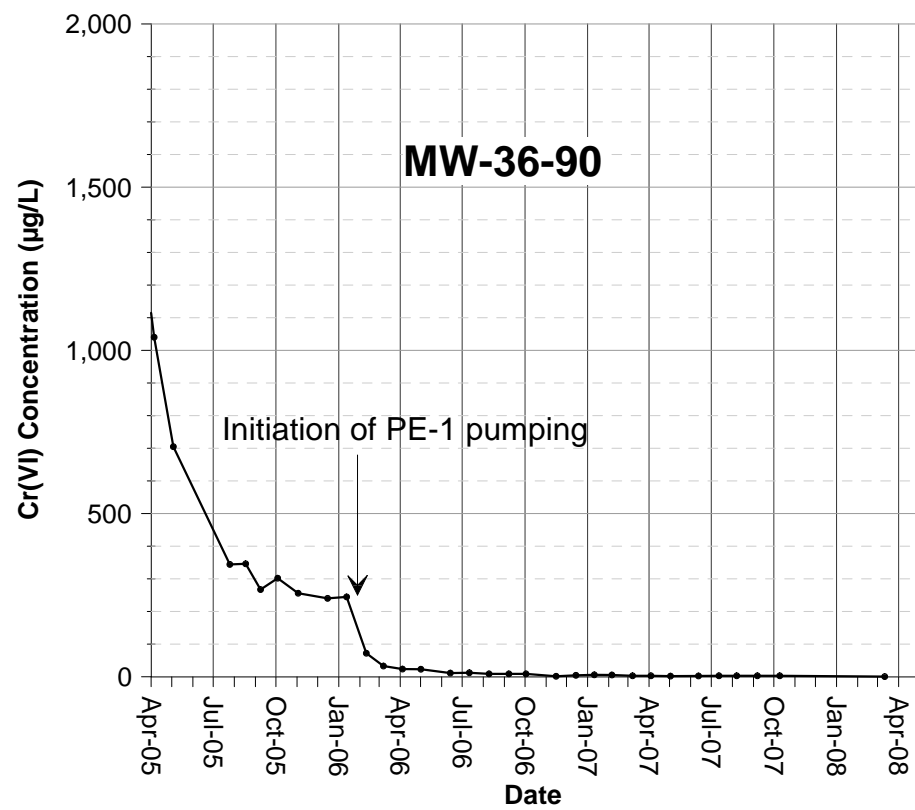
42 Less than 50 ppb

3,810 Greater than 50 ppb

FIGURE 3-2
Cr(VI) CONCENTRATIONS
FLOODPLAIN CROSS-SECTION B,
MARCH 2008

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

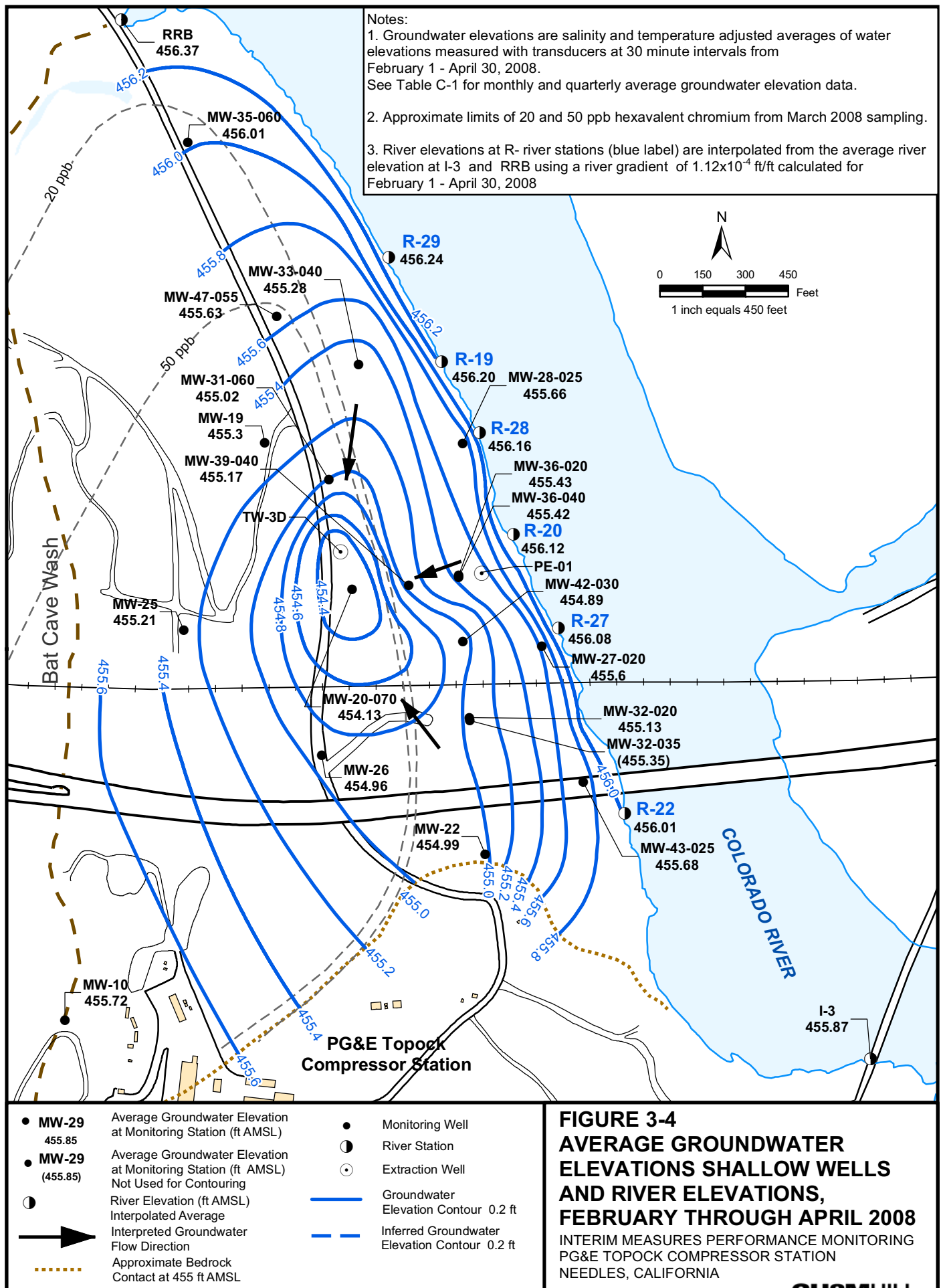
CH2MHILL



Notes

1. Hexavalent chromium [Cr(VI)] results in micrograms per liter (µg/L), approximately 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 APRIL 2008
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



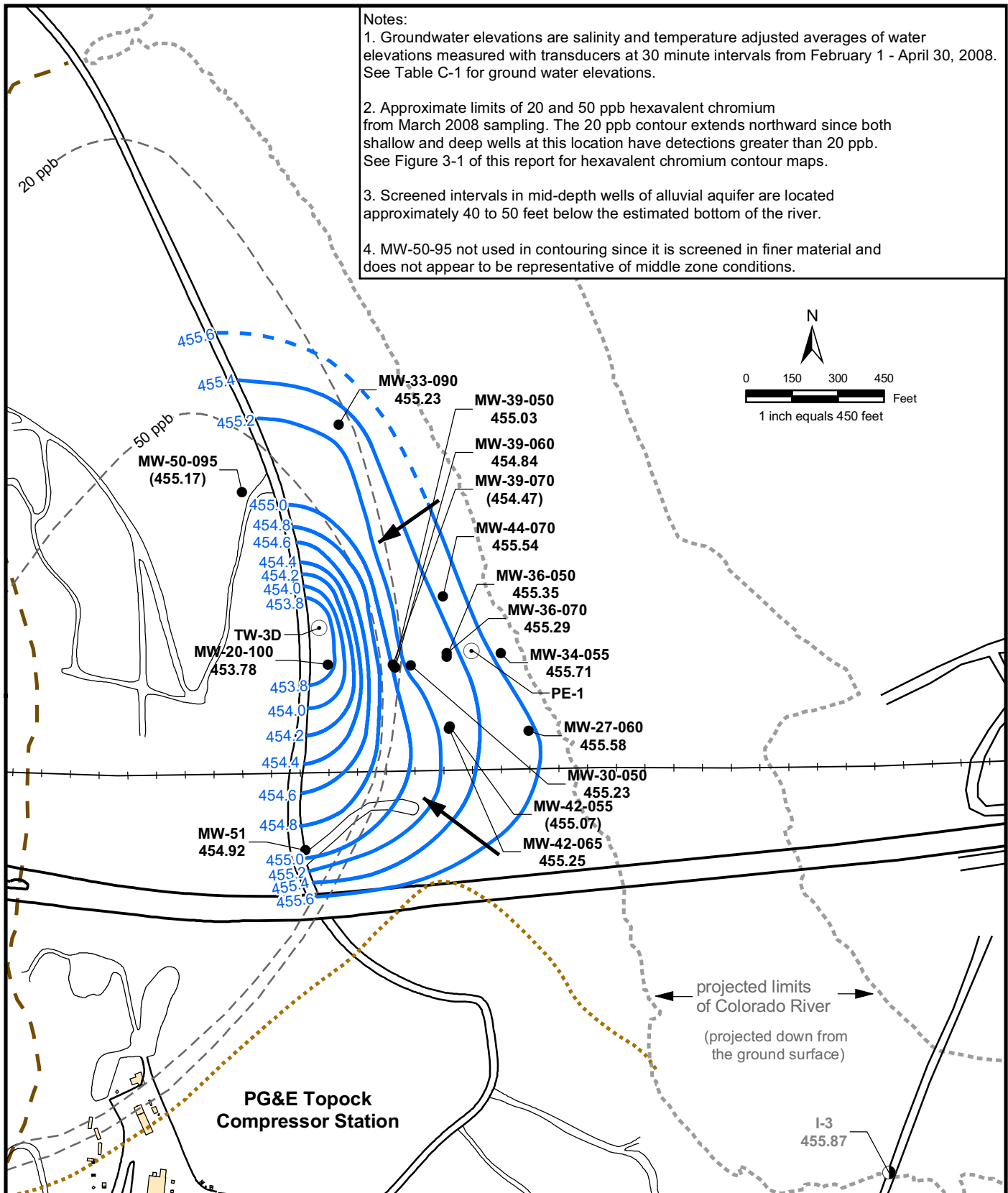
Notes:

1. Groundwater elevations are salinity and temperature adjusted averages of water elevations measured with transducers at 30 minute intervals from February 1 - April 30, 2008. See Table C-1 for ground water elevations.

2. Approximate limits of 20 and 50 ppb hexavalent chromium from March 2008 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.

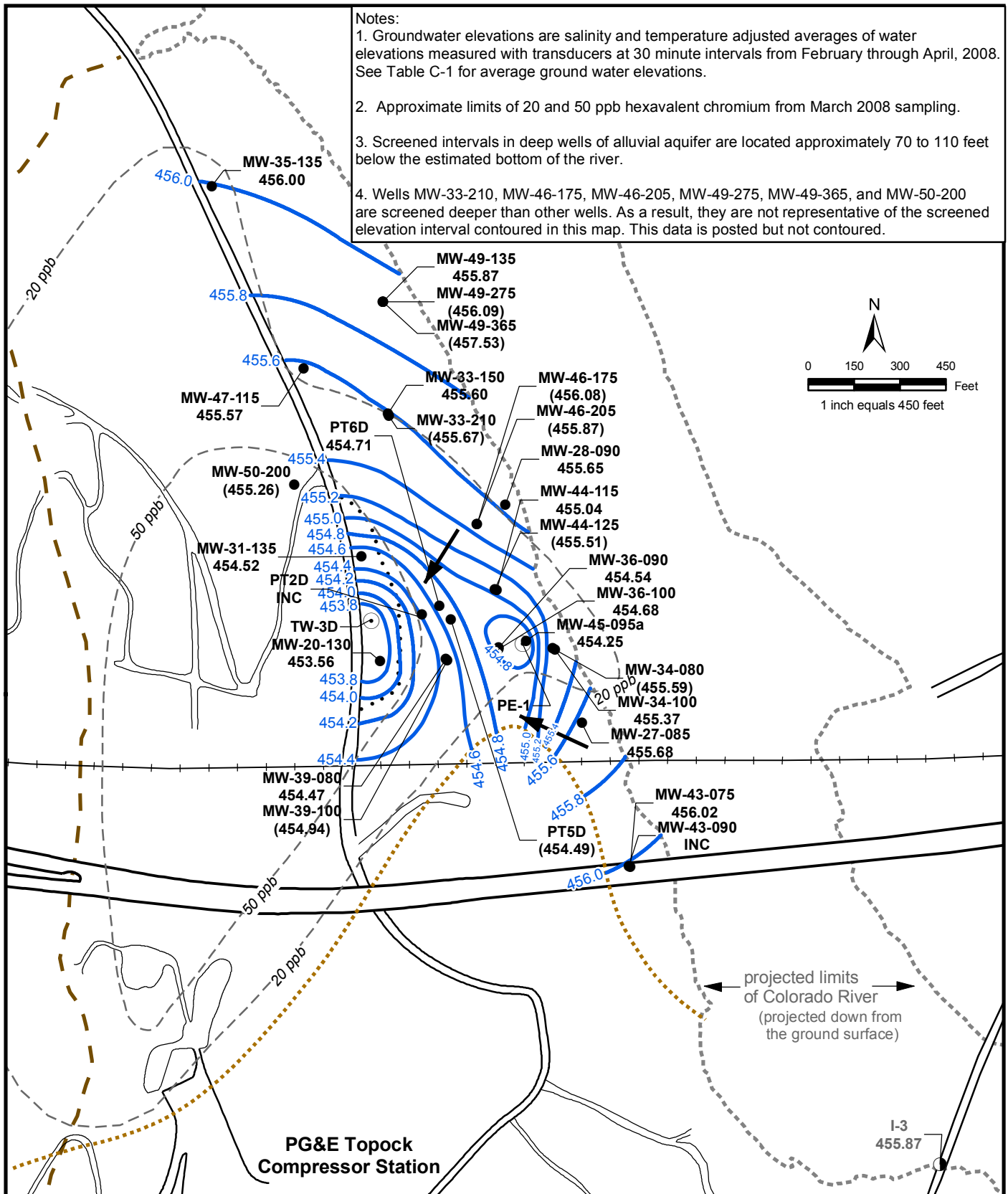


- MW-29
455.85
Average Groundwater Elevation
at Monitoring Station (ft AMSL)
- MW-29
(455.85)
Average Groundwater Elevation
at Monitoring Station (ft AMSL)
Not Used for Contouring
- Approximate Bedrock Contact
at 425 ft AMSL
- Interpreted Groundwater
Flow Direction
- Monitoring Well
- River Station
- Extraction Well
- Groundwater
Elevation Contour 0.2 ft
- - -
Inferred Groundwater
Elevation Contour 0.2 ft

FIGURE 3-5
AVERAGE GROUNDWATER
ELEVATIONS MID-DEPTH WELLS
FEBRUARY THROUGH APRIL 2008
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 February through April, 2008. See Table C-1 for average ground water elevations.
2. Approximate limits of 20 and 50 ppb hexavalent chromium from March 2008 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.

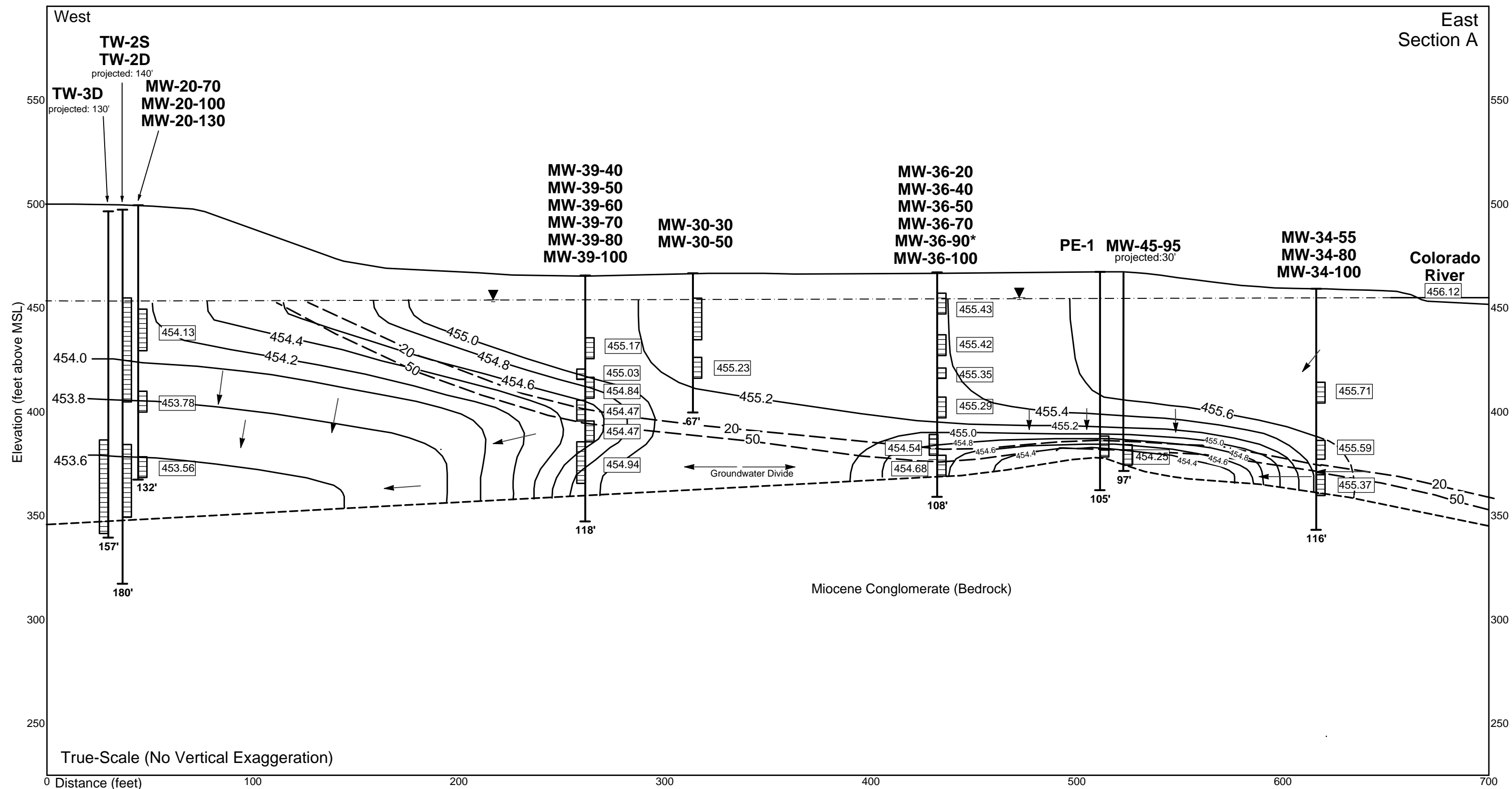


- MW-29**
● 455.85 Average Groundwater Elevation at Monitoring Station (ft AMSL)
- MW-29**
● (455.85) Average Groundwater Elevation at Monitoring Station (ft AMSL) Not Used for Contouring
- ➔ Interpreted Groundwater Flow Direction
- Approximate Bedrock Contact at 395 ft AMSL

- 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
FEBRUARY THROUGH APRIL 2008
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CH2MHILL



Notes:
Results show average groundwater elevations for February 1 through April 30, 2008 measured with transducers at 30 minute intervals.

Groundwater elevations adjusted for salinity and temperature.
Well MW-36-90* is excluded from contouring.
River elevation (R-20) is the calculated average river level
based upon the river gradient between RRB and I-3.

Legend:

MW-30-50

Inferred water table

well scr

455.23	Monthly average groundwater head (ft AMSL)
--------	--

103 boring depth (feet)

Inferred hexavalent chromium contour (ppb)

———— 453.5 ————

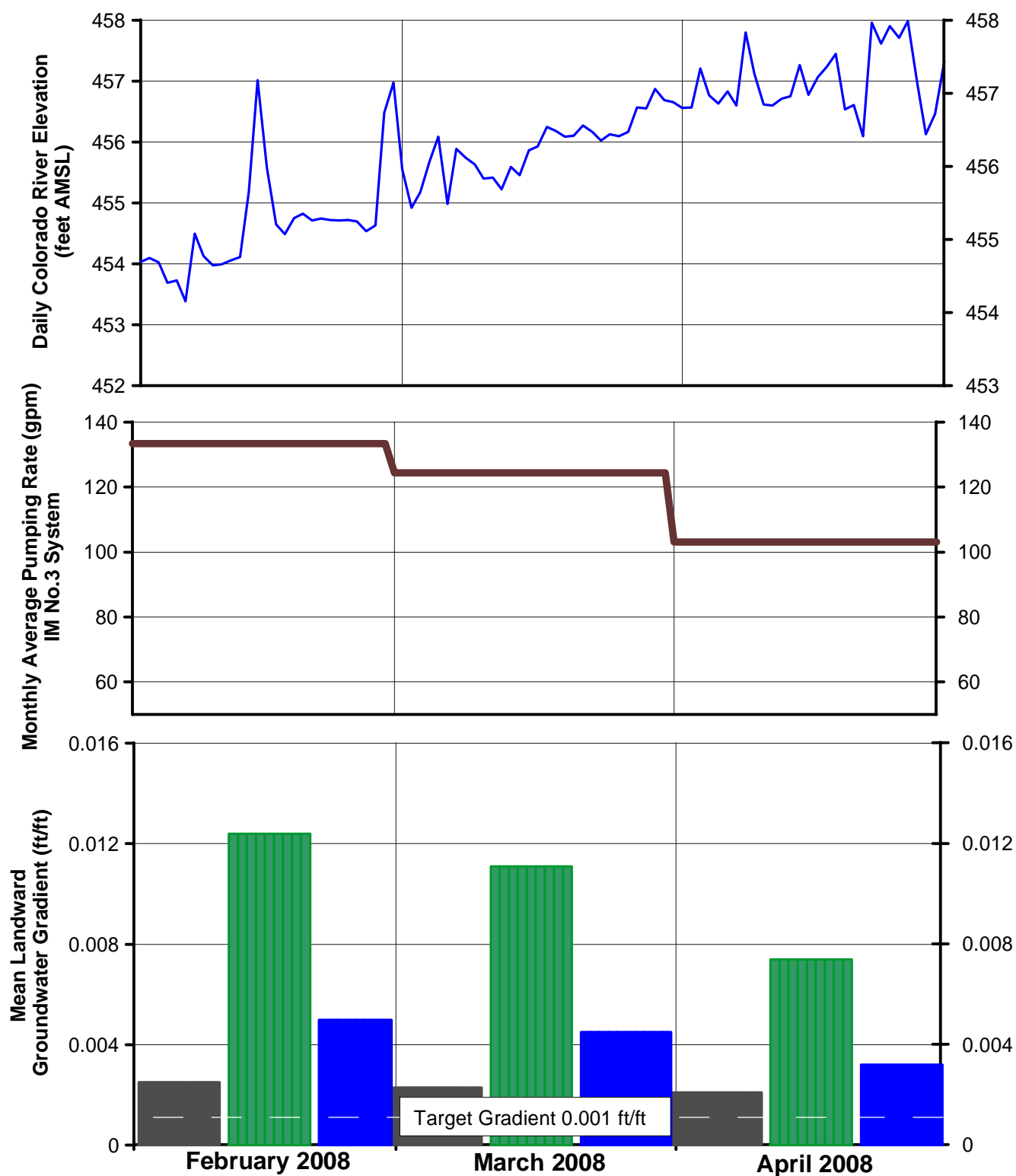
Groundwater head contour

Inferred groundwater head contour

Interpreted groundwater flow direction

**FIGURE 3-7
AVERAGE GROUNDWATER ELEVATIONS
FOR WELLS ON FLOODPLAIN
CROSS-SECTION A
FEBRUARY THROUGH APRIL 2008**

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

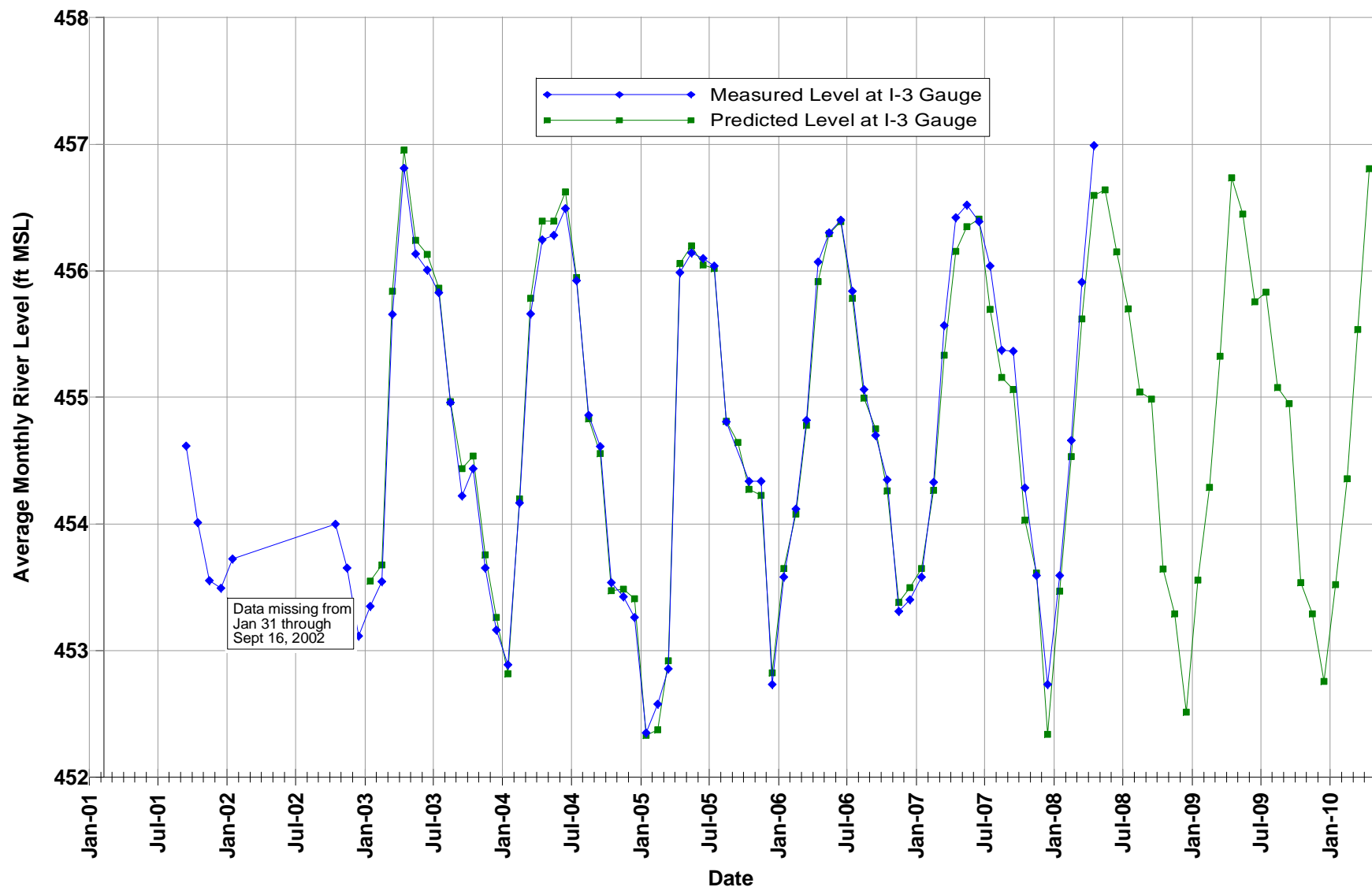


MW-31-135/MW-33-150 well pair
MW-45-95/MW-34-100 well pair
MW-45-95/MW-27-85 well pair

Notes:

- 1) For IM pumping, the target landward gradient for well pairs is 0.001 feet/foot.
- 2) Refer to Table 3-1 and Section 3.1 for discussion of pumping data. The lower average pumping rate in April is due to a 7-day shutdown. Before and after shutdown, the average pumping rate was 134.2 gpm.
- 3) Pumping rate plotted is the combined rate of extraction wells TW-3D and PE-1 in operation each month.
- 4) Refer to Table 3-3 and Section 3.4 for discussion of gradient data.

FIGURE 3-8
MEASURED HYDRAULIC GRADIENTS,
RIVER ELEVATION AND PUMPING RATE
FEBRUARY THROUGH APRIL 2008
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



Note:
 Projected river level is calculated based on monthly averages of Davis Dam release and stage in Lake Havasu as of May 14, 2008.
 Measured data through April 30, 2008.
 I-3 data unavailable from September 18 through October 4, 2006
 River projections at I-3 are based upon May 2008 USBR projections.

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

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

Appendix A
Extraction System Operations Log for February
through April 2008

Appendix A

Extraction System Operations Log for February through April 2008

PG&E Topock Interim Measures Performance Monitoring Program

During the first quarter 2008 (February through April), 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-2S and TW-2D were not operated during first quarter 2008. The operational run time for the IM groundwater extraction system (combined or individual pumping) was 89 percent during the first quarter 2008.

The IM No. 3 facility treated approximately 15,571,042 gallons of extracted groundwater during the first quarter 2008. The IM No. 3 facility also treated approximately 35,365 gallons of water generated from the groundwater monitoring program, 299,200 gallons of water from IM No. 3 injection well development, and 14,400 gallons of plant potable water used for cleaning during the annual preventative maintenance shutdown. Four containers of solids from the IM No. 3 facility were transported offsite during the first quarter 2008.

Periods of planned and unplanned extraction system down time (that together resulted in less than 11 percent of downtime during the first quarter 2008) 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.

FEBRUARY 2008

- **February 13, 2008 (planned):** The extraction well system was offline from 9:15 am until 3:54 pm to complete electrical testing, maintenance on the microfilter unit, servicing the air compressor, and replacing/cleaning select inline instrumentation. Extraction system downtime was 6 hours 39 minutes.
- **February 20, 2008 (unplanned):** The extraction well system was offline from 2:59 pm until 3:08 pm and 3:21 pm to until 3:28 pm due to temporary loss of City of Needles power. Extraction system downtime was 16 minutes.
- **February 21, 2008 (unplanned):** The extraction well system was offline from 9:49 am until 9:50 am while transferring operations to generator power and 12:15 pm until 12:21 pm to return operations to City of Needles power. Extraction system downtime was 7 minutes.
- **February 24, 2008 (unplanned):** The extraction well system was offline from 7:03 am until 7:09 am to transfer operations to generator power and 8:14 am to until 8:20 am to return operations to City of Needles power. Extraction system downtime was 12 minutes.

MARCH 2008

- **March 2, 2008 (unplanned):** The extraction well system was offline from 5:41 am until 7:25 am, 7:38 am until 8:04 am, 8:12 am until 8:26 am, 8:41 am until 8:45 am, 4:24 pm until 4:26 pm, and 4:41 pm until 5:05 pm to repair a microfilter feed tank valve. Extraction system downtime was 2 hours 54 minutes.

- **March 8, 2008 (planned):** The extraction well system was offline from 7:42 pm until 8:51 pm, while replacing a valve on the microfilter feed tank, and 11:22 pm until 11:29 pm to switch brine tanks. Extraction system downtime was 1 hour 17 minutes.
- **March 9, 2008 (planned):** The extraction well system was offline from 5:30 am until 8:54 am and 8:55 am until 11:36 am to replace a polymer system pump. Extraction system downtime was 6 hours 6 minutes.
- **March 11, 2008 (unplanned):** The extraction well system was offline from 7:48 am until 8:13 am to repair a microfilter feed tank valve. Extraction system downtime was 25 minutes.
- **March 12, 2008 (unplanned):** The extraction well system was offline from 7:43 am until 8:24 am to install backup control air compressor. Extraction system downtime was 41 minutes.
- **March 12, 2008 (unplanned):** The extraction well system was offline from 2:15 pm until 3:33 pm for continued work on control air compressor installation. Extraction system downtime was 1 hour 18 minutes.
- **March 18 – 25, 2008 (planned):** The extraction well system was offline periodically (typically individual 1-hour periods) during this time to allow for treatment of approximately 290,080 gallons of injection well backwash/re-development water. Daily extraction system downtimes are summarized below:
 - March 18th – 1 hour 35 minutes
 - March 19th – 2 hours 9 minutes
 - March 20th – 5 hours 33 minutes
 - March 21st – 4 hours 18 minutes
 - March 22nd – 5 hours 31 minutes
 - March 23rd – 3 hours 58 minutes
 - March 24th – 4 hours 37 minutes
 - March 25th – 3 hours 19 minutes
- **March 28, 2008 (unplanned):** The extraction well system was offline from 2:58 am until 1:58 pm to replace the flocculator rake drive on the clarifier. Extraction system downtime was 11 hours.

APRIL 2008

- **April 8, 2008 (unplanned):** The extraction well system was offline from 9:07 pm until 9:09 p.m. when the City of Needles power supply imbalance alarmed and shut down the extraction wells. Extraction system downtime was 2 minutes.
- **April 9, 2008 (unplanned):** The extraction well system was offline from 2:57 p.m. until 3:53 p.m. due to backwash operation for Injection Well IW-03. Extraction system downtime was 56 minutes.

- **April 19, 2008 (unplanned):** The extraction well system was offline from 4:59 a.m. to 5:56 a.m. due to low seal water pump pressure alarm. Extraction system downtime was 57 minutes.
- **April 21 - 28, 2008 (planned):** The extraction well system was offline during this time to perform annual preventative maintenance. The extraction well system was offline from April 21st 6:56 a.m. until April 27th 11:19 a.m. Extraction downtime during this period was 6 days, 4 hours, and 23 minutes. Extraction wells were intermittently operated on April 27th for a total of 2 hours and 52 minutes to bring extraction well water into the plant in preparation for plant start-up on April 28th. The extraction well system was offline for the following times on April 27th:
 - April 27th
 - from 0:00 to 11:19 a.m. (11 hours, 19 minutes)
 - from 11:50 a.m. to 11:54 a.m. (4 minutes)
 - from 1:25 p.m. to 2:09 p.m. (44 minutes)
 - from 2:59 p.m. to 11:59 p.m. (9 hours)

The extraction well system was offline during three periods on April 28th from 0:00 until 9:07 a.m., from 10:13 a.m. to 11:46 a.m., and from 11:50 a.m. to 11:51 a.m. IM-3 facility start-up began on April 28th at 9:07 a.m. The two outage periods following facility start-up are due to the adjustment of unit processes as the plant came online. Extraction system downtime on April 28th was 10 hours and 41 minutes. The extraction well system was offline for a total of 7 days and 52 minutes between April 21st and April 28th to accomplish the annual preventative maintenance.

Appendix B
Chromium Sampling Results for
Monitoring Wells in Floodplain Area

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, April 2007 through April 2008

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 Zone								
MW-27-020	02-Oct-07	ND (0.2)	2.20	-170	0.2	1,133	454.5	453.6
MW-28-025	04-Oct-07	ND (1.0)	ND (1.0)	-61	0.5	1,394	454.8	454.5
MW-29	04-Oct-07	ND (1.0)	ND (1.0)	-112	0.5	3,172	455.3	454.3
	12-Mar-08	ND (1.0)	ND (1.0)	-132	0.4	4,490	455.4	455.0
MW-30-030	08-Oct-07	ND (1.0)	ND (1.0) LF	-97	0.5	42,690	454.6	454.1
MW-32-020	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
	10-Mar-08	ND (2.1)	ND (1.0)	-121	0.3	45,930	454.8	454.6
MW-32-035	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
	10-Dec-07	---	ND (2.0)	-145	0.2	19,800	452.7	452.3
	10-Mar-08	---	ND (1.0)	-145	0.1	25,210	455.0	454.5
MW-33-040	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
	12-Dec-07	0.40	4.10	22	0.2	8,969	453.0	452.5
	12-Mar-08	ND (0.2)	ND (1.0)	-30	0.3	6,112	455.2	454.8
MW-36-020	03-Oct-07	ND (1.0)	ND (1.0)	-216	0.7	25,659	456.7	453.7
MW-36-040	03-Oct-07	ND (1.0)	ND (1.0)	-249	0.3	9,051	454.1	453.6
MW-39-040	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	04-Oct-07	ND (1.0)	ND (1.0)	-130	0.1	21,073	453.8	453.6
MW-43-025	02-Oct-07	ND (1.0)	ND (1.0)	-166	0.3	1,226	454.8	454.3
	10-Dec-07	---	ND (1.0)	-171	0.1	1,333	452.3	452.4
	10-Mar-08	---	ND (1.0)	-161	0.2	1,614	455.1	454.8
Middle Zone								
MW-27-060	02-Oct-07	ND (0.2)	ND (1.0)	-109	0.4	7,542	454.5	453.9
MW-33-090	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
	13-Dec-07	21.0	22.7	138	0.1	10,680	453.0	452.6
	13-Dec-07 FD	20.6	21.3	FD	FD	FD	FD	FD
	12-Mar-08	23.7	22.5	-66	0.2	11,390	455.2	454.4
MW-34-055	03-Oct-07	ND (0.2)	ND (1.0)	-207	0.4	1,116	455.0	454.6
MW-36-050	10-Oct-07	ND (0.2)	2.00	-172	0.0	3,810	454.4	454.1
MW-36-070	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	08-Oct-07	ND (0.2)	ND (1.0)	-90	0.0	3,780	453.9	453.5
MW-39-060	08-Oct-07	ND (0.2)	ND (1.0)	-83	0.1	5,211	453.6	453.4
MW-39-070	03-May-07	10.1 R	10.4	-18	2.1	16,700	455.5	456.6

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, April 2007 through April 2008

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 Zone								
MW-39-070	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	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
	11-Dec-07	ND (1.0)	ND (1.0)	-132	0.2	14,960	452.3	452.1
	11-Mar-08	ND (1.0)	ND (1.0)	-126	0.3	15,890	454.9	455.7
MW-42-065	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
	11-Dec-07	ND (1.0)	ND (1.0)	-59	0.1	16,470	452.5	452.1
	11-Mar-08	ND (1.0)	ND (1.0)	-50	0.2	17,980	455.1	455.5
MW-44-070	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
	11-Dec-07	ND (0.2)	ND (1.0)	-147	0.1	4,448	452.3	452.1
	11-Mar-08	ND (0.2)	ND (1.0)	-128	0.3	4,663	454.8	454.6
MW-52S	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
	11-Oct-07	ND (1.0)	ND (1.0)	-175	0.2	12,740	---	453.7
	17-Dec-07	ND (1.0)	ND (1.0)	-232	0.0	14,800	---	453.3
	13-Mar-08	ND (1.0)	ND (1.0)	-176	0.5	11,390	---	455.0
Deep Wells								
MW-27-085	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
	11-Dec-07	ND (1.0)	ND (1.0)	-44	0.1	18,240	452.5	452.1
	10-Mar-08	ND (1.0)	ND (1.0)	-64	0.2	18,550	454.8	454.5
MW-28-090	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
	14-Dec-07	ND (0.2)	ND (1.0)	-133	0.2	7,932	452.7	452.9
	13-Mar-08	ND (0.2)	ND (1.0)	-117	0.2	8,048	455.4	455.4
MW-33-150	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
	12-Dec-07	8.90	10.0	-67	0.1	17,920	453.4	452.4
	12-Mar-08	7.87	8.06	1	0.6	18,180	455.1	454.2

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, April 2007 through April 2008

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-33-210	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
	12-Dec-07	13.3	14.3	-14	0.0	19,800	453.7	452.4
	12-Mar-08	11.7	11.5	-31	0.1	21,180	455.3	454.3
MW-34-080	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
	12-Nov-07	ND (1.0)	ND (1.0)	-327	0.1	9,046	453.8	453.0
	13-Dec-07	ND (1.0)	ND (1.0)	-34	0.1	5,648	452.7	452.4
	16-Jan-08	ND (1.0)	ND (1.0)	-26	0.1	9,135	453.9	453.6
	16-Jan-08 FD	ND (1.0)	1.20	FD	FD	FD	FD	FD
	13-Feb-08	ND (0.2)	ND (1.0)	-52	0.2	9,412	455.0	454.7
	12-Mar-08	ND (0.2)	10.9	-62	0.1	9,779	455.5	455.5
	08-Apr-08	ND (1.0)	ND (1.0)	29	0.3	9,061	457.3	457.7
MW-34-100	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
	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
	13-Nov-07	590	598	-68	0.1	17,040	453.3	453.3
	13-Dec-07	567	591	115	0.1	17,000	452.4	452.5
	13-Dec-07 FD	614	610	FD	FD	FD	FD	FD
	16-Jan-08	564	648	-7	0.1	17,830	453.4	453.5
	13-Feb-08	492	560	-20	0.1	18,310	454.6	454.5

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, April 2007 through April 2008

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	12-Mar-08	358	338	9	0.2	19,150	455.2	455.3
	08-Apr-08	280	276	20	0.2	17,878	456.8	457.6
	08-Apr-08 FD	292	274	FD	FD	FD	FD	FD
MW-36-090	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
	11-Mar-08	ND (0.71)	1.46	-54	0.2	2,918	454.0	454.9
	11-Mar-08 FD	---	1.24	FD	FD	FD	FD	FD
MW-36-100	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
	11-Mar-08	146	145	-170	0.2	14,550	454.2	454.8
MW-39-080	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
	08-Oct-07	58.6	48.3	-10	0.1	13,529	453.6	453.5
	14-Mar-08	34.8	28.6	-63	0.4	14,220	454.1	455.2
MW-39-100	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
	14-Mar-08	1150	1290	37	0.6	22,680	454.9	455.5
MW-43-075	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	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	02-Apr-07	1210	1420	-2	0.0	18,100	454.8	455.2

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, April 2007 through April 2008

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-44-115	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
	13-Nov-07	766	890	-206	0.1	13,360	453.1	453.2
	13-Nov-07 FD	767	884	FD	FD	FD	FD	FD
	11-Dec-07	736	766	-60	0.1	13,420	453.0	452.1
	14-Jan-08	746	652	-48	0.1	13,550	452.9	453.0
	14-Feb-08	744	668	-48	0.1	14,300	455.1	457.1
	14-Feb-08 FD	735	706	FD	FD	FD	FD	FD
	11-Mar-08	742	596	-70	0.3	14,330	454.4	454.6
	07-Apr-08	685	689	100	0.8	13,480	455.4	455.8
MW-44-125	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
	12-Nov-07	318	330	-295	0.1	13,300	453.5	452.6
	11-Dec-07	359	311	-61	0.1	14,030	452.7	452.1
	14-Jan-08	338	344	-55	0.1	13,630	453.6	453.2
	14-Feb-08	326	324	-82	0.1	13,760	455.5	457.1
	14-Mar-08	338	291	-112	0.1	13,430	455.5	455.6
	07-Apr-08	318	326	-6	0.3	10,272	455.7	455.5
MW-45-095A	04-May-07	169	140	-84	0.3	10,337	455.2	456.7
MW-46-175	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
	13-Nov-07	104	95.0	-292	0.1	17,300	453.7	452.9
	13-Dec-07	123	128	-202	0.0	17,510	453.0	452.3
	14-Jan-08	51.5	133	-159	0.1	17,520	453.6	452.9
	13-Feb-08	125	136	-146	0.1	18,300	454.1	454.5
	13-Mar-08	99.8	92.8	-174	0.1	18,300	455.3	455.6
	07-Apr-08	95.6	100	-52	0.2	17,588	455.7	455.4

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, April 2007 through April 2008

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-46-205	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
	14-Dec-07	3.50	4.20	-12	0.1	21,470	453.6	452.8
	13-Mar-08	5.21	5.20	91	0.1	22,360	455.7	455.8
MW-49-135	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
	13-Mar-08	ND (1.0)	1.43	-82	8.4	14,430	455.3	454.7
MW-49-275	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
	13-Mar-08	ND (1.0)	1.27	-191	0.1	26,350	455.9	454.7
MW-49-365	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
	13-Mar-08	ND (1.0)	ND (1.0)	-207	0.1	40,600	457.5	454.8
MW-52D	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
	11-Oct-07	ND (1.0)	ND (1.0)	-201	1.2	25,600	---	453.9
	17-Dec-07	ND (1.0)	ND (1.0)	-280	0.0	24,100	---	453.5
	13-Mar-08	ND (1.0)	ND (1.0)	-142	0.1	22,190	---	455.3
MW-52M	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
	11-Oct-07	ND (1.0)	ND (1.0)	-164	0.2	18,170	---	454.0
	17-Dec-07	ND (1.0)	ND (1.0)	-240	0.0	21,200	---	453.4
	13-Mar-08	ND (1.0)	ND (1.0)	-220	0.2	17,460	---	455.1
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
	11-Oct-07	ND (2.0)	2.30 J	-159	0.3	28,930	---	454.4
	11-Oct-07 FD	ND (1.0)	ND (1.0) J	FD	FD	FD	FD	FD
	17-Dec-07	ND (1.0)	ND (1.0)	-283	0.0	30,000	---	453.2
	13-Mar-08	ND (1.0)	ND (1.0)	-241	0.4	27,630	---	454.7

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, April 2007 through April 2008
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-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
	11-Oct-07	ND (1.0)	ND (1.0)	-160	7.4	21,500	---	454.3
	17-Dec-07	ND (1.0)	ND (1.0)	-176	0.0	22,000	---	453.2
	13-Mar-08	ND (1.0)	ND (1.0)	-140	6.9	18,890	---	454.7

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.

Samples taken after February 1, 2008, were field filtered due to the approved change from analysis method 7199 to 218.6 for Cr(VI) analyses (DTSC, 2008b).

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.

Refer to table footnotes for data qualifier explanation.

TABLE B-2

Groundwater Sampling Results for Other Monitoring Wells in PMP Area, April 2007 through April 2008
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 Zone						
MW-12	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
	13-Dec-07	2530	2930	-14.1	6.15	5740
	10-Mar-08	2760	2860	-51.3	7.58	5980
MW-19	02-May-07	836	777	109	---	2560
	05-Oct-07	1390	1510	33.9	6.67	2260
MW-20-070	03-May-07	2790	3050	151	8.68	3210
	11-Oct-07	2400	2140	147	9.14	3230
	12-Mar-08	2580	2260	86.1	7.91	3210
MW-21	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
	11-Dec-07	ND (1.0)	ND (1.0)	80.7	1.71	14500
	11-Mar-08	ND (1.0)	1.80	-91.8	2.11	13800
MW-22	10-Oct-07	ND (1.0)	ND (1.0)	-72	0.21	28500
	17-Dec-07	---	1.50	-129	0.00	33500
	11-Mar-08	ND (1.0)	ND (1.0)	-93.5	2.29	30800
MW-24A	12-Dec-07	---	3300	145	1.96	2950
	12-Mar-08	---	2000	-201	0.20	9760
MW-25	02-Oct-07	895	805	33.0	6.67	1320
	02-Oct-07 FD	933	884	FD	FD	FD
MW-26	02-Oct-07	3510	3740	25.0	6.90	3790
	11-Dec-07	---	2980	148	4.89	3870
	12-Mar-08	2980	2560	180	3.90	4380
	12-Mar-08 FD	2720	2640	FD	FD	FD
MW-31-060	04-Oct-07	726 J	669	94.4	6.10	3040
MW-35-060	01-Oct-07	24.8	21.3	52.2	0.80	7430
	01-Oct-07 FD	24.8	20.6	FD	FD	FD
	11-Mar-08	35.8	35.4	-181	0.94	6930
MW-47-055	04-May-07	30.3	31.6	112	2.28	4290
	04-Oct-07	61.9	59.2	50.6	2.50	3880
	12-Dec-07	152	134	30.3	2.15	4040
	14-Feb-08	37.1	39.0	5.00	2.42	4450
	14-Feb-08 FD	37.2	39.4	FD	FD	FD
	14-Mar-08	53.7	46.1	84.9	2.82	3840
	14-Mar-08 FD	48.4	42.6	FD	FD	FD
TW-02S	04-Oct-07	1250	1220	9.00	4.80	4830
Middle Zone						
MW-20-100	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

TABLE B-2

Groundwater Sampling Results for Other Monitoring Wells in PMP Area, April 2007 through April 2008
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-20-100	12-Mar-08	9690	7910	96.2	2.95	3770
MW-50-095	02-May-07	304	264	135	31.4	3390
	04-Oct-07	217	216	68.0	2.00	5320
	11-Dec-07	173	163	83.5	2.30	5120
	12-Mar-08	150	160	80.4	2.29	5160
	12-Mar-08 FD	148	160	FD	FD	FD
MW-51	01-May-07	4670	5120	94.0	3.65	10300
	05-Oct-07	4500	4340	127	2.20	10600
	11-Dec-07	---	4460	89.0	3.78	10900
	11-Mar-08	4940	4590	-70.6	0.97	12300
Deep Wells						
MW-20-130	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
	12-Mar-08	13300	11300	101	1.75	8850
MW-31-135	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	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	04-May-07	14.1	13.0	126	0.20	13800
	04-Oct-07	11.6	12.2	63.4	0.20	13000
	12-Dec-07	10.3	10.9	52.8	0.10	15000
	12-Dec-07 FD	10.5	11.3	FD	FD	FD
	14-Mar-08	18.0	16.5	57.8	0.23	13500
MW-50-200	30-Apr-07	10900	12100	65.0	4.75	23700
	04-Oct-07	9430	9780	70.0	4.30	24100
	11-Dec-07	8930	9340	123	2.86	21300
	12-Mar-08	10900	11800	101	1.29	21800
TW-02D	04-Oct-07	210	228	18.0	1.30	6970
TW-04	03-Oct-07	33.4	32.2	21.6	0.10	20300
	03-Oct-07 FD	33.6	32.7	FD	FD	FD
	12-Dec-07	26.1	23.2	78.1	0.05	21900
	14-Mar-08	27.4	28.4	16.4	0.13	22000
TW-05	04-Oct-07	6.60	7.50	53.0	0.40	16800

TABLE B-2

Groundwater Sampling Results for Other Monitoring Wells in PMP Area, April 2007 through April 2008
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

NOTES:

Analytical results are validated.

ND = not detected at listed reporting limit (RL)

FD = field duplicate

(---) = 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 taken after February 1, 2008, were field filtered due to the approved change from analysis method 7199 to 218.6 for Cr(VI) analyses (DTSC, 2008b).

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.

Appendix C
Hydraulic Data for Reporting Period

TABLE C-1

Average Monthly and Quarterly Groundwater Elevations, February 2008 through April 2008
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

Well ID	Aquifer Zone	February 2008	March 2008	April 2008	Quarter Average	Days in Quarter Average
I-3	River Station	454.66	455.91	456.99	455.87	90
MW-10	Shallow Zone	455.12	455.65	456.38	455.72	90
MW-19	Shallow Zone	454.26	455.32	456.29	455.30	90
MW-20-070	Shallow Zone	452.98	454.12	455.26	454.13	90
MW-20-100	Middle Zone	452.61	453.74	454.96	453.78	90
MW-20-130	Deep Wells	452.35	453.49	454.80	453.56	90
MW-22	Shallow Zone	454.14	455.01	455.81	454.99	90
MW-25	Shallow Zone	454.37	455.16	456.05	455.21	90
MW-26	Shallow Zone	454.09	454.90	455.85	454.96	90
MW-27-020	Shallow Zone	454.31	455.68	456.75	455.60	90
MW-27-060	Middle Zone	454.29	455.66	456.74	455.58	90
MW-27-085	Deep Wells	454.49	455.70	456.82	455.68	90
MW-28-025	Shallow Zone	454.39	455.73	456.82	455.66	90
MW-28-090	Deep Wells	454.44	455.69	456.78	455.65	90
MW-30-050	Middle Zone	453.99	455.25	456.42	455.23	90
MW-31-060	Shallow Zone	453.93	455.05	456.06	455.02	90
MW-31-135	Deep Wells	453.35	454.51	455.64	454.52	90
MW-32-020	Shallow Zone	453.97	455.16	456.23	455.13	90
MW-32-035	Shallow Zone	454.17	455.40	456.44	455.35	90
MW-33-040	Shallow Zone	454.32	455.03	456.48	455.28	57
MW-33-090	Middle Zone	454.45	455.63	456.73	455.23	67
MW-33-150	Deep Wells	454.55	455.62	456.61	455.60	90
MW-33-210	Deep Wells	454.71	455.69	456.58	455.67	90
MW-34-055	Middle Zone	454.48	455.76	456.87	455.71	90
MW-34-080	Deep Wells	454.39	455.60	456.73	455.59	90
MW-34-100	Deep Wells	454.13	455.39	456.54	455.37	90
MW-35-060	Shallow Zone	454.77	456.08	457.12	456.01	90
MW-35-135	Deep Wells	454.96	456.03	456.96	456.00	90
MW-36-020	Shallow Zone	454.17	455.49	456.61	455.43	90
MW-36-040	Shallow Zone	454.19	455.46	456.57	455.42	90
MW-36-050	Middle Zone	454.08	455.39	456.52	455.35	90
MW-36-070	Middle Zone	454.06	455.33	456.44	455.29	90
MW-36-090	Deep Wells	453.28	454.53	455.77	454.54	90
MW-36-100	Deep Wells	453.41	454.65	455.94	454.68	90
MW-39-040	Shallow Zone	453.91	455.22	456.34	455.17	90
MW-39-050	Middle Zone	453.82	455.06	456.18	455.03	90
MW-39-060	Middle Zone	453.56	454.80	456.11	454.84	90
MW-39-070	Middle Zone	453.24	454.46	455.66	454.47	90
MW-39-080	Deep Wells	453.21	454.44	455.70	454.47	90
MW-39-100	Deep Wells	453.83	454.87	456.08	454.94	90
MW-42-030	Shallow Zone	453.68	454.92	456.01	454.89	90
MW-42-055	Middle Zone	453.89	455.12	456.16	455.07	90
MW-42-065	Middle Zone	454.08	455.26	456.36	455.25	90
MW-43-025	Shallow Zone	454.39	455.75	456.84	455.68	90
MW-43-075	Deep Wells	454.73	456.08	457.21	456.02	90
MW-43-090	Deep Wells	360.24	456.19	457.27	425.63	90
MW-44-070	Middle Zone	454.33	455.57	456.67	455.54	90
MW-44-115	Deep Wells	453.82	455.06	456.20	455.04	90

TABLE C-1

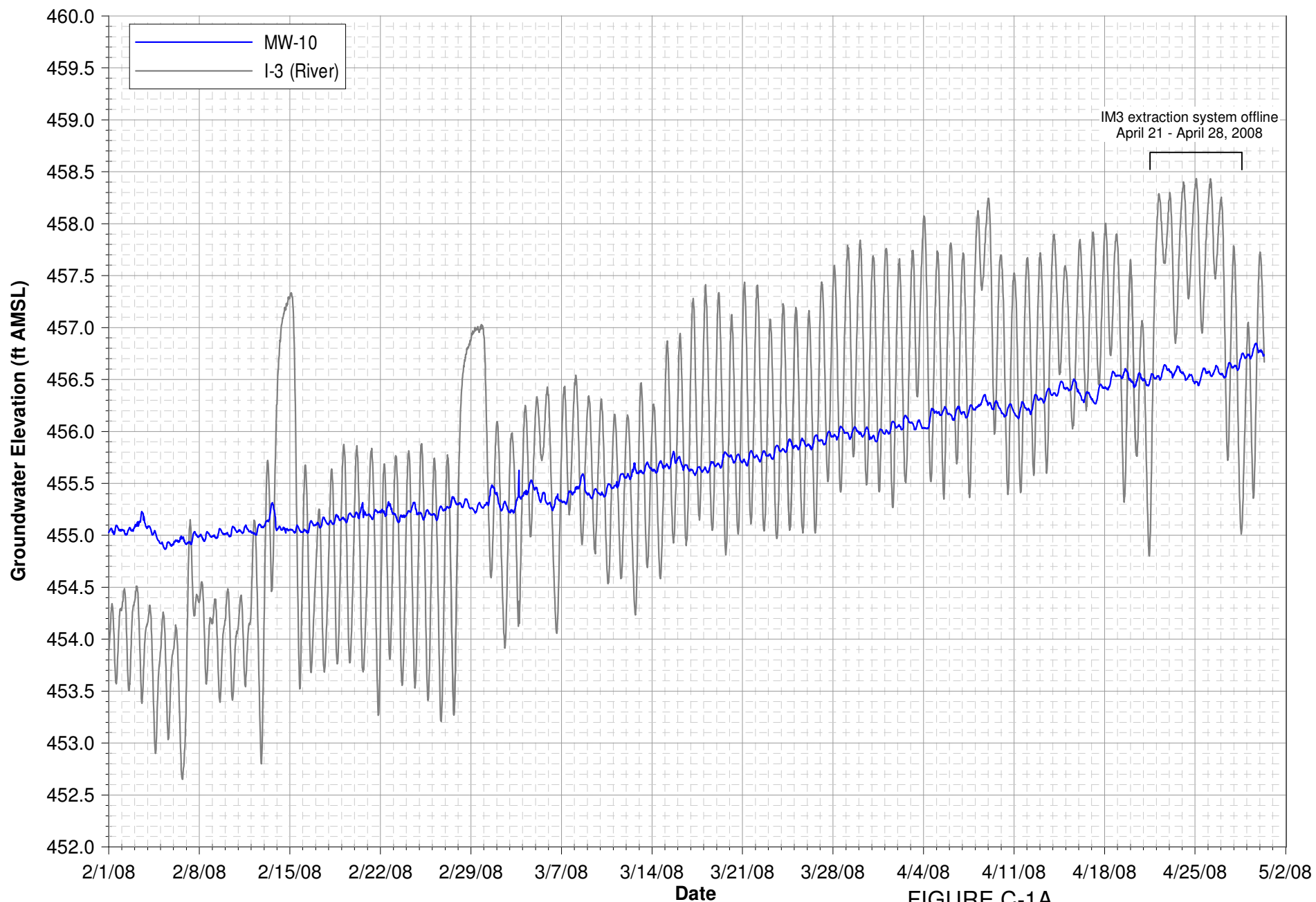
Average Monthly and Quarterly Groundwater Elevations, February 2008 through April 2008
Interim Measures Performance Monitoring
PG&E Topock Compressor Station

Well ID	Aquifer Zone	February 2008	March 2008	April 2008	Quarter Average	Days in Quarter Average
MW-44-125	Deep Wells	454.27	455.53	456.67	455.51	90
MW-45-095a	Deep Wells	452.76	454.14	455.79	454.25	90
MW-46-175	Deep Wells	454.89	456.15	457.17	456.08	90
MW-46-205	Deep Wells	454.82	455.85	456.89	455.87	90
MW-47-055	Shallow Zone	454.52	455.67	456.65	455.63	90
MW-47-115	Deep Wells	454.50	455.59	456.59	455.57	90
MW-49-135	Deep Wells	454.78	455.88	456.91	455.87	90
MW-49-275	Deep Wells	455.13	456.08	457.02	456.09	90
MW-49-365	Deep Wells	456.56	457.54	458.46	457.53	90
MW-50-095	Middle Zone	454.13	455.17	456.19	455.17	90
MW-50-200	Deep Wells	454.31	455.25	456.20	455.26	90
MW-51	Middle Zone	454.04	454.91	455.79	454.92	90
PT2D	Deep Wells	452.93	495.11	455.49	468.31	90
PT5D	Deep Wells	453.26	454.49	455.69	454.49	90
PT6D	Deep Wells	453.45	454.72	455.92	454.71	90
RRB	River Station	455.05	456.42	457.60	456.37	90

NOTES

Averages include data collected from February 2008 through April 2008

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

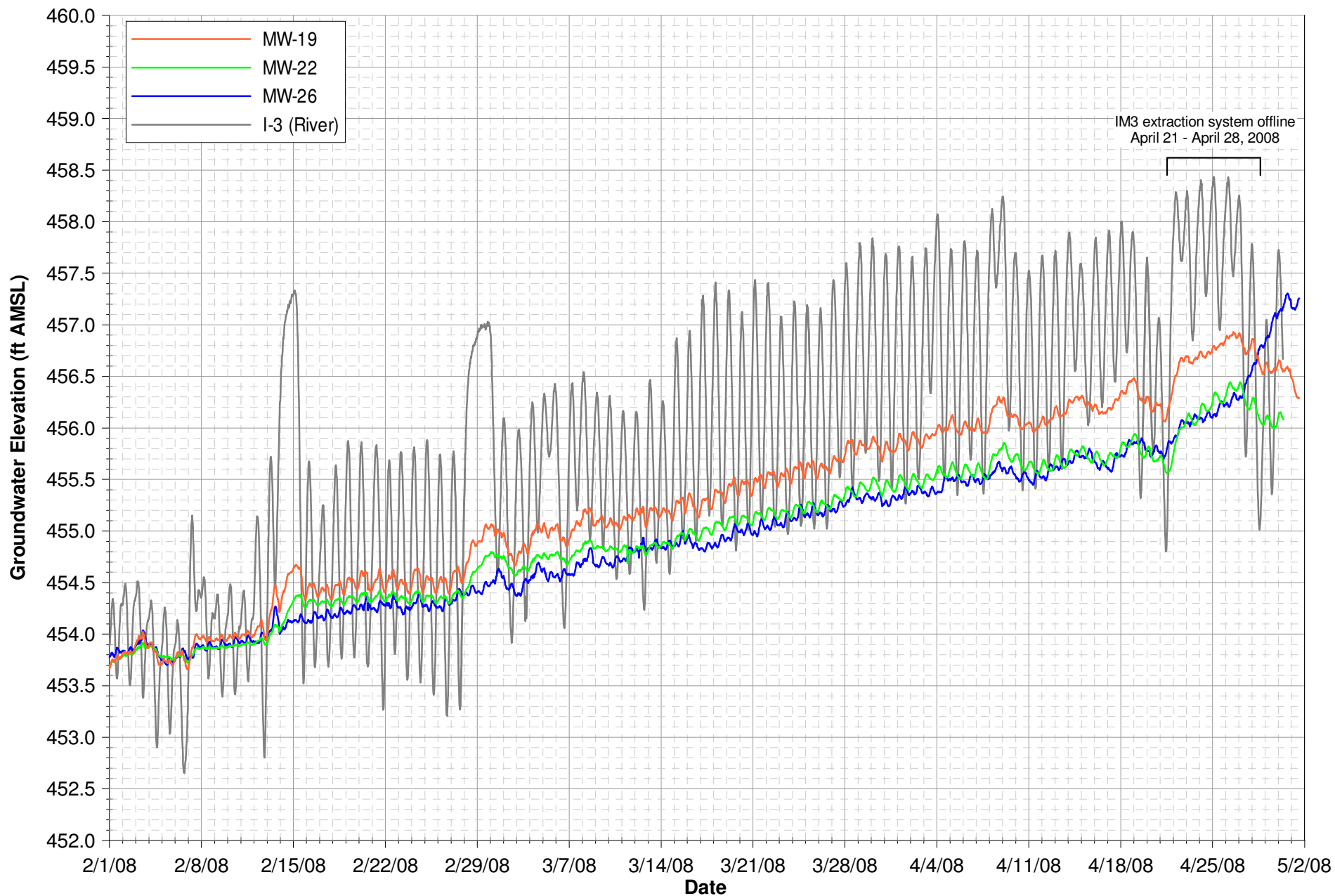


Note:
Data subject to review.

FIGURE C-1A

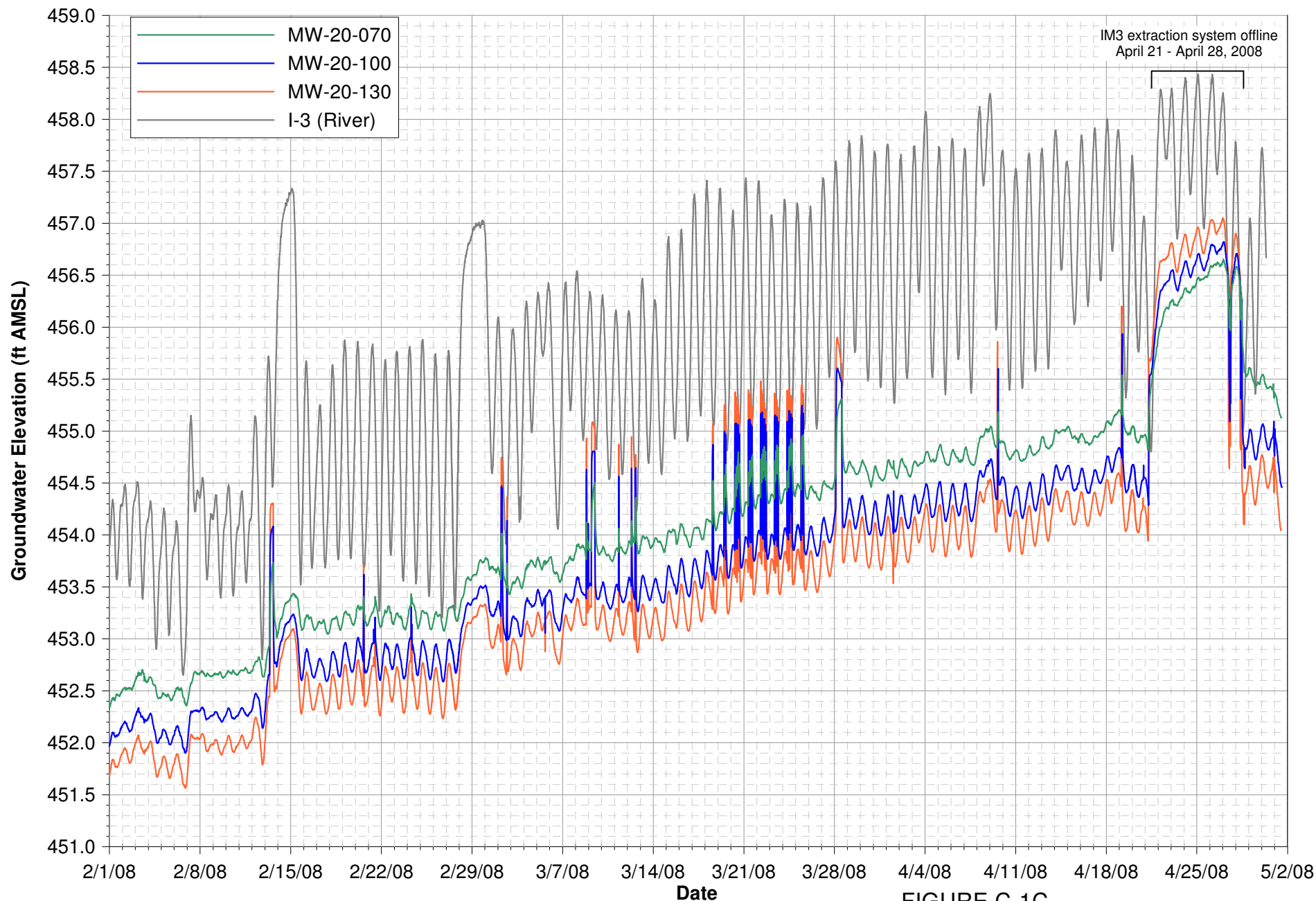
MW-10 HYDROGRAPH

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



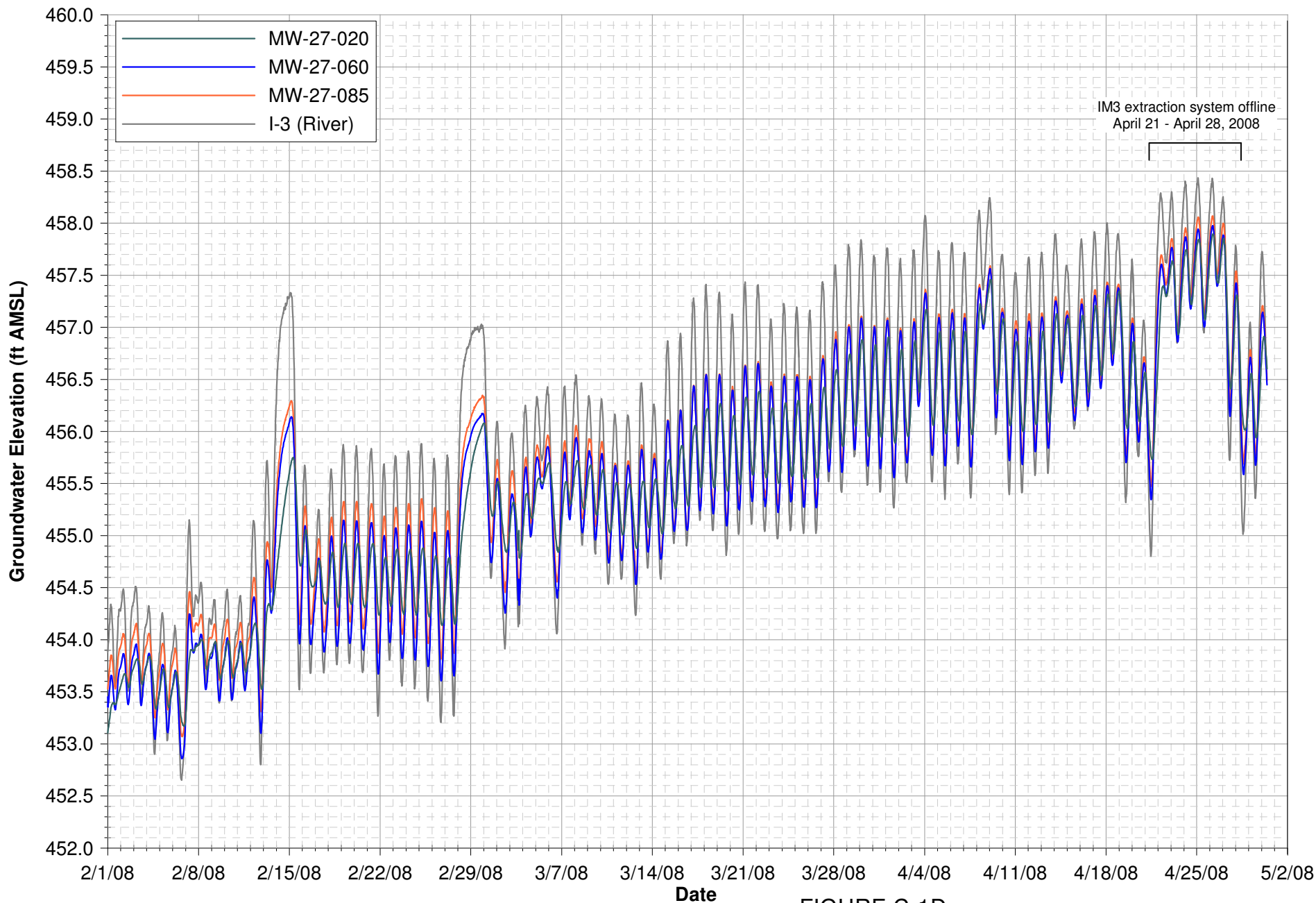
Notes:
Data subject to review.

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



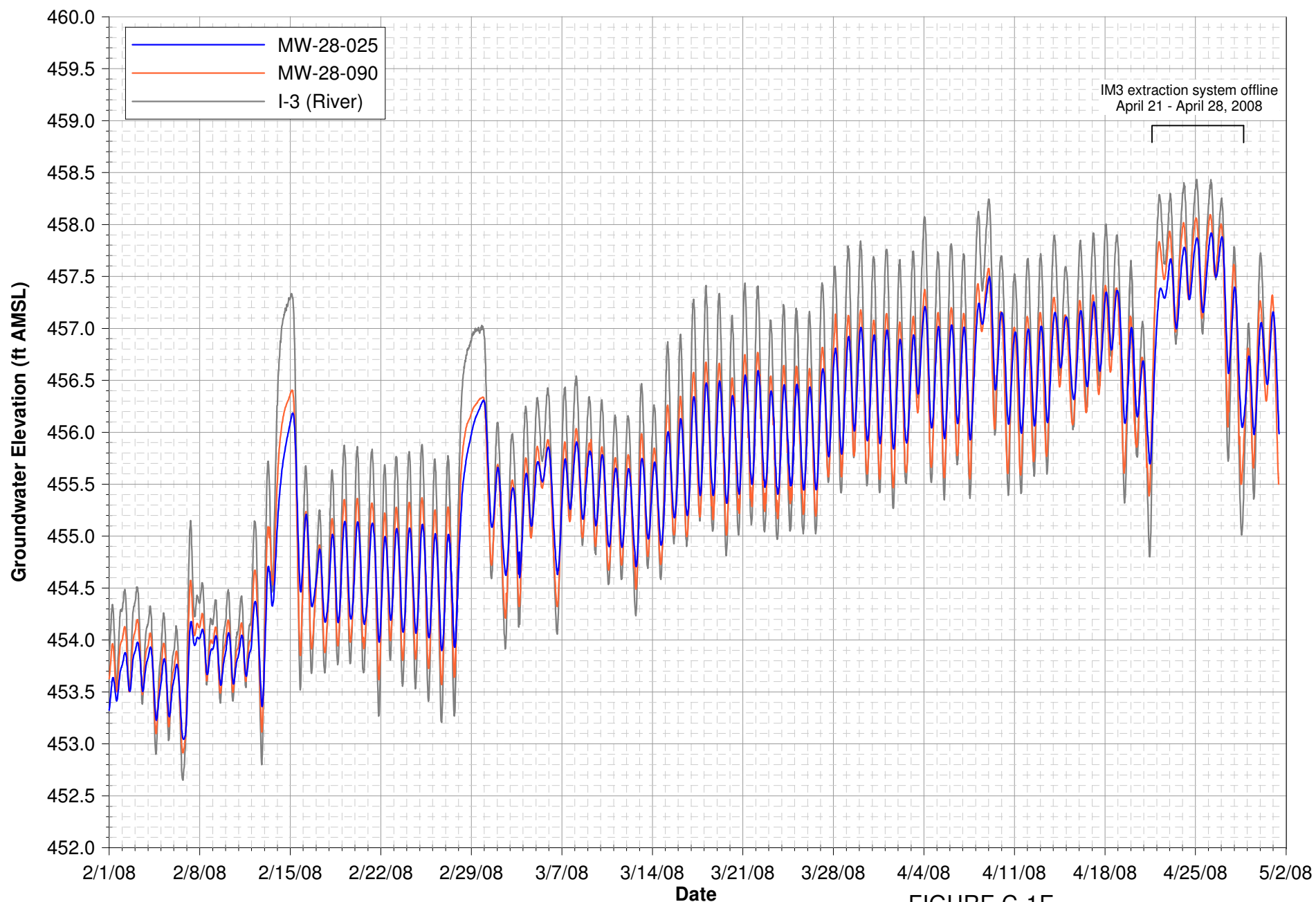
Notes:
Data subject to review.
IM3 extraction system intermittently
offline 3/17/08 - 3/28/08.

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



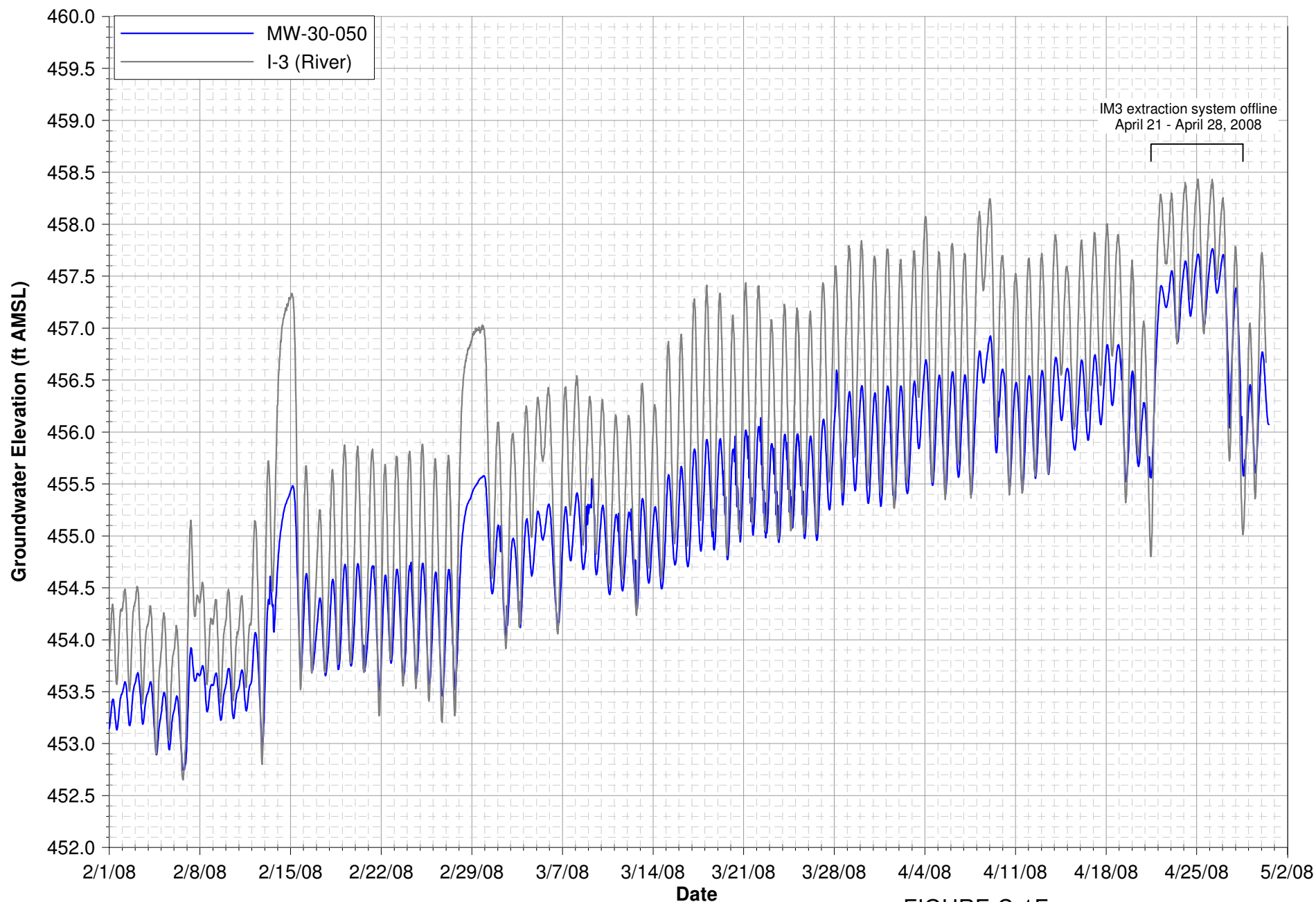
Notes:
Data subject to review.

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



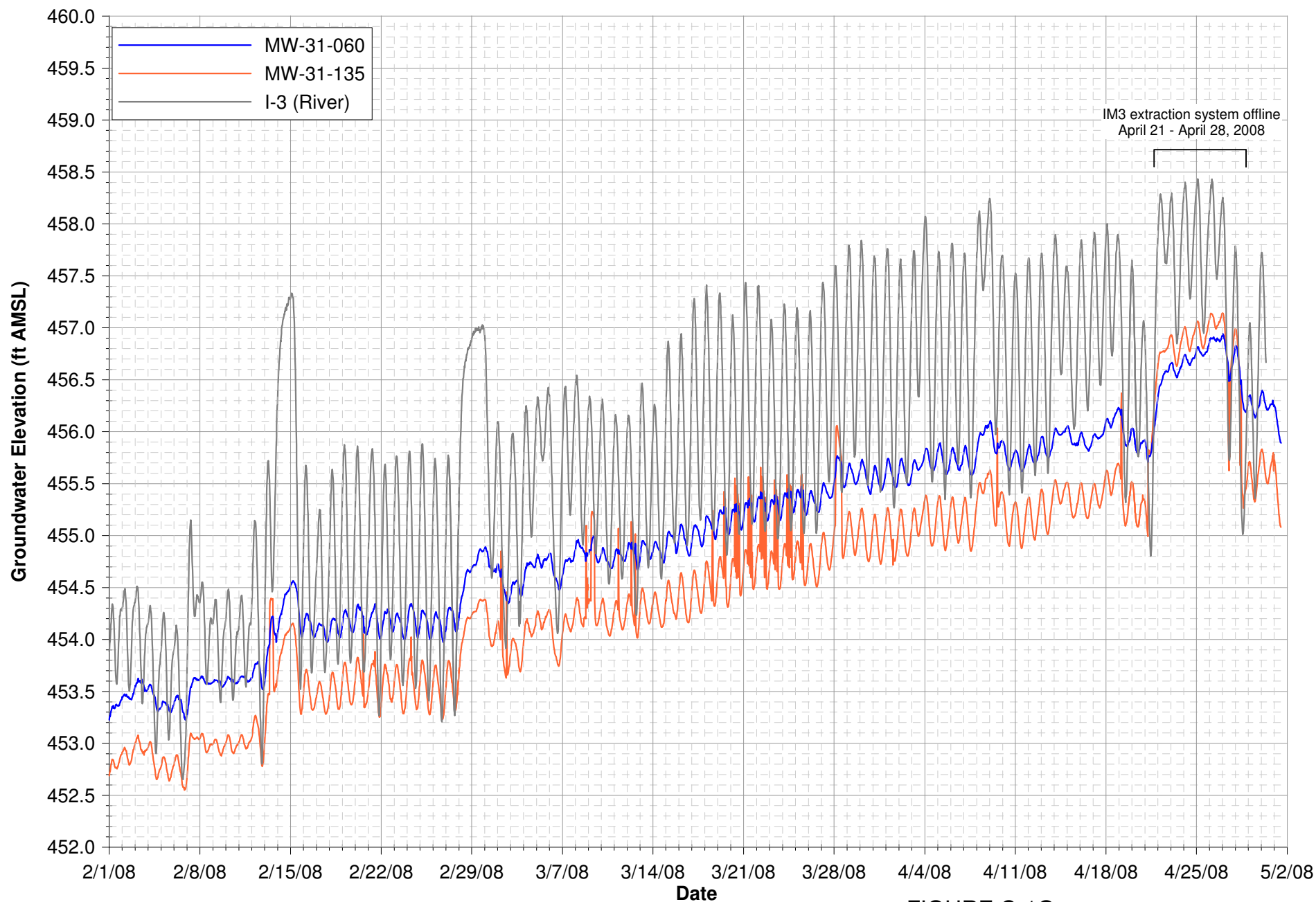
Notes:
Data subject to review.

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



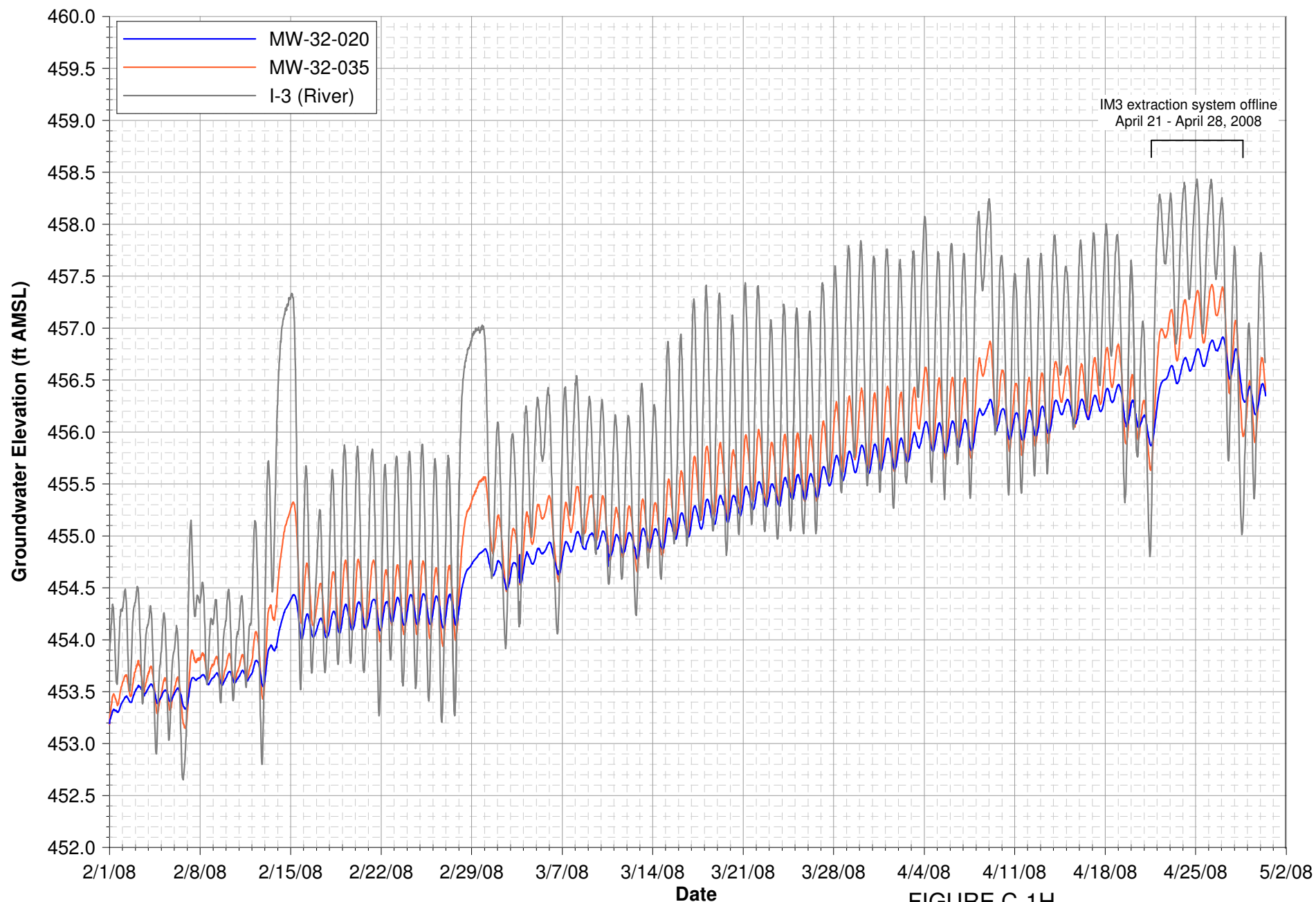
Notes:
Data subject to review.

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



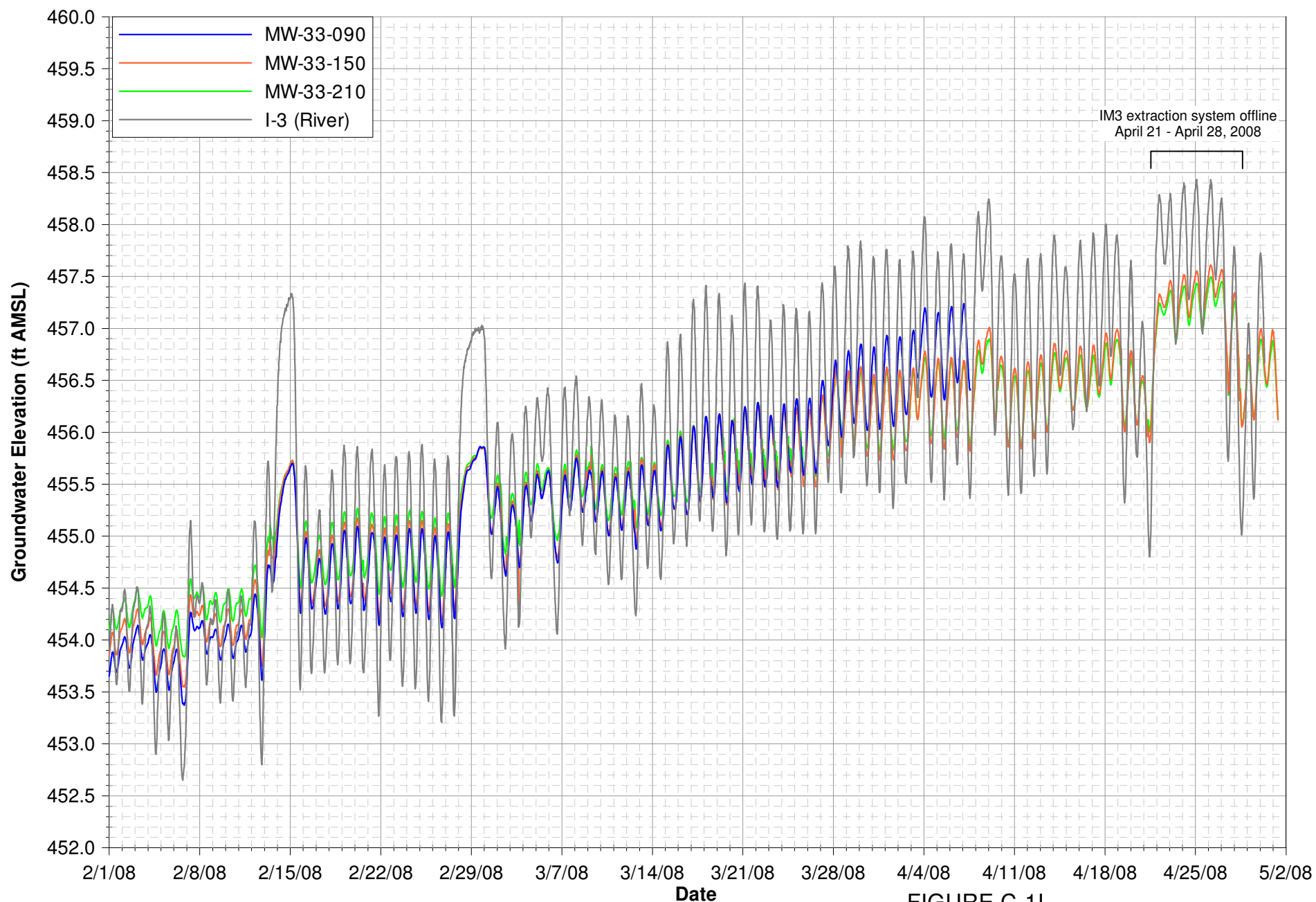
Notes:
Data subject to review.
IM3 extraction system intermittently
offline 3/17/08 - 3/28/08.

FIGURE C-1G
MW-31 WELL HYDROGRAPHS
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



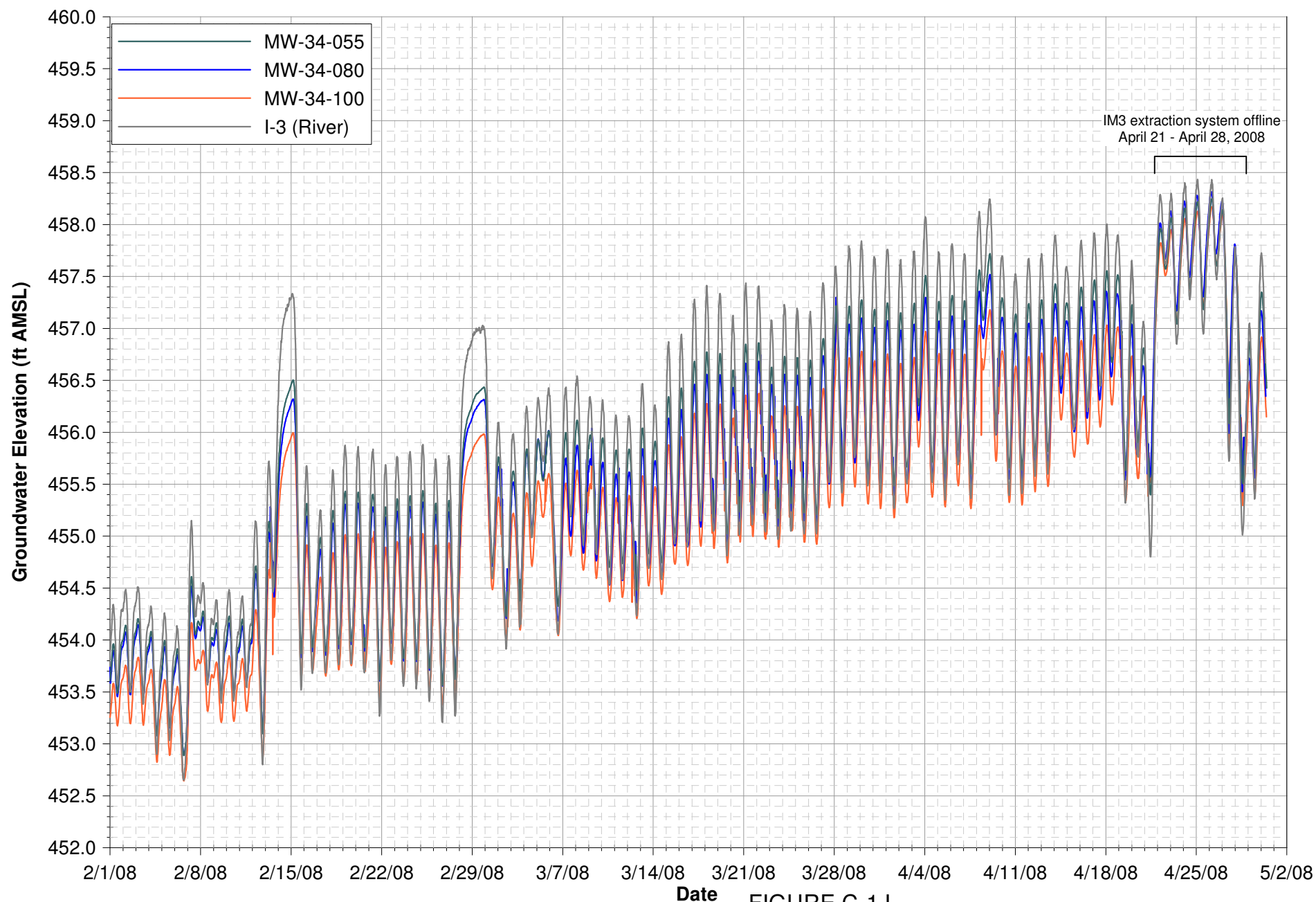
Notes:
Data subject to review.

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



Notes:
 Data subject to review.
 MW-33-90 data unavailable 4/8/08 to present.

FIGURE C-11
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

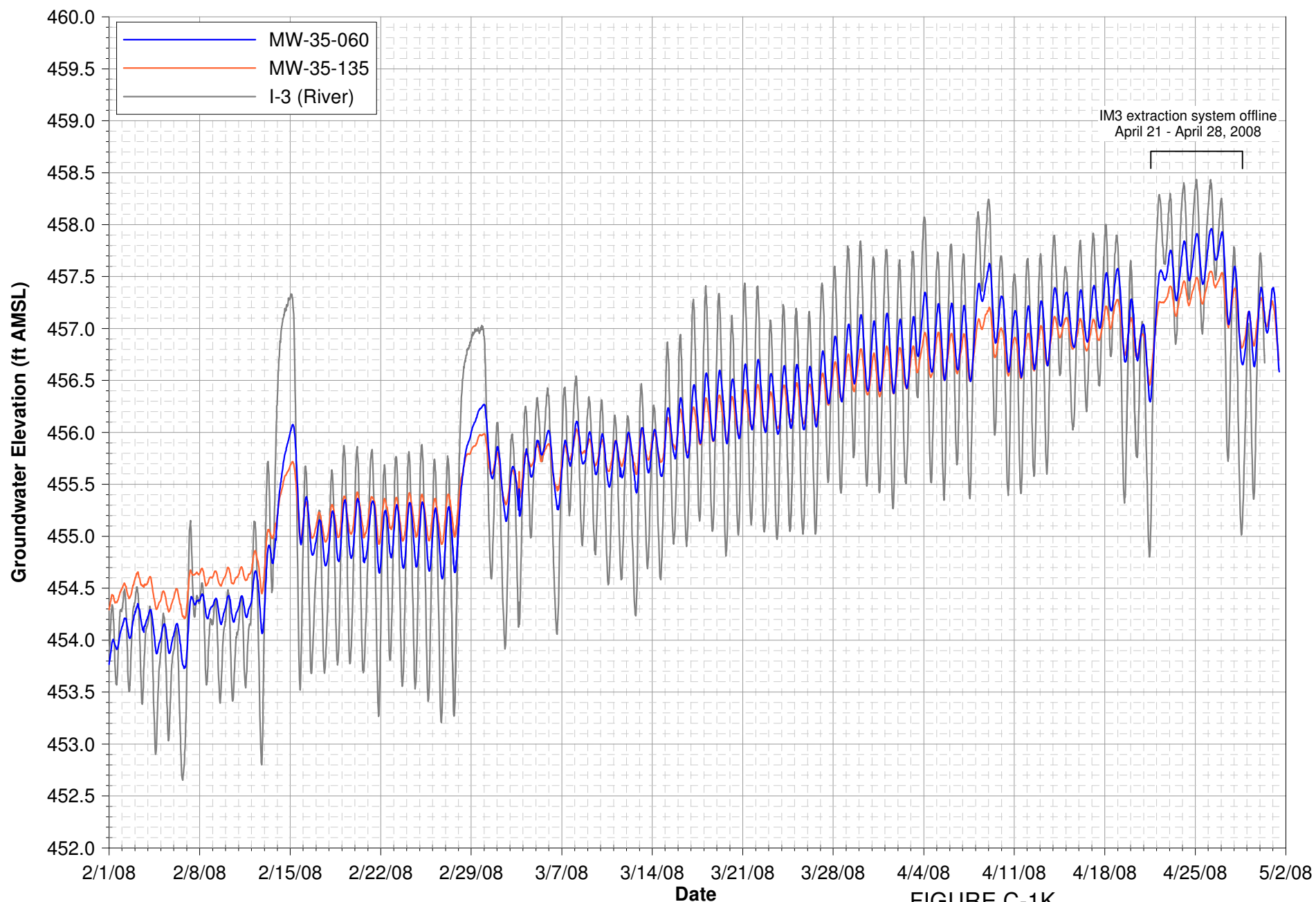
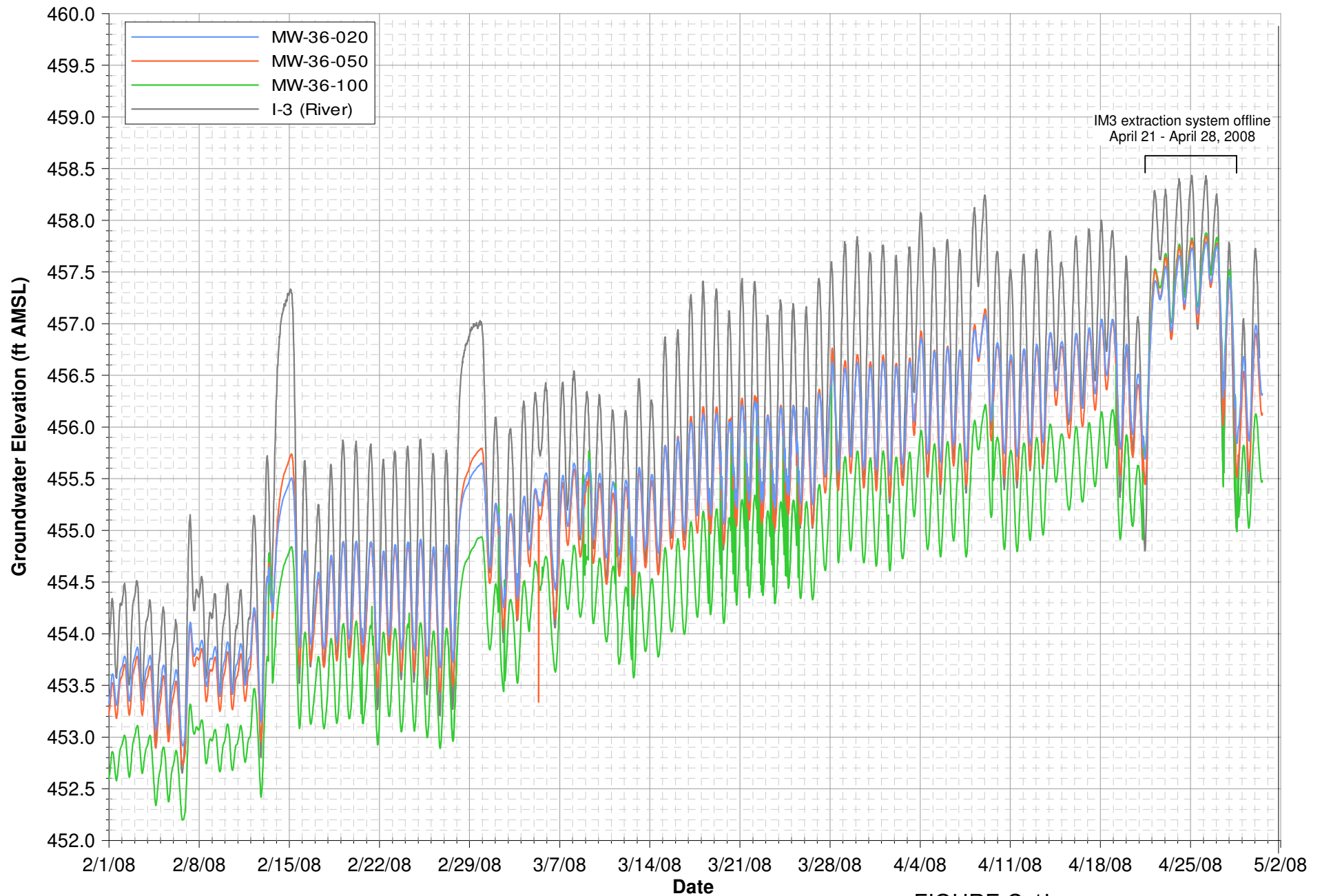


FIGURE C-1K

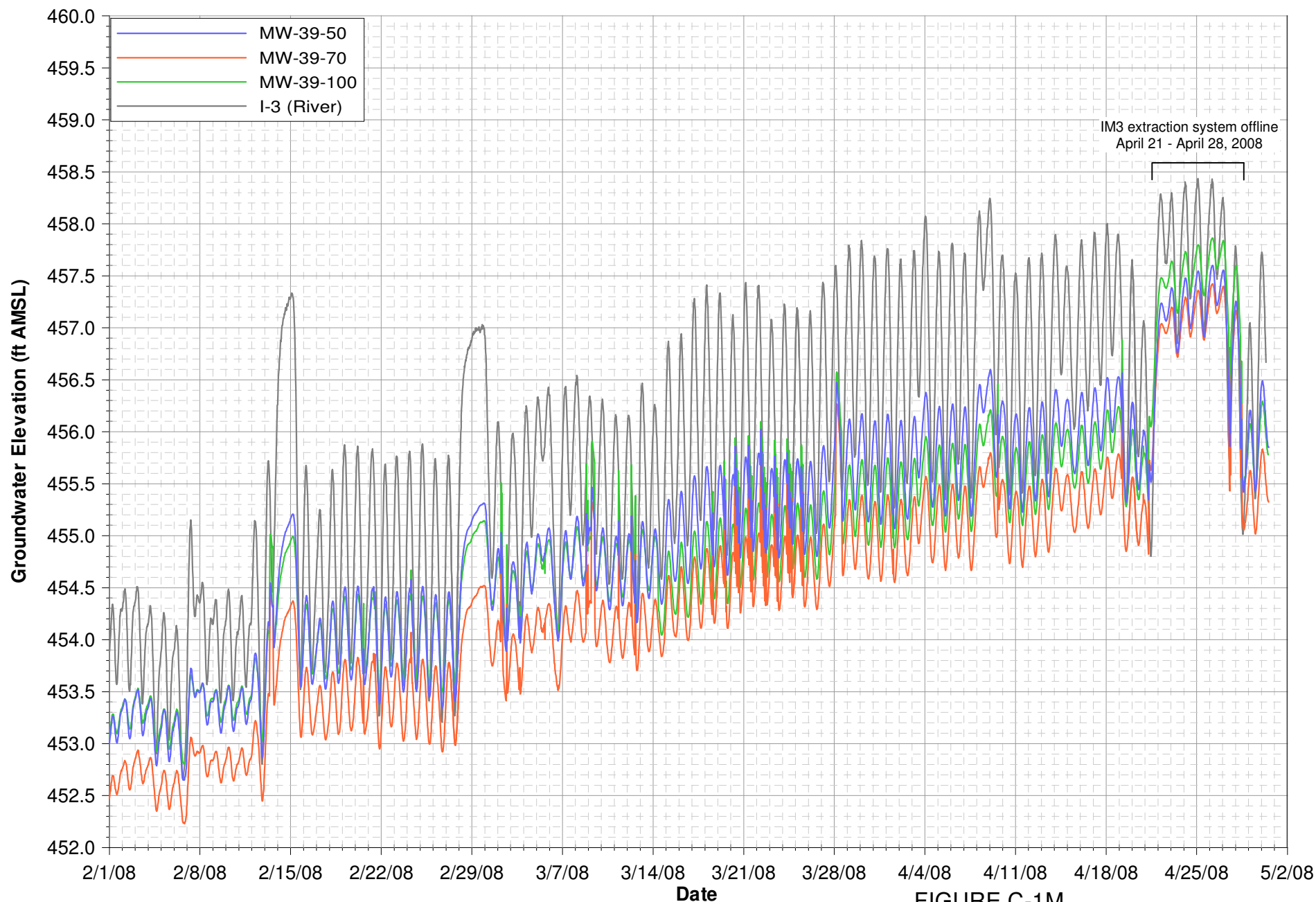
MW-35 WELL HYDROGRAPHS

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



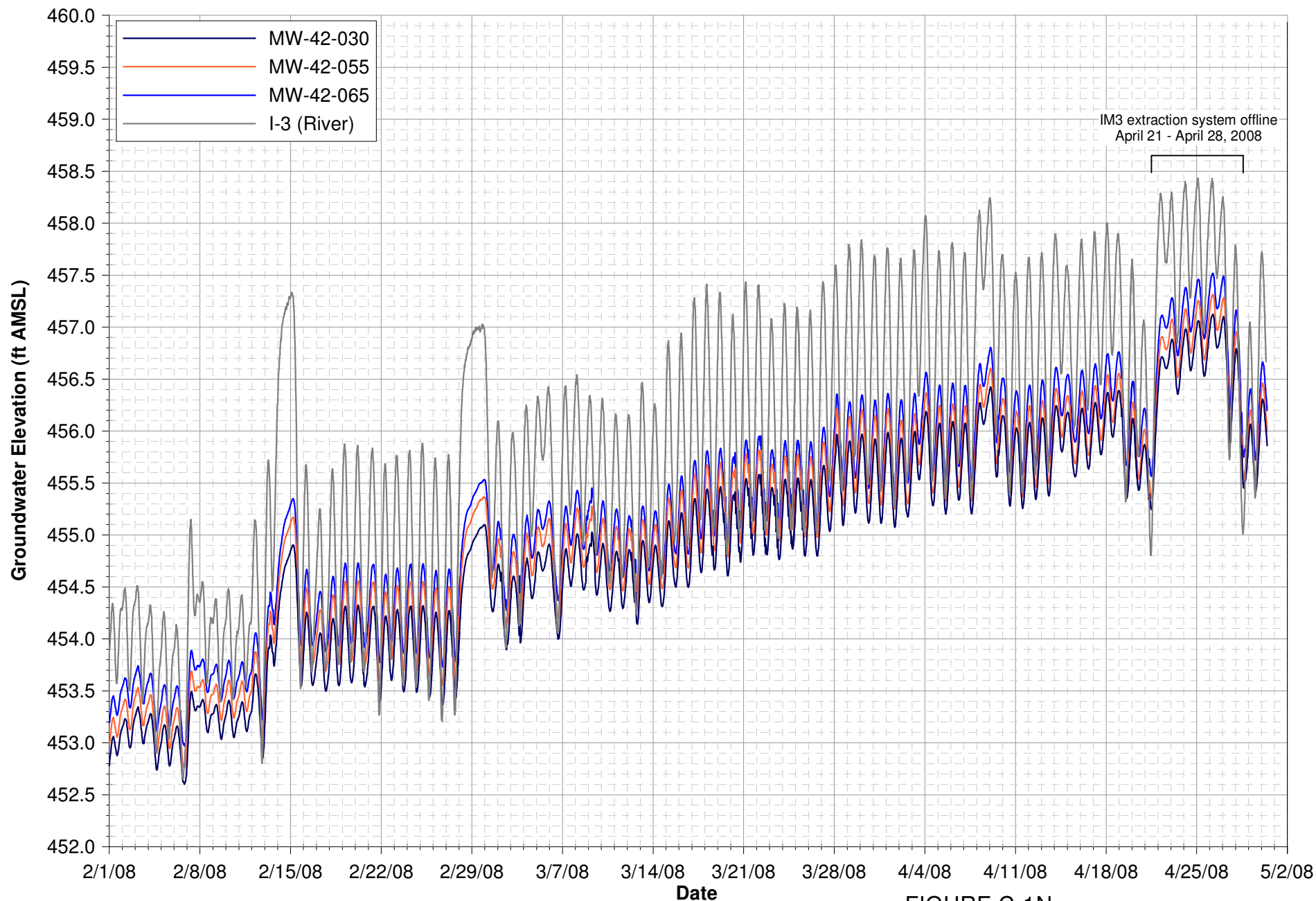
Notes:
Data subject to review.
IM3 extraction system intermittently
offline 3/17/08 - 3/28/08.

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



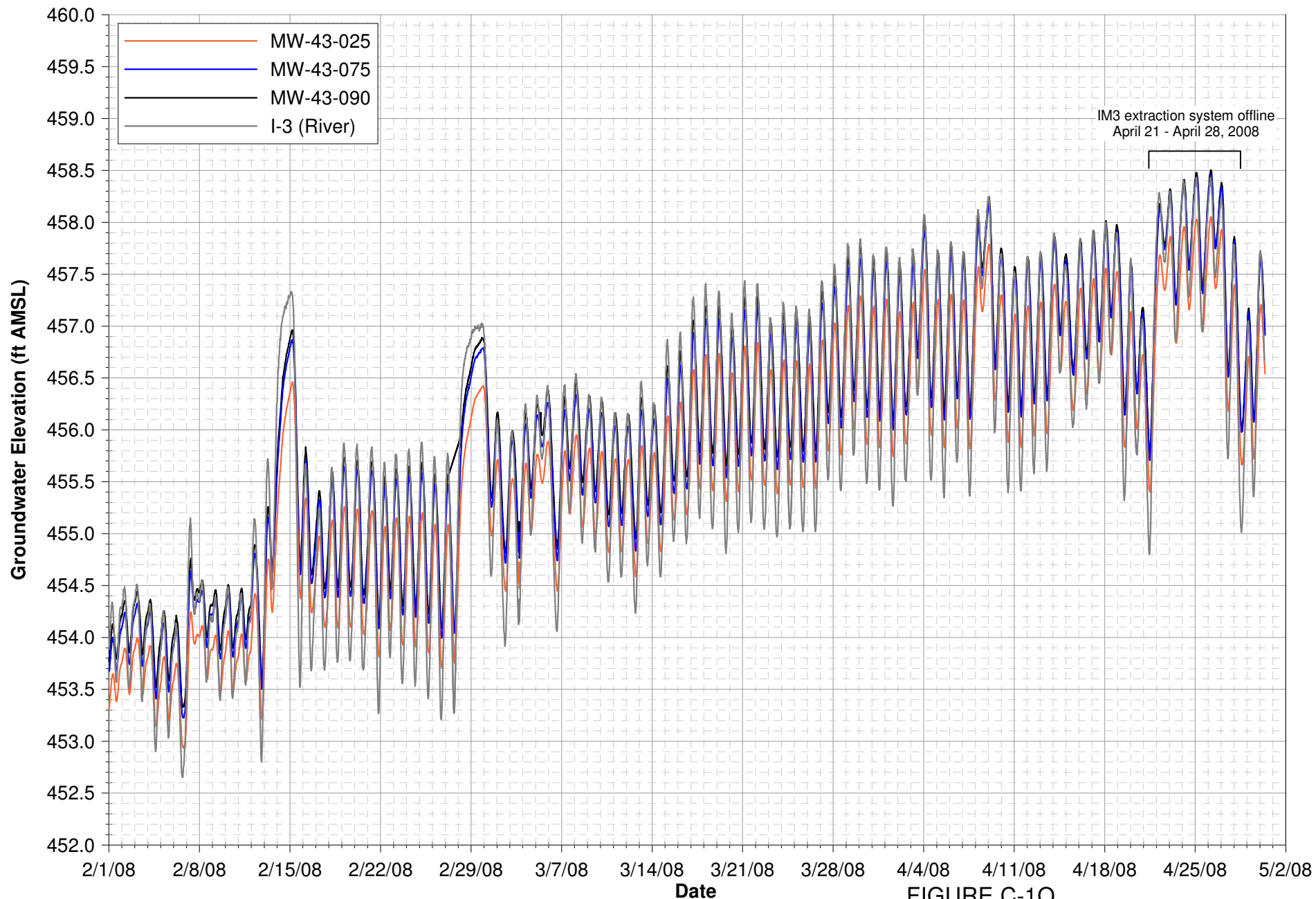
Notes:
Data subject to review.
IM3 extraction system intermittently
offline 3/17/08 - 3/28/08.

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



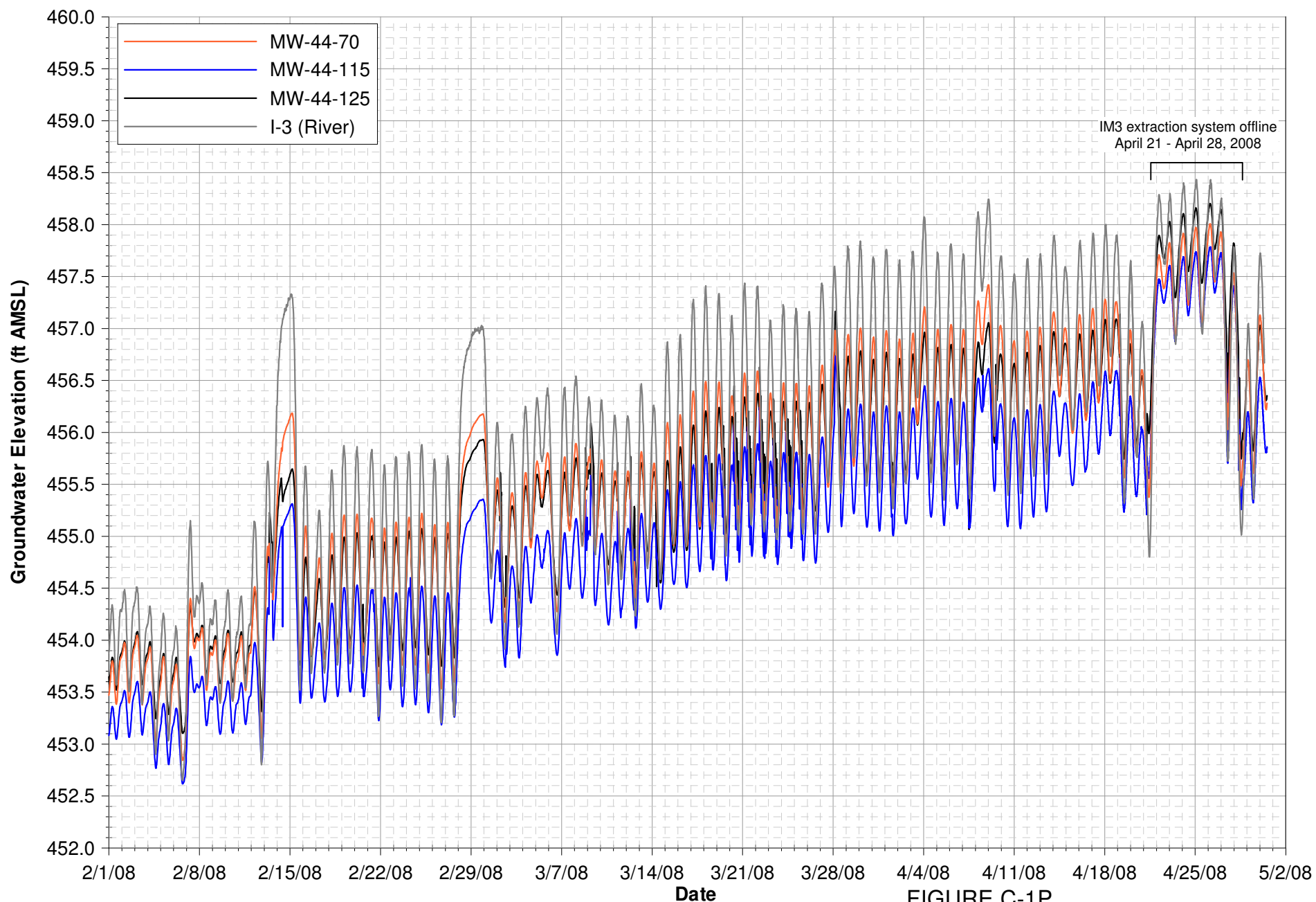
Notes:
Data subject to review.

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



Notes:
Data subject to review.

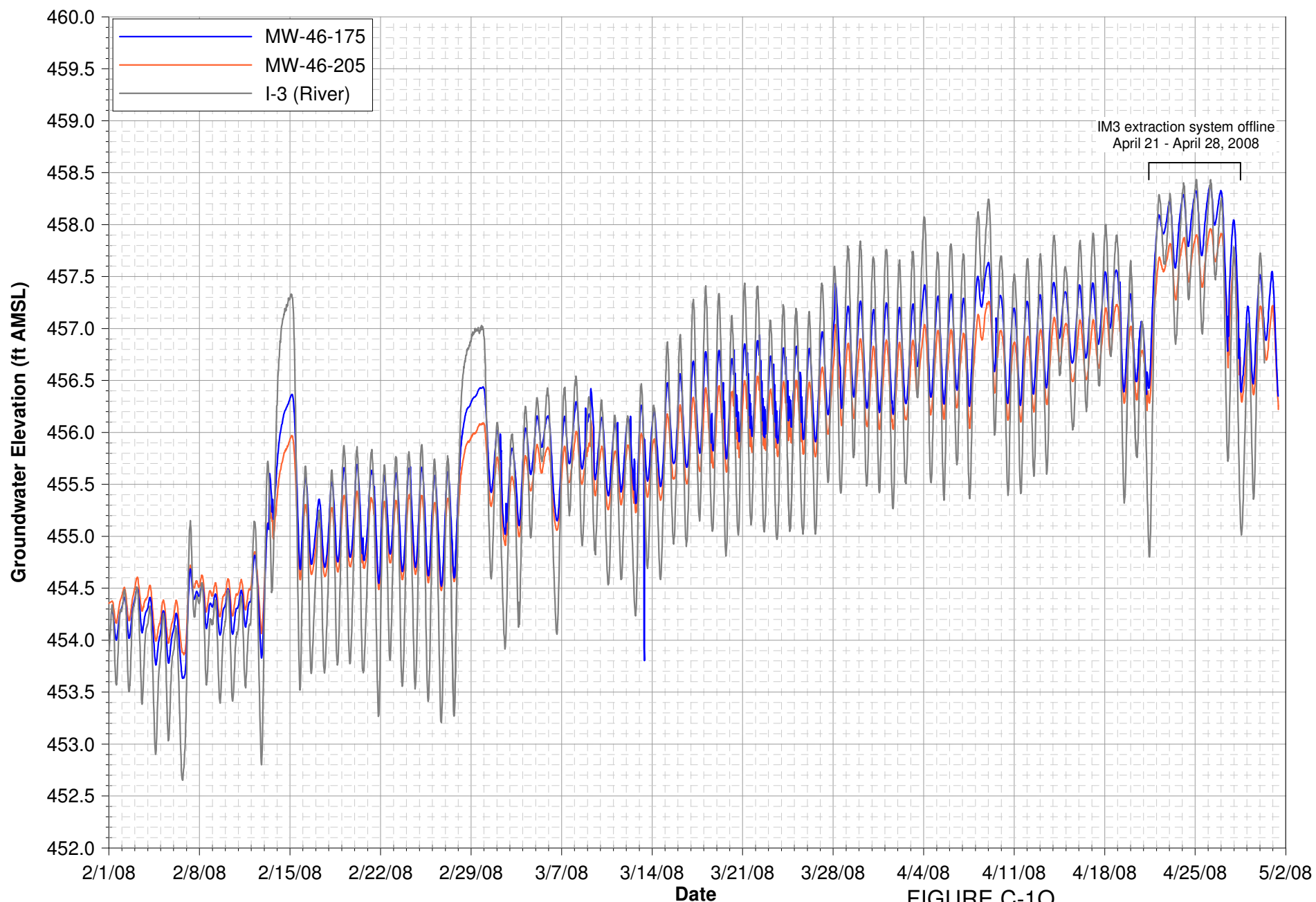
FIGURE C-10
MW-43 CLUSTER HYDROGRAPHS
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



Notes:
Data subject to review.
IM3 extraction system intermittently
offline 3/17/08 - 3/28/08.

FIGURE C-1P

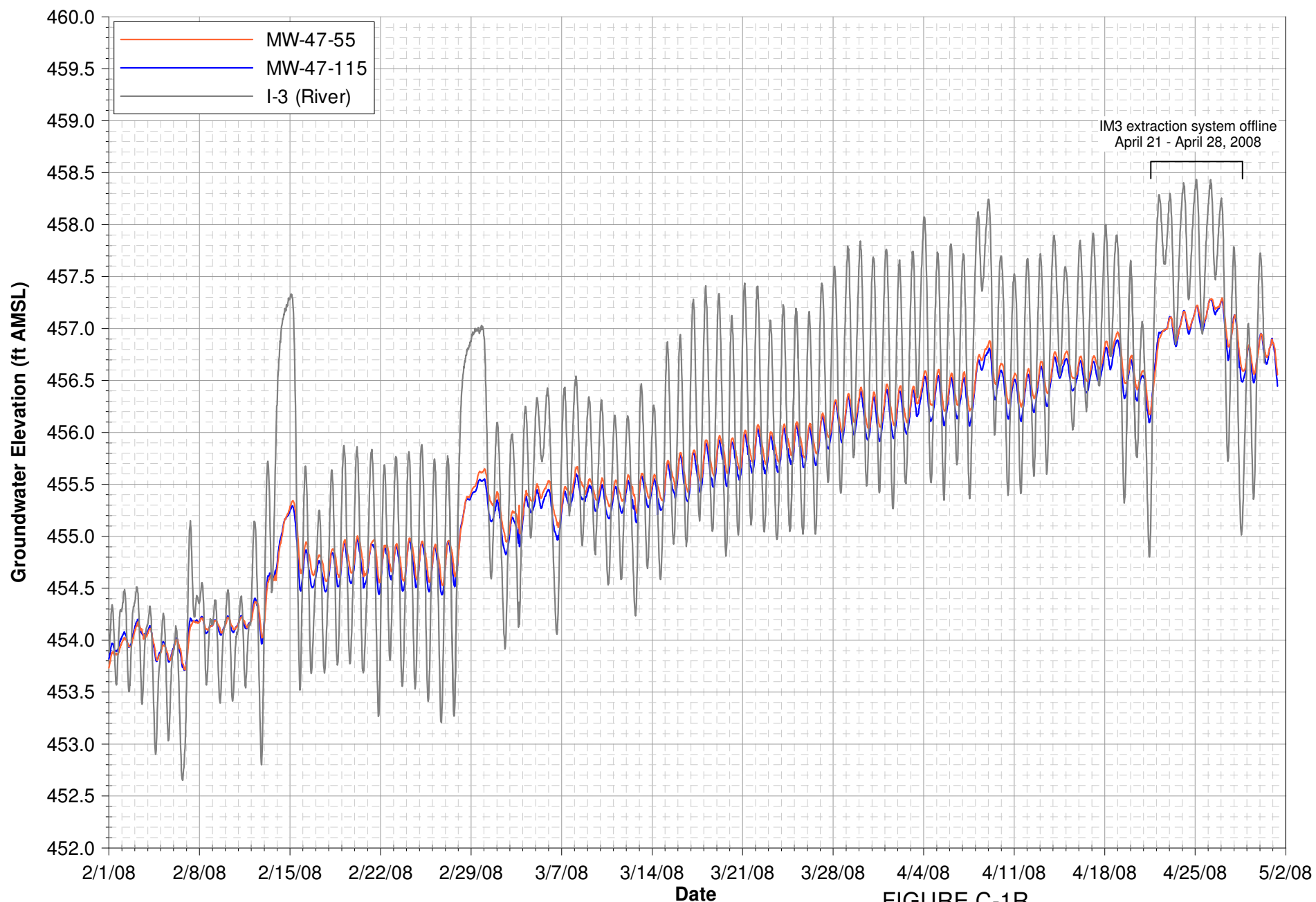
MW-44 CLUSTER HYDROGRAPHS
INTERIM MEASURES PERFORMANCE MONITORING
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



Notes:
Data subject to review.

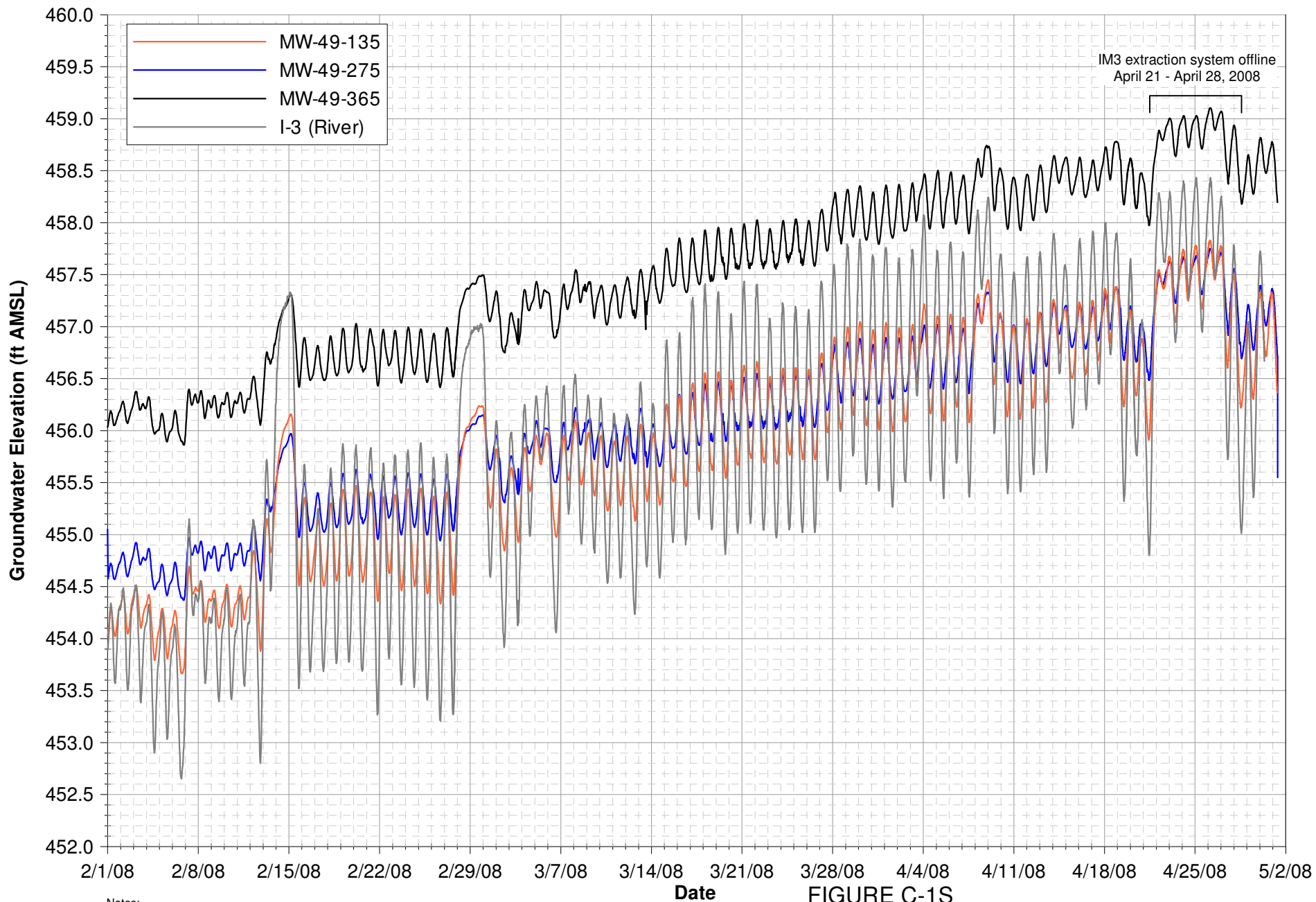
FIGURE C-1Q

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



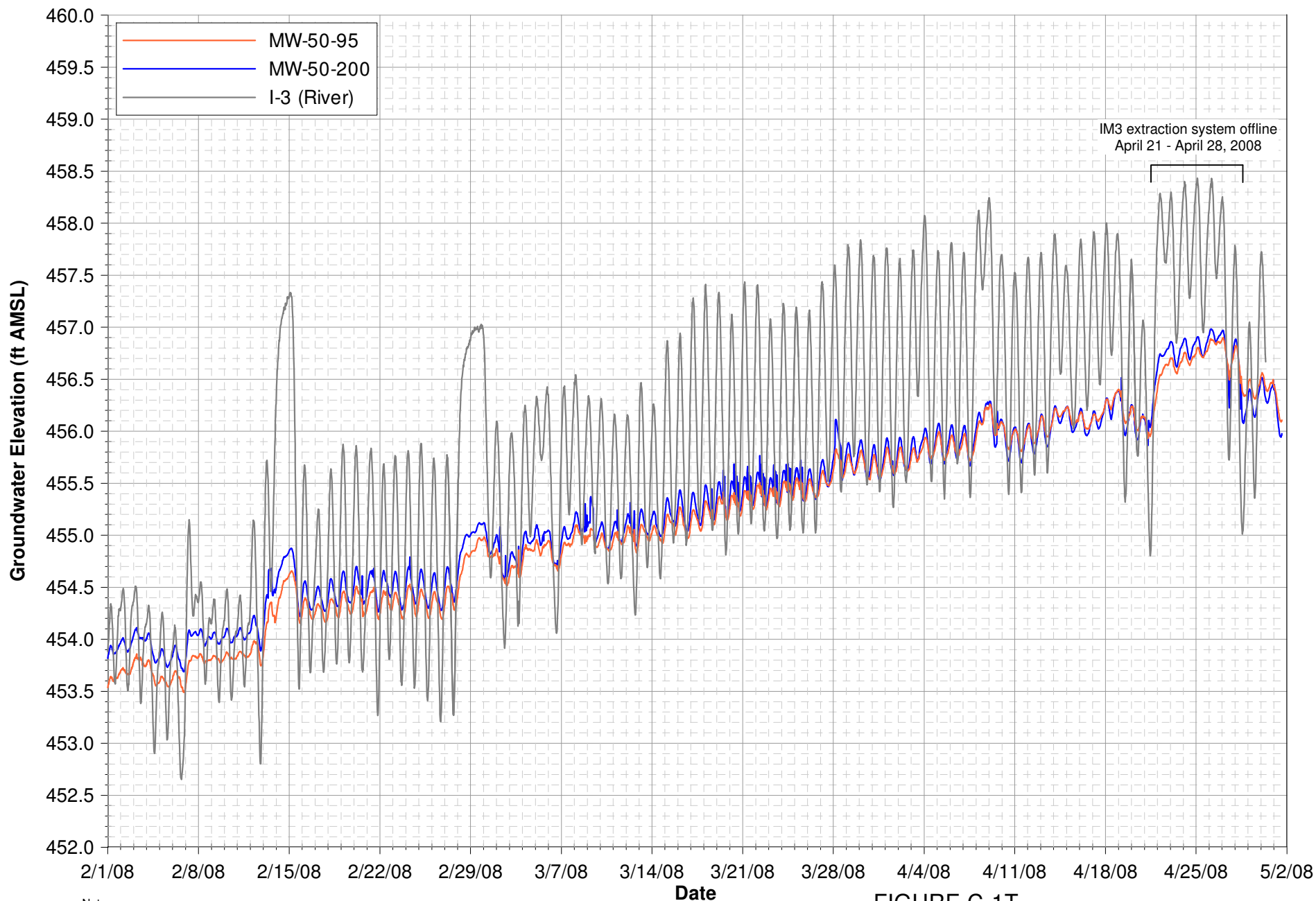
Notes:
Data subject to review.

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



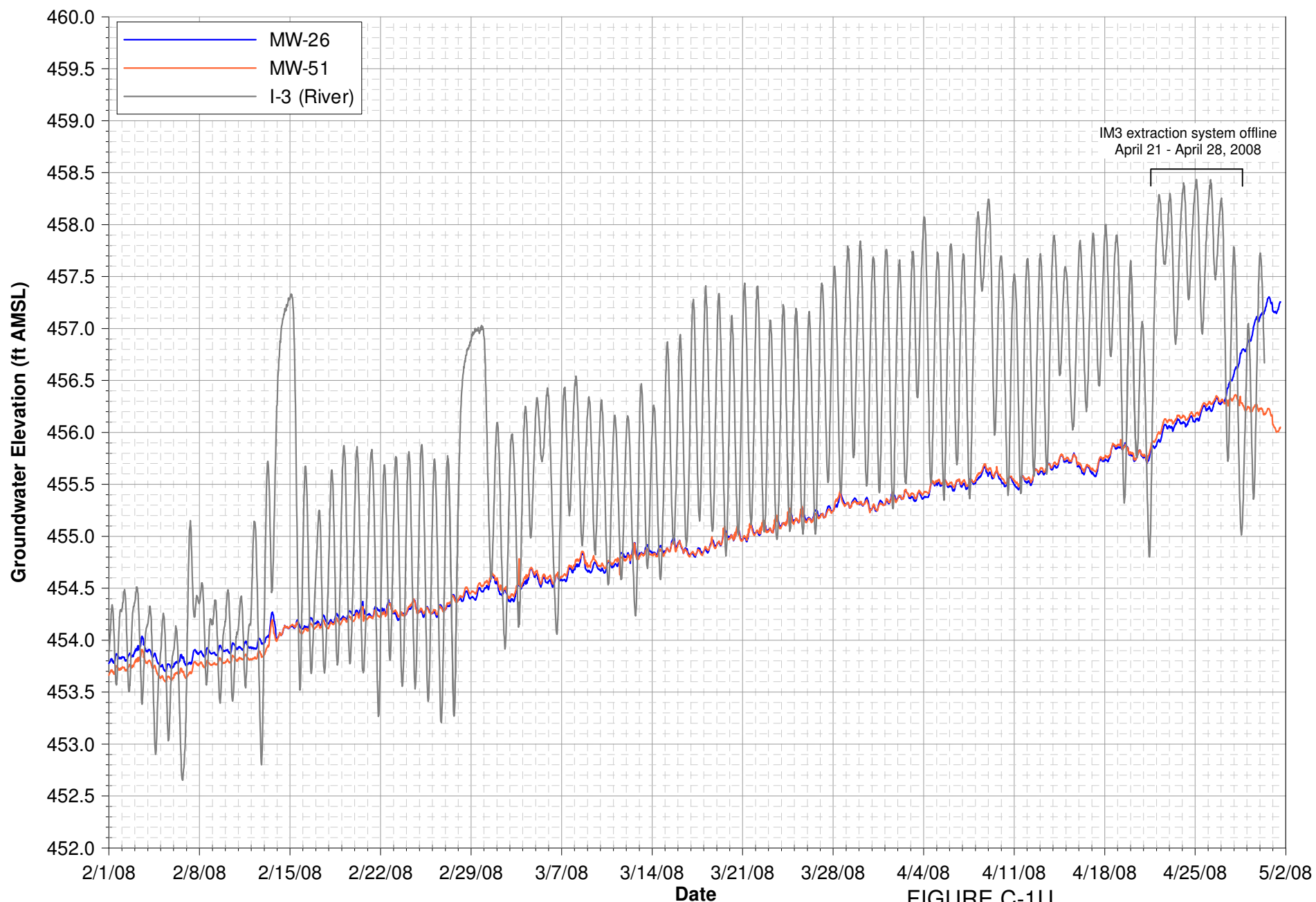
Notes:
Data subject to review.

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



Notes:
Data subject to review.

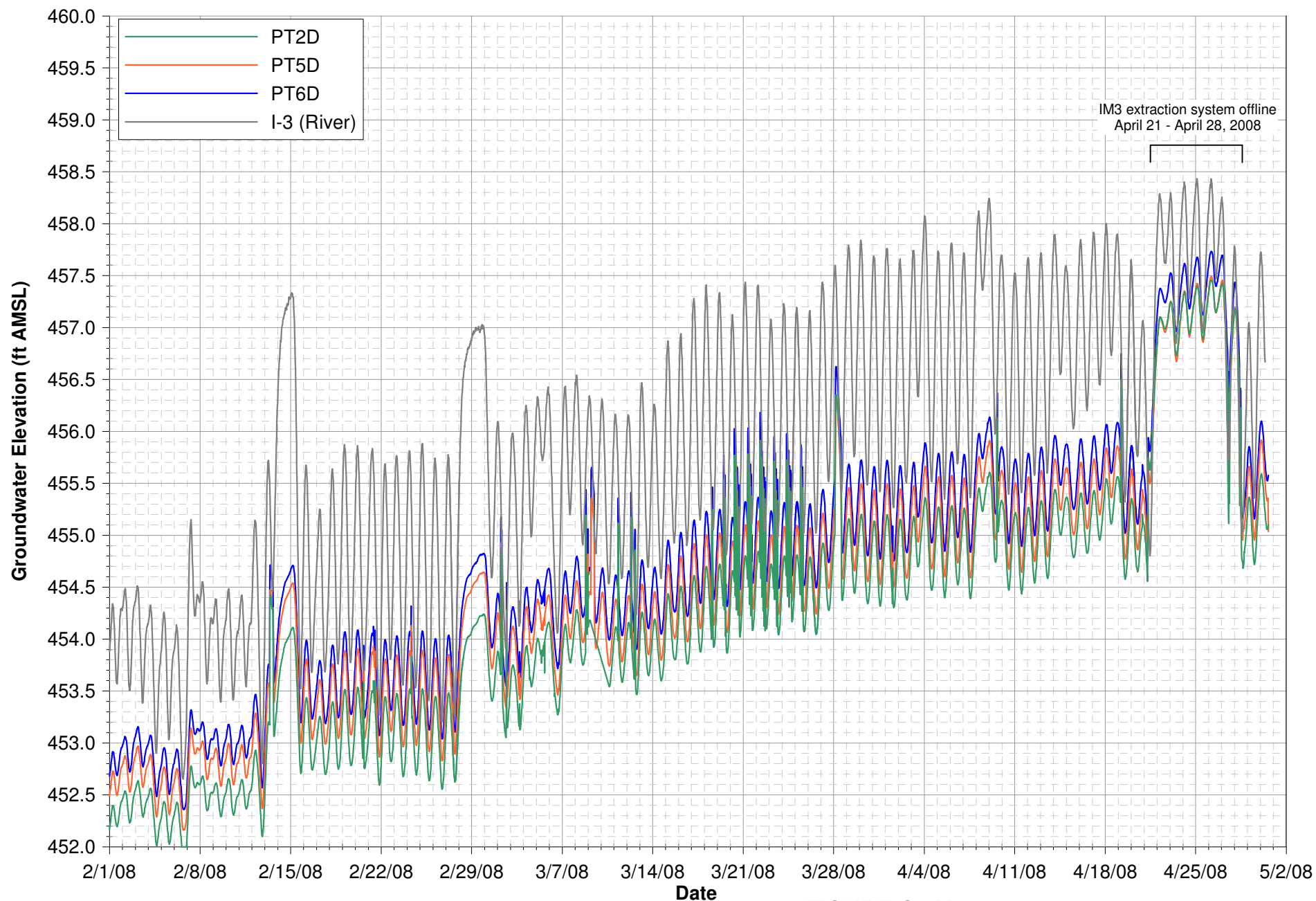
FIGURE C-1T
MW-50 CLUSTER HYDROGRAPHS
 INTERIM MEASURES PERFORMANCE MONITORING
 PG&E TOPOCK COMPRESSOR STATION
 NEEDLES, CALIFORNIA



Notes:
Data subject to review.

FIGURE C-1U

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



Note:
Data subject to review.
IM3 extraction system intermittently
offline 3/17/08 - 3/28/08.

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



Notes:
Data subject to review.
IM3 extraction system intermittently
offline 3/17/08 - 3/28/08.

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 April 2008

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 (1.0)	198	55.4	9.89	431	0.412	81.7
	15-Jun-05	1980	-7.0	-60.0	749	388	9.79	ND (1.0)	189	55.4	10.5	433	0.414	73.8
	15-Jun-05 FD	2050	-8.3	-57.0	760	392	9.81	ND (1.0)	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	9.90	ND (1.0)	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	13.0	ND (5.0)	158	47.6	9.82	472	0.535	85.0
	03-Oct-06 FD	1840	-8.1	-60.5	669	352	12.9	ND (5.0)	154	45.9	9.51	466	0.515	80.0
	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	80.0
	03-May-07	1750	-8.4	-66.7	697	344	25.1	ND (1.0)	139	41.2	8.65	390	0.477	77.5
	11-Oct-07	1820	-8.2	-63.9	699	367	15.6	ND (1.0)	130	39.1	11.0	600	0.54	80.0
	12-Mar-08	1790	-7.6	-65.2	695	360	22.1	ND (1.0)	139	41.2	10.7	403	0.51	77.0
MW-20-100	10-Mar-05	2490	-5.2	-49.0	466	511	9.98	ND (1.0)	133	19.8	8.98	712	0.859	84.2
	15-Jun-05	2500	-4.7	-46.0	921	506	9.02	ND (1.0)	137	21.3	9.06	592	0.713	84.0
	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 (1.0)	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	27.0	7.75	597	0.803	92.5
	05-May-06	2260	-5.1	-46.4	927	522	9.99	ND (1.0)	193	32.0	10.8	577	0.716	82.5
	03-Oct-06	2320	-5.8	-51.5	863	456	13.4	ND (5.0)	202	34.4	10.9 J	568	0.874	90.0
	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	9.90	521	0.715	87.5
	03-May-07	2300	-7.3	-59.2	879	493	23.2	ND (1.0)	209	36.0	12.0 J	559	0.699	87.5
	03-May-07 FD	2330	-6.7	-59.3	888	484	19.7	ND (1.0)	208	34.6	9.63 J	532	0.686	87.5
	10-Oct-07	2160	-7.2	-57.2	858	468	3.25	ND (1.0)	190	32.0	15.0	560	0.81	92.0
	12-Mar-08	2470	-6.9	-58.3	827	442	19.2	ND (1.0)	218	35.4	11.9	469	0.702	87.0
MW-20-130	09-Mar-05	5520	-5.8	-56.0	3120	1080	10.9	ND (1.0)	219	12.1	24.7	2250	1.90	68.9
	09-Mar-05 FD	6200	-5.4	-51.0	3080	1080	10.9	ND (1.0)	231	12.8	25.4	2390	1.99	68.9

TABLE D-1

Chemical Performance Monitoring Results, March 2005 through April 2008

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	15-Jun-05	7790	-5.0	-48.0	3410	1230	11.1	ND (1.0)	352	23.2	31.3	2980	2.75	68.7
	07-Oct-05	7330	-5.0	-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
	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 (1.0)	349	20.3	27.7	2810	2.40	69.2
	18-Oct-06	8450	-6.3	-51.4	3680	1100	11.5	ND (5.0)	358	20.9	28.0	2870	2.28	70.0
	13-Dec-06	7890	-6.0	-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	27.0	2760	2.24	70.0
	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	9.80 J	ND (1.0)	338	22.5	27.8	2550	2.49	75.0
	03-May-07 FD	8100	-6.9	-60.1	3950	1290	20.4 J	ND (1.0)	338	21.9	27.3	2550	2.47	72.5
	05-Oct-07	7980	-7.0	-57.5	3670	1070	11.6	ND (1.0)	310	19.0	31.0	2900	2.40	77.0
	12-Mar-08	8460	-6.2	-58.7	3690	1220	14.3	ND (1.0)	342	23.4	47.0	2260	2.07	75.0
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	20.0	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	9.80	143	0.396	153
	14-Dec-05 FD	896	-8.4	-50.0	219	155	3.75	ND (0.5)	73.0	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	-9.0	-59.4	272	172	3.95	ND (0.5)	78.0	17.3	7.38	222	0.418	150
	03-May-06 FD	924	-9.0	-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	15.0	7.25	206	0.466	163
	06-Mar-07	843	-9.0	-66.9	221	164	3.95	ND (0.5)	72.9	14.4	6.85	203	0.459	160
	02-Oct-07	796	-9.0	-65.8	189	155	4.58	ND (1.0)	66.0	14.0	7.90	200	0.49	180
	02-Oct-07 FD	758	-9.0	-65.7	195	157	4.40	ND (1.0)	63.0	13.0	7.70	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

TABLE D-1

Chemical Performance Monitoring Results, March 2005 through April 2008

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	13-Jun-05	2130	-8.2	-65.0	847	371	4.90	ND (0.5)	178	44.6	14.0	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	4.90	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	42.0	12.8	555	0.723	121
	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	-9.0	-67.0	917	387	6.02	0.646	163	41.6	12.9	621	0.622	90.0
	02-Oct-07	2180	-8.6	-66.3	945	391	7.84	ND (1.0)	170	42.0	15.0	620	0.66	100
	12-Mar-08	2500	-8.1	-67.2	908	398	10.7 J	ND (1.0)	176	44.1 J	16.2 J	498	0.589	103
	12-Mar-08 FD	2420	-8.9	-68.2	905	398	7.61 J	ND (1.0)	160	32.8 J	12.7 J	462	0.601	102
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	81.0	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	4.90	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 (1.0)	ND (1.0)	97.0	34.0	5.30	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	3.50	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	37.0	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 (1.0)	ND (1.0)	120	37.0 J	4.80	150	0.26 J	230
MW-30-30	10-Mar-05	38800	-9.8	-79.0	16000	4270	ND (5.0)	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	5.20	521
	15-Dec-05	35700	-8.7	-59.0	19700	4070	ND (1.0)	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

TABLE D-1

Chemical Performance Monitoring Results, March 2005 through April 2008

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-30-30	02-May-06	32400	-10.3	-70.7	15400	3300	ND (0.5)	ND (5.0)	882	828	59.4	10300	3.95	756
	10-Oct-06	29400	-9.4	-68.7	17800	4400	ND (2.5)	ND (2.5)	729	653	55.0	10200	4.32	550
	08-Oct-07	27400	-9.0	-73.9	13700	3370	ND (1.0)	3.88	650	540	56.0	9600	4.50	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	37.0	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
	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	14.0	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	70.0
	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)	87.0	15.4	9.32	275	0.359	73.0
	15-Mar-06	1560 J	-8.6	-65.6	661	191	4.37	ND (0.5)	106	17.5	7.30	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	5.00	ND (0.5)	113	20.6	9.60 J	325	0.464	80.0
	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
MW-32-20	04-Oct-07	1720	-9.4	-69.6	799	208	5.15	ND (1.0)	150	26.0	7.30	580	0.64	80.0
	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	-9.0	-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 (5.0)	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 (1.0)	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	46.0	4780	2.87	218
	02-Oct-06	46200 J	-8.6	-67.1	20200	3190	ND (2.5)	7.30	1870	1070	87.0	11300	6.34	660
	11-Dec-06	37900	-8.0	-67.0	17900	3020	ND (5.0)	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

TABLE D-1

Chemical Performance Monitoring Results, March 2005 through April 2008

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-32-20	01-Oct-07	37200	-8.3	-70.1	20600	3160	ND (1.0)	6.44	1800	1100	93.0	9900	5.70	700
	10-Mar-08	26000	-9.4	-72.6	15800	2280	ND (1.0)	5.66	1190	710	67.4	11600	2.31	800
MW-32-35	09-Mar-05	3560	-8.2	-68.0	1770	465	ND (0.5)	0.845	312	85.5	13.0	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 (5.0)	567	134	29.3	1530	1.26	208
	16-Dec-05	7660	-8.8	-63.0	3510	710	ND (1.0)	1.02	606	128	30.0	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
	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	-9.0	-70.4	5090	1000	ND (0.5)	1.90	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)	2.60	1250	273	26.2	3280	1.35	475
	01-Oct-07	13700	-8.9	-72.7	6830	1120	ND (1.0)	2.62	1000	390	29.0	4000	1.70	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	52.0	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	1.20	232
	14-Dec-05	5100	-10.8	-74.0	2150	552	ND (0.5)	0.588	217	45.0	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 (1.0)	ND (1.0)	15.0	3.30	3.30	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	28.0	2750	1.65	304
	15-Mar-05	8980	---	---	3920	ND (5.0)	ND (1.0)	---	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	24.0	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

TABLE D-1

Chemical Performance Monitoring Results, March 2005 through April 2008

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-34-80	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 (1.0)	282	57.0	18.6	2080	1.33	245
	03-Oct-07	5490	-11.3	-87.8	2630	696	ND (1.0)	ND (1.0)	220	53.0	21.0	2000	1.20	240
	13-Dec-07	5420	-10.9	-88.6	2380	698	ND (1.0)	ND (1.0)	193	49.1	25.4	1450	1.09	264
	12-Mar-08	5500	-11.4	-87.3	2510	739	ND (1.0)	ND (1.0)	237	52.6	19.2	2030	1.14	238
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
	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)	87.0	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	-104.0	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	-101.0	89.4	253	0.336	ND (0.2)	74.2	28.9	5.47	86.5	ND (0.2)	132
	05-Dec-07	---	-11.7	-99.0	94.7	256	ND (1.0)	ND (0.2)	89.8	31.7	6.60	93.4	0.157	137
	02-Apr-08	---	---	---	93.0	267	ND (1.0)	ND (1.0)	80.2	30.7	5.50	106	0.432	136
R-28	08-Mar-05	651	-12.5	-102.0	90.4	231	ND (13)	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	6.30	77.0	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	91.0	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	32.0	4.66	108	ND (0.2)	143
	14-Mar-07	710	-12.8	-100.0	96.7	268	0.534	ND (0.5)	87.9	31.0	5.71	105	ND (0.2)	133
	09-May-07	690	-13	-102.0	95.8	271	ND (0.5)	ND (0.5)	86.1	30.5	5.92	103	ND (0.2)	143
	12-Sep-07	682	-12.4	-99.4	106	296	0.372	ND (0.2)	73.8	29.9	6.36	89.2	ND (0.2)	122

TABLE D-1

Chemical Performance Monitoring Results, March 2005 through April 2008

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-28	06-Dec-07	---	-11.7	-98.6	96.5	258	0.345	ND (0.2)	75.7	30.4	6.62	79.4	ND (0.2)	139
	02-Apr-08	---	---	---	92.5	309	ND (1.0)	ND (1.0)	84.7	31.4	5.58	108	0.467	137

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).