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June 21, 2006

Norman Shopay  
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Subject: Performance Monitoring Report for May 2006  
Interim Measures Performance Monitoring Program  
PG&E Topock Compressor Station, Needles, California

Dear Mr. Shopay:

Enclosed is the *Performance Monitoring Report for May 2006* for the Interim Measure Performance Monitoring Program at the PG&E Topock Compressor Station. This monitoring report documents the performance monitoring results for May 1 through 31, 2006, and has been prepared in conformance with DTSC's letter dated February 14, 2005.

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

Sincerely,

*Paul Berton* for Yvonne Meeks

Enclosure

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# **Performance Monitoring Report for May 2006**

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

Prepared for  
**California Department of Toxic Substances Control**

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

June 21, 2006

**CH2MHILL**  
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Oakland, California 94612

**Performance Monitoring Report  
for May 2006**

**Interim Measures Performance Monitoring Program**

**PG&E Topock Compressor Station  
Needles, California**

**Prepared for  
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**June 21, 2006**

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



Paul Bertucci, C.E.G. No. 1977  
Project Hydrogeologist



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# Acronyms and Abbreviations

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µg/L	micrograms per liter
cfs	cubic feet per second
Cr(T)	total chromium
Cr(VI)	hexavalent chromium
DTSC	Department of Toxic Substances Control
gpm	gallons per minute
IM	Interim Measure
PG&E	Pacific Gas and Electric Company
PMP	Performance Monitoring Program
USBR	United States Bureau of Reclamation

# 1.0 Introduction

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

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

This monthly report has been prepared in compliance with DTSC’s requirements and documents the monitoring activities and performance evaluation of the IM hydraulic containment system for the period from May 1 through 31, 2006. The next monthly report for the June 2006 reporting period will be submitted by July 14, 2006.

Figure 1-2 shows the locations of wells used for the IM extraction, performance monitoring, and hydraulic gradient calculation. During March 2006, eight additional groundwater monitoring wells (four well cluster sites) were installed as part of the 2006 IM performance monitoring drilling program (*Technical Addendum No. 1, Well Installation Work Plan*, CH2M HILL, dated January 27, 2006). The new monitoring wells that were installed in March 2006 include MW-44 (3 wells), MW-45 (1 well), MW-46 (2 wells), and MW-47 (2 wells). The IM well-drilling program continued in April and included installation of additional groundwater monitoring wells at three more locations: MW-49 (3 wells), MW-50 (2 wells), and MW-51. The new performance monitoring wells installed in March and April have been equipped with pressure transducers and, as of the May 2006 reporting period, are being used for hydraulic monitoring in the floodplain area. Well MW-48, the final well in the IM drilling program, was installed in early May 2006. MW-48 is a bedrock monitoring well, and hence will not be used for IM performance monitoring.

The performance monitoring wells, updated through May 2006, are defined as:

- **Floodplain Wells** (monitoring wells on the Colorado River floodplain): MW-22, MW-27 cluster (3), MW-28 cluster (2), MW-29, MW-30 cluster (2), MW-32 cluster (2), MW-33 cluster (4), MW-34 cluster (3), MW-36 cluster (6), MW-39 cluster (6), MW-42 cluster (3), MW-43 cluster (3), MW-44 cluster (3), MW-45, MW-46 cluster (2), MW-49 cluster (3).
- **Intermediate Wells** (monitoring wells located immediately north, west, and southwest of the floodplain): MW-12, MW-19, MW-20 cluster (3), MW-21, MW-26, MW-31 cluster (2), MW-35 cluster (2), MW-47 cluster (2), MW-50 cluster (2 wells), and MW-51.
- **Interior Wells** (monitoring wells located upgradient of IM pumping): MW-10 and MW-25.

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

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

## 2.0 Extraction System Operations

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Pumping data for the IM groundwater extraction system for the period May 1 through May 31, 2006 are shown in Table 2-1. During the reporting period, extraction wells TW-3D and PE-1 operated at a combined target pump rate of 135 gallons per minute (gpm), excluding periods of planned and unplanned downtime.

The May 2006 monthly average pumping rate was 130 gpm. A total of 5,804,484 gallons of groundwater were extracted and treated by the IM No. 3 treatment plant during May 2006. The operational run time for the IM extraction system was approximately 98 percent during this reporting period. An operations log for the extraction system during May 2006, including downtime, is included in Appendix A.

During May 2006, approximately 31,765 gallons of well development and purge water from the groundwater monitoring program and 2006 IM investigation aquifer tests were treated at the IM No. 3 facility, in accordance with the DTSC approval letter dated May 3, 2006. During the periods when the IM well development and testing water was processed at the treatment facility, the pumping rate from extraction well TW-3D was reduced approximately 3.5 gpm, as approved by DTSC's May 3 approval letter.

The concentrate (i.e., brine) from the reverse osmosis system was shipped offsite under manifest as a Resource Conservation and Recovery Act non-hazardous waste and transported to United States Filter Corporation in Los Angeles, California for treatment and disposal. One container of solids (approximately 14 cubic yards each) from the IM No. 3 facility was disposed of at the Chemical Waste Management at the Kettleman Hills facility during May 2006.

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

Table 2-2 summarizes the analytical results of groundwater samples collected from the extraction well system during the May reporting period and prior months. Future monitoring of the extraction well water quality will be completed at the frequency required by the Waste Discharge Requirements issued for the IM No. 3 treatment facility.



## 3.0 Chromium Sampling Results

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During May 2006, the groundwater monitoring wells in the floodplain area were sampled for Cr(VI), total chromium (Cr[T]), and field water quality parameters under quarterly, monthly, biweekly, and weekly 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 2006*, dated June 1, 2006 for the prior and current sampling plan and frequencies for groundwater wells in the performance monitoring area.

Table B-1 in Appendix B presents the groundwater sampling results for Cr(VI) and Cr(T), as well as groundwater elevation and selected field water quality parameters for monitoring wells in the floodplain area during May 2006 and the previous months. Table B-2 (Appendix B) presents the groundwater sampling data for the other wells monitored in the PMP area during the evaluation period.

Figure 3-1 presents the Cr(VI) results distribution for May 2006 in plan view for the groundwater wells monitoring the upper, middle, and lower depth intervals of the Alluvial Aquifer in the floodplain area. The Cr(VI) contour maps for May 2006 performance monitoring have been revised to incorporate data from the new IM monitoring wells (listed in Section 1.0) and the water quality data trends observed in the floodplain area. The revised Cr(VI) contour maps presented on Figure 3-1 do not reflect plume migration during performance monitoring, but rather provide additional interpretation of the inferred distribution of Cr(VI) within the three depth intervals of the Alluvial Aquifer. The aquifer depth intervals, well screens, and May 2006 Cr(VI) sampling results and contours are also shown on Figure 3-1 in a vertical cross-section extending east-west across the floodplain. The California drinking water standard for Cr(T) is 50 µg/L.

Figure 3-2 presents the May 2006 Cr(VI) results for additional floodplain monitoring wells on a cross-section oriented parallel to the Colorado River (see Figure 1-2 for locations of the cross-sections). The hydrogeologic cross-sections presented on Figures 3-1 and 3-2 show the locations and sampling results for the new monitoring wells installed at MW-44, MW-45, and MW-46. For ongoing IM performance evaluation, Cr(VI) concentration trend graphs and hydrographs for key floodplain monitoring wells are presented on Figures B-1 (well MW-33-90), B-2 (MW-34-100), and B-3 (MW-36-100) in Appendix B.

## 4.0 Hydraulic Gradient Results

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During the reporting period, water levels were recorded at intervals of 30 minutes with pressure transducers in 64 wells and two river monitoring stations (I-3 and RRB). The data are typically continuous, with only short interruptions for sampling or maintenance. The location of the wells monitored are shown on Figure 1-2 and listed in Section 1.0.

The monthly average and the minimum and maximum daily average groundwater and river elevations have been calculated from the pressure transducer data for the May reporting period (May 1 through May 31, 2006) and are summarized in Appendix C, Table C-1.

Reported groundwater elevations (or hydraulic heads) are adjusted for temperature and for salinity differences between wells (i.e., adjusted to a common freshwater equivalent), as described in the Performance Monitoring Plan. Groundwater elevation hydrographs (for May 2006) for all wells with transducers are included in Appendix C. The elevation of the Colorado River measured at the river gauge (I-3, Figure 1-2) during May 2006 is also shown on the hydrographs.

The May 2006 hydraulic data and groundwater gradient maps for the upper, middle, and lower depth intervals are shown on Figures 4-1, 4-2, and 4-3, respectively. The groundwater elevations for all depth intervals of the Alluvial Aquifer indicate very strong landward hydraulic gradients throughout the floodplain. 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. The average groundwater elevations measured in the new IM monitoring wells during May 2006 are presented on the middle and lower depth interval gradient maps (Figures 4-2 and 4-3, respectively). The hydraulic data from some of the new monitoring wells are not contoured on these gradient maps due to the significant differences in well screen elevations (e.g., wells screened in the lower depth interval range from 395 to 117 feet below mean sea level). Further analysis and evaluation of hydraulic data from monitoring wells screened in similar elevation intervals in the aquifer will be pursued as part of the PMP.

The landward gradients measured during May 2006 were similar to April 2006. This was the result of a continued high net extraction rate (130 gpm) and rising Colorado River levels during the reporting period. The May 2006 average monthly groundwater elevations are also presented and contoured in cross-section on Figure 4-4 (cross-section location shown on Figure 1-2).

Table 4-1 summarizes the estimated and actual dam discharges and river elevations since April 2004. The actual Davis Dam average discharge for May 2006 of 16,818 cubic feet per second [cfs] was greater than the United States Bureau of Reclamation (USBR) projected discharge of 15,500 cfs for the current reporting period. The actual Colorado River elevation at I-3 (monthly average) was 0.3 feet greater than the level predicted by using the multiple regression method with USBR projections for the May reporting period.

Table 4-2 summarizes gradients measured between the three designated well pairs (MW-31-135/MW-33-150, MW-20-130/MW-34-80, and MW-20-130/MW-42-65) during May 2006. Pumping from extraction well PE-1 began on January 26, 2006. Since that time, the central well pair has been affected by PE-1 pumping. Pumping at PE-1 would tend to lower the water level in MW-34-80 and decrease the apparent gradient in the central well pair. Nevertheless, average gradients in the three well pairs were landward at magnitudes that were between two to four times the target value of 0.001 feet per foot (0.0023, 0.0039, and 0.0042 respectively). These gradients were similar to the average gradients measured in April 2006.

## 5.0 Proposed Modifications to Hydraulic Gradient Pairs

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Initiation of pumping from the second groundwater extraction well PE-1 on the floodplain, in combination with TW-3D, began on January 26, 2006. This has resulted in the need to re-assess the well pairs used for evaluating hydraulic gradients for IM performance monitoring, since well PE-1 is actively pumping at a location between wells which are currently used for gradient measurement (specifically, central well pair MW-20-130/MW-34-80). The current set of wells used for gradient calculation listed in Table 4-2 was selected in February 2005 based on a single pumping center at the MW-20 bench (TW-2D/TW-3D well location).

Table 5-1 presents the proposed new gradient control wells for the current IM extraction system, with concurrent pumping at separate well locations TW-3D and PE-1. The new gradient well pairs are more optimally located to measure and document the hydraulic gradients produced from the two-well extraction system. As listed in Table 5-1, the well pairs proposed for gradient control are screened at similar elevations as the pumping wells. The distances between the proposed new well pairs and the mean landward gradients measured in May 2006 are summarized in Table 5-1. Refer to Figure 4-3 for the locations of the new well pairs proposed for gradient control monitoring of the current IM extraction system.

To better define the drawdown and hydraulic gradient at the TW-3D pumping center, the standby extraction well TW-2D has been instrumented with a pressure transducer. PG&E proposes that well TW-2D be used as the inner gradient control well with MW-33-150 (northern well pair) and with MW-28-90 (central well pair). Well MW-31-135 will serve as the backup pumping center well for gradient control with MW-33-150 and MW-28-90 should pumping from TW-2D resume. The gradients measured in May 2006 between the proposed new TW-3D well pairs were three to four times the target gradient of 0.001 ft/ft (Table 5-1).

Well/piezometer MW-45-95 was specifically installed to be the inner control well for performance monitoring at the PE-1 pumping center on the floodplain. The proposed gradient well pairs for PE-1 are MW-45-95/MW-34-100 (central gradient pair) and MW-45-95/MW-27-85 (southern well pair). The mean hydraulic gradients measured in May 2006 for the proposed southern and central well pairs at PE-1 were 0.005 and 0.013 ft/ft, respectively (Table 5-1). These gradients are 5 and over 10 times the target gradient, respectively.

Modifications of the well pairs used for measuring and documenting gradient control for the current IM extraction system will be incorporated in the ongoing PMP pending review and approval by the DTSC.

## 6.0 Status of Operation and Monitoring

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Reporting of the IM extraction and monitoring activities will continue as described in the Performance Monitoring Plan. The next status report will be a monthly performance monitoring report. It will be submitted by July 14, 2006 and cover the monthly June 2006 reporting period.

As per DTSC direction, PG&E will continue to operate both TW-3D and PE-1 at a target combined pumping rate of 135 gpm, except for periods when planned and unplanned downtime occur during June 2006. Treated groundwater will be discharged into the IM No. 3 injection wells in accordance with Waste Discharge Requirements Order No. R7-2004-0103. Brine generated as a byproduct of the treatment process will continue to be transported offsite.

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

Current USBR projections show that the average Davis Dam release for June 2006 (16,100 cfs) will be less than in May 2006 (16,818 cfs). Based on June 6, 2006 USBR projections, it is anticipated that the Colorado River level at the I-3 gage location in June 2006 will decrease approximately 0.1 foot, compared to the average river level in May 2006. Future adjustments in pumping rates from the IM extraction system will be proposed based on expected river levels, observed groundwater gradients, potential system modifications, and other relevant factors.



**TABLE 2-1**

Pumping Rate and Extracted Volume for IM System through May 2006

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

Extraction Well	May 2006 Period <sup>a</sup>		Project To Date <sup>b</sup>
	Average Monthly Pumping Rate <sup>c</sup> (gpm)	Volume Pumped (gal)	Cumulative Volume Pumped (gal)
TW-2S	0	0	994,438
TW-2D	0	0	52,875,356
TW-3D	96.6	4,311,499	22,036,158
PE-1	33.4	1,492,985	6,310,596
<b>Total</b>	130.0	5,804,484	82,216,548
Volume Pumped from the MW-20 Well Cluster			1,527,724
Total Volume Pumped (gal)			83,774,272
Total Volume Pumped (ac-ft)			257.0

**Notes:**

gpm: gallons per minute.

gal: gallons.

ac-ft: acre-feet.

<sup>a</sup> Pumping results during the monthly period are based on readings collected between May 1, 2006 at 12:00 a.m. and May 31, 2006 at 11:59 p.m. (31 days).<sup>b</sup> Interim Measure groundwater extraction at the Topock site was initiated in March 2004.<sup>c</sup> The "Average Pumping Rate" is the overall average during the reporting period, including system downtime based on flow meter readings.

TABLE 2-2

Analytical Results for Extraction Wells, December 2005 through May 2006

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

Well ID	Sample Date	Dissolved Total Chromium mg/L	Hexavalent Chromium mg/L	Total Dissolved Solids mg/L
TW-2D	07-Dec-05	3.67 UF	3.60	5840
TW-2D	18-Jan-06	1.98	2.18	6930
TW-2D	15-Mar-06	1.36	1.36	5220 J
TW-2D	03-May-06	1.12	1.12	---
TW-2S	15-Mar-06	2.87	2.72	1620 J
TW-2S	03-May-06	2.60	2.40	---
TW-3D	18-Jan-06	4.72	4.33	5090
TW-3D	08-Feb-06	2.88	3.25	5490
TW-3D	08-Mar-06	3.21	3.04	5380
TW-3D	06-Apr-06	2.71	2.95	5740
TW-3D	11-May-06	2.69	2.74	---
PE-1	08-Feb-06	0.136	0.136	7380
PE-1	08-Mar-06	0.125	0.136	6830
PE-1	06-Apr-06	0.117	0.133	6680
PE-1	11-May-06	0.109	0.118	---

**Notes:**

mg/L = concentration in milligrams per liter (mg/L)

UF = unfiltered

J = concentration or reporting limit estimated by laboratory or data validation.

(---) = data not collected.

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

The TW-2D analytical results from August through December 2005 were obtained from a sample point (SC-100B) on the influent conveyance system at the IM3 treatment system. These samples were unfiltered and represent total recoverable chromium.



**TABLE 4-1**

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)
April 2004	17,400	17,354	-46	456.4	456.2	-0.2
May 2004	17,100	16,788	-312	456.3	456.3	0.0
June 2004	15,800	16,869	1,069	455.8	456.6	0.8
July 2004	14,000	14,951	951	455.2	455.9	0.7
August 2004	12,100	12,000	-100	454.5	454.9	0.4
September 2004	11,200	10,979	-221	454.2	454.6	0.4
October 2004	8,600	7,538	-1,062	453.2	453.5	0.3
November 2004	9,500	8,075	-1,425	453.6	453.4	-0.2
December 2004	6,200	8,090	1,890	452.4	453.3	0.9
January 2005	8,800	4,900	-3,900	453.4	452.4	-1.0
February 2005	8,000	4,820	-3,180	453.1	452.6	-0.5
March 2005	15,600	7,110	-8,490	455.8	452.9	-2.9
April 2005	16,700	16,306	-394	455.9	456.0	0.1
May 2005	16,700	15,579	-1,121	456.2	456.1	-0.1
June 2005	14,600	15,223	623	455.8	456.1	0.3
July 2005	15,400	15,612	212	456.0	456.0	0.0
August 2005	11,700	11,544	-156	454.6	454.8	0.2
September 2005	12,400	12,335	-65	454.6	NA	NA
October 2005	12,300	11,201	-1,099	454.5	454.3	-0.2
November 2005	10,900	10,216	-684	454.3	454.3	0
December 2005	6,900	6,745	-155	452.8	452.7	-0.1
January 2006	8,400	9,166	766	453.2	453.6	0.4
February 2006	11,100	10,790	-310	454.1	454.1	0.0
March 2006	13,000	12,429	-571	454.7	454.8	0.1
April 2006	16,600	18,300	1700	456.0	456.1	0.1
May 2006	15,500	16,818	1318	456.0	456.3	0.3
June 2006	16,100	----	----	456.2	----	----

**Notes:**

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

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

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

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

**TABLE 4-2**

Average Hydraulic Gradients Measured at Well Pairs, May 2006

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

<b>Well Pair</b>	<b>Mean Landward Hydraulic Gradient (feet/foot)</b>	<b>Measurement Dates 2006</b>
Northern Gradient Pair MW-31-135 / MW-33-150	0.0023	May 1 through 31
Central Gradient Pair MW-20-130 / MW-34-80	0.0039	May 1 through 31
Southern Gradient Pair MW-20-130 / MW-42-65	0.0042	May 1 through 31

**Notes:**

- 1) Refer to Figure 1-2 for location of well pairs
- 2) For IM pumping, the target landward gradient for the selected well pairs is 0.001 feet/foot
- 3) Extraction well PE-1 began pumping on 1/26/06. As a result, the gradient reported for the central well pair is affected by having an additional pumping well between wells used for gradient calculation.

**TABLE 5-1**

Proposed Modifications to Hydraulic Gradient Well Pairs, June 2006 Revision  
*Interim Measures Performance Monitoring Program*  
*PG&E Topock Compressor Station*

Well Pair Location	Proposed Gradient Control Well Pair	Elevation of Screen Interval (feet MSL)	Distance Between Wells (feet)	Mean Landward Hydraulic Gradient May 2006 (feet/foot)	Remarks
For TW-3D Performance Monitoring					
Northern Gradient Pair					
inner well	TW-2D	384-349	680	0.004	Use MW-31-135 as inner gradient well when TW-2D pumping
outer well	MW-33-150	353-333			
Central Gradient Pair					
inner well	TW-2D	384-349	570	0.003	Use MW-31-135 as inner gradient well when TW-2D pumping
outer well	MW-28-90	395-375			
For PE-1 Performance Monitoring					
Central Gradient Pair					
inner well	MW-45-95	384-374	100	0.013	
outer well	MW-34-100	369-359			
Southern Gradient Pair					
inner well	MW-45-95	384-374	330	0.005	
outer well	MW-27-85	380-370			

**Notes:**

Well screen elevations for active IM extraction wells:

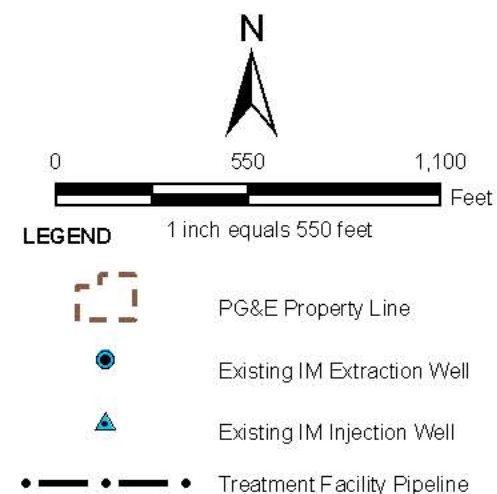
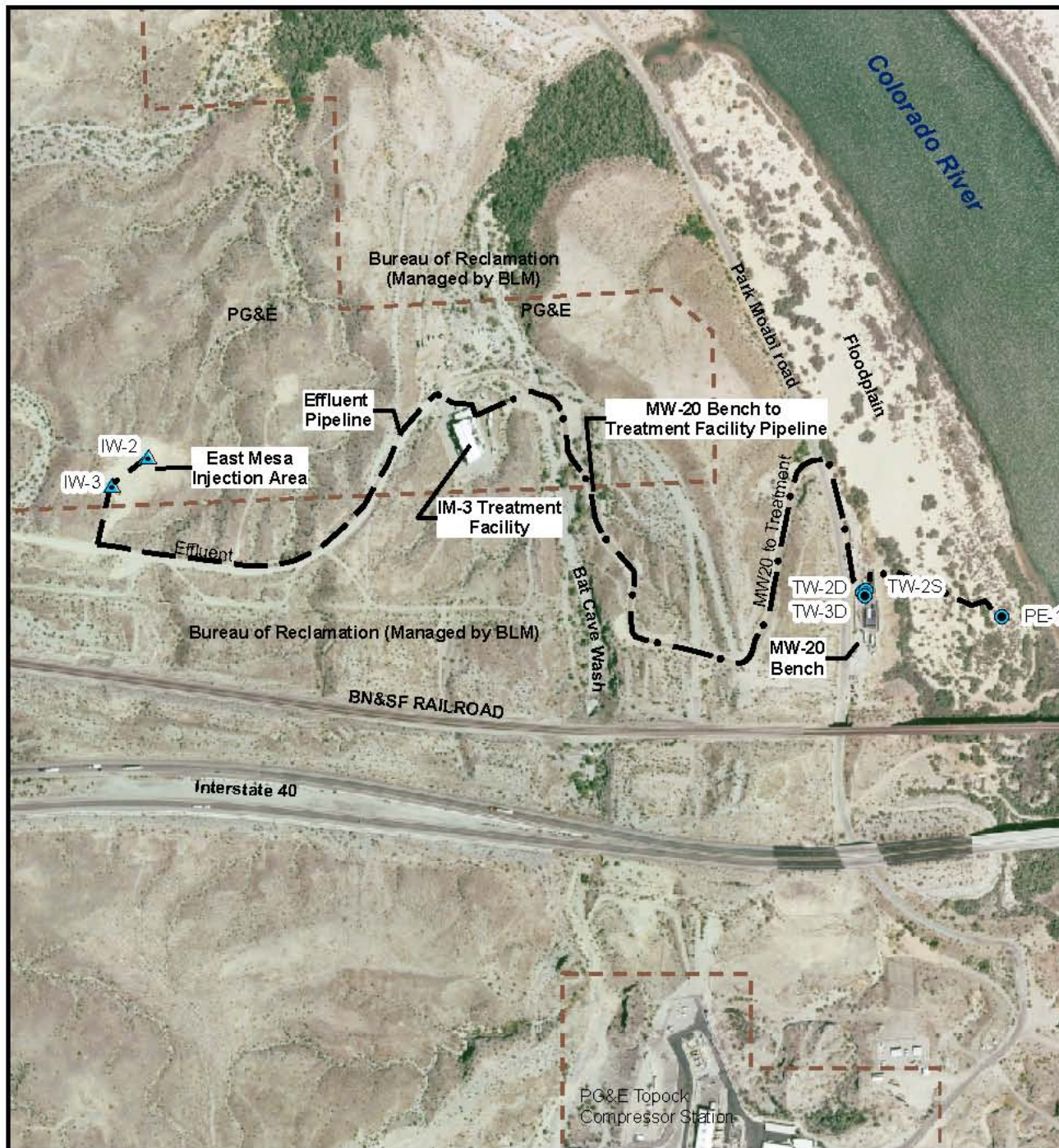
TW-3D 386-341 feet mean sea level (MSL)

PE-1 379-369 feet MSL

For IM pumping, the target landward gradient for the selected well pairs is 0.001 feet/foot

## Figures

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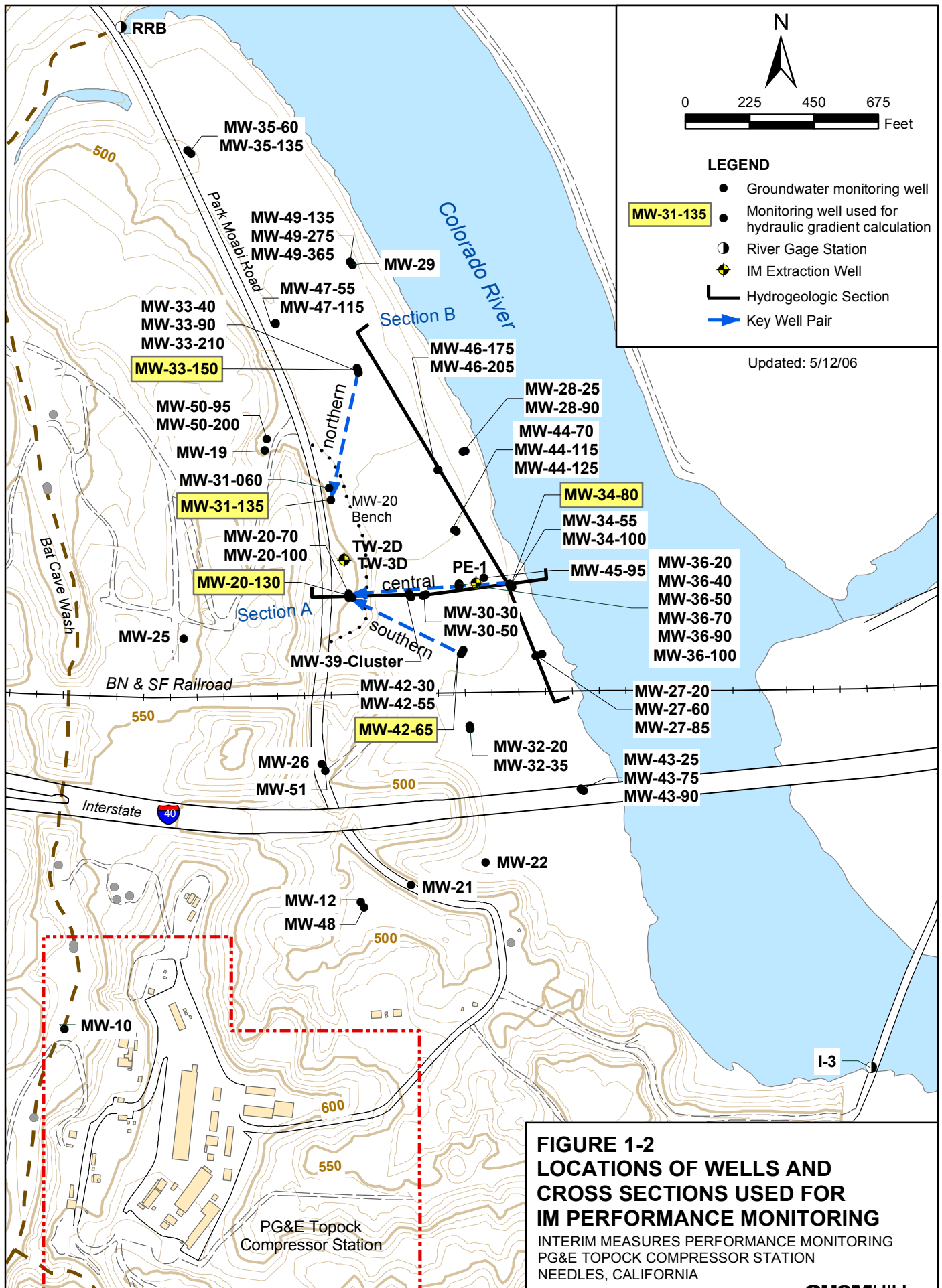
**Notes:** Location map shows Interim Measures No.3 wells as of November 2005. Aerial photography taken May 2005.

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

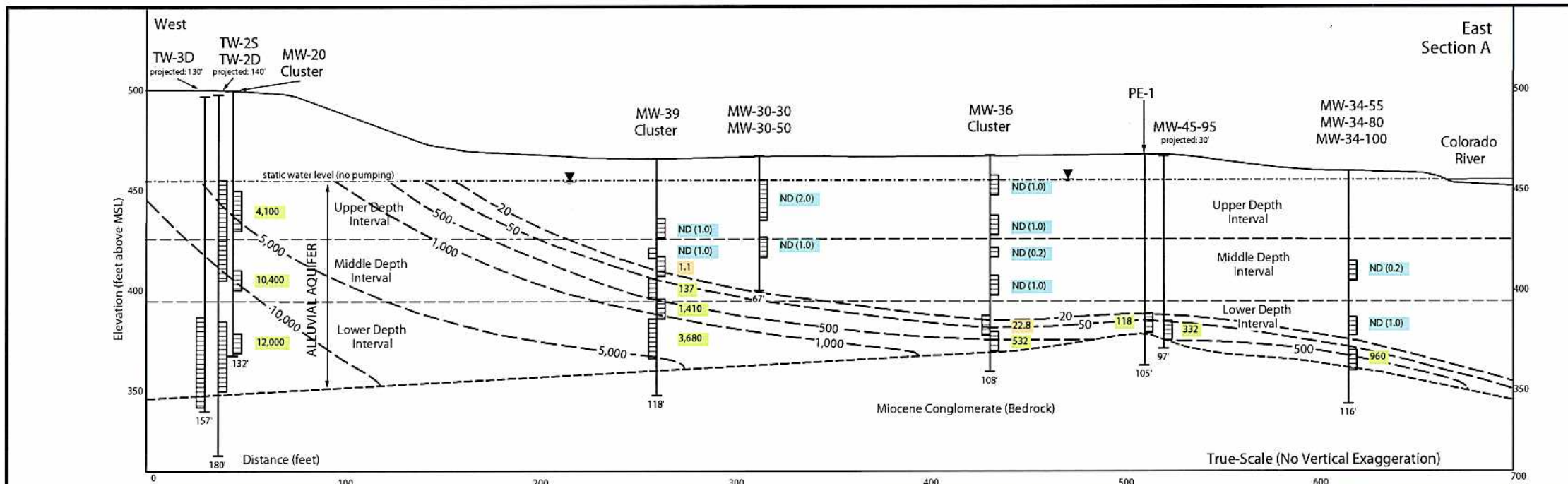
INTERIM MEASURES PERFORMANCE MONITORING  
PG&E TOPOCK COMPRESSOR STATION  
NEEDLES, CALIFORNIA

**CH2MHILL**









## LEGEND

### Maximum Hexavalent Chromium [Cr(VI)] Concentrations in Groundwater, May 2006 Monitoring

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

ND = not detected at listed reporting limit

J = Concentration estimated by laboratory or data validation

Results posted are maximum concentrations from primary and duplicate samples from May 2006. Results marked \* from March 2006 sampling. See Tables B-1 and B-2 for sampling data and other results.

**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

Hydrogeologic Section A (true-scale) showing aquifer depth intervals, well screens, and Cr(VI) sampling results.

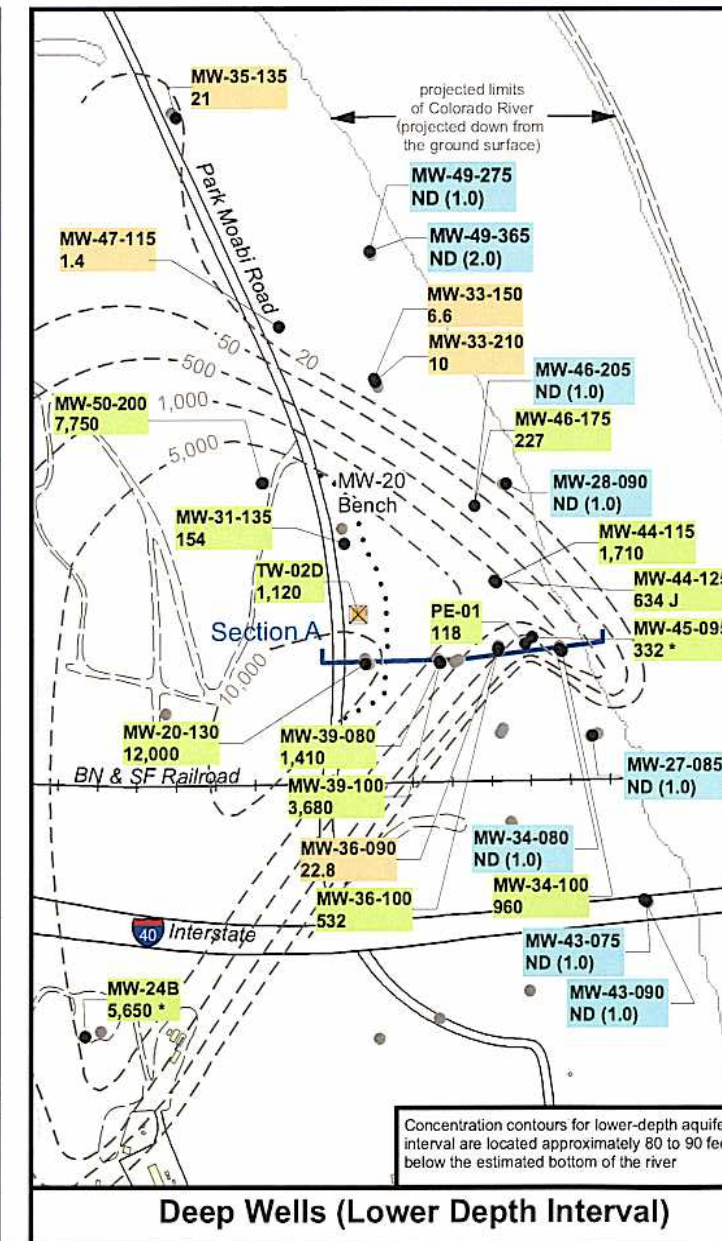
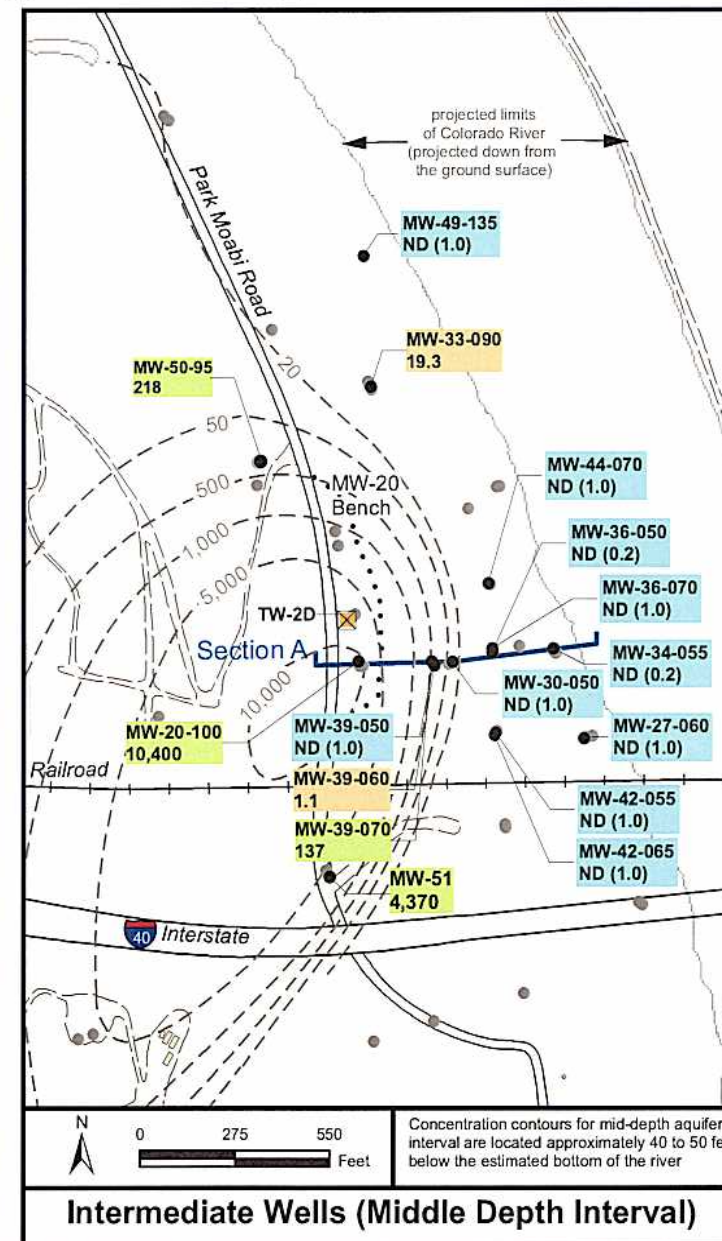
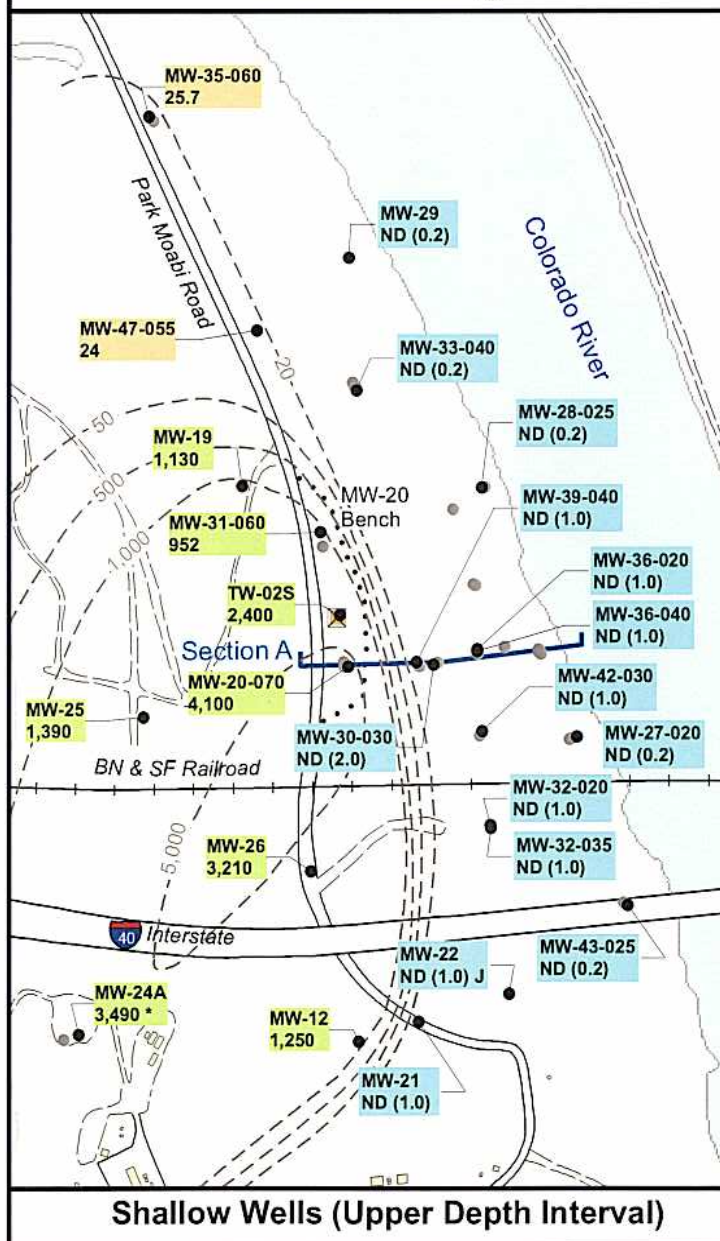
## NOTES ON CONTOUR MAPS

1. The Cr(VI) contour maps for May 2006 performance monitoring have been revised to incorporate data from new wells and water quality data trends for floodplain area. The revised maps provide additional interpretation of plume limits and do not reflect plume migration during performance monitoring.

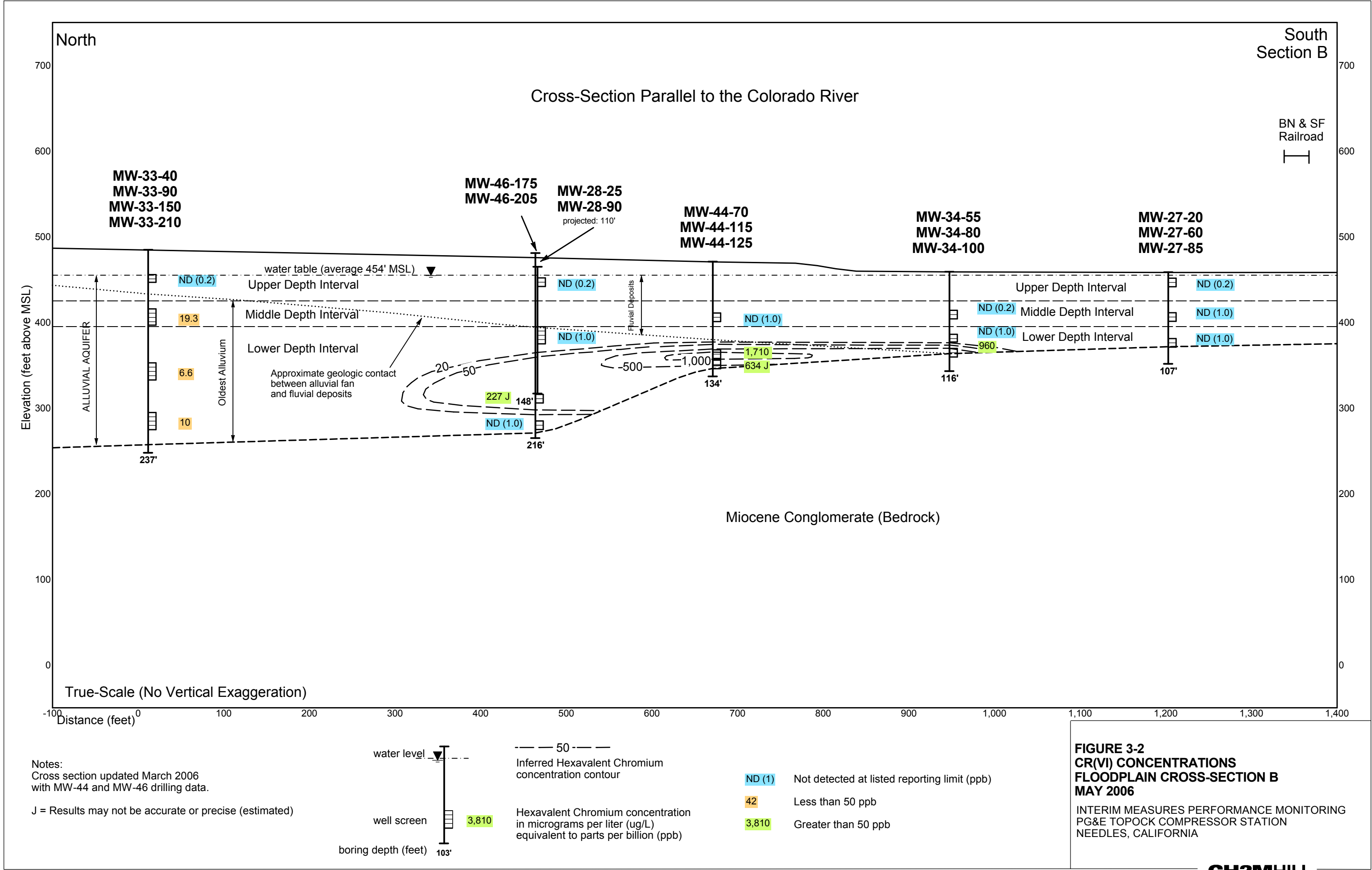
2. The locations of the Cr(VI) contours shown for depths 80-90 feet below the Colorado River (east and southeast of well cluster MW-34) are estimated based on hydrogeologic and geochemical conditions documented in site investigations 2004-2006. The actual locations of contours beyond well control points in these areas are not certain, but are inferred using available site investigation and monitoring data (bedrock structure, hydraulic gradients, observed distribution of geochemically reducing conditions and Cr(VI) concentration gradients). There is no data confirming the existence of Cr(VI) under the Colorado River.

## FIGURE 3-1 MAXIMUM CR(VI) CONCENTRATIONS IN ALLUVIAL AQUIFER, MAY 2006

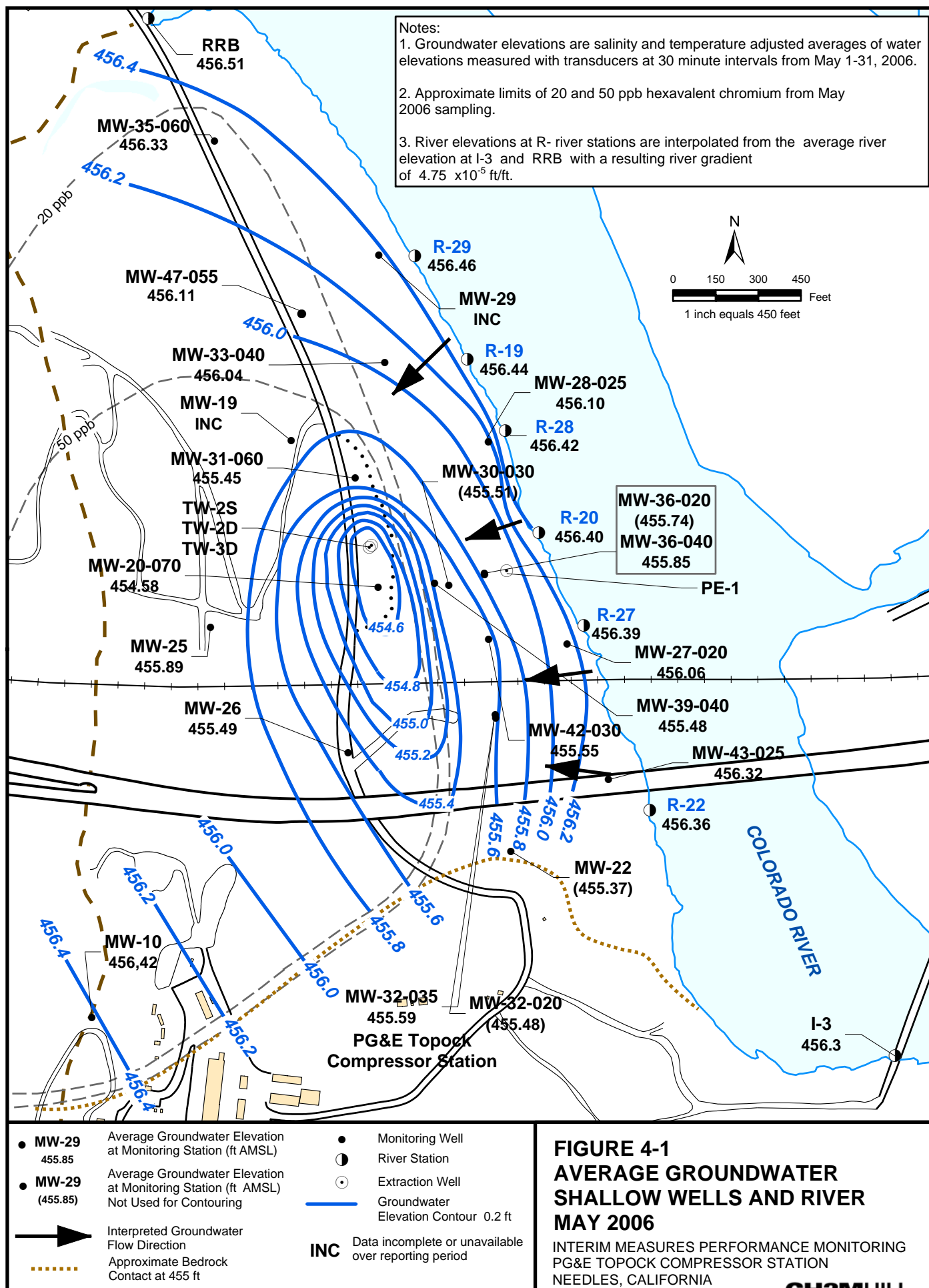
INTERIM MEASURES PERFORMANCE MONITORING  
PG&E TOPOCK COMPRESSOR STATION  
NEEDLES, CALIFORNIA

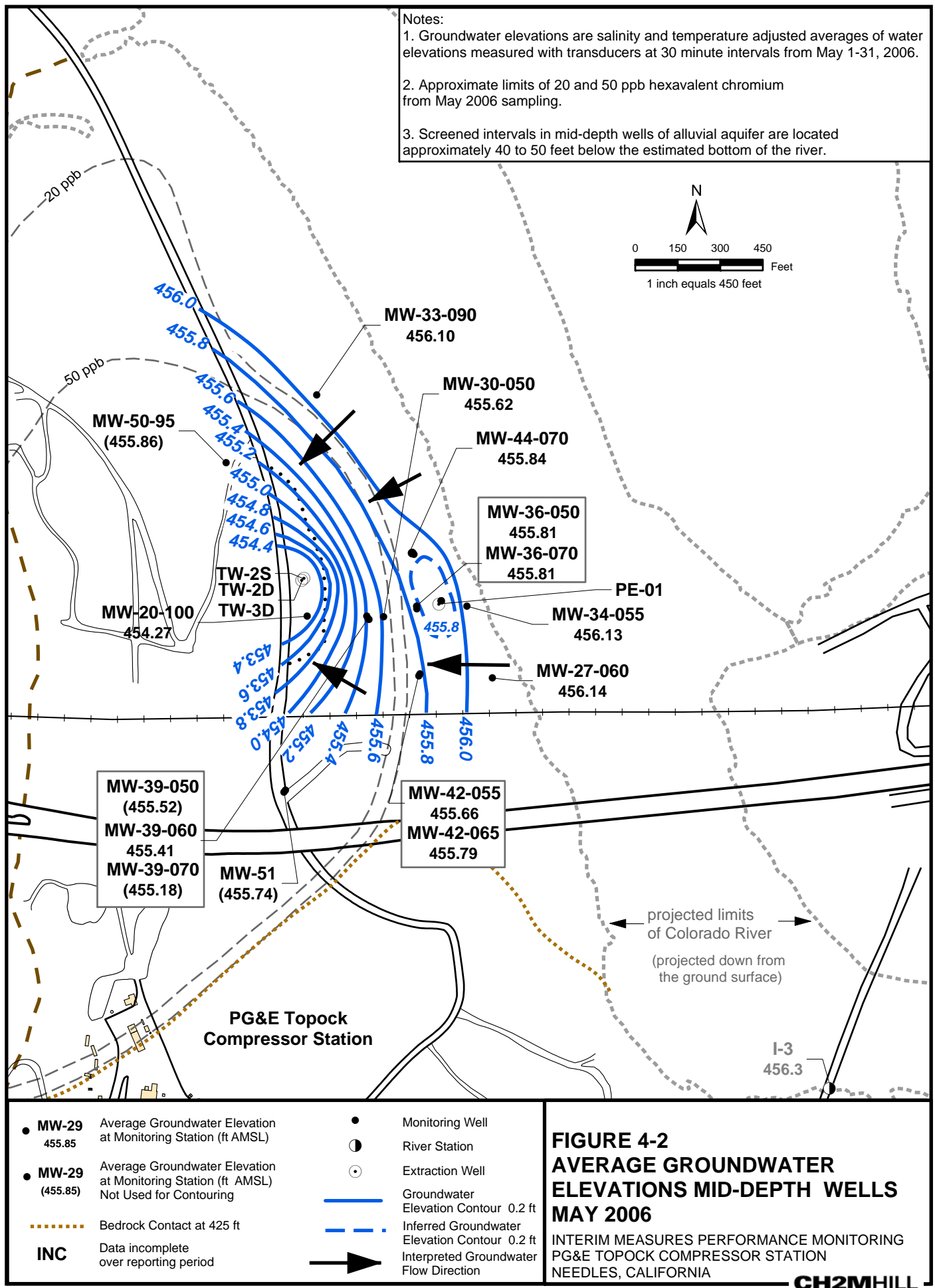


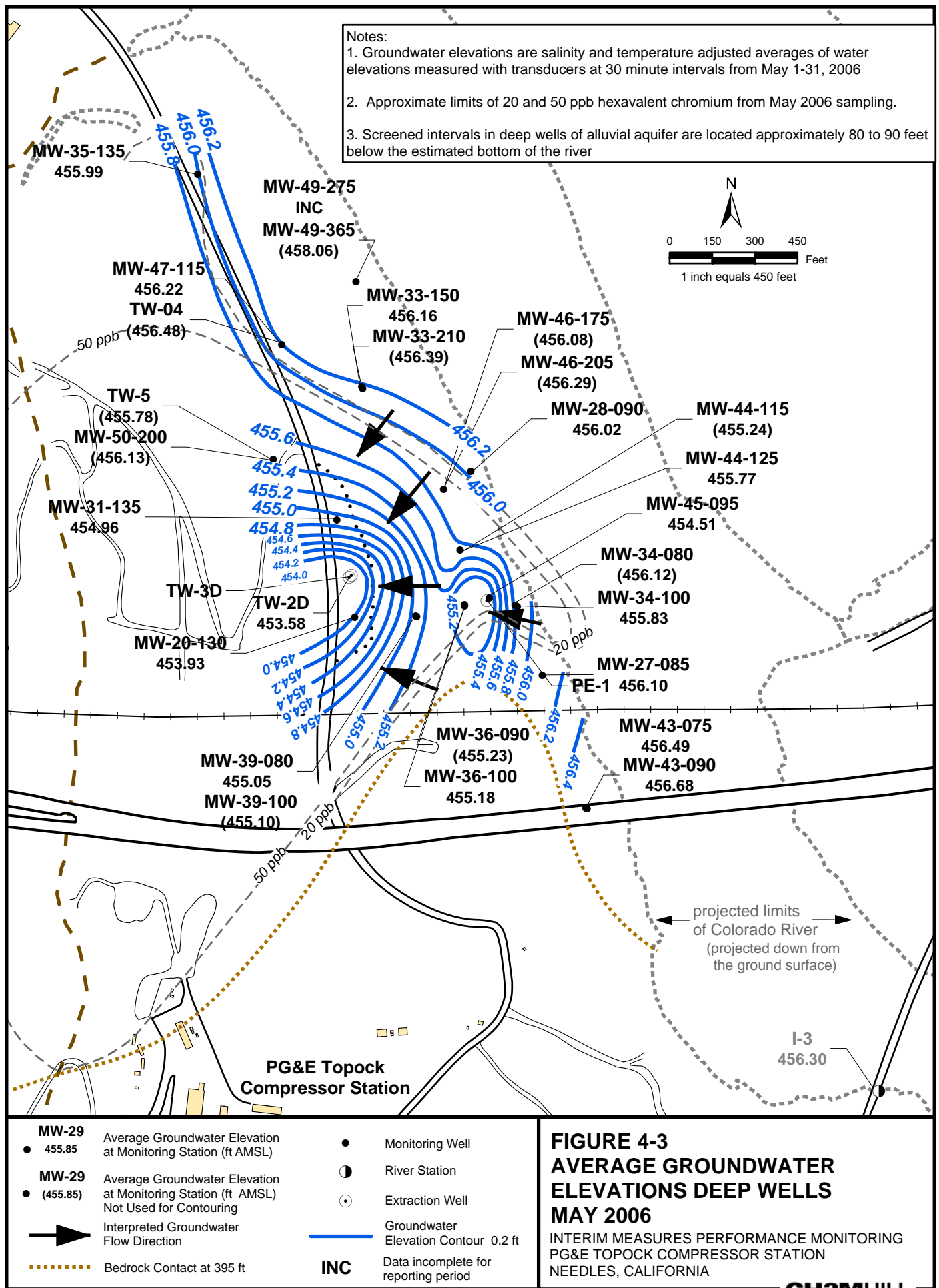


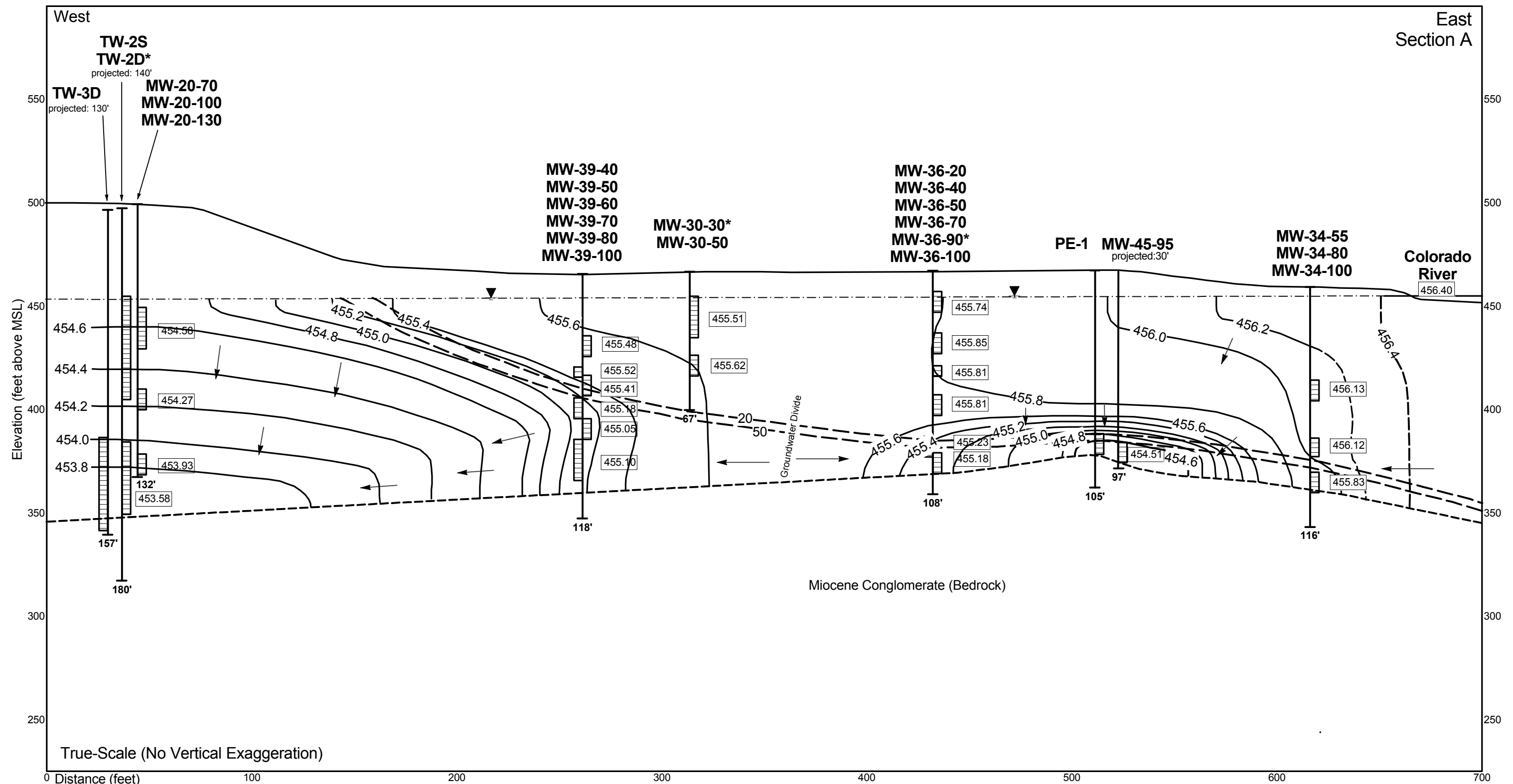








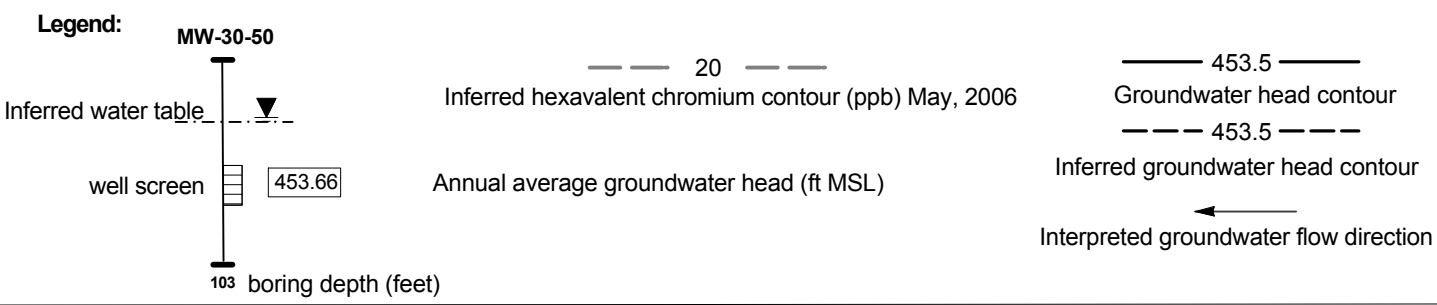




Notes:  
 Results show average groundwater elevations for May 1-31, 2006 measured with transducers at 30 minute intervals. Groundwater elevations adjusted for salinity and temperature.

Wells TW-2D\*, MW-30-30\* and MW-36-90\* excluded from contouring.

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



**FIGURE 4-4**  
**AVERAGE GROUNDWATER ELEVATIONS**  
**FOR WELLS ON FLOODPLAIN**  
**CROSS-SECTION A MAY 2006**  
 INTERIM MEASURES PERFORMANCE MONITORING  
 PG&E TOPOCK COMPRESSOR STATION  
 NEEDLES, CALIFORNIA

**Appendix A**  
**Extraction System Operations Log for**  
**May 2006**

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## Appendix A

### Extraction System Operations Log for May 2006

#### PG&E Topock Interim Measures Performance Monitoring Program

During May 2006, 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. The operational run time for the IM groundwater extraction system (combined or individual pumping from TW-3D and PE-1) was approximately 98 percent during the May reporting period.

The IM No. 3 facility also treated approximately 31,765 gallons of water generated from monitoring well development and aquifer testing during May 2006. Treatment of this water at the IM No. 3 facility was approved by the Regional Board on January 26, 2006, according to the conditions of Order No. R7-2004-0103.

Periods of planned and unplanned extraction system downtime during May 2006 are summarized below. The times shown are in Pacific Standard Time (PST reverse osmosis) to be consistent with other data collected (e.g. water level data) at the site.

- **May 9, 2006 (unplanned):** The IM No. 3 extraction well system was shut down from 12:21 a.m. until 12:55 a.m. due to a Needles power failure at the site. Another shut down occurred from 10:23 a.m. to 10:33 am to return operations from generator power to Needles power. Extraction system downtime was 44 minutes.
- **May 21, 2006 (unplanned):** The IM No. 3 extraction well system was shut down from 11:47 a.m. to 1:17 pm to switch from inline microfilter modules (inline) to clean offline microfilter modules. Another shutdown occurred from 3:04 p.m. to 5:01 p.m. due to power failure at the site. Extraction system downtime was 3 hours 27 minutes.
- **May 22, 2006 (unplanned):** The IM No. 3 extraction well system was shut down from 2:40 a.m. to 5:16 a.m. due to power supply issues as the site. Another shut down occurred from 6:41 p.m. to 8:21 p.m. due to a flow control valve restricting flow to Injection Well IW-2. Extraction system downtime was 4 hours 16 minutes.
- **May 24, 2006 (planned):** The IM No. 3 extraction well system was shut down from 6:21 a.m. until 12:42 a.m. to install a rental reverse osmosis unit. The rental unit will provide temporary service as required while upgrades in piping are completed on the permanent reverse osmosis unit over the next two to three months. Extraction system downtime was 6 hours 21 minutes.
- **May 25, 2006 (planned):** The IM No. 3 extraction well system was shut down from 9:30 a.m. until 11:46 a.m. to return service to the permanent reverse osmosis unit after operating the temporary reverse osmosis unit for approximately 24 hours. Extraction system downtime was 2 hours 16 minutes.

**Appendix B**  
**Chromium Sampling Results for Monitoring**  
**Wells in Floodplain Area**

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TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, December 2005 through May 2006  
Interim Measures Performance Monitoring  
PG&E Topock Compressor Station

		Sample Date	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters			Groundwater and River Elevations at Sampling Time	
					ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Shallow Wells									
MW-27-020	14-Dec-05	ND (0.2)	ND (1.0)	-171	2.2	1,120	453.2	452.5	
	06-Mar-06	ND (0.2)	ND (1.0)	-153	0.4	910	455.0	455.1	
	01-May-06	ND (0.2)	ND (1.0)	---	2.5	1,510	455.4	454.7	
MW-28-025	16-Dec-05	ND (0.2)	ND (1.0)	-69	2.5	1,390	453.3	453.1	
	09-Mar-06	ND (0.2)	ND (1.0)	-54	3.5	1,140	455.2	455.2	
	05-May-06	ND (0.2)	ND (1.0)	-126	0.8	1,260	456.3	455.8	
MW-29	12-Dec-05	ND (0.2)	ND (1.0)	-40	5.5	4,280	454.0	453.1	
	13-Apr-06	ND (0.2)	ND (1.0)	-142	4.2	4,220	455.7	455.2	
	05-May-06	ND (0.2)	ND (1.0)	-128	1.3	4,430	456.0	455.4	
MW-30-030	15-Dec-05	ND (5.0)	ND (1.0)	-100	3.0	38,900	453.6	452.2	
	13-Mar-06	ND (5.0)	ND (1.0)	-99	1.1	55,600	454.1	454.2	
	02-May-06	ND (2.0)	ND (1.0)	-104	2.4	54,600	455.4	455.7	
MW-32-020	16-Dec-05	ND (2.0)	ND (1.0)	-107	2.7	33,900	453.3	452.7	
	10-Mar-06	ND (2.0)	ND (1.0)	-125	0.4	---	454.4	455.1	
	04-May-06	ND (1.0)	ND (1.0)	-120	0.4	25,500	455.2	454.9	
MW-32-035	16-Dec-05	ND (1.0)	ND (1.0)	-141	2.4	11,200	453.1	452.7	
	10-Mar-06	ND (2.0)	ND (1.0)	-161	0.1	9,570	454.7	454.9	
	04-May-06	ND (1.0)	ND (1.0)	-171	0.3	16,500	455.5	455.1	
MW-33-040	12-Dec-05	ND (1.0)	1.70	45	4.8	---	453.6	452.7	
	09-Mar-06	ND (0.2)	ND (1.0) LF	---	---	---	454.8	455.2	
	04-May-06	ND (0.2)	ND (1.0) LF	12	5.3	4,580	455.5	454.8	
MW-36-020	15-Dec-05	ND (2.0)	ND (1.0)	-112	2.4	---	452.7	452.3	
	07-Mar-06	ND (1.0)	ND (1.0)	-148	2.5	18,900	---	455.2	
	01-May-06	ND (1.0)	ND (1.0)	-180	5.3	20,100	455.5	456.0	
MW-36-040	15-Dec-05	ND (1.0)	ND (1.0)	-190	2.7	15,400	452.7	452.5	
	07-Mar-06	ND (1.0)	ND (1.0)	-166	3.3	17,000	454.4	454.6	
	01-May-06	ND (1.0)	ND (1.0)	-179	5.1	13,500	455.4	455.0	
MW-39-040	16-Dec-05	ND (0.2)	ND (1.0)	-177	2.1	5,680	452.7	453.1	
	07-Mar-06	ND (1.0)	ND (1.0)	-162	3.0	8,450	454.1	454.3	
	02-May-06	ND (1.0)	ND (1.0)	-188	0.1	8,150	455.6	456.4	
MW-42-030	15-Dec-05	ND (1.0)	ND (1.0)	-129	2.4	14,500	452.6	452.3	
	07-Mar-06	ND (1.0)	ND (1.0)	-154	0.4	11,400	454.3	454.5	
	02-May-06	ND (1.0)	ND (1.0)	-160	2.3	18,500	455.2	455.2	
MW-43-025	16-Dec-05	ND (0.2)	ND (1.0)	-184	2.5	1,420	453.0	452.7	
	10-Mar-06	ND (0.2)	ND (1.0)	-153	0.3	1,350	455.3	455.4	
	04-May-06	ND (0.2)	ND (1.0)	-176	0.4	1,280	456.2	455.4	
Middle-Depth Wells									
MW-27-060	15-Dec-05	ND (1.0)	ND (1.0)	-134	2.9	10,000	452.8	452.4	
	07-Mar-06	ND (1.0)	ND (1.0)	-118	2.5	13,700	454.8	454.9	
	01-May-06	ND (1.0)	ND (1.0)	-140	1.0	12,100	455.7	455.1	
MW-30-050	16-Dec-05	ND (1.0)	ND (1.0)	-263	2.5	8,840	453.1	453.0	

Refer to table footnotes for data qualifier explanation.



TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, December 2005 through May 2006  
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-Depth Wells								
MW-30-050	09-Mar-06	ND (1.0)	ND (1.0)	-81	2.4	8,800	454.2	454.2
	02-May-06	ND (1.0)	ND (1.0)	-102	2.8	14,300	455.6	456.1
MW-33-090	13-Dec-05	16.4	21.8 J	-43	2.3	9,310	453.7	452.9
	13-Dec-05 FD	16.5	14.0 J	FD	FD	FD	FD	FD
	08-Mar-06	16.7	14.3	-42	0.3	10,200	454.9	455.0
	03-May-06	16.1	16.4	-44	0.4	10,400	455.5	454.7
	03-May-06 FD	19.3	15.3	FD	FD	FD	FD	FD
MW-34-055	14-Dec-05	ND (1.0)	ND (1.0)	-124	2.1	6,610	453.2	452.7
	08-Mar-06	ND (1.0)	ND (1.0)	-106	---	8,460	454.4	454.4
	03-May-06	ND (0.2)	ND (1.0)	-117	0.3	7,580	456.3	456.0
MW-36-050	15-Dec-05	ND (1.0)	ND (1.0)	-136	2.8	13,700	452.6	452.5
	07-Mar-06	ND (1.0)	ND (1.0)	-110	2.7	8,400	454.5	454.8
	07-Mar-06 FD	ND (1.0)	ND (1.0)	FD	FD	FD	FD	FD
	01-May-06	ND (0.2)	ND (1.0)	-162	3.6	6,810	454.8	454.7
MW-36-070	15-Dec-05	ND (1.0)	ND (1.0)	-108	2.3	9,310	452.7	452.3
	10-Feb-06	ND (10)	ND (1.0)	-91	2.7	12,600	453.5	453.7
	07-Mar-06	ND (1.0)	ND (1.0)	-67	2.5	9,720	454.6	455.0
	06-Apr-06	ND (1.0)	ND (1.0)	---	1.8	7,740	455.5	456.0
	01-May-06	ND (1.0)	ND (1.0)	-130	4.6	8,180	455.7	455.4
MW-39-050	12-Jan-06	ND (10)	ND (1.0)	-9	2.8	18,300	453.0	453.9
	08-Mar-06	ND (1.0)	ND (1.0)	71	2.3	16,000	454.3	455.0
	02-May-06	ND (1.0)	ND (1.0)	-45	0.2	9,380	455.4	455.3
MW-39-060	16-Dec-05	20.4	20.4	-40	2.3	11,200	452.7	453.2
	08-Mar-06	7.10	2.70	12	2.1	---	453.8	454.3
	08-Mar-06 FD	6.90	2.40	FD	FD	FD	FD	FD
	02-May-06	1.10	1.40	-39	0.2	12,000	455.3	454.8
MW-39-070	16-Dec-05	1240	1080	22	2.2	10,000	452.4	453.0
	10-Feb-06	338	340	48	2.8	15,500	452.9	454.0
	08-Mar-06	200	169	201	2.8	16,300	453.5	454.5
	06-Apr-06	223	204	88	2.1	12,300	454.8	456.3
	02-May-06	137	123	31	0.2	11,200	455.0	455.7
MW-42-055	15-Dec-05	ND (1.0)	ND (1.0)	-143	2.4	11,100	452.8	452.3
	07-Mar-06	ND (1.0)	ND (1.0)	-122	0.3	16,500	454.3	454.4
	02-May-06	ND (1.0)	ND (1.0)	-138	2.2	21,400	456.1	455.0
MW-42-065	15-Dec-05	ND (1.0)	ND (1.0)	-78	2.5	13,200	452.9	452.3
	07-Mar-06	ND (1.0)	ND (1.0)	-58	0.4	20,100	454.4	454.3
	02-May-06	ND (1.0)	ND (1.0)	-76	2.2	25,400	455.3	454.6
MW-44-070	09-Mar-06	ND (1.0)	ND (1.0)	-393	2.4	6,970	453.2	454.0
	23-Mar-06	ND (1.0) J	ND (1.0)	-166	2.4	7,600	454.1	454.1
	04-Apr-06	ND (1.0)	ND (1.0)	-96	1.6	9,200	455.3	455.3
	04-May-06	ND (1.0)	ND (1.0)	-156	4.5	10,000	455.6	455.3

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, December 2005 through May 2006  
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-27-085	15-Dec-05		1.20 J	6.60	-124	2.8	14,300	452.9	452.5
	12-Jan-06		ND (1.0)	ND (1.0)	-91	2.8	22,600	453.4	453.3
	08-Feb-06		ND (1.0)	ND (1.0)	-82	2.6	21,100	453.9	453.7
	06-Mar-06		ND (1.0)	ND (1.0)	-92	0.2	15,800	454.8	454.8
	03-Apr-06		ND (1.0)	ND (1.0)	-102	2.5	18,200	454.5	454.3
	01-May-06		ND (1.0)	ND (1.0)	-104	0.9	18,300	455.1	454.7
MW-28-090	16-Dec-05		ND (1.0)	ND (1.0)	-176	2.5	8,430	453.3	453.2
	10-Jan-06		ND (1.0)	ND (1.0)	-140	3.3	11,000	453.6	453.8
	09-Feb-06		ND (0.2) J	ND (1.0)	-156	2.8	8,830	453.8	453.8
	06-Mar-06		ND (1.0)	ND (1.0)	-151	0.3	6,830	454.4	454.4
	06-Apr-06		ND (1.0)	ND (1.0)	---	2.1	8,160	455.5	455.4
	05-May-06		ND (1.0)	ND (1.0)	-150	0.8	8,690	455.9	456.2
MW-33-150	12-Dec-05		6.60	5.70	21	3.9	19,200	453.7	452.8
	10-Jan-06		6.40	5.00	27	3.7	21,800	453.7	453.6
	07-Feb-06		4.30 J	6.40	-61	2.7	20,400	455.2	453.9
	08-Mar-06		4.20	3.20	-55	0.3	20,400	454.9	455.2
	06-Apr-06		4.50	3.00	39	2.1	18,300	455.5	455.2
	03-May-06		6.60	5.50	-23	1.0	17,100	455.5	454.5
MW-33-210	12-Dec-05		6.90	5.60	40	3.6	21,900	454.1	452.9
	10-Jan-06		7.60	5.20	13	3.2	24,200	454.0	453.3
	07-Feb-06		9.00	7.20	-14	2.7	22,800	454.6	454.0
	06-Mar-06		10.7	6.50	-37	0.2	16,600	455.1	454.5
	13-Apr-06		4.20	ND (4.2)	21	6.8	18,100	455.7	454.7
	05-May-06		10.0	8.80	34	0.4	20,100	456.4	456.5
MW-34-080	14-Dec-05		ND (1.0)	ND (1.0)	-88	2.3	10,400	453.6	453.2
	11-Jan-06		ND (1.0)	ND (1.0)	-38	3.1	18,100	453.6	453.3
	08-Feb-06		ND (1.0)	ND (1.0)	-22	2.6	16,400	454.1	454.2
	09-Mar-06		ND (1.0)	ND (1.0)	-12	2.2	15,100	454.8	454.8
	03-Apr-06		ND (1.0)	ND (1.0)	-38	2.4	13,500	454.4	454.0
	03-May-06		ND (1.0)	ND (1.0)	-68	0.2	13,800	456.3	455.3
MW-34-100	14-Dec-05		808	751	-26	2.3	12,400	453.3	452.6
	14-Dec-05	FD	811	791	FD	FD	FD	FD	FD
	28-Dec-05		804	824	-28	2.4	19,300	452.7	452.3
	12-Jan-06		837	771	104	3.2	21,000	454.0	454.0
	12-Jan-06	FD	856	764	FD	FD	FD	FD	FD
	23-Jan-06		822	716	136	2.6	23,300	454.0	453.8
	08-Feb-06		797	706	65	2.5	20,100	453.8	453.8
	08-Feb-06	FD	785	708	FD	FD	FD	FD	FD
	22-Feb-06		752	831	225	3.0	21,900	---	453.6
	22-Feb-06	FD	748	846	FD	FD	FD	FD	FD
	08-Mar-06		800	857	-8	---	18,600	454.2	454.3
	08-Mar-06	FD	801	773	FD	FD	FD	FD	FD
	23-Mar-06		830	851	113	2.2	18,400	454.1	454.4

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, December 2005 through May 2006  
Interim Measures Performance Monitoring  
PG&E Topock Compressor Station

			Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters			Groundwater and River Elevations at Sampling Time	
					ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm	Groundwater Elevation salinity-adjusted feet MSL	River Elevation Downstream I-3 Station
Deep Wells									
MW-34-100	23-Mar-06	FD	828	855	FD	FD	FD	FD	FD
	03-Apr-06		858	910	42	2.8	16,800	454.1	454.1
	21-Apr-06		852	873	---	---	---	---	455.8
	03-May-06		900	946	-10	0.3	18,200	455.2	454.8
	03-May-06	FD	920	946	FD	FD	FD	FD	FD
	17-May-06		935	1180	44	3.1	23,800	455.2	455.2
	17-May-06	FD	930	1190	FD	FD	FD	FD	FD
	31-May-06		960	929	104	3.1	16,100	456.6	456.3
MW-36-090	15-Dec-05		240	219	34	2.5	18,000	452.5	452.4
	12-Jan-06		245	223	13	2.8	19,500	452.8	453.4
	10-Feb-06		71.8	71.4	37	3.4	16,100	453.0	453.8
	07-Mar-06		33.0	27.5	42	3.1	14,700	453.7	454.4
	04-Apr-06		23.5	15.7	5	2.4	12,700	455.4	455.3
	01-May-06		22.8	18.3	24	4.4	11,400	454.3	454.6
MW-36-100	13-Dec-05		306	333	5	2.2	16,500	453.0	452.8
	12-Jan-06		287	288	28	2.9	21,600	452.8	453.3
	09-Feb-06		307	288	18	2.6	19,700	452.9	453.6
	13-Mar-06		540	531	-16	0.2	17,400	453.1	453.7
	05-Apr-06		554	492	24	0.1	15,300	453.7	455.3
	02-May-06		532	517	23	2.7	21,900	454.4	454.8
MW-39-080	15-Dec-05		2740	2570	78	2.2	15,400	452.5	452.2
	12-Jan-06		2280	2060	58	2.9	18,200	452.4	453.7
	10-Feb-06		1750	1610	66	2.6	18,900	453.0	454.0
	08-Mar-06		1420	1400	154	2.2	20,900	453.7	454.6
	06-Apr-06		1200	1120	86	2.0	15,800	454.8	456.2
	02-May-06		1410	1450	61	0.2	14,900	454.9	455.0
MW-39-100	13-Dec-05		3640	3440	139	3.0	20,100	452.9	452.8
	12-Jan-06		4720	4280	121	3.6	22,900	452.6	453.7
	09-Feb-06		4500	4310	120	2.9	21,700	453.1	453.5
	13-Mar-06		4070	4640	51	0.7	20,400	452.9	453.9
	05-Apr-06		4470	4050	73	0.9	18,300	454.2	454.9
	05-Apr-06	FD	4460	4330	FD	FD	FD	FD	FD
	02-May-06		3680	3480	67	3.5	---	454.4	454.7
MW-43-075	16-Dec-05		ND (1.0)	ND (1.0)	-179	2.4	15,900	453.1	452.7
	11-Jan-06		ND (1.0)	ND (1.0)	-134	3.2	18,400	453.7	453.7
	10-Feb-06		ND (1.0)	ND (1.0)	-154	3.0	18,500	454.4	454.3
	10-Mar-06		ND (1.0)	ND (1.0)	-149	0.1	14,400	455.4	455.4
	03-Apr-06		ND (1.0)	ND (1.0)	-148	2.3	15,000	454.9	454.2
	04-May-06		ND (1.0)	ND (1.0)	-167	0.3	15,400	456.6	456.1
MW-43-090	16-Dec-05		ND (1.0)	ND (1.0)	-127	2.5	22,300	453.2	452.7
	11-Jan-06		ND (1.0)	ND (1.0)	-89	3.3	26,500	454.1	453.8
	10-Feb-06		ND (1.0)	ND (1.0)	-112	2.8	25,900	453.9	454.2
	10-Mar-06		ND (2.0)	ND (1.0)	-116	0.0	21,100	455.5	455.1

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, December 2005 through May 2006  
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-43-090	03-Apr-06	ND (1.0)	ND (1.0)	-97	2.3	21,100	455.2	454.3
	04-May-06	ND (1.0)	ND (1.0)	-124	0.4	22,400	456.6	455.9
MW-44-115	14-Mar-06	735 J	730	-11	1.5	16,500	452.7	454.2
	22-Mar-06	1440	1970	-74	3.0	---	453.2	453.8
	04-Apr-06	1550	1620	37	1.8	15,800	455.2	455.3
	04-Apr-06 FD	1570	1570	FD	FD	FD	FD	FD
	20-Apr-06	1680	1650	-38	0.4	11,400	454.8	455.4
	20-Apr-06 FD	1680	1610	FD	FD	FD	FD	FD
	26-Apr-06	1560	1580	-27	2.5	15,800	455.9	455.8
	04-May-06	1710	1870	-21	4.9	17,300	454.7	454.8
	10-May-06	1490	1550	7	2.2	22,700	454.7	454.7
	17-May-06	1560	1880	-10	1.9	19,600	455.3	456.1
	31-May-06	1610	1580	-11	0.2	13,100	454.8	455.5
	31-May-06 FD	1610	1600	FD	FD	FD	FD	FD
MW-44-125	09-Mar-06	66.6 R	67.5 R	-419	2.6	13,500	453.3	454.1
	22-Mar-06	362	430	-280	1.5	15,000	454.2	453.7
	04-Apr-06	372	374	10	1.9	15,600	456.1	455.5
	20-Apr-06	461	504	-138	0.0	11,400	455.6	455.9
	26-Apr-06	480	485	-147	2.5	16,200	456.6	456.0
	26-Apr-06 FD	479	493	FD	FD	FD	FD	FD
	04-May-06	584	592	-144	4.4	17,200	456.0	455.4
	10-May-06	634 J	667	-96	2.2	23,000	455.7	454.9
	17-May-06	612	740	-103	1.7	19,700	456.2	456.1
	31-May-06	413	398	-95	0.4	13,600	455.8	455.6
MW-45-095a	24-Mar-06	259	216	-20	2.3	16,100	453.3	454.6
MW-45-095b	24-Mar-06	332	327	-12	2.1	16,700	452.0	454.5
MW-46-175	14-Mar-06	287	279	-44	2.2	19,500	455.2	454.5
	24-Mar-06	213	173	-93	1.9	19,900	456.4	454.7
	07-Apr-06	208 J	186	-116	2.1	18,500	455.8	455.9
	04-May-06	222	237	-27	4.8	20,800	455.3	454.7
	18-May-06	227	268	-17	2.6	20,500	455.5	454.8
	31-May-06	139 J	169	37	1.2	15,900	455.7	455.3
MW-46-205	14-Mar-06	ND (1.0)	ND (1.0)	-117	2.3	22,600	455.1	454.9
	24-Mar-06	ND (1.0)	ND (1.0)	-202	1.7	24,000	456.5	454.4
	07-Apr-06	ND (1.0) J	ND (1.0)	-200	1.9	22,400	460.2	456.2
	04-May-06	ND (1.0)	ND (1.0)	-177	4.6	25,900	455.6	454.8
MW-49-135	25-Apr-06	ND (1.0) J	ND (1.0)	-167	2.4	18,800	455.8	455.2
	18-May-06	ND (1.0)	ND (1.0)	-178	2.3	17,100	456.3	455.8
MW-49-275	25-Apr-06	ND (1.0)	ND (1.0)	-143	3.3	29,400	455.4	454.9
	18-May-06	ND (1.0)	ND (1.0)	-214	2.2	26,700	455.4	455.1
MW-49-365	26-Apr-06	ND (2.0)	ND (1.0)	-244	2.2	37,600	458.0	455.1
	16-May-06	ND (2.0)	ND (1.0)	-192	1.8	44,900	458.4	455.5

Refer to table footnotes for data qualifier explanation.

TABLE B-1

Groundwater Sampling Results for Floodplain Monitoring Wells, December 2005 through May 2006  
Interim Measures Performance Monitoring  
PG&E Topock Compressor Station

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**NOTES:**

ND = not detected at listed reporting limit (RL)

FD = field duplicate

J = concentration or RL estimated by laboratory or data validation

T = data from the downhole transducers to fill groundwater elevation data gaps at some locations

MSL = mean sea level

(---) = data not collected, available, rejected, or field instrumentation malfunctioned

µg/L = micrograms per liter

mV = oxidation-reduction potential (ORP)

µS/cm = microSiemens per centimeter

M = I-3 Transducer damaged

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

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

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

TABLE B-2

Groundwater Sampling Results for Other Monitoring Wells in PMP Area, December 2005 through May 2006  
Interim Measures Performance Monitoring  
PG&E Topock Compressor Station

Well ID	Sample Date	Hexavalent Chromium µg/L	Dissolved Total Chromium µg/L	Selected Field Parameters		
				ORP mV	Dissolved Oxygen mg/L	Specific Conductance µS/cm
Shallow Wells						
MW-12	13-Dec-05	626	602	97.0	6.99	3260
	18-Apr-06	1210	1300	91.0	7.28	3460
	01-May-06	1250	1280	-38	---	3840
MW-19	12-Dec-05	1240	1270	153	7.68	2140
	09-Mar-06	1090	1080	227	7.43	3850
	02-May-06	1130	1120	38.0	3.30	2450
MW-20-070	15-Dec-05	4640	4310	149	7.97	3210
	10-Mar-06	5170	4510	228	7.32	5830
	05-May-06	4100	4440	97.0	7.21	3050
MW-21	14-Dec-05	ND (1.0)	ND (1.0)	-90	5.35	12100
	09-Mar-06	---	---	---	4.20	15100
	02-May-06	ND (1.0)	ND (1.0)	-77	---	11500
MW-22	16-Dec-05	ND (2.0)	ND (1.0)	-90	2.31	31200
	15-Mar-06	ND (2.0)	ND (1.0)	---	8.54	34800
	03-May-06	ND (1.0) J	ND (1.0)	-88	4.14	34200
MW-24A	06-Mar-06	3490	3980	239	5.17	3140
MW-25	14-Dec-05	1460	1370	156	7.97	1220
	14-Dec-05 FD	1450	1350	FD	FD	FD
	09-Mar-06	1360	1430	210	7.40	2750
	03-May-06	1390	1300	98.0	7.72	2110
	03-May-06 FD	1280	1310	FD	FD	FD
MW-26	12-Dec-05	3220	3160	161	9.93	3440
	08-Mar-06	3280	3020	170	9.16	3840
	01-May-06	3210	3110	---	---	3290
MW-31-060	13-Dec-05	1300	1250	119	6.75	2870
	15-Mar-06	1020	1010	217	7.01	2750
	15-Mar-06 FD	1000	1010	FD	FD	FD
	01-May-06	952	959	---	---	2740
MW-35-060	14-Dec-05	32.5	32.5	95.0	3.97	5800
	14-Dec-05 FD	33.3	28.6	FD	FD	FD
	14-Mar-06	31.6	24.3	42.0	2.92	---
	01-May-06	25.7	26.4	-37	---	6770
MW-47-055	23-Mar-06	10.9 J	7.90	-94	2.98	5800
	16-May-06	24.0	27.3	22.0	2.89	4430
TW-02S	15-Mar-06	2720	2870	-38	7.53	3200
	03-May-06	2400	2600	80.0	6.75	3150
Middle-Depth Wells						
MW-20-100	15-Dec-05	9460	9010	140	3.03	3980
	10-Mar-06	10100	10200	198	3.77	4360
	05-May-06	10400	12100	98.0	5.20	3760
MW-50-095	09-May-06	199	194	30.0	3.00	5480
	24-May-06	218	221	50.0	3.42	---
MW-51	12-May-06	4370	4630	92.0	2.51	12100

TABLE B-2

Groundwater Sampling Results for Other Monitoring Wells in PMP Area, December 2005 through May 2006  
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-51	30-May-06	4130	4530	17.0	1.53	10600
<b>Deep Wells</b>						
MW-20-130	16-Dec-05	10500	9340	123	3.32	11700
	10-Mar-06	10700	10600	213	3.49	14500
	05-May-06	12000	13700	97.0	2.21	12400
MW-24B	07-Mar-06	5650	5970	199	2.59	17200
MW-31-135	14-Dec-05	221	198	124	4.13	7980
	15-Mar-06	173	186	33.0	3.05	13400
	09-May-06	154	146 LF	82.0	2.75	15900
MW-35-135	14-Dec-05	25.7	22.8	38.0	3.17	8480
	10-Mar-06	28.0	24.0	103	2.44	12400
	10-Mar-06 FD	26.5	25.7	FD	FD	FD
	02-May-06	21.0	20.7	0.00	2.70	13000
MW-47-115	23-Mar-06	ND (2.0) J	ND (1.0)	-161	2.32	15600
	16-May-06	1.40	5.10	-67	1.93	18400
MW-50-200	09-May-06	7750	7360	-11	1.91	20200
	24-May-06	5810	5910	60.0	4.11	37000
PE-01	13-Dec-05	ND (1.0)	ND (1.0) LF	-148	2.19	12400
TW-02D	15-Mar-06	1360	1360	5.00	5.20	8470
	03-May-06	1120	1120	82.0	6.10	8490
TW-04	18-May-06	1.00	6.40	-97	0.56	15600
TW-05	10-May-06	1.10 J	1.30	-161	0.60	15100

**NOTES:**

Analytical results are validated.

ND = not detected at listed reporting limit (RL)

FD = field duplicate

J = concentration or RL estimated by laboratory or data validation

(---) = data not collected, available, or field instrumentation malfunctioned

µg/L = micrograms per liter

mg/L = milligrams per liter

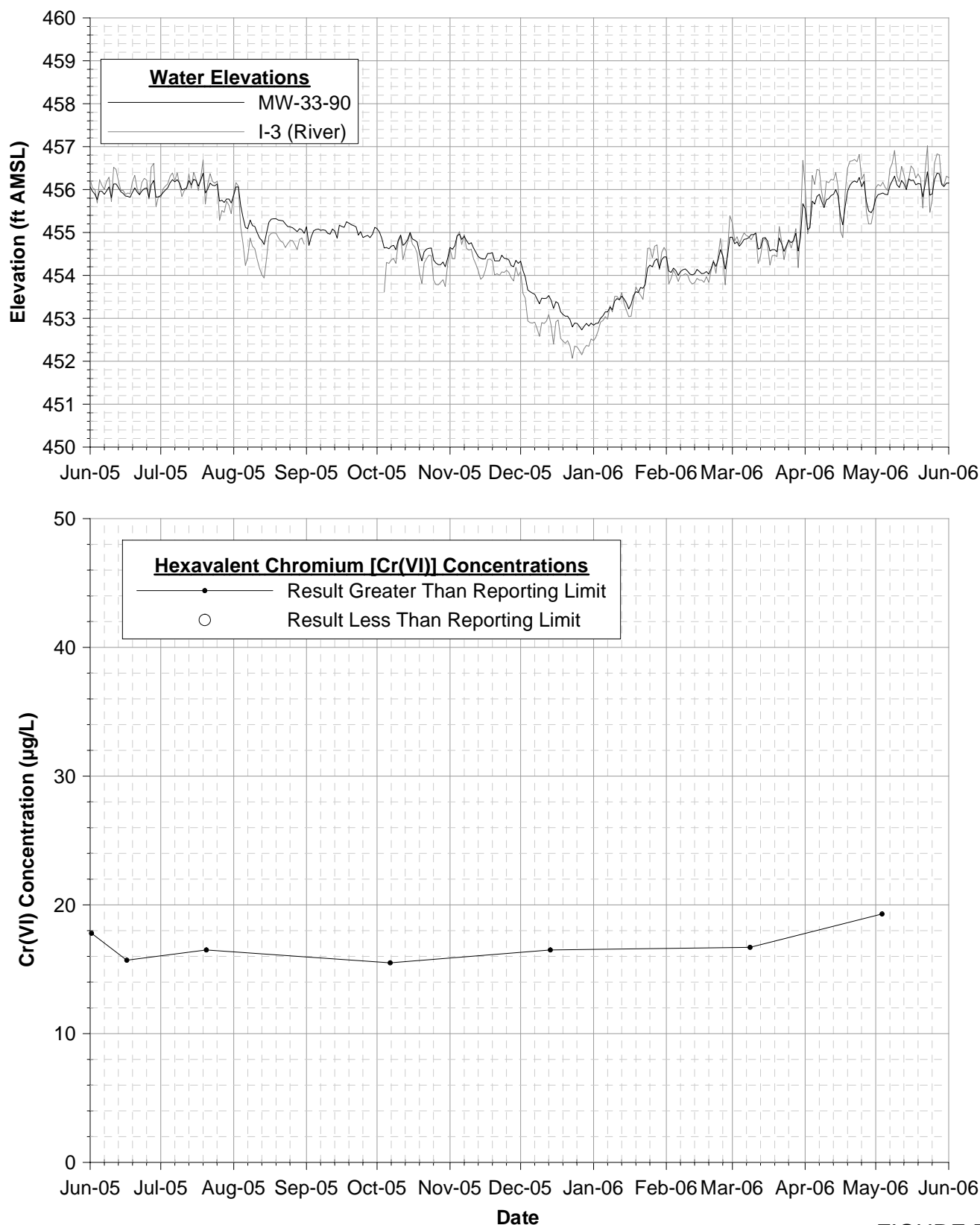
mV = oxidation-reduction potential (ORP)

µS/cm = microSiemens per centimeter

PMP = Interim Measure Performance Monitoring Program

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

MW-21 was not sampled in March 2006 because the well was purged dry and did not produce enough water within 24 hours.



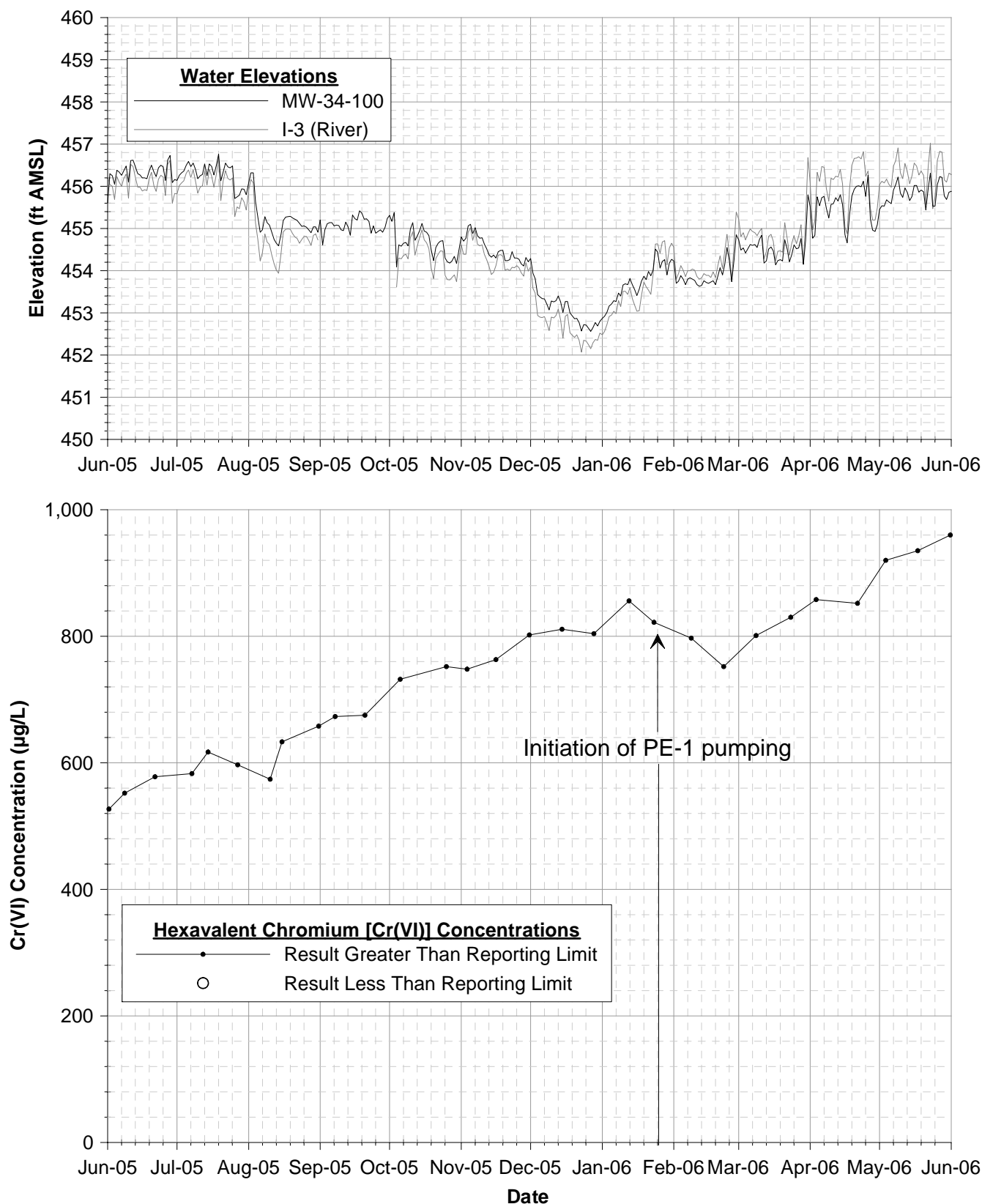
**FIGURE B-1**  
**MW-33-90 CR(VI) CONCENTRATION & HYDROGRAPH - THROUGH 5/3/2006**

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

**Notes**

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

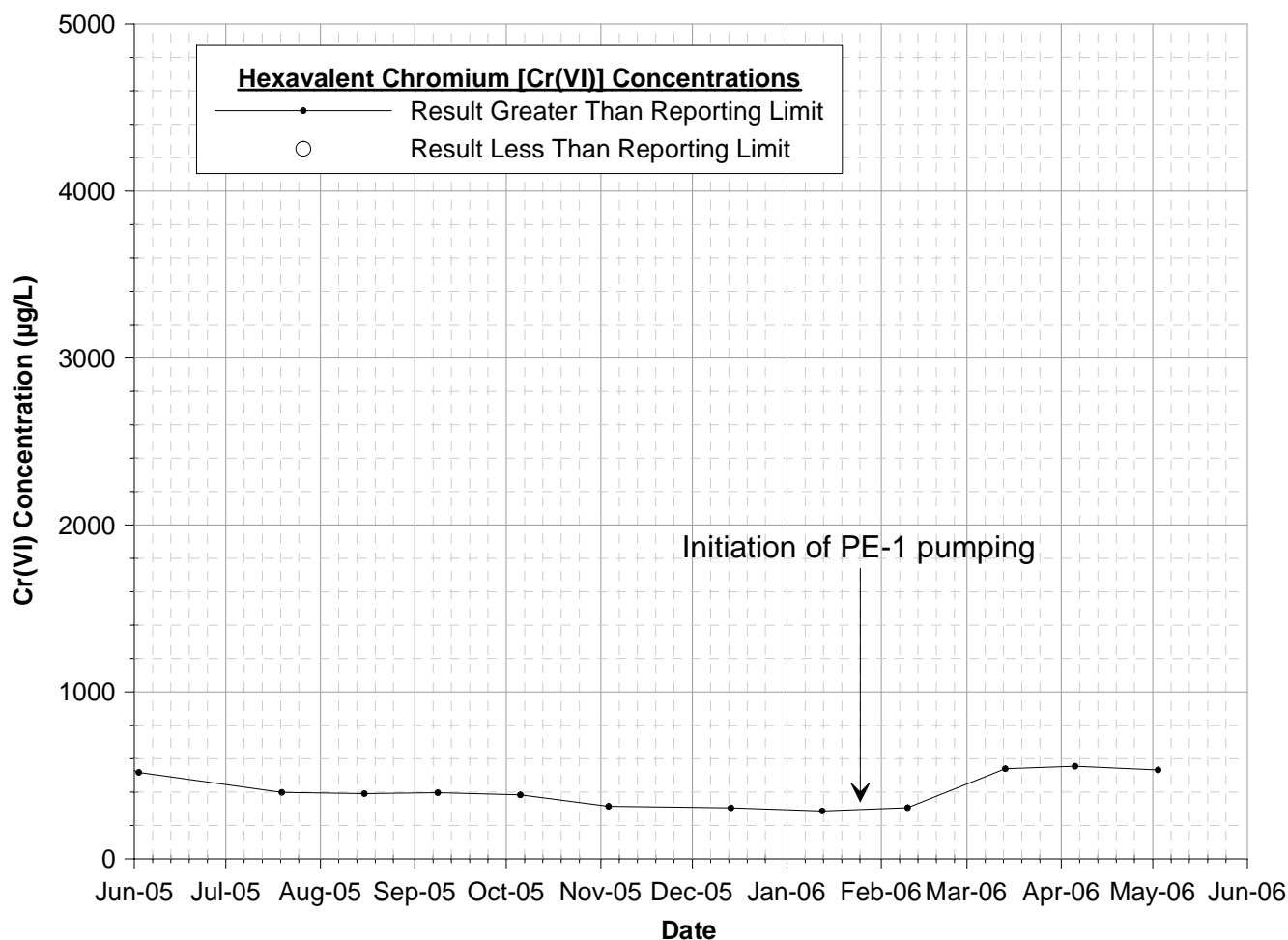
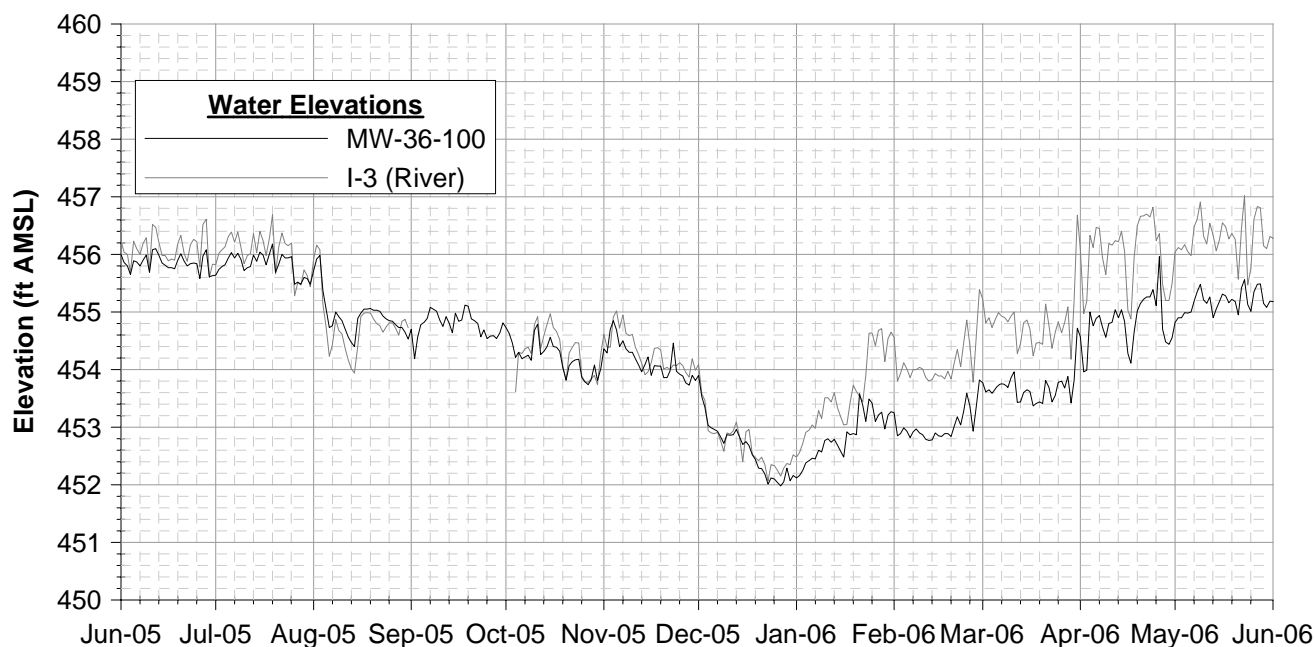




**FIGURE B-2**  
**MW-34-100 CR(VI) CONCENTRATION &**  
**HYDROGRAPH - THROUGH 5/31/06**  
 INTERIM MEASURES PERFORMANCE MONITORING  
 PG&E TOPOCK COMPRESSOR STATION  
 NEEDLES, CALIFORNIA

**Notes**

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



**FIGURE B-3**  
**MW-36-100 CR(VI) CONCENTRATION &**  
**HYDROGRAPH - THROUGH 5/2/06**  
 INTERIM MEASURES PERFORMANCE MONITORING  
 PG&E TOPOCK COMPRESSOR STATION  
 NEEDLES, CALIFORNIA

**Notes**

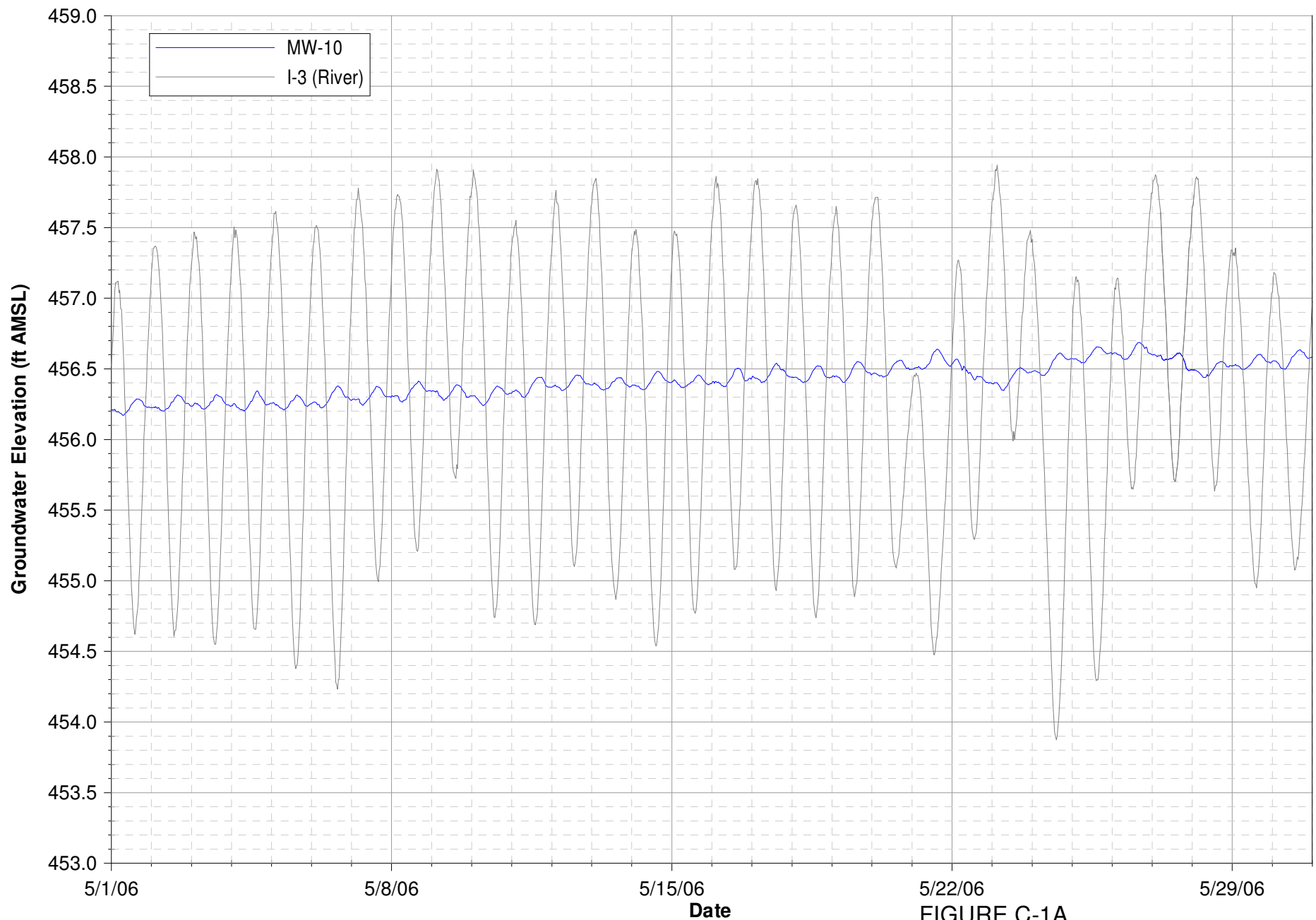
1. Chromium results in micrograms per liter (µg/L), equivalent to parts per billion (ppb).
2. Data subject to review.
3. Results plotted are maximum concentrations from primary and duplicate samples; see Table B-1 for complete results.
4. I-3 data unavailable 9/1/05 through 10/4/05 due to river damage.

**Appendix C**  
**Hydraulic Monitoring Data for Reporting Period**

**TABLE C-1***Monthly Average, Minimum, and Maximum Groundwater Elevations, May 2006**Interim Measures Performance Monitoring**PG&E Topock Compressor Station*

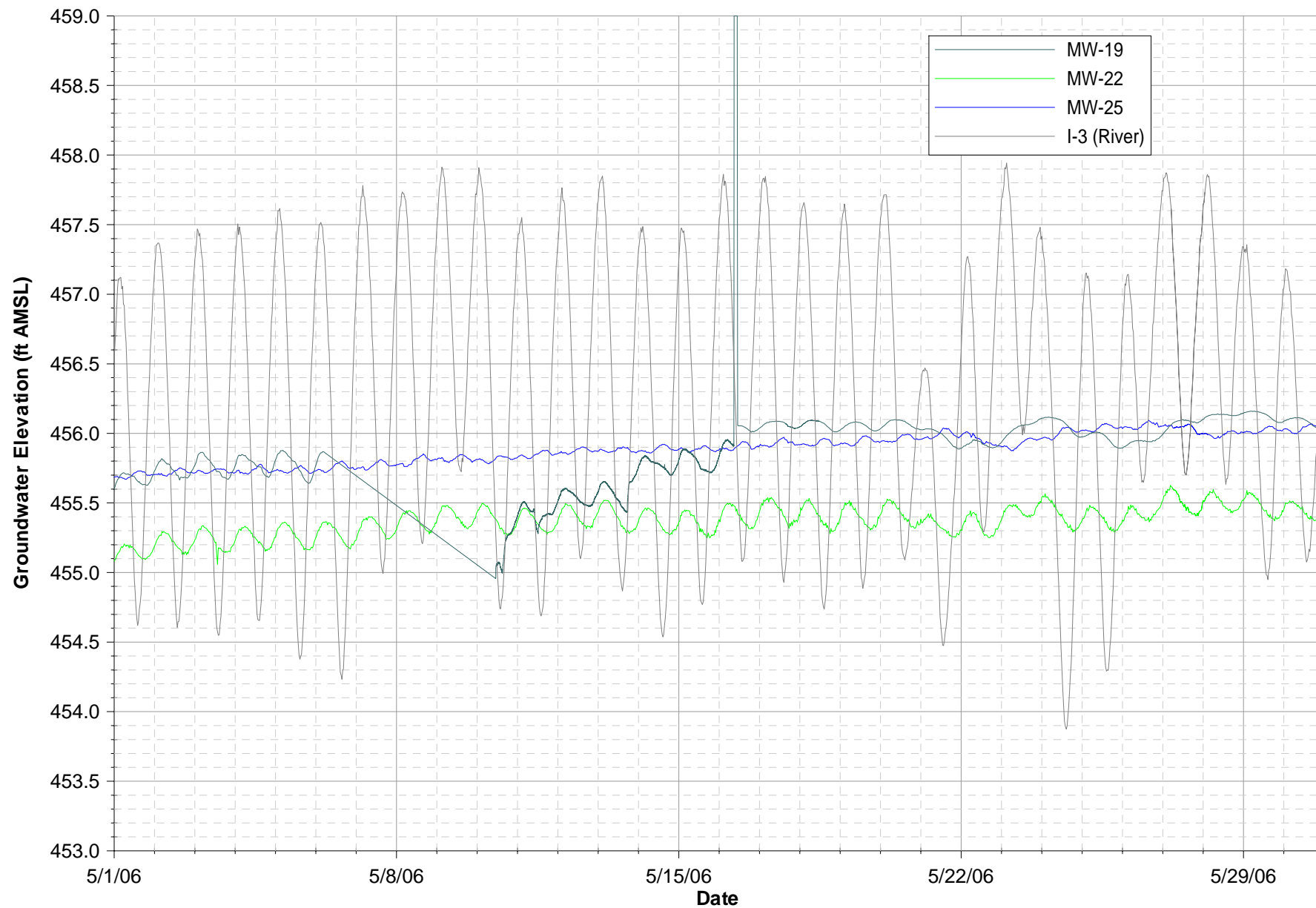
Well	Average (ft AMSL)	Minimum (ft AMSL)	Maximum (ft AMSL)	Aquifer Depth
I-3	456.30	454.92	457.57	River Station
MW-10	456.42	456.36	456.49	Shallow
MW-19	INC	INC	INC	Shallow
MW-20-070	454.58	454.47	454.75	Shallow
MW-20-100	454.27	454.04	454.70	Mid-Depth
MW-20-130	453.93	453.61	454.52	Deep
MW-22	455.37	455.28	455.47	Shallow
MW-25	455.89	455.86	455.93	Shallow
MW-26	455.49	455.43	455.55	Shallow
MW-27-020	456.06	455.67	456.46	Shallow
MW-27-060	456.14	455.40	456.83	Mid-Depth
MW-27-085	456.10	455.32	456.83	Deep
MW-28-025	456.32	455.71	456.90	Shallow
MW-28-090	456.02	455.09	456.85	Deep
MW-29	INC	INC	INC	Shallow
MW-30-030	455.51	455.28	455.72	Shallow
MW-30-050	455.62	454.97	456.23	Mid-Depth
MW-31-060	455.45	455.30	455.60	Shallow
MW-31-135	454.96	454.61	455.36	Deep
MW-32-020	455.48	455.31	455.64	Shallow
MW-32-035	455.59	455.18	455.98	Shallow
MW-33-040	456.05	455.64	456.44	Shallow
MW-33-090	456.10	455.61	456.56	Mid-Depth
MW-33-150	456.16	455.64	456.62	Deep
MW-33-210	456.39	455.94	456.79	Deep
MW-34-055	456.13	455.19	456.99	Mid-Depth
MW-34-080	456.12	455.22	456.94	Deep
MW-34-100	455.83	454.98	456.63	Deep
MW-35-060	456.34	455.94	456.73	Shallow
MW-35-135	455.99	455.75	456.23	Deep
MW-36-020	455.74	455.13	456.29	Shallow
MW-36-040	455.85	455.14	456.50	Shallow
MW-36-050	455.81	455.07	456.48	Mid-Depth
MW-36-070	455.81	455.07	456.49	Mid-Depth
MW-36-090	455.23	454.59	455.91	Deep
MW-36-100	455.18	454.52	455.87	Deep
MW-39-040	455.48	454.87	456.06	Shallow
MW-39-050	455.52	454.93	456.09	Mid-Depth
MW-39-060	455.41	454.84	455.95	Mid-Depth
MW-39-070	455.18	454.72	455.71	Mid-Depth
MW-39-080	455.05	454.57	455.60	Deep
MW-39-100	455.10	454.61	455.65	Deep
MW-42-030	455.55	455.08	456.01	Shallow
MW-42-055	455.66	455.16	456.13	Mid-Depth
MW-42-065	455.79	455.30	456.26	Mid-Depth
MW-43-025	456.32	455.55	457.07	Shallow
MW-43-075	456.49	455.66	457.31	Deep
MW-43-090	456.68	455.84	457.50	Deep
MW-44-070	455.84	454.53	456.64	Mid-Depth
MW-44-115	455.24	454.11	455.93	Deep
MW-44-125	455.77	454.66	456.47	Deep
MW-45-095a	454.51	453.69	455.72	Deep
MW-46-175	456.08	455.46	456.63	Deep
MW-46-205	456.29	455.80	456.74	Deep
MW-47-055	456.11	455.92	456.32	Shallow
MW-47-115	456.22	455.96	456.47	Deep
MW-49-135	INC	INC	INC	Deep
MW-49-275	INC	INC	INC	Deep
MW-49-365	458.06	457.75	458.35	Deep
MW-50-095	455.86	455.67	456.03	Deep
MW-50-200	456.13	455.91	456.33	Deep
MW-51	456.21	456.17	456.26	Mid-Depth
RRB	456.51	455.20	457.49	River Station
TW-02D	453.58	452.90	456.06	Deep
TW-04	INC	INC	INC	Deep
TW-05	INC	INC	INC	Deep

Note: INC Data Incomplete or unavailable over reporting period.



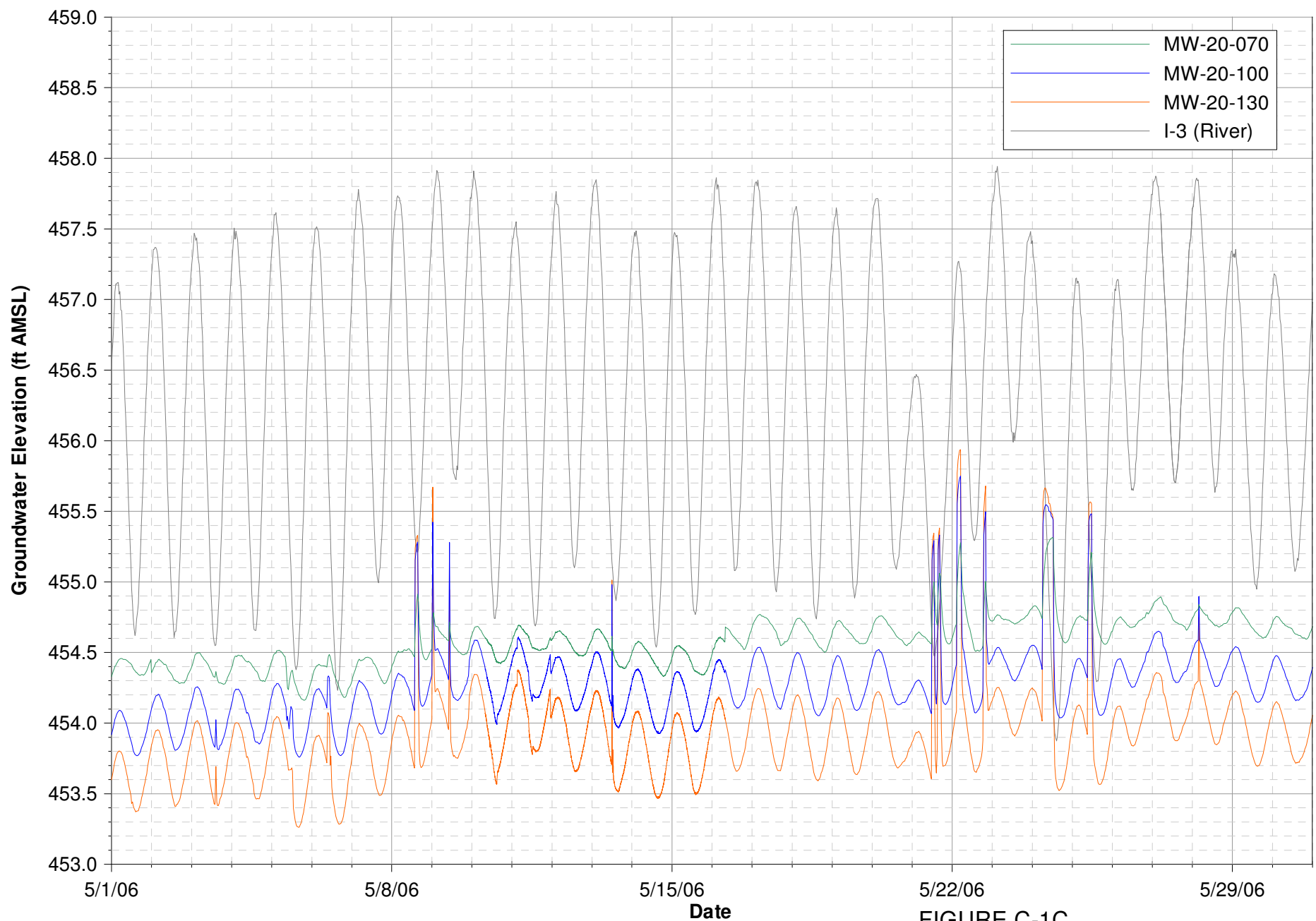
Note: Data subject to review.

**FIGURE C-1A**  
**MW-10 HYDROGRAPH**  
INTERIM MEASURES PERFORMANCE MONITORING  
PG & E TOPOCK COMPRESSOR STATION  
NEEDLES, CALIFORNIA



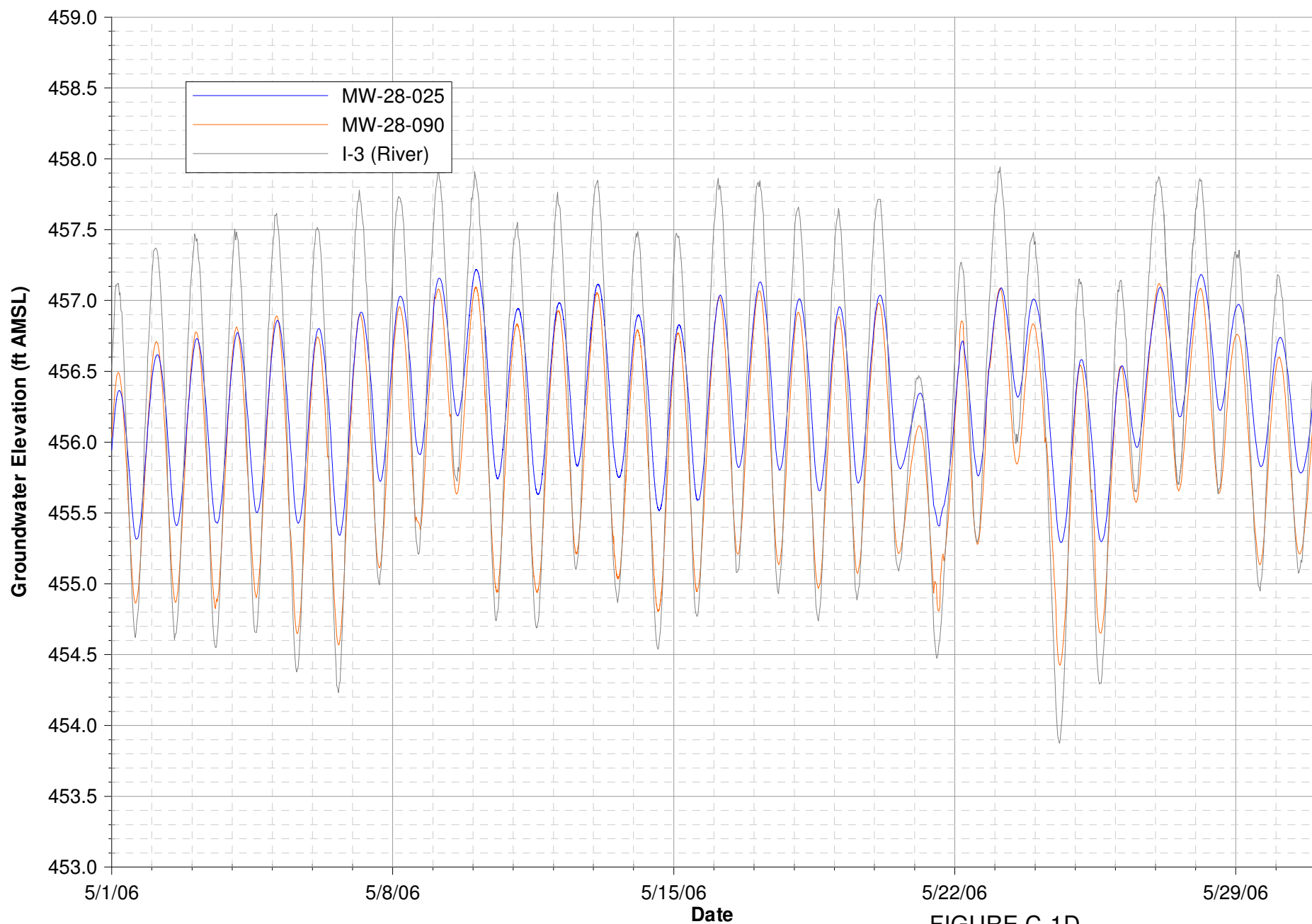
Note: Data subject to review.  
MW-19 transducer failed 5/6/06, new transducer installed 5/10/06.

**FIGURE C-1B**  
**MW-19, MW-22, AND MW-25 HYDROGRAPHS**  
 INTERIM MEASURES PERFORMANCE MONITORING  
 PG & E TOPOCK COMPRESSOR STATION  
 NEEDLES, CALIFORNIA



Note: Data subject to review.

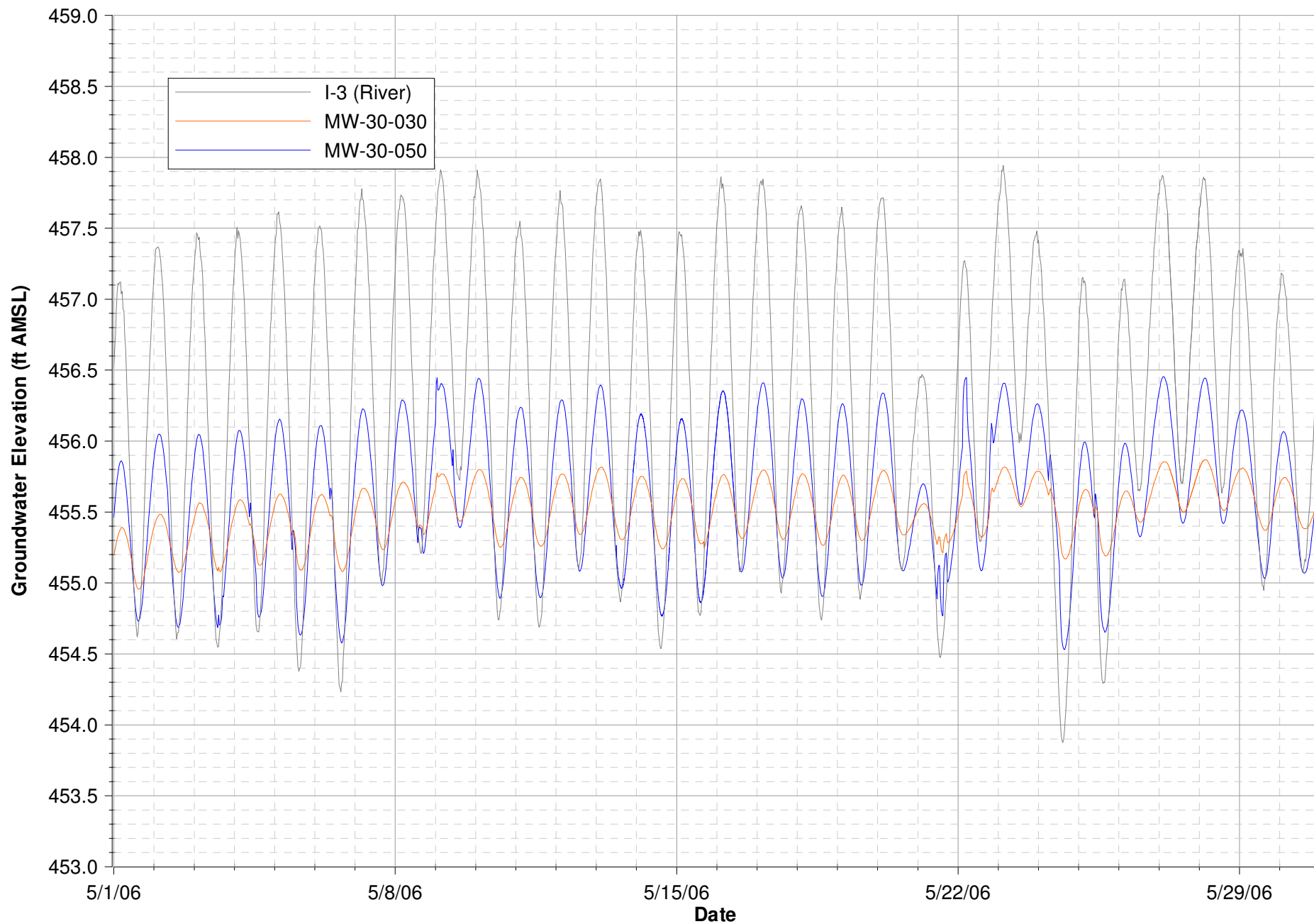
**FIGURE C-1C**  
**MW-20 CLUSTER HYDROGRAPHS**  
INTERIM MEASURES PERFORMANCE MONITORING  
PG & E TOPOCK COMPRESSOR STATION  
NEEDLES, CALIFORNIA



Note: Data subject to review.

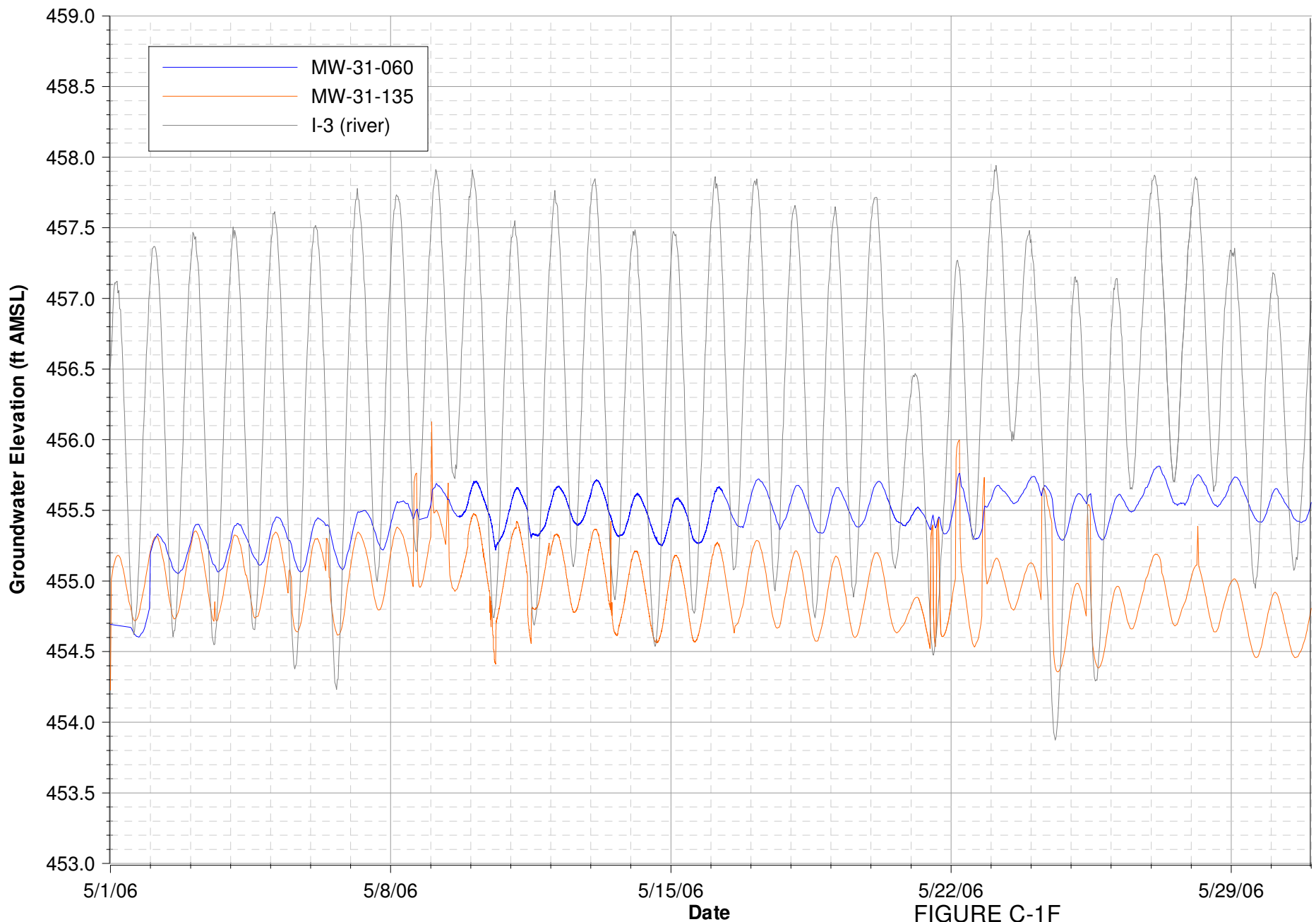
**FIGURE C-1D**  
**MW-28 CLUSTER HYDROGRAPHS**  
 INTERIM MEASURES PERFORMANCE MONITORING  
 PG & E TOPOCK COMPRESSOR STATION  
 NEEDLES, CALIFORNIA





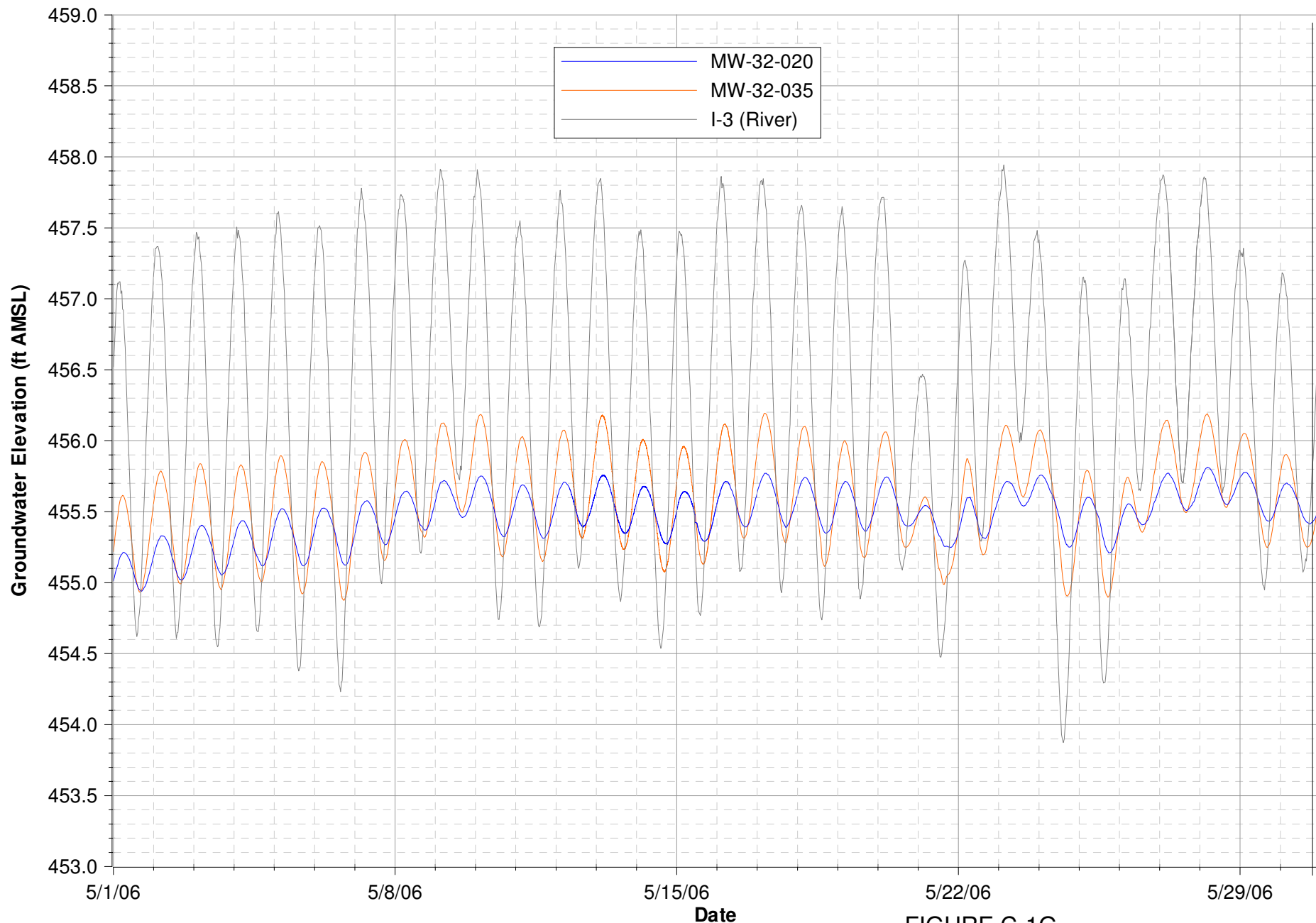
Note: Data subject to review.

**FIGURE C-1E**  
**MW-30 CLUSTER HYDROGRAPHS**  
INTERIM MEASURES PERFORMANCE MONITORING  
PG & E TOPOCK COMPRESSOR STATION  
NEEDLES, CALIFORNIA



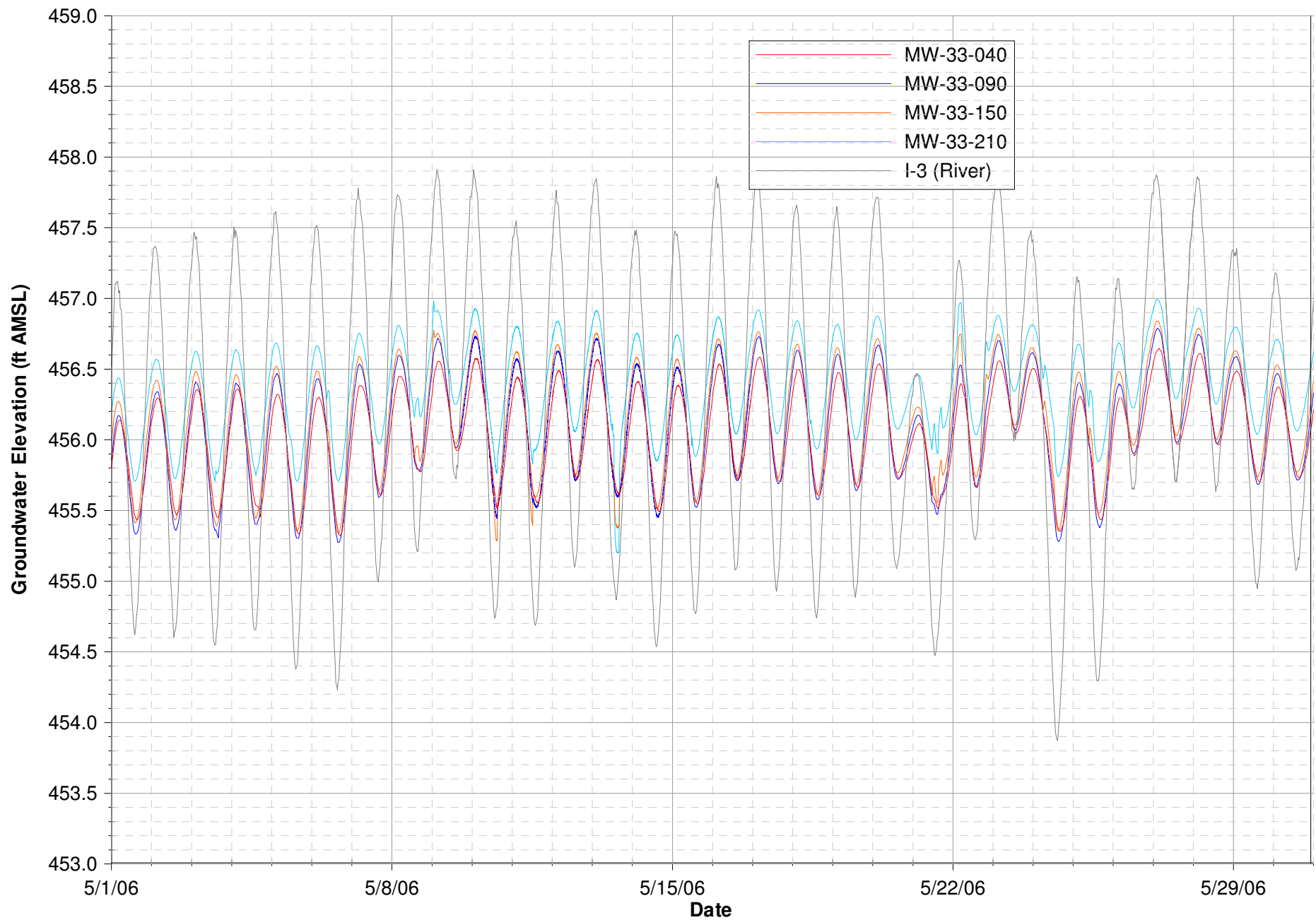
Note: Data subject to review.

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



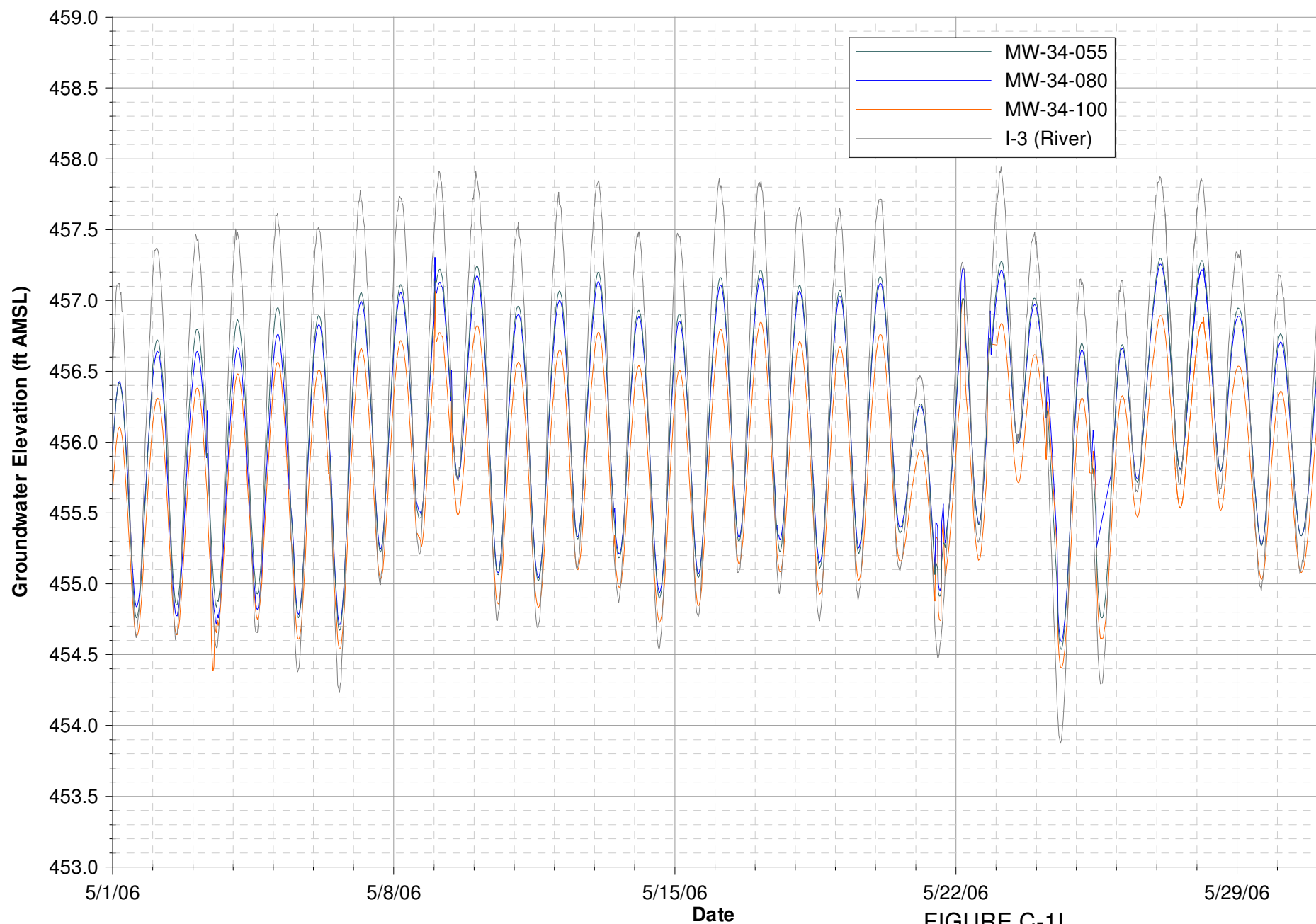
Note: Data subject to review.

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



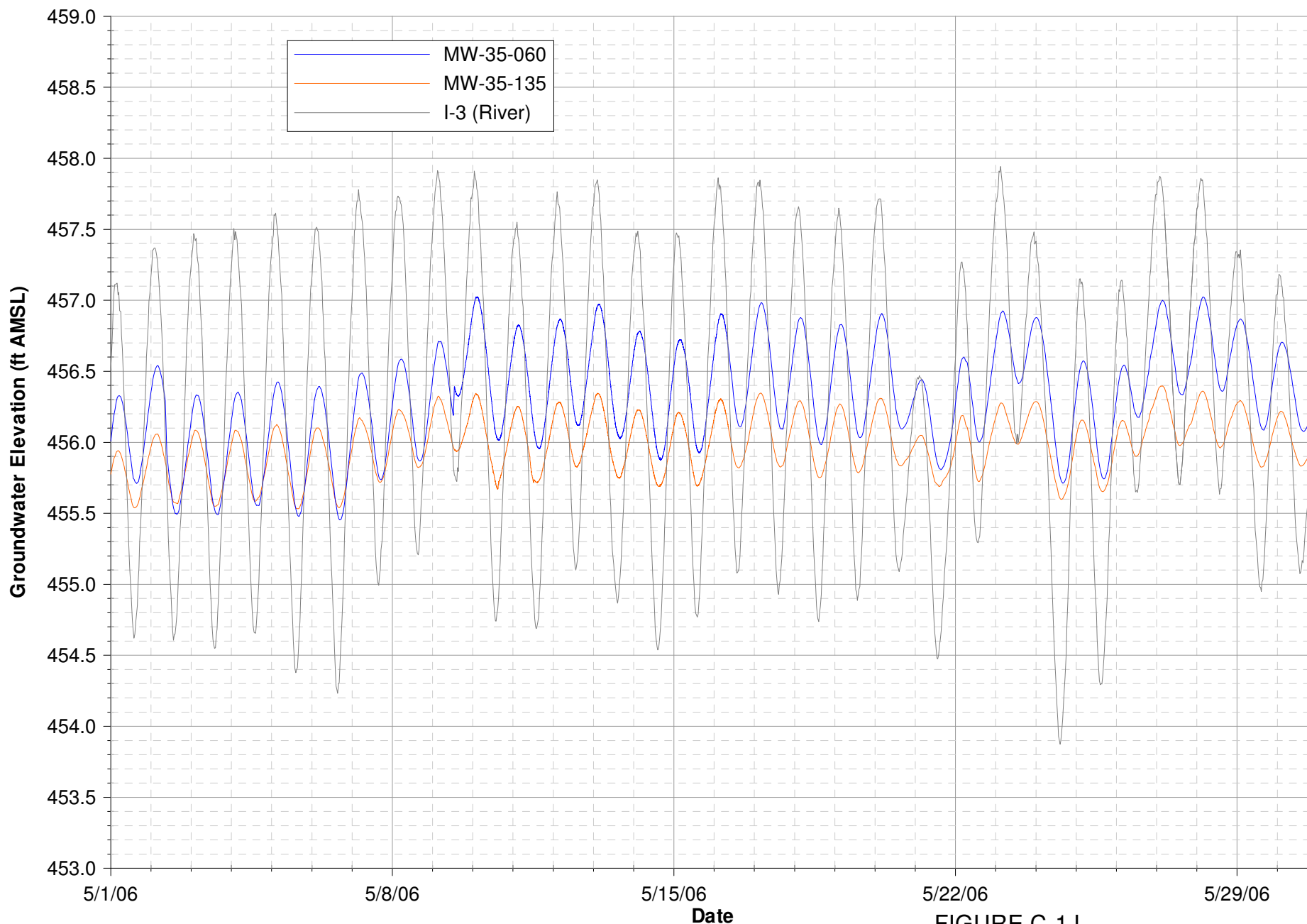
Note: Data subject to review.

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



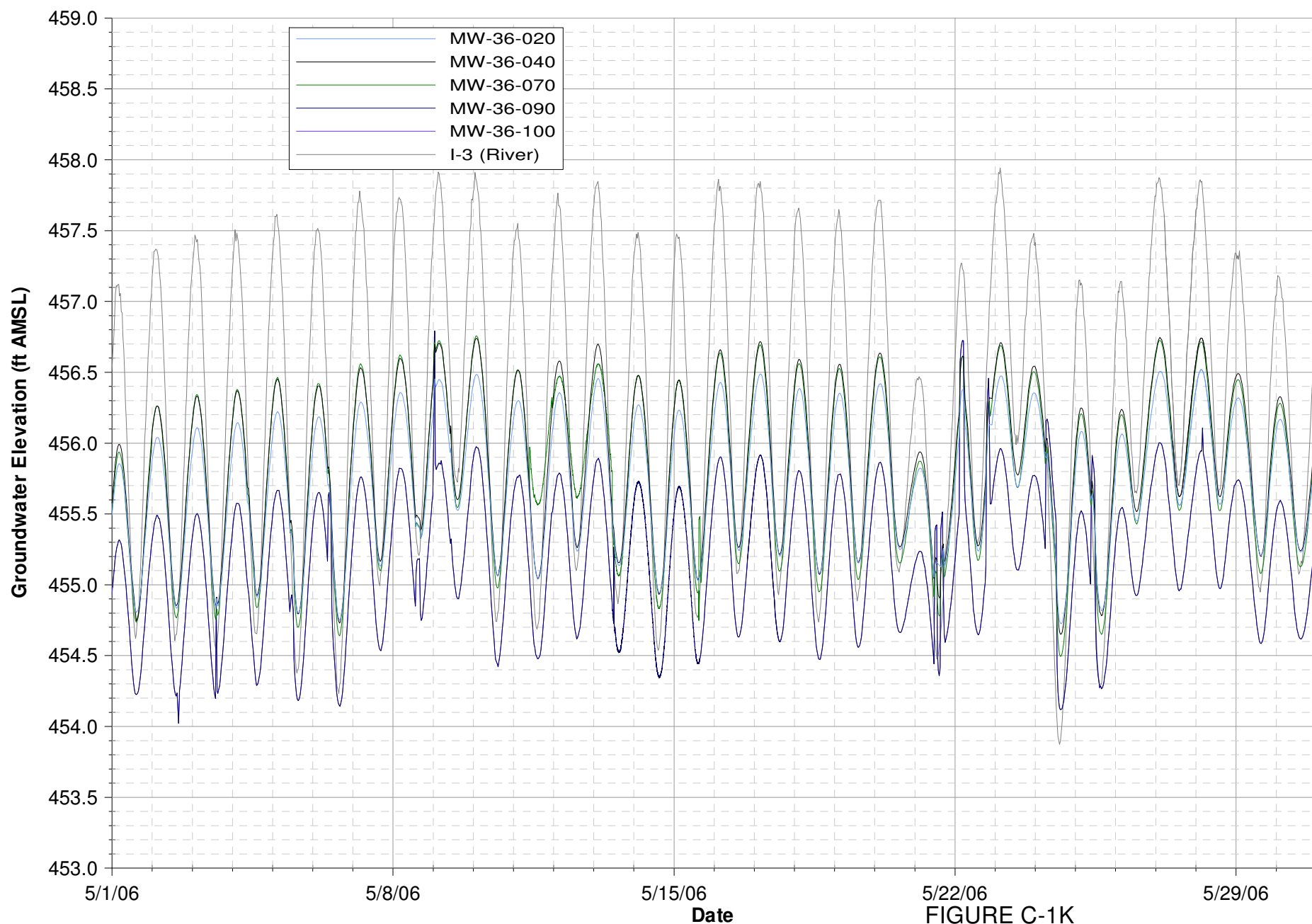
Note: Data subject to review.

**FIGURE C-11**  
**MW-34 CLUSTER HYDROGRAPHS**  
INTERIM MEASURES PERFORMANCE MONITORING  
PG & E TOPOCK COMPRESSOR STATION  
NEEDLES, CALIFORNIA



Note: Data subject to review.

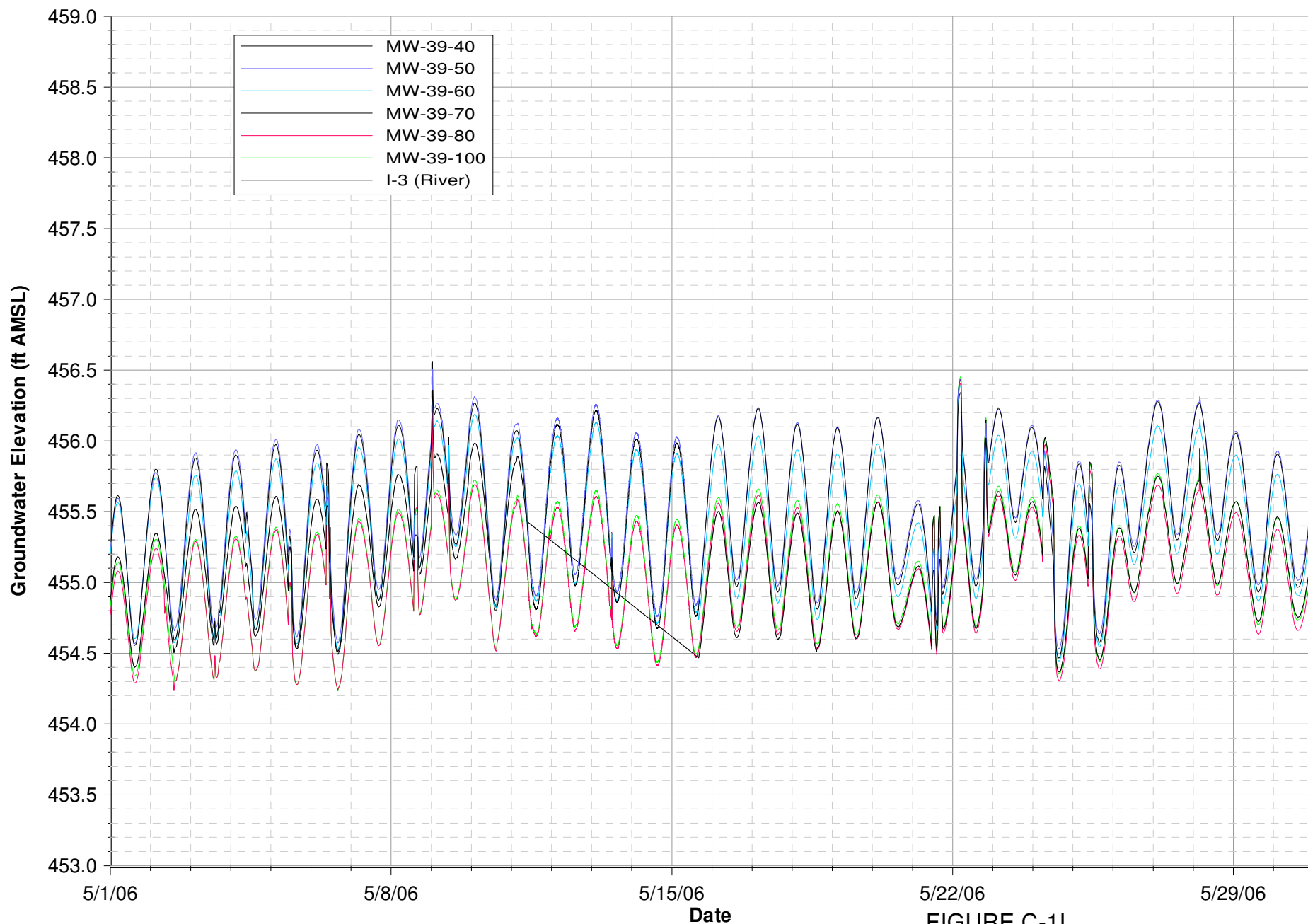
FIGURE C-1J  
MW-35 CLUSTER HYDROGRAPHS  
INTERIM MEASURES PERFORMANCE MONITORING  
PG & E TOPOCK COMPRESSOR STATION  
NEEDLES, CALIFORNIA



Note: Data subject to review.

FIGURE C-1K

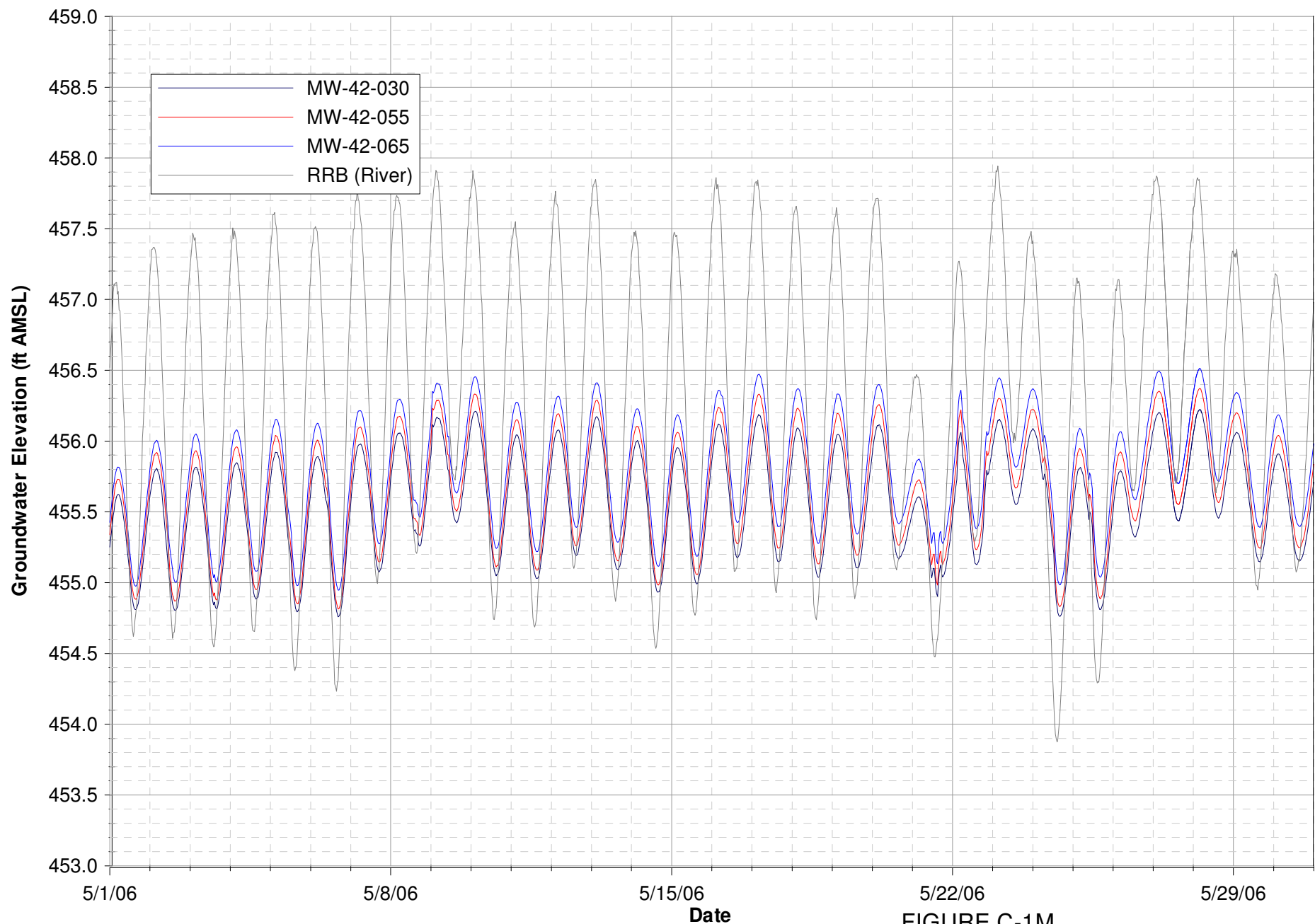
**MW-36 CLUSTER HYDROGRAPHS**  
 INTERIM MEASURES PERFORMANCE MONITORING  
 PG & E TOPOCK COMPRESSOR STATION  
 NEEDLES, CALIFORNIA



Note: Data subject to review.  
Data missing from MW-39-70 from 5/11 through 5/16/2006

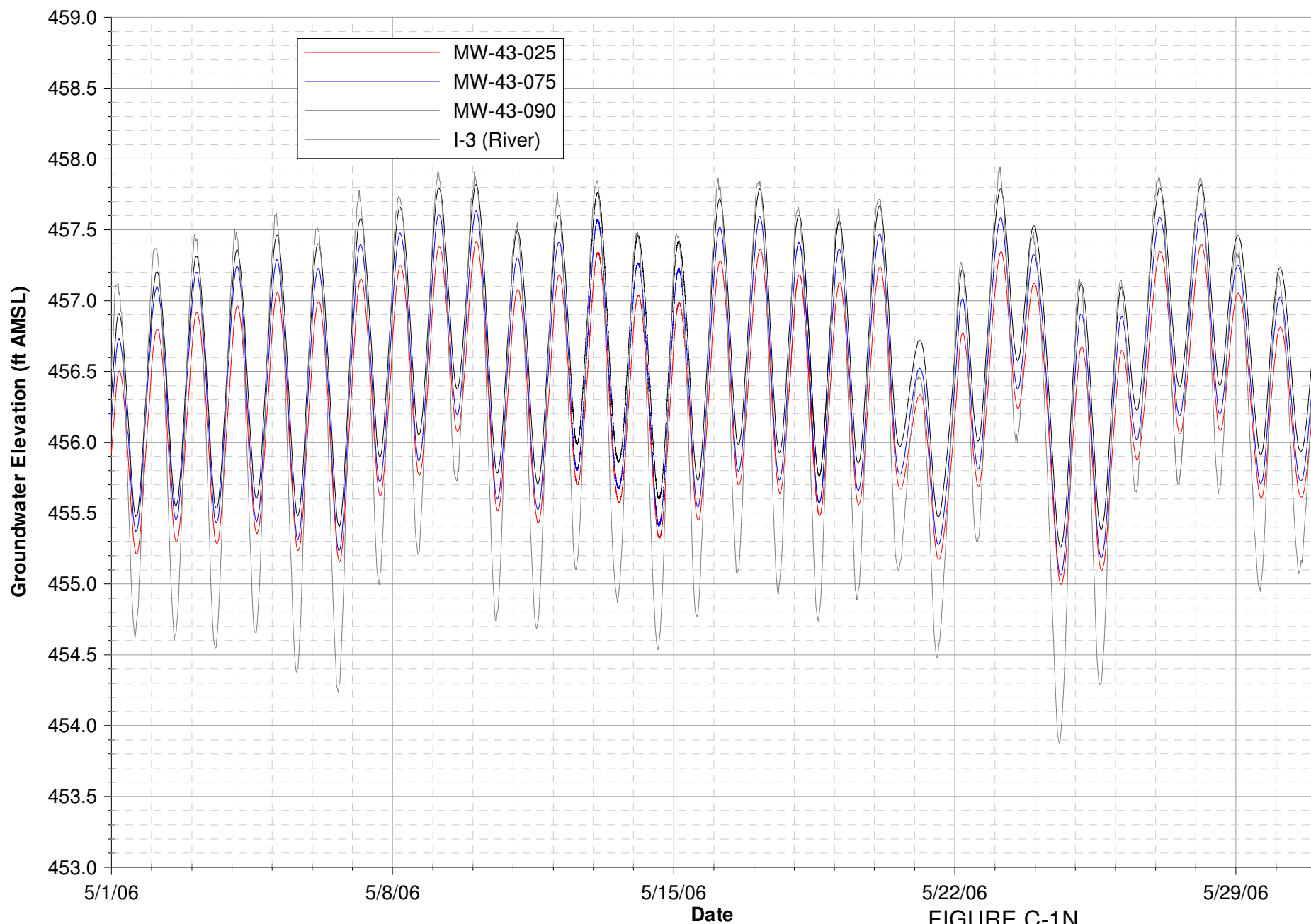
**FIGURE C-1L**  
**MW-39 CLUSTER HYDROGRAPHS**  
INTERIM MEASURES PERFORMANCE MONITORING  
PG & E TOPOCK COMPRESSOR STATION  
NEEDLES, CALIFORNIA





Note: Data subject to review.

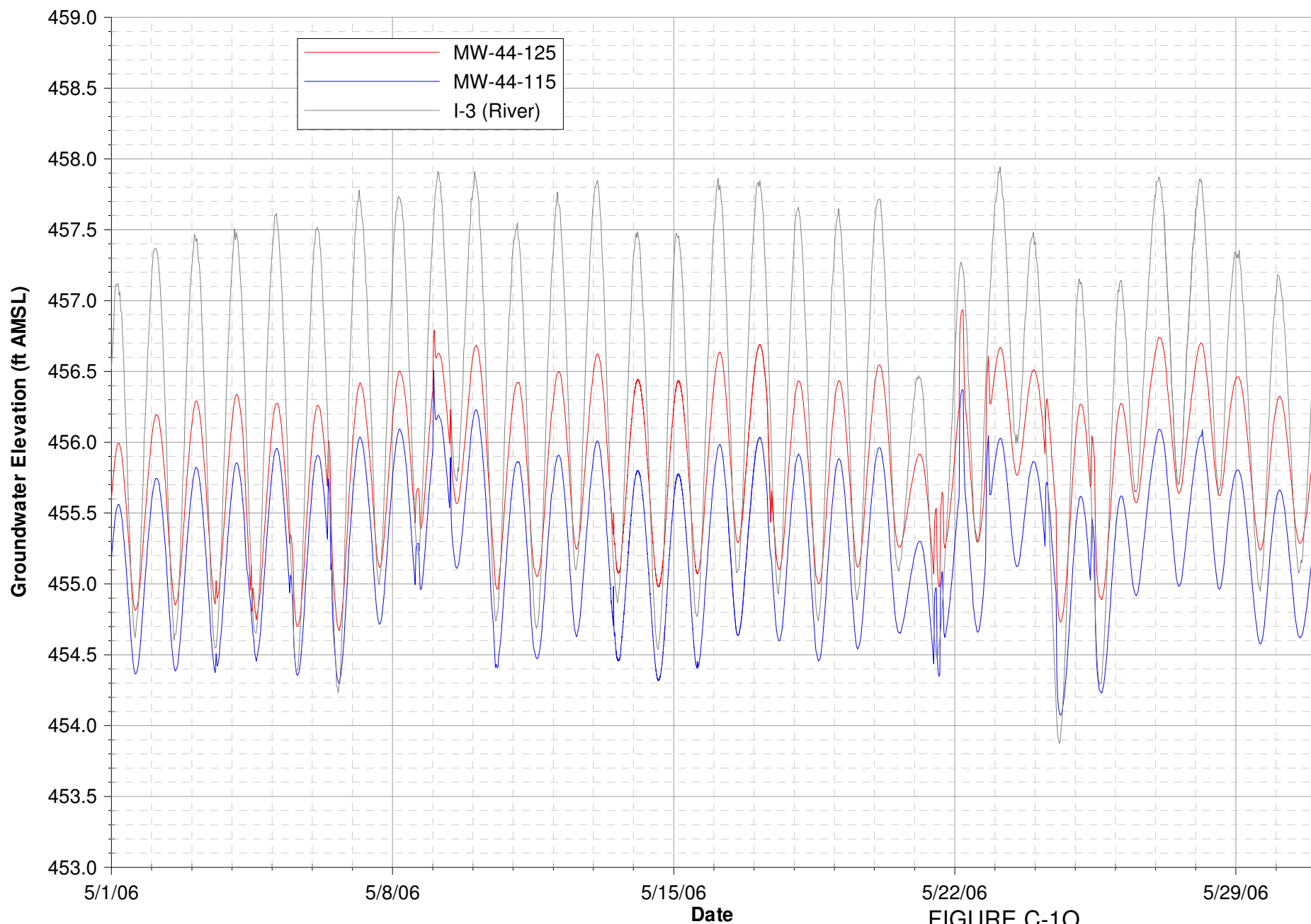
**FIGURE C-1M**  
**MW-42 CLUSTER HYDROGRAPHS**  
INTERIM MEASURES PERFORMANCE MONITORING  
PG & E TOPOCK COMPRESSOR STATION  
NEEDLES, CALIFORNIA



Note: Data subject to review.

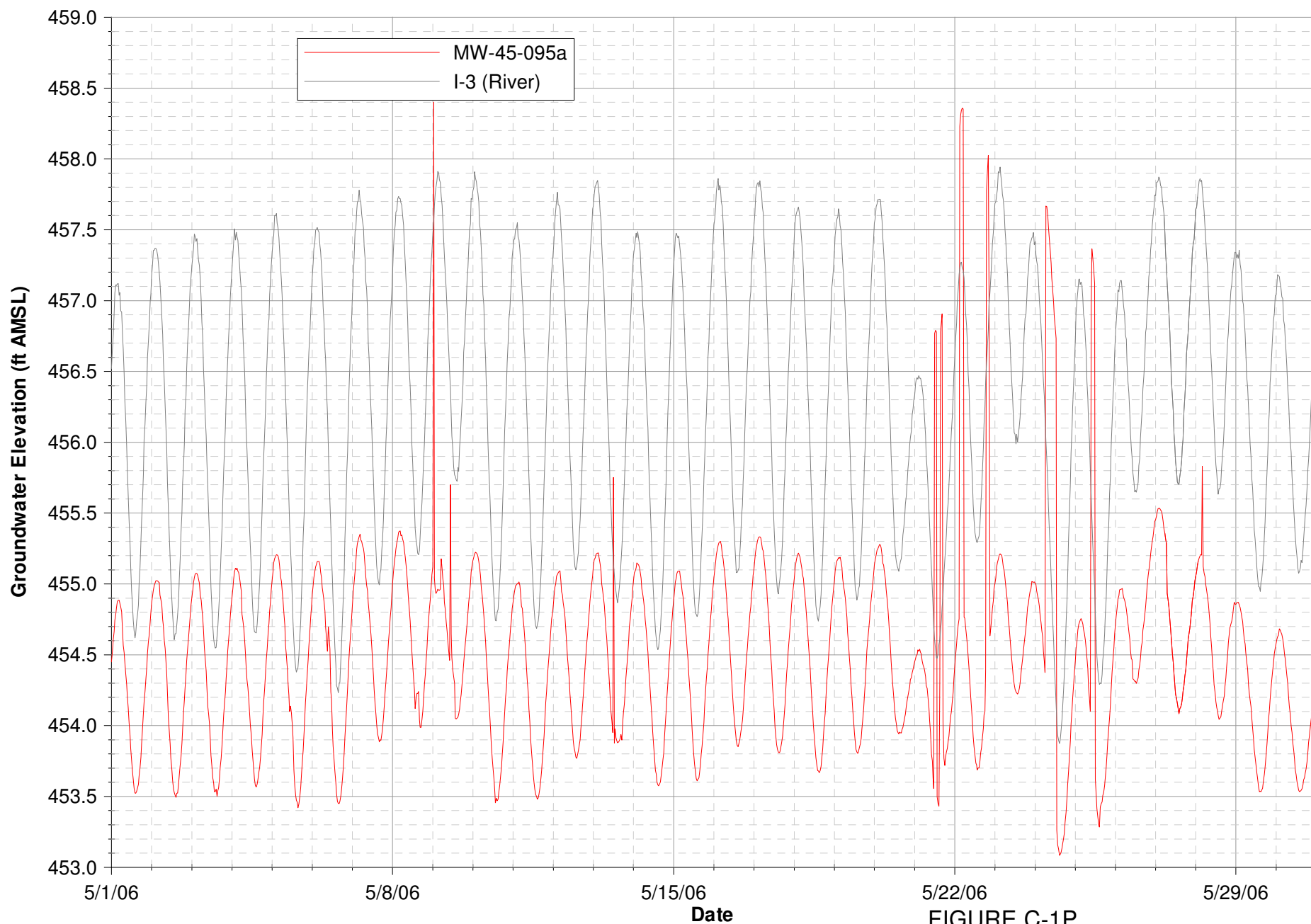
FIGURE C-1N

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



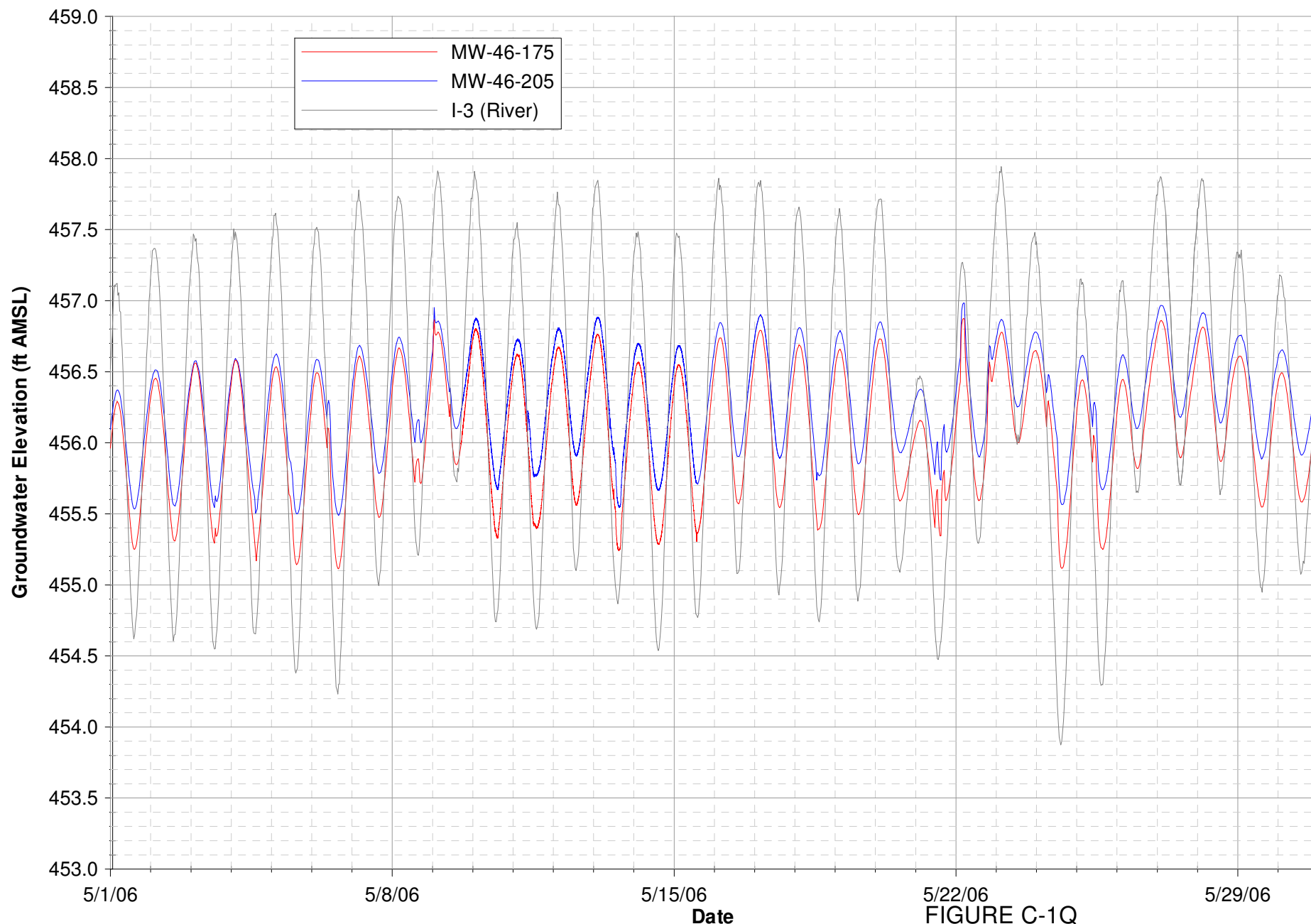
Note: Data subject to review.

**FIGURE C-10**  
**MW-44 CLUSTER HYDROGRAPHS**  
INTERIM MEASURES PERFORMANCE MONITORING  
PG & E TOPOCK COMPRESSOR STATION  
NEEDLES, CALIFORNIA



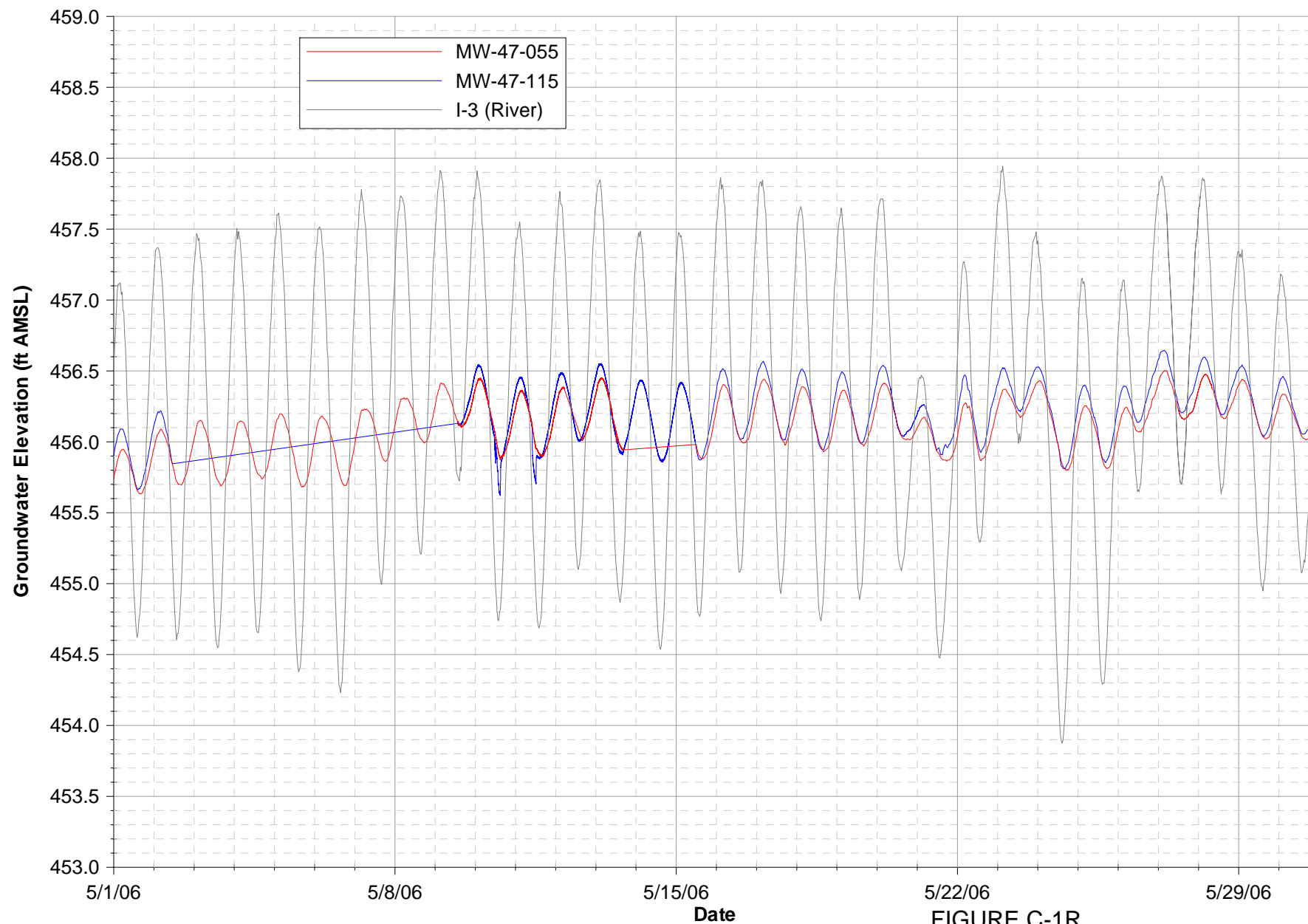
Note: Data subject to review.

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



Note: Data subject to review.

**FIGURE C-1Q**  
**MW-46 CLUSTER HYDROGRAPHS**  
INTERIM MEASURES PERFORMANCE MONITORING  
PG & E TOPOCK COMPRESSOR STATION  
NEEDLES, CALIFORNIA

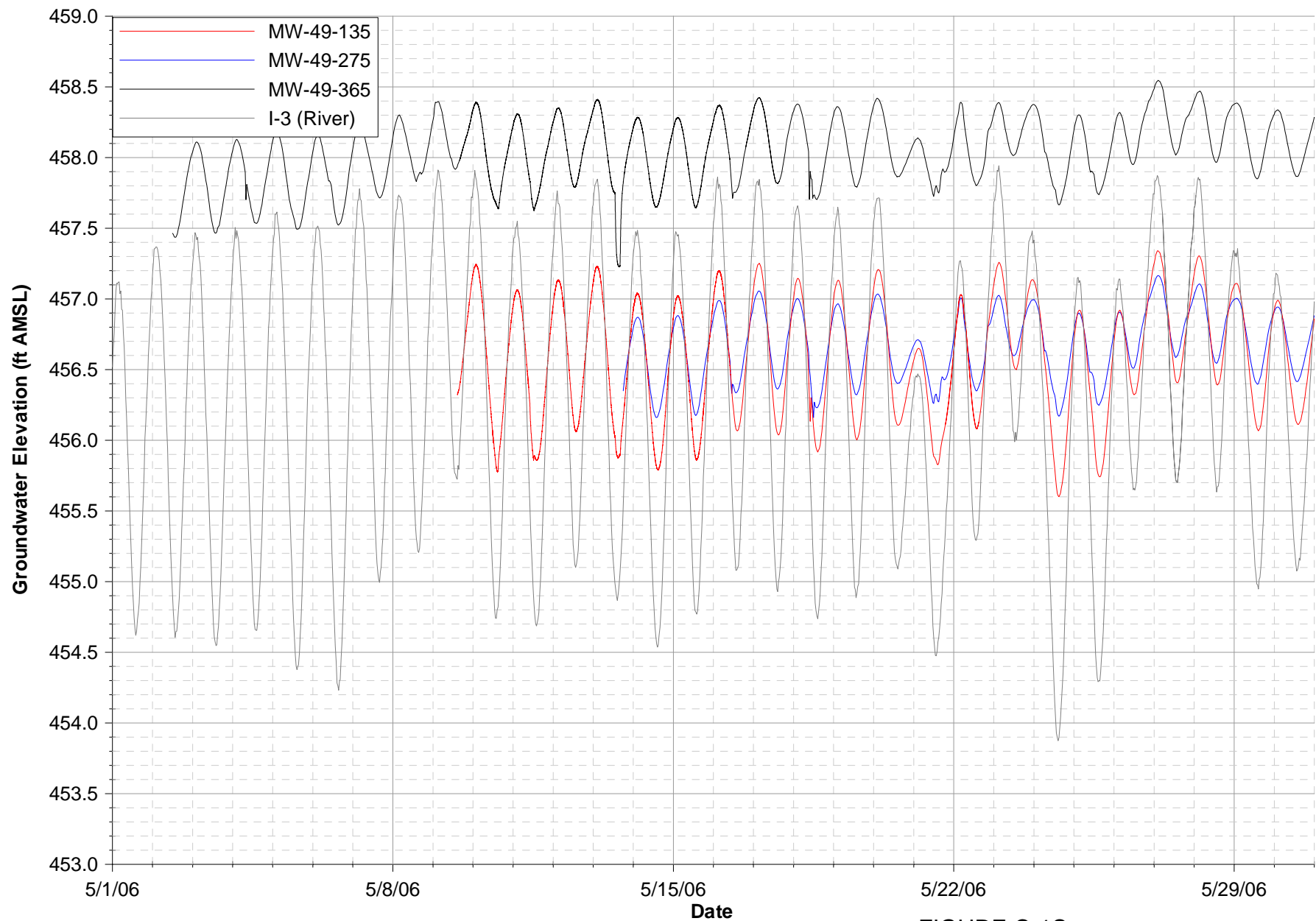


Note: Data subject to review.  
Data missing from MW-47-115 from 5/02 through 5/10/2006

FIGURE C-1R

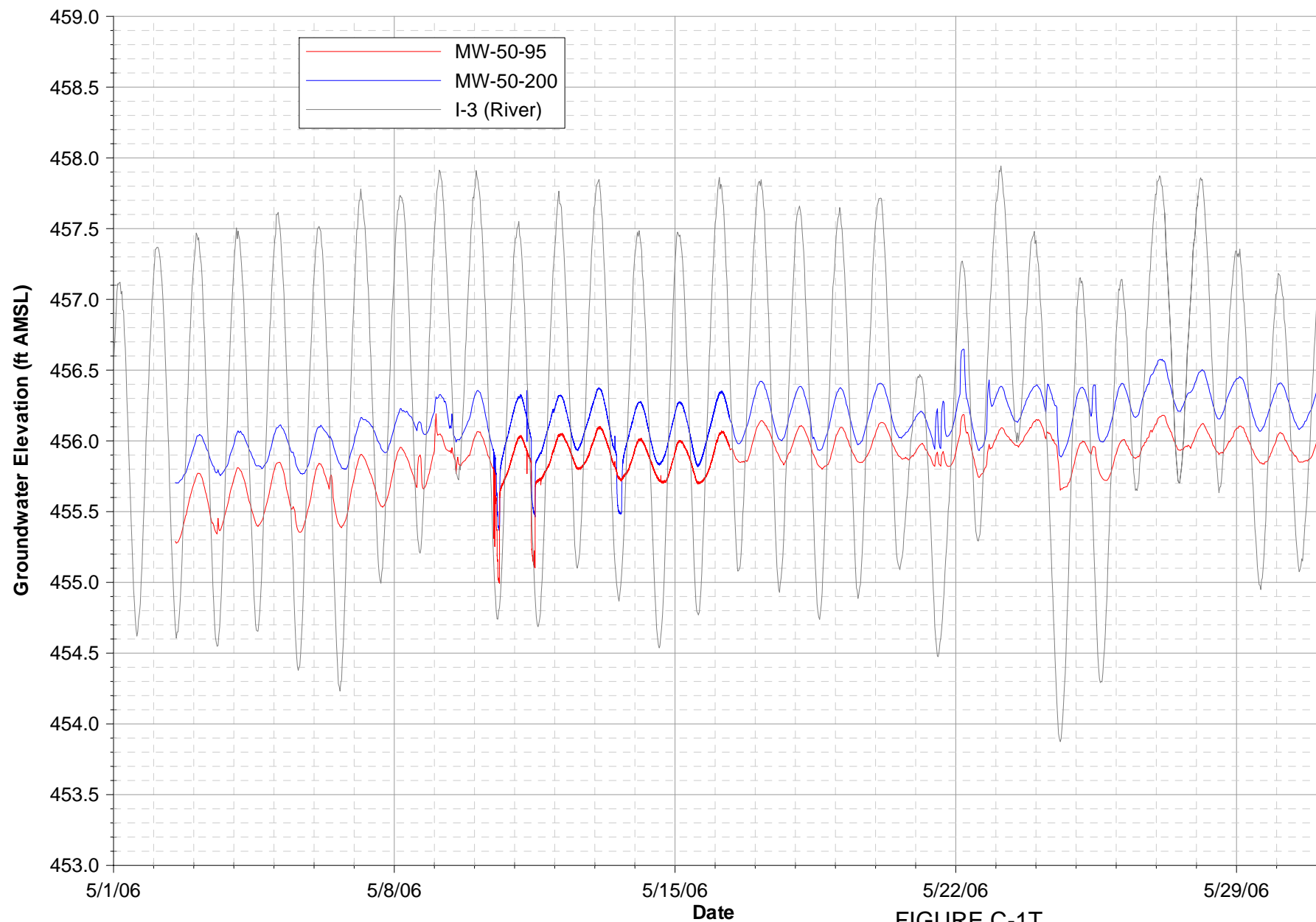
MW-47 WELL HYDROGRAPHS

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



Note: Data subject to review.  
 Transducers installed in MW-49 wells on 5/2/06.  
 Transducer in MW-49-135 failed, re-installed on 5/9/06.  
 Transducer in MW-49-275 failed, re-installed on 5/13/06.

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

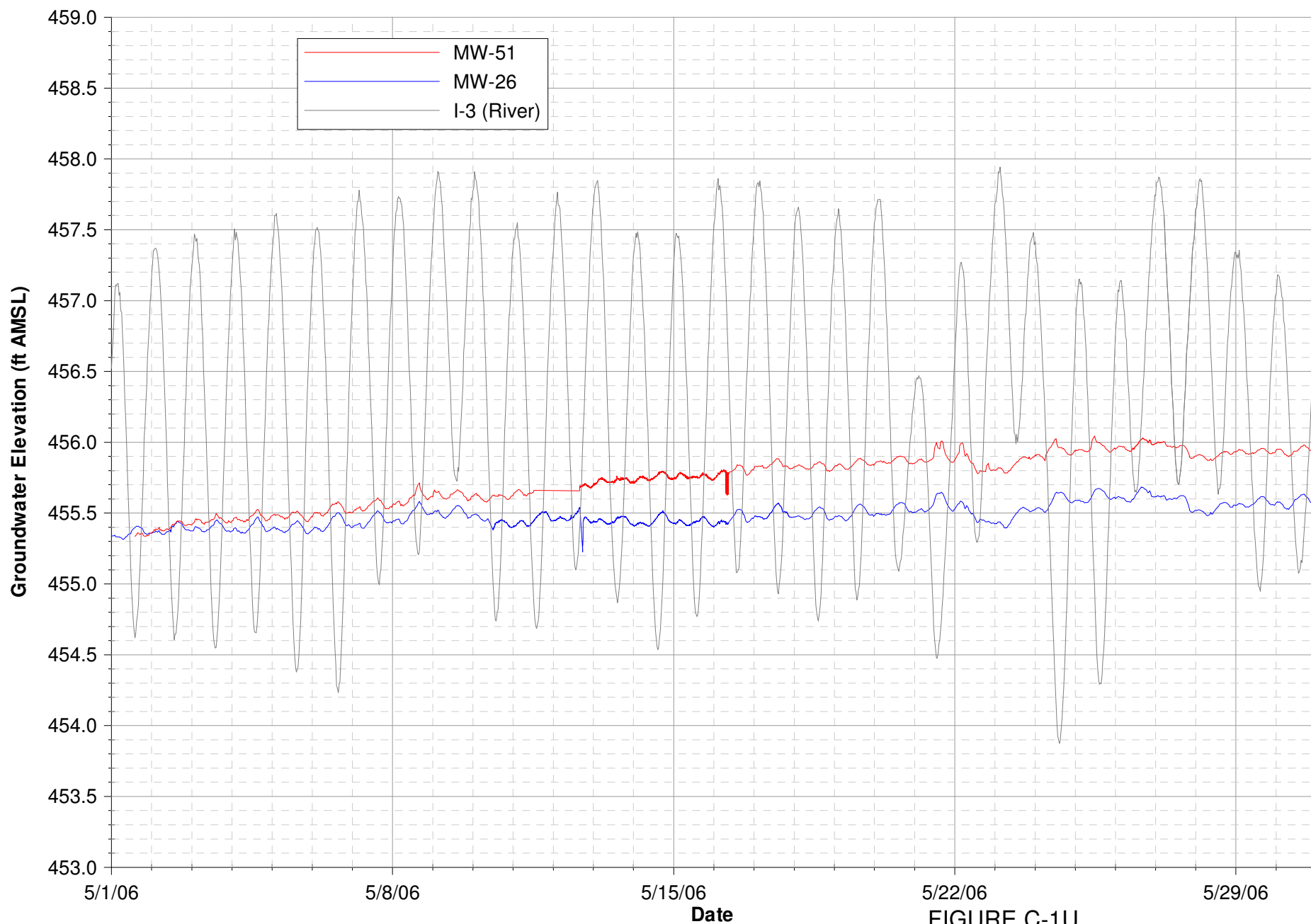


Note: Data subject to review.  
Transducers installed in MW-50 wells on 5/2/06.

**FIGURE C-1T**  
**MW-50 CLUSTER**

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





Note: Data subject to review.

FIGURE C-1U

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