



The 3.1/3.2-pg/L contour is shown as "-.-.-" where inferred and cannot be fully delineated by Fourth Quarter 2012 monitoring data. Further updates of the outline will be forthcoming as sampling results from new and future monitoring wells are incorporated.

Holstead Rd Roy Rd Plymouth Rd American Ave Mountain General Rd

MW-162S1 5.0/5.4  
MW-162S2 1.6/2.0  
MW-162S3 0.2/ND

MW-161S1 3.2/3.4  
MW-161S2 2.5/2.6  
MW-161S3 1.7/1.7

04N-04 2.3/2.6  
04N-03 3.4/3.6  
04N-02 0.64/ND  
03N-01 3.3/3.5  
03N-02 2.6/3.0  
04N-01 0.47/ND

MW-130S1 3.9/4.2  
MW-130S2 3.4/3.2  
MW-131S1 2.7/3.2

MW-154S1 22.0/21.0  
MW-154S2 1.6/1.8  
02N-01 0.12/ND  
MW-166S1 0.22/ND  
MW-166S2 ND/ND

MW-136S1 2.7/3.3  
MW-136S2 ND/ND  
11-11 4.0/4.6

MW-137S1 4.1/4.4  
MW-137S2 4.0/4.1  
MW-137S3 1.7/1.9  
MW-138S1 4.9/5.5  
MW-138S2 4.2/5.1  
11-07 ND/ND

MW-139S1 7.1/7.3  
MW-139S2 0.47/ND  
MW-140S1 4.3/4.8  
MW-140S2 3.6/4.2  
MW-140S3 3.0/3.3

MW-142S1 6.6/7.2  
MW-142S2 1.8/1.9  
MW-142S3 3.4/3.4  
14-03 2.9/3.0  
15-15 0.85/ND  
15-02 0.88/ND

MW-113S1 3.0/3.0  
MW-113S2 3.2/3.2  
MW-113D 0.07/ND  
15-14 2.0/2.0  
14-11 3.1/3.2  
14-10 3.3/3.3

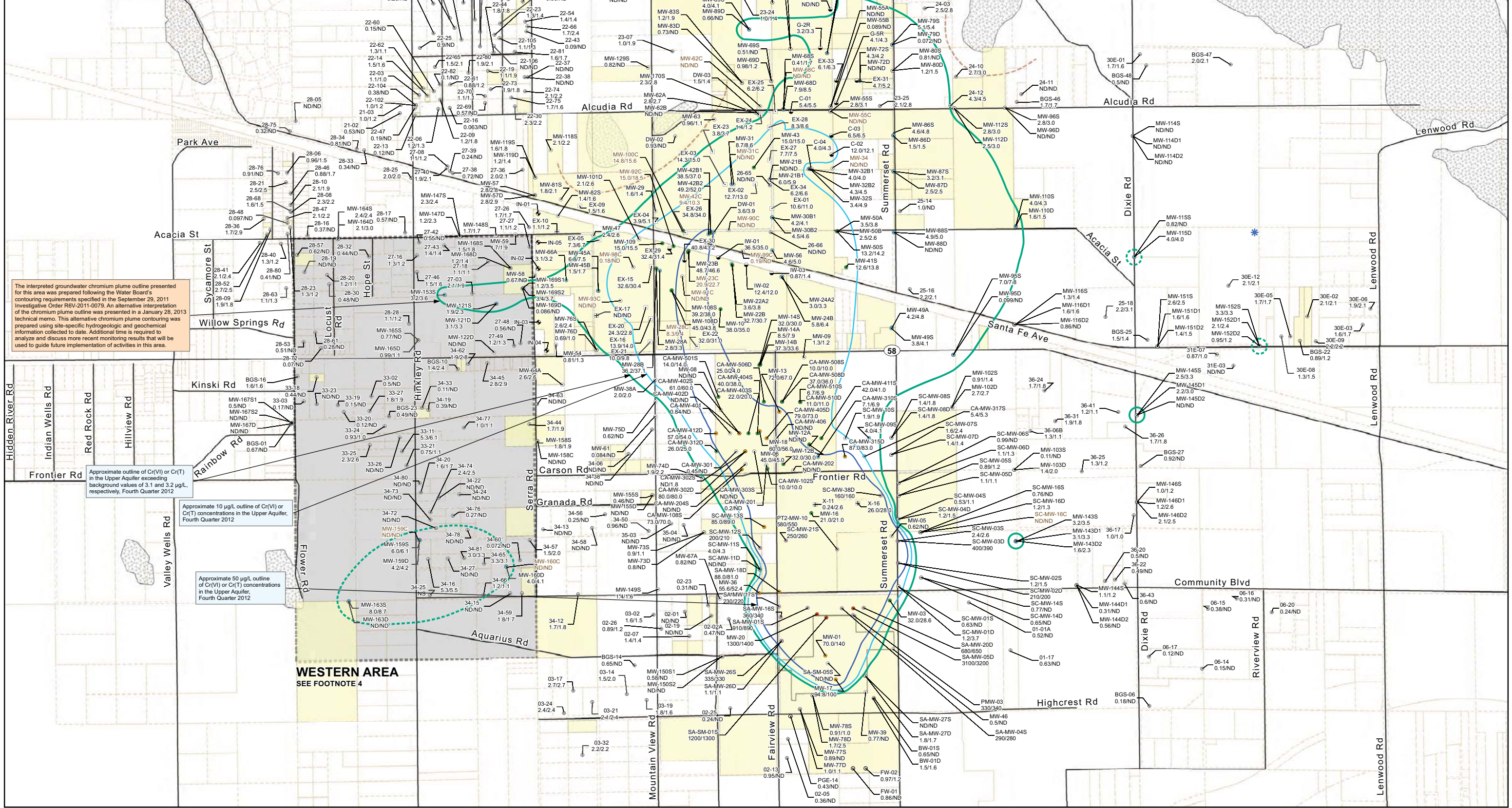
MW-111S1 2.7/2.7  
MW-111S2 2.2/2.9  
MW-111D ND/ND  
14-12 2.1/2.5  
14-06 2.6/2.6  
14-07 2.8/2.7  
14-15 2.8/2.6

MW-104S1 3.6/3.4  
MW-104S2 3.2/3.4  
MW-104D ND/ND  
14-07 2.8/2.7  
14-15 2.8/2.6  
MW-106S 2.5/2.7  
MW-106D 0.11/ND

MW-124S1 2.1/2.5  
MW-124S2 2.6/2.6  
MW-124D ND/ND  
MW-125S1 1.9/2.0  
MW-117S1 0.7/ND  
MW-117S2 0.86/1.0  
MW-117D ND/ND

MW-125S1 2.1/2.4  
MW-125S2 1.5/1.6  
MW-125S3 1.7/1.7  
MW-84S 1.6/2.0  
MW-84D 0.089/ND  
MW-105S 2.5/2.6  
MW-105D ND/ND  
MW-107S 1.9/2.0  
MW-107D 0.51/ND  
MW-94S 2.1/2.3  
MW-94D ND/ND  
MW-97S 2.2/2.6  
MW-97D 1.3/2.1  
24-04 2.3/2.5  
24-03 2.5/2.8  
MW-79S

MW-85S 1.5/1.6  
MW-85D ND/ND  
MW-126S1 2.6/2.8  
MW-126S2 1.3/1.4  
MW-127S1 1.1/1.4  
MW-127S2 1.3/1.5  
MW-70S 1.2/1.8  
MW-70D 1.4/1.8  
EX-32 2.4/2.5  
G-1R ND/ND  
G-2R



The interpreted groundwater chromium plume outline presented for this area was prepared following the Water Board's contouring requirements specified in the September 29, 2011 Investigative Order RBV-2011-0079. An alternative interpretation of the chromium plume outline was presented in a January 28, 2013 technical memo. This alternative chromium plume contouring was prepared using site-specific hydrogeologic and geochemical information collected to date. Additional time is required to analyze and discuss more recent monitoring results that will be used to guide future implementation of activities in this area.

Approximate outline of Cr(VI) or Cr(T) in the Upper Aquifer exceeding background values of 3.1 and 3.2 µg/L, respectively, Fourth Quarter 2012

Approximate 10 µg/L outline of Cr(VI) or Cr(T) concentrations in the Upper Aquifer, Fourth Quarter 2012

Approximate 50 µg/L outline of Cr(VI) or Cr(T) concentrations in the Upper Aquifer, Fourth Quarter 2012

**WESTERN AREA**  
SEE FOOTNOTE 4

- Legend**
- Groundwater Monitoring Well
  - Agricultural Supply Well
  - ⊕ Domestic Supply Well
  - Other Supply Well
  - Groundwater Extraction Well (active)
  - ⊕ Multi-use Test Well, or Inactive Extraction/Injection Well
  - ⊕ Freshwater Injection Well
  - ⊕ Step-Out Monitoring Wells Planned or Under Construction
  - PG&E-Owned Property
  - PG&E Compressor Station
  - County Parcels
  - Transmission Lines
  - Approximate Limit of Saturated Alluvium Upper Aquifer
  - Bedrock Exposed at Ground Surface
  - Western Area

MW-102S Well ID  
0.91/1.4 Cr(VI)/Cr(T) concentrations in micrograms per liter (µg/L); maximum of primary and duplicate samples during Fourth Quarter 2012 sampling

Cr(VI) = Hexavalent Chromium  
Cr(T) = Total Dissolved Chromium  
ND = Not Detected; NS = Not Sampled

- Groundwater Cr(VI) Concentrations in Monitoring Wells**
- > 1,000 µg/L
  - 100 - 1,000 µg/L
  - 50 - 100 µg/L
  - 10 - 50 µg/L
  - 3.1 - 10 µg/L
  - < 3.1 µg/L or ND

**Notes:**

1. Chromium results are shown for site-wide Groundwater Monitoring Program and domestic wells sampled in the Fourth Quarter (October-December) 2012 monitoring period. Fourth Quarter 2012 results for selected In situ Reactive Zone (IRZ) monitoring wells are shown to aid in plume mapping. For wells sampled multiple times during the reporting period, the most recent results are shown.
2. The concentration contours are based on Fourth Quarter 2012 chromium results for the groundwater monitoring and extraction wells that are completed in the shallow zone and deep zone of the Upper Aquifer as noted on Figures 3-2 and 3-3. Results for domestic wells and lower aquifer monitoring wells (brown colored labels) were not used for chromium plume contouring.
3. Concentration contours represent the maximum extent of either Cr(VI) or Cr(T) at any depth within the upper aquifer based on Fourth Quarter 2012 chromium results. Some chromium results for wells within the 50-, 10-, and 3.1/3.2-µg/L chromium contours are less than the contoured concentrations.
4. An evaluation of available hydrogeologic and groundwater quality data for the shaded "Western Area" shown on this figure was included in the January 14, 2013 document titled Conceptual Site Model for Groundwater Flow and the Occurrence of Chromium in Groundwater of the Western Area Report (CH2MHILL and Stantec, 2013). The findings of the January 14 report indicate that groundwater in the "Western Area" contains naturally occurring chromium.

\* Monitoring well MW-154S1 is completed in low permeability sediments across the water table. This well purges dry during sampling and is very slow to recharge. Groundwater samples from this well may not be representative of the groundwater conditions in the upper aquifer as sampled in other wells in this area.

**FIGURE 3-1 CHROMIUM RESULTS FOR FOURTH QUARTER 2012 GROUNDWATER MONITORING AND DOMESTIC WELL SAMPLING AND INTERPRETED MAXIMUM PLUME OUTLINE IN UPPER AQUIFER**  
FOURTH QUARTER 2012 GROUNDWATER MONITORING REPORT AND DOMESTIC WELL RESULTS  
SITE-WIDE GROUNDWATER MONITORING PROGRAM  
PACIFIC GAS AND ELECTRIC COMPANY  
HINKLEY COMPRESSOR STATION  
HINKLEY, CALIFORNIA

