

Orchard Rd

Grass Hopper

Bn Ranch Rd

Harpers Way

Hinkley Rd

Halsted Rd

American Ave

Friends Rd

Sunset Rd

American Ave

Plymouth Rd

Holstead Rd

Roy Rd

Holstead Rd

Mountain General Rd

Burnt Tree Rd

Fossil Bed Rd

Burnt Tree Rd

American Way

Coon Canyon Rd

Mountain General Rd

Sierra Rd

Mountain View Rd

Orchard St

Sonoma St

Hinkley Rd

Tindall Rd

Coon

28N-05 3.8/3.2

28N-07 4.0/3.3

28N-04 2.1/2.2

27N-02 3.6/3.1

27N-01 2.2/1.8

33N-02 3.7/3.6

33N-01 3.1/3.0

04N-04 2.1/2.6

MW-174S3 1.9/2.2

MW-174S1 2.9/3.1

MW-174S2 2.1/2.4

03N-01 3.5/3.4

MW-130S1 3.3/3.7

MW-130S2 3.5/4.1

MW-131S1 2.9/3.3

10-04 1.5/1.7

MW-133S2 0.09ND

MW-145S1\* 12.2/15.2

MW-145S2 1.3/1.6

MW-166S1 0.19ND

MW-166S2 ND/ND

MW-136S1 2.9/3.1

MW-136S2 ND/ND

MW-137S1 4.4/5.2

MW-137S2 4.4/4.5

MW-137S3 1.5/1.6

MW-139S1 6.1/6.0

MW-139S2 1.1/1.5

MW-140S1 4.5/4.8

MW-140S2 3.8/3.8

MW-140S3 3.4/3.3

11-10 4.3/4.6

MW-138S1 4.8/5.2

MW-138S2 4.3/4.5

15-15 0.95ND

15-02 0.63/1.1

MW-175S1 3.5/3.9

MW-175S2 3.0/3.3

MW-175D 2.9/3.5

MW-173S1 4.2/4.3

MW-173S2 2.9/3.0

MW-173D 1.0/1.4

MW-142S1 6.6/7.1

MW-142S2 2.1/2.3

MW-142S3 2.1/2.4

15-13 2.2/2.5

MW-113S1 2.9/2.8

MW-113S2 3.0/3.1

MW-113D ND/ND

MW-111S1 2.7/2.8

MW-111S2 2.5/2.6

MW-111D ND/ND

MW-115S1 2.9/3.1

MW-115S2 1.9/2.2

MW-115D ND/ND

14-12 2.9/3.1

9-16-04 1.6/0.6

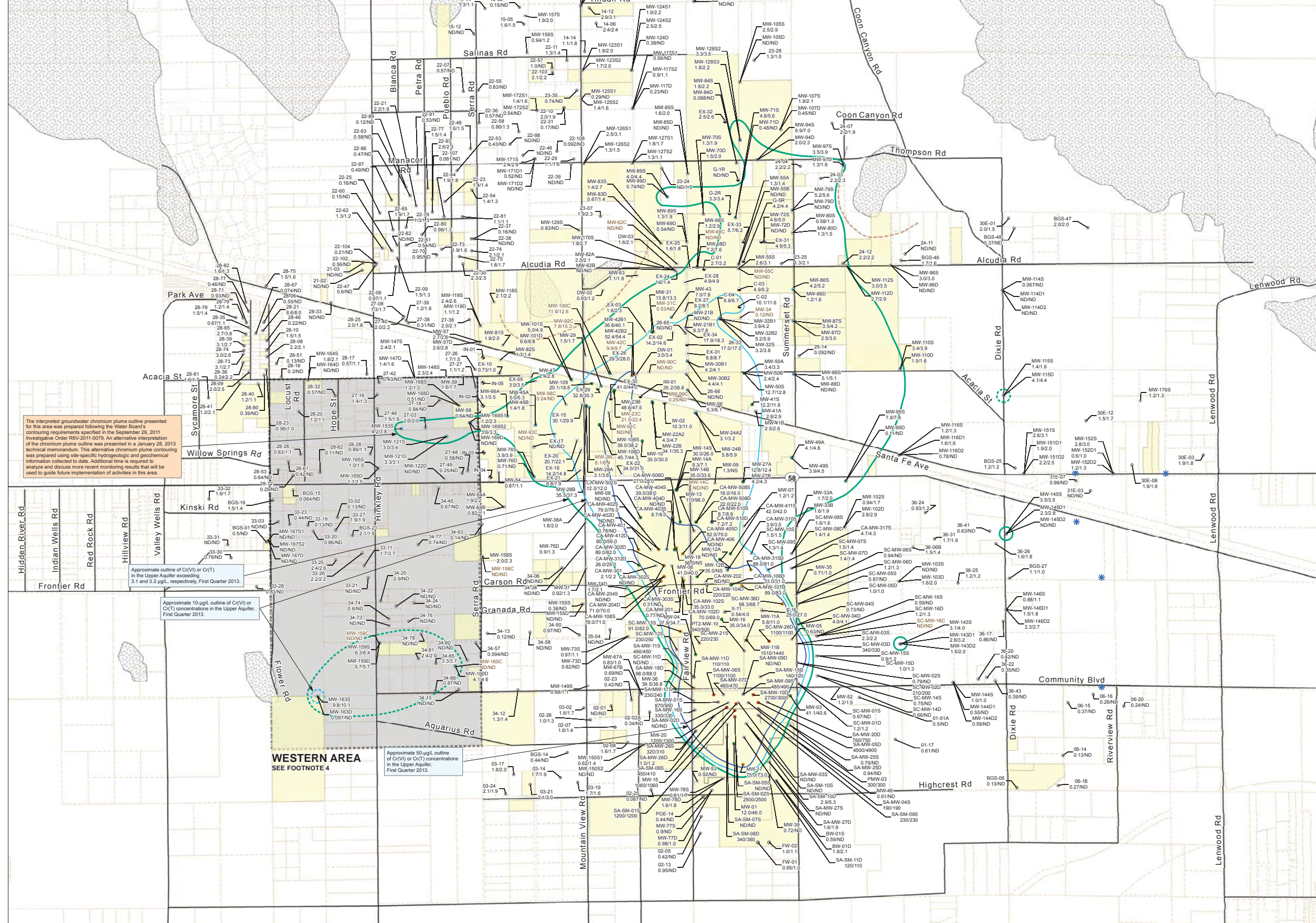
MW-124S1 1.9/2.2

MW-124S2

MW-106S 2.8/2.9

MW-106D ND/ND

MW-105S



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 RW-2011-0079. An alternative interpretation of the chromium plume outline was presented in a January 28, 2013 technical memorandum. This alternative chromium plume contouring was prepared using site-specific hydrologic 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) concentrations in the Upper Aquifer exceeding 3.1 and 3.2 µg/L, respectively, First Quarter 2013.

Approximate 10-µg/L outline of Cr(VI) or Cr(T) concentrations in the Upper Aquifer, First Quarter 2013.

Approximate 50-µg/L outline of Cr(VI) or Cr(T) concentrations in the Upper Aquifer, First Quarter 2013.

- LEGEND:**
- Groundwater monitoring well
  - Agricultural supply well
  - Domestic supply well
  - Other supply well
  - Groundwater extraction well (active)
  - Multiuse 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

Well ID	Cr(VI)/Cr(T) concentrations in µg/L; maximum of primary and duplicate samples during First Quarter 2013 sampling.
MW-102S	0.91/1.4

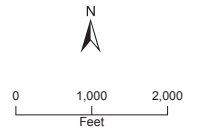
**ABBREVIATIONS:**

µg/L	micrograms per liter
Cr(VI)	hexavalent chromium
Cr(T)	total dissolved chromium
IRZ	In Situ Reactive Zone
ND	not detected
NS	not sampled

**Groundwater Cr(VI) concentrations in monitoring wells:**

- More than 1,000 µg/L
- 100 to 1,000 µg/L
- 50 to 100 µg/L
- 10 to 50 µg/L
- 3.1 to 10 µg/L
- Less than 3.1 µg/L or ND

- NOTES:**
- Chromium results are shown for site-wide Groundwater Monitoring Program and domestic wells sampled in the First Quarter (January through March) 2013 monitoring period. First Quarter 2013 results for selected 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.
  - The concentration contours are based on First Quarter 2013 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.
  - Concentration contours represent the maximum extent of either Cr(VI) or Cr(T) at any depth within the Upper Aquifer based on First Quarter 2013 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.
  - 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 FIRST**  
**QUARTER 2013 GROUNDWATER**  
**MONITORING AND DOMESTIC**  
**WELL SAMPLING AND INTERPRETED**  
**MAXIMUM PLUME OUTLINE**  
**IN UPPER AQUIFER**  
 FIRST QUARTER 2013 GROUNDWATER MONITORING  
 REPORT AND DOMESTIC WELL RESULTS  
 SITE-WIDE GROUNDWATER MONITORING PROGRAM  
 PACIFIC GAS AND ELECTRIC COMPANY  
 HINKLEY COMPRESSOR STATION  
 HINKLEY, CALIFORNIA