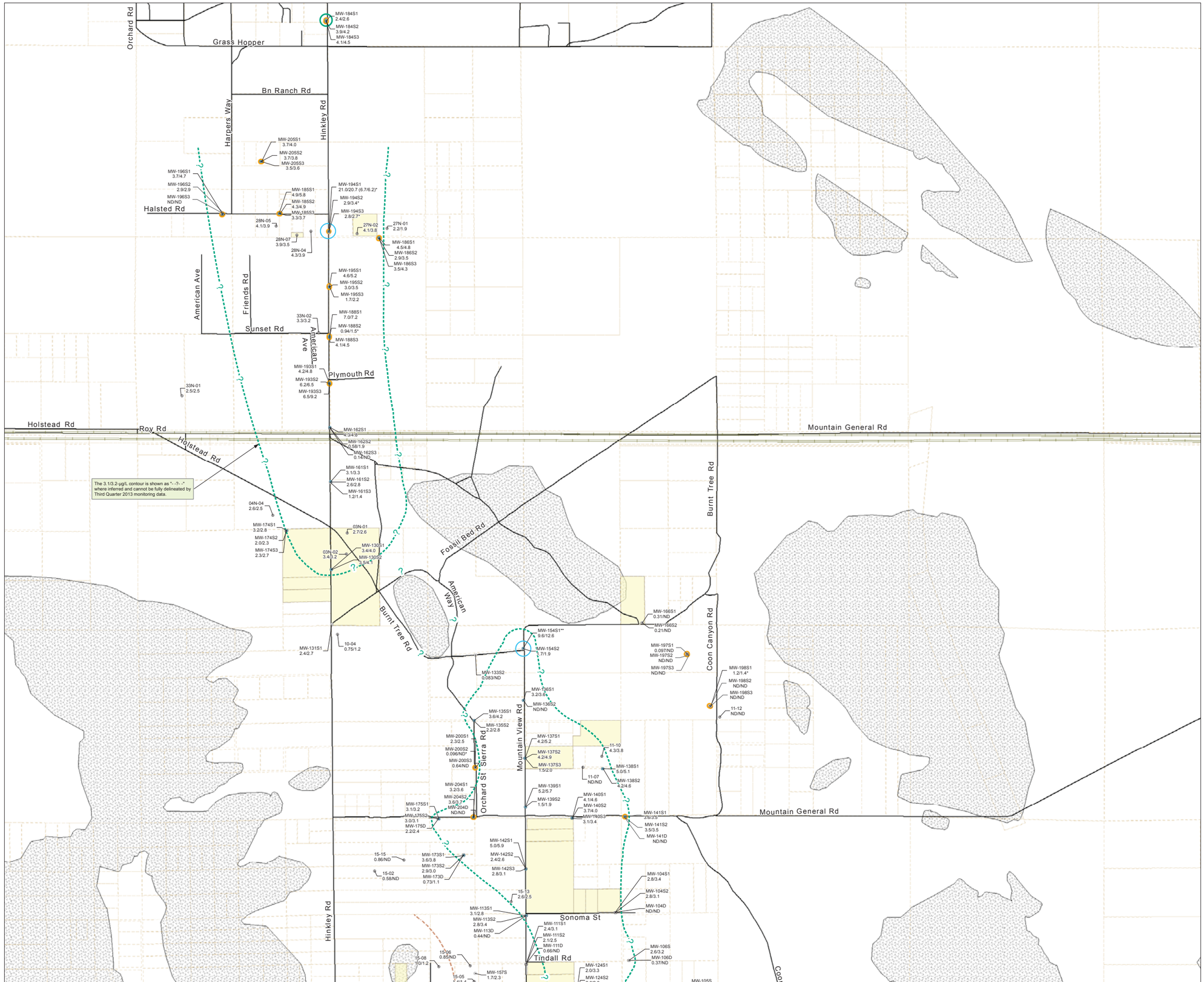
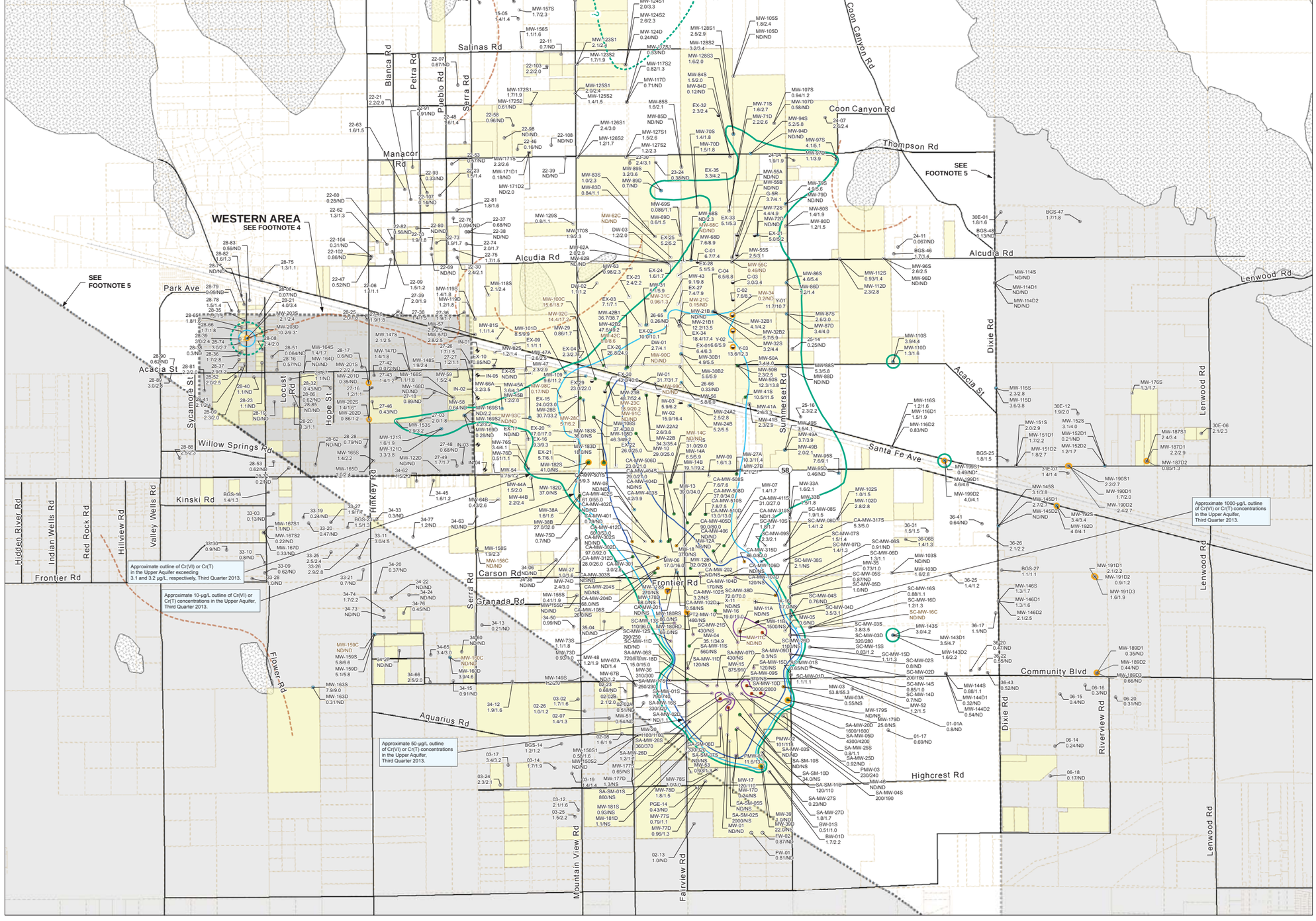

Orchard Rd
Grass Hopper
Bn Ranch Rd
Harpers Way
Hinkley Rd
Halsted Rd
American Ave
Friends Rd
Sunset Rd
Americaan Ave
Plymouth Rd
Holstead Rd
Roy Rd
Holstead Rd
Mountain General Rd
Burnt Tree Rd
Fossil Bed Rd
American Way
Burnt Tree Rd
Coon Canyon Rd
Mountain View Rd
Orchard St
Sierra Rd
Hinkley Rd
Sonoma St
Tindall Rd
Mountain General Rd
MW-184S1 2.4/2.6
MW-184S2 3.9/4.2
MW-184S3 4.1/4.5
MW-205S1 3.7/4.0
MW-205S2 3.7/3.8
MW-205S3 3.5/3.6
MW-196S1 3.7/4.7
MW-196S2 2.9/2.9
MW-196S3 ND/ND
MW-185S1 4.9/5.8
MW-185S2 4.3/4.9
MW-185S3 3.3/3.7
28N-05 4.1/3.9
28N-07 3.9/3.5
28N-04 4.3/3.9
MW-194S1 21.0/20.7 (6.7/6.2)*
MW-194S2 2.9/3.4*
MW-194S3 2.8/2.7*
27N-02 4.1/3.8
27N-01 2.2/1.9
MW-186S1 4.5/4.8
MW-186S2 2.9/3.5
MW-186S3 3.5/4.3
MW-195S1 4.6/5.2
MW-195S2 3.0/3.5
MW-195S3 1.7/2.2
33N-02 3.3/3.2
MW-188S1 7.0/7.2
MW-188S2 0.94/1.5*
MW-188S3 4.1/4.5
MW-193S1 4.2/4.8
MW-193S2 6.2/6.5
MW-193S3 6.5/9.2
33N-01 2.5/2.5
MW-162S1 4.3/4.6
MW-162S2 0.58/1.9
MW-162S3 0.14/ND
MW-161S1 3.1/3.3
MW-161S2 2.6/2.8
MW-161S3 1.2/1.4
04N-04 2.6/2.5
MW-174S1 3.2/2.8
MW-174S2 2.0/2.3
MW-174S3 2.3/2.7
03N-01 2.7/2.6
03N-02 3.4/3.2
MW-130S1 3.4/4.0
MW-130S2 2.5/4.1
MW-131S1 2.4/2.7
10-04 0.75/1.2
The 3.1/3.2-µg/L contour is shown as "--?--" where inferred and cannot be fully delineated by Third Quarter 2013 monitoring data.
MW-154S1** 9.6/12.6
MW-154S2 1.7/1.9
MW-133S2 0.083/ND
MW-166S1 0.31/ND
MW-166S2 0.21/ND
MW-197S1 0.097/ND
MW-197S2 ND/ND
MW-197S3 ND/ND
MW-198S1 1.2/1.4*
MW-198S2 ND/ND
MW-198S3 ND/ND
11-12 ND/ND
MW-136S1 3.2/3.6
MW-136S2 ND/ND
MW-135S1 3.6/4.2
MW-135S2 2.2/2.8
MW-200S1 2.3/2.5
MW-200S2 0.096/ND*
MW-200S3 0.64/ND
MW-137S1 4.2/5.2
MW-137S2 4.2/4.9
MW-137S3 1.5/2.0
11-10 4.3/3.8
11-07 ND/ND
MW-138S1 5.0/5.1
MW-138S2 4.2/4.6
MW-204S1 3.2/3.6
MW-204S2 3.6/3.7
MW-204D ND/ND
MW-139S1 5.2/5.7
MW-139S2 1.5/1.9
MW-140S1 4.1/4.6
MW-140S2 3.7/4.0
MW-140S3 3.1/3.4
MW-175S1 3.1/3.2
MW-175S2 3.0/3.1
MW-175D 2.2/2.4
MW-141S1 3.6/3.5
MW-141S2 3.5/3.5
MW-141D ND/ND
MW-142S1 5.0/5.9
MW-142S2 2.4/2.6
MW-142S3 2.8/3.1
15-15 0.86/ND
MW-173S1 3.6/3.8
MW-173S2 2.9/3.0
MW-173D 0.73/1.1
15-02 0.58/ND
15-13 2.6/2.5
MW-104S1 2.8/3.4
MW-104S2 2.8/3.1
MW-104D ND/ND
MW-113S1 3.1/2.8
MW-113S2 2.8/3.4
MW-113D 0.44/ND
MW-111S1 2.4/3.1
MW-111S2 2.1/2.5
MW-111D 0.68/ND
15-06 0.85/ND
15-08 10/1.2
15-05 2.4/2.4
MW-157S 1.7/2.3
MW-124S1 2.0/3.3
MW-124S2
MW-106S 2.6/3.2
MW-106D 0.37/ND
MW-105S



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
- New well installed during Third Quarter 2013
- PG&E-owned property
- PG&E Compressor Station
- County parcels
- Transmission lines
- Approximate limit of saturated alluvium upper aquifer
- Approximate location of Lockhart Fault; fault trace is inferred, and there is no surface expression (Stamos et al., 2001)
- Bedrock exposed at ground surface

MW-77S Well ID
0.88/1.1 Cr(VI)/Cr(T) concentrations in µg/L; maximum of primary and duplicate samples during Third Quarter 2013 sampling.

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:

1. Chromium results are shown for site-wide Groundwater Monitoring Program and domestic wells sampled in the Third Quarter (July through September) 2013 monitoring period. Third 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.
2. The concentration contours are based on Third 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 5-1 and 5-2. 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 Third 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.
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.
5. Pursuant to the Lahontan Regional Water Control Board's letter *Review of Chromium Plume Maps, Third Quarter 2013 Groundwater Monitoring Report and Agreement with Northern Investigation Concept* dated December 12, 2013, groundwater monitoring wells are not used for chromium contouring if they are located in the areas south west of the Lockhart Fault and on or east of Dixie Road.

* October 2013 sample result (Fourth Quarter 2013 Sampling Event). Additional results posted for MW-194S1 shown in parentheses are also from October 2013 sampling.

** 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.

N

0 1,000 2,000
Feet

FIGURE 5-5 - REVISED
CHROMIUM RESULTS FOR THIRD QUARTER 2013 GROUNDWATER MONITORING AND DOMESTIC WELL SAMPLING AND INTERPRETED MAXIMUM PLUME OUTLINE IN UPPER AQUIFER
THIRD QUARTER 2013 GROUNDWATER MONITORING REPORT AND DOMESTIC WELL RESULTS
SITE-WIDE GROUNDWATER MONITORING PROGRAM
PACIFIC GAS AND ELECTRIC COMPANY
HINKLEY COMPRESSOR STATION
HINKLEY, CALIFORNIA

CH2MHILL