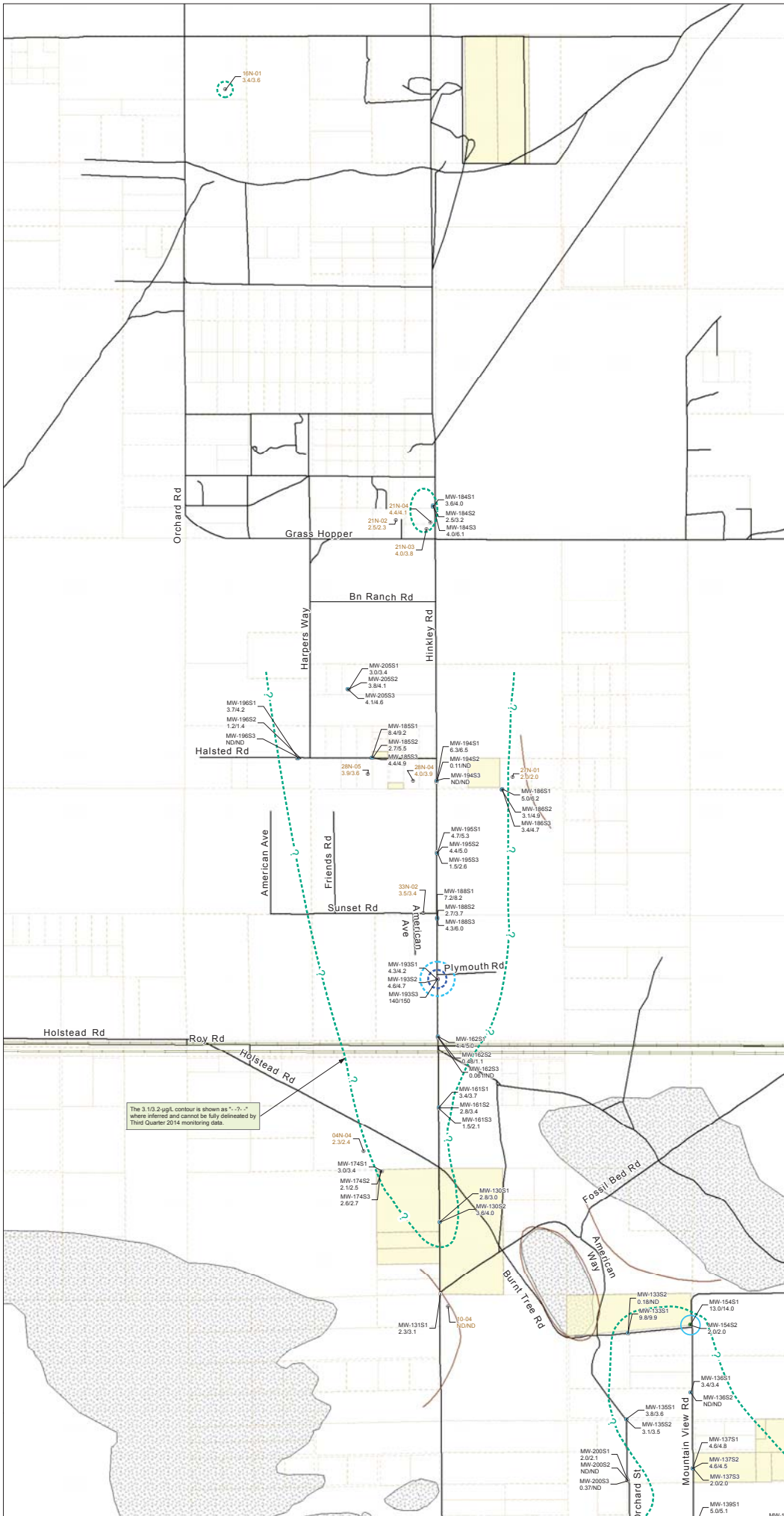
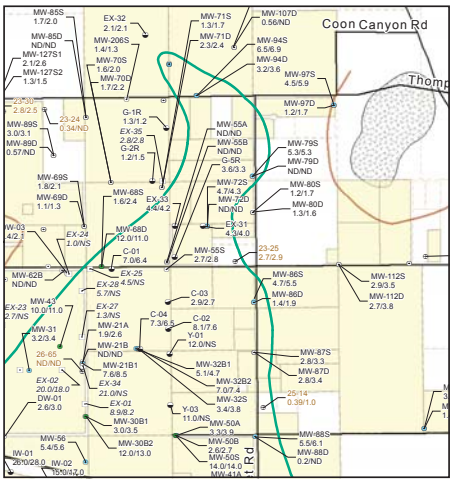

16N-01
3.4/3.6
Orchard Rd
Grass Hopper
21N-04
4.4/4.1
21N-02
2.5/2.3
21N-03
4.0/3.8
MW-184S1
3.6/4.0
MW-184S2
2.5/3.2
MW-184S3
4.0/6.1
Bn Ranch Rd
Harpers Way
Hinkley Rd
MW-205S1
3.0/3.4
MW-205S2
3.8/4.1
MW-205S3
4.1/4.6
MW-196S1
3.7/4.2
MW-196S2
1.2/1.4
MW-196S3
ND/ND
Halsted Rd
MW-185S1
8.4/9.2
MW-185S2
2.7/5.5
MW-185S3
4.4/4.9
28N-05
3.9/3.8
28N-04
4.0/3.9
MW-194S1
6.3/6.5
MW-194S2
0.11/ND
MW-194S3
ND/ND
27N-01
2.1/2.0
MW-186S1
5.0/6.2
MW-186S2
3.1/4.9
MW-186S3
3.4/4.7
American Ave
Friends Rd
MW-195S1
4.7/5.3
MW-195S2
4.4/5.0
MW-195S3
1.5/2.6
33N-02
3.5/3.4
MW-188S1
7.2/8.2
MW-188S2
2.7/3.7
MW-188S3
4.3/6.0
Sunset Rd
American Ave
Plymouth Rd
MW-193S1
4.3/4.2
MW-193S2
4.6/4.7
MW-193S3
140/150
Holstead Rd
Roy Rd
Holstead Rd
MW-162S1
14/50.4
MW-162S2
0.48/1.1
MW-162S3
0.06/ND
MW-161S1
3.4/3.7
MW-161S2
2.8/3.4
MW-161S3
1.5/2.1
The 3.1/3.2-µg/L contour is shown as "- -?- -" where inferred and cannot be fully delineated by Third Quarter 2014 monitoring data.
04N-04
2.3/2.4
MW-174S1
3.0/3.4
MW-174S2
2.1/2.5
MW-174S3
2.6/2.7
MW-130S1
2.8/3.0
MW-130S2
3.6/4.0
Fossil Bed Rd
American Way
Burnt Tree Rd
MW-131S1
2.3/3.1
10-04
ND/ND
MW-133S2
0.18/ND
MW-133S1
9.8/9.9
MW-154S1
13.0/14.0
MW-154S2
2.0/2.0
MW-136S1
3.4/3.4
MW-136S2
ND/ND
MW-135S1
3.8/3.6
MW-135S2
3.1/3.5
Mountain View Rd
MW-137S1
4.6/4.8
MW-137S2
4.6/4.5
MW-137S3
2.0/2.0
MW-200S1
2.0/2.1
MW-200S2
ND/ND
MW-200S3
0.37/ND
Orchard St
MW-139S1
5.0/5.1

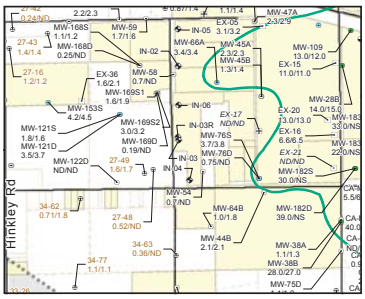
PG&E Interpreted Plume Outlines

PG&E does not agree with the contouring requirements set forth by the Water Board but has completed this map in accordance with the requested standards. The insets below provide PG&E's interpretation of several areas where they believe the requirements of the Water Board create an inaccurate representation of the chromium plume. These interpretations were created using all available hydrogeologic and geochemical information, applications of industry standard, and professional judgment. These displays present the same information and use the same scale as the larger map area.

Inset 1

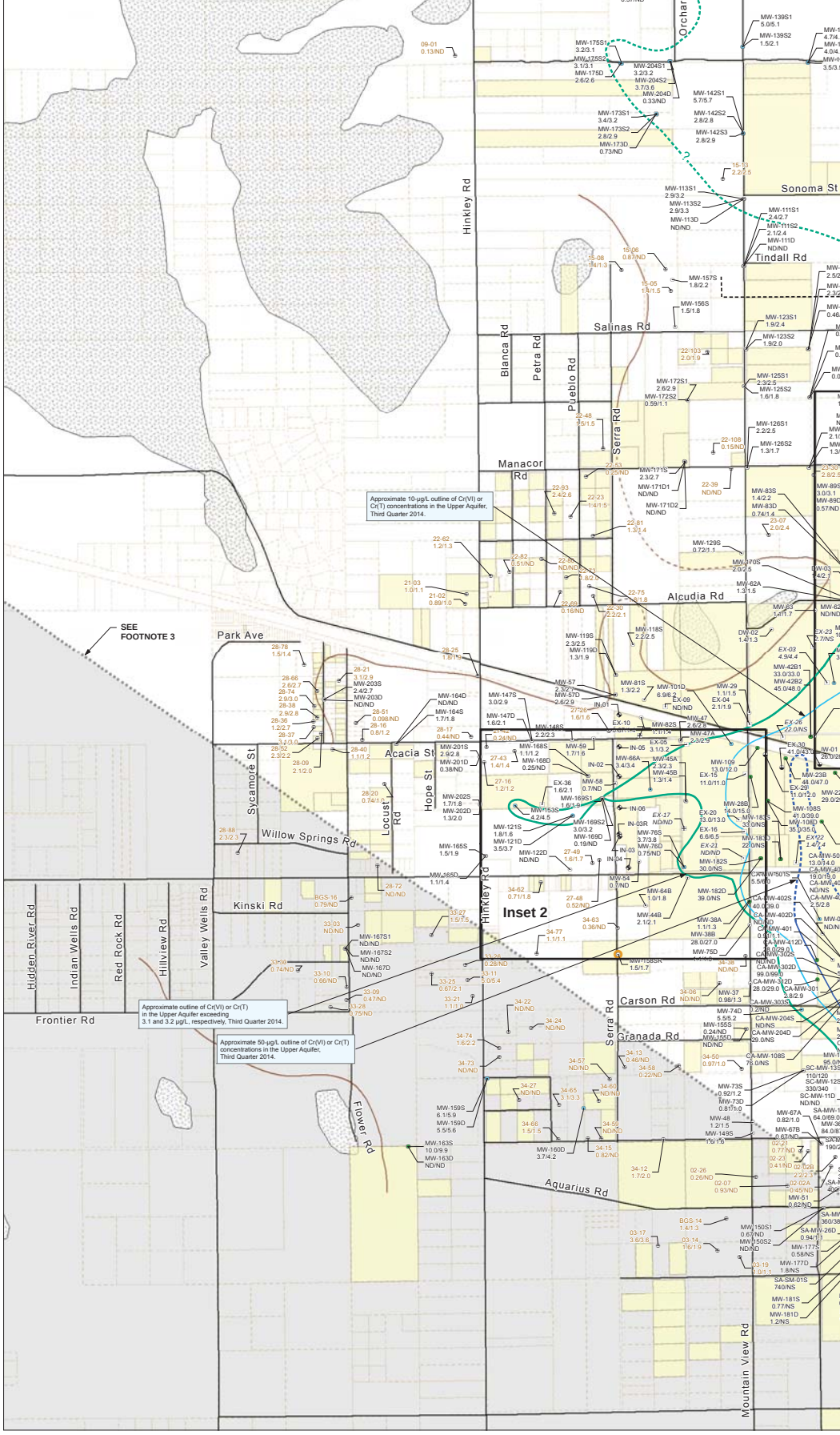


Inset 2



General PG&E Comment to Figure 5-5

1. An evaluation of available hydrogeologic and groundwater quality data for the Western Area 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.
2. PG&E does not believe chromium concentrations north of the contiguous plume can be adequately evaluated with the information available at this time. Natural chromium levels present in the North Hinkley Valley will be further evaluated in the upcoming background study to be conducted by the United States Geological Survey.
3. Some monitoring wells currently used for contouring produce very little water or purge dry during sampling. Chromium concentrations from these locations, such as MW-154S1 and MW-193S3, may not be representative of the dominant groundwater flow or PG&E's impact to local groundwater.



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 wells installed during Third Quarter 2014
- 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
- Western area

MW-77S Well ID
0.87/ND Cr(VI)/Cr(T) concentrations in µg/L; maximum of primary and duplicate samples during Third Quarter 2014 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:

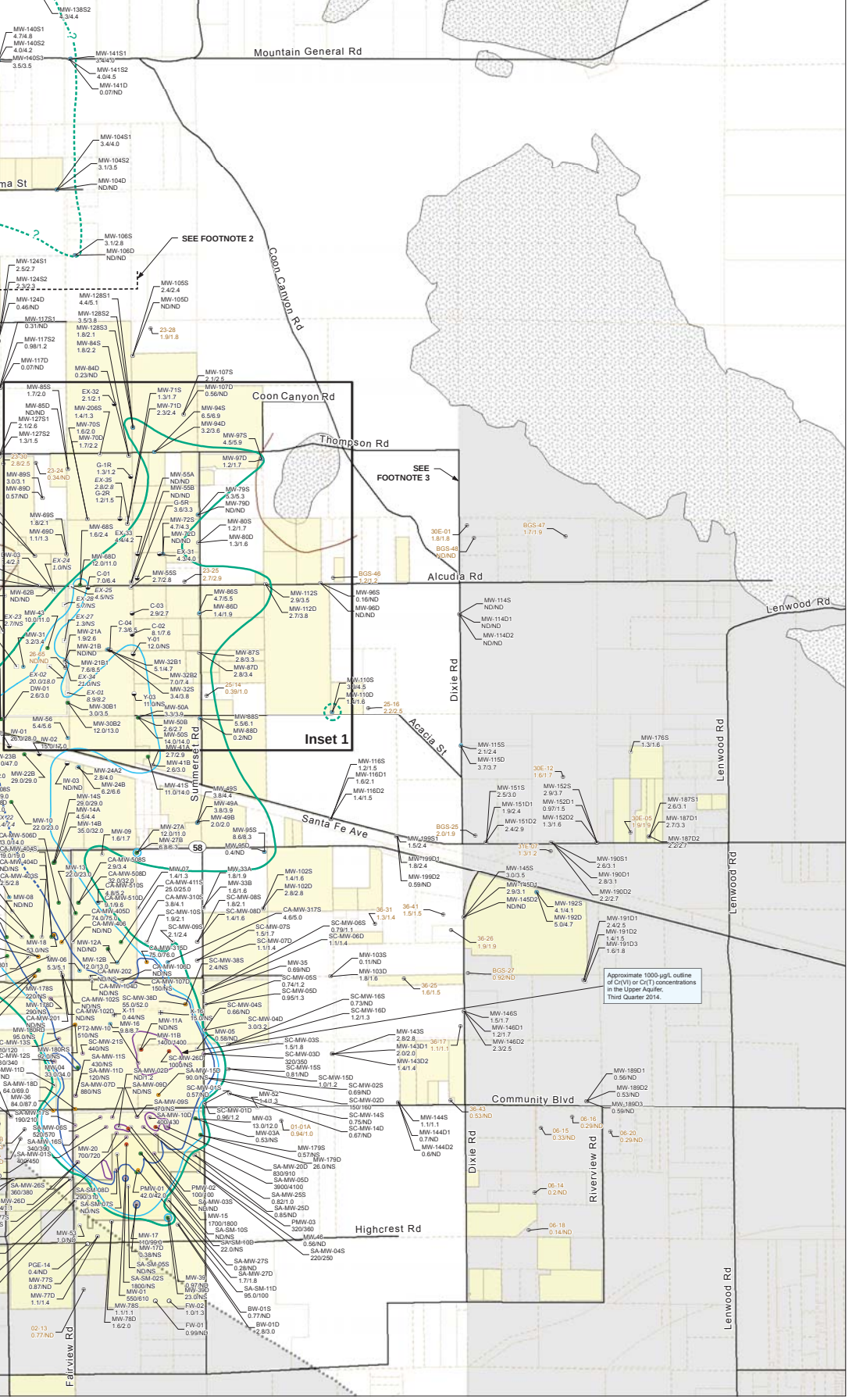
1. Chromium results are shown for site-wide Groundwater Monitoring Program and domestic
the reporting period, the most recent results are shown.

2. The concentration contours are based on Third Quarter 2014 chromium results for the gro
Upper Aquifer as noted on Figures 5-1 and 5-2. Results for domestic wells (brown-colored
pursuant to the Lahonton Regional Water Quality Control Board's Letter Conditional Accep

3. Pursuant to the Lahontan Regional Water Quality Control Board's letter *Review of Chromi*
December 12, 2013, groundwater monitoring wells are not used for chromium contouring i

4. Chromium plume contouring for concentrations of 10, 50 and 1000 ug/L are completed usi
and Northwest Freshwater Injection Projects and represent a composite of the shallow and

BAO R:\PGEHINKLEY20000353\MAPFILES\2014\GMP_REPORT\Q3\FIG5-5_PLUMEMAP_UA_COMPLIANCE_INSETS.MXD GMOON 10/27/2014 1:45:53 PM



domestic wells sampled in the Third Quarter (July through September) 2014 monitoring period. For wells sampled multiple times during

or the groundwater monitoring and extraction wells that are completed in the shallow zone and deep zone of the
n-colored labels) were not used for chromium plume contouring except for those located north of Grasshopper Road,
nal Acceptance of Northern Areas Investigation Proposal dated February 26, 2014

f Chromium Plume Maps, Third Quarter 2013 Groundwater Monitoring Report and Agreement with Northern Investigation Concept dated
ntouring if they are located in the areas southwest of the Lockhart Fault and on or east of Dixie Road.

pleted using the more robust dataset presented in the October 15, 2014 Third Quarter 2014 Monitoring Report for the In Situ Reactive Zone
hallow and deep zone contours presented therein. Select wells from that program are shown here for reference.

N

0 1,000 2,000
Feet

FIGURE 5-5
CHROMIUM RESULTS FOR THIRD QUARTER 2014 GROUNDWATER MONITORING AND DOMESTIC WELL SAMPLING AND COMPLIANCE MAXIMUM PLUME OUTLINE IN UPPER AQUIFER
THIRD QUARTER 2014 GROUNDWATER MONITORING REPORT AND DOMESTIC WELL RESULTS
SITE-WIDE GROUNDWATER MONITORING PROGRAM
PACIFIC GAS AND ELECTRIC COMPANY
HINKLEY COMPRESSOR STATION
HINKLEY, CALIFORNIA

CH2MHILL