

Orchard Rd

Grass Hopper

Bn Ranch Rd

Harpers Way

Hinkley Rd

Halsted Rd

American Ave

Friends Rd

Sunset Rd

American Ave

Plymouth Rd

MW-184S3
(4.7/5.3)
MW-184S1
(2.7/3.4)
MW-184S2
(3.7/4.1)

Northern Disputed Plume Area

MW-205S3
(3.6/3.7)
MW-205S2
(3.9/3.8)
MW-205S1
(2.5/3)

MW-196S3
(ND/ND)
MW-196S2
(3.7/4.3)
MW-196S1
(3.7/3.6)

MW-185S1
(4.8/5.3)
MW-185S2
(3.7/3.7)
MW-185S3
(3.9/3.9)

MW-194S2
(0.33/ND)

MW-194S1
(5.9/5.8)
MW-194S3
(2.1/2.3)
MW-186S1
(4.6/4.8)

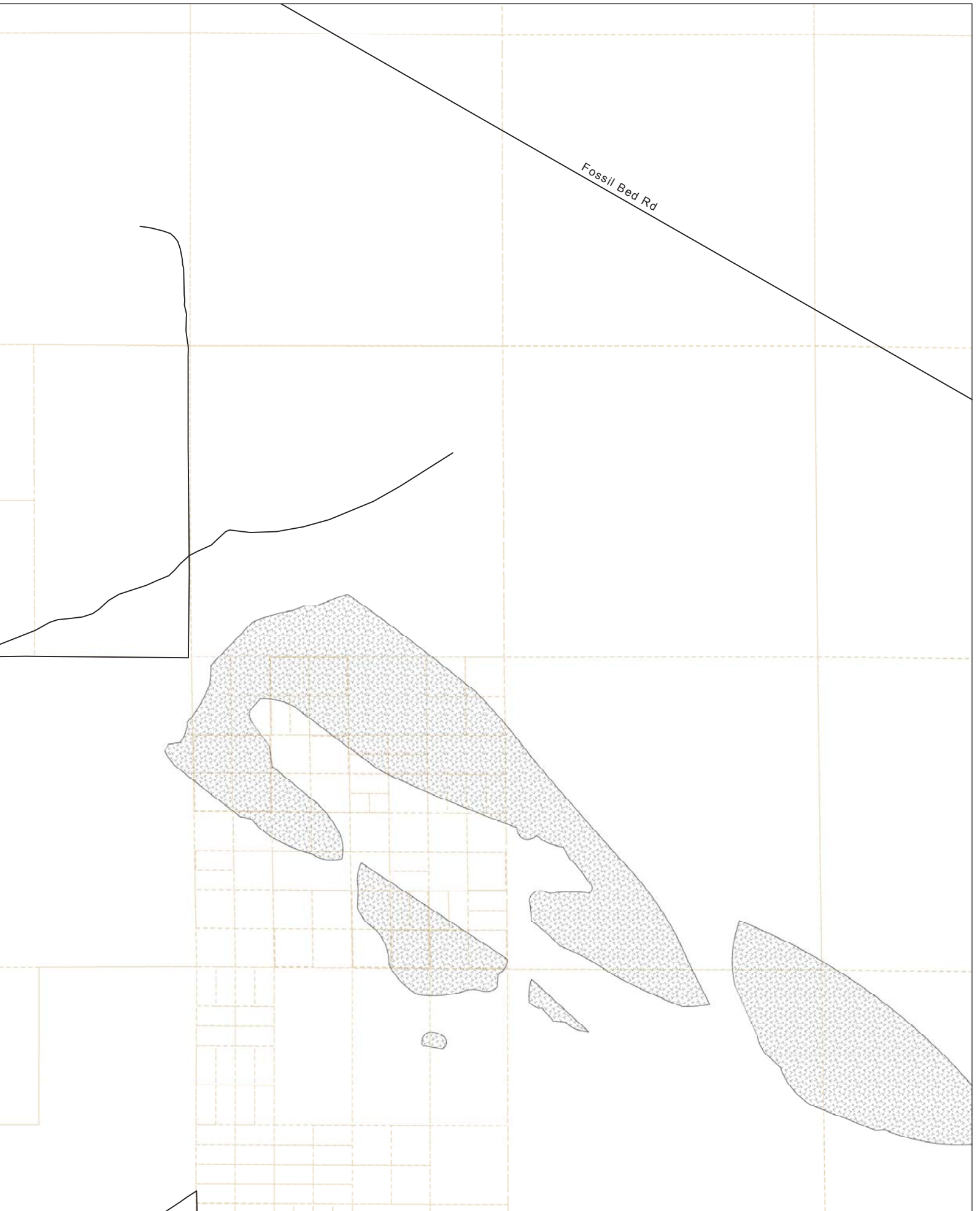
MW-186S2
(3.4/4.2)
MW-186S3
4/4.4

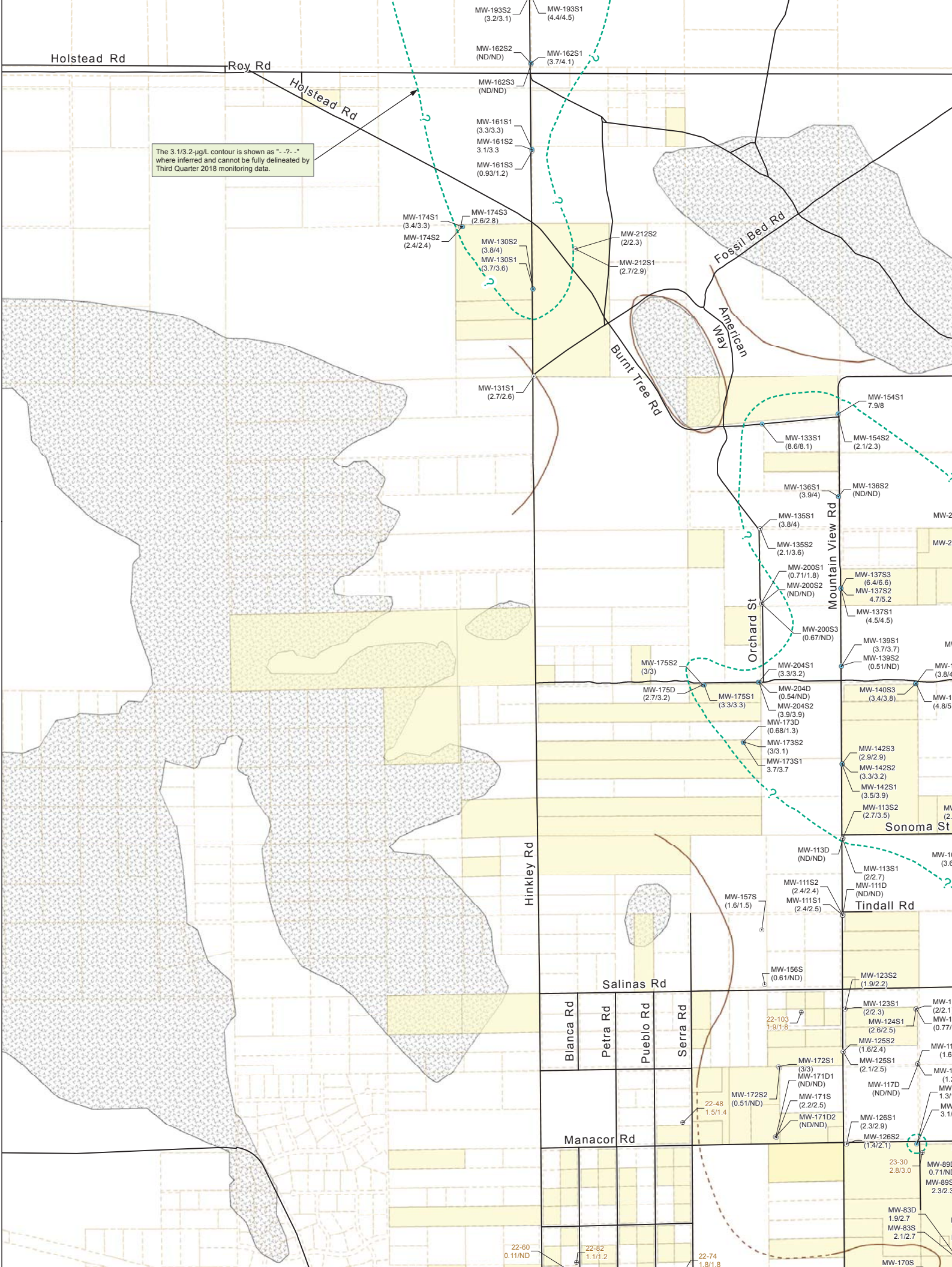
MW-195S1
(4.9/5.3)
MW-195S3
(1.5/2.2)
MW-195S2
(4.1/4.7)

Northern Disputed Plume Area

MW-188S1
(7/6.7)
MW-188S3
(4.5/5)
MW-188S2
(3/2.9)

MW-193S3
(ND/ND)





The 3.1/3.2-µg/L contour is shown as "-.-.-" where inferred and cannot be fully delineated by Third Quarter 2018 monitoring data.

MW-193S2 (3.2/3.1)

MW-193S1 (4.4/4.5)

MW-162S2 (ND/ND)

MW-162S1 (3.7/4.1)

MW-162S3 (ND/ND)

MW-161S1 (3.3/3.3)

MW-161S2 (3.1/3.3)

MW-161S3 (0.93/1.2)

MW-174S1 (3.4/3.3)

MW-174S2 (2.4/2.4)

MW-174S3 (2.6/2.8)

MW-130S2 (3.8/4)

MW-130S1 (3.7/3.6)

MW-212S2 (2/2.3)

MW-212S1 (2.7/2.9)

MW-131S1 (2.7/2.6)

MW-154S1 (7.9/8)

MW-133S1 (8.6/8.1)

MW-154S2 (2.1/2.3)

MW-136S1 (3.9/4)

MW-136S2 (ND/ND)

MW-135S1 (3.8/4)

MW-135S2 (2.1/3.6)

MW-200S1 (0.71/1.8)

MW-200S2 (ND/ND)

MW-200S3 (0.67/ND)

MW-137S3 (6.4/6.6)

MW-137S2 (4.7/5.2)

MW-137S1 (4.5/4.5)

MW-139S1 (3.7/3.7)

MW-139S2 (0.51/ND)

MW-175S2 (3/3)

MW-175D (2.7/3.2)

MW-175S1 (3.3/3.3)

MW-204S1 (3.3/3.2)

MW-204D (0.54/ND)

MW-204S2 (3.9/3.9)

MW-173D (0.68/1.3)

MW-173S2 (3/3.1)

MW-173S1 (3.7/3.7)

MW-142S3 (2.9/2.9)

MW-142S2 (3.3/3.2)

MW-142S1 (3.5/3.9)

MW-113S2 (2.7/3.5)

MW-113D (ND/ND)

MW-111S2 (2.4/2.4)

MW-111S1 (2.4/2.5)

MW-113S1 (2/2.7)

MW-111D (ND/ND)

MW-157S (1.6/1.5)

MW-156S (0.61/ND)

MW-123S2 (1.9/2.2)

MW-123S1 (2/2.3)

MW-124S1 (2.6/2.5)

MW-125S2 (1.6/2.4)

MW-125S1 (2.1/2.5)

MW-172S1 (3/3)

MW-171D1 (ND/ND)

MW-171S (2.2/2.5)

MW-171D2 (ND/ND)

MW-117D (ND/ND)

MW-126S1 (2.3/2.9)

MW-126S2 (1.4/2.1)

MW-110S (2.1/2.1)

MW-110S1 (2/2.1)

MW-110S2 (0.77/1.1)

MW-111 (1.6/1.6)

MW-112 (1.1/1.1)

MW-113 (1.3/1.3)

MW-114 (3.1/3.1)

MW-115 (2.3/2.9)

MW-116 (1.4/2.1)

MW-117 (2.8/3.0)

MW-118 (0.71/ND)

MW-119 (2.3/2.3)

MW-120 (2.3/2.3)

MW-121 (1.9/2.7)

MW-122 (2.1/2.7)

MW-123 (2.1/2.7)

MW-124 (1.9/2.7)

MW-125 (2.1/2.7)

MW-126 (1.9/2.7)

MW-127 (2.1/2.7)

MW-128 (1.9/2.7)

MW-129 (2.1/2.7)

MW-130 (1.9/2.7)

MW-131 (2.1/2.7)

MW-132 (1.9/2.7)

MW-133 (2.1/2.7)

MW-134 (1.9/2.7)

MW-135 (2.1/2.7)

MW-136 (1.9/2.7)

MW-137 (2.1/2.7)

MW-138 (1.9/2.7)

MW-139 (2.1/2.7)

MW-140 (1.9/2.7)

MW-141 (2.1/2.7)

MW-142 (1.9/2.7)

MW-143 (2.1/2.7)

MW-144 (1.9/2.7)

MW-145 (2.1/2.7)

MW-146 (1.9/2.7)

MW-147 (2.1/2.7)

MW-148 (1.9/2.7)

MW-149 (2.1/2.7)

MW-150 (1.9/2.7)

MW-151 (2.1/2.7)

MW-152 (1.9/2.7)

MW-153 (2.1/2.7)

MW-154 (1.9/2.7)

MW-155 (2.1/2.7)

MW-156 (1.9/2.7)

MW-157 (2.1/2.7)

MW-158 (1.9/2.7)

MW-159 (2.1/2.7)

MW-160 (1.9/2.7)

MW-161 (2.1/2.7)

MW-162 (1.9/2.7)

MW-163 (2.1/2.7)

MW-164 (1.9/2.7)

MW-165 (2.1/2.7)

MW-166 (1.9/2.7)

MW-167 (2.1/2.7)

MW-168 (1.9/2.7)

MW-169 (2.1/2.7)

MW-170 (1.9/2.7)

MW-171 (2.1/2.7)

MW-172 (1.9/2.7)

MW-173 (2.1/2.7)

MW-174 (1.9/2.7)

MW-175 (2.1/2.7)

MW-176 (1.9/2.7)

MW-177 (2.1/2.7)

MW-178 (1.9/2.7)

MW-179 (2.1/2.7)

MW-180 (1.9/2.7)

MW-181 (2.1/2.7)

MW-182 (1.9/2.7)

MW-183 (2.1/2.7)

MW-184 (1.9/2.7)

MW-185 (2.1/2.7)

MW-186 (1.9/2.7)

MW-187 (2.1/2.7)

MW-188 (1.9/2.7)

MW-189 (2.1/2.7)

MW-190 (1.9/2.7)

MW-191 (2.1/2.7)

MW-192 (1.9/2.7)

MW-193 (2.1/2.7)

MW-194 (1.9/2.7)

MW-195 (2.1/2.7)

MW-196 (1.9/2.7)

MW-197 (2.1/2.7)

MW-198 (1.9/2.7)

MW-199 (2.1/2.7)

MW-200 (1.9/2.7)

MW-201 (2.1/2.7)

MW-202 (1.9/2.7)

MW-203 (2.1/2.7)

MW-204 (1.9/2.7)

MW-205 (2.1/2.7)

MW-206 (1.9/2.7)

MW-207 (2.1/2.7)

MW-208 (1.9/2.7)

MW-209 (2.1/2.7)

MW-210 (1.9/2.7)

MW-211 (2.1/2.7)

MW-212 (1.9/2.7)

MW-213 (2.1/2.7)

MW-214 (1.9/2.7)

MW-215 (2.1/2.7)

MW-216 (1.9/2.7)

MW-217 (2.1/2.7)

MW-218 (1.9/2.7)

MW-219 (2.1/2.7)

MW-220 (1.9/2.7)

MW-221 (2.1/2.7)

MW-222 (1.9/2.7)

MW-223 (2.1/2.7)

MW-224 (1.9/2.7)

MW-225 (2.1/2.7)

MW-226 (1.9/2.7)

MW-227 (2.1/2.7)

MW-228 (1.9/2.7)

MW-229 (2.1/2.7)

MW-230 (1.9/2.7)

MW-231 (2.1/2.7)

MW-232 (1.9/2.7)

MW-233 (2.1/2.7)

MW-234 (1.9/2.7)

MW-235 (2.1/2.7)

MW-236 (1.9/2.7)

MW-237 (2.1/2.7)

MW-238 (1.9/2.7)

MW-239 (2.1/2.7)

MW-240 (1.9/2.7)

MW-241 (2.1/2.7)

MW-242 (1.9/2.7)

MW-243 (2.1/2.7)

MW-244 (1.9/2.7)

MW-245 (2.1/2.7)

MW-246 (1.9/2.7)

MW-247 (2.1/2.7)

MW-248 (1.9/2.7)

MW-249 (2.1/2.7)

MW-250 (1.9/2.7)

MW-251 (2.1/2.7)

MW-252 (1.9/2.7)

MW-253 (2.1/2.7)

MW-254 (1.9/2.7)

MW-255 (2.1/2.7)

MW-256 (1.9/2.7)

MW-257 (2.1/2.7)

MW-258 (1.9/2.7)

MW-259 (2.1/2.7)

MW-260 (1.9/2.7)

MW-261 (2.1/2.7)

MW-262 (1.9/2.7)

MW-263 (2.1/2.7)

MW-264 (1.9/2.7)

MW-265 (2.1/2.7)

MW-266 (1.9/2.7)

MW-267 (2.1/2.7)

MW-268 (1.9/2.7)

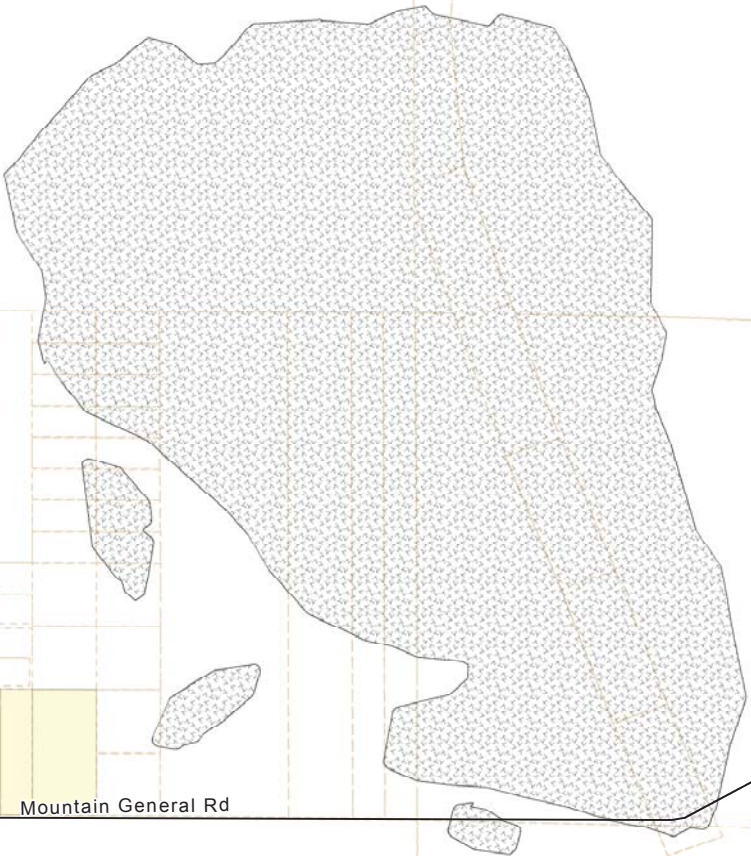
MW-269 (2.1/2.7)

MW-270 (1.9/2.7)

Mountain General Rd

Burnt Tree Rd

Coon Canyon Rd



MW-166S2 (ND/ND)
 MW-166S1 (0.22/ND)
 MW-197S2 (ND/ND)
 MW-197S1 (1.1/1)
 MW-197S3 (ND/ND)

Northern Disputed Plume Area

07S2 (3.7/4)
 07S1 (6.9/7)
 MW-138S1 (4.9/4.6)
 MW-138S2 (4.6/4.3)

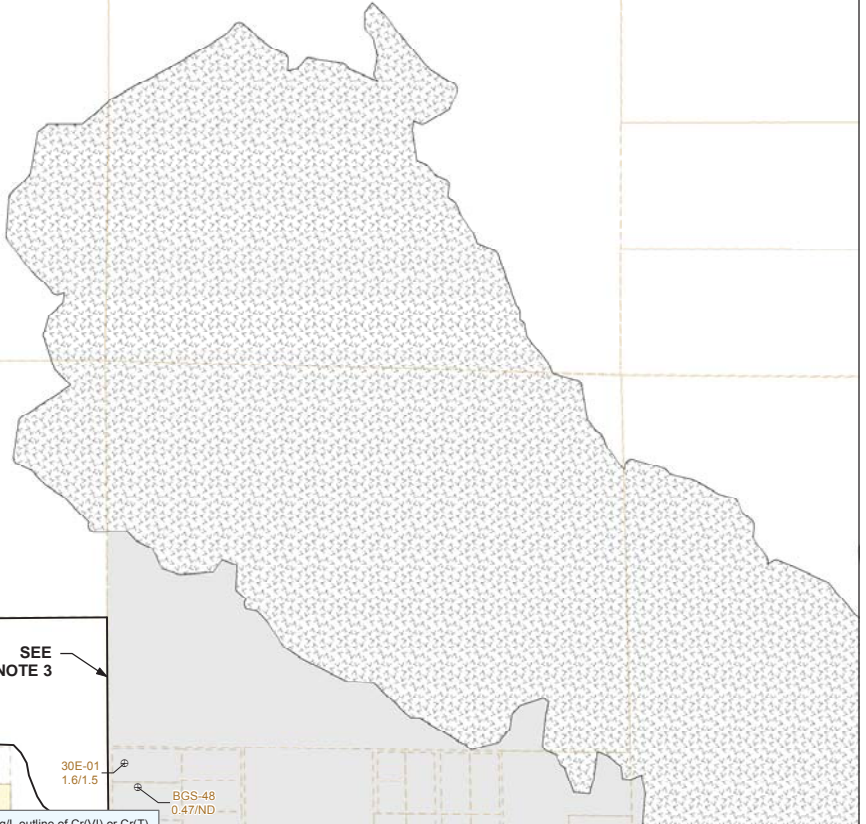
MW-141S2 (4.1/4)
 40S2
 40S1
 MW-141D (3.7/3.7)
 MW-219S1 (3.7/3.4)
 MW-141D (ND/ND)
 MW-219S2 (1/1)

Mountain General Rd

MW-104S2 (8/2.7)
 04S1 (3/3.7)
 MW-104D (ND/ND)

MW-106D (ND/ND)
 MW-106S (2.9/2.9)

Coon Canyon Rd



24S2
 24D (1.2)
 7S1 (1.9)
 17S2 (2/1.3)
 127S2 (1.6)
 127S1 (3.6)

MW-105D (ND/ND)
 MW-105S (2.8/2.9)
 MW-128S3 (1.6/1.8)
 MW-128S2 (3/3)
 MW-128S1 (6.5/6.9)

Coon Canyon Rd

Thompson Rd

SEE NOTE 3

MW-85D (ND/ND)
 MW-85S (1.1/1.6)
 MW-70S (1.3/1.3)
 MW-85D (1.1/1.6)
 MW-85S (1.1/1.6)

MW-84D (0.18/ND)
 MW-206S (2.3/3.8)
 MW-84S (1.5/2)
 G-1R (0.55/ND)
 MW-94S (7/7)
 MW-94D (3.9/4.3)
 MW-221S (5/5.4)
 EX-35 (3.7/3.5)
 MW-71D (0.4/1.2)
 EX-62 (4.8/4.4)

Coon Canyon Rd

Thompson Rd

SEE NOTE 3

MW-68S (0.5/ND)
 MW-69D (1.5/1.7)
 MW-68D (2.4/2.6)
 MW-55S

MW-70D (1.3/1.3)
 G-2R (1.1/1.4)
 MW-68S EX-33 (1.9/2.7 2.6/3.1)
 MW-71S (0.61/1.3)
 EX-31 (2.9/5.6)
 MW-72S (5.7/5.6)

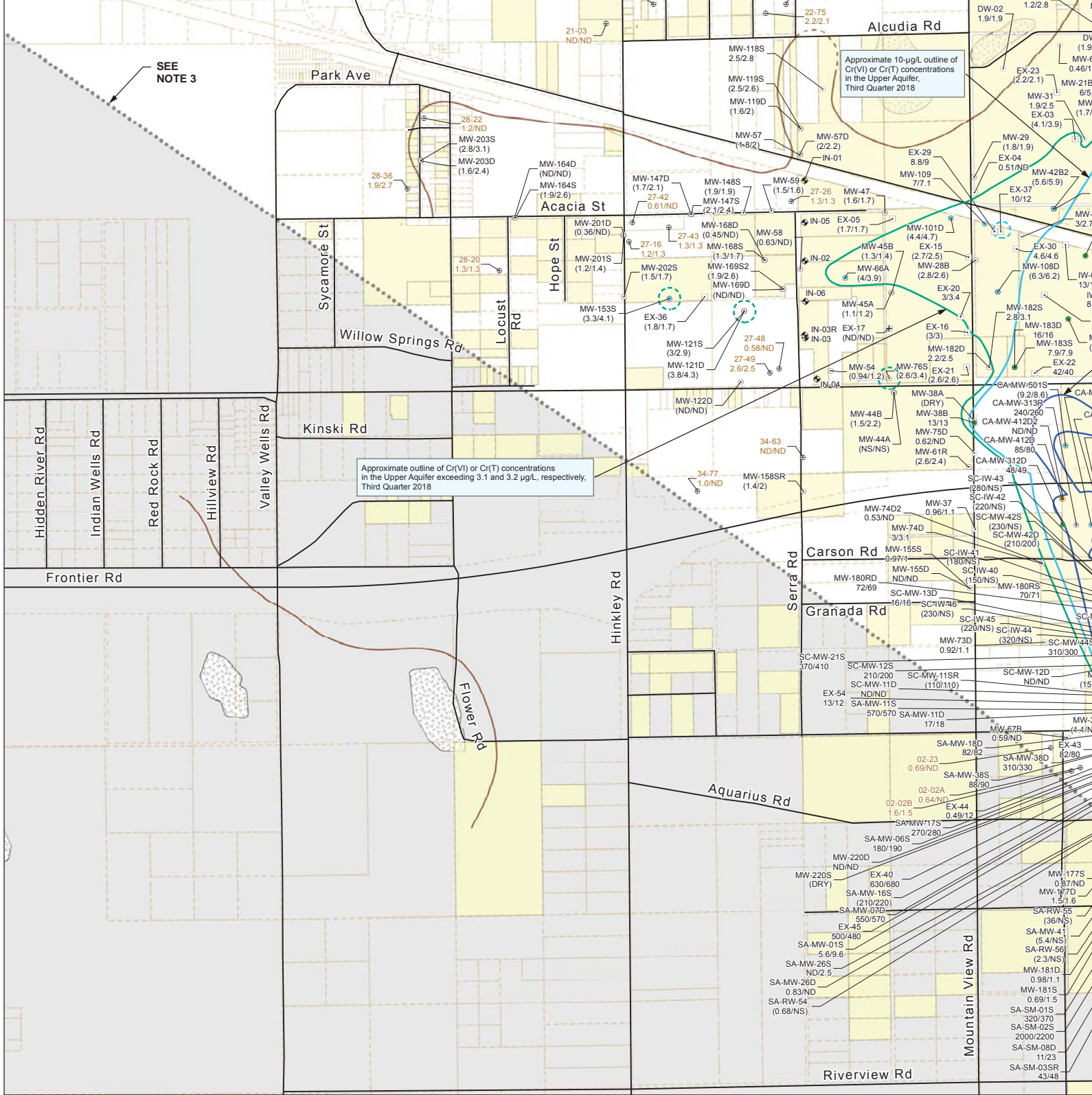
Coon Canyon Rd

Thompson Rd

SEE NOTE 3

Approximate 50-µg/L outline of Cr(VI) or Cr(T)

30E-01 (1.6/1.5)
 BGS-48 (0.47/ND)



- LEGEND:**
- Monitoring Well
 - ⊕ Domestic Supply Well (active and inactive)
 - Other Supply Well
 - Groundwater Extraction Well
 - ⊕ Multi-use Test Well, or Inactive Extraction/Injection Well
 - ▲ IRZ_INJ
 - ◆ Freshwater Injection Well
 - PG&E-Owned Property
 - PG&E Compressor Station
 - County Parcel
 - 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

SA-MW-01S Well ID
5.6/9.6 Cr(VI)/Cr(T) concentrations in µg/L; maximum of primary and duplicate samples during Third Quarter 2018 sampling. (210/220)
Data in parentheses are from previous reporting period. See Table E-1 for sample dates.

Groundwater Cr(VI) Concentrations in Monitoring Wells:

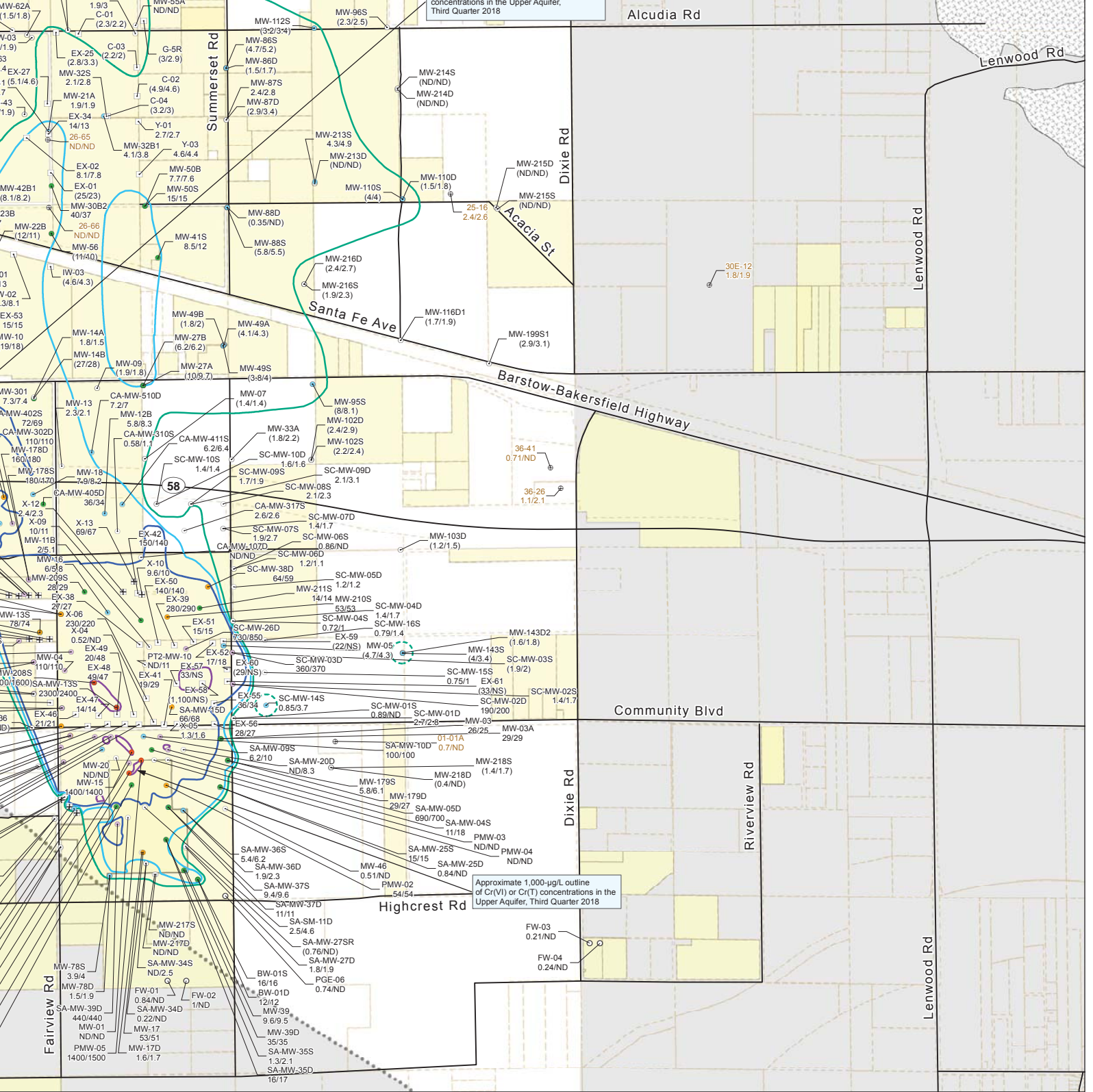
- More than 1,000 µg/L
- 100 to 1,000 µg/L
- 50 to 100 µg/L
- 10 to 50 µg/L
- 3.1 to 10 µg/L
- Less than 3.1 µg/L or ND

ABBREVIATIONS:

- µg/L Micrograms per Liter
- Cr(VI) Hexavalent Chromium
- Cr(T) Total Dissolved Chromium
- J Estimated Result
- ND Not Detected
- NS Not Sampled

- NOTES:**
1. Chromium results are shown for Site-wide Groundwater Monitoring Program and domestic wells sampled in the reporting period, the most recent results are shown.
 2. The concentration contours are based on Third Quarter 2018 chromium results for the groundwater monitoring Figures 5-1 and 5-2. Results for domestic wells (brown-colored labels) were not used for chromium plume control Board's Cleanup and Abatement Order dated November 4, 2015 (Water Board 2015).
 3. Pursuant to the Lahontan Regional Water Quality Control Board's Cleanup and Abatement Order dated November 4, 2015, monitoring wells sampled southwest of Lockhart Fault and on or east of Dixie Road. Monitoring wells sampled southwest of Lockhart Fault and on or east of Dixie Road.
 4. Chromium plume contours in the general area south of Highway 58, were developed using a larger set of monitoring wells from the Northwest Freshwater Injection Projects (Arcadis 2018). Select wells from that program are shown here.

WORK CITED:
Arcadis. 2018. Third Quarter 2018 Monitoring Report for the In Situ Reactive Zone and Northwest Freshwater Injection Projects. California Regional Water Quality Control Board, Lahontan Region Order No. R6V-2008-0014 (Waste Discharge Permit).
Stamos, C.L., P. Martin, T. Nishikawa, and B.F. Cox. 2001. *Simulation of Ground-Water Flow in the Mojave River Basin*. Prepared in cooperation with the Mojave Water Agency.
Water Board. 2015. Cleanup and Abatement Order No. R6V-2015-0068 Requiring Pacific Gas and Electric Company to Remediate Chromium Contamination in the Upper Aquifer of the Mojave River Basin.



the Third Quarter (July through September) 2018 monitoring period. For wells sampled multiple times during

ing and extraction wells that are completed in the shallow zone and deep zone of the Upper Aquifer as noted on

ember 4, 2015 (Water Board 2015), groundwater monitoring wells are not used for chromium contouring if they are located in the areas southwest

Monitoring data which is presented in the Third Quarter 2018 Monitoring Report for the In Situ Reactive Zone

ection Projects, Pacific Gas and Electric Company, Hinkley Compressor Station, Hinkley, California,

er Basin, California. U.S. Geological Survey Water-Resources Investigations Report 01-4002, Version 3.

pany to Cleanup and Abate Waste Discharges of Total and Hexavalent Chromium to the Groundwaters of the Mojave Hydrologic Unit. November 4.

FIGURE 5-5
CHROMIUM RESULTS FOR THIRD QUARTER 2018
GROUNDWATER MONITORING AND DOMESTIC WELL
SAMPLING AND MAXIMUM COMPOSITE PLUME
OUTLINE IN UPPER AQUIFER

THIRD QUARTER 2018 GROUNDWATER MONITORING
 REPORT AND DOMESTIC WELL RESULTS
 SITE-WIDE GROUNDWATER MONITORING PROGRAM

PACIFIC GAS AND ELECTRIC COMPANY
 HINKLEY COMPRESSOR STATION
 HINKLEY, CALIFORNIA