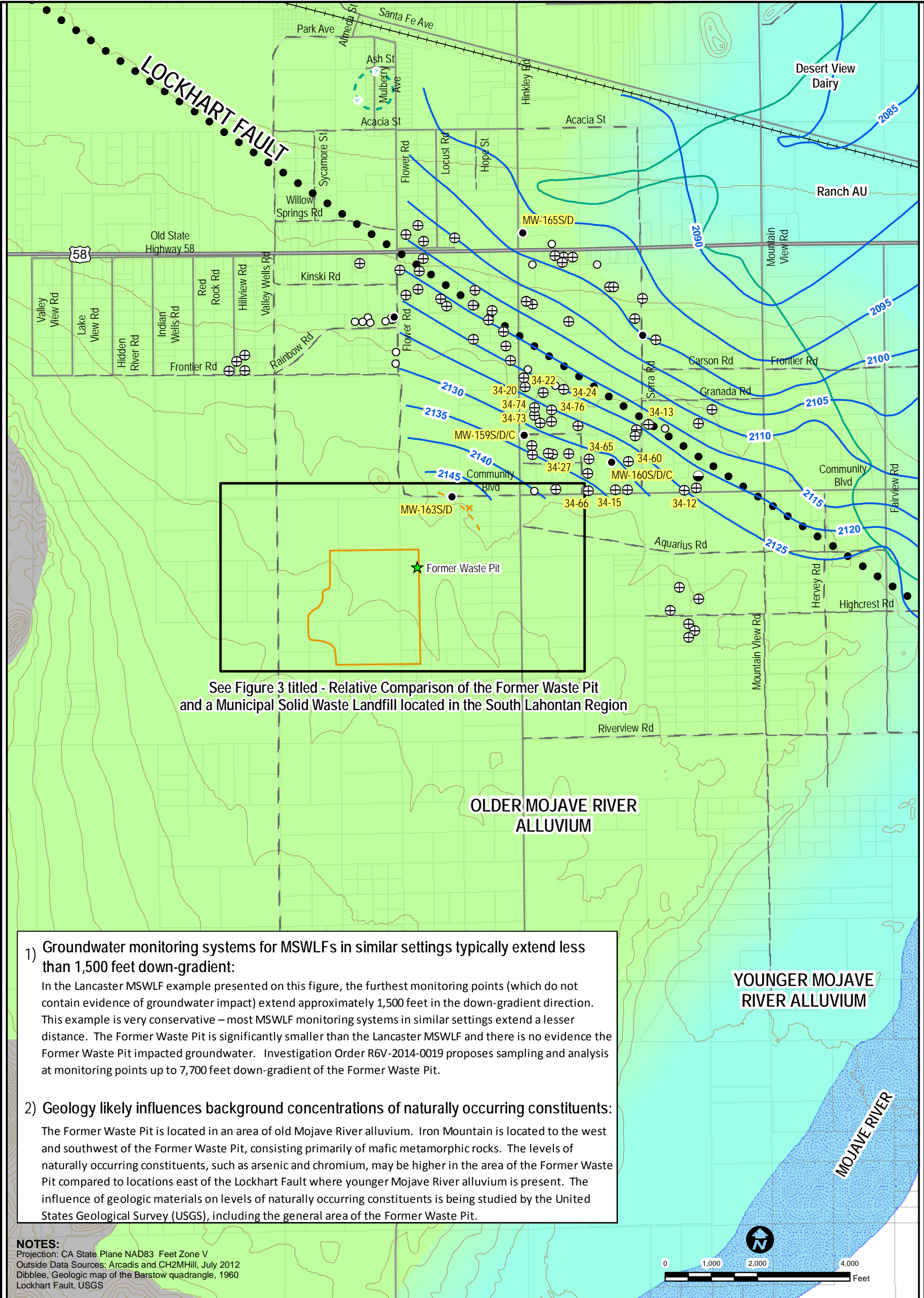


A:\1857\PG&E\MXD\_Files\2nd Half 2013\WQ 1 Mile MW-163\Figure 4 (Western HV) (2014-4-22)11x17.mxd



See Figure 3 titled - Relative Comparison of the Former Waste Pit and a Municipal Solid Waste Landfill located in the South Lahontan Region

- 1) **Groundwater monitoring systems for MSWLFs in similar settings typically extend less than 1,500 feet down-gradient:**  
 In the Lancaster MSWLF example presented on this figure, the furthest monitoring points (which do not contain evidence of groundwater impact) extend approximately 1,500 feet in the down-gradient direction. This example is very conservative – most MSWLF monitoring systems in similar settings extend a lesser distance. The Former Waste Pit is significantly smaller than the Lancaster MSWLF and there is no evidence the Former Waste Pit impacted groundwater. Investigation Order R6V-2014-0019 proposes sampling and analysis at monitoring points up to 7,700 feet down-gradient of the Former Waste Pit.
  
- 2) **Geology likely influences background concentrations of naturally occurring constituents:**  
 The Former Waste Pit is located in an area of old Mojave River alluvium. Iron Mountain is located to the west and southwest of the Former Waste Pit, consisting primarily of mafic metamorphic rocks. The levels of naturally occurring constituents, such as arsenic and chromium, may be higher in the area of the Former Waste Pit compared to locations east of the Lockhart Fault where younger Mojave River alluvium is present. The influence of geologic materials on levels of naturally occurring constituents is being studied by the United States Geological Survey (USGS), including the general area of the Former Waste Pit.

**NOTES:**  
 Projection: CA State Plane NAD83 Feet Zone V  
 Outside Data Sources: Arcadis and CH2MHill, July 2012  
 Dibblee, Geologic map of the Barstow quadrangle, 1960  
 Lockhart Fault, USGS

- Wells by Well Type**
- Monitoring Well
  - ⊕ Domestic Supply Well
  - Other Supply Well
  - ★ Waste Pit (magnified)
  - ▭ PGE Property Boundaries (12/31/13)
  - ~ First Quarter 2014 Potentiometric Surface (Upper Aquifer, Shallow)
  - Geologic Fault (Dotted Where Concealed)

- Iron Mountain – Exposed Mafic Metamorphic Bedrock
- Approximate Location of Young Mojave River Alluvium
- Approximate Location of Older Mojave River Alluvium – Regional Aquifer System (RAS)

**Chromium Plume (Fourth Quarter 2013)**  
 Concentration of Hexavalent Chromium (ug/l)

3.1 ug/l

**MW-163** Wells proposed for quarterly sampling and laboratory analysis in Water Board Order R6V-2014-0019

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FOR:  
**Pacific Gas & Electric**  
 Groundwater Remediation Project  
 Hinkley, California

JOB NUMBER: 185702424  
 DRAWN BY: TF  
 CHECKED BY: CM  
 APPROVED BY: CM

**ILLUSTRATION OF THE FORMER WASTE PIT RELATIVE TO THE GROUNDWATER MONITORING POINTS PROPOSED IN INVESTIGATION ORDER R6V-2014-0019**

FIGURE:  
**4**  
 DATE: 06/10/13