TABLES

TABLE 1-1. SURVEYED COORDINATES AND ELEVATIONS, NEW RI SOIL BORINGS AND MONITORING WELLS

RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Boring or Well ID	Date Surveyed	Nevada State Plane[1] (feet)		Elevation[2] (feet msl)	
		Y-coord (N)	X-coord (E)	Ground	TOC
Remedial Investigation Data Gap Soil Borings					
Area 2 - Soil Borings Between Debris Pile and Pond AP-5					
RISB-15	5/8/2015	26,719,525.95	827,763.33	1757.52	NA
RISB-16	5/8/2015	26,719,545.25	827,858.33	1758.03	NA
RISB-17	10/13/2014	26,719,560.07	827,979.93	1756.90	NA
RISB-18	5/8/2015	26,719,583.43	828,098.76	1756.07	NA
RISB-19	10/13/2014	26,719,603.51	828,218.13	1754.39	NA
RISB-20	5/8/2015	26,719,633.09	827,782.11	1754.17	NA
RISB-21	10/13/2014	26,719,652.30	827,901.56	1753.84	NA
RISB-22	10/13/2014	26,719,674.03	828,020.68	1753.80	NA
RISB-23	10/13/2014	26,719,695.76	828,139.70	1753.25	NA
RISB-24	10/13/2014	26,719,717.51	828,258.77	1752.81	NA
RISB-25	10/13/2014	26,719,722.78	827,704.16	1752.33	NA
RISB-26	10/13/2014	26,719,744.51	827,823.20	1752.26	NA
RISB-27	10/13/2014	26,719,766.43	827,942.27	1752.20	NA
RISB-28	10/13/2014	26,719,788.03	828,061.36	1751.78	NA
RISB-29	10/13/2014	26,719,809.85	828,180.44	1750.94	NA
Area 3 - Debris Pile Test Pits					
RIT-1	5/8/2015	26,719,849.65	828,481.66	1745.97	NA
RIT-2	5/8/2015	26,719,898.85	828,610.71	1749.66	NA
RIT-3	5/8/2015	26,719,832.79	828,549.13	1746.53	NA
Area 3 - Debris Pile Area Soil Borings					
RISB-9	10/13/2014	26,719,537.80	828,434.87	1757.96	NA
RISB-10	5/8/2015	26,719,681.80	828,416.47	1754.85	NA
RISB-11	10/13/2014	26,719,673.48	828,589.67	1752.98	NA
RISB-12A	5/8/2015	26,719,861.98	828,379.76	1742.36	NA
RISB-12B	5/8/2015	26,719,864.00	828,379.93	1742.08	NA
RISB-13	10/13/2014	26,719,799.18	828,682.61	1743.33	NA
RISB-14	5/8/2015	26,719,946.57	828,609.49	1745.15	NA
Area 4 - Soil Borings West of Pond Mn-1					
RISB-30	10/13/2014	26,718,842.10	828,453.69	1772.34	NA
RISB-31	10/13/2014	26,718,923.37	828,526.74	1771.85	NA
RISB-32	5/8/2015	26,718,876.50	828,353.19	1772.19	NA
RISB-33	10/13/2014	26,718,946.05	828,419.89	1770.69	NA
RISB-34	5/8/2015	26,719,023.40	828,500.93	1769.65	NA
RISB-35	5/8/2015	26,718,968.77	828,323.67	1770.47	NA
RISB-36	10/13/2014	26,719,049.95	828,386.07	1767.85	NA
RISB-37	10/13/2014	26,719,131.29	828,459.08	1766.35	NA

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RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Boring or Well ID	Date Surveyed	Nevada State Plane[1] (feet)		Elevation[2] (feet msl)	
		Y-coord (N)	X-coord (E)	Ground	TOC
Area 5 - Soil Borings North of WC-East Pond					
RISB-38	10/13/2014	26,720,933.21	827,827.00	1725.51	NA
RISB-39	10/13/2014	26,720,803.95	827,944.50	1728.41	NA
RISB-40	10/13/2014	26,720,793.32	828,054.95	1728.63	NA
RISB-41	10/13/2014	26,720,780.64	828,200.39	1730.73	NA
RISB-42	5/8/2015	26,721,062.55	827,804.35	1723.01	NA
RISB-43	10/13/2014	26,721,018.19	827,930.02	1723.94	NA
RISB-44	5/8/2015	26,720,966.47	828,052.86	1724.72	NA
RISB-45	5/8/2015	26,720,916.82	828,180.10	1726.60	NA
RISB-46	5/8/2015	26,720,907.17	828,315.64	1727.81	NA
RISB-47	5/8/2015	26,720,836.61	828,433.42	1729.52	NA
RISB-48	5/8/2015	26,720,784.11	828,555.32	1729.13	NA
RISB-49	10/13/2015	26,721,149.91	827,907.92	1721.94	NA
Area 6 - Soil Borings Southwest of GW-11 Pond					
RISB-50	10/13/2014	26,719,726.35	826,341.33	1754.57	NA
RISB-51	10/13/2014	26,719,752.72	826,412.39	1752.71	NA
RISB-52	10/13/2014	26,719,857.74	826,444.80	1752.76	NA
Area 7 - Soil Borings Northwest of L'Hoist					
RISB-53	5/8/2015	26,718,448.06	827,606.56	1777.34	NA
RISB-54	5/8/2015	26,718,444.30	827,723.25	1778.64	NA
RISB-55	5/8/2015	26,718,454.84	827,802.58	1779.06	NA
Area 8a - Soil Borings North of the Unit Buildings					
RISB-56	5/8/2015	26,717,586.03	828,165.14	1812.40	NA
RISB-57	5/8/2015	26,717,604.90	828,599.91	1812.77	NA
Area 8b - Soil Borings in the Leach Plant Area					
RISB-58	5/8/2015	26,718,274.07	828,397.25	1796.59	NA
RISB-59	5/8/2015	26,718,126.08	828,580.22	1805.50	NA
RISB-60	5/8/2015	26,718,176.10	828,889.04	1798.45	NA
RISB-61	5/8/2015	26,717,984.05	828,403.17	1799.20	NA
RISB-62	5/8/2015	26,717,836.03	828,630.73	1798.53	NA
RISB-63	5/8/2015	26,717,894.25	828,902.54	1798.14	NA

TABLE 1-1. SURVEYED COORDINATES AND ELEVATIONS, NEW RI SOIL BORINGS AND MONITORING WELLS

RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Boring or Well ID	Date Surveyed	Nevada State Plane[1] (feet)		Elevation[2] (feet msl)	
		Y-coord (N)	X-coord (E)	Ground	TOC
New Onsite Monitoring Wells					
Middle WBZ / Upper Muddy Creek Wells					
M-161D	1/15/2015	26,719,894.08	827,237.39	1748.22	1750.26
M-162D	1/15/2015	26,719,954.88	827,774.02	1745.25	1747.27
M-186D	1/15/2015	26,718,347.70	829,025.58	1798.16	1800.81
Wells Near the Unit Buildings					
M-189	1/15/2015	26,717,101.09	828,371.74	1813.00	1812.48
M-190	1/15/2015	26,717,162.19	828,816.12	1813.36	1812.79
M-191	1/15/2015	26,717,253.84	828,087.42	1813.46	1812.84
M-192	1/15/2015	26,717,297.62	828,393.86	1813.03	1812.56
M-193	1/15/2015	26,717,398.56	828,805.73	1812.79	1812.56
New Offsite Monitoring Wells					
Downgradient Area Wells					
PC-134D	1/15/2015	26,728,169.62	828,857.19	1618.65	1618.39
PC-137D	1/15/2015	26,728,198.40	829,522.61	1618.71	1618.28
PC-151	1/15/2015	26,726,718.53	826,961.80	1638.86	1638.54
PC-152	1/15/2015	26,726,722.47	827,332.80	1637.38	1636.95
PC-153	1/15/2015	26,726,720.74	827,665.99	1636.10	1635.78
PC-154	1/15/2015	26,728,095.12	827,203.72	1625.23	1624.72
PC-158	1/15/2015	26,728,109.85	827,714.18	1620.49	1620.02
PC-159	1/15/2015	26,728,109.44	827,903.69	1620.86	1620.19
PC-160	1/15/2015	26,728,119.76	828,112.26	1618.00	1619.23
Las Vegas Wash Wells					
PC-155A	1/15/2015	26,734,079.00	830,687.23	1552.48	1555.54
PC-155B	1/15/2015	26,734,087.57	830,681.67	1552.77	1555.96
PC-156A	1/15/2015	26,733,839.62	831,227.78	1546.75	1549.68
PC-156B	1/15/2015	26,733,845.94	831,220.07	1546.97	1550.51
PC-157A	1/15/2015	26,733,942.99	831,609.81	1544.79	1547.95
PC-157B	1/15/2015	26,733,955.90	831,603.79	1544.77	1547.96

Notes:

(1) NAD83 FIPS Zone 2701

(2) Elevation is in feet, Mean Sea Level datum (NAVD 88).

Ground = Ground surface

TOC = Top of well casing

NA = Not Applicable

Surveying was conducted by Atkins North America, Inc., Licensed Land Surveyor, located in Henderson, Nevada.

TABLE 1-2. NEW RI MONITORING WELL CONSTRUCTION DETAILS
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Well ID	Installed by	Date Installed	Ground Surface (ft msl)	TOC (ft msl)	Borehole Diameter (inches)	Borehole Depth (ft bgs)	Surface Cement Seal Interval (ft bgs)	Cement/ Bentonite Seal Interval (ft bgs)	Bentonite Pellet Seal Interval (ft bgs)	Filter Pack Interval (ft bgs)	Perforated Interval (ft bgs)	Well Casing Material	Slot Size (in.)	Filter Pack Sand Size
On-Site Wells														
M-161D	National EWP	12/5/14	1748.22	1750.26	8	150	0 to 15	15 to 123	123 to 128	128 to 141	130 to 140	4" Sch 40 PVC	0.010	#2/12
M-162D	National EWP	12/11/14	1745.25	1747.27	8	140	0 to 8	8 to 124	124 to 128	128 to 140	130 to 140	4" Sch 40 PVC	0.010	#2/12
M-186D	National EWP	12/10/14	1798.16	1800.81	8	179	0 to 10	10 to 147	147 to 151	151 to 173	153 to 173	4" Sch 40 PVC	0.010	#2/12
M-189	National EWP	12/3/14	1813.00	1812.48	6	51	NA	0 to 30	30 to 33	33 to 51	35 to 50	2" Sch 40 PVC	0.020	#3
M-190	National EWP	12/5/14	1813.36	1812.79	6	50	NA	0 to 30	30 to 33	33 to 50	35 to 50	2" Sch 40 PVC	0.020	#3
M-191	National EWP	12/1/14	1813.46	1812.84	6	51	NA	0 to 30	30 to 33	33 to 51	35 to 50	2" Sch 40 PVC	0.010	#3
M-192	National EWP	12/3/14	1813.03	1812.56	6	50	NA	0 to 30	30 to 33	33 to 50	35 to 50	2" Sch 40 PVC	0.020	#3
M-193	National EWP	12/4/14	1812.79	1812.56	6	50	NA	0 to 30	30 to 33	33 to 50	35 to 50	2" Sch 40 PVC	0.020	#3
Off-Site Wells														
PC-134D	National EWP	1/7/15	1618.65	1618.39	8	90	0 to 8	8 to 74	74 to 78	78 to 90	80 to 90	4" Sch 40 PVC	0.010	#2/12
PC-137D	National EWP	1/9/15	1618.71	1618.28	8	90	0 to 6	6 to 74	74 to 78	78 to 90	80 to 90	4" Sch 40 PVC	0.010	#2/12
PC-151	National EWP	12/17/14	1638.86	1638.54	6	30	NA	0 to 5	5 to 7	7 to 28	8 to 28	2" Sch 40 PVC	0.020	#3
PC-152	National EWP	12/16/14	1637.38	1636.95	6	31.5	NA	0 to 5	5 to 8	8 to 30	10 to 30	2" Sch 40 PVC	0.020	#3
PC-153	National EWP	12/15/14	1636.10	1635.78	6	40	0 to 6	NA	6 to 8	8 to 31	10 to 30	2" Sch 40 PVC	0.020	#3
PC-154	National EWP	12/18/14	1625.23	1624.72	6	30	0 to 5	NA	5 to 7	7 to 24	8 to 23	2" Sch 40 PVC	0.020	#3
PC-155A	National EWP	4/20/15	1552.48	1555.54	6	30	0 to 6	NA	6 to 8	8 to 30	10 to 30	2" Sch 40 PVC	0.020	#3
PC-155B	National EWP	4/20/15	1552.77	1555.96	6	50	0 to 5	5 to 33	33 to 36	36 to 48	38 to 48	2" Sch 40 PVC	0.020	#3
PC-156A	National EWP	4/22/15	1546.75	1549.68	6	20	0 to 5	NA	5 to 8	8 to 20	10 to 20	2" Sch 40 PVC	0.020	#3
PC-156B	National EWP	4/22/15	1546.97	1550.51	6	50	0 to 5	5 to 21	21 to 23	23 to 45	25 to 45	2" Sch 40 PVC	0.020	#3
PC-157A	National EWP	4/21/15	1544.79	1547.95	6	25	0 to 5	NA	5 to 7	7 to 24	9 to 24	2" Sch 40 PVC	0.020	#3
PC-157B	National EWP	4/21/15	1544.77	1547.96	6	50	0 to 5	5 to 20	20 to 28	28 to 40	30 to 40	2" Sch 40 PVC	0.020	#3
PC-158	National EWP	11/6/14	1620.49	1620.02	6	23	0 to 1	1 to 3	3 to 5	5 to 23	7 to 22	2" Sch 40 PVC	0.020	#3
PC-159	National EWP	11/4/14	1620.86	1620.19	6	30	0 to 1	1 to 6	6 to 8	8 to 26	10 to 25	2" Sch 40 PVC	0.020	#3
PC-160	National EWP	11/7/14	1618.00	1619.23	6	30	0 to 5	NA	5 to 7	7 to 25	9 to 24	2" Sch 40 PVC	0.020	#3

Notes:

All depths are in feet below ground surface (ft bgs).

ft msl = elevation in feet, mean sea level datum

NA = Not Applicable

PVC = Polyvinyl Chloride

Where the borehole depth is deeper than the bottom of the filter pack, the open borehole interval beneath the filter pack was backfilled with bentonite pellets and/or slough prior to placement of the filter pack.

Table 2-1. Historical On-Site Ditches

Discharge Source	Time Period	Description
Beta Ditch (to Upper and Lower BMI Ponds)		
Site Operators		
Unknown (during US Government Operations)	1942 to 1944	Wastewater originating from site processes (contents undocumented, but likely acid effluent and waste caustic liquor)
WECCO	1945 to 1955	Perchlorate process solids, graphite, calcium carbonate, calcium sulfate
State Industries	1969 to 1988	Sulfuric acid, borax, soda ash, phosphate, cyanide
Koch Materials	1979 to ~1995	Fluids containing petroleum hydrocarbon related materials including heavy oils/tars, asphalt cement, and washout of chemical tanks
Kerr-McGee	Post-1976 1979 1980	Non-contact cooling water and storm water runoff. Discharges from cooling tower upsets. 840,000 gallon discharge from pond C-1 (boiler plant blowdown, manganese dioxide cathode wash solution, boron neutralization solutions) Approximately 500,000 to 600,000 gallons of sodium chlorate process solution were discharged.
W.S. Hatch Company J.B. Kelley Inc.	1980 to 1988	Truck waste water (contained lime, soda ash, barite, magnesium chloride) and may also have included dilute concentrations of ferric chloride, hydrochloric acid, sodium hydrosulfide, sodium hydroxide, and/or titanium tetrachloride.
U.S. Lime and Flintkote (facility formerly occupied by Chemstar and currently occupied by L'hoist)		Unknown process water discharges.
Wastes		
Potassium Chlorate process wastes	1945-1975	Centrifuge mother liquor (represented loss of potassium chlorate, potassium chloride, sodium chlorate, and sodium chloride), filter cake sludges, process vessel overflow solutions.
Sodium Chlorate process wastes	1951-1975	Cell bottoms and filter cake washings sluiced with process liquid wastes (through 1964), brine rinse and wash water from water softeners.
Potassium Perchlorate process wastes	1945-1975	Centrifuge mother liquor (represented loss of potassium chlorate, potassium chloride, sodium chlorate, and sodium chloride); Sluiced filter cake (colloidal suspension of diatomaceous earth in aqueous solution of potassium perchlorate mother liquor, sodium chloride,

Table 2-1. Historical On-Site Ditches

Discharge Source	Time Period	Description
		potassium chloride, potassium chlorate, sodium perchlorate, sodium carbonate, calcium carbonate, and chromium).
Ammonium Perchlorate process wastes	1951-1975	Waste solution from chlorine gas scrubber; Slurry containing ammonium perchlorate filter cake, the dissolving tank, dryer feed screw, and cyclone dust (this combined stream contained ammonium perchlorate, sodium chloride, sodium perchlorate, chromium hydroxide and iron hydroxide); Cooling tower overflows (solution with ammonium perchlorate and salt).
Magnesium Perchlorate process wastes	1969-1975	Filter cakes and process area washdown water. Liquid stream contained magnesium carbonate, ammonium perchlorate, and magnesium perchlorate.
Boron operation process wastes	1972-1975	Boron process neutralization tank waste (boron leach liquor), a slurry consisting of sodium carbonate, magnesium sulfate, sodium borate, and sodium sulfate.
Magnesium process sources (Leach Beds, Tailings and Conveyances)	1953 – 1975	Storm water from leach beds and tailing pile areas.
Storm water and non-process wastewater	1971-1976	Storm water run-off, non-contact cooling water, discharges from cooling tower.
Beta Ditch Extension		
The western-most portion of the Beta Ditch, which is also referred to as the Beta Ditch Extension or Stauffer Effluent Ditch, was constructed to accommodate waste discharges from companies located west of Kerr-McGee (primarily Stauffer and Montrose) and was connected to the Beta Ditch in 1970. The wastes listed below also flowed across the Site within the Beta Ditch. The Beta Ditch Extension was excavated between 2010 and 2011 as part of the Site's Interim Soil Removal Excavation.		
Site Operators		
Stauffer	1971 - 1976	Waste water and cooling water containing organics, effluent containing caustic from tank car, filter and floor washings, and cell liquor.
Montrose	1971 - 1976	Waste water containing sulfuric acid (possibly with trace DDT), hydrochloric acid containing various polychlorinated benzenes, and sulfonated metabolites of DDT.

Table 2-2. Historical and Current Surface Impoundments

Impoundment	Description
Closed Ponds Operated Between 1942 and 1944 (Figure 2-2)	
Trade Effluent settling ponds	The U.S. Government formerly operated four Trade Effluent settling ponds on the north-central side of the BMI Complex, of which about two and one-fifth of the ponds extended onto the subject property (approximately one-fifth of Pond T4, and all of Ponds T5 and T6). The original system was comprised of four surface impoundments and a distribution pipeline; each settling pond had an area of approximately 20 acres and an average liquid level depth of 7.5 feet. The impoundments contained earthen sides and a French drain system. The ponds likely received wastes between 1942 and 1944, although details regarding their use are not known. Liquid wastes discharged to the pond included acid process liquor (hydrochloric acid generated from primary and secondary scrubbing towers that washed chlorinator exhaust gases in the chlorination process) and caustic process liquors (presumed to be sodium hydroxide generated from absorber towers installed to remove the last traces of chlorine and hydrochloric acid passing the primary and secondary scrubber towers). A French drain system located on the north side of the ponds allowed waste water to seep into the area north of the settling ponds. Dark areas of apparent staining resulting from this French drain system are apparent in aerial images of the site from the 1940s. After use of the settling ponds by the U.S. Government ceased, solid materials/wastes were also placed in this area at various times between 1945 and 1979. The nature of these materials is unknown. Portions of the southern extent of this area were converted to ammonium perchlorate storage areas by 1953. The western portion of this area was subsequently operated as a hazardous waste landfill. Surface impoundments WC-East and WC-West were constructed in the northeastern portion of this area in 1988. Limited soil sampling performed in the 1990s in this area did not identify significant contamination.
Closed Ponds Operated Between 1942 and 1966	
Upper and Lower BMI Ponds (located off-site)	Process wastes were primarily discharged to the off-site Upper and Lower BMI Ponds via the Beta Ditch between 1942 and 1966 (see Table 2-1). The off-site BMI ponds (not depicted in report figures) appear to have been constructed in the early 1940s, once the four Trade Effluent evaporation/settling ponds were determined to be inadequate. The BMI ponds were designed to manage commingled industrial wastewater originating from the BMI Complex that was conveyed to the ponds via a system of open surface ditches and subsurface siphons. The BMI ponds were used by the subject property and various other entities within the BMI Complex from the early 1940s until the mid-1970s, when each of the operating companies was required to achieve “zero discharge” with regards to industrial wastewater management. According to the ECA, the extrapolated combined effluent discharged by WECCO, AP&CC, and Kerr-McGee to the BMI ponds prior to January 1976 is estimated at approximately 600,000 gallons per day. The aqueous waste streams discharged to the BMI ponds were generated from the manufacture of chlorates (containing hexavalent chromium), perchlorates, and boron products; discharges did not contain manganese dioxide process wastes.

Table 2-2. Historical and Current Surface Impoundments

Impoundment	Description
Closed Ponds Operated Between 1967 and 2005 (Figure 2-5)	
Old P-2 and P-3	The Old P-2 Pond, installed in 1972 with a 12,000-square foot surface area and a 350,000-gallon capacity, was located approximately 300 feet southwest of the steam plant. Installed in 1972, the Old P-3 Pond had an approximate surface area of 13,000 square feet. Both ponds were taken out of service and decommissioned in 1990. During their operation, the Old P-2 and P-3 Ponds received sodium chlorate solution from process washdown, excess solution above the handling capacity of the process vessels, storm water from the process area, caustic scrubber solution from the ammonium perchlorate plant, and solution from cooling tower leaks. These solutions were concentrated in the surface impoundments through evaporation and then returned to the process where residual sodium chlorate was recovered. Process liquids sent to the surface impoundments contained hexavalent chromium, sodium chloride, sodium chlorate, and sodium perchlorate, but apparently were not considered hazardous waste. Although the ponds were always lined, the lining was replaced on several occasions due to leaks and failures. With respect to the Old P-2 Pond, leaks were identified with the original single liner in 1980, and a second single liner failed (resulting in the release of approximately 50,000 gallons of solution) in 1982. The third liner placed in the Old P-2 Pond also was found to have leaked in 1984 or 1985. No detailed information regarding the liner associated with the Old P-3 Pond was located. Soil sampling within the ponds during the 1990s identified elevated chromium levels.
New P-2 Pond	The New P-2 Pond replaced the Old P-2 and P-3 Ponds, and it received similar wastewater discharges. This pond was initially constructed with two synthetic liners. Approximately 18 months after it was constructed, a third polyethylene liner was installed. This pond had leak detection that was monitored monthly. The date of decommissioning of this pond is unknown.
S-1 and P-1	Single-lined wastewater surface impoundments P-1 and S-1 were located approximately 200 feet and 60 feet south of the steam plant, respectively. The impoundments were constructed in an area that had previously been used for deposition of solid materials, including manganese dioxide process tailings (see Section 5.2.11). P-1 had an approximate surface area of 26,000 square feet and an approximate capacity of 700,000 gallons. S-1 had an approximate surface area of 47,500 square feet and an approximate capacity of 2,000,000 gallons. Each impoundment was constructed as an evaporation pond (not equipped to recycle liquids back to the process). Both ponds managed liquid wastes from the potassium chlorate, potassium perchlorate, sodium perchlorate, and boron manufacturing processes, as well as cooling tower and reboiler wastes from the boron trichloride process. In addition, S-1 received wastes from the sodium chlorate process, and P-1 received liquors, residual salt solutions, and rinsates generated during decommissioning and closure of pond S-1 and decommissioning of the potassium perchlorate manufacturing process. Liquid wastes discharged to both impoundments reportedly contained chromium in excess of hazardous waste criteria.

Table 2-2. Historical and Current Surface Impoundments

Impoundment	Description
	P-1 operated from 1972 to 1975, when it was abandoned because the original liner had failed; it was relined and subsequently operated from 1980 to 1983. S-1 operated from 1974 to 1982, and records suggest that a liner failure may have been identified in 1980. Both impoundments were closed in 1983/4 pursuant to RCRA under a NDEP-approved closure plan, and confirmatory soil sampling was performed to demonstrate that residual chromium levels were below the required cleanup level of 5.0 mg/L. Soils contaminated with chromium were removed during closure activities associated with both ponds. NDEP approved final closure of S-1 and P-1 on December 5, 1985.
State Industries, Inc. Impoundments	State Industries, Inc. operated two surface impoundments on the southwestern portion of the site beginning in 1972 associated with its hot water heater manufacturing operations. Both impoundments were single-lined. The western impoundment was circular and measured approximately 130 feet in diameter. The eastern impoundment was rectangular and measured approximately 150 feet by 250 feet. The impoundments received spent pickling process wastes (for solar evaporation). The process wastes (approximately 35,000 gallons per month) included spent sulfuric acid, borax, soda ash, phosphates, and TURCO II H.T.C. soap. One of the State Industries impoundments is known to have leaked on three separate occasions in 1974, and a liner apparently ripped on one impoundment in 1980. The western impoundment was closed and covered by a warehouse in approximately 1983. The eastern impoundment was closed by 1988, which involved leaving the liner in place and mixing the contents with soil until the material solidified; an engineered protective cover may not have been placed over this area. Sludge within the ponds was sampled prior to closure and found to be nonhazardous. The former State Industries, Inc. impoundments were designated as LOU-62.
C-1	This single-lined process wastewater surface impoundment, with a 69,000-square foot surface area and an approximate capacity of 3,125,000 gallons, was located near the eastern property boundary, approximately 400 feet north of the manganese tailings pile area. C-1 was constructed in 1974 and was used to hold nonhazardous industrial liquid waste for evaporation (the pond was not equipped to recycle liquids back to the process). Wastewaters received included boiler plant blowdown, boiler plant washdown, manganese dioxide cathode wash solution, boron neutralization solutions, hot process water softener solutions, and main cooling tower blowdown and filter wash. Wastewater discharged to C-1 was nonhazardous but contained sodium hexametaphosphate, neutralized sulfuric acid, calcium and magnesium hydroxide, metal wastes, various sulfates and phosphates, and boron neutralization wastewater. C-1 and associated piping were decommissioned in 1994.
AP-1, 2, 3 and 4	These lined surface impoundments were associated with the former ammonium perchlorate process, specifically to concentrate dilute ammonium perchlorate-containing solutions. AP-1, AP-2, and AP-3 were placed into operation in May 1974, and AP-4 was constructed in 1983. Impoundment AP-2 was found to have leaked in 1979, and the liner was replaced (along with the liner for AP-3). Impoundments AP-1 and AP-3 required frequent patching by late 1983 to mitigate leaks that had developed; the liners were ultimately replaced with double

Table 2-2. Historical and Current Surface Impoundments

Impoundment	Description
	liner systems. Elevated nitrates were identified in groundwater downgradient of AP-1, 2, and 3 in the 1990s. All four ponds were removed from service, cleaned and emptied in the early 2000s.
Active Surface Impoundments (Figure 2-6)	
GW-11	This approximately 11-acre, double-lined impoundment (equipped with leak detection between the liners) is located in the area of the former Trade Effluent ponds on the northern portion of the subject property. GW-11 was constructed in late 1998 to contain perchlorate-containing groundwater extracted from the IWF and the AWF systems. This pond is still in use for storing extracted groundwater prior to its treatment and discharge.
Mn-1	This double-lined process wastewater surface impoundment (equipped with leak detection between the two liners), with a surface area of 53,000 square feet and a capacity of 3.5 million gallons, is located near the eastern property boundary, approximately 200 feet north of the manganese tailings pile area. Mn-1 was placed into operation in 1983 and is used to hold nonhazardous industrial liquid waste for evaporation (the pond is not equipped to recycle liquids back to the process). Mn-1 was removed from active service following the construction of Mn-2 (discussed below) and is awaiting demolition. Most recently wastewaters included manganese dioxide cell feed filter waste and potassium phosphate cathode wash solution. Historically, Mn-1 also received calcine belt filter wash water from the manganese dioxide Leach Plant until 1989. Wastewater discharged to Mn-1 was nonhazardous but contains calcium, magnesium, manganese from cathode scale, tank mud, cell sludge, sodium hexametaphosphate, and other naturally occurring constituents.
Mn-2	Mn-2 was constructed in 2013 and is a quadruple-lined surface water impoundment located near the eastern property boundary, with a capacity of 1.8 acres and holds 3.75 million gallons (at 3 feet vertical freeboard). Mn-2 is used as an evaporation for water from various effluent sources, which include: used to hold cathode cleaning effluent, wastewater from the boron products area, waste water plant effluent (as needed) and slurries from process tank clean outs in the leach plant (as needed). According to Tronox, none of these waste streams are considered hazardous. Mn-2 is located immediately south of Mn-1.
WC-East (also known as WC-2)	This double-lined wastewater surface impoundment (equipped with leak detection between the liners), with a 67,600-square foot surface area and a capacity of 12,515,200 gallons, is located within the former Trade Effluent settling pond area on the northern portion of the subject property. WC-East was placed into operation in 1989 and subsequently received a composite liquid waste stream from Units 3, 5, and 6 and the steam plant. The solutions discharged to WC-East include process water softeners, steam generation blowdown, cooling tower blowdown from Units 3 and 5, manganese dioxide product wash solution from Unit 6, manganese dioxide cathode wash solution, process seal water/filter flush, and concentrated brine from the vapor recompression units. Solution from WC-East was processed through vapor recompression units to reclaim water for cooling and process use, and the concentrated brine effluent was discharged to surface impoundments WC-East or WC-West. Currently, WC-East continues to receive

Table 2-2. Historical and Current Surface Impoundments

Impoundment	Description
	process wastewater discharges, which are routed through an on-site distillation process for purification before being recycled back to the process water system.
WC-West (also known as WC-1)	This triple-lined wastewater surface impoundment (equipped with leak detection between the liners), with an 88,580-square foot surface area and a capacity of 19,658,500 gallons, is located within the former Trade Effluent settling pond area near the east-central portion of the subject property. WC-West was placed into operation in 1988 and subsequently received waste streams similar to those received at WC-East, as described above. Currently, WC-West continues to receive process wastewater discharges, which are routed through an on-site distillation process for purification before being recycled back to the process water system.
AP-5	AP-5, covering an area of approximately 10.88 acres, was historically used associated with the former ammonium perchlorate process, specifically as part of a larger impoundment cluster used to concentrate dilute ammonium perchlorate-containing solutions. Remediation of AP-5 is currently being conducted by Tetra Tech on behalf of the Trust.
AP-6	AP-6, a double-lined pond located directly east of AP-5, was likely constructed by Kerr-McGee sometime between 1993 and 1995. Limited information has been identified about the historical use of AP-6, but accumulated solids from AP-2 were reportedly transferred to AP-6 for subsequent product recovery. In 1996, minor damage to AP-6's top liner required pond liquor to be transferred out in preparation for repair. The pond was reportedly removed from active service in approximately 2001.
Central Retention Basin and Northern Retention Basin	During the 2011-2012 interim soil removal action, the Site was graded such that storm water would be retained on-site. Two retention basins and a drainage channel were constructed: 1) the Central Retention Basin, located approximately 800 feet south (upgradient) of the IWF and 2) the Northern Retention Basin, located approximately 300 feet north (downgradient) of the IWF. A shallow channel located along the eastern side of the Site connects the two retention basins and conveys overflow from the Central Retention Basin into the Northern Retention Basin. Surface runoff from on-site areas and a majority of water collected by the storm sewer network within the Tronox-leased area are directed to the Central Retention Basin. The retention basins have altered the location and extent of infiltration at the Site and thereby have had significant effects on groundwater conditions. Following a series of storm events between August and October 2012, storm water collected in the Central Retention Basin altering local infiltration pathways and influencing downgradient groundwater conditions.

TABLE 3-1a. SUMMARY OF PHYSICAL TESTING RESULTS - SOIL CLASSIFICATION PROPERTIES
Nevada Environmental Response Trust Site; Henderson, Nevada

Boring Number	Depth (feet bgs)	Stratigraphic Unit	Soil Type (1)	Atterberg Limits		Grain Size Distribution (wt. percent)							
				Liquid Limit	Plasticity Index	% Gravel	Sand Size			% Sand	Fines		% Fines
							Coarse	Medium	Fine		Silt	Clay	
Onsite Locations													
M-161D	105.6	UMCf-fg1	CH	91	71	**0**	0	8	19	**27**	55	18	**73**
M-161D	114.7	UMCf-fg1	CH	118	91	**0**	0	3	23	**26**	66	9	**74**
M-161D	126.5	UMCf-fg1 (sandy lens)	MH/SM	64	23	**0**	0	12	34	**46**	48	6	**54**
M-161D	149.5	UMCf-fg1	CH	95	66	**0**	0	5	22	**27**	56	17	**73**
M-162D	123.7	UMCf-fg1	CH	138	113	**0**	0	2	16	**18**	66	16	**82**
M-186D	133.7	UMCf-fg1 (sandy lens)	SW-SM	17	NP	**7**	11	49	26	**86**	(2)	(2)	**7**
M-186D	144.0	UMCf-fg1 (sandy lens)	SM	90	44	**6**	7	35	35	**77**	(2)	(2)	**17**
M-186D	165.5	UMCf-fg1	MH	125	70	**0**	0	2	17	**19**	72	9	**81**
M-189	30.0	UMCf-fg1	MH	75	35	**0**	0	1	25	**26**	59	15	**74**
M-190	34.3	UMCf-fg1	MH	62	30	**0**	0	1	22	**23**	59	18	**77**
M-190	38.0	UMCf-fg1	MH	76	39	**0**	0	2	21	**23**	62	15	**77**
M-190	47.0	UMCf-fg1 (sandy lens)	SC	61	38	**31**	5	27	21	**53**	(2)	(2)	**16**
M-191	44.0	UMCf-fg1 (sandy lens)	SM	57	15	**10**	2	20	34	**56**	(2)	(2)	**34**
M-191	46.0	UMCf-fg1	MH	65	29	**0**	0	11	24	**35**	49	16	**65**
M-192	35.0	UMCf-fg1	MH	69	15	**0**	0	4	23	**27**	57	16	**73**
M-192	40.0	UMCf-fg1 (sandy lens)	MH/SM	55	22	**0**	0	16	29	**45**	44	11	**55**
RISB-09	31.0	Alluvium	SM	16	NP	**18**	13	25	28	**66**	(2)	(2)	**16**
RISB-12	24.0	Alluvium	SW-SC	14	NP	**22**	21	32	16	**69**	(2)	(2)	**9**
RISB-23	23.0	Alluvium	SP-SM	27	NP	**24**	21	19	25	**65**	(2)	(2)	**11**

TABLE 3-1a. SUMMARY OF PHYSICAL TESTING RESULTS - SOIL CLASSIFICATION PROPERTIES
Nevada Environmental Response Trust Site; Henderson, Nevada

Boring Number	Depth (feet bgs)	Stratigraphic Unit	Soil Type (1)	Atterberg Limits		Grain Size Distribution (wt. percent)							
				Liquid Limit	Plasticity Index	% Gravel	Sand Size			% Sand	Fines		% Fines
							Coarse	Medium	Fine		Silt	Clay	
Offsite Locations													
PC-134D	52.1	UMCf-fg1	CH/SC	86	58	**0**	0	13	36	**49**	44	7	**51**
PC-134D	63.4	UMCf-fg1	SC	74	39	**0**	0	35	26	**61**	26	13	**39**
PC-134D	84.5	UMCf-fg1	MH	95	53	**0**	0	0	14	**14**	58	28	**86**
PC-134D	89.3	UMCf-fg1	CH	82	50	**0**	0	3	13	**16**	59	25	**84**
PC-137D	60.0	UMCf-fg1	SM	96	40	**0**	0	51	21	**72**	24	4	**28**
PC-137D	62.3	UMCf-fg1	CL	40	15	**0**	0	0	11	**11**	64	25	**89**
PC-137D	67.0	UMCf-fg1	MH	100	--	**0**	0	7	19	**26**	53	21	**74**
PC-137D	89.5	UMCf-fg1	MH	74	37	**0**	0	7	21	**28**	44	29	**72**
PC-153	17.0	Alluvium	SP	--	--	**22**	12	31	30	**73**	(2)	(2)	**5**
PC-153	36.0	UMCf-fg1	MH	100	54	**0**	0	8	26	**34**	54	12	**66**
PC-159	11.0	Alluvium	SW-SM	16	NP	**38**	18	22	16	**56**	(2)	(2)	**6**
PC-159	13.5	Alluvium	GP	--	--	**60**	10	15	12	**37**	(2)	(2)	**3**
PC-159	16.0	Alluvium	SW-SM	13	NP	**25**	18	31	19	**68**	(2)	(2)	**7**
PC-159	18.3	Alluvium	SP-SM	22	NP	**7**	10	32	42	**84**	(2)	(2)	**9**
PC-159	21.0	Alluvium	SW-SM	18	NP	**1**	9	46	36	**91**	(2)	(2)	**8**
PC-159	24.0	Alluvium	SW-SM	16	NP	**6**	14	42	30	**86**	(2)	(2)	**8**

Notes:

Methodologies for particle size and Atterberg Limits were ASTM D4464M/D422 and ASTM D4318, respectively.

(1) Unified Soil Classification System (UCSC) soil classification

(2) By ASTM D422M: No separation of silt and clay

"--" means not tested

NP = Non-Plastic

TABLE 3-1b. SUMMARY OF PHYSICAL TESTING RESULTS - SOIL PHYSICAL PROPERTIES
Nevada Environmental Response Trust Site; Henderson, Nevada

Location	Boring Number	Depth (feet bgs)	Stratigraphic Unit	Soil Type (1)	Bulk Density (g/cc) (2)	POROSITY		Sample Orientation (3)	Hydraulic Conductivity (5) (cm/s)
						Total (% Vb)	Effective (4) (% Vb)		
Onsite									
	M-161D	105.6	UMCf-fg1	CH	1.26	54	17	V	--
	M-161D	149.5	UMCf-fg1	CH	0.97	59	10	V	3.8×10^{-6}
	M-186D	165.5	UMCf-fg1	MH	0.66	71	24	V	--
	M-189	30.0	UMCf-fg1	MH	0.90	62	16	V	3.7×10^{-6}
	M-190	34.3	UMCf-fg1	MH	1.04	56	11	V	3.5×10^{-6}
	M-190	47.0	UMCf-fg1 (sandy lens)	SC	1.23	50	9	V	2.6×10^{-6}
	M-191	44.0	UMCf-fg1 (sandy lens)	SM	1.11	52	12	V	3.7×10^{-6}
	M-191	46.0	UMCf-fg1	MH	1.01	54	9	V	3.1×10^{-6}
	M-192	35.0	UMCf-fg1	MH	0.92	60	15	V	2.6×10^{-6}
	M-192	40.0	UMCf-fg1 (sandy lens)	MH/SM	0.99	48	21	V	1.4×10^{-5}
Offsite									
	PC-134D	52.1	UMCf-fg1	CH/SC	0.89	68	22	V	--
	PC-134D	84.5	UMCf-fg1	MH	0.82	65	19	V	--
	PC-137D	62.3	UMCf-fg1	CL	1.34	46	12	V	--
	PC-137D	89.5	UMCf-fg1	MH	1.17	54	10	V	--
	PC-153	36.0	UMCf-fg1	MH	0.64	66	15	V	3.5×10^{-6}

Notes:

Methodologies for bulk density, porosity, and hydraulic conductivity were API RP40, Mod. ASTM D425, and EPA 9100, respectively.

(1) Unified Soil Classification System (UCSC) soil classification

(2) Water = 0.9981 grams/cubic centimeter (g/cc)

(3) Sample Orientation: H = horizontal; V = vertical.

(4) Effective Porosity = no pore fluids in place; all interconnected pore channels.

(5) Permeability to water and conductivity measured at saturated conditions.

Vb = Bulk Volume, cc

TABLE 3-1c. SUMMARY OF SOIL ANALYTICAL RESULTS - TOTAL ORGANIC CARBON
Nevada Environmental Response Trust Site; Henderson, Nevada

Location	Boring Number	Depth (feet bgs)	Stratigraphic Unit	Soil Type	Total Organic Carbon (mg/kg)
Onsite					
	M-161D	105.6	UMCf-fg1	CH	700
	M-161D	149.5	UMCf-fg1	CH	1,400
	M-186D	144.0	UMCf-fg1 (sandy lens)	SM	710
	M-186D	165.5	UMCf-fg1	MH	650
	M-189	30.0	UMCf-fg1	MH	210
	M-190	34.3	UMCf-fg1	MH	270
	M-190	47.0	UMCf-fg1 (sandy lens)	SC	130
	M-191	44.0	UMCf-fg1 (sandy lens)	SM	330
	M-192	35.0	UMCf-fg1	MH	1,100
	M-192	40.0	UMCf-fg1 (sandy lens)	MH/SM	510
	RISB-09	31.0	Alluvium	SM	160
	RISB-12	24.0	Alluvium	SW-SC	420
	RISB-23	23.0	Alluvium	SP-SM	280
Offsite					
	PC-134D	52.1	UMCf-fg1	CH/SC	330
	PC-134D	84.5	UMCf-fg1	MH	3,900
	PC-137D	62.3	UMCf-fg1	CL	2,550
	PC-137D	89.5	UMCf-fg1	MH	4,600
	PC-153	17.0	Alluvium	SP	<100
	PC-153	36.0	UMCf-fg1	MH	500
	PC-159	13.5	Alluvium	GP	2,100
	PC-159	18.3	Alluvium	SP-SM	<100
	PC-159	24.0	Alluvium	SW-SM	<100

Notes:

1) Analyzed using the Walkley Black method.
2) mg/kg = milligrams per kilogram, or parts per million

TABLE 3-2. SUMMARY OF GROUNDWATER ELEVATIONS,
NEW MIDDLE WATER-BEARING ZONE WELLS
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

On-Site Monitoring Well ID	Screened Interval		Stratigraphic Unit		Groundwater Elevations		
	Top (ft bgs)	Bottom (ft bgs)	Screened Unit(s)	GW table in Unit	Date	Depth (ft btoc)	Elevation (ft msl)
WELL CLUSTER M-71/ M-164/ M-163/ M-162/ M-162D							
M-71	18	42	Qal/ UMCf- fg1	UMCf- fg1	2/4/15	36.01	1711.03
M-164	60	70	UMCf- fg1	na (1)	1/28/15	35.13	1712.48
M-163	80	90	UMCf- fg1	na (1)	1/27/15	28.21	1719.64
M-162	100	110	UMCf- fg1	na (1)	1/13/15	23.20	1724.62
M-162D	130	140	UMCf- fg1	na (1)	1/27/15	10.64	1736.63
WELL CLUSTER M-135/ M-134/ M-136/ M-161/ M-161D							
M-135	29	39	Qal/UMCf- fg1	UMCf- fg1	2/5/15	34.92	1716.93
M-134	60	70	UMCf- fg1	UMCf- fg1	2/5/15	34.56	1717.58
M-136	80	90	UMCf- fg1	na (1)	2/5/15	29.72	1722.15
M-161	100	110	UMCf- fg1	na (1)	1/13/15	24.08	1728.32
M-161D	130	140	UMCf- fg1	na (1)	1/19/15	16.28	1733.98
WELL CLUSTER M-148A/ M-186/ M-186D							
M-148A	40	50	Qal/ UMCf-fg1	Qal	1/28/15	46.83	1753.21
M-186	105	115	UMCf- fg1	na (1)	1/26/15	46.00	1754.60
M-186D	153	173	UMCf- fg1	na (1)	3/11/15	40.47	1760.34

Notes:

GW Table: Groundwater Table

ft btoc = feet below top of casing

ft msl = feet, mean sea level datum

na (1): not applicable; deeper well screened below the water table

Wells M-161D, M-162D, and M-186D were installed during the RI Data Gap Investigation.

TABLE 3-3. VERTICAL HEAD GRADIENTS - SECOND QUARTER 2015

RI Data Evaluation

Nevada Environmental Response Trust Site; Henderson, Nevada

Well Name	Screened Interval	Water Elevation (ft)	Vertical Gradient (ft/ft)
IWF Vertical Gradients			
M-135	UMCf (Shallow WBZ)	1,717.16	---
M-134	UMCf (Shallow WBZ)	1,717.47	0.01
M-136	UMCf (Shallow WBZ)	1,721.76	0.09
M-161	UMCf (Middle WBZ)	1,728.65	0.16
M-161D [1]	UMCf (Middle WBZ)	1,733.98	0.16
M-71	Qal/UMCf	1,711.23	---
M-164	UMCf (Shallow WBZ)	1,712.64	0.041
M-163	UMCf (Shallow WBZ)	1,719.83	0.16
M-162	UMCf (Middle WBZ)	1,724.46	0.18
M-162D [1]	UMCf (Middle WBZ)	1,736.63	0.24
M-74	Qal/UMCf	1,717.32	---
M-133	UMCf (Shallow WBZ)	1,717.50	0.0043
M-132	UMCf (Shallow WBZ)	1,720.12	0.046
M-165	UMCf (Middle WBZ)	1,721.93	0.05
AWF Vertical Head Gradients			
PC-135A	Qal	1,589.40	---
PC-134A	UMCf (Shallow WBZ)	1,588.67	-0.031
PC-134D [1]	UMCf (Shallow WBZ)	1,591.39	0.045
PC-136	Qal	1,585.41	---
PC-137	UMCf (Shallow WBZ)	1,583.69	-0.047
PC-137D [1]	UMCf (Shallow WBZ)	1,587.03	0.03
Other On-site Areas			
M-5A	UMCf (Shallow WBZ)	1,713.68	---
TR-2	UMCf (Middle WBZ)	1,726.02	0.11
TR-1 [2]	UMCf (Middle WBZ)	1,761.42	0.19
M-148A	UMCf (Shallow WBZ)	1,752.55	---
M-186	UMCf (Middle WBZ)	1,754.35	0.028
M-186D [1]	UMCf (Middle WBZ)	1,760.34	0.066
M-38 [3]	UMCf (Shallow WBZ)	1,728.11	---
M-150	UMCf (Middle WBZ)	1,735.38	0.067
M-154	UMCf (Middle WBZ)	1,747.15	0.12

Notes:

[1] Well was installed as part of NERT Site Remedial Investigation (RI) in first quarter 2015. Groundwater elevation and vertical gradient shown are based on first quarter 2015 data.

[2] Groundwater elevation was measured during NERT Site RI in first quarter 2015.

[3] M-38 is not co-located with M-150 and M-154, but is located approximately 200 feet to the west.

TABLE 3-4. SUMMARY OF SLUG TESTING RESULTS, ON-SITE
MIDDLE WATER-BEARING ZONE WELLS
RI Data Evaluation
Nevada Environmental Repsonse Trust Site; Henderson, Nevada

Well Name	Test Date	Formation Tested	Screened Interval	Hydraulic Conductivity	
			ft bgs	ft/day	cm/s
M-117	1/13/2015	UMCf-fg1	130 - 150	0.011	3.9E-06
M-118	1/13/2015	UMCf-fg1	138 - 158	0.049	1.7E-05
M-149	1/21/2015-1/22/2015	UMCf-fg1	100 - 120	0.0079	2.8E-06
M-153	1/20/2015-1/22/2015	UMCf-fg1	150 - 170	0.0014	4.9E-07
M-150	1/16/2015-1/20/2015	UMCf-fg1	125 - 145	0.0012	4.2E-07
M-154	1/15/2015-1/16/2015	UMCf-fg1	175 - 195	0.0022	7.8E-07
M-151	1/19/2015-1/21/2015	UMCf-fg1	125 - 145	0.0019	6.7E-07
M-152	1/14/2015-/1/15/2015	UMCf-fg1	125 - 145	0.060	2.1E-05
M-156	1/22/2015-1/23/2015	UMCf-fg1	175 - 195	0.00093	3.3E-07
M-161	1/15/2015-1/16/2015	UMCf-fg1	100 - 110	0.0082	2.9E-06
M-161D	2/9/2015-2/11/2015	UMCf-fg1	130 - 140	0.026	9.2E-06
M-162	1/15/2015	UMCf-fg1	100 - 110	0.084	3.0E-05
M-162D	2/10/2015-2/12/2015	UMCf-fg1	130 - 140	0.0022	7.8E-07
M-181	1/19/2015	UMCf-fg1	105 - 115	0.22	7.8E-05
M-186	1/20/2015	UMCf-fg1	105 - 115	0.23	8.1E-05
M-186D	2/10/2015-2/12/2015	UMCf-fg1	153 - 173	0.0051	1.8E-06
MC-MW-18	1/22/2015-1/23/2015	UMCf-fg1	96 - 116	0.44	1.6E-04
MC-MW-39	1/22/2015	UMCf-fg1	100 - 120	0.25	8.8E-05
MC-MW-42	1/22/2015-1/23/2015	UMCf-fg1	96 - 116	0.011	3.9E-06
TR-2	1/16/2015-1/20/2015	UMCf-fg1	145 - 175	0.0040	1.4E-06
TR-4	1/21/2015-1/25/2015	UMCf-fg1	125 - 145	0.0030	1.1E-06
TR-7	1/12/2015	UMCf-cg2	260 - 290	1.2	4.2E-04
TR-9	1/14/2015	UMCf-cg2	230 - 250	2.9	1.0E-03

Notes:

ft bgs = feet below ground surface

ft/day = feet per day

cm/sec = centimeters per second

UMCf-fg1 = Upper Muddy Creek formation, fine-grained facies #1

UMCf-cg2 = Upper Muddy Creek formation, coarse-grained facies #2

1. A slug test could not be conducted in well M-155 since flowing artesian conditions were present.

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
AREA 2 - Area Between Debris Pile and AP-5										
Soil Boring RISB-15	26,719,516.60	827,741.86	RISB-15-0.5-20141031	10/31/2014	0.5	Soil	5.1	ND<0.053	21	---
			RISB-15-5.0-20141031	10/31/2014	5	Soil	3.3	0.057 J	15	---
			RISB-15-10.0-20141103	11/03/2014	10	Soil	8.0	0.17 J	17	---
			RISB-15-15.0-20141103	11/03/2014	15	Soil	16	0.98 J	19	---
			RISB-15-20.0-20141103	11/03/2014	20	Soil	85	5.7 J	17	---
			RISB-15-25.0-20141103	11/03/2014	25	Soil	26	3.0 J	22	---
			RISB-15-30.0-20141103	11/03/2014	30	Soil	86	130	18	---
			RISB-15-GW-20141103	11/3/2014	35-39	***GW Grab***	***1,000***	***2,600***	***6.2***	---
Soil Boring RISB-16	26,719,538.42	827,860.99	RISB-16-0.5-20141029	10/29/2014	0.5	Soil	1.3	ND<0.054	16	---
			RISB-16-5.0-20141029	10/29/2014	5	Soil	2.5	ND<0.055	14	---
			RISB-16-5.0-20141029-FD	10/29/2014	5	Soil Dup.	2.5	ND<0.055	14	---
			RISB-16-10.0-20141029	10/29/2014	10	Soil	8.7	ND<0.056	15	---
			RISB-16-15.0-20141029	10/29/2014	15	Soil	19	3.6	14	---
			RISB-16-20.0-20141029	10/29/2014	20	Soil	55	6.9	14 J	---
			RISB-16-25.0-20141029	10/29/2014	25	Soil	22	4.2	20 J	---
			RISB-16-30.0-20141029	10/29/2014	30	Soil	99	410	66 J	---
			RISB-16-GW-20141029	10/29/2014	30-35	***GW Grab***	***800***	***4,000***	***18***	---
Soil Boring RISB-17	26,719,560.07	827,979.93	RISB-17-0.5-20141028	10/28/2014	0.5	Soil	0.18	0.27	12	---
			RISB-17-5.0-20141028	10/28/2014	5	Soil	0.97 J	ND<0.054	14	---
			RISB-17-10.0-20141028	10/28/2014	10	Soil	4.3 J	ND<0.055	16	---
			RISB-17-15.0-20141028	10/28/2014	15	Soil	5.9 J	0.31 J	14	---
			RISB-17-15.0-20141028-FD	10/28/2014	15	Soil Dup.	6.4 J	0.37 J	15	---
			RISB-17-20.0-20141028	10/28/2014	20	Soil	8.5 J	0.78 J	9.6	---
			RISB-17-25.0-20141029	10/29/2014	25	Soil	45 J	7.5 J	13	---
			RISB-17-29.0-20141029	10/29/2014	29	Soil	540	2,100	33	---
			RISB-17-GW-20141029	10/29/2014	34-35.5	***GW Grab***	***1,400***	***4,300***	***20***	---

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
Soil Boring RISB-18	26,719,581.82	828,099.01	RISB-18-0.5-20141027	10/27/2014	0.5	Soil	43	1.7 J	19	---
			RISB-18-5.0-20141028	10/28/2014	5	Soil	16	9.4	16	---
			RISB-18-10.0-20141028	10/28/2014	10	Soil	36	10	16	---
			RISB-18-15.0-20141028	10/28/2014	15	Soil	7.6	5.4	12	---
			RISB-18-20.0-20141028	10/28/2014	20	Soil	5.7	4.4	16	---
			RISB-18-20.0-20141028-FD	10/28/2014	20	Soil Dup.	5.6	4.2	20	---
			RISB-18-25.0-20141028	10/28/2014	25	Soil	290	1,100	48	---
			RISB-18-27.0-20141028	10/28/2014	27	Soil	310	1,400	57	---
			RISB-18-GW-20141028	10/28/2014	28-36	***GW Grab***	***2,500***	***4,800***	***21***	---
Soil Boring RISB-19	26,719,603.51	828,218.13	RISB-19-0.5-20141027	10/27/2014	0.5	Soil	17	0.24	22	---
			RISB-19-5.0-20141027	10/27/2014	5	Soil	7.9	0.33	19	---
			RISB-19-10.0-20141027	10/27/2014	10	Soil	72	12	18	---
			RISB-19-15.0-20141027	10/27/2014	15	Soil	23	8.7	14	---
			RISB-19-20.0-20141027	10/27/2014	20	Soil	16	4.2	13	---
			RISB-19-25.0-20141027	10/27/2014	25	Soil	150	410	32	---
			RISB-19-25.0-20141027-FD	10/27/2014	25	Soil Dup.	160	400	28	---
			RISB-19-30.0-20141027	10/27/2014	30	Soil	88	180	33	---
			RISB-19-35.0-20141027	10/27/2014	35	Soil	140	530	27	---
			RISB-19-40.0-20141027	10/27/2014	40	Soil	780	2,500	34	---
			RISB-19-GW-20141027	10/27/2014	40-45	***GW Grab***	***1,800***	***4,800***	***22***	---
Soil Boring RISB-20	26,719,630.55	827,782.56	RISB-20-0.5-20141029	10/29/2014	0.5	Soil	0.33	2.9	14 J	---
			RISB-20-5.0-20141029	10/29/2014	5	Soil	23	0.24	9.9 J	---
			RISB-20-10.0-20141030	10/30/2014	10	Soil	7.8	ND<0.055	15	---
			RISB-20-15.0-20141030	10/30/2014	15	Soil	2.5	ND<0.054	13	---
			RISB-20-20.0-20141030	10/30/2014	20	Soil	6.7	0.082 J	17	---
			RISB-20-25.0-20141030	10/30/2014	25	Soil	510	13	23	---
			RISB-20-GW-20141030	10/30/2014	30-40	**GW Grab**	**2,000** 0	**2,700 0**	**10**	---
			RISB-20-GW-20141030-FD	10/30/2014	30-40	**GW Dup.**	**2,200** 0	**2,500 0**	**10**	---

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
Soil Boring RISB-21	26,719,652.30	827,901.56	RISB-21-0.5-20141031	10/31/2014	0.5	Soil	940	7.9	14	---
			RISB-21-5.0-20141031	10/31/2014	5	Soil	710	6.9	16	---
			RISB-21-10.0-20141031	10/31/2014	10	Soil	690	4.8	16	---
			RISB-21-10.0-20141031-FD	10/31/2014	10	Soil Dup.	660	4.8	15	---
			RISB-21-15.0-20141031	10/31/2014	15	Soil	410	2.6	15	---
			RISB-21-20.0-20141031	10/31/2014	20	Soil	380	1.5	15	---
			RISB-21-25.0-20141031	10/31/2014	25	Soil	440	2.0	17	---
			RISB-21-30.0-20141031	10/31/2014	30	Soil	87	230	17	---
			RISB-21-GW-20141031	10/31/2014	32-35	**GW Grab**	**1,100**	**4,400** 0	**16**	---
Soil Boring RISB-22	26,719,674.03	828,020.68	RISB-22-0.5-20141029	10/29/2014	0.5	Soil	0.58	1.6	11	---
			RISB-22-5.0-20141029	10/29/2014	5	Soil	0.73	0.79	13	---
			RISB-22-10.0-20141029	10/29/2014	10	Soil	16	0.23	12 J	---
			RISB-22-10.0-20141029-FD	10/29/2014	10	Soil Dup.	20	0.23	12 J	---
			RISB-22-15.0-20141029	10/29/2014	15	Soil	5.9	ND<0.054	9.8 J	---
			RISB-22-20.0-20141029	10/29/2014	20	Soil	3.4	ND<0.054	12 J	---
			RISB-22-25.0-20141029	10/29/2014	25	Soil	280	2.7	17 J	---
			RISB-22-29.0-20141029	10/29/2014	29	Soil	50	25	12 J	---
			RISB-22-GW-20141029	10/29/2014	29-35	**GW Grab**	**1,500**	**4,500** 0	**21**	---
Soil Boring RISB-23	26,719,695.76	828,139.70	RISB-23-0.5-20141028	10/28/2014	0.5	Soil	3.7	0.072 J	11	---
			RISB-23-5.0-20141028	10/28/2014	5	Soil	3.0	0.075 J	14	---
			RISB-23-10.0-20141029	10/29/2014	10	Soil	17	0.30	13	---
			RISB-23-15.0-20141029	10/29/2014	15	Soil	38	0.67	14	---
			RISB-23-15.0-20141029-FD	10/29/2014	15	Soil Dup.	40	0.92	14	---
			RISB-23-20.0-20141029	10/29/2014	20	Soil	8.2	0.25	10	---
			RISB-23-25.0-20141029	10/29/2014	25	Soil	120	2.1	33	---
			RISB-23-GW-20141029	10/29/2014	28-35	**GW Grab**	**2,400**	**4,400** 0	**21**	---

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
Soil Boring RISB-24	26,719,717.51	828,258.77	RISB-24-0.5-20141027	10/27/2014	0.5	Soil	3.1	2.8	18	---
			RISB-24-5.0-20141027	10/27/2014	5	Soil	0.32 J	2.5	17	---
			RISB-24-10.0-20141027	10/27/2014	10	Soil	0.087 J	ND<0.056	20	---
			RISB-24-15.0-20141027	10/27/2014	15	Soil	0.11 J	0.24	20	---
			RISB-24-20.0-20141027	10/27/2014	20	Soil	0.16 J	ND<0.054	14 J	---
			RISB-24-20.0-20141027-FD	10/27/2014	20	Soil Dup.	0.16 J	ND<0.054	26 J	---
			RISB-24-25.0-20141027	10/27/2014	25	Soil	0.18	ND<0.054	39	---
			RISB-24-GW-20141028	10/28/2014	27-35	***GW Grab***	***1,300***	***3,600***	***16***	---
			RISB-24-GW-20141028-FD	10/28/2014	27-35	***GW Dup.***	***1,300***	***3,600***	***16***	---
Soil Boring RISB-25	26,719,722.78	827,704.16	RISB-25-0.5-20141023	10/23/2014	0.5	Soil	5.8	0.11 J	14	---
			RISB-25-5.0-20141023	10/23/2014	5	Soil	4.4	0.088 J	13	---
			RISB-25-10.0-20141023	10/23/2014	10	Soil	7.3	0.16 J	15	---
			RISB-25-15.0-20141023	10/23/2014	15	Soil	17 J	0.46	11	---
			RISB-25-20.0-20141023	10/23/2014	20	Soil	40 J	0.97	17	---
			RISB-25-25.0-20141023	10/23/2014	25	Soil	73 J	140	18	---
			RISB-25-30.0-20141023	10/23/2014	30	Soil	97 J	190	14	---
			RISB-25-GW-20141023	10/23/2014	34-35	**GW Grab**	**1,500**	**2,100 0**	**8.5**	---
Soil Boring RISB-26	26,719,744.51	827,823.20	RISB-26-0.5-20141023	10/23/2014	0.5	Soil	110	8.9	18	---
			RISB-26-5.0-20141023	10/23/2014	5	Soil	76	5.0	13	---
			RISB-26-10.0-20141023	10/23/2014	10	Soil	91	5.2	13	---
			RISB-26-15.0-20141023	10/23/2014	15	Soil	66	4.0	11	---
			RISB-26-15.0-20141023-FD	10/23/2014	15	Soil Dup.	52	3.1	12	---
			RISB-26-20.0-20141023	10/23/2014	20	Soil	53	2.8	10	---
			RISB-26-25.0-20141023	10/23/2014	25	Soil	100	150	19	---
			RISB-26-30.0-20141023	10/23/2014	30	Soil	100	200	16	---
			RISB-26-31.0-20141024	10/24/2014	31	Soil	81 J	92	25	---
			RISB-26-GW-20141024	10/24/2014	32-40	***GW Grab***	***2,300***	***3,100***	***12***	---

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
Soil Boring RISB-27	26,719,766.43	827,942.27	RISB-27-0.5-20141024	10/24/2014	0.5	Soil	4.1 J	0.26	17	---
			RISB-27-5.0-20141024	10/24/2014	5	Soil	65 J	5.3	13	---
			RISB-27-10.0-20141024	10/24/2014	10	Soil	73 J	5.9	13	---
			RISB-27-10.0-20141024-FD	10/24/2014	10	Soil Dup.	68 J	5.7	12	---
			RISB-27-15.0-20141024	10/24/2014	15	Soil	21 J	2.8	8.2	---
			RISB-27-20.0-20141024	10/24/2014	20	Soil	24 J	6.1	8.8	---
			RISB-27-25.0-20141024	10/24/2014	25	Soil	200 J	1,100	38	---
			RISB-27-GW-20141024	10/24/2014	31-34	***GW Grab***	***1,600***	***4,300***	***20***	---
Soil Boring RISB-28	26,719,788.03	828,061.36	RISB-28-0.5-20141024	10/24/2014	0.5	Soil	19 J	0.99	12	---
			RISB-28-5.0-20141024	10/24/2014	5	Soil	40 J	6.8	11	---
			RISB-28-5.0-20141024-FD	10/24/2014	5	Soil Dup.	38 J	5.0	11	---
			RISB-28-10.0-20141027	10/27/2014	10	Soil	73	8.1	19	---
			RISB-28-15.0-20141027	10/27/2014	15	Soil	40	3.9	15	---
			RISB-28-20.0-20141027	10/27/2014	20	Soil	14	1.4	12	---
			RISB-28-25.0-20141027	10/27/2014	25	Soil	24	19	21	---
			RISB-28-GW-20141027	10/27/2014	27-33	***GW Grab***	***1,900***	***4,200***	***23***	---
Soil Boring RISB-29	26,719,809.85	828,180.44	RISB-29-0.5-20141027	10/27/2014	0.5	Soil	18	9	19	---
			RISB-29-5.0-20141027	10/27/2014	5	Soil	87	12	20	---
			RISB-29-10.0-20141027	10/27/2014	10	Soil	31	5.6	16	---
			RISB-29-15.0-20141027	10/27/2014	15	Soil	9.8	3.8	23	---
			RISB-29-20.0-20141027	10/27/2014	20	Soil	6.9	2.6	20	---
			RISB-29-23.0-20141027	10/27/2014	23	Soil	20	37	16	---
			RISB-29-GW-20141027	10/27/2014	28-34	***GW Grab***	***2,200***	***4,200***	***20***	---
AREA 3 - Debris Pile										
Test Pit RIT-1	26,719,849.65	828,481.66	RIT-1-01-20141111	11/11/2014	NA	Soil	2.4	0.81	---	ND<0.54
			RIT-1-02-20141111	11/11/2014	NA	Soil	7.4	4.8	---	ND<0.48
			RIT-1-03-20141112	11/12/2014	NA	Soil	2.9	1.8	---	ND<0.50
			RIT-1-04-20141112	11/12/2014	NA	Soil	9.8	1.8	---	ND<0.52
			RIT-1-05-20141112	11/12/2014	NA	Soil	4.6	0.18 J	---	ND<0.51

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
Test Pit RIT-2	26,719,898.85	828,610.71	RIT-2-01-20141112	11/12/2014	NA	Soil	30	15	---	ND<0.51
			RIT-2-02-20141112	11/12/2014	NA	Soil	1.7	0.62	---	ND<0.51
			RIT-2-03-20141112	11/12/2014	NA	Soil	68	76	---	ND<0.82
			RIT-2-03-20141112-FD	11/12/2014	NA	Soil Dup.	46	78	---	ND<0.51
			RIT-2-04-20141113	11/13/2014	NA	Soil	1.9	0.73	---	ND<0.52
			RIT-2-05-20141113	11/13/2014	NA	Soil	110	750	---	0.51 UJ
Test Pit RIT-3			RIT-3-01-20141113	11/13/2014	NA	Soil	13	16	---	ND<0.51
			RIT-3-02-20141113	11/13/2014	NA	Soil	0.93	ND<0.052	---	ND<0.47
			RIT-3-03-20141113	11/13/2014	NA	Soil	0.10 UJ	0.074 J	---	2.7 J
			RIT-3-03-20141113-FD	11/13/2014	NA	Soil Dup.	1.8 J	0.076 J	---	0.61 J
			RIT-3-04-20141113	11/13/2014	NA	Soil	1.0	ND<0.052	---	ND<0.51
			RIT-3-05-20141113	11/13/2014	NA	Soil	7.3	0.56	---	ND<0.49
Soil Boring RISB-9	26,719,537.80	828,434.87	RISB-09-0.5-20141211	12/11/2014	0.5	Soil	47	3.4	11	---
			RISB-09-5.0-20141211	12/11/2014	5	Soil	35	3.7	17	---
			RISB-09-10.0-20141211	12/11/2014	10	Soil	5.9	7.7	14	---
			RISB-09-15.0-20141211	12/11/2014	15	Soil	8.5	6.2	16	---
			RISB-09-20.0-20141211	12/11/2014	20	Soil	4.7	4.8	15	---
			RISB-09-25.0-20141211	12/11/2014	25	Soil	52	270	62	---
			RISB-09-30.0-20141212	12/12/2014	30	Soil	49	130	33	---
			RISB-09-GW-20141212	12/12/2014	28-40	***GW Grab***	***480***	***3,000***	***11***	---
Soil Boring RISB-10	26,719,689.48	828,422.52	RISB-10-0.5-20141215	12/15/2014	0.5	Soil	130	8.3	14	---
			RISB-10-5.0-20141215	12/15/2014	5	Soil	18	3.2	12	---
			RISB-10-10.0-20141215	12/15/2014	10	Soil	4.6	7.1	15	---
			RISB-10-15.0-20141215	12/15/2014	15	Soil	4.3	7.3	16	---
			RISB-10-15.0-20141215-FD	12/15/2014	15	Soil Dup.	5.0	6.8	13	---
			RISB-10-20.0-20141215	12/15/2014	20	Soil	2.0	5.0	13	---
			RISB-10-25.0-20141215	12/15/2014	25	Soil	34	380	17	---
			RISB-10-GW-20141215	12/15/2014	28-40	***GW Grab***	***640***	***2,700***	***11***	---

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
Soil Boring RISB-11	26,719,673.48	828,589.67	RISB-11-0.5-20141217	12/17/2014	0.5	Soil	43	1.6	11	---
			RISB-11-5.0-20141217	12/17/2014	5	Soil	32	8.7	11	---
			RISB-11-10.0-20141217	12/17/2014	10	Soil	3.0	5.5	12	---
			RISB-11-10.0-20141217-FD	12/17/2014	10	Soil Dup.	4.0	5.7	11	---
			RISB-11-15.0-20141217	12/17/2014	15	Soil	2.4	4.8	13	---
			RISB-11-20.0-20141217	12/17/2014	20	Soil	2.5	6.1	11	---
			RISB-11-22.5-20141217	12/17/2014	22.5	Soil	5.4	13	15	---
			RISB-11-GW-20141217	12/17/2014	25-35	***GW Grab***	***320***	***1,100***	***3.6***	---
			RISB-11-GW-20141217-FD	12/17/2014	25-35	***GW Dup.***	***320***	***1,100***	***3.7***	---
Soil Boring RISB-12	26,719,868.83	828,372.36	RISB-12-0.5-20141215	12/15/2014	0.5	Soil	78	1.6	24	---
			RISB-12-2.5-20141216	12/16/2014	2.5	Soil	17	0.16 J	25	3.2
			RISB-12-10.0-20141216	12/16/2014	10	Soil	27	0.55	19	---
			RISB-12-15.0-20141216	12/16/2014	15	Soil	32	2.3	15	---
			RISB-12-15.0-20141216-FD	12/16/2014	15	Soil Dup.	32	2.2	14	---
			RISB-12-17.5-20141216	12/16/2014	17.5	Soil	20	12	18	---
			RISB-12-GW-20141216	12/16/2014	20-30	***GW Grab***	***680***	***2,500***	***13***	---
Soil Boring RISB-13	26,719,799.18	828,682.61	RISB-13-0.5-20141217	12/17/2014	0.5	Soil	39	19	13	---
			RISB-13-5.0-20141218	12/18/2014	5	Soil	4.5	11	15	---
			RISB-13-10.0-20141218	12/18/2014	10	Soil	3.1	5.3	13	---
			RISB-13-15.0-20141218	12/18/2014	15	Soil	3.6	3.8	11	---
			RISB-13-GW-20141218	12/18/2014	18-30	***GW Grab***	***270***	***670***	***2.0***	---
Soil Boring RISB-14	26,719,953.80	828,613.79	RISB-14-0.5-20141216	12/16/2014	0.5	Soil	18	5.2	21	---
			RISB-14-5.0-20141216	12/16/2014	5	Soil	12	7.0	19	---
			RISB-14-10.0-20141216	12/16/2014	10	Soil	8.0	11	20	---
			RISB-14-15.0-20141216	12/16/2014	15	Soil	5.1	5.6	15	---
			RISB-14-19.0-20141216	12/16/2014	19	Soil	2.6	3.3	11	---
			RISB-14-19.0-20141216-FD	12/16/2014	19	Soil Dup.	2.2	3.3	13	---
			RISB-14-GW-20141216	12/16/2014	23-35	***GW Grab***	***310***	***850***	***2.9***	---

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
AREA 4 - Area West of Pond Mn-1										
Soil Boring RISB-30	26,718,842.10	828,453.69	RISB-30-0.5-20141118	11/18/2014	0.5	Soil	1.7	0.72	20	ND<0.51
			RISB-30-5.0-20141118	11/18/2014	5	Soil	25	25	19	ND<0.53
			RISB-30-10.0-20141118	11/18/2014	10	Soil	3.9	2.9	18	ND<0.52
			RISB-30-15.0-20141118	11/18/2014	15	Soil	3.6	11	23	ND<0.53
			RISB-30-20.0-20141118	11/18/2014	20	Soil	0.84	0.75	18	0.95 J
			RISB-30-25.0-20141118	11/18/2014	25	Soil	2.7	1.6	23	ND<0.52
			RISB-30-25.0-20141118-FD	11/18/2014	25	Soil Dup.	2.6	1.8	23	ND<0.52
			RISB-30-30.0-20141118	11/18/2014	30	Soil	5.5	16	18	1.1
			RISB-30-GW-20141118	11/18/2014	33-40	***GW Grab***	***390***	***1,900***	***9.6***	***910***
Soil Boring RISB-31	26,718,923.37	828,526.74	RISB-31-0.5-20141119	11/19/2014	0.5	Soil	39	11	12	ND<0.54
			RISB-31-5.0-20141119	11/19/2014	5	Soil	25	30	12	ND<0.54
			RISB-31-10.0-20141119	11/19/2014	10	Soil	21	42	11	ND<0.53
			RISB-31-15.0-20141119	11/19/2014	15	Soil	23	45	12	ND<0.54
			RISB-31-20.0-20141119	11/19/2014	20	Soil	26	29	12	ND<0.52
			RISB-31-25.0-20141120	11/20/2014	25	Soil	17 J	22	13	ND<0.52
			RISB-31-25.0-20141120-FD	11/20/2014	25	Soil Dup.	7.7 J	16	14	ND<0.52
			RISB-31-30.0-20141120	11/20/2014	30	Soil	6.3 J	19 J	13	ND<0.54
			RISB-31-GW-20141119	11/19/2014	33-40	***GW Grab***	***210***	***640***	***1.2***	***170***
Soil Boring RISB-32	26,718,876.50	828,353.19	RISB-32-0.5-20141120	11/20/2014	0.5	Soil	81 J	48 J	17	ND<0.47
			RISB-32-5.0-20141120	11/20/2014	5	Soil	17 J	19 J	14	ND<0.57
			RISB-32-10.0-20141120	11/20/2014	10	Soil	32 J	22 J	18	ND<0.56
			RISB-32-15.0-20141120	11/20/2014	15	Soil	3.1 J	0.97 J	18	ND<0.56
			RISB-32-20.0-20141120	11/20/2014	20	Soil	3.4 J	2.5 J	17	0.74 J
			RISB-32-20.0-20141120-FD	11/20/2014	20	Soil Dup.	3.8 J	2.4 J	17	0.64 UJ
			RISB-32-25.0-20141120	11/20/2014	25	Soil	1.6 J	1.2 J	16	1.1
			RISB-32-30-20141120	11/20/2014	30	Soil	37 J	140 J	22	6.6
			RISB-32-GW-20141120	11/20/2014	33-40	***GW Grab***	***600***	***1,700***	***7.9***	***620***

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
Soil Boring RISB-33	26,718,946.05	828,419.89	RISB-33-0.5-20141119	11/19/2014	0.5	Soil	0.12	ND<0.052	11	ND<0.51
			RISB-33-5.0-20141119	11/19/2014	5	Soil	4.7	1.1 J	13	ND<0.52
			RISB-33-5.0-20141119-FD	11/19/2014	5	Soil Dup.	6.0	2.0 J	13	ND<0.52
			RISB-33-10.0-20141119	11/19/2014	10	Soil	7.9	6	13	ND<0.51
			RISB-33-15.0-20141119	11/19/2014	15	Soil	4.6	4.1	14	ND<0.54
			RISB-33-20.0-20141119	11/19/2014	20	Soil	1.8 J	0.75	11	ND<0.54
			RISB-33-25.0-20141119	11/19/2014	25	Soil	1.9	0.73	11	ND<0.50
			RISB-33-30.0-20141119	11/19/2014	30	Soil	1.1	0.20 J	13	ND<0.52
			RISB-33-GW-20141119	11/19/2014	35-45	***GW Grab***	***510***	***660***	***6.1***	***790***
Soil Boring RISB-34	26,719,023.40	828,500.93	RISB-34-0.5-20141119	11/19/2014	0.5	Soil	2.6	0.21	10	ND<0.50
			RISB-34-5.0-20141119	11/19/2014	5	Soil	3.9	0.48	8.9	ND<0.50
			RISB-34-10.0-20141119	11/19/2014	10	Soil	40	7.1	11	ND<0.76
			RISB-34-15.0-20141119	11/19/2014	15	Soil	7.2	6.0	11	ND<0.56
			RISB-34-20.0-20141120	11/20/2014	20	Soil	5.9	2.8	13	0.58 J
			RISB-34-25.0-20141120	11/20/2014	25	Soil	1.3	0.69	11	1.2 J
			RISB-34-30.0-20141120	11/20/2014	30	Soil	6.7	18	12	1.7
			RISB-34-GW-20141119	11/19/2014	32-40	***GW Grab***	***230***	***1,300***	***6.2***	***400***
			RISB-34-GW-20141119-FD	11/19/2014	32-40	***GW Dup.***	***240***	***1,300***	***6.0***	***400***
Soil Boring RISB-35	26,718,968.77	828,323.67	RISB-35-0.5-20141119	11/19/2014	0.5	Soil	3.9	1.1	13	ND<0.51
			RISB-35-5.0-20141119	11/19/2014	5	Soil	14	12	11	ND<0.55
			RISB-35-10.0-20141119	11/19/2014	10	Soil	21	28	14	ND<0.53
			RISB-35-15.0-20141119	11/19/2014	15	Soil	4.5	2.4	10	ND<0.57
			RISB-35-15.0-20141119-FD	11/19/2014	15	Soil Dup.	4.6	2.5	12	ND<0.53
			RISB-35-20.0-20141119	11/19/2014	20	Soil	1.1	0.41	11	ND<0.53
			RISB-35-25.0-20141119	11/19/2014	25	Soil	5.4	2.5	17	1.3
			RISB-35-31.0-20141119	11/19/2014	31	Soil	37	120	32	16
			RISB-35-GW-20141119	11/19/2014	35-45	***GW Grab***	***670***	***1,900***	***6.4***	***520***

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
Soil Boring RISB-36	26,719,049.95	828,386.07	RISB-36-0.5-20141118	11/18/2014	0.5	Soil	0.63	0.39	18	ND<0.51
			RISB-36-5.0-20141118	11/18/2014	5	Soil	7.3	2.3	19	ND<0.52
			RISB-36-10.0-20141118	11/18/2014	10	Soil	12	10	19	ND<0.52
			RISB-36-15.0-20141118	11/18/2014	15	Soil	13	23	19	ND<0.54
			RISB-36-20.0-20141118	11/18/2014	20	Soil	4.3	7.7	13	4.0
			RISB-36-25.0-20141118	11/18/2014	25	Soil	6.1	9.6	16	0.77 J
			RISB-36-30.0-20141118	11/18/2014	30	Soil	30	91	27	5.4
			RISB-36-35.0-20141118	11/18/2014	35	Soil	65	380	38	110
			RISB-36-GW-20141118	11/18/2014	35-45	***GW Grab***	***0.077 J***	***2,400***	***13***	***750***
Soil Boring RISB-37	26,719,131.29	828,459.08	RISB-37-0.5-20141117	11/17/2014	0.5	Soil	6.5	0.65	34	ND<0.58
			RISB-37-5.0-20141118	11/18/2014	5	Soil	1.1	0.18 J	19	ND<0.53
			RISB-37-10.0-20141118	11/18/2014	10	Soil	2.2	0.35	19	ND<0.59
			RISB-37-15.0-20141118	11/18/2014	15	Soil	4.6	1.0 J	18	ND<0.56
			RISB-37-20.0-20141118	11/18/2014	20	Soil	0.61	0.094 J	18	0.68 J
			RISB-37-20.0-20141118-FD	11/18/2014	20	Soil Dup.	0.68	0.16 J	19	0.60 J
			RISB-37-25.0-20141118	11/18/2014	25	Soil	1.5	0.61	13	1.1
			RISB-37-30.0-20141118	11/18/2014	30	Soil	28	150	27	33
			RISB-37-GW-20141118	11/18/2014	31-40	***GW Grab***	***310***	***1,800***	***9.3***	***630***

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
AREA 5 - North of WC-East Pond										
Soil Boring RISB-38	26,720,933.21	827,827.00	RISB-38-0.5-20141201	12/1/2014	0.5	Soil	0.14	0.17 J	13	ND<0.50
			RISB-38-5.0-20141201	12/1/2014	5	Soil	17	14	17	ND<0.54
Soil Boring RISB-42	26,721,062.55	827,804.35	RISB-42-0.5-20141201	12/1/2014	0.5	Soil	0.017 J	ND<0.051	16	ND<0.51
			RISB-42-5.0-20141201	12/1/2014	5	Soil	0.18	0.20 J	19	ND<0.52
Soil Boring RISB-43	26,721,018.19	827,930.02	RISB-43-0.5-20141121	12/1/2014	0.5	Soil	0.19	0.10 J	14	0.47 UJ
			RISB-43-5.0-20141121	12/1/2014	5	Soil	17	15	14	0.55 UJ
			RISB-43-5.0-20141121-FD	12/1/2014	5	Soil Dup.	17	14	15	0.55 UJ
Soil Boring RISB-44	26,720,966.47	828,052.86	RISB-44-0.5-20141121	12/1/2014	0.5	Soil	0.47	ND<0.052	14	0.48 UJ
			RISB-44-5.0-20141121	12/2/2014	5	Soil	12	15	13	0.50 UJ
Soil Boring RISB-47	26,720,836.61	828,433.42	RISB-47-0.5-20141120	11/20/2014	0.5	Soil	7.9 J	8.5 J	13	ND<0.47
			RISB-47-5.0-20141120	11/20/2014	5	Soil	1.6 J	4.7 J	14	ND<0.50
Soil Boring RISB-48	26,720,784.11	828,555.32	RISB-48-0.5-20141120	11/20/2014	0.5	Soil	1.8 J	0.79 J	13	ND<0.48
			RISB-48-5.0-20141121	11/21/2014	5	Soil	14	11	14	0.52 UJ
Soil Boring RISB-49	26,721,149.91	827,907.92	RISB-49-0.5-20141117	11/17/2014	0.5	Soil	3.6	4.0	10	ND<0.48
			RISB-49-5.0-20141117	11/17/2014	5	Soil	16	15	10	ND<0.52
			RISB-49-10.0-20141117	11/17/2014	10	Soil	9.4	8.7	11	ND<0.51
AREA 6 - Southwest of GW-11 Pond										
Soil Boring RISB-50	26,719,726.35	826,341.33	RISB-50-0.5-20141029	10/29/2014	0.5	Soil	---	---	---	---
			RISB-50-5.0-20141029	10/29/2014	5	Soil	---	---	---	---
			RISB-50-10.0-20141029	10/29/2014	10	Soil	---	---	---	---
Soil Boring RISB-51	26,719,752.72	826,412.39	RISB-51-0.5-20141030	10/30/2014	0.5	Soil	---	---	---	---
			RISB-51-5.0-20141030	10/30/2014	5	Soil	---	---	---	---
			RISB-51-5.0-20141030-FD	10/30/2014	5	Soil Dup.	---	---	---	---
			RISB-51-10.0-20141030	10/30/2014	10	Soil	---	---	---	---
Soil Boring RISB-52	26,719,857.74	826,444.80	RISB-52-0.5-20141030	10/30/2014	0.5	Soil	---	---	---	---
			RISB-52-5.0-20141030	10/30/2014	5	Soil	---	---	---	---
			RISB-52-10.0-20141030	10/30/2014	10	Soil	---	---	---	---

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
AREA 7 - Northwest of L'Hoist (Area of Chloroform Impacts to Soil Gas)										
Soil Boring RISB-53	26,718,448.06	827,606.56	RISB-53-0.5-20141106	11/6/2014	0.5	Soil	---	---	---	ND<0.50
			RISB-53-5.0-20141106	11/6/2014	5	Soil	---	---	---	3.0
			RISB-53-5.0-20141106-FD	11/6/2014	5	Soil Dup.	---	---	---	2.4
			RISB-53-10.0-20141107	11/7/2014	10	Soil	---	---	---	2.7
			RISB-53-15.0-20141107	11/7/2014	15	Soil	---	---	---	5.2
			RISB-53-20.0-20141107	11/7/2014	20	Soil	---	---	---	3.2
			RISB-53-24.0-20141107	11/7/2014	24	Soil	---	---	---	15
			RISB-53-GW-20141107	11/7/2014	27-30	***GW Grab***	---	---	---	***80***
			RISB-53-GW-20141107-FD	11/7/2014	27-30	***GW Dup.***	---	---	---	***64***
Soil Boring RISB-54	26,718,444.30	827,723.25	RISB-54-0.5-20141117	11/17/2014	0.5	Soil	---	---	---	ND<0.51
			RISB-54-5.0-20141117	11/17/2014	5	Soil	---	---	---	ND<0.61
			RISB-54-10.0-20141117	11/17/2014	10	Soil	---	---	---	2.6 J
			RISB-54-15.0-20141117	11/17/2014	15	Soil	---	---	---	1.7
			RISB-54-20.0-20141117	11/17/2014	20	Soil	---	---	---	2.8
			RISB-54-25.0-20141117	11/17/2014	25	Soil	---	---	---	4.0
			RISB-54-GW-20141117	11/17/2014	39-40	***GW Grab***	---	---	---	***28***
Soil Boring RISB-55	26,718,454.84	827,802.58	RISB-55-0.5-20141114	11/14/2014	0.5	Soil	---	---	---	ND<0.50
			RISB-55-5.0-20141114	11/14/2014	5	Soil	---	---	---	ND<0.58
			RISB-55-5.0-20141114-FD	11/14/2014	5	Soil Dup.	---	---	---	ND<0.55
			RISB-55-10.0-20141114	11/14/2014	10	Soil	---	---	---	1 J
			RISB-55-10.0-20141114-FD	11/14/2014	10	Soil Dup.	---	---	---	0.88 J
			RISB-55-15.0-20141114	11/14/2014	15	Soil	---	---	---	1.2
			RISB-55-20.0-20141114	11/14/2014	20	Soil	---	---	---	0.97 J
			RISB-55-25.0-20141114	11/14/2014	25	Soil	---	---	---	3.7
			RISB-55-30.0-20141114	11/14/2014	30	Soil	---	---	---	2.4
			RISB-55-GW-20141114	11/14/2014	41-43	***GW Grab***	---	---	---	***79***

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
AREA 8 - North of Unit Buildings (Area of Chloroform Impacts to Soil Gas)										
Soil Boring RISB-56	26,717,586.03	828,165.14	RISB-56-0.5-20141104	11/4/2014	0.5	Soil	---	---	---	ND<0.49
			RISB-56-5.0-20141104	11/4/2014	5	Soil	---	---	---	ND<0.55
			RISB-56-10.0-20141104	11/4/2014	10	Soil	---	---	---	ND<0.53
			RISB-56-15.0-20141104	11/4/2014	15	Soil	---	---	---	ND<0.53
			RISB-56-15.0-20141104-FD	11/4/2014	15	Soil Dup.	---	---	---	ND<0.54
			RISB-56-18.0-20141104	11/4/2014	20	Soil	---	---	---	ND<0.49
			RISB-56-25.0-20141104	11/4/2014	25	Soil	---	---	---	0.8 J
			RISB-56-29.0-20141104	11/4/2014	29	Soil	---	---	---	1.5
			RISB-56-35.0-20141104	11/4/2014	35	Soil	---	---	---	31
			RISB-56-GW-20141104	11/4/2014	43-45	***GW Grab***	---	---	---	***440***
			RISB-56-GW-20141104-FD	11/4/2014	43-45	***GW Dup.***	---	---	---	***430***
Soil Boring RISB-57	26,717,604.90	828,599.91	RISB-57-0.5-20141103	11/3/2104	0.5	Soil	---	---	---	ND<0.44
			RISB-57-5.0-20141103	11/3/2104	5	Soil	---	---	---	ND<0.43
			RISB-57-10.0-20141103	11/3/2104	10	Soil	---	---	---	1.6
			RISB-57-15.0-20141103	11/3/2104	15	Soil	---	---	---	0.49 J
			RISB-57-20.0-20141103	11/3/2104	20	Soil	---	---	---	0.87 J
			RISB-57-20.0-20141103-FD	11/3/2104	20	Soil Dup.	---	---	---	1.2 J
			RISB-57-25.0-20141103	11/3/2104	25	Soil	---	---	---	1.1
			RISB-57-30.0-20141103	11/3/2104	30	Soil	---	---	---	1.3
			RISB-57-35.0-20141103	11/3/2014	35	Soil	---	---	---	34
			RISB-57-GW-20141103	11/3/2014	41-45	***GW Grab***	---	---	---	***89***

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
AREA 8 - Monitoring Well Pilot Borings Near Unit Buildings										
Pilot Boring Well M-189	26,717,101.09	828,371.74	M-189-0.5-20141202	12/2/2014	0.5	Soil	270	43	16	ND<0.50
			M-189-5.0-20141202	12/2/2014	5	Soil	82	31	15	ND<0.50
			M-189-5.0-20141202-FD	12/2/2014	5	Soil Dup.	100	30	17	ND<0.51
			M-189-10.0-20141202	12/2/2014	10	Soil	12	2.7	16	ND<0.48
			M-189-15.0-20141202	12/2/2014	15	Soil	19	13	21	ND<0.50
			M-189-20.0-20141202	12/2/2014	20	Soil	260	1,700	58	0.73 J
			M-189-25.0-20141202	12/2/2014	25	Soil	43	370	25	ND<0.56
			M-189-30.0-20141202	12/2/2014	30	Soil	54	2,100	38	2.4
			M-189 GW-20150310	3/10/2015	42-50	***GW***	***0.85***	***3.8***	***0.03***	***1.8***
Pilot Boring Well M-190	26,717,162.19	828,816.12	M-190-0.5-20141205	12/5/2014	0.5	Soil	0.38	0.26	14	ND<0.51
			M-190-5.0-20141205	12/5/2014	5	Soil	0.52	0.37	14	ND<0.48
			M-190 GW-20150310	3/10/2015	43-50	***GW***	***9.7***	***140***	***0.35***	***9.3***
Pilot Boring Well M-191	26,717,253.84	828,087.42	M-191-1.0-20141201	12/1/2014	1	Soil	180	830	150 J	7.7
			M-191-1.0-20141201-FD	12/1/2014	1	Soil Dup.	170	860	330 J	6.3
			M-191-5.0-20141201	12/1/2014	5	Soil	210	550	38	2.7
			M-191-10.0-20141201	12/1/2014	10	Soil	890	2,300	60	2.6
			M-191-15.0-20141201	12/1/2014	15	Soil	1,000	5,000	88	2.5
			M-191-20.0-20141201	12/1/2014	20	Soil	1,100	17,000	210	12
			M-191-25.0-20141201	12/1/2014	25	Soil	5,600	74,000	720	11
			M-191-30.0-20141201	12/1/2014	30	Soil	2,400	42,000	220	130
			M-191-33.0-20141201	12/1/2014	33	Soil	1,100	15,000	110	230
			M-191 GW-20150310	3/10/2015	45-50	***GW***	***64***	***1,000***	***4.4***	***46***

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
Pilot Boring Well M-192	26,717,297.62	828,393.86	M-192-0.5-20141203	12/3/2014	0.5	Soil	110	13	7.3	0.93 J
			M-192-5.0-20141203	12/3/2014	5	Soil	190	50	17	1.8
			M-192-10.0-20141203	12/3/2014	10	Soil	150	93	---	5.0
			M-192-15.0-20141203	12/3/2014	15	Soil	320	310	---	2.4
			M-192-15.0-20141203-FD	12/3/2014	15	Soil Dup.	200	320	---	2.0
			M-192-20.0-20141203	12/3/2014	20	Soil	180	190	---	7.6
			M-192-25.0-20141203	12/3/2014	25	Soil	620	390	---	4.3
			M-192-30.0-20141203	12/3/2014	30	Soil	380	260	---	64
			M-192-35.0-20141203	12/3/2014	35	Soil	1,200	1,300	---	54
			M-192 GW-20150311	3/11/2015	43-50	***GW***	***250***	***360***	***0.41***	***23***
Pilot Boring Well M-193	26,717,398.56	828,805.73	M-193-0.5-20141204	12/4/2014	0.5	Soil	2.4	1.7	15	ND<0.49
			M-193-5.0-20141204	12/4/2014	5	Soil	2	0.28	15	ND<0.52
			M-193-10.0-20141204	12/4/2014	10	Soil	6.7	0.98	15	ND<0.51
			M-193-15.0-20141204	12/4/2014	15	Soil	31	2.7	14	ND<0.55
			M-193-20.0-20141204	12/4/2014	20	Soil	56	4.3	16	ND<0.51
			M-193-20.0-20141204-FD	12/4/2014	20	Soil Dup.	62	4.2	13	ND<0.49
			M-193-25.0-20141204	12/4/2014	25	Soil	81	8.1	12	0.71 J
			M-193-30.0-20141204	12/4/2014	30	Soil	350	61	25	4.6
			M-193-35.0-20141204	12/4/2014	35	Soil	330	110	47	13
			M-193-40.0-20141204	12/4/2014	40	Soil	65	4.1	21	---
			M-193 GW-20150311	3/11/2015	44-50	***GW***	***400***	***170***	***0.42***	***13***

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
AREA 8 - Leach Plant										
Soil Boring RISB-58	26,718,274.07	828,397.25	RISB-58-0.5-20141112	11/12/2014	0.5	Soil	0.039 J	ND<0.055	9.5	ND<0.52
			RISB-58-5.0-20141113	11/13/2014	5	Soil	0.010 UJ	0.055 UJ	12	ND<0.54
			RISB-58-5.0-20141113-FD	11/13/2014	5	Soil Dup.	0.62 J	0.15 J	10	ND<0.54
			RISB-58-10.0-20141113	11/13/2014	10	Soil	0.010 UJ	ND<0.056	12	ND<0.51
			RISB-58-15.0-20141113	11/13/2014	15	Soil	0.011 UJ	ND<0.055	13	ND<0.62
			RISB-58-20.0-20141113	11/13/2014	20	Soil	ND<0.010	ND<0.055	17	ND<0.52
			RISB-58-25.0-20141113	11/13/2014	25	Soil	0.010 UJ	ND<0.055	18	ND<0.54
			RISB-58-30.0-20141113	11/13/2014	30	Soil	0.010 UJ	ND<0.053	13	ND<0.48
			RISB-58-35.0-20141113	11/13/2014	35	Soil	0.010 UJ	ND<0.055	12	ND<0.53
			RISB-58-40.0-20141113	11/13/2014	40	Soil	0.043 J	ND<0.058	29	1.8
			RISB-58-GW-20141113	11/13/2014	46-54	***GW Grab***	***710***	***1,200***	***4.0***	***350***
Soil Boring RISB-59	26,718,126.08	828,580.22	RISB-59-0.8-20141105	11/5/2014	0.8	Soil	4.8	1.1	15	ND<0.54
			RISB-59-5.0-20141105	11/5/2014	5	Soil	2.6	0.93	7.1	ND<0.53
			RISB-59-5.0-20141105-FD	11/5/2014	5	Soil Dup.	2.4	0.98	8.3	ND<0.50
			RISB-59-10.0-20141105	11/5/2014	10	Soil	2.5	ND<0.054	12	ND<0.53
			RISB-59-15.0-20141105	11/5/2014	15	Soil	2.6	ND<0.055	12	ND<0.55
			RISB-59-20.0-20141105	11/5/2014	20	Soil	2.9	0.38	12	ND<0.53
			RISB-59-25.0-20141105	11/5/2014	25	Soil	2.3	ND<0.054	11	ND<0.54
			RISB-59-30.0-20141105	11/5/2014	30	Soil	2.0	0.091 J	7.7	ND<0.52
			RISB-59-35.0-20141105	11/5/2014	35	Soil	2.1	ND<0.055	22	ND<0.54
			RISB-59-39.0-20141105	11/5/2014	39	Soil	15	53	77	ND<0.63
			RISB-59-GW-20141105	11/5/2014	42-50	***GW Grab***	***19***	***720***	***2.9***	***200***

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
Soil Boring RISB-60	26,718,176.10	828,889.04	RISB-60-0.5-20141112	11/12/2014	0.5	Soil	0.19 J	ND<0.058	18	ND<0.52
			RISB-60-5.0-20141112	11/12/2014	5	Soil	0.37 J	ND<0.055	12	ND<0.54
			RISB-60-10.0-20141112	11/12/2014	10	Soil	0.81 J	ND<0.055	15	ND<0.56
			RISB-60-15.0-20141112	11/12/2014	15	Soil	4.3 J	ND<0.055	13	ND<0.51
			RISB-60-20.0-20141112	11/12/2014	20	Soil	6.3	ND<0.055	14	ND<0.50
			RISB-60-25.0-20141112	11/12/2014	25	Soil	1.3 J	ND<0.055	16	ND<0.55
			RISB-60-30.0-20141112	11/12/2014	30	Soil	0.27 J	ND<0.053	14	ND<0.60
			RISB-60-30.0-20141112-FD	11/12/2014	30	Soil Dup	0.30 J	ND<0.053	16	ND<0.52
			RISB-60-35.0-20141112	11/12/2014	35	Soil	0.64 J	ND<0.056	16	ND<0.53
			RISB-60-GW-20141112	11/12/2014	45-55	***GW Grab***	***220***	***170***	***0.17***	***7.0 J***
			RISB-60-GW-20141112-FD	11/12/2014	45-55	***GW Dup.***	***210***	***160***	***0.17***	***28 J***
Soil Boring RISB-61	26,717,984.05	828,403.17	RISB-61-0.8-20141105	11/5/2014	0.8	Soil	400	80	13	ND<0.52
			RISB-61-5.0-20141106	11/6/2014	5	Soil	63	16	16	ND<0.52
			RISB-61-10.0-20141106	11/6/2014	10	Soil	110	24	310	ND<0.53
			RISB-61-15.0-20141106	11/6/2014	15	Soil	100	42	12	ND<0.54
			RISB-61-20.0-20141106	11/6/2014	20	Soil	110	28	35	ND<0.52
			RISB-61-25.0-20141106	11/6/2014	25	Soil	120	43	20	0.88 J
			RISB-61-25.0-20141106-FD	11/6/2014	25	Soil Dup.	160	44	16	0.86 J
			RISB-61-30.0-20141106	11/6/2014	30	Soil	2,200	990	23	4.7
			RISB-61-35.0-20141106	11/6/2014	35	Soil	1,500	670	22	29
			RISB-61-GW-20141106	11/6/2014	37-45	***GW Grab***	***460***	***710***	***2.0***	***200***

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate ppm	Chlorate ppm	Chromium ppm	Chloroform ppb
Soil Boring RISB-62	26,717,836.03	828,630.73	RISB-62-0.8-20141111	11/11/2014	0.8	Soil	ND<0.010	ND<0.054	12	ND<0.50
			RISB-62-5.0-20141111	11/11/2014	5	Soil	ND<0.010	ND<0.054	17	ND<0.51
			RISB-62-10.0-20141111	11/11/2014	10	Soil	ND<0.010	ND<0.054	20	ND<0.54
			RISB-62-15.0-20141111	11/11/2014	15	Soil	ND<1.0	ND<0.054	25	ND<0.53
			RISB-62-20.0-20141111	11/11/2014	20	Soil	ND<0.010	0.063 J	24	ND<0.51
			RISB-62-25.0-20141111	11/11/2014	25	Soil	0.16	ND<0.053	24	ND<0.53
			RISB-62-30.0-20141111	11/11/2014	30	Soil	11	110	47	22
			RISB-62-30.0-20141111-FD	11/11/2014	30	Soil Dup.	8.9	110	43	30
			RISB-62-GW-20141111	11/11/2014	32-40	***GW Grab***	***53***	***500***	***2.3***	***120***
Soil Boring RISB-63	26,717,894.25	828,902.54	RISB-63-0.5-20141110	11/10/2014	0.5	Soil	49	36	13	ND<0.51
			RISB-63-5.0-20141110	11/10/2014	5	Soil	130	80	14	ND<0.51
			RISB-63-10.0-20141110	11/10/2014	10	Soil	92	72	30	ND<0.52
			RISB-63-15.0-20141110	11/10/2014	15	Soil	28	31	18	ND<0.50
			RISB-63-20.0-20141110	11/10/2014	20	Soil	17	25	17	ND<0.49
			RISB-63-25.0-20141110	11/10/2014	25	Soil	3.5 J	5.0	12	ND<0.50
			RISB-63-30.0-20141110	11/10/2014	30	Soil	60	31	34	1.8
			RISB-63-30.0-20141110-FD	11/10/2014	30	Soil Dup.	77	31	46	1.5
			RISB-63-35.0-20141110	11/10/2014	35	Soil	61	52	38	4.6
			RISB-63-GW-20141110	11/10/2014	35-45	***GW Grab***	***260***	***170***	***0.35***	***28***
Pilot Boring Well M-186D	26,718,358.35	829,041.58	M-186D-0.5-20141208	12/8/2014	0.5	Soil	100	17,000	19	ND<0.50
			M-186D-0.5-20141208-FD	12/8/2014	0.5	Soil Dup	120	17,000	18	ND<0.49
			M-186D-5.0-20141208	12/8/2014	5	Soil	13	17	12	ND<0.50
			M-186D-10.0-20141208	12/8/2014	10	Soil	---	---	---	ND<0.50
			M-186D-15.0-20141208	12/8/2014	15	Soil	---	---	---	ND<0.49
			M-186D-20.0-20141208	12/8/2014	20	Soil	---	---	---	ND<0.49
Well M-148A	26,718,357.14	829,030.34	M-148A-GW-20150128	1/28/2015	40-50	***GW***	***3.6***	***41***	***0.12***	***6.8***

TABLE 4-1. SUMMARY OF ANALYTICAL RESULTS - KEY CONSTITUENTS
NERT RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site; Henderson, Nevada

Location Name	Northing (feet)	Easting (feet)	Sample Name	Date Sampled	Depth (ft bgs)	Sample Type	Perchlorate	Chlorate	Chromium	Chloroform
							ppm	ppm	ppm	ppb

Notes:

ft bgs - feet below ground surface

'---' means not tested for this chemical.

ND - Not detected above the laboratory reporting limit shown.

J - Estimated concentration.

UJ - The analyte was analyzed for, but it was not detected and the sample detection limit is an estimated quantity.

GW Grab - Groundwater grab sample collected from a temporary well screen placed in the open borehole. The sample depth listed is the saturated screen interval sampled.

GW Dup. - Groundwater field duplicate sample

GW - Groundwater sample collected from permanent shallow well.

Soil Dup. - Soil field duplicate sample

ppb - parts per billion. Soil results are reported in µg/kg (micrograms per kilogram). Groundwater results are reported in µg/L (micrograms per liter).

ppm - parts per million. Soil results are reported in mg/kg (milligrams per kilogram). Groundwater results are reported in mg/L (milligrams per liter).

1. The Area 6 borings (RISB-50, RISB-51, RISB-52) were analyzed for organochlorine pesticides and dioxins/furans only.
2. Shallow well M-148A is located 11 feet NE of the M-186D pilot boring and provides shallow groundwater concentration data near M-186D.

TABLE 4-2. STATISTICAL SUMMARY OF SOIL SAMPLING RESULTS FROM UPPER TEN FEET
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Leaching Screening Levels[1]		Industrial Worker Screening Levels[1]		RZ-A Background[2]		BMI Complex Background[3]		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source[1]	Level	Source[4]	Minimum	Maximum	Minimum	Maximum				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
Chlorine Oxyanions	Chlorate	µg/kg	1,030	LBCL	38,900,000	BCL	57 J	29,900	--	--	407	308	75.7	<52	5,800 UJ	45 J	20,900,000	3,200	260,000	1,900,000	7.3	SA106
	Chlorite	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<40	<40	--	--	--	--	--	--	--
	Perchlorate	µg/kg	18.5	LBCL	908,000	BCL	46 J	17,000 J+	--	--	588	567	96.4	10 UJ	<430	12	56,000,000	7,000	380,000	2,900,000	7.6	RSAR7
Metals/ Inorganics	Aluminum	mg/kg	75	LBCL	100,000	BCL	7,340	11,400	3,700	15,000	415	415	100.0	--	--	3,500	14,000	8,900	8,800	1,400	0.16	M-191
	Antimony	mg/kg	0.3	LBCL	519	BCL	0.6 J-	3.4	0.039	0.5	412	119	28.9	0.5 UJ	2.4 UJ	0.11 J-	30.3	0.21	1.2	3.7	3.1	SA130
	Arsenic	mg/kg	1	LBCL	2.15	BCL	1.6	4.25	2.1	7.2	910	910	100.0	--	--	0.58	2,000	3.3	16	120	7.4	SA130
	Barium	mg/kg	82	LBCL	100,000	BCL	111	213	73	840	415	415	100.0	--	--	65	6,760	180	220	370	1.7	SA56
	Beryllium	mg/kg	3	LBCL	2,540	BCL	0.362	0.588 J	0.16	0.89	309	309	100.0	--	--	0.221 J	2.16	0.47	0.48	0.15	0.31	SA130
	Boron	mg/kg	21.4	LBCL	100,000	BCL	3.6 J	11.7	3.2	12	415	194	46.7	<1.412	<26	1.5 J	1,510	9.5	31	150	4.9	SA62
	Cadmium	mg/kg	0.4	LBCL	1,270	BCL	<0.1	0.48	0.052	0.16	415	224	54.0	<0.005	<2.6	0.04 J	8.88	0.15	0.26	0.64	2.4	SA103
	Calcium	mg/kg	--	--	--	--	19,200	43,300	8,200	83,000	309	308	99.7	<55.6	<55.6	9,930 J+	62,500	26,000	27,000	9,200	0.34	RSAM2
	Chromium (total)	mg/kg	180,000	CAL	--	--	5.57	10.7 J	2.6	17	417	417	100.0	--	--	3.48	330 J	9.4	13	19	1.5	M-191
	Chromium VI	mg/kg	2	LBCL	1,230	BCL	0.26 J	<0.43	0.25	0.25	623	130	20.9	<0.11	<0.51	0.11 J	106	0.84	4.6	15	3.2	SA106
	Cobalt	mg/kg	0.453	LBCL	385	BCL	5.4	9.1	3.7	16	466	466	100.0	--	--	1.7	420	7.6	13	34	2.6	M-186D
	Copper	mg/kg	45.8	LBCL	48,200	BCL	15.8	140	7.8	30	415	415	100.0	--	--	7.1	171	18	22	18	0.81	SA130
	Iron	mg/kg	7.56	LBCL	100,000	BCL	11,300	20,600	5,400	20,000	415	415	100.0	--	--	5,000	25,000	15,000	15,000	2,700	0.18	M-191
	Lead	mg/kg	14	CAL	800	BCL	7.1	72.8	3	35	491	490	99.8	<5.4	<5.4	3.6 J-	5,280	9.2	39	310	7.9	DS-C23-1
	Lithium	mg/kg	20	LBCL	2,600	BCL	--	--	7.5	26	14	14	100.0	--	--	9.9 J	21.9	12	14	3.8	0.28	TSB-GJ-02
	Magnesium	mg/kg	889	LBCL	100,000	BCL	7,700	13,000	4,600	18,000	478	477	99.8	55.6 UJ	55.6 UJ	3,340 J	189,000	9,700	12,000	18,000	1.4	DS-DB-1
	Manganese	mg/kg	1.3	LBCL	28,100	BCL	262	537	150	1,100	612	612	100.0	--	--	77.1	204,000 J	400	2,400	12,000	4.8	DS-C23-1
	Mercury	mg/kg	0.104	LBCL	208	BCL	0.006 J	0.362	0.0072	0.11	417	359	86.1	<0.00668	<0.041	0.003 J	1.99	0.018	0.055	0.17	3.2	SA169
	Molybdenum	mg/kg	3.37	LBCL	6,490	BCL	0.31	32.7	0.17	2	415	291	70.1	<0.0523	<10	0.17 J	82.2	0.49	1.3	6.3	4.8	SA56
	Nickel	mg/kg	7	LBCL	24,700	BCL	12.7	21.4	7.8	30	415	415	100.0	--	--	5.8	180	15	17	14	0.8	M-186D
	Niobium	mg/kg	1.17	LBCL	130	BCL	--	--	1	2.8	42	4	9.5	<0.7559	<2.1	1.9 J	9.2 J+	2.2	3.9	3.5	0.91	TSB-GR-02
	Palladium	mg/kg	--	--	--	--	--	--	0.14	1.5	57	14	24.6	<0.048	<0.06	0.33	0.79	0.47	0.48	0.11	0.23	TSB-GJ-07
	Phosphorus (total)	mg/kg	0.077	CAL	100,000	BCL	684	1,220	640	2,000	325	325	100.0	--	--	360	2,480	860	890	220	0.25	SA61
	Platinum	mg/kg	1.51	LBCL	649	BCL	0.006 J	<0.11	0.043	0.099	309	178	57.6	<0.01	<0.24	0.005 J	0.16	0.01	0.015	0.015	1	SA64
	Potassium	mg/kg	--	--	--	--	1,450	4,210	620	3,900	309	308	99.7	11.1 UJ	11.1 UJ	1,230 J	6,930 J	2,200	2,300	620	0.27	SA32
	Selenium	mg/kg	0.3	LBCL	6,490	BCL	0.8 J	<4.4	0.047	0.6	415	12	2.9	<0.16	<50	0.58 J	1.3 J	1	0.96	0.17	0.18	SA30
	Silicon	mg/kg	--	--	--	--	--	--	340	4,200	67	67	100.0	--	--	41 J	510 J	120	140	74	0.53	M-192
	Silver	mg/kg	0.85	LBCL	6,490	BCL	<0.5	<0.5	0.019	0.26	415	82	19.8	<0.022	<16	0.02	9.6	0.12	0.48	1.4	2.9	SA130
	Sodium	mg/kg	--	--	--	--	307	1,050	110	1,300	309	308	99.7	22.2 UJ	22.2 UJ	197	11,700	730	1,100	1,200	1.1	SA106
	Strontium	mg/kg	700	CAL	100,000	BCL	129	339	69	810	352	350	99.4	0.56 UJ	<213	72.5 J	1,200	190	210	100	0.5	SA56
	Sulfur	mg/kg	--	--	--	--	--	--	--	--	64	43	67.2	<210.7	<440	451 J	26,000	930	2,900	5,100	1.8	RISB-60
	Thallium	mg/kg	0.4	LBCL	85.7	BCL	0.071	0.193 J	0.1	1.8	415	288	69.4	<0.1	<0.28	0.054	61.8	0.1	0.45	3.7	8.3	SA56
	Tin	mg/kg	5,000	CAL	100,000	BCL	<10.2	<11	0.19	0.8	309	54	17.5	<8.6	<12.2	0.4	11.9	0.54	1.4	2.3	1.6	RSAK8
	Titanium	mg/kg	134,000	LBCL	100,000	BCL	480	1,080	200	1,000	309	309	100.0	--	--	310	1,270	760	740	180	0.24	SA166
	Tungsten	mg/kg	37.6	LBCL	9,730	BCL	<0.11	0.62	0.49	2.5	352	268	76.1	0.1 UJ	52 UJ	0.1 J-	69.9	0.23	0.93	5.3	5.7	SA130
	Vanadium	mg/kg	300	LBCL	6,490	BCL	28	54.9	15	59	309	309	100.0	--	--	17.7	111	43	43	10	0.24	SA130
	Zinc	mg/kg	620	LBCL	100,000	BCL	25.8	254	15	120	415	415	100.0	--	--	17.5 J-	511	34	40	35	0.88	SA130
	Zirconium	mg/kg	8	CAL	104	BCL	--	--	60	180	57	55	96.5	<26	<26	7.9 J	34 J	21	22	4.2	0.19	M-191
Other Inorganics	Ammonia	mg/kg	--	--	100,000	BCL	<0.52	<0.56	--	--	285	33	11.6	<0.51	<11.1	0.16 J	563 J	1.7	47	120	2.6	RSAM5
	Ammonia (as NH_3)	mg/kg	--	--	--	--	--	--	--	--	57	22	38.6	<1.2	<2.7	1.6 J	45	3.5	6.3	9	1.4	RISB-62
	Bicarbonate as HCO_3	mg/kg	--	--	--	--	--	--	--	--	57	57	100.0	--	--	1,200	93,000	29,000	31,000	18,000	0.58	M-192
	Bromide	mg/kg	87.4	LBCL	100,000	BCL	<1	1.2	--	--	372	37	9.9	0.0625 UJ	<28.4	0.2 J	83.3	1.2	4.1	14	3.3	SA15
	Chloride	mg/kg	--	--	--	--	3.3 J+	467	0.25	1,100	371	357	96.2	2.1 UJ	<85.2	0.9 J	6,670	66	330	740	2.2	RSAJ2
	Cyanide (total)	mg/kg	2	LBCL	27.9	BCL	<0.75	<1.1	--	--	204	5	2.5	<0.13	<1.22	0.48 J	1.3	0.6	0.75	0.34	0.46	RSAJ2
	Fluoride	mg/kg	--	--	55,000	BCL	--	--	0.051	2.5	14	5	35.7	<0.25	<0.25	0.52 J	2.3	0.75	1.1	0.73	0.7	TSB-GJ-05
	Hydroxide	mg/kg	--	--	--	--	--	--	--	--	57	0	0.0	<46	<190	--	--	--	--	--	--	--
	Nitrate/Nitrite	mg/kg	7	LBCL	100,000	BCL	--	--	--	--	768	445	57.9	<0.047	22 UJ	0.08 J	515 J	3.5	11	31	2.8	SA15
	ortho-Phosphate (total) (as PO_4)	mg/kg	--	--	--	--	--	--	--	--	51	2	3.9	<4.1	4.6 UJ	5.7	35	20	20	21	1	RISB-61
	ortho-Phosphate	mg/kg	--	--	--	--	--	--	--	--	46	7	15.2	<1.1	<56.9	2.4 J	2,900 J	5.7	420	1,100	2.6	SA11
	Sulfate	mg/kg	--	--	--	--	24.2	9,510 J+	0.61	4,100	361	356	98.6	<2.1	<22.2	6.7	31,700	180	990	2,900	2.9	SA130

TABLE 4-2. STATISTICAL SUMMARY OF SOIL SAMPLING RESULTS FROM UPPER TEN FEET
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Leaching Screening Levels[1]		Industrial Worker Screening Levels[1]		RZ-A Background[2]		BMI Complex Background[3]		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source[1]	Level	Source[4]	Minimum	Maximum	Minimum	Maximum				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
Radionuclides	Radium-226	pCi/g	0.006	LBCL	--	--	0.483	1.72 J	--	--	345	333	96.5	<0.500	<0.500	0.203	2.53	0.94	0.96	0.35	0.37	SA92
	Radium-228	pCi/g	0.006	LBCL	--	--	0.460	2.46	--	--	345	334	96.8	<0.445	<0.500	0.367	4.84	1.2	1.3	0.53	0.41	RSAJ7
	Thorium-228	pCi/g	0.0027	LBCL	--	--	1.16	2.88	1.1	2.3	348	348	100.0	--	--	0.178	3.12	1.7	1.7	0.35	0.21	SA172
	Thorium-230	pCi/g	0.001	LBCL	--	--	0.509	1.71	0.66	3	348	348	100.0	--	--	0.433 J-	4.31	1.1	1.2	0.46	0.39	SA74
	Thorium-232	pCi/g	0.0035	LBCL	--	--	1.02	2.07	1.1	2.2	348	348	100.0	--	--	0.143	2.52 J	1.5	1.5	0.34	0.22	SA189
	Thorium-234	pCi/g	--	--	--	--	--	--	-0.53	2.5	29	0	0.0	<7.34	<10.7	--	--	--	--	--	--	--
	Uranium-233/234	pCi/g	--	--	--	--	--	--	--	--	43	43	100.0	--	--	0.305	1.81	0.98	1	0.26	0.26	RISB-13
	Uranium-234	pCi/g	--	--	--	--	0.391 J	1.74	--	--	305	305	100.0	--	--	0.266	3.66	1	1.2	0.45	0.39	SA149
	Uranium-235	pCi/g	--	--	--	--	0.0176	0.203	--	--	305	212	69.5	<0.00925	<0.311	0.0114 J+	0.253	0.06	0.071	0.036	0.51	RSAK6
	Uranium-235/236	pCi/g	--	--	--	--	--	--	--	--	43	20	46.5	<0.0426	<0.103	0.0363	0.210 J	0.086	0.086	0.04	0.47	RISB-39
	Uranium-238	pCi/g	--	--	--	--	0.361	1.59	0.45	2.4	348	330	94.8	<1	<2.89	0.237 J	3.58	0.96	1.1	0.39	0.37	SA149
	Uranium (total)	mg/kg	13.5	LBCL	3,880	BCL	0.655	1.94	0.43	2.7	352	351	99.7	<0.11	<0.11	0.44 J	7.56	0.99	1.2	0.63	0.54	SA56
VOCs	Acetone	µg/kg	800	LBCL	100,000,000	BCL	4.3 J	75	--	--	418	151	36.1	1.5 UJ	<41	2.7	150 J+	15	22	23	1.1	SA106
	Acetonitrile	µg/kg	--	--	6,150,000	BCL	--	--	--	--	14	0	0.0	1.98 UJ	1.98 UJ	--	--	--	--	--	--	--
	t-Amyl methyl ether	µg/kg	--	--	--	--	<3.7	<7.9	--	--	404	0	0.0	<0.78	<10	--	--	--	--	--	--	--
	Benzene	µg/kg	2	LBCL	4,230	BCL	<3.7	<7.9	--	--	418	2	0.5	<0.169	<10	0.82 J	14 J-	7.4	7.4	9.3	1.3	SA169
	Bromobenzene	µg/kg	--	--	695,000	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.226	<10	--	--	--	--	--	--	--
	Bromochloromethane	µg/kg	--	--	--	--	<3.7	<7.9	--	--	418	0	0.0	<0.15	<10	--	--	--	--	--	--	--
	Bromodichloromethane	µg/kg	30	LBCL	3,370	BCL	<3.7	<7.9	--	--	418	2	0.5	<0.11	<10	0.4 J	0.69 J	0.54	0.54	0.21	0.38	SSAO8-10
	Bromoform	µg/kg	40	LBCL	325,000	BCL	<3.7	<7.9	--	--	418	1	0.2	<0.12	<10	1.7 J	1.7 J	1.7	1.7	--	--	SA102
	Bromomethane	µg/kg	10	LBCL	39,200	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.25	<13	--	--	--	--	--	--	--
	2-Butanone	µg/kg	1,600	CAL	34,100,000	BCL	0.79 J	<13	--	--	418	118	28.2	<0.93	<20	0.57 J	27	1.5	2.9	4.7	1.6	SSAO7-06
	n-Butylbenzene	µg/kg	--	--	237,000	BCL	<3.7	<7.9	--	--	418	1	0.2	<0.28	<10	1.2 J	1.2 J	1.2	1.2	--	--	RISB-59
	sec-Butylbenzene	µg/kg	--	--	223,000	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.246	<10	--	--	--	--	--	--	--
	Carbon disulfide	µg/kg	2,000	LBCL	721,000	BCL	--	--	--	--	14	0	0.0	<0.55	<0.55	--	--	--	--	--	--	--
	Carbon tetrachloride	µg/kg	3	LBCL	3,860	BCL	<3.7	<7.9	--	--	418	1	0.2	<0.32	<10	0.63 J	0.63 J	0.63	0.63	--	--	RSAN3
	Chlorobenzene	µg/kg	70	LBCL	695,000	BCL	<3.7	<7.9	--	--	418	7	1.7	<0.124	<10	0.64 J	5.5 J	1.2	1.7	1.7	0.97	SA10
	Chloroethane	µg/kg	--	--	1,250,000	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.351	<10	--	--	--	--	--	--	--
	Chloroform	µg/kg	30	LBCL	1,560	BCL	<3.7	<7.9	--	--	418	111	26.6	<0.142	<9.1	0.31 J	150	1.9	7.2	21	2.9	SA11
	Chloromethane	µg/kg	--	--	8,050	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.39	<10	--	--	--	--	--	--	--
	2-Chlorotoluene	µg/kg	--	--	511,000	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.26	<10	--	--	--	--	--	--	--
	4-Chlorotoluene	µg/kg	--	--	--	--	<3.7	<7.9	--	--	418	0	0.0	<0.39	<10	--	--	--	--	--	--	--
	Cumene	µg/kg	--	--	647,000	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.177	<10	--	--	--	--	--	--	--
	p-Cymene	µg/kg	--	--	647,000	BCL	<3.7	<7.9	--	--	418	2	0.5	<0.238	<10	0.55 J	0.77 J	0.66	0.66	0.16	0.24	RISB-59
	Dibromochloromethane	µg/kg	20	LBCL	6,090	BCL	<3.7	<7.9	--	--	418	1	0.2	0.22 UJ	<10	0.9 J	0.9 J	0.9	0.9	--	--	RISB-62
	1,2-Dibromoethane	µg/kg	--	--	179	BCL	<3.7	<7.9	--	--	404	0	0.0	<0.26	<10	--	--	--	--	--	--	--
	Dibromomethane	µg/kg	--	--	191,000	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.351	<10	--	--	--	--	--	--	--
	1,2-Dichlorobenzene	µg/kg	900	LBCL	373,000	BCL	0.38 J	<7.9	--	--	418	6	1.4	<0.15	<10	0.26 J	0.56 J	0.39	0.39	0.096	0.25	SA10
	1,3-Dichlorobenzene	µg/kg	--	--	373,000	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.13	<10	--	--	--	--	--	--	--
	1,4-Dichlorobenzene	µg/kg	100	LBCL	13,700	BCL	<3.7	<7.9	--	--	418	11	2.6	<0.108	<10	0.56 J	17	9.1	8.1	6.9	0.85	SA19
	Dichlorodifluoromethane	µg/kg	--	--	340,000	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.26	12 UJ	--	--	--	--	--	--	--
	1,1-Dichloroethane	µg/kg	1,000	LBCL	21,500	BCL	<3.7	<7.9	--	--	418	1	0.2	<0.11	<10	3 J	3 J	3	3	--	--	SA08
	1,2-Dichloroethane	µg/kg	1	LBCL	2,250	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.35	<10	--	--	--	--	--	--	--
	1,1-Dichloroethene	µg/kg	3	LBCL	1,280,000	BCL	0.53 J	<7.9	--	--	418	4	1.0	0.27 UJ	<10	0.55 J-	1.2 J	0.77	0.82	0.28	0.34	SSAN8-04
	1,2-Dichloroethene	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<0.543	<0.543	--	--	--	--	--	--	--
	cis-1,2-Dichloroethene	µg/kg	20	LBCL	741,000	BCL	<3.7	<7.9	--	--	418	1	0.2	<0.28	<10	4.1	4.1	4.1	4.1	--	--	RISB-57
	trans-1,2-Dichloroethene	µg/kg	30	LBCL	548,000	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.2	<10	--	--	--	--	--	--	--
	1,2-Dichloropropane	µg/kg	1	LBCL	4,320	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.28	<10	--	--	--	--	--	--	--
	1,3-Dichloropropane	µg/kg	1	LBCL	64,600	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.179	<10	--	--	--	--	--	--	--
	2,2-Dichloropropane	µg/kg	--	--	--	--	<3.7	<7.9	--	--	418	0	0.0	<0.173	<10	--	--	--	--	--	--	--
	1,1-Dichloropropene	µg/kg	--	--	--	--	<3.7	<7.9	--	--	418	0	0.0	<0.27	<10	--	--	--	--	--	--	--
	cis-1,3-Dichloropropene	µg/kg	--	--	--	--	<3.7	<7.9	--	--	418	0	0.0	0.43 UJ	<10	--	--	--	--	--	--	--
	trans-1,3-Dichloropropene	µg/kg	--	--	--	--	<3.7	<7.9	--	--	418	0	0.0	<0.202	<10	--	--	--	--	--	--	--
	Diisopropyl ether	µg/kg	--	--	--	--	<3.7	<7.9	--	--	404	0	0.0	<0.87	<10	--	--	--	--	--	--	--

TABLE 4-2. STATISTICAL SUMMARY OF SOIL SAMPLING RESULTS FROM UPPER TEN FEET
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Leaching Screening Levels[1]		Industrial Worker Screening Levels[1]		RZ-A Background[2]		BMI Complex Background[3]		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source[1]	Level	Source[4]	Minimum	Maximum	Minimum	Maximum				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
VOCs	Dimethyl disulfide	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<0.213	<0.213	--	--	--	--	--	--	--
	2,2-Dimethylpentane	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<0.275	<0.275	--	--	--	--	--	--	--
	2,3-Dimethylpentane	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<0.224	<0.224	--	--	--	--	--	--	--
	2,4-Dimethylpentane	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	0.193 UJ	0.193 UJ	--	--	--	--	--	--	--
	3,3-Dimethylpentane	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<0.203	<0.203	--	--	--	--	--	--	--
	Ethanol	µg/kg	--	--	100,000,000	BCL	--	--	--	--	20	0	0.0	194 UJ	60,000 UJ	--	--	--	--	--	--	--
	Ethyl benzene	µg/kg	700	LBCL	19,700	BCL	<3.7	<7.9	--	--	389	0	0.0	<0.186	<10	--	--	--	--	--	--	--
	Ethyl tert-butyl ether	µg/kg	--	--	--	--	<3.7	<7.9	--	--	404	1	0.2	0.87 UJ	<10	0.38 J	0.38 J	0.38	0.38	--	--	RSAO2
	3-Ethylpentane	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<0.21	<0.21	--	--	--	--	--	--	--
	Formaldehyde	µg/kg	--	--	67,000,000	BCL	--	--	--	--	3	0	0.0	210 UJ	220 UJ	--	--	--	--	--	--	--
	n-Heptane	µg/kg	30	LBCL	220,000	BCL	--	--	--	--	14	0	0.0	<0.163	<0.163	--	--	--	--	--	--	--
	2-Hexanone	µg/kg	--	--	1,930,000	BCL	<7.4	<16	--	--	418	2	0.5	<0.281	<20	0.66 J	0.66 J	0.66	0.66	0	0	SA33
	Iodomethane	µg/kg	--	--	1,510,000	BCL	--	--	--	--	14	0	0.0	<0.257	<0.257	--	--	--	--	--	--	--
	Methanol	µg/kg	--	--	100,000,000	BCL	--	--	--	--	6	0	0.0	53,000 UJ	60,000 UJ	--	--	--	--	--	--	--
	Methyl tert-butyl ether	µg/kg	--	--	209,000	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.17	<10	--	--	--	--	--	--	--
	Methylene chloride	µg/kg	1	LBCL	59,100	BCL	0.54 J	<7.9	--	--	418	84	20.1	0.88 UJ	<10	0.3 J	8.2	1.2	1.5	1.2	0.77	RSAM8
	2-Methylhexane	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<0.203	<0.203	--	--	--	--	--	--	--
	3-Methylhexane	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<0.14	<0.14	--	--	--	--	--	--	--
	2-Nitropropane	µg/kg	--	--	59.8	BCL	--	--	--	--	14	0	0.0	<1.74	<1.74	--	--	--	--	--	--	--
	n-Nonyl aldehyde	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<0.88	<0.88	--	--	--	--	--	--	--
	n-Propylbenzene	µg/kg	--	--	237,000	BCL	<3.7	<7.9	--	--	418	1	0.2	<0.29	<10	0.78 J	0.78 J	0.78	0.78	--	--	RISB-59
	Styrene	µg/kg	200	LBCL	1,730,000	BCL	<3.7	<7.9	--	--	418	1	0.2	0.32 UJ	<10	0.28 J	0.28 J	0.28	0.28	--	--	SA55
	1,1,1,2-Tetrachloroethane	µg/kg	--	--	20,100	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.224	<10	--	--	--	--	--	--	--
	1,1,2,2-Tetrachloroethane	µg/kg	0.2	LBCL	2,570	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.141	<10	--	--	--	--	--	--	--
	Tetrachloroethene	µg/kg	3	LBCL	3,520	BCL	0.86 J	<7.9	--	--	418	3	0.7	<0.274	<10	0.68 J	1.5 J	0.73	0.97	0.46	0.47	SA149
	Toluene	µg/kg	600	LBCL	521,000	BCL	0.62 J	<7.9	--	--	418	77	18.4	<0.131	<10	0.23 J	3.6 J	0.77	0.94	0.61	0.65	RSAJ7
	1,2,3-Trichlorobenzene	µg/kg	--	--	--	--	<3.7	<7.9	--	--	418	5	1.2	<0.38	<10	0.81 J	4.8 J	1.8	2.4	1.6	0.68	RSAK7
	1,2,4-Trichlorobenzene	µg/kg	300	LBCL	125,000	BCL	<3.7	<7.9	--	--	418	12	2.9	<0.37	<10	0.65 J	3.7 J	1.4	1.6	0.91	0.57	SA11
	1,3,5-Trichlorobenzene	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<0.676	<0.676	--	--	--	--	--	--	--
	1,1,1-Trichloroethane	µg/kg	100	LBCL	1,390,000	BCL	<3.7	<7.9	--	--	418	1	0.2	<0.146	<10	0.95 J	0.95 J	0.95	0.95	--	--	SA08
	1,1,2-Trichloroethane	µg/kg	0.9	LBCL	5,550	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.283	<10	--	--	--	--	--	--	--
	Trichloroethene	µg/kg	3	LBCL	6,010	BCL	<3.7	<7.9	--	--	418	3	0.7	<0.12	<10	0.42 J-	2.1	0.5	1	0.95	0.94	RISB-57
	Trichlorofluoromethane	µg/kg	--	--	1,980,000	BCL	<3.7	<7.9	--	--	418	6	1.4	0.36 UJ	<10	0.35 J	1.7 J	1.4	1.2	0.63	0.55	RSAN6
	1,2,3-Trichloropropane	µg/kg	--	--	121	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.41	<10	--	--	--	--	--	--	--
	1,2,4-Trimethylbenzene	µg/kg	--	--	604,000	BCL	<3.7	<7.9	--	--	418	9	2.2	<0.218	<10	0.42 J	1.7 J	0.82	0.87	0.43	0.5	RISB-59
	1,3,5-Trimethylbenzene	µg/kg	--	--	246,000	BCL	<3.7	<7.9	--	--	418	1	0.2	<0.211	<10	0.5 J	0.5 J	0.5	0.5	--	--	SSAO8-11
	2,2,3-Trimethylbutane	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<0.21	<0.21	--	--	--	--	--	--	--
	Vinyl acetate	µg/kg	8,000	LBCL	2,710,000	BCL	--	--	--	--	14	0	0.0	<0.177	<0.177	--	--	--	--	--	--	--
	Vinyl chloride	µg/kg	0.7	LBCL	1,970	BCL	<3.7	<7.9	--	--	418	1	0.2	<0.237	<10	0.28 J	0.28 J	0.28	0.28	--	--	RSAM7
	m,p-Xylene	µg/kg	--	--	--	--	<3.7	<7.9	--	--	386	10	2.6	<0.53	<10	0.64 J	5.3 J-	1.5	1.9	1.3	0.73	SA169
	o-Xylene	µg/kg	9,000	LBCL	282,000	BCL	<3.7	<7.9	--	--	386	3	0.8	<0.306	<10	0.46 J	0.74 J	0.57	0.59	0.14	0.24	RISB-54
	Xylenes (total)	µg/kg	10,000	LBCL	214,000	BCL	--	--	--	--	46	0	0.0	<0.857	<13	--	--	--	--	--	--	--
	1,2-Dibromo-3-chloropropane	µg/kg	--	--	52.9	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.3	<12	--	--	--	--	--	--	--
	4-Methyl-2-pentanone	µg/kg	--	--	17,200,000	BCL	<7.4	<16	--	--	418	4	1.0	0.96 UJ	<20	0.92 J	3.4 J	1.7	1.9	1	0.54	RSAJ7
	tert Butyl alcohol	µg/kg	--	--	21,300,000	BCL	<74	<160	--	--	404	1	0.2	5.2 UJ	<200	7.6 J	7.6 J	7.6	7.6	--	--	RSAM4
	tert-Butylbenzene	µg/kg	--	--	393,000	BCL	<3.7	<7.9	--	--	418	0	0.0	<0.25	<10	--	--	--	--	--	--	--
	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	--	--	5,550,000	BCL	--	--	--	--	18	0	0.0	<0.535	<5.5	--	--	--	--	--	--	--

TABLE 4-2. STATISTICAL SUMMARY OF SOIL SAMPLING RESULTS FROM UPPER TEN FEET
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Leaching Screening Levels[1]		Industrial Worker Screening Levels[1]		RZ-A Background[2]		BMI Complex Background[3]		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source[1]	Level	Source[4]	Minimum	Maximum	Minimum	Maximum				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
SVOCs	Acetophenone	µg/kg	--	--	1,740,000	BCL	--	--	--	--	14	0	0.0	<33.3	<33.3	--	--	--	--	--	--	--
	Aniline	µg/kg	--	--	450,000	BCL	--	--	--	--	57	0	0.0	<33.3	<4,700	--	--	--	--	--	--	--
	Azobenzene	µg/kg	--	--	20,700	BCL	--	--	--	--	14	0	0.0	<33.3	<33.3	--	--	--	--	--	--	--
	Benzenethiol	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<123.11	<123.11	--	--	--	--	--	--	--
	Benzidine	µg/kg	--	--	11.2	BCL	--	--	--	--	38	0	0.0	670 UJ	37,000 UJ	--	--	--	--	--	--	--
	Benzoic acid	µg/kg	20,000	LBCL	100,000,000	BCL	--	--	--	--	54	0	0.0	<33.3	<19,000	--	--	--	--	--	--	--
	Benzyl alcohol	µg/kg	--	--	100,000,000	BCL	--	--	--	--	57	0	0.0	<33.3	<8,300	--	--	--	--	--	--	--
	4-Bromophenyl-phenyl ether	µg/kg	--	--	--	--	--	--	--	--	57	0	0.0	<33.3	<4,200	--	--	--	--	--	--	--
	Butylbenzylphthalate	µg/kg	810,000	LBCL	240,000	BCL	<180	<540	--	--	725	14	1.9	<33.3	<4,600	2.8 J	15,000 J	6.1	1,100	4,000	3.7	DS-C24-1
	Carbazole	µg/kg	30	LBCL	128,000	BCL	--	--	--	--	14	0	0.0	33.3 UJ	33.3 UJ	--	--	--	--	--	--	--
	4-Chloroaniline	µg/kg	30	LBCL	12,800	BCL	--	--	--	--	57	0	0.0	<33.3	<7,400	--	--	--	--	--	--	--
	2-Chloronaphthalene	µg/kg	--	--	351,000	BCL	--	--	--	--	57	0	0.0	<33.3	<3,700	--	--	--	--	--	--	--
	2-Chlorophenol	µg/kg	200	LBCL	1,730,000	BCL	--	--	--	--	57	0	0.0	<33.3	<3,900	--	--	--	--	--	--	--
	4-Chlorophenyl-phenyl ether	µg/kg	--	--	--	--	--	--	--	--	57	0	0.0	<33.3	<4,700	--	--	--	--	--	--	--
	4-Chlorothioanisole	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<7.61	<7.61	--	--	--	--	--	--	--
	4-Chlorothiophenol	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<185	<185	--	--	--	--	--	--	--
	Di-n-butylphthalate	µg/kg	270,000	LBCL	91,600,000	BCL	53 J	<540	--	--	725	49	6.8	<27	<5,000	32 J	7,500	61	420	1,200	2.8	SSAP4-01
	Di-n-octylphthalate	µg/kg	--	--	11,000,000	BCL	<180	<540	--	--	725	6	0.8	<13	<5,000	70 J	88 J	83	82	6.3	0.077	SSAO4-01
	Dibenzofuran	µg/kg	--	--	2,600,000	BCL	--	--	--	--	57	0	0.0	<33.3	<3,700	--	--	--	--	--	--	--
	3,3'-Dichlorobenzidine	µg/kg	0.3	LBCL	5,700	BCL	--	--	--	--	57	0	0.0	<33.3	<8,300	--	--	--	--	--	--	--
	2,2'-/4,4'-Dichlorobenzil	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<70	<700	--	--	--	--	--	--	--
	2,4-Dichlorophenol	µg/kg	50	LBCL	2,750,000	BCL	--	--	--	--	57	0	0.0	<33.3	<3,700	--	--	--	--	--	--	--
	Diethylphthalate	µg/kg	--	--	100,000,000	BCL	<180	<540	--	--	725	5	0.7	<24	<5,300	42 J	350 J	62	110	130	1.2	SA86
	2,4-Dimethylphenol	µg/kg	400	LBCL	18,300,000	BCL	--	--	--	--	57	0	0.0	<33.3	<7,200	--	--	--	--	--	--	--
	Dimethylphthalate	µg/kg	88,000	CAL	100,000,000	BCL	<180	<540	--	--	725	77	10.6	<22	<3,800	1.1 J	790	52	100	150	1.4	BDT-1-S-10
	2,4-Dinitrophenol	µg/kg	10	LBCL	1,830,000	BCL	--	--	--	--	57	0	0.0	<330	18,000 UJ	--	--	--	--	--	--	--
	2,4-Dinitrotoluene	µg/kg	0.04	LBCL	8,280	BCL	--	--	--	--	57	0	0.0	<33.3	<4,500	--	--	--	--	--	--	--
	2,6-Dinitrotoluene	µg/kg	0.03	LBCL	916,000	BCL	--	--	--	--	57	0	0.0	<33.3	<5,300	--	--	--	--	--	--	--
	1,4-Dioxane	µg/kg	--	--	25,700	BCL	10 J	<210	--	--	679	0	0.0	<33.3	<7,100	--	--	--	--	--	--	--
	Diphenyl disulfide	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<28.72	<28.72	--	--	--	--	--	--	--
	Diphenyl sulfide	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<3.53	<3.53	--	--	--	--	--	--	--
	Diphenyl sulfone	µg/kg	--	--	2,750,000	BCL	--	--	--	--	14	0	0.0	<6.65	<6.65	--	--	--	--	--	--	--
	1,2-Diphenylhydrazine	µg/kg	--	--	3,210	BCL	--	--	--	--	14	0	0.0	<33.3	<33.3	--	--	--	--	--	--	--
	Hexachlorobenzene	µg/kg	100	LBCL	1,600	BCL	1.5 J	230	--	--	1290	695	53.9	<0.28	<4,800	0.32 J	300,000	94	3,900	22,000	5.6	SA127
	Hexachlorobutadiene	µg/kg	100	LBCL	32,900	BCL	<3.7	<7.9	--	--	418	7	1.7	<0.28	<33.3	0.95 J	4.5 J	2	2	1.2	0.6	SA11
	Hexachlorocyclopentadiene	µg/kg	20,000	LBCL	5,470,000	BCL	--	--	--	--	57	0	0.0	130 UJ	7,400 UJ	--	--	--	--	--	--	--
	Hexachloroethane	µg/kg	20	LBCL	183,000	BCL	--	--	--	--	57	0	0.0	33.3 UJ	<7,400	--	--	--	--	--	--	--
	Hydroxymethyl phthalimide	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<43.4	<43.4	--	--	--	--	--	--	--
	Isophorone	µg/kg	30	LBCL	2,700,000	BCL	--	--	--	--	57	0	0.0	<33.3	<3,700	--	--	--	--	--	--	--
	1-Methylnaphthalene	µg/kg	33	CAL	--	--	--	--	--	--	60	11	18.3	<0.26	<8,300	0.62 J	400 J	14	56	120	2.1	EE-C18-1
	2-Methylnaphthalene	µg/kg	--	--	--	--	<6.8	<21	--	--	753	22	2.9	<0.31	<3,900	0.77 J	580 J	9.2	53	130	2.4	EE-C18-1
	2-Methylphenol	µg/kg	800	LBCL	45,800,000	BCL	--	--	--	--	57	0	0.0	<80	<4,500	--	--	--	--	--	--	--
	3&4-Methylphenol	µg/kg	--	--	--	--	--	--	--	--	57	0	0.0	<66.6	<7,400	--	--	--	--	--	--	--
	2-Nitroaniline	µg/kg	--	--	2,740,000	BCL	--	--	--	--	57	0	0.0	<33.3	<3,700	--	--	--	--	--	--	--
	3-Nitroaniline	µg/kg	--	--	--	--	--	--	--	--	57	0	0.0	<33.3	<7,400	--	--	--	--	--	--	--
	4-Nitroaniline	µg/kg	--	--	--	--	--	--	--	--	57	0	0.0	<130	<7,400	--	--	--	--	--	--	--
	Nitrobenzene	µg/kg	7	LBCL	13,600	BCL	<6.8	<21	--	--	725	0	0.0	<6.7	<3,900	--	--	--	--	--	--	--
	2-Nitrophenol	µg/kg	--	--	--	--	--	--	--	--	57	0	0.0	33.3 UJ	<7,400	--	--	--	--	--	--	--
	4-Nitrophenol	µg/kg	--	--	7,330,000	BCL	--	--	--	--	57	0	0.0	<140	7,800 UJ	--	--	--	--	--	--	--
	n-Nitrosodiphenylamine	µg/kg	60	LBCL	524,000	BCL	--	--	--	--	57	0	0.0	<33.3	<4,500	--	--	--	--	--	--	--
	Octachlorostyrene	µg/kg	--	--	--	--	<6.8	25	--	--	721	127	17.6	6.7 UJ	<130,000	2.1 J	21,000 J	77	480	2,100	4.3	RSAJ6

TABLE 4-2. STATISTICAL SUMMARY OF SOIL SAMPLING RESULTS FROM UPPER TEN FEET
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Leaching Screening Levels[1]		Industrial Worker Screening Levels[1]		RZ-A Background[2]		BMI Complex Background[3]		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source[1]	Level	Source[4]	Minimum	Maximum	Minimum	Maximum				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
SVOCs	Pentachlorobenzene	µg/kg	--	--	733,000	BCL	--	--	--	--	14	0	0.0	<33.3	<33.3	--	--	--	--	--	--	--
	Pentachlorophenol	µg/kg	1	LBCL	4,450	BCL	--	--	--	--	57	0	0.0	<330	<19,000	--	--	--	--	--	--	--
	Phenol	µg/kg	5,000	LBCL	100,000,000	BCL	--	--	--	--	57	0	0.0	<33.3	<5,000	--	--	--	--	--	--	--
	Pyridine	µg/kg	--	--	886,000	BCL	<69	<210	--	--	725	0	0.0	33.3 UJ	<14,000	--	--	--	--	--	--	--
	1,2,4,5-Tetrachlorobenzene	µg/kg	--	--	275,000	BCL	--	--	--	--	14	0	0.0	<33.3	<33.3	--	--	--	--	--	--	--
	2,4,5-Trichlorophenol	µg/kg	14,000	LBCL	91,600,000	BCL	--	--	--	--	57	0	0.0	<33.3	<7,200	--	--	--	--	--	--	--
	2,4,6-Trichlorophenol	µg/kg	8	LBCL	233,000	BCL	--	--	--	--	57	0	0.0	<33.3	<4,200	--	--	--	--	--	--	--
	bis(2-Chloro-1-methylethyl) ether	µg/kg	--	--	19,000	BCL	--	--	--	--	14	0	0.0	<33.3	<33.3	--	--	--	--	--	--	--
	bis(2-Chloroethoxy)methane	µg/kg	--	--	--	--	--	--	--	--	57	0	0.0	<33.3	<7,400	--	--	--	--	--	--	--
	bis(2-Chloroethyl) ether	µg/kg	0.02	LBCL	1,370	BCL	--	--	--	--	57	0	0.0	<33.3	<3,900	--	--	--	--	--	--	--
	bis(2-Ethylhexyl)phthalate	µg/kg	180,000	LBCL	183,000	BCL	150 J	540 UJ	--	--	725	161	22.2	33.3 UJ	<5,000	58 J	61,000	98	550	4,800	8.8	SSAP4-01
	bis(4-Chlorophenyl) disulfide	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<202.9	<202.9	--	--	--	--	--	--	--
	bis(4-Chlorophenyl) sulfone	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<330	<330	--	--	--	--	--	--	--
	4-Chloro-3-methylphenol	µg/kg	--	--	--	--	--	--	--	--	57	0	0.0	33.3 UJ	<3,900	--	--	--	--	--	--	--
	n-Nitroso-di-n-propylamine	µg/kg	0.002	LBCL	366	BCL	--	--	--	--	57	0	0.0	<33.3	<3,900	--	--	--	--	--	--	--
PAHs	Acenaphthene	µg/kg	29,000	LBCL	2,360,000	BCL	<6.8	<21	--	--	796	10	1.3	<0.16	<3,700	0.62 J	57 J	8.7	16	18	1.1	SSAO8-12
	Acenaphthylene	µg/kg	--	--	147,000	BCL	1.8 J	<21	--	--	796	18	2.3	<0.17	<3,900	0.66 J	52 J	6.3	14	16	1.1	SA190
	Anthracene	µg/kg	590,000	LBCL	9,080,000	BCL	6.7 J	<21	--	--	796	31	3.9	<0.47	<4,500	0.55 J	170 J	11	21	34	1.6	EE-C18-1
	Benzo(a)anthracene	µg/kg	80	LBCL	3,230	BCL	1.1 J	<21	--	--	796	136	17.1	<0.9	<3,900	0.72 J	1,200	13	81	180	2.2	SSAP5-03
	Benzo(a)pyrene	µg/kg	400	LBCL	323	BCL	<6.8	<21	--	--	795	95	11.9	<0.48	<3,700	1.5 J	1,400	24	110	250	2.2	SSAP5-03
	Benzo(b)fluoranthene	µg/kg	200	LBCL	3,230	BCL	<6.8	<21	--	--	795	123	15.5	<1.2	<3,900	1.3 J	2,600 J	32	180	400	2.3	SSAP5-03
	Benzo(g,h,i)perylene	µg/kg	1,100,000	CAL	38,900,000	BCL	4.3 J	<21	--	--	795	119	15.0	<1.1	<6,100	1.4 J	1,100	18	96	200	2.1	SSAP5-03
	Benzo(k)fluoranthene	µg/kg	2,000	LBCL	32,300	BCL	<6.8	<21	--	--	795	83	10.4	<0.91	<4,300	1.6 J	1,400 J	12	98	240	2.5	DS-C24-2
	Chrysene	µg/kg	8,000	LBCL	323,000	BCL	1.4 J	14	--	--	796	167	21.0	<1	<4,200	1 J	2,400	22	120	300	2.5	EE-C18-1
	Dibenz(a,h)anthracene	µg/kg	80	LBCL	323	BCL	<6.8	<21	--	--	793	36	4.5	<1.3	<5,600	1.8 J	320 J	28	63	82	1.3	SSAP5-03
	Fluoranthene	µg/kg	210,000	LBCL	33,700,000	BCL	1.8 J	<21	--	--	796	152	19.1	<1	<3,900	1.7 J	1,700 J	16	110	250	2.4	SSAQ6-02
	Fluorene	µg/kg	28,000	LBCL	3,460,000	BCL	<6.8	<21	--	--	796	4	0.5	<0.47	<3,900	0.52 J	3.2 J	1.1	1.5	1.2	0.82	EE-C24-1
	Indeno(1,2,3-cd)pyrene	µg/kg	700	LBCL	3,230	BCL	5.3 J	<21	--	--	795	102	12.8	<0.57	<7,200	1 J	940	11	96	210	2.2	SSAP5-03
	Naphthalene	µg/kg	4,000	LBCL	15,600	BCL	<3.7	<21	--	--	1200	48	4.0	<0.32	<3,700	0.4 J	2,000 J-	1.9	59	290	4.9	SSAO8-12
	Phenanthrene	µg/kg	140	CAL	24,500	BCL	2.1 J	<21	--	--	796	121	15.2	<1.1	<3,700	1.7 J	1,000 J	9.6	57	140	2.5	SA42
	Pyrene	µg/kg	210,000	LBCL	20,800,000	BCL	2.2 J	<21	--	--	796	192	24.1	<1.1	<4,500	1.1 J	4,200	15	120	380	3.3	EE-C18-1
PCBs	Aroclor-1016	µg/kg	--	--	32,800	BCL	<35	<36	--	--	74	0	0.0	<33	<370	--	--	--	--	--	--	--
	Aroclor-1221	µg/kg	--	--	1,150	BCL	<70	<73	--	--	74	0	0.0	<34	<740	--	--	--	--	--	--	--
	Aroclor-1232	µg/kg	--	--	1,150	BCL	<35	<36	--	--	74	0	0.0	<33	<370	--	--	--	--	--	--	--
	Aroclor-1242	µg/kg	--	--	1,150	BCL	<35	<36	--	--	74	0	0.0	<33	<370	--	--	--	--	--	--	--
	Aroclor-1248	µg/kg	--	--	1,150	BCL	<35	<36	--	--	74	1	1.4	<33	<370	91 J	91 J	91	91	--	--	RSAS5
	Aroclor-1254	µg/kg	--	--	1,150	BCL	<35	<36	--	--	74	0	0.0	<33	<370	--	--	--	--	--	--	--
	Aroclor-1260	µg/kg	27	CAL	1,150	BCL	<35	<36	--	--	117	12	10.3	<17	<370	21 J	510 J+	64	160	160	1	SA33
Dioxins/ Furans	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	µg/kg	7	CAL	--	--	0.000233 JK	0.026	--	--	721	634	87.9	<0.000054	<6.6	0.000086 UJK	36 J	0.019	0.63	3	4.7	SA127
	1,2,3,4,6,7,8-Heptachlorodibenzofuran	µg/kg	3.9	CAL	--	--	0.000375 J	0.308	--	--	721	689	95.6	<0.000047	<0.99	0.000036 J	500 J	0.13	7.8	43	5.5	SA127
	1,2,3,4,7,8,9-Heptachlorodibenzofuran	µg/kg	3.9	CAL	--	--	0.000465 J-	0.143 JK	--	--	721	655	90.8	<0.000038	<0.097	0.000094 JK	210	0.078	3.7	20	5.2	RSAJ6
	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	µg/kg	0.42	CAL	--	--	0.00053 JK	0.0038	--	--	721	519	72.0	<0	<1.2	0.000054 JK	5.3	0.006	0.11	0.46	4.4	SA127
	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	µg/kg	0.42	CAL	--	--	0.000113 J	0.00767	--	--	721	610	84.6	<0.000025	<2.9	0.000062 JK	10	0.0063	0.19	0.88	4.7	SA127
	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	µg/kg	0.42	CAL	0.414	BCL	0.000144 J	0.00903	--	--	721	616	85.4	<0.000038	<0.64	0.000061 JK	9.6 J	0.0048	0.17	0.85	4.9	SA127
	1,2,3,4,7,8-Hexachlorodibenzofuran	µg/kg	0.23	CAL	--	--	0.000165 JK	0.177	--	--	721	668	92.6	<0.000026	1.3 UJ	0.000045 J	198	0.068	3.3	16	5	RSAJ6
	1,2,3,6,7,8-Hexachlorodibenzofuran	µg/kg	0.23	CAL	--	--	0.000174 J	0.104	--	--	721	661	91.7	<0.000017	<4.6	0.000028 JK	130	0.043	2.3	12	5.2	RSAJ6
	1,2,3,7,8,9-Hexachlorodibenzofuran	µg/kg	0.23	CAL	--	--	0.000157 J	0.0169	--	--	721	587	81.4	<0.000022	<7.9	0.000042 JK	28	0.011	0.47	2.5	5.2	SA127
	2,3,4,6,7,8-Hexachlorodibenzofuran	µg/kg	0.23	CAL	--	--	0.0000606 J	0.0539	--	--	721	616	85.4	<0.000018	<5.1	0.00004 JK	69	0.016	0.69	4	5.8	RSAJ6
	1,2,3,4,5,6,7,8-Octachlorodibenzo-p-dioxin	µg/kg	220	CAL	--	--	<0.00489	0.0765	--	--	721	638	88.5	<0.0029	<0.92	0.00022 J	38	0.029	0.76	3.3	4.3	SA127
	1,2,3,4,5,6,7,8-Octachlorodibenzofuran	µg/kg	390	CAL	--	--	0.00054 JK	0.936	--	--	721	685	95.0	<0.000109	4.5 UJ	0.00022 JK	1,400 J	0.4	23	120	5.2	RSAJ7
	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	µg/kg	0.025	CAL	--	--	0.00019 JK	0.0044	--	--	721	494	68.5	<0	<3.1	0.0000385 JK	6.4 J	0.01	0.14	0.58	4.3	SA127
	1,2,3,7,8-Pentachlorodibenzofuran	µg/kg	0.47	CAL	--	--	0.000112 JK	0.0773	--	--	721	630	87.4	<0.000023	<3.7	0.000068	92	0.052	1.6	8	5	SA127
	2,3,4,7,8-Pentachlorodibenzofuran	µg/kg	0.047	CAL	--	--	0.0000763 JK	0.046	--	--	721	600	83.2	<0.000022	<0.12	0.000039	49 J	0.033	0.88	4.3	4.9	SA127
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	µg/kg	0.015	CAL	1	BCL	0.00038 JK	0.00158	--	--	721	482	66.9	<0	<1.6	0.0000284 JK	2.1 J	0.0031	0.044	0.19	4.2	SA127
	2,3,7,8-Tetrachlorodibenzofuran	µg/kg	0.084	CAL	--	--	0.000343 J	0.0445	--	--	721	643	89.2	<0.000022	<1.5	0.000063 JK	48.2	0.029	1	4.6	4.7	RSAI7

TABLE 4-2. STATISTICAL SUMMARY OF SOIL SAMPLING RESULTS FROM UPPER TEN FEET
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Leaching Screening Levels[1]		Industrial Worker Screening Levels[1]		RZ-A Background[2]		BMI Complex Background[3]		No. of Samples	No. of Detects	% Detects	Nondetects		Detects					
			Level	Source[1]	Level	Source[4]	Minimum	Maximum	Minimum	Maximum				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
Pesticides - OCPs	Aldrin	µg/kg	20	LBCL	151	BCL	<1.8	<3.6	--	--	380	2	0.5	<0.0878	<18,000	0.49 J+	0.52 J+	0.51	0.51	0.021	0.042	SSAL2-05
	alpha-BHC	µg/kg	26.6	LBCL	334,000	BCL	<1.8	<3.6	--	--	381	16	4.2	<0.0962	<18,000	0.24 J+	59	0.61	5.4	15	2.7	RSAJ6
	beta-BHC	µg/kg	5.45	LBCL	66,700	BCL	1.1 J	7.3	--	--	381	191	50.1	<0.3451	<18,000	0.72 J	1,300 J	12	78	210	2.7	EE-E08A-1
	delta-BHC	µg/kg	28,100	LBCL	334,000	BCL	<1.8	<3.6	--	--	380	7	1.8	<0.0833	<18,000	0.48 J+	1.5 J	0.59	0.79	0.38	0.48	SA86
	gamma-BHC	µg/kg	0.5	LBCL	11,100	BCL	<1.8	<3.6	--	--	381	3	0.8	<0.0833	<18,000	0.83 J+	1.9	1.3	1.3	0.54	0.4	RSAQ4
	Chlordane (total)	µg/kg	500	LBCL	8,900	BCL	<8.6	<18	--	--	316	1	0.3	0.21 UJ	<87,000	3 J	3 J	3	3	--	--	SA66
	alpha-Chlordane	µg/kg	--	--	--	--	<1.8	<3.6	--	--	380	0	0.0	<0.0996	<18,000	--	--	--	--	--	--	--
	gamma-Chlordane	µg/kg	--	--	--	--	<1.8	<3.6	--	--	374	4	1.1	<0.0855	<18,000	3.9	31	6.5	12	13	1.1	SA107
	trans/gamma-Chlordane	µg/kg	--	--	--	--	--	--	--	--	5	0	0.0	<0.53	<55	--	--	--	--	--	--	--
	2,4'-DDD	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	<0.1129	<0.1129	--	--	--	--	--	--	--
	4,4'-DDD	µg/kg	800	LBCL	13,500	BCL	<3.4	<7	--	--	379	10	2.6	<0.1604	<35,000	1.4 J+	32 J	4.6	7.8	9.3	1.2	SSAL3-04
	2,4'-DDE	µg/kg	3,000	LBCL*	--	--	--	--	--	--	64	16	25.0	<0.0893	<15	1.6 J	88 J	5.1	18	26	1.4	RISB-52
	4,4'-DDE	µg/kg	3,000	LBCL	9,500	BCL	2.9 J	14	--	--	381	179	47.0	<0.24	<35,000	0.29 J	7,700	15	400	1,300	3.3	SSAM2-02
	4,4'-DDT	µg/kg	2,000	LBCL	9,500	BCL	2.2 J	<7	--	--	381	144	37.8	<0.4267	<35,000	0.66 J	2,300	13	150	420	2.8	SSAM2-01
	Dieldrin	µg/kg	0.2	LBCL	160	BCL	<3.4	<7	--	--	380	8	2.1	0.0726 UJ	<35,000	0.27 J	62	33	35	25	0.71	SSAM2-02
	Endosulfan I	µg/kg	--	--	--	--	<1.8	<3.6	--	--	380	2	0.5	<0.0833	<18,000	0.24 J+	1.5 J	0.87	0.87	0.89	1	SSAL3-01
	Endosulfan II	µg/kg	--	--	--	--	<3.4	<7	--	--	380	0	0.0	<0.1464	<35,000	--	--	--	--	--	--	--
	Endosulfan sulfate	µg/kg	--	--	--	--	<3.4	<7	--	--	380	2	0.5	<0.1167	<35,000	4.2	16 J+	10	10	8.3	0.83	BDT-4-S-15
	Endrin	µg/kg	50	LBCL	275,000	BCL	<3.4	<7	--	--	380	2	0.5	0.0833 UJ	<35,000	0.7 J	5.4	3.1	3.1	3.3	1.1	SA180
	Endrin aldehyde	µg/kg	--	--	--	--	<3.4	<7	--	--	380	0	0.0	<0.1065	<35,000	--	--	--	--	--	--	--
	Endrin ketone	µg/kg	--	--	--	--	<3.4	<7	--	--	380	10	2.6	<0.3844	<35,000	0.61 J	20 J	1.2	3.5	5.9	1.7	SA86
	Heptachlor	µg/kg	1,000	LBCL	570	BCL	<1.8	<3.6	--	--	378	1	0.3	0.21 UJ	<18,000	930 J	930 J	930	930	--	--	EE-E08A-1
	Heptachlor epoxide	µg/kg	30	LBCL	282	BCL	<1.8	<3.6	--	--	379	1	0.3	<0.1153	<18,000	37	37	37	37	--	--	CS-E08B-1
	Methoxychlor	µg/kg	8,000	LBCL	4,580,000	BCL	<18	<36	--	--	380	19	5.0	<0.43	<180,000	0.5 J	380	2.7	56	110	2	SSAM2-01
	2,4,5-TP	µg/kg	--	--	7,330,000	BCL	--	--	--	--	2	0	0.0	<21	<23	--	--	--	--	--	--	--
	Toxaphene	µg/kg	2,000	LBCL	2,330	BCL	<34	<70	--	--	380	1	0.3	7.136 UJ	<350,000	620 J	620 J	620	620	--	--	SSAL3-04
	Atrazine	µg/kg	--	--	11,600	BCL	--	--	--	--	31	0	0.0	<12	<150	--	--	--	--	--	--	--
	Chlorpyrifos	µg/kg	--	--	2,750,000	BCL	<20	<20	--	--	87	0	0.0	<6.2	<82	--	--	--	--	--	--	--
	Coumaphos	µg/kg	--	--	--	--	<13	<13	--	--	87	0	0.0	<2.7	<36	--	--	--	--	--	--	--
	Dasanit	µg/kg	--	--	--	--	<25	<25	--	--	87	0	0.0	<7.8	<100	--	--	--	--	--	--	--
	Demeton (O + S)	µg/kg	--	--	--	--	--	--	--	--	31	0	0.0	<7.2	<96	--	--	--	--	--	--	--
	Demeton-O	µg/kg	--	--	--	--	<39	<39	--	--	87	0	0.0	<5.1	<67	--	--	--	--	--	--	--
	Demeton-S	µg/kg	--	--	--	--	<15	<15	--	--	87	0	0.0	<4.7	<62	--	--	--	--	--	--	--
	Diazinon	µg/kg	--	--	825,000	BCL	<22	<22	--	--	87	0	0.0	<7	<93	--	--	--	--	--	--	--
	Dibrom	µg/kg	--	--	1,830,000	BCL	<70	<70	--	--	87	0	0.0	<22	<290	--	--	--	--	--	--	--
	Dichlorovos	µg/kg	--	--	8,850	BCL	<23	<23	--	--	87	0	0.0	<7.1	<94	--	--	--	--	--	--	--
	Dimethoate	µg/kg	--	--	--	--	<22	<22	--	--	87	3	3.4	<6.8	<90	11 J	13 J	12	12	1	0.083	SA05
	Disulfoton	µg/kg	--	--	36,700	BCL	<48	<48	--	--	87	0	0.0	<7.4	<98	--	--	--	--	--	--	--
	Ethoprop	µg/kg	--	--	--	--	<15	<15	--	--	87	0	0.0	<4.7	<63	--	--	--	--	--	--	--
	Ethyl p-nitrophenyl benzenethiophosphate	µg/kg	--	--	--	--	<13	<13	--	--	87	0	0.0	<3.5	<47	--	--	--	--	--	--	--
	Famphur	µg/kg	--	--	--	--	<13	<13	--	--	87	0	0.0	<3.1	<41	--	--	--	--	--	--	--
	Fenthion	µg/kg	--	--	--	--	<33	<33	--	--	87	0	0.0	<8.4	<110	--	--	--	--	--	--	--
	Guthion	µg/kg	--	--	--	--	13 UJ	13 UJ	--	--	87	0	0.0	<3.4	<45	--	--	--	--	--	--	--
	Malathion	µg/kg	--	--	18,300,000	BCL	<15	<15	--	--	87	0	0.0	<4.5	<59	--	--	--	--	--	--	--
	Merphos	µg/kg	--	--	--	--	<30	<30	--	--	87	0	0.0	<4.9	<65	--	--	--	--	--	--	--
	Methyl parathion	µg/kg	--	--	229,000	BCL	<20	<20	--	--	87	0	0.0	<6.1	<81	--	--	--	--	--	--	--
	Mevinphos	µg/kg	--	--	--	--	15 UJ	15 UJ	--	--	87	0	0.0	<4.4	<59	--	--	--	--	--	--	--
	Parathion	µg/kg	--	--	5,500,000	BCL	<18	<18	--	--	87	0	0.0	<5.1	<67	--	--	--	--	--	--	--
	Phorate	µg/kg	--	--	--	--	20 UJ	20 UJ	--	--	87	0	0.0	<5.5	<73	--	--	--	--	--	--	--
	Prothiophos	µg/kg	--	--	--	--	<20	<20	--	--	87	0	0.0	<3.8	<50	--	--	--	--	--	--	--
	Ronnel	µg/kg	--	--	45,800,000	BCL	<46	<46	--	--	87	0	0.0	<15	<190	--	--	--	--	--	--	--
	Simazine	µg/kg	--	--	21,400	BCL	--	--	--	--	30	0	0.0	<21	<280	--	--	--	--	--	--	--
	Stirophos	µg/kg	--	--	--	--	<15	<15	--	--	87	1	1.1	<4.2	<55	41	41	41	41	--	--	SA166
	Sulfotepp	µg/kg	--	--	--	--	<20	<20	--	--	87	0	0.0	<6	<80	--	--	--	--	--	--	--
	Sulprofos	µg/kg	--	--	--	--	<13	<13	--	--	87	0	0.0	<4.1	<54	--	--	--	--	--	--	--
	Thionazin	µg/kg	--	--	--	--	<18	<18	--	--	87	0	0.0	<5.4	<71	--	--	--	--	--	--	--
	o-Ethyl o-2,4,5-trichlorophenyl ethyl-phosphonothioate	µg/kg	--	--	--	--	<20	<20	--	--	87	0	0.0	<6	<80	--	--	--	--	--	--	--

TABLE 4-2. STATISTICAL SUMMARY OF SOIL SAMPLING RESULTS FROM UPPER TEN FEET
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Leaching Screening Levels[1]		Industrial Worker Screening Levels[1]		RZ-A Background[2]		BMI Complex Background[3]		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source[1]	Level	Source[4]	Minimum	Maximum	Minimum	Maximum				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
Petroleum Indicators	Diesel Range Organics (C10-C28)	µg/kg	--	--	--	--	--	--	--	--	57	33	57.9	<2,500	<7,800	3,200 J	6,600,000	15,000	240,000	1,100,000	4.7	RISB-12
	EFH (C10-C40)	µg/kg	--	--	--	--	--	--	--	--	57	51	89.5	<2,700	<2,700	2,700 J	8,100,000	15,000	240,000	1,100,000	4.7	RISB-12
	Ethylene glycol	µg/kg	--	--	100,000,000	BCL	--	--	--	--	6	0	0.0	53,000 UJ	60,000 UJ	--	--	--	--	--	--	--
	Gasoline Range Organics (C6-C10)	µg/kg	--	--	--	--	--	--	--	--	55	0	0.0	<140	<180	--	--	--	--	--	--	--
	Hexane extractable material	µg/kg	--	--	--	--	--	--	--	--	14	0	0.0	173,490 UJ	173,490 UJ	--	--	--	--	--	--	--
	Oil Range Organics	µg/kg	--	--	--	--	<41,000	58,000	--	--	245	21	8.6	<26,000	<530,000	35,000 J	390,000	54,000	96,000	94,000	0.98	RSAQ8
	Petroleum Hydrocarbons (C29-C40)	µg/kg	--	--	--	--	--	--	--	--	57	29	50.9	<2,500	<7,800	2,600 J	800,000	20,000	100,000	190,000	1.9	RISB-59
	Total petroleum hydrocarbon-diesel	µg/kg	--	--	--	--	34,000 J	<45,000	--	--	259	16	6.2	<1,520	<49,000	34,000 J	4,100,000 J	89,000	700,000	1,300,000	1.9	SA42
	Total petroleum hydrocarbon-gasoline	µg/kg	--	--	--	--	--	--	--	--	77	1	1.3	<28.88	<12,000	130	130	130	130	--	--	SA08
Other Organics	Benzenesulfonic acid	µg/kg	--	--	100,000,000	BCL	<500	<500	--	--	35	0	0.0	<500	<500	--	--	--	--	--	--	--
	4-Chlorobenzenesulfonic acid	µg/kg	70	LBCL	117,000	BCL	<500	<500	--	--	35	0	0.0	<500	<500	--	--	--	--	--	--	--
	Diethylphosphorodithioate	µg/kg	--	--	100,000,000	BCL	<500	<500	--	--	35	0	0.0	<500	<500	--	--	--	--	--	--	--
	o,o-Dimethyl Phosphorodithioate	µg/kg	--	--	100,000,000	BCL	<2,500	<2,500	--	--	35	0	0.0	<2,500	<2,500	--	--	--	--	--	--	--
	Phthalic acid	µg/kg	--	--	100,000,000	BCL	<500	<500	--	--	90	0	0.0	<249.68	<70,000	--	--	--	--	--	--	--

Notes:

[1] NDEP, 2015. User's Guide and Background Technical Document for NDEP Basic Comparison Levels (BCLs) for Human Health for the BMI Complex and Common Areas. Revision 13, February.

[2] NDEP, 2010. NDEP Response to Background Issues and Determination of Background Dataset for TRX. August 17.

[3] TIMET/BRC, 2007. Background Shallow Soil Summary Report, BMI Complex and Common Areas Vicinity.

[4] Industrial Worker screening levels are the lowest level among the indoor worker and outdoor worker Basic Comparison Levels (BCLs). from https://ndep.nv.gov/bmi/docs/bcl_calculations_February_2015.pdf

LBCL: Leaching-based Basic Comparison Levels (LBCLs), with a dilution attenuation factor (DAF) of 1 from: https://ndep.nv.gov/bmi/docs/bcl_calculations_February_2015.pdf

CAL: Where no LBCL is available from NDEP, LBCLs were calculated as described in Appendix C.

*LBCL: The LBCL for 4,4-DDE was used as a surrogate for 2, 4-DDE.

	Detected in less than 5% of samples/below LBCL
	Essential Nutrient, macronutrient or salt
	Detected concentrations were below the maximum concentration of the background dataset.
	Total Uranium was used to evaluate the nature and extent of impacts in soil from these compounds

TABLE 4-3. INITIAL COPC SCREENING RESULTS FOR SOIL
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Units	Leaching Screening Levels[1]		Industrial Worker Screening Levels[1]		RZ-A Background[2]		BMI Complex Background[3]		No. of Samples	No. of Detects	% Detects	Nondetects		Detects					
			Level	Source[1]	Level	Source[4]	Minimum	Maximum	Minimum	Maximum				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
Chlorates	Chlorate	µg/kg	1,030	LBCL	38,900,000	BCL	57 J	29,900	--	--	407	308	75.7	<52	5,800 UJ	45 J	20,900,000	3,200	260,000	1,900,000	7.3	SA106
	Perchlorate	µg/kg	18.5	LBCL	908,000	BCL	46 J	17,000 J+	--	--	588	567	96.4	10 UJ	<430	12	56,000,000	7,000	380,000	2,900,000	7.6	RSAR7
Metals	Antimony	mg/kg	0.3	LBCL	519	BCL	0.6 J-	3.4	0.039	0.5	412	119	28.9	0.5 UJ	2.4 UJ	0.11 J-	30.3	0.21	1.2	3.7	3.1	SA130
	Arsenic	mg/kg	1	LBCL	2.15	BCL	1.6	4.25	2.1	7.2	910	910	100.0	--	--	0.58	2,000	3.3	16	120	7.4	SA130
	Barium	mg/kg	82	LBCL	100,000	BCL	111	213	73	840	415	415	100.0	--	--	65	6,760	180	220	370	1.7	SA56
	Boron	mg/kg	21.4	LBCL	100,000	BCL	3.6 J	11.7	3.2	12	415	194	46.7	<1.412	<26	1.5 J	1,510	9.5	31	150	4.9	SA62
	Cadmium	mg/kg	0.4	LBCL	1,270	BCL	<0.1	0.48	0.052	0.16	415	224	54.0	<0.005	<2.6	0.04 J	8.88	0.15	0.26	0.64	2.4	SA103
	Chromium VI	mg/kg	2	LBCL	1,230	BCL	0.26 J	<0.43	0.25	0.25	623	130	20.9	<0.11	<0.51	0.11 J	106	0.84	4.6	15	3.2	SA106
	Cobalt	mg/kg	0.453	LBCL	385	BCL	5.4	9.1	3.7	16	466	466	100.0	--	--	1.7	420	7.6	13	34	2.6	M-186D
	Copper	mg/kg	45.8	LBCL	48,200	BCL	15.8	140	7.8	30	415	415	100.0	--	--	7.1	171	18	22	18	0.81	SA130
	Iron	mg/kg	7.56	LBCL	100,000	BCL	11,300	20,600	5,400	20,000	415	415	100.0	--	--	5,000	25,000	15,000	15,000	2,700	0.18	M-191
	Lead	mg/kg	14	CAL	800	BCL	7.1	72.8	3	35	491	490	99.8	<5.4	<5.4	3.6 J-	5,280	9.2	39	310	7.9	DS-C23-1
	Magnesium	mg/kg	889	LBCL	100,000	BCL	7,700	13,000	4,600	18,000	478	477	99.8	55.6 UJ	55.6 UJ	3,340 J	189,000	9,700	12,000	18,000	1.4	DS-DB-1
	Manganese	mg/kg	1.3	LBCL	28,100	BCL	262	537	150	1,100	612	612	100.0	--	--	77.1	204,000 J	400	2,400	12,000	4.8	DS-C23-1
	Mercury	mg/kg	0.104	LBCL	208	BCL	0.006 J	0.362	0.0072	0.11	417	359	86.1	<0.00668	<0.041	0.003 J	1.99	0.018	0.055	0.17	3.2	SA169
	Molybdenum	mg/kg	3.37	LBCL	6,490	BCL	0.31	32.7	0.17	2	415	291	70.1	<0.0523	<10	0.17 J	82.2	0.49	1.3	6.3	4.8	SA56
	Nickel	mg/kg	7	LBCL	24,700	BCL	12.7	21.4	7.8	30	415	415	100.0	--	--	5.8	180	15	17	14	0.8	M-186D
	Niobium	mg/kg	1.17	LBCL	130	BCL	--	--	1	2.8	42	4	9.5	<0.7559	<2.1	1.9 J	9.2 J+	2.2	3.9	3.5	0.91	TSB-GR-02
	Phosphorus (total)	mg/kg	0.077	CAL	100,000	BCL	684	1,220	640	2,000	325	325	100.0	--	--	360	2,480	860	890	220	0.25	SA61
	Silver	mg/kg	0.85	LBCL	6,490	BCL	<0.5	<0.5	0.019	0.26	415	82	19.8	<0.022	<16	0.02	9.6	0.12	0.48	1.4	2.9	SA130
	Strontium	mg/kg	700	CAL	100,000	BCL	129	339	69	810	352	350	99.4	0.56 UJ	<213	72.5 J	1,200	190	210	100	0.5	SA56
	Thallium	mg/kg	0.4	LBCL	85.7	BCL	0.071	0.193 J	0.1	1.8	415	288	69.4	<0.1	<0.28	0.054	61.8	0.1	0.45	3.7	8.3	SA56
	Tungsten	mg/kg	37.6	LBCL	9,730	BCL	<0.11	0.62	0.49	2.5	352	268	76.1	0.1 UJ	52 UJ	0.1 J-	69.9	0.23	0.93	5.3	5.7	SA130
Other Inorganics	Nitrate/Nitrite	mg/kg	7	LBCL	100,000	BCL	--	--	--	--	768	445	57.9	<0.047	22 UJ	0.08 J	515 J	3.5	11	31	2.8	SA15
Radionuclides	Radium-226	pCi/g	0.006	LBCL	--	--	0.483	1.72 J	--	--	345	333	96.5	<0.500	<0.500	0.203	2.53	0.94	0.96	0.35	0.37	SA92
	Radium-228	pCi/g	0.006	LBCL	--	--	0.460	2.46	--	--	345	334	96.8	<0.445	<0.500	0.367	4.84	1.2	1.3	0.53	0.41	RSAJ7
	Thorium-228	pCi/g	0.0027	LBCL	--	--	1.16	2.88	1.1	2.3	348	348	100.0	--	--	0.178	3.12	1.7	1.7	0.35	0.21	SA172
	Thorium-230	pCi/g	0.001	LBCL	--	--	0.509	1.71	0.66	3	348	348	100.0	--	--	0.433 J-	4.31	1.1	1.2	0.46	0.39	SA74
	Thorium-232	pCi/g	0.0035	LBCL	--	--	1.02	2.07	1.1	2.2	348	348	100.0	--	--	0.143	2.52 J	1.5	1.5	0.34	0.22	SA189
VOCs	Chloroform	µg/kg	30	LBCL	1,560	BCL	<3.7	<7.9	--	--	418	111	26.6	<0.142	<9.1	0.31 J	150	1.9	7.2	21	2.9	SA11
	Methylene chloride	µg/kg	1	LBCL	59,100	BCL	0.54 J	<7.9	--	--	418	84	20.1	0.88 UJ	<10	0.3 J	8.2	1.2	1.5	1.2	0.77	RSAM8
SVOCs	Hexachlorobenzene	µg/kg	100	LBCL	1,600	BCL	1.5 J	230	--	--	1290	695	53.9	<0.28	<4,800	0.32 J	300,000	94	3,900	22,000	5.6	SA127
	1-Methylnaphthalene	µg/kg	33	CAL	--	--	--	--	--	--	60	11	18.3	<0.26	<8,300	0.62 J	400 J	14	56	120	2.1	EE-C18-1
	Octachlorostyrene	µg/kg	--	--	--	--	<6.8	25	--	--	721	127	17.6	6.7 UJ	<130,000	2.1 J	21,000 J	77	480	2,100	4.3	RSAJ6
PAHs	Benzo(a)anthracene	µg/kg	80	LBCL	3,230	BCL	1.1 J	<21	--	--	796	136	17.1	<0.9	<3,900	0.72 J	1,200	13	81	180	2.2	SSAP5-03
	Benzo(a)pyrene	µg/kg	400	LBCL	323	BCL	<6.8	<21	--	--	795	95	11.9	<0.48	<3,700	1.5 J	1,400	24	110	250	2.2	SSAP5-03
	Benzo(b)fluoranthene	µg/kg	200	LBCL	3,230	BCL	<6.8	<21	--	--	795	123	15.5	<1.2	<3,900	1.3 J	2,600 J	32	180	400	2.3	SSAP5-03
	Indeno(1,2,3-cd)pyrene	µg/kg	700	LBCL	3,230	BCL	5.3 J	<21	--	--	795	102	12.8	<0.57	<7,200	1 J	940	11	96	210	2.2	SSAP5-03
	Phenanthrene	µg/kg	140	CAL	24,500	BCL	2.1 J	<21	--	--	796	121	15.2	<1.1	<3,700	1.7 J	1,000 J	9.6	57	140	2.5	SA42
PCBs	Aroclor-1260	µg/kg	27	CAL	1,150	BCL	<35	<36	--	--	117	12	10.3	<17	<370	21 J	510 J+	64	160	160	1	SA33

TABLE 4-3. INITIAL COPC SCREENING RESULTS FOR SOIL
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Units	Leaching Screening Levels[1]		Industrial Worker Screening Levels[1]		RZ-A Background[2]		BMI Complex Background[3]		No. of Samples	No. of Detects	% Detects	Nondetects		Detects					
			Level	Source[1]	Level	Source[4]	Minimum	Maximum	Minimum	Maximum				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
Dioxins/ Furans	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	µg/kg	7	CAL	--	--	0.000233 JK	0.026	--	--	721	634	87.9	<0.000054	<6.6	0.000086 UJK	36 J	0.019	0.63	3	4.7	SA127
	1,2,3,4,6,7,8-Heptachlorodibenzofuran	µg/kg	3.9	CAL	--	--	0.000375 J	0.308	--	--	721	689	95.6	<0.000047	<0.99	0.000036 J	500 J	0.13	7.8	43	5.5	SA127
	1,2,3,4,7,8,9-Heptachlorodibenzofuran	µg/kg	3.9	CAL	--	--	0.000465 J-	0.143 JK	--	--	721	655	90.8	<0.000038	<0.097	0.000094 JK	210	0.078	3.7	20	5.2	RSAJ6
	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	µg/kg	0.42	CAL	--	--	0.00053 JK	0.0038	--	--	721	519	72.0	<0	<1.2	0.000054 JK	5.3	0.006	0.11	0.46	4.4	SA127
	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	µg/kg	0.42	CAL	--	--	0.000113 J	0.00767	--	--	721	610	84.6	<0.000025	<2.9	0.000062 JK	10	0.0063	0.19	0.88	4.7	SA127
	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	µg/kg	0.42	CAL	0.414	BCL	0.000144 J	0.00903	--	--	721	616	85.4	<0.000038	<0.64	0.000061 JK	9.6 J	0.0048	0.17	0.85	4.9	SA127
	1,2,3,4,7,8-Hexachlorodibenzofuran	µg/kg	0.23	CAL	--	--	0.000165 JK	0.177	--	--	721	668	92.6	<0.000026	1.3 UJ	0.000045 J	198	0.068	3.3	16	5	RSAJ6
	1,2,3,6,7,8-Hexachlorodibenzofuran	µg/kg	0.23	CAL	--	--	0.000174 J	0.104	--	--	721	661	91.7	<0.000017	<4.6	0.000028 JK	130	0.043	2.3	12	5.2	RSAJ6
	1,2,3,7,8,9-Hexachlorodibenzofuran	µg/kg	0.23	CAL	--	--	0.000157 J	0.0169	--	--	721	587	81.4	<0.000022	<7.9	0.000042 JK	28	0.011	0.47	2.5	5.2	SA127
	2,3,4,6,7,8-Hexachlorodibenzofuran	µg/kg	0.23	CAL	--	--	0.0000606 J	0.0539	--	--	721	616	85.4	<0.000018	<5.1	0.00004 JK	69	0.016	0.69	4	5.8	RSAJ6
	1,2,3,4,5,6,7,8-Octachlorodibenzofuran	µg/kg	390	CAL	--	--	0.00054 JK	0.936	--	--	721	685	95.0	<0.000109	4.5 UJ	0.00022 JK	1,400 J	0.4	23	120	5.2	RSAJ7
	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	µg/kg	0.025	CAL	--	--	0.00019 JK	0.0044	--	--	721	494	68.5	<0	<3.1	0.0000385 JK	6.4 J	0.01	0.14	0.58	4.3	SA127
	1,2,3,7,8-Pentachlorodibenzofuran	µg/kg	0.47	CAL	--	--	0.000112 JK	0.0773	--	--	721	630	87.4	<0.000023	<3.7	0.000068	92	0.052	1.6	8	5	SA127
	2,3,4,7,8-Pentachlorodibenzofuran	µg/kg	0.047	CAL	--	--	0.0000763 JK	0.046	--	--	721	600	83.2	<0.000022	<0.12	0.000039	49 J	0.033	0.88	4.3	4.9	SA127
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	µg/kg	0.015	CAL	1	BCL	0.00038 JK	0.00158	--	--	721	482	66.9	<0	<1.6	0.0000284 JK	2.1 J	0.0031	0.044	0.19	4.2	SA127
	2,3,7,8-Tetrachlorodibenzofuran	µg/kg	0.084	CAL	--	--	0.000343 J	0.0445	--	--	721	643	89.2	<0.000022	<1.5	0.000063 JK	48.2	0.029	1	4.6	4.7	RSAI7
Pesticides - OCPs	beta-BHC	µg/kg	5.45	LBCL	66,700	BCL	1.1 J	7.3	--	--	381	191	50.1	<0.3451	<18,000	0.72 J	1,300 J	12	78	210	2.7	EE-E08A-1
	4,4'-DDE	µg/kg	3,000	LBCL	9,500	BCL	2.9 J	14	--	--	381	179	47.0	<0.24	<35,000	0.29 J	7,700	15	400	1,300	3.3	SSAM2-02
	4,4'-DDT	µg/kg	2,000	LBCL	9,500	BCL	2.2 J	<7	--	--	381	144	37.8	<0.4267	<35,000	0.66 J	2,300	13	150	420	2.8	SSAM2-01

Notes:

[1] NDEP, 2015. User's Guide and Background Technical Document for NDEP Basic Comparison Levels (BCLs) for Human Health for the BMI Complex and Common Areas. Revision 13, February.

[2] NDEP, 2010. NDEP Response to Background Issues and Determination of Background Dataset for TRX. August 17.

[3] TIMET/BRC, 2007. Background Shallow Soil Summary Report, BMI Complex and Common Areas Vicinity.

[4] Industrial Worker screening levels are the lowest level among the indoor worker and outdoor worker Basic Comparison Levels (BCLs). from https://ndep.nv.gov/bmi/docs/bcl_calculations_February_2015.pdf

LBCL: Leaching-based Basic Comparison Levels (LBCLs), with a dilution attenutation factor (DAF) of 1 from: https://ndep.nv.gov/bmi/docs/bcl_calculations_February_2015.pdf

CAL: Where no LBCL is available from NDEP, LBCLs were calculated as described in Appendix C.

TABLE 5-1a. PRELIMINARY CHEMICALS OF POTENTIAL CONCERN IN GROUNDWATER
RI/FS Work Plan
Nevada Environmental Response Trust Site; Henderson, Nevada

Chlorates	Perchlorate	Chlorate
Metals	Aluminum	Iron
	Arsenic	Lead
	Boron	Magnesium
	Chromium VI	Manganese
	Chromium (total)	Strontium
	Cobalt	Tungsten
VOCs	Benzene	Carbon Tetrachloride
	Bromodichloromethane	Chlorobenzene
	Bromoform	Chloroform
	1,2-Dichlorobenzene	Chloromethane
	1,4-Dichlorobenzene	Dibromochloromethane
	1,1-Dichloroethane	Methylene Chloride
	1,2-Dichloroethane	Tetrachloroethene
	1,1-Dichloroethene	Trichloroethene
	1,4-Dioxane	1,2,3-Trichloropropane
Organochlorine Pesticides	alpha-BHC	Heptachlor epoxide
Radionuclides	Radium-226 and -228	Thorium-232
	Thorium-228	Uranium-238
	Thorium-230	Uranium
SVOCs	bis(2-Ethylhexyl)phthalate	
General Chemistry	Ammonia	Nitrite
	Bromide*	Phosphorus (total)
	Chloride	Sulfate
	Cyanide (total)	Total Dissolved Solids
	Nitrate	
Organic Acids	4-Chlorobenzenesulfonic acid	

Notes:

* = The asterisk indicates that no comparison screening criterion is available.

TABLE 5-1b. STATISTICAL SUMMARY OF ON-SITE GROUNDWATER SAMPLING RESULTS, September 2014 to December 2015
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Residential Screening Levels		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
Chlorates	Chlorate	µg/L	1,000	BCL	235	202	86.0	<10	<200	37	4,800,000	120,000	880,000	1,400,000	1.5	RISB-19
	Perchlorate	µg/L	18	BCL	1596	1552	97.2	<0.5	<950	0.55 J	2,500,000	380,000	520,000	580,000	1.1	RISB-18
Metals/ Inorganics	Aluminum	µg/L	50	BCL	221	42	19.0	<25	<130	25 J	530 J	52	110	120	1.1	RISB-18
	Antimony	µg/L	6	MCL	59	6	10.2	<0.5	<2.5	0.56 J	1.3 J	0.98	0.96	0.26	0.27	RISB-10
	Arsenic	µg/L	10	MCL	221	221	100.0	--	--	3.4	460	93	100	69	0.69	M-12A
	Barium	µg/L	2,000	MCL	59	58	98.3	<50	<50	9.2 J	170	38	47	32	0.67	RISB-29
	Boron	µg/L	6,670	BCL	233	233	100.0	--	--	490	21,000	3,000	4,200	3,700	0.87	RISB-14
	Cadmium	µg/L	5	MCL	59	0	0.0	<2	<20	--	--	--	--	--	--	--
	Calcium	µg/L	--	--	19	19	100.0	--	--	21,000	520,000	170,000	220,000	190,000	0.88	M-6A
	Chromium (total)	µg/L	100	MCL	782	754	96.4	<2.5	<13	2.8 J	27,000	560	4,400	6,700	1.5	I-T
	Chromium VI	µg/L	100	BCL	275	256	93.1	0.25 UJ	0.25 UJ	0.25 J	21,000	320	3,300	5,500	1.7	M-38
	Cobalt	µg/L	10	BCL	221	14	6.3	<2.5	<13	3.7 J	6.3 J	4.3	4.5	0.66	0.15	MC-50
	Copper	µg/L	1,300	MCL	59	2	3.4	<5	<50	5.3 J	5.9 J	5.6	5.6	0.42	0.076	RISB-32
	Iron	µg/L	300	BCL	234	85	36.3	<10	<50	10 J	43,000	35	2,200	7,100	3.3	M-10
	Lead	µg/L	15	MCL	221	46	20.8	<2.5	<25	2.6 J	23 J	5.1	6.6	4.2	0.64	TR-6
	Magnesium	µg/L	189,000	BCL	221	221	100.0	--	--	11,000	960,000	130,000	180,000	170,000	0.95	TR-6
	Manganese	µg/L	20	BCL	234	95	40.6	<10	<50	10 J	3,200	140	460	700	1.5	RISB-60
	Mercury	µg/L	2	BCL	56	9	16.1	<0.1	<0.5	0.12 J	0.47	0.22	0.22	0.11	0.48	RISB-37
	Molybdenum	µg/L	167	BCL	40	39	97.5	<50	<50	16 J	150	40	50	30	0.6	RISB-15
	Nickel	µg/L	667	BCL	59	14	23.7	<5	<50	5.6 J	23	9.8	11	4.4	0.41	RISB-31
	Niobium	µg/L	3.34	BCL	7	0	0.0	<11	<22	--	--	--	--	--	--	--
	Palladium	µg/L	--	--	7	2	28.6	<0.88	<0.88	0.55 J	1.1 J	0.83	0.83	0.39	0.47	RISB-09
	Phosphorus (total)	µg/L	0.667	BCL	192	96	50.0	<25	<25	25 J	9,900	54	390	1,300	3.4	RISB-63
	Potassium	µg/L	--	--	19	19	100.0	--	--	5,500	140,000	14,000	26,000	32,000	1.2	M-192
	Selenium	µg/L	50	MCL	40	37	92.5	<2.5	<2.5	2.8	9.5	4.5	4.6	1.1	0.25	RISB-10
	Silicon	µg/L	--	--	14	14	100.0	--	--	41,000	51,000	46,000	46,000	3,600	0.078	RISB-14
	Silver	µg/L	100	BCL	40	0	0.0	<5	<25	--	--	--	--	--	--	--
	Sodium	µg/L	--	--	25	25	100.0	--	--	110,000	4,900,000	1,100,000	1,500,000	1,500,000	1	MC-50
	Strontium	µg/L	20,000	BCL	187	187	100.0	--	--	700	53,000	5,400	7,700	7,700	0.99	TR-6
	Thallium	µg/L	2	MCL	40	0	0.0	<0.5	<2.5	--	--	--	--	--	--	--
	Tungsten	µg/L	250	BCL	66	0	0.0	<500	<2,500	--	--	--	--	--	--	--
	Vanadium	µg/L	167	BCL	19	19	100.0	--	--	15	210	34	57	58	1	MC-50
	Zinc	µg/L	10,000	BCL	57	15	26.3	<10	<100	11 J	34	18	19	8.3	0.43	RISB-31
	Zirconium	µg/L	2.67	BCL	9	6	66.7	1 UJ	<200	1.5 J	5.8 J	3	3.3	1.8	0.53	RISB-14

TABLE 5-1b. STATISTICAL SUMMARY OF ON-SITE GROUNDWATER SAMPLING RESULTS, September 2014 to December 2015
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Residential Screening Levels		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
Other Inorganics	Nitrogen, Nitrate-Nitrite	µg/L	--	--	5	5	100.0	--	--	920	23,000 J	1,100	9,800	12,000	1.2	M-38
	Ammonia (as N)	µg/L	--	--	199	40	20.1	<100	<100	110 J	260,000	2,400	13,000	42,000	3.1	M-37
	Bicarbonate as HCO_3	µg/L	--	--	33	33	100.0	--	--	86,000	450,000	150,000	190,000	100,000	0.55	MC-50
	Bromide	µg/L	--	--	194	155	79.9	<1,300	<13,000	260 J	29,000	1,500	2,600	3,200	1.2	M-125
	Carbon	µg/L	--	--	27	20	74.1	<650	<650	690 J	6,800	1,300	2,300	1,800	0.78	MC-45
	Chloride	µg/L	250,000	2nd MCL	208	208	100.0	--	--	53,000	12,000,000	460,000	1,200,000	2,000,000	1.7	TR-6
	Cyanide (total)*	µg/L	200	BCL	163	21	12.9	2.4 UJ	<250	9 J	466	36	84	130	1.5	M-55
	Dissolved Solids (total)	µg/L	--	--	759	759	100.0	--	--	500,000	26,000,000	5,100,000	6,100,000	4,100,000	0.68	TR-6
	Hydroxide	µg/L	--	--	33	0	0.0	<1,400	<1,400	--	--	--	--	--	--	--
	Nitrate/Nitrite	µg/L	--	--	606	389	64.2	<70	<35,000	400	170,000 J	5,200	11,000	21,000	1.8	M-140
	ortho-Phosphate (total) (as P)	µg/L	--	--	33	0	0.0	80 UJ	<4,000	--	--	--	--	--	--	--
	Sulfate	µg/L	--	--	203	203	100.0	--	--	150,000	3,000,000	1,200,000	1,200,000	650,000	0.56	M-148A
	Sulfide (total)	µg/L	--	--	33	3	9.1	<20	<2,000	25 J	52 J	51	43	15	0.36	RISB-60
Radionuclides	Radium-226	pCi/L	5	MCL	187	152	81.3	<0.0721	<0.224	0.0773	21.3	0.26	0.63	1.8	2.8	RISB-13
	Radium-228	pCi/L	5	MCL	187	48	25.7	<0.246	<0.834	0.344	11.4	0.58	1	1.6	1.6	RISB-13
	Thorium-228	pCi/L	0.14	BCL	187	60	32.1	<0.146	<1.8	0.188	22.4	0.95	1.2	2.8	2.3	RISB-13
	Thorium-230	pCi/L	0.05	BCL	187	133	71.1	<0.119	<0.927	0.0771 J	39.6	0.77	1.1	3.4	3.2	RISB-13
	Thorium-232	pCi/L	0.17	BCL	187	4	2.1	<0.0655	<0.922	0.0634	8.34	0.25	2.2	4.1	1.8	RISB-13
	Uranium-233/234	pCi/L	--	--	187	187	100.0	--	--	0.829	66.9	11	12	11	0.87	RISB-13
	Uranium-235/236	pCi/L	--	--	187	86	46.0	<0.0862	<4.29	0.0779	3.88	0.55	0.69	0.59	0.85	M-69
	Uranium-238	pCi/L	--	--	187	187	100.0	--	--	0.566	43.8	7.7	8.1	7.3	0.9	RISB-13
	Uranium (total)	µg/L	30	CAL	187	187	100.0	--	--	1.9	160	27	28	25	0.9	M-148A
VOCs	Benzene	µg/L	5	BCL	204	13	6.4	<0.25	<5	0.84	58,000	1,200	5,900	16,000	2.7	MC-29
	Bromobenzene	µg/L	85.2	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	Bromochloromethane	µg/L	83	RSL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	Bromodichloromethane	µg/L	80	MCL	204	17	8.3	<0.25	<50	0.27 J	0.72	0.32	0.38	0.12	0.32	M-81A
	Bromoform	µg/L	80	MCL	204	20	9.8	0.25 UJ	<80	0.4 J	4.1 J	1.2	1.5	0.98	0.65	RISB-55
	Bromomethane	µg/L	8.53	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	2-Butanone	µg/L	6,860	BCL	204	0	0.0	<2.5	<500	--	--	--	--	--	--	--
	n-Butylbenzene	µg/L	238	BCL	204	0	0.0	<0.4	<80	--	--	--	--	--	--	--
	sec-Butylbenzene	µg/L	238	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	Carbon tetrachloride	µg/L	5	BCL	204	45	22.1	<0.25	50 UJ	0.25 J	350	0.58	11	52	4.8	M-123
	Chlorobenzene	µg/L	100	BCL	204	16	7.8	<0.25	<5	0.27 J	50,000	780	6,100	13,000	2.2	MC-29
	Chloroethane	µg/L	26.9	BCL	204	1	0.5	<0.25	<80	0.42 J	0.42 J	0.42	0.42	--	--	MC-53
	Chloroform	µg/L	80	MCL	205	173	84.4	<0.25	<0.25	0.36 J	17,000	42	570	2,300	4	M-125
	Chloromethane	µg/L	3.12	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	2-Chlorotoluene	µg/L	90.2	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	4-Chlorotoluene	µg/L	250	RSL	201	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	Cumene	µg/L	667	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	p-Cymene	µg/L	834	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--

TABLE 5-1b. STATISTICAL SUMMARY OF ON-SITE GROUNDWATER SAMPLING RESULTS, September 2014 to December 2015
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Residential Screening Levels		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
VOCs	Dibromochloromethane	µg/L	80	MCL	204	3	1.5	<0.25	<50	0.25 J	0.4 J	0.3	0.32	0.076	0.24	RISB-55
	1,2-Dibromoethane	µg/L	0.05	MCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	Dibromomethane	µg/L	8.14	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	1,2-Dichlorobenzene	µg/L	600	MCL	204	29	14.2	<0.25	<10	0.31 J	1,000	3.3	110	260	2.4	MC-29
	1,3-Dichlorobenzene	µg/L	80.7	BCL	204	16	7.8	<0.25	<10	0.25 J	54 J	1.3	11	18	1.6	MC-29
	1,4-Dichlorobenzene	µg/L	75	MCL	204	27	13.2	<0.25	<5	0.28 J	1,800	1.7	180	460	2.6	MC-29
	Dichlorodifluoromethane	µg/L	393	BCL	204	0	0.0	<0.25	50 UJ	--	--	--	--	--	--	--
	1,1-Dichloroethane	µg/L	2.79	BCL	204	22	10.8	<0.25	<50	0.28 J	30	1.2	3.5	6.9	2	M-5A
	1,2-Dichloroethane	µg/L	5	BCL	204	11	5.4	<0.25	<50	0.27 J	17	0.81	2.4	4.9	2	M-5A
	1,1-Dichloroethene	µg/L	7	MCL	204	26	12.7	<0.25	<50	0.25 J	130	0.96	12	33	2.7	M-97
	cis-1,2-Dichloroethene	µg/L	70	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	trans-1,2-Dichloroethene	µg/L	100	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	1,2-Dichloropropane	µg/L	5	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	1,3-Dichloropropane	µg/L	8.24	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	2,2-Dichloropropane	µg/L	--	--	204	0	0.0	0.25 UJ	80 UJ	--	--	--	--	--	--	--
	1,1-Dichloropropene	µg/L	--	--	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	cis-1,3-Dichloropropene	µg/L	--	--	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	trans-1,3-Dichloropropene	µg/L	--	--	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	Ethyl benzene	µg/L	700	MCL	204	5	2.5	<0.25	<50	0.7	0.94	0.7	0.75	0.11	0.14	TR-3
	Ethyl tert-butyl ether	µg/L	--	--	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	Methylene Chloride	µg/L	5	BCL	204	1	0.5	<0.88	<180	1.1 J	1.1 J	1.1	1.1	--	--	M-135
	n-Propylbenzene	µg/L	238	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	Styrene	µg/L	100	BCL	202	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	1,1,1,2-Tetrachloroethane	µg/L	0.605	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	1,1,2,2-Tetrachloroethane	µg/L	0.0775	BCL	204	0	0.0	0.25 UJ	<50	--	--	--	--	--	--	--
	Tetrachloroethene	µg/L	5	BCL	204	69	33.8	<0.25	<13	0.26 J	83	0.57	2.8	12	4.4	M-123
	Toluene	µg/L	1,000	MCL	204	7	3.4	<0.25	<50	0.38 J	1.5 J	0.38	0.72	0.53	0.74	MC-51
	1,2,3-Trichlorobenzene	µg/L	7	RSL	204	5	2.5	<0.4	<80	0.82 J	1.1	0.9	0.91	0.11	0.13	MC-50
	1,2,4-Trichlorobenzene	µg/L	70	MCL	204	6	2.9	<0.4	<40	0.41 J	120 J	2.6	22	48	2.2	MC-29
	1,1,1-Trichloroethane	µg/L	200	MCL	204	0	0.0	<0.25	50 UJ	--	--	--	--	--	--	--
	1,1,2-Trichloroethane	µg/L	5	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	Trichloroethene	µg/L	5	BCL	204	73	35.8	<0.25	<50	0.26 J	16	1.7	3.7	4.1	1.1	M-2A
	Trichlorofluoromethane	µg/L	1,270	BCL	204	6	2.9	<0.25	<50	0.32 J	100	0.32	27	43	1.6	M-123
	1,2,3-Trichloropropane	µg/L	0.0026	BCL	385	101	26.2	<0.0025	<50	0.0025 J	0.57	0.036	0.095	0.12	1.2	M-135
	1,2,4-Trimethylbenzene	µg/L	14.6	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	1,3,5-Trimethylbenzene	µg/L	14.5	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	Vinyl chloride	µg/L	2	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	m,p-Xylene	µg/L	--	--	204	5	2.5	<0.5	<100	3.1	3.9	3.1	3.3	0.36	0.11	TR-3
	o-Xylene	µg/L	1,200	BCL	204	5	2.5	<0.25	<50	2	2.5	2	2.1	0.22	0.11	TR-3
	Xylenes (total)	µg/L	10,000	BCL	2	0	0.0	<0.5	<0.5	--	--	--	--	--	--	--

TABLE 5-1b. STATISTICAL SUMMARY OF ON-SITE GROUNDWATER SAMPLING RESULTS, September 2014 to December 2015
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Residential Screening Levels		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
VOCs	1,2-Dibromo-3-chloropropane	µg/L	0.2	MCL	204	0	0.0	<0.5	<100	--	--	--	--	--	--	--
	tert Butyl alcohol	µg/L	62,600	BCL	3	0	0.0	<5	<5	--	--	--	--	--	--	--
	tert-Butylbenzene	µg/L	238	BCL	204	0	0.0	<0.25	<50	--	--	--	--	--	--	--
	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/L	58,900	BCL	3	0	0.0	<0.5	<0.5	--	--	--	--	--	--	--
	1,4-Dioxane	µg/L	0.779	BCL	181	52	28.7	<0.5	<2.5	0.5 J	22	0.85	2.7	4.7	1.8	MW-16
SVOCs	Aniline	µg/L	13.7	BCL	20	0	0.0	<1.9	<2.5	--	--	--	--	--	--	--
	Benzidine	µg/L	0.000339	BCL	16	0	0.0	4.9 UJ	6.2 UJ	--	--	--	--	--	--	--
	Benzoic acid	µg/L	133,000	BCL	9	1	11.1	<1.9	<2.2	6.1 J	6.1 J	6.1	6.1	--	--	RISB-09
	Benzyl alcohol	µg/L	16,700	BCL	22	0	0.0	1.9 UJ	2.5 UJ	--	--	--	--	--	--	--
	4-Bromophenyl-phenyl ether	µg/L	--	--	22	0	0.0	<0.47	<0.62	--	--	--	--	--	--	--
	Butylbenzylphthalate	µg/L	41	BCL	22	0	0.0	<1.9	<2.5	--	--	--	--	--	--	--
	4-Chloroaniline	µg/L	0.39	BCL	20	0	0.0	<0.97	<1.2	--	--	--	--	--	--	--
	2-Chloronaphthalene	µg/L	2.08	BCL	22	0	0.0	<0.19	<0.25	--	--	--	--	--	--	--
	2-Chlorophenol	µg/L	64.2	BCL	8	0	0.0	<0.49	<0.55	--	--	--	--	--	--	--
	4-Chlorophenyl-phenyl ether	µg/L	--	--	22	0	0.0	<0.19	<0.25	--	--	--	--	--	--	--
	Di-n-butylphthalate	µg/L	3,340	BCL	22	0	0.0	<0.95	<1.2	--	--	--	--	--	--	--
	Di-n-octylphthalate	µg/L	400	BCL	22	0	0.0	<1.9	<2.5	--	--	--	--	--	--	--
	Dibenzofuran	µg/L	66.7	BCL	22	0	0.0	<0.19	<0.25	--	--	--	--	--	--	--
	1,2-Dichlorobenzene	µg/L	600	MCL	22	3	13.6	<0.19	<0.25	0.39 J	0.63	0.59	0.54	0.13	0.24	M-65
	1,3-Dichlorobenzene	µg/L	80.7	BCL	22	4	18.2	<0.19	<0.25	0.24 J	0.65 J	0.26	0.35	0.2	0.57	M-66
	1,4-Dichlorobenzene	µg/L	75	MCL	22	3	13.6	<0.19	<0.25	0.28 J	0.41 J	0.39	0.36	0.07	0.19	M-66
	3,3'-Dichlorobenzidine	µg/L	0.173	BCL	16	0	0.0	<1.9	<2.5	--	--	--	--	--	--	--
	2,4-Dichlorophenol	µg/L	100	BCL	8	0	0.0	<0.97	<1.1	--	--	--	--	--	--	--
	Diethylphthalate	µg/L	26,700	BCL	22	9	40.9	<0.47	<0.62	0.68 J	2.3 J	1	1.1	0.5	0.44	M-38
	2,4-Dimethylphenol	µg/L	667	BCL	8	0	0.0	<0.97	<1.1	--	--	--	--	--	--	--
	Dimethylphthalate	µg/L	334,000	BCL	22	0	0.0	<0.24	<0.31	--	--	--	--	--	--	--
	2,4-Dinitrophenol	µg/L	66.7	BCL	8	0	0.0	<1.9	<2.2	--	--	--	--	--	--	--
	2,4-Dinitrotoluene	µg/L	0.251	BCL	22	0	0.0	<1.9	<2.5	--	--	--	--	--	--	--
	2,6-Dinitrotoluene	µg/L	33.4	BCL	22	0	0.0	<1.9	<2.5	--	--	--	--	--	--	--
	1,2-Diphenylhydrazine	µg/L	0.0974	BCL	22	0	0.0	<0.47	<0.62	--	--	--	--	--	--	--
	Hexachlorobenzene	µg/L	1	MCL	22	0	0.0	<0.47	<0.62	--	--	--	--	--	--	--
	Hexachlorobutadiene	µg/L	0.999	BCL	226	8	3.5	<0.25	<50	0.25 J	1.1 J	0.57	0.62	0.33	0.54	M-66
	Hexachlorocyclopentadiene	µg/L	50	BCL	22	0	0.0	<1.9	2.5 UJ	--	--	--	--	--	--	--
	Hexachloroethane	µg/L	5.56	BCL	22	0	0.0	<0.47	<0.62	--	--	--	--	--	--	--
	Isophorone	µg/L	82	BCL	22	0	0.0	<0.47	0.62 UJ	--	--	--	--	--	--	--
	1-Methylnaphthalene	µg/L	1.1	RSL	20	0	0.0	<3.3	<4	--	--	--	--	--	--	--
	2-Methylnaphthalene	µg/L	36	RSL	21	0	0.0	<0.49	<0.62	--	--	--	--	--	--	--
	2-Methylphenol	µg/L	1,670	BCL	8	0	0.0	<0.97	<1.1	--	--	--	--	--	--	--

TABLE 5-1b. STATISTICAL SUMMARY OF ON-SITE GROUNDWATER SAMPLING RESULTS, September 2014 to December 2015
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Residential Screening Levels		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
SVOCs	3&4-Methylphenol	µg/L	--	--	5	0	0.0	<1.9	<2	--	--	--	--	--	--	--
	4-Methylphenol	µg/L	167	BCL	6	0	0.0	<2	<2.3	--	--	--	--	--	--	--
	2-Nitroaniline	µg/L	100	BCL	21	0	0.0	<1.9	<2.5	--	--	--	--	--	--	--
	3-Nitroaniline	µg/L	--	--	20	0	0.0	<1.9	<2.5	--	--	--	--	--	--	--
	4-Nitroaniline	µg/L	3.8	RSL	20	0	0.0	<1.9	<2.5	--	--	--	--	--	--	--
	Nitrobenzene	µg/L	0.14	BCL	22	0	0.0	<0.47	<0.62	--	--	--	--	--	--	--
	2-Nitrophenol	µg/L	--	--	8	0	0.0	<0.97	<1.1	--	--	--	--	--	--	--
	4-Nitrophenol	µg/L	267	BCL	8	0	0.0	<1.9	<2.2	--	--	--	--	--	--	--
	n-Nitrosodiphenylamine	µg/L	15.9	BCL	20	0	0.0	<0.49	<0.62	--	--	--	--	--	--	--
	Octachlorostyrene	µg/L	--	--	22	0	0.0	<6.2	<7.4	--	--	--	--	--	--	--
	Pentachlorophenol	µg/L	1	BCL	8	0	0.0	<0.97	<1.1	--	--	--	--	--	--	--
	Phenol	µg/L	10,000	BCL	8	0	0.0	<0.49	<0.55	--	--	--	--	--	--	--
	1,2,4-Trichlorobenzene	µg/L	70	MCL	22	2	9.1	<0.47	<0.6	1.4	2.1	1.8	1.8	0.49	0.28	RISB-13
	2,4,5-Trichlorophenol	µg/L	3,340	BCL	8	0	0.0	<0.97	<1.1	--	--	--	--	--	--	--
	2,4,6-Trichlorophenol	µg/L	7.08	BCL	8	0	0.0	<0.49	<0.55	--	--	--	--	--	--	--
	bis(2-Chloro-1-methylethyl) ether	µg/L	0.373	BCL	22	0	0.0	<0.19	0.25 UJ	--	--	--	--	--	--	--
	bis(2-Chloroethoxy)methane	µg/L	59	RSL	22	0	0.0	<0.19	<0.25	--	--	--	--	--	--	--
	bis(2-Chloroethyl) ether	µg/L	0.0137	BCL	22	0	0.0	<0.19	<0.25	--	--	--	--	--	--	--
	bis(2-Ethylhexyl)phthalate	µg/L	6	BCL	22	1	4.5	<1.9	<2.5	3.3 J	3.3 J	3.3	3.3	--	--	RISB-11
	4,6-Dinitro-2-methylphenol	µg/L	--	--	8	0	0.0	<1.9	<2.2	--	--	--	--	--	--	--
	4-Chloro-3-methylphenol	µg/L	1,400	RSL	8	0	0.0	<0.19	<0.22	--	--	--	--	--	--	--
	n-Nitroso-di-n-propylamine	µg/L	0.0111	BCL	22	0	0.0	<0.95	<1.2	--	--	--	--	--	--	--
PAHs	Acenaphthene	µg/L	6.24	BCL	28	0	0.0	<0.11	<0.25	--	--	--	--	--	--	--
	Acenaphthylene	µg/L	6.22	BCL	28	0	0.0	<0.11	<0.25	--	--	--	--	--	--	--
	Anthracene	µg/L	6.25	BCL	28	0	0.0	<0.11	<0.25	--	--	--	--	--	--	--
	Benzo(a)anthracene	µg/L	0.107	BCL	28	0	0.0	<0.11	<2.5	--	--	--	--	--	--	--
	Benzo(a)pyrene	µg/L	0.2	BCL	29	0	0.0	<0.11	<0.62	--	--	--	--	--	--	--
	Benzo(b)fluoranthene	µg/L	0.107	BCL	29	0	0.0	<0.11	<1.2	--	--	--	--	--	--	--
	Benzo(g,h,i)perylene	µg/L	1,000	BCL	29	0	0.0	<0.11	2.5 UJ	--	--	--	--	--	--	--
	Benzo(k)fluoranthene	µg/L	1.07	BCL	29	0	0.0	<0.11	<0.31	--	--	--	--	--	--	--
	Chrysene	µg/L	10.7	BCL	29	0	0.0	<0.11	<0.25	--	--	--	--	--	--	--
	Dibenz(a,h)anthracene	µg/L	0.0107	BCL	29	0	0.0	<0.11	<0.31	--	--	--	--	--	--	--
	Fluoranthene	µg/L	1,330	BCL	29	0	0.0	<0.11	<0.25	--	--	--	--	--	--	--
	Fluorene	µg/L	6.23	BCL	29	0	0.0	<0.11	<0.25	--	--	--	--	--	--	--
	Indeno(1,2,3-cd)pyrene	µg/L	0.107	BCL	29	0	0.0	0.11 UJ	<1.2	--	--	--	--	--	--	--
	Naphthalene	µg/L	0.165	BCL	233	1	0.4	<0.11	<80	0.7 J	0.7 J	0.7	0.7	--	--	M-163
	Phenanthrene	µg/L	6.22	BCL	29	0	0.0	<0.11	<0.25	--	--	--	--	--	--	--
	Pyrene	µg/L	6.22	BCL	29	0	0.0	<0.11	<0.25	--	--	--	--	--	--	--

TABLE 5-1b. STATISTICAL SUMMARY OF ON-SITE GROUNDWATER SAMPLING RESULTS, September 2014 to December 2015
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Residential Screening Levels		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
PCBs	Aroclor-1016	µg/L	1.11	BCL	7	0	0.0	<0.28	<0.31	--	--	--	--	--	--	--
	Aroclor-1221	µg/L	0.039	BCL	7	0	0.0	<0.28	<0.31	--	--	--	--	--	--	--
	Aroclor-1232	µg/L	0.039	BCL	7	0	0.0	<0.28	<0.31	--	--	--	--	--	--	--
	Aroclor-1242	µg/L	0.039	BCL	7	0	0.0	<0.28	<0.31	--	--	--	--	--	--	--
	Aroclor-1248	µg/L	0.039	BCL	7	0	0.0	<0.28	<0.31	--	--	--	--	--	--	--
	Aroclor-1254	µg/L	0.039	BCL	7	0	0.0	<0.28	<0.31	--	--	--	--	--	--	--
	Aroclor-1260	µg/L	0.039	BCL	7	1	14.3	<0.28	<0.31	0.4 J	0.4 J	0.4	0.4	--	--	RISB-12
Dioxins/Furans	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	µg/L	0.003	CAL	7	6	85.7	0.00000067 UJ	0.00000067UJ	0.000001 J	0.000021 J	0.0000032	0.0000056	0.0000076	1.4	RISB-12
	1,2,3,4,6,7,8-Heptachlorodibenzofuran	µg/L	0.003	CAL	7	7	100.0	--	--	0.00000097 J	0.00022	0.0000032	0.00004	0.00008	2	RISB-12
	1,2,3,4,7,8,9-Heptachlorodibenzofuran	µg/L	0.003	CAL	7	4	57.1	<0.00000054	<0.00000077	0.0000016 J	0.000087	0.0000092	0.000027	0.00004	1.5	RISB-12
	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	µg/L	0.0003	CAL	7	1	14.3	<0.00000039	<0.00000058	0.0000032 J	0.0000032 J	0.0000032	0.0000032	--	--	RISB-12
	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	µg/L	0.0003	CAL	7	1	14.3	<0.00000039	<0.000002	0.000005 J	0.000005 J	0.000005	0.000005	--	--	RISB-12
	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	µg/L	0.0000126	BCL	7	1	14.3	<0.00000034	<0.00000076	0.0000064 J	0.0000064 J	0.0000064	0.0000064	--	--	RISB-12
	1,2,3,4,7,8-Hexachlorodibenzofuran	µg/L	0.0003	CAL	7	5	71.4	<0.00000033	0.00000064UJ	0.00000044 J	0.0001	0.0000084	0.000025	0.000042	1.7	RISB-12
	1,2,3,6,7,8-Hexachlorodibenzofuran	µg/L	0.0003	CAL	7	5	71.4	<0.00000031	0.0000006 UJ	0.00000063 J	0.000063	0.0000051	0.000016	0.000027	1.7	RISB-12
	1,2,3,7,8,9-Hexachlorodibenzofuran	µg/L	0.0003	CAL	7	4	57.1	<0.00000034	<0.00000066	0.00000096 J	0.0000094 J	0.0000012	0.0000032	0.0000041	1.3	RISB-12
	2,3,4,6,7,8-Hexachlorodibenzofuran	µg/L	0.0003	CAL	7	3	42.9	<0.00000032	<0.00000063	0.0000016 J	0.000014 J	0.0000027	0.0000061	0.0000069	1.1	RISB-12
	1,2,3,4,5,6,7,8-Octachlorodibenzo-p-dioxin	µg/L	0.1	CAL	7	7	100.0	--	--	0.0000052 J	0.000029 J	0.0000074	0.000012	0.0000094	0.77	RISB-12
	1,2,3,4,5,6,7,8-Octachlorodibenzofuran	µg/L	0.1	CAL	7	7	100.0	--	--	0.0000029 J	0.00053	0.0000088	0.000098	0.00019	2	RISB-12
	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	µg/L	0.00003	CAL	7	1	14.3	<0.00000059	<0.00000093	0.000005 J	0.000005 J	0.000005	0.000005	--	--	RISB-12
	1,2,3,7,8-Pentachlorodibenzofuran	µg/L	0.001	CAL	7	5	71.4	<0.00000045	0.00000056UJ	0.00000063 J	0.000059	0.0000053	0.000015	0.000025	1.7	RISB-12
	2,3,4,7,8-Pentachlorodibenzofuran	µg/L	0.0001	CAL	7	4	57.1	<0.00000036	<0.00000058	0.00000093 J	0.000036 J	0.0000041	0.000011	0.000017	1.5	RISB-12
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	µg/L	0.00003	MCL	7	1	14.3	<0.00000029	<0.00000055	0.0000021 J	0.0000021 J	0.0000021	0.0000021	--	--	RISB-12
	2,3,7,8-Tetrachlorodibenzofuran	µg/L	0.0003	CAL	7	6	85.7	<0.00000043	<0.00000043	0.00000065 J	0.000065	0.0000043	0.000014	0.000025	1.8	RISB-12
Pesticides - OCPs	Aldrin	µg/L	0.00458	BCL	20	0	0.0	<0.0014	<0.0019	--	--	--	--	--	--	--
	alpha-BHC	µg/L	10	BCL	20	8	40.0	<0.0024	<0.0027	0.0056 J	0.032	0.0076	0.013	0.011	0.88	RISB-14
	beta-BHC	µg/L	2	BCL	20	7	35.0	<0.0038	<0.0044	0.011 J	0.078	0.049	0.044	0.024	0.56	RISB-13
	delta-BHC	µg/L	10	BCL	20	8	40.0	<0.0033	<0.004	0.0059	0.057 J	0.016	0.024	0.018	0.77	M-126
	gamma-BHC	µg/L	0.2	BCL	20	4	20.0	<0.0028	<0.0034	0.005 J	0.13 J	0.059	0.063	0.066	1	M-126
	gamma-Chlordane	µg/L	--	--	20	0	0.0	<0.028	<0.037	--	--	--	--	--	--	--
	4,4'-DDD	µg/L	0.325	BCL	20	0	0.0	<0.0038	<0.0049	--	--	--	--	--	--	--
	2,4'-DDE	µg/L	--	--	20	0	0.0	<0.019	<0.025	--	--	--	--	--	--	--
	4,4'-DDE	µg/L	0.229	BCL	20	0	0.0	<0.0028	<0.0037	--	--	--	--	--	--	--
	4,4'-DDT	µg/L	0.229	BCL	20	0	0.0	<0.0038	<0.0049	--	--	--	--	--	--	--
	Dieldrin	µg/L	0.00487	BCL	20	0	0.0	<0.0019	<0.0025	--	--	--	--	--	--	--
	Endosulfan I	µg/L	--	--	20	0	0.0	<0.0028	<0.0037	--	--	--	--	--	--	--
	Endosulfan II	µg/L	--	--	20	0	0.0	<0.0019	0.0025 UJ	--	--	--	--	--	--	--
	Endosulfan sulfate	µg/L	--	--	20	0	0.0	<0.0028	<0.0037	--	--	--	--	--	--	--
	Endrin	µg/L	2	BCL	20	0	0.0	<0.0019	<0.0025	--	--	--	--	--	--	--
	Endrin aldehyde	µg/L	--	--	20	0	0.0	<0.0019	<0.0025	--	--	--	--	--	--	--

TABLE 5-1b. STATISTICAL SUMMARY OF ON-SITE GROUNDWATER SAMPLING RESULTS, September 2014 to December 2015
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Residential Screening Levels		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum
Pesticides - OCPs	Endrin ketone	µg/L	--	--	20	0	0.0	<0.0066	<0.0086	--	--	--	--	--	--	--
	Heptachlor	µg/L	0.4	MCL	20	0	0.0	<0.0028	<0.0037	--	--	--	--	--	--	--
	Heptachlor epoxide	µg/L	0.2	BCL	20	0	0.0	<0.0024	<0.0031	--	--	--	--	--	--	--
	Methoxychlor	µg/L	40	MCL	20	0	0.0	<0.0033	<0.0043	--	--	--	--	--	--	--
	Toxaphene	µg/L	3	MCL	20	0	0.0	<0.24	<0.31	--	--	--	--	--	--	--
Pesticides - OPPs	Atrazine	µg/L	3	BCL	7	0	0.0	<0.31	<0.34	--	--	--	--	--	--	--
	Chlorpyrifos	µg/L	100	BCL	7	0	0.0	<0.38	<0.42	--	--	--	--	--	--	--
	Coumaphos	µg/L	--	--	7	0	0.0	<0.14	<0.16	--	--	--	--	--	--	--
	Dasanit	µg/L	--	--	7	0	0.0	<0.58	<0.64	--	--	--	--	--	--	--
	Demeton (O + S)	µg/L	--	--	7	0	0.0	<0.22	<0.25	--	--	--	--	--	--	--
	Diazinon	µg/L	30	BCL	7	0	0.0	<0.16	<0.17	--	--	--	--	--	--	--
	Dichlorovos	µg/L	0.269	BCL	7	0	0.0	<0.17	<0.19	--	--	--	--	--	--	--
	Dimethoate	µg/L	4	RSL	7	0	0.0	<0.48	<0.53	--	--	--	--	--	--	--
	Disulfoton	µg/L	1.33	BCL	7	0	0.0	<0.34	<0.38	--	--	--	--	--	--	--
	Ethoprop	µg/L	--	--	7	0	0.0	<0.19	<0.21	--	--	--	--	--	--	--
	Ethyl p-nitrophenyl benzenethiophosphate	µg/L	0.089	RSL	7	0	0.0	<0.16	<0.18	--	--	--	--	--	--	--
	Famphur	µg/L	--	--	7	0	0.0	<0.19	<0.21	--	--	--	--	--	--	--
	Fenthion	µg/L	--	--	7	0	0.0	<0.16	<0.18	--	--	--	--	--	--	--
	Malathion	µg/L	667	BCL	7	0	0.0	<0.14	<0.16	--	--	--	--	--	--	--
	Merphos	µg/L	0.6	RSL	7	0	0.0	<0.19	<0.2	--	--	--	--	--	--	--
	Methyl parathion	µg/L	8.34	BCL	7	0	0.0	<0.15	<0.17	--	--	--	--	--	--	--
	Mevinphos	µg/L	--	--	7	0	0.0	<0.49	<0.54	--	--	--	--	--	--	--
	Parathion	µg/L	200	BCL	7	0	0.0	<0.15	<0.17	--	--	--	--	--	--	--
	Phorate	µg/L	3	RSL	7	0	0.0	<0.16	<0.18	--	--	--	--	--	--	--
	Ronnel	µg/L	1,670	BCL	7	0	0.0	<0.12	<0.14	--	--	--	--	--	--	--
	Simazine	µg/L	4	BCL	7	0	0.0	<0.24	0.26 UJ	--	--	--	--	--	--	--
	Stirophos	µg/L	--	--	7	0	0.0	<0.13	<0.15	--	--	--	--	--	--	--
	Sulfotepp	µg/L	7.1	RSL	7	0	0.0	<0.18	<0.2	--	--	--	--	--	--	--
	Sulprofos	µg/L	--	--	7	0	0.0	<0.33	<0.37	--	--	--	--	--	--	--
	Thionazin	µg/L	--	--	7	0	0.0	<0.33	<0.37	--	--	--	--	--	--	--
	o-Ethyl o-2,4,5-trichlorophenyl ethyl-phosphonothioate	µg/L	--	--	7	0	0.0	<0.26	<0.28	--	--	--	--	--	--	--
Petroleum Indicators	Diesel Range Organics (C10-C28)	µg/L	--	--	14	11	78.6	<25	29 UJ	23 J	880	65	190	260	1.4	RISB-59
	EFH (C10-C40)	µg/L	--	--	14	12	85.7	<25	29 UJ	44 J	1,600	99	290	440	1.5	RISB-59
	Gasoline Range Organics (C6-C10)	µg/L	--	--	7	2	28.6	<25	<25	35 J	46 J	40	40	7.8	0.19	RISB-58
	Petroleum Hydrocarbons (C29-C40)	µg/L	--	--	14	3	21.4	<23	<31	42 J	720	96	290	380	1.3	RISB-59
Other Organics	4-Chlorobenzenesulfonic acid	µg/L	33,400	BCL	13	4	30.8	<0.097	<0.097	130	23,000 J	2,400	7,000	11,000	1.5	M-5A
	Organic Halides (total)	µg/L	--	--	8	8	100.0	--	--	1,700	14,000 J-	5,800	6,500	4,800	0.73	M-5A
	Phenolics, Recoverable (total)	µg/L	--	--	8	2	25.0	<25	<25	5.3 J	6.7 J	6	6	0.99	0.16	M-5A
	Phthalic acid	µg/L	66,700	BCL	7	0	0.0	5.9 UJ	7 UJ	--	--	--	--	--	--	--

TABLE 5-1b. STATISTICAL SUMMARY OF ON-SITE GROUNDWATER SAMPLING RESULTS, September 2014 to December 2015
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Unit	Residential Screening Levels		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
			Level	Source				Minimum	Maximum	Minimum	Maximum	Median	Mean	Standard Deviation	Coefficient of Variation	Location of Maximum

Notes:

--: Not Available

µg/L: micrograms per liter

Groundwater screening levels were selected according to the following hierarchy of criteria:

1. Maximum Contaminant Level (MCL): Primary United States Environmental Protection Agency (USEPA) maximum contaminant level (40 CFR Part 141).
2. Basic Contaminant Level (BCL): Residential water basic comparison levels in Nevada Division of Environmental Protection (NDEP) February 2015 BCL Table (NDEP 2015).
3. Regional Screening Level (RSL): Tap water regional screening levels in USEPA Pacific Southwest, Region 9, Regional Screening Levels Chemical Specific Parameters table, November 2015. The screening levels were selected as the minimal values of carcinogenic screening level and noncarcinogenic screening level (USEPA 2015).
4. 2nd Maximum Contaminant Level (2nd MCL): National Secondary Drinking Water Regulations (40 CFR Part 143).
5. Where no MCL or BCL is available from NDEP, BCLs were calculated as described in Appendix C-1.

Detected in less than 5% of samples/below MCL or BCL

Essential Nutrient, macronutrient or salt

No toxicity data or surrogates available to estimate a screening level

Total Uranium was used to evaluate the nature and extent of groundwater from these compounds

*Cyanide (total) includes historical values from 2001 to 2009 only.

Sources:

USEPA. National Primary Drinking Water Regulations. Code of Federal Regulations, 40 CFR Part 141.

NDEP, 2015. User's Guide and Background Technical Document for NDEP Basic Comparison Levels (BCLs) for Human Health for the BMI Complex and Common Areas. Revision 13, February.

USEPA, 2015. Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites. November.

USEPA. National Secondary Drinking Water Regulations. Code of Federal Regulations, 40 CFR Part 143.

TABLE 5-1c. EVALUATION OF INITIAL GROUNDWATER COPCs
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	COPC in RIWP?	Retained as Site COPC in groundwater?	Rationale for not retaining as Site COPC
Chlorates	**Chlorate**	yes	**YES**	
	Perchlorate	yes	**YES**	
Metals/ Inorganics	**Aluminum**	yes	**YES**	
	Arsenic	yes	**YES**	
	Boron	yes	**YES**	
	Chromium (total)	yes	**YES**	
	Chromium VI	yes	**YES**	
	Cobalt	yes	no	Below MCL in groundwater.
	Iron	yes	**YES**	
	Lead	yes	**YES**	
	Magnesium	yes	**YES**	
	Manganese	yes	**YES**	
	Phosphorus (total)	yes	**YES**	
	Strontium	yes	**YES**	
	Vanadium	no	**YES**	
	Zirconium	no	**YES**	
Other Inorganics	Ammonia (as N)	yes	no	Considered macronutrient/salt
	Bromide	yes	**YES**	
	Chloride	yes	no	Considered macronutrient/salt
	Cyanide (total)*	yes	**YES**	
	Total Dissolved Solids	yes	**YES**	
	Nitrate/Nitrite	yes	**YES**	
	Sulfate	yes	no	Considered macronutrient/salt
Radionuclides	Radium-226	yes	no	Use data for Uranium (total)
	Radium-228	yes	no	Use data for Uranium (total)
	Thorium-228	yes	no	Evaluate parent compound Thorium-232
	Thorium-230	yes	no	Evaluate parent compound Thorium-232
	Thorium-232	yes	no	Less than 5% detection frequency
	Uranium-238	yes	no	Use data for Uranium (total)
	Uranium (total)	yes	**YES**	
VOCs	**Benzene**	yes	**YES**	
	Bromodichloromethane	yes	no	Below MCL in groundwater
	Bromoform	yes	no	Below MCL in groundwater
	Carbon tetrachloride	yes	**YES**	
	Chlorobenzene	yes	**YES**	
	Chloroform	yes	**YES**	
	Chloromethane	yes	no	Not detected in groundwater.
	Dibromochloromethane	yes	no	Below MCL in groundwater
	1,2-Dichlorobenzene	yes	**YES**	
	1,4-Dichlorobenzene	yes	**YES**	
	1,1-Dichloroethane	yes	**YES**	
	1,2-Dichloroethane	yes	**YES**	
	1,1-Dichloroethene	yes	**YES**	
	1,4-Dioxane	yes	**YES**	
	Methylene Chloride	yes	no	Below BCL in groundwater.
	Tetrachloroethene	yes	**YES**	
	Trichloroethene	yes	**YES**	
	1,2,3-Trichloropropane	yes	**YES**	
SVOCs	bis(2-Ethylhexyl)phthalate	yes	no	Below BCL in groundwater.
PCBs	**Aroclor-1260**	no	**YES**	

TABLE 5-1c. EVALUATION OF INITIAL GROUNDWATER COPCs
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	COPC in RIWP?	Retained as Site COPC in groundwater?	Rationale for not retaining as Site COPC
Dioxins/ Furans	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	no	YES	
	1,2,3,4,6,7,8-Heptachlorodibenzofuran	no	YES	
	1,2,3,4,7,8,9-Heptachlorodibenzofuran	no	YES	
	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	no	YES	
	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	no	YES	
	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	no	YES	
	1,2,3,4,7,8-Hexachlorodibenzofuran	no	YES	
	1,2,3,6,7,8-Hexachlorodibenzofuran	no	YES	
	1,2,3,7,8,9-Hexachlorodibenzofuran	no	YES	
	2,3,4,6,7,8-Hexachlorodibenzofuran	no	YES	
	1,2,3,4,5,6,7,8-Octachlorodibenzo-p-dioxin	no	YES	
	1,2,3,4,5,6,7,8-Octachlorodibenzofuran	no	YES	
	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	no	YES	
	1,2,3,7,8-Pentachlorodibenzofuran	no	YES	
	2,3,4,7,8-Pentachlorodibenzofuran	no	YES	
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	no	YES	
	2,3,7,8-Tetrachlorodibenzofuran	no	YES	
Pesticides - OCPs	alpha-BHC	yes	no	Below BCL in groundwater.
	Heptachlor epoxide	yes	no	Not detected in groundwater
Other Organics	4-Chlorobenzenesulfonic acid	yes	no	Below BCL in groundwater and not detected in soil.

Notes:

BCL: Basic Contaminant Level

COPC: Chemical of Potential Concern

MCL: Maximum Contaminant Level

RIWP: Remedial Investigation and Feasibility Study Work Plan (ENVIRON, 2012)

*Cyanide (total) includes historical values from 2001 to 2009 only.

Not retained

Essential Nutrient, macronutrient or salt

TABLE 5-1d. UPDATED CHEMICALS OF POTENTIAL CONCERN (COPCs) IN GROUNDWATER
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Residential Screening Levels		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
		Level (µg/L)	Source				Minimum (µg/L)	Maximum (µg/L)	Minimum (µg/L)	Maximum (µg/L)	Median (µg/L)	Mean (µg/L)	Standard Deviation	Coefficient of Variation	Location of Maximum
Chlorates	Chlorate	1,000	BCL	235	202	86.0	<10	<200	37	4,800,000	120,000	880,000	1,400,000	1.5	RISB-19
	Perchlorate	18	BCL	1596	1552	97.2	<0.5	<950	0.55 J	2,500,000	380,000	520,000	580,000	1.1	RISB-18
Metals	Aluminum	50	BCL	221	42	19.0	<25	<130	25 J	530 J	52	110	120	1.1	RISB-18
	Arsenic	10	MCL	221	221	100.0	--	--	3.4	460	93	100	69	0.69	M-12A
	Boron	6,670	BCL	233	233	100.0	--	--	490	21,000	3,000	4,200	3,700	0.87	RISB-14
	Chromium (total)	100	MCL	782	754	96.4	<2.5	<13	2.8 J	27,000	560	4,400	6,700	1.5	I-T
	Chromium VI	100	BCL	275	256	93.1	0.25 UJ	0.25 UJ	0.25 J	21,000	320	3,300	5,500	1.7	M-38
	Iron	300	BCL	234	85	36.3	<10	<50	10 J	43,000	35	2,200	7,100	3.3	M-10
	Lead	15	MCL	221	46	20.8	<2.5	<25	2.6 J	23 J	5.1	6.6	4.2	0.64	TR-6
	Magnesium	189,000	BCL	221	221	100.0	--	--	11,000	960,000	130,000	180,000	170,000	0.95	TR-6
	Manganese	20	BCL	234	95	40.6	<10	<50	10 J	3,200	140	460	700	1.5	RISB-60
	Phosphorus (total)	0.667	BCL	192	96	50.0	<25	<25	25 J	9,900	54	390	1,300	3.4	RISB-63
	Strontium	20,000	BCL	187	187	100.0	--	--	700	53,000	5,400	7,700	7,700	0.99	TR-6
	Vanadium	167	BCL	19	19	100.0	--	--	15	210	34	57	58	1	MC-50
	Zirconium	2.67	BCL	9	6	66.7	1 UJ	<200	1.5 J	5.8 J	3	3.3	1.8	0.53	RISB-14
Other Organics	Bromide	11,000	CAL	194	155	79.9	<1,300	<13,000	260 J	29,000	1,500	2,600	3,200	1.2	M-125
	Cyanide (total)*	200	BCL	163	21	12.9	2.4 UJ	<250	9 J	466	36	84	130	1.5	M-55
	Total Dissolved Solids	--	--	759	759	100.0	--	--	500,000	26,000,000	5,100,000	6,100,000	4,100,000	0.68	TR-6
	Nitrate/Nitrite	--	--	606	389	64.2	<70	<35,000	400	170,000 J	5,200	11,000	21,000	1.8	M-140
Radionuclides	Uranium (total)	30	CAL	187	187	100.0	--	--	1.9	160	27	28	25	0.9	M-148A
VOCs	Benzene	5	BCL	204	13	6.4	<0.25	<5	0.84	58,000	1,200	5,900	16,000	2.7	MC-29
	Carbon tetrachloride	5	BCL	204	45	22.1	<0.25	50 UJ	0.25 J	350	0.58	11	52	4.8	M-123
	Chlorobenzene	100	BCL	204	16	7.8	<0.25	<5	0.27 J	50,000	780	6,100	13,000	2.2	MC-29
	Chloroform	80	MCL	205	173	84.4	<0.25	<0.25	0.36 J	17,000	42	570	2,300	4	M-125
	1,2-Dichlorobenzene	600	MCL	204	29	14.2	<0.25	<10	0.31 J	1,000	3.3	110	260	2.4	MC-29
	1,4-Dichlorobenzene	75	MCL	204	27	13.2	<0.25	<5	0.28 J	1,800	1.7	180	460	2.6	MC-29
	1,1-Dichloroethane	2.79	BCL	204	22	10.8	<0.25	<50	0.28 J	30	1.2	3.5	6.9	2	M-5A
	1,2-Dichloroethane	5	BCL	204	11	5.4	<0.25	<50	0.27 J	17	0.81	2.4	4.9	2	M-5A
	1,1-Dichloroethene	7	MCL	204	26	12.7	<0.25	<50	0.25 J	130	0.96	12	33	2.7	M-97
	1,4-Dioxane	0.779	BCL	181	52	28.7	<0.5	<2.5	0.5 J	22	0.85	2.7	4.7	1.8	MW-16
	Tetrachloroethene	5	BCL	204	69	33.8	<0.25	<13	0.26 J	83	0.57	2.8	12	4.4	M-123
	Trichloroethene	5	BCL	204	73	35.8	<0.25	<50	0.26 J	16	1.7	3.7	4.1	1.1	M-2A
	1,2,3-Trichloropropane	0.0026	BCL	385	101	26.2	<0.0025	<50	0.0025 J	0.57	0.036	0.095	0.12	1.2	M-135
PCBs	Aroclor-1260	0.039	BCL	7	1	14.3	<0.28	<0.31	0.4 J	0.4 J	0.4	0.4	--	--	RISB-12

TABLE 5-1d. UPDATED CHEMICALS OF POTENTIAL CONCERN (COPCs) IN GROUNDWATER
Nevada Environmental Response Trust Site, Henderson, Nevada

Chemical Group	Chemical	Residential Screening Levels		No. of Samples	No. of Detects	% Detects	Nondetects		Detects						
		Level (µg/L)	Source				Minimum (µg/L)	Maximum (µg/L)	Minimum (µg/L)	Maximum (µg/L)	Median (µg/L)	Mean (µg/L)	Standard Deviation	Coefficient of Variation	Location of Maximum
Dioxins/ Furans	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	0.003	CAL	7	6	85.7	0.00000067 UJ	0.00000067UJ	0.000001 J	0.000021 J	0.0000032	0.0000056	0.0000076	1.4	RISB-12
	1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.003	CAL	7	7	100.0	--	--	0.00000097 J	0.00022	0.0000032	0.00004	0.00008	2	RISB-12
	1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.003	CAL	7	4	57.1	<0.00000054	<0.00000077	0.0000016 J	0.000087	0.0000092	0.000027	0.00004	1.5	RISB-12
	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	0.0003	CAL	7	1	14.3	<0.00000039	<0.00000058	0.0000032 J	0.0000032 J	0.0000032	0.0000032	--	--	RISB-12
	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	0.0003	CAL	7	1	14.3	<0.00000039	<0.000002	0.000005 J	0.000005 J	0.000005	0.000005	--	--	RISB-12
	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	0.0000126	BCL	7	1	14.3	<0.00000034	<0.00000076	0.0000064 J	0.0000064 J	0.0000064	0.0000064	--	--	RISB-12
	1,2,3,4,7,8-Hexachlorodibenzofuran	0.0003	CAL	7	5	71.4	<0.00000033	0.00000064UJ	0.00000044 J	0.0001	0.0000084	0.000025	0.000042	1.7	RISB-12
	1,2,3,6,7,8-Hexachlorodibenzofuran	0.0003	CAL	7	5	71.4	<0.00000031	0.0000006 UJ	0.00000063 J	0.000063	0.0000051	0.000016	0.000027	1.7	RISB-12
	1,2,3,7,8,9-Hexachlorodibenzofuran	0.0003	CAL	7	4	57.1	<0.00000034	<0.00000066	0.00000096 J	0.0000094 J	0.0000012	0.0000032	0.0000041	1.3	RISB-12
	2,3,4,6,7,8-Hexachlorodibenzofuran	0.0003	CAL	7	3	42.9	<0.00000032	<0.00000063	0.0000016 J	0.000014 J	0.0000027	0.0000061	0.0000069	1.1	RISB-12
	1,2,3,4,5,6,7,8-Octachlorodibenzo-p-dioxin	0.1	CAL	7	7	100.0	--	--	0.0000052 J	0.000029 J	0.0000074	0.000012	0.0000094	0.77	RISB-12
	1,2,3,4,5,6,7,8-Octachlorodibenzofuran	0.1	CAL	7	7	100.0	--	--	0.0000029 J	0.00053	0.0000088	0.000098	0.00019	2	RISB-12
	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	0.00003	CAL	7	1	14.3	<0.00000059	<0.00000093	0.000005 J	0.000005 J	0.000005	0.000005	--	--	RISB-12
	1,2,3,7,8-Pentachlorodibenzofuran	0.001	CAL	7	5	71.4	<0.00000045	0.00000056UJ	0.00000063 J	0.000059	0.0000053	0.000015	0.000025	1.7	RISB-12
	2,3,4,7,8-Pentachlorodibenzofuran	0.0001	CAL	7	4	57.1	<0.00000036	<0.00000058	0.00000093 J	0.000036 J	0.0000041	0.000011	0.000017	1.5	RISB-12
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.00003	MCL	7	1	14.3	<0.00000029	<0.00000055	0.0000021 J	0.0000021 J	0.0000021	0.0000021	--	--	RISB-12
	2,3,7,8-Tetrachlorodibenzofuran	0.0003	CAL	7	6	85.7	<0.00000043	<0.00000043	0.00000065 J	0.000065	0.0000043	0.000014	0.000025	1.8	RISB-12

Notes:

--: Not Available

µg/L: micrograms per liter

Groundwater screening levels were selected according to the following hierarchy of criteria:

1. Maximum Contaminant Level (MCL): Primary United States Environmental Protection Agency (USEPA) maximum contaminant level (40 CFR Part 141).
2. Basic Contaminant Level (BCL): Residential water basic comparison levels in Nevada Division of Environmental Protection (NDEP) February 2015 BCL Table (NDEP 2015).
3. Regional Screening Level (RSL): Tap water regional screening levels in USEPA Pacific Southwest, Region 9, Regional Screening Levels Chemical Specific Parameters Table November 2015. The screening levels were selected as the minimal values of carcinogenic screening level and noncarcinogenic screening level (USEPA 2015).
4. 2nd Maximum Contaminant Level (2nd MCL): National Secondary Drinking Water Regulations (40 CFR Part 143).

*Cyanide (total) includes historical values from 2001 to 2009 only.

RIWP - Remedial Investigation and Feasibility Study Work Plan (ENVIRON 2012)

TABLE 5-2. SUMMARY OF ANALYTICAL RESULTS FOR TRUST SITE MONITORING PROGRAM WELLS - MAJOR COPCs
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

On-Site Monitoring Well ID	Screened Interval		Stratigraphic Unit		2015 Sampling Results							
	Top (ft bgs)	Bottom (ft bgs)	Screened Unit(s)	GW table in Unit	Date Sampled	Perchlorate (mg/L)	Chlorate (mg/L)	Chromium (µg/L)	Manganese (mg/L)	Boron (mg/L)	Nitrate (mg/L)	Chloroform (µg/L)
					Criteria:	*0.018*	*1.0*	*100*	*0.02*	*6.67*	*na*	*80*
SHALLOW WBZ WELLS (0 - 90 ft bgs)												
Upgradient Site Boundary Wells												
M-120	80	100	UMCf- cg1	UMCf- cg1	1/20/15	**0.087**	0.05	6.4	ND<0.01	0.80	6.8	3.8
M-121	77	97	UMCf- cg1	UMCf- cg1	1/16/15	**1.2**	**24**	28	ND<0.01	3.7	38	3.1
Wells Located Between the Upgradient Site Boundary and the Unit Buildings												
M-10	43	63	UMCf- fg1	UMCf- fg1	5/5/15	**7.2**	**23**	**320**	**2.1**	2.7	1.9	16
M-103	70	90	UMCf- fg1	na (dry)	DRY	ns	ns	ns	ns	ns	ns	ns
M-137	52	72	UMCf- cg1	UMCf- cg1	2/3/15	**0.96**	**8.3 J**	50	ND<0.01	3.0	23	1.3
M-138	50	65	UMCf- cg1	UMCf- cg1	2/3/15	**1.3**	**12 J**	65	ND<0.01	2.8	9.7	3.0
TR-8	63	93	UMCf- cg1	UMCf- cg1	1/27/15	**0.077**	1.0	17	ND<0.01	1.1	14	8.8
TR-10	80	100	UMCf- cg1	UMCf- cg1	1/20/15	**3.3**	**27**	**130**	ND<0.01	2.1	33	3.2
Wells Located in the Vicinity of the Unit Buildings												
M-11	33	53	Qal/ UMCf- fg1	Qal	1/30/15	**15**	**190**	**1,400**	ND<0.01	6.1	8.6	55
M-12A	40	50	UMCf- fg1	UMCf- fg1	1/20/15	**230**	**2,000**	**9,700**	ND<0.01	3.0	46	**560**
M-13	28	48	Qal/ UMCf- fg1	UMCf- fg1	2/2/15	**14**	**100 J**	**370**	**0.43**	3.1	13	17
M-29	22	42	Qal/ UMCf- fg1	nm	No access	ns	ns	ns	ns	ns	ns	ns
M-139	45	60	UMCf- fg1	UMCf- fg1	2/4/15	**1.2**	**4.3**	29	ND<0.01	1.6	5.9 J	0.48 J
M-144	35	45	UMCf- fg1	UMCf- fg1	2/2/15	**6.0**	**540**	75	ND<0.01	3.0	22	2.0
M-145	45	60	UMCf- fg1	UMCf- fg1	6/2/15	**0.11**	---	32	---	---	---	---
M-146	40	50	UMCf- fg1	UMCf- fg1	1/30/15	**3.2**	**23**	92	ND<0.01	5.9	24	2.0
M-189	35	50	UMCf- fg1	UMCf- fg1	3/10/15	**0.85**	**3.8**	30	ND<0.01	2.3	9.3 J	1.8
M-190	35	50	UMCf- fg1	UMCf- fg1	3/10/15	**9.7**	**140**	**350**	ND<0.01	1.9	12 J	9.3
M-191	35	50	UMCf- fg1	UMCf- fg1	3/10/15	**64**	**1,000**	**4,400**	ND<0.01	2.2	27 J	46
M-192	35	50	UMCf- fg1	UMCf- fg1	3/11/15	**250**	**360**	**410**	0.010 J	2.2	6.9 J	23
M-193	35	50	UMCf- fg1	UMCf- fg1	3/11/15	**400**	**170**	**420**	ND<0.01	2.8	16 J	13

TABLE 5-2. SUMMARY OF ANALYTICAL RESULTS FOR TRUST SITE MONITORING PROGRAM WELLS - MAJOR COPCs
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

On-Site Monitoring Well ID	Screened Interval		Stratigraphic Unit		2015 Sampling Results							
	Top (ft bgs)	Bottom (ft bgs)	Screened Unit(s)	GW table in Unit	Date Sampled	Perchlorate (mg/L)	Chlorate (mg/L)	Chromium (µg/L)	Manganese (mg/L)	Boron (mg/L)	Nitrate (mg/L)	Chloroform (µg/L)
					Criteria:	*0.018*	*1.0*	*100*	*0.02*	*6.67*	*na*	*80*
Wells Located Between the Unit Buildings and the Former Beta Ditch												
M-2A	30	40	Qal	Qal	2/4/15	**320**	**3,200**	**11,000**	ND<0.01	3.5	58 J	**900**
M-19	15	35	Qal/ UMCf- fg1	UMCf-fg1	5/29/15	**14**	---	**350**	---	---	---	---
M-21	18	38	Qal/ UMCf- fg1	nm (dry)	DRY	ns	ns	ns	ns	ns	ns	ns
M-31A	35	55	Qal/ UMCf- fg1	UMCf- fg1	1/28/15	**770**	**1,400**	**5,900**	ND<0.01	6.4	40	**340**
M-32	30	45	Qal/ UMCf- fg1	UMCf- fg1	5/5/15	**270**	**810**	**2,400**	**0.25**	**8.9**	19	**210**
M-33	30	45	Qal/ UMCf- fg1	UMCf- fg1	5/5/15	**260**	**380**	**380**	**0.54**	5.5	27	**98**
M-35	25	40	Qal/ UMCf- fg1	Qal	1/29/15	**160**	**920**	**3,900**	ND<0.01	**12**	26	**500**
M-52	35	45	UMCf- fg1	UMCf- fg1	1/30/15	**410**	**720**	**1,900**	ND<0.01	6.0	26	**220**
M-75	35	50	Qal/ UMCf- fg1	Qal	2/3/15	**48**	**610**	**1,900**	ND<0.01	4.3	32	**160**
M-76	35	50	Qal/ UMCf- fg1	Qal	2/3/15	**130**	**530**	**2,100**	ND<0.01	4.0	38	80
M-77	29	44	Qal/ UMCf- fg1	Qal	1/28/15	**220**	**150**	**560**	**1.3 J**	3.4	25	21
M-92	35	45	UMCf- fg1	UMCf- fg1	1/29/15	**3.3**	**8.4**	21	ND<0.01	1.5 J	24 J	33
M-93	35	45	UMCf- fg1	UMCf- fg1	ns (1)	ns	ns	ns	ns	ns	ns	ns
M-97	35	45	UMCf- fg1	UMCf -fg1	1/29/15	**140**	**180**	71	ND<0.01	5.9 J	36	7.2
M-115	35	45	Qal/ UMCf- fg1	UMCf- fg1	2/3/15	**18**	14 J	54	ND<0.01	2.1	46 J	42
M-123	36	51	UMCf- fg1	UMCf- fg1	1/27/15	**0.27**	ND<0.1	6.1	**0.036**	3.4	33	**11,000**
M-124	34	49	UMCf- fg1	UMCf- fg1	1/29/15	**1.7**	**18**	24	ND<0.01	2.0 J	36 J	**350**
M-128	40	55	UMCf- fg1	UMCf- fg1	1/30/15	**6.6**	**15**	31	ND<0.01	1.8	39	56
M-141	40	50	Qal/ UMCf- fg1	UMCf- fg1	1/28/15	**450**	**120**	**5,400**	**0.45 J**	**10**	43	**520**
M-142	30	45	UMCf- fg1	UMCf- fg1	2/3/15	**8.9**	**15 J**	42	ND<0.01	2.0	40 J	59
M-147	25	40	Qal/ UMCf-fg1	UMCf- fg1	2/4/15	**9.4**	**54**	**240**	ND<0.01	3.1	54	33
M-148A	40	50	Qal/ UMCf-fg1	Qal	1/28/15	**4.6**	**41**	**150**	ND<0.01	3.2	43	6.8
M-182	80	90	UMCf- fg1	na (1)	1/28/15	**8.9**	**420**	**1,400**	ND<0.05	2.1	100	**1,200**
TR-6	60	80	UMCf- cg1	UMCf- cg1	1/15/15	**0.41**	**18**	32	ND<0.01	2.1	20 J	**1,700**

TABLE 5-2. SUMMARY OF ANALYTICAL RESULTS FOR TRUST SITE MONITORING PROGRAM WELLS - MAJOR COPCs
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

On-Site Monitoring Well ID	Screened Interval		Stratigraphic Unit		2015 Sampling Results							
	Top (ft bgs)	Bottom (ft bgs)	Screened Unit(s)	GW table in Unit	Date Sampled	Perchlorate (mg/L)	Chlorate (mg/L)	Chromium (µg/L)	Manganese (mg/L)	Boron (mg/L)	Nitrate (mg/L)	Chloroform (µg/L)
					Criteria:	*0.018*	*1.0*	*100*	*0.02*	*6.67*	*na*	*80*
Wells Located Between the Former Beta Ditch and the IWF/Barrier Wall												
M-14A	20	40	Qal/ UMCf- fg1	UMCf- fg1	1/29/15	**27**	**15**	47	ND<0.01	2.6 J	58	**120**
M-22A	16	26	Qal/ UMCf- fg1	UMCf- fg1	2/2/15	**16**	**3,600**	**16,000**	**0.046**	4.2	200 J	**1,400**
M-25	24	39	Qal/ UMCf- fg1	UMCf- fg1	2/3/15	**460**	**1,900**	**6,900**	ND<0.01	**9.7**	120	**400**
M-36	20	35	Qal/ UMCf- fg1	---	ns (2)	ns	ns	ns	ns	ns	ns	ns
M-37	20	35	Qal/ UMCf- fg1	UMCf -fg1	1/29/15	**1,100**	**12**	35	**0.16**	3.3	580	18
M-38	20	35	Qal/ UMCf-fg1	UMCf- fg1	5/7/15	**700**	**4,400**	**17,000**	ND<0.02	4.4	100 J	**1,200**
M-57A	20	40	Qal/ UMCf- fg1	UMCf- fg1	2/6/15	**34**	**17**	64	ND<0.01	2.3	43 J	**420**
M-58	15	45	Qal/ UMCf- fg1	Qal	2/4/15	**1,100**	**3,000**	**1,500**	**0.14**	4.9	100	**1,000**
M-64	13	38	Qal/ UMCf- fg1	UMCf- fg1	2/2/15	**490**	**46**	**4,100**	ND<0.01	3.2	17	33
M-65	14	39	Qal/ UMCf- fg1	UMCf- fg1	2/3/15	**1,200**	**4,800**	**22,000**	ND<0.02	4.5	220	**1,400**
M-66	18	43	Qal/ UMCf- fg1	Qal	2/3/15	**2,100**	**4,400**	**23,000**	ND<0.02	4.7	280	**1,400**
M-67	8	38	Qal/ UMCf- fg1	Qal	1/29/15	**310**	**1,300**	**5,100**	ND<0.01	**9.7 J**	34 J	**690**
M-68	11	40	Qal/ UMCf- fg1	Qal	2/2/15	**180**	**470**	**1,400**	**0.047**	5.0	51	**330**
M-125	35	50	UMCf- fg1	UMCf- fg1	1/27/15	**0.69**	ND<0.05	29	ND<0.05	2.2	23	**17,000**
M-126	20	40	Qal/ UMCf- fg1	UMCf- fg1	2/6/15	**0.93**	ND<0.1	ND<13	**1.3**	1.9	20 J	**16,000**
Wells Located Downgradient of the IWF/Barrier Wall Near the Former Injection Trenches												
M-69	20	40	Qal/ UMCf- fg1	UMCf- fg1	2/4/15	**330**	**16**	59	ND<0.01	3.1	230 J	55
M-70	15	40	Qal/ UMCf- fg1	UMCf- fg1	2/4/15	**710**	**1,300**	**3,900**	0.013 J	**6.8**	210	**280**
M-71	18	42	Qal/ UMCf- fg1	UMCf- fg1	2/4/15	**1,100**	**1,500**	**4,700**	ND<0.01	6.1	260	**190**
M-72	10	35	Qal/ UMCf- fg1	UMCf- fg1	2/4/15	**1,200**	**3,600**	**8,800**	0.028 J	**12**	310	**560**
M-73	11	36	Qal/ UMCf- fg1	UMCf- fg1	1/29/15	**540**	**2,900**	**9,400**	ND<0.01	**14 J**	67 J	**1,000**
M-74	9	39	Qal/ UMCf- fg1	UMCf- fg1	1/29/15	**150**	**450**	**1,400**	ND<0.01	4.6 J	57 J	**240**
M-79	11	35	Qal/ UMCf- fg1	UMCf- fg1	2/5/15	**610**	**24**	**200**	ND<0.01	3.6	340 J	61
M-80	12	42	Qal/ UMCf- fg1	UMCf- fg1	2/6/15	**430**	**600**	**1,400**	0.031	2.9	190	**120**
M-81A	30	40	Qal/ UMCf- fg1	UMCf- fg1	2/6/15	**570**	**780**	**1,800**	ND<0.01	3.9	190 J	**360 J**
M-83	11	40	Qal/ UMCf- fg1	Qal	2/6/15	**620**	**320**	**1,100**	ND<0.01	3.3	250	**120**

TABLE 5-2. SUMMARY OF ANALYTICAL RESULTS FOR TRUST SITE MONITORING PROGRAM WELLS - MAJOR COPCs
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

On-Site Monitoring Well ID	Screened Interval		Stratigraphic Unit		2015 Sampling Results							
	Top (ft bgs)	Bottom (ft bgs)	Screened Unit(s)	GW table in Unit	Date Sampled	Perchlorate (mg/L)	Chlorate (mg/L)	Chromium (µg/L)	Manganese (mg/L)	Boron (mg/L)	Nitrate (mg/L)	Chloroform (µg/L)
					Criteria:	*0.018*	*1.0*	*100*	*0.02*	*6.67*	*na*	*80*
M-132	80	90	UMCf- fg1	UMCf- fg1	2/4/15	**14**	**160**	**210**	ND<0.01	2.9	25	57
M-133	60	70	UMCf- fg1	UMCf- fg1	1/29/15	**46**	**359**	**1,000**	ND<0.01	2.1 J	38 J	**290**
M-134	60	70	UMCf- fg1	UMCf- fg1	2/5/15	**81**	**34**	**150**	ND<0.01	1.8	19 J	**140**
M-135	29	39	Qal/UMCf- fg1	UMCf- fg1	2/5/15	**42**	**21**	54	ND<0.01	2.8	36 J	**120**
M-136	80	90	UMCf- fg1	na (1)	2/15/15	**72**	**16**	87	ND<0.01	1.1	14	12
M-140	23	43	Qal/ UMCf- fg1	Qal	2/6/15	**1,500**	**330**	**2,100**	0.017 J	4.8	650 J	**100**
M-163	80	90	UMCf- fg1	na (1)	1/27/15	**0.15**	0.037	29	ND<0.01	0.84	8.6	ND<0.25
M-164	60	70	UMCf- fg1	na (1)	1/28/15	**740**	**140**	**4,700**	ND<0.01	2.1	130	**230**
Wells Located Between the Former Injection Trenches and the Downgradient Site Boundary												
M-98	19	29	Qal	nm (dry)	DRY	ns	ns	ns	ns	ns	ns	ns
M-99	16	31	Qal/ UMCf- fg1	nm (dry)	DRY	ns	ns	ns	ns	ns	ns	ns
M-100	19	29	Qal	nm (dry)	DRY	ns	ns	ns	ns	ns	ns	ns
M-101	17	27	Qal	nm (dry)	DRY	ns	ns	ns	ns	ns	ns	ns
M-23	9	37	Qal	Qal	2/5/15	**190**	**130**	**320**	**0.023**	4.1	180 J	**460**
Wells Located Near the Northwest Site Boundary												
M-5A	40	50	UMCf- fg1	UMCf- fg1	2/6/15	**22**	0.36	ND<13	**1.4**	2.1	5.0 UJ	7.0
MW-16	25	40	Qal/ UMCf- fg1	UMCf- fg1	2/5/15	**0.54**	ND<0.1	ND<5	**0.71**	2.1	6.7 J	1.8
M-6A	27	43	Qal/ UMCf- fg1	UMCf- fg1	1/22/15	**16**	**6.9**	19	ND<0.01	3.8	ND<5	2.0
M-7B	26	51	Qal/ UMCf- fg1	UMCf- fg1	2/5/15	**25**	**8.8**	ND<13	ND<0.01	4.3	8.8 J	1.9
H-28	38	51	Qal	Qal	3/12/15	**14**	ND<0.05	53	**2.0**	2.4	<1.3	0.61
MC-29	38	50	Qal/ UMCf- fg1	Qal	2/5/15	**1.6**	0.33	7.2	**0.72**	1.8	ND<13	**710**
MC-45	30	34	Qal	Qal	1/27/15	**0.66**	ND<0.1	ND<2.5	**1.0**	1.9	ND<13	2.0
MC-50	29	49	Qal	Qal	1/27/15	**0.51**	ND<0.1	ND<2.5	**0.81 J**	2.0	ND<13	0.92
MC-51	24	49	Qal/ UMCf- fg1	Qal	2/5/15	**0.079**	ND<0.1	ND<2.5	**0.29**	2.1	ND<13	3.4
MC-53	20	40	Qal/ UMCf- fg1	Qal	1/22/15	**2.9**	**24**	23	**0.14**	2.3	ND<13	2.8
MC-93	32	42	Qal/ UMCf- fg1	Qal	2/5/15	**28**	**50**	60	**0.027**	3.4	2.9 J	8.8
MC-97	31	41	Qal/ UMCf- fg1	Qal	2/5/15	**2.5**	**8.5**	5.8	**0.097**	2.1	ND<5	0.71

TABLE 5-2. SUMMARY OF ANALYTICAL RESULTS FOR TRUST SITE MONITORING PROGRAM WELLS - MAJOR COPCs
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

On-Site Monitoring Well ID	Screened Interval		Stratigraphic Unit		2015 Sampling Results							
	Top (ft bgs)	Bottom (ft bgs)	Screened Unit(s)	GW table in Unit	Date Sampled	Perchlorate (mg/L)	Chlorate (mg/L)	Chromium (µg/L)	Manganese (mg/L)	Boron (mg/L)	Nitrate (mg/L)	Chloroform (µg/L)
					Criteria:	*0.018*	*1.0*	*100*	*0.02*	*6.67*	*na*	*80*
MIDDLE WBZ WELLS (90 - 300 ft bgs)												
Middle WBZ Wells Screened Between ~90 and 150 ft bgs												
M-117	130	150	UMCf- fg1	na (1)	1/16/15	ND<0.0005	ND<0.01	22	ND<0.01	0.83	7.8	ND<0.25
M-118	138	158	UMCf- fg1	na (1)	1/20/15	0.00079 J	ND<0.02	19	ND<0.01	0.77	6.8	ND<0.25
M-149	100	120	UMCf- fg1	na (1)	1/26/15	**68**	**24**	**430**	ND<0.01	0.81 J	12	21
M-150	150	170	UMCf- fg1	na (1)	1/12/15	**0.060**	0.10	38	0.033	0.68	9.2	ND<0.25
M-151	125	145	UMCf- fg1	na (1)	1/21/15	0.0067	ND<0.02	26	ND<0.01	0.73	7.0	ND<0.25
M-152	125	145	UMCf- fg1	na (1)	5/21/15	**0.20**	---	26	---	---	---	---
M-161	100	110	UMCf- fg1	na (1)	1/13/15	0.0085	ND<0.05	23	ND<0.01	0.92	7.0	ND<0.25
M-161D	130	140	UMCf- fg1	na (1)	3/12/15	**0.110**	ND<0.01	19	ND<0.01	0.92	5.9	ND<0.25
M-162	100	110	UMCf- fg1	na (1)	1/13/15	**99**	**110**	27	ND<0.01	0.83	25	ND<0.25
M-162D	130	140	UMCf- fg1	na (1)	3/12/15	0.0061	ND<0.01	29	ND<0.01	0.75	11	ND<0.25
M-165	110	120	UMCf- fg1	na (1)	1/21/15	**0.040**	0.064	29	ND<0.01	0.74	7.8	0.47 J
M-181	105	115	UMCf- fg1	na (1)	1/21/15	**0.042**	ND<0.02	38	ND<0.01	0.72	15 J	ND<0.25
M-186	105	115	UMCf- fg1	na (1)	1/26/15	**230**	**1,400**	**3,400**	ND<0.01	4.0 J	30	**540**
TR-2	145	175	UMCf- fg1	na (1)	1/14/15	ND<0.0005	ND<0.02	21	ND<0.01	0.80	6.5	ND<0.25
TR-4	125	145	UMCf- fg1	na (1)	1/14/15	0.00055 J	ND<0.02	21	ND<0.01	0.79	7.1	0.36 J
Deeper Middle WBZ Wells Screened Between ~150 and 300 ft bgs												
M-153	150	170	UMCf- fg1	na (1)	1/26/15	0.017	ND<0.02	19	ND<0.01	0.79 J	2.9	ND<0.25
M-154	175	195	UMCf- fg1	na (1)	1/12/15	ND<0.0005	ND<0.01	22	0.022	0.78	3.7	ND<0.25
M-156	175	195	UMCf- fg1	na (1)	5/21/15	ND<0.0005	---	ND<2.5	---	---	---	---
M-186D	153	173	UMCf- fg1	na (1)	3/11/15	**0.84**	**2.8**	33	ND<0.01	0.72	10 J	ND<0.50
M-155	200	220	UMCf- cg2	na (1)	1/21/15	ND<0.00095	ND<0.02	81	ND<0.01	0.80	5.2	ND<0.25
TR-1	282	312	UMCf- cg2	na (1)	1/14/15	ND<0.0005	ND<0.02	17	ND<0.01	0.85	5.6	ND<0.25
TR-3	220	250	UMCf- cg2	na (1)	1/15/15	ND<0.0005	ND<0.02	35	ND<0.01	0.83	5.4 J	ND<0.25
TR-5	221	251	UMCf- cg2	na (1)	1/14/15	ND<0.0005	ND<0.01	16	ND<0.01	0.77	5.4	ND<0.25
TR-7	260	290	UMCf- cg2	na (1)	1/15/15	ND<0.0005	ND<0.02	14	ND<0.01	0.57	5.0 J	ND<0.25
TR-9	230	250	UMCf- cg2	na (1)	1/20/15	0.018	ND<0.01	13	ND<0.01	0.49	5.2	ND<0.25
TR-11	210	230	UMCf- cg2	na (1)	1/14/15	ND<0.0005	ND<0.01	15	ND<0.01	0.70	4.9 J	ND<0.25

TABLE 5-2. SUMMARY OF ANALYTICAL RESULTS FOR TRUST SITE MONITORING PROGRAM WELLS - MAJOR COPCs
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

On-Site Monitoring Well ID	Screened Interval		Stratigraphic Unit		2015 Sampling Results							
	Top (ft bgs)	Bottom (ft bgs)	Screened Unit(s)	GW table in Unit	Date Sampled	Perchlorate (mg/L)	Chlorate (mg/L)	Chromium (µg/L)	Manganese (mg/L)	Boron (mg/L)	Nitrate (mg/L)	Chloroform (µg/L)
					Criteria:	*0.018*	*1.0*	*100*	*0.02*	*6.67*	*na*	*80*
TR-12	272	292	UMCf- cg2	na (1)	5/21/15	ND<0.0005	---	42	---	---	---	---

TABLE 5-2. SUMMARY OF ANALYTICAL RESULTS FOR TRUST SITE MONITORING PROGRAM WELLS - MAJOR COPCs
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

On-Site Monitoring Well ID	Screened Interval		Stratigraphic Unit		2015 Sampling Results							
	Top (ft bgs)	Bottom (ft bgs)	Screened Unit(s)	GW table in Unit	Date Sampled	Perchlorate (mg/L)	Chlorate (mg/L)	Chromium (µg/L)	Manganese (mg/L)	Boron (mg/L)	Nitrate (mg/L)	Chloroform (µg/L)
					Criteria:	*0.018*	*1.0*	*100*	*0.02*	*6.67*	*na*	*80*

Notes:

µg/L: micrograms per liter (parts per billion)

mg/L: milligrams per liter (parts per million)

GW Table: Groundwater Table

na (1): not applicable; deeper well screened below the water table.

nm: not measured.

ns (1): Well M-93 could not be sampled due to an obstruction in the well at 38 feet.

ns (2): Well M-36 is damaged and could not be sampled.

"---" means the analyte was not tested.

ND = Not detected at or above the detection limit shown.

J = Estimated value.

UJ = The analyte was not detected, and the detection limit is an estimated quantity.

1. Perchlorate and chromium results are from the annual groundwater monitoring event conducted in May 2015. The perchlorate, chlorate, chromium, and chloroform results for new well M-186D are from the most recent semiannual sampling event conducted in February 2016.
2. Trust monitoring program wells MC- 21, MC-45, MC-50, MC-51, MC-93 and MC-97 are not scheduled for chromium analysis as part of the annual performance monitoring. For these wells, the chromium results are from the RI 2015 sampling in January-March 2015.
3. Concentrations above the screening criteria are shown in bold and are highlighted. Perchlorate concentrations above 1,000 mg/L are shown in a darker shade. Perchlorate concentrations below 1 mg/L and above the screening criterion are shown in a lighter shade.

TABLE 5-3. SUMMARY OF ANALYTICAL RESULTS FOR TRUST SITE MONITORING PROGRAM WELLS - VOCs IDENTIFIED AS COPCs
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

On-Site Monitoring Well ID	Screened Interval		Stratigraphic Unit		2015 SAMPLING RESULTS														
	Top (ft bgs)	Bottom (ft bgs)	Screened Unit(s)	GW table in Unit	Date Sampled	Total VOCs (µg/L)	Benzene (µg/L)	Chloro-benzene (µg/L)	1,2-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloroform (µg/L)	1,4-Dioxane (µg/L)	PCE (µg/L)	TCE (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	Carbon Tetra-chloride (µg/L)	1,2,3-Trichloro-propane (µg/L)
					Criteria:		*5*	*100*	*600*	*75*	*80*	*0.779*	*5*	*5*	*2.79*	*5*	*7*	*5*	*0.0026*
SHALLOW WATER-BEARING ZONE WELLS (0 - 90 ft bgs)																			
Upgradient Site Boundary Wells																			
M-120	80	100	UMCf- cg1	UMCf- cg1	1/20/15	4.1	ND<0.25	ND<0.25	ND<0.50	ND<0.25	3.8	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-121	77	97	UMCf- cg1	UMCf- cg1	1/16/15	3.1	ND<0.25	ND<0.25	ND<0.50	ND<0.25	3.1	ND<0.50	ND<0.25	ND<0.25	ND<0.25	0.25 UJ	ND<0.25	ND<0.25	ND<0.0025
Wells Located Between the Upgradient Site Boundary and the Unit Buildings																			
M-10	43	63	UMCf- fg1	UMCf- fg1	5/5/15	16	ND<0.25	ND<0.25	ND<0.25	ND<0.25	16	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**0.038**
M-103	70	90	UMCf- fg1	na (dry)	DRY	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
M-137	52	72	UMCf- cg1	UMCf- cg1	2/3/15	10	ND<0.25	ND<0.25	ND<0.25	ND<0.25	1.3	ND<0.50	0.28 J	**8.9**	ND<0.25	0.25 UJ	ND<0.25	ND<0.25	ND<0.0025
M-138	50	65	UMCf- cg1	UMCf- cg1	2/3/15	4.5	ND<0.25	ND<0.25	ND<0.25	ND<0.25	3.0	ND<0.50	0.69	0.50	0.31 J	0.25 UJ	ND<0.25	ND<0.25	ND<0.0025
TR-8	63	93	UMCf- cg1	UMCf- cg1	1/27/15	11	ND<0.25	0.91	ND<0.25	ND<0.25	8.8	ND<0.50	ND<0.25	0.57	ND<0.25	ND<0.25	0.31 J	0.28 J	ND<0.0025
TR-10	80	100	UMCf- cg1	UMCf- cg1	1/20/15	3.2	ND<0.25	ND<0.25	ND<0.50	ND<0.25	3.2	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
Wells Located in the Vicinity of the Unit Buildings																			
M-11	33	53	Qal/ UMCf- fg1	Qal	1/30/15	55	ND<0.25	ND<0.25	ND<0.25	ND<0.25	55	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**0.014**
M-12A	40	50	UMCf- fg1	UMCf- fg1	1/20/15	560	ND<0.50	ND<0.50	ND<1.0	ND<0.50	**560**	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**0.028**
M-13	28	48	Qal/ UMCf- fg1	UMCf- fg1	2/2/15	30	ND<0.25	ND<0.25	ND<0.25	ND<0.25	17	**19**	ND<0.25	**12**	1.3	0.25 UJ	ND<0.25	ND<0.25	**0.021**
M-29	22	42	Qal/ UMCf- fg1	nm	No access	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
M-139	45	60	UMCf- fg1	UMCf- fg1	2/4/15	0.48	ND<0.25	ND<0.25	ND<0.25	ND<0.25	0.48 J	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-144	35	45	UMCf- fg1	UMCf- fg1	2/2/15	14	ND<0.25	ND<0.25	ND<0.25	ND<0.25	2.0	**2.5**	ND<0.25	2.1	ND<0.25	ND<0.25	**10**	0.25 UJ	ND<0.0025
M-145	45	60	UMCf- fg1	UMCf- fg1	6/2/15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M-146	40	50	UMCf- fg1	UMCf- fg1	1/30/15	4.6	ND<0.25	ND<0.25	ND<0.25	ND<0.25	2.0	ND<0.50	ND<0.25	1.7	ND<0.25	ND<0.25	0.53	ND<0.25	ND<0.0025
M-189	35	50	UMCf- fg1	UMCf- fg1	3/10/15	2.1	ND<0.25	ND<0.25	ND<0.25	ND<0.25	1.8	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-190	35	50	UMCf- fg1	UMCf- fg1	3/10/15	9.6	ND<0.25	ND<0.25	ND<0.25	ND<0.25	9.3	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	0.25 J	**0.0088**
M-191	35	50	UMCf- fg1	UMCf- fg1	3/10/15	47	ND<0.25	ND<0.25	ND<0.25	ND<0.25	46	ND<0.50	0.27 J	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	0.0025 J
M-192	35	50	UMCf- fg1	UMCf- fg1	3/11/15	23	ND<0.25	ND<0.25	ND<0.25	ND<0.25	23	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**0.0043 J**
M-193	35	50	UMCf- fg1	UMCf- fg1	3/11/15	13	ND<0.25	ND<0.25	ND<0.25	ND<0.25	13	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**0.010**
Wells Located Between the Unit Buildings and the Former Beta Ditch																			
M-2A	30	40	Qal	Qal	2/4/15	917	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**900**	**1.9 J**	ND<0.50	**16**	ND<0.50	0.50 UJ	ND<0.50	0.86 J	**0.14**
M-19	15	35	Qal/ UMCf- fg1	UMCf-fg1	5/29/15	---	**---**	**---**	---	---	---	---	---	---	---	---	---	---	---
M-21	18	38	Qal/ UMCf- fg1	nm (dry)	DRY	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
M-31A	35	55	Qal/ UMCf- fg1	UMCf- fg1	1/28/15	340	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**340**	0.58 J	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	0.25 J	**0.051**
M-32	30	45	Qal/ UMCf- fg1	UMCf- fg1	5/5/15	210	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**210**	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**0.026**
M-33	30	45	Qal/ UMCf- fg1	UMCf- fg1	5/5/15	98	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**98**	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**0.028**
M-35	25	40	Qal/ UMCf- fg1	Qal	1/29/15	500	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**500**	**0.80 J**	0.41 J	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**0.063**
M-52	35	45	UMCf- fg1	UMCf- fg1	1/30/15	220	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**220**	0.65 J	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**0.026**
M-75	35	50	Qal/ UMCf- fg1	Qal	2/3/15	161	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**160**	**1.5 J**	ND<0.25	0.30 J	ND<0.25	ND<0.25	0.25 J	ND<0.25	**0.14**
M-76	35	50	Qal/ UMCf- fg1	Qal	2/3/15	85	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**80**	0.53 J	ND<0.25	0.51	ND<0.25	ND<0.25	3.8	0.50	**0.22**
M-77	29	44	Qal/ UMCf- fg1	Qal	1/28/15	21	ND<0.25	ND<0.25	ND<0.25	ND<0.25	21	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**0.013**
M-92	35	45	UMCf- fg1	UMCf- fg1	1/29/15	47	ND<0.25	ND<0.25	ND<0.25	ND<0.25	33	**3.1**	ND<0.25	4.5	0.30 J	ND<0.25	**8.7**	0.57	**0.27**
M-93	35	45	UMCf- fg1	UMCf- fg1	ns (1)	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
M-97	35	45	UMCf- fg1	UMCf -fg1	1/29/15	153	ND<0.25	ND<0.25	ND<0.25	ND<0.25	7.2	**4.9**	ND<0.25	**14**	0.30 J	0.29 J	**130**	0.32 J	**0.21**
M-115	35	45	Qal/ UMCf- fg1	UMCf- fg1	2/3/15	49	ND<0.25	ND<0.25	ND<0.25	ND<0.25	42	**1.4 J**	ND<0.25	2.6	ND<0.25	0.25 UJ	3.1	0.66	**0.42**
M-123	36	51	UMCf- fg1	UMCf- fg1	1/27/15	43,497	**7,600**	**22,000**	**820**	**1,500**	**11,000**	ND<0.50	**83**	ND<25	ND<25	ND<25	ND<25	**350**	**0.015**

TABLE 5-3. SUMMARY OF ANALYTICAL RESULTS FOR TRUST SITE MONITORING PROGRAM WELLS - VOCs IDENTIFIED AS COPCs
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

On-Site Monitoring Well ID	Screened Interval		Stratigraphic Unit		2015 SAMPLING RESULTS														
	Top (ft bgs)	Bottom (ft bgs)	Screened Unit(s)	GW table in Unit	Date Sampled	Total VOCs (µg/L)	Benzene (µg/L)	Chloro-benzene (µg/L)	1,2-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloroform (µg/L)	1,4-Dioxane (µg/L)	PCE (µg/L)	TCE (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	Carbon Tetra-chloride (µg/L)	1,2,3-Trichloro-propane (µg/L)
					Criteria:		*5*	*100*	*600*	*75*	*80*	*0.779*	*5*	*5*	*2.79*	*5*	*7*	*5*	*0.0026*
M-124	34	49	UMCf- fg1	UMCf- fg1	1/29/15	361	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**350**	ND<0.50	0.26 J	4.1	ND<0.25	ND<0.25	0.25 J	**6.3**	**0.0097**
M-128	40	55	UMCf- fg1	UMCf- fg1	1/30/15	61	ND<0.25	ND<0.25	ND<0.25	ND<0.25	56	0.51 J	ND<0.25	2.7	ND<0.25	ND<0.25	1.3	0.89	**0.28**
M-141	40	50	Qal/ UMCf- fg1	UMCf- fg1	1/28/15	520	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**520**	**0.85 J**	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**0.036**
M-142	30	45	UMCf- fg1	UMCf- fg1	2/3/15	64	ND<0.25	ND<0.25	ND<0.25	ND<0.25	59	ND<0.50	ND<0.25	2.8	ND<0.25	ND<0.25	1.3	0.81	**0.24**
M-147	25	40	Qal/ UMCf-fg1	UMCf- fg1	2/4/15	34	ND<0.25	ND<0.25	ND<0.25	ND<0.25	33	0.51 J	0.53	ND<0.25	ND<0.25	ND<0.25	ND<0.25	0.32 J	**0.027**
M-148A	40	50	Qal/ UMCf-fg1	Qal	1/28/15	7.1	ND<0.25	ND<0.25	ND<0.25	ND<0.25	6.8	0.68 J	0.27 J	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**0.0058**
M-182	80	90	UMCf- fg1	na (1)	1/28/15	1,205	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**1,200**	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	4.6	**0.14**
TR-6	60	80	UMCf- cg1	UMCf- cg1	1/15/15	1,735	ND<5.0	ND<5.0	ND<10	ND<5.0	**1,700**	ND<0.50	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	**35**	ND<0.0025
Wells Located Between the Former Beta Ditch and the IWF/Barrier Wall																			
M-14A	20	40	Qal/ UMCf- fg1	UMCf- fg1	1/29/15	123	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**120**	ND<0.50	ND<0.25	1.3	ND<0.25	ND<0.25	0.59	1.1	**0.16**
M-22A	16	26	Qal/ UMCf- fg1	UMCf- fg1	2/2/15	1,404	ND<0.25	ND<0.25	0.55	0.46 J	**1,400**	ND<0.50	ND<0.25	0.32 J	ND<0.25	ND<0.25	ND<0.25	0.32 J	**0.16**
M-25	24	39	Qal/ UMCf- fg1	UMCf- fg1	2/3/15	415	ND<0.25	ND<0.25	0.49 J	0.49 J	**400**	3.5	0.57	**11**	ND<0.25	ND<0.25	0.62 J	0.35 J	**0.16**
M-36	20	35	Qal/ UMCf- fg1	---	ns (2)	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
M-37	20	35	Qal/ UMCf- fg1	UMCf -fg1	1/29/15	19	ND<0.25	ND<0.25	ND<0.25	ND<0.25	18	**1.7 J**	ND<0.25	ND<0.25	ND<0.25	ND<0.25	0.50	ND<0.25	**0.19**
M-38	20	35	Qal/ UMCf-fg1	UMCf- fg1	5/7/15	1,205	ND<1.3	ND<1.3	ND<1.3	ND<1.3	**1,200**	**0.78 J**	ND<1.3	5.3	ND<1.3	ND<1.3	ND<1.3	ND<1.3	**0.093**
M-57A	20	40	Qal/ UMCf- fg1	UMCf- fg1	2/6/15	424	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**420**	ND<0.50	0.54 J	0.93 J	ND<0.50	ND<0.50	ND<0.50	2.6	**0.26 J**
M-58	15	45	Qal/ UMCf- fg1	Qal	2/4/15	1,003	ND<0.63	ND<0.63	ND<0.63	ND<0.63	**1,000**	0.52 J	ND<0.63	ND<0.63	ND<0.63	ND<0.63	ND<0.63	0.65 J	**0.14**
M-64	13	38	Qal/ UMCf- fg1	UMCf- fg1	2/2/15	34	ND<0.25	ND<0.25	ND<0.25	ND<0.25	33	ND<0.50	0.33 J	0.39 J	ND<0.25	ND<0.25	ND<0.25	0.25 UJ	**0.056**
M-65	14	39	Qal/ UMCf- fg1	UMCf- fg1	2/3/15	1,407	ND<1.0	ND<1.0	1.1 J	ND<1.0	**1,400**	0.53 J	ND<1.0	6.1	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**0.15**
M-66	18	43	Qal/ UMCf- fg1	Qal	2/3/15	1,406	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**1,400**	0.51 J	1.0 UJ	1.5 J	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**0.16**
M-67	8	38	Qal/ UMCf- fg1	Qal	1/29/15	690	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**690**	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.0025
M-68	11	40	Qal/ UMCf- fg1	Qal	2/4/15	332	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**330**	0.69 J	0.66	ND<0.25	ND<0.25	ND<0.25	ND<0.25	0.52	**0.065**
M-125	35	50	UMCf- fg1	UMCf- fg1	1/27/15	38,676	**4,500**	**17,000**	25	41	**17,000**	ND<0.50	ND<10	ND<10	ND<10	ND<10	ND<10	**52**	**0.020**
M-126	20	40	Qal/ UMCf- fg1	UMCf- fg1	2/6/15	21,566	**1,900**	**2,400**	510	**720**	**16,000**	ND<0.50	ND<13	ND<13	ND<13	ND<13	ND<13	ND<13	**0.011 J**
Wells Located Downgradient of the IWF/Barrier Wall Near the Former Injection Trenches																			
M-69	20	40	Qal/ UMCf- fg1	UMCf- fg1	2/4/15	60	ND<0.25	ND<0.25	3.3	0.80	55	0.73 J	0.32 J	ND<0.25	ND<0.25	0.25 UJ	ND<0.25	0.25 UJ	**0.45**
M-70	15	40	Qal/ UMCf- fg1	UMCf- fg1	2/4/15	291	ND<0.25	ND<0.25	1.2	1.0	**280**	ND<0.50	0.29 J	0.68	ND<0.25	ND<0.25	ND<0.25	4.4	**0.11**
M-71	18	42	Qal/ UMCf- fg1	UMCf- fg1	2/4/15	198	ND<0.25	ND<0.25	1.3	0.82	**190**	ND<0.50	0.44 J	2.1	ND<0.25	ND<0.25	ND<0.25	1.4	**0.13**
M-72	10	35	Qal/ UMCf- fg1	UMCf- fg1	2/4/15	574	ND<0.50	ND<0.50	0.92 J	1.1	**560**	0.55 J	1.9	0.56 J	ND<0.50	ND<0.50	ND<0.50	2.4	**0.19**
M-73	11	36	Qal/ UMCf- fg1	UMCf- fg1	1/29/15	1,000	ND<0.63	ND<0.63	ND<0.63	ND<0.63	**1,000**	ND<0.50	ND<0.63	ND<0.63	ND<0.63	ND<0.63	ND<0.63	ND<0.63	**0.057**
M-74	9	39	Qal/ UMCf- fg1	UMCf- fg1	1/29/15	241	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**240**	ND<0.50	0.69	ND<0.25	ND<0.25	ND<0.25	ND<0.25	0.40 J	**0.039**
M-79	11	35	Qal/ UMCf- fg1	UMCf- fg1	2/5/15	65	ND<0.25	ND<0.25	2.4	0.85	61	ND<0.50	0.38 J	ND<0.25	ND<0.25	ND<0.25	ND<0.25	0.25 UJ	**0.21**
M-80	12	42	Qal/ UMCf- fg1	UMCf- fg1	2/6/15	124	ND<0.25	ND<0.25	0.31 J	ND<0.25	**120**	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	1.9	**0.046**
M-81A	30	40	Qal/ UMCf- fg1	UMCf- fg1	2/6/15	375	ND<0.25	ND<0.25	1.3	0.89	**360 J**	ND<0.50	3.1	0.52	ND<0.25	ND<0.25	ND<0.25	4.1	**0.19 J**
M-83	11	40	Qal/ UMCf- fg1	Qal	2/6/15	127	ND<0.25	ND<0.25	0.70	0.46 J	**120**	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	3.6	**0.085**
M-132	80	90	UMCf- fg1	UMCf- fg1	2/4/15	57	ND<0.25	ND<0.25	ND<0.25	ND<0.25	57	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**0.013**
M-133	60	70	UMCf- fg1	UMCf- fg1	1/29/15	291	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**290**	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	0.51	**0.075**
M-134	60	70	UMCf- fg1	UMCf- fg1	2/5/15	141	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**140**	ND<0.50	ND<0.25	ND<0.25	ND<0.25	0.25 UJ	ND<0.25	0.58	**0.025**
M-135	29	39	Qal/UMCf- fg1	UMCf- fg1	2/5/15	124	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**120**	ND<0.50	0.59	0.63	ND<0.25	ND<0.25	ND<0.25	0.78	**0.57**
M-136	80	90	UMCf- fg1	na (1)	2/5/15	12	ND<0.25	ND<0.25	ND<0.25	ND<0.25	12	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**0.0045 J**
M-140	23	43	Qal/ UMCf- fg1	Qal	2/6/15	105	ND<0.25	ND<0.25	1.2	0.72	**100**	ND<0.50	0.36 J	0.26 J	ND<0.25	ND<0.25	ND<0.25	0.40 J	**0.26**
M-163	80	90	UMCf- fg1	na (1)	1/27/15	2.0	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-164	60	70	UMCf- fg1	na (1)	1/28/15	233	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**230**	ND<0.50	ND<0.25	2.0	ND<0.25	ND<0.25	ND<0.25	0.56	**0.085**

TABLE 5-3. SUMMARY OF ANALYTICAL RESULTS FOR TRUST SITE MONITORING PROGRAM WELLS - VOCs IDENTIFIED AS COPCs
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

On-Site Monitoring Well ID	Screened Interval		Stratigraphic Unit		2015 SAMPLING RESULTS														
	Top (ft bgs)	Bottom (ft bgs)	Screened Unit(s)	GW table in Unit	Date Sampled	Total VOCs (µg/L)	Benzene (µg/L)	Chloro-benzene (µg/L)	1,2-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloroform (µg/L)	1,4-Dioxane (µg/L)	PCE (µg/L)	TCE (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	Carbon Tetra-chloride (µg/L)	1,2,3-Trichloro-propane (µg/L)
					Criteria:		*5*	*100*	*600*	*75*	*80*	*0.779*	*5*	*5*	*2.79*	*5*	*7*	*5*	*0.0026*
Wells Located Between the Former Injection Trenches and the Downgradient Site Boundary																			
M-98	19	29	Qal	nm (dry)	DRY	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
M-99	16	31	Qal/ UMCf- fg1	nm (dry)	DRY	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
M-100	19	29	Qal	nm (dry)	DRY	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
M-101	17	27	Qal	nm (dry)	DRY	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
M-23	9	37	Qal	Qal	2/5/15	463	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**460**	ND<0.50	0.73 J	ND<0.50	ND<0.50	0.50 UJ	ND<0.50	1.5	**0.43**
Wells Located Near the Northwest Site Boundary																			
M-5A	40	50	UMCf- fg1	UMCf- fg1	2/6/15	1,506	**9.0**	**1,400**	17	23	7.0	ND<1.0	ND<1.0	2.9	**30**	**17**	ND<1.0	ND<1.0	ND<0.0050
MW-16	25	40	Qal/ UMCf- fg1	UMCf- fg1	2/5/15	253	**44**	**150**	23	27	1.8	**22**	0.72	ND<0.25	2.6	1.9	ND<0.25	ND<0.25	**0.38**
M-6A	27	43	Qal/ UMCf- fg1	UMCf- fg1	1/22/15	4.9	ND<0.25	ND<0.25	ND<0.25	ND<0.25	2.0	ND<0.50	ND<0.25	ND<0.25	2.1	0.75	ND<0.25	ND<0.25	**0.010**
M-7B	26	51	Qal/ UMCf- fg1	UMCf- fg1	2/5/15	5.7	ND<0.25	ND<0.25	ND<0.25	ND<0.25	1.9	ND<0.50	ND<0.25	ND<0.25	2.1	1.7 J	ND<0.25	0.25 UJ	**0.015**
H-28	38	51	Qal	Qal	3/12/15	1,174	**5.0**	**1,100**	12	16	0.61	**0.89 J**	2.1	**11**	**17**	**10**	ND<0.25	ND<0.25	**0.025 J**
MC-29	38	50	Qal/ UMCf- fg1	Qal	2/5/15	111,748	**58,000**	**50,000**	**1,000**	**1,800**	**710**	ND<2.5	**64 J**	ND<50	ND<50	ND<50	ND<50	50 UJ	ND<0.013
MC-45	30	34	Qal	Qal	1/27/15	84	**25**	39	4.5	6.6	2.0	**3.3**	ND<0.25	0.30 J	1.0	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
MC-50	29	49	Qal	Qal	1/27/15	78	3.4	65 J	0.94	1.7	0.92	**3.3**	ND<0.25	ND<0.25	0.49 J	ND<0.25	ND<0.25	ND<0.25	**0.0031 J**
MC-51	24	49	Qal/ UMCf- fg1	Qal	2/5/15	2,876	**1,300**	**1,500**	22	32	3.4	**4.1 J**	ND<1.3	4.2	**13**	ND<1.3	ND<1.3	1.3 UJ	ND<0.013
MC-53	20	40	Qal/ UMCf- fg1	Qal	1/22/15	7.5	ND<0.25	ND<0.25	ND<0.25	0.28 J	2.8	**2.8**	1.8	0.34 J	1.4	0.48 J	ND<0.25	ND<0.25	**0.0032 J**
MC-93	32	42	Qal/ UMCf- fg1	Qal	2/5/15	16	ND<0.25	0.27 J	ND<0.25	0.31 J	8.8	ND<0.50	3.5	0.45 J	2.0	0.81	ND<0.25	0.25 UJ	**0.010**
MC-97	31	41	Qal/ UMCf- fg1	Qal	2/5/15	5.7	ND<0.25	0.31 J	ND<0.25	ND<0.25	0.71	**2.4**	0.95	0.29 J	2.3	1.1	ND<0.25	0.25 UJ	ND<0.0025
MIDDLE WATER-BEARING ZONE (WBZ) WELLS (90 - 300 ft bgs)																			
Middle WBZ Wells Screened Between ~90 and 150 ft bgs																			
M-117	130	150	UMCf- fg1	na (1)	1/16/15	All ND	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	0.25 UJ	ND<0.25	ND<0.25	ND<0.0025
M-118	138	158	UMCf- fg1	na (1)	1/20/15	All ND	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-149	100	120	UMCf- fg1	na (1)	1/26/15	21	ND<0.25	ND<0.25	ND<0.25	ND<0.25	21	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**0.0027 J**
M-150	150	170	UMCf- fg1	na (1)	1/12/15	All ND	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-151	125	145	UMCf- fg1	na (1)	1/21/15	All ND	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-152	125	145	UMCf- fg1	na (1)	5/21/15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M-161	100	110	UMCf- fg1	na (1)	1/13/15	All ND	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-161D	130	140	UMCf- fg1	na (1)	3/12/15	All ND	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-162	100	110	UMCf- fg1	na (1)	1/13/15	0.40	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-162D	130	140	UMCf- fg1	na (1)	3/12/15	All ND	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-165	110	120	UMCf- fg1	na (1)	1/21/15	1.0	ND<0.25	ND<0.25	ND<0.25	ND<0.25	0.47 J	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-181	105	115	UMCf- fg1	na (1)	1/21/15	All ND	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-186	105	115	UMCf- fg1	na (1)	5/7/15	540	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**540**	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**0.045**
TR-2	145	175	UMCf- fg1	na (1)	1/14/15	All ND	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
TR-4	125	145	UMCf- fg1	na (1)	1/14/15	0.36	ND<0.25	ND<0.25	ND<0.50	ND<0.25	0.36 J	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025

TABLE 5-3. SUMMARY OF ANALYTICAL RESULTS FOR TRUST SITE MONITORING PROGRAM WELLS - VOCs IDENTIFIED AS COPCs
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

On-Site Monitoring Well ID	Screened Interval		Stratigraphic Unit		2015 SAMPLING RESULTS														
	Top (ft bgs)	Bottom (ft bgs)	Screened Unit(s)	GW table in Unit	Date Sampled	Total VOCs (µg/L)	Benzene (µg/L)	Chloro-benzene (µg/L)	1,2-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloroform (µg/L)	1,4-Dioxane (µg/L)	PCE (µg/L)	TCE (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	Carbon Tetra-chloride (µg/L)	1,2,3-Trichloro-propane (µg/L)
					Criteria:		*5*	*100*	*600*	*75*	*80*	*0.779*	*5*	*5*	*2.79*	*5*	*7*	*5*	*0.0026*
Deeper Middle WBZ Wells Screened Between ~150 and 300 ft bgs																			
M-153	150	170	UMCf- fg1	na (1)	1/26/15	All ND	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-154	175	195	UMCf- fg1	na (1)	1/12/15	All ND	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
M-156	175	195	UMCf- fg1	na (1)	5/21/15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M-186D	153	173	UMCf- fg1	na (1)	2/10/16	All ND	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25
M-155	200	220	UMCf- cg2	na (1)	1/21/15	6.2	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
TR-1	282	312	UMCf- cg2	na (1)	1/14/15	All ND	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
TR-3	220	250	UMCf- cg2	na (1)	1/15/15	7.9	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
TR-5	221	251	UMCf- cg2	na (1)	1/14/15	All ND	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
TR-7	260	290	UMCf- cg2	na (1)	1/15/15	All ND	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
TR-9	230	250	UMCf- cg2	na (1)	1/20/15	All ND	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
TR-11	210	230	UMCf- cg2	na (1)	1/15/15	0.3	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.0025
TR-12	272	292	UMCf- cg2	na (1)	5/21/15	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:

µg/L: micrograms per liter (parts per billion)

GW Table: Groundwater Table

na (1): not applicable; deeper well screened below the water table.

nm: not measured.

ns (1): Well M-93 could not be sampled due to an obstruction in the well at 38 feet.

ns (2): Well M-36 is damaged and could not be sampled.

"---" means the analyte was not tested.

J = Estimated value.

UJ = The analyte was not detected, and the detection limit is an estimated quantity.

PCE = Tetrachloroethene

TCE = Trichloroethene

1,1-DCA = 1,1-Dichloroethane; 1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1. "Total VOCs" is the sum of all positive VOC detections using EPA Methods 8260B and 8260SIM. The individual VOC results are shown for those VOCs with detection frequencies greater than 5 percent. "Total VOCs" for which all results were non-detects are marked "All ND".
2. The analytical results for new well M-186D are from the most recent semiannual sampling event conducted in February 2016.
3. Concentrations above the screening criteria are shown in bold and are highlighted.

TABLE 5-4. GROUNDWATER SAMPLING RESULTS FOR COPCs WITH PREVIOUS LOCALIZED EXCEEDANCES OF SCREENING CRITERIA
RI Data Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Monitoring Well	Date	Alpha-BHC	Heptachlor Epoxide	BEHP	4-CBSA	Cyanide (Total)
		µg/L	µg/L	µg/L	µg/L	mg/L
Regulatory Screening Level [1]		*10*	*0.2*	*6*	*33,400*	*0.2*
M-5A	6/4/2009	**---**		---	**52,000**	---
	2/6/2015	---		**---**	23,000 J	**---**
M-125	6/23/2009	**---**		**---**	220	---
	1/27/2015	---		---	130	**---**
M-126	7/28/2010	<0.0050	<0.0070	**---**	---	---
	2/6/2015	0.0059 J	0.0026 UJ	---	2,400 J	**---**
M-128	6/18/2009	<0.048	**0.66**	**---**	**---**	---
	1/30/2015	<0.0026	<0.0026	---	---	**---**
MC-3	5/27/2009	8.9	<4.8	**---**	**---**	---
	2/2/2015	2.6	<0.049	---	---	**---**
M-14A	6/30/2008	<0.047	**0.30 J**	**---**	**---**	---
	1/29/2015	<0.0027	<0.0027	---	---	**---**
M-55	7/1/2008	---		**---**	---	**0.466**
	2/5/2015	---		---	**---**	<0.13 R
M-38	---	---		**---**	---	---
	5/7/2015	---		<2.0	**---**	**---**
M-66	---	---		---	---	---
	2/3/2015	---		2.0 UJ	**---**	**---**
M-22A	6/24/2009	---		**6.2**	---	---
	2/2/2015	---		1.9 UJ	**---**	**---**
M-65	7/2/2008	---		<4.7	---	**---**
	2/3/2015	---		2.0 UJ	**---**	---

Notes:

Bold and highlighted value: Detection Above Screening Level

[1] Screening Levels are Residential Water Basic Comparison Levels (BCLs) from https://ndep.nv.gov/bmi/docs/bcl_calculations_February_2015.pdf

BEHP = bis(2-ethylhexyl)phthalate

4-CBSA = 4-chlorobenzenesulfonic acid

"---" means the well was not scheduled to be tested for this analyte.

J - Estimated value.

UJ - The analyte was not detected, and the detection limit is an estimated quantity.

R - Data are rejected due to QC issues.

TABLE 5-5. PRELIMINARY EVALUATION OF SOIL GAS RESULTS ADJACENT TO OFF-SITE WELLS PC-21A, PC-24, AND PC-67
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Off-site Well Name	Adjacent Soil Gas Sample Location	Soil Gas Sample Depth (ft bgs)	SOIL GAS			GROUNDWATER
			Chloroform Concentration ($\mu g/m^3$)	Chloroform Cancer RBTC ($\mu g/m^3$)	Estimated Residential Cancer Risk	Chloroform Concentration (µg/L)
PC-67	SG-1	5	3,700	168	2E-05	1,000
PC-24	SG-2	5	5,200	168	3E-05	390
PC-21A	SG-3	5	4,400	168	3E-05	180

Notes:
ft bgs = feet below ground surface
RBTC = Risk Based Target Concentration (site-specific screening level)
$\mu g/m^3$ = micrograms per cubic meter
µg/L = micrograms per liter

TABLE 7-1. GROUNDWATER SAMPLING AT NEW GROUNDWATER MONITORING WELLS - ON-SITE NERT RI STUDY AREA
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Monitoring Well ID	NERT On-Site Location	Rationale for Sampling	Well Construction Details for New Wells*						Groundwater Analytical Testing Program							
			Pilot Boring Depth (ft bgs)	Casing Diameter and Type	Screen Size (inches)	Screened Interval (ft bgs)	Sand Pack Interval (ft bgs)	Sand Pack Size	Chlorates[1]	Dissolved Metals[2]	VOCs[3]	PCBs[4]	Radio-nuclides[5]	Dioxins/ Furans[6]	Major Ions[7]	Geochemical Parameters[8]
West of GW-11 Pond																
M-203	West of GW-11 Pond	Evaluate COPCs in shallow groundwater	55	4" PVC	0.01	30-50	33-50	No. 2/12	X	X	X	X	X	X	X	X
Downgradient Site Boundary Monitoring Wells																
M-204	Adjacent to shallow well M-7B	Monitor Middle WBZ	115	4" PVC	0.01	100-110	98-110	No. 2/12	X	X	X	X	X	X	X	X
M-205	Between shallow wells M-7B & M-98	Monitor Shallow WBZ	55	4" PVC	0.01	30-50	28-50	No. 2/12	X	X	X	X	X		X	X
M-206	Adjacent to shallow well M-98 (dry)	Monitor Shallow WBZ	55	4" PVC	0.01	30-50	28-50	No. 2/12	X	X	X	X	X		X	X
M-207	Adjacent to shallow well M-99 (dry)	Monitor Shallow WBZ	50	4" PVC	0.01	25-45	23-45	No. 2/12	X	X	X	X	X		X	X
M-208	Adjacent to shallow well M-100 (dry) and Middle WBZ wells M-151 and M-155	Well cluster to monitor groundwater in the Shallow WBZ UMCf	50	4" PVC	0.01	25-45	23-45	No. 2/12	X	X	X	X	X		X	X
M-209			65	4" PVC	0.01	50-60	48-60	No.2/12	X	X	X	X	X		X	X
M-210			85	4" PVC	0.01	70-80	63-80	No. 2/12	X	X	X	X			X	X
M-211	Adjacent to shallow well M-101 (dry)	Well cluster to monitor groundwater in the Shallow and Middle WBZ UMCf	50	4" PVC	0.01	25-45	23-45	No. 2/12	X	X	X	X	X	X	X	X
M-212			75	4" PVC	0.01	60-70	58-70	No. 2/12	X	X	X	X	X		X	X
M-213			115	4" PVC	0.01	100-110	98-110	No. 2/12	X	X	X	X	X		X	X
M-214	Adjacent to former shallow well M-102	Monitor Shallow WBZ	55	4" PVC	0.01	30-50	28-50	No. 2/12	X	X	X	X	X		X	X
Area Between the Barrier Wall and the Downgradient Site Boundary																
M-215	North side of the Northern Retention Basin	Monitor Shallow Groundwater	50	4" PVC	0.01	25-45	23-45	No. 2/12	X	X	X	X	X		X	X
M-216	North side of the Northern Retention Basin	Well cluster to provide vertical delineation of COPCs north of the former injection trenches	50	4" PVC	0.01	25-45	23-45	No. 2/12	X	X	X	X	X	X	X	X
M-217			75	4" PVC	0.01	60-70	58-70	No. 2/12	X	X	X	X	X		X	X
M-218			115	4" PVC	0.01	100-110	98-110	No. 2/12	X	X	X	X	X		X	X
M-219	North side of the Northern Retention Basin	Monitor Shallow Groundwater	50	4" PVC	0.01	25-45	23-45	No. 2/12	X	X	X	X	X		X	X

TABLE 7-1. GROUNDWATER SAMPLING AT NEW GROUNDWATER MONITORING WELLS - ON-SITE NERT RI STUDY AREA
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Monitoring Well ID	NERT On-Site Location	Rationale for Sampling	Well Construction Details for New Wells*						Groundwater Analytical Testing Program							
			Pilot Boring Depth (ft bgs)	Casing Diameter and Type	Screen Size (inches)	Screened Interval (ft bgs)	Sand Pack Interval (ft bgs)	Sand Pack Size	Chlorates[1]	Dissolved Metals[2]	VOCs[3]	PCBs[4]	Radio-nuclides[5]	Dioxins/ Furans[6]	Major Ions[7]	Geochemical Parameters[8]
M-220	East of the Northern Retention Basin	Monitor Shallow WBZ UMCf	75	4" PVC	0.01	60-70	58-70	No. 2/12	X	X	X	X	X		X	X
M-72D	Adjacent to well M-72	Evaluate COPCs in the Shallow WBZ UMCf	75	4" PVC	0.01	60-70	58-70	No. 2/12	X	X	X	X	X		X	X
M-81D	Adjacent to well M-81A		75	4" PVC	0.01	60-70	58-70	No. 2/12	X	X	X	X	X		X	X
M-83D	Adjacent to well M-83		75	4" PVC	0.01	60-70	58-70	No. 2/12	X	X	X	X	X		X	X
M-140D	Adjacent to well M-140		75	4" PVC	0.01	60-70	58-70	No. 2/12	X	X	X	X	X		X	X
Area Upgradient of the IWF/Barrier Wall																
M-65D	Adjacent to shallow well M-65	Well cluster to better delineate the vertical extent of COPCs in the UMCf	65	4" PVC	0.01	60-70	53-60	No. 2/12	X	X	X	X	X		X	X
M-221			95	4" PVC	0.01	80-90	78-90	No. 2/12	X	X	X	X	X		X	X
M-222			115	4" PVC	0.01	100-110	98-110	No. 2/12	X	X	X	X	X		X	X
M-22D	Adjacent to well M-22A	Evaluate COPCs in the Shallow WBZ UMCf	70	4" PVC	0.01	55-65	53-65	No. 2/12	X	X	X	X	X		X	X
M-36D	Adjacent to well M-36		70	4" PVC	0.01	55-65	53-65	No. 2/12	X	X	X	X	X		X	X
M-66D	Adjacent to well M-66		75	4" PVC	0.01	60-70	58-70	No. 2/12	X	X	X	X	X		X	X
Central Site Area																
M-194	North (downgradient) of Unit Buildings 4 and 5 (within the Leach Plant area)	Evaluate the presence of COPCs in the Middle WBZ UMCf.	120	4" PVC	0.01	95-110	93-110	No. 2/12	X	X	X	X	X		X	X
M-195			120	4" PVC	0.01	95-110	93-110	No. 2/12	X	X	X	X	X		X	X
M-196			120	4" PVC	0.01	100-115	98-115	No.2/12	X	X	X	X	X		X	X
M-197			120	4" PVC	0.01	100-115	98-115	No.2/12	X	X	X	X	X		X	X
M-198			120	4" PVC	0.01	100-115	98-115	No.2/12	X	X	X	X	X		X	X
M-199			120	4" PVC	0.01	100-115	98-115	No.2/12	X	X	X	X	X		X	X
M-200	North of well M-186D		130	4" PVC	0.01	105-120	103-120	No. 2/12	X	X	X	X	X		X	X

TABLE 7-1. GROUNDWATER SAMPLING AT NEW GROUNDWATER MONITORING WELLS - ON-SITE NERT RI STUDY AREA
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Monitoring Well ID	NERT On-Site Location	Rationale for Sampling	Well Construction Details for New Wells*						Groundwater Analytical Testing Program							
			Pilot Boring Depth (ft bgs)	Casing Diameter and Type	Screen Size (inches)	Screened Interval (ft bgs)	Sand Pack Interval (ft bgs)	Sand Pack Size	Chlorates[1]	Dissolved Metals[2]	VOCs[3]	PCBs[4]	Radio-nuclides[5]	Dioxins/ Furans[6]	Major Ions[7]	Geochemical Parameters[8]
M-21D	Adjacent to M-21 (dry)	Evaluate the presence of COPCs in the Shallow WBZ UMCf.	60	4" PVC	0.01	40-55	38-55	No. 2/12	X	X	X	X	X	X	X	X
M-125D	Adjacent to M-125		80	4" PVC	0.01	65-75	63-75	No. 2/12	X	X	X	X	X		X	X
M-201	Adjacent to MC-MW-39		75	4" PVC	0.01	62-72	60-72	No. 2/12	X	X	X	X	X		X	X
M-202	Northeast of RB-40		60	4" PVC	0.01	40-55	43-55	No. 2/12	X	X	X	X	X		X	X

Notes:

***** Well construction details may be modified based on subsurface lithologies encountered during drilling.

ft bgs: feet below ground surface

VOCs: Volatile organic compounds

1. Includes perchlorate and chlorate.
2. Dissolved metals analysis includes aluminum, arsenic, boron, total chromium, hexavalent chromium, iron, lead, magnesium, manganese, total phosphorus, and strontium.
3. VOCs analysis by EPA Method 8260B; 1,2,3-trichloropropane analysis by EPA Method 8260SIM.
4. PCBs - analysis for the COPC Arochlor 1260.
5. Radionuclides - analysis for the COPC Total Uranium.
6. Ten exisitng wells will also be sampled for dioxins and furans: M-11, M12A, M-13, MW-16, M-22A, M-25, M-37, M-75, M-79, and M-135.
7. Major ions include pH, total dissolved solids (TDS), electrical conductivity (EC), and major dissolved ions (calcium, sodium, potassium, sulfate, nitrate, chloride, bicarbonate/carbonate alkalinity, hydroxide).
8. Geochemical parameters include field parameters (dissolved oxygen, redox potential, temperature, turbidity, ferrous iron, sulfide), dissolved organic carbon, bromide, phosphate, nitrite, and sulfide.

TABLE 7-2. SOIL SAMPLING AT NEW DEEP SOIL BORINGS - ON-SITE NERT RI STUDY AREA
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Boring Number	NERT On-Site Location	Rationale for Sampling	Planned Samples*		Soil Analytical Testing Program [1]												
			Boring Depth (ft bgs)	Planned Soil Sample Depths (ft bgs)	Perchlorate	Chlorate	Chromium, total	Nitrate, Nitrite	VOCs	Moisture Content	Other Metals[2]	SVOCs[3]	PAHs[4]	PCBs[5]	Dioxins/ Furans	OCPs[6]	Radio-nuclides[7]
RIDB-1	Area West of the GW-11 Pond	Investigation of the presence, lateral extent, and vertical extent of COPCs in the UMCf	90	0-5, 5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-2			90	0-0.5, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-3			90	0-0.5, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-4			90	0-0.5, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-5			90	0-0.5, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-6			90	0-0.5, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-7			90	0-0.5, 5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-8	Area North of the Barrier Wall	Better delineation of the lateral and vertical extent of COPCs in the on-site area downgradient of the IWF/Barrier Wall	90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-9			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-10			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-11			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-12			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-13			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-14			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-15			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-16			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-17			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-18			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							

TABLE 7-2. SOIL SAMPLING AT NEW DEEP SOIL BORINGS - ON-SITE NERT RI STUDY AREA
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Boring Number	NERT On-Site Location	Rationale for Sampling	Planned Samples*		Soil Analytical Testing Program [1]												
			Boring Depth (ft bgs)	Planned Soil Sample Depths (ft bgs)	Perchlorate	Chlorate	Chromium, total	Nitrate, Nitrite	VOCs	Moisture Content	Other Metals[2]	SVOCs[3]	PAHs[4]	PCBs[5]	Dioxins/ Furans	OCPs[6]	Radio-nuclides[7]
RIDB-19	Area North of the Barrier Wall	Better delineation of the lateral and vertical extent of COPCs in the on-site area downgradient of the IWF/Barrier Wall	90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-20			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-21			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-22			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-23			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-24			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-25			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-26			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-27	Northeast Site Boundary		90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-28			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RIDB-29			90	1, 5, 10 , 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90	X	X	X	X	X	X							
RI Investigation Locations, NERT Site, Central Area																	
RI-1	Central Area of the Site Between the Unit Buildings and the Central Retention Basin	Investigation of the presence, lateral extent, and vertical extent of VOCs and other COPCs in the UMCf	130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-2			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-3			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-4			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-5			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-6			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							

TABLE 7-2. SOIL SAMPLING AT NEW DEEP SOIL BORINGS - ON-SITE NERT RI STUDY AREA
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Boring Number	NERT On-Site Location	Rationale for Sampling	Planned Samples*		Soil Analytical Testing Program [1]												
			Boring Depth (ft bgs)	Planned Soil Sample Depths (ft bgs)	Perchlorate	Chlorate	Chromium, total	Nitrate, Nitrite	VOCs	Moisture Content	Other Metals[2]	SVOCs[3]	PAHs[4]	PCBs[5]	Dioxins/ Furans	OCPs[6]	Radio-nuclides[7]
RI-7	Central Area of the Site Between the Unit Buildings and the Central Retention Basin	Investigation of the presence, lateral extent, and vertical extent of VOCs and other COPCs in the UMCf	130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-8			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-9			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-10			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-11			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-12			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-13			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-14			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-15			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-16			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-17			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-18			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-19			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-20			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-21			130	5, 10, 20, 30	X	X	X	X	X	X	X	X	X	X	X	X	X
				40, 50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							

TABLE 7-2. SOIL SAMPLING AT NEW DEEP SOIL BORINGS - ON-SITE NERT RI STUDY AREA
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Boring Number	NERT On-Site Location	Rationale for Sampling	Planned Samples*		Soil Analytical Testing Program [1]												
			Boring Depth (ft bgs)	Planned Soil Sample Depths (ft bgs)	Perchlorate	Chlorate	Chromium, total	Nitrate, Nitrite	VOCs	Moisture Content	Other Metals[2]	SVOCs[3]	PAHs[4]	PCBs[5]	Dioxins/ Furans	OCPs[6]	Radio-nuclides[7]
RI-22	South of Former Unit 2 and Unit 3	Investigation of the presence, lateral extent, and vertical extent of VOCs and other COPCs in the vadose zone and in the UMCf	130	1, 5, 10, 20, 30, 40	X	X	X	X	X	X	X	X	X	X	X	X	X
				50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-23			130	1, 5, 10, 20, 30, 40	X	X	X	X	X	X	X	X	X	X	X	X	X
				50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-24	North of Former Unit 1		130	1, 5, 10, 20, 30, 40	X	X	X	X	X	X	X	X	X	X	X	X	X
				50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-25	North of Former Unit 2		130	1, 5, 10, 20, 30, 40	X	X	X	X	X	X	X	X	X	X	X	X	X
				50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-26	North of Unit 3		130	1, 5, 10, 20, 30, 40	X	X	X	X	X	X	X	X	X	X	X	X	X
				50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-27	Former Unit 1 Basement		130	1, 5, 10, 20, 30, 40	X	X	X	X	X	X	X	X	X	X	X	X	X
				50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							
RI-28	Former Unit 2 Basement		130	1, 5, 10, 20, 30, 40	X	X	X	X	X	X	X	X	X	X	X	X	X
				50, 60, 70, 80, 90, 100, 110, 120, 130	X	X	X	X	X	X							

Notes:

* Sample depths may be modified based on subsurface lithologies encountered during drilling.

ft bgs: feet below ground surface

VOCs: Volatile organic compounds

[1] Approximately 20% of the soil samples will be tested for physical properties, including Atterberg Limits and/or grain size distribution, porosity, bulk density, and fraction organic carbon (foc). Approximately 5% of the soil samples will be selected for vertical permeability testing.

Other Soil Chemicals of Potential Concern (COPCs)

2. Other metals - antimony, arsenic, barium, boron, cadmium, chromium VI, cobalt, copper, iron, lead , magnesium, manganese, mercury, molybdenum, nickel, niobium, phosphorus (total), silver, strontium, thallium, and tungsten.
3. SVOCs - analysis for the COPCs hexachlorobenzene, 1,-methylnaphthalene, and octachlorostyrene .
4. PAHs - analysis for the COPCs benzo(a)anthracene, benzo(a)pyrne, benzo(b)fluoranthene, indeno(1,2,3-cd)pyrene, and phenanthrene.
5. PCBs - analysis for the COPC Arochlor 1260.
6. Organochlorine Pesticides (OCPs) - analysis for the COPCs beta-BHC, 4,4-DDE, and 4,4-DDT
7. Radionuclides - analysis for the COPCs radium-226, radium-228, thorium-228, thorium-230, and thorium-232.

TABLE 7-3a. GROUNDWATER SAMPLING AT NEW GROUNDWATER MONITORING WELLS - OFF-SITE NERT RI STUDY AREA
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Monitoring Well ID	Off-Site NERT RI Study Area Location	Rationale for Sampling	Well Construction Details for New Wells*							Groundwater Analytical Testing Program				
			Pilot Boring Depth (ft bgs)	Casing Diameter and Type	Screen Size (inches)	Screened Interval (ft bgs)	Sand Pack Interval (ft bgs)	Sand Pack Size	Notes	Chlorates[1]	Dissolved Metals[2]	VOCs[3]	Major Ions[4]	Geochemical Parameters[5]
PC-161	Between the NERT Site and Sunset Road	Better delineation of the lateral extent of the NERT off-site plume in the alluvium (shallow groundwater)	55	2" PVC	0.02	15-50	13-50	No. 3		X	X	X	X	X
PC-162			55	2" PVC	0.02	15-50	13-50	No. 3		X	X	X	X	X
PC-163			30	2" PVC	0.02	10-25	8-25	No. 3		X	X	X	X	X
PC-164			30	2" PVC	0.02	10-25	8-25	No. 3		X	X	X	X	X
PC-165			55	2" PVC	0.02	15-50	13-50	No. 3		X	X	X	X	X
PC-166			50	2" PVC	0.02	15-45	13-45	No. 3		X	X	X	X	X
PC-167			40	2" PVC	0.02	15-35	13-35	No. 3		X	X	X	X	X
PC-168			40	2" PVC	0.02	15-35	13-35	No. 3		X	X	X	X	X
PC-169			35	2" PVC	0.02	15-30	13-30	No. 3		X	X	X	X	X
PC-170			55	2" PVC	0.02	15-50	13-50	No. 3		X	X	X	X	X
PC-171			50	2" PVC	0.02	15-45	13-45	No. 3		X	X	X	X	X
PC-172			35	2" PVC	0.02	15-30	13-30	No. 3		X	X	X	X	X
PC-173			55	2" PVC	0.02	15-50	13-50	No. 3		X	X	X	X	X
PC-174			35	2" PVC	0.02	15-30	13-30	No. 3		X	X	X	X	X
PC-175			35	2" PVC	0.02	15-30	13-30	No. 3		X	X	X	X	X
PC-190	North of PC-162		55	2" PVC	0.02	15-50	13-50	No. 3		X	X	X	X	X
PC-191	North of PC-160		35	2" PVC	0.02	15-30	13-30	No. 3		X	X	X	X	X
PC-176	Downgradient of well PC-130	Better delineation of the vertical extent of COPCs in the UMCf	75	4" PVC	0.01	55-70	53-70	No.2/12		X	X	X	X	X
PC-177	Upgradient of well PC-123		65	4" PVC	0.01	45-60	43-60	No. 2/12		X	X	X	X	X
PC-178	Adjacent to well MW-K5		75	4" PVC	0.01	55-70	53-70	No. 2/12		X	X	X	X	X
PC-179	Adjacent to well PC-64		55	4" PVC	0.01	35-50	33-50	No. 2/12		X	X	X	X	X
PC-180	Between Warm Srings Road and Boulder Highway	Deeper well cluster between shallow wells PC-71 and PC-72 to provide vertical extent of COPCs	50	4" PVC	0.01	35-45	33-45	No. 2/12		X	X	X	X	X
PC-181			70	4" PVC	0.01	55-65	53-65	No. 2/12		X	X	X	X	X
PC-182			90	4" PVC	0.01	75-85	73-85	No. 2/12		X	X	X	X	X

TABLE 7-3a. GROUNDWATER SAMPLING AT NEW GROUNDWATER MONITORING WELLS - OFF-SITE NERT RI STUDY AREA
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Monitoring Well ID	Off-Site NERT RI Study Area Location	Rationale for Sampling	Well Construction Details for New Wells*							Groundwater Analytical Testing Program				
			Pilot Boring Depth (ft bgs)	Casing Diameter and Type	Screen Size (inches)	Screened Interval (ft bgs)	Sand Pack Interval (ft bgs)	Sand Pack Size	Notes	Chlorates[1]	Dissolved Metals[2]	VOCs[3]	Major Ions[4]	Geochemical Parameters[5]
PC-183	Between Warm Srings Road and Boulder Highway	Provide vertical delineation in the deeper Shallow WBZ at well cluster M-44/ M-152/ M-156	50	4" PVC	0.01	35-45	33-45	No. 2/12	These new wells replace wells M-106 and M-107, which have been decommissioned.	X	X	X	X	X
PC-184			70	4" PVC	0.01	55-65	53-65	No. 2/12		X	X	X	X	X
PC-185			90	4" PVC	0.01	75-85	73-85	No. 2/12		X	X	X	X	X
PC-186	Adjacent to well M-96	Deeper well (M-96 is dry)	40	4" PVC	0.01	20-35	18-35	No. 2/12		X	X	X	X	X
PC-187	North of Warm Springs Road	Better delineation of the vertical extent of COPCs in the UMCf	60	4" PVC	0.01	45-55	43-55	No. 2/12		X	X	X	X	X
PC-188	North of Warm Springs Road		65	4" PVC	0.01	50-60	53-60	No. 2/12		X	X	X	X	X
PC-189	Adjacent to well M-48A		65	4" PVC	0.01	50-60	53-60	No. 2/12		X	X	X	X	X

Notes:

***** Well construction details may be modified based on subsurface lithologies encountered during drilling.

ft bgs: feet below ground surface

VOCs: Volatile organic compounds

1. Includes perchlorate and chlorate.
2. Dissolved metals analysis includes aluminum, arsenic, boron, total chromium, hexavalent chromium, iron, lead, magnesium, manganese, total phosphorus, and strontium.
3. VOCs analysis by EPA Method 8260B; 1,2,3-trichloropropane analysis by EPA Method 8260SIM.
4. Major ions include pH, total dissolved solids (TDS), electrical conductivity (EC), and major dissolved ions (calcium, sodium, potassium, sulfate, nitrate, chloride, bicarbonate/carbonate alkalinity, hydroxide).
5. Geochemical parameters include field parameters (dissolved oxygen, redox potential, temperature, turbidity, ferrous iron, sulfide), dissolved organic carbon, bromide, phosphate, nitrite, and sulfide.

TABLE 7-3b. SOIL SAMPLING AT NEW DEEP SOIL BORINGS - OFF-SITE NERT RI STUDY AREA
RI Data Evaluation
Nevada Environmental Response Trust Site; Henderson, Nevada

Boring Number	Off-Site NERT RI Study Area Location	Rationale for Sampling	Planned Samples*			Soil Analytical Testing Program						
			Boring Depth (ft bgs)	Planned Soil Sample Depths (ft bgs)	Notes	Perchlorate	Chlorate	Chromium, total	Nitrate	VOCs	Moisture Content	Physical Properties
PCDB-1	South of the Seep Well Field	Better delineation of the vertical extent of COPCs to help refine mass estimates in the Off-Site RI Study Area	90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	[1]
PCDB-2			90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	
PCDB-3			90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	
PCDB-4	North of the Athens Road Well Field		90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	[1]
PCDB-5			90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	
PCDB-6	Adjacent to new well PC-176		90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	[1]
PCDB-7	Adjacent to new well PC-177		90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	
PCDB-8	Adjacent to well PC-66		90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	[1]
PCDB-9	Southwest of Boulder Highway		90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	
PCDB-10	Between Warm Springs Road and Boulder Highway		90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	
PCDB-11			90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	[1]
PCDB-12			90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	
PCDB-13			90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	
PCDB-14	North of Warm Springs Road		90	5, 10, 20, 30, 40, 50, 60, 70, 80, 90	10 samples	X	X	X	X	X	X	[1]

Notes:

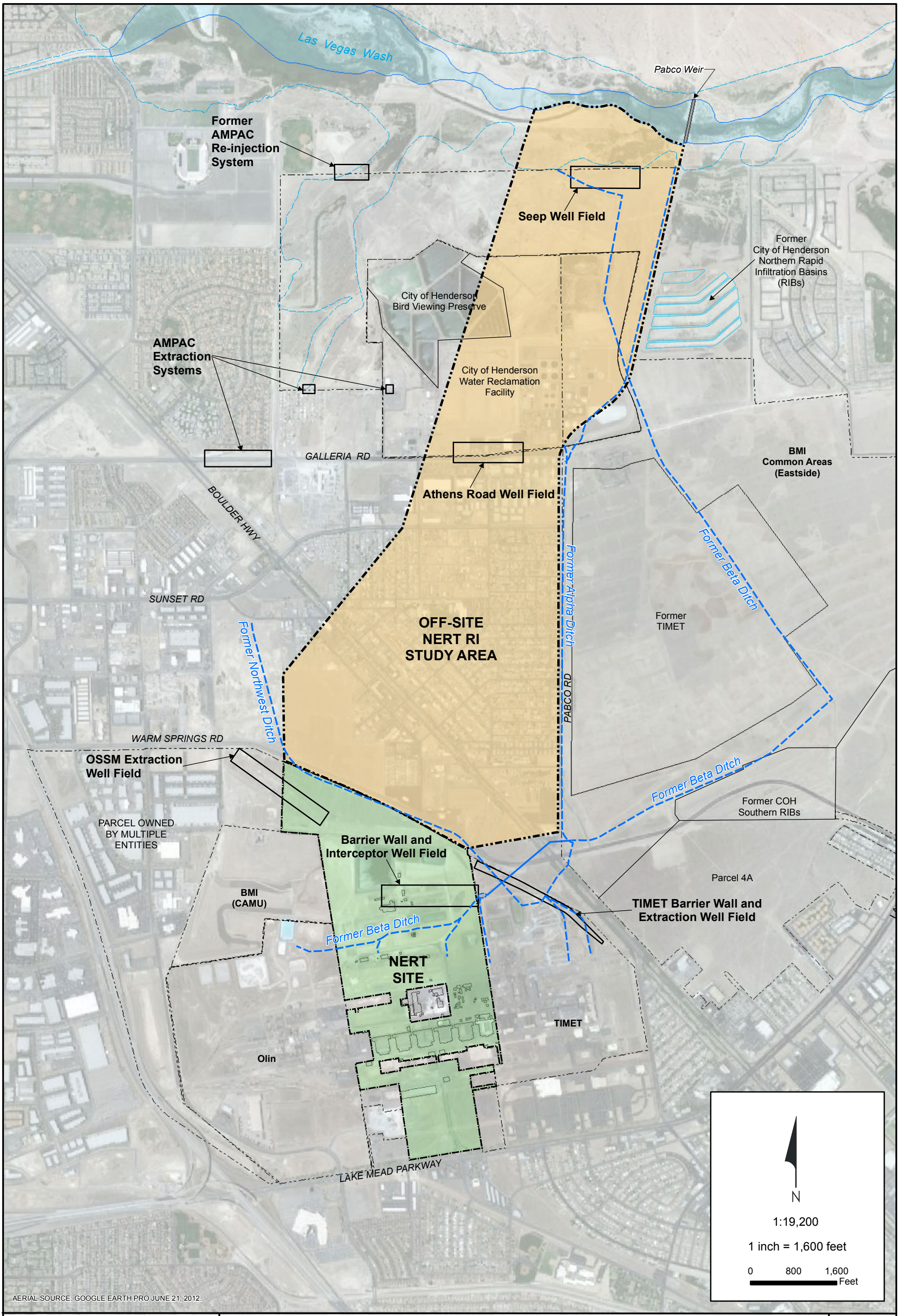
* Sample depths may be modified based on subsurface lithologies encountered during drilling.

ft bgs: feet below ground surface

VOCs: Volatile organic compounds

[1] Approximately 20% of the soil samples will be tested for physical properties, including Atterberg Limits and/or grain size distribution, porosity, bulk density, and fraction organic carbon (foc). Approximately 5% of the soil samples will be selected for vertical permeability testing.

FIGURES



RAMBOLL ENVIRON

RI Study Area
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **1-1**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 1-1-ContinuousOptimizationProgram-area.mxd

Additional Soil Investigation Areas

1 Additional Soil Investigation Area AP-5 Pond
2 Additional Soil Investigation Area Between AP-5 Pond and Debris Pile
3 Additional Soil Investigation Area Debris Pile
4 Additional Soil Investigation Area West of Mn-1 Pond
5 Additional Soil Investigation Area North of WC-East Pond
6 Additional Soil Investigation Area Southwest of GW-11 Pond
7 Additional Soil Investigation Area North of Lhoist and West of Mn-2 Pond
8 Additional Soil Investigation Area at Unit Buildings 4 and 5 and Leach Plant

Legend

- Shallow WBZ Well
- Soil Boring
- Additional Soil Investigation Areas Sampled for Chloroform
- Additional Soil Investigation Area
- Debris Pile Site Features
- NERT-Owned Property
- Groundwater Barrier Wall
- GWETS Operational Areas
- Tronox Operational Areas
- Site Features (Buildings and Tanks)
- Former Ditches

N

1:4,800

1 inch = 400 feet

0 200 400 Feet

RISB-49 RISB-42 RISB-43 RISB-38 RISB-44 RISB-45 RISB-46 RISB-47 RISB-48 RISB-39 RISB-40 RISB-41 5

WC-West Pond

WC-East Pond

Groundwater Holding Pond (GW-11)

Balance Tanks

3

Groundwater Barrier Wall

2

RISB-14 RISB-12A RISB-12B RIT-2 RIT-1 RIT-3 RISB-13 RISB-28 RISB-29 RISB-26 RISB-25 RISB-27 RISB-24 RISB-21 RISB-22 RISB-23 RISB-20 RISB-19 RISB-16 RISB-15 RISB-17 RISB-18 RISB-11 RISB-10 RISB-9

Debris Pile

6 RISB-52 RISB-51 RISB-50

Groundwater Perchlorate Treatment Facility

1 Pond AP-5

RISB-1 through RISB-8 to be located after pond decommissioning

BT Tanks

Former Beta Ditch

RISB-37 RISB-36 RISB-34 RISB-35 RISB-33 RISB-31 RISB-32 RISB-30

Pond Mn-1

Pond Mn-2

4

Steam Plant

Lab

Maintenance Building

RISB-53 RISB-54 RISB-55

7

M-186D RISB-58 RISB-60 RISB-59 RISB-61 RISB-63 RISB-62

Leach Plant

Lhoist

8

Boron Production Facility

RISB-56 RISB-57

M-193 M-192 M-191 M-190 M-189

Unit 1 Unit 2 Unit 3 Unit 4 Unit 5 Unit 6

Admin Building

Wash/Change House/First Aid

bing

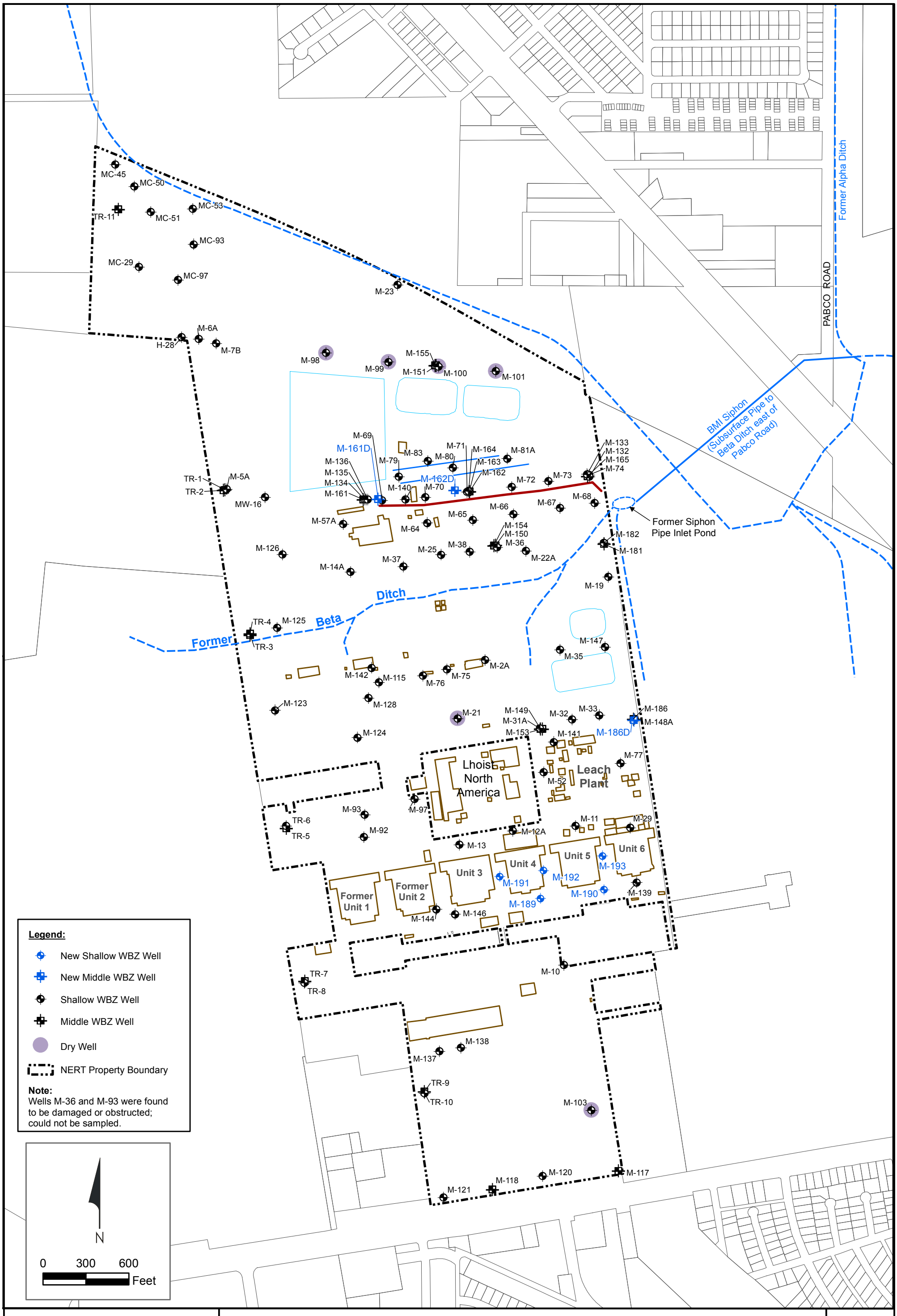
RAMBOLL ENVIRON

RI Data Gap Soil Investigation Areas
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure **1-2**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 1-2_BoringLocations.mxd



RAMBOLL ENVIRON

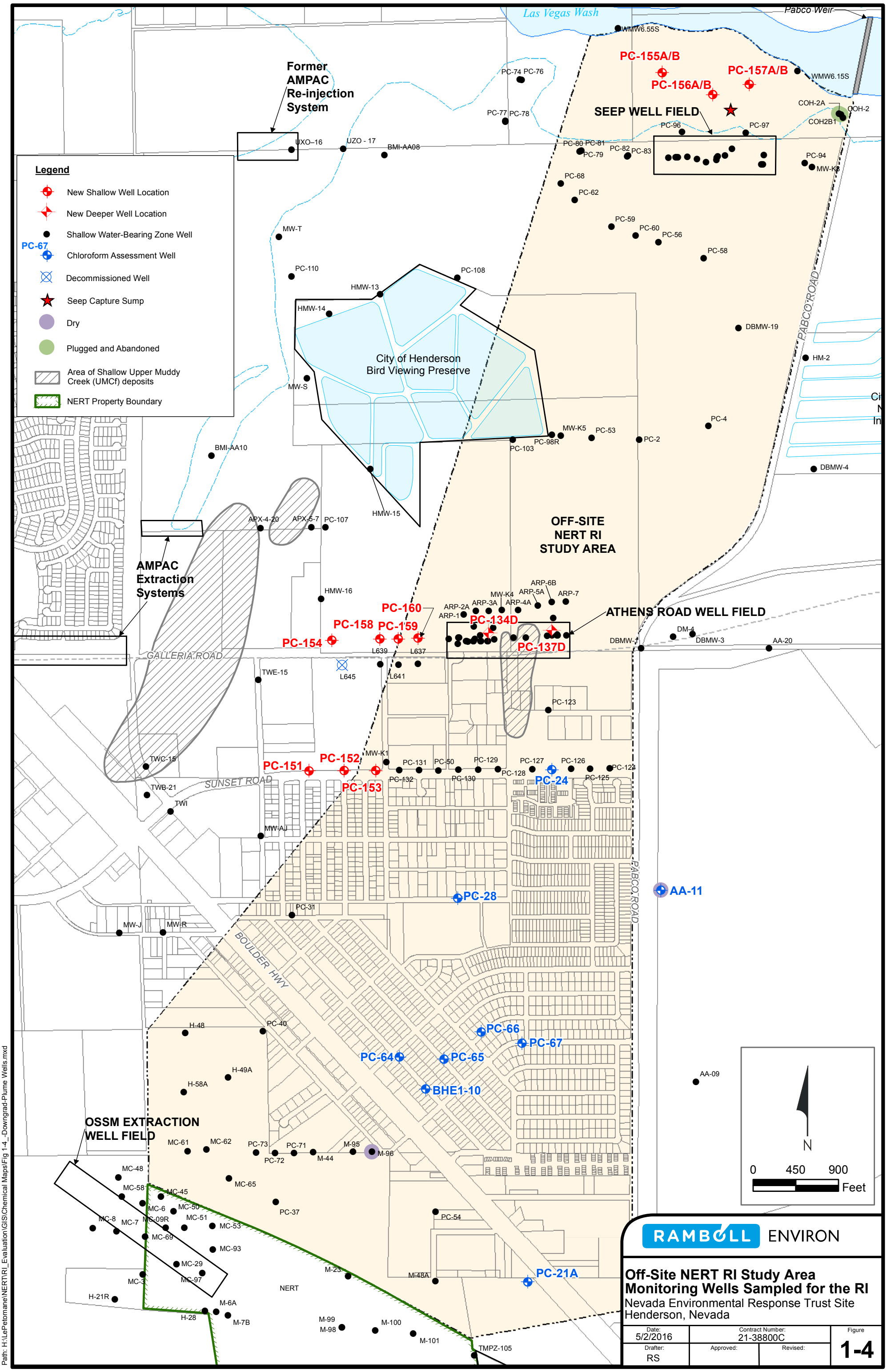
NERT On-Site Monitoring Wells Sampled for the RI
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure **1-3**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 1-3_Trust Onsite Sampled.mxd

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 1-3_Trust Onsite Sampled.mxd



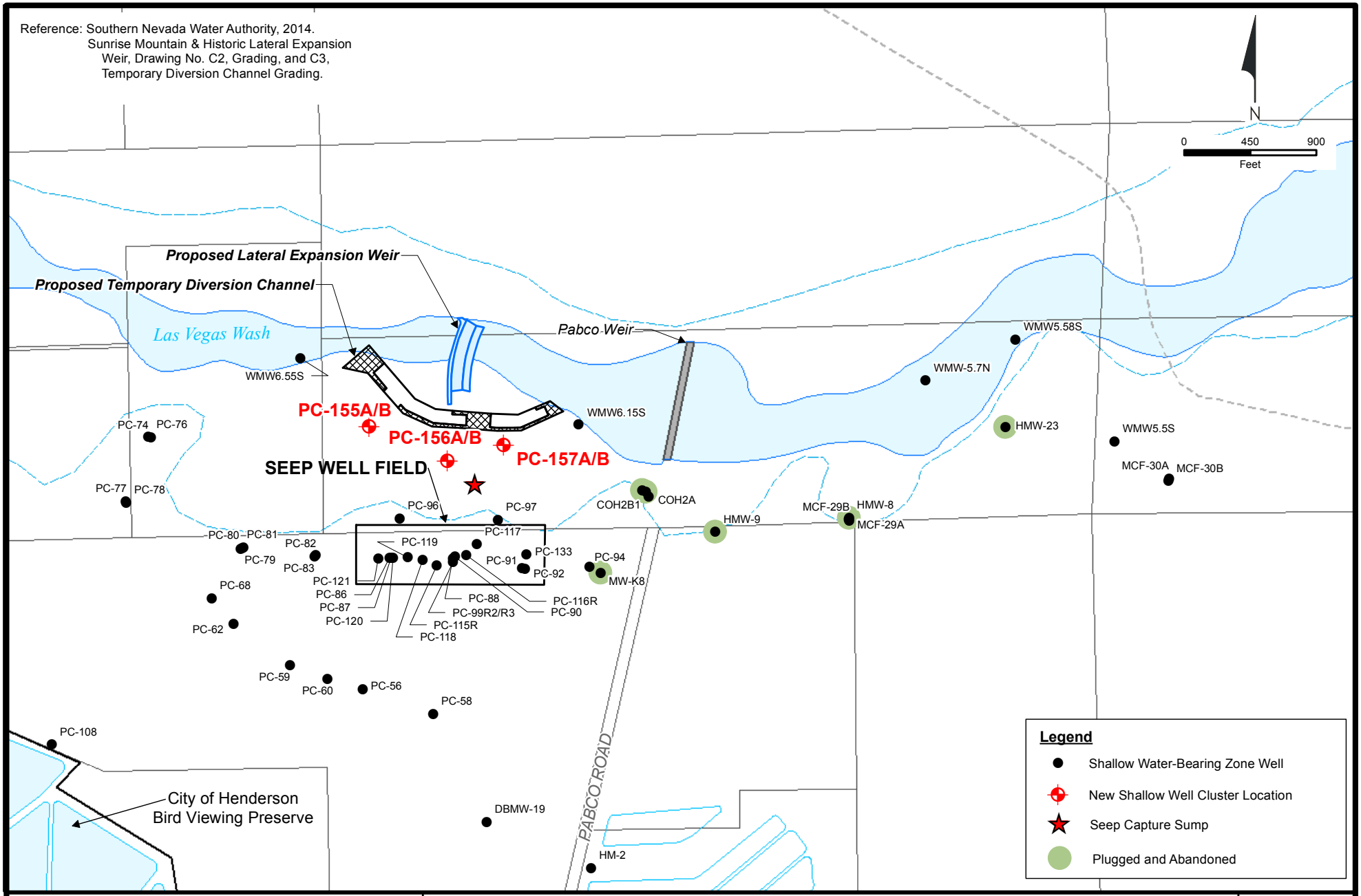
RAMBOLL ENVIRON

Off-Site NERT RI Study Area
Monitoring Wells Sampled for the RI
Nevada Environmental Response Trust Site
Henderson, Nevada

Date:	Contract Number:		Figure
5/2/2016	21-38800C		1-4
Drafter: RS	Approved:	Revised:	

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 1-4_-Downgrad-Plume Wells.mxd

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 1-4_-Downgrad-Plume Wells.mxd



RAMBOLL ENVIRON

Las Vegas Wash Area Monitoring Wells Sampled for the RI

Nevada Environmental Response Trust Site
Henderson, Nevada

Figure
1-5

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 1-5_-WASHAREA-Plume Wells.mxd

NERT SITE HISTORICAL TIMELINE

Figure 2-2 | Figure 2-3 | Figure 2-4 | Figure 2-5 | Figure 2-6

OWNERSHIP

- US Government (1941 - 1962)
- Colorado River Commission (CRC)
- WECCO (1952 - 1955)
- American Potash & Chemical Company (AP&CC) (1955 - 1967)
- US gov't retains ownership over portion of the site
- Kerr-McGee (1967 - 2005)
- Tronox (2005 - 2011)
- Nevada Environmental Response Team (NERT) (2011 - present)

1941 Magnesium production plant constructed by Defense Plant Corporation on behalf of US government

1949 Majority of industrial complex conveyed to CRC

1952 CRC conveys portion of site to WECCO

1955 Merger between WECCO and AP&CC

1962 AP & CC purchases portions of property from US gov't, including the ammonium perchlorate, sodium perchlorate and half of the sodium chlorate plant

1967 AP&CC acquired by Kerr-McGee through merger

2005 Tronox acquires chemical division of Kerr-McGee

2011 NERT gains ownership of site through Tronox bankruptcy

OPERATORS

- Basic Magnesium Inc. (1942 - 1944)
- Western Electric Chemical Company (WECCO) (1945 - 1955)
  - Valite (1947 - unknown)
  - Hardesty AMECCO (1946 - 49)
- American Potash & Chemical Corporation (AP&CC) (1955 - 1967)
- Kerr-McGee (1967 - 2005)
  - Burns Oil (79 - 83) / Koch Materials Co. (83 - mid-90s)
  - W.S. Hatch (80 - 86)/J.B. Kelley (86 - mid-90s)
  - State Industries (1969 - 1988)
- Tronox (2005-present)
  - Pronto Constructors (2001 - present)
  - Angelo & Newton (2007 - present)
  - Industrial Supply (2006 - present)

PRODUCTS

- Chlorobenzol
- Soda Arsenite
- Synthetic Hydrochloric Acid (muriatic acid)
- Monochlorobenzene
- Paradichlorobenzene
- Orthodichlorobenzene
- Dichlorodiphenyltrichloroethane (DDT)
- Synthetic Detergents
- Plastics
- Additional Unknown Building Materials
- Magnesium Metal (1942 - 1944)
- Potassium Perchlorate (1945 - 1982)
- Sodium Perchlorate (1945 - 1980)
- Ammonium Perchlorate (1951 - 1998)
- Sodium Chlorate (1945 - 1997)
- Potassium Chlorate (1945 - 1975)
- Manganese Dioxide (1951 - present)
- High-Purity Manganese Metal (1953-Unknown)
- Magnesium Perchlorate (1969 - 1976)
- Elemental Boron (1972 - present)
- Boron Trichloride (1972 - present)
- Boron Tribromide (1972 - 1994)
- Tumbleleaf Defoliant (1975 - 1985) (sodium chlorate product)

1940 | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 | 2010 | 2020

RMSO 4/29/16
Q:\DRAWINGS\2138800A-M08 < NERT HISTORICAL TIMELINE >

RAMBOLL ENVIRON

DRAFTED BY: RS | DATE: 2/29/16

NERT Site Historical Timeline
Nevada Environmental Response Trust (NERT)
Henderson, Nevada

FIGURE
2-1
PROJECT: 21-38800C

Path: H:\LePetomane\NERT\GIS\Historical Use Eval\MapSeries\Hist_Operations_1942-1944.mxd

Effluent Drainage from North Dike French Drain System

Parcel C

Trade Effluent Pond T4 (1941 - 1944)

Trade Effluent Pond T5 (1941 - 1944)

Trade Effluent Pond T6 (1941 - 1944)

(received waste liquids including acid effluent and caustic liquor)

Northwest Ditch

N

Spillway

Distribution Flume From Acid Neutralization Plant

Disposal Area, Solids from Magnesium Mfg. (LOU-2)

Beta Ditch (Alignment in 1943) (process wastewater via storm and acid drain systems)

Cooling Tower

Diesel ASTs

Acid Neutralization Area

Parcel F

Unit 1

Unit 2

Unit 3

Unit 4

Unit 5

Unit 6

Magnesium Manufacturing (1942 - 1944)

Parcel G

Legend

Product Family [a]

- Magnesium
- Chlorates and Perchlorates
- Organics
- Unknown/Other
- Manganese
- Boron
- Multiple
- Ditch (Alignment in 1943)
- Pipeline
- Storm Drain
- Acid Drain System
- NERT Property Boundary
- Sale Parcel Boundary
- Site Features
- Pond

Notes:
[a] Product family areas represent approximate areas of manufacturing or chemical use.
[b] Digitized from 1943 aerial photo (Source: NDEP).

Aerial Photograph (1943) provided by NDEP.

1 inch = 350 feet

350 175 0 350 Feet

1943 Aerial Photograph

RAMBOLL ENVIRON

DRAFTED BY: LAT | DATE: 5/2/2016

US Government Operations, 1941-1944
RI Evaluation
Nevada Environmental Response Trust Site

FIGURE
2-2
21-38800C

Path: H:\LePetomane\NERT\GIS\Historical Use Eval\MapSeries\Hist_Operations_1945-1951.mxd

Parcel C

Former Trade Effluent Ponds
(used between 1941 and 1944)

Northwest Ditch

N

Siphon Inlet

Subsurface Siphon Pipe to BMI Common Area

Undocumented Drainage

Beta Ditch (constructed in ~1941)
(received wastes from WECCO [chlorate and perchlorate wastes], and potentially Hardesty/AMECCO and Valite)

?

Waste Disposal Area
(contents unknown)

Discharge from Acid Drain System

Cooling Tower

Diesel AST

Valite Operations
Building Materials and Plastics Mfg
(1947 to ?)

U.S. Vanadium
(? - ?)

WECCO Lease Area

Tank Farms
USTs with kerosene, benzene, and fuel oil;
ASTs with electrolysis cells (chlorinated alcohols, sludges) and sulfuric acid

Unit 1
Unit 2
Unit 3
Unit 4
Unit 5
Unit 6

Hardesty/AMECCO
Chemical Mfg*
(1946 - 1949)

WECCO
Chlorate and Perchlorate Mfg
(1945 - 1951)

Parcel G

* Chemicals manufactured by Hardesty/AMECCO included: synthetic hydrochloric acid (muriatic acid), monochlorobenzene, paradichlorobenzene, orthodichlorobenzene, synthetic detergents, pesticides (i.e., DDT), and soda arsenite solution

Legend

Product Family [a]

- Magnesium
- Chlorates and Perchlorates
- Organics
- Unknown/Other
- Manganese
- Boron
- Multiple

Wastewater Conveyance [b]

- Ditch
- Pipe
- Unknown
- Storm Drain
- Acid Drain System
- NERT Property Boundary
- Sale Parcel Boundary
- Site Features
- Former Pond

Notes:
[a] Product family areas represent approximate areas of manufacturing or chemical use.
[b] Surface features digitized from aerial photo. Aerial Photograph (1950) provided by NETR.

1 inch = 350 feet

350 175 0 350 Feet

1950 Aerial Photograph

RAMBOLL ENVIRON

DRAFTED BY: LAT | DATE: 4/29/2016

WECCO, Hardesty/AMECCO, and Valite, 1945 to Approximately 1950
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

FIGURE
2-3
21-38800C

Path: H:\LePetomane\NERT\GIS\Historical Use Eval\MapSeries\Hist_Operations_1951-1967_2.mxd

Disposal Area - Unknown Materials (1960 to 1979)

Former Trade Effluent Ponds (used between 1941 and1944)

Parcel C

Northwest Ditch

N

Siphon Inlet

Subsurface Siphon Pipe to BMI Common Area

Undocumented Drainage

Beta Ditch (received waste from WECCO and AP&CC)

WECCO and AP&CC Ammonium Perchlorate Mfg (1951 to 1967)

Ammonium Perchlorate Plant and other remaining areas of Site purchased from U.S. Gov't in 1962

Discharge from Acid Drain System

Manganese Tailings And Leach Beds

Cooling Tower

Diesel ASTs

WECCO and AP&CC Manganese Tailings and Leach Beds (1951 to 1967)

Chemstar Dolomitic Lime Mfg.

Parcel F

Unit 1

Unit 2

Unit 3

Unit 4

Unit 5

Unit 6

Unknown (part of WECCO purchase)

WECCO and AP&CC Chlorate and Perchlorate Mfg (~1950 to 1967)

WECCO and AP&CC Manganese Dioxide and Manganese Metal Mfg (1951 to 1967)

Parcel G

Legend

Product Family [a]

- Magnesium
- Chlorates and Perchlorates
- Organics
- Unknown/Other
- Manganese
- Boron
- Multiple

Wastewater Conveyance [b]

- Ditch
- Pipe
- Storm Drain
- Acid Drain System
- NERT Property Boundary
- Sale Parcel Boundary
- Site Features
- Former Pond

Notes:
[a] Product family areas represent approximate areas of manufacturing or chemical use.
[b] Digitized from aerial photograph.
Aerial Photograph dated 1965 provided by NETR.

1 inch = 350 feet

350 175 0 350 Feet

1965 Aerial Photograph

RAMBOLL ENVIRON

WECCO and AP&CC Operations, Approximately 1950 to 1967
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

FIGURE
2-4

DRAFTED BY: LAT | DATE: 4/29/2016 | 21-38800C

Path: H:\LePetomane\NERT\GIS\Historical Use Eval\MapSeries\Hist_Operations_1967-2005.mxd

Disposal Area - Unknown Materials (1960 - 1979)

Parcel C

WC-1 Pond (1988 - 2005)

WC-2 Pond (1989 - 2005)

GW-11 Groundwater Holding Pond (1988 - 2005)

Hazardous Waste Landfill (1980 - 1983) Closed/Capped in 1985

1990 Drum Fire

Debris Pile (~1999 to Present)

Siphon Inlet

Subsurface Siphon Pipe to BMI Common Area

AP-4 Pond (1983 to early 2000s)

Drum Crushing and Recycling (1984 - 1991)

Beta Ditch conveyed wastewater and/ or stormwater from:
Kerr-McGee (1967 - 1976)
State Industries (1970 - 1972)
Koch Materials (1979 to mid-1990s)
W.S. Hach (1980 - 1986)
J.B. Kelley (1986 to mid-1990s)

AP-5 Pond (1983 - Present)

AP-6 Pond (~1994 to Present)

Undocumented Drainage

Beta Ditch

C-1 Pond (1974 - 1994)

Mn-1 Pond (1983 - present)*

* Mn-1 not in active service, awaiting demolition as of March 2016

AP-1, 2 and 3 Ponds (1974 to early 2000s)

Kerr-McGee Ammonium Perchlorate (AP) Mfg. (1967 - 1998)

Beta Ditch Extension
Conveyed wastewater (1971-1976) and stormwater (1976 to 2010/11) discharges from OSSM Facilities to Beta Ditch

S-1 Pond (1974 - 1982)

P-2 Pond (? to 1996)

Old P-2 Pond (1972 - 1990)

P-1 Pond (1972 - 1983)

Cooling Tower (demolished 1989)

Old P-3 Pond (1978 - 1986)

Manganese Tailings Piles

Burris Oil (1979 - 1983)

Diesel ASTs (Removed 1994)

Koch Industries Asphalt Emulsion Batch Plant (1983 to mid-1990s)

Chemstar Dolomitic Lime Mfg.

Kerr-McGee Manganese Tailings Piles, Leach Plant, Electroplating

SC* Mixing

Truck Washing

W.S. Hatch (1980 - 1986)

J.B. Kelley (1986 to mid-1990s)

Parcel F

Kerr-McGee Boron Plant (1994? - 2005)

Kerr-McGee Manganese Dioxide Production (1967-2005)

Unit 6

MP*

Kerr-McGee Boron Mfg. (1972-?)

SC, SP*

PCB Storage Area (1978 to ?)

Unit 4

Unit 3

SC*

PC, PP, SC*

Unit 2

Salt Storage

Unit 1

Kerr-McGee Chlorate and Perchlorate Mfg (1967 to mid-1990s)

PCB Transformer Spill (1991)

Parcel G

State Industries (approximate area) (1969 - 1988)

Legend

Wastewater Conveyance [b]

- Ditch
- Pipe

Product Family [a]

- Magnesium
- Chlorates and Perchlorates
- Organics
- Unknown/Other
- Manganese
- Boron
- Multiple
- Storm Drain
- Ponds
- NERT Property Boundary
- Site Features
- Sale Parcel Boundary

Notes:
[a] Product family areas represent approximate areas of manufacturing or chemical use.
[b] Digitized from aerial photo.
Aerial Photograph (1973) provided by NETR

* Notes:
AP = Ammonium Perchlorate
SC = Sodium Chlorate
SP = Sodium Perchlorate
PC = Potassium Chlorate
PP = Potassium Perchlorate
MP = Magnesium Perchlorate

1 inch = 350 feet
350 175 0 350 Feet

1973 Aerial Photograph

RAMBOLL ENVIRON

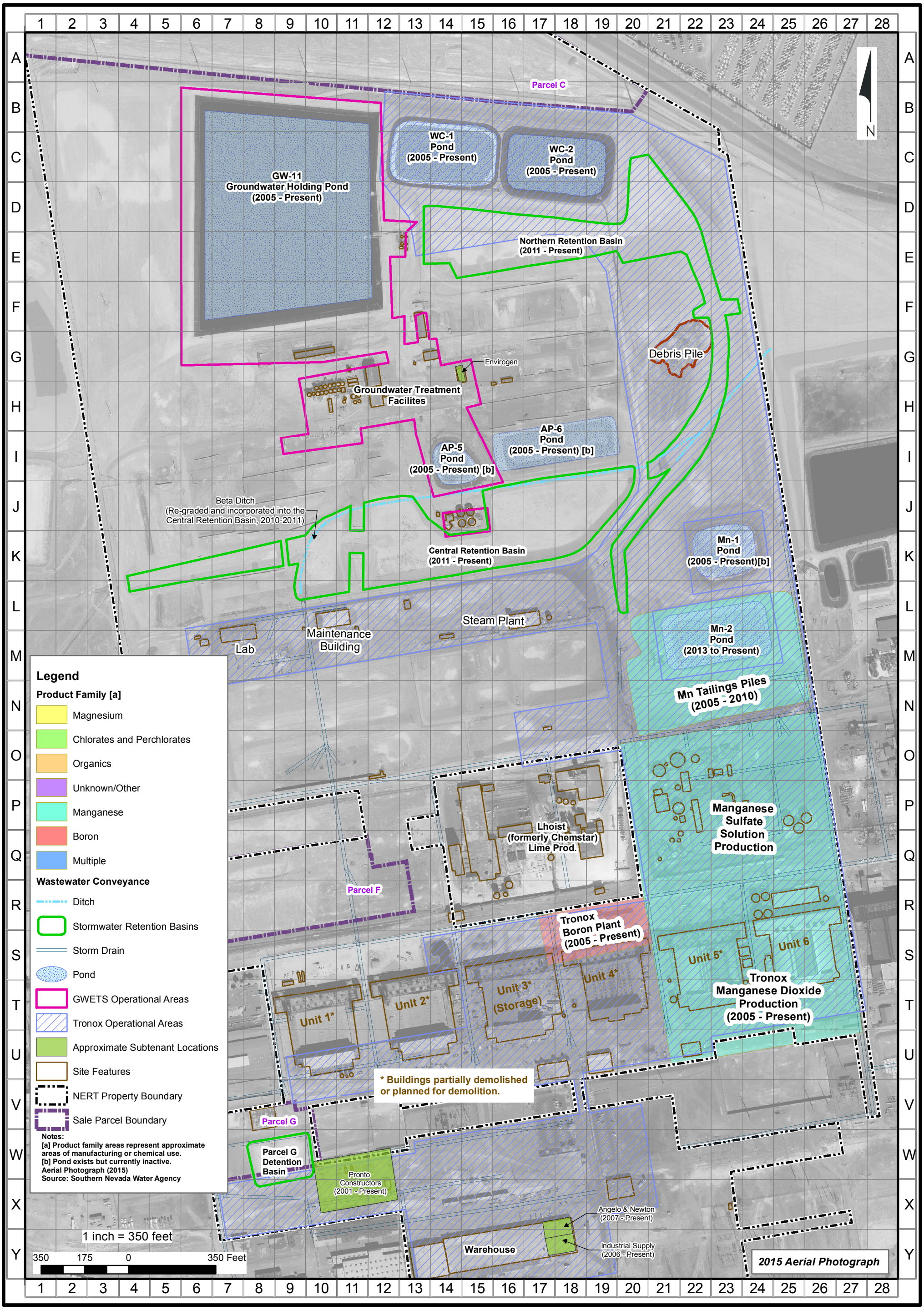
Kerr-McGee Operations, 1967-2005
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

FIGURE
2-5

DRAFTED BY: LAT | DATE: 4/28/2016

21-38800C

Path: H:\LePetomane\NERT\GIS\Historical Use Eval\MapSeries\Curr_Operations_2005-2016.mxd



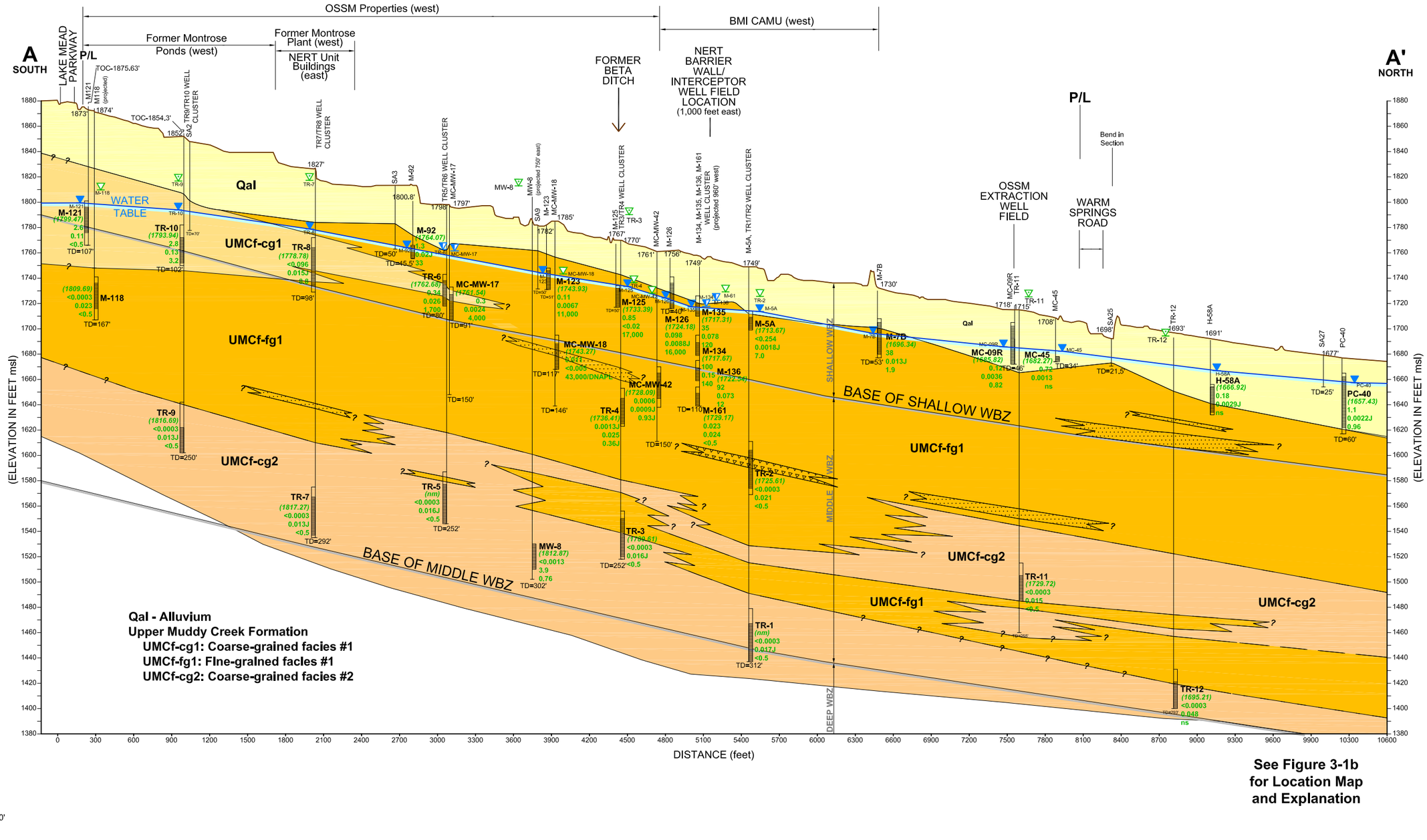
RAMBOLL ENVIRON

Tronox and NERT (Current Operations), 2005 - 2016
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

FIGURE
2-6

DRAFTED BY: EG/KL/JH | DATE: 5/2/2016 | 21-38800C

Q:\DRAWINGS\2129100H\2129100H-Cross_SectionAA-2015-11x17-ver3.DWG - Mon, 02 May 2016 - 2:57pm



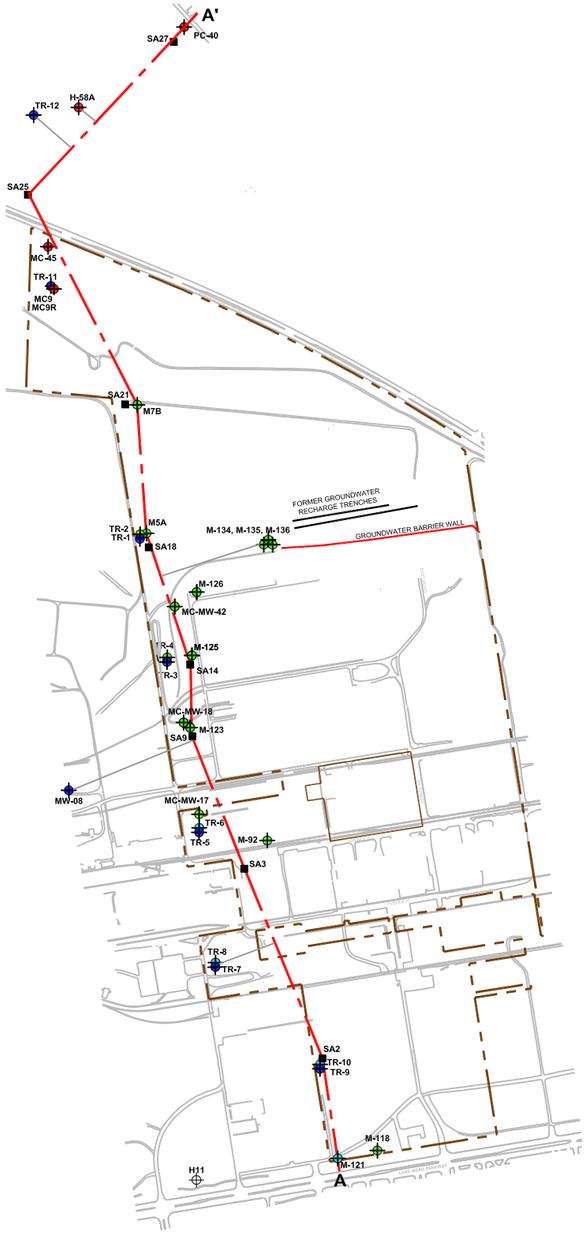
RAMBOLL ENVIRON

Drafter: RS Date: 6/22/15 Contract Number: 21-38800C

Approved: Revised:

Subsurface Cross-Section A-A' Illustrating Site Hydrostratigraphic Units
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure
3-1a



INDEX MAP

0 600 1,200
Scale (Feet)

GROUNDWATER ELEVATIONS
(feet, mean sea level datum)

Shallow Water-Bearing Zone (0-90 ft)

- Water Table Zone Well
- Deeper Shallow WBZ Well

Middle Water-Bearing Zone (90-300 ft)

- Upper Muddy Creek Formation, First Fine-Grained Unit (UMCf-fg1)
- Upper Muddy Creek Formation, Second Coarse-Grained Unit (UMCf-cg2)

A—A' LINE OF GEOLOGIC SECTION

PROPERTY BOUNDARY

- MONITORING WELL WITH SCREEN IN THE ALLUVIAL AQUIFER (Qal)
- MONITORING WELL WITH SCREEN IN THE MUDDY CREEK FINE GRAINED FACIES (UMCf-fg1)
- MONITORING WELL WITH SCREEN IN THE MUDDY CREEK COARSE GRAINED FACIES 1 (UMCf-cg1)
- MONITORING WELL WITH SCREEN IN THE MUDDY CREEK COARSE GRAINED FACIES 2 (UMCf-cg2)

LEGEND

Qal	QUATERNARY ALLUVIUM
UMCf-fg1	MUDDY CREEK FORMATION FINE-GRAINED FACIES #1
	MUDDY CREEK FORMATION FINE-GRAINED FACIES #1 SILTY SAND AND SANDY BED
	MUDDY CREEK FORMATION FINE-GRAINED FACIES #1 VOLCANIC ASH DEPOSIT
UMCf-cg1	MUDDY CREEK FORMATION COARSE-GRAINED FACIES #1
UMCf-cg2	MUDDY CREEK FORMATION COARSE-GRAINED FACIES #2

TR-1 — EXISTING BORING/WELL IDENTIFICATION
1797' — GROUND SURFACE ELEVATION (ft, msl)
— FILTER PACK
— SCREEN INTERVAL
TR-1 — WELL (SCREEN) IDENTIFICATION
TD=40' — TOTAL DEPTH OF BORING/WELL

EXPLANATION:

(1799.47) GROUNDWATER ELEVATION (April/May 2012)

2.6 PERCHLORATE CONCENTRATION (May 2012) in milligrams/liter (mg/L).

0.11 TOTAL CHROMIUM CONCENTRATION (May 2012) in milligrams/liter (mg/L).

10.1 CHLOROFORM (January 2015) in micrograms/liter (µg/L).

NOTES:

"<"	NOT REPORTED AT THE PRACTICAL QUANTITATION LIMIT SHOWN
(nm)	NO WATER LEVEL
ND	NOT DETECTED
NS	NOT SAMPLED
WBZ	WATER-BEARING ZONE

1. Chloroform data for wells MC-MW-17, MC-MW-18, MC-MW-42, and MW-8 are from May 2013.

REFERENCES:

APPENDIX A - ANNUAL REMEDIAL PERFORMANCE REPORT FOR CHROMIUM AND PERCHLORATE, JULY 2011 THROUGH JUNE 2012 [NEVADA ENVIRONMENTAL RESPONSE TRUST, HENDERSON, NEVADA] (AUGUST 2012)

BMI COMPLEX DATABASE

ADAPTED FROM FIGURE 4-1, PHASE A SOURCE AREA INVESTIGATION, TRONOX FACILITY, HENDERSON, NEVADA (ENSR/AECOM 2008)

HYDROSTRATIGRAPHIC NOMENCLATURE FOLLOWS UNIFIED HYDROGEOLOGIC NOMENCLATURE PROPOSED BY NDEP IN JANUARY 6, 2009 LETTER

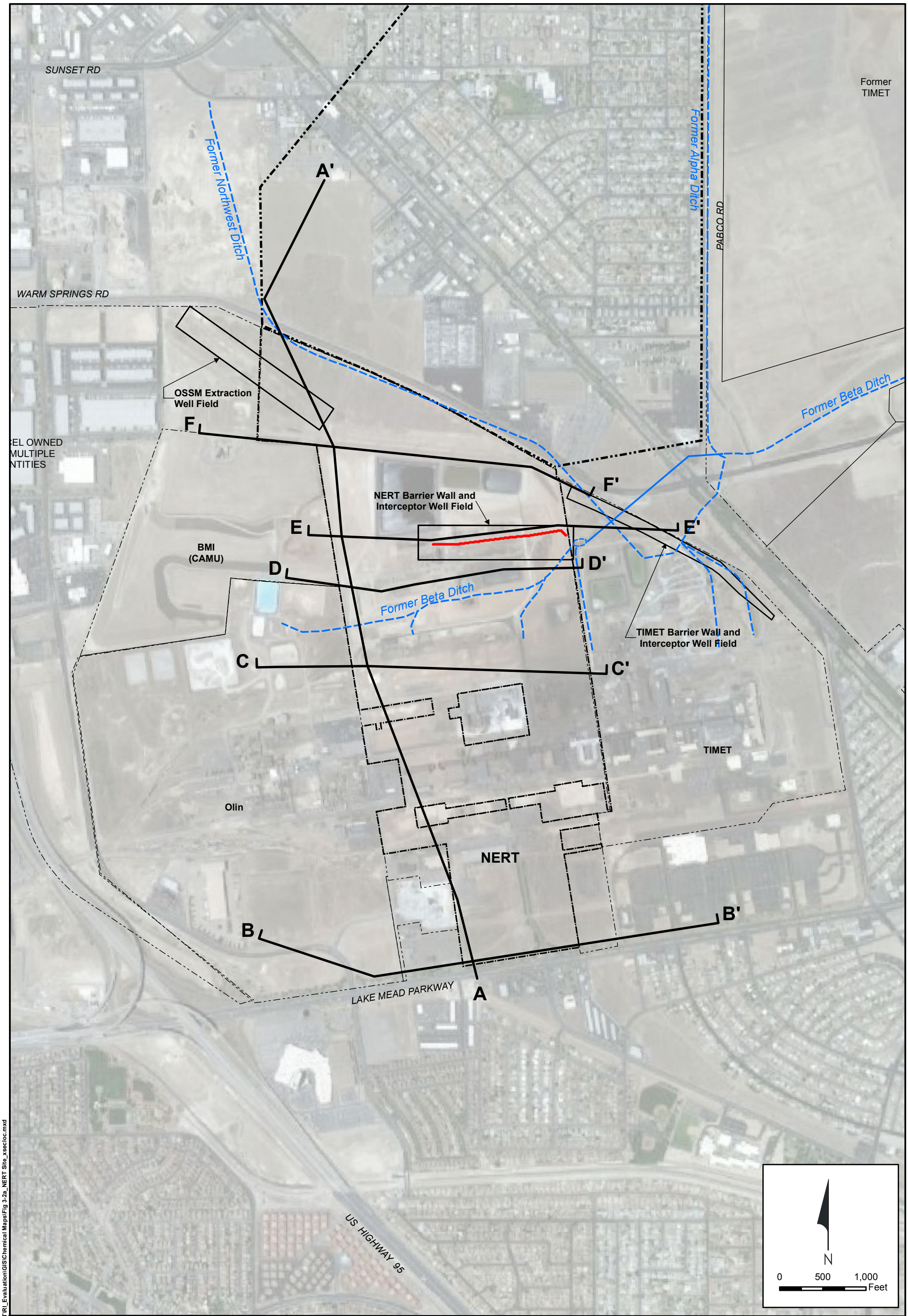
RAMBOLL ENVIRON

Drafter: RS Date: 6/22/15 Contract Number: 21-38800C

Approved: Revised:

Subsurface Cross-Section A-A' - Location Map and Explanation
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure
3-1b



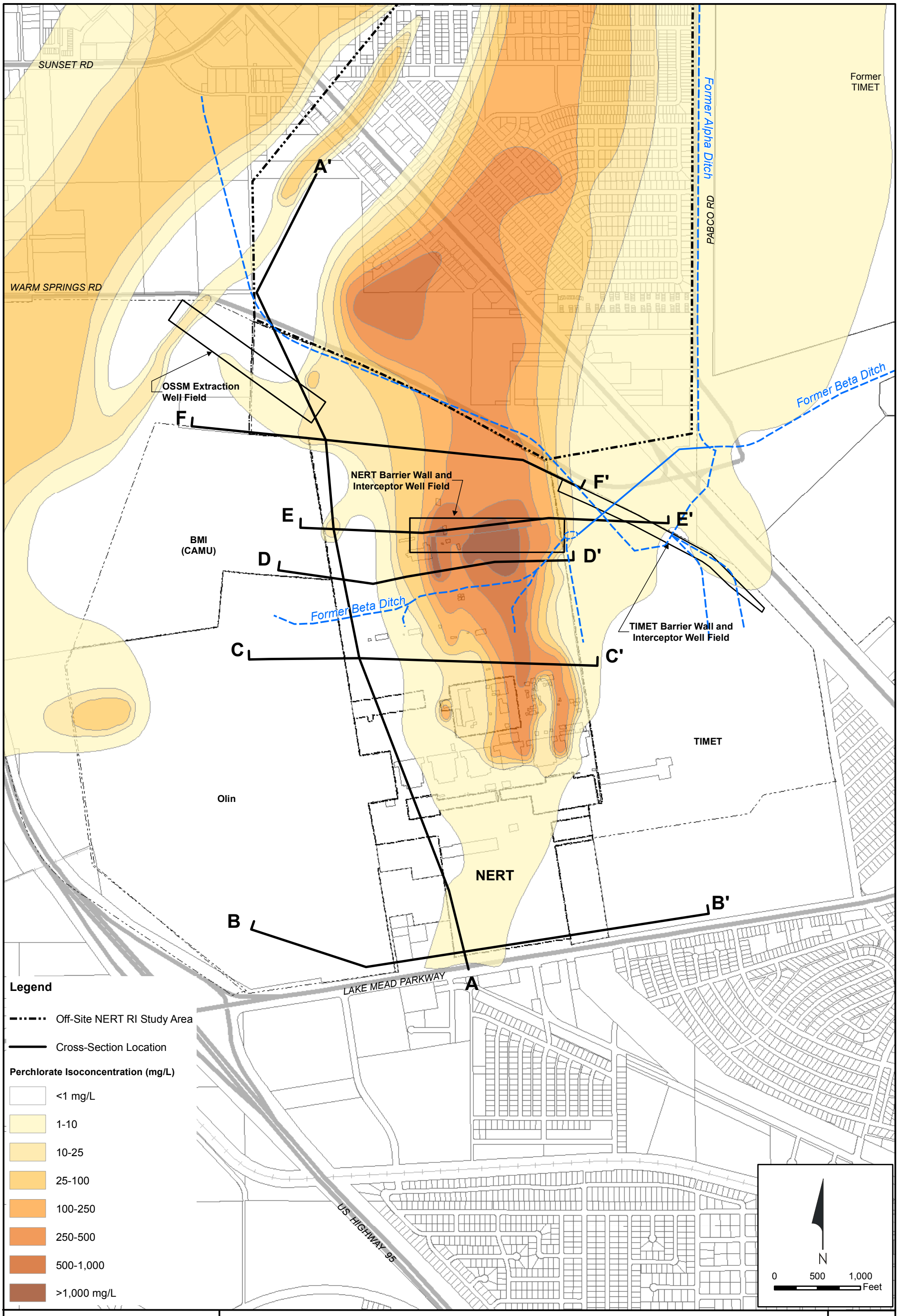
RAMBOLL ENVIRON

Subsurface Cross-Section Location Map - NERT Site
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **3-2a**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 3-2a_NERT Site_xsecloc.mxd



RAMBOLL ENVIRON

Perchlorate Isoconcentration Map (January-June 2015)
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **3-2b**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 3-2B_NERT Site_PERCHLORATE_xsecloc.mxd

Former AMPAC Re-injection System

Seep Well Field

City of Henderson Bird Viewing Preserve

OFF-SITE NERT RI STUDY AREA

AMPAC Extraction Systems

City of Henderson Water Reclamation Facility

K

L'

K'

GALLERIA RD

Athens Road Well Field

BOULDER HWY

J

J'

Former Alpha Ditch

Former Beta Ditch

I

I'

Former TIMET

Former Northwest Ditch

H

H'

PABCO RD

G

G'

L

OSSM Extraction Well Field

NERT

TIMET Barrier Wall and Interceptor Well Field

BMI (CAMU)

Barrier Wall and Interceptor Well Field

Legend

Off-Site NERT RI Study Area

N

0 500 1,000 Feet

RAMBOLL ENVIRON

Subsurface Cross-Section Location Map - Off-Site NERT RI Study Area
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **3-3a**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 3-3a_Downgradient_xsecloc.mxd

Former AMPAC Re-injection System

Seep Well Field

OFF-SITE NERT RI STUDY AREA

City of Henderson Bird Viewing Preserve

AMPAC Extraction Systems

City of Henderson Water Reclamation Facility

K

L'

K'

GALLERIA RD

Athens Road Well Field

BOULDER HWY

J

J'

Former Alpha Ditch

Former Beta Ditch

I

I'

Former TIMET

H

H'

PABCO RD

G

G'

L

OSSM Extraction Well Field

NERT

BMI (CAMU)

Barrier Wall and Interceptor Well Field

AERIAL SOURCE: GOOGLE EARTH PRO. JUNE 21, 2012

Legend

Perchlorate Isoconcentration (mg/L)

- <1 mg/L
- 1-10
- 10-25
- 25-100
- 100-250
- 250-500
- 500-1,000
- >1,000 mg/L
- Off-Site NERT RI Study Area

N

0 500 1,000 Feet

RAMBOLL ENVIRON

Perchlorate Isoconcentration Map (January-June 2015)
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **3-3b**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 3-3b_Downgradient_xsecloc_pERCHLORATE.mxd

N

0 400 800

Feet

TR-12

M-152 (125-145 ft bgs)
2.1E-05/ 0.06

M-156 (175-195 ft bgs)
3.3E-07/ 0.00093

BOULDER HIGHWAY

PABCO ROAD

WARM SPRINGS ROAD

TR-11

OSSM EXTRACTION WELL FIELD

M-151 (125-145 ft bgs)
6.7E-07/ 0.0019

M-151

M-155 (200 - 220 ft bgs)
[b]

M-161D (130-140 ft bgs)
9.2E-06/ 0.026

M-162 (100-110 ft bgs)
3.0E-05/ 0.084

M-161 (100-110 ft bgs)
2.9E-06/ 0.0082

TIMET BARRIER WALL AND INTERCEPTOR WELL FIELD

NERT BARRIER WALL AND INTERCEPTOR WELL FIELD

BMI (CAMU)

TR-2 (145-175 ft bgs)
1.4E-06/ 0.004

TR-1

M-162D

M-161D

M-165

M-181

M-181 (105-115 ft bgs)
7.8E-05/ 0.22

MC-MW-42 (96-116 ft bgs)
3.9E-06/ 0.011

M-162D (130-140 ft bgs)
7.8E-07/ 0.0022

M-154 (175-195 ft bgs)
7.8E-07/ 0.0022

TR-3

TR-4 (125-145 ft bgs)
1.1E-06/ 0.003

M-150 (125-145 ft bgs)
4.2E-07/ 0.0012

M-186 (105-115 ft bgs)
8.1E-05/ 0.23

M-186D

MC-MW-18 (97-117 ft bgs)
1.6E-04/ 0.44

MC-MW-39 (100-120 ft bgs)
8.8E-05/ 0.25

M-149

M-149 (100-120 ft bgs)
2.8E-06/ 0.0079

M-153 (150-170 ft bgs)
4.9E-07/ 0.0014

TR-5

Olin

TIMET

TR-7 (260-290 ft bgs)
4.2E-04/ 1.2

NERT

TR-9 (230-250 ft bgs)
1.0E-03/ 2.9

M-117 (130-150 ft bgs)
3.9E-06/ 0.011

LAKE MEAD PARKWAY

M-118 (138-158 ft bgs)
1.7E-05/ 0.049

Legend

- New Well Location
- Middle Water-Bearing Zone Monitoring Well
- Slug Test Location
- Site Features (Buildings and Tanks)

ft bgs = feet below ground surface

Screen Interval

M-162 (100 - 110 ft bgs)
3.0E-05/ 0.084

Hydraulic Conductivity (cm/sec, ft/day) [a]

Notes:
[a] Hydraulic conductivity values shown are the average of reliable test results.
[b] Test not completed.

1. Wells TR-1, TR-3, TR-5, TR-11, TR-12 and M-165 were not tested.

2. At well TR-2, previous interpretations indicate that an 8 feet thick layer of volcanic ash may be present from 150-158 ft bgs.

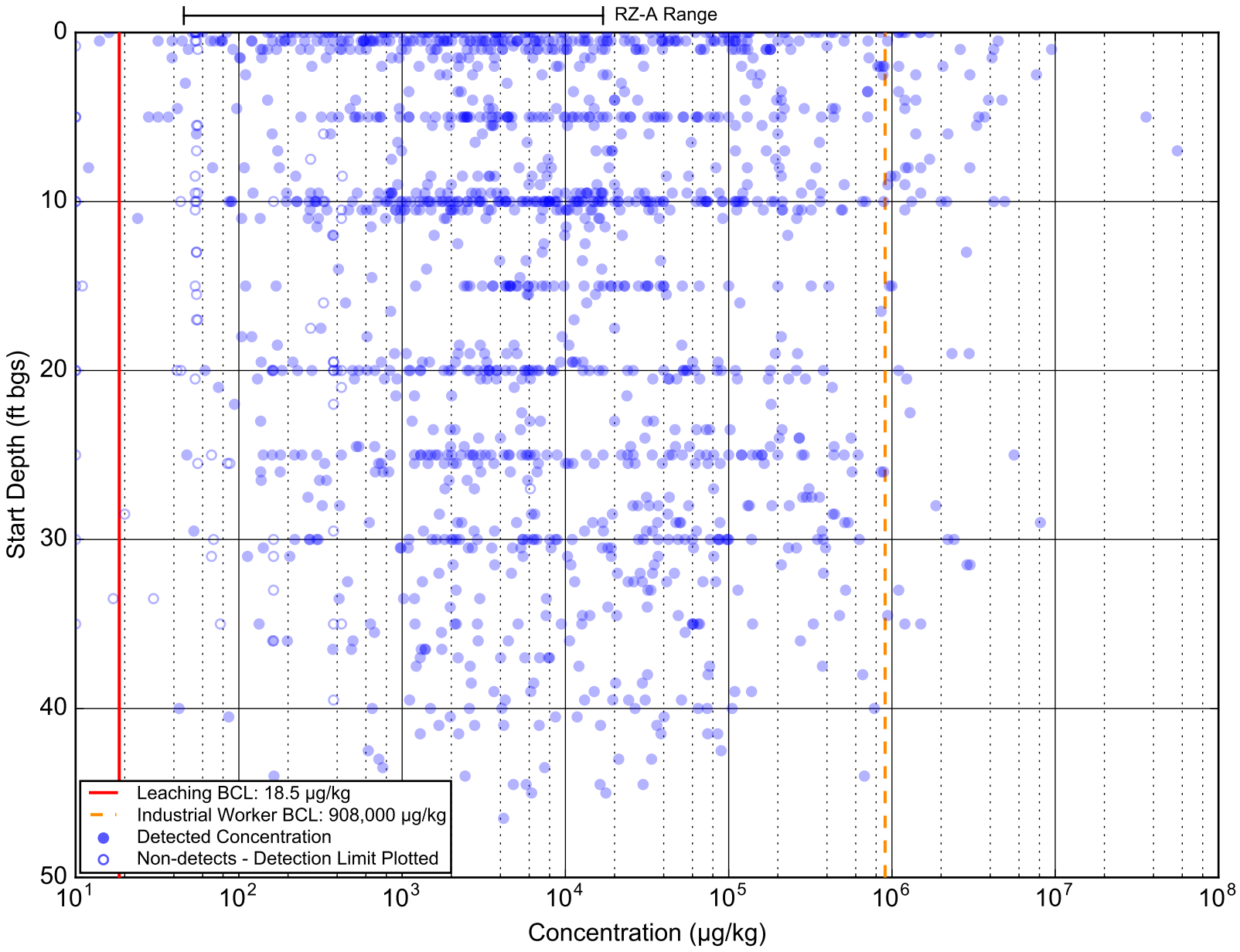
RAMBOLL ENVIRON

Hydraulic Conductivity, Middle Water-Bearing Zone Wells
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
3-4

Drafter: RS Date: 5/2/2016 Contract Number: 21-38800C Approved by: Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 3-4_RemInv Slug Test Results_2.mxd



RAMBOLL ENVIRON

Perchlorate Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-1

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\Soil Evaluation\Maps\Soil Leaching\Perchlorate100\Perchlorate100_D0-10.mxd

N
W E
S

Northeast Retention Basin and Drainage Channel

NERT BARRIER WALL AND INTERCEPTOR WELL FIELD

Debris Pile

Central Retention Basin

UNIT 1
UNIT 2
UNIT 3
UNIT 4
UNIT 5
UNIT 6

RZ-A

M-6A M-7B M-98 M-99 M-100 M-101 AA-BW-03A M-5A MW-16 M-126 M-14A M-125 M-142 M-115 M-128 M-123 M-124 M-92 TR-8 M-97 M-12A M-13 M-144 M-146 M-192 M-191 M-189 M-193 M-190 M-139 M-147 M-35 M-2A M-75 M-76 M-83 M-80 M-81A M-79 M-74 M-73 M-72 M-71 M-135 M-69 M-140 M-70 M-58 M-68 M-67 M-66 M-65 M-64 M-55 M-131 M-57A M-182 M-36 M-38 M-22A M-25 M-37 M-19 M-21 M-32 M-33 M-148A M-31A M-141 M-77 M-52 M-11 M-29

Legend

- Sample Locations
- Shallow Well
- No Data / Concentration < Level
- Detection Limit > Level
- Concentration > Level
- Concentration > 10 * Level
- Concentration > 100 * Level
- Excavated Areas
- Active Pond
- Inactive Pond
- NERT Site Boundary
- Site Features (Buildings and Tanks)
- Former Beta Ditch
- Former Northwest Ditch
- Former Siphon Pipe Inlet Pond
- Subsurface Pipe

The color of each grid cell is based on the maximum concentration of all samples located within that grid cell.

1 inch = 350 feet

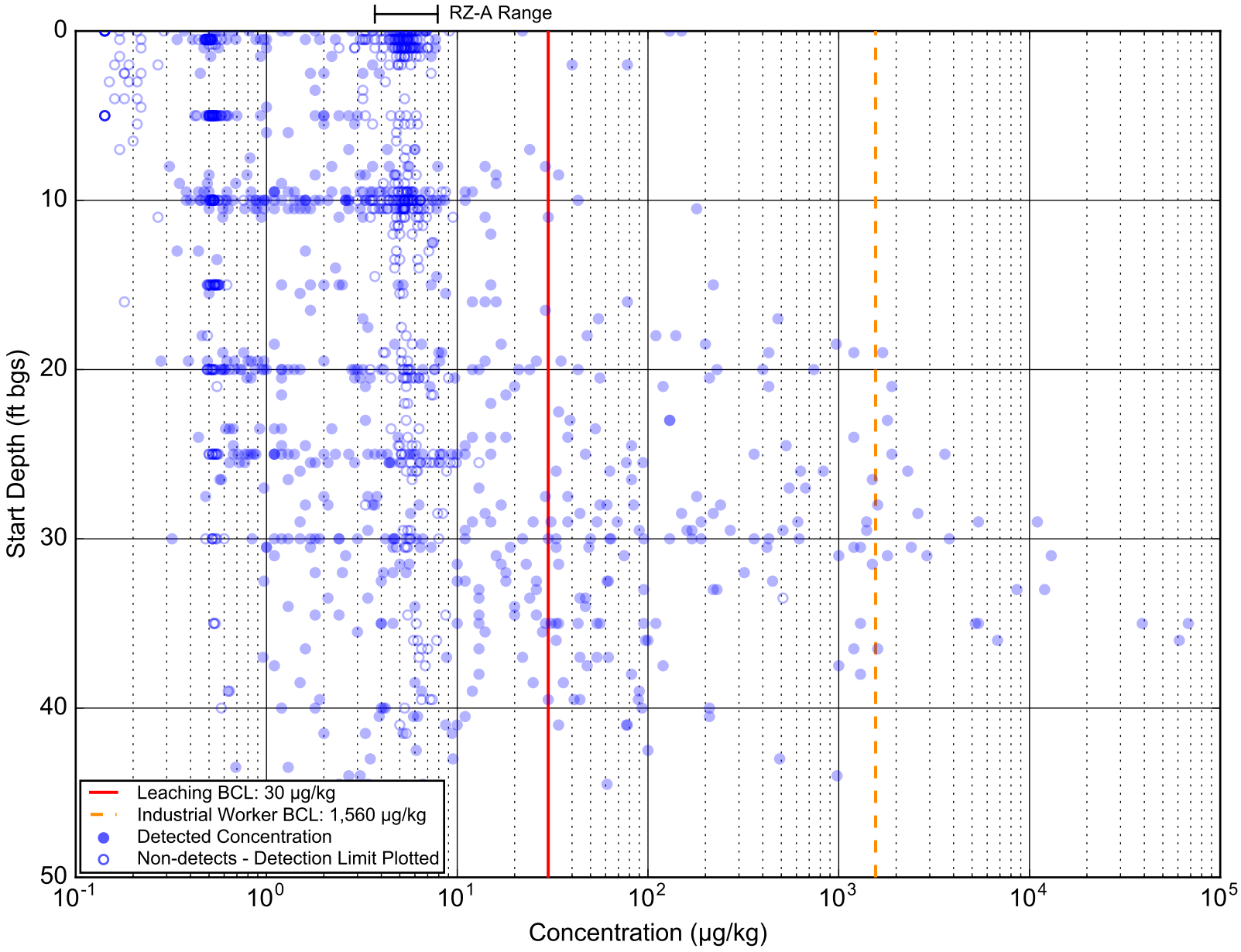
350 175 0 350 Feet

RAMBOLL ENVIRON

DRAFTED BY: EG/KL/JH | DATE: 4/29/2016

PERCHLORATE SOIL CONCENTRATIONS >100 mg/kg, 0-10 FEET BGS
RI Evaluation
Nevada Environmental Response Trust Site
Henderson, Nevada

FIGURE
4-2
21-38800C

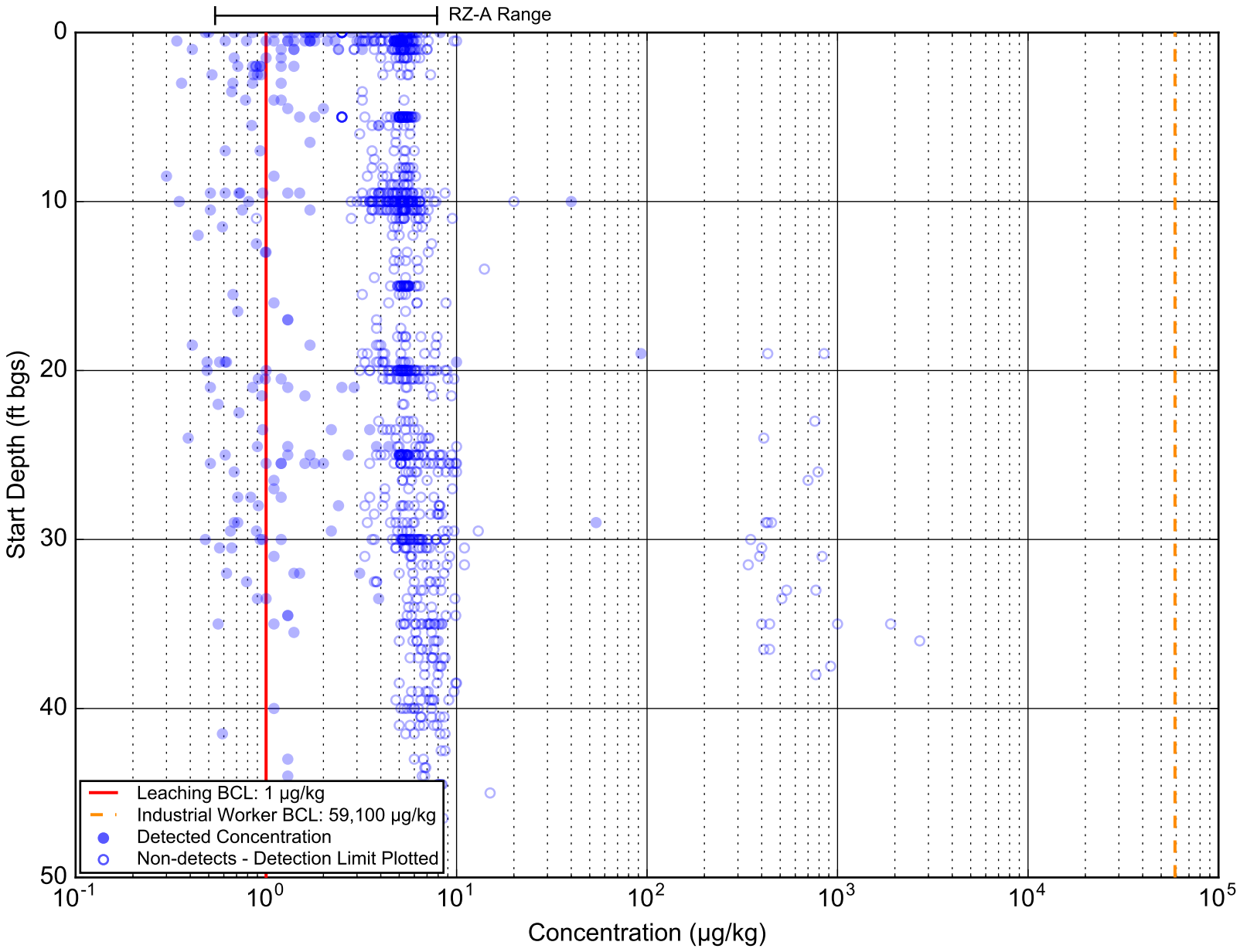


RAMBOLL ENVIRON

Chloroform Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-3

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

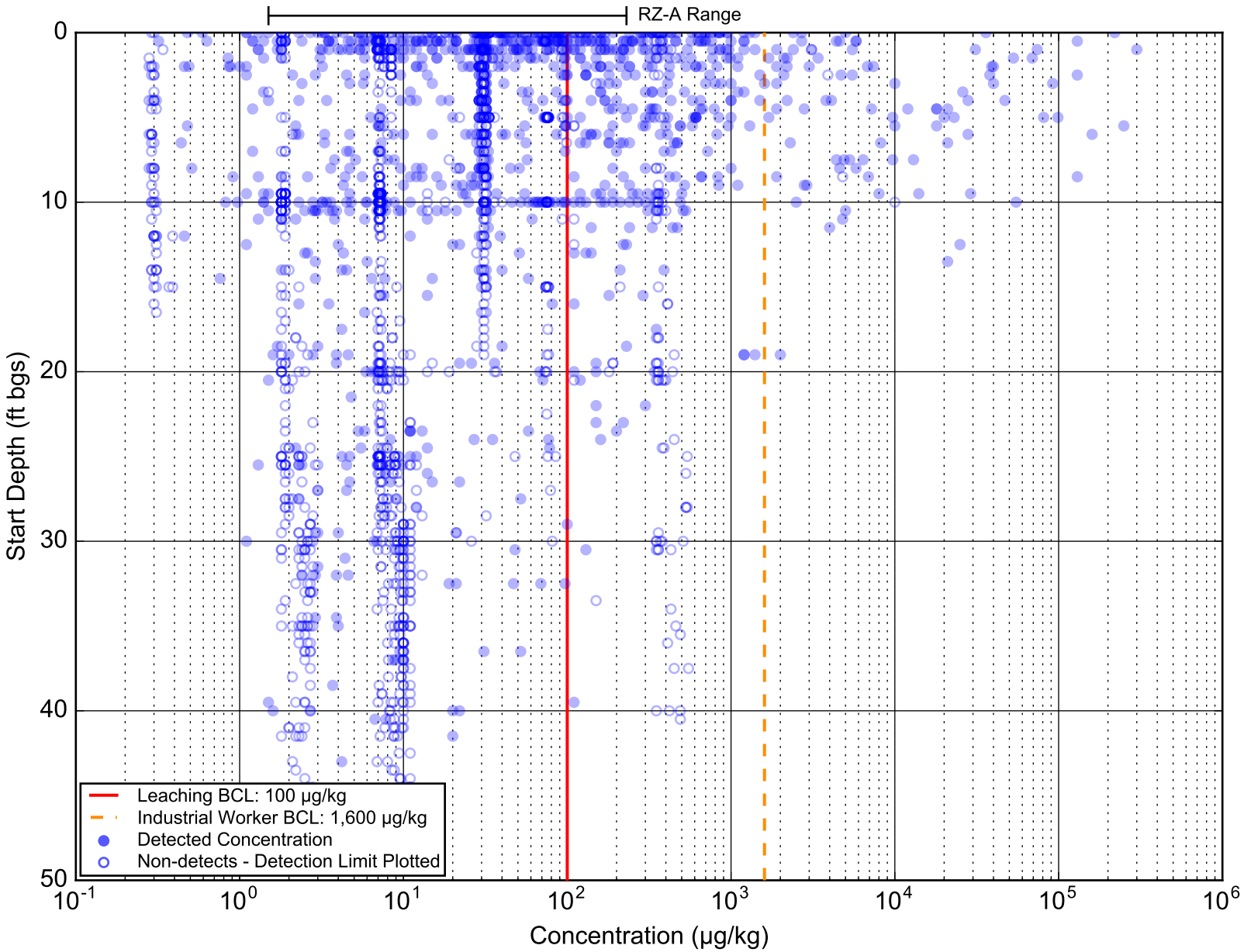


RAMBOLL ENVIRON

Methylene Chloride Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-4

Drafter: KGL/JH | Date: 03/10/2016 | Contract Number: 2138800C | Approved: | Revised:

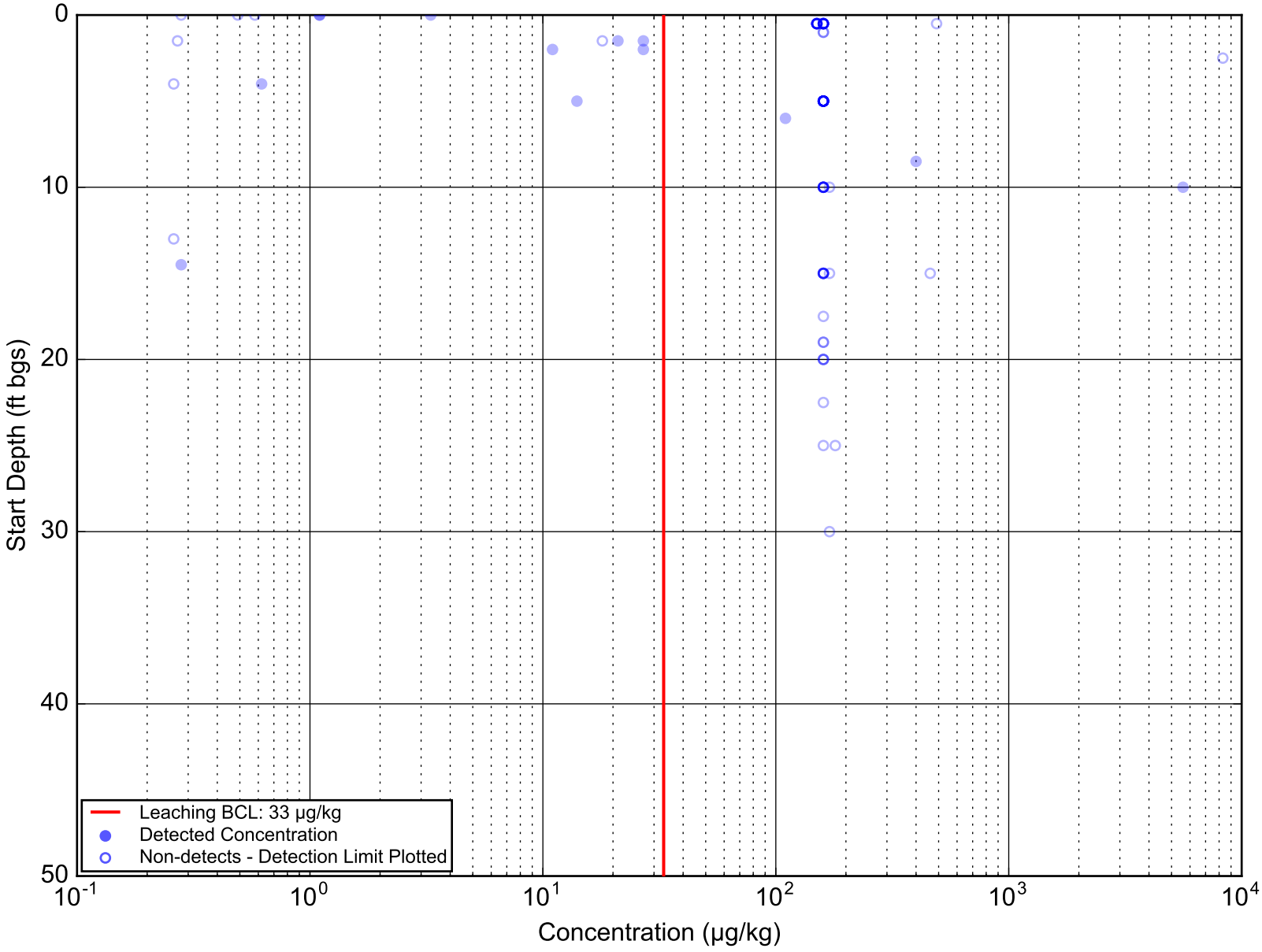


RAMBOLL ENVIRON

Hexachlorobenzene Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-5

Drafter: KGL/JH | Date: 03/10/2016 | Contract Number: 2138800C | Approved: | Revised:

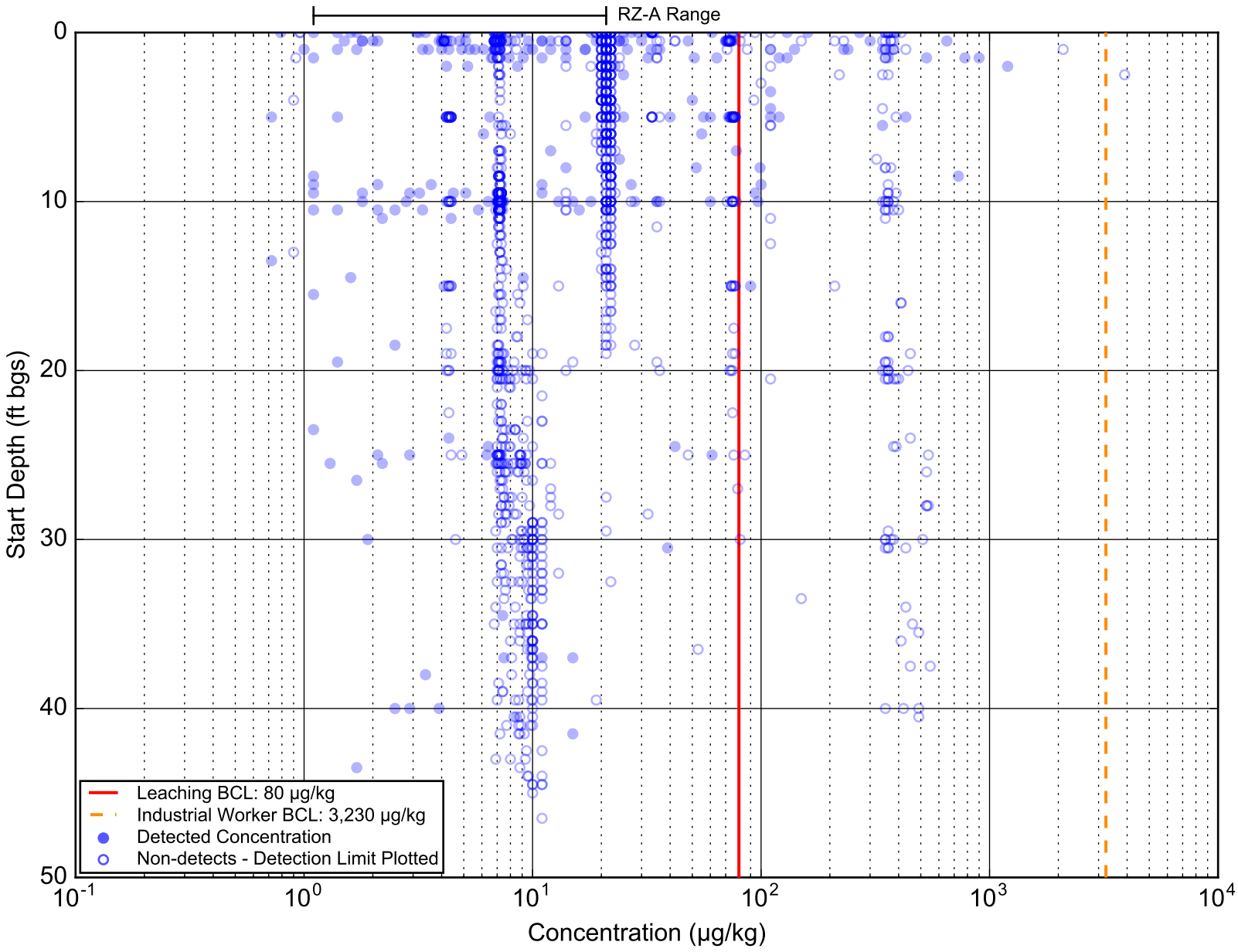


RAMBOLL ENVIRON

1-Methylnaphthalene Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-6

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

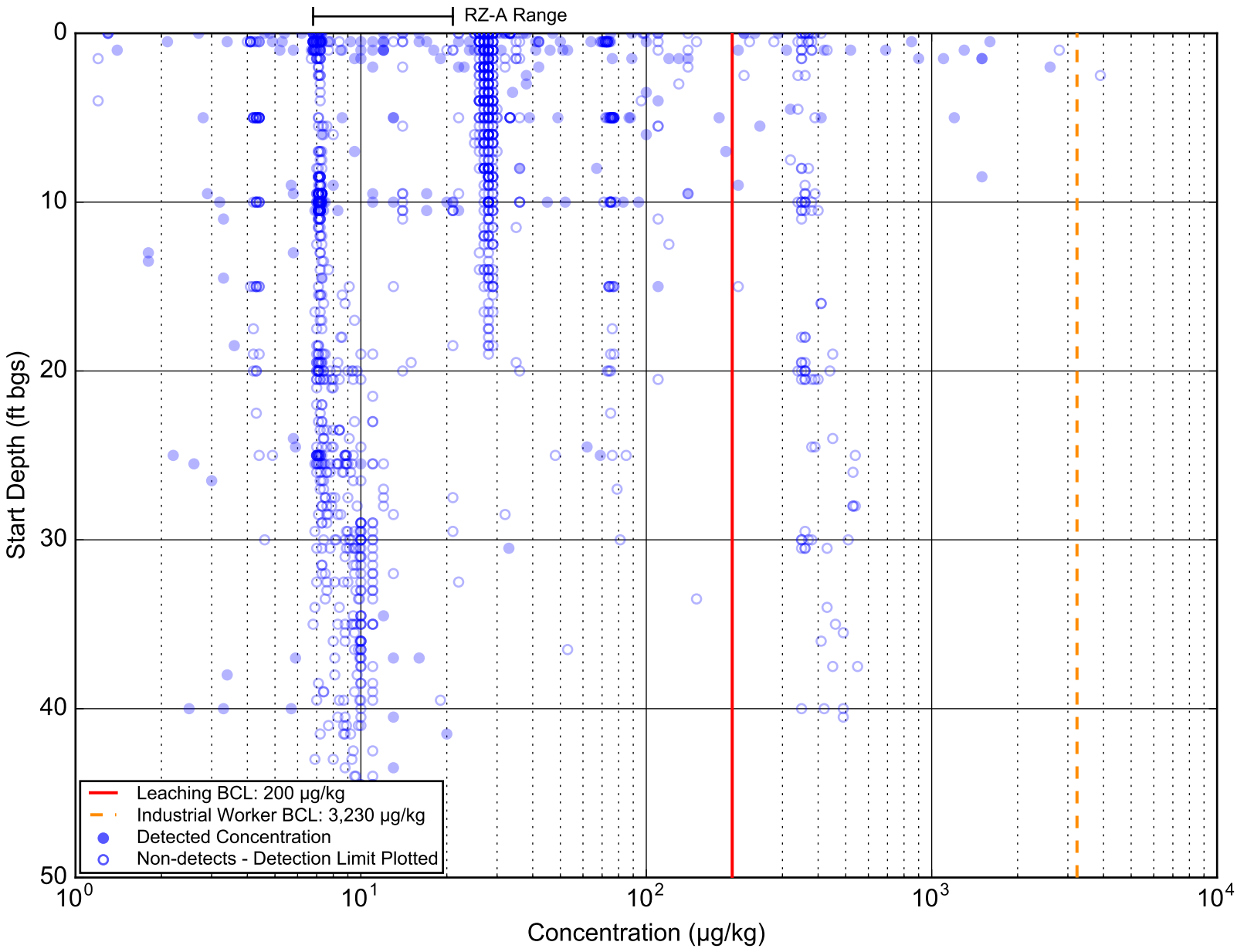


RAMBOLL ENVIRON

Benzo(a)anthracene Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-6a

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

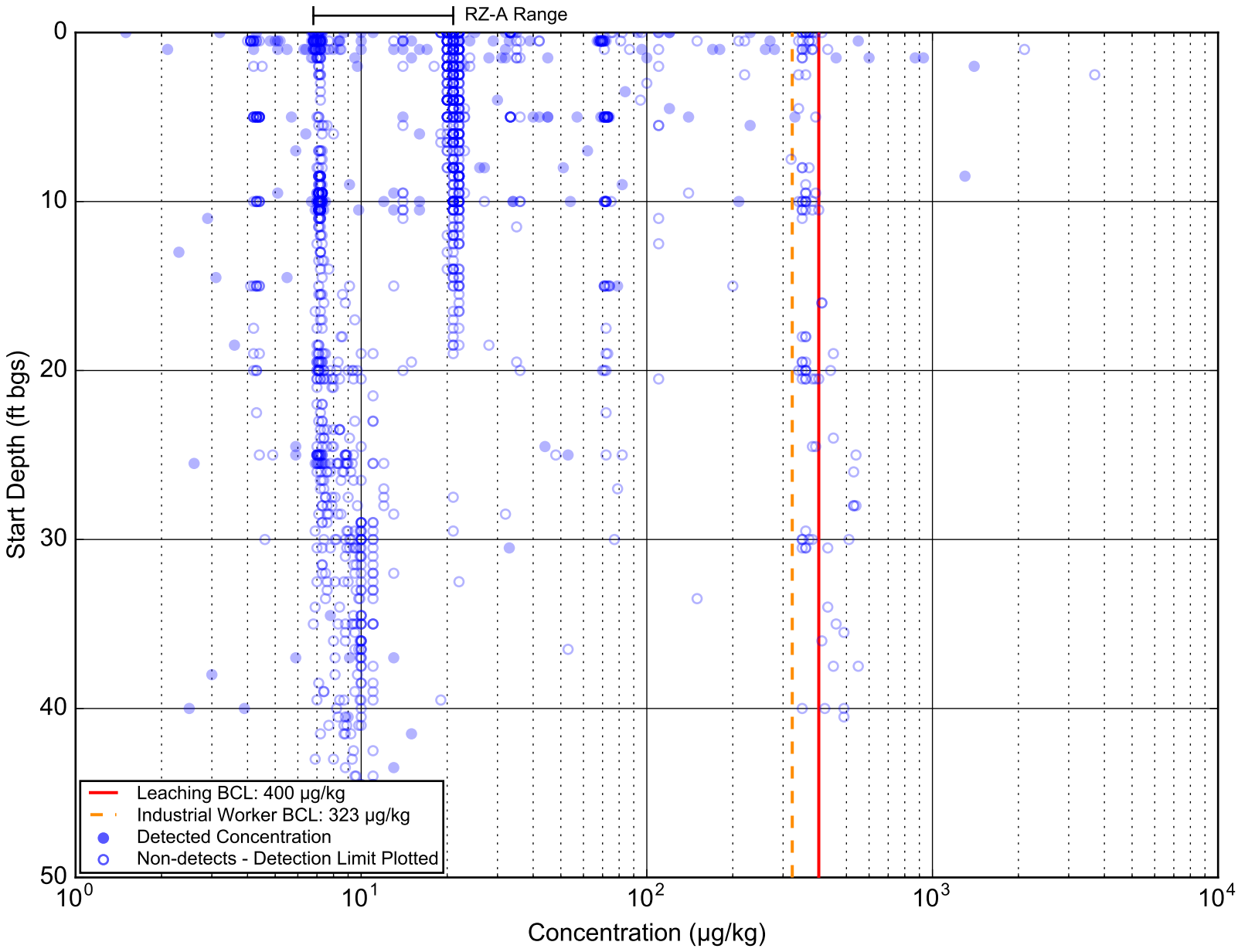


RAMBOLL ENVIRON

Benzo(b)fluoranthene Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-6b

Drafter: KGL/JH | Date: 03/10/2016 | Contract Number: 2138800C | Approved: | Revised:

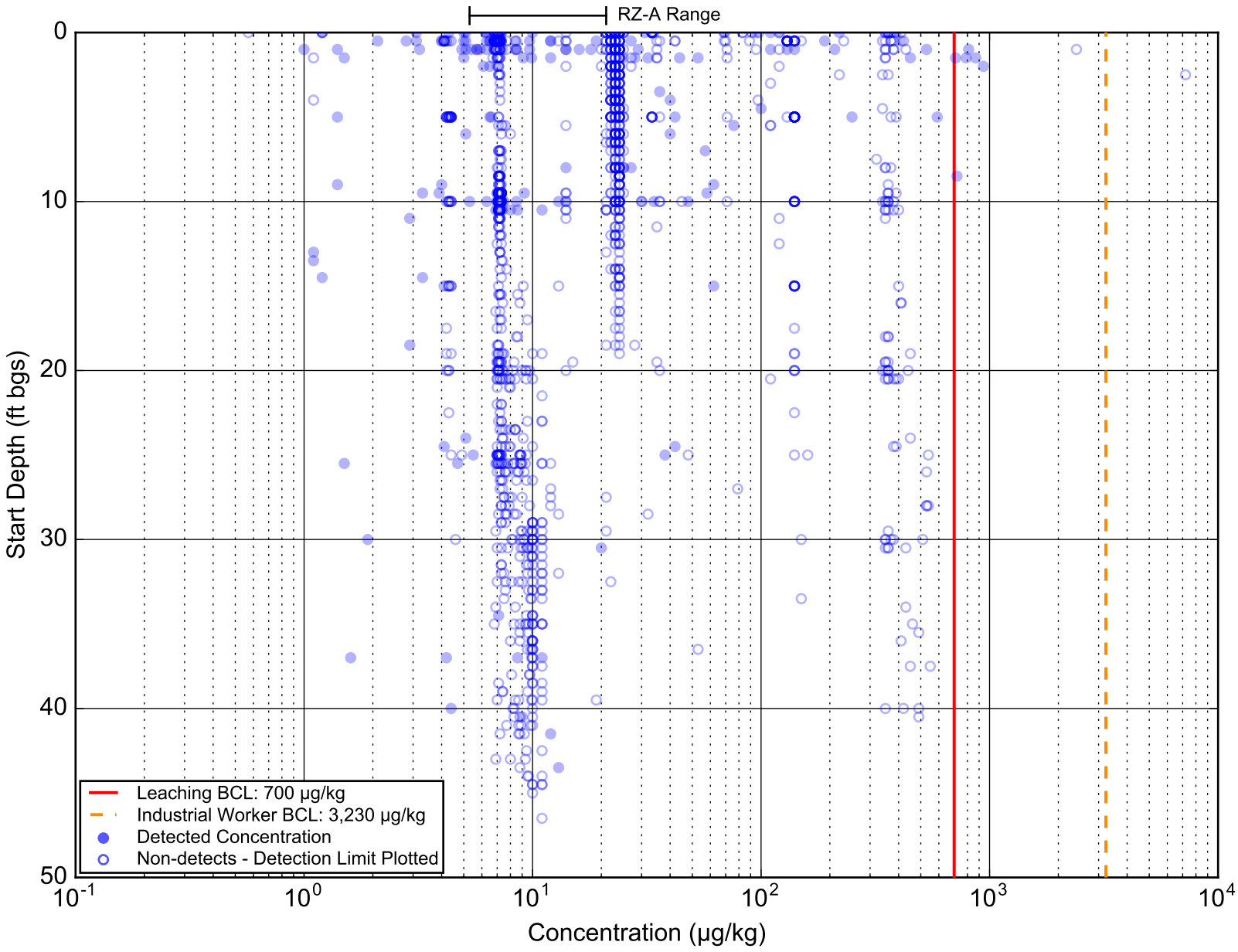


RAMBOLL ENVIRON

Benzo(a)pyrene Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-6c

Drafter: KGL/JH | Date: 03/10/2016 | Contract Number: 2138800C | Approved: | Revised:

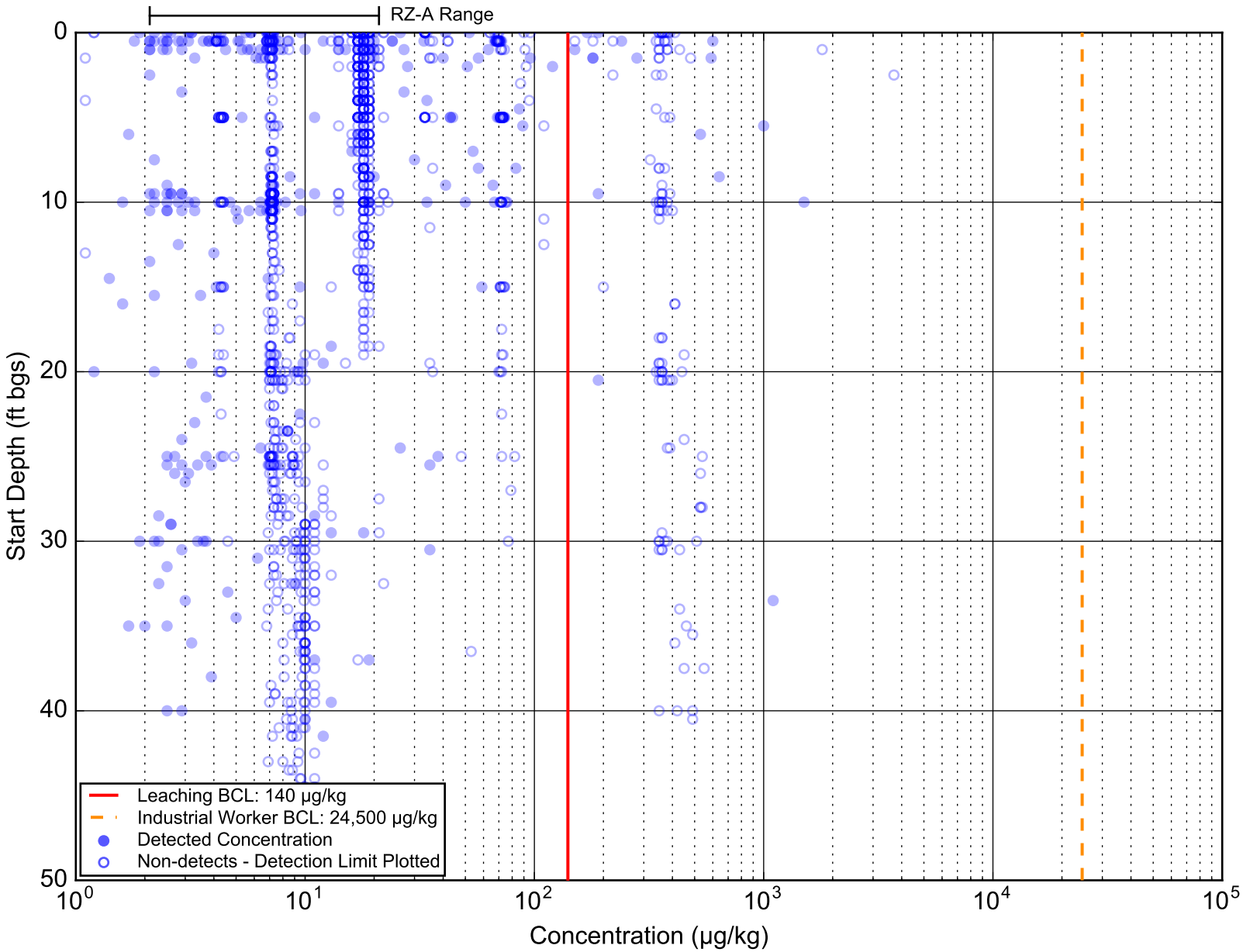


RAMBOLL ENVIRON

Indeno(1,2,3-cd)pyrene Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-6d

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

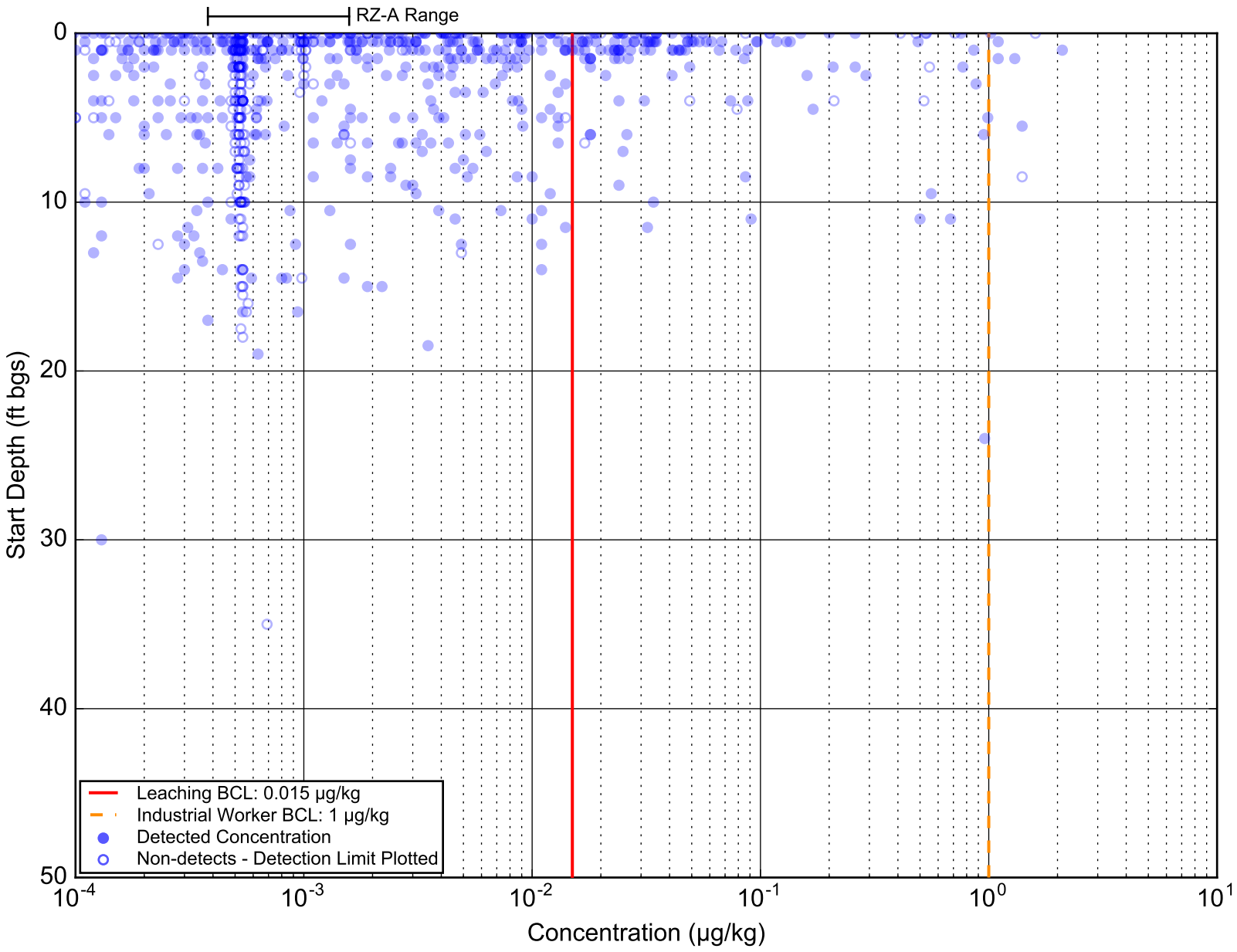


RAMBOLL ENVIRON

Phenanthrene Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-6e

Drafter: KGL/JH | Date: 03/10/2016 | Contract Number: 2138800C | Approved: | Revised:

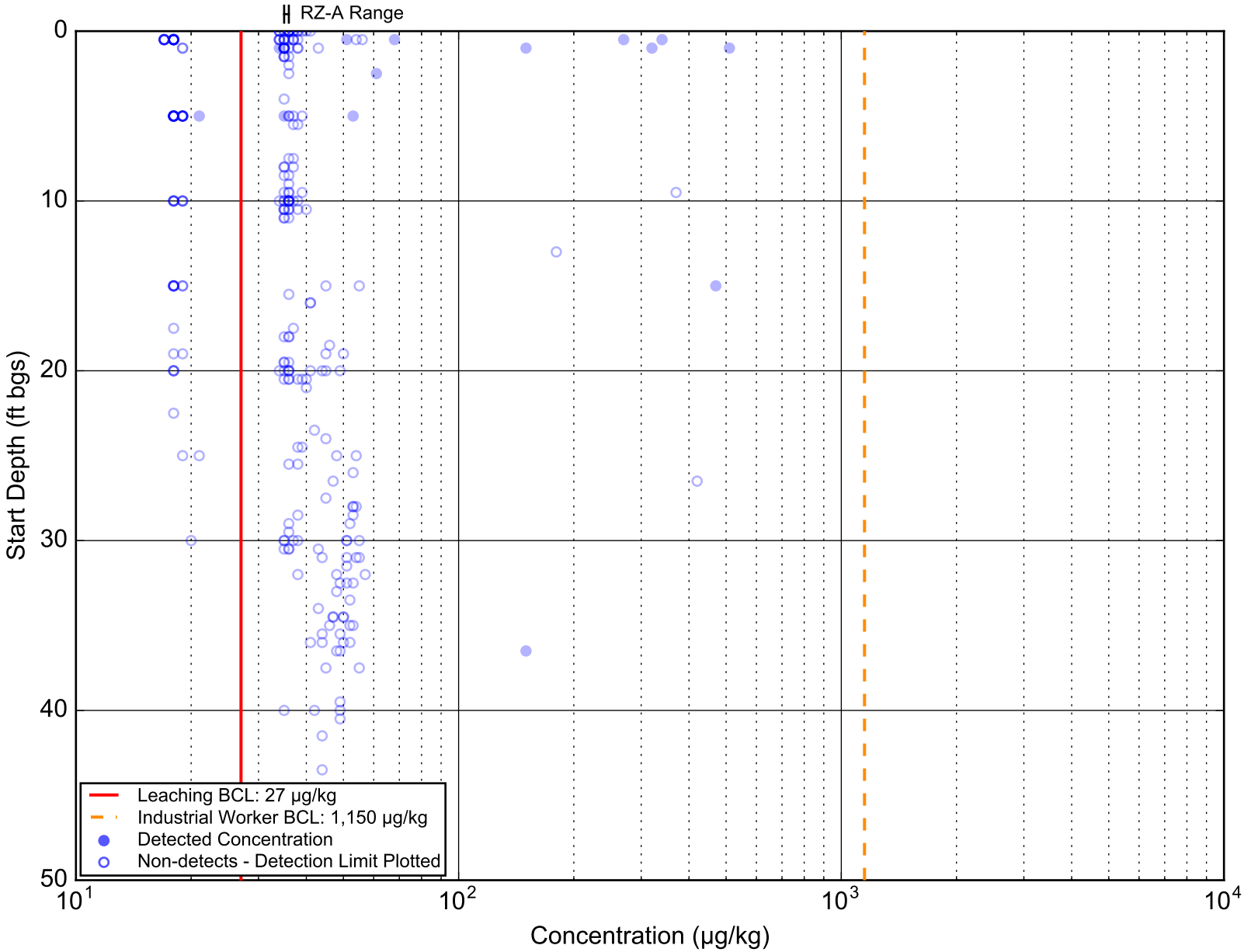


RAMBOLL ENVIRON

2,3,7,8-Tetrachlorodibenzo-p-dioxin Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-7

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

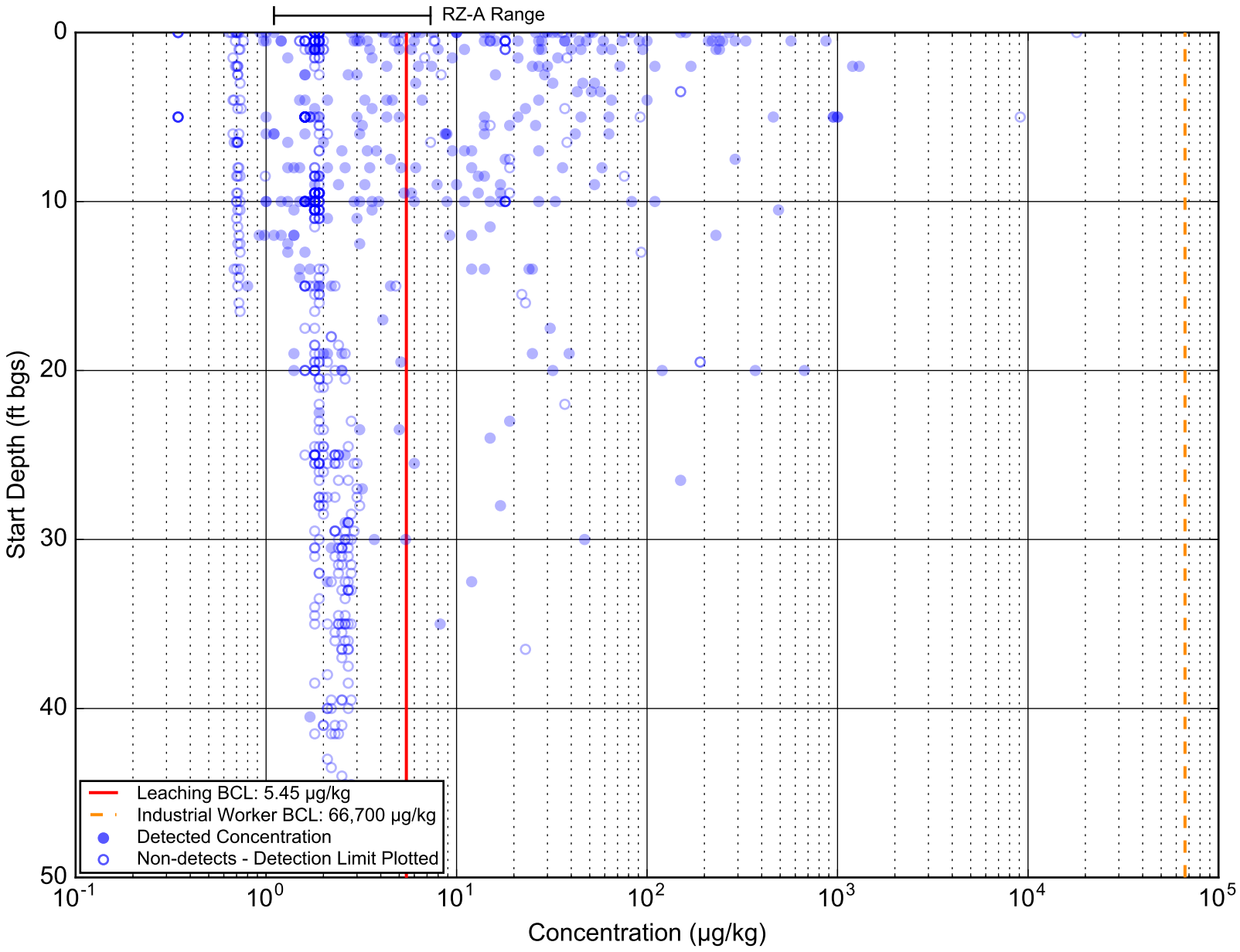


RAMBOLL ENVIRON

Aroclor-1260 Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-8

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

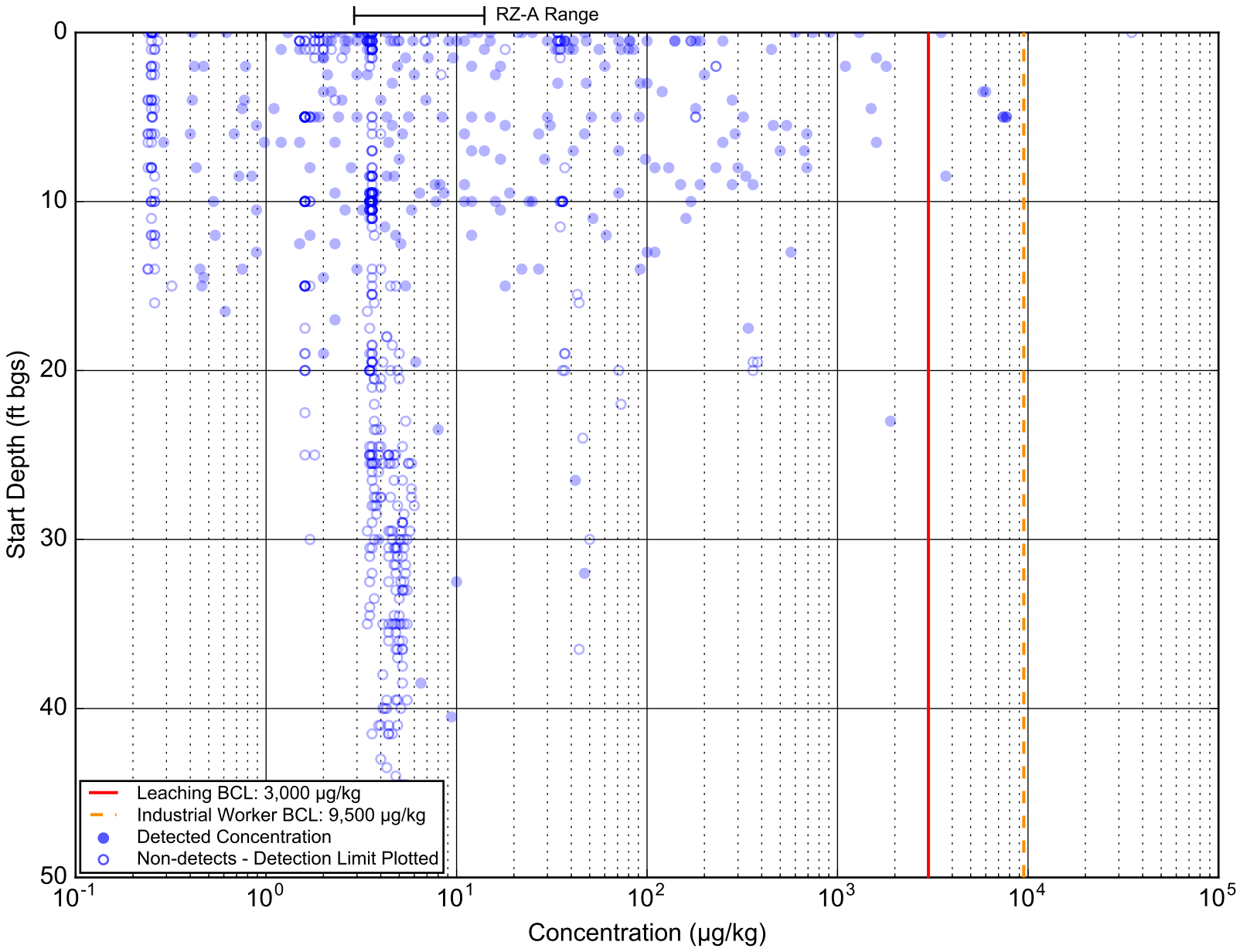


RAMBOLL ENVIRON

beta-BHC Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-9a

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

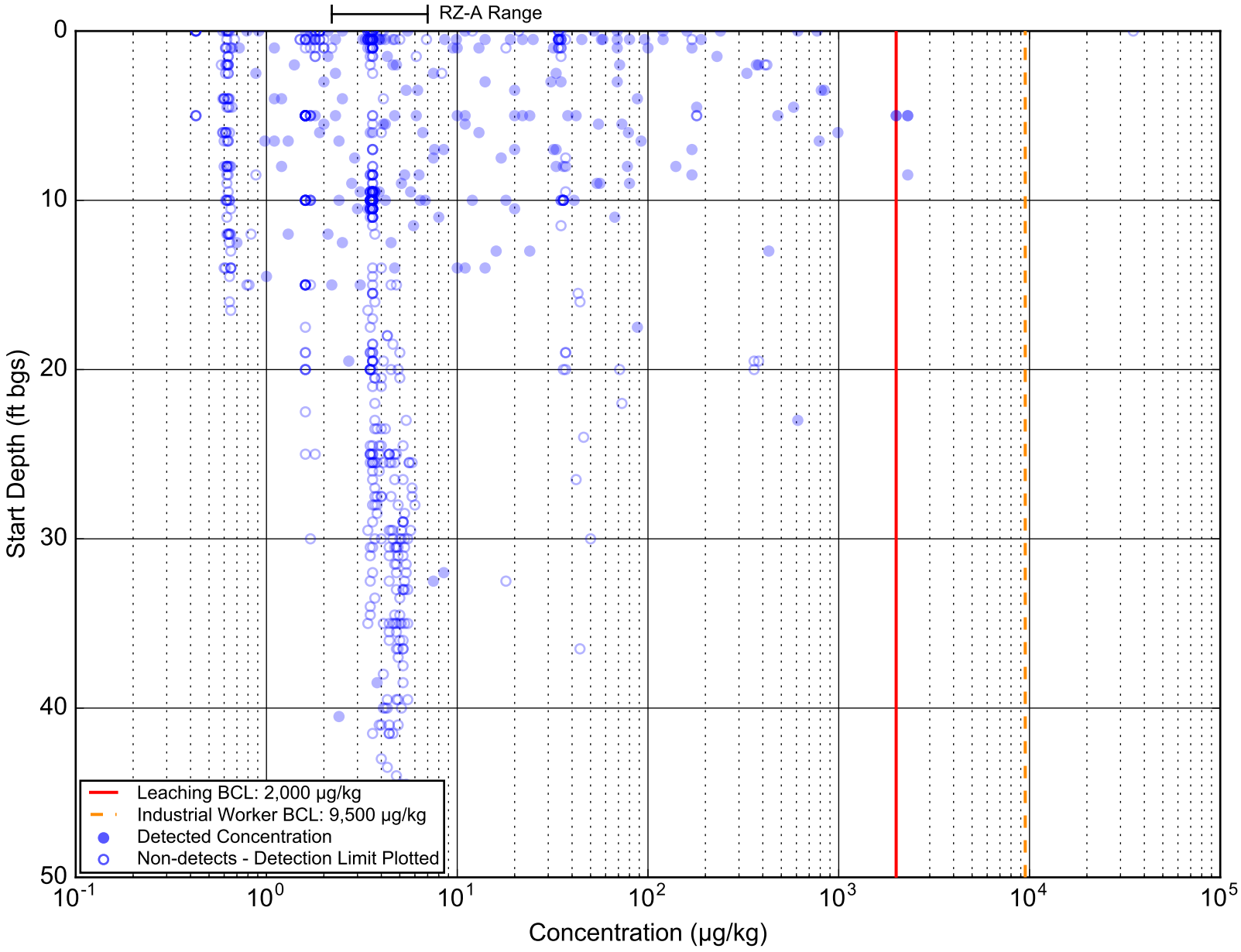


RAMBOLL ENVIRON

4,4'-DDE Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-9b

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

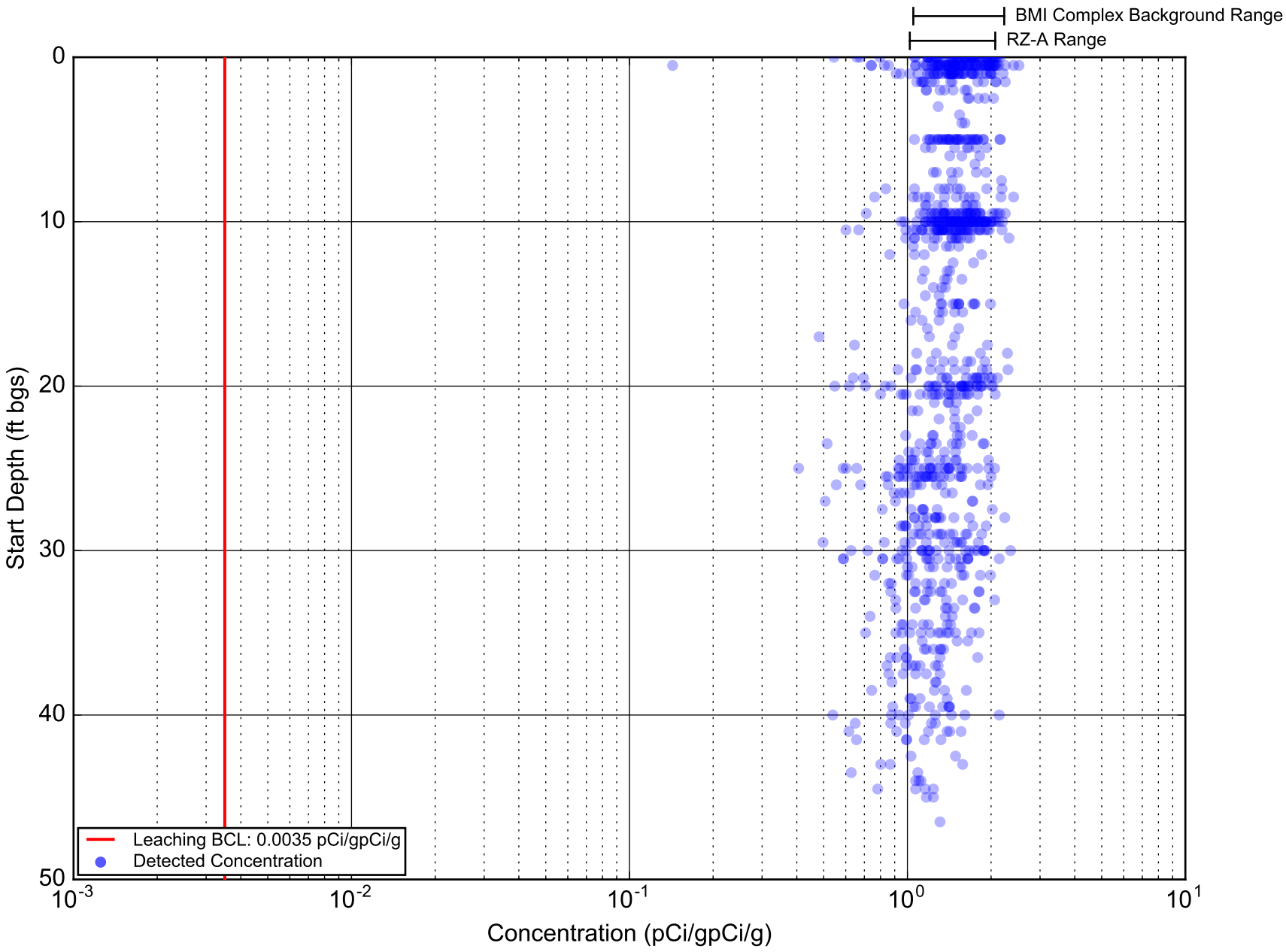


RAMBOLL ENVIRON

4,4'-DDT Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-9c

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

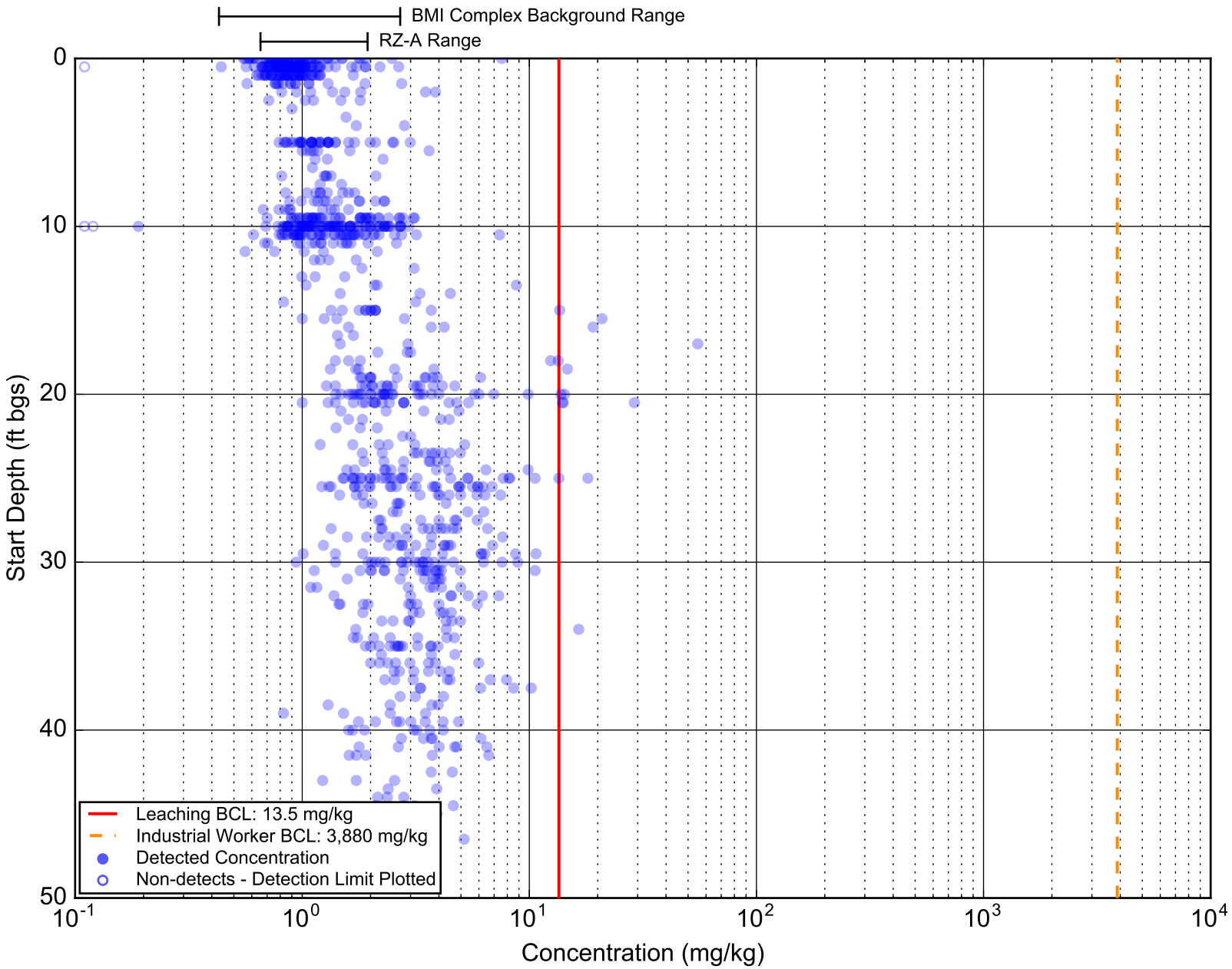


RAMBOLL ENVIRON

Thorium-232 Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-10a

Drafter: KGL/JH | Date: 03/10/2016 | Contract Number: 2138800C | Approved: | Revised:

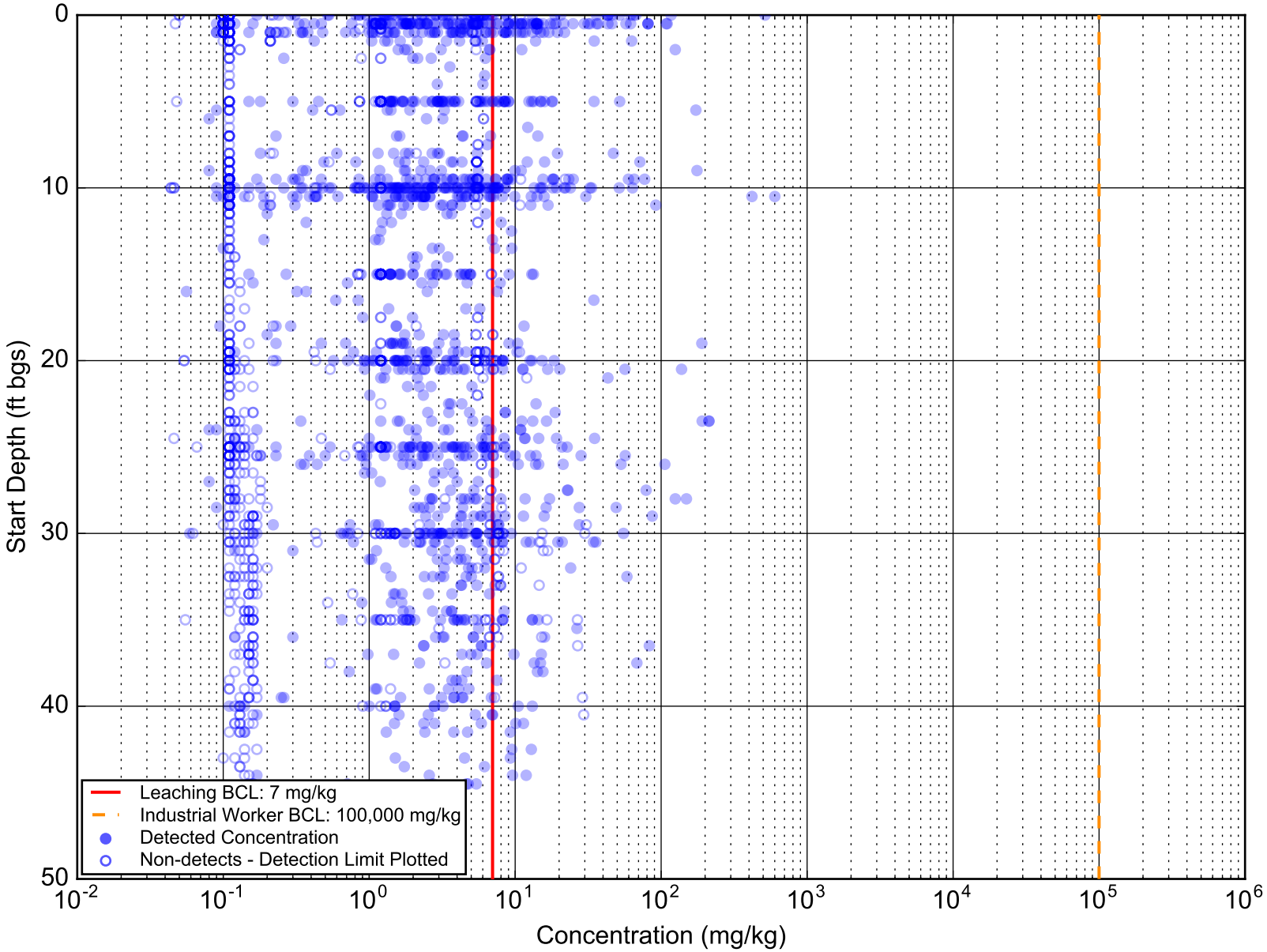


RAMBOLL ENVIRON

Uranium (total) Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-10b

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

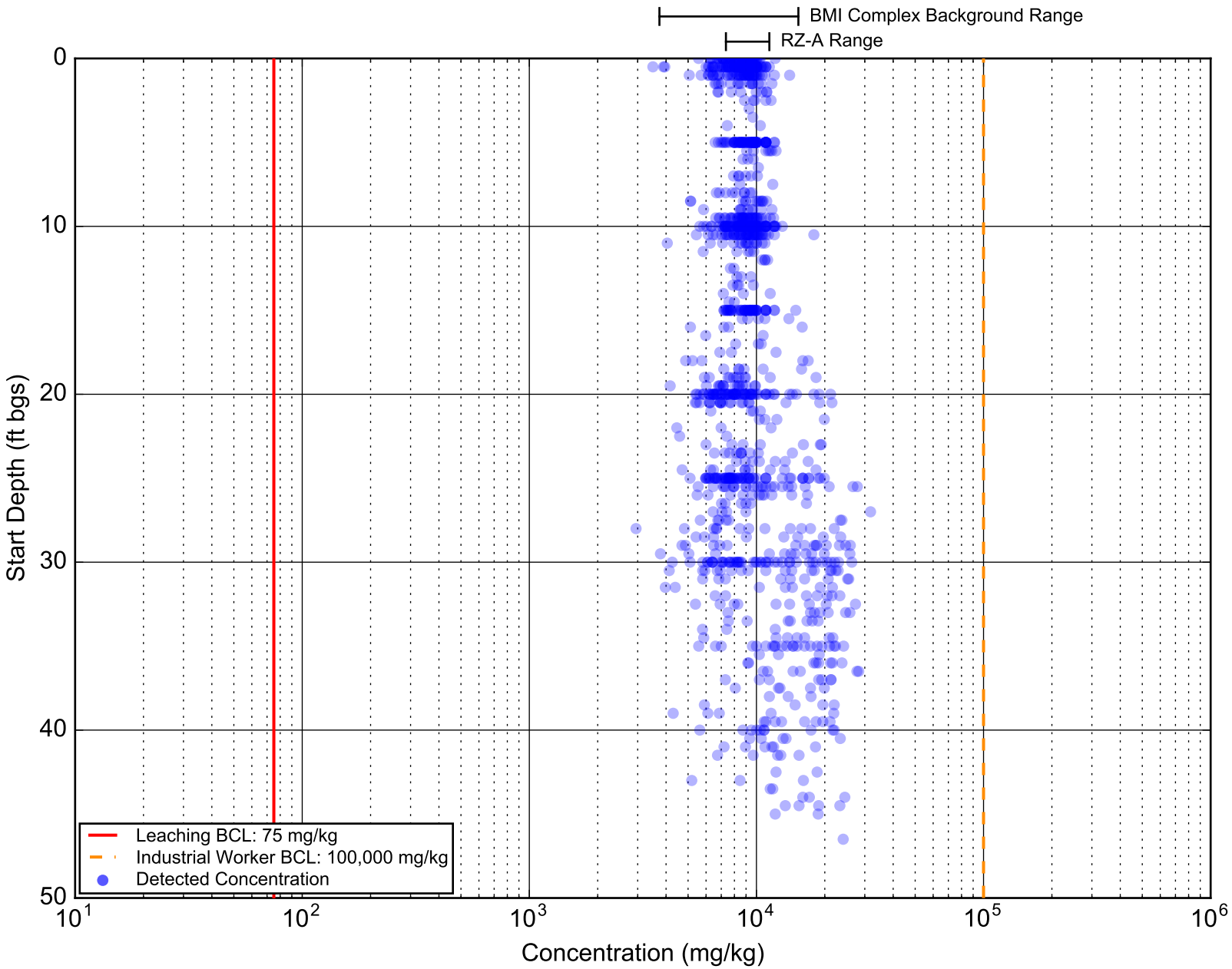


RAMBOLL ENVIRON

Nitrate/Nitrite Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-11

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

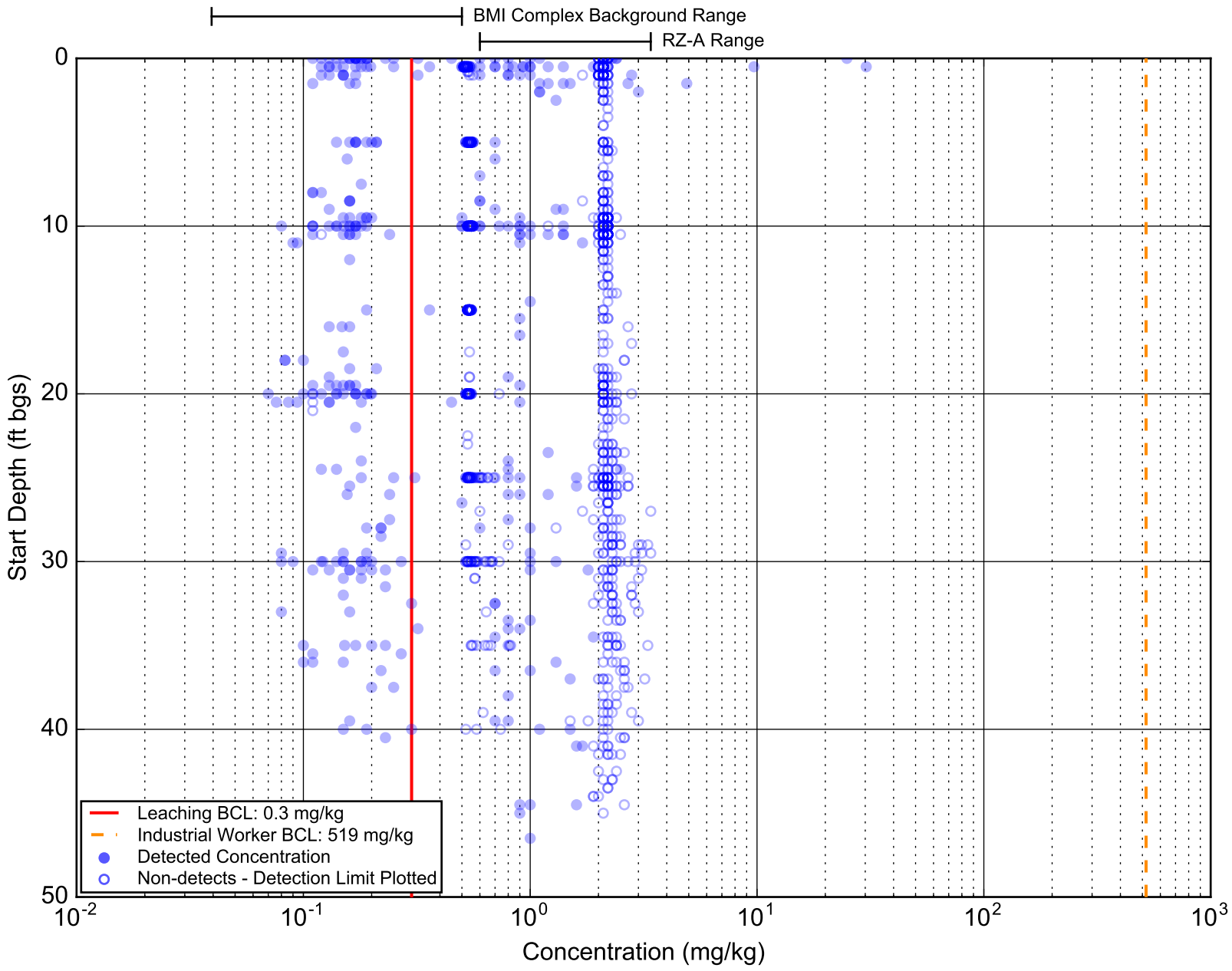


RAMBOLL ENVIRON

Aluminum Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-12

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

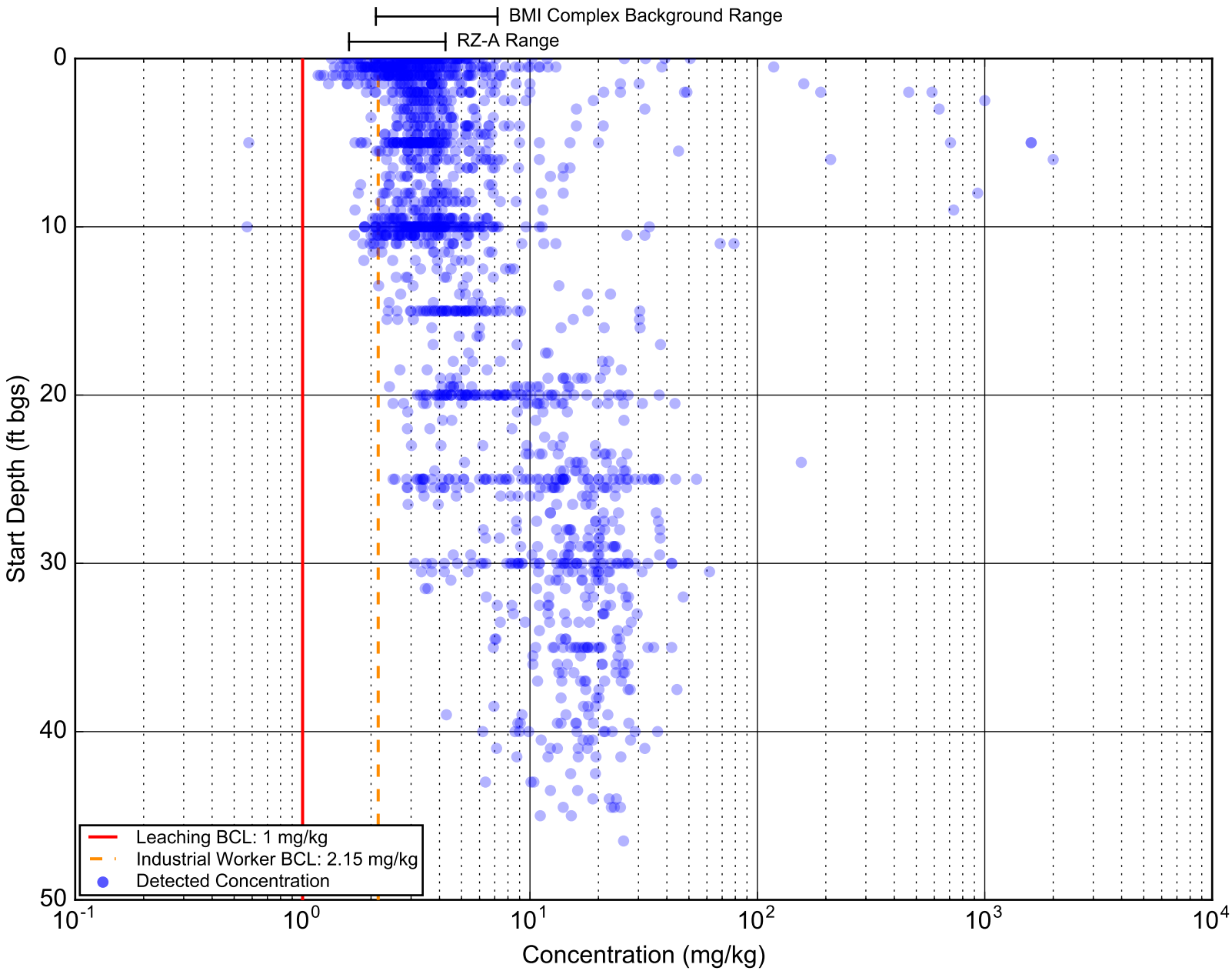


RAMBOLL ENVIRON

Antimony Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-13

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

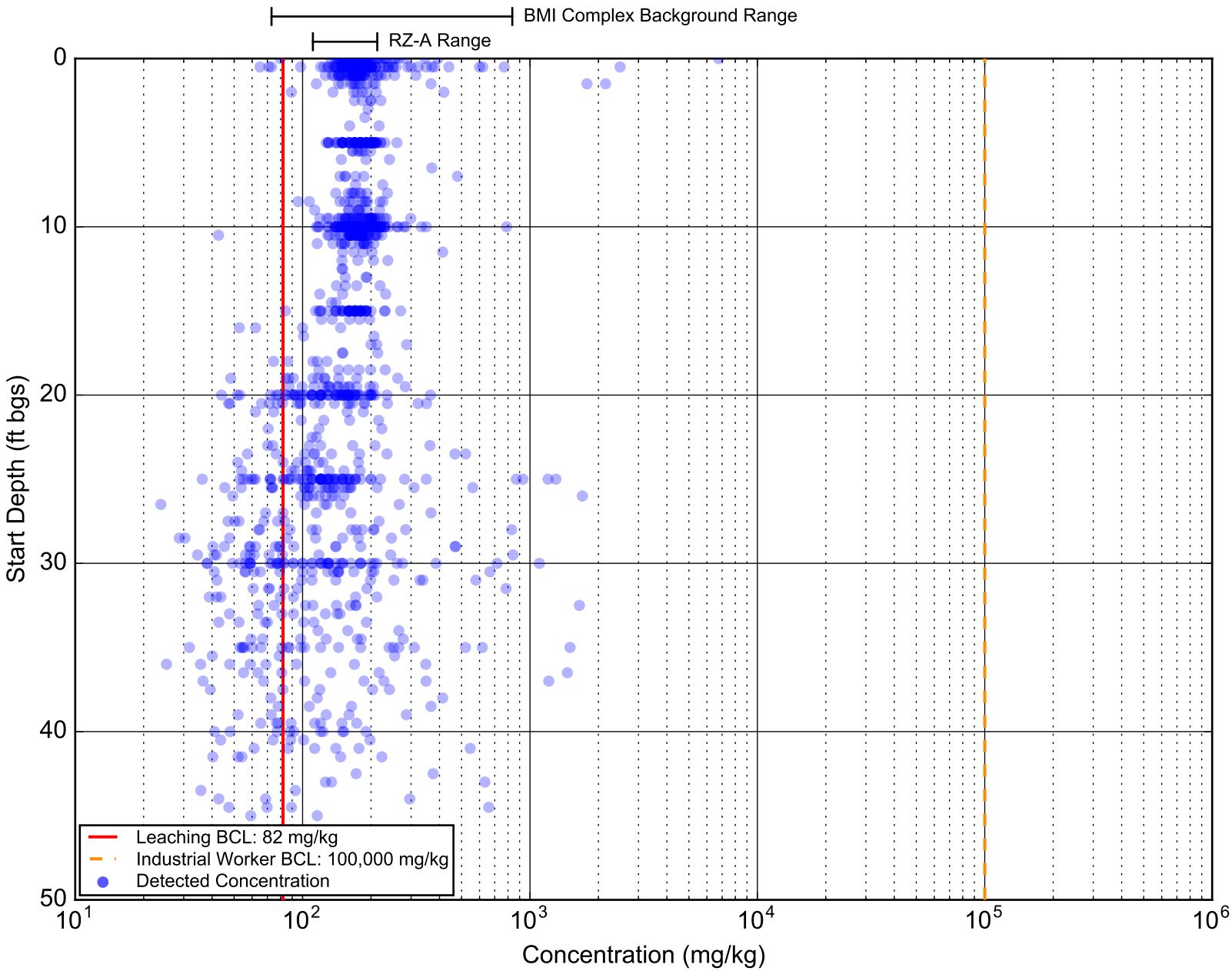


RAMBOLL ENVIRON

Arsenic Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-14

Drafter: KGL/JH | Date: 03/10/2016 | Contract Number: 2138800C | Approved: | Revised:

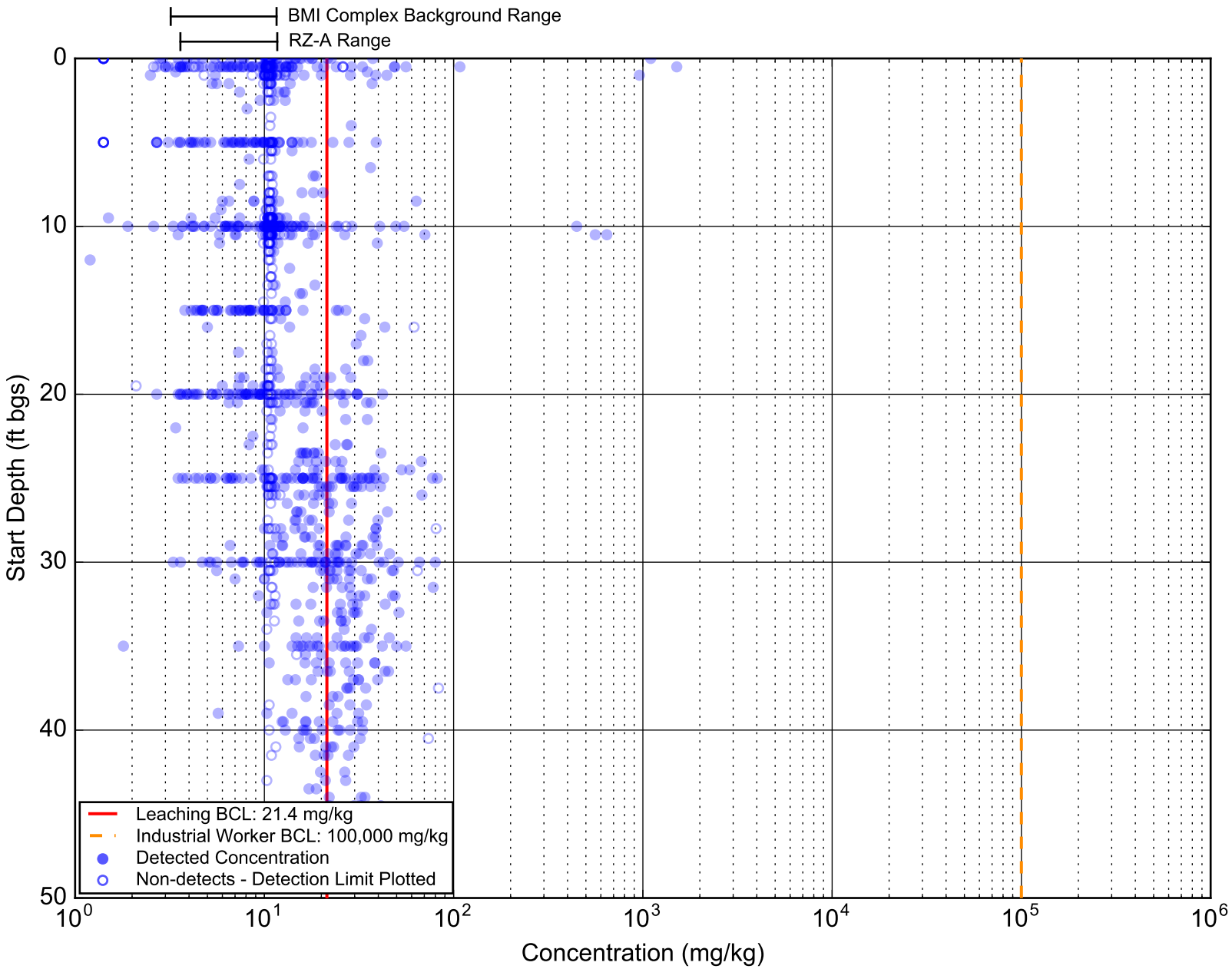


RAMBOLL ENVIRON

Barium Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-15

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

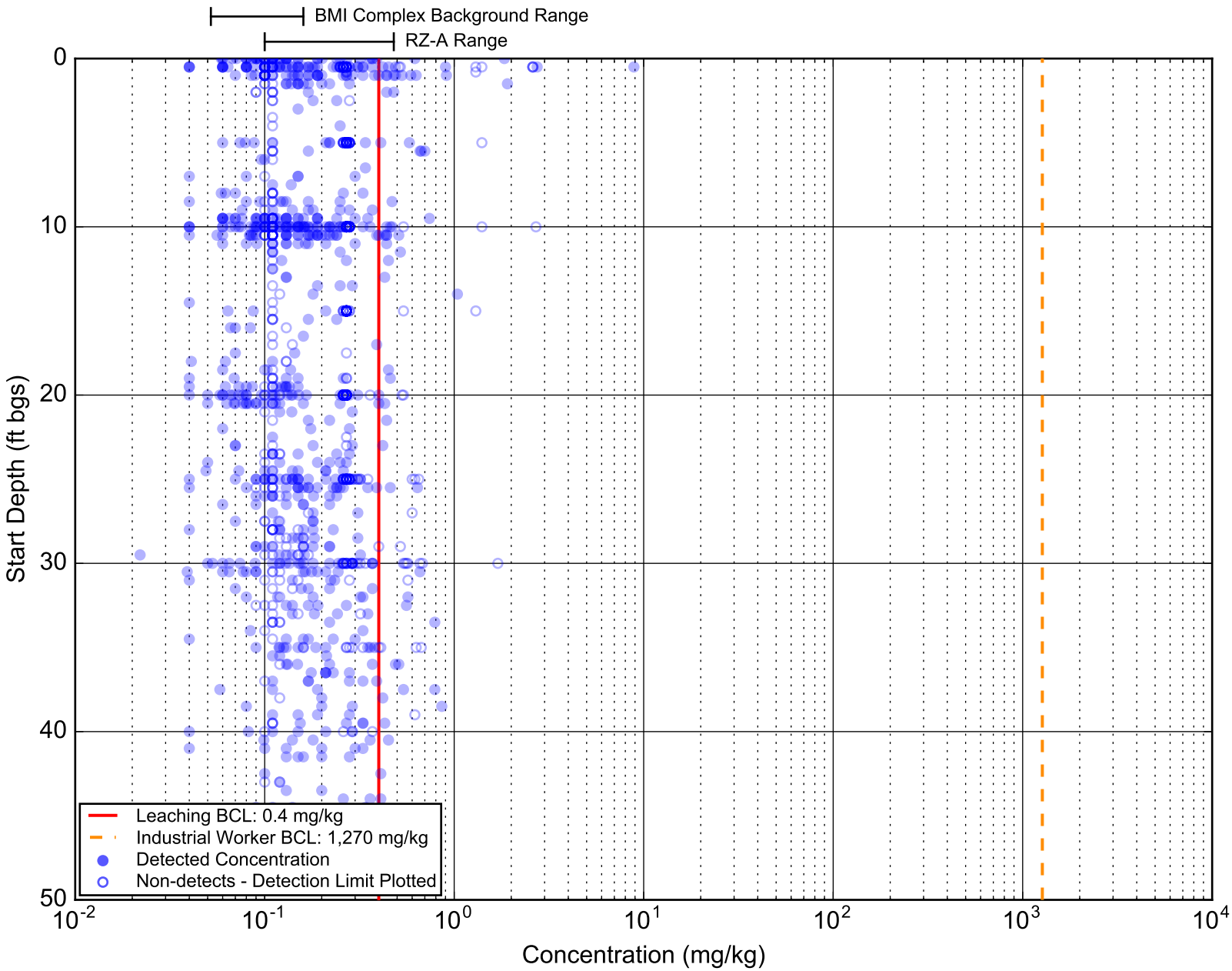


RAMBOLL ENVIRON

Boron Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-16

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

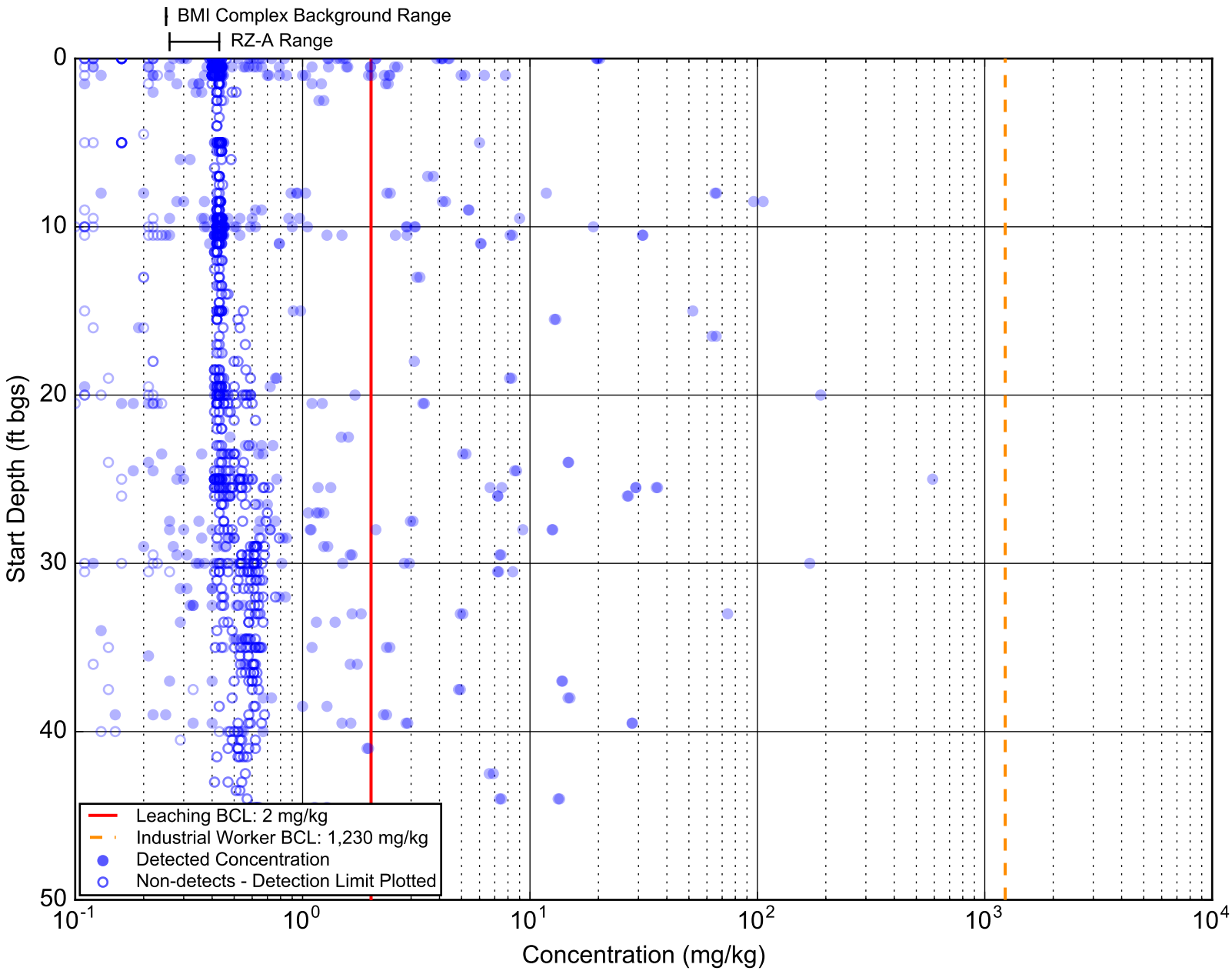


RAMBOLL ENVIRON

Cadmium Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-17

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

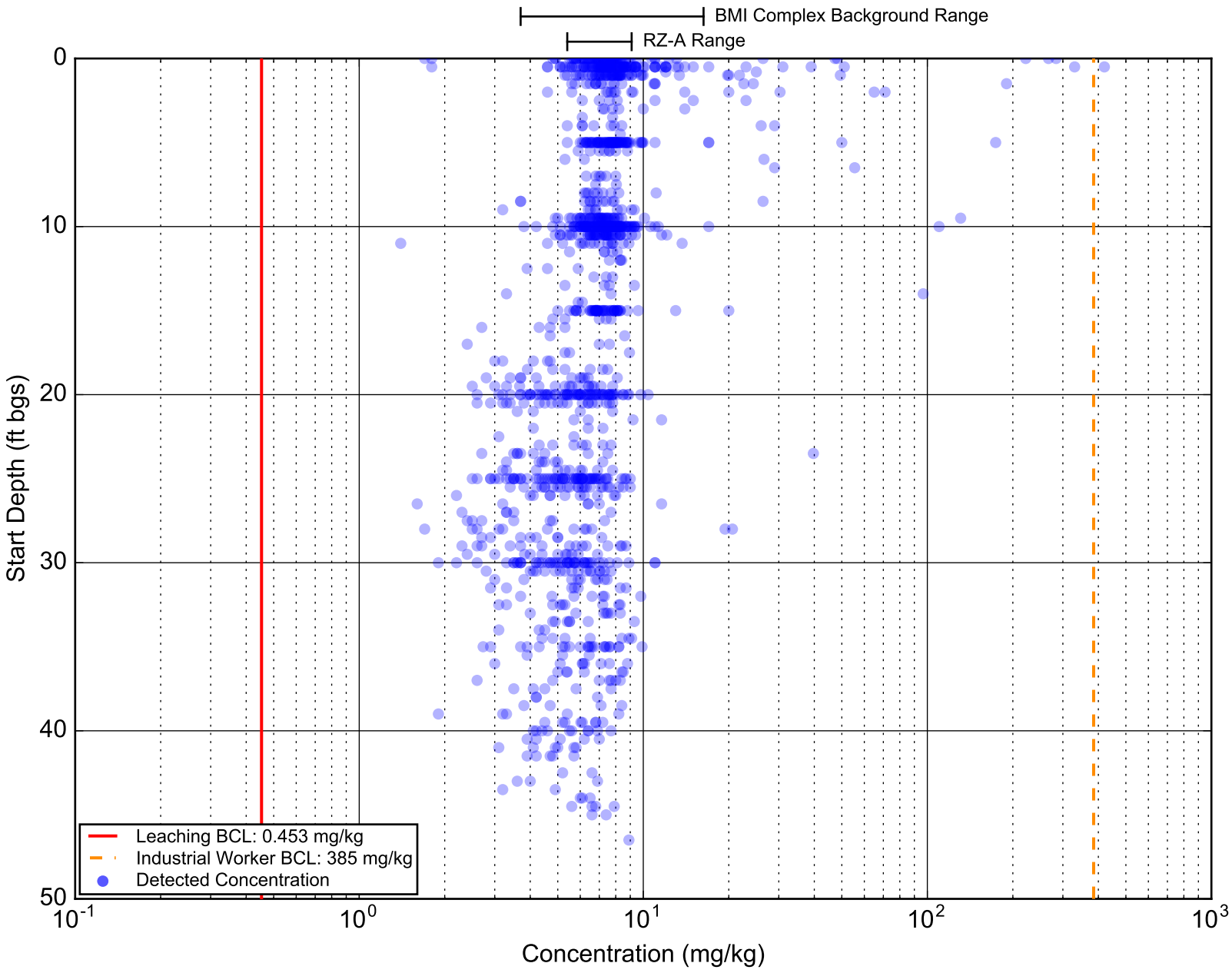


RAMBOLL ENVIRON

Chromium VI Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-18

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

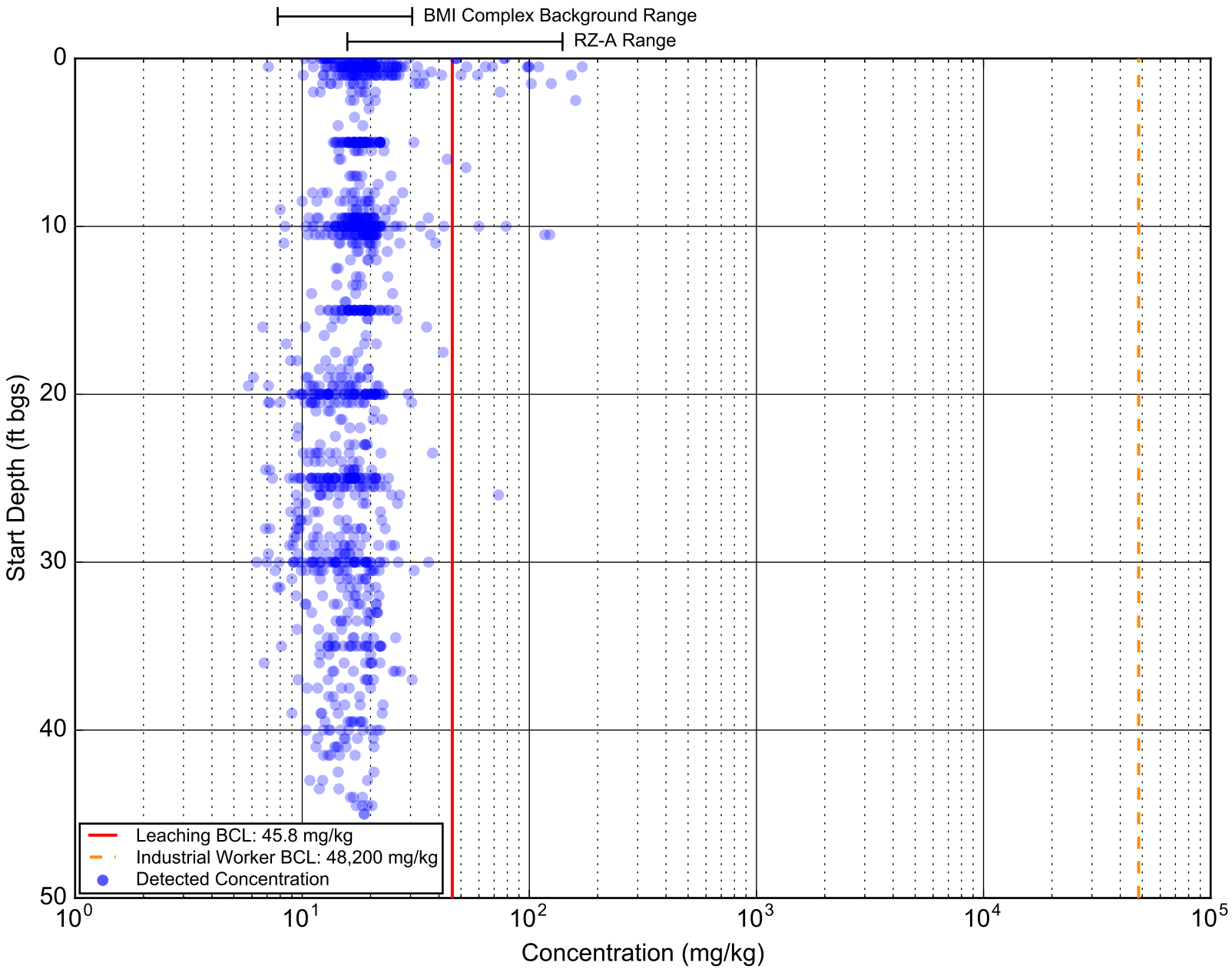


RAMBOLL ENVIRON

Cobalt Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-19

Drafter: KGL/JH | Date: 03/10/2016 | Contract Number: 2138800C | Approved: | Revised:

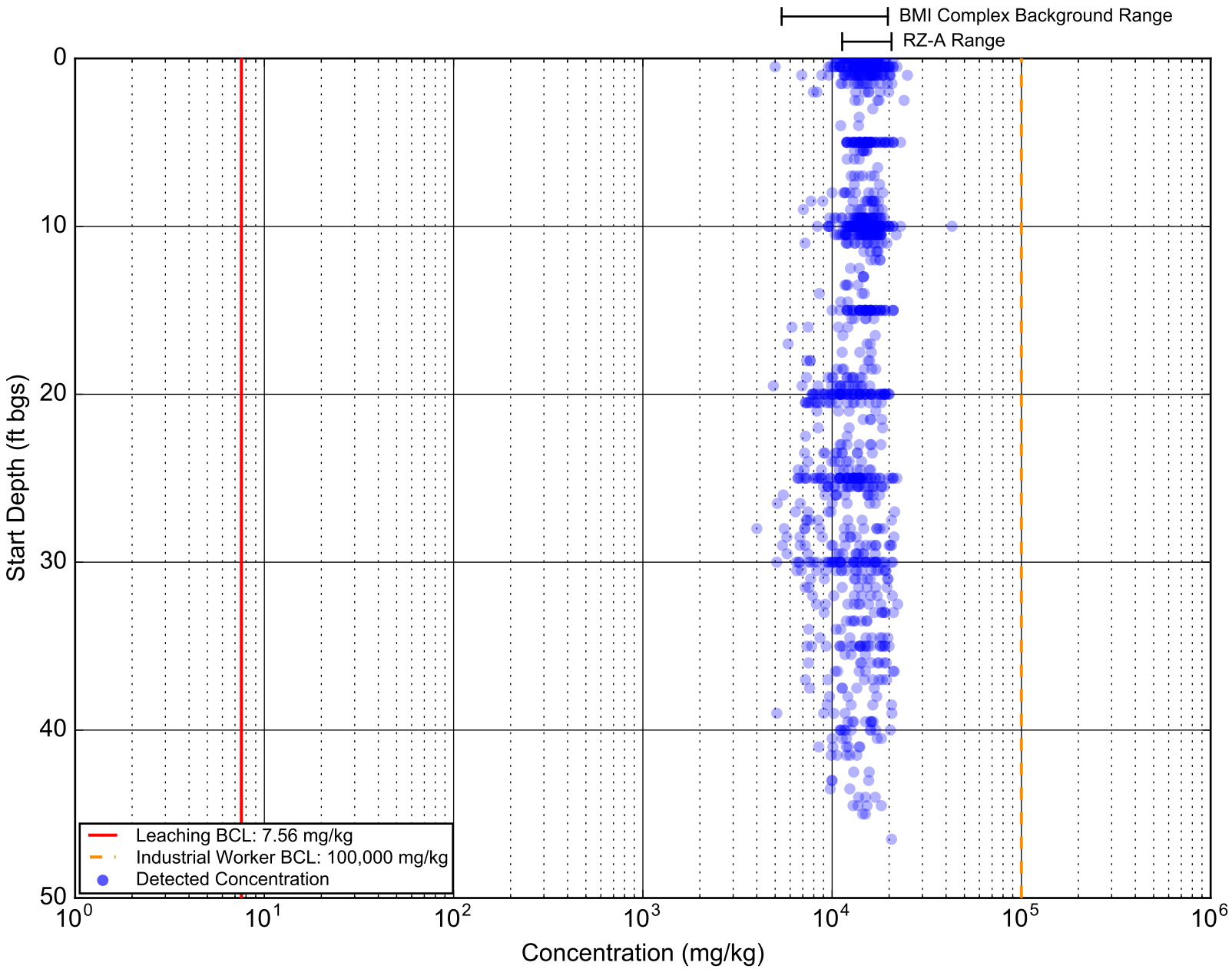


RAMBOLL ENVIRON

Copper Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-20

Drafter: KGL/JH | Date: 03/10/2016 | Contract Number: 2138800C | Approved: | Revised:

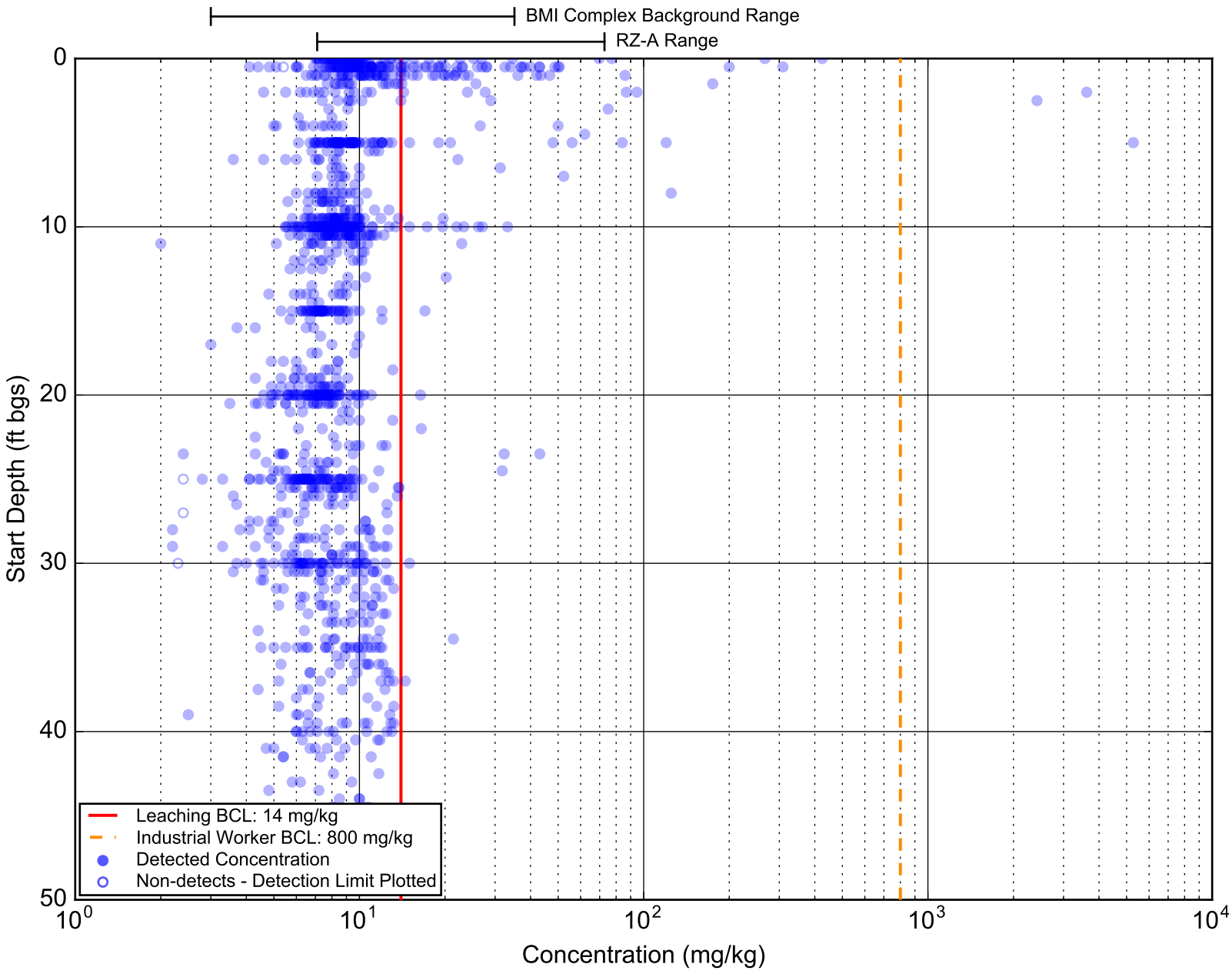


RAMBOLL ENVIRON

Iron Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-21

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

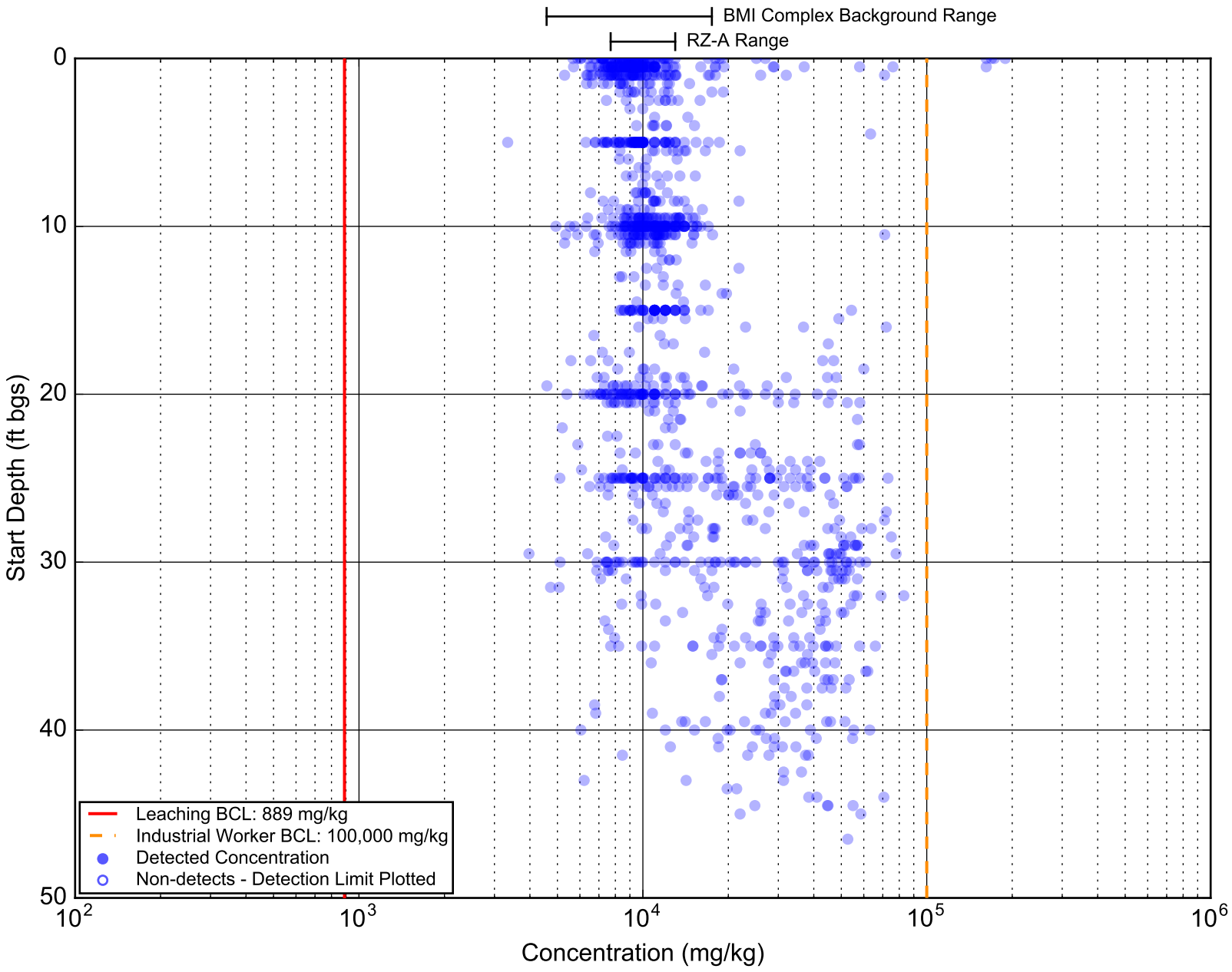


RAMBOLL ENVIRON

Lead Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-22

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

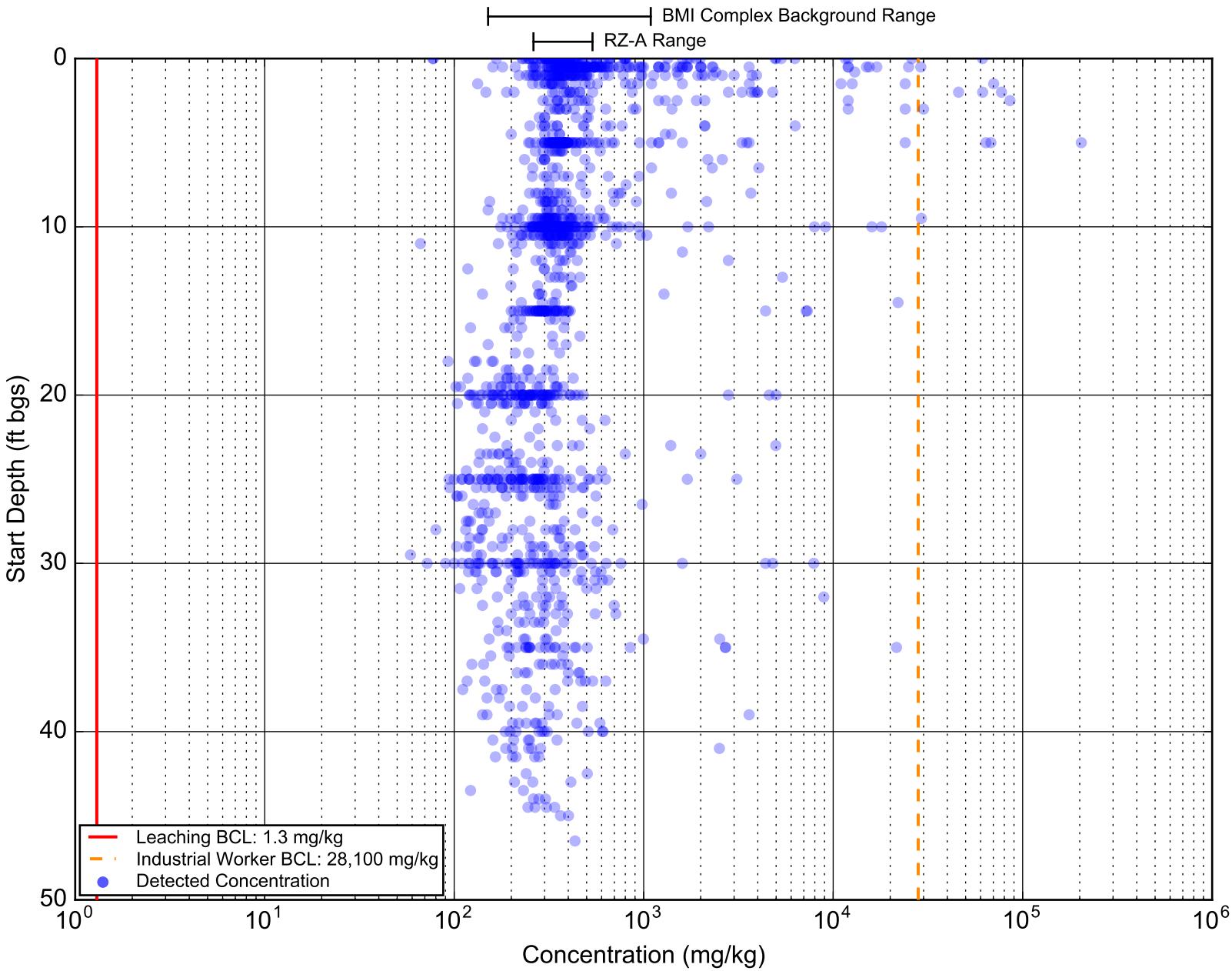


RAMBOLL ENVIRON

Magnesium Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-23

Drafter: KGL/JH | Date: 03/10/2016 | Contract Number: 2138800C | Approved: | Revised:

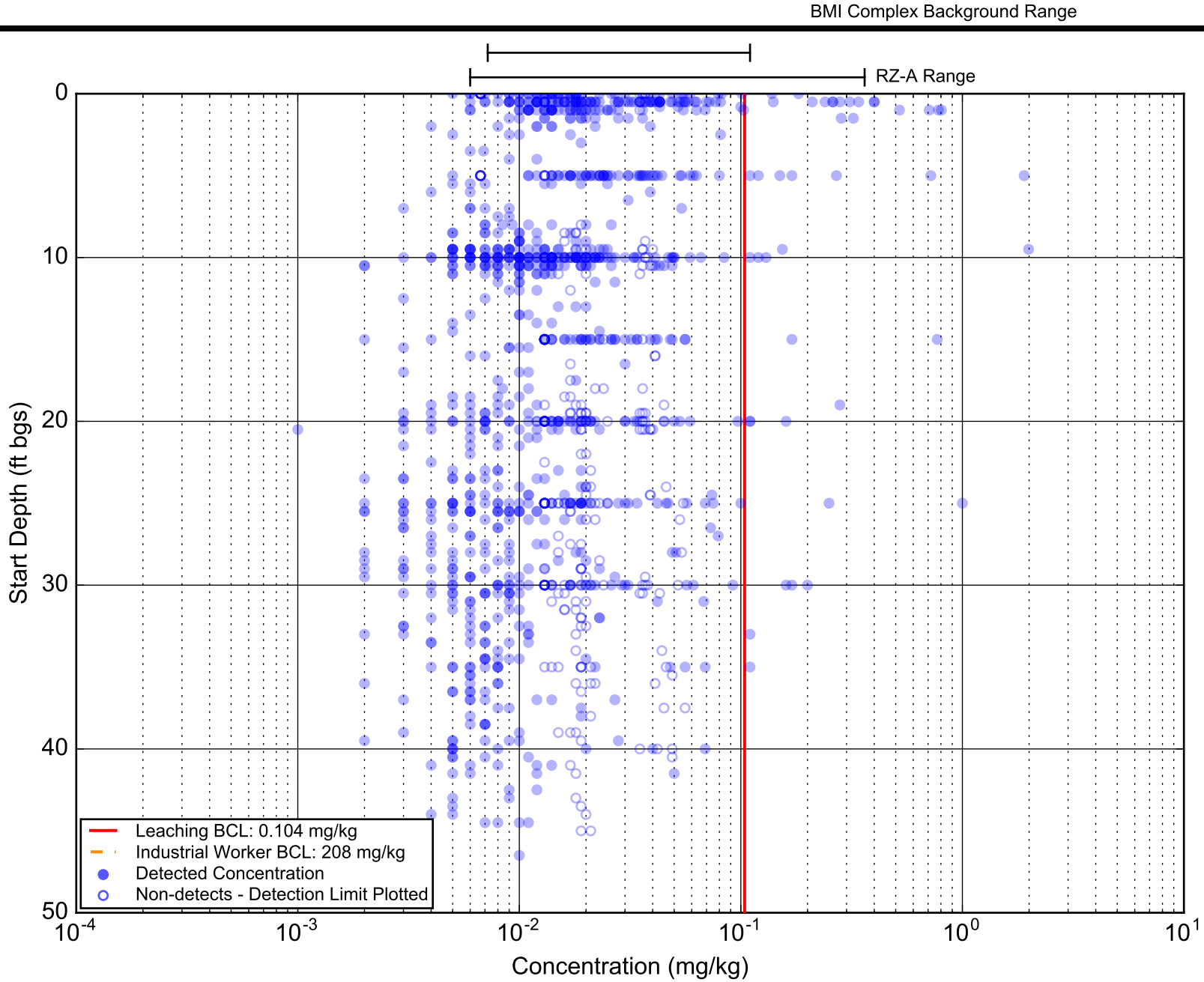


RAMBOLL ENVIRON

Manganese Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-24

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

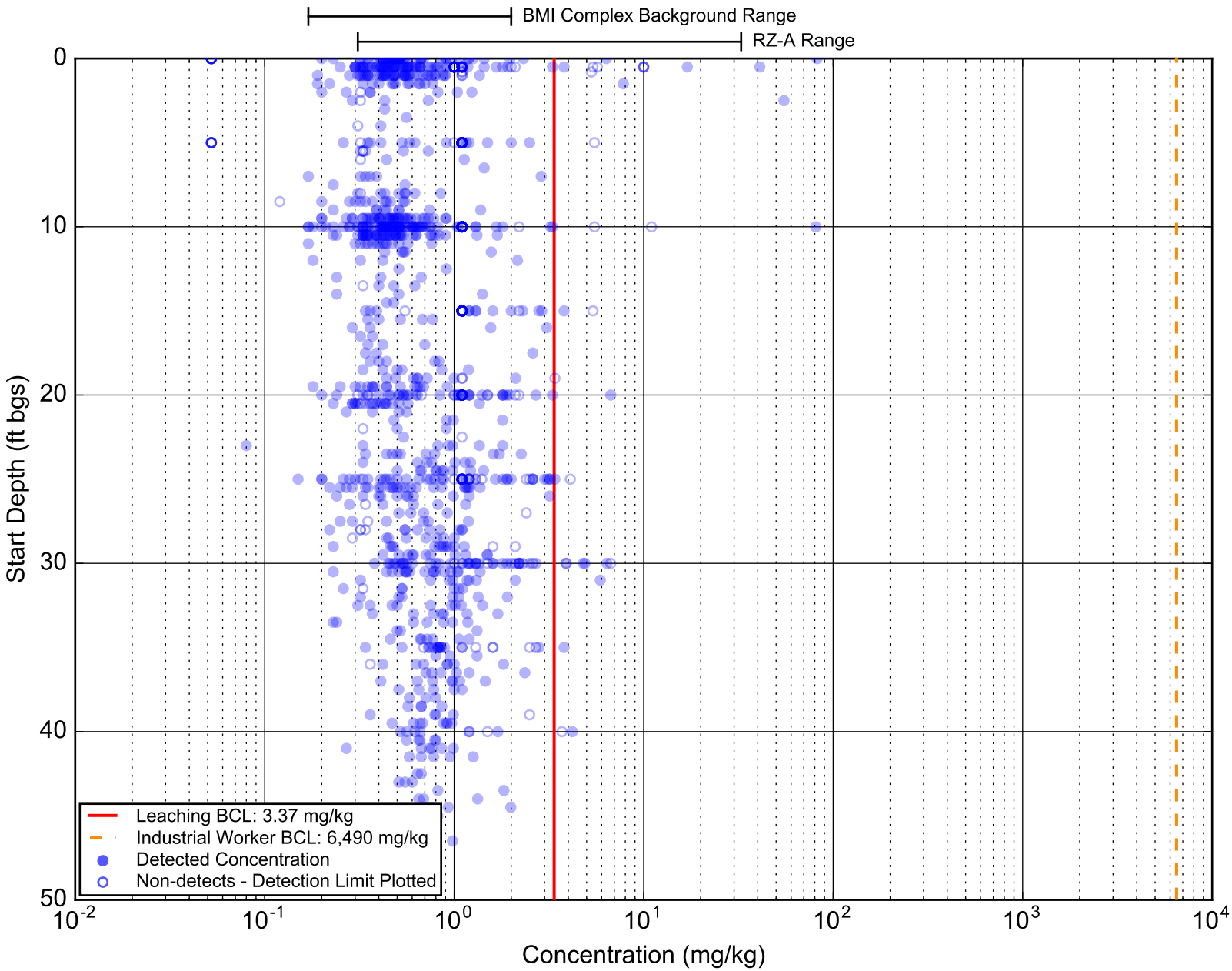


RAMBOLL ENVIRON

Mercury Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-25

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

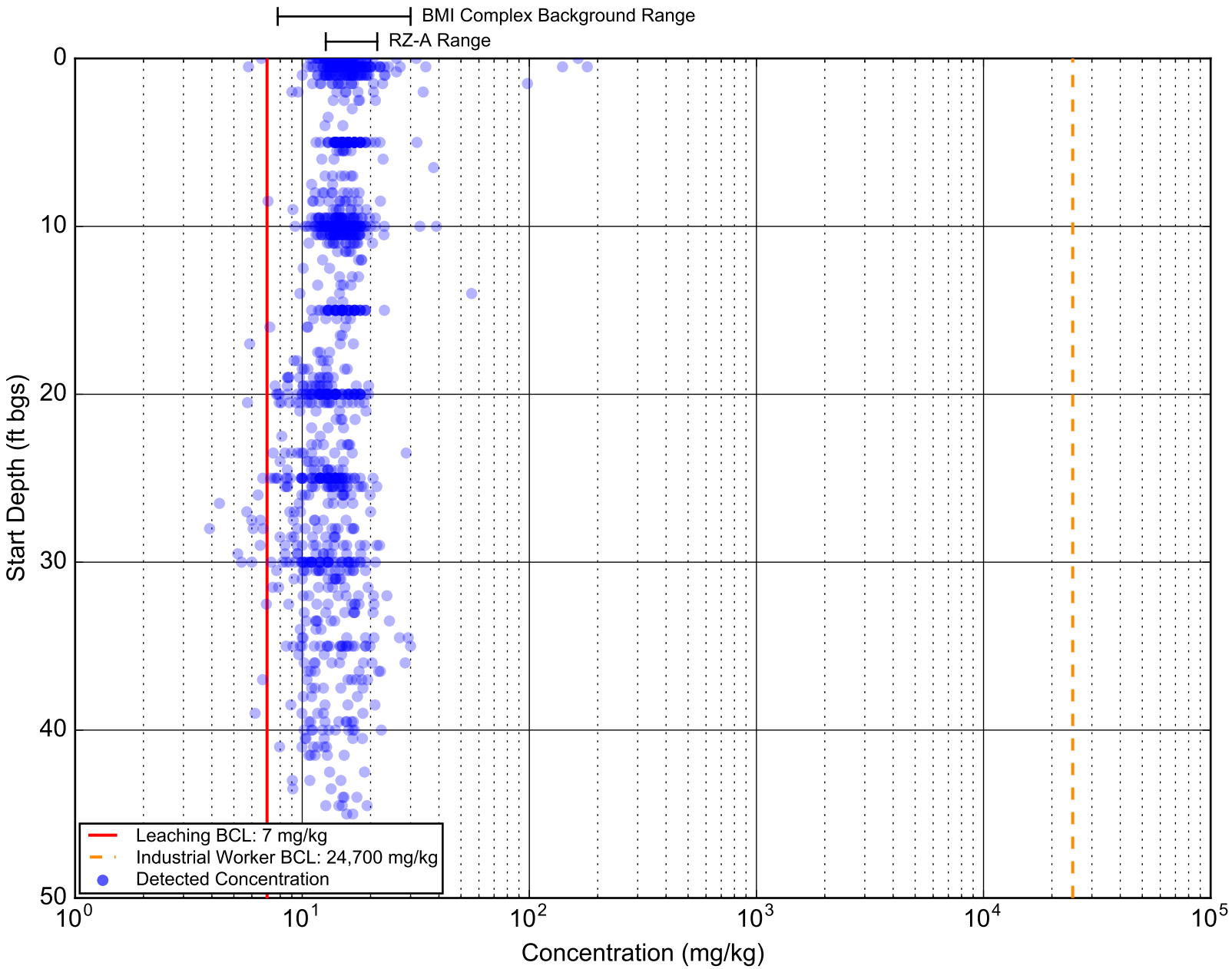


RAMBOLL ENVIRON

Molybdenum Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-26

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

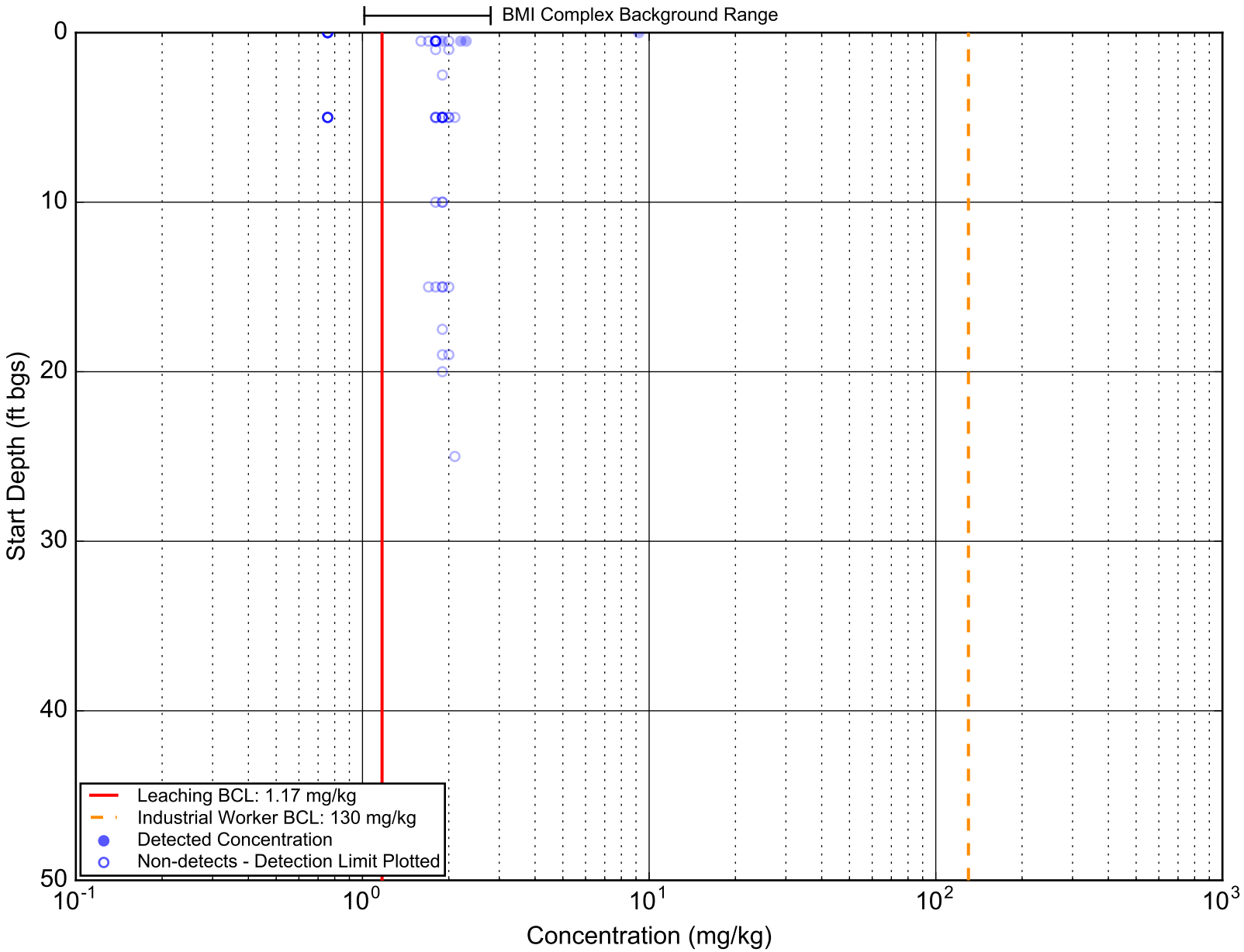


RAMBOLL ENVIRON

Nickel Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-27

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

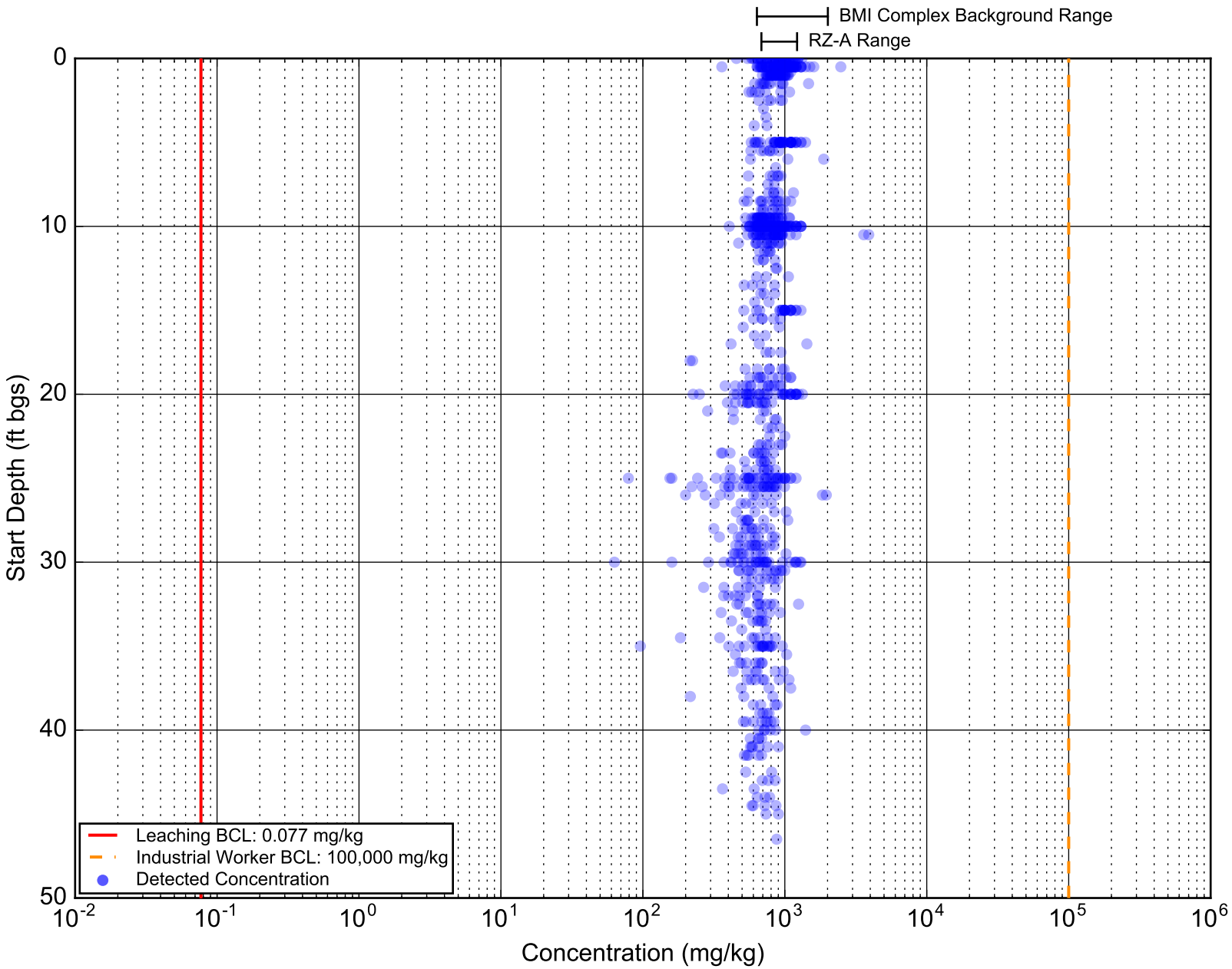


RAMBOLL ENVIRON

Niobium Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-28

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

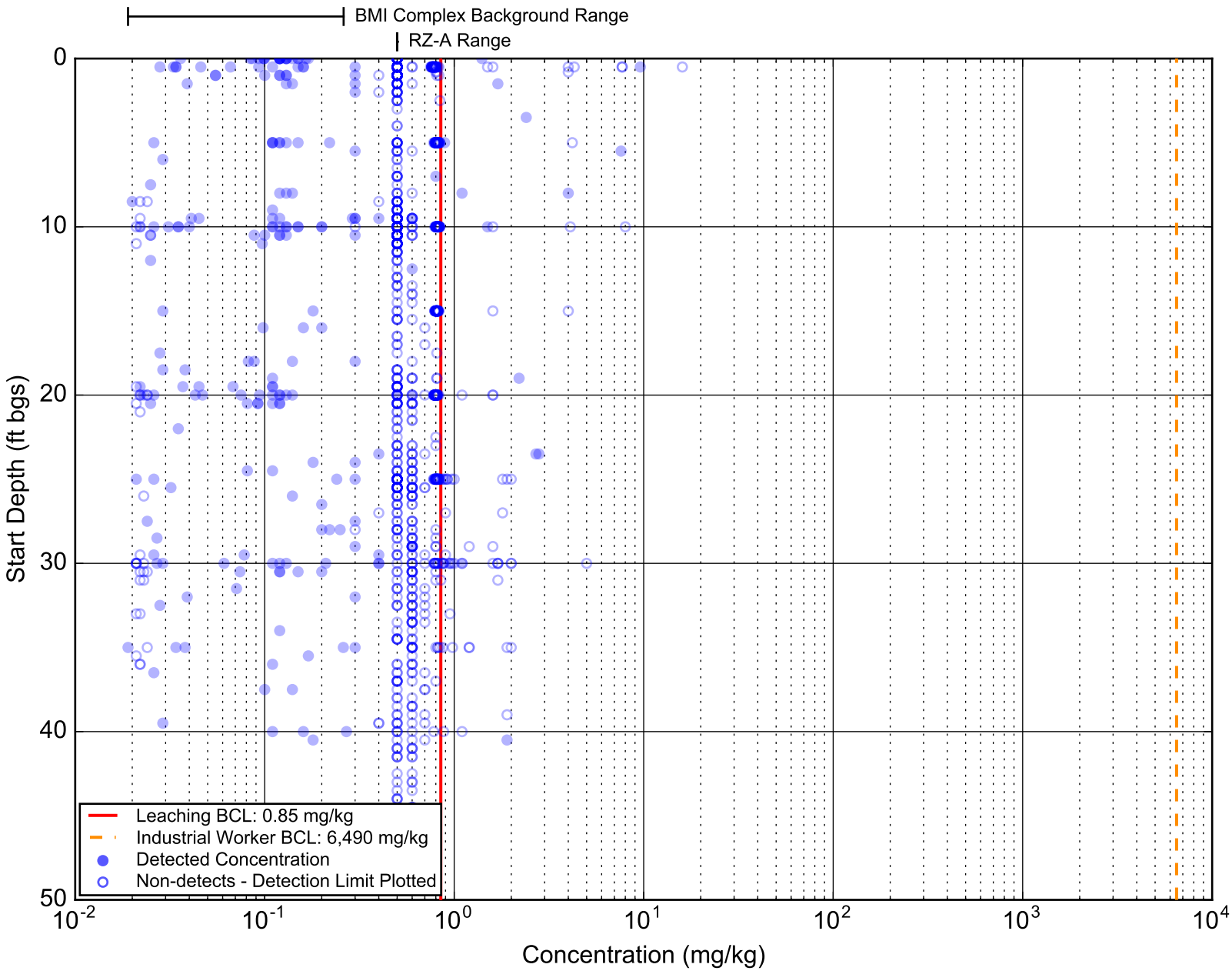


RAMBOLL ENVIRON

Phosphorus (total) Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-29

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

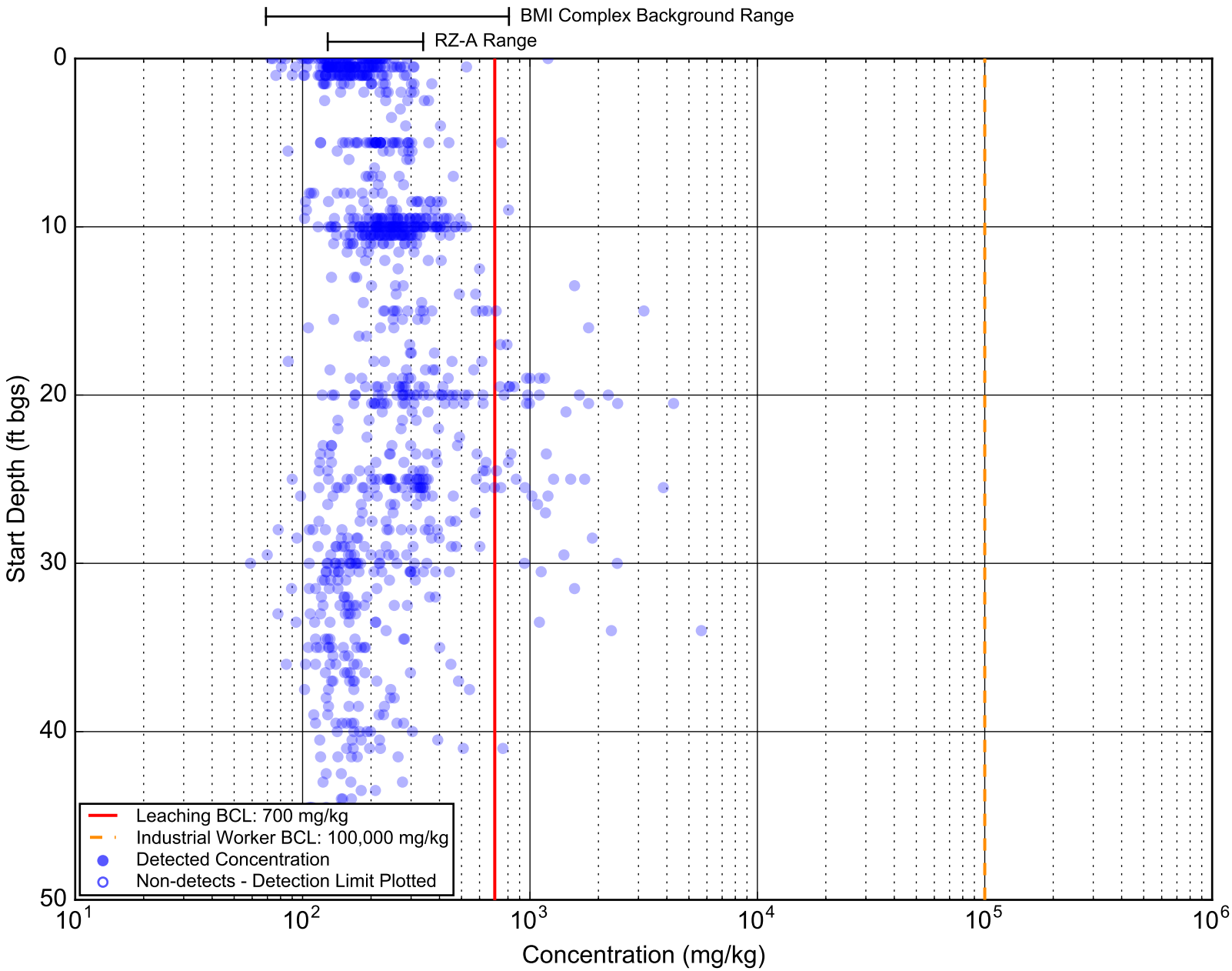


RAMBOLL ENVIRON

Silver Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-30

Drafter: KGL/JH | Date: 03/10/2016 | Contract Number: 2138800C | Approved: | Revised:

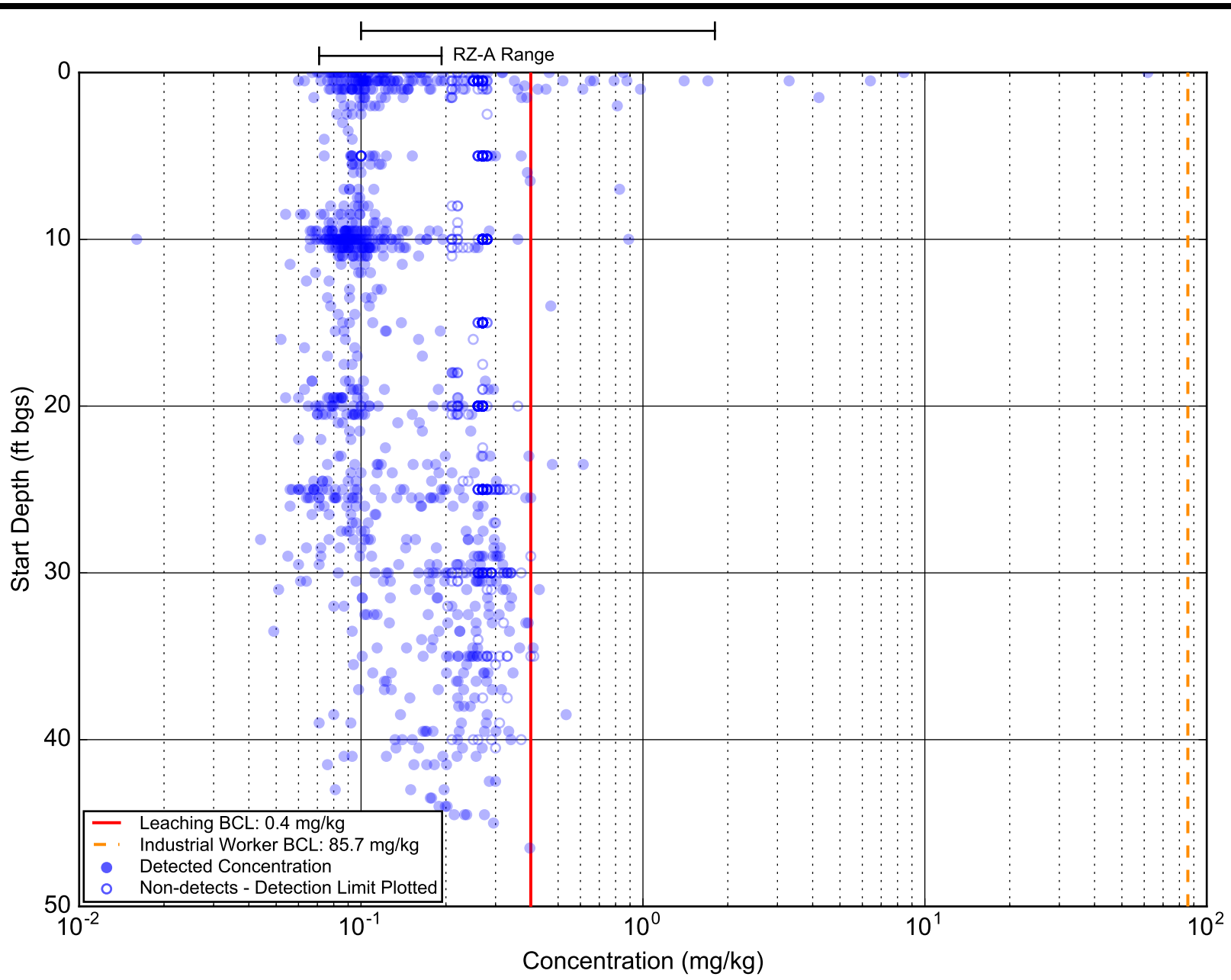


RAMBOLL ENVIRON

Strontium Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-31

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

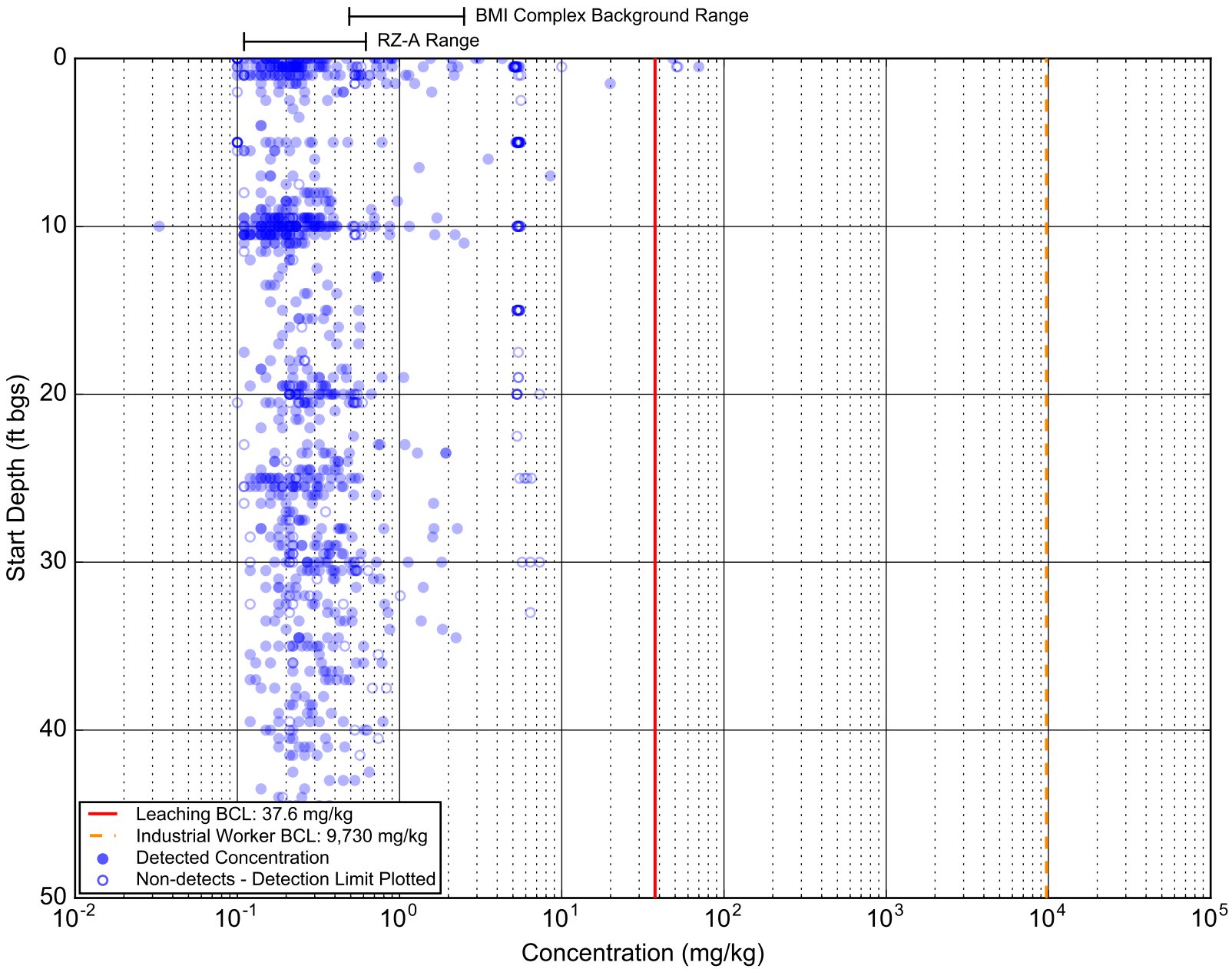


RAMBOLL ENVIRON

Thallium Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-32

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

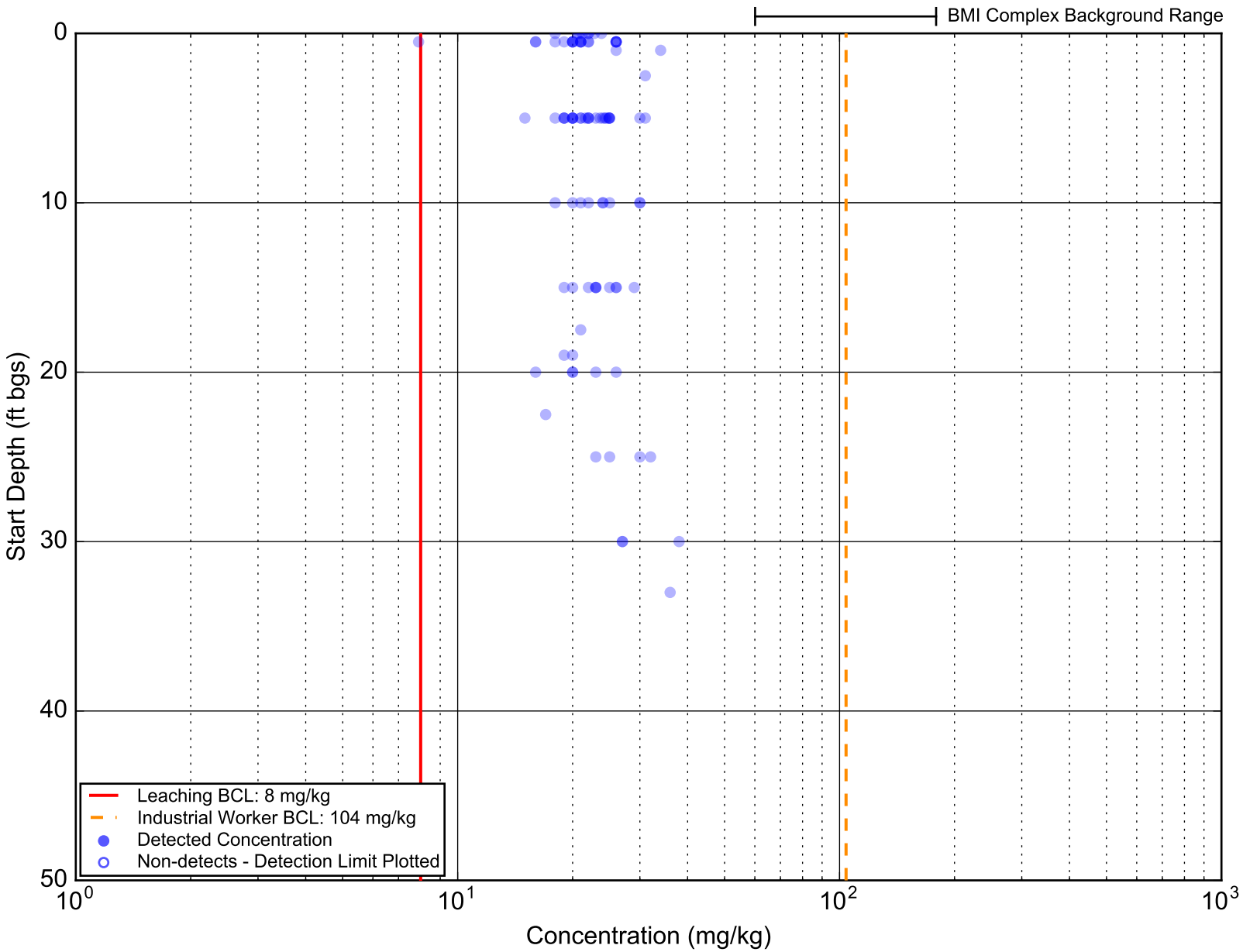


RAMBOLL ENVIRON

Tungsten Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-33

Drafter: KGL/JH Date: 03/10/2016 Contract Number: 2138800C Approved: Revised:

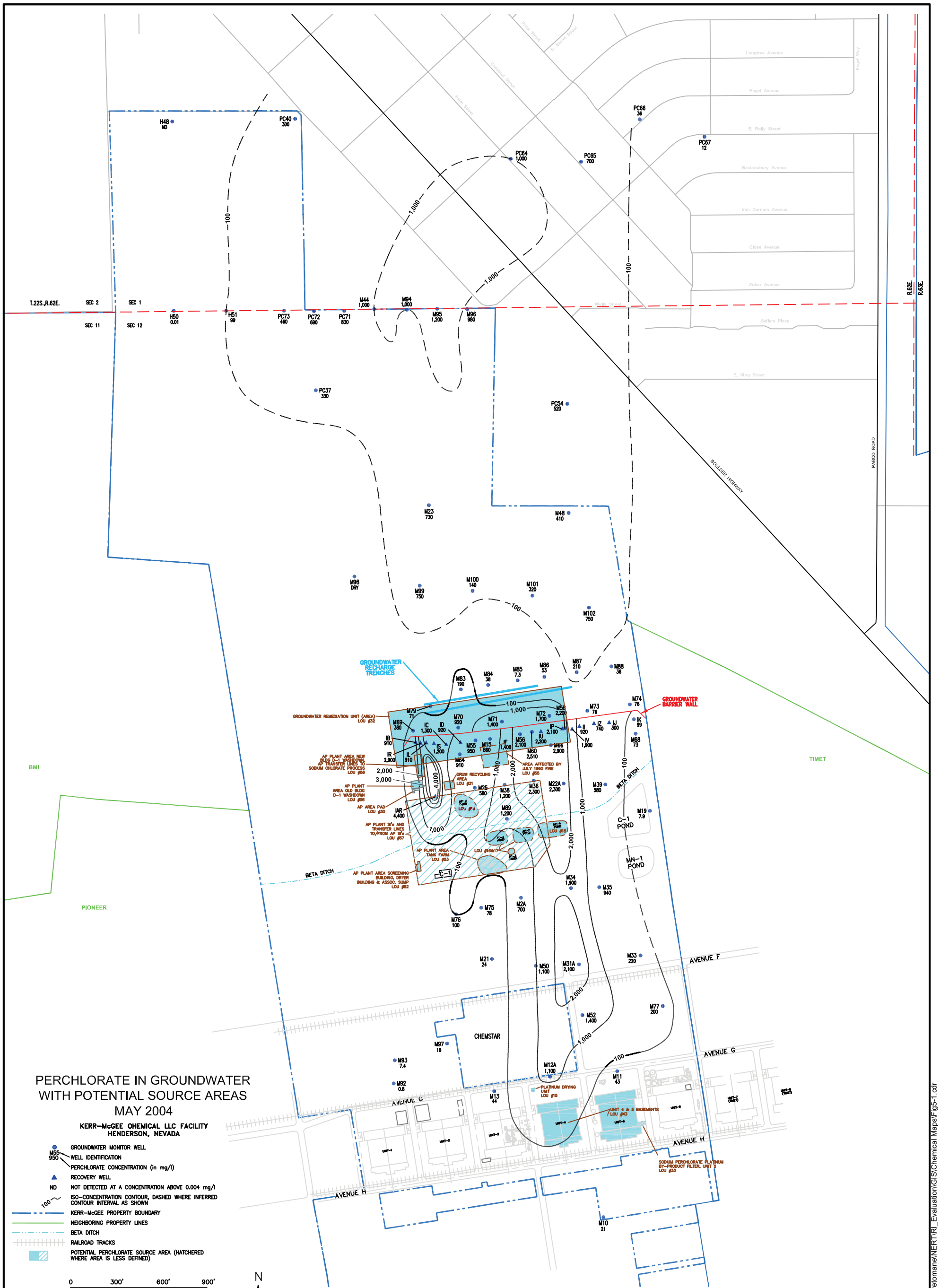


RAMBOLL ENVIRON

Zirconium Soil Concentrations vs. Depth
RI Evaluation
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
4-34

Drafter: KGL/JH | Date: 03/10/2016 | Contract Number: 2138800C | Approved: | Revised:



PERCHLORATE IN GROUNDWATER
WITH POTENTIAL SOURCE AREAS
MAY 2004

KERR-McGEE CHEMICAL LLC FACILITY
HENDERSON, NEVADA

- GROUNDWATER MONITOR WELL
- M55 / 950 — WELL IDENTIFICATION / PERCHLORATE CONCENTRATION (in mg/l)
- RECOVERY WELL
- ND — NOT DETECTED AT A CONCENTRATION ABOVE 0.004 mg/l
- 100 — ISO-CONCENTRATION CONTOUR, DASHED WHERE INFERRED
  CONTOUR INTERVAL AS SHOWN
- KERR-McGEE PROPERTY BOUNDARY
- NEIGHBORING PROPERTY LINES
- BETA DITCH
- RAILROAD TRACKS
- POTENTIAL PERCHLORATE SOURCE AREA (HATCHERED WHERE AREA IS LESS DEFINED)

0 300' 600' 900'

1 INCH = 300 FEET

N

JANUARY 2005

SOURCE: ENSR International, Conceptual Site Model, Kerr-McGee Facility, Henderson, Nevada, February 2005.

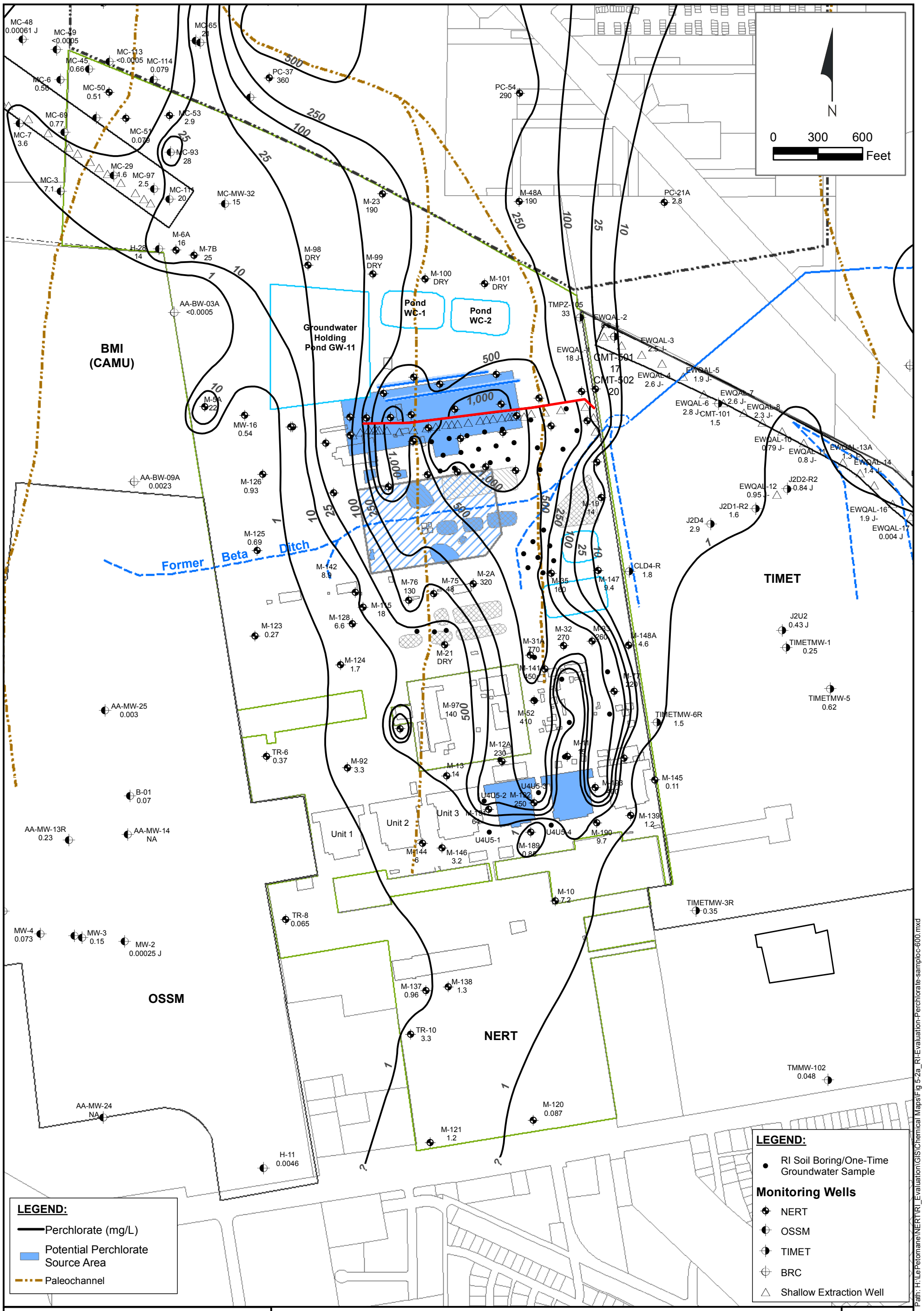
Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig5-1.cdr

RAMBOLL ENVIRON

Perchlorate in Groundwater with Potential Source Areas, May 2004
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-1**

Drafter: RS | Date: 3/13/2016 | Contract Number: 21-38800C | Approved by: | Revised:



RAMBOLL ENVIRON

Perchlorate Isoconcentration Map - NERT Site Area, January-June 2015
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-2a**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-2a_RI-Evaluation-Perchlorate-samploc-600.mxd

N

0 150 300

Feet

NERT Barrier Wall and Interceptor Well Field

Former Beta Ditch

Unit 2

Unit 3

Unit 4

Unit 5

Unit 6

LEGEND:

- RI Soil Boring/One-time Groundwater Sample
- NERT Shallow Monitoring Well
- TIMET Shallow Monitoring Well
- Shallow Extraction Wells
- Perchlorate (mg/L)
- 600 Perchlorate Concentration (mg/L)
- (a) Result appears anomalous
- Paleochannel

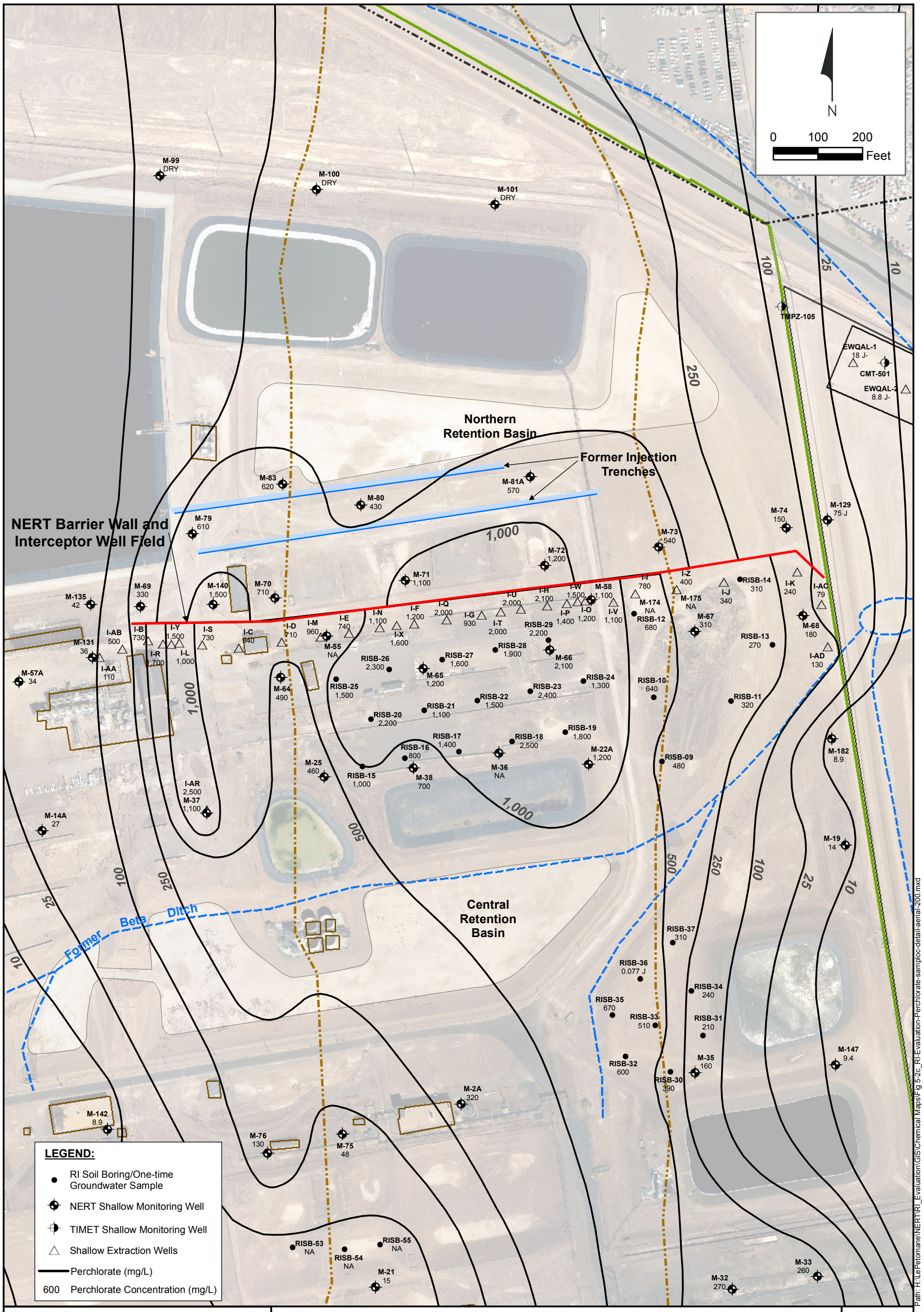
RAMBOLL ENVIRON

Perchlorate Isoconcentration Map - NERT Site Detail, January-June 2015
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-2b**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-2b_RI-Evaluation-Perchlorate-samploc-detail-aerial-300.mxd



RAMBOLL ENVIRON

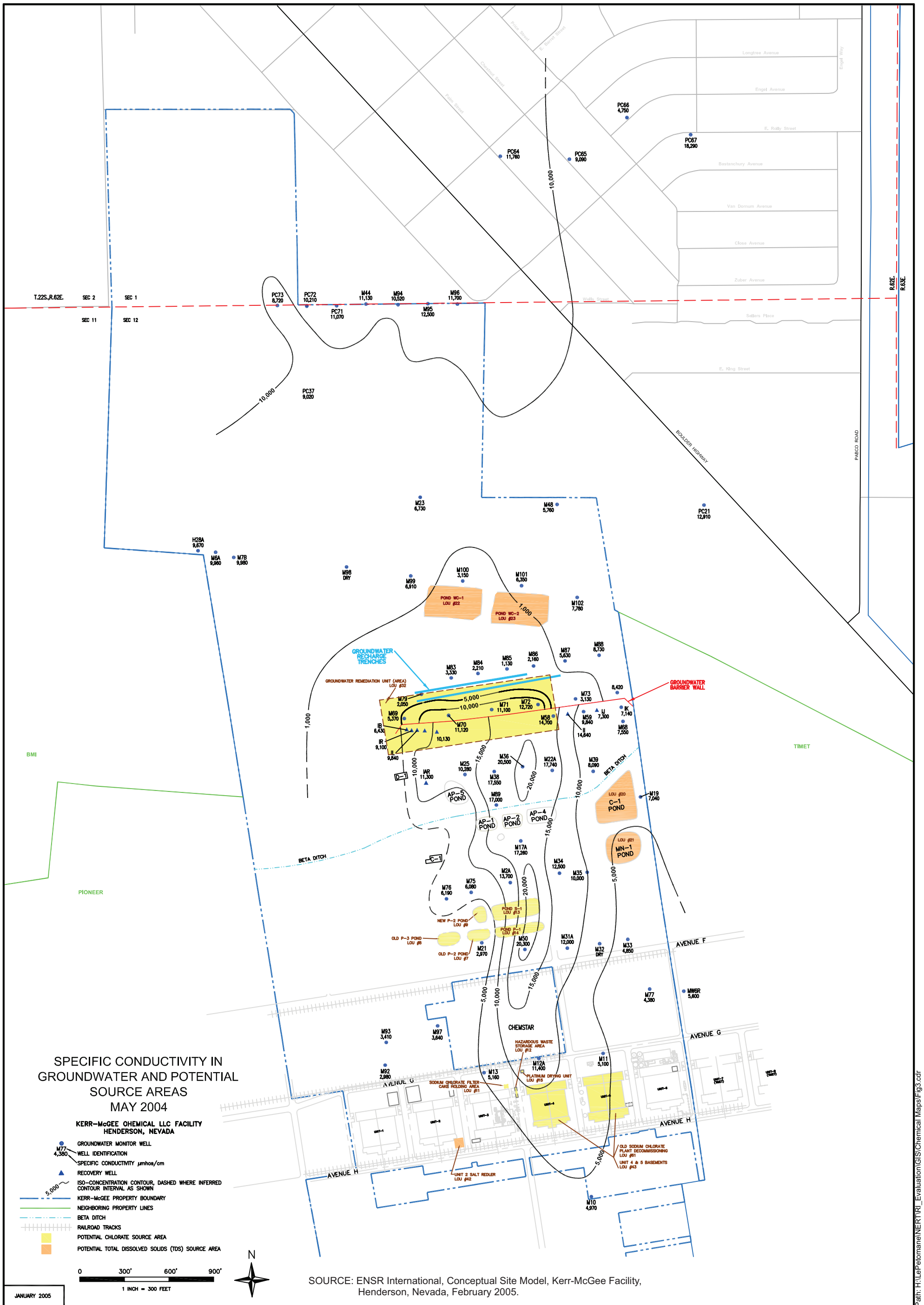
Perchlorate Isoconcentration Map - NERT Site Detail, IWF Area, January-June 2015

Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5-2c**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-2c_RI-Evaluation-Perchlorate-samploc-detail-aerial-200.mxd



SOURCE: ENSR International, Conceptual Site Model, Kerr-McGee Facility, Henderson, Nevada, February 2005.

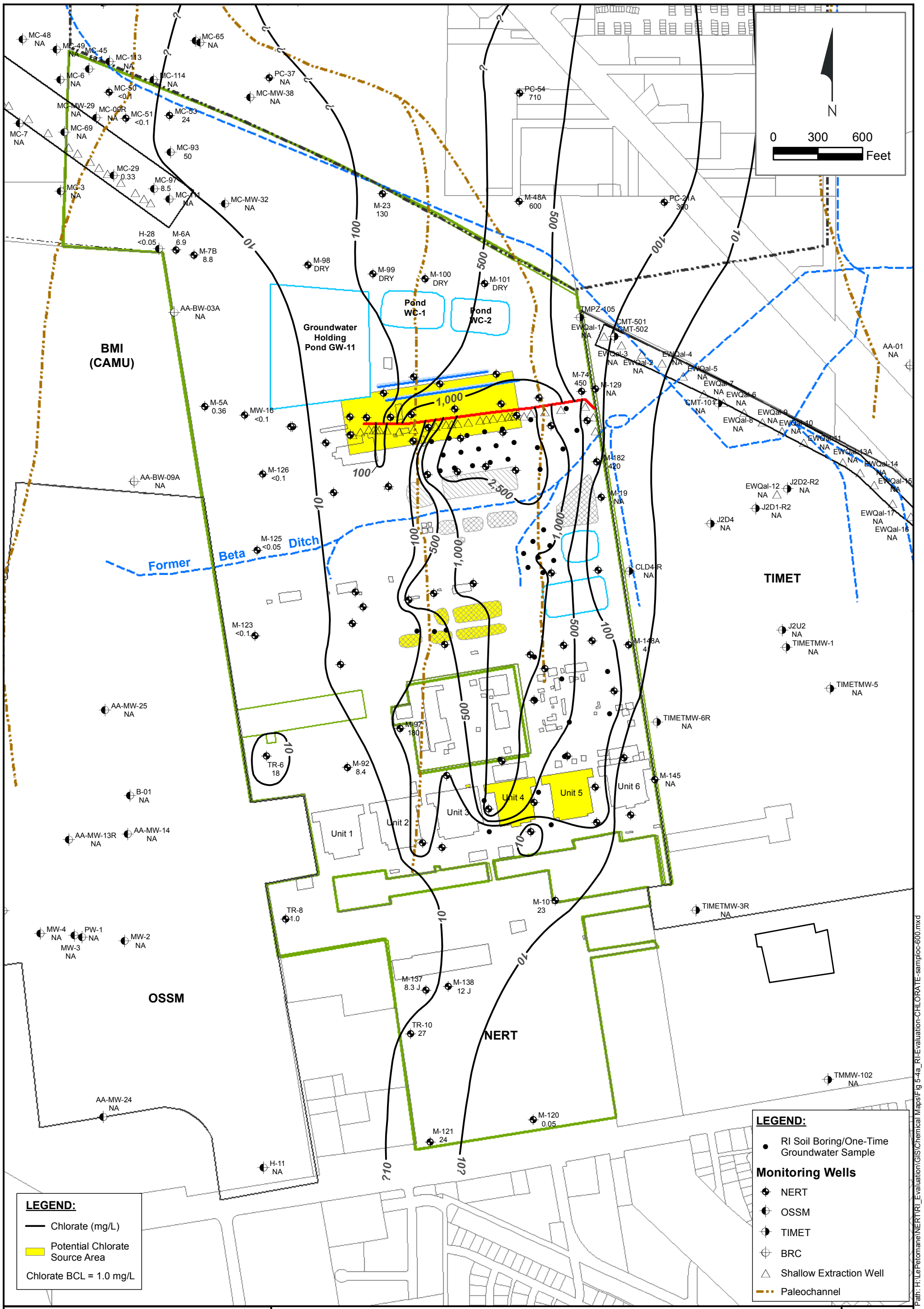
Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig3.cdr

RAMBOLL ENVIRON

Specific Conductivity in Groundwater and Potential Source Areas, May 2004
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-3**

Drafter: RS | Date: 3/13/2016 | Contract Number: 21-38800C | Approved by: | Revised:



RAMBOLL ENVIRON

Chlorate Isoconcentration Map - NERT Site Area, January-June 2015
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-4a**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

N

0 150 300

Feet

NERT Barrier Wall and Interceptor Well Field

Beta Ditch

Former

M-98 DRY
M-99 DRY
M-100 DRY
M-101 DRY
TMPZ-105 NA
CMT-501
CMT-502 NA
EWQal-1 NA
EWQal-2 NA
EWQal-3 NA
EWQal-4 NA
EWQal-5 NA
M-129 NA
M-74 450
M-68 470
M-67 1,300
M-182 420
M-19 NA
M-147 54
CLD4-R NA
M-148A 41
M-139 4.3
M-145 NA
M-33 380
M-32 810
M-31A 1,400
M-83 320
M-81A 780
M-80 600
M-79 24
M-72 3,600
M-73 2,900
M-71 1,500
M-70 1,300
M-140 330
M-135 21
M-69 16
MW-16 <0.1
M-55 NA
M-65 4,800
M-66 4,400
M-58 3,000
M-57A 17
M-131 NA
M-64 46
M-25 1,900
M-38 4,400
M-36 NA
M-22A 3,600
M-37 12
M-14A 15
M-126 <0.1
M-125 <0.05
M-142 15 J
M-115 14 J
M-128 15
M-123 <0.1
M-124 18
M-2A 3,200
M-76 530 J
M-75 610
M-97 180
M-92 8.4
TR-6 18
M-13 100 J
M-12A 2,000
M-11 190
M-35 920
M-193 170
M-192 360
M-191 1,000
M-190 140
M-189 3.8
M-144 540
M-146 23
M-21 DRY
M-52 720
M-141 120
M-77 150
M-63 170
M-61 710
M-59 720
M-60 170
M-62 500
TIMETMW-6R NA
RISB-14 850
RISB-13 670
RISB-12 2,500
RISB-29 4,200
RISB-27 4,300
RISB-28 4,200
RISB-26 3,100
RISB-25 2,100
RISB-24 3,600
RISB-23 4,400
RISB-20 2,700
RISB-21 4,400
RISB-22 4,500
RISB-18 4,800
RISB-19 4,800
RISB-15 2,600
RISB-16 4,000
RISB-17 4,300
RISB-10 2,700
RISB-11 1,100
RISB-09 3,000
RISB-37 1,800
RISB-36 2,400
RISB-34 1,300
RISB-35 1,900
RISB-33 660
RISB-31 640
RISB-32 1,700
RISB-30 1,900
RISB-58 1,200
RISB-57 NA
RISB-56 NA
RISB-53 NA
RISB-54 NA
RISB-55 NA
I-AB 15
I-AA 62
I-AR NA
I-B NA
I-R NA
I-Y 360
I-L NA
I-S NA
I-C NA
I-M NA
I-E NA
I-D NA
I-N NA
I-X 2,600
I-F NA
I-Q NA
I-G NA
I-T NA
I-U NA
I-H NA
I-P NA
I-O NA
I-V NA
I-W 4,100
I-J NA
I-K NA
I-Z NA
I-AC 480
I-AD 400

100
500
1,000
2,500
10

Unit 2
Unit 3
Unit 4
Unit 5
Unit 6

Legend:

- RI Soil Boring/One-time Groundwater Sample
- NERT Shallow Monitoring Well
- TIMET Shallow Monitoring Well
- △ Shallow Extraction Wells
- 600 Chlorate Concentration (mg/L)

Chlorate BCL = 1.0 mg/L

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-4b_RI-Evaluation-Chlorate-samploc-detail-aerial-300.mxd

RAMBOLL ENVIRON

Chlorate Isoconcentration Map - NERT Site Detail, January-June 2015
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure
5-4b

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

N

0 100 200 Feet

M-99 DRY
M-100 DRY
M-101 DRY
TMPZ-105 NA
CM
CM
EWQal-1 NA
100
500
Northern Retention Basin
Former Injection Trenches
M-83 320
M-81A 780
M-80 600
M-129 NA
M-74 450
NERT Barrier Wall and Interceptor Well Field
M-79 24
1000
M-72 3,600
M-73 2,900
M-71 1,500
I-K NA
M-135 21
M-69 16
M-140 330
M-70 1,300
I-J NA
RISB-14 850
M-68 470
I-AC 480
I-X 2,600
I-F NA
I-Q NA
I-G NA
I-T NA
I-U NA
I-H NA
I-P NA
I-O NA
I-V NA
I-I NA
I-W 4,100
M-58 3,000
RISB-12 2,500
I-Z NA
M-55 NA
I-D NA
I-AB 15
I-B NA
I-S NA
I-C NA
I-M NA
I-E NA
I-N NA
RISB-29 4,200
M-66 4,400
M-67 1,300
RISB-13 670
I-AD 400
M-131 NA
I-AA 62
I-Y 360
I-L NA
I-R NA
M-57A 17
M-64 46
M-65 4,800
RISB-27 4,300
RISB-28 4,200
RISB-25 2,100
RISB-26 3,100
RISB-24 3,600
RISB-23 4,400
RISB-21 4,400
RISB-22 4,500
RISB-20 2,700
RISB-10 2,700
RISB-11 1,100
M-182 420
RISB-19 4,800
RISB-18 4,800
RISB-16 4,000
RISB-15 2,600
RISB-17 4,300
M-25 1,900
M-38 4,400
M-36 NA
M-22A 3,600
RISB-09 3,000
2,500
500
100
M-19 NA
I-AR NA
M-37 12
M-14A 15
1,000
Former Beta Ditch
Central Retention Basin
RISB-37 1,800
RISB-36 2,400
RISB-34 1,300
RISB-35 1,900
RISB-33 660
RISB-31 640
RISB-32 1,700
RISB-30 1,900
M-35 920
M-147 54
10
M-2A 3,200
M-142 15 J
M-75 610
M-76 530 J
RISB-53 NA
RISB-54 NA
RISB-55 NA
M-21 DRY
M-32 810
M-33 380

Legend:

- RI Soil Boring/One-time Groundwater Sample
- NERT Shallow Monitoring Well
- TIMET Shallow Monitoring Well
- △ Shallow Extraction Wells
- 600 Chlorate Concentration (mg/L)
- Chlorate BCL = 1.0 mg/L

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-4c_RI-Evaluation-Chlorate-samploc-detail-aerial-200.mxd

RAMBOLL ENVIRON

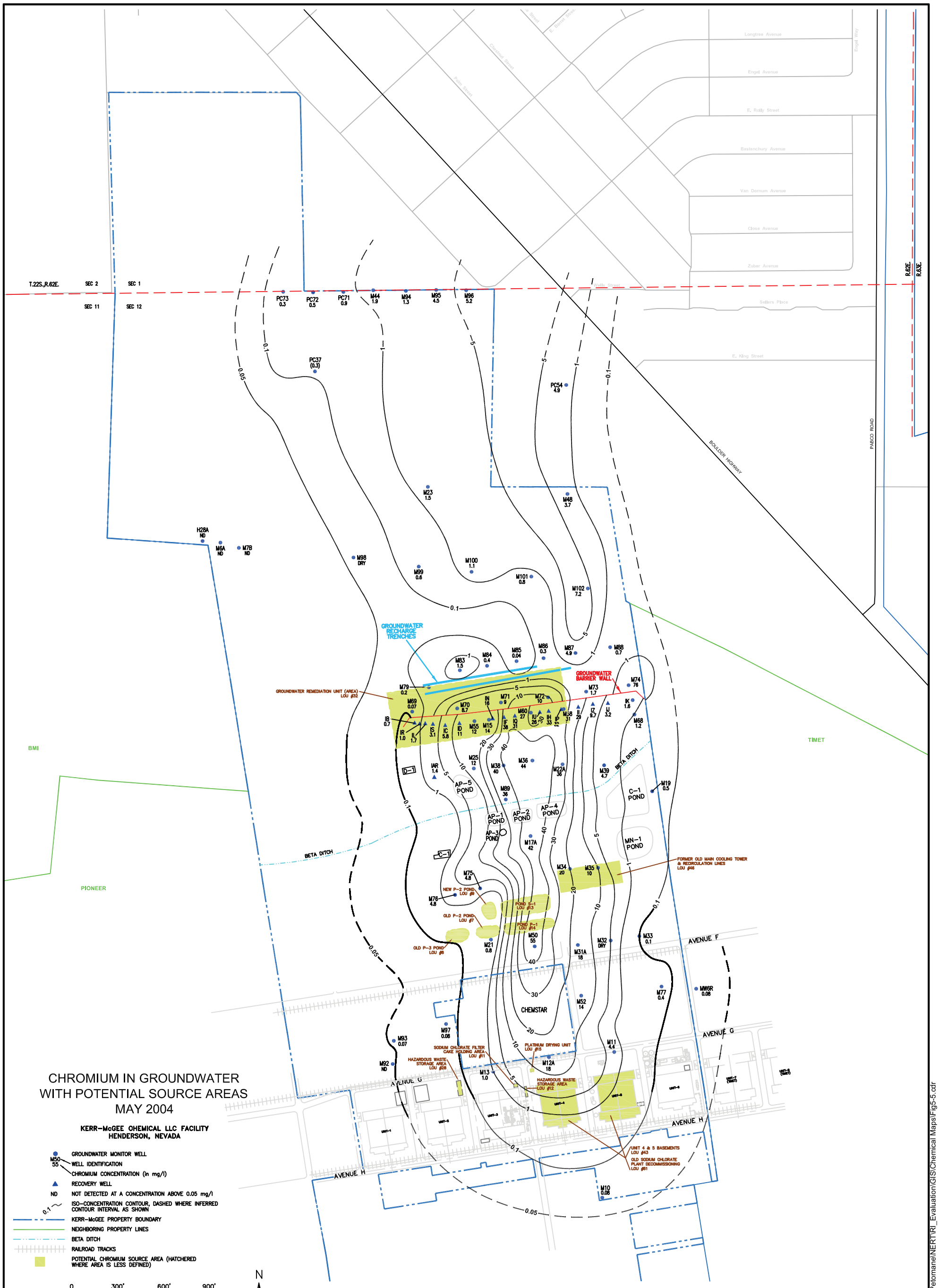
Chlorate Isoconcentration Map - NERT Site Detail, IWF Area, January-June 2015
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-4c**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

CHROMIUM IN GROUNDWATER WITH POTENTIAL SOURCE AREAS MAY 2004

KERR-McGEE CHEMICAL LLC FACILITY
HENDERSON, NEVADA



GROUNDWATER MONITOR WELL
M50 / 55 — WELL IDENTIFICATION / CHROMIUM CONCENTRATION (in mg/l)
RECOVERY WELL
ND — NOT DETECTED AT A CONCENTRATION ABOVE 0.05 mg/l
0.1 — ISO-CONCENTRATION CONTOUR, DASHED WHERE INFERRED CONTOUR INTERVAL AS SHOWN
KERR-McGEE PROPERTY BOUNDARY
NEIGHBORING PROPERTY LINES
BETA DITCH
RAILROAD TRACKS
POTENTIAL CHROMIUM SOURCE AREA (HATCHERED WHERE AREA IS LESS DEFINED)

0 300' 600' 900'
1 INCH = 300 FEET

N

JANUARY 2005

SOURCE: ENSR International, Conceptual Site Model, Kerr-McGee Facility, Henderson, Nevada, February 2005.

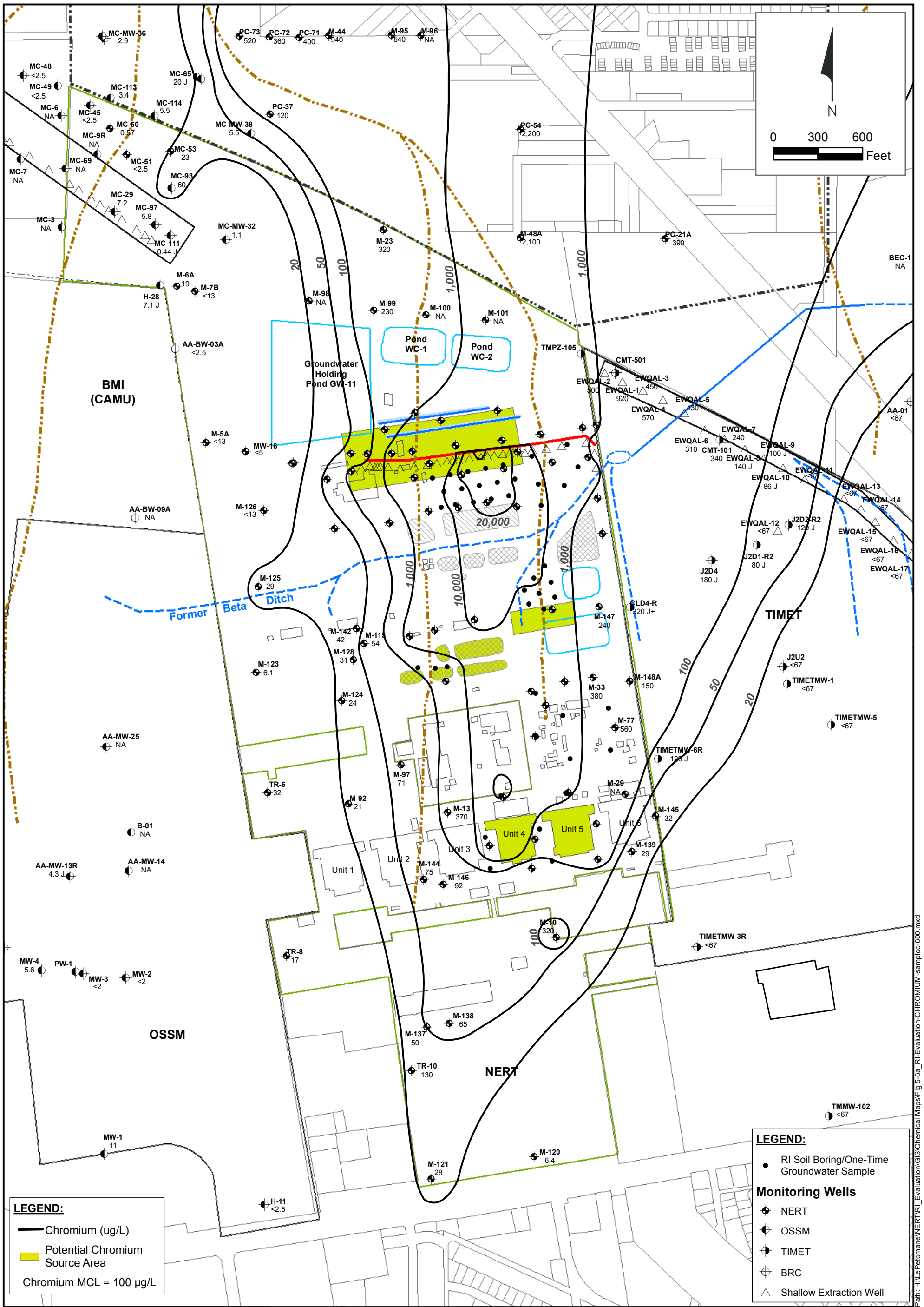
Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig5-5.cdr

RAMBOLL ENVIRON

Chromium in Groundwater with Potential Source Areas, May 2004
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-5**

Drafter: RS | Date: 3/13/2016 | Contract Number: 21-38800C | Approved by: | Revised:



RAMBOLL ENVIRON

Chromium Isoconcentration Map - NERT Site Area, January-June 2015
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure
5-6a

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-6a_RI-Evaluation-CHROMIUM-samploc-600.mxd

N

0 150 300

Feet

NERT Barrier Wall and Interceptor Well Field

Former Beta Ditch

Unit 2

Unit 3

Unit 4

Unit 5

Unit 6

Legend:

- RI Soil Boring/One-time Groundwater Sample
- NERT Shallow Monitoring Well
- TIMET Shallow Monitoring Well
- △ Shallow Extraction Wells
- 600 Chromium Concentration (ug/L)
- Chromium MCL = 100 ug/L

RAMBOLL ENVIRON

Chromium Isoconcentration Map - NERT Site Detail, January-June 2015
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-6b**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-6b_RI-Evaluation-ChROMIUM-samploc-detail-aerial-300.mxd

N

0 100 200

Feet

Northern Retention Basin

Former Injection Trenches

NERT Barrier Wall and Interceptor Well Field

Central Retention Basin

Former Beta Ditch

M-99 1230
M-100 NA
M-101 NA
TMPZ-105
CMT-501
EWQAL-1 920
M-83 1,100
M-81A 1,800
M-80 1,400
M-79 200
M-129 1,100
M-74 1,400
M-73 9,400
M-72 8,800
M-71 4,700
M-135 54
M-69 59
M-140 2,100
M-70 3,900
I-O 16,000
I-I 10,000
I-Z 7,400
I-J 3,000
RISB-14 2,900
I-K 1,800
I-AC 590
M-68 1,400
I-G 13,000
I-T 25,000
I-U 23,000
I-H 21,000
I-P 19,000
I-W 16,000
I-V 10,000
RISB-12 13,000
M-58 15,000
M-67 5,100
RISB-13 2,000
I-AD 1,100
I-B 170
I-Y 900
I-M 7,800
I-E 9,100
I-X 12,000
I-Q 23,000
I-F 18,000
I-N 9,400
RISB-29 20,000
M-55 NA
I-D 5,800
M-131 89
I-AB
I-R 500
I-L 830
M-166 <13 NA
I-S 1,700
I-C 3,100
I-AA 430
M-57A 64
M-64 4,100
RISB-25 8,500
RISB-28 23,000
M-66 23,000
RISB-27 20,000
M-65 22,000
RISB-26 12,000
RISB-24 16,000
RISB-23 21,000
RISB-22 21,000
RISB-21 16,000
RISB-20 10,000
RISB-11 3,700
RISB-10 11,000
RISB-18 21,000
RISB-19 22,000
RISB-16 18,000
RISB-17 20,000
M-36 NA
M-22A 16,000
M-182 1,400
M-25 6,900
RISB-15 6,200
M-38 17,000
RISB-09 11,000
I-AR 460
M-37 35
M-14A 47
M-19 350
RISB-37 9,300
RISB-36 13,000
RISB-34 6,200
RISB-35 6,400
RISB-33 6,100
RISB-31 1,200
RISB-32 7,900
RISB-30 9,600
M-35 5,900
M-147 240
M-2A 11,000
M-142 42
M-75 1,900
M-76 2,100
RISB-53 NA
RISB-54 NA
RISB-55 NA
M-21 DRY
M-32 2,400
M-33 380

50
100
1,000
30,000
20,000
10,000
10,000
1,000
100
250

Legend:

- RI Soil Boring/One-time Groundwater Sample
- NERT Shallow Monitoring Well
- TIMET Shallow Monitoring Well
- Shallow Extraction Wells
- Chromium (µg/L)

Chromium MCL = 100 µg/L

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-6c_RI-Evaluation-Chromium-samploc-detail-aerial-200.mxd

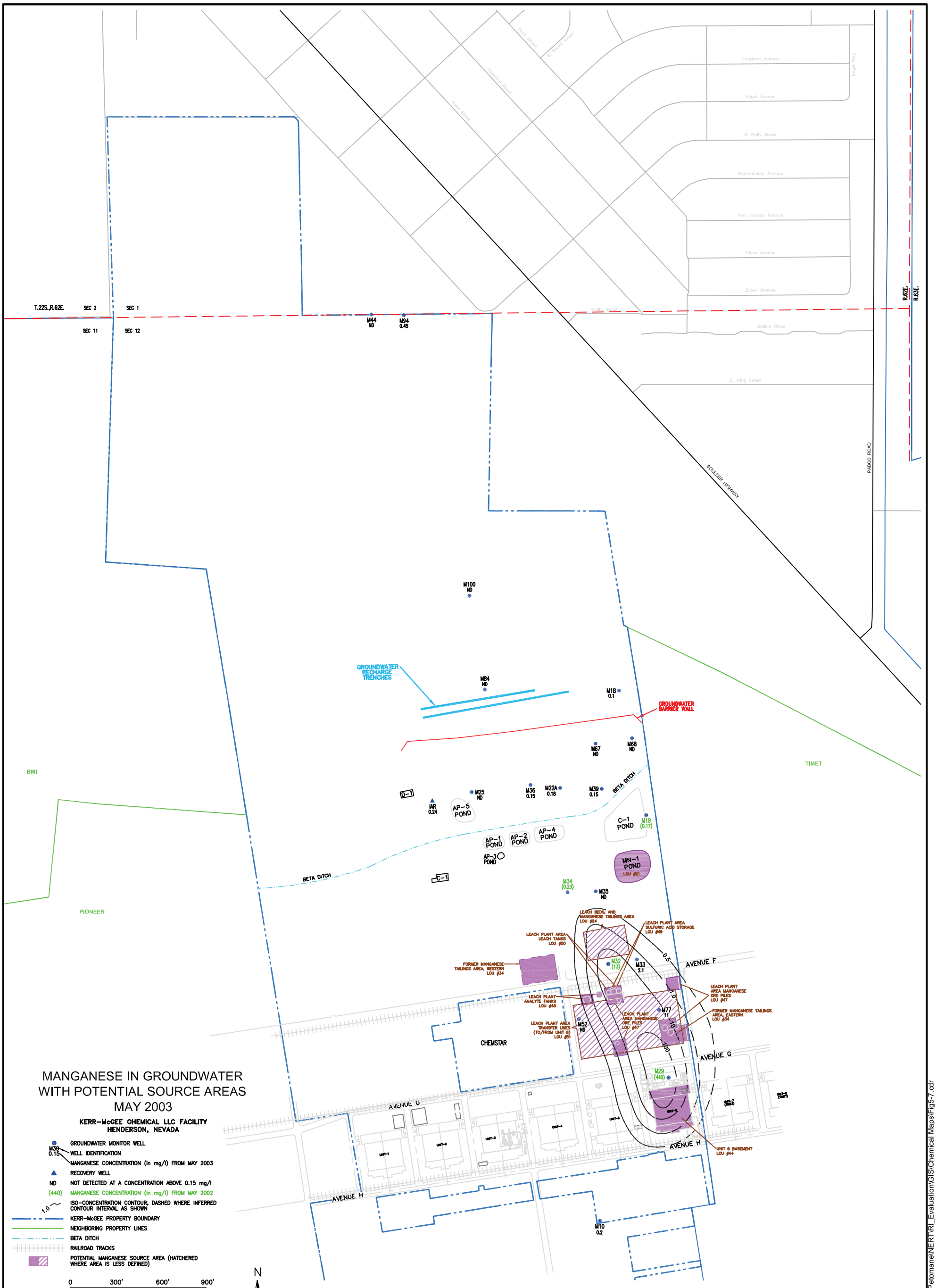
RAMBOLL ENVIRON

Chromium Isoconcentration Map - NERT Site Detail, IWF Area, January-June 2015

Nevada Environmental Response Trust Site; Henderson, Nevada

Figure **5-6c**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:



MANGANESE IN GROUNDWATER WITH POTENTIAL SOURCE AREAS MAY 2003

KERR-McGEE CHEMICAL LLC FACILITY
HENDERSON, NEVADA

- GROUNDWATER MONITOR WELL
- M39 / 0.15 — WELL IDENTIFICATION / MANGANESE CONCENTRATION (in mg/l) FROM MAY 2003
- RECOVERY WELL
- ND — NOT DETECTED AT A CONCENTRATION ABOVE 0.15 mg/l
- (440) — MANGANESE CONCENTRATION (in mg/l) FROM MAY 2002
- 1.0 — ISO-CONCENTRATION CONTOUR, DASHED WHERE INFERRED / CONTOUR INTERVAL AS SHOWN
- KERR-McGEE PROPERTY BOUNDARY
- NEIGHBORING PROPERTY LINES
- BETA DITCH
- RAILROAD TRACKS
- POTENTIAL MANGANESE SOURCE AREA (HATCHERED WHERE AREA IS LESS DEFINED)

0 300' 600' 900'

1 INCH = 300 FEET

N

JANUARY 2005

SOURCE: ENSR International, Conceptual Site Model, Kerr-McGee Facility, Henderson, Nevada, February 2005.

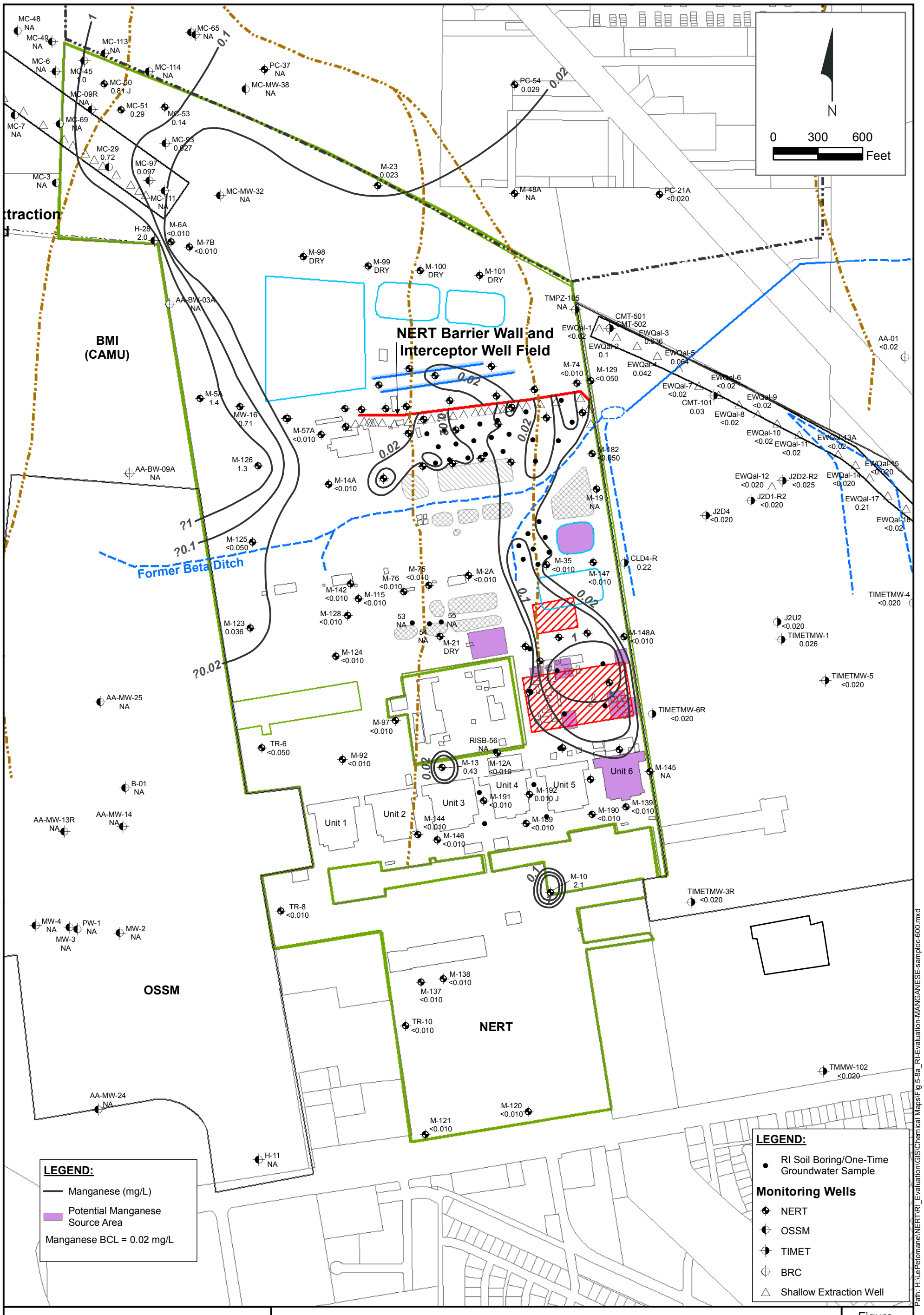
Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig5-7.cdr

RAMBOLL ENVIRON

Manganese in Groundwater with Potential Source Areas, May 2003
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-7**

Drafter: RS | Date: 3/13/2016 | Contract Number: 21-38800C | Approved by: | Revised:



RAMBOLL ENVIRON

Manganese Isoconcentration Map - NERT Site Area, January-June 2015
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-8a**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-8a_RI-Evaluation-MANGANESE-samploc-600.mxd

N

0 150 300 Feet

Former Injection Trenches

NERT Barrier Wall and Interceptor Well Field

0.02 0.1 1

Unit 1 Unit 2 Unit 3 Unit 4 Unit 5 Unit 6

LEGEND:

- RI Soil Boring/One-Time Groundwater Sample

Monitoring Wells

- NERT
- OSSM
- TIMET
- BRC
- Shallow Extraction Well

3.2 Manganese (mg/L)

Manganese BCL = 0.02 mg/L

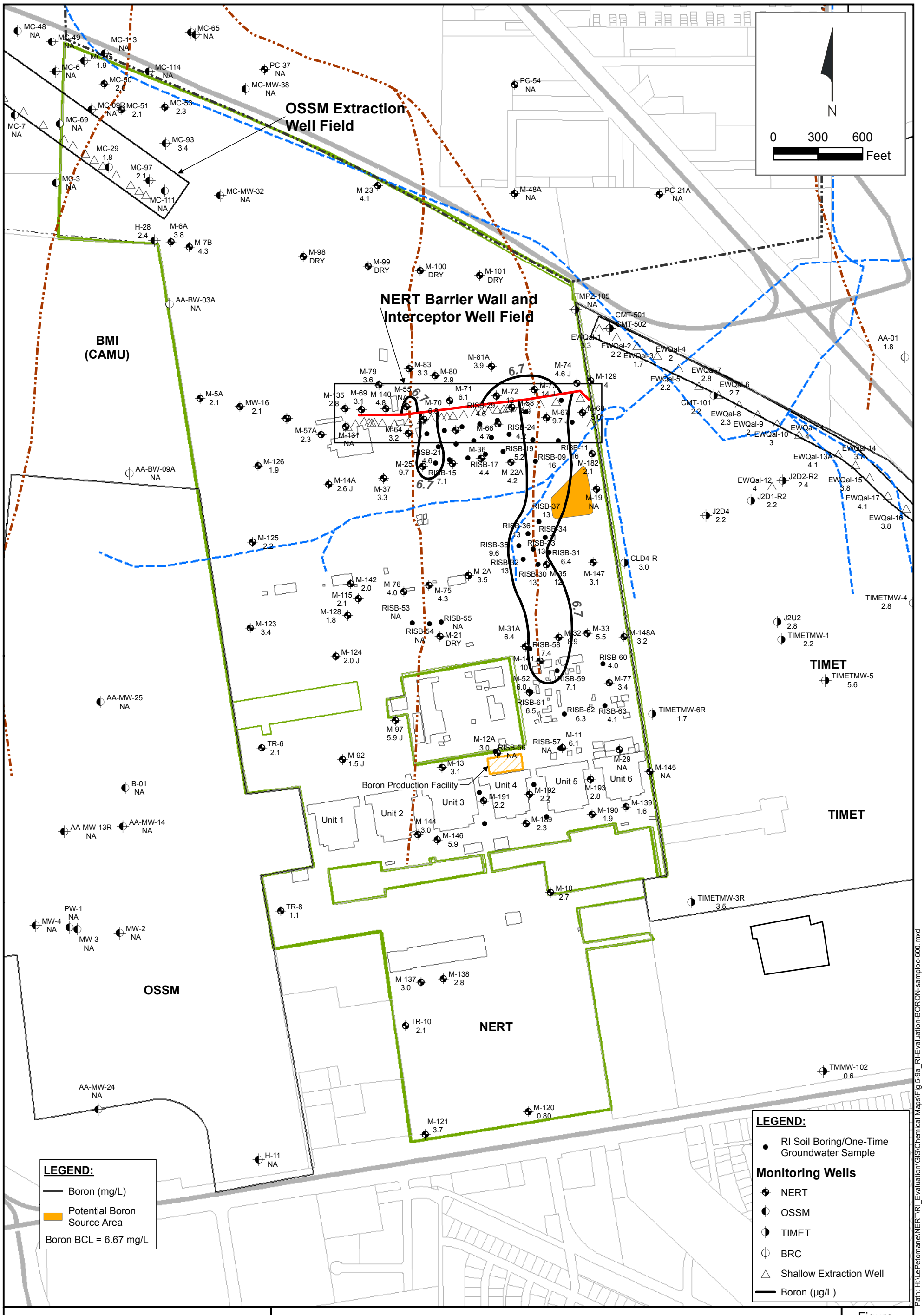
RAMBOLL ENVIRON

Manganese Isoconcentration Map - NERT Site Detail, January-June 2015
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-8b**

Drafter: RS Date: 5/2/2016 Contract Number: 21-38800C Approved by: Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-8b_RI-Evaluation-Manganese-samploc-300-2.mxd



RAMBOLL ENVIRON

Boron Isoconcentration Map - NERT Site Area, January-June 2015
Nevada Environmental Response Trust (NERT)
Henderson, Nevada

Figure
5-9a

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

N

0 150 300

Feet

Former Injection Trenches

NERT Barrier Wall and Interceptor Well Field

6.7

Boron Production Facility

Unit 1

Unit 2

Unit 3

Unit 4

Unit 5

Unit 6

LEGEND:

- RI Soil Boring/One-Time Groundwater Sample

Monitoring Wells

- NERT
- OSSM
- TIMET
- BRC
- Shallow Extraction Well
- Potential Boron Source Area
- 3.2 Boron (mg/L)
- Boron BCL = 6.67 mg/L

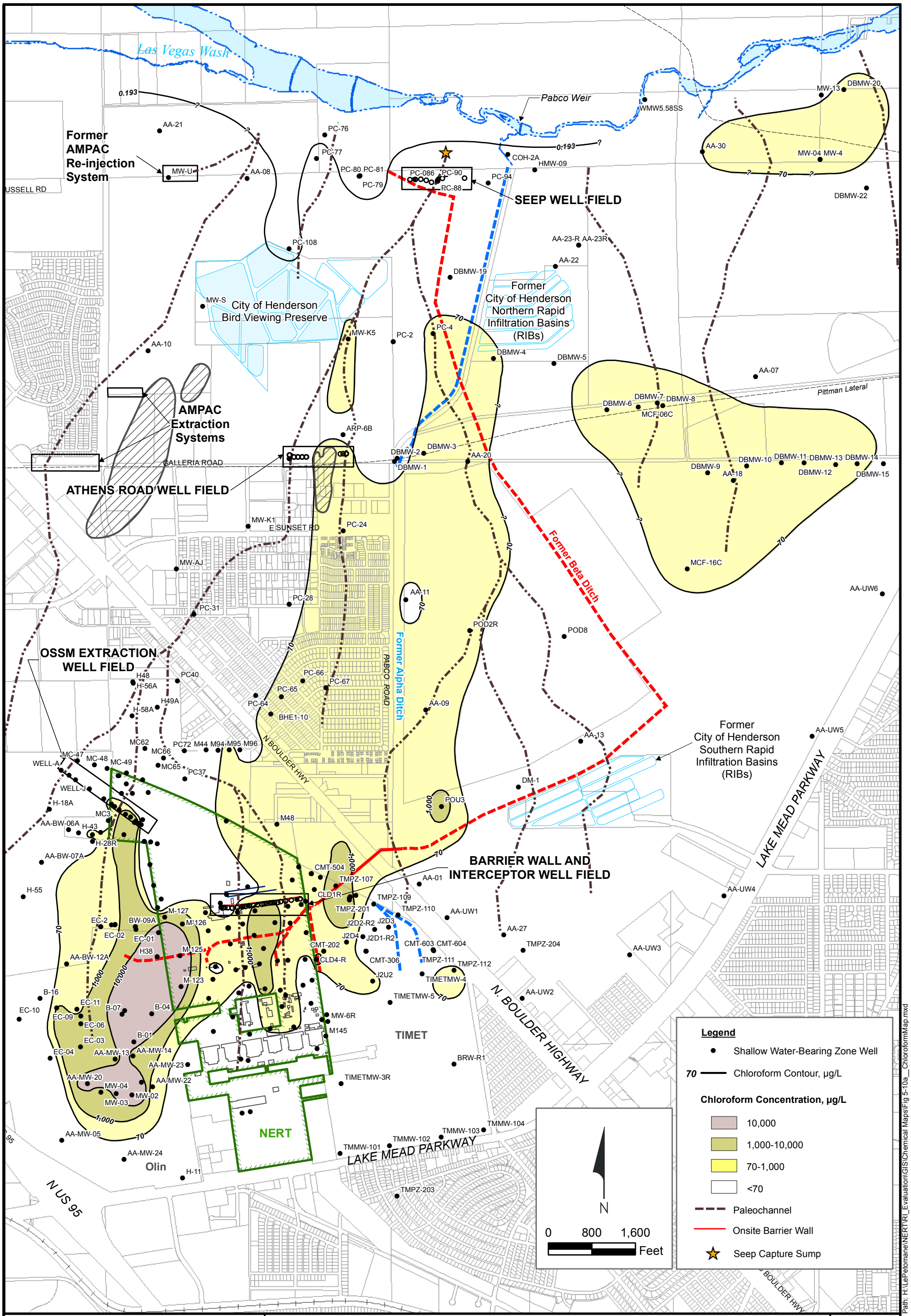
RAMBOLL ENVIRON

Boron Isoconcentration Map - NERT Site Detail, January-June 2015
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-9b**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-9b_RI-Evaluation-Boron-samploc-300.mxd



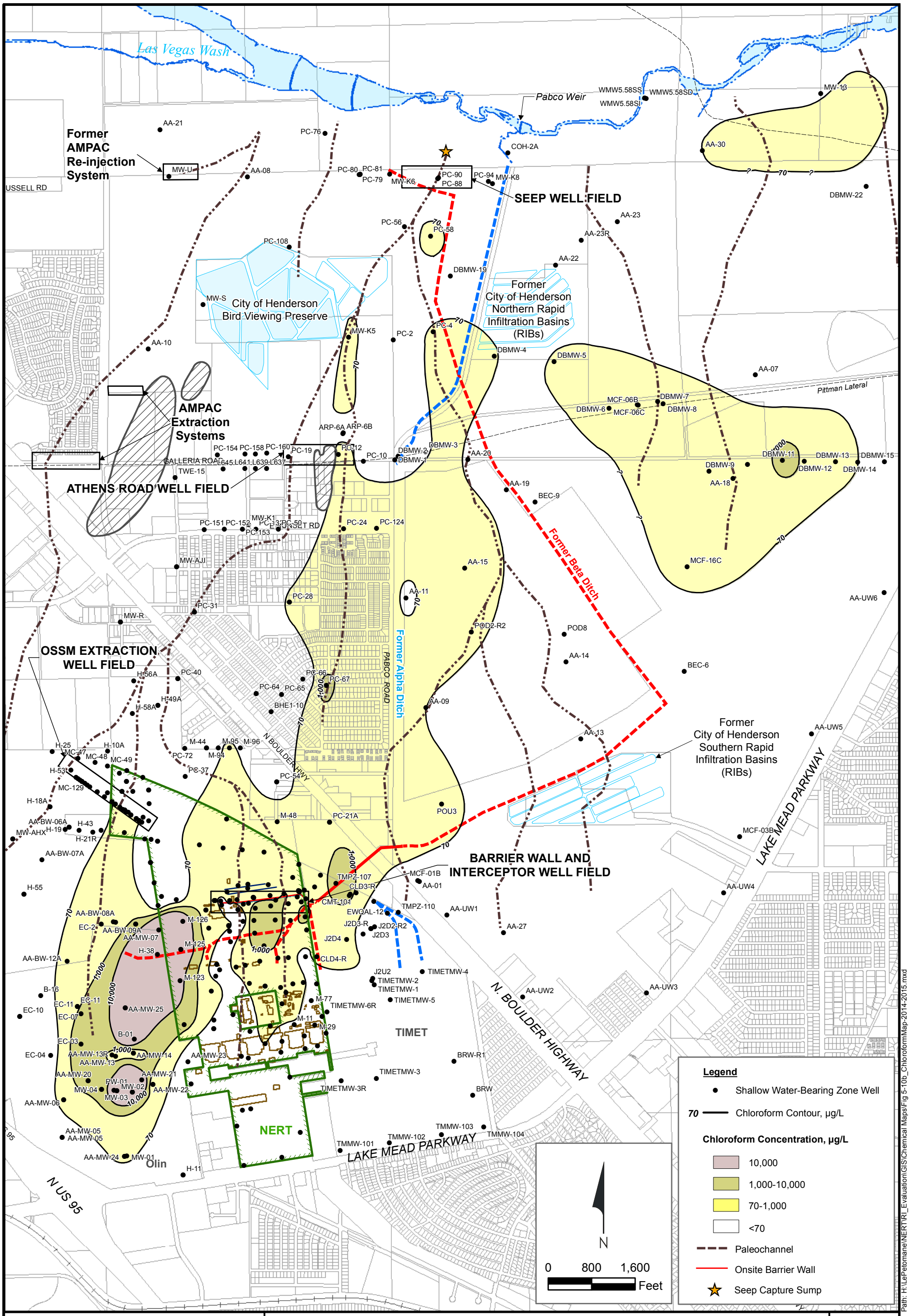
RAMBOLL ENVIRON

Chloroform in Shallow Groundwater, 2008 - 2009
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure
5-10a

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-10a_ChloroformMap.mxd



RAMBOLL ENVIRON

Chloroform in Shallow Groundwater, 2013 - 2015
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure
5-10b

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

N

1:9,600

1 inch = 800 feet

0 400 800 Feet

OSSM EXTRACTION WELL FIELD

NERT BARRIER WALL AND INTERCEPTOR WELL FIELD

TIMET BARRIER WALL AND INTERCEPTOR WELL FIELD

NERT BARRIER WALL AND INTERCEPTOR WELL FIELD

APPROXIMATE EXTENT OF DNAPL IN DEEPER GROUNDWATER

Former Alpha Ditch

Former Beta Ditch

Former Beta Ditch

Lhoist

NERT

PC-66 PC-67 PC-64 PC-65 BHE1-10 PC-54 PC-21A

MC45 MC50 TR-11 MC51 MC53 MC93 MC29 MC97 M-23

H-28A M-6A M-7B M-98 M-99 M-151 M-100 M-101 M-155

M-71 M-162 M-163 M-164 M-74 M-132 M-133 M-165 M-83 M-80 M-81A M-161D M-79 M-162D M-134 M-135 M-136 M-161 M-140 M-70 M-72 M-73 M-68 M-69 M-65 M-66 M-67 M-64 M-57A

TR-2 M-5A TR-1 MW-16

M-126 M-14A M-37 M-25 M-38 M-22A M-36 M-150 M-154 M-181 M-182 M-19

TR-4 TR-3 M-125 M-142 M-75 M-2A M-76 M-115 M-128 M-123 M-124 M-21 M-31A M-149 M-153 M-32 M-33 M-148A M-186 M-186D M-141 M-77 M-52 M-35 M-147

TR-6 TR-5 M-93 M-97 M-92 M-13 M-12A M-11 M-29 M-193 M-191 M-192 M-190 M-139 M-189 M-144 M-146 M-10

TR-7 TR-8

M-138 M-137 TR-9 TR-10 M-103 M-120 M-117 M-121 M-118

1,000 10,000 70

Legend

- NERT Property Boundary
- Central Retention
- Northeast Retention Basin and Drainage Channel
- Site Features (Buildings and Tanks)

2008-2009 Shallow Groundwater Concentrations are in µg/L.

Trust Monitoring Program Wells Sampled for Chloroform, January - May 2015

- Shallow WBZ
- Middle WBZ

Ponds:

- Active
- Inactive

RAMBOLL ENVIRON

Chloroform in Groundwater, NERT Site Area
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-10c**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-10c_Chloroform in GW.mxd

N

0 400 800

Feet

Legend

- Middle Water-Bearing Zone Monitoring Well
- Deeper Middle Water-Bearing Zone Monitoring Well
- Deeper Shallow Water-Bearing Zone Monitoring Well
- Estimated Extent of DNAPL (Montrose 2014)
- NERT Barrier Wall

Notes

ft bgs = feet below ground surface
ND = not detected
ns = not sampled
Perchlorate and Chromium concentrations are in mg/L (parts per million)
Chloroform concentrations are in µg/L (parts per billion)
Results above groundwater BCLs are shown in bold

1. Wells MC-MW-17, MC-MW-18, MC-MW-39, and MC-MW-42 are owned and sampled by Montrose.
2. Well MC-MW-17 is screened at the base of the Shallow Water-Bearing Zone.
3. The most recent sampling data available in the BMI Complex Database are shown for Montrose wells located on the NERT property.

* Recoverable DNAPL was removed from wells MC-MW-12 and MC-MW-18 in April 2013 prior to sampling in May 2013.

MCF-11
MCF-09B
MCF-09A
MCF-25A
MCF-01A

BOULDER HIGHWAY
PABCO ROAD
WARM SPRINGS ROAD
LAKE MEAD PARKWAY

M-152 (125-145 ft bgs)

Perchlorate	**0.20**	5/15
Chromium	0.026	5/15
Chloroform	ns	1/15

TR-12
M-156
M-152

OSSM EXTRACTION WELL FIELD

TR-11

M-151 (125-145 ft bgs)

Perchlorate	0.0067	5/15
Chromium	0.026	5/15
Chloroform	<0.25	1/15

M-162 (100-110 ft bgs)

Perchlorate	**99**	5/15
Chromium	0.027	5/15
Chloroform	<0.25	1/15

M-162D (130-140 ft bgs)

Perchlorate	0.0061	3/15
Chromium	0.029	3/15
Chloroform	<0.25	3/15

TR-2 (145-175 ft bgs)

Perchlorate	<0.0005	5/15
Chromium	0.021	5/15
Chloroform	<0.25	1/15

M-161 (100-110 ft bgs)

Perchlorate	0.0085	5/15
Chromium	0.023	5/15
Chloroform	<0.25	1/15

M-161D (130-140 ft bgs)

Perchlorate	**0.110**	3/15
Chromium	0.019	3/15
Chloroform	<0.25	3/15

M-151
M-155

M-165 (110-120 ft bgs)

Perchlorate	**0.040**	5/15
Chromium	0.029	5/15
Chloroform	**0.47J**	1/15

TIMET BARRIER WALL AND INTERCEPTOR WELL FIELD

BMI (CAMU)

TR-2
TR-1
M-161D
M-162D
M-162
M-161
M-165

NERT BARRIER WALL AND INTERCEPTOR WELL FIELD

M-181 (105-115 ft bgs)

Perchlorate	**0.042**	5/15
Chromium	0.038	5/15
Chloroform	<0.25	1/15

M-181
M-150
M-154

MC-MW-42 (96-116 ft bgs)

Perchlorate	0.001	5/13
Chromium	0.00032	5/13
Chloroform	**0.93J**	5/13

MC-MW-42

M-150 (125-145 ft bgs)

Perchlorate	**0.060**	5/15
Chromium	0.038	5/15
Chloroform	<0.25	1/15

MC-MW-41
TR-3
TR-4

MC-MW-39 (100-120 ft bgs)

Perchlorate	0.0018	4/13
Chromium	<0.0005	4/13
Chloroform	**39**	4/13

TR-4 (125-145 ft bgs)

Perchlorate	0.00055J	5/15
Chromium	0.021	5/15
Chloroform	**0.36J**	1/15

M-149 (100-120 ft bgs)

Perchlorate	**68**	5/15
Chromium	**0.43**	5/15
Chloroform	**21**	1/15

MC-MW-18
MC-MW-39
M-186
M-186D
M-149
M-153

MC-MW-18 (97-117 ft bgs)

Perchlorate	0.0099	5/13
Chromium	<0.0005	5/13
Chloroform	**43,000***	5/13

M-186 (105-115 ft bgs)

Perchlorate	**230**	5/15
Chromium	**3.4**	5/15
Chloroform	**540**	5/15

EC-14
MC-MW-12
MC-MW-11
EC-13
MC-MW-43
MC-MW-17
TR-5

MC-MW-12 (100-120 ft bgs)

Perchlorate	0.0025	5/13
Chromium	0.0039	5/13
Chloroform	**31,000***	5/13

MC-MW-17 (70-90 ft bgs)

Perchlorate	**0.190J**	5/13
Chromium	0.0014J+	5/13
Chloroform	**4,000**	5/13

DPT-01
DMC-MW-26
EC-12
RB-02-DEEP
MC-MW-09
DMC-MW-27
DMC-MW-27R
CP-1

TR-7
TR-9

Olin

NERT

TIMET

M-117 (130-150 ft bgs)

Perchlorate	<0.0005	5/15
Chromium	0.022	5/15
Chloroform	<0.25	1/15

M-117
M-118

M-118 (138-158 ft bgs)

Perchlorate	0.00079J	5/15
Chromium	0.019	5/15
Chloroform	<0.25	1/15

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-11a_Chloroform_Middle water_Bearing_map_90-150FT-2.mxd

RAMBOLL ENVIRON

Middle Water-Bearing Zone Wells, 90 - 150 Feet
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure
5-11a

Drafter: RS Date: 5/2/2016 Contract Number: 21-38800C Approved by:

N

0 400 800

Feet

Legend

- Middle Water-Bearing Zone Monitoring Well
- Deeper Middle Water-Bearing Zone Monitoring Well
- Deeper Shallow Water-Bearing Zone Monitoring Well
- Estimated Extent of DNAPL (Montrose 2014)

Notes

ft bgs = feet below ground surface
ND = not detected
ns = not sampled
Perchlorate and Chromium concentrations are in mg/L (parts per million)
Chloroform concentrations are in µg/L (parts per billion)
Results above groundwater BCLs are shown in bold

TR-12 (272-292 ft bgs)		
Perchlorate	<0.0005	5/15
Chromium	0.042	5/15
Chloroform	ns	1/15

M-156 (175-195 ft bgs)		
Perchlorate	<0.0005	5/15
Chromium	<0.0025	5/15
Chloroform	ns	1/15

TR-11 (210-230 ft bgs)		
Perchlorate	<0.0005	5/15
Chromium	0.015	5/15
Chloroform	<0.25	1/15

M-155 (200-220 ft bgs)		
Perchlorate	<0.00095	1/15
Chromium	0.081	5/15
Chloroform	<0.25	1/15

TR-1 (282-312 ft bgs)		
Perchlorate	<0.0005	5/15
Chromium	0.017	5/15
Chloroform	<0.25	1/15

TR-3 (220-250 ft bgs)		
Perchlorate	<0.0005	5/15
Chromium	0.035	5/15
Chloroform	<0.25	1/15

M-154 (175-195 ft bgs)		
Perchlorate	<0.0005	5/15
Chromium	0.022	5/15
Chloroform	<0.25	1/15

M-153 (150-170 ft bgs)		
Perchlorate	0.017	5/15
Chromium	0.019	5/15
Chloroform	<0.25	1/15

M-186D (153-173 ft bgs)		
Perchlorate	**0.840**	2/16
Chromium	0.033	2/16
Chloroform	<0.50	2/16

TR-5 (221-251 ft bgs)		
Perchlorate	<0.0005	5/15
Chromium	0.016	5/15
Chloroform	<0.25	1/15

TR-7 (260-290 ft bgs)		
Perchlorate	<0.0005	5/15
Chromium	0.014	5/15
Chloroform	<0.25	1/15

TR-9 (230-250 ft bgs)		
Perchlorate	0.018	6/15
Chromium	0.013	6/15
Chloroform	<0.25	1/15

TR-12, TR-11, M-156, M-152, M-155, M-151, TR-1, TR-2, M-161, M-161D, M-162D, M-162, M-165, M-150, M-154, M-181, DMC-MW-28, MC-MW-42, MC-MW-41, TR-3, TR-4, MC-MW-18, MC-MW-39, M-186, M-186D, M-149, M-153, EC-14, MC-MW-11, MC-MW-10, MC-MW-12, MC-MW-43, MC-MW-17, TR-5, EC-13, DPT-01, DMC-MW-26, EC-12, RB-02-DEEP, MC-MW-09, DMC-MW-27, DMC-MW-27R, CP-1, TR-7, TR-9, M-117, M-118, MCF-11, MCF-09B, MCF-09A, MCF-25A, MCF-01A

WARM SPRINGS ROAD

BOULDER HIGHWAY

PABCO ROAD

LAKE MEAD PARKWAY

OSSM EXTRACTION WELL FIELD

NERT BARRIER WALL AND INTERCEPTOR WELL FIELD

TIMET BARRIER WALL AND INTERCEPTOR WELL FIELD

BMI (CAMU)

Olin

NERT

TIMET

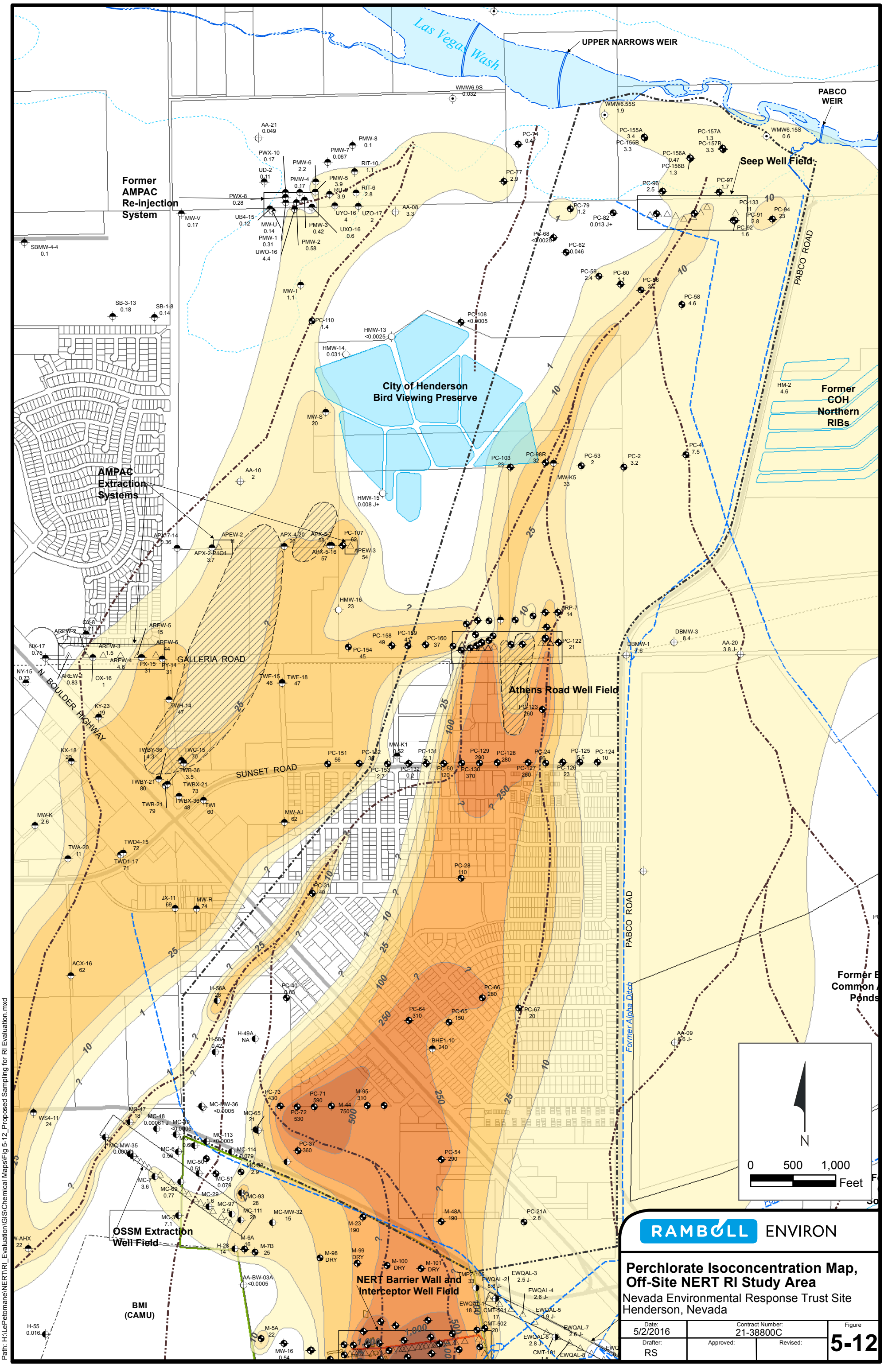
Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-11b_Chloroform_Middle water_Bearing_map_150-300FT-2.mxd

RAMBOLL ENVIRON

Middle Water-Bearing Zone Wells, 150 - 300 Feet
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **5-11b**

Drafter: RS Date: 5/2/2016 Contract Number: 21-38800C Approved by:


Las Vegas Wash
UPPER NARROWS WEIR
PABCO WEIR
Former AMPAC Re-injection System
Seep Well Field
City of Henderson Bird Viewing Preserve
AMPAC Extraction Systems
Former COH Northern RIBs
GALLERIA ROAD
N. BOULDER HIGHWAY
SUNSET ROAD
PABCO ROAD
Athens Road Well Field
OSSM Extraction Well Field
NERT Barrier Wall and Interceptor Well Field
BMI (CAMU)
Former Alpha Ditch
Former B Common A Ponds
WMW6.9S 0.032
WMW6.55S 1.9
WMW6.15S 0.6
PC-155A 3.4
PC-155B 3.3
PC-157A 1.3
PC-157B 3.3
PC-156A 0.47
PC-156B 1.3
PC-74 0.47
PC-77 2.9
PC-96 2.5
PC-97 1.7
PC-133 11
PC-94 23
PC-91 2.8
PC-92 1.6
PC-79 1.2
PC-82 0.013 J+
PC-68 <0.0025
PC-62 0.046
PC-59 2.4
PC-60 1
PC-58 4.6
AA-21 0.049
PMW-8 0.1
PMW-7 0.067
PWX-10 0.17
PMW-6 2.2
RIT-10 1.1
UD-2 0.11
PMW-4 0.17
PMW-5 3.9
RIT-9 3.9
RIT-6 2.8
PWX-8 0.28
MW-V 0.17
UB4-15 0.12
MW-U 0.14
PMW-1 0.31
UWO-16 4.4
PMW-3 0.42
PMW-2 0.58
UXO-16 0.6
UYO-16 4
UZO-17 2
AA-08 3.3
SBMW-4-4 0.1
MW-T 1.1
SB-3-13 0.18
SB-1-8 0.14
PC-110 1.4
PC-108 <0.0005
HMW-13 <0.0025
HMW-14 0.031
MW-S 20
HMW-15 0.008 J+
HMW-16 23
AA-10 2
PC-103 23
PC-98R 32
PC-53 2
PC-2 3.2
MW-K5 33
PC-4 7.5
HM-2 4.6
APX-7-14 0.36
APX-2-P1O1 3.7
APEW-2 11
APX-4-20 26
APX-5-7 58
APX-5-16 57
PC-107 62
APEW-3 54
ARP-7 14
PC-158 49
PC-159 41
PC-160 37
PC-154 45
PC-122 21
DBMW-3 8.4
DBMW-1 7.6
AA-20 3.8 J-
OY-8 0.71
AREW-2 1.1
AREW-5 15
AREW-6 44
NX-17 0.75
AREW-3 1.5
AREW-4 4.6
PX-15 31
PY-14 31
AREW-1 0.83
OX-16 1
NY-15 0.73
TWE-15 46
TWE-18 47
TWH-14 47
KY-23 19
PC-123 260
KX-18 20
TWBY-36 4.3
TWC-15 70
TWB-36 3.5
TWBY-21 80
TWBX-21 73
TWB-21 79
TWBX-36 48
TWI 60
MW-K 2.6
TWA-20 11
TWD4-15 72
TWD1-17 71
MW-AJ 62
PC-151 56
PC-152 38
PC-153 2.7
PC-132 0.2
MW-K1 0.52
PC-131 2.1
PC-129 290
PC-128 280
PC-24 26
PC-125 5.5
PC-124 10
PC-50 120
PC-130 370
PC-127 260
PC-126 23
PC-28 110
PC-31 40
JX-11 69
MW-R 74
ACX-16 62
H-56A 28
PC-40 0.83
H-49A NA
H-58A 0.42
PC-66 280
PC-67 20
PC-64 310
PC-65 150
BHE1-10 240
AA-09 6.6 J-
PC-73 430
PC-71 590
M-95 310
PC-72 530
M-44 750
MC-MW-36 <0.0005
MC-65 21
MC-113 <0.0005
MC-114 0.079
MC-58 2.9
PC-37 360
PC-54 290
MC-MW-35 0.00061
MC-6 0.56
MC-50 0.51
MC-51 0.079
MC-7 3.6
MC-89 0.77
MC-29 1.6
MC-97 2.5
MC-93 28
MC-111 20
MC-MW-32 15
MC-3 7.1
M-48A 190
PC-21A 2.8
M-23 190
M-6A 16
H-28 14
M-7B 25
M-98 DRY
M-99 DRY
M-100 DRY
M-101 DRY
AA-BW-03A <0.0005
TMPZ-105 33
EWQAL-2 8.8 J-
EWQAL-3 2.5 J-
EWQAL-4 2.6 J-
EWQAL-1 18
CMT-501 17
EWQAL-5 1.9 J-
CMT-502 20
EWQAL-7 2.6 J-
EWQAL-6 2.8 J-
CMT-101 1.5
EWQAL-8
H-55 0.016
M-5A 22
MW-16 0.54
WS4-11 24
MC-48 0.00061 J
MC-79 <0.0005
MC-MW-15 0.66
MC-MW-35 0.00061
MC-6 0.56
MC-50 0.51
MC-51 0.079
MC-7 3.6
MC-89 0.77
MC-29 1.6
MC-97 2.5
MC-3 7.1
MC-111 20
MC-MW-32 15
M-6A 16
H-28 14
M-7B 25
M-23 190
M-48A 190
PC-21A 2.8
V-AHX 22
ACX-16 62
JX-11 69
MW-R 74
H-55 0.016
0
500
1,000
Feet
N
RAMBOLL ENVIRON
Perchlorate Isoconcentration Map, Off-Site NERT RI Study Area
Nevada Environmental Response Trust Site
Henderson, Nevada
Date: 5/2/2016
Contract Number: 21-38800C
Figure 5-12
Drafter: RS
Approved:
Revised:
Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-12_Proposed Sampling for RI Evaluation.mxd
Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-12_Proposed Sampling for RI Evaluation.mxd

Legend

- Shallow Water-Bearing Zone Well
- Decommissioned Well
- Chloroform Assessment Well
- PC-57
- Area of Shallow Upper Muddy Creek (UMCf) deposits (so called "UMCf Ridge")
- Well_Field_Area
- NERT Property Boundary
- Revised_Paleochannels
- Seep Pumping Station
- 70 — GWChloroform-2015

Chloroform Concentration, µg/L

- 10,000
- 1,000 - 10,000
- 700 - 1,000
- 70 - 700
- 60 - 70
- 80 — Chloroform µg/L (January 2015)
- (-) — Could Not Be Sampled (no access)
- Soil Gas Sampling Location

Las Vegas Wash

Pabco Weir

Former AMPAC Re-injection System

AMPAC Extraction Systems

SEEP WELL FIELD

ATHENS ROAD WELL FIELD

OSSM EXTRACTION WELL FIELD

NERT

BARRIER WALL AND INTERCEPTOR WELL FIELD

City of Henderson Bird Viewing Preserve

Former City of Henderson Northern Rapid Infiltration Basins (RIBs)

Henderson

PABCO ROAD

Former Alpha Ditch

Former Beta Ditch

GALLERIA ROAD

SUNSET ROAD

BOULDER WAY

UXO-16, UZO - 17, BMI-AA08, BMI-AA10, PC-76, PC-77, PC-80, PC-81, PC-79, PC-96, PC-97, COH2A, PC-94, PC-68, PC-62, PC-59, PC-60, PC-56, PC-58, MW-T, PC-110, PC-108, HMW-13, HMW-14, HMW-15, DBMW-19, HM-2, MW-S, PC-4, MW-K5, PC-53, PC-2, PC-98R, PC-103, DBMW-4, APX-4-20, PC-107, APX-5-7, HMW-16, PC-159 0.70, PC-160 0.79, PC-154 1.0, PC-158 0.80, DM-5, DM-4, DBMW-1, DBMW-3, AA-20, L639, L645, L641, L637, TWE-15, PC-123, PC-152 0.91, PC-151 1.0, PC-153 0.28J, MW-K1, PC-131, PC-50, PC-129, PC-127, PC-126, PC-124, PC-132, PC-130, PC-128, PC-125, PC-24 390, TWC-15, TWB-21, TWI, MW-AJ, PC-28 80, PC-31, MW-J, MW-R, AA-11 (-), H-48, PC-40, PC-66 2.3, PC-64 2.8, PC-65 2.5, PC-67 1,000, H-49A, H-58A, BHE1-10 2.4, AA-09, MC-61, MC-62, PC-73, PC-71, M-95, PC-72, M-44, M-96, MC-48, MC-58, MC-45, MC-65, MC-6, MC-50, PC-37, MC-8, MC-7, MC-09R, MC-51, MC-53, MC-69, PC-54 3.5, PC-21A 180

0 500 1,000 Feet

N

RAMBOLL ENVIRON

Off-Site Chloroform Assessment Wells (January 2015)

Nevada Environmental Response Trust Site
Henderson, Nevada

Date:	Contract Number:		Figure
3/18/16	21-38800C		5-13
Drafter: RS	Approved:	Revised:	

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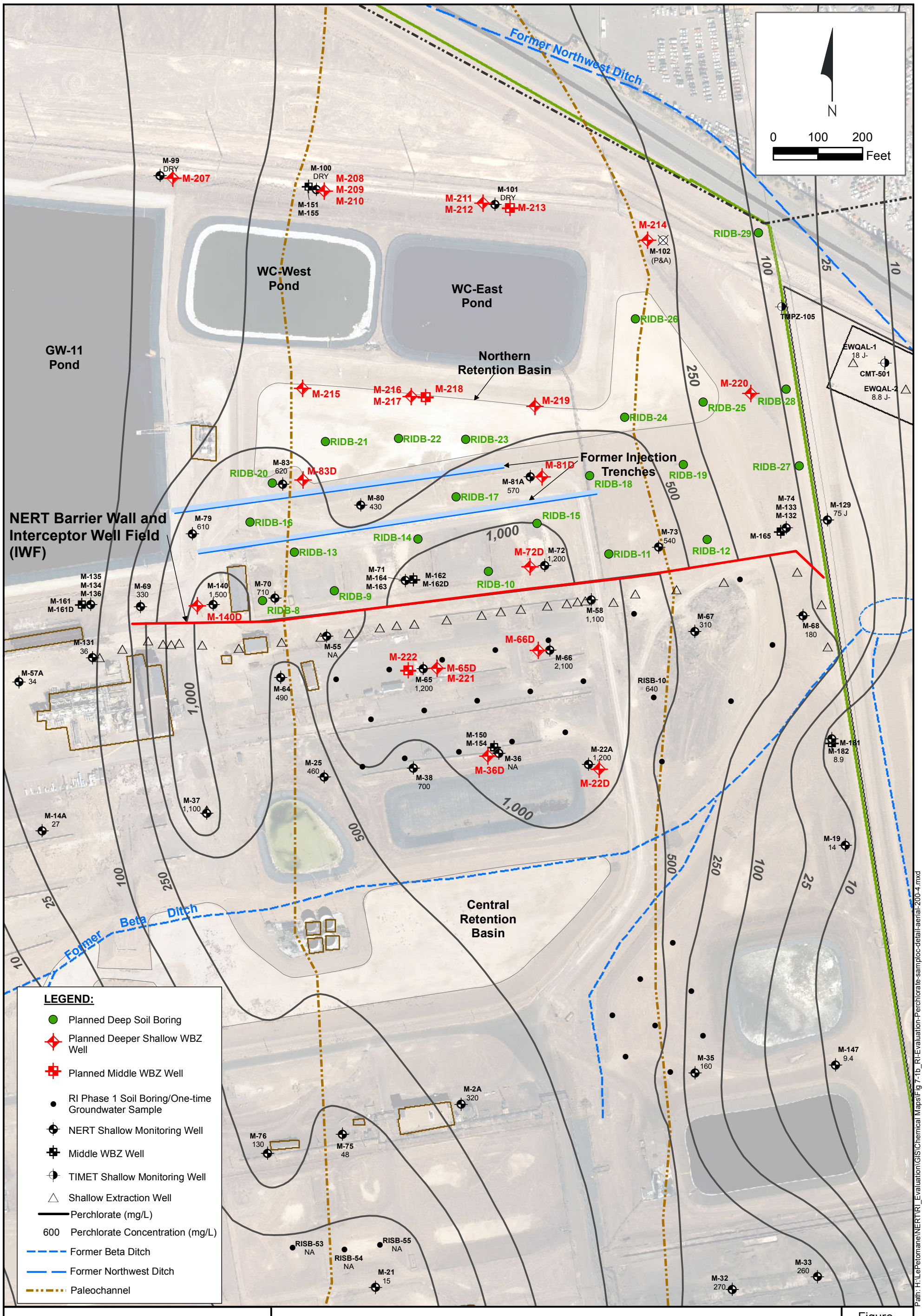
Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 5-13_Downgradient_ChloroformMap-2014-2015.mxd

RI Phase 2 Investigation Locations - NERT Site, Northern Area
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **7-1a**

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\fig 7-1a_RI-Evaluation-Perchlorate-samploc-detail-aerial-Landscape-2.mxd



LEGEND:

- Planned Deep Soil Boring
- Planned Deeper Shallow WBZ Well
- Planned Middle WBZ Well
- RI Phase 1 Soil Boring/One-time Groundwater Sample
- NERT Shallow Monitoring Well
- Middle WBZ Well
- TIMET Shallow Monitoring Well
- Shallow Extraction Well
- Perchlorate (mg/L)
- 600 Perchlorate Concentration (mg/L)
- Former Beta Ditch
- Former Northwest Ditch
- Paleochannel

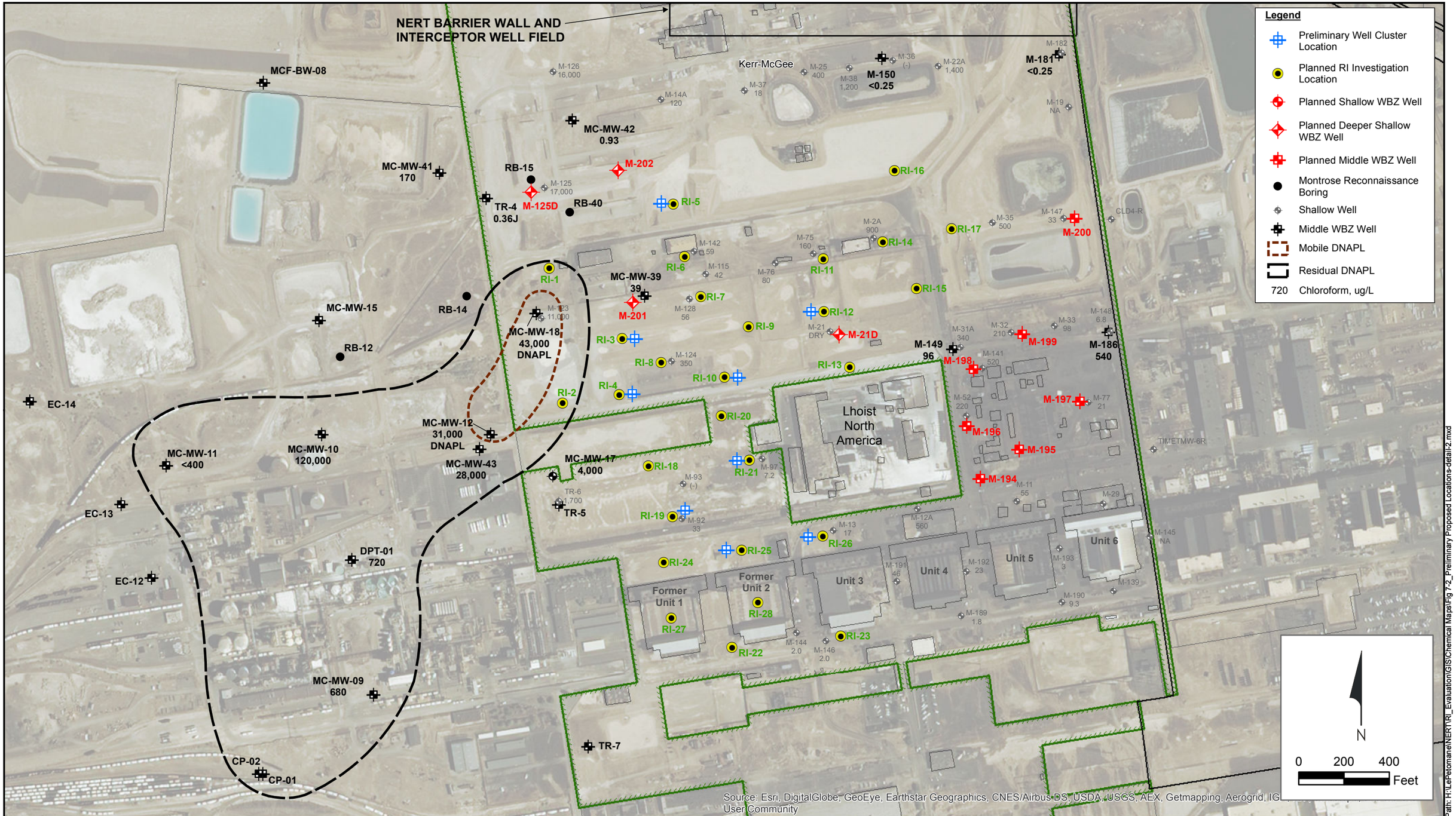
RAMBOLL ENVIRON

RI Phase 2 Investigation Locations - NERT Site Detail, IWF/Barrier Wall Area
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **7-1b**

Drafter: RS | Date: 5/5/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 7-1b_RI-Evaluation-Perchlorate-samploc-detail-aerial-200-4.mxd



RAMBOLL ENVIRON

RI Phase 2 Investigation Locations - NERT Site, Central Area
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure **7-2**

Drafter: RS	Date: 5/2/2016	Contract Number: 21-38800C	Approved by:	Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 7-2_Preliminary Proposed Locations-detail-2.mxd

Legend

- Planned Deep Soil Boring
- Planned Shallow Well
- Planned Deeper Well
- Shallow Soil Investigation Area
- Seep Capture Sump
- 10 — Perchlorate (mg/L)
- Paleochannels

Former AMPAC Re-injection System

AMPAC Extraction Systems

OSSM Extraction Well Field

Seep Well Field

Athens Road Well Field

City of Henderson Bird Viewing Preserve

PABCO ROAD

GALLERIA ROAD

SUNSET ROAD

BOULDER HIGHWAY

Former Alpha Ditch

PCDB-1 PCDB-2 PCDB-3 PCDB-4 PCDB-5 PCDB-6 PCDB-7 PCDB-8 PCDB-9 PCDB-10 PCDB-11 PCDB-12 PCDB-13 PCDB-14

PC-74 0.44
PC-77 2.9
PC-79 1.2
PC-82 0.013 J+
PC-96 2.5
PC-97 1.7
PC-133 11
PC-91 2.8
PC-94 23
PC-92 1.6
PC-68 <0.0025
PC-62 0.046
PC-59 2.4
PC-60 1.1
PC-58 4.6
PC-108 <0.0005
PC-110 1.4
PC-155A 3.4
PC-155B 3.3
PC-157A 1.3
PC-157B 3.3
PC-156A 0.47
PC-156B 1.3
WMW6.9S 0.032
WMW6.55S 1.9
WMW6.15S 0.6
AA-21 0.049
PMW-8 0.1
PMW-7 0.067
PWX-10 0.17
PMW-6 2.2
UD-2 0.11
PMW-4 0.17
PMW-5 3.9
RIT-9 3.9
RIT-10 1.1
RIT-6 2.8
UYO-16 4
UZO-17 2
AA-08 3.3
MW-U 0.14
PMW-1 0.31
UWO-16 4.4
PMW-3 0.42
UXO-16 0.6
PMW-2 0.58
MW-T 1.1
SB-3-13 0.18
SB-1-8 0.14
HMW-13 <0.0025
HMW-14 0.031
HMW-15 0.008 J+
HMW-16 23
MW-S 20
MW-AJ 62
MW-K1 0.62
MW-K5 33
PC-178
PC-103 23
PC-98R 32
PC-53 2
PC-2 3.2
PC-4 7.5
PC-107 62
APX-7-14 0.36
APEW-2 1
APX-4-20 26
APX-5-2 58
APX-5-16 57
APEW-3 54
APX-2-FIO1 3.7
AA-10 2
PC-191
PC-190
PC-161
PC-162
PC-163
PC-164
PC-165
PC-166
PC-167
PC-168
PC-169
PC-170
PC-171
PC-172
PC-173
PC-174
PC-175
PC-176
PC-177
PC-179
PC-180
PC-181
PC-182
PC-183
PC-184
PC-185
PC-186
PC-187
PC-188
PC-189
PC-122 21
PC-123 260
PC-124 10
PC-125 5.5
PC-126 23
PC-127 260
PC-128 280
PC-129 290
PC-130 370
PC-131 2.1
PC-132 0.2
PC-151 56
PC-152 38
PC-153 2.7
PC-154 45
PC-158 49
PC-159 41
PC-160 37
PC-24 26
PC-50 120
PC-54 290
PC-28 110
PC-31 40
PC-40 0.63
PC-64 310
PC-65 150
PC-66 280
PC-67 20
PC-21A 2.8
M-44 750
M-95 310
M-96 DRY
M-23 190
M-48A 190
M-98 DRY
M-99 DRY
M-100 DRY
M-101 DRY
TMPZ-105 33
EWQAL-2 8.8 J-
EWQAL-3 2.5 J-
EWQAL-4
AA-09 6.6 J-
AA-20 3.8 J-
DBMW-1 7.6
DBMW-3 8.4
HM-2 4.6
BHE1-10 240
H-56A 28
H-58A 0.42
H-49A NA
MC-MW-37
MC-MW-38 NA
MC-MW-32 15
MC-MW-35 0.00081
MC-MW-36 <0.0005
MC-60
MC-65 21
MC-47 18
MC-48 0.00061 J
MC-49 <0.0005
MC-15 0.66
MC-6 0.56
MC-113 <0.0005
MC-114 0.079
MC-58 2.9
MC-50 0.51
MC-51 0.079
MC-7 3.6
MC-69 0.77
MC-29 1.6
MC-97 2.5
MC-93 28
MC-111 20
MC-3 7.1
M-6A 16
M-7B 25
H-28 14
AA-BW-03A <0.0005
AREW-1 0.83
AREW-2 1.1
AREW-3 1.5
AREW-4 4.6
AREW-5 15
AREW-6 44
OX-8 0.71
OX-16 1
PX-15 31
PY-14 31
TWE-15 46
TWE-18 47
TWH-14 47
TWBY-36 4.3
TWC-15 70
TWB-36 3.5
TWBY-21 80
TWBX-21 73
TWB-21 79
TWBX-36 48
TWI 60
KY-23 19
KX-18 20
TWA-20 11
TWD4-15 72
TWD1-17 71
JX-11 69
MW-R 74
ACX-16 62

N
0 500 1,000 Feet

RAMBOLL ENVIRON

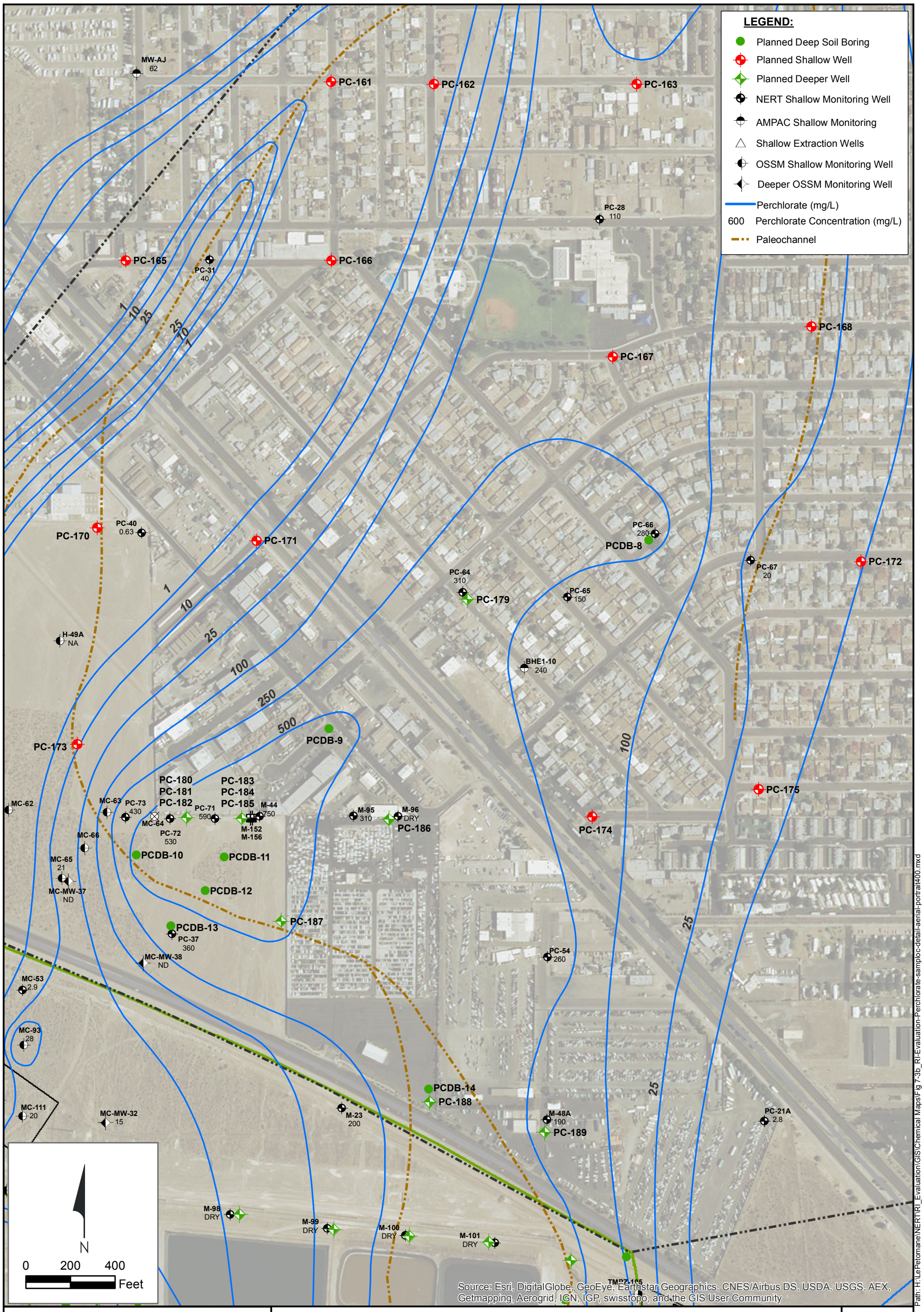
RI Phase 2 Investigation Locations - NERT Off-Site RI Study Area

Nevada Environmental Response Trust Site
Henderson, Nevada

Date:	Contract Number:		Figure
5/2/2016	21-38800C		7-3a
Drafter: RS	Approved:	Revised:	

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 7-3a_Proposed Sampling forDowngradient Plume RI Evaluation.mxd

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 7-3a_Proposed Sampling forDowngradient Plume RI Evaluation.mxd



RAMBOLL ENVIRON

RI Phase 2 Investigation Locations - NERT Off-Site RI Study Area Detail
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure
7-3b

Drafter: RS | Date: 5/2/2016 | Contract Number: 21-38800C | Approved by: | Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 7-3b_RI-Evaluation-Perchlorate-samploc-detail-aerial-portrait400.mxd

Legend

- Planned Deep Soil Boring
- Planned Shallow Well
- Planned Deeper Well
- Shallow Soil Investigation Area
- Seep Capture Sump
- 70 — Chloroform (µg/L)
- Paleochannels

Former AMPAC Re-injection System

AMPAC Extraction Systems

OSSM Extraction Well Field

Seep Well Field

Athens Road Well Field

City of Henderson Bird Viewing Preserve

PABCO ROAD

Former Alpha Ditch

GALLERIA ROAD

SUNSET ROAD

BOULDER HIGHWAY

AA-21 1 (8/09)
PC-76 0.19 (9/09)
MW-U 2 (10/08)
AA-08 0.16 (8/09)
PC-79 0.084 (8/09)
MW-K6 <5 (5/00)
PC-88 <0.067 (9/09)
PC-90 0.38 (9/09)
PC-94 41 (9/09)
PCDB-1
PC-56 <0.24 (5/01)
PCDB-2
PC-58 130 (5/01)
PCDB-3
PC-108 0.17 (9/09)
MW-S 18 (10/08)
AA-10 4.1 (8/09)
PC-178
MW-K5 82 (10/08)
PC-2 25 (8/09)
PC-4 110 (8/09)
PC-191
PCDB-4
ARP-6A 900 (7/06)
PCDB-5
ARP-6B 56 (10/08)
PC-158 0.8 (1/15)
PC-154 1 (1/15)
PC-160 0.79 (1/15)
PC-159 0.7 (1/15)
PC-19 <5 (5/00)
PC-12 660 (5/00)
DBMW-1 55 (4/13)
DBMW-3 46 (4/13)
AA-20 69 (4/13)
TWE-15 1.6 (8/06)
PC-177
PCDB-7
PCDB-6
PC-176
MW-K1 <0.33 (10/08)
PC-50 <5 (5/00)
PC-24 390 (1/15)
PC-124 280 (4/13)
PC-151 1 (1/15)
PC-152 0.91 (1/15)
PC-153 0.28 (1/15)
PC-190
MW-AJ <5 (5/00)
PC-161
PC-162
PC-163
PC-164
AA-11 18 (10/10)
PC-28 80 (1/15)
PC-31 0.77 (5/10)
PC-165
PC-166
MW-R 0.8 (4/11)
PC-168
PC-169
PC-167
H-56A 2 (7/10)
PC-170
PC-40 0.96 (1/15)
PC-171
PCDB-8
PC-66 2.3 (1/15)
PC-67 1,000 (1/15)
PC-172
PC-64 2.8 (1/15)
PC-179
PC-65 2.5 (1/15)
AA-09 70 (4/13)
H-49A 1.4 (4/10)
BHE1-10 2.4 (1/15)
H-58A 2.2 (4/10)
PC-173
PC-180
PC-181
PC-182
PC-183
PC-184
PC-185
M-44 34 (6/08)
M-95 390 (6/08)
PCDB-9
M-96 28 (7/08)
PC-186
PC-175
PC-174
MC-60
H-10A <1 (7/06)
PCDB-10
PC-72 29 (6/08)
PCDB-11
PCDB-12
MC-45 2 (1/15)
MC-MW-37
PC-187
H-53 29000 (2/83)
MC-50 0.92 (1/15)
PCDB-13
PC-37 2 (6/08)
PC-54 3.5 (1/15)
MC-09R 6.5 (4/11)
MC-51 3.4 (2/15)
MC-53 2.8 (1/15)
MC-93 8.8 (2/15)
MC-97 0.71 (2/15)
PCDB-14
PC-188
M-23 460 (2/15)
M-48 180 (7/08)
PC-189
PC-21A 180 (1/15)
M-6A 2 (1/15)
H-28 <0.64 (10/11)
M-7B 1.9 (2/15)
M-98 810 (11/06)
M-99 150 (5/10)
M-100 38 (12/06)
TMPZ-105 470 (4/13)
AA-BW-07A 51 (10/09)
AA-BW-03A 3.4 (10/11)

N

0 500 1,000 Feet

RAMBOLL ENVIRON

RI Phase 2 Investigation Locations with Off-Site Chloroform Plume

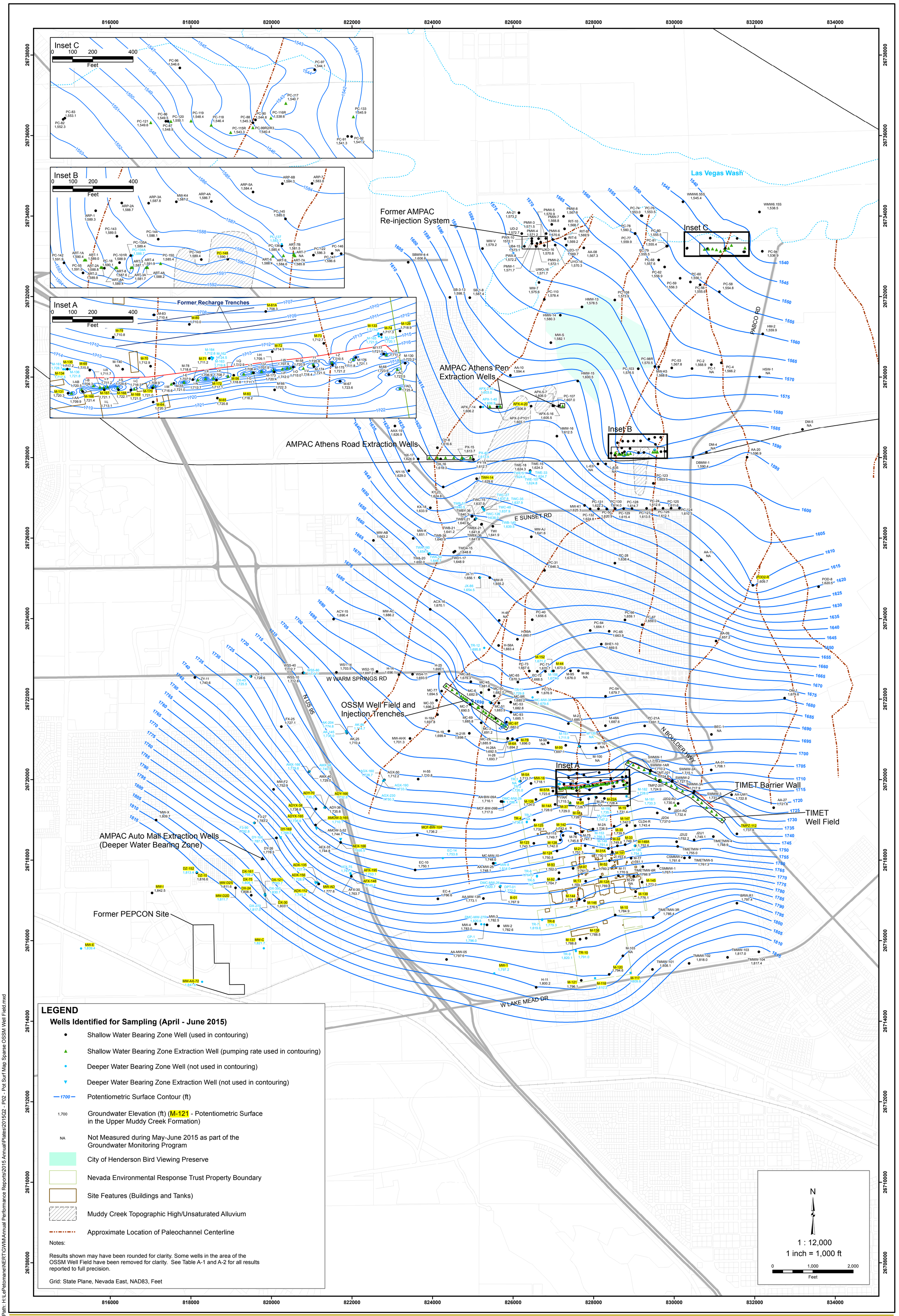
Nevada Environmental Response Trust Site
Henderson, Nevada

Date:	Contract Number:	Figure
5/2/2016	21-38800C	7-3c
Drafter: RS	Approved:	Revised:

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 7-3c_Proposed Sampling forDowngradient Plume Chloroform RI Evaluation.mxd

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Fig 7-3c_Proposed Sampling forDowngradient Plume Chloroform RI Evaluation.mxd

PLATES



LEGEND

Wells Identified for Sampling (April - June 2015)

- Shallow Water Bearing Zone Well (used in contouring)
- Shallow Water Bearing Zone Extraction Well (pumping rate used in contouring)
- Deeper Water Bearing Zone Well (not used in contouring)
- Deeper Water Bearing Zone Extraction Well (not used in contouring)
- 1700 — Potentiometric Surface Contour (ft)
- 1,700 — Groundwater Elevation (ft) (M-121 - Potentiometric Surface in the Upper Muddy Creek Formation)
- NA — Not Measured during May-June 2015 as part of the Groundwater Monitoring Program
- City of Henderson Bird Viewing Preserve
- Nevada Environmental Response Trust Property Boundary
- Site Features (Buildings and Tanks)
- Muddy Creek Topographic High/Unsaturated Alluvium
- Approximate Location of Paleochannel Centerline

Notes:

Results shown may have been rounded for clarity. Some wells in the area of the OSSM Well Field have been removed for clarity. See Table A-1 and A-2 for all results reported to full precision.

Grid: State Plane, Nevada East, NAD83, Feet

N

1 : 12,000

1 inch = 1,000 ft

0 1,000 2,000 Feet

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2015 Annual\Plates\2015Q2 - P02 - Pot Surf Map Sparse OSSM Well Field.mxd

Plate 1

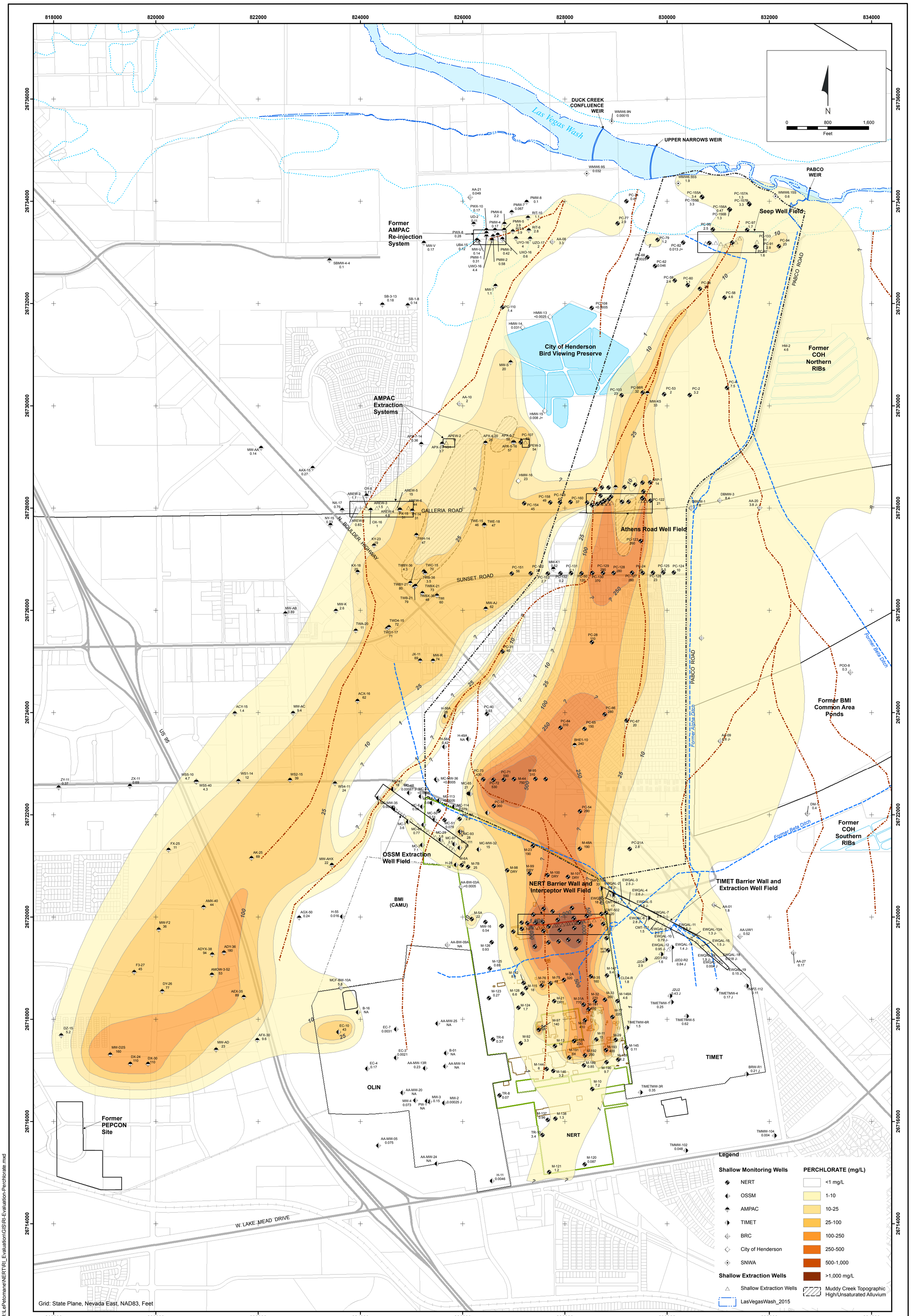
PROJECT: 21-37300A

POTENTIOMETRIC SURFACE MAP SHALLOW WATER-BEARING ZONE SECOND QUARTER 2015

Nevada Environmental Response Trust (NERT)
Henderson, Nevada

DESIGNED BY:	REVISIONS			
EJK	NO.	DESCRIPTION:	DATE:	BY:
DRAWN BY:	0	GENERATE APPROVED MAP	3/14/2016	KL/EG
AS/RS				
CHECKED BY:				
KL/EG				
APPROVED BY:				
JD				

RAMBOLL ENVIRON



Path: H:\LePetomane\NERT\RI_Evaluation\GIS\RI-Evaluation-Perchlorate.mxd

Plate 2

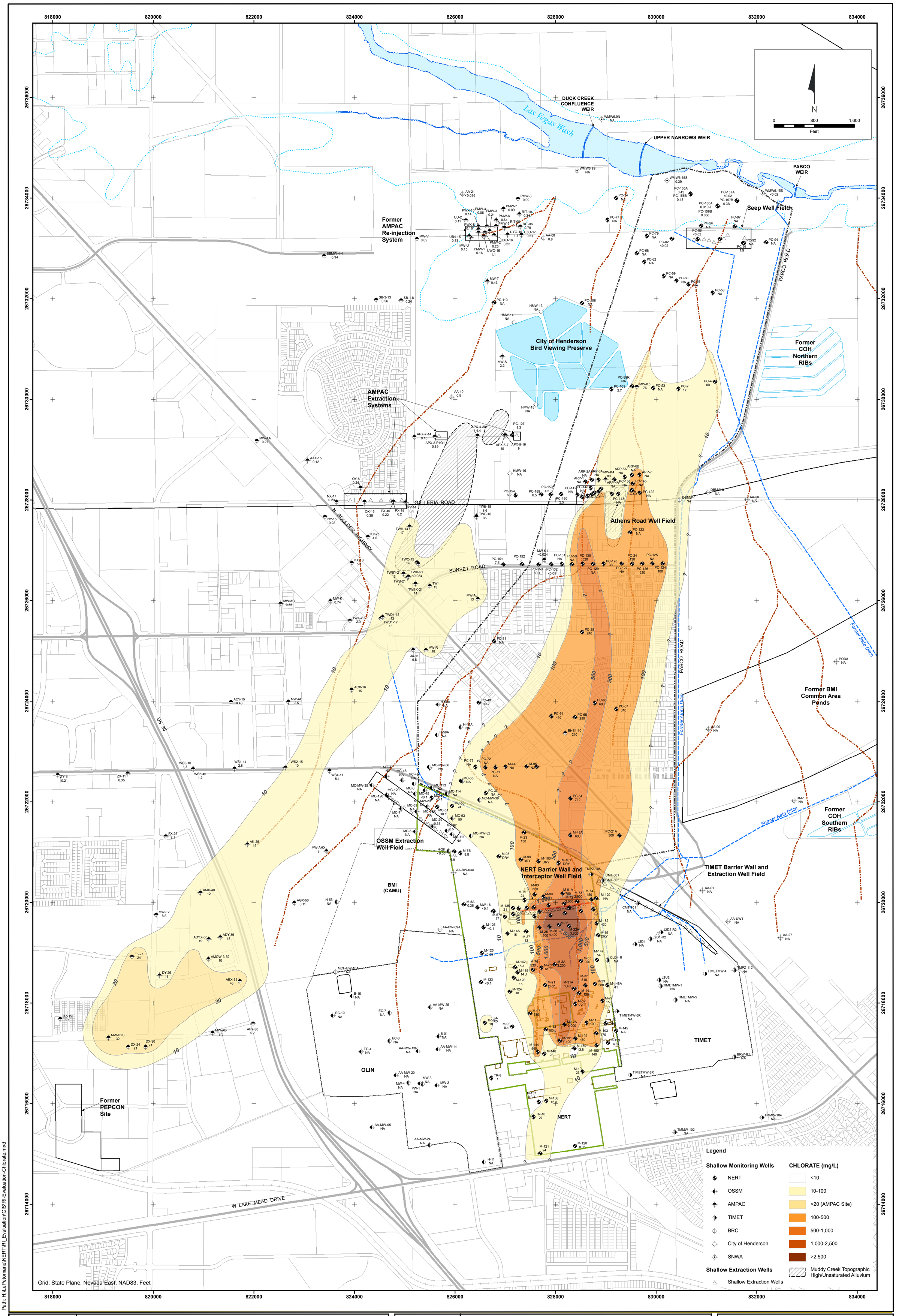
PROJECT: 21-38800C

Perchlorate Isoconcentration Map
January - June 2015

Nevada Environmental Response Trust (NERT)
Henderson, Nevada

DESIGNED BY:	REVISIONS			
	NO.	DESCRIPTION:	DATE:	BY:
DRAWN BY: RS	0	GENERATE APPROVED MAP	6/12/2015	RS
CHECKED BY: JD	0	Revision 1	7/15/2015	RS
APPROVED BY: JD				

RAMBOLL ENVIRON



Path: H:\LePetomane\NERT\RI_Evaluation\GIS\RI-Evaluation-Chlorate.mxd

Plate
3

PROJECT: 21-38800C

Chlorate Isoconcentration Map
January - June 2015
Nevada Environmental Response Trust (NERT)
Henderson, Nevada

DESIGNED BY:	REVISIONS			
	NO.	DESCRIPTION:	DATE:	BY:
DRAWN BY: RS	0	GENERATE APPROVED MAP	6/12/2015	RS
CHECKED BY: JD	0	Revision 1	7/15/2015	RS
APPROVED BY: JD				

RAMBOLL ENVIRON

Inset C
0 100 200 400
Feet

Inset B
0 100 200 400
Feet

Inset A
0 100 200 400
Feet
Former Recharge Trenches

Las Vegas Wash

AMPAC Athens Pen Extraction Wells

AMPAC Athens Road Extraction Wells

OSSM Well Field and Injection Trenches

AMPAC Auto Mall Extraction Wells (Deeper Water Bearing Zone)

Former PEPCON Site

TIMET Barrier Wall

TIMET Well Field

E SUNSET RD

W WARM SPRINGS RD

W LAKE MEAD DR

N US 95

N BOULDER HWY

PABCO RD

LEGEND

Wells Identified for Sampling (May-June 2015)

- Shallow Water Bearing Zone Well (used in contouring)
- Shallow Water Bearing Zone Extraction Well (used in contouring)
- Shallow Well sampled as part of Site Remedial Investigation (RI) (used in contouring)
- Deeper Water Bearing Zone Well (not used in contouring)
- Deeper Water Bearing Zone Extraction Well (not used in contouring)

Chromium Iso-concentration

- <20 µg/L
- 50
- 100
- 1,000
- 10,000
- 20,000
- 30,000
- >100,000

40 (20) Total Chromium (Hexavalent Chromium) Concentrations (µg/L)

J Estimated Concentration

J- Estimated Concentration, Potential Negative Bias

J+ Estimated Concentration, Potential Positive Bias

UJ Estimated Concentration, Below Laboratory Method Reporting Limit

NA Not Analyzed during May-June 2015 of the Groundwater Monitoring Program

City of Henderson Bird Viewing Preserve

Downgradient Plume

Nevada Environmental Response Trust Property Boundary

Site Features (Buildings and Tanks)

Muddy Creek Topographic High/Unsaturated Alluvium

Approximate Location of Paleochannel Centerline

Notes:
Results shown may have been rounded for clarity. See Table A-1 and A-2 for all results reported to full precision.

Available shallow groundwater data collected as part of the Site RI have been included in the plume interpretation shown to address data gaps from previous interpretations. These data have been validated and will be formally presented as part of the upcoming RI Report.

Grid: State Plane, Nevada East, NAD83, Feet

N

1 : 12,000
1 inch = 1,000 ft
0 1,000 2,000
Feet

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Plate 4_2015Q2 - P06 - Cr(Cr6).mxd

Plate 4

PROJECT: 21-38800C

GROUNDWATER TOTAL CHROMIUM MAP SHALLOW WATER-BEARING ZONE SECOND QUARTER 2015

Annual Performance Report
Nevada Environmental Response Trust Site
Henderson, Nevada

DESIGNED BY:	REVISIONS			
EJK	NO.	DESCRIPTION:	DATE:	BY:
DRAWN BY: JD/RS	0	GENERATE APPROVED MAP	3/19/2016	KL/EG
CHECKED BY: KL/EG				
APPROVED BY: JD				

RAMBOLL ENVIRON

Inset A

Inset B

Inset C

Las Vegas Wash

Pabco Weir

E RUSSELL RD

E SUNSET RD

W SUNSET RD

N BOULDER HWY

BOULDER HIGHWAY

W LAKE MEAD DR

E LAKE MEAD DR

LAKE MEAD PARKWAY

S US 95

N US 95

PABCO ROAD

Former Alpha Ditch

Former Beta Ditch

OSSM EXTRACTION WELL FIELD

INTERCEPTOR WELL FIELD

LEGEND

Chloroform Data

- NS (not sampled)
- < 70 µg/L
- 70 - 250 µg/L
- 250 - 500 µg/L
- 500 - 1,000 µg/L
- 1,000 - 10,000 µg/L
- 10,000 - 50,000 µg/L
- > 50,000 µg/L
- Extraction Well
- Destroyed
- 70 Chloroform Isoconcentration Contour (µg/L)
- Approximate Location of Former Alpha Ditch
- Approximate Location of Former Beta Ditch
- Approximate Location of Paleochannel
- Nevada Environmental Response Trust Property Boundary

Notes:
1. Nevada BCL for chloroform in residential water is 0.193 µg/L.
2. USEPA MCLG for chloroform is 70 µg/L.

Data Source: BMI and local NERT databases from samples taken in 2008 and 2009.
More recent data for wells in the downgradient plume area are shown where available.
Grid: State Plane, Nevada East, NAD83, Feet

N

1 : 12,000
1 inch = 1,000 ft

0 1,000 2,000
Feet

Path: H:\LePetomane\NERT\RI_Evaluation\GIS\Chemical Maps\Plate5_WORKING-Plate-1_NEW_ChloroformMap-2015-shallow-ver2.mxd

Plate
5

PROJECT: 21-38800C

GROUNDWATER CHLOROFORM MAP
SHALLOW WATER-BEARING ZONE
2013 - 2015
Nevada Environmental Response Trust Site
Henderson, Nevada

DESIGNED BY:	REVISIONS			
EA	NO.	DESCRIPTION:	DATE:	BY:
DRAWN BY:	0	GENERATE APPROVED MAP		
RS				
CHECKED BY:				
APPROVED BY:				

RAMBOLL ENVIRON