



July 25, 2013

UIC Compliance Coordinator
Nevada Division of Environmental Protection
Bureau of Water Pollution Control
901 South Stewart Street, Suite 4001
Carson City, NV 89701-5249

Subject: UIC Permit # UNEV94218 Permit – First and Second Quarters 2013

Dear UIC Compliance Coordinator:

The Nevada Environmental Response Trust (NERT or the Trust) maintains Underground Injection Control (UIC) Permit #UNEV94218 for groundwater remediation at the Henderson, Nevada site. Note that injection of the stabilized Lake Mead water was suspended as of September 16, 2010, due to soil removal activities surrounding the recharge trenches. This soil excavation is described in the NDEP-Bureau of Corrective Actions approved RZ-D Excavation Plan for the Tronox Henderson facility dated July 2010, and was completed in November 2011. Resumption of the injection of stabilized Lake Mead water is under evaluation, but currently injection is not occurring.

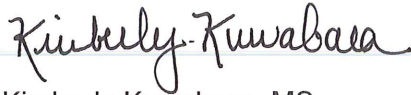
Pursuant to the permit's Section I.A.4 and Table 1 of Attachment A, samples of the Lake Mead water, which is permitted for injection into the recharge trenches, were collected and analyzed for the subject period. Please see Attachment 1 for the Lake Mead water analytical summary, the Permit's checklist and the Lake Mead water sample information form. Supporting electronic analytical reports are provided on the CD in Attachment 3. Please note that ENVIRON, on behalf of the Trust, submitted a letter to Mr. Russ Land, NDEP BWPC, on March 18, 2013, requesting relief from the quarterly monitoring requirement for stabilized Lake Mead water while not actively injecting. The request was approved by Mr. Land via e-mail dated April 4, 2013. Therefore, the second quarter 2013 sample of stabilized Lake Mead water included in this submittal is the last sample that will be collected until injection resumes or the permit is terminated.

In addition, Section I.A.4 and Table 1 of Attachment A of the permit requires quarterly groundwater monitoring and collection of groundwater elevations. This information is provided in Attachment 2, together with a monitoring well sample information form. The supporting electronic analytical reports are provided on the CD in Attachment 3. Section I.A.4 Attachment A requires monitoring of the injection and the extraction monthly rate averages. This information is included in Attachment 2. Section I.A.4 Attachment A requires preparation of a potentiometric surface map each quarter. Maps were prepared for both subject quarters, based upon water levels measured in the respective quarter and are included in Attachment 4.

Please note that the current permit expires on September 19, 2013. Therefore, ENVIRON, on behalf of the Trust, submitted a permit renewal application on March 15, 2013 (at least 180 days prior to permit expiration). The Trust has not received a response regarding renewing the UIC permit.

Should you have any questions concerning this report, please contact Kimberly Kuwabara at (510) 420-2525 or kkuwabara@environcorp.com. Thank you.

Sincerely,



Kimberly Kuwabara, MS
Senior Manager
CEM 2353, exp. 3/20/15

Overnight Mail
Attachments

cc: Greg Lovato, Bureau of Corrective Actions, NDEP
James Dotchin, Bureau of Corrective Actions, NDEP
Weiquan Dong, Bureau of Corrective Actions, NDEP
Andy Steinberg, Nevada Environmental Response Trust
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Steve Kubacki, Veolia Water North America
Allan J. DeLorme, ENVIRON International Corporation
John Pekala, ENVIRON International Corporation

UIC Permit UNEV 94218 – 1st and 2nd Q 2013
CEM Certification

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and, to the best of my knowledge, comply with all applicable federal, state and local statutes, regulations and ordinances.



Kimberly Kuwabara
CEM 2353, expires 3-20-15

ATTACHMENT 1

Lake Mead Water Available to Add to Recharge Trenches Analytical Information (Analytical reports included on Attachment 3 CD)



Stabilized.xlsx

Analytical Summary



Attachment A with
Markups.PDF

UIC Permit - Attachment A Checklist



Form U230 -
Stabilized - 1st & 2nd

Injected Water Sample Information Form

UIC Permit UNEV94218 - 1st and 2nd Quarters 2013 - Stabilized Water Analytical Summary

Sample Date	Sample ID	Analyte	Final	Units	MRL/SQL*	Units	Method
1/7/2013	Stabilized Water	1,1,1-Trichloroethane	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	1,1,2-Trichloroethane	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	1,1-Dichloroethane	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	1,1-Dichloroethylene	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	1,2-Dichloroethane	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	1,2-Dichloropropane	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	2-Butanone (MEK)	ND	ug/L	5	ug/L	EPA 624
1/7/2013	Stabilized Water	2-Hexanone	ND	ug/L	10	ug/L	EPA 624
1/7/2013	Stabilized Water	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5	ug/L	EPA 624
1/7/2013	Stabilized Water	Acetone	ND	ug/L	10	ug/L	EPA 624
1/7/2013	Stabilized Water	Acrolein (Screen)	ND	ug/L	25	ug/L	EPA 624
1/7/2013	Stabilized Water	Acrylonitrile (Screen)	ND	ug/L	25	ug/L	EPA 624
1/7/2013	Stabilized Water	Alkalinity in CaCO3 units	120	mg/L	2	mg/L	SM 2320B
1/7/2013	Stabilized Water	Aluminum Total ICAP/MS	ND	ug/L	20	ug/L	EPA 200.8
1/7/2013	Stabilized Water	Anion Sum - Calculated	9.2	meq/L	0.001	meq/L	SM 1030E
1/7/2013	Stabilized Water	Antimony Total ICAP/MS	ND	ug/L	1	ug/L	EPA 200.8
1/7/2013	Stabilized Water	Arsenic Total ICAP/MS	2.7	ug/L	1	ug/L	EPA 200.8
1/7/2013	Stabilized Water	Barium Total ICAP/MS	99	ug/L	2	ug/L	EPA 200.8
1/7/2013	Stabilized Water	Benzene	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Beryllium Total ICAP/MS	ND	ug/L	1	ug/L	EPA 200.8
1/7/2013	Stabilized Water	Bicarb.Alkalinity as HCO3calc	150	mg/L	2	mg/L	SM2330B
1/7/2013	Stabilized Water	Boron Total ICAP	0.13	mg/L	0.05	mg/L	EPA 200.7
1/7/2013	Stabilized Water	Bromodichloromethane	0.63	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Bromoform	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Bromomethane (Methyl Bromide)	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Cadmium Total ICAP/MS	ND	ug/L	0.5	ug/L	EPA 200.8
1/7/2013	Stabilized Water	Calcium Total ICAP	75	mg/L	1	mg/L	EPA 200.7
1/7/2013	Stabilized Water	Carbon Dioxide,Free(25C)-Calc.	ND	mg/L	2	mg/L	SM4500-CO2-D
1/7/2013	Stabilized Water	Carbon disulfide	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Carbon Tetrachloride	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Carbonate as CO3, Calculated	ND	mg/L	2	mg/L	SM2330B
1/7/2013	Stabilized Water	Cation Sum - Calculated	9.8	meq/L	0.001	meq/L	SM 1030E
1/7/2013	Stabilized Water	Chloride	78	mg/L	1	mg/L	EPA 300.0
1/7/2013	Stabilized Water	Chlorobenzene	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Chlorodibromomethane	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Chloroethane	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Chloroform (Trichloromethane)	0.82	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Chloromethane(Methyl Chloride)	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Chromium Total ICAP/MS	ND	ug/L	1	ug/L	EPA 200.8
1/7/2013	Stabilized Water	cis-1,2-Dichloroethylene	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	cis-1,3-Dichloropropene	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Copper Total ICAP/MS	64	ug/L	2	ug/L	EPA 200.8
1/7/2013	Stabilized Water	Dichlorodifluoromethane	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Dichloromethane	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Ethyl benzene	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Fluoride	0.28	mg/L	0.05	mg/L	SM 4500F-C
1/7/2013	Stabilized Water	Hydroxide as OH Calculated	ND	mg/L	2	mg/L	SM2330B
1/7/2013	Stabilized Water	Iron Total ICAP	0.029	mg/L	0.02	mg/L	EPA 200.7
1/7/2013	Stabilized Water	Lead Total ICAP/MS	3.9	ug/L	0.5	ug/L	EPA 200.8
1/7/2013	Stabilized Water	m,p-Xylenes	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Magnesium Total ICAP	27	mg/L	0.1	mg/L	EPA 200.7
1/7/2013	Stabilized Water	Manganese Total ICAP/MS	ND	ug/L	2	ug/L	EPA 200.8
1/7/2013	Stabilized Water	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Mercury	ND	ug/L	0.2	ug/L	EPA 245.1
1/7/2013	Stabilized Water	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Nickel Total ICAP/MS	ND	ug/L	5	ug/L	EPA 200.8
1/7/2013	Stabilized Water	Nitrate as Nitrogen by IC	0.57	mg/L	0.1	mg/L	EPA 300.0
1/7/2013	Stabilized Water	Nitrate as NO3 (calc)	2.5	mg/L	0.44	mg/L	EPA 300.0
1/7/2013	Stabilized Water	Nitrite Nitrogen by IC	ND	mg/L	0.05	mg/L	EPA 300.0
1/7/2013	Stabilized Water	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	o-Xylene	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Perchlorate	ND	ug/L	4	ug/L	EPA 314.0

1/7/2013	Stabilized Water	PH (H3=past HT not compliant)	8.2	Units	0.1	Units	SM4500-HB
1/7/2013	Stabilized Water	pH of CaCO3 saturation(25C)	7.4	Units	0.1	Units	SM 2330B
1/7/2013	Stabilized Water	pH of CaCO3 saturation(60C)	6.9	Units	0.1	Units	SM 2330B
1/7/2013	Stabilized Water	Potassium Total ICAP	4.6	mg/L	1	mg/L	EPA 200.7
1/7/2013	Stabilized Water	Selenium Total ICAP/MS	ND	ug/L	5	ug/L	EPA 200.8
1/7/2013	Stabilized Water	Silver Total ICAP/MS	ND	ug/L	0.5	ug/L	EPA 200.8
1/7/2013	Stabilized Water	Sodium Total ICAP	85	mg/L	1	mg/L	EPA 200.7
1/7/2013	Stabilized Water	Specific Conductance, 25 C	930	umho/cm	2	umho/cm	SM2510B
1/7/2013	Stabilized Water	Styrene	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Sulfate	210	mg/L	0.5	mg/L	EPA 300.0
1/7/2013	Stabilized Water	Tetrachloroethylene (PCE)	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Tetrahydrofuran	ND	ug/L	10	ug/L	EPA 624
1/7/2013	Stabilized Water	Thallium Total ICAP/MS	ND	ug/L	1	ug/L	EPA 200.8
1/7/2013	Stabilized Water	Toluene	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Total 1,3-Dichloropropene	ND	ug/L	1	ug/L	EPA 624
1/7/2013	Stabilized Water	Total Dissolved Solids (TDS)	630	mg/L	10	mg/L	E160.1/SM2540C
1/7/2013	Stabilized Water	Total Hardness as CaCO3 by ICP (calc)	300	mg/L	3	mg/L	SM 2340B
1/7/2013	Stabilized Water	Total Nitrate, Nitrite-N, CALC	0.57	mg/L	0.1	mg/L	EPA 300.0
1/7/2013	Stabilized Water	trans-1,2-Dichloroethylene	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	trans-1,3-Dichloropropene	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Trichloroethylene (TCE)	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Trichlorofluoromethane	ND	ug/L	0.5	ug/L	EPA 624
1/7/2013	Stabilized Water	Vinyl Acetate	ND	ug/L	10	ug/L	EPA 624
1/7/2013	Stabilized Water	Vinyl chloride (VC)	ND	ug/L	0.3	ug/L	EPA 624
1/7/2013	Stabilized Water	Weak Acid Dissociable Cyanide**	NA	mg/L	0.005	mg/L	SM4500CN-I
1/7/2013	Stabilized Water	Zinc Total ICAP/MS	110	ug/L	20	ug/L	EPA 200.8
2/4/2013	Stabilized Water	Weak Acid Dissociable Cyanide	ND	mg/L	0.005	mg/L	SM4500CN-I
4/1/2013	Stabilized Water	1,1,1-Trichloroethane	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	1,1,2,2-Tetrachloroethane	ND	ug/L	0.06	ug/L	524.2_LL
4/1/2013	Stabilized Water	1,1,2-Trichloroethane	ND	ug/L	0.06	ug/L	524.2_LL
4/1/2013	Stabilized Water	1,1-Dichloroethane	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	1,1-Dichloroethene	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	1,2-Dibromoethane (EDB)	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	1,2-Dichlorobenzene	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	1,2-Dichloroethane	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	1,2-Dichloropropane	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	1,3-Dichlorobenzene	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	1,4-Dichlorobenzene	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	2-Chloroethyl vinyl ether	ND	ug/L	1.8	ug/L	624_LL_UP_3Day
4/1/2013	Stabilized Water	Acrolein	ND	ug/L	4	ug/L	624_LL_UP_3Day
4/1/2013	Stabilized Water	Acrylonitrile	ND	ug/L	1.2	ug/L	624_LL_UP_3Day
4/1/2013	Stabilized Water	Aluminum	ND	ug/L	8.5	ug/L	200.8
4/1/2013	Stabilized Water	Antimony	ND	ug/L	0.3	ug/L	200.8
4/1/2013	Stabilized Water	Arsenic	2.3	ug/L	0.9	ug/L	200.8
4/1/2013	Stabilized Water	Barium	100	ug/L	0.3	ug/L	200.8
4/1/2013	Stabilized Water	Beryllium	ND	ug/L	0.1	ug/L	200.8
4/1/2013	Stabilized Water	Bicarbonate ion as HCO3	150	mg/L	4.8	mg/L	2320B
4/1/2013	Stabilized Water	Boron	0.11	mg/L	0.02	mg/L	200.7
4/1/2013	Stabilized Water	Bromodichloromethane	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	Bromoform	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	Bromomethane	ND	ug/L	0.2	ug/L	524.2_LL
4/1/2013	Stabilized Water	Cadmium	ND	ug/L	0.1	ug/L	200.8
4/1/2013	Stabilized Water	Calcium	70	mg/L	0.05	mg/L	200.7
4/1/2013	Stabilized Water	Carbon Dioxide, Free	3.5 HF	mg/L	2	mg/L	SM4500_CO2_C
4/1/2013	Stabilized Water	Carbon tetrachloride	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	Carbonate as CO3	ND	mg/L	2.4	mg/L	2320B
4/1/2013	Stabilized Water	Chloride	70	mg/L	4	mg/L	300_ORGFM_28D
4/1/2013	Stabilized Water	Chlorobenzene	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	Chloroethane	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	Chloroform	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	Chloromethane	ND	ug/L	0.2	ug/L	524.2_LL
4/1/2013	Stabilized Water	Chromium	ND	ug/L	0.9	ug/L	200.8
4/1/2013	Stabilized Water	cis-1,2-Dichloroethene	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	cis-1,3-Dichloropropene	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	Copper	400 B	ug/L	0.5	ug/L	200.8
4/1/2013	Stabilized Water	Dibromochloromethane	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	Fluoride	0.45 J	mg/L	0.35	mg/L	300_ORGFM_28D
4/1/2013	Stabilized Water	Hardness, as CaCO3	270	mg/L	0.17	mg/L	SM2340B

4/1/2013	Stabilized Water	Hydroxide as OH	ND	mg/L	1.4	mg/L	2320B
4/1/2013	Stabilized Water	Iron	0.064	mg/L	0.015	mg/L	200.7
4/1/2013	Stabilized Water	Langelier Index	0.48	LangSU	N/A	LangSU	SM2330B
4/1/2013	Stabilized Water	Lead	0.7 J	ug/L	0.2	ug/L	200.8
4/1/2013	Stabilized Water	Magnesium	24	mg/L	0.012	mg/L	200.7
4/1/2013	Stabilized Water	Manganese	0.92 J	ug/L	0.7	ug/L	200.8
4/1/2013	Stabilized Water	Mercury	ND	mg/L	0.0001	mg/L	245.1
4/1/2013	Stabilized Water	Methylene Chloride	ND	ug/L	0.4	ug/L	524.2_LL
4/1/2013	Stabilized Water	Nickel	2.1	ug/L	0.5	ug/L	200.8
4/1/2013	Stabilized Water	Nitrate as N	0.52	mg/L	0.08	mg/L	300_ORGFMS
4/1/2013	Stabilized Water	Nitrate as NO3	2.3	mg/L	0.35	mg/L	300_ORGFMS
4/1/2013	Stabilized Water	Nitrate Nitrite as N	0.52	mg/L	0.11	mg/L	300_ORGFMS
4/1/2013	Stabilized Water	Nitrite as N	ND	mg/L	0.11	mg/L	300_ORGFMS
4/1/2013	Stabilized Water	Nitrite as NO2	ND	mg/L	0.35	mg/L	300_ORGFMS
4/1/2013	Stabilized Water	Perchlorate	6.2	ug/L	0.95	ug/L	314.0_LL
4/1/2013	Stabilized Water	pH	7.98 HF	SU	0.1	SU	SM4500_H+
4/1/2013	Stabilized Water	Phosphorus, Total	ND	mg/L	0.02	mg/L	365.3
4/1/2013	Stabilized Water	Potassium	4.2	mg/L	0.37	mg/L	200.7
4/1/2013	Stabilized Water	Selenium	1.6 J	ug/L	0.5	ug/L	200.8
4/1/2013	Stabilized Water	Silver	ND	ug/L	0.1	ug/L	200.8
4/1/2013	Stabilized Water	Sodium	75	mg/L	0.19	mg/L	200.7
4/1/2013	Stabilized Water	Sulfate	210	mg/L	4	mg/L	300_ORGFM_28D
4/1/2013	Stabilized Water	Tetrachloroethene	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	Thallium	ND	ug/L	0.2	ug/L	200.8
4/1/2013	Stabilized Water	Total Anions	8.8	meq/L	0.1	meq/L	Anion_Tot_Calc
4/1/2013	Stabilized Water	Total Cations	8.8	meq/L	0.1	meq/L	Cation_Tot_Calc
4/1/2013	Stabilized Water	Total Dissolved Solids	480	mg/L	10	mg/L	2540C_Calcd
4/1/2013	Stabilized Water	trans-1,2-Dichloroethene	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	trans-1,3-Dichloropropene	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	Trichloroethene	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	Trichlorofluoromethane	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	Vinyl chloride	ND	ug/L	0.05	ug/L	524.2_LL
4/1/2013	Stabilized Water	Zinc	140	ug/L	4	ug/L	200.8

* MRL reported for samples collected in Q1 2013; SQL reported for samples collected in Q2 2013.

** Sample was received with improper preservation. Recollected on 2/4/2013.

HF = Field parameter with a holding time of 15 minutes.

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

B = Compound was found in the blank and sample.

ATTACHMENT A

UNEV 94218: Monitoring Report Requirements

The Permittee shall submit **quarterly reports** on a continuous basis, **whether actively injecting or not**, which contain the following data (please check all information included in the attached report):

The UIC permit number and Attachment A.

The results of the chemical analyses as required by Table 1.

Table 1

PARAMETER	FREQUENCY	LOCATION	LIMITATIONS
VOCs, Total Perchlorate, and Profile I Analysis	Quarterly	Lake Mead Water at Discharge Pipe Prior to Injection	State and Federal Drinking Water Standards. Injectate must not degrade the Groundwater Quality
Total and Hexavalent Chromium	Quarterly	M-11, M-12A, M-36, M-37, M-44, M-84, M- 95, and M-100	Monitor and Report
Total Perchlorate, Including NaClO ₄ and NH ₄ ClO ₄	Quarterly	M-11, M-12A, M-36, M-37, M-44, M-84, M- 95, and M-100	Monitor and Report
TDS	Quarterly	M-11, M-12A, M-36, M-37, M-44, M-84, M- 95, and M-100	Monitor and Report
Injection Rate into Injection trenches and Total Volume injected	Continuously	Discharge Pipe Prior to Injection	100 gpm monthly average. Must be equivalent or less than total extraction rate and volume
Extraction Rate and Total Volume extracted	Continuously	Extraction Wells located Upgradient of Injection Trenches	Cumulative extraction rate must be equivalent or greater than injection rate and volume
Groundwater Elevation and Depth	Quarterly	M-25, M-38, M-80, M-82, M-86, M-95, M-96, M-98, M-99, M-100, and M-102	Monitor and Report

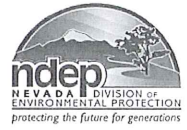
For each month in the reporting period document injection rate (gpm), volume, date, and time injected of Lake Mead water into two injection trenches.

Water level, contour map illustrating groundwater gradient and flow direction.

Summary narrative report of monitoring activities for that reporting period. The report shall include, but not be limited to, any problems encountered with the injection system, the results of any tests performed during that period, and any changes noted to the groundwater. If no injection has occurred, report the non-injection status and the reason the system is not in operation.



Nevada Division of Environmental Protection
Bureau of Water Pollution Control
Underground Injection Control Program
 901 S. Stewart St Ste 4001
 Carson City Nevada 89701
 Ph: 775-687-9418 Fx: 775-687-4684



UIC Form U230 – Field Sampling & Monitoring Summary

This form is to be completed in the field for all UIC water samples to document the sampling location facts and events, and submitted with the sample results.

Sample Date: (mm/dd/yy) 01-07-13 and 04-01-13

Complete All Applicable Blanks – Water samples can be rejected if information not provided.

FACILITY AND PERMIT INFORMATION	
Well Name & No.: Injected stabilized Lake Mead water	UIC Permit No.: UNEV94218
Is there any well name or identification at the wellhead?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no, label should be placed on or near wellhead
Project/Facility Name: Perchlorate Remediation – Nevada Environmental Response Trust, Henderson, NV	
Well Location (Section/TR or Lat/Long) : Section 12 T22S – R62E	
City/Valley: Henderson, NV	County: Clark
Sample for (circle one): NEW WELL <u>ROUTINE REPORTING</u> Other: _____	
Reporting Frequency: <input checked="" type="checkbox"/> Semi-annually <input type="checkbox"/> Annually <input type="checkbox"/> Other _____	
SAMPLE LOCATION or WELL INFORMATION	
Well / Location Type:	Water/Domestic Well Monitoring Geo-Prod <u>Geo-Injection</u> Geo-Observation Discharge Pipe Oil Water Separator Holding Tank Pond Septic Tank Other: _____
(Note: If sample location is not a well (e.g. spring, pond, pipeline, tank), please provide all relevant data on sample location in the space below)	
Non-well location:	
Completion date of well/tank: NA	
Diameter of casing: NA	Type of Casing: Steel PVC Other: <u>ABS Plastic</u>
Total depth of well: ~ 4 foot to horizontal distribution piping	
Bottom depth of cement for last cemented casing string: NA	
Screened or open hole interval (top/bottom depths): NA	
STATUS OF WELL / SAMPLE LOCATION	
Condition or Activity of well during past week/month, prior to sampling: operating normally	
Discuss any field conditions the Division should be aware of with regard to this sample: Both samples were taken during normal operations	
Was the well secured upon arrival?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Was there any problems or damage to the well upon arrival?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Was well in an artesian condition prior to sampling? :	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
WATER LEVEL – WELL GAUGING	
Last date well/sample location (e.g. tank) gauged (mm/dd/yy) : NA	Depth to water - last event: NA
Method used to gauge well/location? :	Cap Tube Tape Measure Other: <u>NA</u>
Measured Water Level :	NA



UIC Form U230 – Field Sampling & Monitoring Summary

SAMPLING INFORMATION	
Date sample collected (mm/dd/yy) :	01-07-13 and 04-01-13
Time Sampled :	10:00 and 13:15, respectively
Name of Sampler :	Veolia Water North America
Location sample taken (be specific) "sample port in pipeline 10 feet from wellhead" :	Sample port at the remedial process ~ 200 feet from injection point
Type of Sample (circle one) :	<input checked="" type="radio"/> Grab Composite other (specify):
Collection method (circle one) :	well bailed water pumped artesian flow air/gas lift <input checked="" type="radio"/> valved flow from active water supply
Collection method/ non-well Describe how sample was taken:	NA
How much fluid (gallons or well volumes) was discharged / purged before collecting sample? :	~ 1 gallon – this is an active water supply
Filtering Note: UIC requirements specify water samples shall not be filtered, unless previously approved. If filtration is approved, sample shall be filtered with a 1.0 micron filter, not 0.45 micron. If approved, document date of approval: _____	
Was the sample filtered? :	<input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO Perchlorate samples filtered; others not filtered
Was conductivity measured during discharge to establish stabilized conditions?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO this is an active water supply line
Was decontamination procedures (reference O & M?) followed during sampling of multiple wells	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="radio"/> NA
FIELD MEASUREMENTS	
pH : NA S. Conductivity : NA Temperature : NA	
What UIC Sample List is required:	UIC List 1 UIC List 2 UIC List 3 Other**: VOC, perchlorate, and Profile 1
** Other constituent listed must have prior UIC approval before using	
Were any holding times exceeded? pH and free carbon dioxide	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
In Final sample documentation, ensure all results are reported with appropriate units. If measurements are below detection limits, indicate detection limit value.	
DO NOT REPORT VALUES AS NON-DETECT OR ND, INSTEAD REPORT as <(Detection Limit Value)	
FORM PREPARATION	
Project Manager: Kimberly Kuwabara	
Company: ENVIRON International Corp.	
Telephone No.: 510-420-2525	eMail Address: kkuwabara@environcorp.com
Signature: <i>Kimberly Kuwabara</i>	Date: 7-25-2013
Qualified Sample Person: Michele Brown	
Company: Veolia Water North America	
Telephone No.: 702-289-5533	eMail Address: michele.brown@veoliawaterna.com
Signature: <i>Michele Brown</i>	Date: 7-23-13

Attachments:

ATTACHMENT 2

Groundwater Monitoring

Analytical Information (Analytical reports included on Attachment 3 CD)



Water Levels 2013
1st & 2nd Q.xls

Water Levels – 1st and 2nd Quarter 2013



UIC Wells - 1st & 2nd
Q 13.xlsx

Summary of Monitoring Well Information



Form U230 -
Monitoring Wells - 1st

Sample Information Form for Monitoring Wells

Nevada Environmental Response Trust
Henderson, Nevada Facility

UIC PERMIT MONITORING WELLS
QUARTERLY GROUNDWATER ELEVATIONS (feet)

Date	M-25		M-38		M-80		M-79*		M-86		M-95		M-96		M-98		M-99		M-100		M-102						
	TOC	DTW	TOC	DTW	TOC	DTW	TOC	DTW	TOC	DTW	TOC	DTW	TOC	DTW	TOC	DTW	TOC	DTW	TOC	DTW	TOC	DTW	TOC	DTW	ELEV		
Nov-04	32.63	1727.48	30.79	1728.94	29.68	1716.37	28.16	1714.37	27.34	1716.89			11.62	1681.9	33.02	1698.88	30.53	1700.21	28.83	1702.1	39.18	1701.06			1701.06		
Feb-05	31.96	1727.97	30.41	1729.32	27.16	1718.89	27.04	1715.49	25.39	1718.84			10.20	1683.32	32.97	1698.33	29.96	1700.78	27.98	1702.95	37.73	1702.51			1702.51		
May-05	32.73	1727.2	30.77	1728.96	27.62	1718.43	27.73	1714.8	28.73	1715.5			10.89	1682.63	32.98	1698.82	30.09	1700.65	28.47	1702.46	39.44	1700.8			1700.8		
Aug-05	30.24	1729.69	30.11	1729.62	27.38	1718.67	26.53	1716	26.18	1718.05			9.79	1683.73	30.81	1701.09	28.74	1702	26.71	1704.22	36.51	1703.73			1703.73		
Nov-05	31.09	1728.84	30.28	1729.45	25.51	1720.54	26.10	1716.43	27.98	1716.25			9.75	1683.77	30.40	1701.5	28.30	1702.44	26.22	1704.71	36.14	1704.1			1704.1		
Feb-06	30.93	1729.00	30.35	1729.38	25.33	1720.72	25.48	1717.05	29.23	1715			10.10	1683.42	29.95	1701.95	27.97	1702.77	26.00	1704.93	36.48	1703.76			1703.76		
May-06	31.15	1728.78	30.51	1729.22	24.61	1721.44	25.13	1717.4	29.34	1714.89			10.03	1683.49	28.66	1703.24	27.85	1702.89	25.98	1704.95	36.91	1703.33			1703.33		
Aug-06	32.06	1727.87	31.65	1728.08	24.97	1721.08	26.12	1716.41	29.24	1714.99			10.10	1683.42	29.90	1702	27.89	1702.85	26.02	1704.91	37.33	1702.91			1702.91		
Nov-06	32.18	1727.75	31.01	1728.72	25.84	1720.21	26.09	1716.44	29.89	1714.34			9.93	1683.59	30.00	1701.9	27.97	1702.77	26.27	1704.66	37.36	1702.58			1702.58		
Feb-07	32.56	1727.37	31.03	1728.7	27.31	1718.74	26.75	1715.78	30.00	1714.23			10.25	1683.27	29.93	1701.97	28.07	1702.67	26.21	1704.72	37.76	1702.48			1702.48		
May-07	32.97	1726.96	31.13	1728.6	29.06	1716.99	27.59	1714.94	31.09	1713.14			10.20	1683.32	30.11	1701.79	28.32	1702.42	26.77	1704.16	38.05	1702.19			1702.19		
Aug-07	33.44	1726.49	31.43	1728.3	31.46	1714.59	29.42	1713.11	32.51	1711.72			10.47	1683.05	28.71	1703.19	29.57	1701.17	28.66	1702.27	39.38	1700.86			1700.86		
Nov-07	33.82	1726.11	31.52	1728.21	31.90	1714.15	30.05	1712.48	34.13	1710.1			11.32	1682.2	33.29	1698.61	32.68	1698.06	33.72	1697.21	41.99	1696.25			1696.25		
Feb-08	33.82	1726.11	31.46	1728.27	24.91	1721.14	25.66	1716.87	32.33	1711.9			11.86	1681.66	33.19	1698.71	33.60	1697.14	32.72	1698.21	42.05	1696.19			1696.19		
May-08	33.64	1726.29	31.37	1728.36	25.15	1720.9	23.45	1719.08	damaged			10.46	1683.06	33.38	1698.52	33.38	1698.52	31.92	1698.82	30.77	1700.16	43.31	1696.93			1696.93	
Aug-08	33.68	1726.25	31.37	1728.36	28.35	1717.7	24.96	1717.57	plugged & abandoned			12.62	1681.47	33.10	1698.8	33.10	1698.8	31.17	1699.57	30.42	1700.51	43.23	1697.01			1697.01	
Nov-08	33.61	1726.32	31.30	1728.43	29.77	1716.28	26.50	1716.03	"			12.63	1681.46	dry		dry		31.58	1699.16	30.81	1700.12	43.11	1697.13			1697.13	
Feb-09	33.58	1726.35	31.37	1728.36	31.58	1714.47	28.33	1714.2	"			12.75	1681.34	"		"		31.90	1698.84	31.27	1699.66	43.21	1697.03			1697.03	
May-09	33.52	1726.41	31.19	1728.54	28.98	1717.07	26.73	1715.8	"			13.02	1680.5	"		"		32.66	1698.08	32.79	1698.14	43.45	1696.79			1696.79	
Nov-09	33.27	1726.66	30.97	1728.76	26.14	1719.91	23.96	1716.57	"			13.35	1680.17	"		"		31.44	1699.3	30.23	1700.7	43.51	1696.73			1696.73	
Feb-10	33.28	1726.65	30.94	1728.79	24.31	1721.74	23.00	1719.53	"			12.89	1680.53	"		"		30.31	1700.43	29.21	1701.72	43.31	1696.93			1696.93	
May-10	32.48	1727.45	30.92	1728.81	23.28	1722.77	21.78	1720.75	"			12.35	1681.17	"		"		29.32	1701.42	27.72	1703.21	43.12	1697.12			1697.12	
Aug-10	32.98	1726.95	31.05	1728.68	23.94	1722.11	21.94	1720.59	"			12.41	1681.17	"		"		28.68	1702.06	26.93	1704	42.46	1697.78			1697.78	
Nov-10	33.00	1726.83	31.96	1727.77	32.64	1713.41	32.64	1709.89	"			13.30	1680.22	"		"		28.97	1701.77	27.84	1703.09	damaged				damaged	
Feb-11	33.41	1726.52	31.28	1728.45	35.52	1710.53	30.66	1711.87	"			12.47	1681.05	"		"		30.71	1700.03	inaccessible							
May-11	33.56	1726.37	31.32	1728.41	35.84	1710.21	32.39	1710.14	"			12.91	1681.05	"		"		34.69	1696.05	33.30	1697.63	"					
Aug-11	33.62	1726.31	31.48	1728.25	35.98	1710.07	31.53	1711	"			13.52	1680	"		"		34.80	1695.94	dry							
Nov-11	32.04	1727.89	31.29	1728.44	36.07	1709.98	31.53	1711	"			14.04	1679.48	"		"		34.78	1695.96	"							
Feb-12	33.68	1726.25	31.45	1728.28	36.22	1709.83	31.85	1710.88	"			14.63	1678.68	"		"		dry		"							
May-12	33.75	1726.18	31.53	1728.2	36.22	1709.83	31.75	1710.78	"			15.84	1678.14	"		"		"		"							
Aug-12	33.69	1726.24	31.48	1728.25	36.16	1709.89	31.64	1710.89	"			15.76	1677.76	"		"		"		"							
Nov-12	30.82	1729.11	29.55	1730.18	33.50	1712.55	30.27	1712.26	"			15.80	1677.72	"		"		"		"							
Feb-13	31.12	1728.81	31.14	1728.59	35.56	1710.49	29.25	1713.28	"			16.10	1677.42	"		"		"		"							
May-13	30.70	1729.23	29.96	1729.77	35.19	1710.86	29.19	1713.34	"			dry				"		33.09	1697.85	"							

M-52 is plugged and abandoned.

* M-79 replaced M-86 (plugged and abandoned)

UIC Permit UNEV94218 - 1st and 2nd Quarters 2013 - Monitoring Well Analytical Summary

Sample Date	Sample ID	Analyte	Final	Units	MRL/SQL*	Units	Method
2/6/2013	M-11	Chromium Total ICAP	1.7	mg/L	0.01	mg/L	EPA 6010
2/6/2013	M-11	Hexavalent chromium (Cr VI)	1.7	mg/L	0.005	mg/L	EPA 7196
2/6/2013	M-11	Perchlorate	25,000	ug/L	4	ug/L	EPA 314.0
2/6/2013	M-11	PH (H3=past HT not compliant)	7.9	Units	0.1	Units	EPA 9040
2/6/2013	M-11	Total Dissolved Solids (TDS)	2,500	mg/L	10	mg/L	E160.1/SM2540C
2/6/2013	M-12A	Chromium Total ICAP	8.4	mg/L	0.01	mg/L	EPA 6010
2/6/2013	M-12A	Hexavalent chromium (Cr VI)	8.4	mg/L	0.005	mg/L	EPA 7196
2/6/2013	M-12A	Perchlorate	160,000	ug/L	4	ug/L	EPA 314.0
2/6/2013	M-12A	PH (H3=past HT not compliant)	8	Units	0.1	Units	EPA 9040
2/6/2013	M-12A	Total Dissolved Solids (TDS)	6,200	mg/L	10	mg/L	E160.1/SM2540C
2/7/2013	M-36	Chromium Total ICAP	24	mg/L	0.01	mg/L	EPA 6010
2/7/2013	M-36	Hexavalent chromium (Cr VI)	25	mg/L	0.005	mg/L	EPA 7196
2/7/2013	M-36	Perchlorate	3,600,000	ug/L	4	ug/L	EPA 314.0
2/7/2013	M-36	PH (H3=past HT not compliant)	7.2	Units	0.1	Units	EPA 9040
2/7/2013	M-36	Total Dissolved Solids (TDS)	17,000	mg/L	10	mg/L	E160.1/SM2540C
2/5/2013	M-37	Chromium Total ICAP	0.053	mg/L	0.01	mg/L	EPA 6010
2/6/2013	M-37	Hexavalent chromium (Cr VI)	ND	mg/L	0.005	mg/L	EPA 7196
2/5/2013	M-37	Perchlorate	1,800,000	ug/L	4	ug/L	EPA 314.0
2/5/2013	M-37	PH (H3=past HT not compliant)	7	Units	0.1	Units	EPA 9040
2/5/2013	M-37	Total Dissolved Solids (TDS)	5,600	mg/L	10	mg/L	E160.1/SM2540C
2/4/2013	M-44	Chromium Total ICAP	0.93	mg/L	0.01	mg/L	EPA 6010
2/4/2013	M-44	Hexavalent chromium (Cr VI)	1	mg/L	0.005	mg/L	EPA 7196
2/4/2013	M-44	Perchlorate	790,000	ug/L	4	ug/L	EPA 314.0
2/4/2013	M-44	PH (H3=past HT not compliant)	7.4	Units	0.1	Units	EPA 9040
2/4/2013	M-44	Total Dissolved Solids (TDS)	8,200	mg/L	10	mg/L	E160.1/SM2540C
2/5/2013	M-79	Chromium Total ICAP	0.42	mg/L	0.01	mg/L	EPA 6010
2/5/2013	M-79	Perchlorate	460,000	ug/L	4	ug/L	EPA 314.0
2/5/2013	M-79	PH (H3=past HT not compliant)	7.5	Units	0.1	Units	EPA 9040
2/5/2013	M-79	Total Dissolved Solids (TDS)	4,000	mg/L	10	mg/L	E160.1/SM2540C
2/4/2013	M-95	Chromium Total ICAP	0.69	mg/L	0.01	mg/L	EPA 6010
2/4/2013	M-95	Hexavalent chromium (Cr VI)	0.68	mg/L	0.005	mg/L	EPA 7196
2/4/2013	M-95	Perchlorate	390,000	ug/L	4	ug/L	EPA 314.0
2/4/2013	M-95	PH (H3=past HT not compliant)	7.4	Units	0.1	Units	EPA 9040
2/4/2013	M-95	Total Dissolved Solids (TDS)	6,100	mg/L	10	mg/L	E160.1/SM2540C
5/15/2013	M-11	Chlorate	330,000	ug/L	80000	ug/L	300.1B_28D
5/15/2013	M-11	Chromium	1.9	mg/L	0.002	mg/L	200.7
5/15/2013	M-11	Chromium, hexavalent	1,900	ug/L	50	ug/L	218.6_ORGFEM
5/15/2013	M-11	Nitrate as N	2.5	mg/L	0.4	mg/L	300_ORGFMS
5/15/2013	M-11	Perchlorate	27,000	ug/L	950	ug/L	314.0_LL
5/15/2013	M-11	pH	8.05 HF	SU	0.1	SU	SM4500_H+
5/15/2013	M-11	Total Dissolved Solids	2700	mg/L	20	mg/L	2540C_Calcd
5/16/2013	M-12A	Chlorate	1,700,000	ug/L	80000	ug/L	300.1B_28D
5/16/2013	M-12A	Chromium	9.3	mg/L	0.01	mg/L	200.7
5/16/2013	M-12A	Chromium, hexavalent	8,300	ug/L	130	ug/L	218.6_ORGFEM
5/16/2013	M-12A	Nitrate as N	8.2	mg/L	1.6	mg/L	300_ORGFMS
5/16/2013	M-12A	Perchlorate	150,000	ug/L	9500	ug/L	314.0_LL
5/16/2013	M-12A	pH	8.23 HF	SU	0.1	SU	SM4500_H+
5/16/2013	M-12A	Total Dissolved Solids	6,600	mg/L	100	mg/L	2540C_Calcd
5/14/2013	M-36	Chlorate	4,600,000	ug/L	160000	ug/L	300.1B_28D
5/14/2013	M-36	Chromium	22	mg/L	0.01	mg/L	200.7
5/14/2013	M-36	Chromium, hexavalent	23,000	ug/L	130	ug/L	218.6_ORGFEM
5/14/2013	M-36	Nitrate as N	83	mg/L	4	mg/L	300_ORGFMS
5/14/2013	M-36	Perchlorate	4,500,000	ug/L	48000	ug/L	314.0_LL
5/14/2013	M-36	pH	7.15 HF	SU	0.1	SU	SM4500_H+
5/14/2013	M-36	Total Dissolved Solids	18,000	mg/L	100	mg/L	2540C_Calcd
5/13/2013	M-37	Chlorate	21,000	ug/L	800	ug/L	300.1B_28D
5/13/2013	M-37	Chromium	0.042	mg/L	0.002	mg/L	200.7
5/13/2013	M-37	Chromium, hexavalent	37	ug/L	0.25	ug/L	218.6_ORGFEM
5/13/2013	M-37	Nitrate as N	120	mg/L	1.6	mg/L	300_ORGFMS
5/13/2013	M-37	Perchlorate	2,300,000	ug/L	48000	ug/L	314.0_LL
5/13/2013	M-37	pH	7.17 HF	SU	0.1	SU	SM4500_H+
5/13/2013	M-37	Total Dissolved Solids	7,600	mg/L	100	mg/L	2540C_Calcd
5/8/2013	M-44	Chromium	0.94	mg/L	0.002	mg/L	200.7
5/16/2013	M-44	Chromium, hexavalent	1,000 H	ug/L	13	ug/L	218.6_ORGFEM

5/8/2013	M-44	Perchlorate	820,000	ug/L	9500	ug/L	314.0_LL
5/8/2013	M-44	pH	7.54 HF	SU	0.1	SU	SM4500_H+
5/8/2013	M-44	Total Dissolved Solids	9,700	mg/L	100	mg/L	2540C_Calcd
5/9/2013	M-79	Chromium	0.4	mg/L	0.002	mg/L	200.7
5/9/2013	M-79	Perchlorate	560,000	ug/L	9500	ug/L	314.0_LL
5/9/2013	M-79	pH	7.73 HF	SU	0.1	SU	SM4500_H+
5/9/2013	M-79	Total Dissolved Solids	4,700	mg/L	100	mg/L	2540C_Calcd
5/8/2013	M-95	Chromium	0.72	mg/L	0.004	mg/L	200.7
5/16/2013	M-95	Chromium, hexavalent	630 H	ug/L	5	ug/L	218.6_ORGFM
5/8/2013	M-95	Perchlorate	350,000	ug/L	9500	ug/L	314.0_LL
5/8/2013	M-95	pH	7.61 HF	SU	0.1	SU	SM4500_H+
5/8/2013	M-95	Total Dissolved Solids	6,900	mg/L	100	mg/L	2540C_Calcd

* MRL reported for samples collected in Q1 2013; SQL reported for samples collected in Q2 2013.

M-84 plugged and abandoned; data for M-79 included instead.

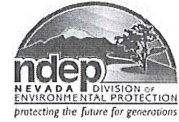
M-100 dry since August 2011.

H = Sample was prepped or analyzed beyond the specified holding time

HF = Field parameter with a holding time of 15 minutes.



**Nevada Division of Environmental Protection
Bureau of Water Pollution Control
Underground Injection Control Program**
901 S. Stewart St Ste 4001
Carson City Nevada 89701
Ph: 775-687-9418 Fx: 775-687-4684



UIC Form U230 – Field Sampling & Monitoring Summary

This form is to be completed in the field for all UIC water samples to document the sampling location facts and events, and submitted with the sample results.

Sample Date: (mm/dd/yy) 02-04-13 to 02-07-13 and 05-08-13 to 05-16-13

Complete All Applicable Blanks – Water samples can be rejected if information not provided.

FACILITY AND PERMIT INFORMATION	
Well Name & No.: M-11, M-12A, M-36, M-37, M-44, M-79, M-95	UIC Permit No.: UNEV94218
Is there any well name or identification at the wellhead?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no, label should be placed on or near wellhead
Project/Facility Name: Perchlorate Remediation – Nevada Environmental Response Trust, Henderson, NV	
Well Location (Section/TR or Lat/Long) : Section 12 T22S – R62E	
City/Valley: Henderson, NV	County: Clark
Sample for (circle one): NEW WELL <u>ROUTINE REPORTING</u> Other: _____	
Reporting Frequency: <input checked="" type="checkbox"/> Semi-annually <input type="checkbox"/> Annually <input type="checkbox"/> Other _____	
SAMPLE LOCATION or WELL INFORMATION	
Well / Location Type:	Water/Domestic Well <u>Monitoring</u> Geo-Prod Geo-Injection Geo-Observation Discharge Pipe Oil Water Separator Holding Tank Pond Septic Tank Other: _____
(Note: If sample location is not a well (e.g. spring, pond, pipeline, tank), please provide all relevant data on sample location in the space below) Non-well location:	
Completion date of well/tank: 1983 to 1995	
Diameter of casing: 2 to 5 inch	Type of Casing: <u>Steel</u> <u>PVC</u> Other: _____
Total depth of well: 27 to 60 feet below ground surface (bgs)	
Bottom depth of cement for last cemented casing string: NA	
Screened or open hole interval (top/bottom depths): shallowest = 5 to 35 feet bgs; deepest = 40 to 50 feet bgs	
STATUS OF WELL / SAMPLE LOCATION	
Condition or Activity of well during past week/month, prior to sampling: operating normally	
Discuss any field conditions the Division should be aware of with regard to this sample: Both month's samples were taken during normal operations	
Was the well secured upon arrival?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Was there any problems or damage to the well upon arrival	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Was well in an artesian condition prior to sampling? :	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
WATER LEVEL – WELL GAUGING	
Last date well/sample location (e.g. tank) gauged (mm/dd/yy) : Q1: 2/4 – 2/7/13; Q2: 5/8-5/16/13	Depth to water - last event:
Method used to gauge well/location? :	Cap Tube <u>Tape Measure</u> Other: _____
Measured Water Level :	Q1 DTW: M-11 = 42.02', M-12A = 39.63', M-36 = 31.02', M-37 = 30.27', M-44 = 23.26', M-79 = 29.25', M-95 = 16.20' Q2 DTW: M-11 = 42.45', M-12A = 40.12', M-36 = 30.91', M-37 = 30.13', M-44 = 23.40', M-79 = 29.19', M-95 = 18.24'



UIC Form U230 – Field Sampling & Monitoring Summary

SAMPLING INFORMATION			
Date sample collected (mm/dd/yy) :	Q1 = 02-04-13 to 02-07-13; Q2 = 05-08-13 to 05-16-13	Time Sampled :	Daylight
Name of Sampler :	Veolia Water North America		
Location sample taken (be specific) "sample port in pipeline 10 feet from wellhead" :	Monitoring well head		
Type of Sample (circle one) :	<input checked="" type="radio"/> Grab <input type="radio"/> Composite <input type="radio"/> other (specify):		
Collection method (circle one) :	well bailed <input checked="" type="radio"/> water pumped <input type="radio"/> artesian flow <input type="radio"/> air/gas lift		
Collection method/ non-well Describe how sample was taken:			
How much fluid (gallons or well volumes) was discharged / purged before collecting sample? :	~ three casing volumes		
Filtering Note: UIC requirements specify water samples shall not be filtered, unless previously approved. If filtration is approved, sample shall be filtered with a 1.0 micron filter, not 0.45 micron. If approved, document date of approval: _____			
Was the sample filtered? :	<input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO Perchlorate samples filtered; others not filtered		
Was conductivity measured during discharge to establish stabilized conditions?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
Was decontamination procedures (reference O & M?) followed during sampling of multiple wells	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NA		
FIELD MEASUREMENTS See attached table			
pH : S. Conductivity : Temperature :			
What UIC Sample List is required:	UIC List 1	UIC List 2	UIC List 3 Other**: Cr, Cr +6, perchlorate, TDS
** Other constituent listed must have prior UIC approval before using			
Were any holding times exceeded? pH, Cr +6	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
In Final sample documentation, ensure all results are reported with appropriate units. If measurements are below detection limits, indicate detection limit value.			
DO NOT REPORT VALUES AS NON-DETECT OR ND, INSTEAD REPORT as <(Detection Limit Value)			
FORM PREPARATION			
Project Manager: Kimberly Kuwabara			
Company: ENVIRON International Corp.			
Telephone No.: 510-420-2525	eMail Address: kkuwabara@environcorp.com		
Signature: <i>Kimberly Kuwabara</i>	Date: 7-25-2013		
Qualified Sample Person: Michele Brown			
Company: Veolia Water North America			
Telephone No.: 702-289-5533	eMail Address: michele.brown@veoliawaterna.com		
Signature: <i>Michele Brown</i>	Date: 7-23-13		

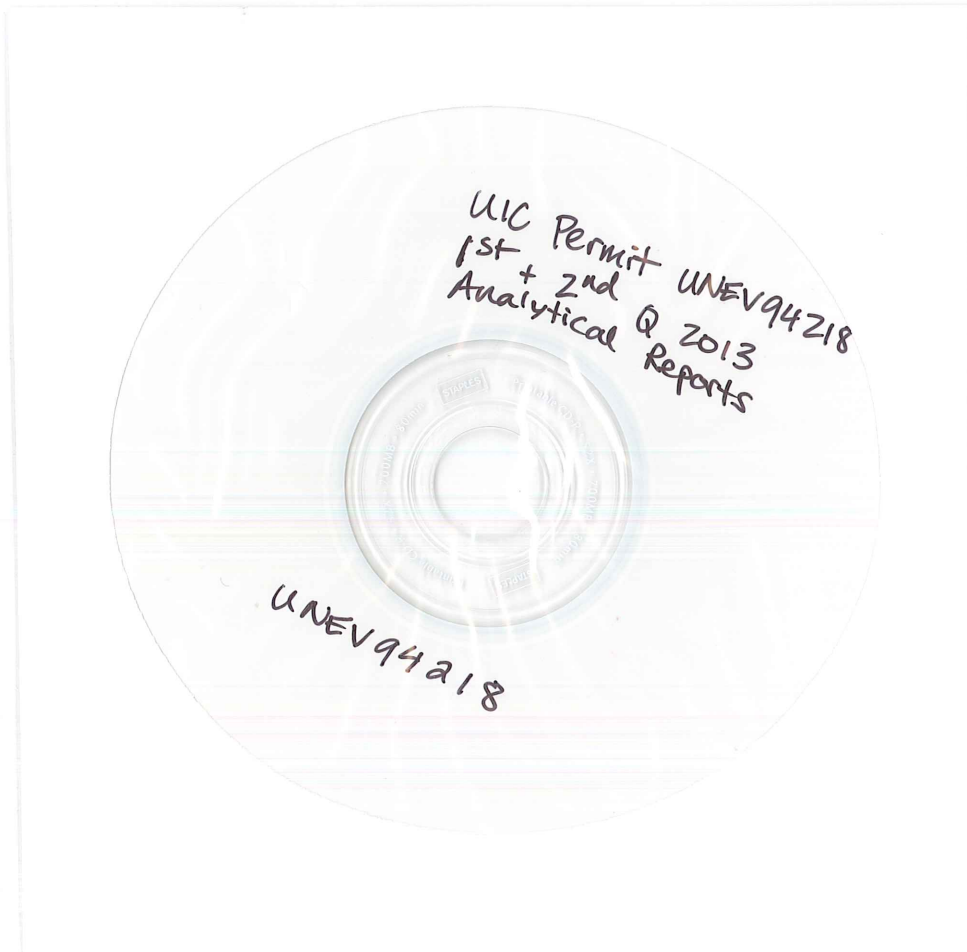
Attachments:

Nevada Environmental Response Trust
Henderson, Nevada Facility

UIC PERMIT UNEV94218
EXTRACTION AND INJECTION RATES (gpm)

MONTH	EXTRACTION RATE	INJECTION RATE		
	from Interceptor Well Field (IWF) (gpm) Monthly Average	Monthly Average	Daily High	Daily Low
January 2013	70.6	0	0	0
February 2013	70.7	0	0	0
March 2013	68.1	0	0	0
April 2013	68.4	0	0	0
May 2013	65.4	0	0	0
June 2013	66.3	0	0	0

ATTACHMENT 3



**Supporting Electronic Analytical Reports
UIC Permit UNEV 94218 Report – 1st and 2nd Q 2013**

I hereby certify that all laboratory analytical data was generated by a laboratory certified by the NDEP for each constituent and media presented herein, exceptions and corresponding justifications are provided below.

Kimberly Kuwabara
Kimberly Kuwabara, CEM 2353 exp 3-20-15

7/25/2013
Date

ATTACHMENT 4

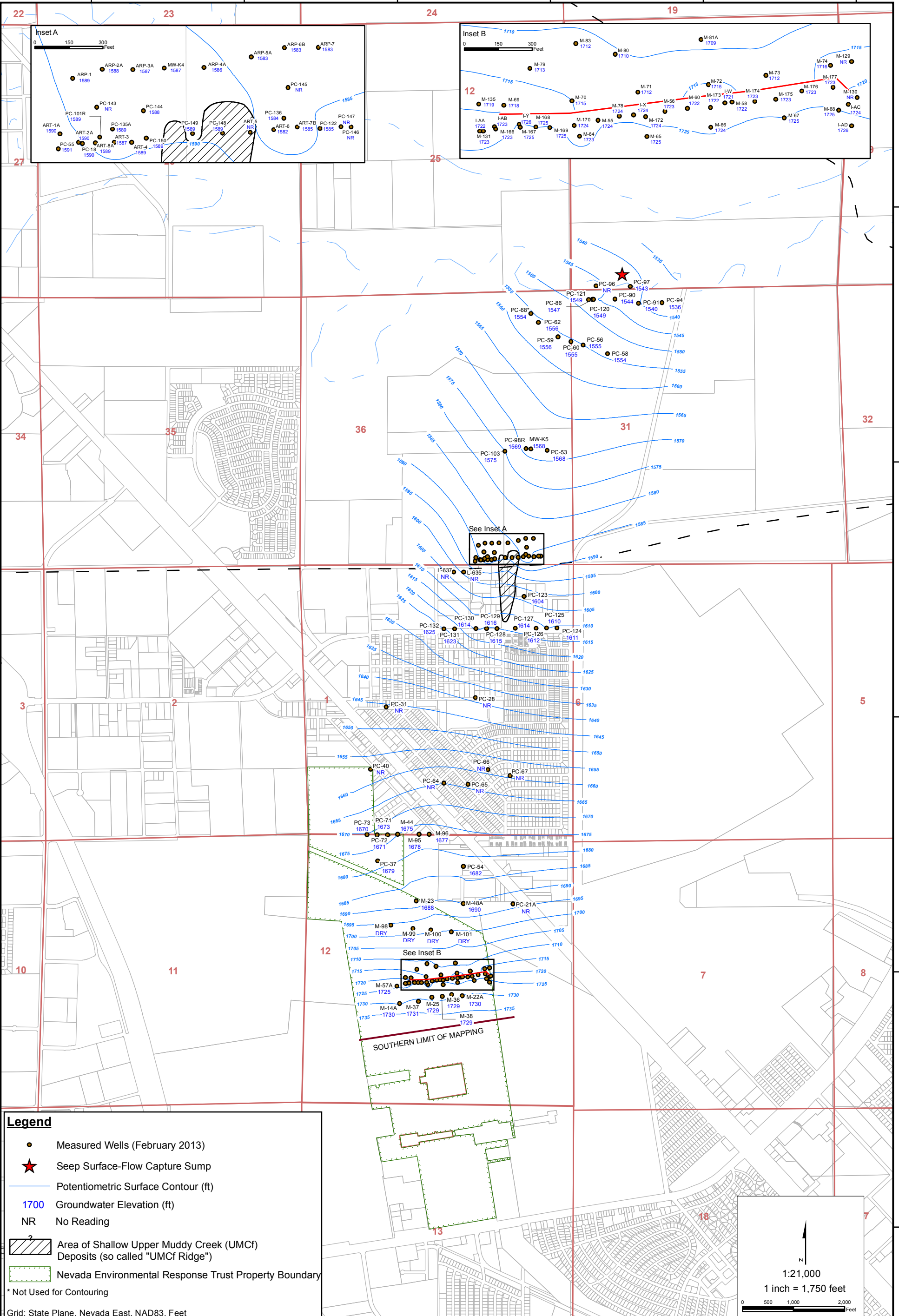


Potentiometric
Surface Map - 1st Q



Potentiometric
Surface Map - 2nd Q

Potentiometric Surface Maps



Legend

- Measured Wells (February 2013)
- ★ Seep Surface-Flow Capture Sump
- Potentiometric Surface Contour (ft)
- 1700 Groundwater Elevation (ft)
- NR No Reading
- ▨ Area of Shallow Upper Muddy Creek (UMCf) Deposits (so called "UMcf Ridge")
- ▭ Nevada Environmental Response Trust Property Boundary

* Not Used for Contouring

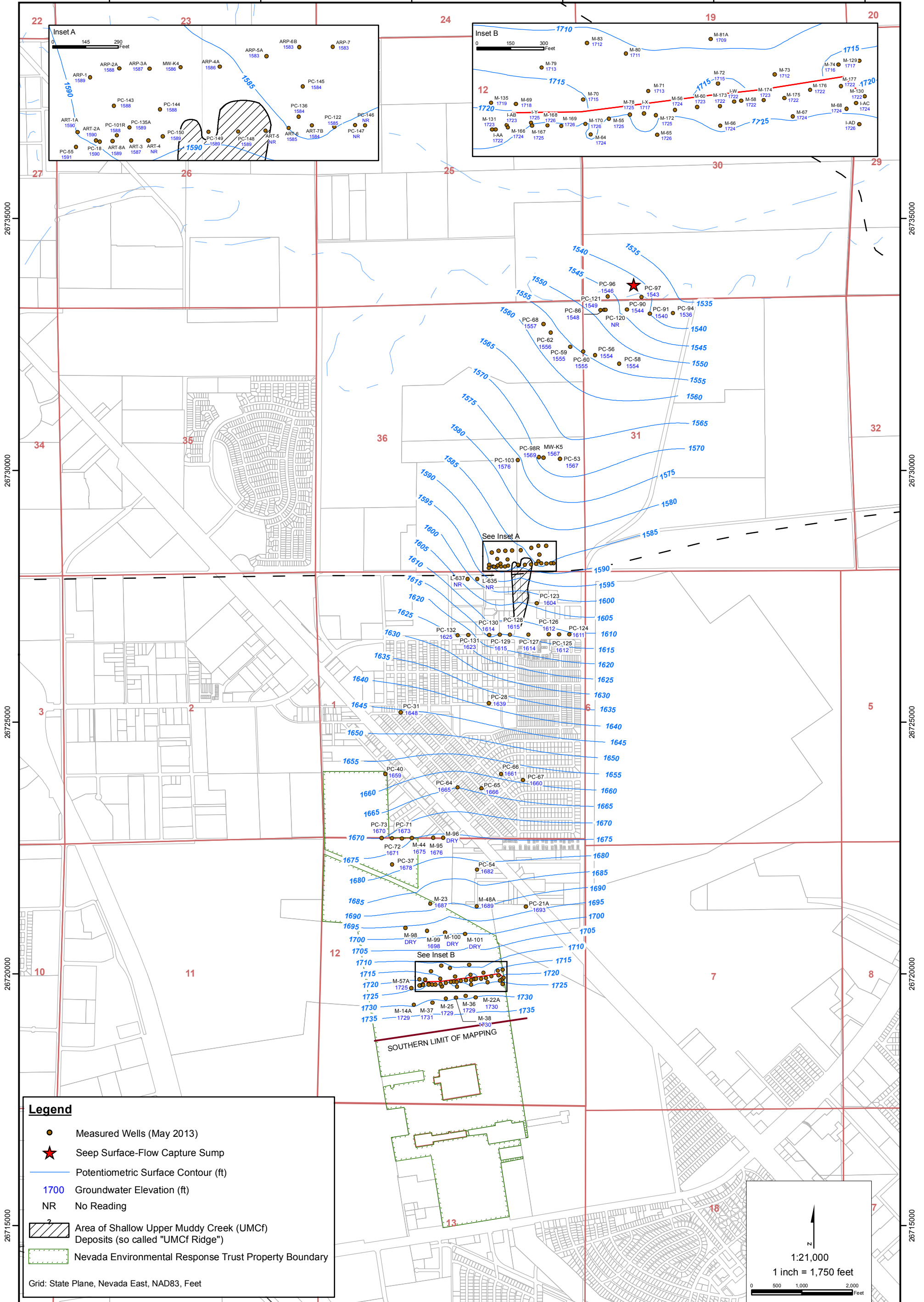
Grid: State Plane, Nevada East, NAD83, Feet

1:21,000
1 inch = 1,750 feet

POTENTIOMETRIC SURFACE MAP- QUARTERNARY ALLUVIUM AQUIFER (FIRST QUARTER 2013)
 UIC Permit #UNEV94218 Report
 Nevada Environmental Response Trust (NERT)
 Henderson, Nevada

Drafter: AS Date: 7/25/2013 Contract Number: 21-32100FA Approved by: Revised: AS

Figure
1



Legend

- Measured Wells (May 2013)
 - ★ Seep Surface-Flow Capture Sump
 - Potentiometric Surface Contour (ft)
 - 1700 Groundwater Elevation (ft)
 - NR No Reading
 - ▨ Area of Shallow Upper Muddy Creek (UMCf) Deposits (so called "UMCf Ridge")
 - ▭ Nevada Environmental Response Trust Property Boundary
- Grid: State Plane, Nevada East, NAD83, Feet

POTENTIOMETRIC SURFACE MAP- QUATERNARY ALLUVIUM AQUIFER (SECOND QUARTER 2013)
 UIC Permit #UNEV94218 Report
 Nevada Environmental Response Trust (NERT)
 Henderson, Nevada

Figure
2

Drafter: AS Date: 7/25/2013 Contract Number: 21-32100FA Approved by: Revised: AS