

AP - 111

**SWMUs No. 1 (Aeration
Basin) & No. 14 (Old API
Separator)**

Investigation Report (4)

August 2015

TABLE 1
Western Refining - Gallup Refinery - Historical Groundwater Analyses

Bold and highlighted values represent values above the applicable standards.		BTEX Parameters					Metals Parameters									
		Benzene (mg/L)	Toluene (mg/L)	Ethyl Benzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)
WQCC 20NMAC 6.2.3103 (Oct 2006)		0.01	0.75	0.75	0.62	NE	0.1	1.0	0.01	NE		0.05	1.0	1.0	0.05	NE
40 CFR 141.62 MCL (May 2009)		0.005	1	0.7	10	NE	0.01	2.0	0.005	NE		0.1	1.3	NE	0.015	NE
EPA RSL for Tap Water (Nov 2012)		0.00041	0.86	0.0013	0.19	0.012	0.000045	2.9		NE		NE	0.62	11	NE	NE
Well ID	DATE SAMPLED															
GWM-1	10/26/2006						0.077	0.53	<0.002	380		<0.006	NL	NL	NL	93
	10/27/2006	0.012	<0.001	>0.001	<0.003	0.16										
	5/24/2007	0.016	<0.001	<0.001	<0.003	0.23	0.081	0.44	<0.002	360		<0.006	NL	NL	<0.005	87
	7/10/2008	0.011	0.0021	0.0039	0.019	0.12	0.07	0.45	<0.002	350		<0.006	0.014	14	0.01	81
	7/27/2009	0.0089	0.002	0.0074	0.034	0.085	0.114	0.53	<0.002	310		<0.006	<0.006	14	0.0072	78
	3/3/2010*	0.012	0.005	0.011	0.05	0.078	0.098	0.42	<0.002	280		<0.006	0.0072	15	0.0078	57
	7/20/2010	0.008	0.002	0.0068	0.03	0.077	0.16	1.2	<0.002	310		<0.006	0.019	20	0.011	70
	9/16/2010	0.0075	0.0049	0.0067	0.03	0.053	0.12	0.87	<0.002	310		<0.006	0.0098	15	0.012	76
	11/2/2010	0.0069	0.0023	0.0035	0.022	0.062	0.14	1.4	<0.002	310		<0.006	<0.006	7.9	0.0095	75
	2/16/2011	0.0095	0.0034	0.0054	0.023	0.057	0.16	0.94	<0.002	310		0.0089	0.0089	17	0.0098	71
	6/15/2011	0.0074	0.0027	0.0053	0.026	0.047	0.14	1.5	<0.002	270		<0.006	<0.006	17	0.01	65
	9/26/2011	0.0096	0.0052	0.0059	0.03	0.051	0.12	1.5		290		<0.006	<0.006	17	<0.005	67
	12/14/2011	0.0085	0.0019	0.0042	0.014	0.054										
	12/17/2011						0.097	0.67		<10		<0.006	0.029	15	0.023	2.5
	3/20/2012	0.0057	<0.001	0.0019	0.007	0.054	0.073	1.1			<0.002	<0.006	<0.006	8.9	0.0058	2.5
GWM-2	9/6/2010									430						76
	9/16/2010	<0.001	<0.001	<0.001	<0.003	0.011										
	10/4/2010	<0.001	<0.001	<0.001	<0.003	0.011										
	2/16/2011	<0.001	<0.001	<0.001	<0.0015	0.0083				420						77
	6/15/2011	<0.001	<0.001	<0.001	<0.0015	0.003				460						74
										570						120
	9/26/2011	<0.001	<0.001	<0.001	<0.0015	0.0026				620						110
	12/14/2011	<0.001	<0.001	<0.001	<0.001	0.0027				620						120
	3/20/2012	<0.005	<0.005	<0.005	<0.001	<0.012										
GWM-3	9/16/2010	<0.001	<0.001	<0.001	<0.003	0.009				540						120
	10/4/2010	<0.001	<0.001	<0.001	<0.003	0.0092				450						89
	2/16/2011	<0.001	<0.001	<0.001	<0.0015	0.0081				450						81
	6/15/2011	<0.001	<0.001	<0.001	<0.0015	0.002				470						83
	9/26/2011	<0.001	<0.001	<0.001	<0.002	<0.0025				500						91
	12/14/2011	<0.001	<0.01	<0.001	<0.002	<0.0025				440						79
	3/20/2012	<0.005	<0.005	<0.005	<0.001	<0.012										

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Western Refining - Gallup Refinery - Historical Groundwater Analyses

Bold and highlighted values represent values above the applicable standards.		Metals Parameters (cont.)								8260b Parameters							
		Manganese (mg/L)	Selenium (mg/L)	Potassium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Silver (mg/L)	Mercury (mg/L)	Uranium (mg/L)	Zinc (mg/L)	1,2,4-Trimethyl benzene (mg/L)	1,3,5-Trimethyl benzene (mg/L)	Naphthalene (mg/L)	1-Methyl naphthalene (mg/L)	2-Methyl naphthalene (mg/L)	Acetone (mg/L)	Isopropyl benzene (mg/L)
WQCC 20NMAC 6.2.3103 (Oct 2006)			0.05	NE	0.05	NE		0.002	0.03	10	NE	NE	0.03	NE	NE	NE	NE
40 CFR 141.62 MCL (May 2009)			0.05	NE	NE	NE		0.002	0.03	NE	NE	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (Nov 2012)			0.078	NE	NE			0.00063	0.047	4.7	0.015	0.087	0.00014	0.00097	0.027	12	NE
Well ID	DATE SAMPLED																
GWM-1	10/26/2006		NL	4.2		1400		<0.0002	NL	NL							
	10/27/2006																
	5/24/2007		<0.05	3.7	<0.005	1300		<0.0002	NL	NL	<0.01	<0.01	<0.02	<0.04	<0.04	<0.1	<0.01
	7/10/2008		<0.05	3.3	<0.005	1400		<0.0002	NL	<0.05	0.0046	<0.002	<0.002	<0.008	<0.008	<0.02	<0.002
	7/27/2009		NL	3.0	<0.005	1300		<0.0002	0.0159	0.025	0.0064	0.0011	0.0024	0.0097	<0.004	<0.01	0.0026
	3/3/2010*		<0.05	2.9	<0.005	1200		<0.0002	0.0224	0.03	0.0081	<0.005	<0.01	<0.02	<0.02	<0.05	<0.005
	7/20/2010		<0.05	3.1	<0.005	1200		<0.0002	0.011	0.031	0.013	<0.001	0.0035	0.0072	<0.004	0.012	0.0016
	9/16/2010		<0.05	2.8	<0.005	1200		<0.0002	0.015	0.023	0.012	0.0019	NA	NA	NA	NA	NA
	11/2/2010		<0.05	2.9	<0.005	1100		<0.0002	0.009	0.025	0.0075	<0.001	<0.02	0.011	<0.004	<0.01	<0.001
	2/16/2011		0.02	4.3	<0.005	1200		<0.002	0.015	0.038	0.008	<0.001	<0.002	0.01	<0.004	<0.01	0.0014
	6/15/2011		0.015	<5.0	<0.005	1000		<0.0002	0.0084	0.026	0.018	0.0031	0.0055	0.024	0.0062	<0.01	0.0018
	9/26/2011		0.0082	3.2		1100		<0.0002	0.007	0.025	0.019	0.0029	0.0044	0.028	<0.004	<0.01	0.0019
	12/14/2011										0.004	<0.001	<0.002	0.0052	<0.004	<0.01	0.0013
	12/17/2011		0.0047	4.0		1100		<0.002	0.02	0.041							
	3/20/2012	0.0058	0.01				<0.005	<0.001	0.0069	0.016	0.0018	<0.001	<0.002	<0.004	<0.004	0.011	<0.001
GWM-2	9/6/2010			3.2		950											
	9/16/2010																
	10/4/2010			3.0		910											
	2/16/2011			3.7		1000											
	6/15/2011			4.2		1600											
	9/26/2011			4.2		1600											
	12/14/2011			4.1		1500											
	3/20/2012																
GWM-3	9/16/2010			8.2		1400											
	10/4/2010			7.6		1300											
	2/16/2011			7.9		1200											
	6/15/2011			5.7		1200											
	9/26/2011			5.1		1300											
	12/14/2011			4.6		1300											
	3/20/2012																

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Bold and highlighted values represent values above the applicable standards.		8260b Parameters (cont.)			General Chemical Parameters										
		n-Butyl benzene (mg/L)	n-Propyl benzene (mg/L)	2,4-Dimethyl phenol (mg/L)	Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphoruu s (mg/L)	Sulfate (mg/L)	pH	Specific Conductance (µmhos/cm)	DRO (mg/L)	GRO (mg/L)
WQCC 20NMAC 6.2.3103 (Oct 2006)		NE	NE	NE	1.6	250.0	NE	NE	10	NE	600.0	6 to 9	NE	0.2¹	NE
40 CFR 141.62 MCL (May 2009)		NE	NE	NE	4.0	NE	NE	1	10	NE	NE	NE	NE	NE	NE
EPA RSL for Tap Water (Nov 2012)		0.78	NE	0.27	NE	NE	NE	1.6	25	0.00031	NE	NE	NE	NE	NE
Well ID	DATE SAMPLED														
GWM-1	10/26/2006				2.0	3700	NL	<2.0	<2.0	<2.5	120	6.87	NR	NR	NR
	10/27/2006														
	5/24/2007	<0.01	<0.01	<0.01	1.9	1800	NL	<2.0	<2.0	<0.5	120	NL	NL	NL	NL
	7/10/2008	<0.002	<0.002	0.028	1.7	1800	NL	<2.0	<2.0	<0.5	110	6.92	7400	NR	NR
	7/27/2009	<0.001	0.0002	0.064	2.1	1600	NL	<4.0	<4.0	<0.5	73	7.03	6200	NR	NR
	3/3/2010*	<0.005	<0.005	NL	2.1	1600	2.7	<4.0	<4.0	<0.5	88	NR	NR	3.9	0.88
	7/20/2010	0.0019	0.0015	0.052	2.9	1500	2.6	<4.0	<4.0	<2.5	57	7.18	6400	NR	NR
	9/16/2010	NA	NA	NA	2.9	1400	NL	<4.0	<4.0	<5.0	48	NR	NR	7.7	0.71
	11/2/2010	0.0016	0.0012	NL	3.5	1300	NL	<1.0	<1.0	<5.0	26	NR	NR	6.0	0.68
	2/16/2011	<0.001	0.0018	NL	2.8	1400	2.5	2.1	<0.5	<0.5	47	NR	NR	5.4	0.7
	6/15/2011	<0.01	0.0028	NL	2.6	1200	2.6	<2.0	<2.0	<2.5	64	NR	NR	4.0	0.53
	9/26/2011	<0.01	0.0027	NL	3.5	1300	1.5	<4.0	<4.0	<2.5	47	NR	NR	3.9	0.65
	12/14/2011	<0.001	0.0022	NL	1.2	1300	2.5	<1.0	<1.0	<10	54	NR	NR	2.9	0.81
	12/17/2011														
	3/20/2012	<0.001	0.0011	NL	3.6	1200	3.2	<0.5	<0.5	<2.5	130	NR	NR	3.5	1
GWM-2	9/6/2010														
	9/16/2010				0.46	1400	NL	<4.0	<4.0	<5.0	700	NR	NR	<1.0	<0.05
	10/4/2010				0.52	1800	3.4	<4.0	<4.0	<0.5	740	NR	NR	<1.0	<0.05
	2/16/2011				0.43	910	3.3	2.6	2.6	<0.5	660	NR	NR	<1.0	<0.05
	6/15/2011				3.1	2200	4.9	66	66	<2.5	1100	NR	NR	<1.0	<0.05
	9/26/2011				16	2200	4.9	52	52	<2.5	1200	NR	NR	<1.0	<0.05
	12/14/2011				0.48	2100	4	25	25	<10	1000	NR	NR	<1.0	<0.05
	3/20/2012				3.6	1500	4.4	<0.5	<0.5	<2.5	1300	NR	NR	2.4	<0.25
GWM-3	9/16/2010				4.7	2000	NL	66	66	<5.0	1500	NR	NR	3.7	0.066
	10/4/2010				5.9	1800	2.3	61	61	<0.5	1500	NR	NR	1.3	0.12
	2/16/2011				4.2	1100	2.1	61	61	<0.5	1900	NR	NR	<1.0	<0.05
	6/15/2011				5.5	610	2.3	<2.0	<2.0	<2.5	1900	NR	NR	1.1	0.12
	9/26/2011				5.3	1000	2.5	130	130	<2.5	2500	NR	NR	2.7	<0.05
	12/14/2011				5.0	1400	2.5	51	51	<10	1800	NR	NR	1.3	<0.05
	3/20/2012				4.9	1300	2.8	<0.5	<0.5	<2.5	1600	NR	NR	2.7	<0.25

9/26/2011 Quarterly sampling combined with Annual sampling event

DEFINITIONS:

NE = Not Established
NA = Not Analyzed
NL = Not Listed on laboratory analysis

STANDARDS:

WQCC 20 NMAC 6.23103 - Standards for Ground Water of 10,000 mg/l TDS Concentration or Less.
a) Human Health Standards; b) Other Standards for Domestic Water
40 CFR 141.62 Detection Limites for Inorganic Contaminatnts
¹ NMED Table 6-2. TPH Screening Guidelines for Potable Ground Water (GW-1) (June 2012)

TABLE 2
Groundwater Level Measurements
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Well ID	Measure- ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water ⁽¹⁾	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
GWM-1	2/18/2008	6,910.22	6,912.61	26.20	19.91	6,892.70	17.5 - 23.5
	5/21/2008	6,910.22	6,912.61		19.47	6,893.14	
	9/10/2008	6,910.22	6,912.61		20.24	6,892.37	
	11/3/2008	6,910.22	6,912.61		20.55	6,892.06	
	2/11/2009	6,910.22	6,912.61		19.81	6,892.80	
	5/4/2009	6,910.22	6,912.61		19.56	6,893.05	
	8/10/2009	6,910.22	6,912.61		20.32	6,892.29	
	10/27/2009	6,910.22	6,912.61		20.57	6,892.04	
	3/3/2010	6,910.22	6,912.61		19.81	6,892.80	
	6/3/2010	6,910.22	6,912.61		18.14	6,894.47	
	9/16/2010	6,910.22	6,912.61		17.90	6,894.71	
	11/2/2010	6,910.22	6,912.61		18.41	6,894.20	
	2/16/2011	6,910.22	6,912.61		15.99	6,896.62	
	6/15/2011	6,910.22	6,912.61		15.82	6,896.79	
	9/26/2011	6,910.22	6,912.61		16.42	6,896.19	
	12/14/2011	6,910.22	6,912.61		16.08	6,896.53	
	6/12/2012	6,910.22	6,912.61		15.56	6,897.05	
	8/21/2012	6,910.22	6,912.61		16.29	6,896.32	
	11/28/2012	6,910.22	6,912.61		14.50	6,898.11	
	3/18/2013	6,910.22	6,912.61		16.87	6,895.74	
	6/12/2013	6,910.22	6,912.61		17.45	6,895.16	
	9/3/2013	6,910.22	6,912.61		17.88	6,894.73	
	11/11/2013	6,910.22	6,912.61		18.41	6,894.20	
	3/11/2014	6,910.22	6,912.61		18.92	6,893.69	
	6/5/2014	6,910.22	6,912.61		19.1	6,893.51	
	9/12/2014	6,910.22	6,912.61		19.56	6,893.05	
	11/11/2014	6,910.22	6,912.61		20.08	6,892.53	

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Well ID	Measure- ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water ⁽¹⁾	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
GWM-2	2/18/2008	6,910.32	6,913.09	18.81	18.45	6,894.64	3.2 - 16.2
	3/17/2008	6,910.32	6,913.09		DRY	DRY	
	5/21/2008	6,910.32	6,913.09		DRY	DRY	
	9/10/2008	6,910.32	6,913.09		DRY	DRY	
	11/3/2008	6,910.32	6,913.09		DRY	DRY	
	2/11/2009	6,910.32	6,913.09		DRY	DRY	
	5/4/2009	6,910.32	6,913.09		DRY	DRY	
	8/10/2009	6,910.32	6,913.09		DRY	DRY	
	10/27/2009	6,910.32	6,913.09		DRY	DRY	
	3/3/2010	6,910.32	6,913.09		DRY	DRY	
	6/3/2010	6,910.32	6,913.09		17.57	6,895.52	
	9/16/2010	6,910.32	6,913.09		17.30	6,895.79	
	11/2/2010	6,910.32	6,913.09		18.87	6,894.22	
	2/16/2011	6,910.32	6,913.09		15.08	6,898.01	
	6/15/2011	6,910.32	6,913.09		15.02	6,898.07	
	9/26/2011	6,910.32	6,913.09		15.89	6,897.20	
	12/14/2011	6,910.32	6,913.09		15.40	6,897.69	
	6/12/2012	6,910.32	6,913.09		14.96	6,898.13	
	8/21/2012	6,910.32	6,913.09		15.79	6,897.30	
	11/28/2012	6,910.32	6,913.09		13.83	6,899.26	
	3/18/2013	6,910.32	6,913.09		16.77	6,896.32	
	6/12/2013	6,910.32	6,913.09		17.10	6,895.99	
	9/3/2013	6,910.32	6,913.09		17.88	6,895.21	
	11/11/2013	6,910.32	6,913.09		18.39	6,894.70	
	3/11/2014	6,910.32	6,913.09		DRY	DRY	
	6/5/2014	6,910.32	6,913.09		DRY	DRY	
	9/12/2014	6,910.32	6,913.09		DRY	DRY	
	11/11/2014	6,910.32	6,913.09		DRY	DRY	

TABLE 2
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Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Well ID	Measure- ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water ⁽¹⁾	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
GWM-3	2/18/2008	6,907.35	6,910.25	17.80	DRY	DRY	3 - 15
	5/21/2008	6,907.35	6,910.25		DRY	DRY	
	9/10/2008	6,907.35	6,910.25		DRY	DRY	
	11/3/2008	6,907.35	6,910.25		DRY	DRY	
	2/11/2009	6,907.35	6,910.25		DRY	DRY	
	5/4/2009	6,907.35	6,910.25		DRY	DRY	
	8/10/2009	6,907.35	6,910.25		DRY	DRY	
	10/27/2009	6,907.35	6,910.25		DRY	DRY	
	3/3/2010	6,907.35	6,910.25		DRY	DRY	
	6/3/2010	6,907.35	6,910.25		17.17	6,893.08	
	9/16/2010	6,907.35	6,910.25		16.92	6,893.33	
	11/2/2010	6,907.35	6,910.25		17.83	6,892.42	
	2/16/2011	6,907.35	6,910.25		12.84	6,897.41	
	6/15/2011	6,907.35	6,910.25		14.20	6,896.05	
	9/26/2011	6,907.35	6,910.25		15.64	6,894.61	
	12/14/2011	6,907.35	6,910.25		14.35	6,895.90	
	6/12/2012	6,907.35	6,910.25		14.70	6,895.55	
	8/21/2012	6,907.35	6,910.25		15.45	6,894.80	
	11/28/2012	6,907.35	6,910.25		13.60	6,896.65	
	3/18/2013	6,907.35	6,910.25		DRY	DRY	
	6/12/2013	6,907.35	6,910.25		DRY	DRY	
	9/3/2013	6,907.35	6,910.25		DRY	DRY	
	11/11/2013	6,907.35	6,910.25		DRY	DRY	
	3/11/2014	6,907.35	6,910.25		DRY	DRY	
	6/5/2014	6,907.35	6,910.25		DRY	DRY	
	9/12/2014	6,907.35	6,910.25		DRY	DRY	
	11/11/2014	6,907.35	6,910.25		DRY	DRY	

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Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Well ID	Measure- ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water ⁽¹⁾	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
NAPIS 1 (KA-1R)	4/11/2008	6,913.62	6,913.86	13.53	8.58	6,905.28	3.7 -13.7
	7/11/2008	6,913.62	6,913.86		8.98	6,904.88	
	11/4/2008	6,913.62	6,913.86		8.83	6,905.03	
	3/23/2009	6,913.62	6,913.86		8.92	6,904.94	
	5/28/2009	6,913.62	6,913.86		8.67	6,905.19	
	8/11/2009	6,913.62	6,913.86		9.06	6,904.80	
	11/23/2009	6,913.62	6,913.86		10.28	6,903.58	
	3/8/2010	6,913.62	6,913.86		8.69	6,905.17	
	6/8/2010	6,913.62	6,913.86		8.37	6,905.49	
	9/15/2010	6,913.62	6,913.86		7.77	6,906.09	
	11/2/2010	6,913.62	6,913.86		7.62	6,906.24	
	3/2/2011	6,913.62	6,913.86		7.47	6,906.39	
	6/15/2011	6,913.62	6,913.86		7.96	6,905.90	
	9/27/2011	6,913.62	6,913.86		7.30	6,906.56	
	12/14/2011	6,913.62	6,913.86		7.45	6,906.41	
	6/12/2012	6,913.62	6,913.86		7.39	6,906.47	
	8/21/2012	6,913.62	6,913.86		7.07	6,906.79	
	11/28/2012	6,913.62	6,913.86		8.04	6,905.82	
	3/18/2013	6,913.62	6,913.86		7.84	6,906.02	
	6/12/2013	6,913.62	6,913.86		7.88	6,905.98	
	9/3/2013	6,913.62	6,913.86		6.64	6,907.22	
	11/12/2013	6,913.62	6,913.86		6.65	6,907.21	
	3/11/2014	6,913.62	6,913.86		6.78	6,907.08	
	6/5/2014	6,913.62	6,913.86		6.86	6,907.00	
	9/12/2014	6,913.62	6,913.86		6.85	6,907.01	
	11/11/2014	6,913.62	6,913.86		6.96	6,906.90	

TABLE 2
Groundwater Level Measurements
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Well ID	Measure- ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water ⁽¹⁾	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
NAPIS 2 (KA-2R)	4/11/2008	6,913.40	6,912.65	13.61	8.83	6,903.82	4.2 - 14.2
	7/11/2008	6,913.40	6,912.65		8.96	6,903.69	
	11/4/2008	6,913.40	6,912.65		9.23	6,903.42	
	3/23/2009	6,913.40	6,912.65		9.35	6,903.30	
	5/28/2009	6,913.40	6,912.65		9.22	6,903.43	
	8/11/2009	6,913.40	6,912.65		9.39	6,903.26	
	11/23/2009	6,913.40	6,912.65		9.72	6,902.93	
	3/8/2010	6,913.40	6,912.65		9.19	6,903.46	
	6/8/2010	6,913.40	6,912.65		8.93	6,903.72	
	9/15/2010	6,913.40	6,912.65		8.57	6,904.08	
	11/2/2010	6,913.40	6,912.65		8.55	6,904.10	
	3/2/2011	6,913.40	6,912.65		9.14	6,903.51	
	6/15/2011	6,913.40	6,912.65		8.67	6,903.98	
	9/27/2011	6,913.40	6,912.65		8.18	6,904.47	
	12/14/2011	6,913.40	6,912.65		8.20	6,904.45	
	6/12/2012	6,913.40	6,912.65		9.40	6,903.25	
	8/21/2012	6,913.40	6,912.65		7.95	6,904.70	
	11/28/2012	6,913.40	6,912.65		8.09	6,904.56	
	3/18/2013	6,913.40	6,912.65		9.19	6,903.46	
	6/12/2013	6,913.40	6,912.65		9.00	6,903.65	
	9/3/2013	6,913.40	6,912.65		8.34	6,904.31	
	11/12/2013	6,913.40	6,912.65		8.20	6,904.45	
	3/11/2014	6,913.40	6,912.65		8.03	6,904.62	
	6/5/2014	6,913.40	6,912.65		8.2	6,904.45	
	9/12/2014	6,913.40	6,912.65		8.1	6,904.55	
	11/11/2014	6,913.40	6,912.65		8.2	6,904.45	

TABLE 2
Groundwater Level Measurements
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Well ID	Measure- ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water ⁽¹⁾	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
NAPIS 3 (KA-3R)	4/11/2008	6,913.38	6,912.76	30.42	14.98	6,897.78	25.4 - 30-4
	7/11/2008	6,913.38	6,912.76		9.72	6,903.04	
	11/4/2008	6,913.38	6,912.76		8.71	6,904.05	
	3/23/2009	6,913.38	6,912.76		9.93	6,902.83	
	6/15/2009	6,913.38	6,912.76		8.59	6,904.17	
	8/31/2009	6,913.38	6,912.76		8.39	6,904.37	
	11/23/2009	6,913.38	6,912.76		21.62	6,891.14	
	3/8/2010	6,913.38	6,912.76		9.24	6,903.52	
	6/10/2010	6,913.38	6,912.76		8.87	6,903.89	
	9/15/2010	6,913.38	6,912.76		7.31	6,905.45	
	11/2/2010	6,913.38	6,912.76		8.65	6,904.11	
	3/2/2011	6,913.38	6,912.76		8.11	6,904.65	
	6/15/2011	6,913.38	6,912.76		7.89	6,904.87	
	9/27/2011	6,913.38	6,912.76		7.74	6,905.02	
	12/14/2011	6,913.38	6,912.76		8.30	6,904.46	
	6/12/2012	6,913.38	6,912.76		7.41	6,905.35	
	8/21/2012	6,913.38	6,912.76		8.56	6,904.20	
	11/28/2012	6,913.38	6,912.76		8.30	6,904.46	
	3/18/2013	6,913.38	6,912.76		9.10	6,903.66	
	6/12/2013	6,913.38	6,912.76		8.64	6,904.12	
	9/3/2013	6,913.38	6,912.76		8.92	6,903.84	
	11/12/2013	6,913.38	6,912.76		8.61	6,904.15	
	3/11/2014	6,913.38	6,912.76		8.9	6,903.86	
	6/5/2014	6,913.38	6,912.76		8.85	6,903.91	
	9/12/2014	6,913.38	6,912.76		7.97	6,904.79	
	11/11/2014	6,913.38	6,912.76		9.18	6,903.58	

TABLE 2
Groundwater Level Measurements
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Well ID	Measure- ment date	Ground Level Elevations (ft)	Well Casing Rim Elevations (ft)	Total Well Depth (ft)	Depth to Water ⁽¹⁾	Groundwater Elevation (ft)	Screened Interval Depth Top to Bottom (ft)
KA-3	11/4/2008	6,913.29	6,912.52	23.20	9.01	6,903.51	15 - 25
	3/23/2009	6,913.29	6,912.52		9.23	6,903.29	
	5/28/2009	6,913.29	6,912.52		9.12	6,903.40	
	8/31/2009	6,913.29	6,912.52		9.36	6,903.16	
	11/23/2009	6,913.29	6,912.52		9.60	6,902.92	
	3/8/2010	6,913.29	6,912.52		8.74	6,903.78	
	6/10/2010	6,913.29	6,912.52		8.39	6,904.13	
	9/15/2010	6,913.29	6,912.52		8.69	6,903.83	
	11/2/2010	6,913.29	6,912.52		8.52	6,904.00	
	3/2/2011	6,913.29	6,912.52		8.51	6,904.01	
	6/15/2011	6,913.29	6,912.52		8.44	6,904.08	
	9/27/2011	6,913.29	6,912.52		8.11	6,904.41	
	12/14/2011	6,913.29	6,912.52		8.08	6,904.44	
	6/12/2012	6,913.29	6,912.52		7.97	6,904.55	
	8/21/2012	6,913.29	6,912.52		7.98	6,904.54	
	11/28/2012	6,913.29	6,912.52		7.97	6,904.55	
	3/18/2013	6,913.29	6,912.52		9.07	6,903.45	
	6/12/2013	6,913.29	6,912.52		8.88	6,903.64	
	9/3/2013	6,913.29	6,912.52		8.35	6,904.17	
	11/12/2013	6,913.29	6,912.52		7.91	6,904.61	
	3/11/2014	6,913.29	6,912.52		8.03	6,904.49	
	6/5/2014	6,913.29	6,912.52		7.95	6,904.57	
	9/12/2014	6,913.29	6,912.52		9	6,903.52	
	11/11/2014	6,913.29	6,912.52		8	6,904.52	
OAPIS-1	10/15/2012	6,914.37	6,916.73	28.30	10.6	6,906.13	16 - 26
	3/18/2013	6,914.37	6,916.73		11.18	6,905.55	
	6/12/2013	6,914.37	6,916.73		11.50	6,905.23	
	9/3/2013	6,914.37	6,916.73		10.69	6,906.04	
	11/11/2013	6,914.37	6,916.73		10.90	6,905.83	
	3/11/2014	6,914.37	6,916.73		11.5	6,905.23	
	6/5/2014	6,914.37	6,916.73		11.75	6,904.98	
	9/12/2014	6,914.37	6,916.73		11.11	6,905.62	
	11/11/2014	6,914.37	6,916.73		17.21	6,899.52	

1 - no free product measured in any wells

TABLE 3
SWMU 1 Soil Boring Samples - Vapor Screening Results
Western Refining Company Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Sample Interval Depth	SWMU 1-1	SWMU 1-2	SWMU 1-3	SWMU 1-4	SWMU 1-5	SWMU 1-6	SWMU 1-7	SWMU 1-8	SWMU 1-9	SWMU 1-10	SWMU 1-11	SWMU 1-12	SWMU 1-13	SWMU 1-14	SWMU 1-15	SWMU 1-16	SWMU 1-17	SWMU 1-18	SWMU 1-19	SWMU 1-20
0 – 2'	12.9	3	17.3	2.9	6.8	10.5	7.6	26.5	3.2/7.0	10.1/6.1	38.9/3.7	63/4.4	3.1	5.7/4.7	5.7/9.3	7.7/5.7	9.5/6.7	8.2/5.2	4.1	21.7
2 – 4'	245	3.7	21.3	3.8	8.1	37.5	4.8	9.9					35.7							4.6
4 – 6'	NR	6.1	10.3	3.0	8.4	15.9	5.1	13.5					15.6							2.5
6 – 8'	333	2.8	18.9	3.1	2.5	5.8/4.9	4.0	8.8												2.8
8 –10'	144	NR	14.2	3.1	3.8	7.8	1.7	10.0												3.9
10 – 12'	399	4.7/4.3	16.3/12.3	7.8	9.8	9.6/0.8	0.5	15.8												1.5
12 – 14'	148/199	3.2	7.4	13.2	8.2		0.4	161												
14 – 16'		3.7	8.9	NR	11.0		5.9	9.9												
16 – 18'		7.2	11.3/10.7	11.8/16.4	16.1		2.8	8.3												
18 – 20'		2.9/2.3	5.4/6.1	8.5	12.8			14.0/10.5												
20 – 22'				8.5	5.7															
22 – 24'				5.6/5.2	5.5															
24 – 26'					10.9															
26 – 28'					3.0/4.1															

Sample Interval Depth	SWMU 1-21	SWMU 1-22	SWMU 1-23	SWMU 1-24	SWMU 1-25	SWMU 1-26	SWMU 1-27	SWMU 1-28	SWMU 1-29	SWMU 1-30	SWMU 1-31	SWMU 1-32	SWMU 1-33	SWMU 1-34	SWMU 1-35	SWMU 1-36	SWMU 1-37	SWMU 1-38	SWMU 1-39
0 – 2'	1.4	4.9/6.8	3.7	4.6	4.1/4.7	6.5	14.5	4.0	3.6	4.6	3.9	0.7	3.1	3.2	0.8	1.9	4.9	10.3	4.4
2 – 4'				6.4			18.2	4.8		6.6					4.7		13.6	8.5	
4 – 6'				14.4						6.7					1.7		12.8	8.2	
6 – 8'				22.9													16.6	11.7	
8 –10'				13.3													8.8		
10 – 12'				15.7													14.6		
12 – 14'				11.7													14.6/11.4		
14 – 16'				17.8													12.3		
16 – 18'				28.0													NR		
18 – 20'				27.0															
20 – 22'				27.1															
22 – 24'				17.7															
24 – 26'				19.5															
26 – 28'				22.8															
28 – 30'				16.7															
30 – 32'				13.2															
32 – 34'				10.9															

UNITS - PPM
NR = No Recover

TABLE 3
SWMU 14 Soil Boring Samples - Vapor Screening Results
Western Refining Company Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Sample Interval Depth	SWMU 14-1	OAPIS-1 (SWMU 14-2)	SWMU 14-3	SWMU 14-4	SWMU 14-5	SWMU 14-6	SWMU 14-7	SWMU 14-8	SWMU 14-9	SWMU 14-10	SWMU 14-11	SWMU 14-12
0 – 2'	5.0/12.6	2.9/280	14.3/6.2	5.9/6.2	5.7/7.4	0.7	141/197	8.2/3717	4.9/106	0.3/0.4	5.3/38.5	949/1094
2 – 4'	7.2	56.8	101	28.2		3.9	293		1712			
4 – 6'	13.9	69.4	122	23.1		306	365		1959			
6 – 8'	13.2	87.5	104	19.2		364	935		582			
8 –10'	21.0	330	343	581		345	649		10.9			
10 – 12'	105.9	294	155	711		367	NR		11.3			
12 – 14'	12.4	14.6	326	34.5		13.6	265		10.8			
14 – 16'	10.9	5.7	NM	8.7		10.5	108					
16 – 18'	10.9	10.7	NM	6.5		4.6	74					
18 – 20'	14.9	NM	NM	2.5			9.9					
20 – 22'	15.8	17.9	8.5				3.2					
22 – 24'	13.0	12.8	5.4				3.3					
24 – 26'	13.7	13.2	2.3									
26 – 28'	9.5											
28 – 30'	9.6											
30 – 32'	5.0											
32 – 34'	10.3											
34 – 36'	9.9											
36 – 38'	3.0											
38 – 40'	8.2											
40 – 42'	2.1											
42 – 44'	3.1											
44 – 46'	4.0											
46 – 48'	4.3											
48 – 50'	3.2											

Sample Interval Depth	SWMU 14-13	SWMU 14-14	SWMU 14-15	SWMU 14-16	SWMU 14-17	SWMU 14-18	SWMU 14-19	SWMU 14-20	SWMU 14-21	SWMU 14-22	SWMU 14-23	SWMU 14-24
0 – 2'	300/975	567/1028	2.8/5000	10.8/375.5	10.9/898	5.0/2537	4.4/5.1	2.0	10.5	2.9	11.0	3.0/4.0
2 – 4'									4.6	7.3	14.8	
4 – 6'									8.6	7.9	13.6	
6 – 8'									7.6	7.3	385.0	
8 –10'									4.5	4.9	112.0	
10 – 12'											315.0	
12 – 14'											398.0	
14 – 16'											52.0	
16 – 18'											120.0	
18 – 20'											NR	
20 – 22'											NR	

UNITS - PPM
NR - No Recovery
NM - No Measurement

TABLE 4
Residential Soil Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analyte					Cross Media Soil-to-Ground Water			Cross Media Soil-to-Ground Water		
	NMED		EPA		NMED	EPA		NMED	EPA	
	Residential Soil (mg/kg)	Endpoint	Residential Soil (mg/kg)	ResSoil key	DAF1 (mg/kg)	GW_Risk-based SSL (mgkg)	GW_MCL-based SSL (mg/kg)	DAF (461) (mg/kg)	GW_Risk-based SSL (461) (mg/kg)	GW_MCL-based SSL (461) (mg/kg)
Applicable depth interval	0-10'		0-2'		All depths			All depths		
Acenaphthene	3.44E+03	n	3.40E+03	n	1.69E+01	4.10E+00	-	7.79E+03	1.89E+03	-
Acenaphthylene	-	-	-	-	-	-	-	-	-	-
Acetone	6.66E+04	n	6.10E+04	n	3.86E+00	2.40E+00	-	1.78E+03	1.11E+03	-
Aniline	-	-	8.50E+01	c**	-	3.90E-03	-	-	1.80E+00	-
Anthracene	1.72E+04	n	1.70E+04	n	2.71E+02	4.20E+01	-	1.25E+05	1.94E+04	-
Antimony	3.13E+01	n	3.10E+01	n	6.61E-01	2.70E-01	0.27	3.05E+02	1.24E+02	1.24E+02
Arsenic	3.90E+00	c	3.90E-01	c*	1.31E-02	1.30E-03	0.29	6.05E+00	5.99E-01	1.34E+02
Azobenzene	-	-	5.10E+00	c	-	8.00E-04	-	-	3.69E-01	-
Barium	1.56E+04	n	1.50E+04	n	3.01E+02	1.20E+02	82	1.39E+05	5.53E+04	3.78E+04
Benz(a)anthracene	1.48E+00	c	1.50E-01	c	7.83E-02	1.00E-02	-	3.61E+01	4.61E+00	-
Benzene	1.54E+01	c	1.10E+00	c*	1.73E-03	2.00E-04	0.0026	7.96E-01	9.22E-02	1.20E+00
Benzo(a)pyrene	1.48E-01	c	1.50E-02	c	2.60E-02	3.50E-03	0.24	1.20E+01	1.61E+00	1.11E+02
Benzo(b)fluoranthene	1.48E+00	c	1.50E-01	c	2.65E-01	3.50E-02	-	1.22E+02	1.61E+01	-
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	1.48E+01	c	1.50E+00	c	2.60E+00	3.50E-01	-	1.20E+03	1.61E+02	-
Benzoic acid	-	-	2.40E+05	nm	-	1.40E+01	-	-	6.45E+03	-
Benzyl alcohol	-	-	6.10E+03	n	-	3.70E-01	-	-	1.71E+02	-
Beryllium	1.56E+02	n	1.60E+02	n	5.77E+01	1.30E+01	3.2	2.66E+04	5.99E+03	1.48E+03
Bis(2-chloroethoxy)methane	-	-	1.80E+02	n	-	1.10E-02	-	-	5.07E+00	-
Bis(2-chloroethyl)ether	2.68E+00	c	2.10E-01	c	2.63E-05	3.10E-06	-	1.21E-02	1.43E-03	-
Bis(2-chloroisopropyl)ether	9.15E+01	c	4.60E+00	c	2.33E-03	1.10E-04	-	1.07E+00	5.07E-02	-
Bis(2-ethylhexyl)phthalate	3.47E+02	cs	3.50E+01	c*	8.62E+00	1.70E-02	1.4	3.97E+03	7.84E+00	6.45E+02
Bromobenzene	-	-	3.00E+02	n	-	3.60E-02	-	-	1.66E+01	-
Bromodichloromethane	5.41E+00	c	2.70E-01	c	2.71E-04	3.20E-05	0.022	1.25E-01	1.48E-02	1.01E+01
Bromoform	6.16E+02	c	6.20E+01	c*	6.04E-01	2.10E-03	0.021	2.78E+02	9.68E-01	9.68E+00
Bromomethane	1.65E+01	n	7.30E+00	n	1.92E-03	1.80E-03	-	8.86E-01	8.30E-01	-
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	-	-
2-Butanone (MEK)	3.71E+04	n	2.80E+04	n	1.27E+00	1.00E+00	-	5.87E+02	4.61E+02	-
Butyl benzyl phthalate	-	-	2.60E+02	c*	-	2.00E-01	-	-	9.22E+01	-
Cadmium	7.03E+01	n	7.00E+01	n	1.37E+00	-	-	6.33E+02	-	-
Carbazole	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	1.53E+03	ns	8.20E+02	ns	2.83E-01	2.10E-01	-	1.30E+02	9.68E+01	-
Carbon tetrachloride	1.08E+01	c	6.10E-01	c	1.60E-03	1.50E-04	0.0019	7.39E-01	6.92E-02	8.76E-01
Chlorobenzene	3.76E+02	ns	2.90E+02	n	4.92E-02	4.90E-02	0.068	2.27E+01	2.26E+01	3.13E+01
Chloroethane	2.98E+04	ns	1.50E+04	ns	5.37E+00	5.90E+00	-	2.48E+03	2.72E+03	-
Chloroform	5.86E+00	c	2.90E-01	c	4.59E-04	5.30E-05	0.022	2.12E-01	2.44E-02	1.01E+01
Chloromethane	2.75E+02	n	1.20E+02	n	4.40E-02	4.90E-02	-	2.03E+01	2.26E+01	-
4-Chloro-3-methylphenol	-	-	6.10E+03	n	-	1.30E+00	-	-	5.99E+02	-
4-Chloroaniline	-	-	2.40E+00	c	-	1.30E-04	-	-	5.99E-02	-
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	-	-	1.60E+03	ns	-	1.80E-01	-	-	8.30E+01	-
2-Chloronaphthalene	6.11E+01	n	6.30E+03	ns	8.69E-04	2.90E+00	-	4.01E-01	1.34E+03	-
2-Chlorophenol	3.91E+02	n	3.90E+02	n	1.16E-01	5.70E-02	-	5.33E+01	2.63E+01	-
2-Chlorotoluene	1.56E+03	ns	1.60E+03	ns	5.58E-01	1.70E-01	-	2.57E+02	7.84E+01	-
Chromium III	1.17E+05	nl	1.20E+05	nm	9.86E+07	2.80E+07	-	4.54E+10	1.29E+10	-
Chromium VI	2.97E+00	c	2.90E-01	c	8.31E-03	5.90E-04	-	3.83E+00	2.72E-01	-
Chrysene	1.48E+02	c	1.50E+01	c	7.99E+00	1.10E+00	-	3.68E+03	5.07E+02	-
cis-1,2-DCE	1.56E+02	n	1.60E+02	n	1.84E-02	8.20E-03	2.10E-02	8.47E+00	3.78E+00	9.68E+00
cis-1,3-Dichloropropene	3.37E+01	c	-	-	1.24E-03	-	-	5.71E-01	-	-
Cobalt	-	-	2.30E+01	n	-	2.10E-01	-	-	9.68E+01	-
Cyanide	4.69E+01	n	4.70E+01	n	2.21E-01	9.40E-02	2	1.02E+02	4.33E+01	9.22E+02
1,1-Dichloroethane	6.45E+01	c	3.30E+00	c	5.98E-03	6.80E-04	-	2.75E+00	3.13E-01	-
1,1-Dichloroethene	4.49E+02	n	2.40E+02	n	1.16E-01	9.30E-02	0.0025	5.36E+01	4.29E+01	1.15E+00
1,1-Dichloropropene	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane	1.86E+00	c	5.40E-03	c	1.10E-06	1.40E-07	8.60E-05	5.07E-04	6.45E-05	3.96E-02
1,2-Dibromoethane (EDB)	5.88E-01	c	3.40E-02	c	1.54E-05	1.80E-06	1.40E-05	7.10E-03	8.30E-04	6.45E-03

TABLE 4
Residential Soil Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analyte					Cross Media Soil-to-Ground Water			Cross Media Soil-to-Ground Water		
	NMED		EPA		NMED	EPA		NMED	EPA	
	Residential Soil (mg/kg)	Endpoint	Residential Soil (mg/kg)	ResSoil key	DAF1 (mg/kg)	GW_Risk-based SSL (mgkg)	GW_MCL-based SSL (mg/kg)	DAF (461) (mg/kg)	GW_Risk-based SSL (461) (mg/kg)	GW_MCL-based SSL (461) (mg/kg)
Applicable depth interval	0-10'		0-2'		All depths			All depths		
1,2-Dichlorobenzene	2.31E+03	ns	1.90E+03	ns	2.80E-01	2.70E-01	0.58	1.29E+02	1.24E+02	2.67E+02
3,3'-Dichlorobenzidine	1.08E+01	c	1.10E+00	c	7.40E-03	7.10E-04	-	3.41E+00	3.27E-01	-
1,2-Dichloroethane (EDC)	7.89E+00	c	4.30E-01	c*	3.56E-04	4.20E-05	0.0014	1.64E-01	1.94E-02	6.45E-01
1,2-Dichloropropane	1.52E+01	c	9.40E-01	c*	1.07E-03	1.30E-04	0.0017	4.94E-01	5.99E-02	7.84E-01
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-
1,3-Dichloropropane	-	-	1.60E+03	ns	-	9.90E-02	-	-	4.56E+01	-
1,4-Dichlorobenzene	3.17E+01	c	2.40E+00	c	3.19E-03	4.00E-04	0.072	1.47E+00	1.84E-01	3.32E+01
2,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	1.83E+02	n	1.80E+02	n	9.98E-02	4.10E-02	-	4.60E+01	1.89E+01	-
2,4-Dimethylphenol	1.22E+03	n	1.20E+03	n	6.65E-01	3.20E-01	-	3.07E+02	1.48E+02	-
4,6-Dinitro-2-methylphenol	-	-	4.90E+00	n	-	2.00E-03	-	-	9.22E-01	-
2,4-Dinitrophenol	1.22E+02	n	1.20E+02	n	6.31E-02	3.40E-02	-	2.91E+01	1.57E+01	-
2,4-Dinitrotoluene	1.57E+01	c	1.60E+00	c*	2.25E-03	2.80E-04	-	1.04E+00	1.29E-01	-
2,6-Dinitrotoluene	6.11E+01	n	6.10E+01	n	3.85E-02	2.00E-02	-	1.77E+01	9.22E+00	-
Dibenz(a,h)anthracene	1.48E-01	c	1.50E-02	c	8.46E-02	1.10E-02	-	3.90E+01	5.07E+00	-
Dibenzofuran	-	-	7.80E+01	n	-	1.10E-01	-	-	5.07E+01	-
Dibromochloromethane	1.21E+01	c	6.80E-01	c	3.31E-04	3.90E-05	2.10E-02	1.52E-01	1.80E-02	9.68E+00
Dibromomethane	5.16E+01	n	2.50E+01	n	1.71E-03	1.90E-03	-	7.89E-01	8.76E-01	-
Dichlorodifluoromethane	1.68E+02	n	9.40E+01	n	3.72E-01	3.00E-01	-	1.71E+02	1.38E+02	-
Diethyl phthalate	4.89E+04	n	4.90E+04	n	9.66E+00	4.70E+00	-	4.45E+03	2.17E+03	-
Dimethyl phthalate	6.11E+05	nl	-	-	8.06E+01	-	-	3.71E+04	-	-
Di-n-butyl phthalate	6.11E+03	n	6.10E+03	n	6.97E+00	1.70E+00	-	3.21E+03	7.84E+02	-
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	6.84E+01	c	5.40E+00	c	1.30E-02	1.50E-03	7.80E-01	5.98E+00	6.92E-01	3.60E+02
Fluoranthene	2.29E+03	n	2.30E+03	n	1.22E+02	7.00E+01	-	5.61E+04	3.23E+04	-
Fluorene	2.29E+03	n	2.30E+03	n	2.03E+01	4.00E+00	-	9.36E+03	1.84E+03	-
Hexachlorobenzene	3.04E+00	c	3.00E-01	c	3.98E-03	5.30E-04	1.30E-02	1.83E+00	2.44E-01	5.99E+00
Hexachlorobutadiene	6.11E+01	n	6.20E+00	c**	1.28E-02	5.00E-04	-	5.91E+00	2.31E-01	-
Hexachlorocyclopentadiene	3.67E+02	n	3.70E+02	n	5.27E-01	7.00E-02	1.60E-01	2.43E+02	3.23E+01	7.38E+01
Hexachloroethane	4.28E+01	n	1.20E+01	c**	8.18E-03	4.80E-04	-	3.77E+00	2.21E-01	-
2-Hexanone	9.38E+02	ns	2.10E+02	n	7.65E+00	7.90E-03	-	3.53E+03	3.64E+00	-
Indeno(1,2,3-cd)pyrene	1.48E+00	c	1.50E-01	c	8.63E-01	1.20E-01	-	3.98E+02	5.53E+01	-
Iron	5.48E+04	n	5.50E+04	n	6.46E+02	2.70E+02	-	2.98E+05	1.24E+05	-
Isophorone	5.12E+03	c	5.10E+02	c*	1.92E-01	2.20E-02	-	8.84E+01	1.01E+01	-
Isopropylbenzene (cumene)	2.43E+03	ns	2.10E+03	ns	8.65E-01	6.40E-01	-	3.99E+02	2.95E+02	-
4-Isopropyltoluene	-	-	-	-	-	-	-	-	-	-
Lead	4.00E+02	IEUBK	4.00E+02	L	-	-	1.40E+01	-	-	6.45E+03
Manganese	1.86E+03	n	-	-	5.72E+01	-	-	2.64E+04	-	-
Mercury	1.56E+01	ns	1.00E+01	ns	3.27E-02	3.30E-02	0.1	1.51E+01	1.52E+01	4.61E+01
Methyl tert-butyl ether (MTBE)	9.01E+02	c	4.30E+01	c	2.41E-02	2.80E-03	-	1.11E+01	1.29E+00	-
Methylene chloride	4.09E+02	n	5.60E+01	c**	4.12E-02	2.50E-03	1.30E-03	1.90E+01	1.15E+00	5.99E-01
1-Methylnaphthalene	-	-	1.60E+01	c	-	5.10E-03	-	-	2.35E+00	-
2-Methylnaphthalene	-	-	2.30E+02	n	-	1.40E-01	-	-	6.45E+01	-
2-Methylphenol	-	-	3.10E+03	n	-	5.80E-01	-	-	2.67E+02	-
3+4-Methylphenol	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	-	-	5.30E+03	ns	-	2.30E-01	-	-	1.06E+02	-
2-Nitroaniline	-	-	6.10E+02	n	-	6.20E-02	-	-	2.86E+01	-
3-Nitroaniline	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	-	-	2.40E+01	c*	-	1.40E-03	-	-	6.45E-01	-
2-Nitrophenol	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-	-	-	-
Naphthalene	4.30E+01	c	3.60E+00	c*	3.57E-03	4.70E-04	-	1.64E+00	2.17E-01	-
n-Butylbenzene	-	-	3.90E+03	ns	-	2.50E+00	-	-	1.15E+03	-
Nickel	1.56E+03	n	1.50E+03	n	4.77E+01	2.00E+01	-	2.20E+04	9.22E+03	-
Nitrobenzene	5.35E+01	c	4.80E+00	c*	6.24E-04	7.90E-05	-	2.88E-01	3.64E-02	-
N-Nitrosodi-n-propylamine	-	-	6.90E-02	c	-	7.00E-06	-	-	3.23E-03	-

TABLE 4
Residential Soil Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analyte					Cross Media Soil-to-Ground Water			Cross Media Soil-to-Ground Water		
	NMED		EPA		NMED	EPA		NMED	EPA	
	Residential Soil (mg/kg)	Endpoint	Residential Soil (mg/kg)	ResSoil key		GW_Risk-based SSL (mg/kg)	GW_MCL-based SSL (mg/kg)		GW_Risk-based SSL (461) (mg/kg)	GW_MCL-based SSL (461) (mg/kg)
Applicable depth interval	0-10'		0-2'		All depths			All depths		
N-Nitrosodiphenylamine	9.93E+02	c	9.90E+01	c	5.65E-01	5.70E-02	-	2.61E+02	2.63E+01	-
n-Propylbenzene	-	-	3.40E+03	ns	-	9.90E-01	-	-	4.56E+02	-
Pentachlorophenol	8.94E+00	c	8.90E-01	c	1.28E-02	3.60E-04	0.01	5.90E+00	1.66E-01	4.61E+00
Phenanthrene	1.83E+03	ns	-	-	2.86E+01	-	-	1.32E+04	-	-
Phenol	1.83E+04	n	1.80E+04	n	4.97E+00	2.60E+00	-	2.29E+03	1.20E+03	-
Pyrene	1.72E+03	n	1.70E+03	n	8.94E+01	9.50E+00	-	4.12E+04	4.38E+03	-
Pyridine	-	-	7.80E+01	n	-	5.30E-03	-	-	2.44E+00	-
sec-Butylbenzene	-	-	-	-	-	-	-	-	-	-
Selenium	3.91E+02	n	3.90E+02	n	9.65E-01	4.00E-01	2.60E-01	4.45E+02	1.84E+02	1.20E+02
Silver	3.91E+02	n	3.90E+02	n	1.57E+00	6.00E-01	-	7.22E+02	2.77E+02	-
Styrene	7.28E+03	ns	6.30E+03	ns	1.39E+00	1.20E+00	0.11	6.40E+02	5.53E+02	5.07E+01
1,2,3-Trichlorobenzene	-	-	4.90E+01	n	-	1.50E-02	-	-	6.92E+00	-
1,1,1,2-Tetrachloroethane	2.91E+01	c	1.90E+00	c	1.65E-03	1.90E-04	-	7.59E-01	8.76E-02	-
1,1,1-Trichloroethane	1.56E+04	ns	8.70E+03	ns	2.91E+00	2.60E+00	0.07	1.34E+03	1.20E+03	3.23E+01
1,1,2,2-Tetrachloroethane	8.02E+00	c	5.60E-01	c	2.13E-04	2.60E-05	-	9.82E-02	1.20E-02	-
1,1,2-Trichloroethane	2.81E+00	n	1.10E+00	c**	1.12E-04	7.70E-05	0.0016	5.14E-02	3.55E-02	7.38E-01
2,4,5-Trichlorophenol	6.11E+03	n	6.10E+03	n	1.04E+01	3.30E+00	-	4.78E+03	1.52E+03	-
2,4,6-Trichlorophenol	6.11E+01	n	4.40E+01	c**	1.04E-01	1.30E-02	-	4.78E+01	5.99E+00	-
1,2,3-Trichloropropane	4.97E-02	c	5.00E-03	c	2.50E-06	2.80E-07	-	1.15E-03	1.29E-04	-
1,2,4-Trichlorobenzene	7.30E+01	n	2.20E+01	c**	9.13E-03	2.90E-03	0.2	4.21E+00	1.34E+00	9.22E+01
1,2,4-Trimethylbenzene	-	-	6.20E+01	n	-	2.10E-02	-	-	9.68E+00	-
1,3,5-Trimethylbenzene	-	-	7.80E+02	ns	-	1.20E-01	-	-	5.53E+01	-
tert-Butylbenzene	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene (PCE)	7.02E+00	c	2.20E+01	c**	4.30E-04	4.40E-03	0.0023	1.98E-01	2.03E+00	1.06E+00
Toluene	5.27E+03	ns	5.00E+03	ns	1.27E+00	5.90E-01	0.69	5.84E+02	2.72E+02	3.18E+02
trans-1,2-DCE	2.70E+02	n	1.50E+02	n	2.69E-02	2.50E-02	2.90E-02	1.24E+01	1.15E+01	1.34E+01
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	-	-
Trichloroethene (TCE)	8.77E+00	n	9.10E-01	c**	1.05E-03	1.60E-04	0.0018	4.85E-01	7.38E-02	8.30E-01
Trichlorofluoromethane	1.41E+03	ns	7.90E+02	n	8.89E-01	6.90E-01	-	4.10E+02	3.18E+02	-
Vanadium	3.91E+02	n	3.90E+02	n	1.83E+02	7.80E+01	-	8.42E+04	3.60E+04	-
Vinyl chloride	7.28E-01	c	6.00E-02	c	5.42E-05	5.30E-06	0.00069	2.50E-02	2.44E-03	3.18E-01
Xylenes, Total	8.14E+02	ns	6.30E+02	ns	1.56E-01	1.90E-01	9.8	7.21E+01	8.76E+01	4.52E+03
Zinc	2.35E+04	n	2.30E+04	n	6.82E+02	2.90E+02	-	3.14E+05	1.34E+05	-

c - carcinogen

n - noncarcinogen

cs - carcinogen, SSL November exceed saturation

ns - noncarcinogen, SSL November exceed saturation

nl - noncarcinogen, SSL may exceed ceiling limit

nls - noncarcinogen, SSL may exceed both saturation and ceiling limit

* = where n SL < 100X c SL, ** = where n SL < 10X c SL

- no screenig value currently available

NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

EPA - Regional Screening Levels (November 2012)

TABLE 5
Non-Residential Soil Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Cross Media Soil-to-Ground Water					Cross Media Soil-to-Ground Water			Cross Media Soil-to-Ground Water		
Analyte	NMED		EPA		NMED	EPA		NMED	EPA	
	ConsWork (mg/kg)	ConsWork Soil (Endpoint)	Industrial (mg/kg)	IndSoil _key	DAF1 (mg/kg)	GW_Risk- based SSL (mg/kg)	GW_MCL- based SSL (mg/kg)	DAF (461) (mg/kg)	GW_Risk- based SSL (461) (mg/kg)	GW_MCL- based SSL (461) (mg/kg)
Applicable depth interval	0-10'		0-2'		All depths			All depths		
Acenaphthene	1.86E+04	n	3.30E+04	n	1.69E+01	4.10E+00	-	7.79E+03	1.89E+03	-
Acenaphthylene	-	-	-	-	-	-	-	-	-	-
Acetone	2.21E+05	nls	6.30E+05	nms	3.86E+00	2.40E+00	-	1.78E+03	1.11E+03	-
Aniline	-	-	3.00E+02	c*	-	3.90E-03	-	-	1.80E+00	-
Anthracene	6.68E+04	n	1.70E+05	nm	2.71E+02	4.20E+01	-	1.25E+05	1.94E+04	-
Antimony	1.24E+02	n	4.10E+02	n	6.61E-01	2.70E-01	0.27	3.05E+02	1.24E+02	1.24E+02
Arsenic	5.30E+01	n	1.60E+00	c	1.31E-02	1.30E-03	0.29	6.05E+00	5.99E-01	1.34E+02
Azobenzene	-	-	2.30E+01	c	-	8.00E-04	-	-	3.69E-01	-
Barium	4.35E+03	n	1.90E+05	nm	3.01E+02	1.20E+02	82	1.39E+05	5.53E+04	3.78E+04
Benz(a)anthracene	2.13E+02	c	2.10E+00	c	7.83E-02	1.00E-02	-	3.61E+01	4.61E+00	-
Benzene	1.38E+02	n	5.40E+00	c*	1.73E-03	2.00E-04	0.0026	7.96E-01	9.22E-02	1.20E+00
Benzo(a)pyrene	2.13E+01	c	2.10E-01	c	2.60E-02	3.50E-03	0.24	1.20E+01	1.61E+00	1.11E+02
Benzo(b)fluoranthene	2.13E+02	c	2.10E+00	c	2.65E-01	3.50E-02	-	1.22E+02	1.61E+01	-
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	2.06E+03	c	2.10E+01	c	2.60E+00	3.50E-01	-	1.20E+03	1.61E+02	-
Benzoic acid	-	-	2.50E+06	nm	-	1.40E+01	-	-	6.45E+03	-
Benzyl alcohol	-	-	6.20E+04	n	-	3.70E-01	-	-	1.71E+02	-
Beryllium	1.44E+02	n	2.00E+03	n	5.77E+01	1.30E+01	3.2	2.66E+04	5.99E+03	1.48E+03
Bis(2-chloroethoxy)methane	-	-	1.80E+03	n	-	1.10E-02	-	-	5.07E+00	-
Bis(2-chloroethyl)ether	7.78E+01	c	1.00E+00	c	2.63E-05	3.10E-06	-	1.21E-02	1.43E-03	-
Bis(2-chloroisopropyl)ether	3.10E+03	cs	2.20E+01	c	2.33E-03	1.10E-04	-	1.07E+00	5.07E-02	-
Bis(2-ethylhexyl)phthalate	4.76E+03	n	1.20E+02	c	8.62E+00	1.70E-02	1.4	3.97E+03	7.84E+00	6.45E+02
Bromobenzene	-	-	1.80E+03	ns	-	3.60E-02	-	-	1.66E+01	-
Bromodichloromethane	1.43E+02	c	1.40E+00	c	2.71E-04	3.20E-05	0.022	1.25E-01	1.48E-02	1.01E+01
Bromoform	4.76E+03	n	2.20E+02	c*	6.04E-01	2.10E-03	0.021	2.78E+02	9.68E-01	9.68E+00
Bromomethane	1.64E+01	n	3.20E+01	n	1.92E-03	1.80E-03	-	8.86E-01	8.30E-01	-
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	-	-
2-Butanone (MEK)	8.43E+04	nls	2.00E+05	nms	1.27E+00	1.00E+00	-	5.87E+02	4.61E+02	-
Butyl benzyl phthalate	-	-	9.10E+02	c	-	2.00E-01	-	-	9.22E+01	-
Cadmium	2.77E+02	n	8.00E+02	n	1.37E+00	-	-	6.33E+02	-	-
Carbazole	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	1.58E+03	ns	3.70E+03	ns	2.83E-01	2.10E-01	-	1.30E+02	9.68E+01	-
Carbon tetrachloride	2.26E+02	ns	3.00E+00	c	1.60E-03	1.50E-04	0.0019	7.39E-01	6.92E-02	8.76E-01
Chlorobenzene	4.06E+02	ns	1.40E+03	ns	4.92E-02	4.90E-02	0.068	2.27E+01	2.26E+01	3.13E+01
Chloroethane	2.61E+04	nls	6.10E+04	ns	5.37E+00	5.90E+00	-	2.48E+03	2.72E+03	-
Chloroform	1.54E+02	c	1.50E+00	c	4.59E-04	5.30E-05	0.022	2.12E-01	2.44E-02	1.01E+01
Chloromethane	2.41E+02	n	5.00E+02	n	4.40E-02	4.90E-02	-	2.03E+01	2.26E+01	-
4-Chloro-3-methylphenol	-	-	6.20E+04	n	-	1.30E+00	-	-	5.99E+02	-
4-Chloroaniline	-	-	8.60E+00	c	-	1.30E-04	-	-	5.99E-02	-
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	-	-	2.00E+04	ns	-	1.80E-01	-	-	8.30E+01	-
2-Chloronaphthalene	2.94E+02	n	8.20E+04	ns	8.69E-04	2.90E+00	-	4.01E-01	1.34E+03	-
2-Chlorophenol	1.55E+03	n	5.10E+03	n	1.16E-01	5.70E-02	-	5.33E+01	2.63E+01	-
2-Chlorotoluene	6.19E+03	ns	2.00E+04	ns	5.58E-01	1.70E-01	-	2.57E+02	7.84E+01	-
Chromium III	4.65E+05	nl	1.50E+06	nm	9.86E+07	2.80E+07	-	4.54E+10	1.29E+10	-
Chromium VI	6.56E+01	c	5.60E+00	c	8.31E-03	5.90E-04	-	3.83E+00	2.72E-01	-
Chrysene	2.06E+04	c	2.10E+02	c	7.99E+00	1.10E+00	-	3.68E+03	5.07E+02	-
cis-1,2-DCE	6.19E+02	c	2.00E+03	n	1.84E-02	8.20E-03	2.10E-02	8.47E+00	3.78E+00	9.68E+00
cis-1,3-Dichloropropene	2.09E+02	ns	-	-	1.24E-03	-	-	5.71E-01	-	-
Cobalt	-	-	3.00E+02	n	-	2.10E-01	-	-	9.68E+01	-
Cyanide	1.86E+02	n	6.10E+02	n	2.21E-01	9.40E-02	2	1.02E+02	4.33E+01	9.22E+02
1,1-Dichloroethane	1.70E+03	cs	1.70E+01	c	5.98E-03	6.80E-04	-	2.75E+00	3.13E-01	-
1,1-Dichloroethene	4.32E+02	ns	1.10E+03	n	1.16E-01	9.30E-02	0.0025	5.36E+01	4.29E+01	1.15E+00
1,1-Dichloropropene	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane	5.07E+00	c	6.90E-02	c	1.10E-06	1.40E-07	8.60E-05	5.07E-04	6.45E-05	3.96E-02
1,2-Dibromoethane (EDB)	1.60E+01	c	1.70E-01	c	1.54E-05	1.80E-06	1.40E-05	7.10E-03	8.30E-04	6.45E-03
1,2-Dichlorobenzene	2.71E+03	ns	9.80E+03	ns	2.80E-01	2.70E-01	0.58	1.29E+02	1.24E+02	2.67E+02
3,3'-Dichlorobenzidine	3.64E+02	c	3.80E+00	c	7.40E-03	7.10E-04	-	3.41E+00	3.27E-01	-
1,2-Dichloroethane (EDC)	5.87E+01	n	2.20E+00	c*	3.56E-04	4.20E-05	0.0014	1.64E-01	1.94E-02	6.45E-01
1,2-Dichloropropane	2.50E+01	n	4.70E+00	c*	1.07E-03	1.30E-04	0.0017	4.94E-01	5.99E-02	7.84E-01

TABLE 5
Non-Residential Soil Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analyte					Cross Media Soil-to-Ground Water			Cross Media Soil-to-Ground Water		
	NMED		EPA		NMED	EPA		NMED	EPA	
	ConsWork (mg/kg)	ConsWork Soil (Endpoint)	Industrial (mg/kg)	IndSoil _key	DAF1 (mg/kg)	GW_Risk- based SSL (mg/kg)	GW_MCL- based SSL (mg/kg)	DAF (461) (mg/kg)	GW_Risk- based SSL (461) (mg/kg)	GW_MCL- based SSL (461) (mg/kg)
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-
1,3-Dichloropropane	-	-	2.00E+04	ns	-	9.90E-02	-	-	4.56E+01	-
1,4-Dichlorobenzene	8.31E+02	cs	1.20E+01	c	3.19E-03	4.00E-04	0.072	1.47E+00	1.84E-01	3.32E+01
2,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	7.15E+02	n	1.80E+03	n	9.98E-02	4.10E-02	-	4.60E+01	1.89E+01	-
2,4-Dimethylphenol	4.76E+03	n	1.20E+04	n	6.65E-01	3.20E-01	-	3.07E+02	1.48E+02	-
4,6-Dinitro-2-methylphenol	-	-	4.90E+01	n	-	2.00E-03	-	-	9.22E-01	-
2,4-Dinitrophenol	4.76E+02	n	1.20E+03	n	6.31E-02	3.40E-02	-	2.91E+01	1.57E+01	-
2,4-Dinitrotoluene	4.76E+02	n	5.50E+00	c	2.25E-03	2.80E-04	-	1.04E+00	1.29E-01	-
2,6-Dinitrotoluene	2.38E+02	n	6.20E+02	n	3.85E-02	2.00E-02	-	1.77E+01	9.22E+00	-
Dibenz(a,h)anthracene	2.13E+01	c	2.10E-01	c	8.46E-02	1.10E-02	-	3.90E+01	5.07E+00	-
Dibenzofuran	-	-	1.00E+03	ns	-	1.10E-01	-	-	5.07E+01	-
Dibromochloromethane	3.32E+02	cs	3.30E+00	c	3.31E-04	3.90E-05	2.10E-02	1.52E-01	1.80E-02	9.68E+00
Dibromomethane	3.10E+03	ns	1.10E+02	n	1.71E-03	1.90E-03	-	7.89E-01	8.76E-01	-
Dichlorodifluoromethane	1.49E+02	ns	4.00E+02	n	3.72E-01	3.00E-01	-	1.71E+02	1.38E+02	-
Diethyl phthalate	1.91E+05	nl	4.90E+05	nm	9.66E+00	4.70E+00	-	4.45E+03	2.17E+03	-
Dimethyl phthalate	2.38E+06	nl	-	-	8.06E+01	-	-	3.71E+04	-	-
Di-n-butyl phthalate	2.38E+04	n	6.20E+04	n	6.97E+00	1.70E+00	-	3.21E+03	7.84E+02	-
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	1.83E+03	cs	2.70E+01	c	1.30E-02	1.50E-03	7.80E-01	5.98E+00	6.92E-01	3.60E+02
Fluoranthene	8.91E+03	n	2.20E+04	n	1.22E+02	7.00E+01	-	5.61E+04	3.23E+04	-
Fluorene	8.91E+03	ns	2.20E+04	n	2.03E+01	4.00E+00	-	9.36E+03	1.84E+03	-
Hexachlorobenzene	1.03E+02	c	1.10E+00	c	3.98E-03	5.30E-04	1.30E-02	1.83E+00	2.44E-01	5.99E+00
Hexachlorobutadiene	2.38E+02	n	2.20E+01	c*	1.28E-02	5.00E-04	-	5.91E+00	2.31E-01	-
Hexachlorocyclopentadiene	8.11E+02	n	3.70E+03	n	5.27E-01	7.00E-02	1.60E-01	2.43E+02	3.23E+01	7.38E+01
Hexachloroethane	1.67E+02	n	4.30E+01	c*	8.18E-03	4.80E-04	-	3.77E+00	2.21E-01	-
2-Hexanone	9.73E+02	ns	1.40E+03	n	7.65E+00	7.90E-03	-	3.53E+03	3.64E+00	-
Indeno(1,2,3-cd)pyrene	2.13E+02	c	2.10E+00	c	8.63E-01	1.20E-01	-	3.98E+02	5.53E+01	-
Iron	2.17E+05	nl	7.20E+05	nm	6.46E+02	2.70E+02	-	2.98E+05	1.24E+05	-
Isophorone	4.75E+04	n	1.80E+03	c*	1.92E-01	2.20E-02	-	8.84E+01	1.01E+01	-
Isopropylbenzene (cumene)	2.81E+03	ns	1.10E+04	ns	8.65E-01	6.40E-01	-	3.99E+02	2.95E+02	-
4-Isopropyltoluene	-	-	-	-	-	-	-	-	-	-
Lead	8.00E+02	IEUBK	8.00E+02	L	-	-	1.40E+01	-	-	6.45E+03
Manganese	4.40E+02	n	-	-	5.72E+01	-	-	2.64E+04	-	-
Mercury	1.36E+01	ns	4.30E+01	ns	3.27E-02	3.30E-02	0.1	1.51E+01	1.52E+01	4.61E+01
Methyl tert-butyl ether (MTBE)	2.49E+04	cs	2.20E+02	c	2.41E-02	2.80E-03	-	1.11E+01	1.29E+00	-
Methylene chloride	1.12E+03	ns	9.60E+02	c**	4.12E-02	2.50E-03	1.30E-03	1.90E+01	1.15E+00	5.99E-01
1-Methylnaphthalene	-	-	5.30E+01	c	-	5.10E-03	-	-	2.35E+00	-
2-Methylnaphthalene	-	-	2.20E+03	ns	-	1.40E-01	-	-	6.45E+01	-
2-Methylphenol	-	-	3.10E+04	n	-	5.80E-01	-	-	2.67E+02	-
3+4-Methylphenol	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	-	-	5.30E+04	ns	-	2.30E-01	-	-	1.06E+02	-
2-Nitroaniline	-	-	6.00E+03	n	-	6.20E-02	-	-	2.86E+01	-
3-Nitroaniline	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	-	-	8.60E+01	c*	-	1.40E-03	-	-	6.45E-01	-
2-Nitrophenol	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-	-	-	-
Naphthalene	1.58E+02	n	1.80E+01	c*	3.57E-03	4.70E-04	-	1.64E+00	2.17E-01	-
n-Butylbenzene	-	-	5.10E+04	ns	-	2.50E+00	-	-	1.15E+03	-
Nickel	6.19E+03	n	2.00E+04	n	4.77E+01	2.00E+01	-	2.20E+04	9.22E+03	-
Nitrobenzene	3.32E+02	n	2.40E+01	c*	6.24E-04	7.90E-05	-	2.88E-01	3.64E-02	-
N-Nitrosodi-n-propylamine	-	-	2.50E-01	c	-	7.00E-06	-	-	3.23E-03	-
N-Nitrosodiphenylamine	3.36E+04	c	3.50E+02	c	5.65E-01	5.70E-02	-	2.61E+02	2.63E+01	-
n-Propylbenzene	-	-	2.10E+04	ns	-	9.90E-01	-	-	4.56E+02	-
Pentachlorophenol	3.10E+02	c	2.70E+00	c	1.28E-02	3.60E-04	0.01	5.90E+00	1.66E-01	4.61E+00
Phenanthrene	7.15E+03	n	-	-	2.86E+01	-	-	1.32E+04	-	-
Phenol	6.88E+04	n	1.80E+05	nm	4.97E+00	2.60E+00	-	2.29E+03	1.20E+03	-
Pyrene	6.68E+03	n	1.70E+04	n	8.94E+01	9.50E+00	-	4.12E+04	4.38E+03	-
Pyridine	-	-	1.00E+03	n	-	5.30E-03	-	-	2.44E+00	-
sec-Butylbenzene	-	-	-	-	-	-	-	-	-	-
Selenium	1.55E+03	n	5.10E+03	n	9.65E-01	4.00E-01	2.60E-01	4.45E+02	1.84E+02	1.20E+02

TABLE 5
Non-Residential Soil Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analyte					Cross Media Soil-to-Ground Water			Cross Media Soil-to-Ground Water		
	NMED		EPA		NMED	EPA		NMED	EPA	
	ConsWork (mg/kg)	ConsWork Soil (Endpoint)	Industrial (mg/kg)	IndSoil _key	DAF1 (mg/kg)	GW_Risk- based SSL (mg/kg)	GW_MCL- based SSL (mg/kg)	DAF (461) (mg/kg)	GW_Risk- based SSL (461) (mg/kg)	GW_MCL- based SSL (461) (mg/kg)
Silver	1.55E+03	n	5.10E+03	n	1.57E+00	6.00E-01	-	7.22E+02	2.77E+02	-
Styrene	9.99E+03	ns	3.60E+04	ns	1.39E+00	1.20E+00	0.11	6.40E+02	5.53E+02	5.07E+01
1,2,3-Trichlorobenzene	-	-	4.90E+02	ns	-	1.50E-02	-	-	6.92E+00	-
1,1,1,2-Tetrachloroethane	7.79E+02	cs	9.30E+00	c	1.65E-03	1.90E-04	-	7.59E-01	8.76E-02	-
1,1,1-Trichloroethane	1.48E+04	ns	3.80E+04	ns	2.91E+00	2.60E+00	0.07	1.34E+03	1.20E+03	3.23E+01
1,1,2,2-Tetrachloroethane	2.21E+02	c	2.80E+00	c	2.13E-04	2.60E-05	-	9.82E-02	1.20E-02	-
1,1,2-Trichloroethane	4.72E+02	ns	5.30E+00	c**	1.12E-04	7.70E-05	0.0016	5.14E-02	3.55E-02	7.38E-01
2,4,5-Trichlorophenol	2.38E+04	n	6.20E+04	n	1.04E+01	3.30E+00	-	4.78E+03	1.52E+03	-
2,4,6-Trichlorophenol	2.38E+02	n	1.60E+02	c**	1.04E-01	1.30E-02	-	4.78E+01	5.99E+00	-
1,2,3-Trichloropropane	7.23E+00	c	9.50E-02	c	2.50E-06	2.80E-07	-	1.15E-03	1.29E-04	-
1,2,4-Trichlorobenzene	6.87E+01	ns	9.90E+01	c**	9.13E-03	2.90E-03	0.2	4.21E+00	1.34E+00	9.22E+01
1,2,4-Trimethylbenzene	-	-	2.60E+02	ns	-	2.10E-02	-	-	9.68E+00	-
1,3,5-Trimethylbenzene	-	-	1.00E+04	ns	-	1.20E-01	-	-	5.53E+01	-
tert-Butylbenzene	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene (PCE)	2.12E+02	cs	1.10E+02	c**	4.30E-04	4.40E-03	0.0023	1.98E-01	2.03E+00	1.06E+00
Toluene	1.34E+04	ns	4.50E+04	ns	1.27E+00	5.90E-01	0.69	5.84E+02	2.72E+02	3.18E+02
trans-1,2-DCE	2.73E+02	ns	6.90E+02	n	2.69E-02	2.50E-02	2.90E-02	1.24E+01	1.15E+01	1.34E+01
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	-	-
Trichloroethene (TCE)	7.68E+00	cs	6.40E+00	c**	1.05E-03	1.60E-04	0.0018	4.85E-01	7.38E-02	8.30E-01
Trichlorofluoromethane	1.30E+03	ns	3.40E+03	ns	8.89E-01	6.90E-01	-	4.10E+02	3.18E+02	-
Vanadium	1.55E+03	n	5.20E+03	n	1.83E+02	7.80E+01	-	8.42E+04	3.60E+04	-
Vinyl chloride	1.49E+02	c	1.70E+00	c	5.42E-05	5.30E-06	0.00069	2.50E-02	2.44E-03	3.18E-01
Xylenes, Total	7.43E+02	ns	2.70E+03	ns	1.56E-01	1.90E-01	9.8	7.21E+01	8.76E+01	4.52E+03
Zinc	9.29E+04	n	3.10E+05	nm	6.82E+02	2.90E+02	-	3.14E+05	1.34E+05	-

c - carcinogen

n - noncarcinogen

cs - carcinogen, SSL November exceed saturation

ns - noncarcinogen, SSL November exceed saturation

nl - noncarcinogen, SSL may exceed ceiling limit

nls - noncarcinogen, SSL may exceed both saturation and ceiling limit

* = where n SL < 100X c SL, ** = where n SL < 10X c SL

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NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

EPA - Regional Screening Levels (November 2012)

Table 6
Groundwater Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analyte	NMED			EPA		
	NMED WQCC Standards (mg/L)	NMED Tap Water mg/L	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)
Acenaphthene	-	2.19	n	4.00E-01	n	-
Acenaphthylene	-	-	-	-	-	-
Acetone	-	21.78289	n	1.20E+01	n	-
Aniline	-	-	-	1.20E-01	c**	-
Anthracene	-	10.95	n	1.30E+00	n	-
Antimony	-	0.0146	n	6.00E-03	n	0.006
Arsenic	0.1	0.000448	c	4.50E-04	c	0.01
Azobenzene	-	-	-	1.00E-03	c	-
Barium	1	7.3	n	2.90E+00	n	2
Benz(a)anthracene	-	0.000295	c	2.90E-04	c	-
Benzene	0.01	0.00413	c	3.90E-03	c*	0.005
Benzo(a)pyrene	0.0007	2.95E-05	c	2.90E-05	c	0.0002
Benzo(b)fluoranthene	-	0.000295	c	2.90E-04	c	-
Benzo(g,h,i)perylene	-	-	-	-	-	-
Benzo(k)fluoranthene	-	0.00295	c	2.90E-03	c	-
Benzoic acid	-	-	-	5.80E+01	n	-
Benzyl alcohol	-	-	-	1.50E+00	n	-
Beryllium	-	0.073	n	1.60E-02	n	0.004
Bis(2-chloroethoxy)methane	-	-	-	4.60E-02	n	-
Bis(2-chloroethyl)ether	-	0.000119	c	1.20E-04	c	-
Bis(2-chloroisopropyl)ether	-	0.0096	c	3.10E-03	c	-
Bis(2-ethylhexyl)phthalate	-	0.048	c	4.80E-02	c*	0.006
Bromobenzene	-	-	-	5.40E-02	n	-
Bromodichloromethane	-	0.001173	c	1.20E-03	c	0.08
Bromoform	-	0.085063	c	7.90E-02	c*	0.08
Bromomethane	-	0.008661	n	7.00E-03	n	-
4-Bromophenyl phenyl ether	-	-	-	-	-	-
Butyl benzyl phthalate	-	-	-	1.40E-01	c*	-
2-Butanone (MEK)	-	7.064516	n	4.90E+00	n	-
Cadmium	0.01	0.01825	n	-	-	-
Carbazole	-	-	-	-	-	-
Carbon disulfide	-	1.042857	n	7.20E-01	n	-
Carbon tetrachloride	0.01	0.004396	c	3.90E-03	c	0.005
Chlorobenzene	-	0.09125	n	7.20E-02	n	0.1
Chloroethane	-	20.85714	n	2.10E+01	n	-
Chloroform	0.1	0.001928	c	1.90E-03	c	0.08
Chloromethane	-	0.187714	n	1.90E-01	n	-
4-Chloro-3-methylphenol	-	-	-	1.10E+00	n	-
4-Chloroaniline	-	-	-	3.20E-03	c	-
4-Chlorophenyl phenyl ether	-	-	-	-	-	-
4-Chlorotoluene	-	-	-	1.90E-01	n	-
2-Chloronaphthalene	-	0.00121	n	5.50E-01	n	-
2-Chlorophenol	-	0.1825	n	7.10E-02	n	-
2-Chlorotoluene	-	0.73	n	1.80E-01	n	-

Table 6
Groundwater Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analyte	NMED			EPA		
	NMED WQCC Standards (mg/L)	NMED Tap Water mg/L	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)
Chromium III	0.05	54.75	n	1.60E+00	n	-
Chromium VI	0.05	0.000431	c	3.10E-04	c	-
Chrysene	-	0.029499	c	2.90E-02	c	-
Cobalt	0.05	-	-	4.70E-03	n	-
Cyanide, Total	0.2	0.0219	n	1.40E-03	n	0.2
Dibenz(a,h)anthracene	-	2.95E-05	c	2.90E-05	c	-
Dibenzofuran	-	-	-	5.80E-03	n	-
Dibromochloromethane	-	0.001471	c	1.50E-03	c	0.08
cis-1,2-DCE	-	0.073	n	2.80E-02	n	0.07
trans-1,2-DCE	-	0.106829	n	8.60E-02	n	0.1
cis-1,3-Dichloropropene	-	0.004329	c	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-
Dibromomethane	-	0.008156	n	7.90E-03	n	-
1,2-Dibromo-3-chloropropane	-	3.16E-06	c	3.20E-06	c	0.0002
1,2-Dibromoethane (EDB)	0.0001	6.53E-05	c	6.50E-05	c	0.00005
1,2-Dichlorobenzene	-	0.370141	n	2.80E-01	n	0.6
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	0.004272	c	4.20E-03	c	0.075
3,3'-Dichlorobenzidine	-	0.001493	c	1.10E-03	c	-
Dichlorodifluoromethane	-	0.202778	n	1.90E-01	n	-
1,1-Dichloroethane	0.025	0.024176	c	2.40E-02	c	-
1,2-Dichloroethane (EDC)	0.01	0.001493	c	1.50E-03	c*	0.005
1,1-Dichloroethene	0.005	0.339535	n	2.60E-01	n	0.007
2,4-Dichlorophenol	-	0.1095	n	3.50E-02	n	-
1,2-Dichloropropane	-	0.00386	c	3.80E-03	c*	0.005
2,2-Dichloropropane	-	-	-	-	-	-
1,3-Dichloropropane	-	-	-	2.90E-01	n	-
1,1-Dichloropropene	-	-	-	-	-	-
Diethyl phthalate	-	29.2	n	1.10E+01	n	-
Dimethyl phthalate	-	365	n	-	-	-
2,4-Dimethylphenol	-	0.73	n	2.70E-01	n	-
4,6-Dinitro-2-methylphenol	-	-	-	1.20E-03	n	-
2,4-Dinitrophenol	-	0.073	n	3.00E-02	n	-
2,4-Dinitrotoluene	-	0.002168	c	2.00E-03	c	-
2,6-Dinitrotoluene	-	0.0365	n	1.50E-02	n	-
Di-n-butyl phthalate	-	3.65	n	6.70E-01	n	-
Di-n-octyl phthalate	-	-	-	-	-	-
Ethylbenzene	0.75	0.014761	c	1.30E-02	c	0.7
Fluoranthene	-	1.46	n	6.30E-01	n	-
Fluorene	-	1.46	n	2.20E-01	n	-
Hexachlorobenzene	-	0.00042	c	4.20E-04	c	0.001
Hexachlorobutadiene	-	0.008615	c	2.60E-03	c*	-
Hexachlorocyclopentadiene	-	0.219	n	2.20E-02	n	0.05
Hexachloroethane	-	0.0168	c	7.90E-03	c**	-

Table 6
Groundwater Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analyte	NMED			EPA		
	NMED WQCC Standards (mg/L)	NMED Tap Water mg/L	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)
2-Hexanone	-	0.876	n	3.40E-02	n	-
Indeno(1,2,3-cd)pyrene	-	0.000295	c	2.90E-04	c	-
Iron, Total	1	25.55	n	1.10E+01	n	-
Isophorone	-	0.707368	c	6.70E-01	c*	-
Isopropylbenzene (Cumene)	-	0.67907	n	3.90E-01	n	-
4-Isopropyltoluene	-	-	-	-	-	-
Lead	0.05	-	-	-	L	0.015
Manganese	0.2	0.876	n	-	-	-
Mercury	0.002	0.000626	n	6.30E-04	n	0.002
Methyl tert-butyl ether (MTBE)	-	0.124661	c	1.20E-01	c	-
Methylene chloride	0.1	0.186383	n	9.90E-02	c**	0.005
1-Methylnaphthalene	-	-	-	9.70E-03	c	-
2-Methylnaphthalene	-	-	-	2.70E-02	n	-
2-Methylphenol	-	-	-	7.20E-01	n	-
3+4-Methylphenol	-	-	-	-	-	-
4-Methyl-2-pentanone	-	-	-	1.00E+00	n	-
Naphthalene	-	0.001431	c	1.40E-03	c*	-
n-Butylbenzene	-	-	-	7.80E-01	n	-
Nickel	0.2	0.73	n	3.00E+00	n	-
2-Nitroaniline	-	-	-	1.50E-01	n	-
3-Nitroaniline	-	-	-	-	-	-
4-Nitroaniline	-	-	-	3.30E-02	c*	-
2-Nitrophenol	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-
Nitrobenzene	-	0.001217	c	1.20E-03	c*	-
N-Nitrosodimethylamine	-	4.22E-06	c	4.20E-06	c	-
N-Nitrosodi-n-propylamine	-	-	-	9.30E-05	c	-
N-Nitrosodiphenylamine	-	0.137143	c	1.00E-01	c	-
n-Propylbenzene	-	-	-	5.30E-01	n	-
Pentachlorophenol	-	0.00168	c	3.50E-04	c	0.001
Phenanthrene	-	1.095	n	-	-	-
Phenol	0.005	10.95	n	4.50E+00	n	-
Pyrene	-	1.095	n	8.70E-02	n	-
Pyridine	-	-	-	1.50E-02	n	-
sec-Butylbenzene	-	-	-	-	-	-
Selenium	0.05	0.1825	n	7.80E-02	n	0.05
Silver	0.05	0.1825	n	7.10E-02	n	-
Styrene	-	1.622222	n	1.10E+00	n	0.1
tert-Butylbenzene	-	-	-	-	-	-
Tetrachloroethene (PCE)	0.02	0.001081	c	9.70E-02	c**	0.005
1,1,1,2-Tetrachloroethane	-	0.005242	c	5.00E-03	c	-
Toluene	0.75	2.28125	n	8.60E-01	n	1
1,2,3-Trichlorobenzene	-	-	-	5.20E-02	n	-
1,2,4-Trichlorobenzene	-	0.004124	n	9.90E-03	c**	0.07

Table 6
Groundwater Screening Levels
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analyte	NMED			EPA		
	NMED WQCC Standards (mg/L)	NMED Tap Water mg/L	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)
2,4,5-Trichlorophenol	-	3.65	n	8.90E-01	n	-
2,4,6-Trichlorophenol	-	0.0365	n	3.50E-02	c**	-
1,2,3-Trichloropropane	-	7.18E-06	c	6.50E-06	c	-
1,2,4-Trimethylbenzene	-	-	-	1.50E-02	n	-
1,1,1-Trichloroethane	0.06	9.125	n	7.50E+00	n	0.2
1,1,2,2-Tetrachloroethane	0.02	0.000671	c	6.60E-04	c	-
1,1,2-Trichloroethane	0.1	0.000416	n	2.40E-03	c**	0.005
Trichloroethene (TCE)	0.1	0.003395	n	4.40E-03	c**	0.005
Trichlorofluoromethane	-	1.288235	n	1.10E+00	n	-
1,3,5-Trimethylbenzene	-	-	-	8.70E-02	n	-
Vanadium	-	0.1825	n	7.80E-02	n	-
Vinyl chloride	0.001	0.000162	c	1.50E-04	c	0.002
Xylenes, Total	0.62	0.202778	n	1.90E-01	n	10
Zinc	10	10.95	n	4.70E+00	n	-
General Chemistry	-					
Chloride	-	-	-	-	-	-
Fluoride	1.6	1.46	n	0.93	n	-
Sulfate	-	-	-	-	-	-
Total Dissolved Solids	-	-	-	-	-	-
Diesel Range Organics (DRO)	-	-	-	-	-	-
Gasoline Range Organics (GRO)	-	-	-	-	-	-
Motor Oil Range Organics (MRO)	-	-	-	-	-	-

c - cancer, * = where n SL < 100X c SL, ** = where n SL < 10X c SL

n - noncancer

620 - Bolded value is applicable screening level

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EPA - Regional Screening Levels (November 2012); carcs multiplied by 10

NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3101 Standards for Ground Water of 10,000 mg/l TDS Concentration or less

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-1 (10-12')	SWMU 1-1 (13-14')	SWMU 1-1 (2-4')	SWMU 1-2 (10-11')	SWMU 1-2 (14-16')	SWMU 1-2 (17-17.25')	SWMU 1-2 (19.5-20')	SWMU 1-2 (6-8')	SWMU 1-3 (10-11')	SWMU 1-3 (11-11.25')	SWMU 1-3 (18.5-19.5')	SWMU 1-3 (19.5-20')	SWMU 1-3 (2-4')	SWMU 1-4 (10-12')	SWMU 1-4 (17-18')
										1210372-002 10/5/2012	1210372-003 10/5/2012	1210372-001 10/5/2012	1210279-002 10/2/2012	1210279-003 10/2/2012	1210279-004 10/2/2012	1210279-005 10/2/2012	1210279-001 10/2/2012	1210279-009 10/2/2012	1210279-010 10/2/2012	1210279-011 10/2/2012	1210279-012 10/2/2012	1210279-008 10/2/2012	1210332-007 10/3/2012	1210332-002 10/3/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	820	55	4700	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<16	<10
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<25	<5	410	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	13
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<510	<51	<5045	<52	<50	<48	<50	<49	<48	<50	<49	<50	<51	<82	<51

-- No screening level or analytical result available
NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)
EPA - Regional Screening Levels (May 2012)
(1) NMED Residential Screening Level
(2) EPA Residential Screening Level
(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic
(4) NMED Construction Worker Screening Level
(5) EPA Industrial - Screening Levels (May 2012)
(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic
(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels
(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-4 (23-24')	SWMU 1-4 (8-10')	SWMU 1-5 (10-12')	SWMU 1-5 (14-16')	SWMU 1-5 (16-18')	SWMU 1-5 (24-25')	SWMU 1-5 (26-27')	SWMU 1-5 (27-28')	SWMU 1-6 (10-11')	SWMU 1-6 (11-12')	SWMU 1-6 (2-4')	SWMU 1-6 (4-6')	SWMU 1-6 (7-5-8')	SWMU 1-7 (12-14')	SWMU 1-7 (14-16')
										1210332-003 10/3/2012	1210332-006 10/3/2012	1210332-012 10/3/2012	1210332-013 10/3/2012	1210332-014 10/3/2012	1210332-015 10/3/2012	1210332-008 10/3/2012	1210332-009 10/3/2012	1210372-016 10/4/2012	1210372-017 10/4/2012	1210372-020 10/4/2012	1210372-022 10/4/2012	1210372-023 10/4/2012	1210372-018 10/4/2012	1210372-019 10/4/2012
Metals (mg/kg)																								
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(7)	3.13E+01	-	mg/Kg	<12.5	<12.5	<12.5	<12.5	<12.5	<12.5	<2.5	<12.5	<12.5	<12.5	<25	<12.5	<12.5	<12.5	<12.5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(7)	3.90E+00																	

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-4 (23-24')	SWMU 1-4 (8-10')	SWMU 1-5 (10-12')	SWMU 1-5 (14-16')	SWMU 1-5 (16-18')	SWMU 1-5 (24-25')	SWMU 1-5 (26-27')	SWMU 1-5 (27-28')	SWMU 1-6 (10-11')	SWMU 1-6 (11-12')	SWMU 1-6 (2-4')	SWMU 1-6 (4-6')	SWMU 1-6 (7.5-8')	SWMU 1-7 (12-14')	SWMU 1-7 (14-16')
										1210332-003 10/3/2012	1210332-006 10/3/2012	1210332-012 10/3/2012	1210332-013 10/3/2012	1210332-014 10/3/2012	1210332-015 10/3/2012	1210332-008 10/3/2012	1210332-009 10/3/2012	1210372-016 10/4/2012	1210372-017 10/4/2012	1210372-020 10/4/2012	1210372-022 10/4/2012	1210372-023 10/4/2012	1210372-018 10/4/2012	1210372-019 10/4/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<10	<10	<10	<10	<10	<10	<12	<10	<10	<10	<10	<10	<10	<10	<10
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<48	<50	<49	<48	<50	<50	<60	<50	<50	<50	<50	<49	<50	<50	<49

-- No screening level or analytical result available
NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)
EPA - Regional Screening Levels (May 2012)
(1) NMED Residential Screening Level
(2) EPA Residential Screening Level
(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic
(4) NMED Construction Worker Screening Level
(5) EPA Industrial - Screening Levels (May 2012)
(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic
(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels
(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-7 (16-18')	SWMU 1-8 (10-12')	SWMU 1-8 (12-14')	SWMU 1-8 (16-18')	SWMU 1-8 (19-20')	SWMU 1-8 (4-6')	SWMU 1-9 (0-0.5')	SWMU 1-9 (1.5-2')	SWMU 1-10 (0-0.5')	SWMU 1-10 (1.5-2')	SWMU 1-11 (0-0.5')	SWMU 1-11 (1.5-2')	SWMU 1-12 (0.5-1')	SWMU 1-12 (0-0.5')	SWMU 1-13 (0-0.5')
										1210372-015 10/4/2012	1210372-007 10/5/2012	1210372-008 10/5/2012	1210372-009 10/5/2012	1210372-005 10/5/2012	1210372-006 10/5/2012	1210811-001 10/15/2012	1210811-002 10/15/2012	1210811-003 10/15/2012	1210811-004 10/15/2012	1210811-005 10/15/2012	1210811-006 10/15/2012	1210811-008 10/15/2012	1210811-007 10/15/2012	1210692-021 10/12/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<10	100	53	<10	<10	<10	<10	<10	45	42	87	120	190	200	77
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10	<10	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<49	280	<50	<50	<50	<52	280	<50	230	210	86	120	190	150	<51

-- No screening level or analytical result available
NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)
EPA - Regional Screening Levels (May 2012)
(1) NMED Residential Screening Level
(2) EPA Residential Screening Level
(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic
(4) NMED Construction Worker Screening Level
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(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic
(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels
(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-13 (1.5-2')	SWMU 1-13 (2-4')	SWMU 1-13 (4-6')	SWMU 1-14 (0-0.5')	SWMU 1-14 (1.5-2')	SWMU 1-15 (0-0.5')	SWMU 1-15 (1.5-2')	SWMU 1-16 (0-0.5')	SWMU 1-16 (1.5-2')	SWMU 1-17 (0-0.5')	SWMU 1-17 (1-1.5')	SWMU 1-18 (0-0.5')	SWMU 1-18 (1-1.5')	SWMU 1-19 (0-0.5')	SWMU 1-20 (0-0.5')
										1210692-022 10/12/2012	1210692-023 10/12/2012	1210692-024 10/12/2012	1210811-009 10/15/2012	1210811-010 10/15/2012	1210811-012 10/15/2012	1210811-013 10/15/2012	1210811-014 10/15/2012	1210811-015 10/15/2012	1210811-016 10/15/2012	1210811-017 10/15/2012	1210858-001 10/16/2012	1210858-002 10/16/2012	1210858-003 10/16/2012	1210692-001 10/11/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	16	<10	<10	58	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<51	<50	<49	94	<48	<49	<48	<49	<50	<51	<49	<50	<50	<52	<50

-- No screening level or analytical result available
NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)
EPA - Regional Screening Levels (May 2012)
(1) NMED Residential Screening Level
(2) EPA Residential Screening Level
(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic
(4) NMED Construction Worker Screening Level
(5) EPA Industrial - Screening Levels (May 2012)
(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic
(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels
(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-20 (1.5-2')	SWMU 1-20 (10-12')	SWMU 1-20 (4-6')	SWMU 1-21 (0-0.5')	SWMU 1-22 (0-0.5')	SWMU 1-22 (1.5-2')	SWMU 1-23 (0-0.5')	SWMU 1-24 (0-0.5')	SWMU 1-24 (1.5-2')	SWMU 1-24 (10.5-11.5')	SWMU 1-24 (16-18')	SWMU 1-24 (24-26')	SWMU 1-24 (32-34')	SWMU 1-25 (0.5-1')	SWMU 1-25 (0-0.5')
										1210692-003 10/11/2012	1210692-005 10/11/2012	1210692-004 10/11/2012	1210858-004 10/16/2012	1210858-006 10/16/2012	1210858-007 10/16/2012	1210859-001 10/16/2012	1210521-001 10/8/2012	1210521-003 10/8/2012	1210521-004 10/8/2012	1210521-005 10/8/2012	1210521-006 10/8/2012	1210521-007 10/8/2012	1210859-004 10/16/2012	1210859-003 10/16/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<10	<10	<10	<10	<10	<10	<10	14	<10	<10	<10	<10	<10	<10	<10
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<49	<50	<51	<52	<51	<49	<52	<51	<50	<49	<49	<51	<50	<50	<51

-- No screening level or analytical result available
NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)
EPA - Regional Screening Levels (May 2012)
(1) NMED Residential Screening Level
(2) EPA Residential Screening Level
(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic
(4) NMED Construction Worker Screening Level
(5) EPA Industrial - Screening Levels (May 2012)
(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic
(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels
(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-26 (0-0.5')	SWMU 1-27 (0-0.5')	SWMU 1-27 (1.5-2')	SWMU 1-28 (0-0.5')	SWMU 1-28 (1.5-2')	SWMU 1-29 (0-0.5')	SWMU 1-30 (0-0.5')	SWMU 1-30 (1.5-2')	SWMU 1-30 (4-6')	SWMU 1-31 (0-0.5')	SWMU 1-32 (0-0.5')	SWMU 1-33 (0-0.5')	SWMU 1-34 (0-0.5')	SWMU 1-35 (0-0.5')	SWMU 1-35 (1.5-2')
										1210859-005 10/16/2012	1210692-009 10/12/2012	1210692-010 10/12/2012	1210692-011 10/12/2012	1210692-012 10/12/2012	1210859-006 10/16/2012	1210692-014 10/12/2012	1210692-015 10/12/2012	1210692-016 10/12/2012	1210856-001 10/16/2012	1210856-002 10/16/2012	1210856-004 10/16/2012	1210856-005 10/16/2012	1210692-017 10/12/2012	1210692-018 10/12/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																								
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<10	<10	<10	27	<10	76	17	23	<10	<10	19	20	<10	12	15
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<5	9.3	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	24
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<48	<50	<50	53	<50	110	79	<49	<49	<51	100	110	<50	72	130

-- No screening level or analytical result available
NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)
EPA - Regional Screening Levels (May 2012)
(1) NMED Residential Screening Level
(2) EPA Residential Screening Level
(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic
(4) NMED Construction Worker Screening Level
(5) EPA Industrial - Screening Levels (May 2012)
(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic
(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels
(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 7
Aeration Basin Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	Units	SWMU 1-35 (4-6')	SWMU 1-36 (0-0.5')	SWMU 1-37 (0-0.5')	SWMU 1-37 (1.5-2')	SWMU 1-37 (12-13')	SWMU 1-37 (13-14')	SWMU 1-37 (17-18')	SWMU 1-37 (8.5-9')	SWMU 1-37 (8-8.5')	SWMU 1-38 (0-0.5')	SWMU 1-38 (1.5-2')	SWMU 1-38 (6-8')	SWMU 1-39 (0-0.5')
										1210692-019 10/12/2012	1210856-006 10/16/2012	1210653-001 10/10/2012	1210653-002 10/10/2012	1210653-005 10/10/2012	1210653-006 10/10/2012	1210653-007 10/10/2012	1210653-004 10/10/2012	1210653-003 10/10/2012	1210692-006 10/11/2012	1210692-007 10/11/2012	1210692-008 10/11/2012	1210859-002 10/16/2012
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg																						
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<10	56	100	100	<10	<10	<10	<10	<10	<10	<10	<10	<10
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	mg/Kg	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	mg/Kg	<52	150	130	130	<50	<50	<49	<51	<51	<51	<51	<51	<51

-- No screening level or analytical result available
NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)
EPA - Regional Screening Levels (May 2012)
(1) NMED Residential Screening Level
(2) EPA Residential Screening Level
(3) EPA Residential - Screening Levels (May 2012) multiplied by 10 because the constituent is listed as carcinogenic
(4) NMED Construction Worker Screening Level
(5) EPA Industrial - Screening Levels (May 2012)
(6) EPA Industrial - Screening Levels (May 2012) multiplied by 10 pursuant to Provision VII.B. of the July 7, 2007 NMED Order because the constituent is listed as carcinogenic
(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels
(11) Background concentrations to be determined

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-1 (0-0.5)	SWMU 14-1 (1.5-2)	SWMU 14-1 (10-12)	SWMU 14-1 (48-50')	SWMU 14-2 (0-0.5)	SWMU 14-2 (1.5-2.0')	SWMU 14-2 (16-18')	SWMU 14-2 (24-25')	SWMU 14-2 (8-10')	SWMU 14-3 (0-0.5')	SWMU 14-3 (1.5-2')	SWMU 14-3 (12-14')	SWMU 14-3 (25.5-26')	SWMU 14-3 (8-10')	SWMU 14-4 (0-0.5')	SWMU 14-4 (1.5-2.0')
									1207748-001 7/16/2012	1207748-002 7/16/2012	1207748-003 7/16/2012	1207900-006 7/18/2012	1207917-005 7/17/2012	1207917-006 7/17/2012	1207917-009 7/17/2012	1207917-010 7/17/2012	1207917-007 7/17/2012	1207900-001 7/18/2012	1207900-002 7/18/2012	1207900-004 7/18/2012	1207900-005 7/18/2012	1207900-003 7/18/2012	1207917-001 7/17/2012	1207917-002 7/17/2012

EPA - Regional Screening Levels (November 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (November 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (Nov. 2012)

(6) EPA Industrial - Screening Levels (Nov. 2012) multiplied by 10

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461

(8) SoilGW Risk-based EPA DAF = 461

(9) SoilGW MCL-based EPA DAF = 461

(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined.

Bold represents value above Residential Screening Level

yellow highlight represents value above Leachate (DAF) Screening Level

Bold with yellow - value exceeds Residential Screening Level and DAF

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-4 (10-12')	SWMU 14-4 (19-50')	SWMU 14-5 (0-0.5')	SWMU 14-5 (1.5-2.0')	SWMU 14-6 (0-0.5')	SWMU 14-6 (1.5-2')	SWMU 14-6 (10-12')	SWMU 14-6 (17-18')	SWMU 14-7 (0-0.5')	SWMU 14-7 (1.5-2')	SWMU 14-7 (23.5-24')	SWMU 14-7 (6-8')	SWMU 14-8 (0-0.5')	SWMU 14-8 (1.5-2.0')	SWMU 14-9 (0-0.5')	SWMU 14-9 (1.5-2')
									1207917-003 7/17/2012	1207917-004 7/17/2012	1207940-016 7/19/2012	1207940-018 7/19/2012	1210582-001 10/9/2012	1210582-002 10/9/2012	1210582-003 10/9/2012	1210582-004 7/18/2012	1207922-006 7/18/2012	1207922-007 7/18/2012	1207922-009 7/18/2012	1207922-008 7/18/2012	1207940-003 7/19/2012	1207940-004 7/19/2012	1207922-001 7/18/2012	1207922-003 7/18/2012
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(8)	8.86E-01	-	<3	-	-	<0.15	<0.001	<0.0008	<1.5	<0.0011	<3	-	-	<3	-	<3	-	<1.5
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(8)	1.30E+02	-	<10	<0.005	<0.006	<0.5	<0.0101	<0.0081	<5	<0.0108	<10	0.000629	<0.002	<10	<			

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-4 (10-12')	SWMU 14-4 (19.5-20')	SWMU 14-5 (0-0.5')	SWMU 14-5 (1.5-2.0')	SWMU 14-6 (0-0.5')	SWMU 14-6 (1.5-2')	SWMU 14-6 (10-12')	SWMU 14-6 (17-18')	SWMU 14-7 (0-0.5')	SWMU 14-7 (1.5-2')	SWMU 14-7 (23.5-24')	SWMU 14-7 (6-8')	SWMU 14-8 (0-0.5')	SWMU 14-8 (1.5-2.0')	SWMU 14-9 (0-0.5')	SWMU 14-9 (1.5-2')
									1207917-003 7/17/2012	1207917-004 7/17/2012	1207940-016 7/19/2012	1207940-018 7/19/2012	1210582-001 10/9/2012	1210582-002 10/9/2012	1210582-003 10/9/2012	1210582-004 10/9/2012	1207922-006 7/18/2012	1207922-007 7/18/2012	1207922-009 7/18/2012	1207922-008 7/18/2012	1207940-003 7/19/2012	1207940-004 7/19/2012	1207922-001 7/18/2012	1207922-003 7/18/2012

EPA - Regional Screening Levels (November 2012)
(1) NMED Residential Screening Level
(2) EPA Residential Screening Level
(3) EPA Residential - Screening Levels (November 2012) multiplied by 10 because the constituent is listed as carcinogenic
(4) NMED Construction Worker Screening Level
(5) EPA Industrial - Screening Levels (Nov. 2012)
(6) EPA Industrial - Screening Levels (Nov. 2012) multiplied by 10
(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels
(11) Background concentrations to be determined.

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-9 (13-14')	SWMU 14-9 (4-6')	SWMU 14-10 (0-0.5')	SWMU 14-10 (1.5-2.0')	SWMU 14-11 (0-0.5')	SWMU 14-11 (1.5-2.0')	SWMU 14-12 (0-0.5')	SWMU 14-12 (1.5-2.0')	SWMU 14-13 (0-0.5')	SWMU 14-13 (1.5-2.0')	SWMU 14-14 (0-0.5')	SWMU 14-14 (1.5-2.0')	SWMU 14-15 (0-0.5')	SWMU 14-15 (1.5-2.0')	SWMU 14-16 (0-0.5')	SWMU 14-16 (1.5-2.0')
									1207922-005 7/18/2012	1207922-004 7/18/2012	1207940-001 7/19/2012	1207940-002 7/19/2012	1207940-012 7/19/2012	1207940-013 7/19/2012	1207940-006 7/19/2012	1207940-007 7/19/2012	1207940-008 7/19/2012	1207940-009 7/19/2012	1207940-010 7/19/2012	1207940-011 7/19/2012	1207940-025 7/19/2012	1207940-026 7/19/2012	1207940-023 7/19/2012	1207940-024 7/19/2012

EPA - Regional Screening Levels (November 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (November 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (Nov. 2012)

(6) EPA Industrial - Screening Levels (Nov. 2012) multiplied by 10

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461

(8) SoilGW Risk-based EPA DAF = 461

(9) SoilGW MCL-based EPA DAF = 461

(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined.

Bold represents value above Residential Screening Level

yellow highlight represents value above Leachate (DAF) Screening Level

Bold with yellow - value exceeds Residential Screening Level and DAF

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-17 (0-0.5')	SWMU 14-17 (1.5-2.0')	SWMU 14-18 (0-0.5')	SWMU 14-18 (1.5-2.0')	SWMU 14-19 (0-0.5')	SWMU 14-19 (1.5-2.0')	SWMU 14-20 (0-0.5')	SWMU 14-21 (0-0.5')	SWMU 14-21 (1.5-2')	SWMU 14-21 (8-10')	SWMU 14-22 (0-0.5')	SWMU 14-22 (1.5-2')	SWMU 14-22 (4-6')	SWMU 14-22 (8-10')	SWMU 14-23 (0-0.5')	SWMU 14-23 (1.5-2')
									1207940-021 7/19/2012	1207940-022 7/19/2012	1207940-014 7/19/2012	1207940-015 7/19/2012	1207940-019 7/19/2012	1207940-020 7/19/2012	1207940-027 7/19/2012	1210582-005 10/9/2012	1210582-006 10/9/2012	1210582-007 10/9/2012	1210583-001 10/9/2012	1210583-002 10/9/2012	1210583-003 10/9/2012	1210583-005 10/9/2012	1210656-001 10/10/2012	1210656-002 10/10/2012
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
4-Chloroaniline	2.40E+01	(3)	8.60E+00	(6)	5.99E-02	(8)	5.99E-02	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
4-Nitroaniline	2.40E+02	(3)	8.60E+01	(6)	6.45E-01	(8)	6.45E-01	-	<3.958	<2.007	<1.989	<3.991	<2.007	<3.954	<0.8	<0.3992	<0.3991	<0.3966	<0.3989	<0.3955	<0.4036	<0.3979	<0.7997	<1.973
4-Nitrophenol	-	-	-	-	-	-	-	-	<2.474	<1.255	<1.243	<2.494	<1.255	<2.471	<0.5	<0.2495	<0.2494	<0.2479	<0.2493	<0.2472	<0.2523	<0.2487	<0.4998	<1.2331
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(8)	3.44E+03	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Acenaphthylene	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Aniline	8.50E+02	(3)	3.00E+02	(6)	1.80E+00	(8)	1.80E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(8)	1.72E+04	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Azobenzene	5.10E+01	(3)	2.30E+01	(6)	3.69E-01	(8)	3.69E-01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(8)	1.48E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(8)	1.48E-01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(8)	1.48E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(8)	1.48E+01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	0.26	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(8)	1.21E-02	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(8)	1.07E+00	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(8)	3.47E+02	-	<4.947	<2.509	<2.487	<4.988	<2.509	<4.942	<1	<0.499	<0.4988	<0.4957	<0.4987	<0.4944	<0.5045	<0.4973	<0.9997	<2.4663
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+02	(6)	9.22E+01	(8)	9.22E+01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Carbazole	-	-	-	-	-	-	-	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(8)	1.48E+02	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(8)	1.48E-01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1995	<0.1983	<0.1995	<0.1978	<0.2018	<0.1989	<0.3999	<0.9865
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	<1.979	<1.004	<0.995	<1.995	<1.004	<1.977	<0.4	<0.1996	<0.1							

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-17 (0-0.5')	SWMU 14-17 (1.5-2.0')	SWMU 14-18 (0-0.5')	SWMU 14-18 (1.5-2.0')	SWMU 14-19 (0-0.5')	SWMU 14-19 (1.5-2.0')	SWMU 14-20 (0-0.5')	SWMU 14-21 (0-0.5')	SWMU 14-21 (1.5-2')	SWMU 14-21 (8-10')	SWMU 14-22 (0-0.5')	SWMU 14-22 (1.5-2')	SWMU 14-22 (4-6')	SWMU 14-22 (8-10')	SWMU 14-23 (0-0.5')	SWMU 14-23 (1.5-2')
									1207940-021 7/19/2012	1207940-022 7/19/2012	1207940-014 7/19/2012	1207940-015 7/19/2012	1207940-019 7/19/2012	1207940-020 7/19/2012	1207940-027 7/19/2012	1210582-005 10/9/2012	1210582-006 10/9/2012	1210582-007 10/9/2012	1210583-001 10/9/2012	1210583-002 10/9/2012	1210583-003 10/9/2012	1210583-005 10/9/2012	1210656-001 10/10/2012	1210656-002 10/10/2012

EPA - Regional Screening Levels (November 2012)

(1) NMED Residential Screening Level

(2) EPA Residential Screening Level

(3) EPA Residential - Screening Levels (November 2012) multiplied by 10 because the constituent is listed as carcinogenic

(4) NMED Construction Worker Screening Level

(5) EPA Industrial - Screening Levels (Nov. 2012)

(6) EPA Industrial - Screening Levels (Nov. 2012) multiplied by 10

(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461

(8) SoilGW Risk-based EPA DAF = 461

(9) SoilGW MCL-based EPA DAF = 461

(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels

(11) Background concentrations to be determined.

Bold represents value above Residential Screening Level

yellow highlight represents value above Leachate (DAF) Screening Level

Bold with yellow - value exceeds Residential Screening Level and DAF

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-23 (12-14')	SWMU 14-23 (14-16')	SWMU 14-24 (0-0.5')	SWMU 14-24 (1.5-2')
									1210656-003 10/10/2012	1210656-004 10/10/2012	1210860-001 10/17/2012	1210860-002 10/17/2012
Metals (mg/kg)												
Antimony	3.13E+01	(1)	1.24E+02	(4)	3.05E+02	(8)	3.13E+01	-	<5	<5	<5	<5
Arsenic	3.90E+00	(1)	5.30E+01	(4)	6.05E+00	(8)	3.90E+00	-	1.6J	1.3J	2.1J	1.7J
Barium	1.56E+04	(1)	4.35E+03	(4)	1.39E+05	(8)	4.35E+03	-	220	130	440	43
Beryllium	1.56E+02	(1)	1.44E+02	(4)	2.66E+04	(8)	1.44E+02	-	0.87	0.75	0.8	0.83
Cadmium	7.03E+01	(1)	2.77E+02	(4)	6.33E+02	(8)	7.03E+01	-	<0.2	<0.2	<0.2	<0.2
Chromium III	1.17E+05	(1)	4.65E+05	(4)	4.54E+10	(8)	1.17E+05	-	8.3	7.8	10	7.8
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	3.83E+00	(8)	2.97E+00	-	8.3	7.8	10	7.8
Cobalt	2.30E+01	(2)	3.00E+02	(5)	9.68E+01	(8)	2.30E+01	-	4	4	4.6	3.5
Cyanide	4.69E+01	(1)	1.86E+02	(4)	1.02E+02	(8)	4.69E+01	-	<0.3	<0.3	<0.263	<0.311
Iron	5.48E+04	(1)	2.17E+05	(4)	2.98E+05	(8)	5.48E+04	-	13000	12000	15000	16000
Lead	4.00E+02	(1)	8.00E+02	(4)	6.45E+03	(8)	4.00E+02	-	3.7	3.5	2.5	3.3
Manganese	1.86E+03	(1)	4.40E+02	(4)	2.64E+04	(8)	4.40E+02	-	300	570	450	230
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.51E+01	(8)	1.36E+01	-	<0.033	<0.033	<0.033	<0.033
Nickel	1.56E+03	(1)	6.19E+03	(4)	2.20E+04	(8)	1.56E+03	-	7.2	6.8	8	6.4
Selenium	3.91E+02	(1)	1.55E+03	(4)	4.45E+02	(8)	3.91E+02	-	<5	<5	<5	<5
Silver	3.91E+02	(1)	1.55E+03	(4)	7.22E+02	(8)	3.91E+02	-	<0.5	<0.5	<0.5	<0.5
Vanadium	3.91E+02	(1)	1.55E+03	(4)	8.42E+04	(8)	3.91E+02	-	14	15	22	14
Zinc	2.35E+04	(1)	9.29E+04	(4)	3.14E+05	(8)	2.35E+04	-	13	12	25	12
Volatile Organic Compounds - (EPA Method 8260) mg/kg												
1,1,1,2-Tetrachloroethane	2.91E+01	(1)	7.79E+02	(4)	7.59E-01	(8)	7.59E-01	-	<0.5	<0.05	<0.0008	<0.0008
1,1,1-Trichloroethane	1.56E+04	(1)	1.48E+04	(4)	1.34E+03	(8)	1.34E+03	-	<0.5	<0.05	<0.0008	<0.0008
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	9.82E-02	(8)	9.82E-02	-	<0.5	<0.05	<0.0008	<0.0008
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	5.14E-02	(8)	5.14E-02	-	<0.5	<0.05	<0.0008	<0.0008
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	2.75E+00	(8)	2.75E+00	-	<1	<0.1	<0.0008	<0.0008
1,1-Dichloroethene	4.49E+02	(1)	4.32E+02	(4)	5.36E+01	(8)	5.36E+01	-	<0.5	<0.05	<0.0008	<0.0008
1,1-Dichloropropene	-	-	-	-	-	-	-	-	<1	<0.1	<0.0008	<0.0008
1,2,3-Trichlorobenzene	4.90E+01	(2)	4.90E+02	(5)	6.92E+00	(8)	6.92E+00	-	<1	<0.1	<0.0008	<0.0008
1,2,3-Trichloropropane	4.97E-02	(1)	7.23E+00	(4)	1.15E-03	(8)	1.15E-03	-	<1	<0.1	<0.0008	<0.0008
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(8)	4.21E+00	-	<0.5	<0.05	<0.0008	<0.0008
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	9.68E+00	(8)	9.68E+00	-	<0.5	<0.05	0.000935	<0.0008
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	5.07E-04	(8)	5.07E-04	-	<1	<0.1	<0.0008	<0.0008
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	7.10E-03	(8)	7.10E-03	-	<0.5	<0.05	<0.0008	<0.0008
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(8)	1.29E+02	-	<0.5	<0.05	<0.0008	<0.0008
1,2-Dichloroethane (EDC)	7.89E+00	(1)	5.87E+01	(4)	1.64E-01	(8)	1.64E-01	-	<0.5	<0.05	<0.0008	<0.0008
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	4.94E-01	(8)	4.94E-01	-	<0.5	<0.05	<0.0008	<0.0008
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.53E+01	(8)	5.53E+01	-	<0.5	<0.05	<0.0008	<0.0008
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	<0.5	<0.05	<0.0008	<0.0008
1,3-Dichloropropane	1.60E+03	(2)	2.00E+04	(5)	4.56E+01	(8)	4.56E+01	-	<0.5	<0.05	<0.0008	<0.0008
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(8)	1.47E+00	-	<0.5	<0.05	<0.0008	<0.0008
1-Methylnaphthalene	1.60E+02	(3)	5.30E+01	(6)	2.35E+00	(8)	2.35E+00	-	2.3	<0.2	<0.0032	<0.0031
2,2-Dichloropropane	-	-	-	-	-	-	-	-	<1	<0.1	<0.0008	<0.0008
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	5.87E+02	(8)	5.87E+02	-	<5	<0.5	0.00846	<0.0078
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	2.57E+02	(8)	2.57E+02	-	<0.5	<0.05	<0.0008	<0.0008
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	3.53E+03	(8)	9.38E+02	-	<5	<0.5	<0.008	<0.0078
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	3.5	<0.2	<0.0032	<0.0031
4-Chlorotoluene	1.60E+03	(2)	2.00E+04	(5)	8.30E+01	(8)	8.30E+01	-	<0.5	<0.05	<0.0008	<0.0008
4-Isopropyltoluene	-	-	-	-	-	-	-	-	<0.5	<0.05	<0.0008	<0.0008
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	1.06E+02	(8)	1.06E+02	-	<5	<0.5	<0.008	<0.0078
Acetone	6.66E+04	(1)	2.21E+05	(4)	1.78E+03	(8)	1.78E+03	-	<7.5	<0.75	0.048	0.0202
Benzene	1.54E+01	(1)	1.38E+02	(4)	7.96E-01	(8)	7.96E-01	-	1.1	<0.05	0.00213	0.00129
Bromobenzene	3.00E+02	(2)	1.80E+03	(5)	1.66E+01	(8)	1.66E+01	-	<0.5	<0.05	<0.0008	<0.0008
Bromodichloromethane	5.41E+00	(1)	1.43E+02	(4)	1.25E-01	(8)	1.25E-01	-	<0.5	<0.05	<0.0008	<0.0008
Bromoform	6.16E+02	(1)	4.76E+03	(4)	2.78E+02	(8)	2.78E+02	-	<0.5	<0.05	<0.0008	<0.0008

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Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-23 (12-14')	SWMU 14-23 (14-16')	SWMU 14-24 (0-0.5')	SWMU 14-24 (1.5-2')
									1210656-003 10/10/2012	1210656-004 10/10/2012	1210860-001 10/17/2012	1210860-002 10/17/2012
Bromomethane	1.65E+01	(1)	1.64E+01	(4)	8.86E-01	(8)	8.86E-01	-	<1.5	<0.15	<0.0008	<0.0008
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	1.30E+02	(8)	1.30E+02	-	<5	<0.5	<0.008	<0.0078
Carbon tetrachloride	1.08E+01	(1)	2.26E+02	(4)	7.39E-01	(8)	7.39E-01	-	<1	<0.1	<0.0008	<0.0008
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	2.27E+01	(8)	2.27E+01	-	<0.5	<0.05	<0.0008	<0.0008
Chloroethane	2.98E+04	(1)	2.61E+04	(4)	2.48E+03	(8)	2.48E+03	-	<1	<0.1	<0.0008	<0.0008
Chloroform	5.86E+00	(1)	1.54E+02	(4)	2.12E-01	(8)	2.12E-01	-	<0.5	<0.05	<0.0008	<0.0008
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	2.03E+01	(8)	2.03E+01	-	<1.5	<0.15	<0.0008	<0.0008
cis-1,2-DCE	1.56E+02	(1)	6.19E+02	(4)	8.47E+00	(8)	8.47E+00	-	<0.5	<0.05	<0.0008	<0.0008
cis-1,3-Dichloropropene	3.37E+01	(1)	2.09E+02	(4)	5.71E-01	(8)	5.71E-01	-	<0.5	<0.05	<0.0008	<0.0008
Dibromochloromethane	1.21E+01	(1)	3.32E+02	(4)	1.52E-01	(8)	1.52E-01	-	<0.5	<0.05	<0.0008	<0.0008
Dibromomethane	5.16E+01	(1)	3.10E+03	(4)	7.89E-01	(8)	7.89E-01	-	<1	<0.1	<0.0008	<0.0008
Dichlorodifluoromethane	1.68E+02	(1)	1.49E+02	(4)	1.71E+02	(8)	1.49E+02	-	<0.5	<0.05	<0.0008	<0.0008
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.98E+00	(8)	5.98E+00	-	3.8	<0.05	<0.0008	<0.0008
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(8)	5.91E+00	-	<1	<0.1	<0.0008	<0.0008
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	3.99E+02	(8)	3.99E+02	-	0.74	<0.05	<0.0008	<0.0008
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.11E+01	(8)	1.11E+01	-	<0.5	<0.05	<0.0008	<0.0008
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	1.90E+01	(8)	1.90E+01	-	<1.5	<0.15	<0.0024	<0.0023
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(8)	1.64E+00	-	1.3	<0.1	<0.0016	<0.0016
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	1.15E+03	(8)	1.15E+03	-	<1.5	<0.15	<0.0008	<0.0008
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	4.56E+02	(8)	4.56E+02	-	1.3	<0.05	<0.0008	<0.0008
sec-Butylbenzene	-	-	-	-	-	-	-	-	0.51	<0.05	<0.0008	<0.0008
Styrene	7.28E+03	(1)	9.99E+03	(4)	6.40E+02	(8)	6.40E+02	-	<0.5	<0.05	<0.0008	<0.0008
tert-Butylbenzene	-	-	-	-	-	-	-	-	<0.5	<0.05	<0.0008	<0.0008
Tetrachloroethene (PCE)	7.02E+00	(1)	2.12E+02	(4)	1.98E-01	(8)	1.98E-01	-	<0.5	<0.05	<0.0008	<0.0008
Toluene	5.27E+03	(1)	1.34E+04	(4)	5.84E+02	(8)	5.84E+02	-	<0.5	<0.05	0.00222	0.000908
trans-1,2-DCE	2.70E+02	(1)	2.73E+02	(4)	1.24E+01	(8)	1.24E+01	-	<0.5	<0.05	<0.0008	<0.0008
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	<0.5	<0.05	<0.0008	<0.0008
Trichloroethene (TCE)	8.77E+00	(1)	7.68E+00	(4)	4.85E-01	(8)	4.85E-01	-	<0.5	<0.05	<0.0008	<0.0008
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	4.10E+02	(8)	4.10E+02	-	<0.5	<0.05	<0.0008	<0.0008
Vinyl chloride	7.28E-01	(1)	1.49E+02	(4)	2.50E-02	(8)	2.50E-02	-	<0.5	<0.05	<0.0008	<0.0008
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	7.21E+01	(8)	7.21E+01	-	<1	<0.1	0.0038	<0.0016
Semi Volatile Organics - (EPA Method 8270) mg/kg												
1,2,4-Trichlorobenzene	7.30E+01	(1)	6.87E+01	(4)	4.21E+00	(8)	4.21E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
1,2-Dichlorobenzene	2.31E+03	(1)	2.71E+03	(4)	1.29E+02	(8)	1.29E+02	-	<0.1982	<0.2017	<0.1997	<0.1997
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	1.47E+00	(8)	1.47E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
1-Methylnaphthalene	1.60E+02	(3)	5.30E+01	(6)	2.35E+00	(8)	2.35E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
2,4,5-Trichlorophenol	6.11E+03	(1)	2.38E+04	(4)	4.78E+03	(8)	4.78E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
2,4,6-Trichlorophenol	6.11E+01	(1)	2.38E+02	(4)	4.78E+01	(8)	4.78E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
2,4-Dichlorophenol	1.83E+02	(1)	7.15E+02	(4)	4.60E+01	(8)	4.60E+01	-	<0.3963	<0.4034	<0.3995	<0.3993
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	3.07E+02	(8)	3.07E+02	-	<0.2972	<0.3025	<0.2996	<0.2995
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	2.91E+01	(8)	2.91E+01	-	<0.3963	<0.4034	<0.3995	<0.3993
2,4-Dinitrotoluene	1.57E+01	(1)	4.76E+02	(4)	1.04E+00	(8)	1.04E+00	-	<0.4954	<0.5042	<0.4993	<0.4992
2,6-Dinitrotoluene	6.11E+01	(1)	2.38E+02	(4)	1.77E+01	(8)	1.77E+01	-	<0.4954	<0.5042	<0.4993	<0.4992
2-Chloronaphthalene	6.11E+01	(1)	2.94E+02	(4)	4.01E-01	(8)	4.01E-01	-	<0.2477	<0.2521	<0.2497	<0.2496
2-Chlorophenol	3.91E+02	(1)	1.55E+03	(4)	5.33E+01	(8)	5.33E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	6.45E+01	(8)	6.45E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	2.67E+02	(8)	2.67E+02	-	<0.4954	<0.5042	<0.4993	<0.4992
2-Nitroaniline	6.10E+02	(2)	6.00E+03	(5)	2.86E+01	(8)	2.86E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
2-Nitrophenol	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
3,3'-Dichlorobenzidine	1.08E+01	(1)	3.64E+02	(4)	3.41E+00	(8)	3.41E+00	-	<0.2477	<0.2521	<0.2497	<0.2496
3+4-Methylphenol	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
3-Nitroaniline	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
4,6-Dinitro-2-methylphenol	4.90E+00	(2)	4.90E+01	(5)	9.22E-01	(8)	9.22E-01	-	<0.4954	<0.5042	<0.4993	<0.4992

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-23 (12-14')	SWMU 14-23 (14-16')	SWMU 14-24 (0-0.5')	SWMU 14-24 (1.5-2')
									1210656-003 10/10/2012	1210656-004 10/10/2012	1210860-001 10/17/2012	1210860-002 10/17/2012
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
4-Chloro-3-methylphenol	6.10E+03	(2)	6.20E+04	(5)	5.99E+02	(8)	5.99E+02	-	<0.4954	<0.5042	<0.4993	<0.4992
4-Chloroaniline	2.40E+01	(3)	8.60E+00	(6)	5.99E-02	(8)	5.99E-02	-	<0.4954	<0.5042	<0.4993	<0.4992
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
4-Nitroaniline	2.40E+02	(3)	8.60E+01	(6)	6.45E-01	(8)	6.45E-01	-	<0.3963	<0.4034	<0.3995	<0.3993
4-Nitrophenol	-	-	-	-	-	-	-	-	<0.2477	<0.2521	<0.2497	<0.2496
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	7.79E+03	(8)	3.44E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Acenaphthylene	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
Aniline	8.50E+02	(3)	3.00E+02	(6)	1.80E+00	(8)	1.80E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Anthracene	1.72E+04	(1)	6.68E+04	(4)	1.25E+05	(8)	1.72E+04	-	<0.1982	<0.2017	<0.1997	<0.1997
Azobenzene	5.10E+01	(3)	2.30E+01	(6)	3.69E-01	(8)	3.69E-01	-	<0.1982	<0.2017	<0.1997	<0.1997
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	3.61E+01	(8)	1.48E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Benzo(a)pyrene	1.48E-01	(1)	2.13E+01	(4)	1.20E+01	(8)	1.48E-01	-	<0.1982	<0.2017	<0.1997	<0.1997
Benzo(b)fluoranthene	1.48E+00	(1)	2.13E+02	(4)	1.22E+02	(8)	1.48E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
Benzo(k)fluoranthene	1.48E+01	(1)	2.06E+03	(4)	1.20E+03	(8)	1.48E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	6.45E+03	(8)	6.45E+03	-	<0.4954	<0.5042	<0.4993	<0.4992
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	1.71E+02	(8)	1.71E+02	-	<0.1982	<0.2017	0.32	<0.1997
Bis(2-chloroethoxy)methane	1.80E+02	(2)	1.80E+03	(5)	5.07E+00	(8)	5.07E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	1.21E-02	(8)	1.21E-02	-	<0.1982	<0.2017	<0.1997	<0.1997
Bis(2-chloroisopropyl)ether	9.15E+01	(1)	3.10E+03	(4)	1.07E+00	(8)	1.07E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	3.97E+03	(8)	3.47E+02	-	<0.4954	<0.5042	<0.4993	<0.4992
Butyl benzyl phthalate	2.60E+03	(3)	9.10E+02	(6)	9.22E+01	(8)	9.22E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
Carbazole	-	-	-	-	-	-	-	-	<0.1982	<0.2017	<0.1997	<0.1997
Chrysene	1.48E+02	(1)	2.06E+04	(4)	3.68E+03	(8)	1.48E+02	-	<0.1982	<0.2017	<0.1997	<0.1997
Dibenz(a,h)anthracene	1.48E-01	(1)	2.13E+01	(4)	3.90E+01	(8)	1.48E-01	-	<0.1982	<0.2017	<0.1997	<0.1997
Dibenzofuran	7.80E+01	(2)	1.00E+03	(5)	5.07E+01	(8)	5.07E+01	-	<0.1982	<0.2017	<0.1997	<0.1997
Diethyl phthalate	4.89E+04	(1)	1.91E+05	(4)	4.45E+03	(8)	4.45E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Dimethyl phthalate	6.11E+05	(1)	2.38E+06	(4)	3.71E+04	(8)	3.71E+04	-	<0.1982	<0.2017	<0.1997	<0.1997
Di-n-butyl phthalate	6.11E+03	(1)	2.38E+04	(4)	3.21E+03	(8)	3.21E+03	-	<0.4954	<0.5042	<0.4993	<0.4992
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	<0.3963	<0.4034	<0.3995	<0.3993
Fluoranthene	2.29E+03	(1)	8.91E+03	(4)	5.61E+04	(8)	2.29E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Fluorene	2.29E+03	(1)	8.91E+03	(4)	9.36E+03	(8)	2.29E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Hexachlorobenzene	3.04E+00	(1)	1.03E+02	(4)	1.83E+00	(8)	1.83E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Hexachlorobutadiene	6.11E+01	(1)	2.38E+02	(4)	5.91E+00	(8)	5.91E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Hexachlorocyclopentadiene	3.67E+02	(1)	8.11E+02	(4)	2.43E+02	(8)	2.43E+02	-	<0.1982	<0.2017	<0.1997	<0.1997
Hexachloroethane	4.28E+01	(1)	1.67E+02	(4)	3.77E+00	(8)	3.77E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Indeno(1,2,3-cd)pyrene	1.48E+00	(1)	2.13E+02	(4)	3.98E+02	(8)	1.48E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Isophorone	5.12E+03	(1)	4.75E+04	(4)	8.84E+01	(8)	8.84E+01	-	<0.4954	<0.5042	<0.4993	<0.4992
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	1.64E+00	(8)	1.64E+00	-	<0.1982	<0.2017	<0.1997	<0.1997
Nitrobenzene	5.35E+01	(1)	3.32E+02	(4)	2.88E-01	(8)	2.88E-01	-	<0.4954	<0.5042	<0.4993	<0.4992
N-Nitrosodi-n-propylamine	6.90E-01	(3)	2.50E-01	(6)	3.23E-03	(8)	3.23E-03	-	<0.1982	<0.2017	<0.1997	<0.1997
N-Nitrosodiphenylamine	9.93E+02	(1)	3.36E+04	(4)	2.61E+02	(8)	2.61E+02	-	<0.1982	<0.2017	<0.1997	<0.1997
Pentachlorophenol	8.94E+00	(1)	3.10E+02	(4)	5.90E+00	(8)	5.90E+00	-	<0.3963	<0.4034	<0.3995	<0.3993
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	1.32E+04	(8)	1.83E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.29E+03	(8)	2.29E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Pyrene	1.72E+03	(1)	6.68E+03	(4)	4.12E+04	(8)	1.72E+03	-	<0.1982	<0.2017	<0.1997	<0.1997
Pyridine	7.80E+01	(2)	1.00E+03	(5)	2.44E+00	(8)	2.44E+00	-	<0.4954	<0.5042	<0.4993	<0.4992
Total Petroleum Hydrocarbons - (EPA Method 8015B) mg/kg												
Diesel Range Organics (DRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	140	19	<10	<10
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-	-	160	<5	<5	<5
Motor Oil Range Organics (MRO)	1.00E+03	(10)	1.00E+03	(10)	1.00E+03	(10)	-	-	<49	<49	<50	<48

-- No screening level or analytical result available
NMED - Risk Assessment Guidance for Site Investigations and Remediation (June 14, 2012)

Table 8
Old API Separator Soil Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Leachate DAF (461) (mg/kg) SoilGW NMED	Source	Min	Background Concentrations (11)	SWMU 14-23 (12-14')	SWMU 14-23 (14-16')	SWMU 14-24 (0-0.5')	SWMU 14-24 (1.5-2')
									1210656-003 10/10/2012	1210656-004 10/10/2012	1210860-001 10/17/2012	1210860-002 10/17/2012

EPA - Regional Screening Levels (November 2012)
(1) NMED Residential Screening Level
(2) EPA Residential Screening Level
(3) EPA Residential - Screening Levels (November 2012) multiplied by 10 because the constituent is listed as carcinogenic
(4) NMED Construction Worker Screening Level
(5) EPA Industrial - Screening Levels (Nov. 2012)
(6) EPA Industrial - Screening Levels (Nov. 2012) multiplied by 10
(7) SoilGW NMED Dilution Attenuation Factor (DAF) = 461
(8) SoilGW Risk-based EPA DAF = 461
(9) SoilGW MCL-based EPA DAF = 461
(10) NMED Table 6-2 TPH Screening Guidelines for Potable Groundwater "unknown oil" with DAF = 1.0 - see report Section 5 for use of screening levels
(11) Background concentrations to be determined.

Bold represents value above Residential Screening Level
yellow highlight represents value above Leachate (DAF) Screening Level
Bold with yellow - value exceeds Residential Screening Level and DAF

Table 9
Aeration Basin Groundwater Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Screening Levels	Source	SWMU 1-2 GW	SWMU 1-3 GW	SWMU 1-4 GW	SWMU 1-5 GW	SWMU 1-6 GW	SWMU 1-7 GW	SWMU 1-8 GW	SWMU 1-24 GW	SWMU 1-37 GW
Sample Date			1210279-006 10/2/2012	1210332-005 10/3/2012	1210372-012 / 026 10/4 & 10/5/2011	1210372-013 10/5/2012	1210372-027 10/4/2012	1210372-028 10/4/2012	1210372-014 10/5/2012	1210660-001 10/10/2012	1210692-026 10/11/2012
Metals (mg/l)											
Antimony	6.00E-03 (2)		<0.0125	<0.0025	<0.0025	-	<0.005	<0.005	<0.005	<0.005	<0.0025
Arsenic	1.00E-02 (2)		0.063	0.015	0.016	-	0.054	0.046	0.032	0.052	0.0082
Barium	1.00E+00 (3)		56	0.54	1.2	-	3.4	3.2	4.7	17	0.24
Beryllium	4.00E-03 (2)		0.21	0.0066	<0.002	-	0.041	0.051	0.0065	0.032	<0.002
Cadmium	1.00E-02 (3)		<0.05	<0.002	<0.002	-	<0.02	<0.02	<0.004	<0.004	<0.002
Chromium III	5.00E-02 (3)		0.31	0.015	<0.006	-	0.16	0.17	0.058	0.14	<0.006
Cobalt	5.00E-02 (3)		0.53	0.043	0.011	-	0.27	0.16	0.053	0.11	0.026
Cyanide, Total	2.00E-01 (3)		0.037	0.032	0.021	-	0.028	0.052	0.018	0.059	0.031
Iron, Total	1.00E+00 (3)		140	20	0.32	-	94	130	39	160	2.5
Lead	1.50E-02 (2)		1.7	0.057	<0.0025	-	0.29	0.34	0.078	0.49	0.0041
Manganese	2.00E-01 (3)		95	2.1	0.99	-	39	33	7.9	43	1.1
Mercury	2.00E-03 (3)		0.00027	<0.0002	<0.0002	-	0.00021	0.00034	<0.0002	0.00022	<0.0002
Nickel	2.00E-01 (3)		0.95	0.35	0.13	-	0.55	0.46	0.11	0.21	0.26
Selenium	5.00E-02 (3)		0.059	0.0097	0.0073	-	0.024	0.022	0.0075	0.023	0.0072
Silver	5.00E-02 (3)		<0.125	<0.005	<0.005	-	<0.05	<0.05	<0.01	<0.01	<0.005
Vanadium	1.83E-01 (4)		<1.25	<0.05	<0.05	-	<0.5	<0.5	<0.1	0.2	<0.05
Zinc	1.00E+01 (3)		1.1	0.068	0.047	-	0.88	0.42	0.11	0.27	0.023
Chloride			1600	1600	1900	-	1200	1800	660	1500	1100
Fluoride	1.60E+00 (3)		3	0.89	4.8	-	8.8	1.1	0.78	13	1.4
Sulfate	-		550	810	180	-	1800	2200	52	110	500
Volatile Organic Compounds - (EPA Method 8260B) (mg/l)											
1,1,1,2-Tetrachloroethane	5.24E-03 (4)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,1,1-Trichloroethane	6.00E-02 (3)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,1,2,2-Tetrachloroethane	2.00E-02 (3)		<0.004	<0.002	<0.002	<0.004	<0.002	<0.004	<0.002	<0.01	<0.002
1,1,2-Trichloroethane	5.00E-03 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,1-Dichloroethane	2.50E-02 (3)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,1-Dichloroethene	5.00E-03 (3)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,1-Dichloropropene	-		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,2,3-Trichlorobenzene	5.20E-02 (1)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,2,3-Trichloropropane	7.18E-06 (4)		<0.004	<0.002	<0.002	<0.004	<0.002	<0.004	<0.002	<0.01	<0.002
1,2,4-Trichlorobenzene	7.00E-02 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,2,4-Trimethylbenzene	1.50E-02 (1)		0.01	<0.001	0.032	<0.002	<0.001	<0.002	0.0069	0.015	<0.001
1,2-Dibromo-3-chloropropane	2.00E-04 (2)		<0.004	<0.002	<0.002	<0.004	<0.002	<0.004	<0.002	<0.01	<0.002
1,2-Dibromoethane (EDB)	5.00E-05 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,2-Dichlorobenzene	6.00E-01 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,2-Dichloroethane (EDC)	5.00E-03 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,2-Dichloropropane	5.00E-03 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,3,5-Trimethylbenzene	8.70E-02 (1)		<0.002	<0.001	0.008	<0.002	<0.001	<0.002	0.0015	<0.005	<0.001
1,3-Dichlorobenzene	-		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,3-Dichloropropane	2.90E-01 (1)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1,4-Dichlorobenzene	7.50E-02 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
1-Methylnaphthalene	9.70E-03 (5)		<0.008	<0.004	0.011	<0.008	<0.004	<0.008	0.0098	<0.02	<0.004
2,2-Dichloropropane	-		<0.004	<0.002	<0.002	<0.004	<0.002	<0.004	<0.002	<0.01	<0.002
2-Butanone	7.06E+00 (4)		<0.02	<0.01	0.047	0.02	0.026	<0.02	<0.01	<0.05	<0.01
2-Chlorotoluene	7.30E-01 (4)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
2-Hexanone	8.76E-01 (4)		<0.02	<0.01	0.016	<0.02	<0.01	<0.02	<0.01	<0.05	<0.01
2-Methylnaphthalene	2.70E-02 (1)		<0.008	<0.004	0.019	<0.008	<0.004	<0.008	0.01	<0.02	<0.004
4-Chlorotoluene	1.90E-01 (1)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
4-Isopropyltoluene	-		<0.002	<0.001	0.0015	<0.002	0.0012	<0.002	<0.001	<0.005	0.012
4-Methyl-2-pentanone	1.00E+00 (1)		<0.02	<0.01	0.015	<0.02	<0.01	<0.02	<0.01	<0.05	<0.01
Acetone	2.18E+01 (4)		0.027	0.014	0.13	0.049	0.27	<0.02	0.058	0.052	0.039
Benzene	5.00E-03 (2)		0.017	0.0034	0.024	0.0045	<0.001	<0.002	0.0023	0.02	0.0011
Bromobenzene	5.40E-02 (1)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Bromodichloromethane	8.00E-02 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Bromoform	8.00E-02 (2)		<0.002	<0.001	<0.001	0.0027	<0.001	<0.002	<0.001	<0.005	<0.001
Bromomethane	8.66E-03 (4)		<0.006	<0.003	<0.003	<0.006	0.003	<0.006	<0.003	<0.015	<0.003
Carbon disulfide	1.04E+00 (4)		<0.02	<0.01	<0.01	<0.02	0.03	<0.02	<0.01	<0.05	<0.01
Carbon Tetrachloride	5.00E-03 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Chlorobenzene	1.00E-01 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Chloroethane	2.09E+01 (4)		<0.004	<0.002	<0.002	<0.004	<0.002	<0.004	<0.002	<0.01	<0.002

Table 9
Aeration Basin Groundwater Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Screening Levels	Source	SWMU 1-2 GW	SWMU 1-3 GW	SWMU 1-4 GW	SWMU 1-5 GW	SWMU 1-6 GW	SWMU 1-7 GW	SWMU 1-8 GW	SWMU 1-24 GW	SWMU 1-37 GW
			1210279-006	1210332-005	1210372-012 / 026	1210372-013	1210372-027	1210372-028	1210372-014	1210660-001	1210692-026
Sample Date			10/2/2012	10/3/2012	10/4 & 10/5/2011	10/5/2012	10/4/2012	10/4/2012	10/5/2012	10/10/2012	10/11/2012
Chloroform	8.00E-02 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Chloromethane	1.88E-01 (4)		<0.006	<0.003	<0.003	<0.006	0.0035	<0.006	<0.003	<0.015	<0.003
cis-1,2-DCE	7.00E-02 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
cis-1,3-Dichloropropene	4.33E-03 (4)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Dibromochloromethane	8.00E-02 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Dibromomethane	8.16E-03 (4)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Dichlorodifluoromethane	2.03E-01 (4)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Ethylbenzene	7.00E-01 (2)		0.0047	<0.001	0.016	<0.002	<0.001	<0.002	0.0028	0.0089	<0.001
Hexachlorobutadiene	8.62E-03 (4)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Isopropylbenzene (Cumene)	6.79E-01 (4)		<0.002	<0.001	0.0015	<0.002	<0.001	<0.002	0.0013	<0.005	<0.001
Methyl tert-butyl ether (MTBE)	1.25E-01 (4)		0.043	0.04	0.059	<0.002	<0.001	0.014	0.31	0.065	0.13
Methylene Chloride	5.00E-03 (2)		<0.006	<0.003	<0.003	<0.006	<0.003	<0.006	<0.003	<0.015	<0.003
Naphthalene	1.43E-03 (4)		<0.004	<0.002	0.032	<0.004	<0.002	<0.004	0.0023	0.022	<0.002
n-Butylbenzene	7.80E-01 (1)		<0.006	<0.003	<0.003	<0.006	<0.003	<0.006	<0.003	<0.015	<0.003
n-Propylbenzene	5.30E-01 (1)		0.0027	<0.001	0.0027	<0.002	<0.001	<0.002	0.0017	<0.005	<0.001
sec-Butylbenzene			<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	0.0014	<0.005	<0.001
Styrene	1.00E-01 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
tert-Butylbenzene			<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Tetrachloroethene (PCE)	5.00E-03 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Toluene	7.50E-01 (3)		0.004	<0.001	0.016	0.0072	<0.001	<0.002	0.0023	0.018	<0.001
trans-1,2-DCE	1.00E-01 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
trans-1,3-Dichloropropene	-		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Trichloroethene (TCE)	5.00E-03 (2)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Trichlorofluoromethane	1.29E+00 (4)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Vinyl chloride	1.00E-03 (3)		<0.002	<0.001	<0.001	<0.002	<0.001	<0.002	<0.001	<0.005	<0.001
Xylenes, Total	6.20E-01 (3)		0.02	<0.0015	0.1	<0.003	<0.0015	<0.003	0.0059	0.038	<0.0015
Semi Volatile Organics - (EPA Method 8270C) (mg/l)											
1,2,4-Trichlorobenzene	7.00E-02 (2)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
1,2-Dichlorobenzene	6.00E-01 (2)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
1,3-Dichlorobenzene	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
1,4-Dichlorobenzene	7.50E-02 (2)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
1-Methylnaphthalene	9.70E-03 (5)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	0.01	<0.01
2,4,5-Trichlorophenol	3.65E+00 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2,4,6-Trichlorophenol	3.65E-02 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2,4-Dichlorophenol	1.10E-01 (4)		<0.02	<0.02	<0.02	<0.02	<0.04	<0.02	<0.02	<0.02	<0.02
2,4-Dimethylphenol	7.30E-01 (4)		0.026	<0.01	0.85	<0.01	<0.02	<0.01	<0.01	0.23	<0.01
2,4-Dinitrophenol	7.30E-02 (4)		<0.02	<0.02	<0.02	<0.02	<0.04	<0.02	<0.02	<0.02	<0.02
2,4-Dinitrotoluene	2.17E-03 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2,6-Dinitrotoluene	3.65E-02 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2-Chloronaphthalene	1.21E-03 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2-Chlorophenol	1.83E-01 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2-Methylnaphthalene	2.70E-02 (1)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2-Methylphenol	7.20E-01 (1)		<0.01	<0.01	0.018	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2-Nitroaniline	1.50E+00 (1)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
2-Nitrophenol	-		<0.01	<0.01	<0.01	<0.01	0.24	<0.01	<0.01	<0.01	<0.01
3,3'-Dichlorobenzidine	1.49E-03 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
3+4-Methylphenol	-		<0.01	<0.01	0.018	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
3-Nitroaniline	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
4,6-Dinitro-2-methylphenol	1.20E-03 (1)		<0.02	<0.02	<0.02	<0.02	<0.04	<0.02	<0.02	<0.02	<0.02
4-Bromophenyl phenyl ether	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
4-Chloro-3-methylphenol	1.10E+00 (1)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
4-Chloroaniline	3.20E-03 (5)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
4-Chlorophenyl phenyl ether	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
4-Nitroaniline	3.30E-02 (5)		<0.01	<0.02	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
4-Nitrophenol	-		<0.01	<0.01	<0.01	<0.01	0.026	<0.01	<0.01	<0.01	<0.01
Acenaphthene	2.19E+00 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Aniline	1.20E-01 (5)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Anthracene	1.10E+01 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Azobenzene	1.00E-03 (5)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benz(a)anthracene	2.95E-04 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01

Table 9
Aeration Basin Groundwater Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Screening Levels	Source	SWMU 1-2 GW	SWMU 1-3 GW	SWMU 1-4 GW	SWMU 1-5 GW	SWMU 1-6 GW	SWMU 1-7 GW	SWMU 1-8 GW	SWMU 1-24 GW	SWMU 1-37 GW
			1210279-006	1210332-005	1210372-012 / 026	1210372-013	1210372-027	1210372-028	1210372-014	1210660-001	1210692-026
Sample Date			10/2/2012	10/3/2012	10/4 & 10/5/2011	10/5/2012	10/4/2012	10/4/2012	10/5/2012	10/10/2012	10/11/2012
Benzo(a)pyrene	2.00E-04 (2)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benzo(b)fluoranthene	2.95E-04 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benzo(g,h,i)perylene	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benzo(k)fluoranthene	2.95E-03 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benzoic acid	5.80E+01 (1)		<0.02	<0.02	<0.02	<0.02	<0.04	<0.02	<0.02	<0.02	<0.02
Benzyl alcohol	1.50E+00 (1)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Bis(2-chloroethoxy)methane	4.60E-02 (1)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Bis(2-chloroethyl)ether	1.19E-04 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Bis(2-chloroisopropyl)ether	9.60E-03 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Bis(2-ethylhexyl)phthalate	6.00E-03 (2)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Butyl benzyl phthalate	1.40E-01 (5)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Carbazole	-		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Chrysene	2.95E-02 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Dibenz(a,h)anthracene	2.95E-05 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Dibenzofuran	5.80E-03 (1)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Diethyl phthalate	2.92E+01 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Dimethyl phthalate	3.65E+02 (4)		<0.01	<0.01	0.01	0.013	<0.02	<0.01	<0.01	<0.01	<0.01
Di-n-butyl phthalate	3.65E+00 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Di-n-octyl phthalate			<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.02
Fluoranthene	1.46E+00 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Fluorene	1.46E+00 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Hexachlorobenzene	1.00E-03 (2)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Hexachlorobutadiene	8.62E-03 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Hexachlorocyclopentadiene	5.00E-02 (2)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Hexachloroethane	1.68E-02 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	2.95E-04 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Isophorone	7.07E-01 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Naphthalene	1.43E-03 (4)		<0.01	<0.01	0.016	<0.01	<0.02	<0.01	<0.01	0.011	<0.01
Nitrobenzene	1.22E-03 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
N-Nitrosodi-n-propylamine	9.30E-05 (5)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
N-Nitrosodiphenylamine	1.37E-01 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Pentachlorophenol	1.00E-03 (2)		<0.02	<0.02	<0.02	<0.02	<0.04	<0.02	<0.02	<0.02	<0.02
Phenanthrene	1.10E+00 (3)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Phenol	1.10E+01 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Pyrene	1.10E+00 (4)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Pyridine	1.50E-02 (1)		<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Total Petroleum Hydrocarbons (method 8015) (mg/l)											
Diesel Range Organics (DRO)	-		<2	<1	4.4	<1	1.3	<1	<1	1.9	1
Gasoline Range Organics (GRO)	-		0.71	0.65	0.73	0.26	0.13	0.22	1	1.9	0.56
Motor Oil Range Organics (MRO)	-		<10	<5	<5	<5	<5	<5	<5	<5	<5

- No screening level or analytical result available

450 - bolded value exceeds screening level

(1) EPA - Regional Screening Levels (November 2012) - Tap Water

(2) EPA - Regional Screening Levels (November 2012) - MCL

(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3103 Standards for Ground Water of 10,000 mg/l TDS Concentration or less

(4) NMED Tap Water Screening Levels (June 2012)

(5) EPA - Regional Screening Levels (November 2012) - Tap Water; carcinogenic screening levels multiplied by 10

Table 10
Old API Separator Groundwater Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	NMED WQCC Standards (mg/L)	NMED Tap Water (mg/L)	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)	Screening Levels	Source	SWMU 14-2 GW	SWMU 14-3 GW	SWMU 14-OAPIS-1GW
				1.00E+01					1207940-029	1207900-007	1210860-004
Sample Date	(3)	(4)		(1)		(2)			7/19/2012	7/18/2012	10/16/2012
Total Metals (mg/l)											
Antimony	-	1.46E-02	n	6.00E-03	n	6.00E-03	6.00E-03	(2)	0.00085	<0.0025	<0.0025
Arsenic	1.00E-01	4.48E-04	c	4.50E-05	c	1.00E-02	1.00E-02	(2)	0.012	0.024	0.0085
Barium	1.00E+00	7.30E+00	n	2.90E+00	n	2.00E+00	1.00E+00	(3)	0.54	2.8	0.68
Beryllium	-	7.30E-02	n	1.60E-02	n	4.00E-03	4.00E-03	(2)	0.0021	0.042	<0.002
Cadmium	1.00E-02	1.83E-02	n	-	-	-	1.00E-02	(3)	<0.002	<0.02	<0.002
Chromium	5.00E-02	4.31E-04	n	1.60E+00	n	-	5.00E-02	(3)	0.075	0.38	0.012
Cobalt	5.00E-02	-	-	4.70E-03	n	-	5.00E-02	(3)	0.038	0.12	0.044
Cyanide, Total	2.00E-01	2.19E-02	n	1.40E-03	n	2.00E-01	2.00E-01	(3)	0.216	-	0.09
Iron, Total	1.00E+00	2.56E+01	n	1.10E+01	n	-	1.00E+00	(3)	31	120	5.6
Lead	5.00E-02	-	-	-	L	1.50E-02	1.50E-02	(2)	0.044	0.19	0.01
Manganese	2.00E-01	8.76E-01	n	-	-	-	2.00E-01	(3)	1.3	45	2
Mercury	2.00E-03	6.26E-04	n	6.30E-04	n	2.00E-03	2.00E-03	(3)	0.000033	0.00011	<0.0002
Nickel	2.00E-01	7.30E-01	n	3.00E+00	n	-	2.00E-01	(3)	0.2	0.18	0.13
Selenium	5.00E-02	1.83E-01	n	7.80E-02	n	5.00E-02	5.00E-02	(3)	0.023	0.0096	0.016
Silver	5.00E-02	1.83E-01	n	7.10E-02	n	-	5.00E-02	(3)	<0.005	<0.05	<0.005
Vanadium	-	1.83E-01	n	7.80E-02	n	-	1.83E-01	(4)	0.029	0.52	<0.05
Zinc	1.00E+01	1.10E+01	n	4.70E+00	n	-	1.00E+01	(3)	0.32	1.1	0.099
Chloride	-	-	-	-	-	-	-	-	-	-	<0.5
Fluoride	1.60E+00	1.46E+00	n	9.30E-01	n	-	1.60E+00	(3)	-	-	<0.1
Sulfate	-	-	-	-	-	-	-	-	-	-	<0.5
Dissolved Metals (mg/l)											
Antimony (Dissolved)	-	1.46E-02	n	6.00E-03	n	6.00E-03	6.00E-03	(2)	<0.005	-	-
Arsenic (Dissolved)	1.00E-01	4.48E-04	c	4.50E-05	c	1.00E-02	1.00E-02	(2)	0.011	-	-
Barium (Dissolved)	1.00E+00	7.30E+00	n	2.90E+00	n	2.00E+00	1.00E+00	(3)	0.18	-	-
Beryllium (Dissolved)	-	7.30E-02	n	1.60E-02	n	4.00E-03	4.00E-03	(2)	<0.002	-	-
Cadmium (Dissolved)	1.00E-02	1.83E-02	n	-	-	-	1.00E-02	(3)	<0.002	-	-
Chromium (Dissolved)	5.00E-02	5.48E+01	n	1.60E+00	n	-	5.00E-02	(3)	0.0077	-	-
Cobalt (Dissolved)	5.00E-02	-	-	4.70E-03	n	-	5.00E-02	(3)	0.029	-	-
Iron, Total (Dissolved)	1.00E+00	2.56E+01	n	1.40E-03	n	-	1.00E+00	(3)	0.14	-	-
Lead (Dissolved)	5.00E-02	-	-	1.10E+01	L	1.50E-02	1.50E-02	(2)	<0.005	-	-
Manganese (Dissolved)	2.00E-01	8.76E-01	n	-	-	-	2.00E-01	(3)	0.54	-	-
Nickel (Dissolved)	2.00E-01	7.30E-01	n	3.00E+00	n	-	2.00E-01	(3)	0.18	-	-
Selenium (Dissolved)	5.00E-02	1.83E-01	n	7.80E-02	n	5.00E-02	5.00E-02	(3)	0.023	-	-
Silver (Dissolved)	5.00E-02	1.83E-01	n	7.10E-02	n	-	5.00E-02	(3)	<0.005	-	-
Vanadium (Dissolved)	-	1.83E-01	n	7.80E-02	n	-	1.83E-01	(4)	<0.05	-	-
Zinc (Dissolved)	1.00E+01	1.10E+01	n	4.70E+00	n	-	1.00E+01	(3)	0.13	-	-
Volatile Organic Compounds - (EPA Method 8260B) (mg/l)											
1,1,1,2-Tetrachloroethane	-	5.24E-03	c	5.00E-04	c	-	5.24E-03	(4)	<0.01	<0.005	<0.01
1,1,1-Trichloroethane	6.00E-02	9.13E+00	n	7.50E+01	n	2.00E-01	6.00E-02	(3)	<0.01	<0.005	<0.01
1,1,2,2-Tetrachloroethane	2.00E-02	6.71E-04	c	6.60E-04	c	-	2.00E-02	(3)	<0.02	<0.01	<0.02
1,1,2-Trichloroethane	1.00E-01	4.16E-04	n	2.40E-03	c**	5.00E-03	5.00E-03	(2)	<0.01	<0.005	<0.01
1,1-Dichloroethane	2.50E-02	2.42E-02	c	2.40E-02	c	-	2.50E-02	(3)	<0.01	0.0044	<0.01
1,1-Dichloroethene	5.00E-03	3.40E-01	n	2.60E-01	n	7.00E-03	5.00E-03	(3)	<0.01	0.0019	<0.01
1,1-Dichloropropene	-	-	-	-	-	-	-	-	<0.01	<0.005	<0.01
1,2,3-Trichlorobenzene	-	-	-	5.20E-02	n	-	5.20E-02	(1)	<0.01	<0.005	<0.01
1,2,3-Trichloropropane	-	7.18E-06	c	6.50E-06	c	-	7.18E-06	(4)	<0.02	<0.01	<0.02
1,2,4-Trichlorobenzene	-	4.12E-03	n	9.90E-03	c**	7.00E-02	7.00E-02	(2)	<0.01	<0.005	<0.01
1,2,4-Trimethylbenzene	-	-	-	1.50E-02	n	-	1.50E-02	(1)	0.085	0.082	<0.01
1,2-Dibromo-3-chloropropane	-	3.16E-06	c	3.20E-06	c	2.00E-04	2.00E-04	(2)	<0.02	<0.01	<0.02
1,2-Dibromoethane (EDB)	1.00E-04	6.53E-05	c	6.50E-05	c	5.00E-05	5.00E-05	(2)	<0.01	<0.005	<0.01
1,2-Dichlorobenzene	-	3.70E-01	n	2.80E-01	n	6.00E-01	6.00E-01	(2)	<0.01	<0.005	<0.01
1,2-Dichloroethane (EDC)	1.00E-02	1.49E-03	c	1.50E-03	c*	5.00E-03	5.00E-03	(2)	<0.01	<0.005	<0.01
1,2-Dichloropropane	-	3.86E-03	c	3.80E-03	c*	5.00E-03	5.00E-03	(2)	<0.01	<0.005	<0.01
1,3,5-Trimethylbenzene	-	-	-	8.70E-02	n	-	8.70E-02	(1)	0.0079	0.0057	<0.01
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	<0.01	<0.005	<0.01
1,3-Dichloropropane	-	-	-	2.90E-01	n	-	2.90E-01	(1)	<0.01	<0.005	<0.01
1,4-Dichlorobenzene	-	4.27E-03	c	4.20E-03	c	7.50E-02	7.50E-02	(2)	<0.01	<0.005	<0.01
1-Methylnaphthalene	-	-	-	9.70E-03	c	-	9.70E-03	(5)	0.061	0.17	<0.04
2,2-Dichloropropane	-	-	-	-	-	-	-	-	<0.02	<0.01	<0.02
2-Butanone	-	7.06E+00	n	4.90E+00	n	-	7.06E+00	(4)	0.066	<0.05	<0.1
2-Chlorotoluene	-	7.30E-01	n	1.80E-01	n	-	7.30E-01	(4)	<0.01	<0.005	<0.01
2-Hexanone	-	8.76E-01	n	3.40E-02	n	-	8.76E-01	(4)	<0.1	<0.05	<0.1

Table 10
Old API Separator Groundwater Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	NMED WQCC Standards (mg/L)	NMED Tap Water (mg/L)	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)	Screening Levels	Source	SWMU 14-2 GW	SWMU 14-3 GW	SWMU 14-OAPIS-1GW
				1.00E+01					1207940-029	1207900-007	1210860-004
Sample Date	(3)	(4)		(1)		(2)			7/19/2012	7/18/2012	10/16/2012
2-Methylnaphthalene	-	-	-	2.70E-02	n	-	2.70E-02	(1)	0.039	0.11	<0.04
4-Chlorotoluene	-	-	-	1.90E-01	n	-	1.90E-01	(1)	<0.01	<0.005	<0.01
4-Isopropyltoluene	-	-	-	-	-	-	-		<0.01	0.0033	<0.01
4-Methyl-2-pentanone	-	-	-	1.00E+00	n	-	1.00E+00	(1)	<0.1	<0.05	<0.1
Acetone	-	2.18E+01	n	1.20E+01	n	-	2.18E+01	(4)	0.42	0.0083	<0.1
Benzene	1.00E-02	4.13E-03	c	3.90E-03	c*	5.00E-03	5.00E-03	(2)	0.067	0.097	0.013
Bromobenzene	-	-	-	5.40E-02	n	-	5.40E-02	(1)	<0.01	<0.005	<0.01
Bromodichloromethane	-	1.17E-03	c	1.20E-02	c	8.00E-02	8.00E-02	(2)	<0.01	<0.005	<0.01
Bromoform	-	8.51E-02	c	7.90E-02	c*	8.00E-02	8.00E-02	(2)	<0.01	<0.005	<0.01
Bromomethane	-	8.66E-03	n	7.00E-03	n	-	8.66E-03	(4)	<0.03	<0.015	<0.03
Carbon disulfide	-	1.04E+00	n	7.20E-01	n	-	1.04E+00	(4)	<0.1	<0.05	<0.1
Carbon Tetrachloride	1.00E-02	4.40E-03	c	3.90E-03	c	5.00E-03	5.00E-03	(2)	<0.01	<0.005	<0.01
Chlorobenzene	-	9.13E-02	n	7.20E-02	n	1.00E-01	1.00E-01	(2)	<0.01	<0.005	<0.01
Chloroethane	-	2.09E+01	n	2.10E+01	n	-	2.09E+01	(4)	<0.02	<0.01	<0.02
Chloroform	1.00E-01	1.93E-03	c	1.90E-03	c	8.00E-02	8.00E-02	(2)	<0.01	<0.005	<0.01
Chloromethane	-	1.88E-01	n	1.90E-01	n	-	1.88E-01	(4)	<0.03	<0.015	<0.03
cis-1,2-DCE	-	7.30E-02	n	2.80E-01	n	7.00E-02	7.00E-02	(2)	<0.01	<0.005	<0.01
cis-1,3-Dichloropropene	-	4.33E-03	c	-	-	-	4.33E-03	(4)	<0.01	<0.005	<0.01
Dibromochloromethane	-	1.47E-03	c	1.50E-03	c	8.00E-02	8.00E-02	(2)	<0.01	<0.005	<0.01
Dibromomethane	-	8.16E-03	n	7.90E-03	n	-	8.16E-03	(4)	<0.01	<0.005	<0.01
Dichlorodifluoromethane	-	2.03E-01	n	1.90E-01	n	-	2.03E-01	(4)	<0.01	<0.005	<0.01
Ethylbenzene	7.50E-01	1.48E-02	c	1.30E-02	c	7.00E-01	7.00E-01	(2)	0.049	0.054	<0.01
Hexachlorobutadiene	-	8.62E-03	c	2.60E-03	c*	-	8.62E-03	(4)	<0.01	<0.005	<0.01
Isopropylbenzene (Cumene)	-	6.79E-01	n	3.90E-01	n	-	6.79E-01	(4)	0.0063	0.0081	<0.01
Methyl tert-butyl ether (MTBE)	-	1.25E-01	c	1.20E-01	c	-	1.25E-01	(4)	0.31	0.25	0.44
Methylene Chloride	1.00E-01	1.86E-01	n	9.90E-02	c**	5.00E-03	5.00E-03	(2)	<0.03	0.0075	<0.03
Naphthalene	-	1.43E-03	c	1.40E-03	c*	-	1.43E-03	(4)	0.042	0.045	<0.02
n-Butylbenzene	-	-	-	7.80E-01	n	-	7.80E-01	(1)	<0.01	0.0043	<0.03
n-Propylbenzene	-	-	-	5.30E-01	n	-	5.30E-01	(1)	0.01	0.012	<0.01
sec-Butylbenzene	-	-	-	-	-	-	-		<0.01	0.0035	<0.01
Styrene	-	1.62E+00	n	1.10E+00	n	1.00E-01	1.00E-01	(2)	<0.01	<0.005	<0.01
tert-Butylbenzene	-	-	-	-	-	-	-		<0.01	<0.005	<0.01
Tetrachloroethene (PCE)	2.00E-02	1.08E-03	c	9.70E-02	c**	5.00E-03	5.00E-03	(2)	<0.01	<0.005	<0.01
Toluene	7.50E-01	2.28E+00	n	8.60E-01	n	1.00E+00	7.50E-01	(3)	<0.01	0.013	<0.01
trans-1,2-DCE	-	1.07E-01	n	8.60E-02	n	1.00E-01	1.00E-01	(2)	<0.01	<0.005	<0.01
trans-1,3-Dichloropropene	-	-	-	-	-	-	-		<0.01	<0.005	<0.01
Trichloroethene (TCE)	1.00E-01	3.40E-03	n	4.40E-03	c**	5.00E-03	5.00E-03	(2)	<0.01	<0.005	<0.01
Trichlorofluoromethane	-	1.29E+00	n	1.10E+00	n	-	1.29E+00	(4)	<0.01	<0.005	<0.01
Vinyl chloride	1.00E-03	1.62E-04	c	1.50E-04	c	2.00E-03	1.00E-03	(3)	<0.01	<0.005	<0.01
Xylenes, Total	6.20E-01	2.03E-01	n	1.90E-01	n	1.00E+01	6.20E-01	(3)	0.045	0.044	<0.015
Semi Volatile Organics - (EPA Method 8270C) (mg/l)											
1,2,4-Trichlorobenzene	-	4.12E-03	n	9.90E-03	c**	7.00E-02	7.00E-02	(2)	<0.01	<0.01	<0.01
1,2-Dichlorobenzene	-	3.70E-01	n	2.80E-01	n	6.00E-01	6.00E-01	(2)	<0.01	<0.01	<0.01
1,3-Dichlorobenzene	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
1,4-Dichlorobenzene	-	4.27E-03	c	4.20E-03	c	7.50E-02	7.50E-02	(2)	<0.01	<0.01	<0.01
1-Methylnaphthalene	-	-	-	9.70E-03	c	-	9.70E-03	(5)	<0.01	0.14	<0.01
2,4,5-Trichlorophenol	-	3.65E+00	n	8.90E-01	n	-	3.65E+00	(4)	<0.01	<0.01	<0.01
2,4,6-Trichlorophenol	-	3.65E-02	n	3.50E-02	c**	-	3.65E-02	(4)	<0.01	<0.01	<0.01
2,4-Dichlorophenol	-	1.10E-01	n	3.50E-02	n	-	1.10E-01	(4)	<0.02	<0.02	<0.02
2,4-Dimethylphenol	-	7.30E-01	n	2.70E-01	n	-	7.30E-01	(4)	0.027	0.034	<0.01
2,4-Dinitrophenol	-	7.30E-02	n	3.00E-02	n	-	7.30E-02	(4)	<0.02	<0.02	<0.02
2,4-Dinitrotoluene	-	2.17E-03	c	2.00E-03	c	-	2.17E-03	(4)	<0.01	<0.01	<0.01
2,6-Dinitrotoluene	-	3.65E-02	n	1.50E-02	n	-	3.65E-02	(4)	<0.01	<0.01	<0.01
2-Chloronaphthalene	-	1.21E-03	n	5.50E-01	n	-	1.21E-03	(4)	<0.01	<0.01	<0.01
2-Chlorophenol	-	1.83E-01	n	7.10E-02	n	-	1.83E-01	(4)	<0.01	<0.01	<0.01
2-Methylnaphthalene	-	-	-	2.70E-02	n	-	2.70E-02	(1)	<0.01	0.077	<0.01
2-Methylphenol	-	-	-	7.20E-01	n	-	7.20E-01	(1)	<0.01	0.0073	<0.01
2-Nitroaniline	-	-	-	1.50E+00	n	-	1.50E+00	(1)	<0.01	<0.01	<0.01
2-Nitrophenol	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
3,3'-Dichlorobenzidine	-	1.49E-03	c	1.10E-03	c	-	1.49E-03	(4)	<0.01	<0.01	<0.01
3+4-Methylphenol	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
3-Nitroaniline	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
4,6-Dinitro-2-methylphenol	-	-	-	1.20E-03	n	-	1.20E-03	(1)	<0.02	<0.02	<0.02
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-		<0.01	<0.01	<0.01

Table 10
Old API Separator Groundwater Analytical Results Summary
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	NMED WQCC Standards (mg/L)	NMED Tap Water (mg/L)	Tap Water key	EPA Screening Levels Tap Water (mg/L)	Tap Water key	MCL (mg/L)	Screening Levels	Source	SWMU 14-2 GW	SWMU 14-3 GW	SWMU 14-OAPIS-1GW
				1.00E+01					1207940-029	1207900-007	1210860-004
Sample Date	(3)	(4)		(1)		(2)			7/19/2012	7/18/2012	10/16/2012
4-Chloro-3-methylphenol	-	-	-	1.10E+00	n	-	1.10E+00	(1)	<0.01	<0.01	<0.01
4-Chloroaniline	-	-	-	3.20E-03	c	-	3.20E-03	(5)	<0.01	<0.01	<0.01
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
4-Nitroaniline	-	-	-	3.30E-02	c*	-	3.30E-02	(5)	<0.02	<0.02	<0.01
4-Nitrophenol	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
Acenaphthene	-	2.19E+00	n	4.00E-01	n	-	2.19E+00	(4)	<0.01	<0.01	<0.01
Acenaphthylene	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
Aniline	-	-	-	1.20E-01	c**	-	1.20E-01	(5)	<0.01	<0.01	<0.01
Anthracene	-	1.10E+01	n	1.30E+00	n	-	1.10E+01	(4)	<0.01	<0.01	<0.01
Azobenzene	-	-	-	1.00E-03	c	-	1.00E-03	(5)	<0.01	<0.01	<0.01
Benz(a)anthracene	-	2.95E-04	c	2.90E-04	c	-	2.95E-04	(4)	<0.01	<0.01	<0.01
Benzo(a)pyrene	7.00E-04	2.95E-05	c	2.90E-05	c	2.00E-04	2.00E-04	(2)	<0.01	<0.01	<0.01
Benzo(b)fluoranthene	-	2.95E-04	c	2.90E-04	c	-	2.95E-04	(4)	<0.01	<0.01	<0.01
Benzo(g,h,i)perylene	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
Benzo(k)fluoranthene	-	2.95E-03	c	2.90E-03	c	-	2.95E-03	(4)	<0.01	<0.01	<0.01
Benzoic acid	-	-	-	5.80E+01	n	-	5.80E+01	(1)	<0.02	<0.02	<0.02
Benzyl alcohol	-	-	-	1.50E+00	n	-	1.50E+00	(1)	<0.01	<0.01	<0.01
Bis(2-chloroethoxy)methane	-	-	-	4.60E-02	n	-	4.60E-02	(1)	<0.01	<0.01	<0.01
Bis(2-chloroethyl)ether	-	1.19E-04	c	1.20E-04	c	-	1.19E-04	(4)	<0.01	<0.01	<0.01
Bis(2-chloroisopropyl)ether	-	9.60E-03	c	3.10E-03	c	-	9.60E-03	(4)	<0.01	<0.01	<0.01
Bis(2-ethylhexyl)phthalate	-	4.80E-02	c	4.80E-02	c*	6.00E-03	6.00E-03	(2)	<0.01	<0.01	<0.01
Butyl benzyl phthalate	-	-	-	1.40E-01	c*	-	1.40E-01	(5)	<0.01	<0.01	<0.01
Carbazole	-	-	-	-	-	-	-		<0.01	<0.01	<0.01
Chrysene	-	2.95E-02	c	2.90E-02	c	-	2.95E-02	(4)	<0.01	<0.01	<0.01
Dibenz(a,h)anthracene	-	2.95E-05	c	2.90E-05	c	-	2.95E-05	(4)	<0.01	<0.01	<0.01
Dibenzofuran	-	-	-	5.80E-03	n	-	2.20E-01	(1)	<0.01	<0.01	<0.01
Diethyl phthalate	-	2.92E+01	n	1.10E+01	n	-	2.92E+01	(4)	<0.01	<0.01	<0.01
Dimethyl phthalate	-	3.65E+02	n	-	-	-	3.65E+02	(4)	<0.01	<0.01	<0.01
Di-n-butyl phthalate	-	3.65E+00	n	6.70E-01	n	-	3.65E+00	(4)	0.02	<0.01	<0.01
Di-n-octyl phthalate	-	-	-	-	-	-	-		<0.01	<0.01	<0.02
Fluoranthene	-	1.46E+00	n	6.30E-01	n	-	1.46E+00	(4)	<0.01	<0.01	<0.01
Fluorene	-	1.46E+00	n	2.20E-01	n	-	1.46E+00	(4)	<0.01	<0.01	<0.01
Hexachlorobenzene	-	4.20E-04	c	4.20E-04	c	1.00E-03	1.00E-03	(2)	<0.01	<0.01	<0.01
Hexachlorobutadiene	-	8.62E-03	c	2.60E-03	c*	-	8.62E-03	(4)	<0.01	<0.01	<0.01
Hexachlorocyclopentadiene	-	2.19E-01	n	2.20E-02	n	5.00E-02	5.00E-02	(2)	<0.01	<0.01	<0.01
Hexachloroethane	-	1.68E-02	c	7.90E-03	c**	-	1.68E-02	(4)	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	-	2.95E-04	c	2.90E-04	c	-	2.95E-04	(4)	<0.01	<0.01	<0.01
Isophorone	-	7.07E-01	c	6.70E-01	c*	-	7.07E-01	(4)	<0.01	<0.01	<0.01
Naphthalene	-	1.43E-03	c	1.40E-03	c*	-	1.43E-03	(4)	<0.01	0.024	<0.01
Nitrobenzene	-	1.22E-03	c	1.20E-03	c*	-	1.22E-03	(4)	<0.01	<0.01	<0.01
N-Nitrosodimethylamine	-	-	-	9.30E-05	-	-	-		<0.01	<0.01	<0.01
N-Nitrosodi-n-propylamine	-	-	-	1.00E-01	c	-	9.30E-05	(5)	<0.01	<0.01	<0.01
N-Nitrosodiphenylamine	-	1.37E-01	c	3.50E-04	c	-	1.37E-01	(4)	<0.01	<0.01	<0.01
Pentachlorophenol	-	1.68E-03	c	-	c	1.00E-03	1.00E-03	(2)	<0.02	<0.02	<0.02
Phenanthrene	-	1.10E+00	n	-	-	-	1.10E+00	(4)	<0.01	0.02	<0.01
Phenol	-	1.10E+01	n	8.70E-02	n	-	1.10E+01	(4)	<0.01	<0.01	<0.01
Pyrene	-	1.10E+00	n	1.50E-02	n	-	1.10E+00	(4)	<0.01	<0.01	<0.01
Pyridine	-	-	-	1.50E-01	n	-	1.50E-01	(1)	<0.01	<0.01	<0.01
Total Petroleum Hydrocarbons (method 8015) (mg/l)											
Diesel Range Organics (DRO)	-	2.00E-01	-	-	-	-	-		6.5	83	<1
Gasoline Range Organics (GRO)	-	-	-	-	-	-	-		1.2	1.5	<0.5
Motor Oil Range Organics (MRO)	-	-	-	-	-	-	-		<5	<50	<5

-- No screening level or analytical result available

450 - bolded value exceeds screening level

(1) EPA - Regional Screening Levels (November 2012) - Tap Water

(2) EPA - Regional Screening Levels (November 2012) - MCL

(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3103 Standards for Ground Water of 10,000 mg/l TDS Concentration or less

(4) NMED Tap Water Screening Levels (June 2012)

(5) EPA - Regional Screening Levels (November 2012) - Tap Water; carcinogenic screening levels multiplied by 10

TABLE 11
Groundwater Field Measurements
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

		Ground Water Data						
Well	Date	Well Volume	Temp (degrees C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	ORP	Purge Volume (calculated / actual - gallons)
OAPIS-1	10/15/2012	0	19.24	5.618	3.73	7.78	-47.1	9.15/9.25
		1	18.19	5.596	4.53	7.24	-95.2	
		2	16.97	5.450	4.71	6.98	-79.1	
		3	15.99	5.331	4.94	6.86	-81.8	

Table 12
SWMU No. 1 Soil Cumulative Risk and Hazard Index Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Maximum Concentration	Maximum Concentration divided by Residential Soil Screening Level	Maximum Concentration divided by Non- Residential Soil Screening Level
CARCINOGENIC CONSTITUENTS							
Metals (mg/kg)							
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	400	134.7449	6.0950
Volatile Organic Compounds - (EPA Method 8260) mg/kg							
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	35	0.21875	0.06604
Benzene	1.54E+01	(1)	1.38E+02	(4)	3.2	0.20804	0.02314
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	5.8	0.08474	0.00317
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	0.0444	0.00005	0.00000
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	13	0.30255	0.08235
Semi Volatile Organics - (EPA Method 8270) mg/kg							
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	1.5	0.0043	0.0003
Carcinogenic Constituents Cumulative Risk x 10⁻⁵						135.563	6.270
NON-CARCINOGENIC CONSTITUENTS							
Metals (mg/kg)							
Barium	1.56E+04	(1)	4.35E+03	(4)	1300	0.0836	0.2986
Beryllium	1.56E+02	(1)	1.44E+02	(4)	1.2	0.0077	0.0083
Chromium III	1.17E+05	(1)	4.65E+05	(4)	400	0.0034	0.0009
Cobalt	2.30E+01	(2)	3.00E+02	(4)	11	0.4783	0.0367
Cyanide	4.69E+01	(1)	1.86E+02	(4)	6	0.1279	0.0323
Iron	5.48E+04	(1)	2.17E+05	(4)	24000	0.4384	0.1107
Lead	4.00E+02	(1)	8.00E+02	(4)	80	0.2000	0.1000
Manganese	1.86E+03	(1)	4.40E+02	(4)	2800	1.5014	6.3568
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.4	0.0896	0.1028
Nickel	1.56E+03	(1)	6.19E+03	(4)	16	0.0103	0.0026
Vanadium	3.91E+02	(1)	1.55E+03	(4)	53	0.1355	0.0342
Zinc	2.35E+04	(1)	9.29E+04	(4)	720	0.0307	0.0077
Volatile Organic Compounds - (EPA Method 8260) mg/kg							
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	17	0.2742	0.0654
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	5.8	0.0074	0.0006
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	0.0722		
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	0.0116	0.0000	0.0000
Acetone	6.66E+04	(1)	2.21E+05	(4)	54.1	0.0008	0.0002

Table 12
SWMU No. 1 Soil Cumulative Risk and Hazard Index Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Maximum Concentration	Maximum Concentration divided by Residential Soil Screening Level	Maximum Concentration divided by Non- Residential Soil Screening Level
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	0.0156	0.0000	0.0000
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	0.0031	0.0000	0.0000
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	2.8	0.0008	0.0001
sec-Butylbenzene	-	-	-	-	0.00128	-	-
Toluene	5.27E+03	(1)	1.34E+04	(4)	3.54	0.0007	0.0003
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	24	0.0295	0.0323
Semi Volatile Organics - (EPA Method 8270) mg/kg							
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	0.64	0.0005	0.0001
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	55	0.2391	0.0250
Fluorene	2.29E+03	(1)	8.91E+03	(4)	3.7	0.0016	0.0004
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	11	0.0060	0.0015
Pyrene	1.72E+03	(1)	6.68E+03	(4)	1.5	0.0009	0.0002
Non-Carcinogenic Constituents Hazard Index						0.562	0.126

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site
Investigations and Remediation (June 14, 2012)

EPA - Regional Screening Levels (May 2012)

- (1) NMED Residential Screening Level
- (2) EPA Residential Screening Level
- (3) EPA Residential - Screening Levels x 10
- (4) NMED Construction Worker Screening Level
- (5) EPA Industrial - Screening Levels
- (6) EPA Industrial - Screening Levels x 10

Table 13
SWMU No. 14 Soil Cumulative Risk and Hazard Index Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Maximum Concentration	Maximum Concentration divided by Residential Soil Screening Level	Maximum Concentration divided by Non- Residential Soil Screening Level
CARCINOGENIC CONSTITUENTS							
Metals (mg/kg)							
Arsenic	3.90E+00	(1)	5.30E+01	(4)	1.6	0.4105	0.0302
Chromium VI	2.97E+00	(1)	6.56E+01	(4)	400	134.7449	6.0950
Volatile Organic Compounds - (EPA Method 8260) mg/kg							
1,1,2-Trichloroethane	2.81E+00	(1)	4.72E+02	(4)	1	0.3557	0.0021
1,1-Dichloroethane	6.45E+01	(1)	1.70E+03	(4)	0.000918	0.0000	0.0000
1,2-Dibromo-3-chloropropane	1.86E+00	(1)	5.07E+00	(4)	2.2	1.1804	0.4343
1,2-Dibromoethane (EDB)	5.88E-01	(1)	1.60E+01	(4)	1.2	2.0400	0.0751
1,2-Dichloropropane	1.52E+01	(1)	2.50E+01	(4)	0.82	0.05381	0.03280
1,4-Dichlorobenzene	3.17E+01	(1)	8.31E+02	(4)	0.000252	0.00001	0.00000
1-Methylnaphthalene	1.60E+02	(3)	5.30E+02	(6)	45	0.28125	0.08491
Benzene	1.54E+01	(1)	1.38E+02	(4)	5.9	0.38357	0.04266
Chloroform	5.86E+00	(1)	1.54E+02	(4)	0.0069	0.00118	0.00004
Ethylbenzene	6.84E+01	(1)	1.83E+03	(4)	23	0.33602	0.01256
Methyl tert-butyl ether (MTBE)	9.01E+02	(1)	2.49E+04	(4)	1.5	0.00166	0.00006
Methylene chloride	4.09E+02	(1)	1.12E+03	(4)	2	0.00489	0.00179
Naphthalene	4.30E+01	(1)	1.58E+02	(4)	17	0.39565	0.10769
Semi Volatile Organics - (EPA Method 8270) mg/kg							
Benz(a)anthracene	1.48E+00	(1)	2.13E+02	(4)	0.61	0.4132	0.0029
Bis(2-chloroethyl)ether	2.68E+00	(1)	7.78E+01	(4)	0.43	0.1605	0.0055
Bis(2-ethylhexyl)phthalate	3.47E+02	(1)	4.76E+03	(4)	2.6	0.0075	0.0005
Chrysene	1.48E+02	(1)	2.06E+04	(4)	0.65	0.0044	0.0000
Carcinogenic Constituents Cumulative Risk x 10⁻⁵						140.775	6.928
NON-CARCINOGENIC CONSTITUENTS							
Metals (mg/kg)							
Antimony	3.13E+01	(1)	1.24E+02	(4)	5.3	0.1694	0.0428
Barium	1.56E+04	(1)	4.35E+03	(4)	2400	0.1543	0.5513
Beryllium	1.56E+02	(1)	1.44E+02	(4)	1.4	0.0090	0.0097
Chromium III	1.17E+05	(1)	4.65E+05	(4)	110	0.0009	0.0002
Cobalt	2.30E+01	(2)	3.00E+02	(4)	10	0.4348	0.0333
Cyanide	4.69E+01	(1)	1.86E+02	(4)	5.5	0.1172	0.0296

Table 13
SWMU No. 14 Soil Cumulative Risk and Hazard Index Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Maximum Concentration	Maximum Concentration divided by Residential Soil Screening Level	Maximum Concentration divided by Non- Residential Soil Screening Level
Iron	5.48E+04	(1)	2.17E+05	(4)	26000	0.4749	0.1199
Lead	4.00E+02	(1)	8.00E+02	(4)	80	0.2000	0.1000
Manganese	1.86E+03	(1)	4.40E+02	(4)	1800	0.9652	4.0865
Mercury	1.56E+01	(1)	1.36E+01	(4)	1.4	0.0896	0.1028
Nickel	1.56E+03	(1)	6.19E+03	(4)	17	0.0109	0.0027
Vanadium	3.91E+02	(1)	1.55E+03	(4)	52	0.1330	0.0336
Zinc	2.35E+04	(1)	9.29E+04	(4)	720	0.0307	0.0077
Volatile Organic Compounds - (EPA Method 8260) mg/kg							
1,1,2,2-Tetrachloroethane	8.02E+00	(1)	2.21E+02	(4)	0.00104	0.0001	0.0000
1,2,4-Trimethylbenzene	6.20E+01	(2)	2.60E+02	(5)	44	0.7097	0.1692
1,3,5-Trimethylbenzene	7.80E+02	(2)	1.00E+04	(5)	16	0.0205	0.0016
2-Butanone (MEK)	3.71E+04	(1)	8.43E+04	(4)	0.055	0.0000	0.0000
2-Chlorotoluene	1.56E+03	(1)	6.19E+03	(4)	0.46	0.0003	0.0001
2-Hexanone	9.38E+02	(1)	9.73E+02	(4)	0.37	0.0004	0.0004
2-Methylnaphthalene	2.30E+02	(2)	2.20E+03	(5)	90	0.3913	0.0409
4-Isopropyltoluene	-	-	-	-	3.4	-	-
4-Methyl-2-pentanone	5.30E+03	(2)	5.30E+04	(5)	0.0142	0.0000	0.0000
Acetone	6.66E+04	(1)	2.21E+05	(4)	47	0.0007	0.0002
Carbon disulfide	1.53E+03	(1)	1.58E+03	(4)	0.025	0.0000	0.0000
Chlorobenzene	3.76E+02	(1)	4.06E+02	(4)	0.11	0.0003	0.0003
Chloromethane	2.75E+02	(1)	2.41E+02	(4)	0.013	0.0000	0.0001
Isopropylbenzene	2.43E+03	(1)	2.81E+03	(4)	6.6	0.0027	0.0024
n-Butylbenzene	3.90E+03	(2)	5.10E+04	(5)	4.6	0.0012	0.0001
n-Propylbenzene	3.40E+03	(2)	2.10E+04	(5)	8.1	0.0024	0.0004
sec-Butylbenzene	-	-	-	-	3.8	-	-
Styrene	7.28E+03	(1)	9.99E+03	(4)	0.077	0.0000	0.0000
Toluene	5.27E+03	(1)	1.34E+04	(4)	45	0.0085	0.0033
Trichlorofluoromethane	1.41E+03	(1)	1.30E+03	(4)	0.000685	0.0000	0.0000
Xylenes, Total	8.14E+02	(1)	7.43E+02	(4)	120	0.1474	0.1615
Semi Volatile Organics - (EPA Method 8270) mg/kg							
2,4-Dimethylphenol	1.22E+03	(1)	4.76E+03	(4)	0.52	0.0004	0.0001
2,4-Dinitrophenol	1.22E+02	(1)	4.76E+02	(4)	0.66	0.0054	0.0014
2-Methylphenol	3.10E+03	(2)	3.10E+04	(5)	1.1	0.0004	0.0000

Table 13
SWMU No. 14 Soil Cumulative Risk and Hazard Index Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Residential Soil Screening Level	Source	Non- Residential Soil Screening Level	Source	Maximum Concentration	Maximum Concentration divided by Residential Soil Screening Level	Maximum Concentration divided by Non- Residential Soil Screening Level
3+4-Methylphenol	-	-	-	-	2.2	-	-
4-Nitrophenol	-	-	-	-	0.22	-	-
Acenaphthene	3.44E+03	(1)	1.86E+04	(4)	2	0.0006	0.0001
Benzoic acid	2.40E+05	(2)	2.50E+06	(5)	2.3	0.0000	0.0000
Benzyl alcohol	6.10E+03	(2)	6.20E+04	(5)	0.32	0.0001	0.0000
Fluorene	2.29E+03	(1)	8.91E+03	(4)	3.7	0.0016	0.0004
Phenanthrene	1.83E+03	(1)	7.15E+03	(4)	11	0.0060	0.0015
Phenol	1.83E+04	(1)	6.88E+04	(4)	2.8	0.0002	0.0000
Pyrene	1.72E+03	(1)	6.68E+03	(4)	2.6	0.0015	0.0004
Non-Carcinogenic Constituents Hazard Index						1.302	0.384

-- No screening level or analytical result available

NMED - Risk Assessment Guidance for Site
Investigations and Remediation (June 14, 2012)

EPA - Regional Screening Levels (May 2012)

- (1) NMED Residential Screening Level
- (2) EPA Residential Screening Level
- (3) EPA Residential - Screening Levels x 10
- (4) NMED Construction Worker Screening Level
- (5) EPA Industrial - Screening Levels
- (6) EPA Industrial - Screening Levels x 10

Table 14
SWMU No. 1 Groundwater Cumulative Risk Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Screening Levels	Source	Maximum Concentration	Maximum Concentration divided by Residential Groundwater Screening Level
CARCINOGENIC CONSTITUENTS				
Metals (mg/l)				
Arsenic	4.48E-04	(4)	0.063	140.625
Volatile Organic Compounds - (EPA Method 8260) ug/l				
1-Methylnaphthalene	9.70E-03	(5)	0.011	1.13
Benzene	4.13E-03	(4)	0.024	5.81
Bromoform	8.51E-02	(4)	0.0027	0.03
Ethylbenzene	1.48E-02	(4)	0.016	1.08
Methyl tert-butyl ether (MTBE)	1.25E-01	(4)	0.31	2.49
Naphthalene	1.43E-03	(4)	0.032	22.36
Carcinogenic Constituents Cumulative Risk x 10⁻⁵				173.53
NON-CARCINOGENIC CONSTITUENTS				
Metals (mg/l)				
Barium	7.30E+00	(4)	56	7.67
Beryllium	7.30E-02	(4)	0.21	2.88
Chromium	5.48E+01	(4)	0.31	0.01
Cobalt	4.70E-02	(5)	0.53	11.28
Cyanide, Total	2.19E-02	(4)	0.059	2.69
Iron, Total	2.56E+01	(4)	160	6.26
Lead	-		1.7	-
Manganese, Total	8.76E-01	(4)	95	108.45
Mercury	6.26E-04	(4)	0.00034	0.54
Nickel	7.30E-01	(4)	0.95	1.30
Selenium	1.83E-01	(4)	0.059	0.32
Vanadium	1.83E-01	(4)	0.2	1.10
Zinc	1.10E+01	(4)	1.1	0.10
Volatile Organic Compounds - (EPA Method 8260) mg/l				
1,2,4-Trimethylbenzene	1.50E-02	(1)	0.032	2.13
1,3,5-Trimethylbenzene	8.70E-02	(1)	0.008	0.09
2-Butanone (MEK)	7.06E+00	(4)	0.047	0.01
2-Hexanone	8.76E-01	(4)	0.016	0.02
2-Methylnaphthalene	2.70E-01	(1)	0.019	0.07
4-Isopropyltoluene	-		0.012	-
4-Methyl-2-pentanone	1.00E+00	(1)	0.015	0.02
Acetone	2.18E+01	(4)	0.27	0.01
Bromomethane	8.66E-03	(4)	0.003	0.35
Carbon disulfide	1.04E+00	(4)	0.03	0.03
Chloromethane	1.88E-01	(4)	0.0035	0.02
Isopropylbenzene (Cumene)	6.79E-01	(4)	0.0015	0.00
n-Propylbenzene	5.30E-01	(1)	0.0027	0.01
sec-Butylbenzene	-		0.0014	-
Toluene	2.28E+00	(4)	0.018	0.01
Xylenes, Total	2.03E-01	(4)	0.1	0.49
Semi Volatile Organics - (EPA Method 8270) mg/l				
2,4-Dimethylphenol	7.30E-01	(4)	0.85	1.16
2-Methylphenol	7.20E-01	(1)	0.018	0.03
2-Nitrophenol	-		0.24	-

Table 14
SWMU No. 1 Groundwater Cumulative Risk Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Screening Levels	Source	Maximum Concentration	Maximum Concentration divided by Residential Groundwater Screening Level
3+4-Methylphenol	-		0.018	-
4-Nitrophenol	-		0.026	-
Dimethyl phthalate	3.65E+02	(4)	0.013	0.00
Non-Carcinogenic Constituents Hazard Index				147.04

- No screening level or analytical result available

(1) EPA - Regional Screening Levels (November 2012) - Tap Water

(2) EPA - Regional Screening Levels (November 2012) - MCL

(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3103 Standards for Ground Water of 10,000 mg/l TDS

(4) NMED Tap Water Screening Levels (June 2012)

(5) EPA - Regional Screening Levels (November 2012) - Tap Water; carcinogenic screening levels multiplied by 10

Table 15
SWMU No. 14 Groundwater Cumulative Risk Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

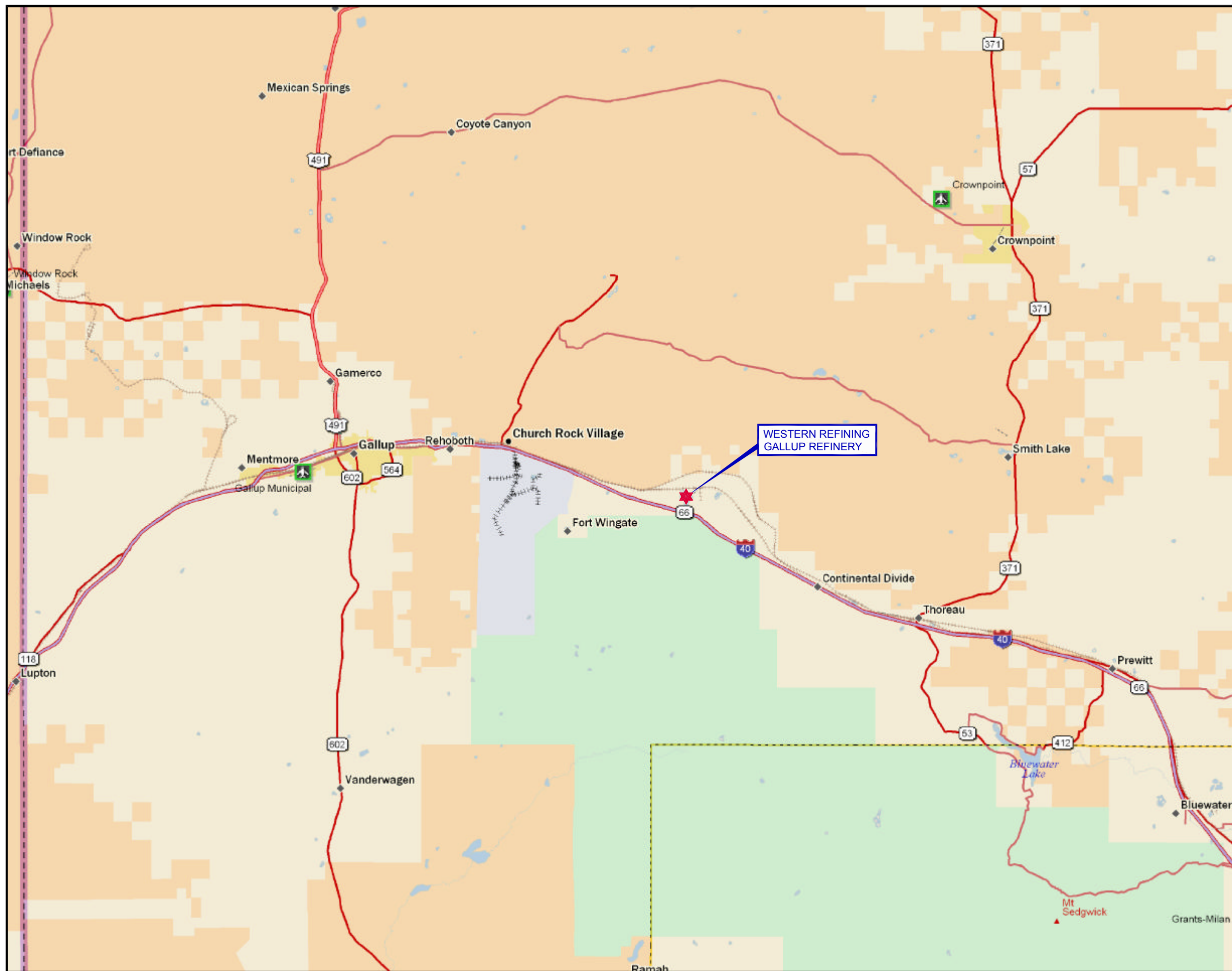
Analytes	Screening Levels	Source	Maximum Concentration	Maximum Concentration divided by Residential Groundwater Screening Level
CARCINOGENIC CONSTITUENTS				
Metals (mg/l)				
Arsenic	4.48E-04	(4)	0.024	53.57
Volatile Organic Compounds - (EPA Method 8260) ug/l				
1,1-Dichloroethane	2.42E-02	(4)	0.0044	0.18
1-Methylnaphthalene	9.70E-03	(5)	0.17	17.53
Benzene	4.13E-03	(4)	0.097	23.49
Ethylbenzene	1.48E-02	(4)	0.054	3.66
Methyl tert-butyl ether (MTBE)	1.25E-01	(4)	0.44	3.53
Naphthalene	1.43E-03	(4)	0.045	31.44
Semi Volatile Organics - (EPA Method 8270) ug/l				
1-Methylnaphthalene	9.70E-03	(5)	0.14	14.43
Carcinogenic Constituents Cumulative Risk x 10⁻⁵				147.83
NON-CARCINOGENIC CONSTITUENTS				
Metals (mg/l)				
Barium	7.30E+00	(4)	2.8	0.38
Beryllium	7.30E-02	(4)	0.042	0.58
Chromium	5.48E+01	(4)	0.38	0.01
Cobalt	4.70E-02	(5)	0.12	2.55
Cyanide, Total	2.19E-02	(4)	0.216	9.86
Iron, Total	2.56E+01	(4)	120	4.70
Lead	-		0.19	-
Manganese, Total	8.76E-01	(4)	45	51.37
Mercury	6.26E-04	(4)	0.00011	0.18
Nickel	7.30E-01	(4)	0.2	0.27
Selenium	1.83E-01	(4)	0.023	0.13
Vanadium	1.83E-01	(4)	0.52	2.85
Zinc	1.10E+01	(4)	1.1	0.10
Volatile Organic Compounds - (EPA Method 8260) mg/l				
1,1-Dichloroethene	0.339534884	(4)	0.0019	
1,2,4-Trimethylbenzene	1.50E-02	(1)	0.085	5.67
1,3,5-Trimethylbenzene	8.70E-02	(1)	0.0079	0.09
2-Butanone (MEK)	7.06E+00	(4)	0.066	0.01
2-Methylnaphthalene	2.70E-01	(1)	0.11	0.41
4-Isopropyltoluene	-		0.0033	-
Acetone	2.18E+01	(4)	0.42	0.02
Isopropylbenzene (Cumene)	6.79E-01	(4)	0.0081	0.01
Methylene Chloride	1.86E-01	(4)	0.0075	0.04
n-Butylbenzene	7.80E+00	(1)	0.0043	0.00
n-Propylbenzene	5.30E-01	(1)	0.012	0.02
sec-Butylbenzene	-		0.0035	-
Toluene	2.28E+00	(4)	0.013	0.01
Xylenes, Total	2.03E-01	(4)	0.045	0.22
Semi Volatile Organics - (EPA Method 8270) mg/l				
2,4-Dimethylphenol	7.30E-01	(4)	0.034	0.05
2-Methylphenol	7.20E-01	(1)	0.0073	0.01
Di-n-butyl phthalate	3.65E+00	(4)	0.02	0.01
Phenanthrene	1.10E+00	(4)	0.02	0.02
Non-Carcinogenic Constituents Hazard Index				79.55

- No screening level or analytical result available

Table 15
SWMU No. 14 Groundwater Cumulative Risk Evaluation
Western Refining Southwest, Inc. - Gallup Refinery
Gallup, New Mexico

Analytes	Screening Levels	Source	Maximum Concentration	Maximum Concentration divided by Residential Groundwater Screening Level
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- (1) EPA - Regional Screening Levels (November 2012) - Tap Water
(2) EPA - Regional Screening Levels (November 2012) - MCL
(3) NMED WQCC standards - Title 20 Chapter 6, Part 2, - 20.6.2.3103 Standards for Ground Water of 10,000 mg/l TDS
(4) NMED Tap Water Screening Levels (June 2012)
(5) EPA - Regional Screening Levels (November 2012) - Tap Water; carcinogenic screening levels multiplied by 10



Map Source: DeLorme Street Atlas USA 2007 Plus.



0 5
SCALE IN MILES

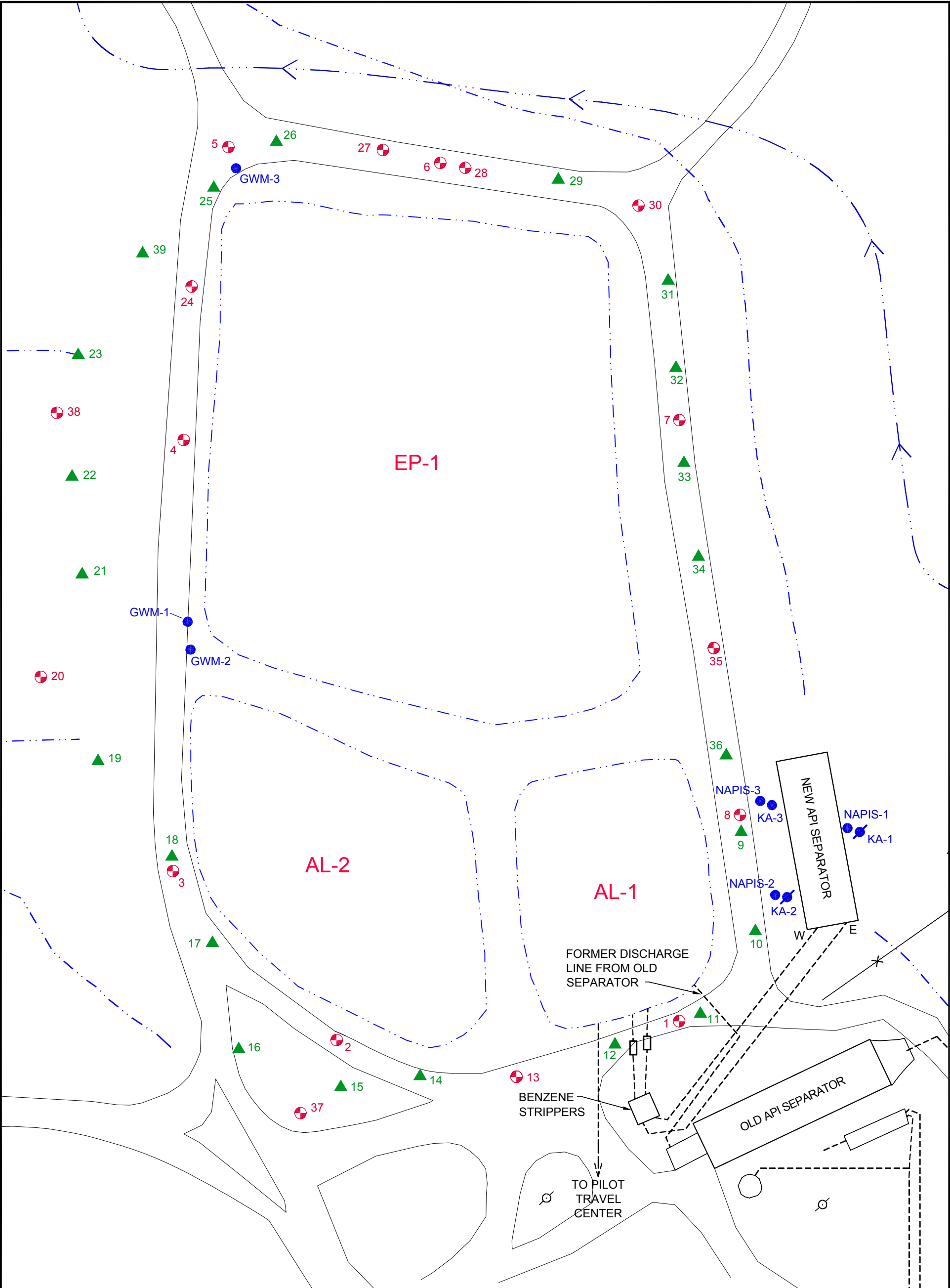


PROJ. NO.: Western Refining | DATE: 01/31/13 | FILE: WestRef-B165

FIGURE 1
SITE LOCATION MAP
GALLUP REFINERY



Cielo Center
1250 S. Capital of Texas Highway
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298




SCALE IN FEET
0 50

LEGEND

-  PERIMETER SOIL BORING LOCATION
-  HAND AUGER SAMPLE LOCATION
-  GWM-1 GROUNDWATER WELL LOCATION
-  KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION
-  PIPELINE

**Western Refining**
GALLUP REFINERY

PROJ. NO.:Western Refining|DATE:08/16/15|FILE:WestRef-dB54

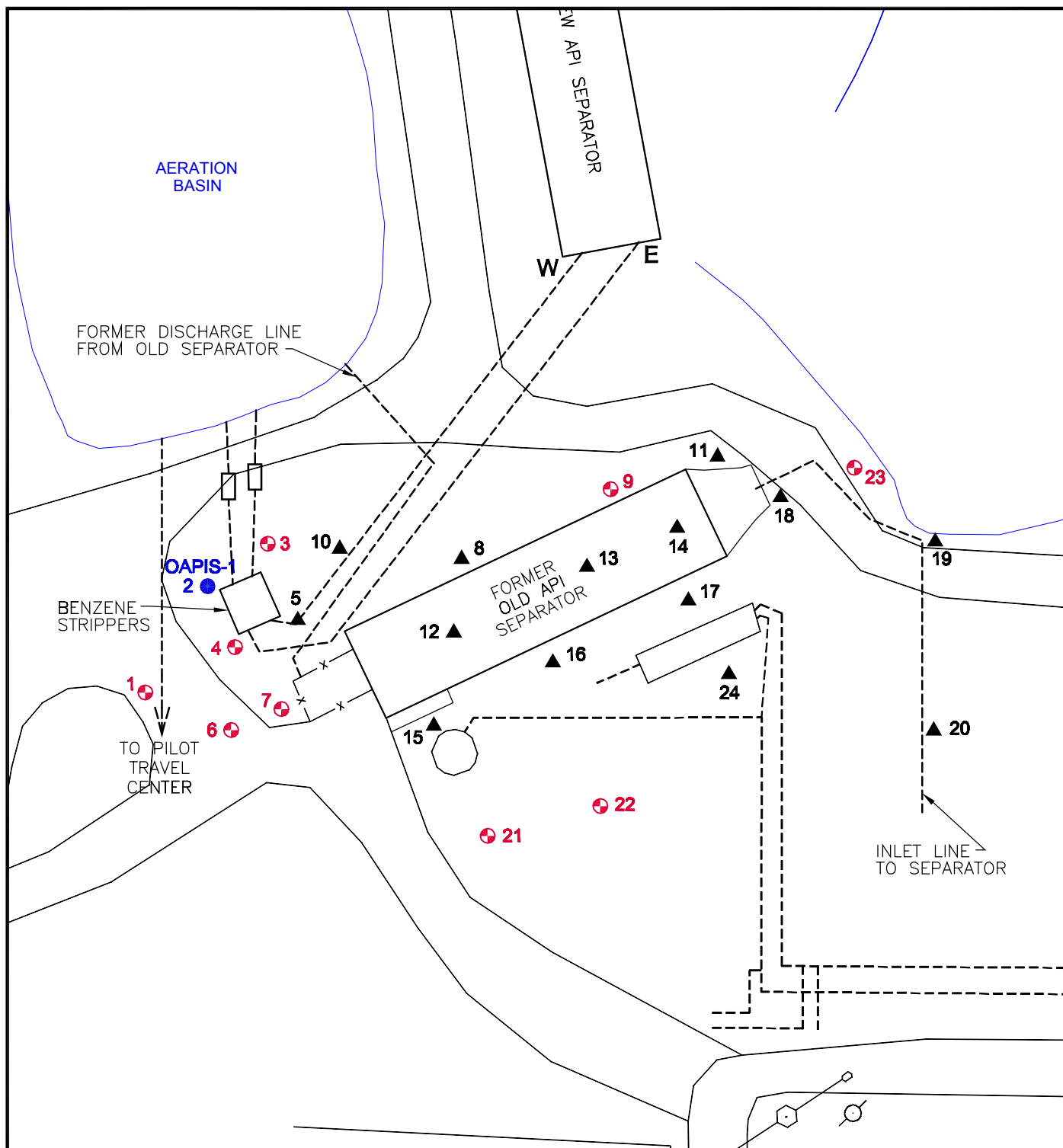
FIGURE 2

SWMU No. 1 SAMPLE LOCATIONS

GALLUP REFINERY

**DiSorbo**
Environmental Consulting Firm

8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759



Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- MONITORING WELL LOCATION
- ⊕ SOIL BORING LOCATION
- ▲ HAND AUGER LOCATION
- PIPELINE



0 40
SCALE IN FEET



QUADRANGLE LOCATION

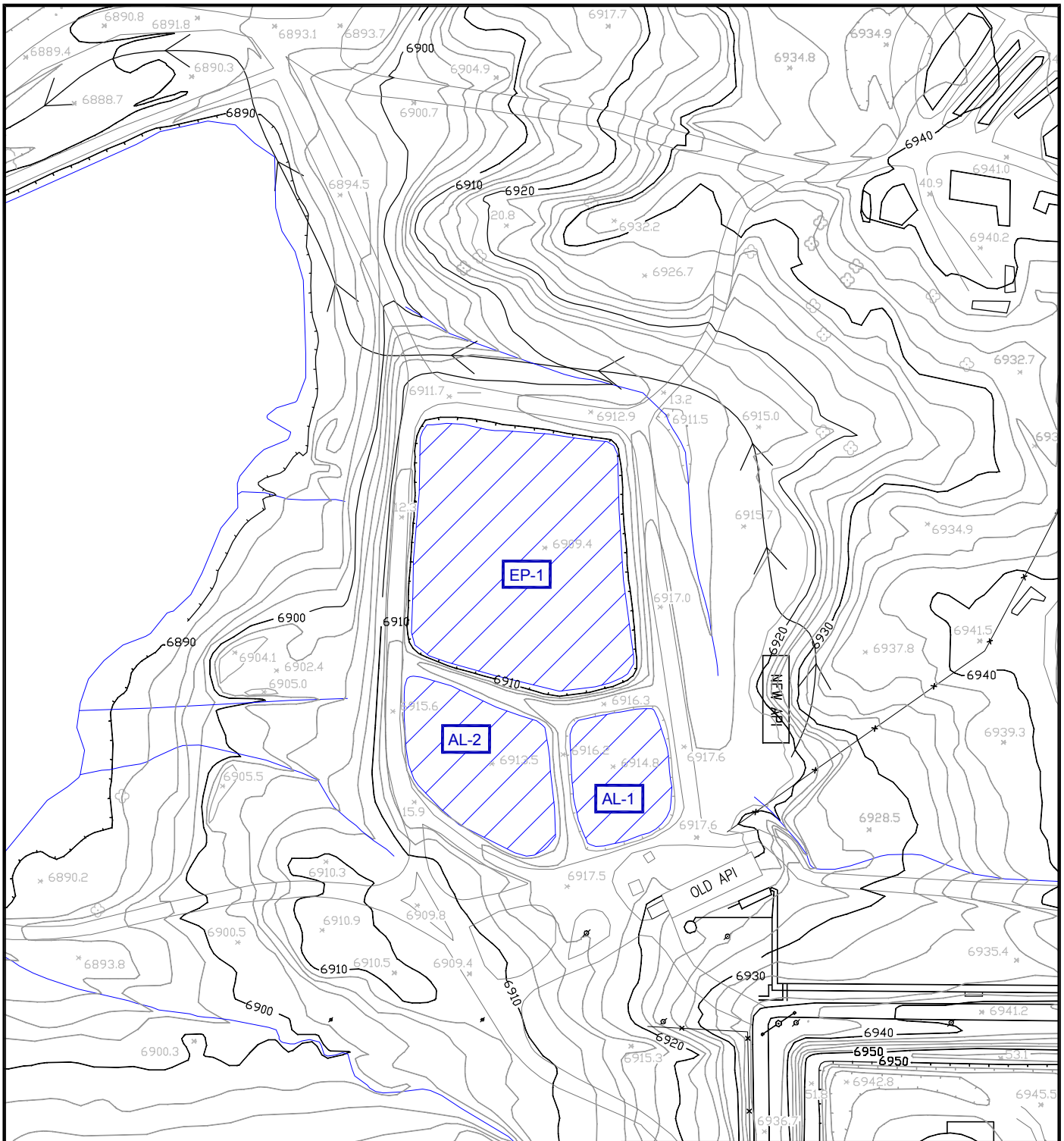


PROJ. NO.: Western Refining | DATE: 08/16/15 | FILE: WestRef-dA32

FIGURE 3 SWMU No. 14 SAMPLE LOCATIONS GALLUP REFINERY

DiSorbo
Environmental Consulting Firm

8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759

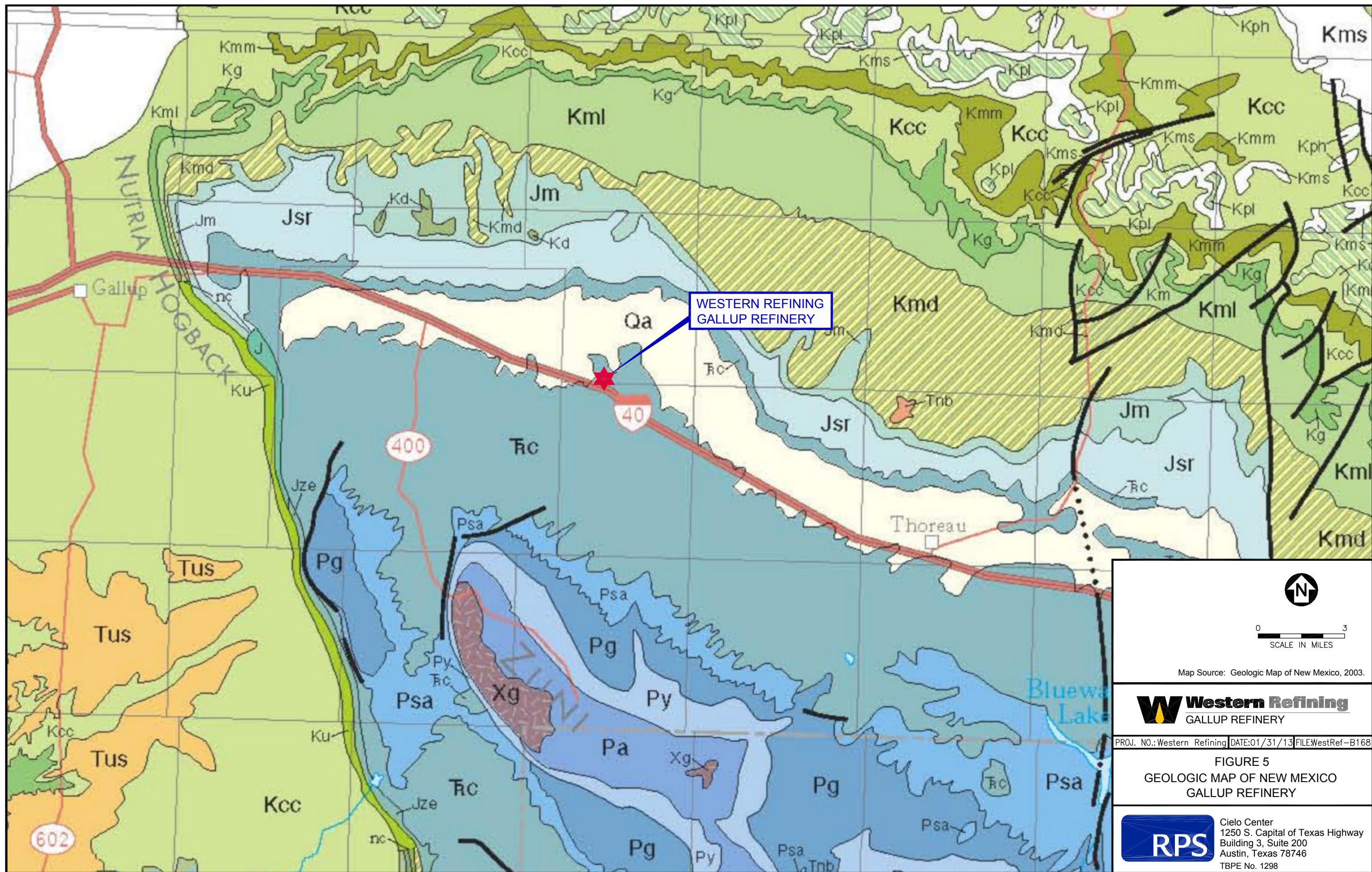


PROJ. NO.: Western Refining | DATE: 01/31/13 | FILE: WestRef-A168

FIGURE 4 TOPOGRAPHIC MAP GALLUP REFINERY



Cielo Center
1250 S. Capital of Texas Highway
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298



Map Source: Geologic Map of New Mexico, 2003.

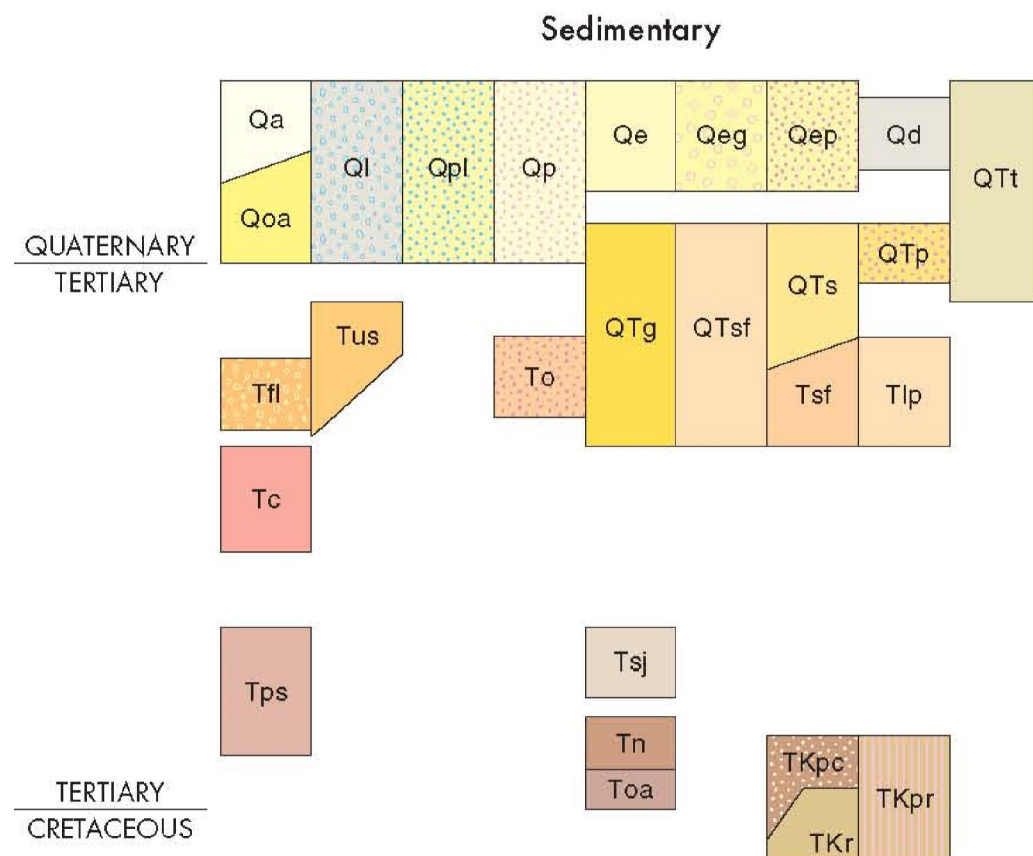
Western Refining
GALLUP REFINERY

PROJ. NO.: Western Refining DATE: 01/31/13 FILE: WestRef-B168

FIGURE 5
GEOLOGIC MAP OF NEW MEXICO
GALLUP REFINERY



Cielo Center
1250 S. Capital of Texas Highway
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298



DESCRIPTION OF MAP UNITS

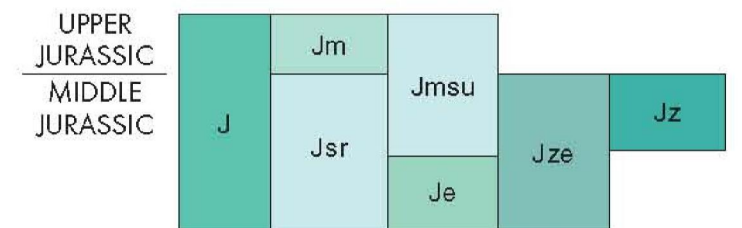
QUATERNARY

- Qa** Alluvium (Holocene to upper Pleistocene)
- Ql** Landslide deposits and colluvium (Holocene to Pleistocene)—Landslide deposits on western flanks of Socorro Mountains not shown for clarity
- Qpl** Lacustrine and playa deposits (Holocene)—Includes associated alluvial and eolian deposits of major lake basins
- Qp** Piedmont alluvial deposits (Holocene to lower Pleistocene)—Includes deposits of higher gradient tributaries bordering major stream valleys, alluvial veneers of the piedmont slope, and alluvial fans. May locally include uppermost Pliocene deposits

TRIASSIC

Chinle Formation of previous workers (e.g., Stewart et al., 1972) is used here as Chinle Group, following Lucas (1993)

- T** Triassic rocks, undivided—Continental red beds
- Trp** Rock Point Formation of Chinle Group (Upper Triassic)—May locally include Wingate Sandstone (Triassic)
- Tc** Chinle Group (Upper Triassic)—Map unit includes Moenkopi Formation (Middle Triassic) at base in many areas; in eastern part of state the following five formations are mapped:
- Tr** Redonda Formation (Upper Triassic)
- Tb** Bull Canyon Formation (Norian)
- Tt** Trujillo Formation (Norian)
- Tg** Garita Creek Formation (Carnian)
- Rs** Santa Rosa Formation (Carnian)—Includes Moenkopi Formation (Middle Triassic) at base in most areas
- Tcu** Upper Chinle Group, Garita Creek through Redonda Formations, undivided
- Tm** Moenkopi Formation (Middle Triassic)



JURASSIC

To compare this map nomenclature to the USGS nomenclature, see the diagram included on this sheet (at right)

- J** Upper and Middle Jurassic rocks, undivided. In southwest includes the basalt-bearing Broken Jug Formation
- Jm** Morrison Formation—Upper Jurassic nonmarine rocks
- Jmsu** Morrison Formation and upper San Rafael Group (lowermost Cretaceous?—upper Jurassic)
- Jz** Zuni Sandstone (Callowian)—Consists of undivided equivalents of the Summerville Formation and Bluff Sandstone; restricted to Zuni Basin area
- Jze** Zuni and Entrada Sandstones, undivided
- Je** Entrada Sandstone (Middle Jurassic)
- Jsr** San Rafael Group (Middle Jurassic)—Consists of Entrada Sandstone, Todilto and Summerville Formations, Bluff Sandstone, and locally Zuni Sandstone (or only Acoma Tongue of Zuni)

Map Source: Geologic Map of New Mexico, 2003.

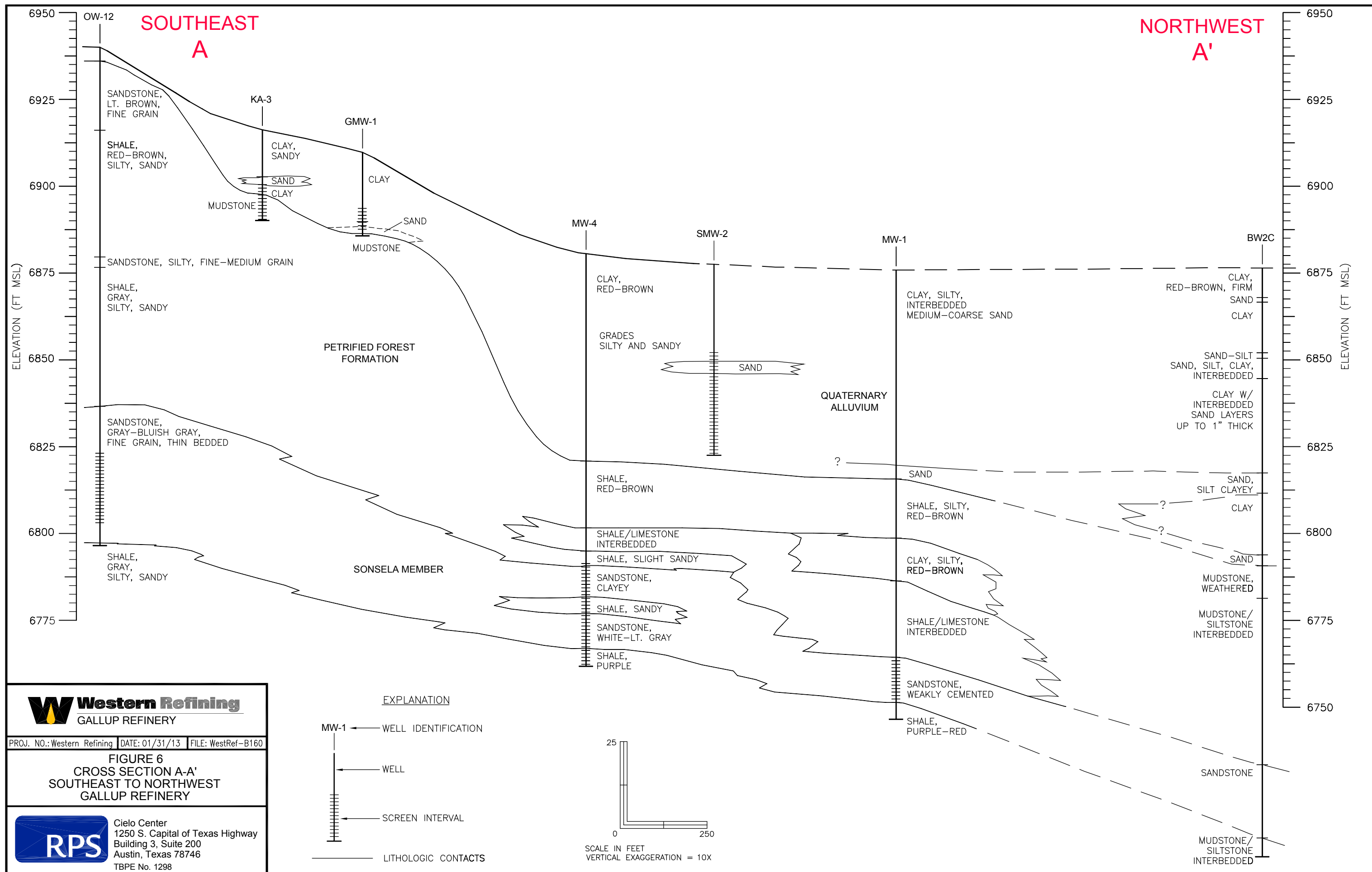


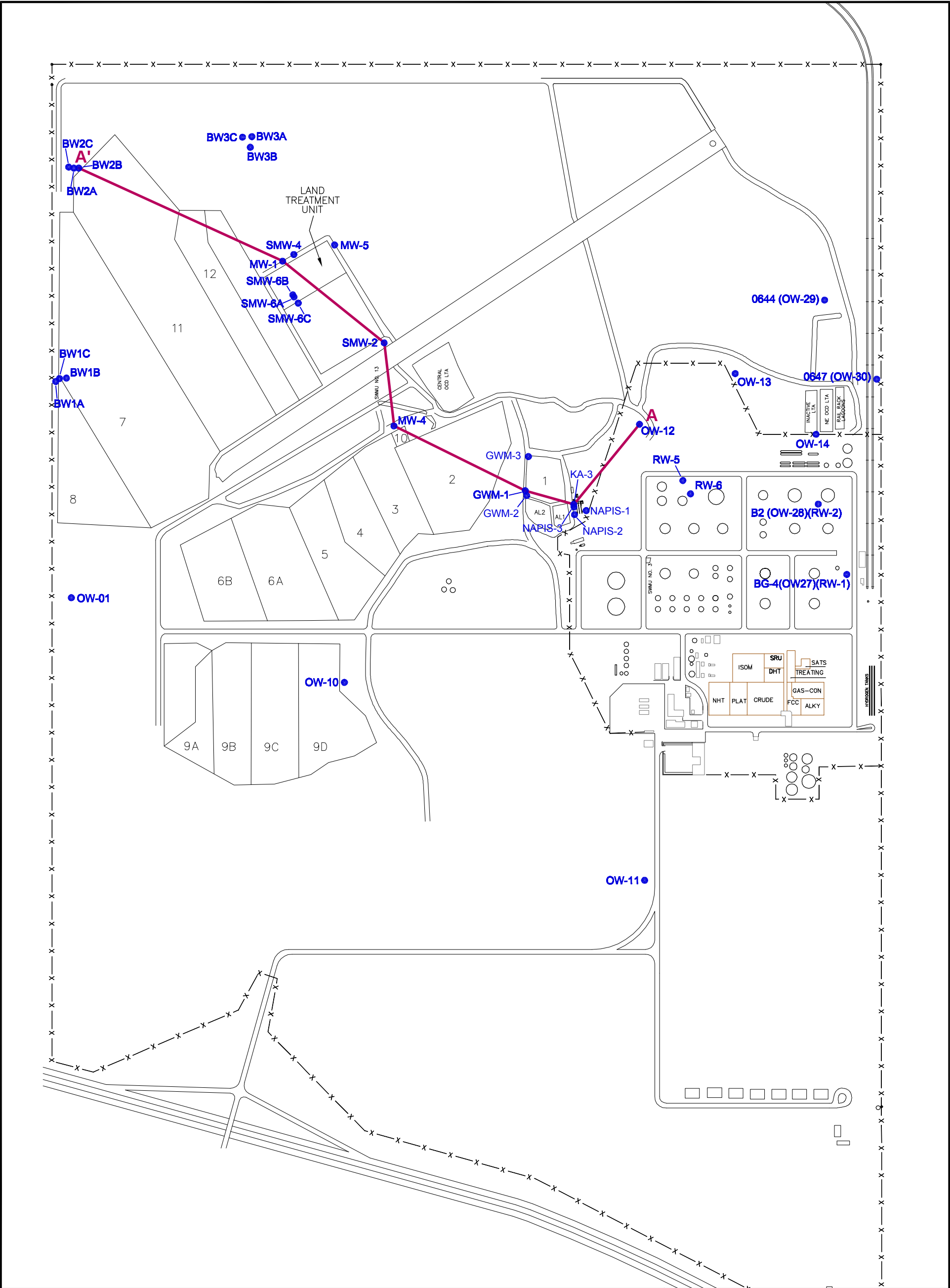
PROJ. NO.: Western Refining DATE: 01/31/13 FILE: WestRef-B168

FIGURE 5
GEOLOGIC MAP OF NEW MEXICO
GALLUP REFINERY



Cielo Center
1250 S. Capital of Texas Highway
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298






0 600
SCALE IN FEET

LEGEND

GWM-1 ● MONITORING WELL LOCATION

A — A' LINE OF CROSS SECTION

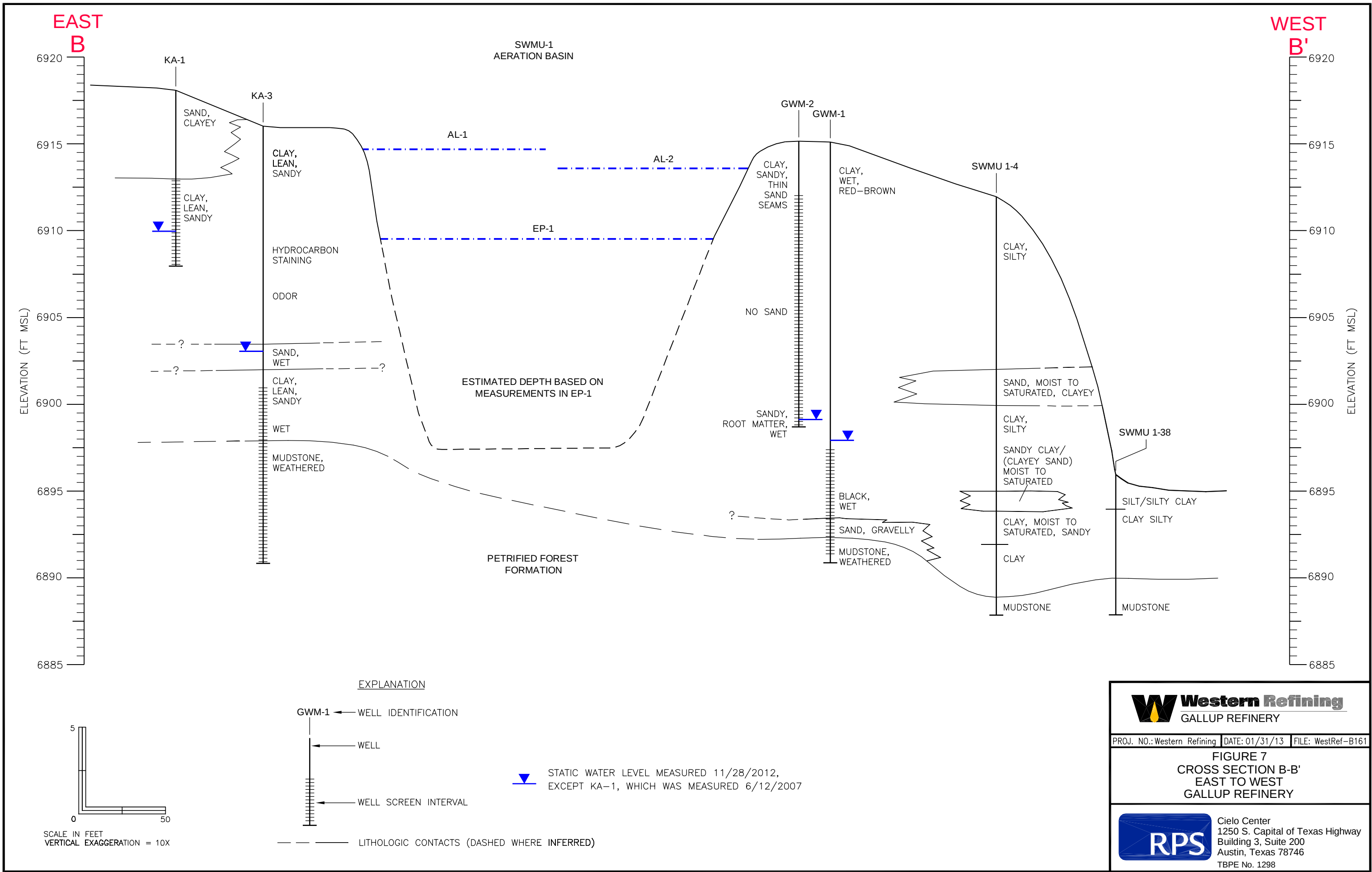
**Western Refining**
GALLUP REFINERY

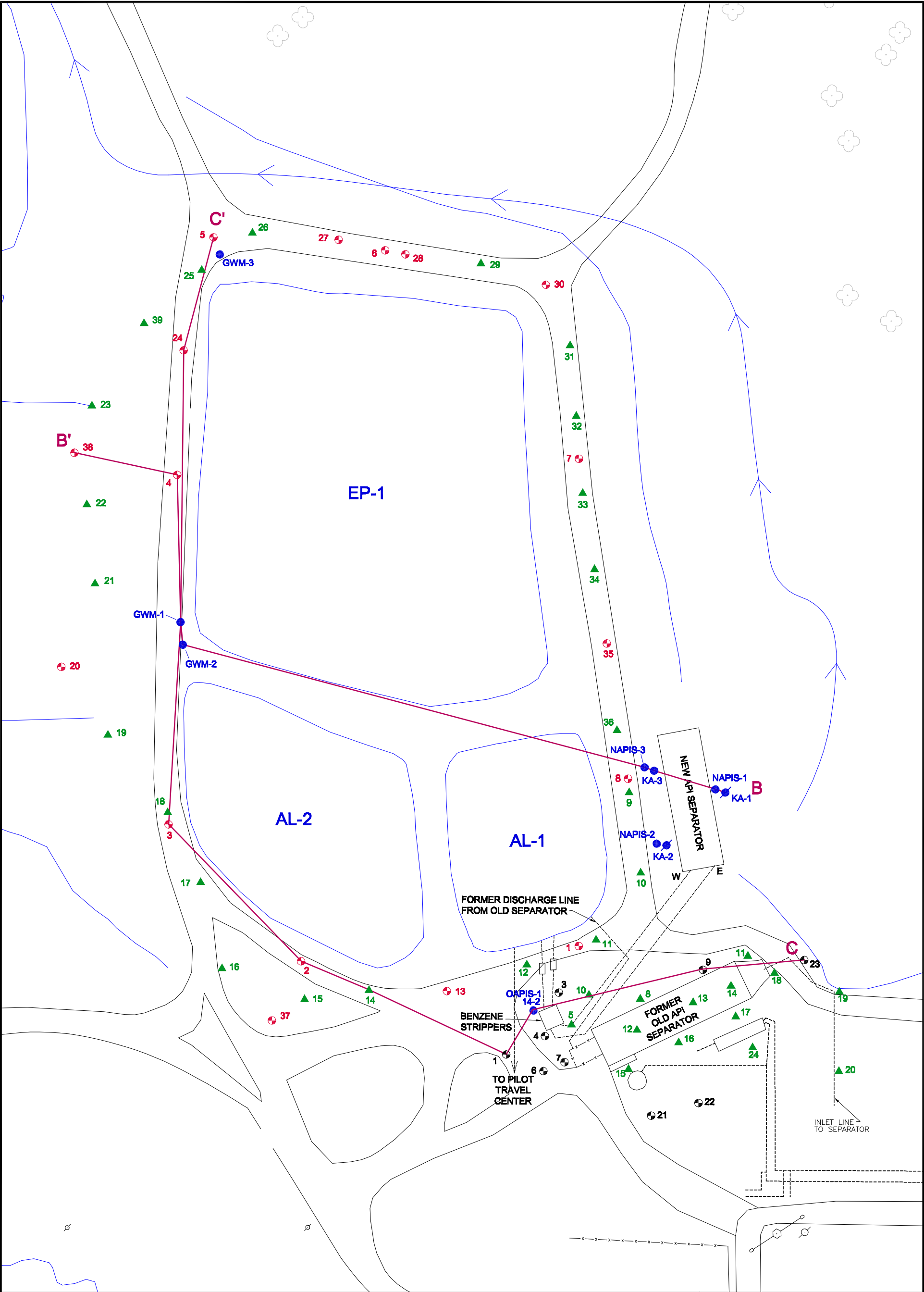
PROJ. NO.:Western Refining|DATE:01/31/13|FILE:WestRef-B166

FIGURE 6A
CROSS SECTION LOCATION MAP
GALLUP REFINERY



Cielo Center
1250 S. Capital of Texas Highway
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298





Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- SOIL BORING LOCATION
- PERIMETER SOIL BORING LOCATION
- HAND AUGER SAMPLE LOCATION
- GWM-1 GROUNDWATER WELL LOCATION
- KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION
- PIPELINE
- B — B' LINE OF CROSS SECTION

NEW MEXICO

QUADRANGLE LOCATION

Western Refining

GALLUP REFINERY

PROJ. NO.: Western Refining | DATE: 08/16/15 | FILE: WestRef-dD01

FIGURE 7A

CROSS SECTION LOCATION MAP

GALLUP REFINERY

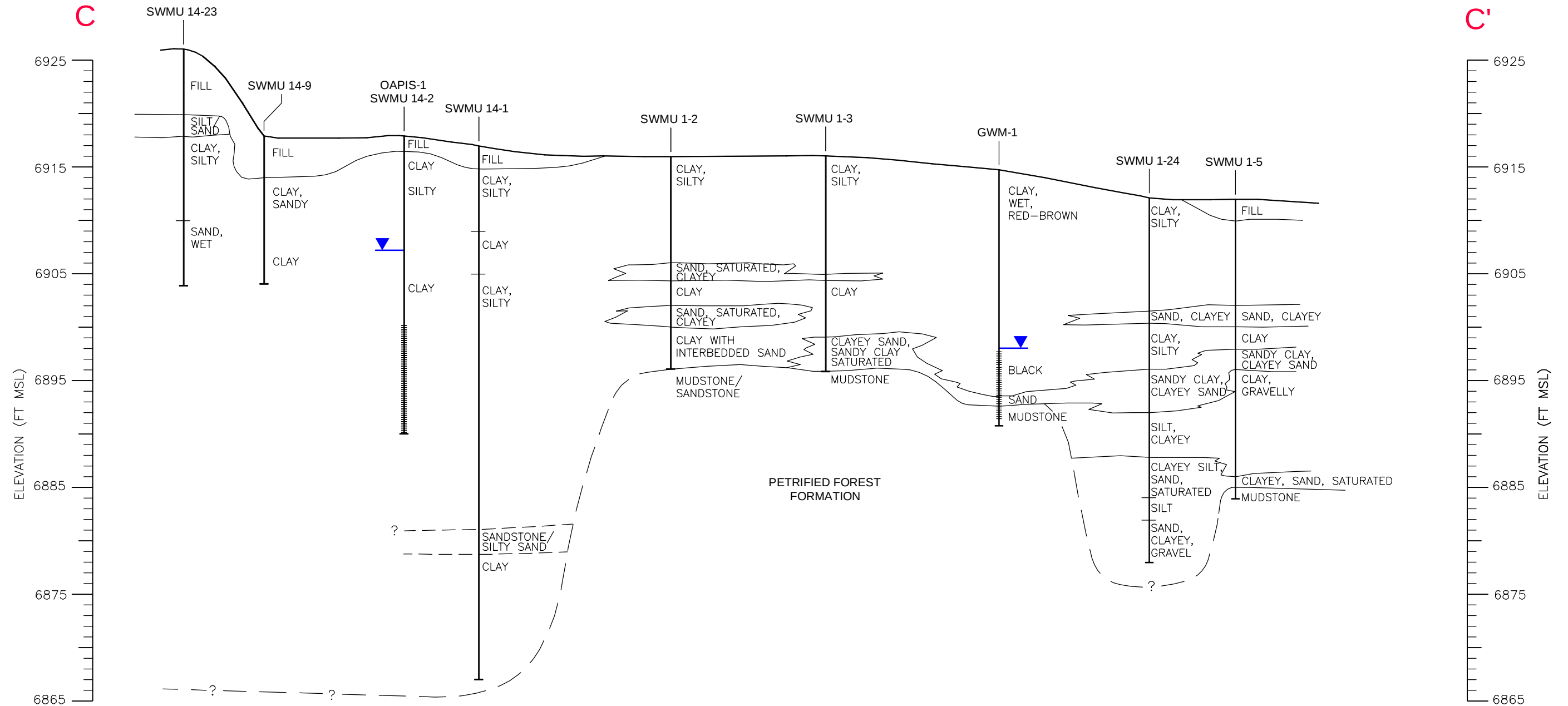
DiSorbo

Environmental Consulting Firm

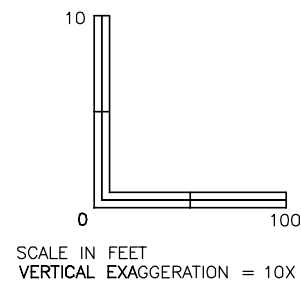
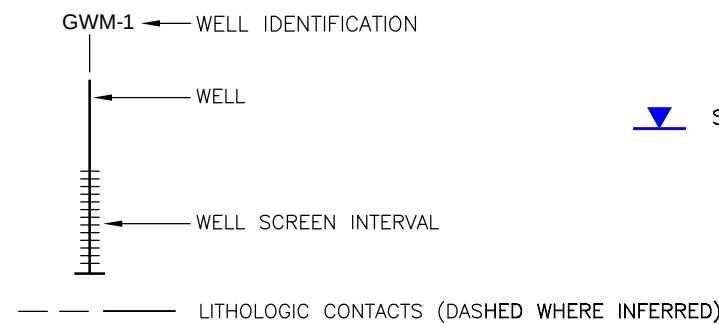
8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759

SOUTH
C

NORTH
C'



EXPLANATION

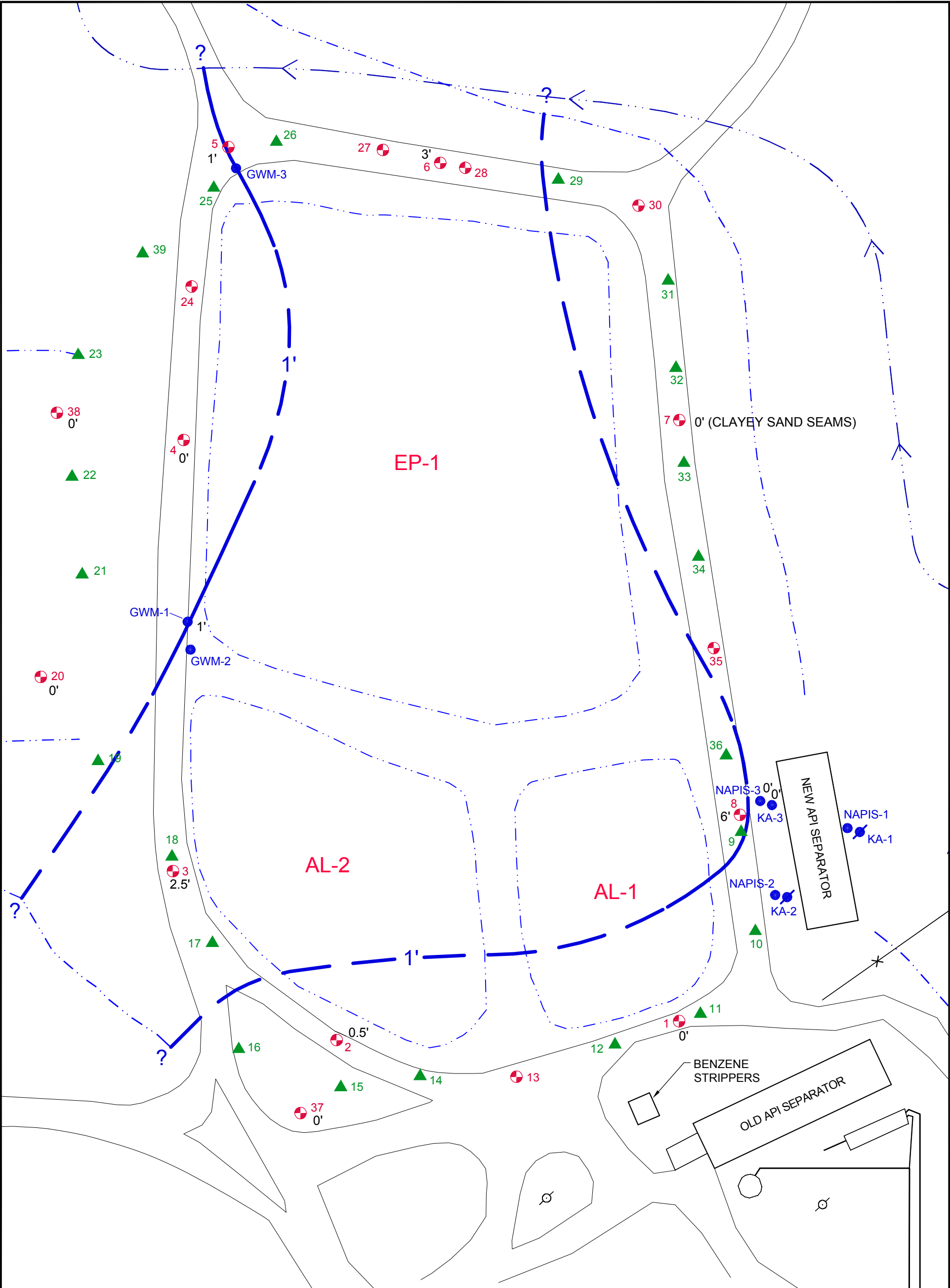


PROJ. NO.: Western Refining | DATE: 01/31/13 | FILE: WestRef-B162

FIGURE 8
CROSS SECTION C-C'
SOUTH TO NORTH
GALLUP REFINERY



Cielo Center
1250 S. Capital of Texas Highway
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298




0 50
SCALE IN FEET

LEGEND

0.5' THICKNESS OF PERMEABLE LAYER (SAND AND CLAYEY SAND / SANDY CLAY) THAT DIRECTLY OVER LIES PETRIFIED FOREST FORMATION BEDROCK (FT)

PERIMETER SOIL BORING LOCATION

HAND AUGER SAMPLE LOCATION

GWM-1 GROUNDWATER WELL LOCATION

KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION

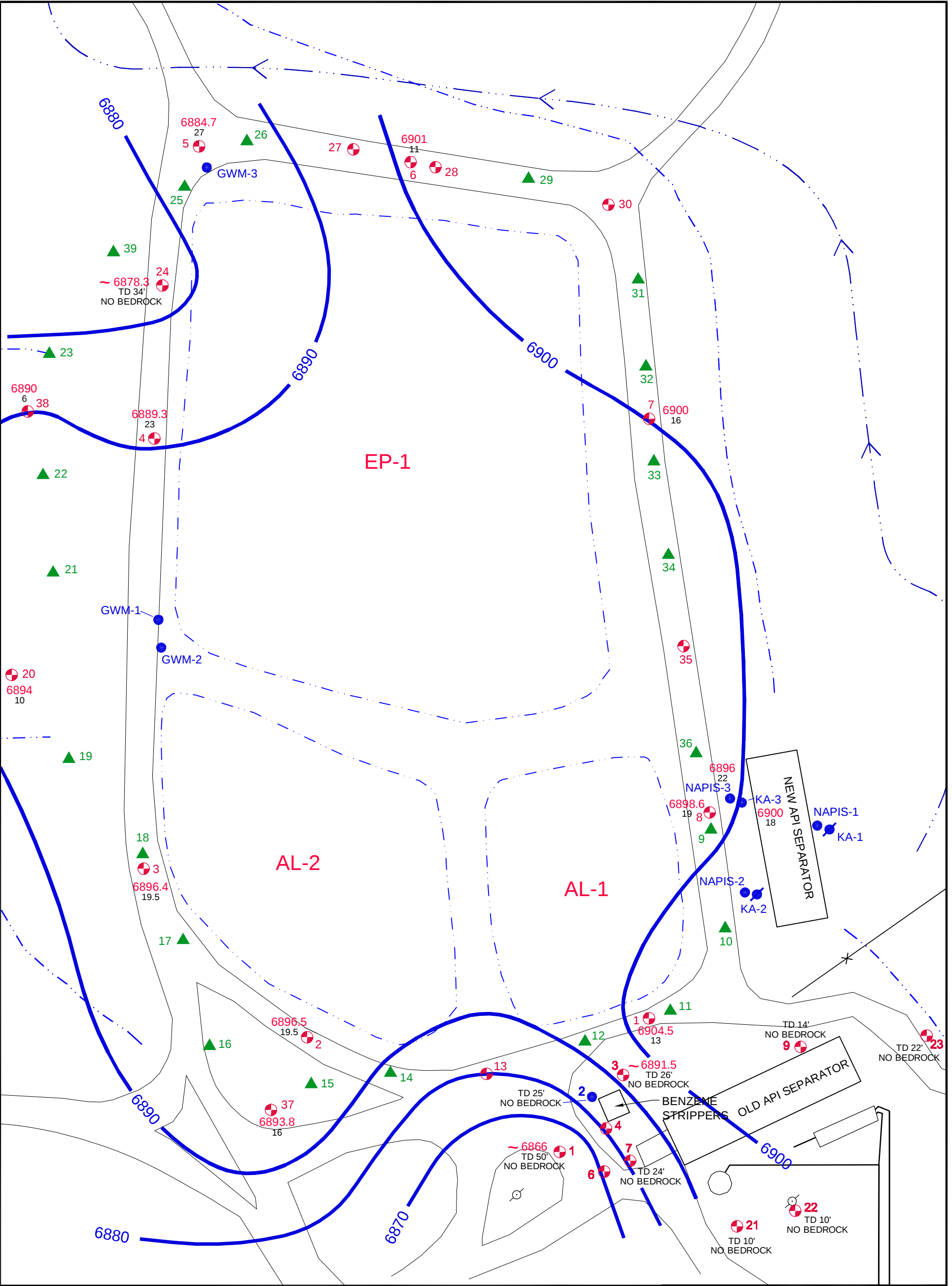
**Western Refining**
GALLUP REFINERY

PROJ. NO.:Western Refining|DATE:01/31/13|FILE:WestRef-B163

FIGURE 9
SAND ISOPACH MAP
SWMU No. 1
GALLUP REFINERY



Cielo Center
1250 S. Capital of Texas Highway
Building 3, Suite 200
Austin, Texas 78746
TBPE No. 1298



LEGEND

- 6896.4 ELEVATION ON TOP OF PETRIFIED FOREST FORMATION (MSL)
- 19.5 DEPTH TO TOP OF PETRIFIED FOREST FORMATION
- ~ ELEVATION ESTIMATED AS PETRIFIED FOREST FORMATION NOT REACHED IN BORING
- TD TOTAL DEPTH OF BORING
- PERIMETER SOIL BORING LOCATION
- HAND AUGER SAMPLE LOCATION
- GWM-1 GROUNDWATER WELL LOCATION
- KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION

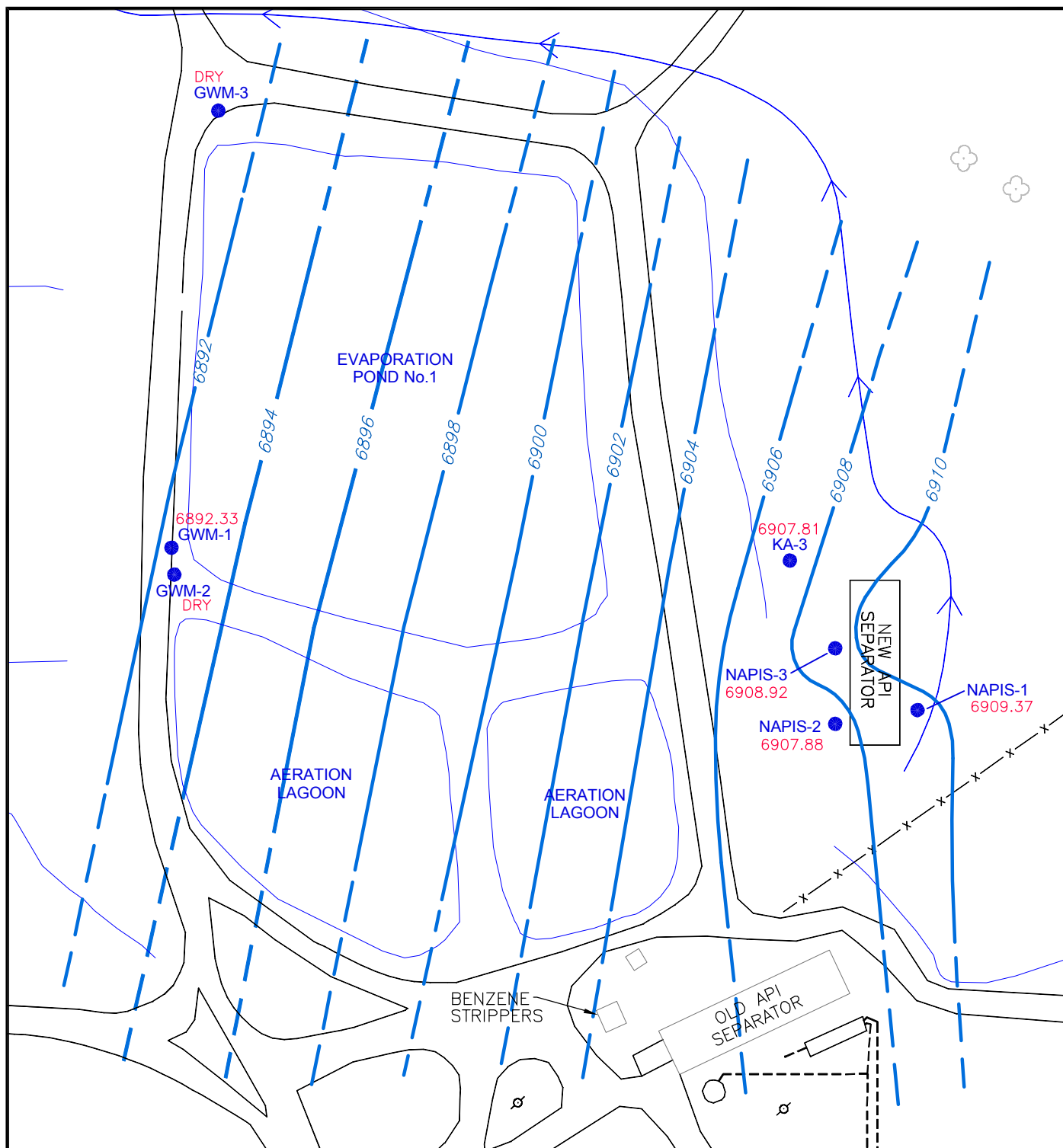


PROJ. NO.:Western Refining|DATE:01/31/13|FILE:WestRef-B164

FIGURE 10
PALEOTOPOGRAPHIC MAP
GALLUP REFINERY



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Austin, Texas 78746
TBPE No. 1298



Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- GWM-1 MONITORING WELL LOCATION
- 6894 POTENTIOMETRIC SURFACE CONTOUR (ABOVE MSL)
- 6907.81 POTENTIOMETRIC SURFACE (MEASURED AUGUST 2009, ABOVE MSL)
- PIPELINE



0 80
SCALE IN FEET

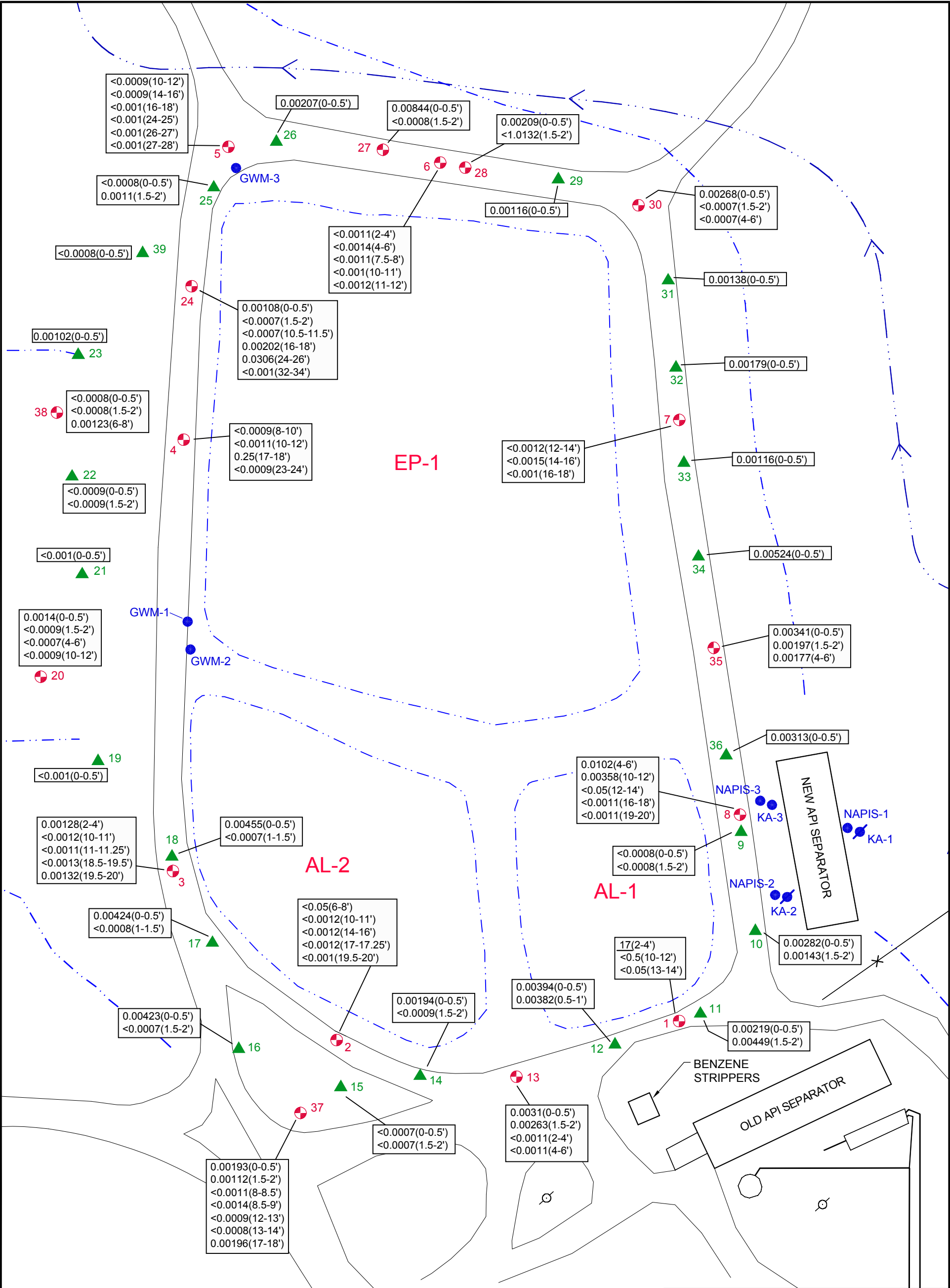


PROJ. NO.: Western Refining | DATE: 09/23/10 | FILE: WestRef-A40

FIGURE 11 POTENTIOMETRIC SURFACE MAP GALLUP REFINERY



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0 50
SCALE IN FEET

LEGEND

-  PERIMETER SOIL BORING LOCATION
-  HAND AUGER SAMPLE LOCATION
-  GWM-1 GROUNDWATER WELL LOCATION
-  KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION
- 0.0031(0-0.5') 1,2,4- TRIMETHYLBENZENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 9.68 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

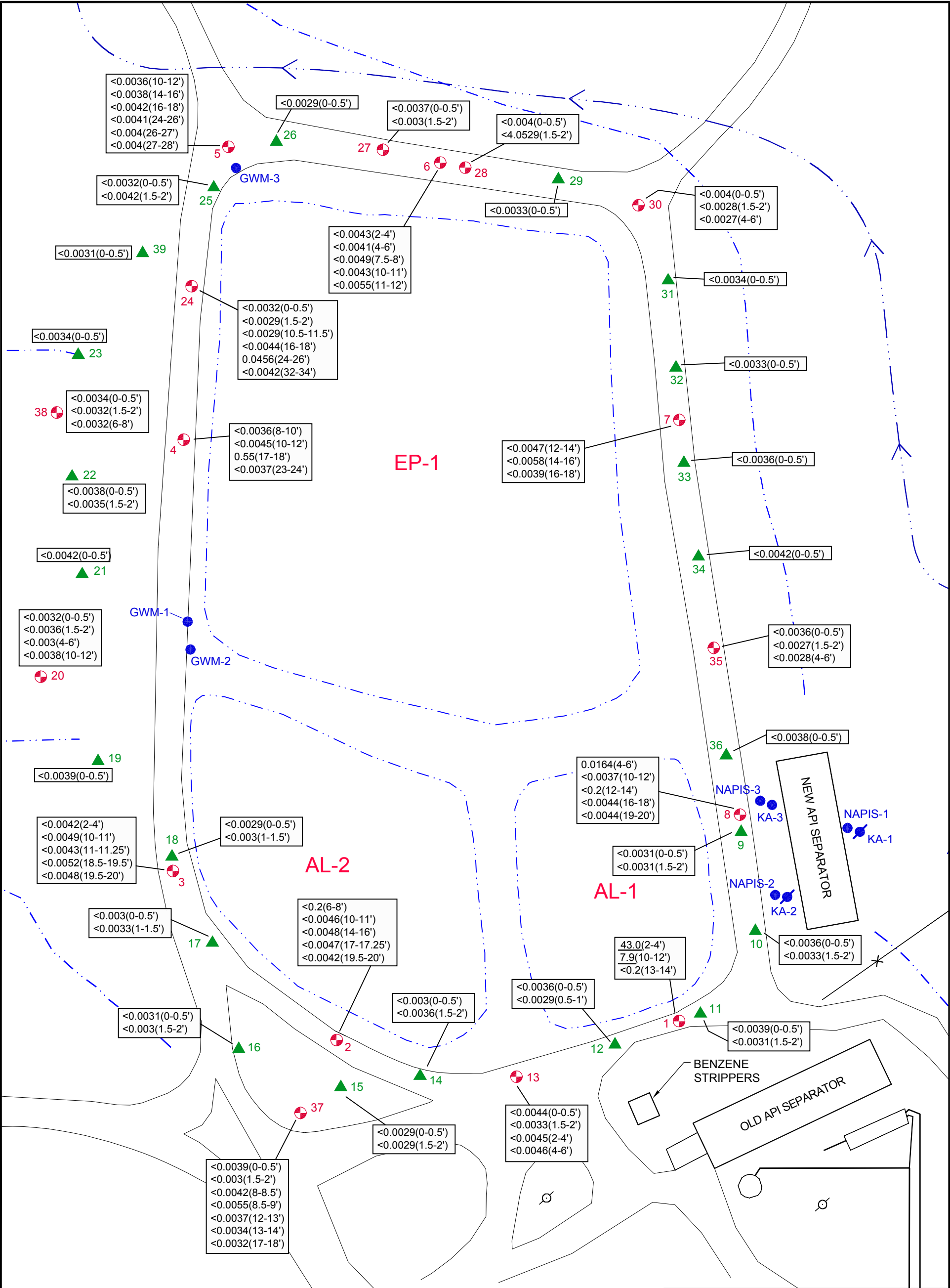
**Western Refining**
GALLUP REFINERY

PROJ. NO.:Western Refining|DATE:01/24/13|FILE:WestRef-B155

FIGURE 12
1,2,4- TRIMETHYLBENZENE
SOIL CONCENTRATIONS - SWMU No. 1
GALLUP REFINERY

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0 50
SCALE IN FEET

LEGEND

-  PERIMETER SOIL BORING LOCATION
-  HAND AUGER SAMPLE LOCATION
-  GWM-1 GROUNDWATER WELL LOCATION
-  KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION
- <0.0044(0-0.5')
- 2.35
- 1-METHYLNAPHTHALENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

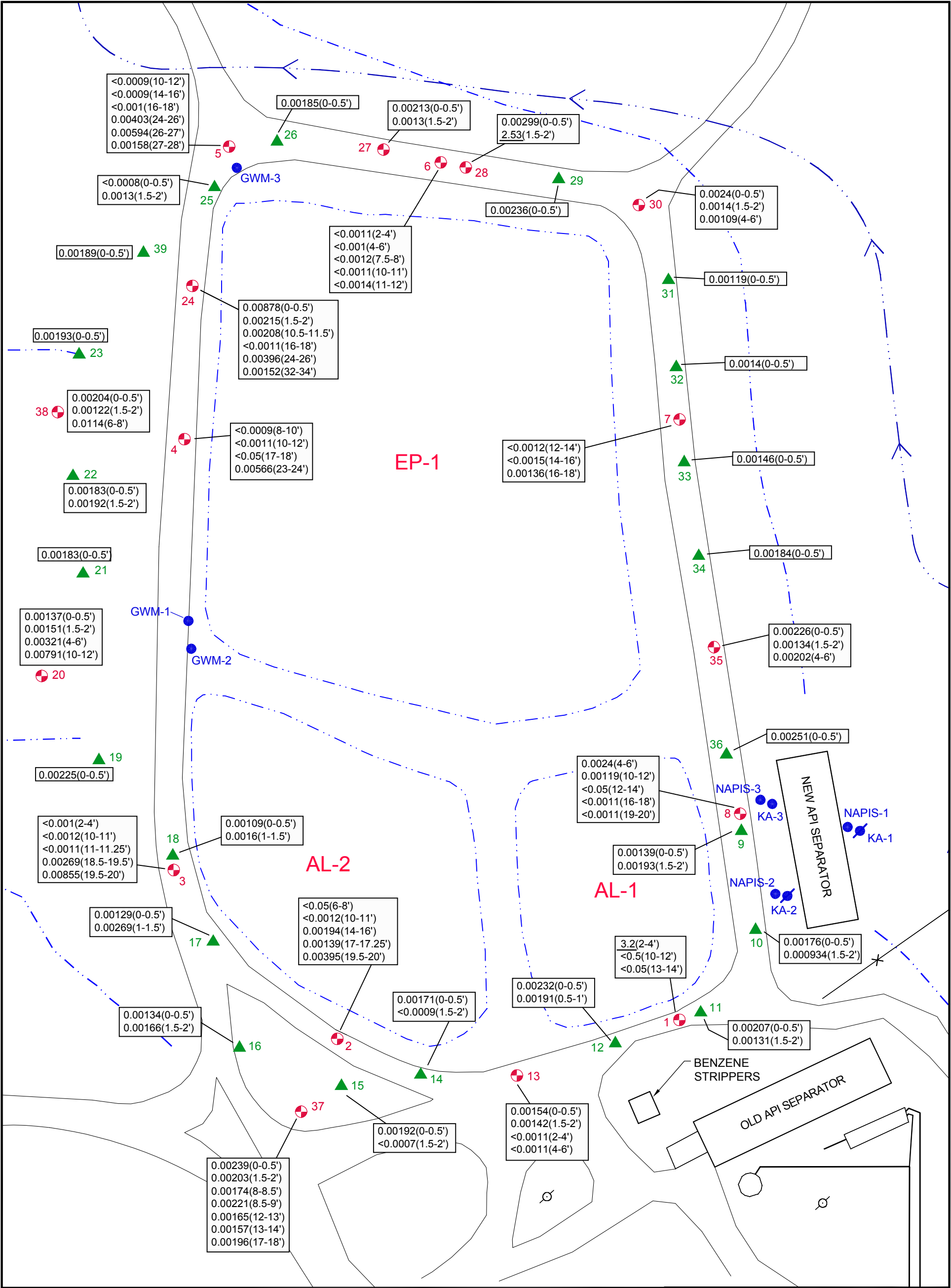
**Western Refining**
GALLUP REFINERY

PROJ. NO.:Western Refining|DATE:01/24/13|FILE:WestRef-B157

FIGURE 13
1-METHYLNAPHTHALENE
SOIL CONCENTRATIONS - SWMU No. 1
GALLUP REFINERY

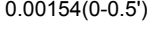
**RPS**

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0 50
SCALE IN FEET

LEGEND

-  PERIMETER SOIL BORING LOCATION
-  HAND AUGER SAMPLE LOCATION
-  GWM-1 GROUNDWATER WELL LOCATION
-  KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION
-  0.00154(0-0.5') BENZENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
-  0.796 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

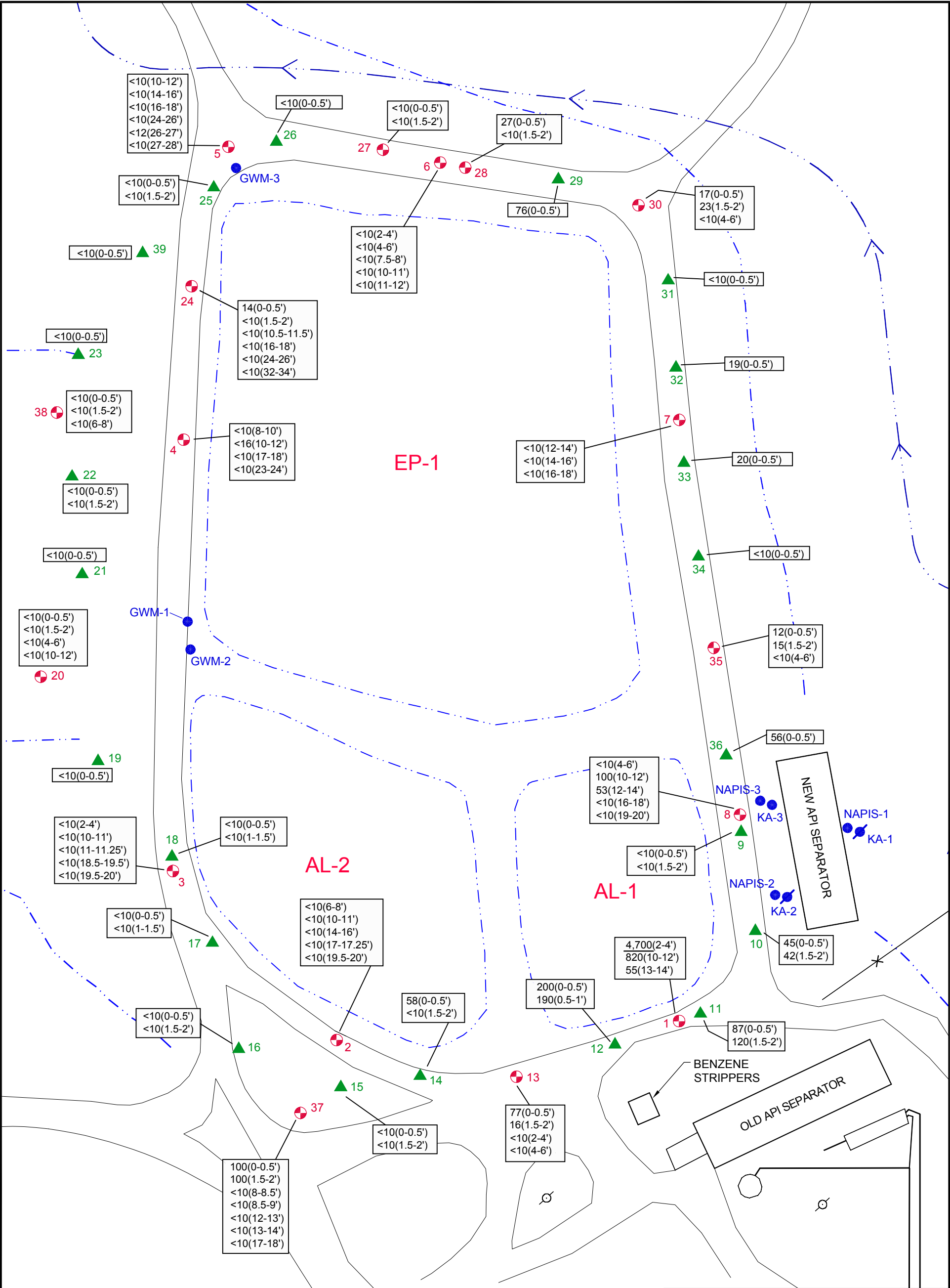
**Western Refining**
GALLUP REFINERY

PROJ. NO.:Western Refining|DATE:01/24/13|FILE:WestRef-B156

FIGURE 14
BENZENE
SOIL CONCENTRATIONS - SWMU No. 1
GALLUP REFINERY



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0 50
SCALE IN FEET

LEGEND

-  PERIMETER SOIL BORING LOCATION
-  HAND AUGER SAMPLE LOCATION
-  GWM-1 GROUNDWATER WELL LOCATION
-  KA-1 PLUGGED & ABANDONED MONITOR WELL LOCATION
- 77(0-0.5') DIESEL RANGE ORGANICS CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 1,000 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

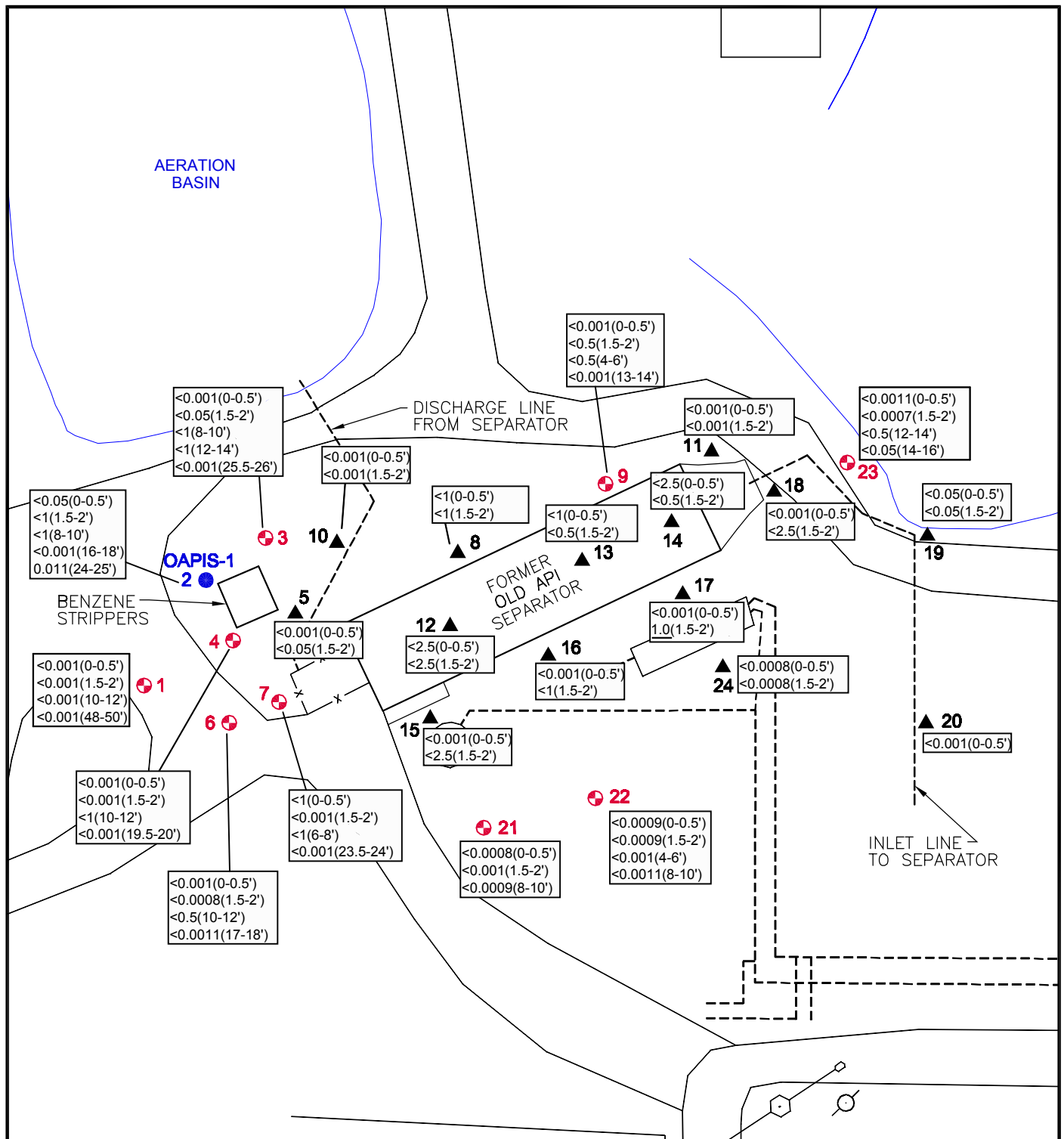
**Western Refining**
GALLUP REFINERY

PROJ. NO.:Western Refining|DATE:01/24/13|FILE:WestRef-B159

FIGURE 16
DIESEL RANGE ORGANICS
SOIL CONCENTRATIONS - SWMU No. 1
GALLUP REFINERY

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Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- MONITORING WELL LOCATION
- ⊕ SOIL BORING LOCATION
- ▲ HAND AUGER LOCATION
- PIPELINE
- <0.001(0-0.5')
1,1,2-TRICHLOROETHANE CONCENTRATION, mg/kg
(SAMPLE DEPTH-FT)
- 0.0514 UNDERLINED CONCENTRATION VALUE
EXCEEDS SCREENING LEVEL



0 40
SCALE IN FEET

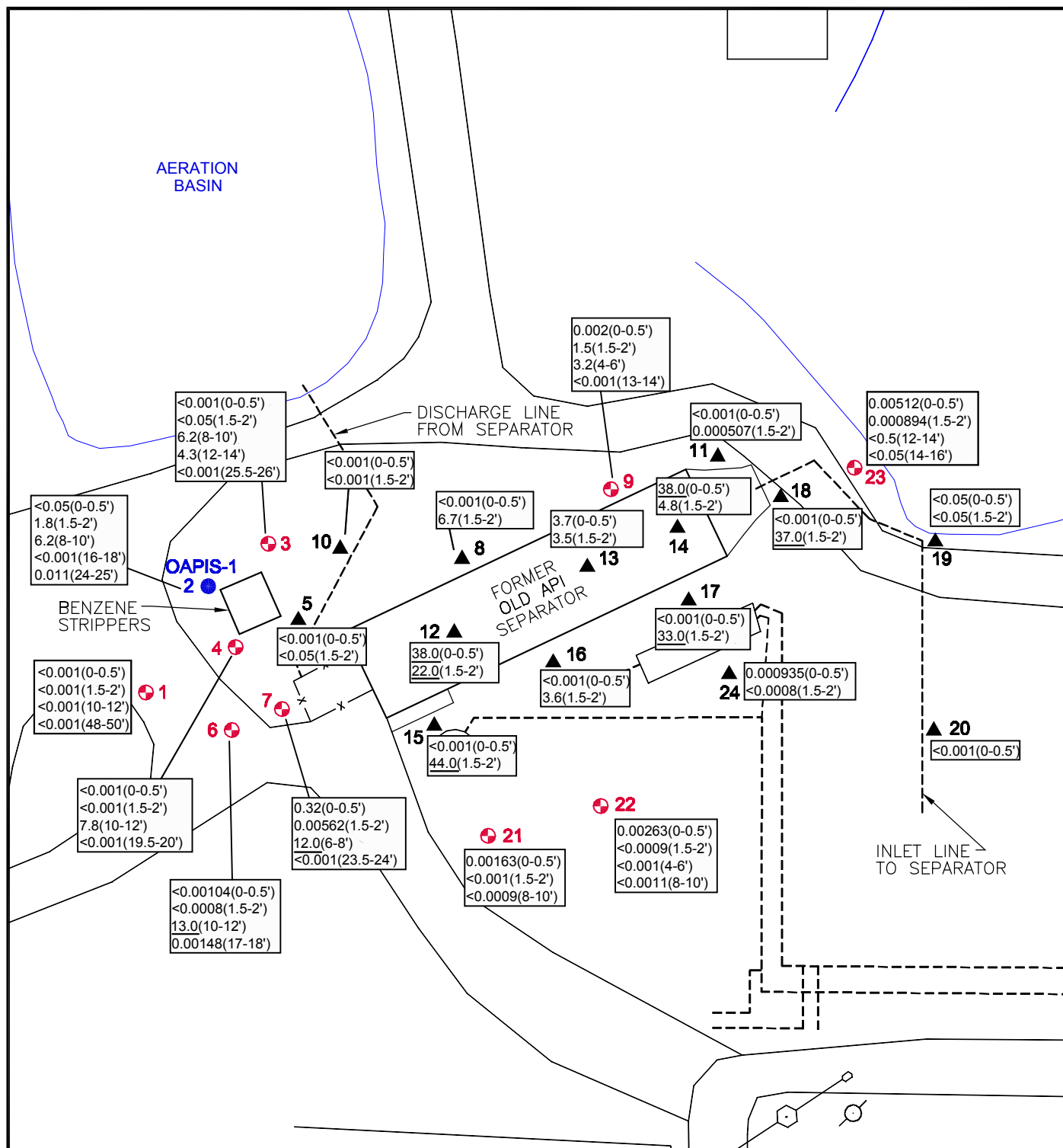


PROJ. NO.: Western Refining | DATE: 01/31/13 | FILE: WestRef-A164

FIGURE 17 1,1,2-TRICHLOROETHANE SOIL CONCENTRATIONS - SWMU No. 14 GALLUP REFINERY



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LEGEND

- MONITORING WELL LOCATION
- ⊕ SOIL BORING LOCATION
- ▲ HAND AUGER LOCATION
- PIPELINE
- 0.00163(0-0.5')
1,2,4-TRIMETHYLBENZENE CONCENTRATION, mg/kg
(SAMPLE DEPTH-FT)
- 9.68 UNDERLINED CONCENTRATION VALUE
EXCEEDS SCREENING LEVEL

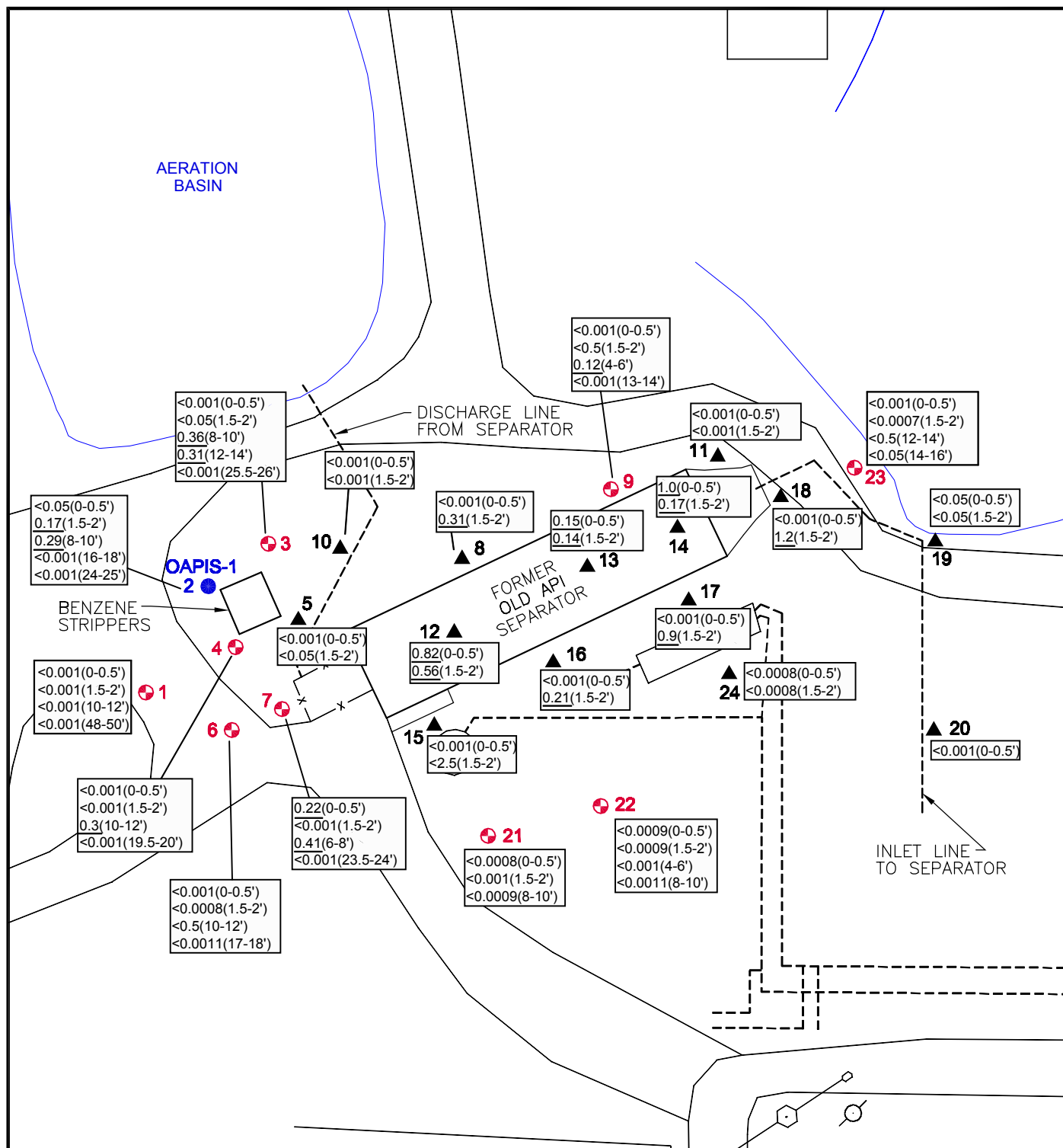


PROJ. NO.: Western Refining | DATE: 01/29/13 | FILE: WestRef-A154

FIGURE 18 1,2,4-TRIMETHYLBENZENE SOIL CONCENTRATIONS - SWMU No. 14 GALLUP REFINERY



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Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- MONITORING WELL LOCATION
- ⊕ SOIL BORING LOCATION
- ▲ HAND AUGER LOCATION

----- PIPELINE

<0.0008(0-0.5')
1,2-DIBROMOETHANE CONCENTRATION, mg/kg
(SAMPLE DEPTH-FT)

0.0071 UNDERLINED CONCENTRATION VALUE
EXCEEDS SCREENING LEVEL



0 40
SCALE IN FEET

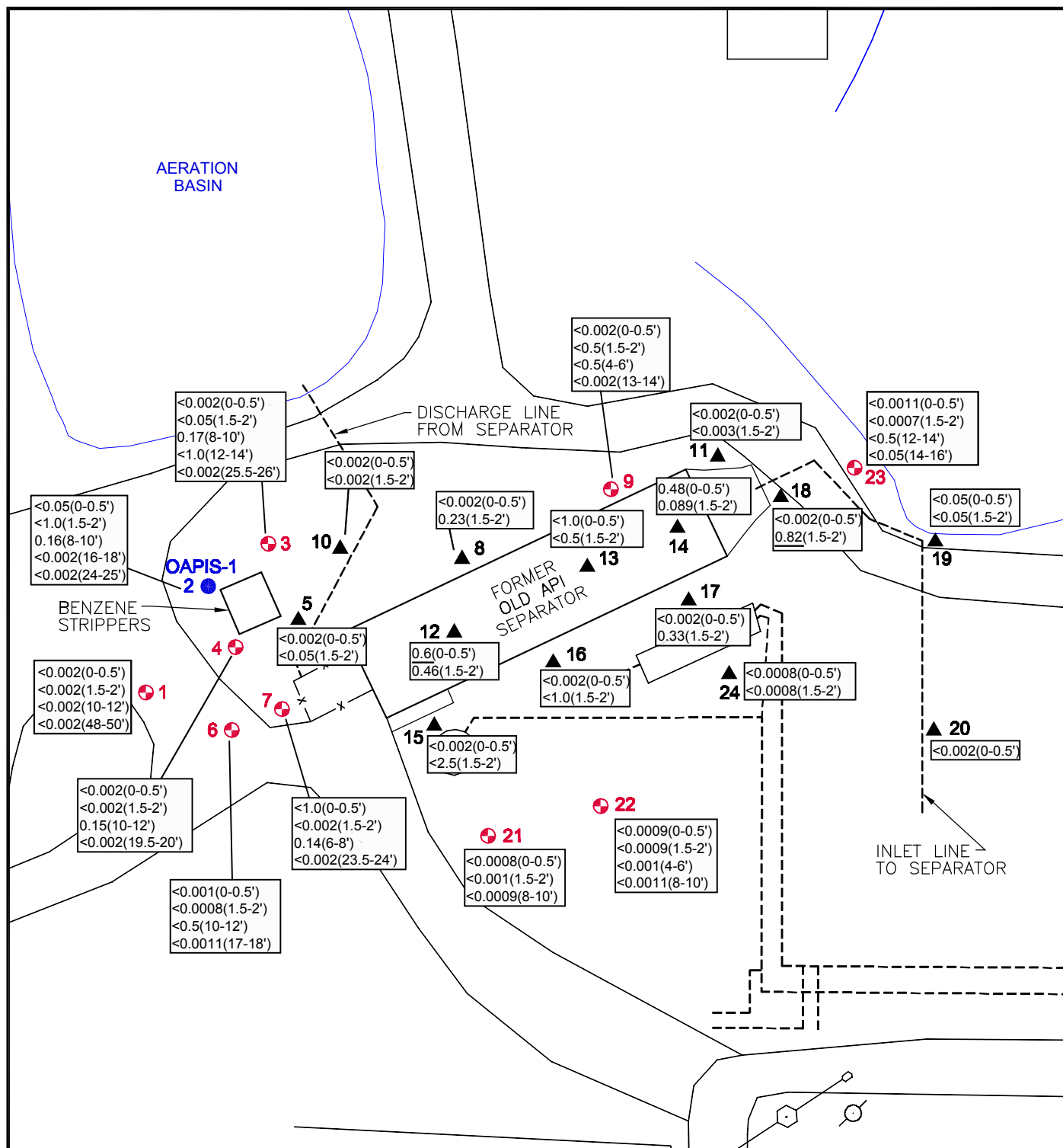


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FIGURE 20 1,2-DIBROMOETHANE SOIL CONCENTRATIONS - SWMU No. 14 GALLUP REFINERY



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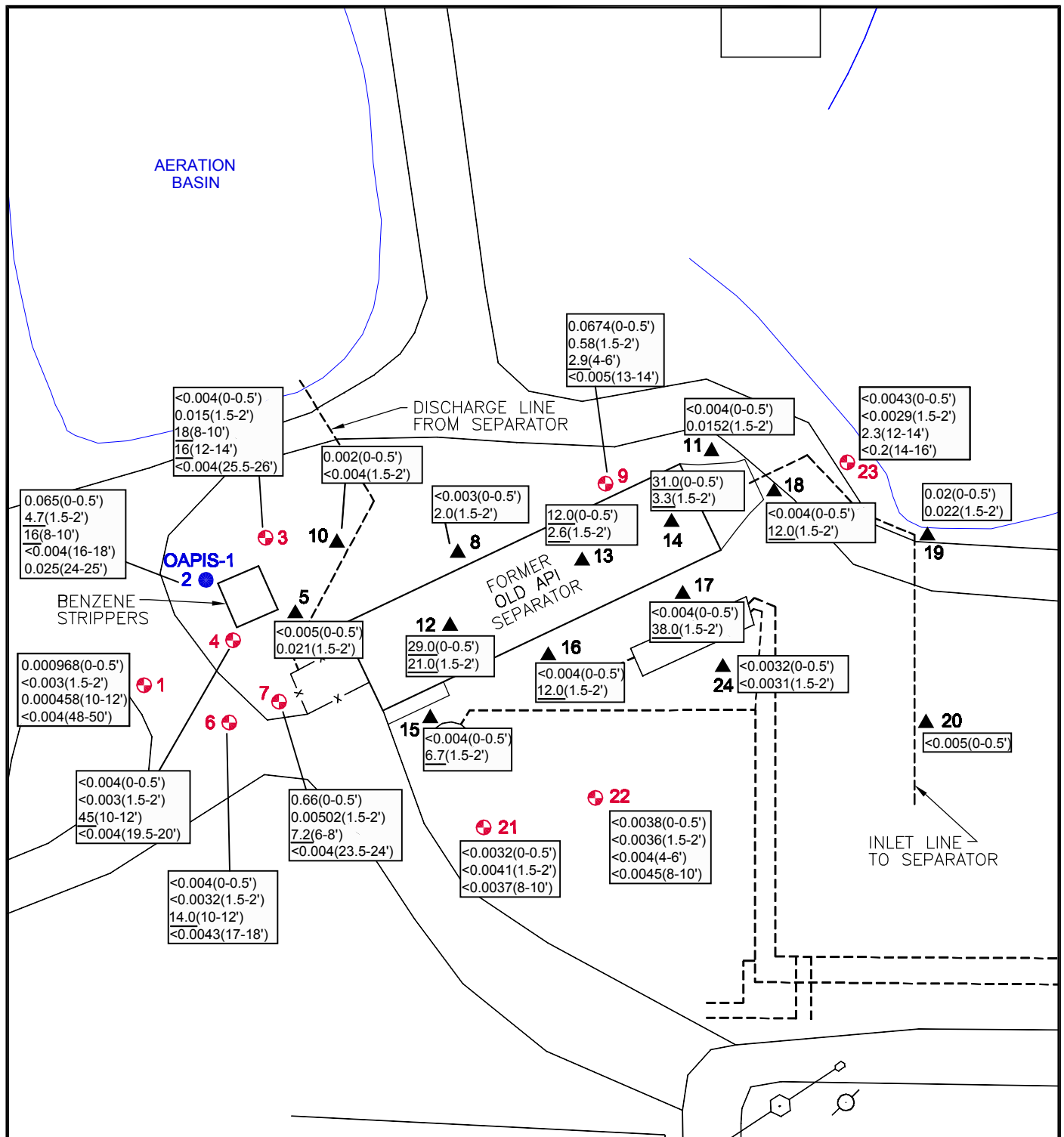


PROJ. NO.: Western Refining | DATE: 01/29/13 | FILE: WestRef-A156

FIGURE 21
1,2-DICHLOROPROPANE
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY



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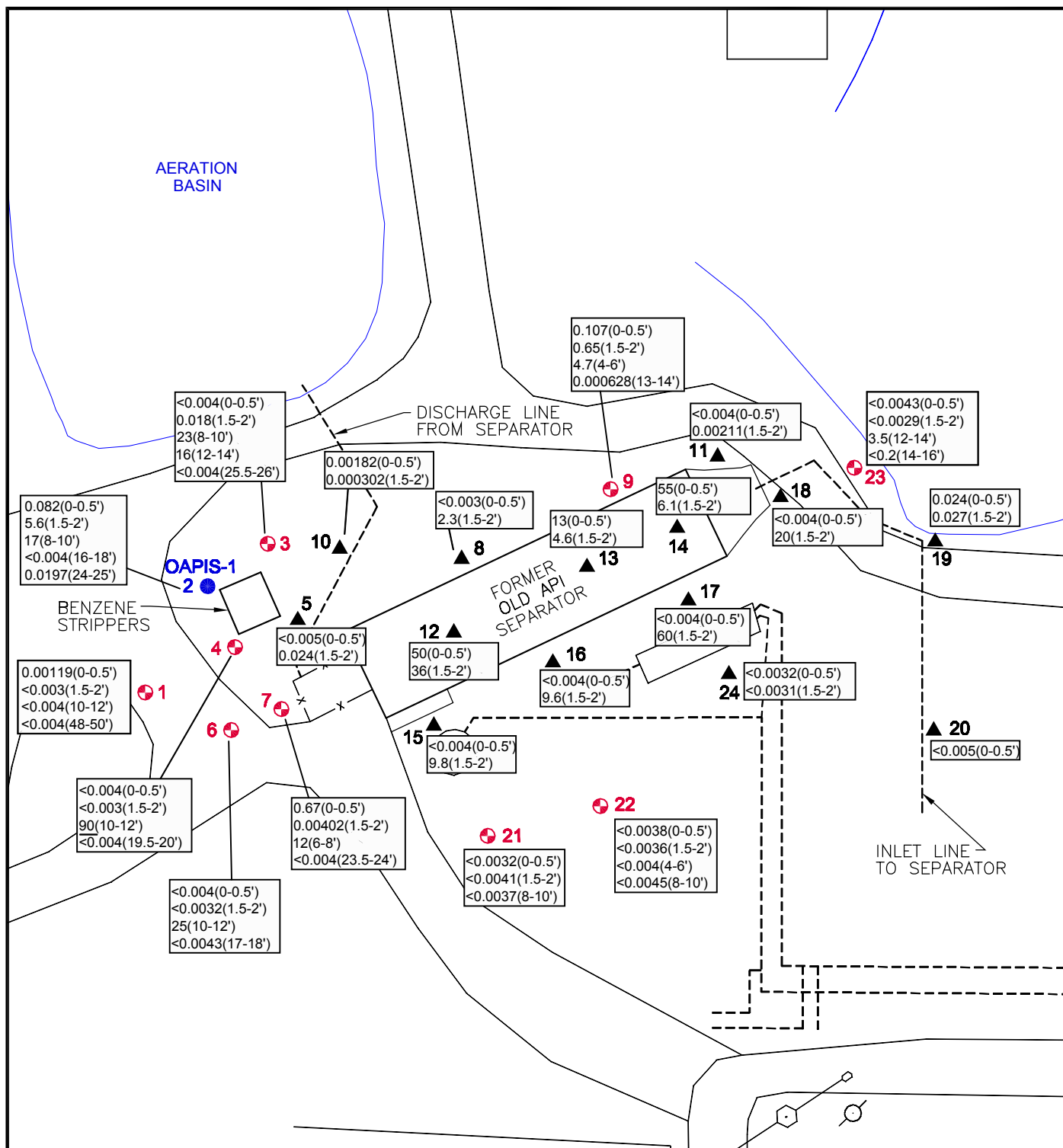


PROJ. NO.: Western Refining | DATE: 01/29/13 | FILE: WestRef-A160

FIGURE 22
1-METHYLNAPHTHALENE
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY



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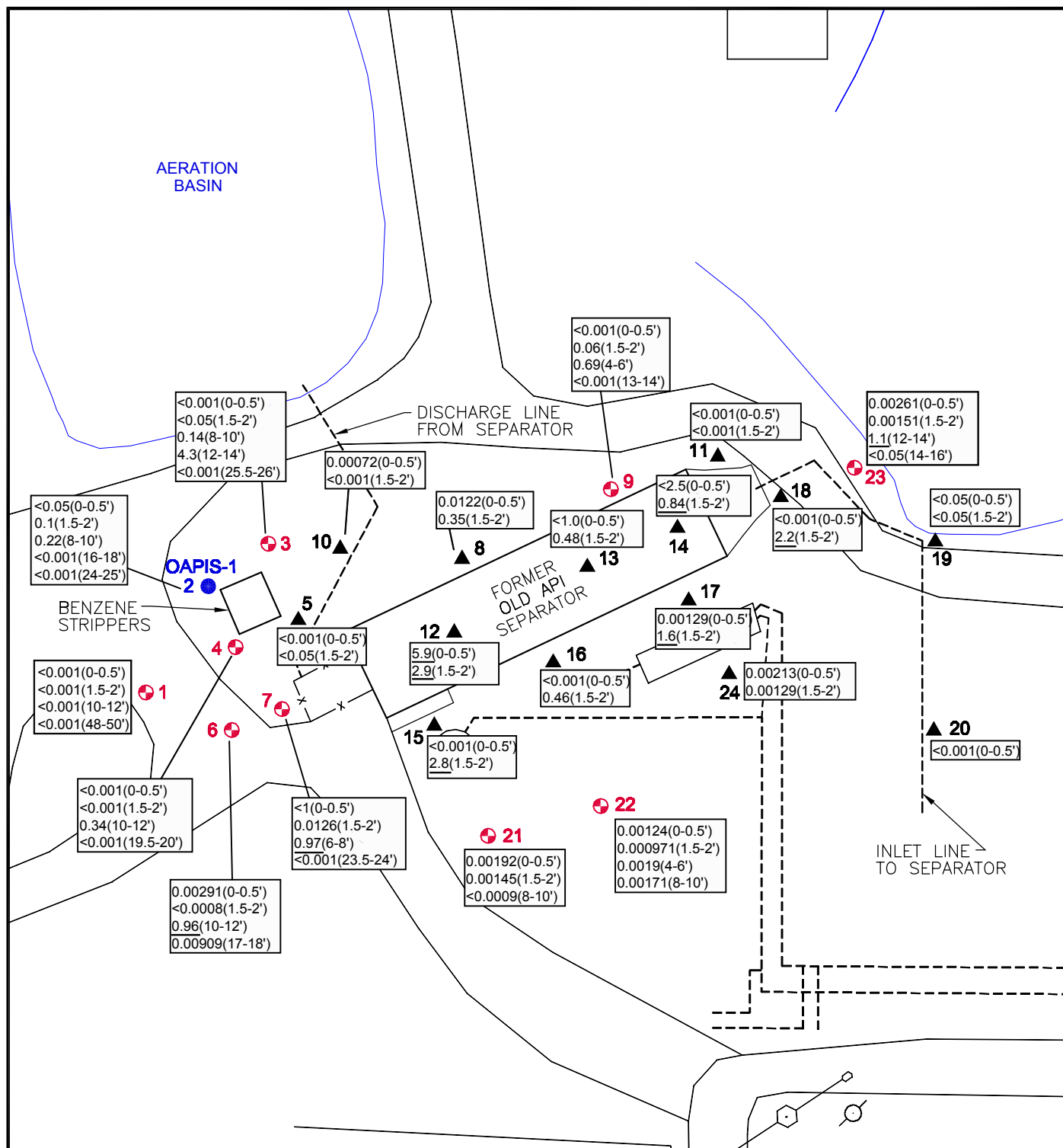


PROJ. NO.: Western Refining | DATE: 01/29/13 | FILE: WestRef-A161

FIGURE 23
2-METHYLNAPHTHALENE
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY



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Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- MONITORING WELL LOCATION
- ⊕ SOIL BORING LOCATION
- ▲ HAND AUGER LOCATION
- PIPELINE
- 0.00124(0-0.5') BENZENE CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)
- 0.796 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

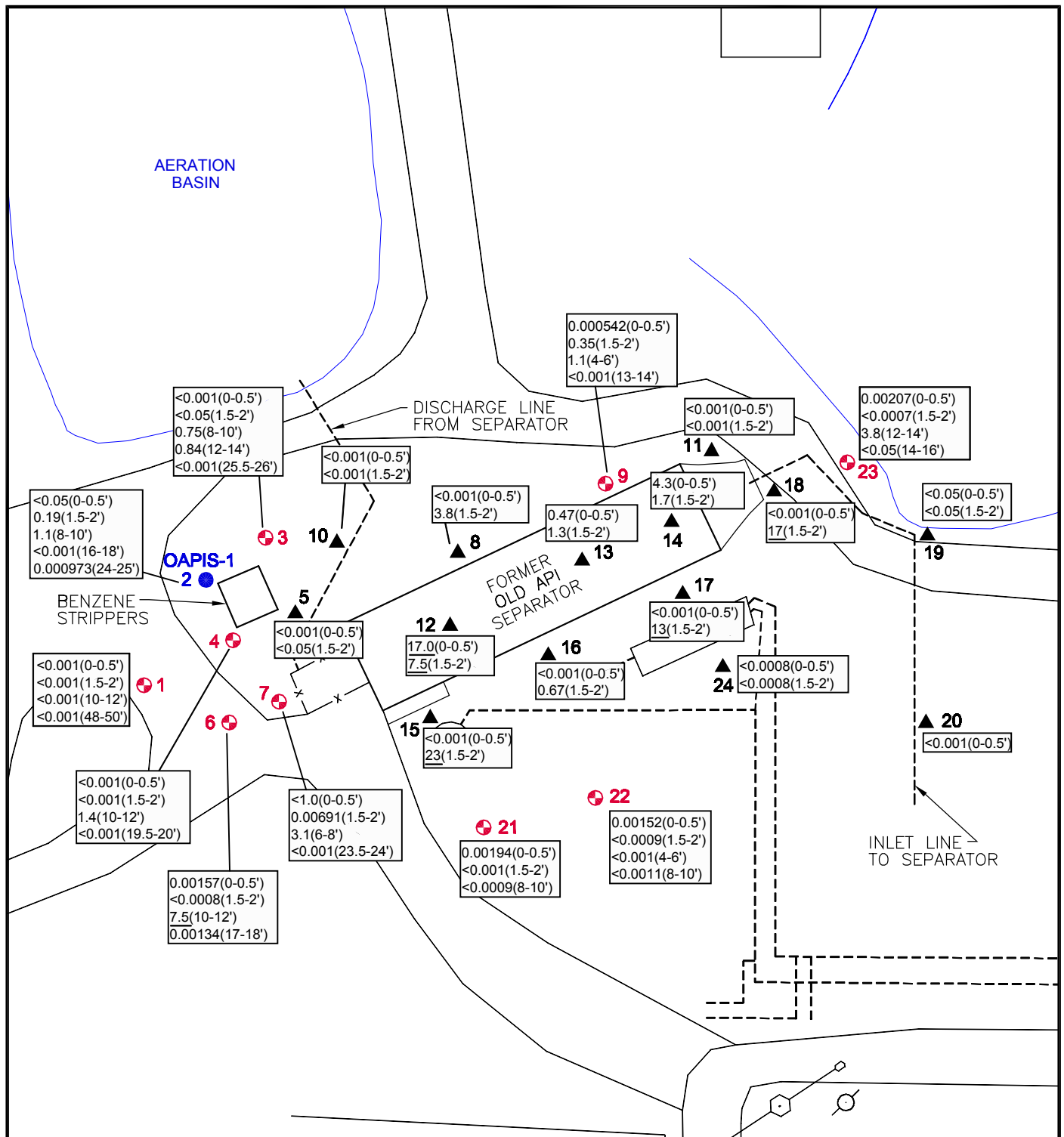


PROJ. NO.: Western Refining | DATE: 01/29/13 | FILE: WestRef-A157

FIGURE 24 BENZENE SOIL CONCENTRATIONS - SWMU No. 14 GALLUP REFINERY



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Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- MONITORING WELL LOCATION
- ⊕ SOIL BORING LOCATION
- ▲ HAND AUGER LOCATION

----- PIPELINE

0.00152(0-0.5')
ETHYLBENZENE CONCENTRATION, mg/kg
(SAMPLE DEPTH-FT)

5.98 UNDERLINED CONCENTRATION VALUE
EXCEEDS SCREENING LEVEL

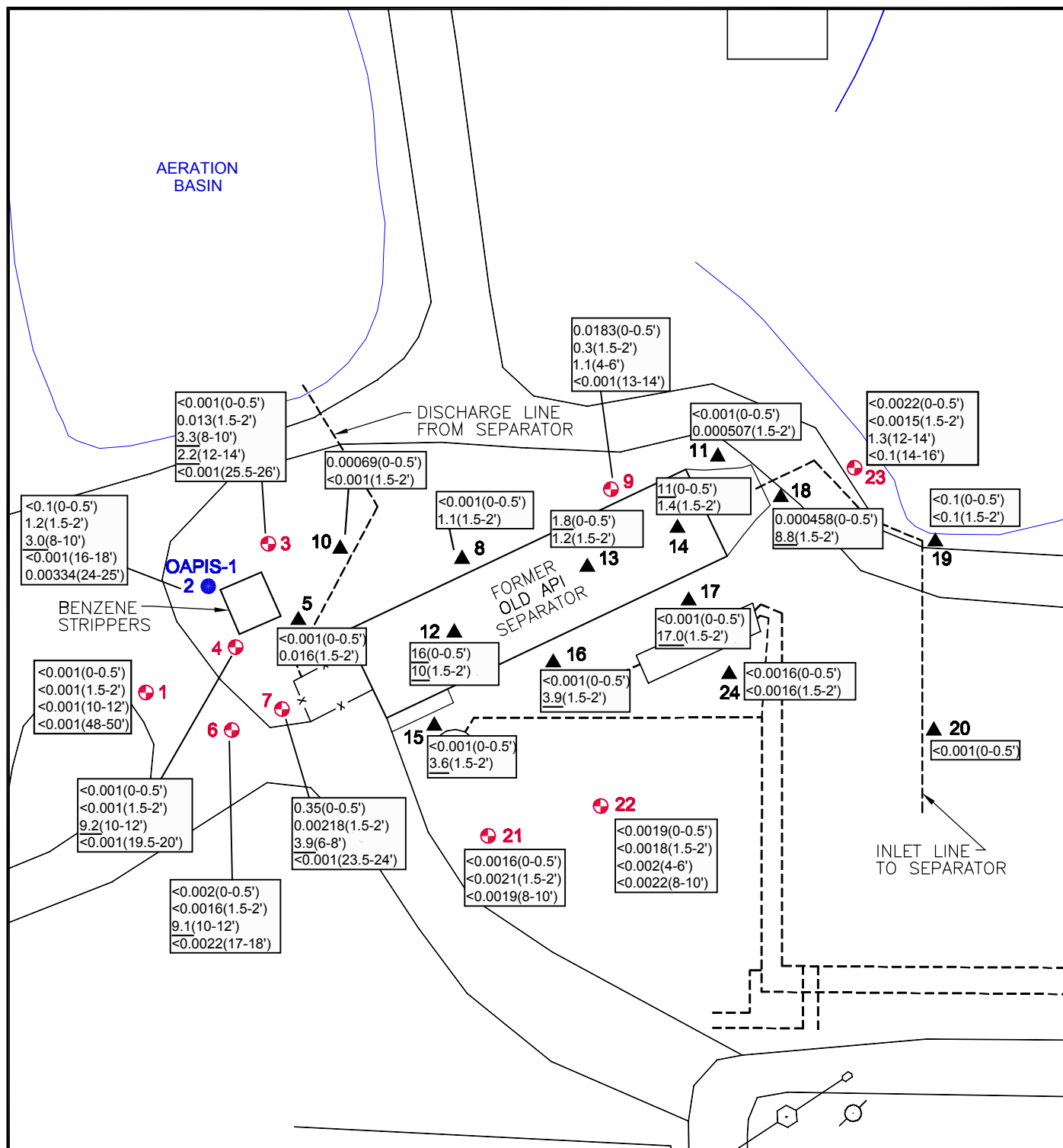


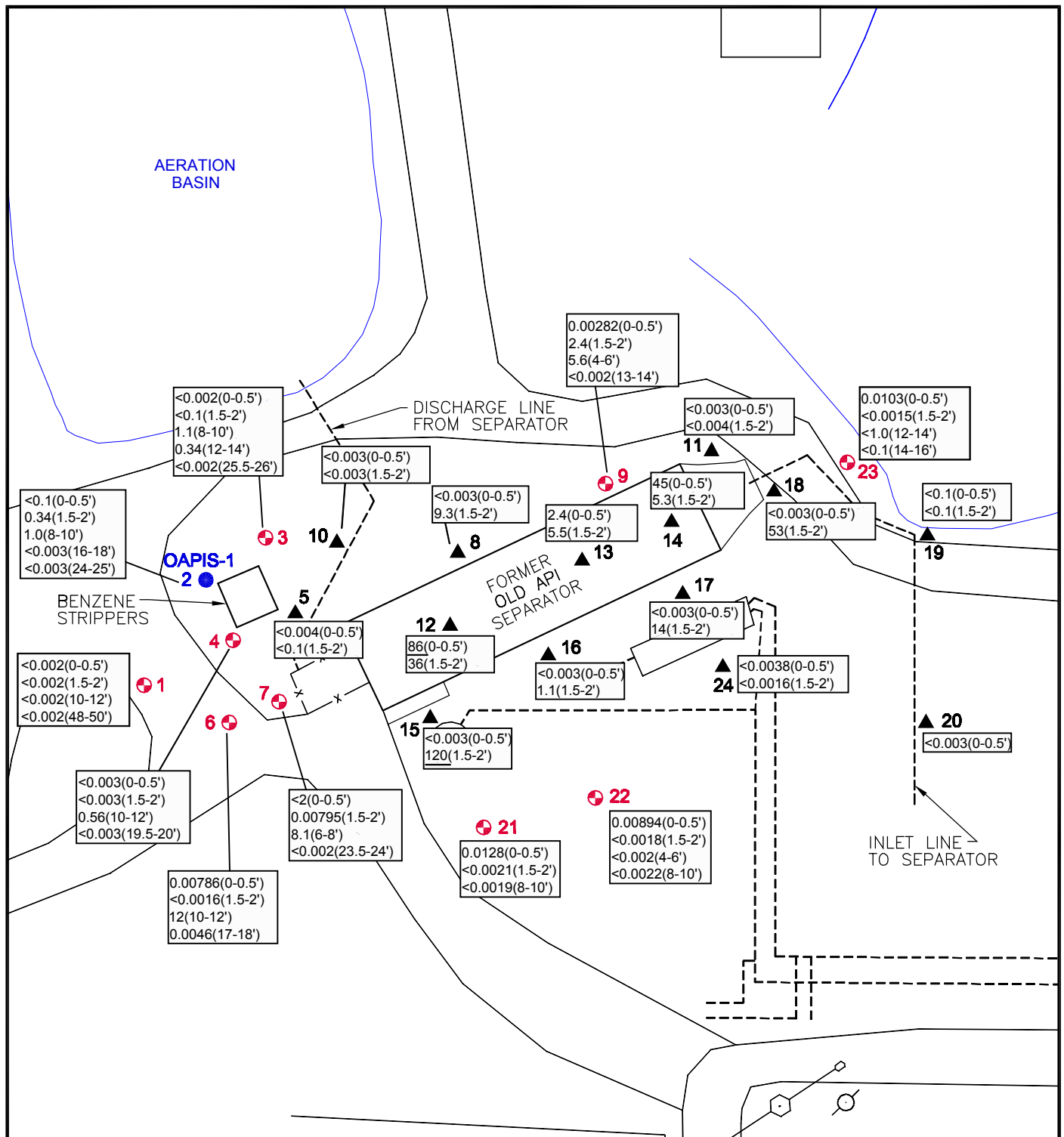
PROJ. NO.: Western Refining | DATE: 01/29/13 | FILE: WestRef-A158

FIGURE 25 ETHYLBENZENE SOIL CONCENTRATIONS - SWMU No. 14 GALLUP REFINERY



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Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

● MONITORING WELL LOCATION
 ⊕ SOIL BORING LOCATION
 ▲ HAND AUGER LOCATION
 --- PIPELINE
 0.0128(0-0.5')
72.1 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL

XYLENES CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)

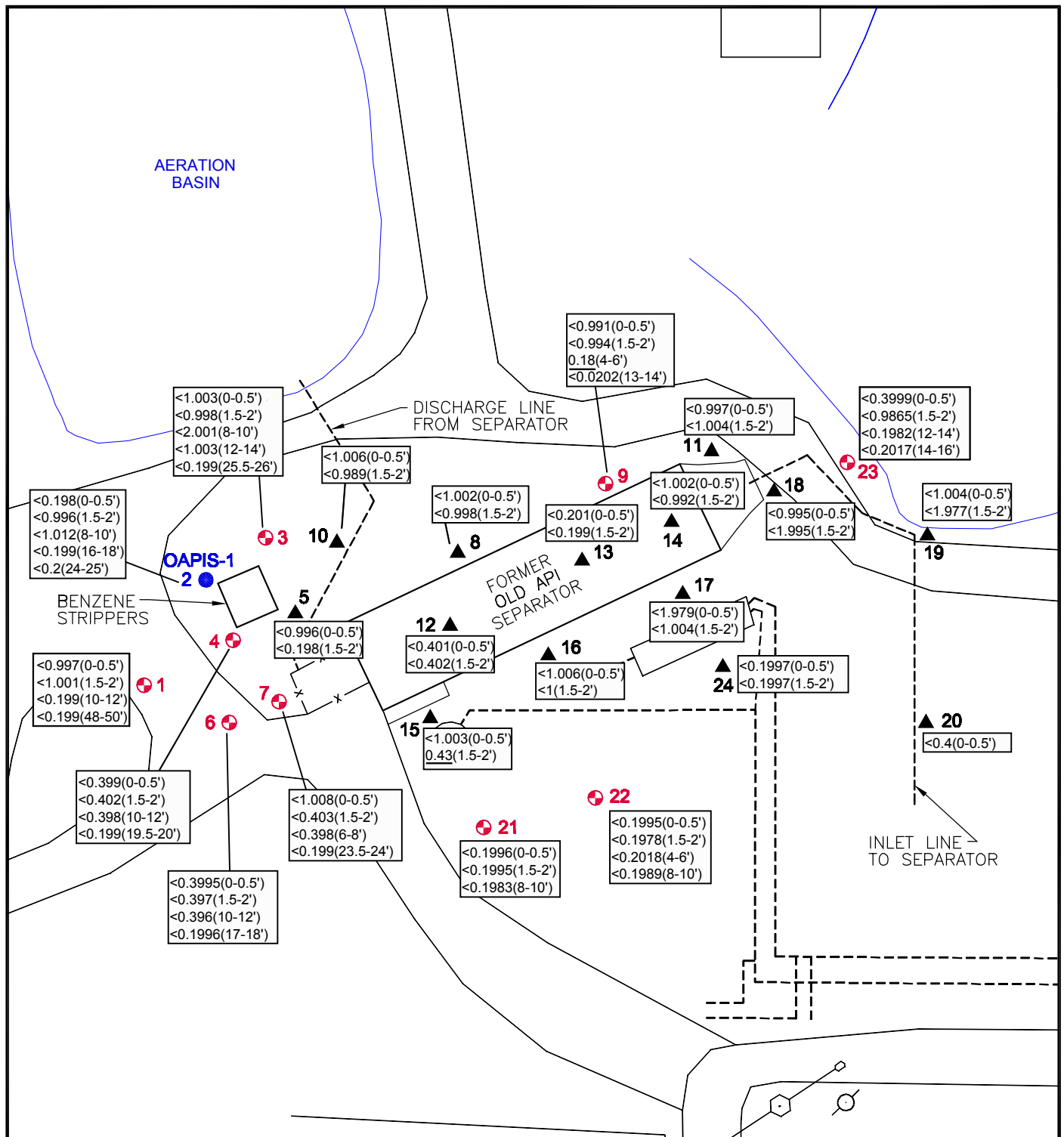


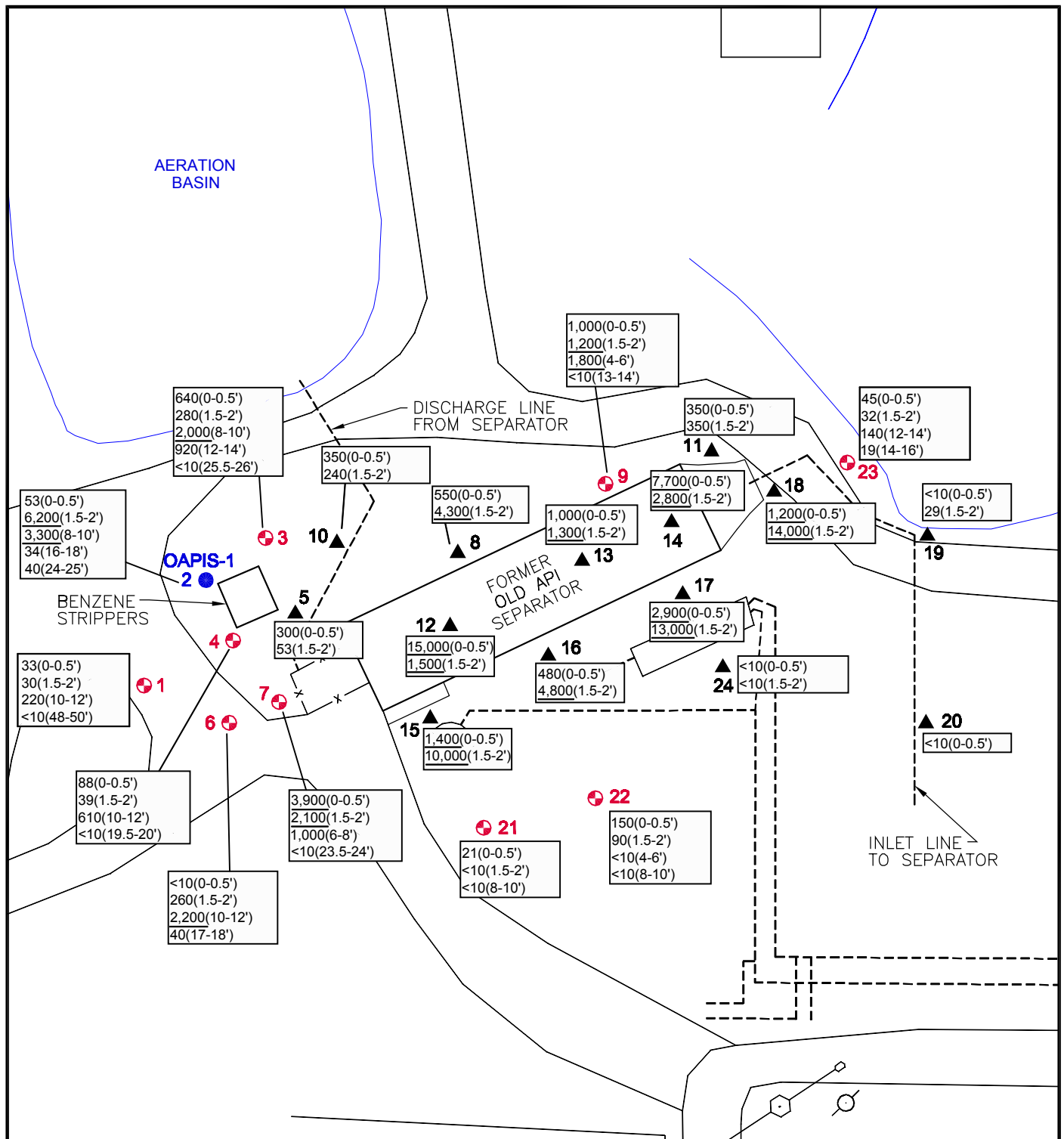
PROJ. NO.: Western Refining | DATE: 01/29/13 | FILE: WestRef-A162

FIGURE 27
XYLENES
SOIL CONCENTRATIONS - SWMU No. 14
GALLUP REFINERY



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Map Source: Compiled by Photogrammetric Methods from Photography Acquired on March 1, 1998.

LEGEND

- MONITORING WELL LOCATION
- ⊕ SOIL BORING LOCATION
- ▲ HAND AUGER LOCATION

----- PIPELINE

21(0-0.5')

DIESEL RANGE ORGANICS CONCENTRATION, mg/kg (SAMPLE DEPTH-FT)

1,000

UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL



0 40

SCALE IN FEET

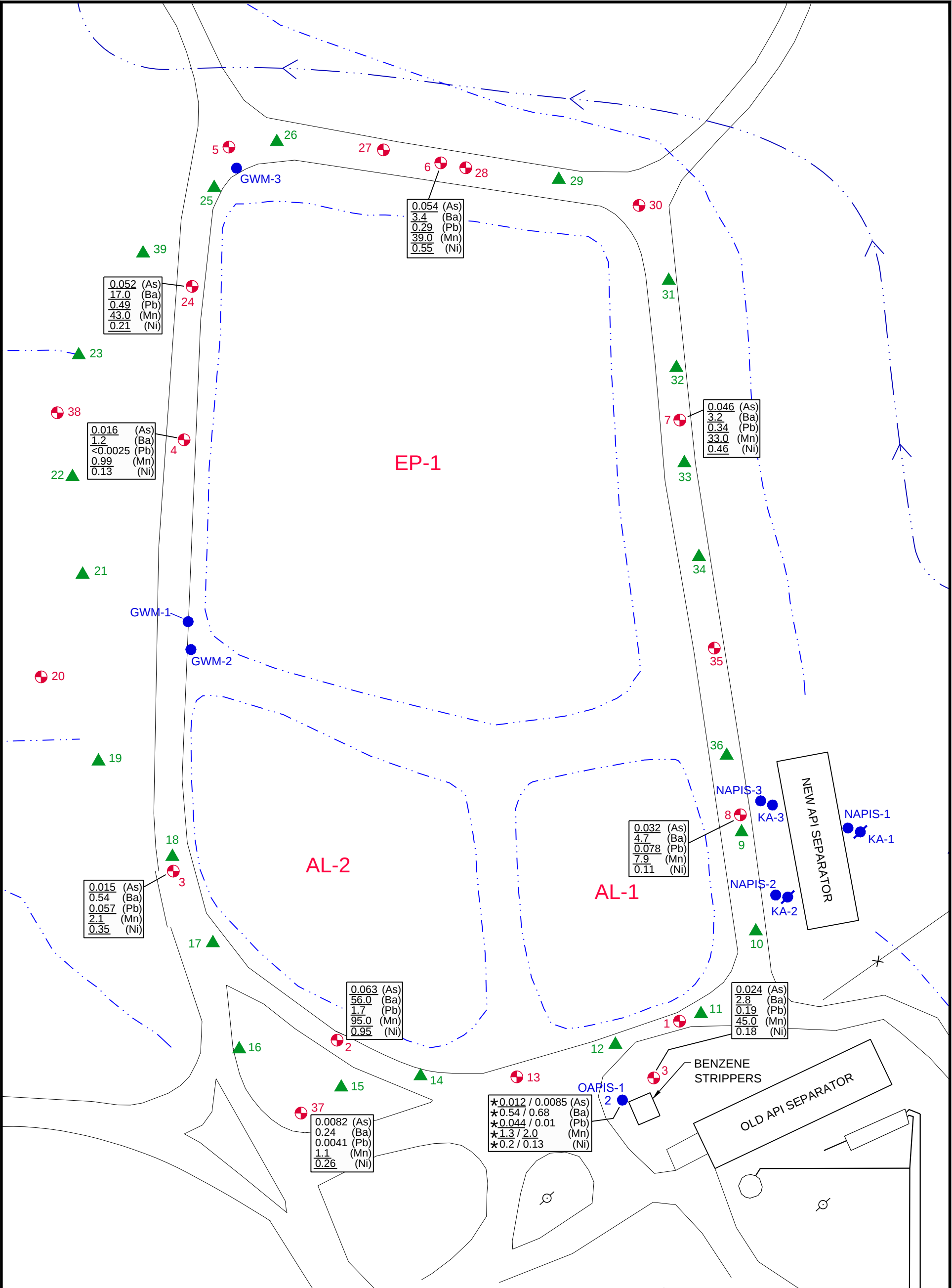


PROJ. NO.: Western Refining | DATE: 01/29/13 | FILE: WestRef-A163

FIGURE 29 DIESEL RANGE ORGANICS SOIL CONCENTRATIONS - SWMU No. 14 GALLUP REFINERY



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NOTE: CONSTITUENT SCREENING LEVEL UNITS - mg/l

LEGEND

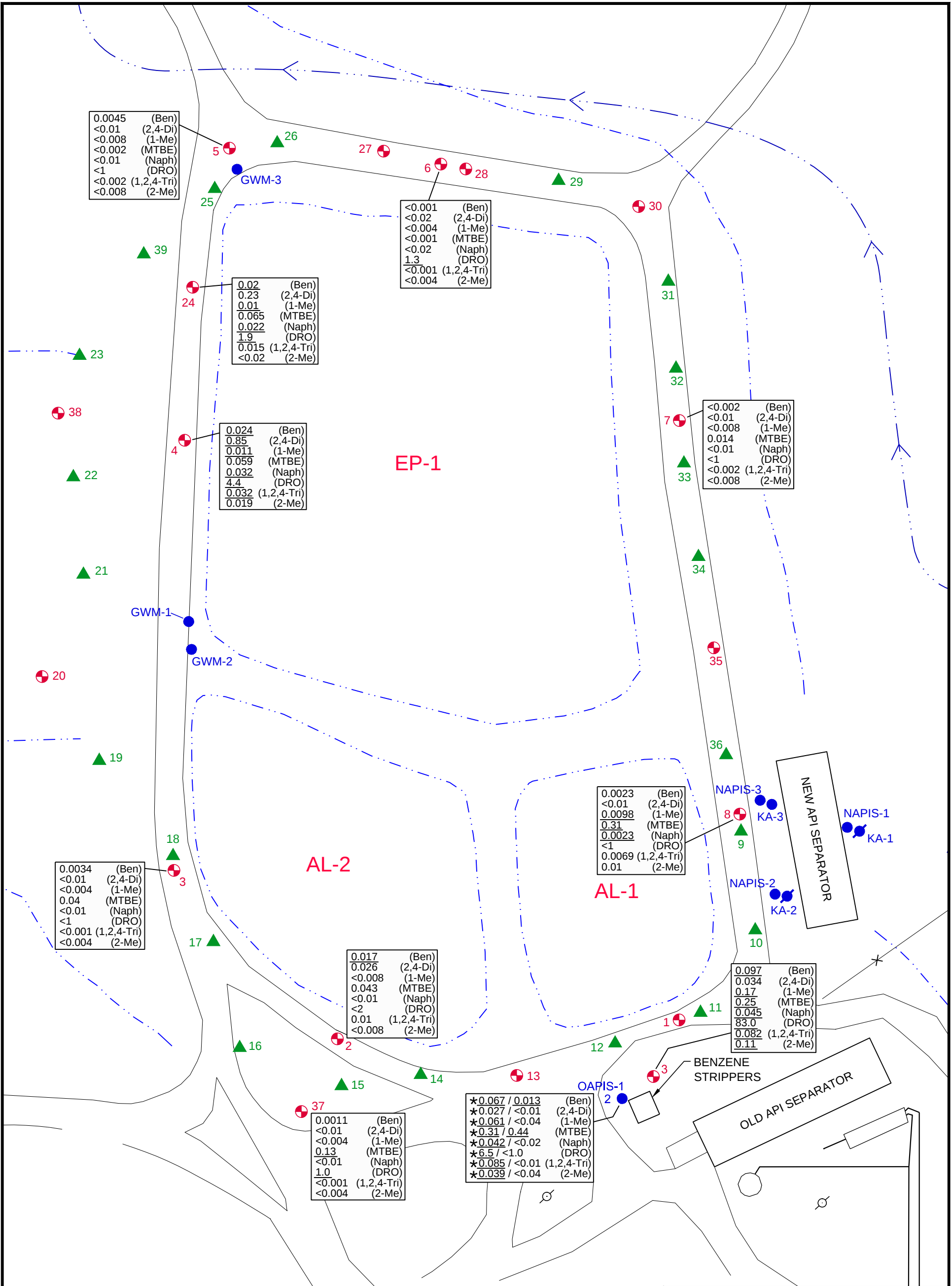
- PERIMETER SOIL BORING LOCATION / TEMPORARY MONITORING WELL
- HAND AUGER SAMPLE LOCATION
- GROUNDWATER WELL LOCATION
- PLUGGED & ABANDONED MONITOR WELL LOCATION
- 0.01 ARSENIC SCREENING LEVEL, mg/l (As)
- 1.0 BARIUM SCREENING LEVEL, mg/l (Ba)
- 0.015 LEAD SCREENING LEVEL, mg/l (Pb)
- 0.2 MANGANESE SCREENING LEVEL, mg/l (Mn)
- 0.2 NICKEL SCREENING LEVEL, mg/l (Ni)
- 0.21 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL
- ★ JULY 2012 SAMPLE RESULTS

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining DATE:05/06/14 FILE:WestRef-B154

FIGURE 30
SWMU No. 1 & No. 14 - METALS
OCTOBER 2012 GROUNDWATER RESULTS
GALLUP REFINERY

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NOTE: CONSTITUENT SCREENING LEVEL UNITS - mg/l

0 50
SCALE IN FEET

LEGEND

- PERIMETER SOIL BORING LOCATION / TEMPORARY MONITORING WELL
- HAND AUGER SAMPLE LOCATION
- GROUNDWATER WELL LOCATION
- PLUGGED & ABANDONED MONITOR WELL LOCATION
- 0.005 BENZENE SCREENING LEVEL, mg/l (Ben)
- 0.73 2,4-DIMETHYLPHENOL SCREENING LEVEL, mg/l (2,4-Di)
- 0.0097 1-METHYLNAPHTHALENE SCREENING LEVEL, mg/l (1-Me)
- 0.125 MTBE SCREENING LEVEL, mg/l (MTBE)
- 0.0014 NAPHTHALENE SCREENING LEVEL, mg/l (Naph)
- 0.2 DRO SCREENING LEVEL, mg/l (DRO)
- 0.015 1,2,4-TRIMETHYLBENZENE SCREENING LEVEL, mg/l (1,2,4-Tri)
- 0.027 2-METHYLNAPHTHALENE SCREENING LEVEL, mg/l (2-Me)
- 1.56 UNDERLINED CONCENTRATION VALUE EXCEEDS SCREENING LEVEL
- *** JULY 2012 SAMPLE RESULTS

Western Refining
GALLUP REFINERY

PROJ. NO.:Western Refining|DATE:05/06/14|FILE:WestRef-B153

FIGURE 31
SWMU No. 1 & No. 14 - ORGANICS
OCTOBER 2012 GROUNDWATER RESULTS
GALLUP REFINERY

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