SDMS DOCID# 1120767

URS

Dave:
Please review and comment. Thanks.
J.T.
12/17/2003

~~SLIC #0833~~
~~#2044P00~~ (AY)
SLIC No. 883

November 3, 2003

Mr. Jimmie Woo
Regional Water Quality Control Board – Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Re: 2003 Annual Groundwater Monitoring Report
Los Nietos Business Center, Santa Fe Springs, California
SLIC No. 883,URS Project No.: 17325516.00001

Dear Mr. Woo:

On behalf of AMB Property Corporation (AMB), URS Corporation Americas (URS) is pleased to submit this report summarizing the 2003 annual groundwater monitoring results for the Los Nietos Business Center located at 9120 – 9169 South Norwalk Boulevard, and 11924 – 11933 East Los Nietos Road in Santa Fe Springs, California (Site). The location of the Site is depicted on Figure 1 (Appendix A). Annual groundwater monitoring is being voluntarily performed at the Site to provide ongoing data to evaluate the effect of regional groundwater conditions beneath the Site.

BACKGROUND

Historical groundwater results from the Site monitoring wells identified volatile organic compounds (VOCs) and metals above maximum contaminant levels (MCLs) for drinking water. Research performed by Clayton Environmental Consultants (Clayton) and Versar, Inc. (Versar) identified numerous off-site (up gradient) sources of VOCs and metals in groundwater. Groundwater flow patterns and gradients support migration of VOCs and metals on to the Site from off-site sources (Versar, April 18, 2001). In a letter dated November 4, 1999, the Regional Water Quality Control Board (RWQCB) acknowledged the likelihood that chemicals of concern are migrating on to the Site from off-site sources, but requested three additional quarters of groundwater monitoring to establish groundwater trends beneath the Site. Clayton and Versar completed the requested monitoring by August 2000. AMB has elected to voluntarily monitor regional groundwater conditions beneath the Site on an annual basis.

10235 Systems Parkway, Suite A
Sacramento, CA 95827
Telephone: (916) 231-2305
Facsimile: (916) 366-7048

GROUNDWATER MONITORING

URS performed groundwater monitoring on September 16, 2003. The scope of work for groundwater monitoring consisted of collecting depth-to-groundwater measurements and groundwater samples from each of the six Site monitoring wells. Groundwater sampling was performed in accordance with general industry standards, as described in Appendix C. Groundwater purging and sampling logs for the event are included in Appendix D. Groundwater monitoring results are described in the following subsections.

Groundwater Elevations

Depth-to-groundwater measurements were collected from the six Site monitoring wells prior to sample purging. Depth-to-water measurements and groundwater elevations calculated from the measurements are presented in Table 1 (Appendix B), along with historical groundwater elevation data from the Site. Contours of equal groundwater elevation for the 2003 monitoring event are depicted on Figure 2 (Appendix A).

As shown on Figure 3, groundwater flow during the 2003 monitoring event was to the southwest, which is consistent with historic groundwater flow directions observed for the Site. Groundwater elevations generally dropped greater than five feet from the previous monitoring event (June 2002). Groundwater was not present in MW-6, which has a total depth of 60 feet below ground surface (bgs).

Groundwater Analytical Results

Current and historic groundwater analytical results for VOCs and metals from Site monitoring wells MW-1 through MW-6 are presented in Tables 2 and 3, respectively. Laboratory analytical data sheets from the 2003 monitoring event are included in Appendix E. It should be noted that due to the decrease in groundwater elevations, groundwater was not present in MW-6 and no sample could be obtained.

As shown in Table 2, the 2003 groundwater analytical results for VOCs and metals show some minor variations from historic analytical results, none of which appreciably change conclusions expressed in prior assessment documents for the Site. The only significant increase in VOC concentrations occurred in upgradient well MW-1. The data continues to support on-site migration of VOCs and metals from one or more off-site sources. The regional groundwater impact is not anticipated to affect commercial/industrial use of the Site.

URS

If you have any questions or comments regarding the information presented herein, please feel free to call Scott Allin at (916) 231-2305.

Sincerely,
URS Corporation Americas

Scott Allin, R.E.A. II
Senior Program Manager

Vernon P. Elarth, R.G. 7120
Senior Geologist

Attachments:
- Appendix A – Figures
- Appendix B – Tables
- Appendix C – Groundwater Sampling Methodology
- Appendix D – Groundwater Purging and Sampling Logs
- Appendix E – Laboratory Analytical Data Sheets, 2003

Cc: Ms. Janet Frentzel (AMB Property Corporation)

APPENDIX A

FIGURES

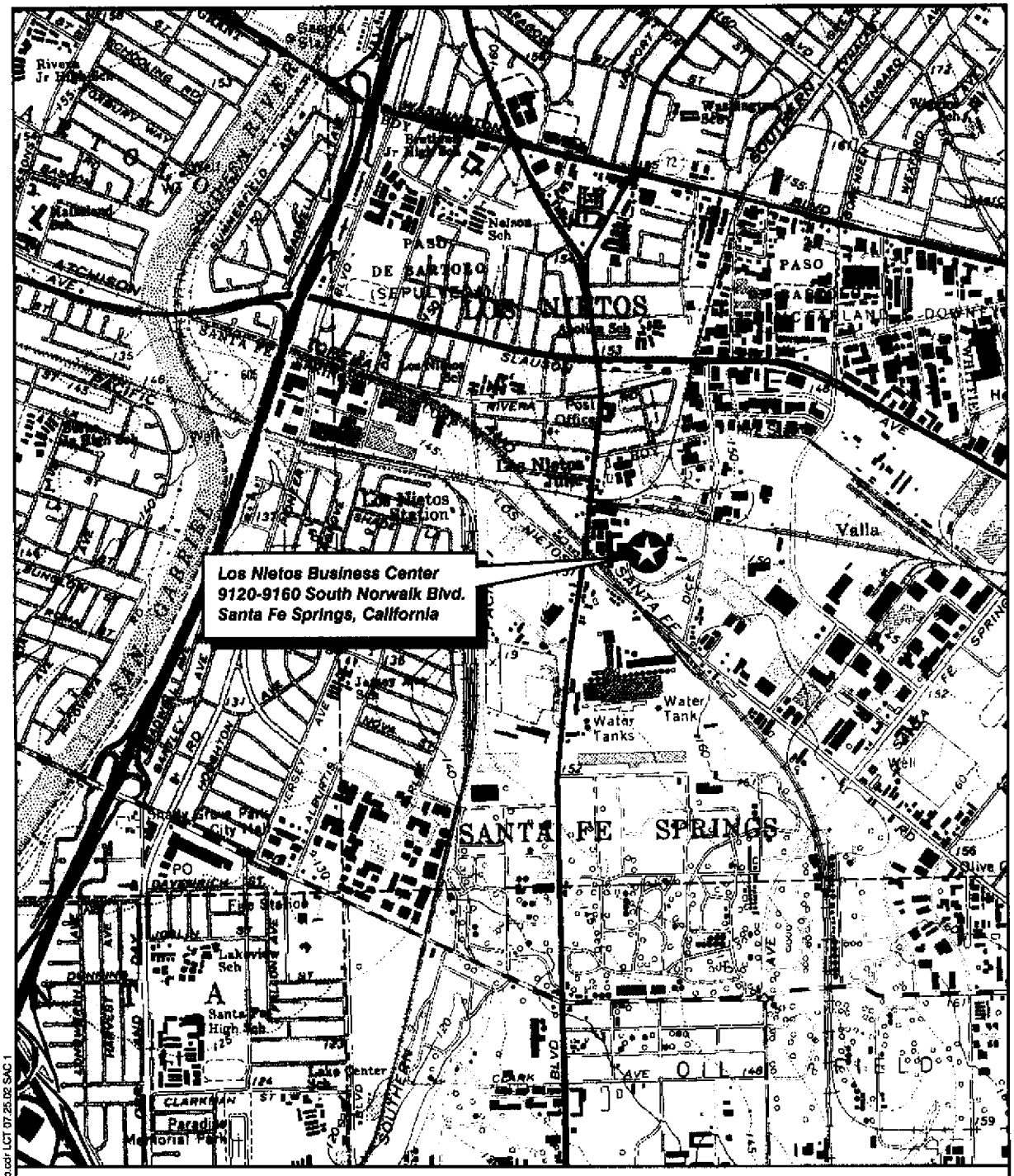

Figure 1. Site Location Map

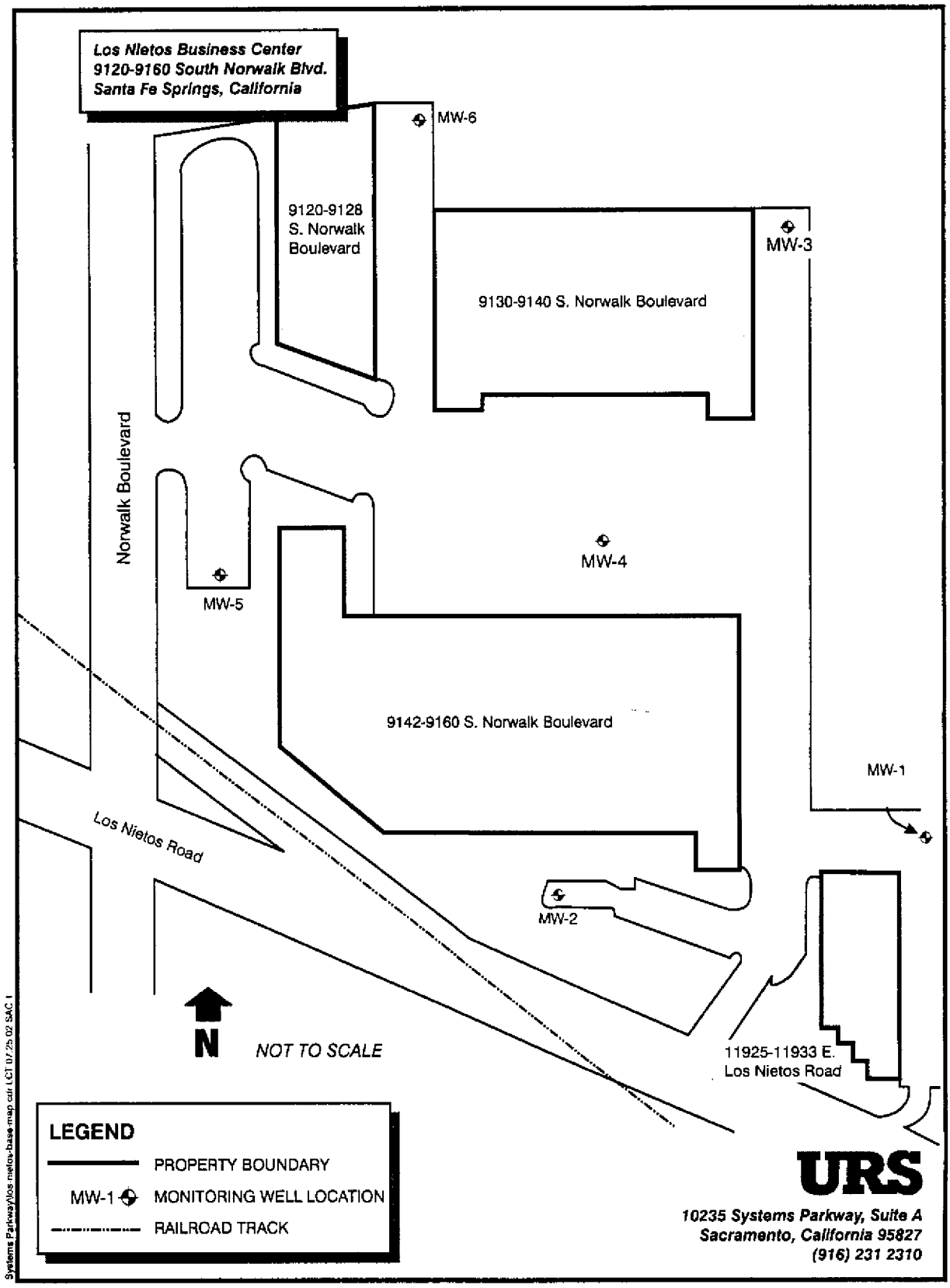

Figure 2. Site Layout Map

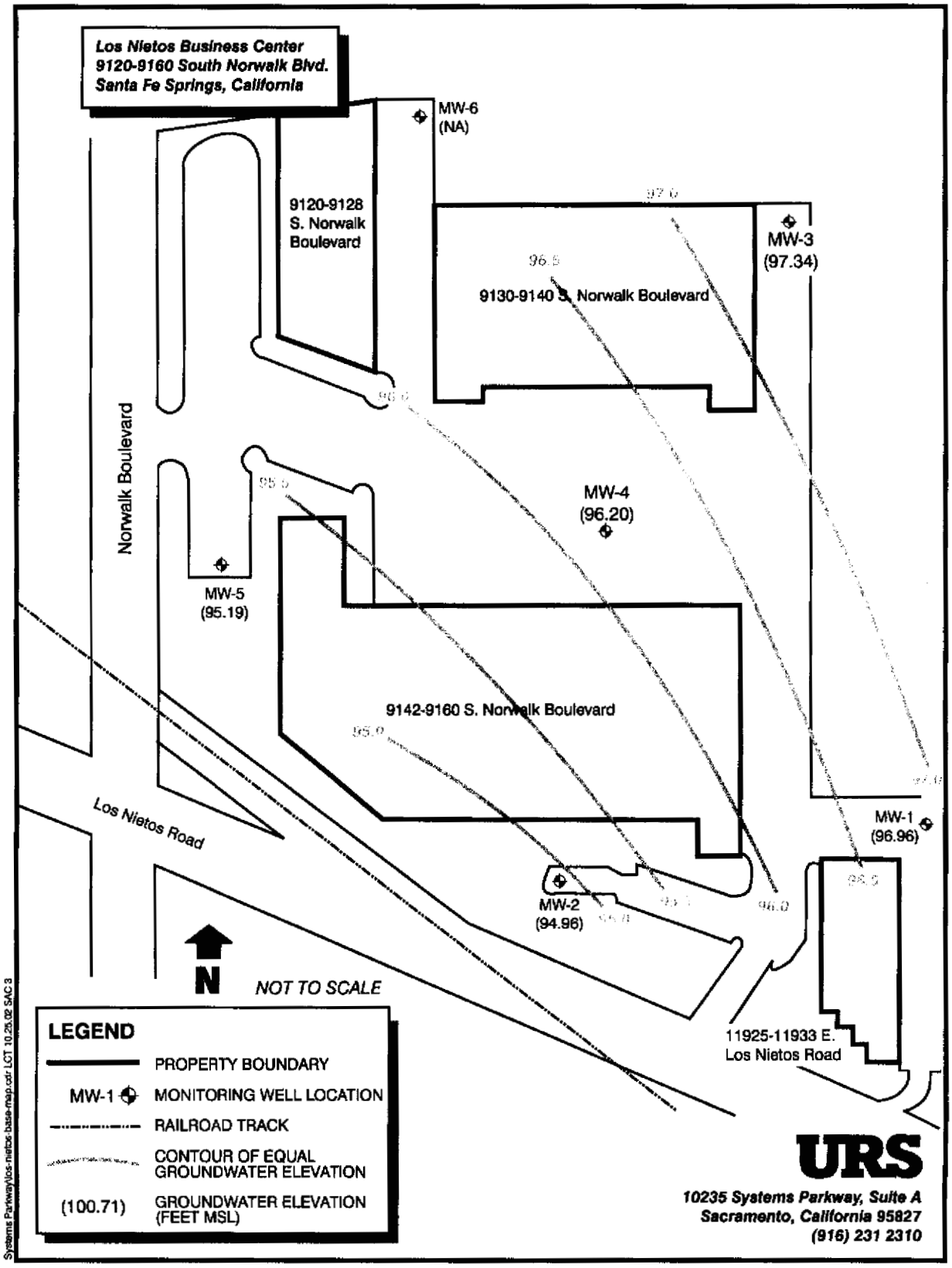

Figure 3. Groundwater Elevation Contours
2003 Annual Event

APPENDIX B

TABLES

Table 1
Groundwater Elevation Data
Los Nietos Business Center
Santa Fe Springs, California

		Groundwater Monitoring Well						Groundwater Flow direction
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	
Well casing elevation (feet amsl)		**150.42**	**153.99**	**149.98**	**149.94**	**155.22**	**156.03**	---
Total Depth of Well		**68.45**	**66.25**	**68.15**	**68.20**	**65.95**	**47.85**	---
March 22, 2000	Depth to groundwater (feet toc) Groundwater elevation (feet amsl)	49.45 **100.97**	54.05 **99.94**	47.25 **102.73**	48.45 **101.49**	54.27 **100.95**	53.55 **102.48**	South/Southwest
June 28, 2000	Depth to groundwater (feet toc) Groundwater elevation (feet amsl)	44.80 **105.62**	49.26 **104.73**	42.53 **107.45**	43.70 **106.24**	49.42 **105.80**	48.65 **107.38**	South/Southwest
March 7, 2001	Depth to groundwater (feet toc) Groundwater elevations (feet amsl)	46.30 **104.12**	51.06 **102.93**	44.30 **105.68**	45.52 **104.42**	51.42 **103.80**	50.68 **105.35**	Southwest
June 27, 2002	Depth to groundwater (feet toc) Groundwater elevations (feet amsl)	48.74 **101.68**	53.84 **100.15**	47.31 **102.67**	48.49 **101.45**	54.51 **100.71**	53.86 **102.17**	Southwest
September 16, 2003	Depth to groundwater (feet toc) Groundwater elevations (feet amsl)	53.46 **96.96**	59.03 **94.96**	52.64 **97.34**	53.74 **96.20**	60.03 **95.19**	na **na**	Southwest
	Change from previous elevation	-4.72	-5.19	-5.33	-5.25	-5.52	na	---

Notes and Abbreviations:
ft/ft = feet per foot
amsl = above mean sea level
toc = top of casing
na = not available

Table 2
Groundwater Analytical Results, Volatile Organic Compounds
Los Nietos Business Center
Santa Fe Springs, California

		Chemicals of Concern (Micrograms Per Liter)										
Monitoring Well No.	Date	CTC	Chloroform	1,1-DCA	1,2-DCA	1,1-DCE	trans-1,2-DCE	cis-1,2-DCE	1,2-DCP	PCE	1,1,1-TCA	TCE
MW-1	Apr-96	ND	0.61	21	ND	11	ND	ND	ND	6.3	4.2	32
	Jul-99	ND	ND	2.6	ND	18.6	ND	ND	--	11.8	ND	11.3
	Sep-99	ND	1.4	3.4	ND	25.6	ND	ND	ND	11.4	1.9	10.9
	Dec-99	ND	12	61	ND	1,030	ND	12	172	ND	29	151
	Mar-00	0.59	1.7	7.4	0.53	81	ND	1.7	29	6.3	3.2	24
	Jun-00	ND	ND	ND	ND	4.9	ND	ND	ND	1.5	ND	4.3
	Mar-01	0.95	2.2	8.8	ND	23	ND	ND	2.3	11	1.2	21
	Jun-02	0.87	1.7	7.6	ND	17	ND	ND	ND	30	ND	49
	Sep-03	0.94	3.9	180	1.9	330	ND	2.4	2.5	19	2.7	32
MW-2	Apr-96	ND	0.91	ND	ND	1.1	ND	ND	--	15	ND	7.7
	Jul-99	ND	1.0	2.2	6.8	ND	ND	1.4	--	10.1	ND	5.5
	Sep-99	ND	ND	4.6	6.2	2.5	ND	2.3	--	15.9	ND	7.7
	Dec-99	1.2	7.3	11.4	13.8	6.9	ND	3.7	ND	15.4	ND	18.9
	Mar-00	2.2	11	4.9	4.1	2.9	ND	1.2	ND	15	ND	16
	Jun-00	ND	1.6	7.1	17	3.1	ND	2.9	ND	14	ND	13
	Mar-01	ND	3.5	8.8	18	3.3	ND	4.0	ND	11	ND	17
	Jun-02	ND	1.7	7.1	20	1.9	ND	3.5	ND	5.5	ND	14
	Sep-03	ND	2.0	9.6	22	2.0	ND	2.7	ND	3.2	ND	13
MW-3	Apr-96	ND	ND	ND	ND	ND	ND	ND	--	1.4	ND	2.6
	Jul-99	ND	ND	ND	ND	ND	ND	ND	--	ND	ND	ND
	Sep-99	ND	ND	ND	ND	ND	ND	ND	--	ND	ND	ND
	Dec-99	ND	ND	3.8	ND	4.9	ND	ND	ND	2.3	ND	3.2
	Mar-00	ND	ND	1.6	ND	1.7	ND	ND	ND	1.6	ND	3.5
	Jun-00	ND	ND	2.7	0.52	3.2	ND	ND	ND	2.2	ND	5.8
	Mar-01	ND	ND	1.5	ND	1.1	ND	ND	ND	1.6	ND	7.0
	Jun-02	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	4.3
	Sep-03	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	14
MW-4	Apr-96	5.1	15	33	17	13	0.51	10	--	18	ND	74
	Jul-99	ND	2.4	3.0	ND	1.6	ND	ND	--	8.7	ND	12.2
	Sep-99	ND	4.4	4.3	3.9	3.1	ND	1.1	--	17.5	ND	13.2
	Dec-99	ND	7.2	4.7	2.3	3.2	ND	1.0	ND	11.1	ND	12.7
	Mar-00	0.58	4.8	3.5	1.8	3.6	ND	ND	ND	8.1	ND	12
	Jun-00	0.56	4.9	5.5	8.9	1.4	ND	1.5	ND	5.3	ND	13
	Mar-01	ND	7.8	20	26	5.0	ND	6.4	ND	4.9	ND	32
	Jun-02	3.0	15	10	13	3.7	ND	3.3	ND	4.7	ND	38
	Sep-03	0.84	7.9	4.8	2.5	1.7	ND	1.0	ND	3.0	ND	20
MW-5	Apr-96	ND	0.76	ND	ND	ND	ND	ND	--	82	ND	78
	Jul-99	ND	ND	ND	ND	2.1	ND	ND	--	73.8	ND	5.0
	Sep-99	ND	ND	ND	ND	2.0	ND	ND	--	81.1	ND	4.8
	Dec-99	ND	ND	ND	ND	2.1	ND	ND	ND	89.5	--	8.3
	Mar-00	ND	ND	ND	ND	2.3	ND	ND	ND	91	ND	7.0
	Jun-00	ND	ND	ND	ND	3.0	ND	ND	ND	97	ND	6.0
	Mar-01	ND	ND	ND	ND	2.4	ND	ND	ND	110	ND	7.4
	Jun-02	ND	ND	ND	ND	1.1	ND	ND	ND	60	ND	4.2
	Sep-03	ND	ND	ND	ND	ND	ND	ND	ND	41	ND	7.3
MW-6	Sep-99	ND	ND	ND	ND	ND	1.9	ND	--	68.2	ND	6.9
	Dec-99	ND	ND	ND	ND	2.1	ND	ND	ND	70.3	ND	12.9
	Mar-00	ND	ND	ND	ND	2.1	ND	ND	ND	69	ND	9.5
	Jun-00	ND	ND	ND	ND	ND	ND	ND	ND	45	ND	5.5
	Mar-01	ND	ND	ND	ND	1.7	ND	ND	ND	49	ND	7.5
	Jun-02	ND	ND	ND	ND	ND	ND	2.0	ND	41	ND	18
	Sep-03	--	--	--	--	--	--	--	--	--	--	--
Ca MCL		0.5	100	5	0.5	6.0	10	6.0	5.0	5.0	200	5.0

Notes and Abbreviations:

CTC - Carbon Tetrachloride
1,1-DCA - 1,1-dichloroethane
1,2-DCA - 1,2-dichloroethane
1,1-DCE - 1,1-dichloroethene
trans-1,1-DCE - trans-1,1-dichloroethene.
cis-1,2,-DCE - cis-1,2-dichloroethene
1,2-DCP - 1,2-dichloropropane
PCE - tetrachloroethene.
1,1,1-TCA - 1,1,1-trichloroethane.
TCE - trichloroethene.
Ca MCL - California Maximum Contaminant Level
-- - not analysed

ND - not detected at or above the methods reporting limit. VOCs not presented were below the laboratory reporting limits

Table 3
Groundwater Analytical Results, Metals
Los Nietos Business Center
Santa Fe Springs, California

Monitoring Well No.	Date	Chemicals of Concern (Milligrams Per Liter)																	
		Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Ti	V	Zn	Cr+6
MW-1	Apr-96	ND	ND	0.2	ND	ND	0.047	ND	ND	ND	ND	ND	ND	0.013	ND	ND	0.12	0.069	--
	Jul-99	ND	ND	0.051	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.015	ND	ND	ND	0.065	--
	Sep-99	ND	ND	0.058	ND	ND	ND	ND	ND	ND	ND	ND	0.014	0.068	ND	0.15	ND	0.055	--
	Dec-99	ND	ND	0.059	ND	0.021	ND	ND	ND	ND	ND	ND	0.017	ND	ND	ND	ND	ND	--
	Mar-00	ND	ND	0.0724	ND	ND	0.0242	ND	0.00949	ND	ND	ND	0.0128	ND	ND	ND	0.00778	0.0735	ND
	Jun-00	ND	ND	0.0672	ND	ND	0.00882	ND	ND	ND	ND	ND	ND	0.0161	ND	ND	ND	0.0179	ND
	Mar-01	ND	ND	0.0653	ND	ND	0.01840	ND	0.01760	ND	ND	ND	ND	ND	ND	ND	ND	0.0127	ND
	Jun-02	ND	ND	0.0567	ND	ND	0.02020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0608	0.022
	Sep-03	ND	ND	0.0748	ND	ND	0.02060	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0485	ND
MW-2	Apr-96	ND	ND	0.11	ND	ND	0.07	ND	ND	ND	0.0068	ND	ND	ND	ND	ND	0.12	ND	--
	Jul-99	ND	ND	0.045	ND	ND	0.027	ND	ND	ND	ND	ND	ND	0.018	ND	0.019	ND	0.103	--
	Sep-99	ND	ND	0.037	ND	ND	0.024	ND	ND	ND	ND	ND	ND	0.071	ND	0.162	ND	0.096	--
	Dec-99	ND	ND	0.043	ND	ND	0.188	ND	0.02	ND	ND	ND	ND	0.016	ND	ND	ND	0.015	--
	Mar-00	0.0167	ND	0.0872	ND	ND	0.369	ND	0.00743	ND	0.00167	ND	0.00526	ND	ND	ND	0.00917	0.0546	0.33
	Jun-00	ND	ND	0.0492	ND	ND	0.0744	ND	ND	ND	ND	ND	ND	0.0176	ND	ND	ND	0.0384	0.073
	Mar-01	ND	ND	0.0506	ND	ND	0.115	ND	0.0117	ND	ND	ND	ND	0.0176	ND	ND	ND	0.0119	0.11
	Jun-02	ND	ND	0.0381	ND	ND	0.0270	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.037
	Sep-03	ND	ND	0.0728	ND	ND	0.0544	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0447	ND
MW-3	Apr-96	ND	ND	0.094	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12	ND	--
	Jul-99	ND	ND	0.107	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014	ND	ND	ND	0.091	--
	Sep-99	ND	ND	0.096	ND	ND	ND	ND	ND	ND	ND	ND	0.016	0.083	ND	0.176	ND	0.052	--
	Dec-99	ND	ND	0.072	ND	ND	0.011	ND	0.019	ND	ND	ND	0.012	ND	ND	ND	ND	0.012	--
	Mar-00	ND	ND	0.0616	ND	ND	0.0161	ND	0.00517	ND	ND	ND	0.00559	ND	ND	ND	ND	0.0485	ND
	Jun-00	ND	ND	0.0516	ND	ND	0.00559	ND	ND	ND	ND	ND	ND	0.0262	ND	ND	ND	ND	ND
	Mar-01	ND	ND	0.0468	ND	ND	0.00786	ND	0.00934	ND	0.000595	ND	ND	0.0218	ND	ND	ND	ND	ND
	Jun-02	ND	ND	0.0433	ND	ND	0.00527	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0128	ND
	Sep-03	ND	ND	0.0734	ND	ND	0.00546	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0393	ND
MW-4	Apr-96	ND	ND	0.096	ND	0.062	ND	ND	0.062	ND	0.0016	ND	0.15	ND	0.064	ND	0.16	0.66	--
	Jul-99	ND	ND	0.057	ND	ND	0.036	ND	ND	ND	ND	ND	0.014	0.015	ND	0.015	ND	0.097	--
	Sep-99	ND	ND	0.037	ND	ND	0.163	ND	0.16	ND	ND	ND	0.02	0.056	ND	0.143	ND	0.231	--
	Dec-99	ND	ND	0.031	ND	ND	0.606	ND	0.02	0.009	ND	ND	0.13	ND	ND	ND	ND	0.065	--
	Mar-00	ND	ND	0.0447	ND	0.00954	0.261	ND	0.0244	ND	ND	ND	0.0180	ND	ND	ND	ND	0.124	0.23
	Jun-00	ND	ND	0.0355	ND	0.0101	0.137	ND	0.00782	ND	ND	ND	0.0196	ND	ND	ND	ND	0.115	0.094
	Mar-01	ND	ND	0.0455	ND	0.0212	0.279	ND	0.0215	ND	ND	ND	0.0323	ND	ND	ND	ND	0.169	0.22
	Jun-02	ND	ND	0.0291	ND	0.00678	0.399	ND	0.0156	ND	ND	ND	0.0105	ND	ND	ND	ND	0.0774	0.42
	Sep-03	ND	ND	0.0683	ND	0.00957	0.679	ND	0.0197	ND	0.000842	ND	0.0118	ND	ND	ND	ND	0.338	0.63
MW-5	Apr-96	ND	ND	0.062	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
	Jul-99	ND	ND	0.047	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	ND	ND	ND	0.058	--
	Sep-99	ND	ND	0.058	ND	ND	0.013	ND	ND	ND	ND	ND	0.014	0.065	ND	0.141	ND	ND	--
	Dec-99	ND	ND	0.044	ND	ND	ND	ND	ND	0.008	ND	ND	0.013	0.013	ND	ND	ND	ND	--
	Mar-00	ND	ND	0.0521	ND	ND	0.0146	ND	0.00557	ND	ND	ND	ND	ND	ND	ND	ND	0.0331	ND
	Jun-00	ND	ND	0.0491	ND	ND	0.0291	ND	ND	ND	0.00184	ND	ND	0.0322	ND	ND	ND	0.0148	0.026
	Mar-01	ND	ND	0.0460	ND	ND	0.0144	ND	0.0118	ND	ND	ND	ND	ND	ND	ND	ND	0.0249	ND
	Jun-02	ND	ND	0.0430	ND	ND	0.0117	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0120	ND
	Sep-03	ND	ND	0.0655	ND	ND	0.0121	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0742	ND
MW-6	Sep-99	ND	ND	0.04	ND	ND	ND	ND	ND	ND	ND	0.016	0.056	ND	ND	0.128	ND	ND	--
	Dec-99	ND	ND	0.041	ND	ND	ND	ND	ND	0.008	ND	ND	0.012	ND	ND	ND	ND	ND	--
	Mar-00	ND	ND	0.105	ND	ND	0.0158	ND	0.0119	ND	ND	ND	0.00638	ND	ND	ND	0.0138	0.0976	ND
	Jun-00	ND	ND	0.0379	ND	ND	0.00701	ND	ND	ND	ND	ND	ND	0.0181	ND	ND	ND	ND	ND
	Mar-01	ND	ND	0.0325	ND	ND	0.01090	ND	0.0111	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Jun-02	ND	ND	0.0369	ND	ND	0.00791	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0253	ND
	Sep-03	---	---	---	---	---	---	---	---	---	--	---	---	---	---	---	---	---	---
Ca MCL		0.006	0.05	1	0.004	0.005	0.05	--	1.0	0.015	0.002	--	0.1	0.05	0.1	0.002	--	--	0.05

Notes and Abbreviations

Sb - Antimony
As - Arsenic
Ba - Barium
Be - Beryllium
Cd - Cadmium
Cr - Chromium (tot.)
Co - Cobalt
Cu - Copper
Pb - Lead
Hg - Mercury
Mo - Molybdenum
Ni - Nickel
Se - Selenium
Ag - Silver
Ti - Thallium
V - Vanadium
Zn - Zinc
Cr+6 - Hexavalent Chromium

ND - Not detected at or above the method reporting limits.
-- - Not analyzed or not available.

APPENDIX C

GROUNDWATER SAMPLING METHODOLOGY

1.0 DECONTAMINATION PROCEDURES

The decontamination procedures for non-dedicated field equipment and well development/purging equipment are given below. These procedures are followed during all field activities.

1. Non-dedicated well development, purging, and sampling equipment is carefully pre-cleaned prior to each use, as follows:

    a. Carefully brush off any loose foreign debris with a soft bristle brush.

    b. Rinse the equipment thoroughly in clean water.

    c. Wash the equipment in a non-phosphate detergent bath.

    d. Rinse thoroughly in clean water.

    e. Rinse thoroughly with deionized water.

    f. Air dry in a dust-free environment.

    g. Store in unused plastic bags or other suitable cover until use.

2. Clean disposable gloves are worn by all field personnel when handling decontaminated equipment.

2.0 COLLECTION OF SAMPLES

2.1 Groundwater Sampling

Groundwater samples are collected for laboratory analysis using the procedures given below.

1. If deemed necessary by the Health and Safety Plan, open the well and measure the organic vapor concentration with a flame-ionization detector (FID) or photo-ionization detector (PID).

2. Measure the water levels (if any) in the well using a decontaminated measuring device. All measurements must be made to the nearest 0.01 foot, and measured relative to the top of the casing. Record the depth of the water in the Monitoring Well Purge Table.

3. Inspect the disposable bailer to ensure that the bottom valve assembly is working correctly.

4. Begin purging the well by inserting a bailer or pump into the PVC monitoring well

casing and carefully lower it into the well. Take care to avoid agitating and aerating the fluid column in the well. Purging may also be performed using an aboveground centrifugal pump or in-well submersible pump with disposable polyethylene tubing. Tubing is disposed after each use.

5. Slowly withdraw the bailer and transfer the water samples to a sampling containers. For centrifugal pumps, valve down purge rate and slowly transfer purge water to sample containers.

6. Measure the temperature, pH, conductivity, and turbidity. Record these and all subsequent measurements in the Monitoring Well Purge Tables.

7. Continue purging the well (a minimum of three well volumes) until the temperature, pH, conductivity, and turbidity have stabilized, or the well is dry.

8. When the water has recovered to 80 percent of the original level, carefully lower a new disposable bailer into the well and recover groundwater samples.

9. Fill the appropriate sample containers by releasing water from the bailer via the bottom emptying device with a minimum of agitation. The most volatile parameters are collected first, proceeding to the least volatile parameters.

10. Place the purge water in a DOT-approved 55-gallon drums.

3.0 ANALYSIS OF SAMPLES

Samples are submitted to a California state-certified laboratory for analysis.

4.0 SAMPLE HANDLING

4.1 Sample Containers, Preservation, and Holding Times

All samples are collected, placed in containers, preserved, and analyzed within the time constraints with applicable local, provincial, and federal procedures. All sample containers are pre-cleaned in accordance with prescribed EPA methods. A custody seal is placed around all sample container lids to prevent leaks and unauthorized tampering with individual samples following collection and prior to the time of analysis.

4.2 Sample Tracking and Management

All samples are tracked using a standard chain-of-custody form. The chain of custody record includes the following information:

1. Sample number
2. Signature of collector
3. Date and time of collection
4. Sample collection location
5. Sample type
6. Signature of persons involved in the chain-of-possession
7. Inclusive dates of possession
8. Analytical parameters
9. Pertinent field observations

The custody record is completed using waterproof ink. Corrections are made by drawing a line through, initialing the error, and then entering the correct information.

Custody of the samples begins at the time of sample collection and are maintained by the sampling team supervisor until samples are relinquished for shipment to the laboratory, or until samples are hand-delivered to the designated laboratory sample custodian. Partial sample sets being accumulated for hand-delivery to the laboratory are stored in coolers with chain-of-custody records sealed in plastic bags and placed in the cooler with the sample sets.

APPENDIX D

GROUNDWATER PURGING AND SAMPLING LOGS

Coast Environmental Services

Groundwater Purging and Sampling Log

Well No: MW1

Ground or Casing Elevation _____

Groundwater Elevation _____

CES Project #: 03-727 Date: 9-16-03

Client: URS Corp

Site Name: Los Nietos Business Park
Santa Fe Springs, CA

Well Details

Total Depth of Well 65 feet (-) Initial Depth to Water before purging 53.46 feet =

Height of Water Column (11.54 feet) X Volume of well casing (0.16 g/ft) 2-inch or (0.65g/ft) 4-inch X Purge Factor (3) = 23 gallons

Well Purging Tables

Purging Method Rediflo Submersible Pump Time purging begins 11:35

Notes on Initial Discharge cloudy, odorless Free Product Thickness Ø

Time	Gallons	pH	Conductivity	Temperature	Turbidity	Odor
11:37	2	7.46	1.30	76.0	moderate	none
11:40	6	7.09	1.26	74.6	slight	none
11:43	12	7.07	1.26	74.8	slight	none
11:46	18	7.09	1.26	74.6	slight	none
11:50	23	7.12	1.26	74.8	slight	none

Time purging ends 11:50 Final Depth to Water after purging 54.28 feet

Approximate Purging Rate 1+02 gpm Percent Recharge 100 %

Well Sampling Description

Sampling Method Disposable Poly Bailer

Sampling Time 12:15 Depth to Water during Sampling 53.46 feet

Notes: clear, odorless, quick to recharge

Coast Environmental Services

Groundwater Purging and Sampling Log

Well No: MW 2

Ground or Casing Elevation ____

Groundwater Elevation ____

CES Project #: 03-727 Date: 9-16-03

Client: URS Corp

Site Name: Los Nietos Business Park
Santa Fe Springs, CA

Well Details

Total Depth of Well 65 feet (-) Initial Depth to Water before purging 59.03 feet =

Height of Water Column (5.97 feet) X Volume of well casing (0.16 g/ft) 2-inch or (0.65g/ft) 4-inch X Purge Factor (3) = 12 gallons

Well Purging Tables

Purging Method Redi flo Submersible Pump Time purging begins 10:50

Notes on Initial Discharge clear, odorless Free Product Thickness Ø

Time	Gallons	pH	Conductivity	Temperature	Turbidity	Odor
10:52	3	7.22	1.69	71.2	clear	none
10:55	6	6.83	1.66	70.8	clear	none
10:57	9	6.96	1.69	70.6	clear	none
11:00	12	6.75	1.70	70.8	clear	none

Time purging ends 11:00 Final Depth to Water after purging 59.20 feet

Approximate Purging Rate 1 gpm Percent Recharge 100 %

Well Sampling Description

Sampling Method Disposable Poly Bailer

Sampling Time 11:20 Depth to Water during Sampling 59.01 feet

Notes: clear, odorless, very quick recharge

Coast Environmental Services

Groundwater Purging and Sampling Log

Well No: MW3

Ground or Casing Elevation _____

Groundwater Elevation _____

CES Project #: 03-727 Date: 9-16-03

Client: UBS Corp

Site Name: Los Nietos Business Park
Santa Fe Springs, CA

Well Details

Total Depth of Well 65 feet (-) Initial Depth to Water before purging 52.64 feet =

Height of Water Column (12.36 feet) X Volume of well casing (0.16 g/ft) 2-inch or (0.65g/ft) 4-inch X Purge Factor (3) = 24 gallons

Well Purging Tables

Purging Method Redi-flo Submersible Pump Time purging begins 10:00

Notes on Initial Discharge clear, odorless Free Product Thickness Ø

Time	Gallons	pH	Conductivity	Temperature	Turbidity	Odor
10:02	3	7.23	1.33	68.1	none	none
10:04	6	7.19	1.33	68.6	none	none
10:09	12	7.11	1.35	68.8	none	none
10:12	18	7.09	1.37	68.9	none	none
10:15	24	7.08	1.40	68.9	none	none

Time purging ends 10:25 Final Depth to Water after purging 54.20 feet

Approximate Purging Rate 1 to 2 gpm Percent Recharge 100 %

Well Sampling Description

Sampling Method Disposable Poly Bailer

Sampling Time 10:35 Depth to Water during Sampling 52.70 feet

Notes: clear, odorless

Coast Environmental Services

Groundwater Purging and Sampling Log

Well No: MW4

Ground or Casing Elevation _____

Groundwater Elevation _____

CES Project #: 03-727 Date: 9-16-03

Client: URS Corp.

Site Name: Los Nietos Business Center
Santa Fe Springs, CA

Well Details

Total Depth of Well 65 feet (-) Initial Depth to Water before purging 53.74 feet =

Height of Water Column (11.26 feet) X Volume of well casing (0.16 g/ft) 2-inch or (0.65g/ft) 4-inch X Purge Factor (3) = 22 gallons

Well Purging Tables

Purging Method Red. Flo Submersible Pump Time purging begins 9:00

Notes on Initial Discharge cloudy, odorless Free Product Thickness Ø

Time	Gallons	pH	Conductivity	Temperature	Turbidity	Odor
9:01	2	6.99	1.61	68.6	slight	none
9:03	5	6.88	1.62	69.0	slight	none
9:06	11	6.70	1.61	69.1	slight	none
9:09	17	6.82	1.61	69.0	clear	none
9:15	22	6.74	1.61	68.7	clear	none

Time purging ends 9:15 Final Depth to Water after purging 54.80 feet

Approximate Purging Rate 1 to 2 gpm Percent Recharge 100 %

Well Sampling Description

Sampling Method Disposable Poly Bailer

Sampling Time 9:35 Depth to Water during Sampling 53.75 feet

Notes: clear, odorless

Coast Environmental Services

Groundwater Purging and Sampling Log

Well No: MW5

Ground or Casing Elevation _____

Groundwater Elevation _____

CES Project #: 03-727 Date: 9-16-03

Client: URS Corp

Site Name: Los Nietos Business Park
Santa Fe Springs, CA

Well Details

Total Depth of Well 65 feet (-) Initial Depth to Water before purging 60.03 feet =

Height of Water Column (4.97 feet) X (0.16 g/ft) 2-inch or (0.65g/ft) 4-inch X (3) = 10 gallons

Volume of well casing — Purge Factor

Well Purging Tables

Purging Method Redi-flo Submersible Pump Time purging begins 8:05

Notes on Initial Discharge cloudy, odorless Free Product Thickness Ø

Time	Gallons	pH	Conductivity	Temperature	Turbidity	Odor
8:07	2	6.56	1.48	67.2	high	none
8:09	4	6.75	1.37	67.5	high	none
8:12	7	6.73	1.36	67.9	mod	none
8:15	10	6.77	1.35	67.8	slight	none

Time purging ends 8:15 Final Depth to Water after purging 62.24 feet

Approximate Purging Rate ~1 gpm Percent Recharge 100 %

Well Sampling Description

Sampling Method Disposable Poly Bailer

Sampling Time 8:40 Depth to Water during Sampling 60.04 feet

Notes: clear, odorless

Coast Environmental Services

Groundwater Purging and Sampling Log

Well No: MW6

Ground or Casing Elevation _____

Groundwater Elevation _____

CES Project #: 03-727 Date: 9-16-03

Client: URS Corp

Site Name: Los Nietos Business Center
Santa Fe Springs, CA

Well Details

Total Depth of Well 60 feet (-) Initial Depth to Water before purging n/a feet =

Height of Water Column (Ø feet) X (0.16 g/ft) 2-inch or (0.65g/ft) 4-inch X ( ) =

Volume of well casing — Purge Factor

Well Purging Tables

Purging Method PVC Bailer Time purging begins 7:20 Am

Notes on Initial Discharge n/a Free Product Thickness _____

Time	Gallons	pH	Conductivity	Temperature	Turbidity	Odor
			– dry well –			
			water level >60 feet			
			– no reading on Solonist WLM			
			– no water in bailer to 60'			

Time purging ends _____ Final Depth to Water after purging _____ feet

Approximate Purging Rate _____ gpm Percent Recharge _____ %

Well Sampling Description

Sampling Method _____

Sampling Time _____ Depth to Water during Sampling _____ feet

Notes: no sample collected

APPENDIX E

LABORATORY ANALYTICAL DATA SHEETS, 2003

Calscience Environmental Laboratories, Inc.

September 23, 2003

Scott Allin
URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Subject: **Calscience Work Order No.: 03-09-0906**
Client Reference: Los Nietos / 17325516.00001

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/16/2003 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Don Burley
Project Manager

Michael J. Crisostomo
Quality Assurance Manager

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received:	09/16/03
Work Order No:	03-09-0906
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Los Nietos / 17325516.00001

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW5	**03-09-0906-1**	**09/16/03**	**Aqueous**	**N/A**	**09/18/03**	**030917L02**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	10	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	10	1		ug/L	Tetrachloroethene	41	1	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	7.3	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
Dibromofluoromethane	95	86-118		Toluene-d8	94	88-110	
1,4-Bromofluorobenzene	89	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received:	09/16/03
Work Order No:	03-09-0906
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Los Nietos / 17325516.00001

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW4	**03-09-0906-2**	**09/16/03**	**Aqueous**	**N/A**	**09/18/03**	**030917L02**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	10	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	0.84	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	7.9	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	10	1		ug/L	Tetrachloroethene	3.0	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	20	1	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	4.8	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	2.5	0.5	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	1.7	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	1.0	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
Dibromofluoromethane	94	86-118		Toluene-d8	95	88-110	
1,4-Bromofluorobenzene	89	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received:	09/16/03
Work Order No:	03-09-0906
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Los Nietos / 17325516.00001

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW3	**03-09-0906-3**	**09/16/03**	**Aqueous**	**N/A**	**09/18/03**	**030917L02**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	10	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	10	1		ug/L	Tetrachloroethene	3.1	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	14	1	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
Dibromofluoromethane	93	86-118		Toluene-d8	95	88-110	
1,4-Bromofluorobenzene	89	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received:	09/16/03
Work Order No:	03-09-0906
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Los Nietos / 17325516.00001

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW2	**03-09-0906-4**	**09/16/03**	**Aqueous**	**N/A**	**09/18/03**	**030917L02**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	10	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	2.0	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	10	1		ug/L	Tetrachloroethene	3.2	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	13	1	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	9.6	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	22	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	2.0	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	2.7	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
Dibromofluoromethane	95	86-118		Toluene-d8	95	88-110	
1,4-Bromofluorobenzene	90	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received:	09/16/03
Work Order No:	03-09-0906
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Los Nietos / 17325516.00001

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW1	**03-09-0906-5**	**09/16/03**	**Aqueous**	**N/A**	**09/18/03**	**030917L02**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	10	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	0.94	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	3.9	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	10	1		ug/L	Tetrachloroethene	19	1	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	2.7	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	32	1	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	180	1	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	1.9	0.5	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	330	2	2	D	ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	2.4	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
1,2-Dichloropropane	2.5	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
Dibromofluoromethane	97	86-118		Toluene-d8	94	88-110	
1,4-Bromofluorobenzene	89	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received:	09/16/03
Work Order No:	03-09-0906
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Los Nietos / 17325516.00001

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	**099-10-006-8,455**	**N/A**	**Aqueous**	**N/A**	**09/18/03**	**030917L02**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	10	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	10	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
Dibromofluoromethane	93	86-118		Toluene-d8	96	88-110	
1,4-Bromofluorobenzene	89	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received: 09/16/03
Work Order No: 03-09-0906
Preparation: EPA 3005A Filt. / EPA 7470A Filt.
Method: EPA 6010B / EPA 7470A

Project: Los Nietos / 17325516.00001

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW5	**03-09-0906-1**	**09/16/03**	**Aqueous**	**09/16/03**	**09/17/03**	**030916L02A**

Comment(s): Mercury was analyzed on 9/17/2003 10:37:02 AM with batch 030916L02A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.0150	1		mg/L	Mercury	ND	0.00050	1		mg/L
Arsenic	ND	0.0150	1		mg/L	Molybdenum	ND	0.00500	1		mg/L
Barium	0.0655	0.0100	1		mg/L	Nickel	ND	0.00500	1		mg/L
Beryllium	ND	0.00100	1		mg/L	Selenium	ND	0.0150	1		mg/L
Cadmium	ND	0.00500	1		mg/L	Silver	ND	0.00500	1		mg/L
Chromium (Total)	0.0121	0.0050	1		mg/L	Thallium	ND	0.0150	1		mg/L
Cobalt	ND	0.00500	1		mg/L	Vanadium	ND	0.00500	1		mg/L
Copper	ND	0.00500	1		mg/L	Zinc	0.0742	0.0100	1		mg/L
Lead	ND	0.0100	1		mg/L						

MW4	**03-09-0906-2**	**09/16/03**	**Aqueous**	**09/16/03**	**09/17/03**	**030916L02A**

Comment(s): Mercury was analyzed on 9/17/2003 10:40:02 AM with batch 030916L02A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.0150	1		mg/L	Mercury	0.000842	0.00050	1		mg/L
Arsenic	ND	0.0150	1		mg/L	Molybdenum	ND	0.00500	1		mg/L
Barium	0.0683	0.0100	1		mg/L	Nickel	0.0118	0.0050	1		mg/L
Beryllium	ND	0.00100	1		mg/L	Selenium	ND	0.0150	1		mg/L
Cadmium	0.00957	0.00500	1		mg/L	Silver	ND	0.00500	1		mg/L
Chromium (Total)	0.679	0.005	1		mg/L	Thallium	ND	0.0150	1		mg/L
Cobalt	ND	0.00500	1		mg/L	Vanadium	ND	0.00500	1		mg/L
Copper	0.0197	0.0050	1		mg/L	Zinc	0.338	0.010	1		mg/L
Lead	ND	0.0100	1		mg/L						

MW3	**03-09-0906-3**	**09/16/03**	**Aqueous**	**09/16/03**	**09/17/03**	**030916L02A**

Comment(s): Mercury was analyzed on 9/17/2003 10:43:04 AM with batch 030916L02A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.0150	1		mg/L	Mercury	ND	0.00050	1		mg/L
Arsenic	ND	0.0150	1		mg/L	Molybdenum	ND	0.00500	1		mg/L
Barium	0.0734	0.0100	1		mg/L	Nickel	ND	0.00500	1		mg/L
Beryllium	ND	0.00100	1		mg/L	Selenium	ND	0.0150	1		mg/L
Cadmium	ND	0.00500	1		mg/L	Silver	ND	0.00500	1		mg/L
Chromium (Total)	0.00546	0.00500	1		mg/L	Thallium	ND	0.0150	1		mg/L
Cobalt	ND	0.00500	1		mg/L	Vanadium	ND	0.00500	1		mg/L
Copper	ND	0.00500	1		mg/L	Zinc	0.0393	0.0100	1		mg/L
Lead	ND	0.0100	1		mg/L						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received: 09/16/03
Work Order No: 03-09-0906
Preparation: EPA 3005A Filt. / EPA 7470A Filt.
Method: EPA 6010B / EPA 7470A

Project: Los Nietos / 17325516.00001

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW2	**03-09-0906-4**	**09/16/03**	**Aqueous**	**09/16/03**	**09/17/03**	**030916L02A**

Comment(s): Mercury was analyzed on 9/17/2003 10:46:07 AM with batch 030916L02A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.0150	1		mg/L	Mercury	ND	0.00050	1		mg/L
Arsenic	ND	0.0150	1		mg/L	Molybdenum	ND	0.00500	1		mg/L
Barium	0.0728	0.0100	1		mg/L	Nickel	ND	0.00500	1		mg/L
Beryllium	ND	0.00100	1		mg/L	Selenium	ND	0.0150	1		mg/L
Cadmium	ND	0.00500	1		mg/L	Silver	ND	0.00500	1		mg/L
Chromium (Total)	0.0544	0.0050	1		mg/L	Thallium	ND	0.0150	1		mg/L
Cobalt	ND	0.00500	1		mg/L	Vanadium	ND	0.00500	1		mg/L
Copper	ND	0.00500	1		mg/L	Zinc	0.0447	0.0100	1		mg/L
Lead	ND	0.0100	1		mg/L						

MW1	**03-09-0906-5**	**09/16/03**	**Aqueous**	**09/16/03**	**09/17/03**	**030916L02A**

Comment(s): Mercury was analyzed on 9/17/2003 10:49:09 AM with batch 030916L02A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.0150	1		mg/L	Mercury	ND	0.00050	1		mg/L
Arsenic	ND	0.0150	1		mg/L	Molybdenum	ND	0.00500	1		mg/L
Barium	0.0748	0.0100	1		mg/L	Nickel	ND	0.00500	1		mg/L
Beryllium	ND	0.00100	1		mg/L	Selenium	ND	0.0150	1		mg/L
Cadmium	ND	0.00500	1		mg/L	Silver	ND	0.00500	1		mg/L
Chromium (Total)	0.0206	0.0050	1		mg/L	Thallium	ND	0.0150	1		mg/L
Cobalt	ND	0.00500	1		mg/L	Vanadium	ND	0.00500	1		mg/L
Copper	ND	0.00500	1		mg/L	Zinc	0.0485	0.0100	1		mg/L
Lead	ND	0.0100	1		mg/L						

Method Blank	**099-04-008-1,252**	**N/A**	**Aqueous**	**09/16/03**	**09/17/03**	**030916L02A**

Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.00050	1		mg/L

Method Blank	**097-01-003-3,247**	**N/A**	**Aqueous**	**09/16/03**	**09/17/03**	**030916L02A**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.0150	1		mg/L	Molybdenum	ND	0.00500	1		mg/L
Arsenic	ND	0.0150	1		mg/L	Nickel	ND	0.00500	1		mg/L
Barium	ND	0.0100	1		mg/L	Selenium	ND	0.0150	1		mg/L
Beryllium	ND	0.00100	1		mg/L	Silver	ND	0.00500	1		mg/L
Cadmium	ND	0.00500	1		mg/L	Thallium	ND	0.0150	1		mg/L
Chromium (Total)	ND	0.00500	1		mg/L	Vanadium	ND	0.00500	1		mg/L
Cobalt	ND	0.00500	1		mg/L	Zinc	ND	0.0100	1		mg/L
Copper	ND	0.00500	1		mg/L	Lead	ND	0.0100	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscienc Environm ntal Laboratories, Inc.

ANALYTICAL REPORT

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received:	09/16/03
Work Order No:	03-09-0906
Preparation:	N/A
Method:	EPA 7196A

Project: Los Nietos / 17325516.00001

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW5	**03-09-0906-1**	**09/16/03**	**Aqueous**	**N/A**	**09/16/03**	**30916CRL1**

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	0.020	1		mg/L

MW4	**03-09-0906-2**	**09/16/03**	**Aqueous**	**N/A**	**09/16/03**	**30916CRL1**

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	0.63	0.02	1		mg/L

MW3	**03-09-0906-3**	**09/16/03**	**Aqueous**	**N/A**	**09/16/03**	**30916CRL1**

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	0.020	1		mg/L

MW2	**03-09-0906-4**	**09/16/03**	**Aqueous**	**N/A**	**09/16/03**	**30916CRL1**

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	0.020	1		mg/L

MW1	**03-09-0906-5**	**09/16/03**	**Aqueous**	**N/A**	**09/16/03**	**30916CRL1**

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	0.020	1		mg/L

Method Blank	**099-05-064-1,181**	**N/A**	**Aqueous**	**N/A**	**09/16/03**	**30916CRL1**

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	0.020	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received: 09/16/03
Work Order No: 03-09-0906
Preparation: EPA 5030B
Method: EPA 8260B

Project: Los Nietos / 17325516.00001

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW5	**Aqueous**	**GC/MS CC**	**N/A**	**09/18/03**	**030917S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	105	81-123	3	0-15	
Carbon Tetrachloride	111	114	61-133	3	0-17	
Chlorobenzene	98	100	82-124	2	0-15	
1,2-Dichlorobenzene	99	102	82-124	2	0-16	
1,1-Dichloroethene	101	99	70-136	1	0-20	
Toluene	96	99	87-123	3	0-15	
Trichloroethene	98	101	66-108	3	0-16	
Vinyl Chloride	118	118	61-133	0	0-20	
Methyl-t-Butyl Ether (MTBE)	102	101	67-127	1	0-20	
Tert-Butyl Alcohol (TBA)	105	87	20-158	19	0-41	
Diisopropyl Ether (DIPE)	93	92	71-125	1	0-16	
Ethyl-t-Butyl Ether (ETBE)	98	94	69-129	4	0-19	
Tert-Amyl-Methyl Ether (TAME)	94	93	70-124	1	0-19	
Ethanol	104	107	39-141	3	0-53	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Project: Los Nietos / 17325516.00001

Date Received:	09/16/03
Work Order No:	03-09-0906
Preparation:	EPA 5030B
Method:	EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-8,455	**Aqueous**	**GC/MS CC**	**N/A**	**09/18/03**	**030917L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	102	84-120	2	0-23	
Carbon Tetrachloride	112	113	66-132	1	0-43	
Chlorobenzene	99	98	89-119	1	0-25	
1,2-Dichlorobenzene	100	100	89-119	1	0-20	
1,1-Dichloroethene	102	102	80-128	1	0-28	
Toluene	99	97	84-126	2	0-31	
Trichloroethene	100	97	69-105	2	0-29	
Vinyl Chloride	117	117	70-124	1	0-36	
Methyl-t-Butyl Ether (MTBE)	94	95	68-134	1	0-25	
Tert-Butyl Alcohol (TBA)	70	73	48-144	5	0-25	
Diisopropyl Ether (DIPE)	90	91	79-121	0	0-27	
Ethyl-t-Butyl Ether (ETBE)	91	92	74-134	2	0-34	
Tert-Amyl-Methyl Ether (TAME)	90	89	73-127	1	0-38	
Ethanol	90	83	49-133	7	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received: 09/16/03
Work Order No: 03-09-0906
Preparation: EPA 3010A Total
Method: EPA 6010B

Project: Los Nietos / 17325516.00001

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
03-09-0859-5	Aqueous	ICP 3300	09/16/03	09/17/03	030916S02

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	99	102	80-120	3	0-20	
Arsenic	80	83	80-120	3	0-20	
Barium	95	100	80-120	3	0-20	
Beryllium	95	97	80-120	3	0-20	
Cadmium	88	91	80-120	3	0-20	
Chromium (Total)	92	95	80-120	3	0-20	
Cobalt	90	92	80-120	2	0-20	
Copper	102	106	80-120	3	0-20	
Lead	73	82	80-120	2	0-20	3
Molybdenum	89	91	80-120	2	0-20	
Nickel	4X	4X	80-120	4X	0-20	Q
Selenium	32	33	80-120	3	0-20	3
Silver	96	99	80-120	3	0-20	
Thallium	84	86	80-120	2	0-20	
Vanadium	94	97	80-120	3	0-20	
Zinc	4X	4X	80-120	4X	0-20	Q

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Project: Los Nietos / 17325516.00001

Date Received: 09/16/03
Work Order No: 03-09-0906
Preparation: EPA 3005A Filt.
Method: EPA 6010B

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-3,247	Aqueous	ICP 3300	09/17/03	030916-I-02	030916L02A

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Antimony	1.00	1.04	104	80-120	
Arsenic	1.00	1.12	112	80-120	
Barium	1.00	1.14	114	80-120	
Beryllium	1.00	1.03	103	80-120	
Cadmium	1.00	1.07	107	80-120	
Chromium (Total)	1.00	1.06	106	80-120	
Cobalt	1.00	1.13	113	80-120	
Copper	1.00	1.02	102	80-120	
Lead	1.00	1.05	105	80-120	
Molybdenum	1.00	1.06	106	80-120	
Nickel	1.00	1.10	110	80-120	
Selenium	1.00	1.01	101	80-120	
Silver	0.500	0.503	101	80-120	
Thallium	1.00	1.07	107	80-120	
Vanadium	1.00	1.05	105	80-120	
Zinc	1.00	1.05	105	80-120	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received: 09/16/03
Work Order No: 03-09-0906
Preparation: EPA 7470A Total
Method: EPA 7470A

Project: Los Nietos / 17325516.00001

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
03-09-0859-5	**Aqueous**	**Mercury**	**09/16/03**	**09/17/03**	**030916S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	98	98	71-134	0	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received: 09/16/03
Work Order No: 03-09-0906
Preparation: EPA 7470A Filt.
Method: EPA 7470A

Project: Los Nietos / 17325516.00001

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-008-1,252	**Aqueous**	**Mercury**	**09/17/03**	**030916L02**	**030916L02A**

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Mercury	0.0100	0.0101	101	90-122	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Date Received: 09/16/03
Work Order No: 03-09-0906
Preparation: N/A
Method: EPA 7196A

Project: Los Nietos / 17325516.00001

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW2	**Aqueous**	**UV 2**	**N/A**	**09/16/03**	**30916CRS1**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	98	98	70-130	0	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

URS Corporation
10235 Systems Parkway, Suite A
Sacramento, CA 95827-3007

Project: Los Nietos / 17325516.00001

Date Received: 09/16/03
Work Order No: 03-09-0906
Preparation: N/A
Method: EPA 7196A

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-05-064-1,181	**Aqueous**	**UV 2**	**09/16/03**	**NONE**	**30916CRL1**

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Chromium, Hexavalent	0.50	0.51	102	80-120	

Calscience Environmental Laboratories, Inc.

GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 03-09-0906

Qualifier	Definition
3	Spike or Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
D	The sample data was reported from a diluted analysis.
ND	Not detected at indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the sample concentration exceeding the spike concentration by a factor of four or greater.

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 03 - 09 - 0906

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: UBS

DATE: 9/16/03

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- ____ Chilled, cooler with temperature blank provided.
- ____ Chilled, cooler without temperature blank.
- ____ Chilled and placed in cooler with wet ice.
- ____ Ambient and placed in cooler with wet ice.
- ____ Ambient temperature.
- ____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

- ____ °C Temperature blank.
- 4 °C IR thermometer.
- ____ Ambient temperature.

Initial: [illegible]

CUSTODY SEAL INTACT:

Sample(s): ____ Cooler: ____ No (Not Intact) : ____ Not Applicable (N/A): [illegible]

Initial: [illegible]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			[illegible]

Initial: [illegible]

COMMENTS:

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date: September 16, 2003

Page 1 of 1

LABORATORY CLIENT: URS Corp.

ADDRESS: 10235 Systems Parkway, Suite A

CITY: Sacramento STATE: CA ZIP: 95827

TEL: 916 231 2305 FAX: 916 366 7048 E-MAIL:

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ COELT REPORTING

SPECIAL INSTRUCTIONS: Filter and Preserve in Lab within 24 hours!

CLIENT PROJECT NAME / NUMBER: Los Nietos/17325516.00001

PROJECT CONTACT: Scott Allin

SAMPLER(S): (SIGNATURE) Kevin Sheridan

COELT LOG CODE: ☐☐☐☐

P.O. NO.:

LAB USE ONLY: 09-0906

COOLER RECEIPT TEMP = ____ °C

REQUESTED ANALYSES

LAB USE ONLY	GEIMS ID	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) or ____	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8260B)	VOCs (5035 / 8260B) EnCore	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EDB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	Cr6 (Hex Chromium)				
1		MW5	9-16	8:40	Water	5						X					X			X				
2		MW4	↓	9:35	↓	↓						X					X			X				
3		MW3	↓	10:35	↓	↓						X					X			X				
4		MW2	↓	11:20	↓	↓						X					X			X				
5		MW1	↓	12:15	↓	↓						X					X			X				

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]		9/16/03	1:05
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature) [signature]	Date: 9/16/03	Time: 1305

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Yellow and Pink copies as noted.

09/10/01 Revision

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