November 26, 2007

Mary A. Siders, PhD.
Bureau of Corrective Actions
Nevada Division of Environmental Protection
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701

For:
National Dry Cleaners, Inc.
c/o Randall Jackson
Williams & Company Consulting, Inc
9237 Ward Parkway, Suite 114.
Kansas City, MO 64114

and:
Al Phillips the Cleaners, Inc.
3250 West Ali Baba Lane. Suite C-F
Las Vegas, Nevada 89119

Re: **Installation of Downgradient Groundwater Monitoring Wells**
Maryland Square Shopping Center
3661 South Maryland Parkway, Las Vegas, Nevada
Facility ID: H-000086

Dear Dr. Siders:

At the request of Al Phillips the Cleaners, Inc. (Al Phillips) and National Dry Cleaners Incorporated (NDCI), URS Corporation (URS) has prepared this letter report to present the findings of the October 2007 installation of downgradient groundwater monitoring wells for environmental site characterization for the former Al Phillips facility located at Maryland Square Shopping Center in Las Vegas, Nevada (Figure 1). Three permanent and one temporary groundwater monitoring wells were installed and sampled to further assess the downgradient extent of the dissolved tetrachloroethene (PCE) impact to groundwater as requested by the Nevada Division of Environmental Protection (NDEP). A summary of the site background, investigation methods, and quality control measures were included in the *Monitoring Well Installation Work Plan* dated September 24, 2007, that was submitted to NDEP and approved by NDEP in a letter dated October 10, 2007.

The purpose of the scope of work presented in the work plan was to evaluate and further characterize groundwater impact in the residential area downgradient of the site to better define the leading edge of the dissolved PCE plume. The scope of work was accomplished by performing the following tasks:

- Install and sample three new permanent groundwater monitoring wells and one temporary well;
- Evaluate the groundwater gradient and flow direction at the east end of the plume;
- Evaluate the downgradient extent of PCE impact to groundwater based on the additional groundwater analysis;
- Initiate groundwater monitoring for the three new wells;

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- Survey the elevations of the three new wells;
- Report findings of the additional groundwater assessment.

Investigation

One temporary well (B-T) was installed on October 24 and sampled on October 25, 2007. Three permanent wells (MW-28, MW-29, and MW-30) were installed and developed from October 24 through October 27, and sampled on November 11, 2007. The locations of these wells are shown in Figure 2 and the borehole logs are attached. Reference elevations for the permanent wells are scheduled to be surveyed in December 2007. Other well characteristics are summarized in Table 1. Groundwater sample collection logs for the permanent wells, which include measurements of field parameters during purging of the wells, are also attached. Groundwater samples were submitted to a Nevada certified analytical laboratory for analysis of volatile organic compounds (VOCs) by U.S. Environmental Protection Agency (USEPA) method 8260B. Additionally, groundwater samples from the permanents wells were analyzed for dissolved iron and manganese; chloride, nitrate, and sulfate; alkalinity; and total organic carbon by USEPA methods SW6020, 300.0/SW9056, SM2320B, and SW9060/415.1/SM5310C, respectively. Residual investigate material were placed in 55-gallon drums and are being disposed of in accordance with state and federal regulations.

TABLE 1
SUMMARY OF DOWNGRADIENT WELL CHARACTERISTICS
Maryland Square Shopping Center

Well ID	Install Date	Top of Casing (Elevation)	Screen Depth (feet BTOC)	Sample Date	Depth to Water (feet BTOC)
SHALLOW WELLS					
B-T	10/24/2007	NM	22-25	10/25/2007	20.04
MW-28	10/25/2007	*	15-35	11/6/2007	14.02
MW-29	10/24/2007	*	15-35	11/6/2007	14.20
MW-30	10/26/2007	*	20-40	11/6/2007	20.11

Note: * Wells are scheduled to be surveyed in December 2007. BTOC = below top of casing.

Analytical Results

Well locations and PCE concentrations are shown on Figure 2, and Table 2 summarizes analytical data for VOCs, specifically PCE, trichlorothene (TCE), and cis-1,2-dichloroethene. An equipment blank (MW29-EB) and a duplicate sample (MW-28D) were collected and analyzed for quality control purposes. The metals, ions, and alkalinity data are summarized in Table 3. The laboratory analytical reports are attached.

TABLE 2
SELECTED VOC CONCENTRATIONS IN MONITORING WELLS
Maryland Square Shopping Center

Well ID	Sample Date	Concentration (µg/L)		
		Perchloroethylene (PCE)	Trichloroethene (TCE)	Cis-1,2-Dichlorethene
B-T	10/25/2007	550	ND	ND
MW-28	11/6/2007	3.0	ND	ND
MW-28D	11/6/2007	2.6	ND	ND
MW-29	11/6/2007	2.5	ND	ND
MW-30	11/6/2007	74	ND	ND
MW-29-EB	11/6/2007	ND	ND	ND

Note: µg/L = micrograms per liter, ND = not detected above the laboratory reporting limit

TABLE 3
SUMMARY OF OTHER ANALYTICAL DATA
Maryland Square Shopping Center

Well ID	Sample Date	Concentration (mg/L)						
		Total Iron	Dissolved Manganese	Chloride	Nitrate as N	Sulfate	Total Alkalinity	Total Organic Carbon
MW-28	11/6/2007	1.9	0.021	250	5.9	2,000	250	1.2
MW-29	11/6/2007	1.2	<0.0050	250	6.1	1,900	260	24.0
MW-30	11/6/2007	1.9	0.046	320	6.7	3,700	270	1.6

Note: mg/L = milligrams per liter

Findings

Figure 2 shows the PCE concentrations from the select downgradient shallow monitoring wells sampled during the September 2007 sampling event and PCE concentrations detected in the new wells. PCE concentrations detected in wells MW-28 and MW-29 on Ottawa Drive were below 5 µg/L. This data seems to indicate that these wells are located near the southern edge of the PCE plume and that it does not divert to the south. The PCE concentration detected in well MW-30 on Geronimo Way was 74 µg/L. This data suggests that this well is close to the eastern end of the PCE plume. The PCE concentration detected in the temporary well B-T located near the intersection of Cherokee Lane and Spencer Street was 550 µg/L. This data seems to indicate that the plume trends in a more northeasterly direction as it crosses Spencer Street. This temporary well was located approximately 750 feet from the irrigation well located near the maintenance facility on the adjacent golf course (Figure 2).

NDEP requires the following statements to be provided by the responsible Environmental Manager for this project (per NRS 459.500):

> *"I hereby certify that all laboratory analytical data was generated by a laboratory certified by the NDEP for each constituent and media presented herein."*
>
> *"I, Scott Ball, hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state, and local statutes, regulations and ordinances."*

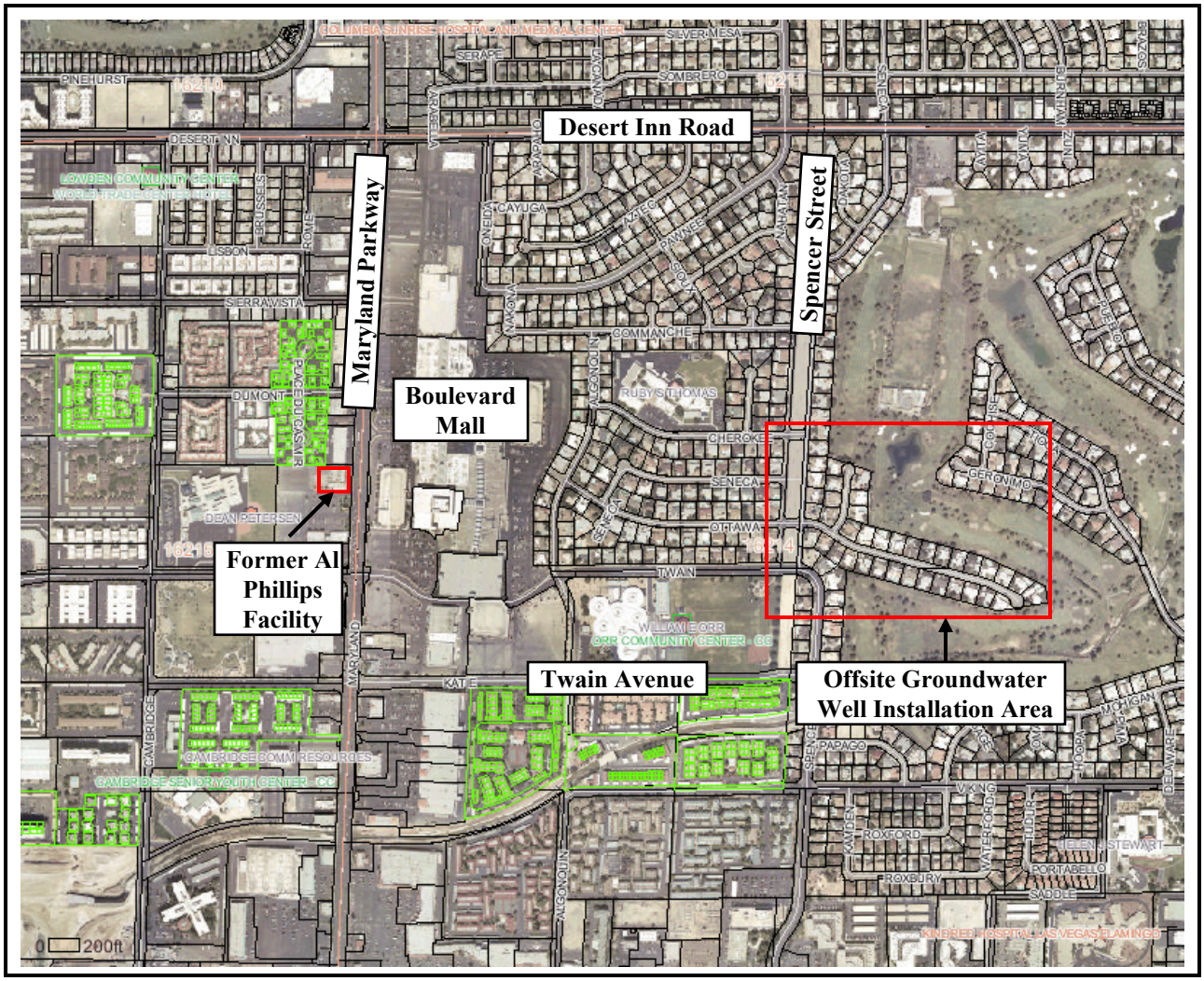
If you have questions regarding this data please contact the undersigned at 702-492-7921 or at scott_ball@urscorp.com.

Sincerely,
URS Corporation

Scott Ball

Scott Ball, C.E.M. 1316, expires 10/15/09
Senior Project Manager

cc: Mr. Randall L. Jackson, NDCI
Mr. Dennis P. Connair, URS



Source: Clark County Assessors Web Site
Scale: 200 feet

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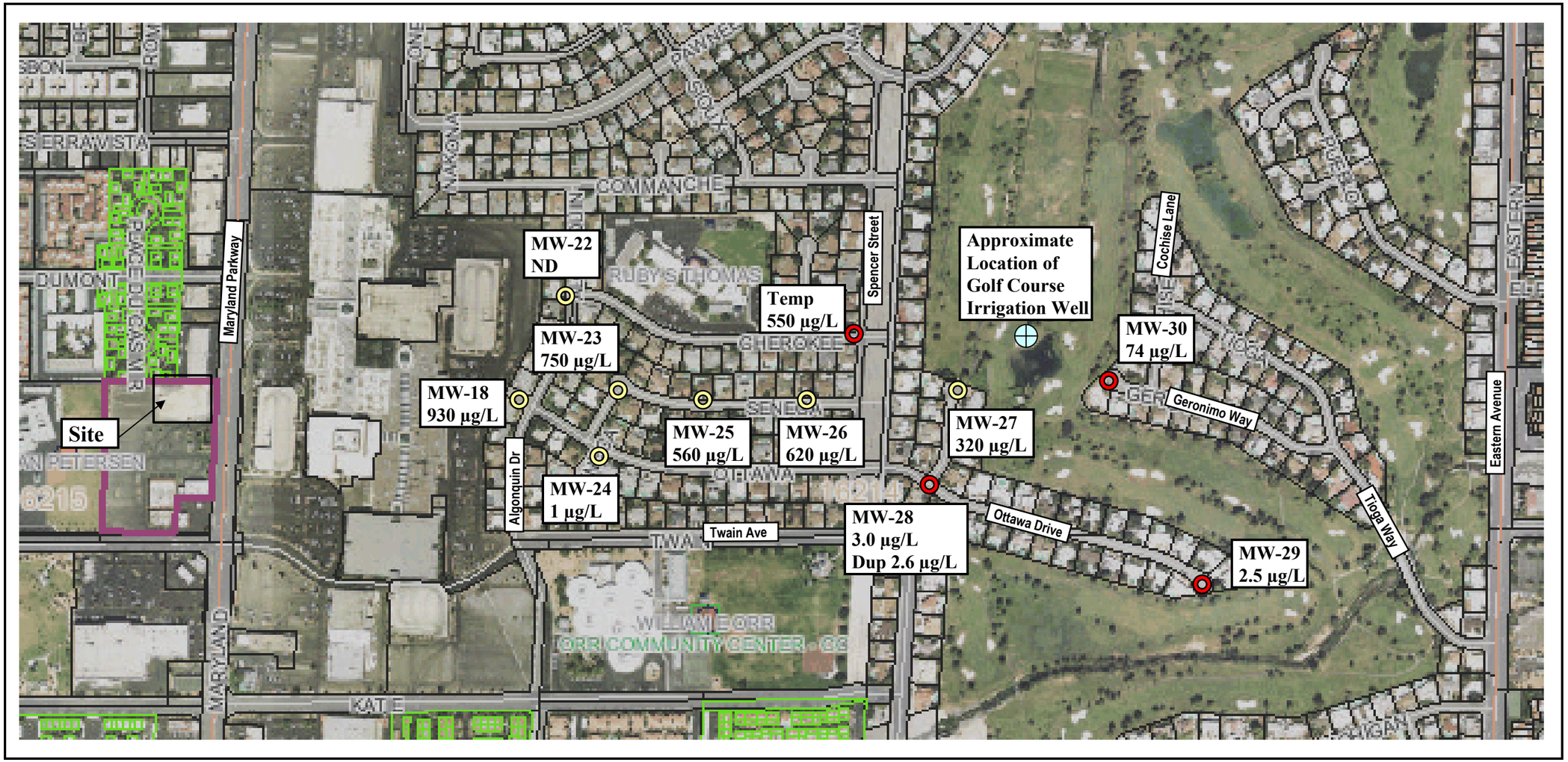
SITE LOCATION MAP

Al Phillips The Cleaner
Groundwater Monitoring Well Installation
Maryland Square Shopping Center
3661 South Maryland Parkway
Las Vegas, Nevada

November 2007
Job No. 26698724

Well Installation Fig 1.ppt FIGURE 1



Source: Clark County Assessors Web Site
Scale: 0Feet 500 Feet

Legend:

MW-29 Approximate Location of New Monitoring Wells

MW-27 Approximate Location of Selected Existing Monitoring Wells

N

URS

MONITORING WELL LOCATIONS AND PCE CONCENTRATONS

Al Phillips The Cleaner
Downgradient Groundwater Monitoring Well Installation
Maryland Square Shopping Center
3661 South Maryland Parkway
Las Vegas, Nevada

November 2007
Job No. 26698724
Well Installation Fig 2.ppt

FIGURE 2

BOREHOLE LOG
B-T

Al Phillips The Cleaner Maryland Square Shopping Center Groundwater Monitoring Well Installation Las Vegas, Nevada Project No. 26698724	Date Started: Date Completed: Drilling Company: Drilling Method: Sampling Method: Logged By:	10/24/2007 10/25/2007 WDC Explorations Hollow-Stem Auger Grab/Temporary PVC casing Holly Woodward

Depth In Feet	Time (0100 hrs)	Sample	Blow Count (ft)	PID/FID (ppm)	Sample Number	USCS/Other	Graphic Log	SOIL DESCRIPTION	Well: B-T Elev.:	Remarks/Well Information
0								0-4.5” ASPHALT		WELL CONSTRUCTION Date Compl.: 10/24/2007 Comp. Rep: H. Woodward
1						Af		@ 4.5” to 3’ silty SAND: fine-grained, lt. brown, sl. moist, med. dense, poorly graded w. sl. plasticity, some pea gravel, artificial fill		
2										SURFACE COMPLETION Type: NA Vault: NA Diameter: NA Seal: NA Depth: NA
3						ML		3’-6’ sandy SILT: lt. brown, sl. moist		
4										
5										WELL CASING Material: PVC Diameter: 1.25” Depth: 0-22’ Joints: flush
6						SM		6’-15’ silty SAND: brown, sl. moist, poorly graded, some gravel		
7										
8										WELL SCREEN Material: PVC Diameter: 1.25” Depth: 22-25’ Joints: flush Opening: 0.02” Slotted Cap: Expanding
9										
10										
11										
12										SAND FILTER PACK Type : Monterey Size: 3 Depth: 19-25’
13										
14										
15						CL		15’-17.5’ CLAY: brown, sl. moist, med. dense, poorly graded, some sand and gravel		ANNULUS SEAL Sand Pack: NA Depth: NA Borehole: NA Depth: NA
16										
17								@17.5’ same as above but very moist		
18										REMARKS
19										
20										
21										
22										
23										
24										
25								Bottom of borehole @ 25’bgs Encountered Groundwater at approx. 22’		

BOREHOLE LOG
MW-28

Al Phillips The Cleaner Maryland Square Shopping Center Groundwater Monitoring Well Installation Las Vegas, Nevada Project No. 2698724	Date Started: Date Completed: Drilling Company: Drilling Method: Sampling Method: Logged By:	10/25/2007 10/25/2007 WDC Exploration Hollow Stem Auger None Holly Woodward

Depth In Feet	Time (0100 hrs)	Sample	Well Material Log	PID/FID (ppm)	Sample Number	USCS/Other	Graphic Log	SOIL DESCRIPTION	Well: MW-28 Elev.:	Remarks/Well Information
0	0915							ASPHALT		WELL CONSTRUCTION Date Compl.: 10/25/2007 Comp. Rep: H. Woodward
						GW		6”-1’ GRAVEL		
1										
2										SURFACE COMPLETION Type: Flush Mount Vault: Traffic Diameter: 12” Seal: Concrete Depth: 0’-1’
3						Af		1’-6’ Silty SAND: fine-grain, lt. brown, sl. moist, med. dense., poorly graded w. sl. plasticity, Artificial fill		
4										
5										WELL CASING Material: PVC Diameter: 4” Depth: 0’-15’ Joints: 5’, 25’
6										
7										
8						SM		6’-12’ silty SAND: brown, sl. moist		WELL SCREEN Material: PVC Diameter: 4” Depth: 15’-35’ Joints: 15’, 25’ Opening: 0.02” slotted Cap: expanding
9										
10										
11										
12										SAND FILTER PACK Type : Monterey Size: 3 Depth: 12’-35’
13						SM		12’-15’ silty SAND: brown, sl. moist, some pea gravel and gravel		
14										
15								15’-35’ silty SAND: brown		ANNULUS SEAL Sand Pack: bentonite Depth: 9’-12’ Borehole: concrete Depth: 0’-9’
16										
17	1020							17’-17.5’ encountered some gravel		
18										REMARKS No sampling was performed Borehole was drilled and a Monitor well was installed.
19										
20						SM				
21										
22										
23										
24										
25										

BOREHOLE LOG
MW-28

Al Phillips The Cleaner Maryland Square Shopping Center Groundwater Monitoring Well Installation Las Vegas, Nevada Project No. 2698724	Date Started: Date Completed: Drilling Company: Drilling Method: Sampling Method: Logged By:	10/25/2007 10/25/2007 WDC Exploration Hollow Stem Auger None Holly Woodward

Depth In Feet	Time (0100 hrs)	Sample	Well Material Log	PID/FID (ppm)	Sample Number	USCS/Other	Graphic Log	SOIL DESCRIPTION	Well: MW-28 Elev.:	Remarks/Well Information
26										
27										
28										
29										
30						SM		Same as above		
31										
32										
33										
34										
35								Bottom of borehole @ 35 ft. bgs Groundwater encountered at Approximately 15'-16' bgs.		
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
51										

BOREHOLE LOG
MW-29

Al Phillips The Cleaner Maryland Square Shopping Center Groundwater Monitoring Well Installation Las Vegas, Nevada Project No. 2698724	Date Started: Date Completed: Drilling Company: Drilling Method: Sampling Method: Logged By:	10/24/2007 10/25/2007 WDC Exploration Hollow Stem Auger None Holly Woodward	

Depth In Feet	Time (0100 hrs)	Sample	Well Material Log	PID/FID (ppm)	Sample Number	USCS/Other	Graphic Log	SOIL DESCRIPTION	Well: MW-29 Elev.:	Remarks/Well Information
0	1255							ASPHALT		WELL CONSTRUCTION Date Compl.: 10/25/2007 Comp. Rep: H. Woodward
1						Af		6”-1.5’ silty SAND: brown, sl. moist, Med. dense, some gravel, Artificial fill		
2						ML		1.5’-4’ sandy SILT: lt. brown, roots in soil		SURFACE COMPLETION Type: Flush Mount Vault: Traffic Diameter: 12” Seal: Concrete Depth: 0’-1’
3										
4										WELL CASING Material: PVC Diameter: 4” Depth: 0’-15’ Joints: 5’, 15’
5										
6										
7										
8										WELL SCREEN Material: PVC Diameter: 4” Depth: 15’-35’ Joints: 15’, 25’ Opening: 0.02” slotted Cap: expanding
9										
10										
11						SM		4’-19’ silty SAND: brown, sl. moist, some gravel		
12										SAND FILTER PACK Type : Monterey Size: 3 Depth: 12’-35’
13										
14										
15										ANNULUS SEAL Sand Pack: bentonite Depth: 9’-12’ Borehole: concrete Depth: 0’-9’
16										
17										
18										REMARKS No sampling was performed Borehole was drilled and a Monitor well was installed.
19										
20										
21										
22						CL		19’-35’ CLAY: brown, wet, some pea gravel and sand		
23										
24										
25										

BOREHOLE LOG
MW-29

Al Phillips The Cleaner Maryland Square Shopping Center Groundwater Monitoring Well Installation Las Vegas, Nevada Project No. 2698724	Date Started: Date Completed: Drilling Company: Drilling Method: Sampling Method: Logged By:	10/24/2007 10/25/2007 WDC Exploration Hollow Stem Auger None Holly Woodward	

Depth In Feet	Time (0100 hrs)	Sample	Well Material Log	PID/FID (ppm)	Sample Number	USCS/Other	Graphic Log	SOIL DESCRIPTION	Well: MW-29 Elev.:	Remarks/Well Information
26										
27										
28										
29										
30						CL		Same as above		
31										
32										
33										
34										
35								Bottom of borehole @ 35 ft. bgs Groundwater encountered at Approximately 18.5' bgs.		
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
51										

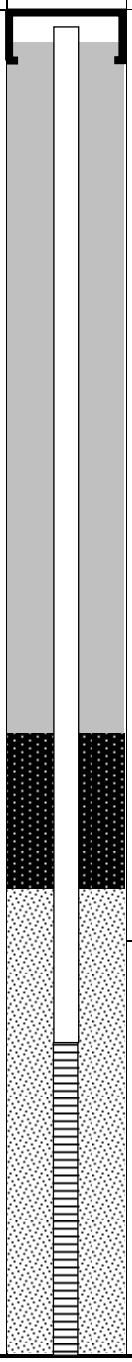
BOREHOLE LOG
MW-30

Al Phillips The Cleaner
Maryland Square Shopping Center
Groundwater Monitoring Well Installation
Las Vegas, Nevada
Project No. 2698724

Date Started:	10/26/2007
Date Completed:	10/26/2007
Drilling Company:	WDC Exploration
Drilling Method:	Hollow Stem Auger
Sampling Method:	None
Logged By:	Holly Woodward

Depth In Feet	Time (0100 hrs)	Sample	Well Material Log	PID/FID (ppm)	Sample Number	USCS/Other	Graphic Log	SOIL DESCRIPTION
0	0900							Asphalt
1						Af		6”-2’ Silty SAND: brown, sl. moist, Med. dense, some gravel, Artificial fill
2								
3						ML		2’-5’ Sandy SILT: brown, some pea gravel and gravel
4								
5								
6								
7								
8						ML		5’-13’ sandy SILT: brown, some pea gravel, gravel, and clay
9								
10								
11								
12								
13						SM		13’-14’ Silty SAND: brown with some pea gravel
14								
15								
16								
17								
18								
19						GC		14’-28’ Sandy, silty GRAVEL: poorly graded
20								
21								
22								
23								
24	0945							
25								

Well: MW-30
Elev.:



Remarks/Well Information

WELL CONSTRUCTION
Date Compl.: 10/26/2007
Comp. Rep: H. Woodward

SURFACE COMPLETION
Type: Flush Mount
Vault: Traffic
Diameter: 12”
Seal: Concrete
Depth: 0’-1’

WELL CASING
Material: PVC
Diameter: 4”
Depth: 0’-20’
Joints: 10’, 20’

WELL SCREEN
Material: PVC
Diameter: 4”
Depth: 20’-40’
Joints: 20’, 30’
Opening: 0.02” slotted
Cap: expanding

SAND FILTER PACK
Type : Monterey
Size: 3
Depth: 17’-40’

ANNULUS SEAL
Sand Pack: bentonite
Depth: 14’-17’
Borehole: concrete
Depth: 0’-14’

REMARKS
No sampling was performed
Borehole was drilled and a Monitor well was installed.

BOREHOLE LOG
MW-30

Al Phillips The Cleaner Maryland Square Shopping Center Groundwater Monitoring Well Installation Las Vegas, Nevada Project No. 2698724	Date Started: Date Completed: Drilling Company: Drilling Method: Sampling Method: Logged By:	10/26/2007 10/26/2007 WDC Exploration Hollow Stem Auger None Holly Woodward	

Depth In Feet	Time (0100 hrs)	Sample	Well Material Log	PID/FID (ppm)	Sample Number	USCS/Other	Graphic Log	SOIL DESCRIPTION	Well: MW-30 Elev.:	Remarks/Well Information
26						GC		Same as above		
27										
28						SM		28'-33' Silty SAND: brown, wet, some pea gravel		
29										
30										
31										
32										
33						CL		33'-40' Sandy, silty CLAY: hard, wet		
34										
35										
36										
37										
38										
39										
40	1020							Bottom of borehole @ 40 ft. bgs Groundwater encountered at Approximately 24' bgs.		
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
51										

URS

GROUNDWATER SAMPLE COLLECTION LOG

Project Name: AL PHILLIPS - MARYLAND SQUARE
Job Number: 26698724
Sample Collected By: Holly Woodward
Date & Time Collected: 11-6-07 1149

Sample Number: MW - 30
Screen Depth: 20 - 40 ft
Depth to Well Bottom: 39.72

I. EQUIPMENT

Purging Method/Equipment: LF/T
Sampling Equipment: LF/T

II. PURGING INFORMATION

Depth to Water (Static) 20.11 (feet) Depth to Water (Pumping) 20.13 (feet)
Pump Rate .1 (Liters/minute) Pump Placement 30 (feet)

Time (min)	Pumping Rates (L/min)	Water Level (ft)	pH (s.u)	Conductance (mS/cm)	Turbidity (ntu)	DO (mg/L)	T (°C)	TDS (g/L)	ORP (mV)
0	~~.100~~		6.57	0.367	144.0	7.19	22.2	2.4	223
10	~~.100~~ .1	20.12	6.75	0.368	133.0	3.44	23.1	2.4	221
20	.1	↓	6.76	0.368	116.0	3.42	23.9	2.4	207
30	↓	20.13	6.78	0.369	112.0	3.36	24.0	2.4	176
40		↓	6.79	0.369	117.0	3.20	24.1	2.4	152
45			6.80	0.369	118.0	3.18	24.2	2.4	150
50			6.80	0.369	121.0	3.19	24.17	2.4	145
55			6.80	0.369	129.0	3.15	24.18	2.4	143
60		↓	6.80	0.369	132.0	3.13	24.19	2.4	143
65		20.13	6.81	0.369	138.0	3.13	24.19	2.4	141
70		↓	6.80	0.368	136.0	3.11	24.26	2.4	139
75			6.80	0.368	138.0	3.10	24.26	2.4	138
80		↓	6.81	0.368	138.0	3.10	24.25	2.4	136
85	↓	20.13	6.81	0.368	144.0	3.09	24.23	2.4	135

Color/composition of water at purging start: Clear At end of purging: Clear
Total Volume Purged: 8.5L Total Purge Time: 85min Purged Dry (Y/N) N

III. SAMPLE PACKAGING

Container Type & Volume	Filter (Y/N)	Preservatives	Parameters
3 x 40ml VOA	N	HCl	VOCs (8260B)
1 x p	↓	HNO3	Iron + Manganese (6020)
1 x p	↓	none	Cl, NO3 SO4 (300) Alk (310)
1 x ag	—	H3PO4	TOC (415.1)

Comments: Turbidity high - new well. Had to change temp meas to 100th's

Notes: LF = Low flow purging method /sampling equipment. T = Tsunami pump. G = Grundfos pump. DB = Dedicated bailer sampling equiment.
3W = 3 well volume purging method. 3 well volume purging method = length of static water column * well casing volume (gal/ft: 2" = 0.16, 4" = 0.65) * 3

URS Corportation
811 Grier Drive
Las Vegas, NV 89119
Phone: (702) 492-7900
Fax: (702) 492-9149

URS

GROUNDWATER SAMPLE COLLECTION LOG

Project Name: AL PHILLIPS - MARYLAND SQUARE
Job Number: 26698724
Sample Collected By: Holly woodward
Date & Time Collected: 11-6-07 1552

Sample Number: MW - 29
Screen Depth: 15 - 35 ft
Depth to Well Bottom: 34 40

I. EQUIPMENT

Purging Method/Equipment: LF/T
Sampling Equipment: LF/T

II. PURGING INFORMATION

Depth to Water (Static) 14.20 (feet) Depth to Water (Pumping) 14.21 (feet)
Pump Rate .2 (Liters/minute) Pump Placement 25 (feet)

Time (min)	Pumping Rates (L/min)	Water Level (ft)	pH (s.u)	Conductance (mS/cm)	Turbidity (ntu)	DO (mg/L)	T (°C)	TDS (g/L)	ORP (mV)
0	.1	14.21	7.64	4.7	-2.3	12.60	24.77	0.02	205
5	↓	↓	7.82	3.3	-2.2	11.42	24.37	0.02	215
10		14.21	7.66	3.6	-2.1	11.26	24.14	0.03	226
15		↓	6.71	0.163	71.4	12.91	22.91	1.5	246
20			6.82	0.384	75.2	12.73	22.30	2.5	237
25		↓	6.83	0.418	60.7	8.23	22.00	2.7	199
30		14.21	6.82	0.422	54.2	7.35	21.96	2.7	175
35		↓	6.79	0.425	41.9	6.55	21.89	2.7	144
40			6.76	0.426	34.3	6.26	21.88	2.7	129
45		↓	6.75	0.428	25.2	6.12	21.99	2.7	119
50	↓	14.21	6.77	0.426	23.0	6.07	21.98	2.7	116
55	.2	↓	6.78	0.426	21.3	6.07	21.96	2.7	115
60			6.82	0.426	19.0	6.03	21.92	2.7	112
65			6.83	0.426	17.9	6.01	21.88	2.7	111
70			6.84	0.426	17.2	6.06	21.81	2.7	109
75	↓	↓	6.89	0.426	15.1	6.04	21.80	2.7	108

Color/composition of water at purging start: clear At end of purging: clear
Total Volume Purged: 9.5L Total PurgeTime: 75 min Purged Dry (Y/N) N

III. SAMPLE PACKAGING

Container Type & Volume	Filter (Y/N)	Preservatives	Parameters
3 x 40ml VOA	N	HCl	VOCs (8260B)
1 x p	↓	HNO3	Iron + Manganese
1 x p		none	Cl, NO3, SO4 (300) Alk (310)
1 x AG		H3PO4	TOC (415.1)

Comments: pumped slow because of turbidity 5 gal bottom

Notes: LF = Low flow purging method /sampling equipment. T = Tsunami pump. G = Grundfos pump. DB = Dedicated bailer sampling equiment.
3W = 3 well volume purging method. 3 well volume purging method = length of static water column * well casing volume (gal/ft: 2" = 0.16, 4" = 0.65) * 3

URS Corporation
811 Grier Drive
Las Vegas, NV 89119
Phone: (702) 492-7900
Fax: (702) 492-9149

URS

GROUNDWATER SAMPLE COLLECTION LOG

Project Name: AL PHILLIPS - MARYLAND SQUARE
Job Number: 26698724
Sample Collected By: Holly Woodward
Date & Time Collected: 11-6-07 1422

Sample Number: MW - 28
Screen Depth: 15 - 35 ft
Depth to Well Bottom: 34.92

I. EQUIPMENT

Purging Method/Equipment: LF/T
Sampling Equipment: LF/T

II. PURGING INFORMATION

Depth to Water (Static) 14.02 (feet) Depth to Water (Pumping) 14.04 (feet)
Pump Rate .1 (Liters/minute) Pump Placement 25 (feet)

Time (min)	Pumping Rates (L/min)	Water Level (ft)	pH (s.u)	Conductance (mS/cm)	Turbidity (ntu)	DO (mg/L)	T (°C)	TDS (g/L)	ORP (mV)
0	.100	14.04	6.74	50.3	52.4	8.66	28.15	0.28	163
10		↓	6.94	16.8	55.5	11.37	27.63	0.06	192
15		14.04	7.14	91.8	103.0	12.07	25.60	2.0	198
20			6.83	0.323	119.7	11.62	25.59	2.2	198
25			6.86	0.355	170.0	11.36	25.60	2.4	197
30			6.89	0.380	177.0	11.11	25.71	2.5	196
35			6.83	0.390	179.0	10.88	25.88	2.5	195
40		14.04	6.84	0.397	173.0	10.72	26.01	2.5	193
45			6.88	0.407	162.0	10.36	26.32	2.6	184
50			6.88	0.411	168.0	10.23	26.44	2.6	178
55			6.81	0.414	175.0	10.06	26.60	2.7	166
60			6.81	0.416	182.0	9.84	26.78	2.7	133
65		14.04	6.82	0.415	192.0	9.74	26.80	2.7	126
70			6.80	0.416	191.0	9.69	26.75	2.7	125
75			6.80	0.415	195.0	9.67	26.72	2.7	126
80	↓	↓	6.80	0.415	196.0	9.62	26.75	2.7	125

Color/composition of water at purging start: Clear At end of purging: Clear
Total Volume Purged: 8L Total PurgeTime: 80 min Purged Dry (Y/N) N

III. SAMPLE PACKAGING

Container Type & Volume	Filter (Y/N)	Preservatives	Parameters
3 x 40ml VOA	N	HCl	VOCs (8260B)
1 x p	↓	HNO_3	Iron + Manganese
1 x p		~~Cl, HNO_3~~ HW none	Cl, NO_3, SO_4 (300) Alk (310)
1 x ag		H_3PO_4	TOC (415.1)

Comments: Turbidity high - new well. Soft bottom

Notes: LF = Low flow purging method /sampling equipment. T = Tsunami pump. G = Grundfos pump. DB = Dedicated bailer sampling equiment.
3W = 3 well volume purging method. 3 well volume purging method = length of static water column * well casing volume (gal/ft: 2" = 0.16, 4" = 0.65) * 3

URS Corportation
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Las Vegas, NV 89119
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Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

URS Corporation
811 Grier Dr.
Las Vegas, NV 89119
Job#: 26698724

Attn: Holly Woodward
Phone: (702) 492-7922
Fax: (702) 492-9149

Alpha Analytical Number: URS07102921-01A
Client I.D. Number: B-T

Sampled: 10/25/07
Received: 10/27/07
Analyzed: 10/31/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	40 µg/L
2	Vinyl chloride	ND	10 µg/L
3	Chloroethane	ND	10 µg/L
4	Bromomethane	ND	40 µg/L
5	Trichlorofluoromethane	ND	10 µg/L
6	1,1-Dichloroethene	ND	10 µg/L
7	Dichloromethane	ND	40 µg/L
8	trans-1,2-Dichloroethene	ND	10 µg/L
9	1,1-Dichloroethane	ND	10 µg/L
10	cis-1,2-Dichloroethene	ND	10 µg/L
11	Chloroform	ND	10 µg/L
12	1,2-Dichloroethane	ND	10 µg/L
13	1,1,1-Trichloroethane	ND	10 µg/L
14	Carbon tetrachloride	ND	10 µg/L
15	1,2-Dichloropropane	ND	10 µg/L
16	Trichloroethene	ND	10 µg/L
17	Bromodichloromethane	ND	10 µg/L
18	cis-1,3-Dichloropropene	ND	10 µg/L
19	trans-1,3-Dichloropropene	ND	10 µg/L
20	1,1,2-Trichloroethane	ND	10 µg/L
21	Dibromochloromethane	ND	10 µg/L
22	Tetrachloroethene	550	10 µg/L
23	Chlorobenzene	ND	10 µg/L
24	Bromoform	ND	10 µg/L
25	1,1,2,2-Tetrachloroethane	ND	10 µg/L
26	1,3-Dichlorobenzene	ND	10 µg/L
27	1,4-Dichlorobenzene	ND	10 µg/L
28	1,2-Dichlorobenzene	ND	10 µg/L
29	Surr: 1,2-Dichloroethane-d4	114	%REC
30	Surr: Toluene-d8	97	%REC
31	Surr: 4-Bromofluorobenzene	94	%REC

Reporting Limits were increased due to high concentrations of target analytes.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com
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11/2/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: URS07102921 **Project:** 26698724

Alpha's Sample ID	Client's Sample ID	Matrix	pH
07102921-01A	B-T	Aqueous	6

11/2/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *02-Nov-07*

QC Summary Report

Work Order: 07102921

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **07103106.D** Batch ID: **MS15W1031A** Analysis Date: **10/31/2007 09:49**

Sample ID: **MBLK MS15W1031A** Units : **µg/L** Run ID: **MSD_15_071031A** Prep Date: **10/31/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloromethane	ND	2								
Vinyl chloride	ND	1								
Chloroethane	ND	1								
Bromomethane	ND	2								
Trichlorofluoromethane	ND	1								
1,1-Dichloroethene	ND	1								
Dichloromethane	ND	2								
trans-1,2-Dichloroethene	ND	1								
1,1-Dichloroethane	ND	1								
cis-1,2-Dichloroethene	ND	1								
Chloroform	ND	1								
1,2-Dichloroethane	ND	1								
1,1,1-Trichloroethane	ND	1								
Carbon tetrachloride	ND	1								
1,2-Dichloropropane	ND	1								
Trichloroethene	ND	1								
Bromodichloromethane	ND	1								
cis-1,3-Dichloropropene	ND	1								
trans-1,3-Dichloropropene	ND	1								
1,1,2-Trichloroethane	ND	1								
Dibromochloromethane	ND	1								
Tetrachloroethene	ND	1								
Chlorobenzene	ND	1								
Bromoform	ND	1								
1,1,2,2-Tetrachloroethane	ND	1								
1,3-Dichlorobenzene	ND	1								
1,4-Dichlorobenzene	ND	1								
1,2-Dichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	11.3		10		113	75	128			
Surr: Toluene-d8	9.92		10		99	80	120			
Surr: 4-Bromofluorobenzene	9.6		10		96	80	120			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **07103103.D** Batch ID: **MS15W1031A** Analysis Date: **10/31/2007 08:32**

Sample ID: **LCS MS15W1031A** Units : **µg/L** Run ID: **MSD_15_071031A** Prep Date: **10/31/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	9.82	1	10		98	80	120			
Trichloroethene	10.6	1	10		106	70	130			
Chlorobenzene	10	1	10		100	70	130			
Surr: 1,2-Dichloroethane-d4	9.91		10		99	75	128			
Surr: Toluene-d8	9.73		10		97	80	120			
Surr: 4-Bromofluorobenzene	9.83		10		98	80	120			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **07103107.D** Batch ID: **MS15W1031A** Analysis Date: **10/31/2007 10:12**

Sample ID: **07102922-03AMS** Units : **µg/L** Run ID: **MSD_15_071031A** Prep Date: **10/31/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	40.3	2.5	50	0	81	66	132			
Trichloroethene	41.9	2.5	50	0	84	69	130			
Chlorobenzene	41.4	2.5	50	0	83	70	130			
Surr: 1,2-Dichloroethane-d4	51.4		50		103	75	128			
Surr: Toluene-d8	47.7		50		95	80	120			
Surr: 4-Bromofluorobenzene	47.9		50		96	80	120			

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *02-Nov-07*

QC Summary Report

Work Order: 07102921

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **07103108.D** Batch ID: **MS15W1031A** Analysis Date: **10/31/2007 10:35**

Sample ID: **07102922-03AMSD** Units : **µg/L** Run ID: **MSD_15_071031A** Prep Date: **10/31/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	43.9	2.5	50	0	88	66	132	40.3	8.6(20)	
Trichloroethene	46	2.5	50	0	92	69	130	41.9	9.4(20)	
Chlorobenzene	45.8	2.5	50	0	92	70	130	41.42	10.0(20)	
Surr: 1,2-Dichloroethane-d4	50.6		50		101	75	128			
Surr: Toluene-d8	47.9		50		96	80	120			
Surr: 4-Bromofluorobenzene	47.7		50		95	80	120			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Billing Information :

AMENDED

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

NV

WorkOrder : URSL07102921

Report Due By : 5:00 PM On : 05-Nov-07

Client:
URS Corporation
811 Grier Dr.

Las Vegas, NV 89119

Report Attention	Phone Number	EMail Address
Holly Woodward	(702) 492-7922 x	holly_woodward@urscorp.com

EDD Required : **No**

Sampled by : Client

PO : APMS

Client's COC # : 19400 Job : 26698724

Cooler Temp	Samples Received	Date Printed
4 °C	27-Oct-07	30-Oct-07

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests: VOC_W								Sample Remarks
URS07102921-01A	B-T	AQ	10/25/07 14:55	3	0	5	8010								

Comments: Samples received Sat 10/27/07, kept cold and secure until login on 10/29/07. Security seals intact. Frozen ice. Amended 10/30/07 to correct PO number due to login error.KM :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	10/30/07 0920

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

NV

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : URSL07102921

Report Due By : 5:00 PM On : 05-Nov-07

Client:
URS Corporation
811 Grier Dr.

Las Vegas, NV 89119

Report Attention	Phone Number	EMail Address
Holly Woodward	(702) 492-7922 x	holly_woodward@urscorp.com

EDD Required : **No**

Sampled by : Client

PO :

Client's COC # : 19400 Job : 26698724/APMS

Cooler Temp	Samples Received	Date Printed
4 °C	27-Oct-07	29-Oct-07

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests VOC_W								Sample Remarks
URS07102921-01A	B-T	AQ	10/25/07 14:55	3	0	5	8010								

Comments: Samples received Sat 10/27/07, kept cold and secure until login on 10/29/07. Security seals intact. Frozen ice. :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	10/29/07 1025

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name URS
Address 811 Grier Drive
City, State, Zip Las Vegas, NV 89119
Phone Number 702-492-7900 Fax 492-9149

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ____ CA ____ NV X WA ____
ID ____ OR ____ OTHER ____

Page # ____ **of** ____

Client Name: Same	~~P.O.~~ # Job 26698724	~~Job~~ # P.O. APMS	
Address	EMail Address ~~woodwardholly@hw~~ holly-woodward@urscorp.com		
City, State, Zip	Phone # 702-492-7922	Fax # 492-9149	
	Report Attention Holly Woodward		

Required QC Level? I II III IV

EDD / EDF? YES ____ NO ____

Global ID # ____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	Analyses Required: 8010/8260B						REMARKS
1455	10/25/07	AQ	URS07102921-01	B-T			3VOA	X						

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	Holly Woodward	Holly Woodward	URS	10/26/07	12:10
Received by	V. Smith	V. SMITH	[illegible]	10-26-07	12:10
Relinquished by	V. Smith	V. SMITH	[illegible]	10-26-07	4:00
Received by	K Murray	K Murray	AAI	10/29/07	1015
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

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ANALYTICAL REPORT

URS Corporation
811 Grier Dr.
Las Vegas, NV 89119

Attn: Holly Woodward
Phone: (702) 492-7922
Fax: (702) 492-9149
Date Received 11/07/07

Job#: 26698724

Metals by ICPMS
EPA Method SW6020

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**AP MS MW-30**					
Lab ID :	URS07110701-01A	Manganese (Mn)	0.046	0.0050 mg/L	11/06/07	11/07/07
		Iron (Fe)	1.9	0.30 mg/L	11/06/07	11/07/07
Client ID :	**AP MS MW-28**					
Lab ID :	URS07110701-02A	Manganese (Mn)	0.021	0.0050 mg/L	11/06/07	11/07/07
		Iron (Fe)	1.9	0.30 mg/L	11/06/07	11/07/07
Client ID :	**AP MS MW-29**					
Lab ID :	URS07110701-04A	Manganese (Mn)	ND	0.0050 mg/L	11/06/07	11/07/07
		Iron (Fe)	1.2	0.30 mg/L	11/06/07	11/07/07

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com
Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16.

11/13/07
Report Date

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ANALYTICAL REPORT

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Attn: Holly Woodward
Phone: (702) 492-7922
Fax: (702) 492-9149
Date Received : 11/07/07

Job#: 26698724

Alkalinity
SM2320B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**AP MS MW-30**					
Lab ID :	URS07110701-01A	Alkalinity, Total (As CaCO3 at pH 4.5)	270	1.0 mg/L	11/06/07	11/07/07
Client ID :	**AP MS MW-28**					
Lab ID :	URS07110701-02A	Alkalinity, Total (As CaCO3 at pH 4.5)	250	1.0 mg/L	11/06/07	11/07/07
Client ID :	**AP MS MW-29**					
Lab ID :	URS07110701-04A	Alkalinity, Total (As CaCO3 at pH 4.5)	260	1.0 mg/L	11/06/07	11/07/07

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ANALYTICAL REPORT

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Attn: Holly Woodward
Phone: (702) 492-7922
Fax: (702) 492-9149
Date Received : 11/07/07

Job#: 26698724

Anions by IC
EPA Method 300.0 / 9056

	Parameter	Concentration	Reporting Limit	Date / Time Sampled	Date / Time Analyzed
Client ID : **AP MS MW-30**	Nitrate (NO3) - N	6.7	0.25 mg/L	11/06/07 11:49	11/07/07 10:47
Lab ID : URS07110701-01A					
Client ID : **AP MS MW-28**	Nitrate (NO3) - N	5.9	0.25 mg/L	11/06/07 14:22	11/07/07 11:06
Lab ID : URS07110701-02A					
Client ID : **AP MS MW-29**	Nitrate (NO3) - N	6.1	0.25 mg/L	11/06/07 15:52	11/07/07 11:24
Lab ID : URS07110701-04A					

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11/13/07
Report Date

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ANALYTICAL REPORT

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Job#: 26698724

Attn: Holly Woodward
Phone: (702) 492-7922
Fax: (702) 492-9149

Anions by Ion Chromatography (IC) EPA Method 300.0 / SW9056

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**AP MS MW-30**					
Lab ID :	URS07110701-01A	Chloride	320	50 mg/L	11/06/07	11/07/07
		Sulfate (SO4)	3,700	100 mg/L	11/06/07	11/07/07
Client ID :	**AP MS MW-28**					
Lab ID :	URS07110701-02A	Chloride	250	50 mg/L	11/06/07	11/07/07
		Sulfate (SO4)	2,000	100 mg/L	11/06/07	11/07/07
Client ID :	**AP MS MW-29**					
Lab ID :	URS07110701-04A	Chloride	250	50 mg/L	11/06/07	11/07/07
		Sulfate (SO4)	1,900	100 mg/L	11/06/07	11/07/07

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Job#: 26698724

Attn: Holly Woodward
Phone: (702) 492-7922
Fax: (702) 492-9149

Alpha Analytical Number: URS07110701-01A
Client I.D. Number: AP MS MW-30

Sampled: 11/06/07
Received: 11/07/07
Analyzed: 11/08/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	4.0 µg/L
2	Vinyl chloride	ND	1.0 µg/L
3	Chloroethane	ND	1.0 µg/L
4	Bromomethane	ND	4.0 µg/L
5	Trichlorofluoromethane	ND	1.0 µg/L
6	1,1-Dichloroethene	ND	1.0 µg/L
7	Dichloromethane	ND	4.0 µg/L
8	trans-1,2-Dichloroethene	ND	1.0 µg/L
9	1,1-Dichloroethane	ND	1.0 µg/L
10	cis-1,2-Dichloroethene	ND	1.0 µg/L
11	Chloroform	1.8	1.0 µg/L
12	1,2-Dichloroethane	ND	1.0 µg/L
13	1,1,1-Trichloroethane	ND	1.0 µg/L
14	Carbon tetrachloride	ND	1.0 µg/L
15	1,2-Dichloropropane	ND	1.0 µg/L
16	Trichloroethene	ND	1.0 µg/L
17	Bromodichloromethane	ND	1.0 µg/L
18	cis-1,3-Dichloropropene	ND	1.0 µg/L
19	trans-1,3-Dichloropropene	ND	1.0 µg/L
20	1,1,2-Trichloroethane	ND	1.0 µg/L
21	Dibromochloromethane	ND	1.0 µg/L
22	Tetrachloroethene	74	1.0 µg/L
23	Chlorobenzene	ND	1.0 µg/L
24	Bromoform	ND	1.0 µg/L
25	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
26	1,3-Dichlorobenzene	ND	1.0 µg/L
27	1,4-Dichlorobenzene	ND	1.0 µg/L
28	1,2-Dichlorobenzene	ND	1.0 µg/L
29	Surr: 1,2-Dichloroethane-d4	95	%REC
30	Surr: Toluene-d8	108	%REC
31	Surr: 4-Bromofluorobenzene	102	%REC

Some Reporting Limits were increased due to high concentrations of target analytes.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16.

11/13/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

URS Corporation
811 Grier Dr.
Las Vegas, NV 89119
Job#: 26698724

Attn: Holly Woodward
Phone: (702) 492-7922
Fax: (702) 492-9149

Alpha Analytical Number: URS07110701-02A
Client I.D. Number: AP MS MW-28

Sampled: 11/06/07
Received: 11/07/07
Analyzed: 11/08/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	2.0 µg/L
2	Vinyl chloride	ND	1.0 µg/L
3	Chloroethane	ND	1.0 µg/L
4	Bromomethane	ND	2.0 µg/L
5	Trichlorofluoromethane	ND	1.0 µg/L
6	1,1-Dichloroethene	ND	1.0 µg/L
7	Dichloromethane	ND	2.0 µg/L
8	trans-1,2-Dichloroethene	ND	1.0 µg/L
9	1,1-Dichloroethane	ND	1.0 µg/L
10	cis-1,2-Dichloroethene	ND	1.0 µg/L
11	Chloroform	ND	1.0 µg/L
12	1,2-Dichloroethane	ND	1.0 µg/L
13	1,1,1-Trichloroethane	ND	1.0 µg/L
14	Carbon tetrachloride	ND	1.0 µg/L
15	1,2-Dichloropropane	ND	1.0 µg/L
16	Trichloroethene	ND	1.0 µg/L
17	Bromodichloromethane	ND	1.0 µg/L
18	cis-1,3-Dichloropropene	ND	1.0 µg/L
19	trans-1,3-Dichloropropene	ND	1.0 µg/L
20	1,1,2-Trichloroethane	ND	1.0 µg/L
21	Dibromochloromethane	ND	1.0 µg/L
22	Tetrachloroethene	3.0	1.0 µg/L
23	Chlorobenzene	ND	1.0 µg/L
24	Bromoform	ND	1.0 µg/L
25	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
26	1,3-Dichlorobenzene	ND	1.0 µg/L
27	1,4-Dichlorobenzene	ND	1.0 µg/L
28	1,2-Dichlorobenzene	ND	1.0 µg/L
29	Surr: 1,2-Dichloroethane-d4	91	%REC
30	Surr: Toluene-d8	111	%REC
31	Surr: 4-Bromofluorobenzene	96	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

URS Corporation
811 Grier Dr.
Las Vegas, NV 89119
Job#: 26698724

Attn: Holly Woodward
Phone: (702) 492-7922
Fax: (702) 492-9149

Alpha Analytical Number: URS07110701-03A
Client I.D. Number: AP MS MW28D

Sampled: 11/06/07
Received: 11/07/07
Analyzed: 11/08/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	2.0 µg/L
2	Vinyl chloride	ND	1.0 µg/L
3	Chloroethane	ND	1.0 µg/L
4	Bromomethane	ND	2.0 µg/L
5	Trichlorofluoromethane	ND	1.0 µg/L
6	1,1-Dichloroethene	ND	1.0 µg/L
7	Dichloromethane	ND	2.0 µg/L
8	trans-1,2-Dichloroethene	ND	1.0 µg/L
9	1,1-Dichloroethane	ND	1.0 µg/L
10	cis-1,2-Dichloroethene	ND	1.0 µg/L
11	Chloroform	ND	1.0 µg/L
12	1,2-Dichloroethane	ND	1.0 µg/L
13	1,1,1-Trichloroethane	ND	1.0 µg/L
14	Carbon tetrachloride	ND	1.0 µg/L
15	1,2-Dichloropropane	ND	1.0 µg/L
16	Trichloroethene	ND	1.0 µg/L
17	Bromodichloromethane	ND	1.0 µg/L
18	cis-1,3-Dichloropropene	ND	1.0 µg/L
19	trans-1,3-Dichloropropene	ND	1.0 µg/L
20	1,1,2-Trichloroethane	ND	1.0 µg/L
21	Dibromochloromethane	ND	1.0 µg/L
22	Tetrachloroethene	2.6	1.0 µg/L
23	Chlorobenzene	ND	1.0 µg/L
24	Bromoform	ND	1.0 µg/L
25	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
26	1,3-Dichlorobenzene	ND	1.0 µg/L
27	1,4-Dichlorobenzene	ND	1.0 µg/L
28	1,2-Dichlorobenzene	ND	1.0 µg/L
29	Surr: 1,2-Dichloroethane-d4	93	%REC
30	Surr: Toluene-d8	109	%REC
31	Surr: 4-Bromofluorobenzene	99	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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Report Date

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ANALYTICAL REPORT

URS Corporation
811 Grier Dr.
Las Vegas, NV 89119
Job#: 26698724

Attn: Holly Woodward
Phone: (702) 492-7922
Fax: (702) 492-9149

Alpha Analytical Number: URS07110701-04A
Client I.D. Number: AP MS MW-29

Sampled: 11/06/07
Received: 11/07/07
Analyzed: 11/08/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	2.0 µg/L
2	Vinyl chloride	ND	1.0 µg/L
3	Chloroethane	ND	1.0 µg/L
4	Bromomethane	ND	2.0 µg/L
5	Trichlorofluoromethane	ND	1.0 µg/L
6	1,1-Dichloroethene	ND	1.0 µg/L
7	Dichloromethane	ND	2.0 µg/L
8	trans-1,2-Dichloroethene	ND	1.0 µg/L
9	1,1-Dichloroethane	ND	1.0 µg/L
10	cis-1,2-Dichloroethene	ND	1.0 µg/L
11	Chloroform	2.1	1.0 µg/L
12	1,2-Dichloroethane	ND	1.0 µg/L
13	1,1,1-Trichloroethane	ND	1.0 µg/L
14	Carbon tetrachloride	ND	1.0 µg/L
15	1,2-Dichloropropane	ND	1.0 µg/L
16	Trichloroethene	ND	1.0 µg/L
17	Bromodichloromethane	ND	1.0 µg/L
18	cis-1,3-Dichloropropene	ND	1.0 µg/L
19	trans-1,3-Dichloropropene	ND	1.0 µg/L
20	1,1,2-Trichloroethane	ND	1.0 µg/L
21	Dibromochloromethane	ND	1.0 µg/L
22	Tetrachloroethene	2.5	1.0 µg/L
23	Chlorobenzene	ND	1.0 µg/L
24	Bromoform	ND	1.0 µg/L
25	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
26	1,3-Dichlorobenzene	ND	1.0 µg/L
27	1,4-Dichlorobenzene	ND	1.0 µg/L
28	1,2-Dichlorobenzene	ND	1.0 µg/L
29	Surr: 1,2-Dichloroethane-d4	92	%REC
30	Surr: Toluene-d8	109	%REC
31	Surr: 4-Bromofluorobenzene	101	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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11/13/07
Report Date

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ANALYTICAL REPORT

URS Corporation
811 Grier Dr.
Las Vegas, NV 89119
Job#: 26698724

Attn: Holly Woodward
Phone: (702) 492-7922
Fax: (702) 492-9149

Alpha Analytical Number: URS07110701-05A
Client I.D. Number: AP MS MW29-EB

Sampled: 11/06/07
Received: 11/07/07
Analyzed: 11/08/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	2.0 µg/L
2	Vinyl chloride	ND	1.0 µg/L
3	Chloroethane	ND	1.0 µg/L
4	Bromomethane	ND	2.0 µg/L
5	Trichlorofluoromethane	ND	1.0 µg/L
6	1,1-Dichloroethene	ND	1.0 µg/L
7	Dichloromethane	ND	2.0 µg/L
8	trans-1,2-Dichloroethene	ND	1.0 µg/L
9	1,1-Dichloroethane	ND	1.0 µg/L
10	cis-1,2-Dichloroethene	ND	1.0 µg/L
11	Chloroform	ND	1.0 µg/L
12	1,2-Dichloroethane	ND	1.0 µg/L
13	1,1,1-Trichloroethane	ND	1.0 µg/L
14	Carbon tetrachloride	ND	1.0 µg/L
15	1,2-Dichloropropane	ND	1.0 µg/L
16	Trichloroethene	ND	1.0 µg/L
17	Bromodichloromethane	ND	1.0 µg/L
18	cis-1,3-Dichloropropene	ND	1.0 µg/L
19	trans-1,3-Dichloropropene	ND	1.0 µg/L
20	1,1,2-Trichloroethane	ND	1.0 µg/L
21	Dibromochloromethane	ND	1.0 µg/L
22	Tetrachloroethene	ND	1.0 µg/L
23	Chlorobenzene	ND	1.0 µg/L
24	Bromoform	ND	1.0 µg/L
25	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
26	1,3-Dichlorobenzene	ND	1.0 µg/L
27	1,4-Dichlorobenzene	ND	1.0 µg/L
28	1,2-Dichlorobenzene	ND	1.0 µg/L
29	Surr: 1,2-Dichloroethane-d4	97	%REC
30	Surr: Toluene-d8	109	%REC
31	Surr: 4-Bromofluorobenzene	100	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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11/13/07
Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: URS07110701 **Project:** 26698724

Alpha's Sample ID	Client's Sample ID	Matrix	pH
07110701-01A	AP MS MW-30	Aqueous	2
07110701-02A	AP MS MW-28	Aqueous	2
07110701-03A	AP MS MW28D	Aqueous	2
07110701-04A	AP MS MW-29	Aqueous	2
07110701-05A	AP MS MW29-EB	Aqueous	2

11/13/07

Report Date

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ANALYTICAL REPORT

URS Corporation
811 Grier Dr.
Las Vegas, NV 89119

Attn: Holly Woodward
Phone: (702) 492-7922
Fax: (702) 492-9149
Date Received : 11/07/07

Job#: 26698724

Total Organic Carbon as NonPurgeable Organic Carbon
EPA Method SW9060/415.1/SM-5310C

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**AP MS MW-30**					
Lab ID :	URS07110701-01A	Total Organic Carbon	1.6	1.0 mg/L	11/06/07	11/08/07
Client ID :	**AP MS MW-28**					
Lab ID :	URS07110701-02A	Total Organic Carbon	1.2	1.0 mg/L	11/06/07	11/09/07
Client ID :	**AP MS MW-29**					
Lab ID :	URS07110701-04A	Total Organic Carbon	24	4.0 mg/L	11/06/07	11/09/07

Roger Scholl Randy Gardner Walter Hinchman

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11/13/07
Report Date

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *12-Nov-07*

QC Summary Report

Work Order: 07110701

Method Blank

Type **MBLK** Test Code: **EPA Method SW6020**

File ID: **110707.B\104_ICB.D** Batch ID: **18678** Analysis Date: **11/07/2007 19:15**

Sample ID: **MB-18678** Units : **mg/L** Run ID: **ICP/MS_071107D** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Manganese (Mn)	ND	0.005								
Iron (Fe)	ND	0.3								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW6020**

File ID: **110707.B\105_LCS.D** Batch ID: **18678** Analysis Date: **11/07/2007 19:20**

Sample ID: **LCS-18678** Units : **mg/L** Run ID: **ICP/MS_071107D** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Manganese (Mn)	2.6	0.005	2.5		104	83	120			
Iron (Fe)	50	0.3	50		100	83	119			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW6020**

File ID: **110707.B\115SMPL.D** Batch ID: **18678** Analysis Date: **11/07/2007 20:09**

Sample ID: **07110525-06AMS** Units : **mg/L** Run ID: **ICP/MS_071107D** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Manganese (Mn)	3.18	0.005	2.5	0.7026	99	70	130			
Iron (Fe)	64.7	0.3	50	16.9	96	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW6020**

File ID: **110707.B\116SMPL.D** Batch ID: **18678** Analysis Date: **11/07/2007 20:13**

Sample ID: **07110525-06AMSD** Units : **mg/L** Run ID: **ICP/MS_071107D** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Manganese (Mn)	3.26	0.005	2.5	0.7026	102	70	130	3.175	2.5(20)	
Iron (Fe)	65.6	0.3	50	16.9	97	70	130	64.69	1.5(20)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *08-Nov-07*

QC Summary Report

Work Order: 07110701

Laboratory Control Spike Type **LCS** Test Code: **SM2320B**

File ID: Batch ID: **W1107AL** Analysis Date: **11/07/2007 00:00**

Sample ID: **LCS-W1107AL** Units : **mg/L** Run ID: **WETLAB_071107B** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Alkalinity, Total (As CaCO3 at pH 4.5)	5.02	1	5		100	90	110			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

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Date: *09-Nov-07*

QC Summary Report

Work Order: 07110701

Method Blank

Type **MBLK** Test Code: **EPA Method 300.0 / 9056**

File ID: **13** Batch ID: **18670A** Analysis Date: **11/07/2007 09:51**

Sample ID: **MB-18670** Units : **mg/L** Run ID: **IC_2_071107A** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Nitrate (NO3) - N	ND	0.25								

Laboratory Fortified Blank

Type **LFB** Test Code: **EPA Method 300.0 / 9056**

File ID: **14** Batch ID: **18670A** Analysis Date: **11/07/2007 10:10**

Sample ID: **LFB-18670** Units : **mg/L** Run ID: **IC_2_071107A** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Nitrate (NO3) - N	1.28	0.25	1.25		102	90	110			

Sample Matrix Spike

Type **LFM** Test Code: **EPA Method 300.0 / 9056**

File ID: **30** Batch ID: **18670A** Analysis Date: **11/07/2007 15:06**

Sample ID: **07110701-01ALFM** Units : **mg/L** Run ID: **IC_2_071107A** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Nitrate (NO3) - N	7.72	0.25	1.25	6.714	80	80	120			

Sample Matrix Spike Duplicate

Type **LFMD** Test Code: **EPA Method 300.0 / 9056**

File ID: **31** Batch ID: **18670A** Analysis Date: **11/07/2007 15:25**

Sample ID: **07110701-01ALFMD** Units : **mg/L** Run ID: **IC_2_071107A** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Nitrate (NO3) - N	7.83	0.25	1.25	6.714	90	80	120	7.72	1.5(10)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *09-Nov-07*

QC Summary Report

Work Order: 07110701

Method Blank

Type **MBLK** Test Code: **EPA Method 300.0 / 9056**

File ID: **13** Batch ID: **18670B** Analysis Date: **11/07/2007 09:51**

Sample ID: **MB-18670** Units : **mg/L** Run ID: **IC_2_071107B** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Sulfate (SO4)	ND	0.5								

Laboratory Fortified Blank

Type **LFB** Test Code: **EPA Method 300.0 / 9056**

File ID: **14** Batch ID: **18670B** Analysis Date: **11/07/2007 10:10**

Sample ID: **LFB-18670** Units : **mg/L** Run ID: **IC_2_071107B** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Sulfate (SO4)	10.1	0.5	10		101	90	110			

Sample Matrix Spike

Type **LFM** Test Code: **EPA Method 300.0 / 9056**

File ID: **33** Batch ID: **18670B** Analysis Date: **11/07/2007 16:02**

Sample ID: **07110701-01ALFM** Units : **mg/L** Run ID: **IC_2_071107B** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Sulfate (SO4)	4680	2.5	1000	3741	94	80	120			

Sample Matrix Spike Duplicate

Type **LFMD** Test Code: **EPA Method 300.0 / 9056**

File ID: **34** Batch ID: **18670B** Analysis Date: **11/07/2007 16:20**

Sample ID: **07110701-01ALFMD** Units : **mg/L** Run ID: **IC_2_071107B** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Sulfate (SO4)	4770	2.5	1000	3741	102	80	120	4679	1.8(10)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *09-Nov-07*

QC Summary Report

Work Order: 07110701

Method Blank

Type **MBLK** Test Code: **EPA Method 300.0 / 9056**

File ID: **13** Batch ID: **18670C** Analysis Date: **11/07/2007 09:51**

Sample ID: **MB-18670** Units : **mg/L** Run ID: **IC_2_071107B** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	ND	0.5								

Laboratory Fortified Blank

Type **LFB** Test Code: **EPA Method 300.0 / 9056**

File ID: **14** Batch ID: **18670C** Analysis Date: **11/07/2007 10:10**

Sample ID: **LFB-18670** Units : **mg/L** Run ID: **IC_2_071107B** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	4.88	0.5	5		98	90	110			

Sample Matrix Spike

Type **LFM** Test Code: **EPA Method 300.0 / 9056**

File ID: **33** Batch ID: **18670C** Analysis Date: **11/07/2007 16:02**

Sample ID: **07110701-01ALFM** Units : **mg/L** Run ID: **IC_2_071107B** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	805	2.5	500	319.3	97	80	120			

Sample Matrix Spike Duplicate

Type **LFMD** Test Code: **EPA Method 300.0 / 9056**

File ID: **34** Batch ID: **18670C** Analysis Date: **11/07/2007 16:20**

Sample ID: **07110701-01ALFMD** Units : **mg/L** Run ID: **IC_2_071107B** Prep Date: **11/07/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	827	2.5	500	319.3	102	80	120	805.4	2.7(10)	

Comments:

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Date: *12-Nov-07*

QC Summary Report

Work Order: 07110701

Method Blank

Type **MBLK** Test Code: **EPA Method SW9060 / SM5310C**

File ID: Batch ID: **TOC1108** Analysis Date: **11/08/2007 10:23**

Sample ID: **MBLK-TOC1108** Units : **mg/L** Run ID: **TOC_071108A** Prep Date: **11/08/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Total Organic Carbon	ND	1								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW9060 / SM5310C**

File ID: Batch ID: **TOC1108** Analysis Date: **11/08/2007 09:58**

Sample ID: **LCS-TOC1108** Units : **mg/L** Run ID: **TOC_071108A** Prep Date: **11/08/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Total Organic Carbon	4.48	1	5		90	74	126			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW9060 / SM5310C**

File ID: Batch ID: **TOC1108** Analysis Date: **11/08/2007 12:53**

Sample ID: **07110753-02AMS** Units : **mg/L** Run ID: **TOC_071108A** Prep Date: **11/08/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Total Organic Carbon	8.38	1	5	4.015	87	56	137			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW9060 / SM5310C**

File ID: Batch ID: **TOC1108** Analysis Date: **11/08/2007 13:24**

Sample ID: **07110753-02AMSD** Units : **mg/L** Run ID: **TOC_071108A** Prep Date: **11/08/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Total Organic Carbon	8	1	5	4.015	80	56	137	8.379	4.6(20)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *13-Nov-07*

QC Summary Report

Work Order: 07110701

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\071108\07110804.D** Batch ID: **MS09W1108A** Analysis Date: **11/08/2007 12:24**

Sample ID: **MBLK MS09W1108A** Units : **µg/L** Run ID: **MSD_09_071108A** Prep Date: **11/08/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloromethane	ND	2								
Vinyl chloride	ND	1								
Chloroethane	ND	1								
Bromomethane	ND	2								
Trichlorofluoromethane	ND	1								
1,1-Dichloroethene	ND	1								
Dichloromethane	ND	2								
trans-1,2-Dichloroethene	ND	1								
1,1-Dichloroethane	ND	1								
cis-1,2-Dichloroethene	ND	1								
Chloroform	ND	1								
1,2-Dichloroethane	ND	1								
1,1,1-Trichloroethane	ND	1								
Carbon tetrachloride	ND	1								
1,2-Dichloropropane	ND	1								
Trichloroethene	ND	1								
Bromodichloromethane	ND	1								
cis-1,3-Dichloropropene	ND	1								
trans-1,3-Dichloropropene	ND	1								
1,1,2-Trichloroethane	ND	1								
Dibromochloromethane	ND	1								
Tetrachloroethene	ND	1								
Chlorobenzene	ND	1								
Bromoform	ND	1								
1,1,2,2-Tetrachloroethane	ND	1								
1,3-Dichlorobenzene	ND	1								
1,4-Dichlorobenzene	ND	1								
1,2-Dichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.64		10		96	75	128			
Surr: Toluene-d8	10.8		10		108	80	120			
Surr: 4-Bromofluorobenzene	9.24		10		92	80	120			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\071108\07110802.D** Batch ID: **MS09W1108A** Analysis Date: **11/08/2007 11:39**

Sample ID: **LCS MS09W1108A** Units : **µg/L** Run ID: **MSD_09_071108A** Prep Date: **11/08/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	10.5	1	10		105	80	120			
Trichloroethene	8.92	1	10		89	70	130			
Chlorobenzene	9.67	1	10		97	70	130			
Surr: 1,2-Dichloroethane-d4	9.41		10		94	75	128			
Surr: Toluene-d8	11		10		110	80	120			
Surr: 4-Bromofluorobenzene	8.71		10		87	80	120			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\071108\07110808.D** Batch ID: **MS09W1108A** Analysis Date: **11/08/2007 13:55**

Sample ID: **07110726-02AMS** Units : **µg/L** Run ID: **MSD_09_071108A** Prep Date: **11/08/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	53.1	2.5	50	0	106	66	132			
Trichloroethene	44.3	2.5	50	0	89	69	130			
Chlorobenzene	48.7	2.5	50	0	97	70	130			
Surr: 1,2-Dichloroethane-d4	47.1		50		94	75	128			
Surr: Toluene-d8	54.3		50		109	80	120			
Surr: 4-Bromofluorobenzene	43.2		50		86	80	120			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *13-Nov-07*

QC Summary Report

Work Order: 07110701

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS09\DATA\071108\07110809.D** Batch ID: **MS09W1108A** Analysis Date: **11/08/2007 14:18**

Sample ID: **07110726-02AMSD** Units : **µg/L** Run ID: **MSD_09_071108A** Prep Date: **11/08/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	53.2	2.5	50	0	106	66	132	53.1	0.2(20)	
Trichloroethene	44.8	2.5	50	0	90	69	130	44.34	1.0(20)	
Chlorobenzene	48.7	2.5	50	0	97	70	130	48.65	0.2(20)	
Surr: 1,2-Dichloroethane-d4	46.4		50		93	75	128			
Surr: Toluene-d8	54.4		50		109	80	120			
Surr: 4-Bromofluorobenzene	43.3		50		87	80	120			

Comments:

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Billing Information :

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

NV

WorkOrder : URSL07110701

Report Due By : 5:00 PM On : 14-Nov-07

Client:
URS Corporation
811 Grier Dr.

Las Vegas, NV 89119

Report Attention	Phone Number	EMail Address
Holly Woodward	(702) 492-7922 x	holly_woodward@urscorp.com

EDD Required : **No**

Sampled by : Client

PO : AP-MD SQ.

Client's COC # : 15330, 15331 Job : 26698724

Cooler Temp	Samples Received	Date Printed
4 °C	07-Nov-07	07-Nov-07

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	ALKALINITY_W	ANIONS(A)_W	ANIONS(B)_W	ANIONS(C)_W	HOLD	METALS_AQ	TOC_W	VOC_W	Sample Remarks
URS07110701-01A	AP MS MW-30	AQ	11/06/07 11:49	6	0	5	Alk	NO3, SO4, Cl	NO3, SO4, Cl	NO3, SO4, Cl		Fe, Mn	TOC	8010	
URS07110701-02A	AP MS MW-28	AQ	11/06/07 14:22	6	0	5	Alk	NO3, SO4, Cl	NO3, SO4, Cl	NO3, SO4, Cl		Fe, Mn	TOC	8010	
URS07110701-03A	AP MS MW28D	AQ	11/06/07 14:25	3	0	5								8010	
URS07110701-04A	AP MS MW-29	AQ	11/06/07 15:52	6	0	5	Alk	NO3, SO4, Cl	NO3, SO4, Cl	NO3, SO4, Cl		Fe, Mn	TOC	8010	
URS07110701-05A	AP MS MW29-EB	AQ	11/06/07 15:58	3	0	5								8010	
URS07110701-06A	Trip Blank	AQ	11/06/07 00:00	1	0	5					Hold				Reno Trip Blank 3/6/07

Comments: Security seals intact. Frozen ice. TOC pH=2. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Sauvageau	Elizabeth Sauvageau	Alpha Analytical, Inc.	11-7-07 8:42

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name: URS
Address: 811 Grier Drive
City, State, Zip: Las Vegas, NV 89119
Phone Number: 702-492-7922 Fax: 702-492-9149

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA ___ NV X WA ___
ID ___ OR ___ OTHER ___

Page # 1 of 2

15330

Client Name: same
Address:
City, State, Zip:
P.O. # AP-MD SQ.
Job # 26698724
EMail Address: holly.woodward@urscorp.com
Phone # 702-492-7922
Fax # 702-492-9149
Report Attention: Holly Woodward

Required QC Level? I II III IV
EDD / EDF? YES ___ NO ___
Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	8010/8260B	300.0/Cl/N	310 ALK	6020 Fe/Mn	415.1 TOC			REMARKS
1149	11/6/07	AQ	URS07110701-01	AP MS MW-30			3VOA	X							
							1P		X	X					
							1P				X				
							1OT					X			1 OT HW
1422			-02	MW-28			3VOA	X							
							1P		X	X					
							1P				X				
							1OT					X			
1425			-03	MW28D			3VOA	X							

Holly Woodward

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	Holly Woodward	Holly Woodward	URS	11-6-07	1635
Received by	[signature]	V. SMITH	[signature]	11-6-07	1635
Relinquished by	[signature]	V. SMITH	[signature]	11-6-07	1635
Received by	E. Sauvageau	E. Sauvageau	Alpha	11-7-07	8:42
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Billing Information:
Name: URS
Address: 811 Grier Drive
City, State, Zip: Las Vegas, NV 89119
Phone Number: 702 492-7900 Fax: 702 492 9149

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA ___ NV X WA ___
ID ___ OR ___ OTHER ___

Page # 2 of 2

15331

Client Name:
Address: Same
City, State, Zip:
P.O. #: AP-MD SQ
Job #:
EMail Address: holly-woodward@urscorp.com
Phone #: 702 492-7922
Fax #: 702-492 9149
Report Attention: Holly Woodward

Required QC Level? I II III IV
EDD / EDF? YES ___ NO ___
Global ID # ___

Analyses Required

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	8010/8260B	300 cl/NO3	310 Alk	6020 Fe/Mn	415.1 TOC			REMARKS
1532	11/6/07	AQ	·04	APMS MW-29			3VOA	X							
							1P		X	X					
							1P				X				
							1OT					X			
1538			·05	APMS MW29-EB			3VOA	X							
			·06	TRIPBLANK			1VOA								

Holly Woodward

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	Holly Woodward	Holly Woodward	URS	11-6-07	1635
Received by	[illegible]	U. SMITH	Alpha	11-6-07	1635
Relinquished by	[illegible]	U. SMITH	Alpha	11-6-07	1935
Received by	E. Sauvageau	E. Sauvageau	Alpha	11-7-07	8:42
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.