SEVERN TRENT STL

January 11, 2005

STL Los Angeles
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Santa Ana, CA 92705

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STL LOT NUMBER: **E4L090141**
PO/CONTRACT: G09J2-0520

Scott Robinson
URS Corporation
1333 Broadway
Suite 800
Oakland, CA 94612

Dear Scott Robinson,

This report contains the analytical results for the four samples received under chain of custody by STL Los Angeles on December 8, 2004. These samples are associated with your ARCO #5387 project.

STL Los Angeles certifies that the test results provided in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number for STL Los Angeles is 01118CA / E87652.

Any matrix related anomaly is footnoted within the report. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

This report shall not be reproduced except in full, without the written approval of the laboratory.

This report contains 000029 pages.

If you have any questions, please feel free to call me at (714) 258-8610.

Sincerely,

Beth Riley
Project Manager

cc: Project File

CASE NARRATIVE

LOT NUMBER E4L090141

COMMENTS:

Affected Samples:
E4L090141 (1): SG-10-5.5
E4L090141 (2): SG-7-5.5
E4L090141 (3): SG-10-9
E4L090141 (4): SG-7-10

Affected Methods:
TO-14A, TO-3

Case Narrative:
Samples were received for an additional analyte that the lab did not have. The method development for 1,1-Difluoroethane (Freon 152A) was not complete until after the holding time had expired for these samples.

ANALYTICAL REPORT

PROJECT NO. 38486988.0063601

ARCO #5387

Lot #: E4L090141

Scott Robinson

URS Corporation

SEVERN TRENT LABORATORIES, INC.

Beth Riley
Project Manager

January 11, 2005

EXECUTIVE SUMMARY - Detection Highlights

E4L090141

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SG-10-5.5 12/03/04 13:25 001				
GRO (C4 - C12)	0.33 JDX	1.8	ppm(v/v)	EPA-19 TO-3
Acetone	0.14	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0016	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
2-Butanone (MEK)	0.012	0.010	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.00056	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethanol	0.030	0.025	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	0.0025	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	0.0029	0.0020	ppm(v/v)	EPA-21 TO-14A
Naphthalene	0.00074	0.0050	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Tetrachloroethene	0.0019	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Toluene	0.0086	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.0027	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	0.0011	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
m-Xylene & p-Xylene	0.0092	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.0033	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.013	0.0020	ppm(v/v)	EPA-21 TO-14A
SG-7-5.5 12/03/04 14:33 002				
GRO (C4 - C12)	0.10 JDX	1.9	ppm(v/v)	EPA-19 TO-3
Acetone	0.027	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0011	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00058	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethanol	0.0038	0.025	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethylbenzene	0.00089	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
4-Ethyltoluene	0.0017	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Tetrachloroethene	0.00098	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Toluene	0.0037	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.0015	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
1,3,5-Trimethylbenzene	0.00087	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			

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EXECUTIVE SUMMARY - Detection Highlights

E4L090141

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SG-7-5.5 12/03/04 14:33 002				
m-Xylene & p-Xylene	0.0032	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.0011	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Xylenes (total)	0.0043	0.0020	ppm(v/v)	EPA-21 TO-14A
SG-10-9 12/03/04 15:28 003				
GRO (C4 - C12)	0.12 JDX	1.8	ppm(v/v)	EPA-19 TO-3
Acetone	0.054	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0010	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
2-Butanone (MEK)	0.0040	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00057	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethanol	0.012 JDX	0.025	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	0.00085	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
4-Ethyltoluene	0.0010	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Tetrachloroethene	0.0053	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0036	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.0011	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
m-Xylene & p-Xylene	0.0029	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.00095	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Xylenes (total)	0.0038	0.0020	ppm(v/v)	EPA-21 TO-14A
SG-7-10 12/03/04 16:33 004				
GRO (C4 - C12)	0.95 JDX	1.9	ppm(v/v)	EPA-19 TO-3
Acetone	0.40	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0038	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	0.031	0.010	ppm(v/v)	EPA-21 TO-14A
tert-Butyl alcohol	0.0018	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Carbon disulfide	0.0027	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00059	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethanol	0.016 JDX	0.025	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	0.0015	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			

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EXECUTIVE SUMMARY - Detection Highlights

E4L090141

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SG-7-10 12/03/04 16:33 004				
4-Ethyltoluene	0.0014	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
2-Hexanone	0.0013	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Tetrachloroethene	0.0031	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0087	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.0013	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
m-Xylene & p-Xylene	0.0042	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.0014	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Xylenes (total)	0.0057	0.0020	ppm(v/v)	EPA-21 TO-14A

ANALYTICAL METHODS SUMMARY

E4L090141

PARAMETER	ANALYTICAL METHOD
TPH by TO-3	EPA-19 TO-3
Volatile Organics by TO-14A	EPA-21 TO-14A

References:

EPA-19 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA/600/4-89/017, January 1988

EPA-21 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", Second Edition, EPA/625/R-96/010b, January 1999

SAMPLE SUMMARY

E4L090141

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G0LMK	001	SG-10-5.5	12/03/04	13:25
G0LRG	002	SG-7-5.5	12/03/04	14:33
G0LRL	003	SG-10-9	12/03/04	15:28
G0LRN	004	SG-7-10	12/03/04	16:33

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

URS Corporation

Client Sample ID: SG-10-5.5

GC/MS Volatiles

Lot-Sample #...: E4L090141-001 **Work Order #...:** G0LMK1AD **Matrix.....:** AE
Date Sampled...: 12/03/04 **Date Received..:** 12/08/04
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5005373
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.14**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.0016 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.012**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	ND	0.010	ppm(v/v)	0.0010
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00056 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	**0.030**	**0.025**	**ppm(v/v)**	**0.0022**
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.0025**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.0029**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

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URS Corporation

Client Sample ID: SG-10-5.5

GC/MS Volatiles

Lot-Sample #...: E4L090141-001 **Work Order #...:** G0LMK1AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.010	ppm(v/v)	0.0010
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	0.00050
Naphthalene	**0.00074 JDX**	**0.0050**	**ppm(v/v)**	**0.00050**
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	**0.0019 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Toluene	**0.0086**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	**0.0027**	**0.0020**	**ppm(v/v)**	**0.00080**
1,3,5-Trimethylbenzene	**0.0011 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0092**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.0033**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.013**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-10-5.5

GC Volatiles

Lot-Sample #...:	E4L090141-001	**Work Order #...:**	G0LMK1AE	**Matrix.....:**	AE
Date Sampled...:	12/03/04	**Date Received..:**	12/08/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	1.8				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.33 JDX**	**1.8**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-7-5.5

GC/MS Volatiles

Lot-Sample #...: E4L090141-002 **Work Order #...:** G0LRG1AD **Matrix.....:** AE
Date Sampled...: 12/03/04 **Date Received..:** 12/08/04
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5005373
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.027**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.0011 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	ND	0.010	ppm(v/v)	0.0020
tert-Butyl alcohol	ND	0.010	ppm(v/v)	0.0010
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00058 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	**0.0038 JDX**	**0.025**	**ppm(v/v)**	**0.0022**
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.00089 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.0017 JDX**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

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URS Corporation

Client Sample ID: SG-7-5.5

GC/MS Volatiles

Lot-Sample #...: E4L090141-002 **Work Order #...:** G0LRG1AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.010	ppm(v/v)	0.0010
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	0.00050
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	**0.00098 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Toluene	**0.0037**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	**0.0015 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
1,3,5-Trimethylbenzene	**0.00087 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0032**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.0011 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0043**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-7-5.5

GC Volatiles

Lot-Sample #...:	E4L090141-002	**Work Order #...:**	G0LRG1AE	**Matrix.....:**	AE
Date Sampled...:	12/03/04	**Date Received..:**	12/08/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	1.9				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.10 JDX**	**1.9**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-10-9

GC/MS Volatiles

Lot-Sample #...: E4L090141-003 **Work Order #...:** G0LRL1AD **Matrix.....:** AE
Date Sampled...: 12/03/04 **Date Received..:** 12/08/04
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5005373
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.054**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.0010 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.0040 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	ND	0.010	ppm(v/v)	0.0010
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00057 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	**0.012 JDX**	**0.025**	**ppm(v/v)**	**0.0022**
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.00085 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.0010 JDX**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

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URS Corporation

Client Sample ID: SG-10-9

GC/MS Volatiles

Lot-Sample #...: E4L090141-003 **Work Order #...:** G0LRL1AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.010	ppm(v/v)	0.0010
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	0.00050
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	**0.0053**	**0.0020**	**ppm(v/v)**	**0.00060**
Toluene	**0.0036**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	**0.0011 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0029**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.00095 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0038**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-10-9

GC Volatiles

Lot-Sample #...:	E4L090141-003	**Work Order #...:**	G0LRL1AE	**Matrix.....:**	AE
Date Sampled...:	12/03/04	**Date Received..:**	12/08/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	1.83				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.12 JDX**	**1.8**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-7-10

GC/MS Volatiles

Lot-Sample #...: E4L090141-004 **Work Order #...:** G0LRN1AD **Matrix.....:** AE
Date Sampled...: 12/03/04 **Date Received..:** 12/08/04
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5005373
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.40**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.0038**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.031**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	**0.0018 JDX**	**0.010**	**ppm(v/v)**	**0.0010**
Carbon disulfide	**0.0027 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00059 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	**0.016 JDX**	**0.025**	**ppm(v/v)**	**0.0022**
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.0015 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.0014 JDX**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

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URS Corporation

Client Sample ID: SG-7-10

GC/MS Volatiles

Lot-Sample #...: E4L090141-004 **Work Order #...:** G0LRN1AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	**0.0013 JDX**	**0.010**	**ppm(v/v)**	**0.0010**
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	0.00050
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	**0.0031**	**0.0020**	**ppm(v/v)**	**0.00060**
Toluene	**0.0087**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	**0.0013 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0042**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.0014 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0057**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-7-10

GC Volatiles

Lot-Sample #...:	E4L090141-004	**Work Order #...:**	G0LRN1AE	**Matrix.....:**	AE
Date Sampled...:	12/03/04	**Date Received..:**	12/08/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	1.88				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.95 JDX**	**1.9**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

QC DATA ASSOCIATION SUMMARY

E4L090141

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5005373	
002	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5005373	
003	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5005373	
004	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5005373	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L090141 **Work Order #...:** G16N91AA **Matrix.....:** AIR
MB Lot-Sample #: M5A050000-373

Prep Date.....: 01/04/05 **Instrument ID..:** MSB
Analysis Date..: 01/04/05 **Prep Batch #...:** 5005373
Dilution Factor: 1

Analyst ID.....: 101605

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
tert-Butyl alcohol	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Diisopropyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethanol	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L090141 **Work Order #...:** G16N91AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Naphthalene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Difluoroethane (Freon	ND	0.0040	ppm(v/v)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E4L090141 **Work Order #...:** G14911AE **Matrix.....:** AIR
MB Lot-Sample #: E5A050000-111

Prep Date.....: 01/04/05 **Instrument ID..:** GC7
Analysis Date..: 01/04/05 **Prep Batch #...:** 5005111
Dilution Factor: 1

Analyst ID.....: 358011

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
GRO (C4 - C12)	ND	1.0	ppm(v/v)	EPA-19 TO-3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E4L090141 **Work Order #...:** G16N91AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A050000-373 G16N91AD-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005373
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 101605

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**101**	**(70 - 125)**			**EPA-21 TO-14A**
	98	**(70 - 125)**	**2.4**	**(0-20)**	**EPA-21 TO-14A**
Methylene chloride	**102**	**(75 - 120)**			**EPA-21 TO-14A**
	99	**(75 - 120)**	**3.1**	**(0-20)**	**EPA-21 TO-14A**
1,1,2,2-Tetrachloroethane	**103**	**(65 - 130)**			**EPA-21 TO-14A**
	104	**(65 - 130)**	**1.2**	**(0-20)**	**EPA-21 TO-14A**
Toluene	**99**	**(75 - 125)**			**EPA-21 TO-14A**
	99	**(75 - 125)**	**0.24**	**(0-20)**	**EPA-21 TO-14A**
Trichloroethene	**101**	**(70 - 125)**			**EPA-21 TO-14A**
	98	**(70 - 125)**	**2.7**	**(0-20)**	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E4L090141 **Work Order #...:** G16N91AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A050000-373 G16N91AD-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005373
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 101605

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	**0.0505**	**0.0508**	**ppm(v/v)**	**101**		**EPA-21 TO-14A**
	0.0505	**0.0496**	**ppm(v/v)**	**98**	**2.4**	**EPA-21 TO-14A**
Methylene chloride	**0.0545**	**0.0555**	**ppm(v/v)**	**102**		**EPA-21 TO-14A**
	0.0545	**0.0538**	**ppm(v/v)**	**99**	**3.1**	**EPA-21 TO-14A**
1,1,2,2-Tetrachloroethane	**0.0500**	**0.0514**	**ppm(v/v)**	**103**		**EPA-21 TO-14A**
	0.0500	**0.0520**	**ppm(v/v)**	**104**	**1.2**	**EPA-21 TO-14A**
Toluene	**0.0495**	**0.0490**	**ppm(v/v)**	**99**		**EPA-21 TO-14A**
	0.0495	**0.0489**	**ppm(v/v)**	**99**	**0.24**	**EPA-21 TO-14A**
Trichloroethene	**0.0495**	**0.0501**	**ppm(v/v)**	**101**		**EPA-21 TO-14A**
	0.0495	**0.0487**	**ppm(v/v)**	**98**	**2.7**	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E4L090141 **Work Order #...:** G14911AF-LCS **Matrix.....:** AIR
LCS Lot-Sample#: E5A050000-111 G14911AG-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005111
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
GRO (C4 - C12)	**99 LW**	**(75 - 125)**			**EPA-19 TO-3**
	101 LW	**(75 - 125)**	**1.9**	**(0-20)**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E4L090141 **Work Order #...:** G14911AF-LCS **Matrix.....:** AIR
LCS Lot-Sample#: E5A050000-111 G14911AG-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005111
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
GRO (C4 - C12)	**10.3**	**10.2 LW**	**ppm(v/v)**	**99**		**EPA-19 TO-3**
	10.3	**10.4 LW**	**ppm(v/v)**	**101**	**1.9**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

SEVERN TRENT STL

January 11, 2005

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921
www.stl-inc.com

STL LOT NUMBER: **E4L090159**
PO/CONTRACT: G09J2-0520

Scott Robinson
URS Corporation
1333 Broadway
Suite 800
Oakland, CA 94612

Dear Scott Robinson,

This report contains the analytical results for the five samples received under chain of custody by STL Los Angeles on December 8, 2004. These samples are associated with your ARCO #5387 project.

STL Los Angeles certifies that the test results provided in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number for STL Los Angeles is 01118CA / E87652.

Any matrix related anomaly is footnoted within the report. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. All applicable quality control procedures met method-specified acceptance criteria.

This report shall not be reproduced except in full, without the written approval of the laboratory.

This report contains 000031 pages.

If you have any questions, please feel free to call me at (714) 258-8610.

Sincerely,

Beth Riley
Project Manager

cc: Project File

ANALYTICAL REPORT

PROJECT NO. 38486988.0063601

ARCO #5387

Lot #: E4L090159

Scott Robinson

URS Corporation

SEVERN TRENT LABORATORIES, INC.

Beth Riley
Project Manager

January 11, 2005

EXECUTIVE SUMMARY - Detection Highlights

E4L090159

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SG-3-4.0 12/06/04 11:10 001				
GRO (C4 - C12)	0.83 JDX	8.4	ppm(v/v)	EPA-19 TO-3
Acetone	0.25 DH	0.028	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0059 DH	0.0056	ppm(v/v)	EPA-21 TO-14A
tert-Butyl alcohol	0.0047	0.028	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX,DH			
Ethanol	0.23 DH	0.070	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	0.0097 DH	0.0056	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	0.0088 DH	0.0056	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	0.0016	0.0056	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX,DH			
Tetrachloroethene	0.0031	0.0056	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX,DH			
Toluene	0.029 DH	0.0056	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.0080 DH	0.0056	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	0.0043	0.0056	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX,DH			
m-Xylene & p-Xylene	0.034 DH	0.0056	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.013 DH	0.0056	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.047 DH	0.0056	ppm(v/v)	EPA-21 TO-14A
SG-2-4.0 12/06/04 10:47 002				
GRO (C4 - C12)	0.20 JDX	2.1	ppm(v/v)	EPA-19 TO-3
Acetone	0.077	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0017	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
2-Butanone (MEK)	0.0055	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Carbon disulfide	0.0039	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00054	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethanol	0.048	0.025	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	0.0031	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	0.0021	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.00065	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Toluene	0.0080	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.0019	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
1,3,5-Trimethylbenzene	0.00088	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
m-Xylene & p-Xylene	0.0072	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

E4L090159

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SG-2-4.0 12/06/04 10:47 002				
o-Xylene	0.0025	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.0097	0.0020	ppm(v/v)	EPA-21 TO-14A
SG-1-4.0 12/06/04 11:50 003				
GRO (C4 - C12)	1.5 JDX	4.6	ppm(v/v)	EPA-19 TO-3
Acetone	0.47	0.016	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0075	0.0031	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	0.022	0.016	ppm(v/v)	EPA-21 TO-14A
tert-Butyl alcohol	0.0063	0.016	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Carbon disulfide	0.0049	0.016	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethanol	0.16	0.039	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	0.0088	0.0031	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	0.0050	0.0031	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.0032	0.0031	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.0037	0.0031	ppm(v/v)	EPA-21 TO-14A
Toluene	0.026	0.0031	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.0053	0.0031	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	0.0019	0.0031	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
m-Xylene & p-Xylene	0.028	0.0031	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.0090	0.0031	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.037	0.0031	ppm(v/v)	EPA-21 TO-14A
SG-2-8.5 12/06/04 14:09 004				
GRO (C4 - C12)	280	5.9	ppm(v/v)	EPA-19 TO-3
Methyl tert-butyl ether (MTBE)	1.1 DF	0.051	ppm(v/v)	EPA-21 TO-14A
SG-3-7.0 12/06/04 15:08 005				
GRO (C4 - C12)	1.7 JDX	1.8	ppm(v/v)	EPA-19 TO-3
Acetone	0.11	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.00083	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
2-Butanone (MEK)	0.0065	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00051	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethanol	0.022 JDX	0.025	ppm(v/v)	EPA-21 TO-14A

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EXECUTIVE SUMMARY - Detection Highlights

E4L090159

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SG-3-7.0 12/06/04 15:08 005				
Ethylbenzene	0.0011	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
4-Ethyltoluene	0.0010	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Methylene chloride	0.0018	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Methyl tert-butyl ether (MTBE)	0.00076	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Tetrachloroethene	0.00075	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Toluene	0.0040	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.00090	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
m-Xylene & p-Xylene	0.0023	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.00080	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Xylenes (total)	0.0031	0.0020	ppm(v/v)	EPA-21 TO-14A

ANALYTICAL METHODS SUMMARY

E4L090159

PARAMETER	ANALYTICAL METHOD
TPH by TO-3	EPA-19 TO-3
Volatile Organics by TO-14A	EPA-21 TO-14A

References:

EPA-19 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA/600/4-89/017, January 1988

EPA-21 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", Second Edition, EPA/625/R-96/010b, January 1999

SAMPLE SUMMARY

E4L090159

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G0LR0	001	SG-3-4.0	12/06/04	11:10
G0LR2	002	SG-2-4.0	12/06/04	10:47
G0LR3	003	SG-1-4.0	12/06/04	11:50
G0LR4	004	SG-2-8.5	12/06/04	14:09
G0LR5	005	SG-3-7.0	12/06/04	15:08

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

URS Corporation

Client Sample ID: SG-3-4.0

GC/MS Volatiles

Lot-Sample #...: E4L090159-001 **Work Order #...:** G0LR01AD **Matrix.....:** AE
Date Sampled...: 12/06/04 **Date Received..:** 12/08/04
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005373
Dilution Factor: 2.8
Analyst ID.....: 101605 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.25 DH**	**0.028**	**ppm(v/v)**	**0.0056**
Benzene	**0.0059 DH**	**0.0056**	**ppm(v/v)**	**0.0022**
Benzyl chloride	ND DH	0.028	ppm(v/v)	0.0022
Bromodichloromethane	ND DH	0.0056	ppm(v/v)	0.0022
Bromoform	ND DH	0.0056	ppm(v/v)	0.0014
Bromomethane	ND DH	0.0056	ppm(v/v)	0.0028
2-Butanone (MEK)	ND DH	0.028	ppm(v/v)	0.0056
tert-Butyl alcohol	**0.0047 JDX,DH**	**0.028**	**ppm(v/v)**	**0.0028**
Carbon disulfide	ND DH	0.028	ppm(v/v)	0.0056
Carbon tetrachloride	ND DH	0.0056	ppm(v/v)	0.0014
Chlorobenzene	ND DH	0.0056	ppm(v/v)	0.0014
Dibromochloromethane	ND DH	0.0056	ppm(v/v)	0.0014
Chloroethane	ND DH	0.011	ppm(v/v)	0.0022
Chloroform	ND DH	0.0056	ppm(v/v)	0.0022
Chloromethane	ND DH	0.011	ppm(v/v)	0.0028
1,2-Dibromoethane (EDB)	ND DH	0.0056	ppm(v/v)	0.0014
1,2-Dichlorobenzene	ND DH	0.0056	ppm(v/v)	0.0022
1,3-Dichlorobenzene	ND DH	0.0056	ppm(v/v)	0.0020
1,4-Dichlorobenzene	ND DH	0.0056	ppm(v/v)	0.0022
Dichlorodifluoromethane	ND DH	0.0056	ppm(v/v)	0.0014
1,1-Dichloroethane	ND DH	0.0056	ppm(v/v)	0.0014
1,2-Dichloroethane	ND DH	0.0056	ppm(v/v)	0.0022
cis-1,2-Dichloroethene	ND DH	0.0056	ppm(v/v)	0.0022
trans-1,2-Dichloroethene	ND DH	0.0056	ppm(v/v)	0.0014
1,1-Dichloroethene	ND DH	0.0056	ppm(v/v)	0.0014
1,2-Dichloropropane	ND DH	0.0056	ppm(v/v)	0.0022
cis-1,3-Dichloropropene	ND DH	0.0056	ppm(v/v)	0.0014
trans-1,3-Dichloropropene	ND DH	0.0056	ppm(v/v)	0.0022
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND DH	0.0056	ppm(v/v)	0.0022
Diisopropyl ether	ND DH	0.0056	ppm(v/v)	0.00056
Ethanol	**0.23 DH**	**0.070**	**ppm(v/v)**	**0.0062**
Tert-amyl methyl ether	ND DH	0.0056	ppm(v/v)	0.00056
Tert-butyl ethyl ether	ND DH	0.0056	ppm(v/v)	0.00056
Ethylbenzene	**0.0097 DH**	**0.0056**	**ppm(v/v)**	**0.0014**
4-Ethyltoluene	**0.0088 DH**	**0.0056**	**ppm(v/v)**	**0.0020**
Hexachlorobutadiene	ND DH	0.011	ppm(v/v)	0.0028

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URS Corporation

Client Sample ID: SG-3-4.0

GC/MS Volatiles

Lot-Sample #...: E4L090159-001 **Work Order #...:** G0LR01AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND DH	0.028	ppm(v/v)	0.0028
Methylene chloride	ND DH	0.0056	ppm(v/v)	0.0022
4-Methyl-2-pentanone (MIBK)	ND DH	0.028	ppm(v/v)	0.0056
Methyl tert-butyl ether (MTBE)	**0.0016 JDX,DH**	**0.0056**	**ppm(v/v)**	**0.0014**
Naphthalene	ND DH	0.014	ppm(v/v)	0.0014
Styrene	ND DH	0.0056	ppm(v/v)	0.0017
1,1,2,2-Tetrachloroethane	ND DH	0.0056	ppm(v/v)	0.0014
Tetrachloroethene	**0.0031 JDX,DH**	**0.0056**	**ppm(v/v)**	**0.0017**
Toluene	**0.029 DH**	**0.0056**	**ppm(v/v)**	**0.0014**
1,2,4-Trichloro-benzene	ND DH	0.014	ppm(v/v)	0.0028
1,1,1-Trichloroethane	ND DH	0.0056	ppm(v/v)	0.0014
1,1,2-Trichloroethane	ND DH	0.0056	ppm(v/v)	0.0017
Trichloroethene	ND DH	0.0056	ppm(v/v)	0.0014
Trichlorofluoromethane	ND DH	0.0056	ppm(v/v)	0.0014
1,1,2-Trichloro-1,2,2-trifluoroethane	ND DH	0.0056	ppm(v/v)	0.0014
1,2,4-Trimethylbenzene	**0.0080 DH**	**0.0056**	**ppm(v/v)**	**0.0022**
1,3,5-Trimethylbenzene	**0.0043 JDX,DH**	**0.0056**	**ppm(v/v)**	**0.0022**
Vinyl acetate	ND DH	0.028	ppm(v/v)	0.0056
Vinyl chloride	ND DH	0.0056	ppm(v/v)	0.0022
m-Xylene & p-Xylene	**0.034 DH**	**0.0056**	**ppm(v/v)**	**0.0028**
o-Xylene	**0.013 DH**	**0.0056**	**ppm(v/v)**	**0.0017**
Xylenes (total)	**0.047 DH**	**0.0056**	**ppm(v/v)**	**0.0022**
1,1-Difluoroethane (Freon 152A)	ND DH	0.011	ppm(v/v)	0.0076

NOTE(S):

DH Reporting limits elevated due to insufficient sample quantity.

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-3-4.0

GC Volatiles

Lot-Sample #...:	E4L090159-001	**Work Order #...:**	G0LR01AE	**Matrix.....:**	AE
Date Sampled...:	12/06/04	**Date Received..:**	12/08/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	8.43				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.83 JDX**	**8.4**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-2-4.0

GC/MS Volatiles

Lot-Sample #...: E4L090159-002 **Work Order #...:** G0LR21AD **Matrix.....:** AE
Date Sampled...: 12/06/04 **Date Received..:** 12/08/04
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005373
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.077**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.0017 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.0055 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	ND	0.010	ppm(v/v)	0.0010
Carbon disulfide	**0.0039 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00054 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	**0.048**	**0.025**	**ppm(v/v)**	**0.0022**
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.0031**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.0021**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

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URS Corporation

Client Sample ID: SG-2-4.0

GC/MS Volatiles

Lot-Sample #...: E4L090159-002 **Work Order #...:** G0LR21AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.010	ppm(v/v)	0.0010
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	0.00050
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	**0.00065 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Toluene	**0.0080**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	**0.0019 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
1,3,5-Trimethylbenzene	**0.00088 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0072**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.0025**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0097**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-2-4.0

GC Volatiles

Lot-Sample #...: E4L090159-002	**Work Order #...:** G0LR21AE		**Matrix.....:** AE
Date Sampled...: 12/06/04	**Date Received..:** 12/08/04		
Prep Date.....: 01/04/05	**Analysis Date..:** 01/04/05		
Prep Batch #...: 5005111			
Dilution Factor: 2.11			
Analyst ID.....: 358011	**Instrument ID..:** GC7		
	Method.....: EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.20 JDX**	**2.1**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-1-4.0

GC/MS Volatiles

Lot-Sample #...: E4L090159-003 **Work Order #...:** G0LR31AD **Matrix.....:** AE
Date Sampled...: 12/06/04 **Date Received..:** 12/08/04
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005373
Dilution Factor: 1.55
Analyst ID.....: 101605 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.47**	**0.016**	**ppm(v/v)**	**0.0031**
Benzene	**0.0075**	**0.0031**	**ppm(v/v)**	**0.0012**
Benzyl chloride	ND	0.016	ppm(v/v)	0.0012
Bromodichloromethane	ND	0.0031	ppm(v/v)	0.0012
Bromoform	ND	0.0031	ppm(v/v)	0.00078
Bromomethane	ND	0.0031	ppm(v/v)	0.0016
2-Butanone (MEK)	**0.022**	**0.016**	**ppm(v/v)**	**0.0031**
tert-Butyl alcohol	**0.0063 JDX**	**0.016**	**ppm(v/v)**	**0.0016**
Carbon disulfide	**0.0049 JDX**	**0.016**	**ppm(v/v)**	**0.0031**
Carbon tetrachloride	ND	0.0031	ppm(v/v)	0.00078
Chlorobenzene	ND	0.0031	ppm(v/v)	0.00078
Dibromochloromethane	ND	0.0031	ppm(v/v)	0.00078
Chloroethane	ND	0.0062	ppm(v/v)	0.0012
Chloroform	ND	0.0031	ppm(v/v)	0.0012
Chloromethane	ND	0.0062	ppm(v/v)	0.0016
1,2-Dibromoethane (EDB)	ND	0.0031	ppm(v/v)	0.00078
1,2-Dichlorobenzene	ND	0.0031	ppm(v/v)	0.0012
1,3-Dichlorobenzene	ND	0.0031	ppm(v/v)	0.0011
1,4-Dichlorobenzene	ND	0.0031	ppm(v/v)	0.0012
Dichlorodifluoromethane	ND	0.0031	ppm(v/v)	0.00078
1,1-Dichloroethane	ND	0.0031	ppm(v/v)	0.00078
1,2-Dichloroethane	ND	0.0031	ppm(v/v)	0.0012
cis-1,2-Dichloroethene	ND	0.0031	ppm(v/v)	0.0012
trans-1,2-Dichloroethene	ND	0.0031	ppm(v/v)	0.00078
1,1-Dichloroethene	ND	0.0031	ppm(v/v)	0.00078
1,2-Dichloropropane	ND	0.0031	ppm(v/v)	0.0012
cis-1,3-Dichloropropene	ND	0.0031	ppm(v/v)	0.00078
trans-1,3-Dichloropropene	ND	0.0031	ppm(v/v)	0.0012
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0031	ppm(v/v)	0.0012
Diisopropyl ether	ND	0.0031	ppm(v/v)	0.00031
Ethanol	**0.16**	**0.039**	**ppm(v/v)**	**0.0034**
Tert-amyl methyl ether	ND	0.0031	ppm(v/v)	0.00031
Tert-butyl ethyl ether	ND	0.0031	ppm(v/v)	0.00031
Ethylbenzene	**0.0088**	**0.0031**	**ppm(v/v)**	**0.00078**
4-Ethyltoluene	**0.0050**	**0.0031**	**ppm(v/v)**	**0.0011**
Hexachlorobutadiene	ND	0.0062	ppm(v/v)	0.0016

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URS Corporation

Client Sample ID: SG-1-4.0

GC/MS Volatiles

Lot-Sample #...: E4L090159-003 **Work Order #...:** G0LR31AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.016	ppm(v/v)	0.0016
Methylene chloride	**0.0032**	**0.0031**	**ppm(v/v)**	**0.0012**
4-Methyl-2-pentanone (MIBK)	ND	0.016	ppm(v/v)	0.0031
Methyl tert-butyl ether (MTBE)	ND	0.0031	ppm(v/v)	0.00078
Naphthalene	ND	0.0078	ppm(v/v)	0.00078
Styrene	ND	0.0031	ppm(v/v)	0.00093
1,1,2,2-Tetrachloroethane	ND	0.0031	ppm(v/v)	0.00078
Tetrachloroethene	**0.0037**	**0.0031**	**ppm(v/v)**	**0.00093**
Toluene	**0.026**	**0.0031**	**ppm(v/v)**	**0.00078**
1,2,4-Trichloro-benzene	ND	0.0078	ppm(v/v)	0.0016
1,1,1-Trichloroethane	ND	0.0031	ppm(v/v)	0.00078
1,1,2-Trichloroethane	ND	0.0031	ppm(v/v)	0.00093
Trichloroethene	ND	0.0031	ppm(v/v)	0.00078
Trichlorofluoromethane	ND	0.0031	ppm(v/v)	0.00078
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0031	ppm(v/v)	0.00078
1,2,4-Trimethylbenzene	**0.0053**	**0.0031**	**ppm(v/v)**	**0.0012**
1,3,5-Trimethylbenzene	**0.0019 JDX**	**0.0031**	**ppm(v/v)**	**0.0012**
Vinyl acetate	ND	0.016	ppm(v/v)	0.0031
Vinyl chloride	ND	0.0031	ppm(v/v)	0.0012
m-Xylene & p-Xylene	**0.028**	**0.0031**	**ppm(v/v)**	**0.0016**
o-Xylene	**0.0090**	**0.0031**	**ppm(v/v)**	**0.00093**
Xylenes (total)	**0.037**	**0.0031**	**ppm(v/v)**	**0.0012**
1,1-Difluoroethane (Freon 152A)	ND	0.0062	ppm(v/v)	0.0042

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-1-4.0

GC Volatiles

Lot-Sample #...: E4L090159-003	**Work Order #...:** G0LR31AE	**Matrix.....:** AE	
Date Sampled...: 12/06/04	**Date Received..:** 12/08/04		
Prep Date.....: 01/04/05	**Analysis Date..:** 01/04/05		
Prep Batch #...: 5005111			
Dilution Factor: 4.65			
Analyst ID.....: 358011	**Instrument ID..:** GC7		
	Method.....: EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**1.5 JDX**	**4.6**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-2-8.5

GC/MS Volatiles

Lot-Sample #...: E4L090159-004 **Work Order #...:** G0LR41AD **Matrix.....:** AE
Date Sampled...: 12/06/04 **Date Received..:** 12/08/04
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5005373
Dilution Factor: 25.43
Analyst ID.....: 101605 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND DF	0.25	ppm(v/v)	0.051
Benzene	ND DF	0.051	ppm(v/v)	0.020
Benzyl chloride	ND DF	0.25	ppm(v/v)	0.020
Bromodichloromethane	ND DF	0.051	ppm(v/v)	0.020
Bromoform	ND DF	0.051	ppm(v/v)	0.013
Bromomethane	ND DF	0.051	ppm(v/v)	0.025
2-Butanone (MEK)	ND DF	0.25	ppm(v/v)	0.051
tert-Butyl alcohol	ND DF	0.25	ppm(v/v)	0.025
Carbon disulfide	ND DF	0.25	ppm(v/v)	0.051
Carbon tetrachloride	ND DF	0.051	ppm(v/v)	0.013
Chlorobenzene	ND DF	0.051	ppm(v/v)	0.013
Dibromochloromethane	ND DF	0.051	ppm(v/v)	0.013
Chloroethane	ND DF	0.10	ppm(v/v)	0.020
Chloroform	ND DF	0.051	ppm(v/v)	0.020
Chloromethane	ND DF	0.10	ppm(v/v)	0.025
1,2-Dibromoethane (EDB)	ND DF	0.051	ppm(v/v)	0.013
1,2-Dichlorobenzene	ND DF	0.051	ppm(v/v)	0.020
1,3-Dichlorobenzene	ND DF	0.051	ppm(v/v)	0.018
1,4-Dichlorobenzene	ND DF	0.051	ppm(v/v)	0.020
Dichlorodifluoromethane	ND DF	0.051	ppm(v/v)	0.013
1,1-Dichloroethane	ND DF	0.051	ppm(v/v)	0.013
1,2-Dichloroethane	ND DF	0.051	ppm(v/v)	0.020
cis-1,2-Dichloroethene	ND DF	0.051	ppm(v/v)	0.020
trans-1,2-Dichloroethene	ND DF	0.051	ppm(v/v)	0.013
1,1-Dichloroethene	ND DF	0.051	ppm(v/v)	0.013
1,2-Dichloropropane	ND DF	0.051	ppm(v/v)	0.020
cis-1,3-Dichloropropene	ND DF	0.051	ppm(v/v)	0.013
trans-1,3-Dichloropropene	ND DF	0.051	ppm(v/v)	0.020
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND DF	0.051	ppm(v/v)	0.020
Diisopropyl ether	ND DF	0.051	ppm(v/v)	0.0051
Ethanol	ND DF	0.64	ppm(v/v)	0.056
Tert-amyl methyl ether	ND DF	0.051	ppm(v/v)	0.0051
Tert-butyl ethyl ether	ND DF	0.051	ppm(v/v)	0.0051
Ethylbenzene	ND DF	0.051	ppm(v/v)	0.013
4-Ethyltoluene	ND DF	0.051	ppm(v/v)	0.018
Hexachlorobutadiene	ND DF	0.10	ppm(v/v)	0.025

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URS Corporation

Client Sample ID: SG-2-8.5

GC/MS Volatiles

Lot-Sample #...: E4L090159-004 **Work Order #...:** G0LR41AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND DF	0.25	ppm(v/v)	0.025
Methylene chloride	ND DF	0.051	ppm(v/v)	0.020
4-Methyl-2-pentanone (MIBK)	ND DF	0.25	ppm(v/v)	0.051
Methyl tert-butyl ether (MTBE)	**1.1 DF**	**0.051**	**ppm(v/v)**	**0.013**
Naphthalene	ND DF	0.13	ppm(v/v)	0.013
Styrene	ND DF	0.051	ppm(v/v)	0.015
1,1,2,2-Tetrachloroethane	ND DF	0.051	ppm(v/v)	0.013
Tetrachloroethene	ND DF	0.051	ppm(v/v)	0.015
Toluene	ND DF	0.051	ppm(v/v)	0.013
1,2,4-Trichloro-benzene	ND DF	0.13	ppm(v/v)	0.025
1,1,1-Trichloroethane	ND DF	0.051	ppm(v/v)	0.013
1,1,2-Trichloroethane	ND DF	0.051	ppm(v/v)	0.015
Trichloroethene	ND DF	0.051	ppm(v/v)	0.013
Trichlorofluoromethane	ND DF	0.051	ppm(v/v)	0.013
1,1,2-Trichloro-1,2,2-trifluoroethane	ND DF	0.051	ppm(v/v)	0.013
1,2,4-Trimethylbenzene	ND DF	0.051	ppm(v/v)	0.020
1,3,5-Trimethylbenzene	ND DF	0.051	ppm(v/v)	0.020
Vinyl acetate	ND DF	0.25	ppm(v/v)	0.051
Vinyl chloride	ND DF	0.051	ppm(v/v)	0.020
m-Xylene & p-Xylene	ND DF	0.051	ppm(v/v)	0.025
o-Xylene	ND DF	0.051	ppm(v/v)	0.015
Xylenes (total)	ND DF	0.051	ppm(v/v)	0.020
1,1-Difluoroethane (Freon 152A)	ND DF	0.10	ppm(v/v)	0.069

NOTE(S):

DF Reporting limits elevated due to matrix interferences.

URS Corporation

Client Sample ID: SG-2-8.5

GC Volatiles

Lot-Sample #...:	E4L090159-004	**Work Order #...:**	G0LR41AE	**Matrix.....:**	AE
Date Sampled...:	12/06/04	**Date Received..:**	12/08/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	5.9				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**280**	**5.9**	**ppm(v/v)**	

URS Corporation

Client Sample ID: SG-3-7.0

GC/MS Volatiles

Lot-Sample #...: E4L090159-005 **Work Order #...:** G0LR51AD **Matrix.....:** AE
Date Sampled...: 12/06/04 **Date Received..:** 12/08/04
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5005373
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.11**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.00083 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.0065 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	ND	0.010	ppm(v/v)	0.0010
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00051 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	**0.022 JDX**	**0.025**	**ppm(v/v)**	**0.0022**
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.0011 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.0010 JDX**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

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URS Corporation

Client Sample ID: SG-3-7.0

GC/MS Volatiles

Lot-Sample #...: E4L090159-005 **Work Order #...:** G0LR51AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.010	ppm(v/v)	0.0010
Methylene chloride	**0.0018 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	**0.00076 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	**0.00075 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Toluene	**0.0040**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	**0.00090 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0023**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.00080 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0031**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-3-7.0

GC Volatiles

Lot-Sample #...: E4L090159-005	**Work Order #...:** G0LR51AE		**Matrix.....:** AE	
Date Sampled...: 12/06/04	**Date Received..:** 12/08/04			
Prep Date.....: 01/04/05	**Analysis Date..:** 01/04/05			
Prep Batch #...: 5005111				
Dilution Factor: 1.77				
Analyst ID.....: 358011	**Instrument ID..:** GC7			
	Method.....: EPA-19 TO-3			

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**1.7 JDX**	**1.8**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

QC DATA ASSOCIATION SUMMARY

E4L090159

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5005373	
002	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5005373	
003	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5005373	
004	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5005373	
005	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5005373	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L090159 **Work Order #...:** G16N91AA **Matrix.....:** AIR
MB Lot-Sample #: M5A050000-373

Prep Date.....: 01/04/05 **Instrument ID..:** MSB
Analysis Date..: 01/04/05 **Prep Batch #...:** 5005373
Dilution Factor: 1

Analyst ID.....: 101605

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
tert-Butyl alcohol	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Diisopropyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethanol	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L090159 **Work Order #...:** G16N91AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Naphthalene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Difluoroethane (Freon	ND	0.0040	ppm(v/v)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E4L090159 **Work Order #...:** G14911AE **Matrix.....:** AIR
MB Lot-Sample #: E5A050000-111

Prep Date.....: 01/04/05 **Instrument ID..:** GC7
Analysis Date..: 01/04/05 **Prep Batch #...:** 5005111
Dilution Factor: 1

Analyst ID.....: 358011

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
GRO (C4 - C12)	ND	1.0	ppm(v/v)	EPA-19 TO-3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E4L090159 **Work Order #...:** G16N91AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A050000-373 G16N91AD-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005373
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 101605

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**101**	**(70 - 125)**			**EPA-21 TO-14A**
	98	**(70 - 125)**	**2.4**	**(0-20)**	**EPA-21 TO-14A**
Methylene chloride	**102**	**(75 - 120)**			**EPA-21 TO-14A**
	99	**(75 - 120)**	**3.1**	**(0-20)**	**EPA-21 TO-14A**
1,1,2,2-Tetrachloroethane	**103**	**(65 - 130)**			**EPA-21 TO-14A**
	104	**(65 - 130)**	**1.2**	**(0-20)**	**EPA-21 TO-14A**
Toluene	**99**	**(75 - 125)**			**EPA-21 TO-14A**
	99	**(75 - 125)**	**0.24**	**(0-20)**	**EPA-21 TO-14A**
Trichloroethene	**101**	**(70 - 125)**			**EPA-21 TO-14A**
	98	**(70 - 125)**	**2.7**	**(0-20)**	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E4L090159 **Work Order #...:** G16N91AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A050000-373 G16N91AD-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005373
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 101605

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	0.0505	0.0508	ppm(v/v)	101		EPA-21 TO-14A
	0.0505	0.0496	ppm(v/v)	98	2.4	EPA-21 TO-14A
Methylene chloride	0.0545	0.0555	ppm(v/v)	102		EPA-21 TO-14A
	0.0545	0.0538	ppm(v/v)	99	3.1	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	0.0500	0.0514	ppm(v/v)	103		EPA-21 TO-14A
	0.0500	0.0520	ppm(v/v)	104	1.2	EPA-21 TO-14A
Toluene	0.0495	0.0490	ppm(v/v)	99		EPA-21 TO-14A
	0.0495	0.0489	ppm(v/v)	99	0.24	EPA-21 TO-14A
Trichloroethene	0.0495	0.0501	ppm(v/v)	101		EPA-21 TO-14A
	0.0495	0.0487	ppm(v/v)	98	2.7	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E4L090159 **Work Order #...:** G14911AF-LCS **Matrix.....:** AIR
LCS Lot-Sample#: E5A050000-111 G14911AG-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005111
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
GRO (C4 - C12)	**99 LW**	**(75 - 125)**			**EPA-19 TO-3**
	101 LW	**(75 - 125)**	**1.9**	**(0-20)**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E4L090159 **Work Order #...:** G14911AF-LCS **Matrix.....:** AIR
LCS Lot-Sample#: E5A050000-111 G14911AG-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005111
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
GRO (C4 - C12)	**10.3**	**10.2 LW**	**ppm(v/v)**	**99**		**EPA-19 TO-3**
	10.3	**10.4 LW**	**ppm(v/v)**	**101**	**1.9**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

ARCO SITE #5387

E4L090141 Page ___ of ___ 7656

Chain of Custody Record

PLEASE FAX COPY

Project Name: ARCO 5387-SVS Investigation
BP BU/AR Region/Enfos Segment:
State or Lead Regulatory Agency: Alameda County Health Care Services
Requested Due Date (mm/dd/yy): 12/10/04

On-site Time:		Temp:	
Off-site Time:		Temp:	
Sky Conditions:	CLEAR, SUNNY APPROX 60°F		
Meteorological Events:			
Wind Speed:		Direction:	

Lab Name:	Severn Trent Labs, Inc. (STL)	BP/AR Facility No.:	ARCO 5387	Consultant/Contractor:	URS Corporation
Address:	1220 Quarry Lane	BP/AR Facility Address:	20200 Hesperian Blvd., Hayward, CA	Address:	1333 Broadway, Suite 800
	Pleasonton, CA 94566	Site Lat/Long:			Oakland, CA 94612
Lab PM:	Afsaneh Salimpour	California Global ID No.:	T0600101368	Consultant/Contractor Project No.:	38486988.0063601
Tele/Fax:	925-484-1919	Enfos Project No.:	38486G09JZ-0520	Consultant/Contractor PM:	Scott Robinson
BP/AR PM Contact:	Paul Supple	(Provision) or RCOP (circle one)		Tele/Fax:	510-874-3280
Address:	P.O. Box 6549	Phase/WBS:	CLOSURE	Report Type & QC Level:	
	Moraga, CA 94549	Sub Phase/Task:	ANALYTICAL	E-mail EDD To:	NO EDD
Tele/Fax:		Cost Element:	SUB CONTRACTOR	Invoice to: Consultant or BP or Atlantic Richfield Co. (circle one)	

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Water/Liquid	Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	Requested Analysis: BTEX 8021	BTEX/TPH	BTEX/Oxy/TPH	EPA 8260	EPA 8270	TO-14 (full suite-approx. 60 compounds). Please see Comments	Leak Test Tracer gas(es) (i.e., shaving cream propellents)	TPH/GRO EPA Method TO-3	BTEX AND MTBE: TO-14 OR TO-15		Sample Point Lat/Long and Comments
1	SG-10-5.5	1325	12/03			X		1											X	X	X	X		Full suite TO-14 chemicals,
2	SG-7-5.5	1433	"			X		1											X	X	X	X		including alkanes, aromatics,
3	SG-10-9	1525	"			X		1											X	X	X	X		naphthalenes, etc.
4	SG-7-10	1633	"			X		1											X	X	X	X		(approx. 60 compounds)
5																								
6																								
7																								
8																								
9																								
10																								

Sampler's Name: SRIJESH THAPA
Sampler's Company: URS CORPORATION
Shipment Date: 12/03/04
Shipment Method:
Shipment Tracking No:

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Srijesh Thapa	12/03	1600	SAS MIKE - STL-SF	12/3/04	1600
SAS MIKE	12/3/04	1915	Denise Harrington / STL-SF	12/3/04	1915
[illegible] STL-SF	14:00	12/6/04	[illegible]	12/8/04	1030

Special Instructions: Summa Canisters

Custody Seals In Place Yes ___ No ___ Temp Blank Yes ___ No ___ Cooler Temperature on Receipt NA °F/C Trip Blank Yes ___ No ___

Distribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Pink Copy - Consultant/Contractor

BP COC Rev. 4 10/1/04

3

E4L090141

ARCO SITE #5387

E4L090159 Page 1 of 1

Chain of Custody Record

Project Name: ARCO 5387-SVS Investigation
BP BU/AR Region/Enfos Segment:
State or Lead Regulatory Agency: Alameda County Health Care Services
Requested Due Date (mm/dd/yy): 12/11/2004

On-site Time: 7 am	Temp:
Off-site Time:	Temp:
Sky Conditions: cloudy	
Meteorological Events: windy ~~foggy~~	
Wind Speed: N/A	Direction: SW

Lab Name:	Severn Trent Labs, Inc. (STL)	BP/AR Facility No.:	ARCO 5387	Consultant/Contractor:	URS Corporation
Address:	1220 Quarry Lane	BP/AR Facility Address:	20200 Hesperian Blvd., Hayward, CA	Address:	1333 Broadway, Suite 800
	Pleasonton, CA 94566	Site Lat/Long:			Oakland, CA 94612
Lab PM:	Afsaneh Salimpour	California Global ID No.:	T0600101368	Consultant/Contractor Project No.:	38486988.0063601
Tele/Fax:	925-484-1919	Enfos Project No.:		Consultant/Contractor PM:	Scott Robinson
BP/AR PM Contact:	Paul Supple	Provision or RCOP (circle one)		Tele/Fax:	510-874-3280
Address:	P.O. Box 6549	Phase/WBS:		Report Type & QC Level:	
	Moraga, CA 94549	Sub Phase/Task:		E-mail EDD To:	
Tele/Fax:		Cost Element:		Invoice to: Consultant or BP or Atlantic Richfield Co. (circle one)	

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: BTEX 8021	Requested Analysis: BTEX/TPH	Requested Analysis: BTEX/Oxy/TPH	Requested Analysis: EPA 8260	Requested Analysis: EPA 8270	Requested Analysis: TO-14 (full suite-approx. 60 compounds). Please see Comments	Requested Analysis: Leak Test Tracer gas(es) (i.e., shaving cream propellents) *	Requested Analysis: TPH/GRO EPA Method TO-3	Sample Point Lat/Long and Comments
1	SG-3-4.0	11:10	12/6			X		1											X	X	X	Full suite TO-14 chemicals,
2	SG-2-4.0	10:47	12/6			X		1											X	X	X	including alkanes, aromatics,
3	SG-1-4.0	11:50	12/6			X		1											X	X	X	naphthalenes, etc.
4	SG-2-8.5	14:09	12/6			X		1											X	X	X	(approx. 60 compounds)
5	SG-3-7.0	15:03	12/6			X		1											X	X	X	* Tracer Gas Used
6																						ethane 1,1-difluoro
7																						CAS = 75376
8																						Also used for samples
9																						collected 12/3/04
10																						

		Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name:	Srijesh Thapa	Raymond Underwood	12/6	15:50		12/6/04	1550
Sampler's Company:	URS Corp.		20004	1630		12/6/04	163
Shipment Date:	12/6/2004				STL CA	12/8/04	1030
Shipment Method:	Courier Pickup						
Shipment Tracking No:							

Special Instructions:

Custody Seals In Place Yes ___ No ___ Temp Blank Yes ___ No ___ Cooler Temperature on Receipt 18 °F/C Trip Blank Yes ___ No ___

Distribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Pink Copy - Consultant/Contractor

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2

E4L090159

URS

Unit Weight/Moisture Content/Porosity

Project Name: ARCO 5387-SVS Investigation **1/6/2005**

Project Number: 38486988.0063601

Location: 20200 Hesperian Blvd., Hayward, CA

Sample Number	Total Unit Weight, pcf	Dry Unit Weight, pcf	Moisture Content, %	Assumed Specific Gravity	Total Porosity
SG-5-P-4.5 4.5 feet	131.4	111.2	18.17	2.65 2.70 2.75	32.76% 34.01% 35.21%
SG-5-P-8.5 8.5 feet	129.4	108.3	19.42	2.65 2.70 2.75	34.48% 35.69% 36.86%
SG-9-P-5.5 5.5 feet	130.6	110.0	18.66	2.65 2.70 2.75	33.45% 34.68% 35.87%
SG-9-P-9.0 9.0 feet	132.0	112.0	17.89	2.65 2.70 2.75	32.29% 33.54% 34.75%
SG-10-P-5.5 5.5 feet	127.1	105.1	20.92	2.65 2.70 2.75	36.44% 37.62% 38.75%
SG-10-P-9.0 9.0 feet	128.1	106.6	20.19	2.65 2.70 2.75	35.53% 36.73% 37.88%

URS

Tue Feb 08 09:13:07 2005

GEOTECHNICAL LABORATORY TEST DATA

Project : ARCO 5387 Investigation
Project No. : 38486988
Boring No. : SG-5-P
Sample No. : 4.5
Location : 20200 Hesperian Blvd., Hayward, CA
Soil Description : Dark brown fine sandy clay (CL)
Remarks : k = 1.36E-08 cm/sec

Depth : 4.5 feet
Test Date : 01/03/2005
Test Method : ASTM D422

Filename : SG05P045
Elevation : NA
Tested by : R. Taraya
Checked by : S. Capps

COARSE SIEVE SET

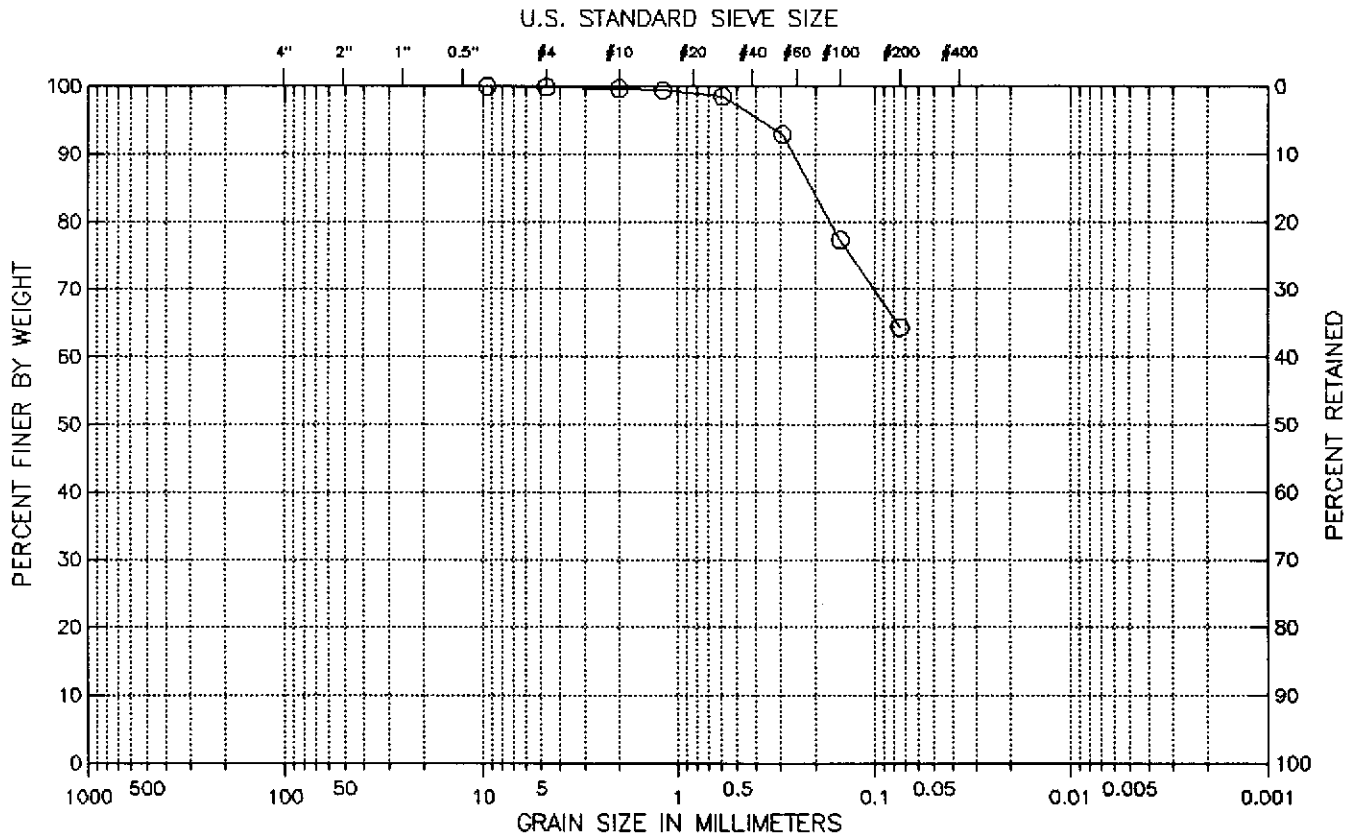
Sieve Mesh	Sieve Openings Inches	Millimeters	Weight Retained (gm)	Cumulative Weight Retained (gm)	Percent Finer (%)
0.375"	0.374	9.51	0.00	0.00	100
#4	0.187	4.75	0.28	0.28	100
#10	0.079	2.00	0.40	0.68	100
#16	0.047	1.19	0.76	1.44	99
#30	0.023	0.60	2.01	3.45	99
#50	0.012	0.30	13.38	16.83	93
#100	0.006	0.15	37.01	53.84	77
#200	0.003	0.07	30.91	84.75	64

Total Dry Weight of Sample = 237.85

D85 : 0.2083 mm
D60 : N/A
D50 : N/A
D30 : N/A
D15 : N/A
D10 : N/A

Soil Classification
ASTM Group Symbol : N/A
ASTM Group Name : N/A
AASHTO Group Symbol : A-4(0)
AASHTO Group Name : Silty Soils

	Boring No. : SG-5-P Sample No: 4.5 Tested by : R. Taraya Filename : SG05P045	Project : ARCO 5387 Investigation Project No.: 38486988 Location: 20200 Hesperian Blvd., Hayward, CA Date : Tue Feb 08 2005



Classification :

Visual Description :
Dark brown fine sandy clay (CL)

Remarks :
k = 1.36E-08 cm/sec

Figure 1

URS

Tue Feb 08 09:13:08 2005

GEOTECHNICAL LABORATORY TEST DATA

Project : ARCO 5387 Investigation
Project No. : 38486988
Boring No. : SG-5-P
Sample No. : 8.5
Depth : 8.5 feet
Test Date : 01/03/2005
Test Method : ASTM D422
Filename : SG05P085
Elevation : NA
Tested by : R. Taraya
Checked by : S. Capps
Location : 20200 Hesperian Blvd., Hayward, CA
Soil Description : Brown fine sandy clay (CL-CH)
Remarks : k = 8.47E-08 cm/sec

COARSE SIEVE SET

Sieve Mesh	Sieve Openings Inches	Millimeters	Weight Retained (gm)	Cumulative Weight Retained (gm)	Percent Finer (%)
#4	0.187	4.75	0.00	0.00	100
#10	0.079	2.00	0.05	0.05	100
#16	0.047	1.19	0.18	0.23	100
#30	0.023	0.60	0.29	0.52	100
#50	0.012	0.30	2.54	3.06	99
#100	0.006	0.15	12.96	16.02	93
#200	0.003	0.07	28.93	44.95	80

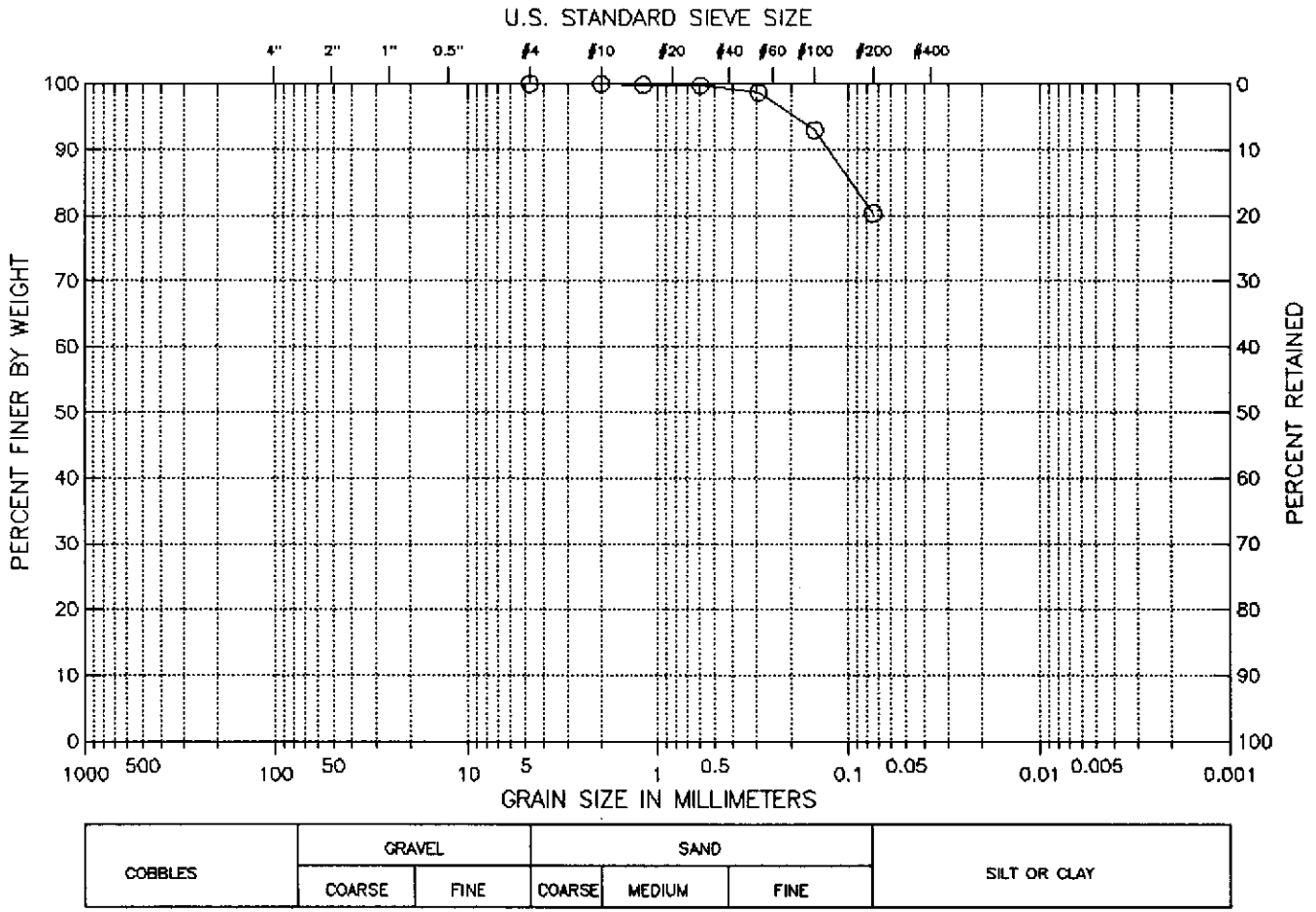
Total Dry Weight of Sample = 228.47

D85 : 0.0958 mm
D60 : N/A
D50 : N/A
D30 : N/A
D15 : N/A
D10 : N/A

Soil Classification
ASTM Group Symbol : N/A
ASTM Group Name : N/A
AASHTO Group Symbol : A-4(0)
AASHTO Group Name : Silty Soils

URS

	Boring No. : SG-5-P Sample No: 8.5 Tested by : R. Taraya Filename : SG05P085	Project : ARCO 5387 Investigation Project No.: 38486988 Location: 20200 Hesperian Blvd., Hayward, CA Date : Tue Feb 08 2005



Classification :

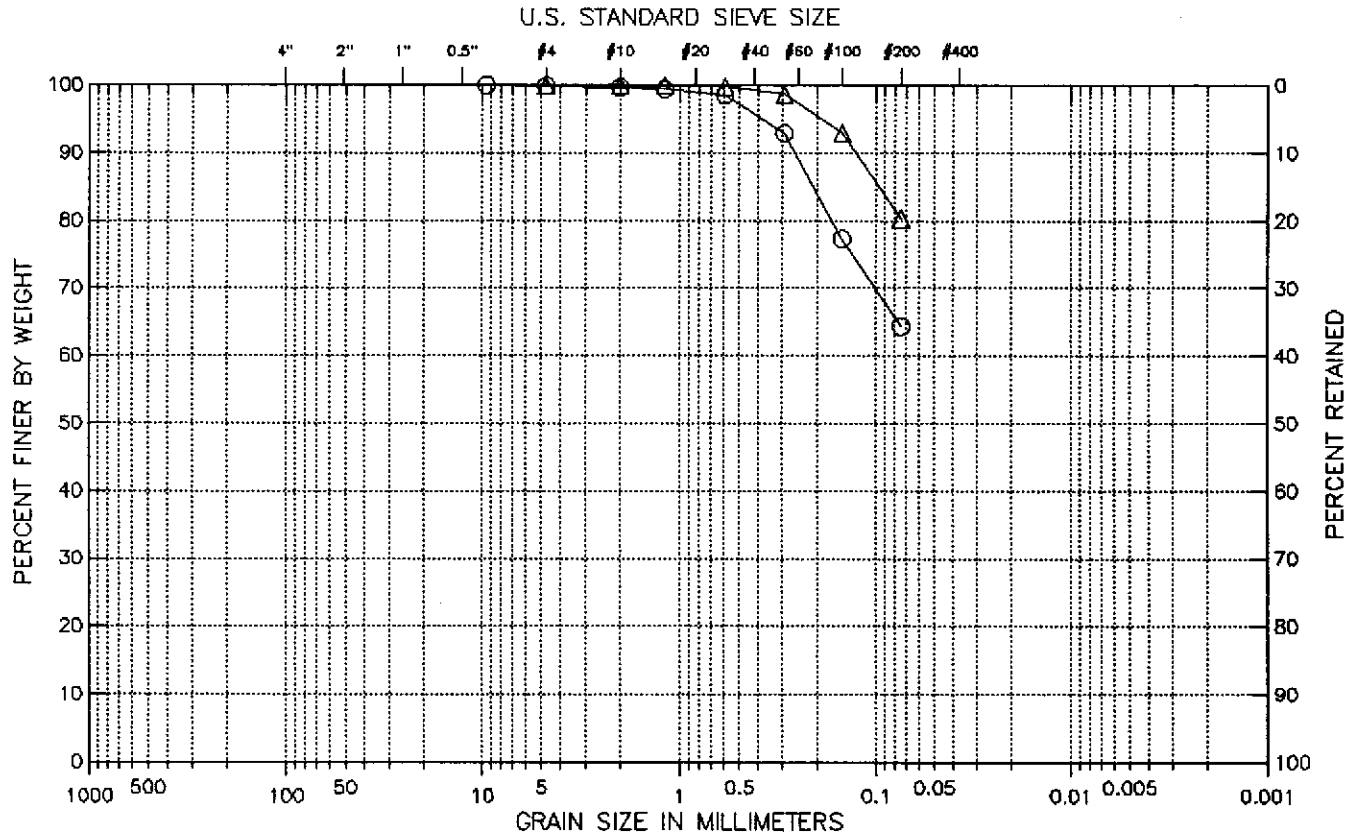
Visual Description :
Brown fine sandy clay (CL-CH)

Remarks :
k = 8.47E-08 cm/sec

Figure 2

URS

Project : ARCO 5387 Investigation
Project No.: 38486988
Location: 20200 Hesperian Blvd., Hayward, CA
Date : Tue Feb 08 2005



Symbol	Boring No.	Sample No.	Depth	Filename	Classification / Description
⊖	SG-5-P	4.5	4.5 feet	SG05P045	Dark brown fine sandy clay (CL)
△	SG-5-P	8.5	8.5 feet	SG05P085	Brown fine sandy clay (CL-CH)

Figure 1

URS

Tue Feb 08 09:13:09 2005 Page : 1

GEOTECHNICAL LABORATORY TEST DATA

Project : ARCO 5387 Investigation
Project No. : 38486988
Boring No. : SG-9-P
Sample No. : 5.5
Location : 20200 Hesperian Blvd., Hayward, CA
Soil Description : Dark brown fine sandy clay (CL)
Remarks : k = 5.17E-08 cm/sec

Depth : 5.5 feet
Test Date : 01/03/2005
Test Method : ASTM D422

Filename : SG09P055
Elevation : NA
Tested by : R. Taraya
Checked by : S. Capps

COARSE SIEVE SET

Sieve Mesh	Sieve Openings Inches	Millimeters	Weight Retained (gm)	Cumulative Weight Retained (gm)	Percent Finer (%)
#4	0.187	4.75	0.00	0.00	100
#10	0.079	2.00	0.34	0.34	100
#16	0.047	1.19	0.38	0.72	100
#30	0.023	0.60	1.15	1.87	99
#50	0.012	0.30	8.63	10.50	96
#100	0.006	0.15	25.94	36.44	84
#200	0.003	0.07	25.81	62.25	73

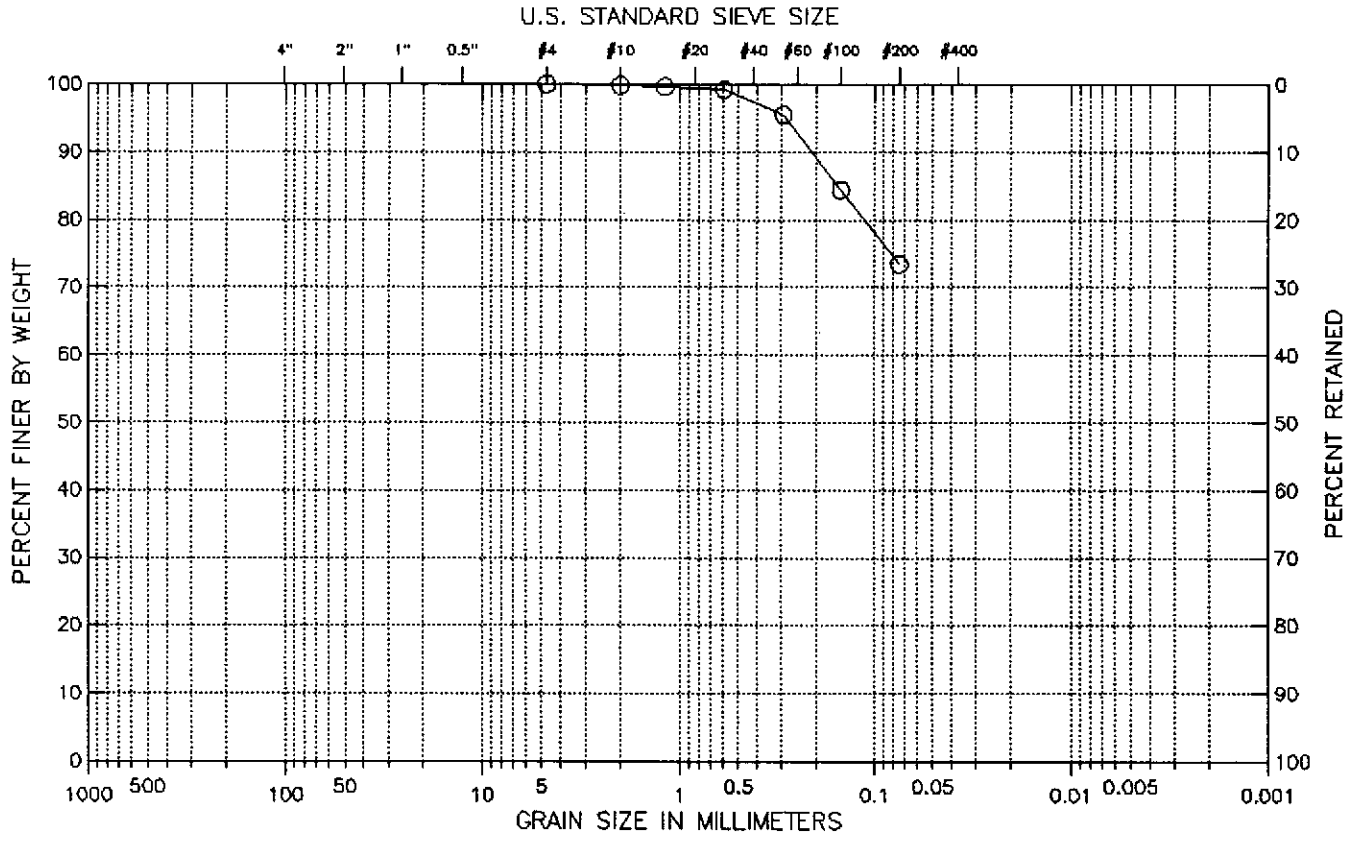
Total Dry Weight of Sample = 234.41

D85 : 0.1541 mm
D60 : N/A
D50 : N/A
D30 : N/A
D15 : N/A
D10 : N/A

Soil Classification
ASTM Group Symbol : N/A
ASTM Group Name : N/A
AASHTO Group Symbol : A-4(0)
AASHTO Group Name : Silty Soils

URS

	Boring No. : SG-9-P Sample No: 5.5 Tested by : R. Taraya Filename : SG09P055	Project : ARCO 5387 Investigation Project No.: 38486988 Location: 20200 Hesperian Blvd., Hayward, CA Date : Tue Feb 08 2005



Classification :

Visual Description :
Dark brown fine sandy clay (CL)

Remarks :
k = 5.17E-08 cm/sec

Figure 3

URS

Tue Feb 08 09:13:10 2005

GEOTECHNICAL LABORATORY TEST DATA

Project : ARCO 5387 Investigation
Project No. : 38486988
Boring No. : SG-9-P
Sample No. : 9.0
Depth : 9.0 feet
Test Date : 01/03/2005
Test Method : ASTM D422
Filename : SG09P090
Elevation : NA
Tested by : R. Taraya
Checked by : S. Capps
Location : 20200 Hesperian Blvd., Hayward, CA
Soil Description : Brown fine sandy clay (CL)
Remarks : k = 1.10E-08 cm/sec

COARSE SIEVE SET

Sieve Mesh	Sieve Openings Inches	Millimeters	Weight Retained (gm)	Cumulative Weight Retained (gm)	Percent Finer (%)
#10	0.079	2.00	0.00	0.00	100
#16	0.047	1.19	0.12	0.12	100
#30	0.023	0.60	0.29	0.41	100
#50	0.012	0.30	5.91	6.32	97
#100	0.006	0.15	38.30	44.62	81
#200	0.003	0.07	33.29	77.91	67

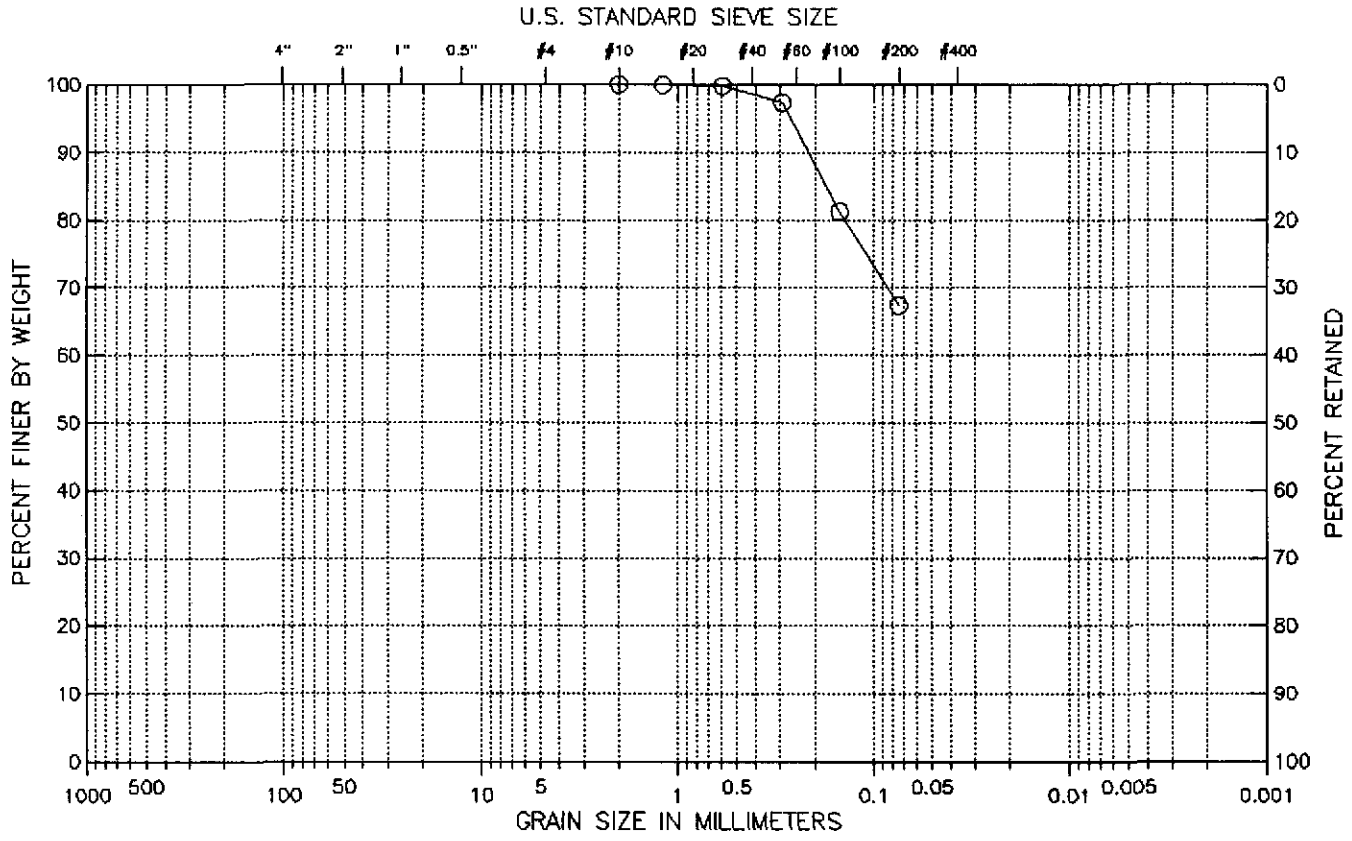
Total Dry Weight of Sample = 238.85

D85 : 0.1743 mm
D60 : N/A
D50 : N/A
D30 : N/A
D15 : N/A
D10 : N/A

Soil Classification
ASTM Group Symbol : N/A
ASTM Group Name : N/A
AASHTO Group Symbol : A-4(0)
AASHTO Group Name : Silty Soils

URS

	Boring No. : SG-9-P Sample No: 9.0 Tested by : R. Taraya Filename : SG09P090	Project : ARCO 5387 Investigation Project No.: 38486988 Location: 20200 Hesperian Blvd., Hayward, CA Date : Tue Feb 08 2005



Classification :

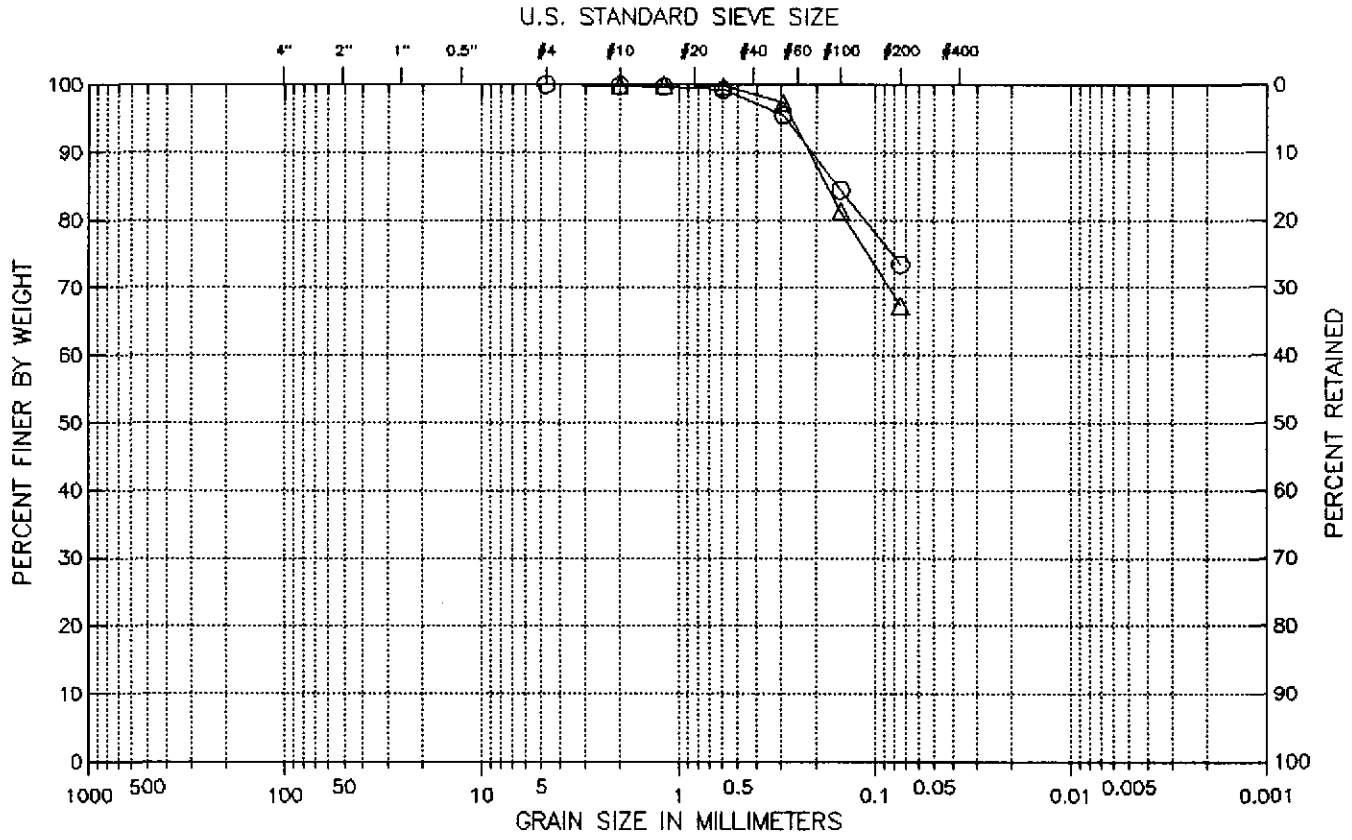
Visual Description :
Brown fine sandy clay (CL)

Remarks :
k = 1.10E-08 cm/sec

Figure 4

URS

Project : ARCO 5387 Investigation
Project No.: 38486988
Location: 20200 Hesperian Blvd., Hayward, CA
Date : Tue Feb 08 2005



Symbol	Boring No.	Sample No.	Depth	Filename	Classification / Description
⊖	SG-9-P	5.5	5.5 feet	SG09P055	Dark brown fine sandy clay (CL)
△	SG-9-P	9.0	9.0 feet	SG09P090	Brown fine sandy clay (CL)

Figure 2

URS

GEOTECHNICAL LABORATORY TEST DATA

Project : ARCO 5387 Investigation
Project No. : 38486988
Boring No. : SG-10-P
Sample No. : 5.5
Depth : 5.5 feet
Test Date : 01/03/2005
Test Method : ASTM D422
Filename : SG10P055
Elevation : NA
Tested by : R. Taraya
Checked by : S. Capps
Location : 20200 Hesperian Blvd., Hayward, CA
Soil Description : Dark brn. fine sandy clay (CL) with trace gravel
Remarks : k = 1.85E-08 cm/sec

COARSE SIEVE SET

Sieve Mesh	Sieve Openings Inches	Millimeters	Weight Retained (gm)	Cumulative Weight Retained (gm)	Percent Finer (%)
0.5"	0.500	12.70	0.00	0.00	100
0.375"	0.374	9.51	1.78	1.78	99
#4	0.187	4.75	1.99	3.77	98
#10	0.079	2.00	1.94	5.71	97
#16	0.047	1.19	1.09	6.80	97
#30	0.023	0.60	1.91	8.71	96
#50	0.012	0.30	7.27	15.98	93
#100	0.006	0.15	22.37	38.35	83
#200	0.003	0.07	26.05	64.40	71

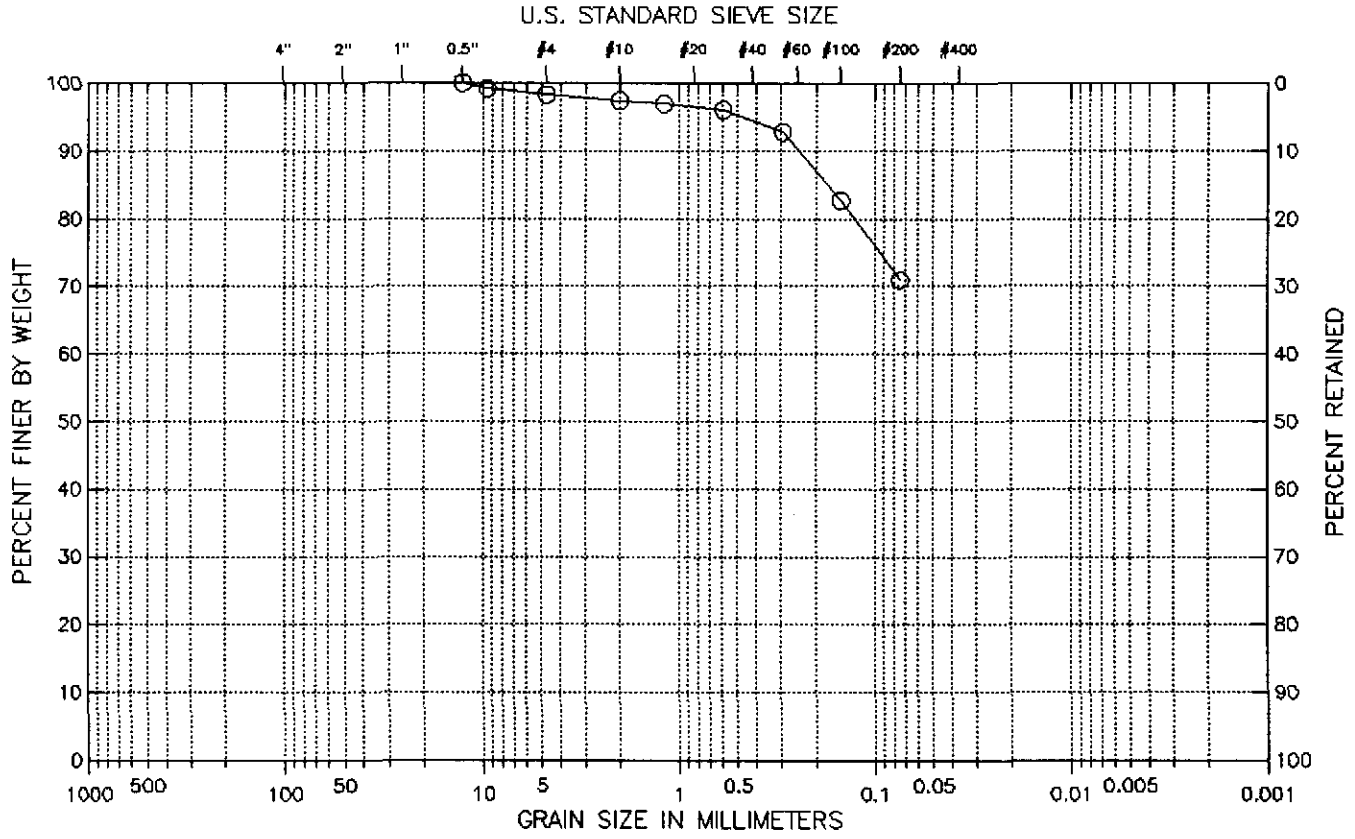
Total Dry Weight of Sample = 221.64

D85 : 0.1741 mm
D60 : N/A
D50 : N/A
D30 : N/A
D15 : N/A
D10 : N/A

Soil Classification
ASTM Group Symbol : N/A
ASTM Group Name : N/A
AASHTO Group Symbol : A-4(0)
AASHTO Group Name : Silty Soils

URS

	Boring No. : SG-10-P Sample No.: 5.5 Tested by : R. Taraya Filename : SG10P055	Project : ARCO 5387 Investigation Project No.: 38486988 Location: 20200 Hesperian Blvd., Hayward, CA Date : Tue Feb 08 2005



Classification :

Visual Description :
Dark brn. fine sandy clay (CL) with trace gravel

Remarks :
k = 1.85E-08 cm/sec

Figure 5

URS

Tue Feb 08 09:13:12 2005

GEOTECHNICAL LABORATORY TEST DATA

Project : ARCO 5387 Investigation
Project No. : 38486988
Boring No. : SG-10-P
Sample No. : 9.0
Location : 20200 Hesperian Blvd., Hayward, CA
Soil Description : Brown fine sandy clay (CL-CH)
Remarks : k = 2.05E-08 cm/sec

Depth : 9.0 feet
Test Date : 01/03/2005
Test Method : ASTM D422

Filename : SG10P090
Elevation : NA
Tested by : R. Taraya
Checked by : S. Capps

COARSE SIEVE SET

Sieve Mesh	Sieve Openings Inches	Millimeters	Weight Retained (gm)	Cumulative Weight Retained (gm)	Percent Finer (%)
#16	0.047	1.19	0.00	0.00	100
#30	0.023	0.60	0.10	0.10	100
#50	0.012	0.30	1.55	1.65	99
#100	0.006	0.15	8.97	10.62	95
#200	0.003	0.07	24.17	34.79	85

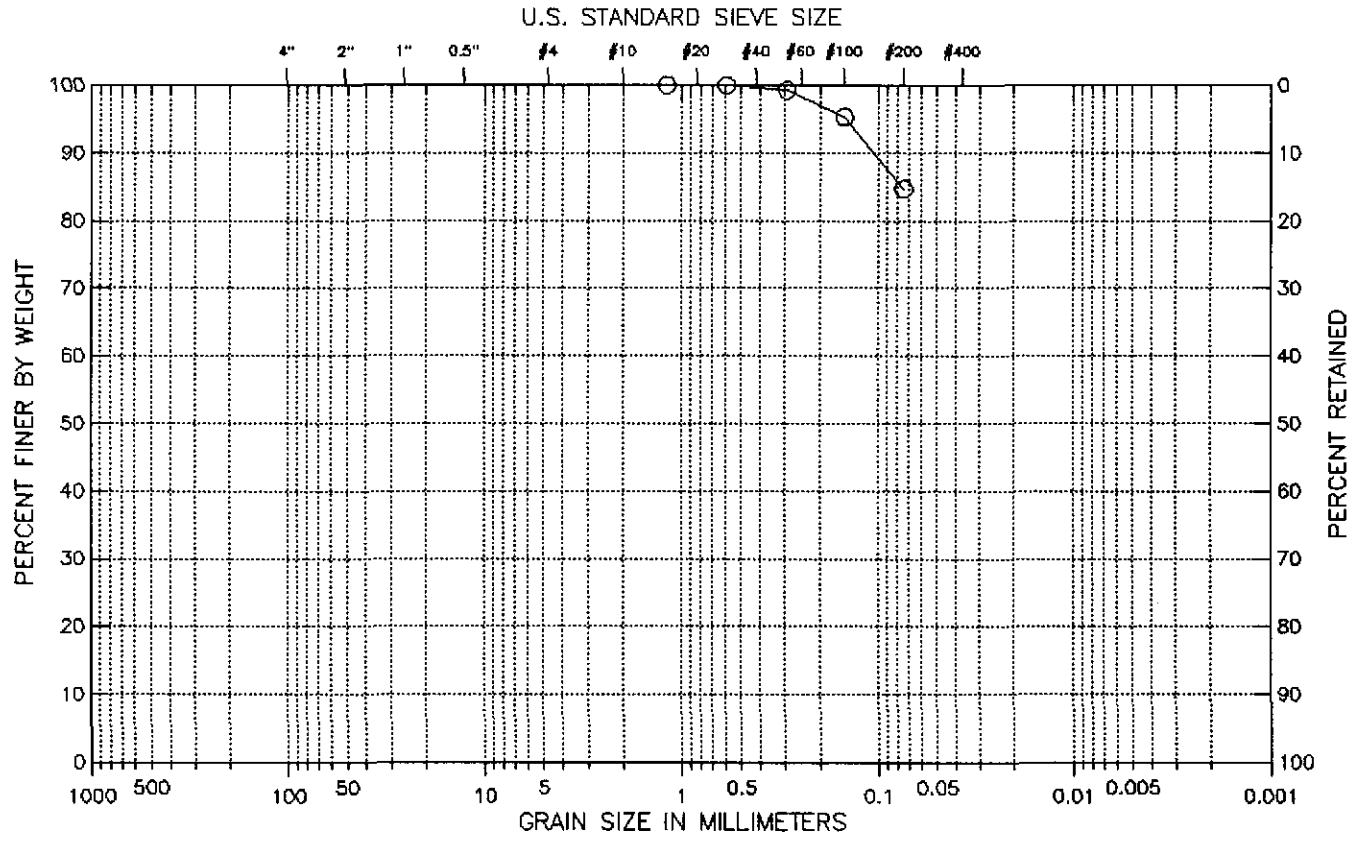
Total Dry Weight of Sample = 228.05

D85 : 0.0753 mm
D60 : N/A
D50 : N/A
D30 : N/A
D15 : N/A
D10 : N/A

Soil Classification
ASTM Group Symbol : N/A
ASTM Group Name : N/A
AASHTO Group Symbol : A-4(0)
AASHTO Group Name : Silty Soils

URS

	Boring No. : SG-10-P Sample No: 9.0 Tested by : R. Taraya Filename : SG10P090	Project : ARCO 5387 Investigation Project No.: 38486988 Location: 20200 Hesperian Blvd., Hayward, CA Date : Tue Feb 08 2005



Classification :

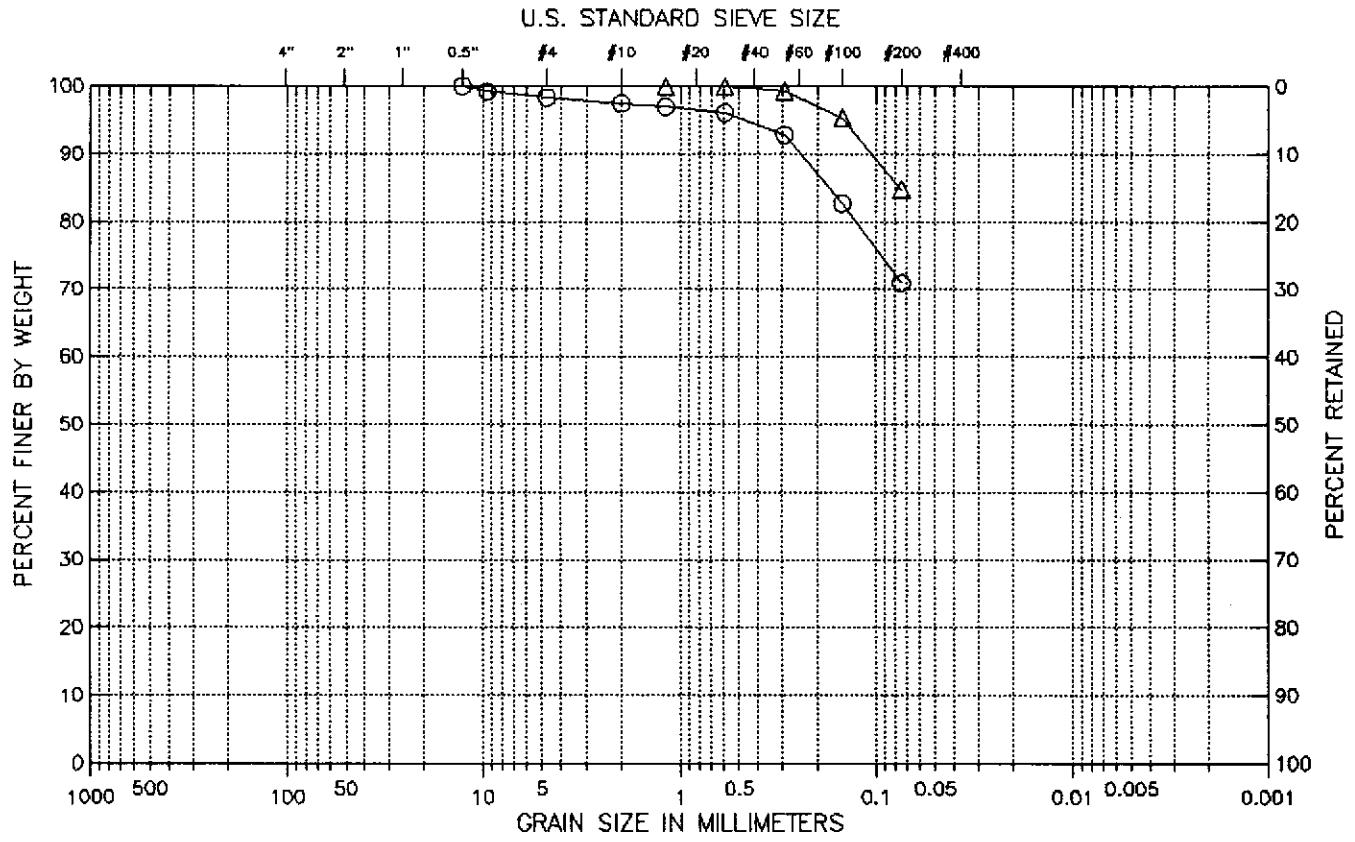
Visual Description :
Brown fine sandy clay (CL-CH)

Remarks :
k = 2.05E-08 cm/sec

Figure 8

URS

Project : ARCO 5387 Investigation
Project No.: 38486988
Location: 20200 Hesperian Blvd., Hayward, CA
Date : Tue Feb 08 2005



Symbol	Boring No.	Sample No.	Depth	Filename	Classification / Description
⊖	SG-10-P	5.5	5.5 feet	SG10P055	Dark brn. fine sandy clay (CL) with trace gravel
△	SG-10-P	9.0	9.0 feet	SG10P090	Brown fine sandy clay (CL-CH)

Figure 3

URS

ASTM D5084-90
Hydraulic Conductivity

Project Name: ARCO 5387-SVS Investigation Project Number: 38486988 .0063601 12/30/2004

Location: Hayward, CA

Boring: **SG-5-P-4.5** Depth,ft.: **4.5**

Description: Dark brown fine sandy clay (CL)

Diameter, cm: 4.93 Height, cm: 7.0 Area, cm^2: 19.07

Wet Weight Before Test: 281.07 gms Initial Water Content: 18.17%

Wet Weight After Test: 285.05 gms Final Water Content: 19.84%

Oven Dry Weight: 237.85 gms Volume, cm^3: 133.52

Total Unit Weight, pcf: 131.4 Dry Unit Weight, pcf: 111.2

Cell Pressure: 85.00 psi Standpipe Area, cm^2: 0.0851 Effective Pressure: 5.00 psi

Back Pressure: 80.00 psi Permeability Board: 1

P-Left, psi	P-Right, psi	Standpipe Height	Centi-meters	Time, minutes	Time, seconds	Hydraulic Conductivity k = cm/sec
80.00	**75.74**	**Initial**				
		H1	383.8	0.5		
		H2	53.6			
		Final				
		H1	381.0	330.5	**19800**	**1.35E-08**
		H2	56.4			
80.00	**75.74**	**Initial**				
		H1	383.8	0.2		
		H2	53.7			
		Final				
		H1	381.6	249.2	**14940**	**1.40E-08**
		H2	55.9			
80.00	**75.74**	**Initial**				
		H1	383.8	249.2		
		H2	53.7			
		Final				
		H1	377.7	992.2	**44580**	**1.32E-08**
		H2	59.8			

Average k = 1.36E-08 cm/sec

URS

ASTM D5084-90
Hydraulic Conductivity

Project Name: ARCO 5387-SVS Investigation Project Number: 38486988 .0063601 12/30/2004

Location: Hayward, CA

Boring: **SG-5-P-8.5** Depth,ft.: **8.5**

Description: Brown fine sandy clay (CL-CH)

Diameter, cm: 4.93 Height, cm: 6.9 Area, cm^2: 19.07

Wet Weight Before Test: 272.84 gms Initial Water Content: 19.42%

Wet Weight After Test: 275.39 gms Final Water Content: 20.54%

Oven Dry Weight: 228.47 gms Volume, cm^3: 131.61

Total Unit Weight, pcf: 129.4 Dry Unit Weight, pcf: 108.3

Cell Pressure: 85.00 psi Standpipe Area, cm^2: 0.0818 Effective Pressure: 5.00 psi

Back Pressure: 80.00 psi Permeability Board: 3

P-Left, psi	P-Right, psi	Standpipe Height	Centi-meters	Time, minutes	Time, seconds	Hydraulic Conductivity k = cm/sec
80.00	**77.16**	**Initial**				
		H1	278.3	8.3		
		H2	52.7			
		Final				
		H1	274.8	100.3	**5520**	**8.45E-08**
		H2	56.2			
80.00	**77.16**	**Initial**				
		H1	278.3	101.8		
		H2	52.8			
		Final				
		H1	275.2	182.8	**4860**	**8.49E-08**
		H2	55.9			
80.00	**77.16**	**Initial**				
		H1	278.0	2.5		
		H2	52.7			
		Final				
		H1	274.5	94.5	**5520**	**8.47E-08**
		H2	56.2			

Average k = 8.47E-08 cm/sec

URS

ASTM D5084-90
Hydraulic Conductivity

Project Name: ARCO 5387-SVS Investigation Project Number: 38486988 .0063601 1/5/2005

Location: Hayward, CA

Boring: **SG-9-P-5.5** Depth,ft.: **5.5**

Description: Dark brown fine sandy clay (CL)

Diameter, cm: 4.93 Height, cm: 7.0 Area, cm^2: 19.07

Wet Weight Before Test: 278.15 gms Initial Water Content: 18.66%

Wet Weight After Test: 280.71 gms Final Water Content: 19.75%

Oven Dry Weight: 234.41 gms Volume, cm^3: 132.94

Total Unit Weight, pcf: 130.6 Dry Unit Weight, pcf: 110.0

Cell Pressure: 85.00 psi Standpipe Area, cm^2: 0.0818 Effective Pressure: 5.00 psi

Back Pressure: 80.00 psi Permeability Board: 3

P-Left, psi	P-Right, psi	Standpipe Height	Centi-meters	Time, minutes	Time, seconds	Hydraulic Conductivity k = cm/sec
80.00	**75.74**	**Initial**				
		H1	377.8	1.5		
		H2	52.4			
		Final				
		H1	374.7	93.5	**5520**	**5.21E-08**
		H2	55.5			
80.00	**75.74**	**Initial**				
		H1	377.8	95.9		
		H2	52.3			
		Final				
		H1	372.9	244.9	**8940**	**5.11E-08**
		H2	57.2			
80.00	**75.74**	**Initial**				
		H1	377.7	0.2		
		H2	52.3			
		Final				
		H1	373.4	129.2	**7740**	**5.18E-08**
		H2	56.6			

Average k = 5.17E-08 cm/sec

URS

ASTM D5084-90
Hydraulic Conductivity

Project Name: ARCO 5387-SVS Investigation Project Number: 38486988 .0063601 1/5/2005

Location: Hayward, CA

Boring: **SG-9-P-9.0** Depth,ft.: **9.0**

Description: Dark brown fine sandy clay (CL)

Diameter, cm: 4.93 Height, cm: 7.0 Area, cm^2: 19.07

Wet Weight Before Test: 281.59 gms Initial Water Content: 17.89%

Wet Weight After Test: 284.55 gms Final Water Content: 19.13%

Oven Dry Weight: 238.85 gms Volume, cm^3: 133.13

Total Unit Weight, pcf: 132.0 Dry Unit Weight, pcf: 111.9

Cell Pressure: 85.00 psi Standpipe Area, cm^2: 0.0851 Effective Pressure: 5.00 psi

Back Pressure: 80.00 psi Permeability Board: 1

P-Left, psi	P-Right, psi	Standpipe Height	Centi-meters	Time, minutes	Time, seconds	Hydraulic Conductivity k = cm/sec
80.00	**75.74**	**Initial**				
		H1	383.0	1412.0		
		H2	52.9			
		Final				
		H1	379.4	1928.0	**30960**	**1.11E-08**
		H2	56.5			
80.00	**75.74**	**Initial**				
		H1	382.6	20.7		
		H2	52.6			
		Final				
		H1	379.6	459.7	**26340**	**1.09E-08**
		H2	55.6			
80.00	**75.74**	**Initial**				
		H1	382.5	461.0		
		H2	52.7			
		Final				
		H1	378.8	1000.0	**32340**	**1.09E-08**
		H2	56.4			

Average k = 1.10E-08 cm/sec

URS

ASTM D5084-90
Hydraulic Conductivity

Project Name: ARCO 5387-SVS Investigation Project Number: 38486988 .0063601 1/6/2005

Location: Hayward, CA

Boring: **SG-10-P-5.5** Depth,ft.: **5.5**

Description: Dark brown fine sandy clay (CL) with trace gravel

Diameter, cm: 4.93 Height, cm: 6.9 Area, cm^2: 19.07

Wet Weight Before Test: 268.00 gms Initial Water Content: 20.92%

Wet Weight After Test: 269.29 gms Final Water Content: 21.50%

Oven Dry Weight: 221.64 gms Volume, cm^3: 131.61

Total Unit Weight, pcf: 127.1 Dry Unit Weight, pcf: 105.1

Cell Pressure: 85.00 psi Standpipe Area, cm^2 0.0818 Effective Pressure: 5.00 psi

Back Pressure: 80.00 psi Permeability Board: 3

P-Left, psi	P-Right, psi	Standpipe Height	Centi-meters	Time, minutes	Time, seconds	Hydraulic Conductivity k = cm/sec
80.00	**75.74**	**Initial**				
		H1	376.8	1.2		
		H2	53.0			
		Final				
		H1	374.7	172.2	**10260**	**1.88E-08**
		H2	55.1			
80.00	**75.74**	**Initial**				
		H1	376.8	174.0		
		H2	53.1			
		Final				
		H1	374.1	404.0	**13800**	**1.80E-08**
		H2	55.8			
80.00	**75.74**	**Initial**				
		H1	376.7	401.2		
		H2	53.2			
		Final				
		H1	372.6	739.2	**20280**	**1.87E-08**
		H2	57.3			

Average k = 1.85E-08 cm/sec

URS

ASTM D5084-90
Hydraulic Conductivity

Project Name: ARCO 5387-SVS Investigation Project Number: 38486988 .0063601 1/6/2005

Location: Hayward, CA

Boring: **SG-10-P-9.0** Depth,ft.: **9.0**

Description: Brown fine sandy clay (CL-CH)

Diameter, cm: 4.93 Height, cm: 7.0 Area, cm^2: 19.07

Wet Weight Before Test: 274.10 gms Initial Water Content: 20.19%

Wet Weight After Test: 278.65 gms Final Water Content: 22.19%

Oven Dry Weight: 228.05 gms Volume, cm^3: 133.52

Total Unit Weight, pcf: 128.1 Dry Unit Weight, pcf: 106.6

Cell Pressure: 85.00 psi Standpipe Area, cm^2: 0.0851 Effective Pressure: 5.00 psi

Back Pressure: 80.00 psi Permeability Board: 1

P-Left, psi	P-Right, psi	Standpipe Height	Centi-meters	Time, minutes	Time, seconds	Hydraulic Conductivity k = cm/sec
80.00	**77.16**	**Initial**				
		H1	282.0	2.1		
		H2	53.0			
		Final				
		H1	280.4	182.1	**10800**	**2.04E-08**
		H2	54.6			
80.00	**77.16**	**Initial**				
		H1	282.0	183.5		
		H2	53.0			
		Final				
		H1	280.1	392.5	**12540**	**2.09E-08**
		H2	54.9			
80.00	**77.16**	**Initial**				
		H1	281.9	393.6		
		H2	53.1			
		Final				
		H1	276.9	960.6	**34020**	**2.03E-08**
		H2	58.0			

Average k = 2.05E-08 cm/sec

SEVERN TRENT STL

January 11, 2005

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921
www.stl-inc.com

STL LOT NUMBER: **E4L160166**
PO/CONTRACT: G09J2-0520

Scott Robinson
URS Corporation
1333 Broadway
Suite 800
Oakland, CA 94612

Dear Scott Robinson,

This report contains the analytical results for the two samples received under chain of custody by STL Los Angeles on December 9, 2004. These samples are associated with your ARCO #5387 project.

STL Los Angeles certifies that the test results provided in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number for STL Los Angeles is 01118CA / E87652.

Any matrix related anomaly is footnoted within the report. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. All applicable quality control procedures met method-specified acceptance criteria.

This report shall not be reproduced except in full, without the written approval of the laboratory.

This report contains 000020 pages.

If you have any questions, please feel free to call me at (714) 258-8610.

Sincerely,

Beth Riley
Project Manager

cc: Project File

ANALYTICAL REPORT

PROJECT NO. 38486988.0063601

ARCO #5387

Lot #: E4L160166

Scott Robinson

URS Corporation

SEVERN TRENT LABORATORIES, INC.

Beth Riley
Project Manager

January 11, 2005

EXECUTIVE SUMMARY - Detection Highlights

E4L160166

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SG-1-7.0 12/06/04 15:47 001				
GRO (C4 - C12)	0.45 JDX	2.0	ppm(v/v)	EPA-19 TO-3
Acetone	0.12	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0026	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	0.0083	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Carbon disulfide	0.0024	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Chloroform	0.0024	0.0020	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.00053	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethanol	0.024 JDX	0.025	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	0.0016	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
4-Ethyltoluene	0.0015	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Tetrachloroethene	0.0014	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Toluene	0.0045	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.0010	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
1,2,4-Trimethylbenzene	0.0013	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
1,3,5-Trimethylbenzene	0.0013	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
m-Xylene & p-Xylene	0.0044	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.0015	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Xylenes (total)	0.0059	0.0020	ppm(v/v)	EPA-21 TO-14A
SG-3-7.0 DUP 12/06/04 16:07 002				
GRO (C4 - C12)	370	5.8	ppm(v/v)	EPA-19 TO-3
Methyl tert-butyl ether (MTBE)	1.4 DF	0.050	ppm(v/v)	EPA-21 TO-14A
Toluene	0.022	0.050	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX,DF			

ANALYTICAL METHODS SUMMARY

E4L160166

PARAMETER	ANALYTICAL METHOD
TPH by TO-3	EPA-19 TO-3
Volatile Organics by TO-14A	EPA-21 TO-14A

References:

EPA-19 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA/600/4-89/017, January 1988

EPA-21 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", Second Edition, EPA/625/R-96/010b, January 1999

SAMPLE SUMMARY

E4L160166

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G07FX	001	SG-1-7.0	12/06/04	15:47
G07F2	002	SG-3-7.0 DUP	12/06/04	16:07

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

URS Corporation

Client Sample ID: SG-1-7.0

GC/MS Volatiles

Lot-Sample #...: E4L160166-001 **Work Order #...:** G07FX1AD **Matrix.....:** AE
Date Sampled...: 12/06/04 **Date Received..:** 12/09/04
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5006289
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.12**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.0026**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.0083 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	ND	0.010	ppm(v/v)	0.0010
Carbon disulfide	**0.0024 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	**0.0024**	**0.0020**	**ppm(v/v)**	**0.00080**
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00053 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	**0.024 JDX**	**0.025**	**ppm(v/v)**	**0.0022**
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.0016 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.0015 JDX**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

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URS Corporation

Client Sample ID: SG-1-7.0

GC/MS Volatiles

Lot-Sample #...: E4L160166-001 **Work Order #...:** G07FX1AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.010	ppm(v/v)	0.0010
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	0.00050
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	**0.0014 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Toluene	**0.0045**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	**0.0010 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	**0.0013 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
1,3,5-Trimethylbenzene	**0.0013 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0044**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.0015 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0059**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-1-7.0

GC Volatiles

Lot-Sample #...:	E4L160166-001	**Work Order #...:**	G07FX1AE	**Matrix.....:**	AE
Date Sampled...:	12/06/04	**Date Received..:**	12/09/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	2				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.45 JDX**	**2.0**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-3-7.0 DUP

GC/MS Volatiles

Lot-Sample #...: E4L160166-002 **Work Order #...:** G07F21AD **Matrix.....:** AE
Date Sampled...: 12/06/04 **Date Received..:** 12/09/04
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5006289
Dilution Factor: 25
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND DF	0.25	ppm(v/v)	0.050
Benzene	ND DF	0.050	ppm(v/v)	0.020
Benzyl chloride	ND DF	0.25	ppm(v/v)	0.020
Bromodichloromethane	ND DF	0.050	ppm(v/v)	0.020
Bromoform	ND DF	0.050	ppm(v/v)	0.012
Bromomethane	ND DF	0.050	ppm(v/v)	0.025
2-Butanone (MEK)	ND DF	0.25	ppm(v/v)	0.050
tert-Butyl alcohol	ND DF	0.25	ppm(v/v)	0.025
Carbon disulfide	ND DF	0.25	ppm(v/v)	0.050
Carbon tetrachloride	ND DF	0.050	ppm(v/v)	0.012
Chlorobenzene	ND DF	0.050	ppm(v/v)	0.012
Dibromochloromethane	ND DF	0.050	ppm(v/v)	0.012
Chloroethane	ND DF	0.10	ppm(v/v)	0.020
Chloroform	ND DF	0.050	ppm(v/v)	0.020
Chloromethane	ND DF	0.10	ppm(v/v)	0.025
1,2-Dibromoethane (EDB)	ND DF	0.050	ppm(v/v)	0.012
1,2-Dichlorobenzene	ND DF	0.050	ppm(v/v)	0.020
1,3-Dichlorobenzene	ND DF	0.050	ppm(v/v)	0.018
1,4-Dichlorobenzene	ND DF	0.050	ppm(v/v)	0.020
Dichlorodifluoromethane	ND DF	0.050	ppm(v/v)	0.012
1,1-Dichloroethane	ND DF	0.050	ppm(v/v)	0.012
1,2-Dichloroethane	ND DF	0.050	ppm(v/v)	0.020
cis-1,2-Dichloroethene	ND DF	0.050	ppm(v/v)	0.020
trans-1,2-Dichloroethene	ND DF	0.050	ppm(v/v)	0.012
1,1-Dichloroethene	ND DF	0.050	ppm(v/v)	0.012
1,2-Dichloropropane	ND DF	0.050	ppm(v/v)	0.020
cis-1,3-Dichloropropene	ND DF	0.050	ppm(v/v)	0.012
trans-1,3-Dichloropropene	ND DF	0.050	ppm(v/v)	0.020
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND DF	0.050	ppm(v/v)	0.020
Diisopropyl ether	ND DF	0.050	ppm(v/v)	0.0050
Ethanol	ND DF	0.62	ppm(v/v)	0.055
Tert-amyl methyl ether	ND DF	0.050	ppm(v/v)	0.0050
Tert-butyl ethyl ether	ND DF	0.050	ppm(v/v)	0.0050
Ethylbenzene	ND DF	0.050	ppm(v/v)	0.012
4-Ethyltoluene	ND DF	0.050	ppm(v/v)	0.018
Hexachlorobutadiene	ND DF	0.10	ppm(v/v)	0.025

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URS Corporation

Client Sample ID: SG-3-7.0 DUP

GC/MS Volatiles

Lot-Sample #...: E4L160166-002 **Work Order #...:** G07F21AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND DF	0.25	ppm(v/v)	0.025
Methylene chloride	ND DF	0.050	ppm(v/v)	0.020
4-Methyl-2-pentanone (MIBK)	ND DF	0.25	ppm(v/v)	0.050
Methyl tert-butyl ether (MTBE)	**1.4 DF**	**0.050**	**ppm(v/v)**	**0.012**
Naphthalene	ND DF	0.12	ppm(v/v)	0.012
Styrene	ND DF	0.050	ppm(v/v)	0.015
1,1,2,2-Tetrachloroethane	ND DF	0.050	ppm(v/v)	0.012
Tetrachloroethene	ND DF	0.050	ppm(v/v)	0.015
Toluene	**0.022 JDX,DF**	**0.050**	**ppm(v/v)**	**0.012**
1,2,4-Trichloro-benzene	ND DF	0.12	ppm(v/v)	0.025
1,1,1-Trichloroethane	ND DF	0.050	ppm(v/v)	0.012
1,1,2-Trichloroethane	ND DF	0.050	ppm(v/v)	0.015
Trichloroethene	ND DF	0.050	ppm(v/v)	0.012
Trichlorofluoromethane	ND DF	0.050	ppm(v/v)	0.012
1,1,2-Trichloro-1,2,2-trifluoroethane	ND DF	0.050	ppm(v/v)	0.012
1,2,4-Trimethylbenzene	ND DF	0.050	ppm(v/v)	0.020
1,3,5-Trimethylbenzene	ND DF	0.050	ppm(v/v)	0.020
Vinyl acetate	ND DF	0.25	ppm(v/v)	0.050
Vinyl chloride	ND DF	0.050	ppm(v/v)	0.020
m-Xylene & p-Xylene	ND DF	0.050	ppm(v/v)	0.025
o-Xylene	ND DF	0.050	ppm(v/v)	0.015
Xylenes (total)	ND DF	0.050	ppm(v/v)	0.020
1,1-Difluoroethane (Freon 152A)	ND DF	0.10	ppm(v/v)	0.068

NOTE(S):

DF Reporting limits elevated due to matrix interferences.

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-3-7.0 DUP

GC Volatiles

Lot-Sample #...:	E4L160166-002	**Work Order #...:**	G07F21AE	**Matrix.....:**	AE
Date Sampled...:	12/06/04	**Date Received..:**	12/09/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	5.79				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**370**	**5.8**	**ppm(v/v)**	

QC DATA ASSOCIATION SUMMARY

E4L160166

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5006289	
002	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5006289	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L160166 **Work Order #...:** G17QR1AA **Matrix.....:** AIR
MB Lot-Sample #: M5A060000-289

Prep Date.....: 01/05/05 **Instrument ID..:** MSB
Analysis Date..: 01/05/05 **Prep Batch #...:** 5006289
Dilution Factor: 1

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
tert-Butyl alcohol	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Diisopropyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethanol	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L160166 **Work Order #...:** G17QR1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Naphthalene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Difluoroethane (Freon	ND	0.0040	ppm(v/v)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E4L160166 **Work Order #...:** G14911AE **Matrix.....:** AIR
MB Lot-Sample #: E5A050000-111

Prep Date.....: 01/04/05 **Instrument ID..:** GC7
Analysis Date..: 01/04/05 **Prep Batch #...:** 5005111
Dilution Factor: 1

Analyst ID.....: 358011

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
GRO (C4 - C12)	ND	1.0	ppm(v/v)	EPA-19 TO-3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E4L160166 **Work Order #...:** G17QR1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A060000-289 G17QR1AD-LCSD
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5006289
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 117751

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**105**	**(70 - 125)**			**EPA-21 TO-14A**
	102	**(70 - 125)**	**2.4**	**(0-20)**	**EPA-21 TO-14A**
Methylene chloride	**101**	**(75 - 120)**			**EPA-21 TO-14A**
	97	**(75 - 120)**	**3.8**	**(0-20)**	**EPA-21 TO-14A**
1,1,2,2-Tetrachloroethane	**103**	**(65 - 130)**			**EPA-21 TO-14A**
	102	**(65 - 130)**	**1.2**	**(0-20)**	**EPA-21 TO-14A**
Toluene	**98**	**(75 - 125)**			**EPA-21 TO-14A**
	97	**(75 - 125)**	**0.98**	**(0-20)**	**EPA-21 TO-14A**
Trichloroethene	**99**	**(70 - 125)**			**EPA-21 TO-14A**
	99	**(70 - 125)**	**0.20**	**(0-20)**	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E4L160166 **Work Order #...:** G17QR1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A060000-289 G17QR1AD-LCSD
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5006289
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	0.0500	0.0525	ppm(v/v)	105		EPA-21 TO-14A
	0.0500	0.0512	ppm(v/v)	102	2.4	EPA-21 TO-14A
Methylene chloride	0.0500	0.0503	ppm(v/v)	101		EPA-21 TO-14A
	0.0500	0.0484	ppm(v/v)	97	3.8	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	0.0500	0.0515	ppm(v/v)	103		EPA-21 TO-14A
	0.0500	0.0509	ppm(v/v)	102	1.2	EPA-21 TO-14A
Toluene	0.0500	0.0488	ppm(v/v)	98		EPA-21 TO-14A
	0.0500	0.0483	ppm(v/v)	97	0.98	EPA-21 TO-14A
Trichloroethene	0.0500	0.0496	ppm(v/v)	99		EPA-21 TO-14A
	0.0500	0.0497	ppm(v/v)	99	0.20	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E4L160166 **Work Order #...:** G14911AF-LCS **Matrix.....:** AIR
LCS Lot-Sample#: E5A050000-111 G14911AG-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005111
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
GRO (C4 - C12)	**99 LW**	**(75 - 125)**			**EPA-19 TO-3**
	101 LW	**(75 - 125)**	**1.9**	**(0-20)**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E4L160166 **Work Order #...:** G14911AF-LCS **Matrix.....:** AIR
LCS Lot-Sample#: E5A050000-111 G14911AG-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005111
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
GRO (C4 - C12)	**10.3**	**10.2 LW**	**ppm(v/v)**	**99**		**EPA-19 TO-3**
	10.3	**10.4 LW**	**ppm(v/v)**	**101**	**1.9**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

ARCO SITE #5387

E4L160166 Page 1 of 1

Chain of Custody Record

Project Name: ARCO 5387-SVS Investigation
BP BU/AR Region/Enfos Segment:
State or Lead Regulatory Agency: Alameda County Health Care Services
Requested Due Date (mm/dd/yy): 12/11/2004

On-site Time:	7:00	Temp:	
Off-site Time:	17:30	Temp:	
Sky Conditions:	windy, cloudy		
Meteorological Events:	windy		
Wind Speed:	N/A	Direction:	SW

Lab Name:	Severn Trent Labs, Inc. (STL)	BP/AR Facility No.:	ARCO 5387	Consultant/Contractor:	URS Corporation
Address:	1220 Quarry Lane	BP/AR Facility Address:	20200 Hesperian Blvd., Hayward, CA	Address:	1333 Broadway, Suite 800
	Pleasonton, CA 94566	Site Lat/Long:			Oakland, CA 94612
Lab PM:	Afsaneh Salimpour	California Global ID No.:	T0600101368	Consultant/Contractor Project No.:	38486988.0063601
Tele/Fax:	925-484-1919	Enfos Project No.:		Consultant/Contractor PM:	Scott Robinson
BP/AR PM Contact:	Paul Supple	Provision or RCOP (circle one)		Tele/Fax:	510-874-3280
Address:	P.O. Box 6549	Phase/WBS:		Report Type & QC Level:	
	Moraga, CA 94549	Sub Phase/Task:		E-mail EDD To:	NO EDD
Tele/Fax:		Cost Element:		Invoice to: Consultant or BP or Atlantic Richfield Co. (circle one)	

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: BTEX 8021	Requested Analysis: BTEX/TPH	Requested Analysis: BTEX/Oxy/TPH	Requested Analysis: EPA 8260	Requested Analysis: EPA 8270	Requested Analysis: TO-14 (full suite-approx. 60 compounds). Please see Comments	Requested Analysis: * Leak Test Tracer gas(es) (I.e., shaving cream propellents)	Requested Analysis: TPH/GRO EPA Method TO-3	Sample Point Lat/Long and Comments
1	SG-1-7.0	15:47	12/6			X		1											X	X	X	
2	SG-3-7.0 Dup	16:09	12/6			X		1											X	X	X	
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Full suite TO-14 chemicals, including alkanes, aromatics, naphthalenes, etc. (approx. 60 compounds)

* Tracer gas: Ethane
1,1-difluoro
CAS-75376

		Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name:	Srijesh Thapa	Srijesh Thapa URS	12/07/04	15:30		12/7/04	1730
Sampler's Company:	URS Corp.	STL-SF	12/8/04	10:30		12/8/04	1030
Shipment Date:	12/07/04						
Shipment Method:							
Shipment Tracking No:							

Special Instructions:

Custody Seals In Place Yes No Temp Blank Yes No Cooler Temperature on Receipt °F/C Trip Blank Yes No

Distribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Pink Copy - Consultant/Contractor

BP COC Rev. 4 10/1/04

2

E4L160166

SEVERN TRENT STL

January 11, 2005

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921
www.stl-inc.com

STL LOT NUMBER: **E4L180176**
PO/CONTRACT: G09J2-0520

Scott Robinson
URS Corporation
1333 Broadway
Suite 800
Oakland, CA 94612

Dear Scott Robinson,

This report contains the analytical results for the five samples received under chain of custody by STL Los Angeles on December 14, 2004. These samples are associated with your ARCO #5387 project.

STL Los Angeles certifies that the test results provided in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number for STL Los Angeles is 01118CA / E87652.

Any matrix related anomaly is footnoted within the report. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. All applicable quality control procedures met method-specified acceptance criteria.

This report shall not be reproduced except in full, without the written approval of the laboratory.

This report contains 000034 pages.

If you have any questions, please feel free to call me at (714) 258-8610.

Sincerely,

Beth Riley
Project Manager

cc: Project File

ANALYTICAL REPORT

PROJECT NO. 38486988.0063601

ARCO #5387

Lot #: E4L180176

Scott Robinson

URS Corporation

SEVERN TRENT LABORATORIES, INC.

Beth Riley
Project Manager

January 11, 2005

EXECUTIVE SUMMARY - Detection Highlights

E4L180176

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SG-5-4.5 12/10/04 10:45 001				
GRO (C4 - C12)	0.28 JDX	2.0	ppm(v/v)	EPA-19 TO-3
Acetone	0.36	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0045	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	0.014	0.010	ppm(v/v)	EPA-21 TO-14A
tert-Butyl alcohol	0.0064	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00058	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethanol	0.013 JDX	0.025	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	0.0014	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
4-Ethyltoluene	0.0013	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
2-Hexanone	0.0015	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Methyl tert-butyl ether (MTBE)	0.0037	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0076	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.00088	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
m-Xylene & p-Xylene	0.0040	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.0016	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Xylenes (total)	0.0056	0.0020	ppm(v/v)	EPA-21 TO-14A
SG-4-4.5 12/10/04 12:04 002				
GRO (C4 - C12)	0.44 JDX	1.6	ppm(v/v)	EPA-19 TO-3
Acetone	0.13	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0011	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
2-Butanone (MEK)	0.0029	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
tert-Butyl alcohol	0.0061	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Carbon disulfide	0.0026	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00059	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethylbenzene	0.00098	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
4-Ethyltoluene	0.0047	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.0010	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

E4L180176

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SG-4-4.5 12/10/04 12:04 002				
Toluene	0.0030	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.0050	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	0.0028	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	0.0061	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.0030	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.0091	0.0020	ppm(v/v)	EPA-21 TO-14A
SG-5-8.5 12/10/04 13:07 003				
GRO (C4 - C12)	37	2.0	ppm(v/v)	EPA-19 TO-3
Benzene	0.0025	0.0040	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethylbenzene	0.0034	0.0040	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
4-Ethyltoluene	0.0017	0.0040	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Methyl tert-butyl ether (MTBE)	2.2	0.040	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0039	0.0040	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
m-Xylene & p-Xylene	0.0053	0.0040	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.0053	0.0040	ppm(v/v)	EPA-21 TO-14A
SG-4-5.0 12/10/04 16:16 004				
GRO (C4 - C12)	0.74 JDX	2.0	ppm(v/v)	EPA-19 TO-3
Acetone	0.64	0.10	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0014	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
2-Butanone (MEK)	0.015	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	0.0058	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00063	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethylbenzene	0.0021	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	0.015	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	0.0022	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Methyl tert-butyl ether (MTBE)	0.0075	0.0020	ppm(v/v)	EPA-21 TO-14A
Naphthalene	0.00099	0.0050	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Tetrachloroethene	0.00063	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

E4L180176

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SG-4-5.0 12/10/04 16:16 004				
Toluene	0.0034	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.019	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	0.0068	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	0.014	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.0067	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.021	0.0020	ppm(v/v)	EPA-21 TO-14A
SG-8-5.0 12/10/04 16:11 005				
GRO (C4 - C12)	1.5 JDX	1.9	ppm(v/v)	EPA-19 TO-3
Acetone	0.42	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0013	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
2-Butanone (MEK)	0.0048	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00061	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethylbenzene	0.00065	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
4-Ethyltoluene	0.0014	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Methyl tert-butyl ether (MTBE)	0.0029	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.0018	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Toluene	0.0031	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.0013	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
m-Xylene & p-Xylene	0.0023	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.00090	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Xylenes (total)	0.0032	0.0020	ppm(v/v)	EPA-21 TO-14A

ANALYTICAL METHODS SUMMARY

E4L180176

PARAMETER	ANALYTICAL METHOD
TPH by TO-3	EPA-19 TO-3
Volatile Organics by TO-14A	EPA-21 TO-14A

References:

EPA-19 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA/600/4-89/017, January 1988

EPA-21 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", Second Edition, EPA/625/R-96/010b, January 1999

SAMPLE SUMMARY

E4L180176

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G1F1K	001	SG-5-4.5	12/10/04	10:45
G1F1T	002	SG-4-4.5	12/10/04	12:04
G1F1X	003	SG-5-8.5	12/10/04	13:07
G1F11	004	SG-4-5.0	12/10/04	16:16
G1F13	005	SG-8-5.0	12/10/04	16:11

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

URS Corporation

Client Sample ID: SG-5-4.5

GC/MS Volatiles

Lot-Sample #...: E4L180176-001 **Work Order #...:** G1F1K1AD **Matrix.....:** AE
Date Sampled...: 12/10/04 **Date Received..:** 12/14/04
Prep Date.....: 01/06/05 **Analysis Date..:** 01/06/05
Prep Batch #...: 5006289
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.36**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.0045**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.014**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	**0.0064 JDX**	**0.010**	**ppm(v/v)**	**0.0010**
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00058 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	**0.013 JDX**	**0.025**	**ppm(v/v)**	**0.0022**
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.0014 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.0013 JDX**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

(Continued on next page)

URS Corporation

Client Sample ID: SG-5-4.5

GC/MS Volatiles

Lot-Sample #...: E4L180176-001 **Work Order #...:** G1F1K1AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	**0.0015 JDX**	**0.010**	**ppm(v/v)**	**0.0010**
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	**0.0037**	**0.0020**	**ppm(v/v)**	**0.00050**
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	ND	0.0020	ppm(v/v)	0.00060
Toluene	**0.0076**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	**0.00088 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0040**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.0016 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0056**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-5-4.5

GC Volatiles

Lot-Sample #...:	E4L180176-001	**Work Order #...:**	G1F1K1AE	**Matrix.....:**	AE
Date Sampled...:	12/10/04	**Date Received..:**	12/14/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	2				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.28 JDX**	**2.0**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-4-4.5

GC/MS Volatiles

Lot-Sample #...: E4L180176-002 **Work Order #...:** G1F1T1AD **Matrix.....:** AE
Date Sampled...: 12/10/04 **Date Received..:** 12/14/04
Prep Date.....: 01/06/05 **Analysis Date..:** 01/06/05
Prep Batch #...: 5006289
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.13**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.0011 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.0029 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	**0.0061 JDX**	**0.010**	**ppm(v/v)**	**0.0010**
Carbon disulfide	**0.0026 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00059 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	ND	0.025	ppm(v/v)	0.0022
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.00098 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.0047**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

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URS Corporation

Client Sample ID: SG-4-4.5

GC/MS Volatiles

Lot-Sample #...: E4L180176-002 **Work Order #...:** G1F1T1AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.010	ppm(v/v)	0.0010
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	0.00050
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	**0.0010 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Toluene	**0.0030**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	**0.0050**	**0.0020**	**ppm(v/v)**	**0.00080**
1,3,5-Trimethylbenzene	**0.0028**	**0.0020**	**ppm(v/v)**	**0.00080**
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0061**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.0030**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0091**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-4-4.5

GC Volatiles

Lot-Sample #...:	E4L180176-002	**Work Order #...:**	G1F1T1AE	**Matrix.....:**	AE
Date Sampled...:	12/10/04	**Date Received..:**	12/14/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	1.65				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.44 JDX**	**1.6**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-5-8.5

GC/MS Volatiles

Lot-Sample #...: E4L180176-003 **Work Order #...:** G1F1X1AD **Matrix.....:** AE
Date Sampled...: 12/10/04 **Date Received..:** 12/14/04
Prep Date.....: 01/06/05 **Analysis Date..:** 01/06/05
Prep Batch #...: 5006289
Dilution Factor: 1.99
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	0.020	ppm(v/v)	0.0040
Benzene	**0.0025 JDX**	**0.0040**	**ppm(v/v)**	**0.0016**
Benzyl chloride	ND	0.020	ppm(v/v)	0.0016
Bromodichloromethane	ND	0.0040	ppm(v/v)	0.0016
Bromoform	ND	0.0040	ppm(v/v)	0.0010
Bromomethane	ND	0.0040	ppm(v/v)	0.0020
2-Butanone (MEK)	ND	0.020	ppm(v/v)	0.0040
tert-Butyl alcohol	ND	0.020	ppm(v/v)	0.0020
Carbon disulfide	ND	0.020	ppm(v/v)	0.0040
Carbon tetrachloride	ND	0.0040	ppm(v/v)	0.0010
Chlorobenzene	ND	0.0040	ppm(v/v)	0.0010
Dibromochloromethane	ND	0.0040	ppm(v/v)	0.0010
Chloroethane	ND	0.0080	ppm(v/v)	0.0016
Chloroform	ND	0.0040	ppm(v/v)	0.0016
Chloromethane	ND	0.0080	ppm(v/v)	0.0020
1,2-Dibromoethane (EDB)	ND	0.0040	ppm(v/v)	0.0010
1,2-Dichlorobenzene	ND	0.0040	ppm(v/v)	0.0016
1,3-Dichlorobenzene	ND	0.0040	ppm(v/v)	0.0014
1,4-Dichlorobenzene	ND	0.0040	ppm(v/v)	0.0016
Dichlorodifluoromethane	ND	0.0040	ppm(v/v)	0.0010
1,1-Dichloroethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dichloroethane	ND	0.0040	ppm(v/v)	0.0016
cis-1,2-Dichloroethene	ND	0.0040	ppm(v/v)	0.0016
trans-1,2-Dichloroethene	ND	0.0040	ppm(v/v)	0.0010
1,1-Dichloroethene	ND	0.0040	ppm(v/v)	0.0010
1,2-Dichloropropane	ND	0.0040	ppm(v/v)	0.0016
cis-1,3-Dichloropropene	ND	0.0040	ppm(v/v)	0.0010
trans-1,3-Dichloropropene	ND	0.0040	ppm(v/v)	0.0016
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0040	ppm(v/v)	0.0016
Diisopropyl ether	ND	0.0040	ppm(v/v)	0.00040
Ethanol	ND	0.050	ppm(v/v)	0.0044
Tert-amyl methyl ether	ND	0.0040	ppm(v/v)	0.00040
Tert-butyl ethyl ether	ND	0.0040	ppm(v/v)	0.00040
Ethylbenzene	**0.0034 JDX**	**0.0040**	**ppm(v/v)**	**0.0010**
4-Ethyltoluene	**0.0017 JDX**	**0.0040**	**ppm(v/v)**	**0.0014**
Hexachlorobutadiene	ND	0.0080	ppm(v/v)	0.0020

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URS Corporation

Client Sample ID: SG-5-8.5

GC/MS Volatiles

Lot-Sample #...: E4L180176-003 **Work Order #...:** G1F1X1AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.020	ppm(v/v)	0.0020
Methylene chloride	ND	0.0040	ppm(v/v)	0.0016
4-Methyl-2-pentanone (MIBK)	ND	0.020	ppm(v/v)	0.0040
Naphthalene	ND	0.010	ppm(v/v)	0.0010
Styrene	ND	0.0040	ppm(v/v)	0.0012
1,1,2,2-Tetrachloroethane	ND	0.0040	ppm(v/v)	0.0010
Tetrachloroethene	ND	0.0040	ppm(v/v)	0.0012
Toluene	**0.0039 JDX**	**0.0040**	**ppm(v/v)**	**0.0010**
1,2,4-Trichloro-benzene	ND	0.010	ppm(v/v)	0.0020
1,1,1-Trichloroethane	ND	0.0040	ppm(v/v)	0.0010
1,1,2-Trichloroethane	ND	0.0040	ppm(v/v)	0.0012
Trichloroethene	ND	0.0040	ppm(v/v)	0.0010
Trichlorofluoromethane	ND	0.0040	ppm(v/v)	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0040	ppm(v/v)	0.0010
1,2,4-Trimethylbenzene	ND	0.0040	ppm(v/v)	0.0016
1,3,5-Trimethylbenzene	ND	0.0040	ppm(v/v)	0.0016
Vinyl acetate	ND	0.020	ppm(v/v)	0.0040
Vinyl chloride	ND	0.0040	ppm(v/v)	0.0016
m-Xylene & p-Xylene	**0.0053**	**0.0040**	**ppm(v/v)**	**0.0020**
o-Xylene	ND	0.0040	ppm(v/v)	0.0012
Xylenes (total)	**0.0053**	**0.0040**	**ppm(v/v)**	**0.0016**
1,1-Difluoroethane (Freon 152A)	ND	0.0080	ppm(v/v)	0.0054

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-5-8.5

GC/MS Volatiles

Lot-Sample #...:	E4L180176-003	**Work Order #...:**	G1F1X2AD	**Matrix.....:**	AE
Date Sampled...:	12/10/04	**Date Received..:**	12/14/04		
Prep Date.....:	01/06/05	**Analysis Date..:**	01/06/05		
Prep Batch #...:	5007225				
Dilution Factor:	19.92				
Analyst ID.....:	117751	**Instrument ID..:**	MSB		
		Method.....:	EPA-21 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methyl tert-butyl ether (MTBE)	2.2	0.040	**ppm(v/v)**	0.010

URS Corporation

Client Sample ID: SG-5-8.5

GC Volatiles

Lot-Sample #...:	E4L180176-003	**Work Order #...:**	G1F1X1AE	**Matrix.....:**	AE
Date Sampled...:	12/10/04	**Date Received..:**	12/14/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	2				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	37	2.0	**ppm(v/v)**	

URS Corporation

Client Sample ID: SG-4-5.0

GC/MS Volatiles

Lot-Sample #...: E4L180176-004 **Work Order #...:** G1F111AD **Matrix.....:** AE
Date Sampled...: 12/10/04 **Date Received..:** 12/14/04
Prep Date.....: 01/06/05 **Analysis Date..:** 01/06/05
Prep Batch #...: 5006289
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	**0.0014 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.015**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	ND	0.010	ppm(v/v)	0.0010
Carbon disulfide	**0.0058 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00063 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	ND	0.025	ppm(v/v)	0.0022
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.0021**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.015**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010
2-Hexanone	**0.0022 JDX**	**0.010**	**ppm(v/v)**	**0.0010**

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URS Corporation

Client Sample ID: SG-4-5.0

GC/MS Volatiles

Lot-Sample #...: E4L180176-004 **Work Order #...:** G1F111AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	**0.0075**	**0.0020**	**ppm(v/v)**	**0.00050**
Naphthalene	**0.00099 JDX**	**0.0050**	**ppm(v/v)**	**0.00050**
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	**0.00063 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Toluene	**0.0034**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	**0.019**	**0.0020**	**ppm(v/v)**	**0.00080**
1,3,5-Trimethylbenzene	**0.0068**	**0.0020**	**ppm(v/v)**	**0.00080**
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.014**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.0067**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.021**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-4-5.0

GC/MS Volatiles

Lot-Sample #...:	E4L180176-004	**Work Order #...:**	G1F112AD	**Matrix.....:**	AE
Date Sampled...:	12/10/04	**Date Received..:**	12/14/04		
Prep Date.....:	01/06/05	**Analysis Date..:**	01/06/05		
Prep Batch #...:	5007225				
Dilution Factor:	10.09				
Analyst ID.....:	117751	**Instrument ID..:**	MSB		
		Method.....:	EPA-21 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.64**	**0.10**	**ppm(v/v)**	**0.020**

URS Corporation

Client Sample ID: SG-4-5.0

GC Volatiles

Lot-Sample #...:	E4L180176-004	**Work Order #...:**	G1F111AE	**Matrix.....:**	AE
Date Sampled...:	12/10/04	**Date Received..:**	12/14/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	2.01				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.74 JDX**	**2.0**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-8-5.0

GC/MS Volatiles

Lot-Sample #...: E4L180176-005 **Work Order #...:** G1F131AD **Matrix.....:** AE
Date Sampled...: 12/10/04 **Date Received..:** 12/14/04
Prep Date.....: 01/06/05 **Analysis Date..:** 01/06/05
Prep Batch #...: 5006289
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.42**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.0013 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.0048 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	ND	0.010	ppm(v/v)	0.0010
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00061 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	ND	0.025	ppm(v/v)	0.0022
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.00065 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.0014 JDX**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

(Continued on next page)

URS Corporation

Client Sample ID: SG-8-5.0

GC/MS Volatiles

Lot-Sample #...: E4L180176-005 **Work Order #...:** G1F131AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.010	ppm(v/v)	0.0010
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	**0.0029**	**0.0020**	**ppm(v/v)**	**0.00050**
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	**0.0018 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Toluene	**0.0031**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	**0.0013 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0023**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.00090 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0032**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-8-5.0

GC Volatiles

Lot-Sample #...:	E4L180176-005	**Work Order #...:**	G1F131AE	**Matrix.....:**	AE
Date Sampled...:	12/10/04	**Date Received..:**	12/14/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	1.87				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**1.5 JDX**	**1.9**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

QC DATA ASSOCIATION SUMMARY

E4L180176

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5006289	
002	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5006289	
003	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5006289	
	AE	EPA-21 TO-14A		5007225	
004	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5006289	
	AE	EPA-21 TO-14A		5007225	
005	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5006289	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L180176 **Work Order #...:** G17QR1AA **Matrix.....:** AIR
MB Lot-Sample #: M5A060000-289

Prep Date.....: 01/05/05 **Instrument ID..:** MSB
Analysis Date..: 01/05/05 **Prep Batch #...:** 5006289
Dilution Factor: 1

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
tert-Butyl alcohol	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Diisopropyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethanol	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L180176 **Work Order #...:** G17QR1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Naphthalene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Difluoroethane (Freon	ND	0.0040	ppm(v/v)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L180176 **Work Order #...:** G185A1AA **Matrix.....:** AIR
MB Lot-Sample #: M5A070000-225

Prep Date.....: 01/06/05 **Instrument ID..:** MSB
Analysis Date..: 01/06/05 **Prep Batch #...:** 5007225
Dilution Factor: 1

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E4L180176 **Work Order #...:** G14911AE **Matrix.....:** AIR
MB Lot-Sample #: E5A050000-111

Prep Date.....: 01/04/05 **Instrument ID..:** GC7
Analysis Date..: 01/04/05 **Prep Batch #...:** 5005111
Dilution Factor: 1

Analyst ID.....: 358011

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
GRO (C4 - C12)	ND	1.0	ppm(v/v)	EPA-19 TO-3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E4L180176 **Work Order #...:** G17QR1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A060000-289 G17QR1AD-LCSD
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5006289
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 117751

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	105	(70 - 125)			**EPA-21 TO-14A**
	102	(70 - 125)	2.4	(0-20)	**EPA-21 TO-14A**
Methylene chloride	101	(75 - 120)			**EPA-21 TO-14A**
	97	(75 - 120)	3.8	(0-20)	**EPA-21 TO-14A**
1,1,2,2-Tetrachloroethane	103	(65 - 130)			**EPA-21 TO-14A**
	102	(65 - 130)	1.2	(0-20)	**EPA-21 TO-14A**
Toluene	98	(75 - 125)			**EPA-21 TO-14A**
	97	(75 - 125)	0.98	(0-20)	**EPA-21 TO-14A**
Trichloroethene	99	(70 - 125)			**EPA-21 TO-14A**
	99	(70 - 125)	0.20	(0-20)	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E4L180176 **Work Order #...:** G17QR1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A060000-289 G17QR1AD-LCSD
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5006289
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	**0.0500**	**0.0525**	**ppm(v/v)**	**105**		**EPA-21 TO-14A**
	0.0500	**0.0512**	**ppm(v/v)**	**102**	**2.4**	**EPA-21 TO-14A**
Methylene chloride	**0.0500**	**0.0503**	**ppm(v/v)**	**101**		**EPA-21 TO-14A**
	0.0500	**0.0484**	**ppm(v/v)**	**97**	**3.8**	**EPA-21 TO-14A**
1,1,2,2-Tetrachloroethane	**0.0500**	**0.0515**	**ppm(v/v)**	**103**		**EPA-21 TO-14A**
	0.0500	**0.0509**	**ppm(v/v)**	**102**	**1.2**	**EPA-21 TO-14A**
Toluene	**0.0500**	**0.0488**	**ppm(v/v)**	**98**		**EPA-21 TO-14A**
	0.0500	**0.0483**	**ppm(v/v)**	**97**	**0.98**	**EPA-21 TO-14A**
Trichloroethene	**0.0500**	**0.0496**	**ppm(v/v)**	**99**		**EPA-21 TO-14A**
	0.0500	**0.0497**	**ppm(v/v)**	**99**	**0.20**	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E4L180176 **Work Order #...:** G14911AF-LCS **Matrix.....:** AIR
LCS Lot-Sample#: E5A050000-111 G14911AG-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005111
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
GRO (C4 - C12)	**99 LW**	**(75 - 125)**			**EPA-19 TO-3**
	101 LW	**(75 - 125)**	**1.9**	**(0-20)**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E4L180176 **Work Order #...:** G14911AF-LCS **Matrix.....:** AIR
LCS Lot-Sample#: E5A050000-111 G14911AG-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005111
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
GRO (C4 - C12)	**10.3**	**10.2 LW**	**ppm(v/v)**	99		**EPA-19 TO-3**
	10.3	**10.4 LW**	**ppm(v/v)**	101	1.9	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

ARCO SITE #5387

E4L180176 Page 1 of 1

Chain of Custody Record

bp FAX COPY PLEASE

Project Name: ARCO 5387-SVS Investigation
BP BU/AR Region/Enfos Segment:
State or Lead Regulatory Agency: Alameda County Health Care Services
Requested Due Date (mm/dd/yy):

On-site Time: 7:00 AM	Temp: 50°F
Off-site Time:	Temp: 55°F
Sky Conditions: FOGGY & COLD	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name:	Severn Trent Labs, Inc. (STL)	BP/AR Facility No.:	ARCO 5387	Consultant/Contractor:	URS Corporation
Address:	1220 Quarry Lane	BP/AR Facility Address:	20200 Hesperian Blvd., Hayward, CA	Address:	1333 Broadway, Suite 800
	Pleasonton, CA 94566	Site Lat/Long:			Oakland, CA 94612
Lab PM:	Afsaneh Salimpour	California Global ID No.:	T0600101368	Consultant/Contractor Project No.:	38486988.0063601
Tele/Fax:	925-484-1919	Enfos Project No.:		Consultant/Contractor PM:	Scott Robinson
BP/AR PM Contact:	Paul Supple	Provision or RCOP (circle one)		Tele/Fax:	510-874-3280
Address:	P.O. Box 6549	Phase/WBS:		Report Type & QC Level:	
	Moraga, CA 94549	Sub Phase/Task:		E-mail EDD To:	NO EDD
Tele/Fax:		Cost Element:		Invoice to: Consultant or BP or Atlantic Richfield Co. (circle one)	

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Preservative:	Requested Analysis: BTEX 8021	BTEX/TPH	BTEX/Oxy/TPH	EPA 8260	EPA 8270	TO-14 (full suite-approx. 60 compounds). Please see Comments	Leak Test Tracer gas(es) (i.e., shaving cream propellents) *	TPH/GRO EPA Method TO-3	BTEX AND MTBE BY EPA METHOD TO-15 OR TO-15		Sample Point Lat/Long and Comments
1	SG-5-4.5	1045	12/10/04			X														X	X	X	X		Full suite TO-14 chemicals,
2	SG-6-4.5	1205	"			X														X	X	X	X		including alkanes, aromatics,
3	SG-5-8.5	1307	"			X														X	X	X	X		naphthalenes, etc.
4	SG-6-5.0	1616	"			X														X	X	X	X		(approx. 60 compounds)
5	SG-8-5.0	1611	"			X														X	X	X	X		*TRACER GAS
6																									ETHANE 1,1-DIFLUORO
7																									CAS-75376
8																									
9																									
10																									

Sampler's Name:	SEZTOSH THATA AND KEVIN UNO	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company:	URS CORPORATION	[signature]	12/10/04	1630	[signature]	12-10-04	1630
Shipment Date:		[signature] 12-10-04	1736		Denise Harrington / STL-SF	12/10/04	1730
Shipment Method:		[signature] STL-SF	12/13	1500	[signature] STL CA	12/14/04	1020
Shipment Tracking No:							

Special Instructions:

Custody Seals In Place Yes No Temp Blank Yes No Cooler Temperature on Receipt °F/C Trip Blank Yes No

Distribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Pink Copy - Consultant/Contractor

BP COC Rev. 4 10/1/04

2

E4L180176

SEVERN TRENT STL

January 11, 2005

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921
www.stl-inc.com

STL LOT NUMBER: **E4L180224**
PO/CONTRACT: G09J2-0520

Scott Robinson
URS Corporation
1333 Broadway
Suite 800
Oakland, CA 94612

Dear Scott Robinson,

This report contains the analytical results for the three samples received under chain of custody by STL Los Angeles on December 17, 2004. These samples are associated with your ARCO #5387 project.

STL Los Angeles certifies that the test results provided in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number for STL Los Angeles is 01118CA / E87652.

Any matrix related anomaly is footnoted within the report. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. All applicable quality control procedures met method-specified acceptance criteria.

This report shall not be reproduced except in full, without the written approval of the laboratory.

This report contains 000023 pages.

If you have any questions, please feel free to call me at (714) 258-8610.

Sincerely,

Beth Riley
Project Manager

cc: Project File

ANALYTICAL REPORT

PROJECT NO. 38486988.0063601

ARCO #5387

Lot #: E4L180224

Scott Robinson

URS Corporation

SEVERN TRENT LABORATORIES, INC.

Beth Riley
Project Manager

January 11, 2005

EXECUTIVE SUMMARY - Detection Highlights

E4L180224

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SG-4-8.5 12/10/04 18:15 001				
GRO (C4 - C12)	340	5.8	ppm(v/v)	EPA-19 TO-3
Methyl tert-butyl ether (MTBE)	1.7 DF	0.050	ppm(v/v)	EPA-21 TO-14A
SG-5-8.5 DUP 12/10/04 19:28 002				
GRO (C4 - C12)	350	5.1	ppm(v/v)	EPA-19 TO-3
Methyl tert-butyl ether (MTBE)	1.8 DF	0.059	ppm(v/v)	EPA-21 TO-14A
SG-8-9.0 12/10/04 17:54 003				
GRO (C4 - C12)	0.27 JDX	1.8	ppm(v/v)	EPA-19 TO-3
Acetone	0.093	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.00087	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
2-Butanone (MEK)	0.0057	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
tert-Butyl alcohol	0.0012	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00057	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethanol	0.0024	0.025	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethylbenzene	0.00092	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Methylene chloride	0.00084	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Methyl tert-butyl ether (MTBE)	0.00062	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Toluene	0.0041	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.00092	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
m-Xylene & p-Xylene	0.0020	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.00066	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Xylenes (total)	0.0026	0.0020	ppm(v/v)	EPA-21 TO-14A

ANALYTICAL METHODS SUMMARY

E4L180224

PARAMETER	ANALYTICAL METHOD
TPH by TO-3	EPA-19 TO-3
Volatile Organics by TO-14A	EPA-21 TO-14A

References:

EPA-19 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA/600/4-89/017, January 1988

EPA-21 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", Second Edition, EPA/625/R-96/010b, January 1999

SAMPLE SUMMARY

E4L180224

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G1GEV	001	SG-4-8.5	12/10/04	18:15
G1GE1	002	SG-5-8.5 DUP	12/10/04	19:28
G1GE2	003	SG-8-9.0	12/10/04	17:54

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

URS Corporation

Client Sample ID: SG-4-8.5

GC/MS Volatiles

Lot-Sample #...: E4L180224-001 **Work Order #...:** G1GEV1AD **Matrix.....:** AE
Date Sampled...: 12/10/04 **Date Received..:** 12/17/04
Prep Date.....: 01/06/05 **Analysis Date..:** 01/06/05
Prep Batch #...: 5006289
Dilution Factor: 25
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND DF	0.25	ppm(v/v)	0.050
Benzene	ND DF	0.050	ppm(v/v)	0.020
Benzyl chloride	ND DF	0.25	ppm(v/v)	0.020
Bromodichloromethane	ND DF	0.050	ppm(v/v)	0.020
Bromoform	ND DF	0.050	ppm(v/v)	0.012
Bromomethane	ND DF	0.050	ppm(v/v)	0.025
2-Butanone (MEK)	ND DF	0.25	ppm(v/v)	0.050
tert-Butyl alcohol	ND DF	0.25	ppm(v/v)	0.025
Carbon disulfide	ND DF	0.25	ppm(v/v)	0.050
Carbon tetrachloride	ND DF	0.050	ppm(v/v)	0.012
Chlorobenzene	ND DF	0.050	ppm(v/v)	0.012
Dibromochloromethane	ND DF	0.050	ppm(v/v)	0.012
Chloroethane	ND DF	0.10	ppm(v/v)	0.020
Chloroform	ND DF	0.050	ppm(v/v)	0.020
Chloromethane	ND DF	0.10	ppm(v/v)	0.025
1,2-Dibromoethane (EDB)	ND DF	0.050	ppm(v/v)	0.012
1,2-Dichlorobenzene	ND DF	0.050	ppm(v/v)	0.020
1,3-Dichlorobenzene	ND DF	0.050	ppm(v/v)	0.018
1,4-Dichlorobenzene	ND DF	0.050	ppm(v/v)	0.020
Dichlorodifluoromethane	ND DF	0.050	ppm(v/v)	0.012
1,1-Dichloroethane	ND DF	0.050	ppm(v/v)	0.012
1,2-Dichloroethane	ND DF	0.050	ppm(v/v)	0.020
cis-1,2-Dichloroethene	ND DF	0.050	ppm(v/v)	0.020
trans-1,2-Dichloroethene	ND DF	0.050	ppm(v/v)	0.012
1,1-Dichloroethene	ND DF	0.050	ppm(v/v)	0.012
1,2-Dichloropropane	ND DF	0.050	ppm(v/v)	0.020
cis-1,3-Dichloropropene	ND DF	0.050	ppm(v/v)	0.012
trans-1,3-Dichloropropene	ND DF	0.050	ppm(v/v)	0.020
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND DF	0.050	ppm(v/v)	0.020
Diisopropyl ether	ND DF	0.050	ppm(v/v)	0.0050
Ethanol	ND DF	0.62	ppm(v/v)	0.055
Tert-amyl methyl ether	ND DF	0.050	ppm(v/v)	0.0050
Tert-butyl ethyl ether	ND DF	0.050	ppm(v/v)	0.0050
Ethylbenzene	ND DF	0.050	ppm(v/v)	0.012
4-Ethyltoluene	ND DF	0.050	ppm(v/v)	0.018
Hexachlorobutadiene	ND DF	0.10	ppm(v/v)	0.025

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URS Corporation

Client Sample ID: SG-4-8.5

GC/MS Volatiles

Lot-Sample #...: E4L180224-001 **Work Order #...:** G1GEV1AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND DF	0.25	ppm(v/v)	0.025
Methylene chloride	ND DF	0.050	ppm(v/v)	0.020
4-Methyl-2-pentanone (MIBK)	ND DF	0.25	ppm(v/v)	0.050
Methyl tert-butyl ether (MTBE)	**1.7 DF**	**0.050**	**ppm(v/v)**	**0.012**
Naphthalene	ND DF	0.12	ppm(v/v)	0.012
Styrene	ND DF	0.050	ppm(v/v)	0.015
1,1,2,2-Tetrachloroethane	ND DF	0.050	ppm(v/v)	0.012
Tetrachloroethene	ND DF	0.050	ppm(v/v)	0.015
Toluene	ND DF	0.050	ppm(v/v)	0.012
1,2,4-Trichloro-benzene	ND DF	0.12	ppm(v/v)	0.025
1,1,1-Trichloroethane	ND DF	0.050	ppm(v/v)	0.012
1,1,2-Trichloroethane	ND DF	0.050	ppm(v/v)	0.015
Trichloroethene	ND DF	0.050	ppm(v/v)	0.012
Trichlorofluoromethane	ND DF	0.050	ppm(v/v)	0.012
1,1,2-Trichloro-1,2,2-trifluoroethane	ND DF	0.050	ppm(v/v)	0.012
1,2,4-Trimethylbenzene	ND DF	0.050	ppm(v/v)	0.020
1,3,5-Trimethylbenzene	ND DF	0.050	ppm(v/v)	0.020
Vinyl acetate	ND DF	0.25	ppm(v/v)	0.050
Vinyl chloride	ND DF	0.050	ppm(v/v)	0.020
m-Xylene & p-Xylene	ND DF	0.050	ppm(v/v)	0.025
o-Xylene	ND DF	0.050	ppm(v/v)	0.015
Xylenes (total)	ND DF	0.050	ppm(v/v)	0.020
1,1-Difluoroethane (Freon 152A)	ND DF	0.10	ppm(v/v)	0.068

NOTE(S):

DF Reporting limits elevated due to matrix interferences.

URS Corporation

Client Sample ID: SG-4-8.5

GC Volatiles

Lot-Sample #...:	E4L180224-001	**Work Order #...:**	G1GEV1AE	**Matrix.....:**	AE
Date Sampled...:	12/10/04	**Date Received..:**	12/17/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	5.8				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**340**	**5.8**	**ppm(v/v)**	

URS Corporation

Client Sample ID: SG-5-8.5 DUP

GC/MS Volatiles

Lot-Sample #...: E4L180224-002 **Work Order #...:** G1GE11AD **Matrix.....:** AE
Date Sampled...: 12/10/04 **Date Received..:** 12/17/04
Prep Date.....: 01/06/05 **Analysis Date..:** 01/06/05
Prep Batch #...: 5006289
Dilution Factor: 29.28
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND DF	0.29	ppm(v/v)	0.059
Benzene	ND DF	0.059	ppm(v/v)	0.023
Benzyl chloride	ND DF	0.29	ppm(v/v)	0.023
Bromodichloromethane	ND DF	0.059	ppm(v/v)	0.023
Bromoform	ND DF	0.059	ppm(v/v)	0.015
Bromomethane	ND DF	0.059	ppm(v/v)	0.029
2-Butanone (MEK)	ND DF	0.29	ppm(v/v)	0.059
tert-Butyl alcohol	ND DF	0.29	ppm(v/v)	0.029
Carbon disulfide	ND DF	0.29	ppm(v/v)	0.059
Carbon tetrachloride	ND DF	0.059	ppm(v/v)	0.015
Chlorobenzene	ND DF	0.059	ppm(v/v)	0.015
Dibromochloromethane	ND DF	0.059	ppm(v/v)	0.015
Chloroethane	ND DF	0.12	ppm(v/v)	0.023
Chloroform	ND DF	0.059	ppm(v/v)	0.023
Chloromethane	ND DF	0.12	ppm(v/v)	0.029
1,2-Dibromoethane (EDB)	ND DF	0.059	ppm(v/v)	0.015
1,2-Dichlorobenzene	ND DF	0.059	ppm(v/v)	0.023
1,3-Dichlorobenzene	ND DF	0.059	ppm(v/v)	0.020
1,4-Dichlorobenzene	ND DF	0.059	ppm(v/v)	0.023
Dichlorodifluoromethane	ND DF	0.059	ppm(v/v)	0.015
1,1-Dichloroethane	ND DF	0.059	ppm(v/v)	0.015
1,2-Dichloroethane	ND DF	0.059	ppm(v/v)	0.023
cis-1,2-Dichloroethene	ND DF	0.059	ppm(v/v)	0.023
trans-1,2-Dichloroethene	ND DF	0.059	ppm(v/v)	0.015
1,1-Dichloroethene	ND DF	0.059	ppm(v/v)	0.015
1,2-Dichloropropane	ND DF	0.059	ppm(v/v)	0.023
cis-1,3-Dichloropropene	ND DF	0.059	ppm(v/v)	0.015
trans-1,3-Dichloropropene	ND DF	0.059	ppm(v/v)	0.023
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND DF	0.059	ppm(v/v)	0.023
Diisopropyl ether	ND DF	0.059	ppm(v/v)	0.0059
Ethanol	ND DF	0.73	ppm(v/v)	0.064
Tert-amyl methyl ether	ND DF	0.059	ppm(v/v)	0.0059
Tert-butyl ethyl ether	ND DF	0.059	ppm(v/v)	0.0059
Ethylbenzene	ND DF	0.059	ppm(v/v)	0.015
4-Ethyltoluene	ND DF	0.059	ppm(v/v)	0.020
Hexachlorobutadiene	ND DF	0.12	ppm(v/v)	0.029

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URS Corporation

Client Sample ID: SG-5-8.5 DUP

GC/MS Volatiles

Lot-Sample #...: E4L180224-002 **Work Order #...:** G1GE11AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND DF	0.29	ppm(v/v)	0.029
Methylene chloride	ND DF	0.059	ppm(v/v)	0.023
4-Methyl-2-pentanone (MIBK)	ND DF	0.29	ppm(v/v)	0.059
Methyl tert-butyl ether (MTBE)	**1.8 DF**	**0.059**	**ppm(v/v)**	**0.015**
Naphthalene	ND DF	0.15	ppm(v/v)	0.015
Styrene	ND DF	0.059	ppm(v/v)	0.018
1,1,2,2-Tetrachloroethane	ND DF	0.059	ppm(v/v)	0.015
Tetrachloroethene	ND DF	0.059	ppm(v/v)	0.018
Toluene	ND DF	0.059	ppm(v/v)	0.015
1,2,4-Trichloro-benzene	ND DF	0.15	ppm(v/v)	0.029
1,1,1-Trichloroethane	ND DF	0.059	ppm(v/v)	0.015
1,1,2-Trichloroethane	ND DF	0.059	ppm(v/v)	0.018
Trichloroethene	ND DF	0.059	ppm(v/v)	0.015
Trichlorofluoromethane	ND DF	0.059	ppm(v/v)	0.015
1,1,2-Trichloro-1,2,2-trifluoroethane	ND DF	0.059	ppm(v/v)	0.015
1,2,4-Trimethylbenzene	ND DF	0.059	ppm(v/v)	0.023
1,3,5-Trimethylbenzene	ND DF	0.059	ppm(v/v)	0.023
Vinyl acetate	ND DF	0.29	ppm(v/v)	0.059
Vinyl chloride	ND DF	0.059	ppm(v/v)	0.023
m-Xylene & p-Xylene	ND DF	0.059	ppm(v/v)	0.029
o-Xylene	ND DF	0.059	ppm(v/v)	0.018
Xylenes (total)	ND DF	0.059	ppm(v/v)	0.023
1,1-Difluoroethane (Freon 152A)	ND DF	0.12	ppm(v/v)	0.079

NOTE(S):

DF Reporting limits elevated due to matrix interferences.

URS Corporation

Client Sample ID: SG-5-8.5 DUP

GC Volatiles

Lot-Sample #...:	E4L180224-002	**Work Order #...:**	G1GE11AE	**Matrix.....:**	AE
Date Sampled...:	12/10/04	**Date Received..:**	12/17/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	5.08				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**350**	**5.1**	**ppm(v/v)**	

URS Corporation

Client Sample ID: SG-8-9.0

GC/MS Volatiles

Lot-Sample #...: E4L180224-003 **Work Order #...:** G1GE21AD **Matrix.....:** AE
Date Sampled...: 12/10/04 **Date Received..:** 12/17/04
Prep Date.....: 01/06/05 **Analysis Date..:** 01/06/05
Prep Batch #...: 5006289
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.093**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.00087 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.0057 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	**0.0012 JDX**	**0.010**	**ppm(v/v)**	**0.0010**
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00057 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	**0.0024 JDX**	**0.025**	**ppm(v/v)**	**0.0022**
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.00092 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	ND	0.0020	ppm(v/v)	0.00070
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

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URS Corporation

Client Sample ID: SG-8-9.0

GC/MS Volatiles

Lot-Sample #...: E4L180224-003 **Work Order #...:** G1GE21AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.010	ppm(v/v)	0.0010
Methylene chloride	**0.00084 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	**0.00062 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	ND	0.0020	ppm(v/v)	0.00060
Toluene	**0.0041**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	**0.00092 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0020**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.00066 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0026**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-8-9.0

GC Volatiles

Lot-Sample #...:	E4L180224-003	**Work Order #...:**	G1GE21AE	**Matrix.....:**	AE
Date Sampled...:	12/10/04	**Date Received..:**	12/17/04		
Prep Date.....:	01/04/05	**Analysis Date..:**	01/04/05		
Prep Batch #...:	5005111				
Dilution Factor:	1.76				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.27 JDX**	**1.8**	**ppm(v/v)**	

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

QC DATA ASSOCIATION SUMMARY

E4L180224

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5006289	
002	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5006289	
003	AE	EPA-19 TO-3		5005111	
	AE	EPA-21 TO-14A		5006289	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L180224 **Work Order #...:** G17QR1AA **Matrix.....:** AIR
MB Lot-Sample #: M5A060000-289

Prep Date.....: 01/05/05 **Instrument ID..:** MSB
Analysis Date..: 01/05/05 **Prep Batch #...:** 5006289
Dilution Factor: 1

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
tert-Butyl alcohol	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Diisopropyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethanol	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L180224 **Work Order #...:** G17QR1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Naphthalene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Difluoroethane (Freon	ND	0.0040	ppm(v/v)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E4L180224 **Work Order #...:** G14911AE **Matrix.....:** AIR
MB Lot-Sample #: E5A050000-111

Prep Date.....: 01/04/05 **Instrument ID..:** GC7
Analysis Date..: 01/04/05 **Prep Batch #...:** 5005111
Dilution Factor: 1

Analyst ID.....: 358011

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
GRO (C4 - C12)	ND	1.0	ppm(v/v)	EPA-19 TO-3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E4L180224 **Work Order #...:** G17QR1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A060000-289 G17QR1AD-LCSD
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5006289
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 117751

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**105**	**(70 - 125)**			**EPA-21 TO-14A**
	102	**(70 - 125)**	**2.4**	**(0-20)**	**EPA-21 TO-14A**
Methylene chloride	**101**	**(75 - 120)**			**EPA-21 TO-14A**
	97	**(75 - 120)**	**3.8**	**(0-20)**	**EPA-21 TO-14A**
1,1,2,2-Tetrachloroethane	**103**	**(65 - 130)**			**EPA-21 TO-14A**
	102	**(65 - 130)**	**1.2**	**(0-20)**	**EPA-21 TO-14A**
Toluene	**98**	**(75 - 125)**			**EPA-21 TO-14A**
	97	**(75 - 125)**	**0.98**	**(0-20)**	**EPA-21 TO-14A**
Trichloroethene	**99**	**(70 - 125)**			**EPA-21 TO-14A**
	99	**(70 - 125)**	**0.20**	**(0-20)**	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E4L180224 **Work Order #...:** G17QR1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A060000-289 G17QR1AD-LCSD
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5006289
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	**0.0500**	**0.0525**	**ppm(v/v)**	**105**		**EPA-21 TO-14A**
	0.0500	**0.0512**	**ppm(v/v)**	**102**	**2.4**	**EPA-21 TO-14A**
Methylene chloride	**0.0500**	**0.0503**	**ppm(v/v)**	**101**		**EPA-21 TO-14A**
	0.0500	**0.0484**	**ppm(v/v)**	**97**	**3.8**	**EPA-21 TO-14A**
1,1,2,2-Tetrachloroethane	**0.0500**	**0.0515**	**ppm(v/v)**	**103**		**EPA-21 TO-14A**
	0.0500	**0.0509**	**ppm(v/v)**	**102**	**1.2**	**EPA-21 TO-14A**
Toluene	**0.0500**	**0.0488**	**ppm(v/v)**	**98**		**EPA-21 TO-14A**
	0.0500	**0.0483**	**ppm(v/v)**	**97**	**0.98**	**EPA-21 TO-14A**
Trichloroethene	**0.0500**	**0.0496**	**ppm(v/v)**	**99**		**EPA-21 TO-14A**
	0.0500	**0.0497**	**ppm(v/v)**	**99**	**0.20**	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E4L180224 **Work Order #...:** G14911AF-LCS **Matrix.....:** AIR
LCS Lot-Sample#: E5A050000-111 G14911AG-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005111
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
GRO (C4 - C12)	**99 LW**	**(75 - 125)**			**EPA-19 TO-3**
	101 LW	**(75 - 125)**	**1.9**	**(0-20)**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E4L180224 **Work Order #...:** G14911AF-LCS **Matrix.....:** AIR
LCS Lot-Sample#: E5A050000-111 G14911AG-LCSD
Prep Date.....: 01/04/05 **Analysis Date..:** 01/04/05
Prep Batch #...: 5005111
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
GRO (C4 - C12)	**10.3**	**10.2 LW**	**ppm(v/v)**	**99**		**EPA-19 TO-3**
	10.3	**10.4 LW**	**ppm(v/v)**	**101**	**1.9**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

ARCO SITE #5387

E4L180224 Page 1 of 1

Chain of Custody Record

Project Name: ARCO 5387-SVS Investigation
BP BU/AR Region/Enfos Segment:
State or Lead Regulatory Agency: Alameda County Health Care Services
Requested Due Date (mm/dd/yy):

On-site Time:	Temp:
Off-site Time:	Temp:
Sky Conditions: OVERCAST	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name:	Severn Trent Labs, Inc. (STL)	BP/AR Facility No.:	ARCO 5387	Consultant/Contractor:	URS Corporation
Address:	1220 Quarry Lane	BP/AR Facility Address:	20200 Hesperian Blvd., Hayward, CA	Address:	1333 Broadway, Suite 800
	Pleasonton, CA 94566	Site Lat/Long:			Oakland, CA 94612
Lab PM:	Afsaneh Salimpour	California Global ID No.:	T0600101368	Consultant/Contractor Project No.:	38486988.0063601
Tele/Fax:	925-484-1919	Enfos Project No.:	G09TZ-0520	Consultant/Contractor PM:	Scott Robinson
BP/AR PM Contact:	Paul Supple	Provision or RCOP (circle one)		Tele/Fax:	510-874-3280
Address:	P.O. Box 6549	Phase/WBS:	CLOSURE	Report Type & QC Level:	
	Moraga, CA 94549	Sub Phase/Task:	ANALYTICAL	E-mail EDD To:	NO EDD
Tele/Fax:		Cost Element:		Invoice to: Consultant or BP or Atlantic Richfield Co. (circle one)	

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: BTEX 8021	Requested Analysis: BTEX/TPH	Requested Analysis: BTEX/Oxy/TPH	Requested Analysis: EPA 8260	Requested Analysis: EPA 8270	Requested Analysis: TO-14 (full suite-approx. 60 compounds). Please see Comments	Requested Analysis: Leak Test Tracer gas(es) * (i.e., shaving cream propellents)	Requested Analysis: TPH/GRO EPA Method TO-3	Requested Analysis: BTEX AND MTBE: TO/GA OR TO-15	Sample Point Lat/Long and Comments
1	SG-6-8.5	1815	12/10/04			X													X	X	X	X	Full suite TO-14 chemicals,
2	SG-5-8.5 DUP	1928	"			X													X	X	X	X	including alkanes, aromatics,
3	SG-8-9.0	1754	"			X													X	X	X	X	naphthalenes, etc.
4																							(approx. 60 compounds)
5																							* TRACER GAS-
6																							ETHANE 1, 1-DIFLUORO
7																							CAS- 75376
8																							
9																							
10																							

Sampler's Name:	SRIJESH THAPA / KEVIN UNO	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date / Time
Sampler's Company:	URS CORPORATION - OAKLAND	Srijesh Thapa / URS Corporation	12/16/04	1045		
Shipment Date:	12/15/04	STL-SF	12/16/04	15:00	STL CA	12-17-04 0930
Shipment Method:						
Shipment Tracking No:						

Special Instructions: SUMMA CANISTERS

Custody Seals In Place Yes No Temp Blank Yes No Cooler Temperature on Receipt N/A °F/C Trip Blank Yes No

Distribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Pink Copy - Consultant/Contractor

BP COC Rev. 4 10/1/04

2

E4L180224

SEVERN TRENT STL

January 11, 2005

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921
www.stl-inc.com

STL LOT NUMBER: **E4L280291**
PO/CONTRACT: G09J2-0520

Scott Robinson
URS Corporation
1333 Broadway
Suite 800
Oakland, CA 94612

Dear Scott Robinson,

This report contains the analytical results for the two samples received under chain of custody by STL Los Angeles on December 28, 2004. These samples are associated with your ARCO #5387 project.

STL Los Angeles certifies that the test results provided in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number for STL Los Angeles is 01118CA / E87652.

Any matrix related anomaly is footnoted within the report. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. All applicable quality control procedures met method-specified acceptance criteria.

This report shall not be reproduced except in full, without the written approval of the laboratory.

This report contains 000020 pages.

If you have any questions, please feel free to call me at (714) 258-8610.

Sincerely,

Beth Riley
Project Manager

cc: Project File

ANALYTICAL REPORT

PROJECT NO. 38486988.0063601

ARCO #5387

Lot #: E4L280291

Scott Robinson

URS Corporation

SEVERN TRENT LABORATORIES, INC.

Beth Riley
Project Manager

January 11, 2005

EXECUTIVE SUMMARY - Detection Highlights

E4L280291

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SG-6-5.5 12/21/04 10:05 001				
GRO (C4 - C12)	4.0	1.6	ppm(v/v)	EPA-19 TO-3
Acetone	0.052	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0017	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00074	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethanol	0.025	0.025	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	0.0011	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
4-Ethyltoluene	0.0020	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0043	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.0016	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
1,3,5-Trimethylbenzene	0.0012	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
m-Xylene & p-Xylene	0.0050	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.0022	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.0072	0.0020	ppm(v/v)	EPA-21 TO-14A
SG-9-5.5 12/21/04 11:06 002				
Acetone	0.057	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0012	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
2-Butanone (MEK)	0.0036	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
tert-Butyl alcohol	0.0042	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00068	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethylbenzene	0.00069	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
4-Ethyltoluene	0.00074	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Methylene chloride	0.0013	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Toluene	0.0036	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	0.0024	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.00086	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Xylenes (total)	0.0033	0.0020	ppm(v/v)	EPA-21 TO-14A

ANALYTICAL METHODS SUMMARY

E4L280291

PARAMETER	ANALYTICAL METHOD
TPH by TO-3	EPA-19 TO-3
Volatile Organics by TO-14A	EPA-21 TO-14A

References:

EPA-19 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA/600/4-89/017, January 1988

EPA-21 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", Second Edition, EPA/625/R-96/010b, January 1999

SAMPLE SUMMARY

E4L280291

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G1WJA	001	SG-6-5.5	12/21/04	10:05
G1WJC	002	SG-9-5.5	12/21/04	11:06

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

URS Corporation

Client Sample ID: SG-6-5.5

GC/MS Volatiles

Lot-Sample #...: E4L280291-001 **Work Order #...:** G1WJA1AD **Matrix.....:** AE
Date Sampled...: 12/21/04 **Date Received..:** 12/28/04
Prep Date.....: 01/07/05 **Analysis Date..:** 01/07/05
Prep Batch #...: 5007401
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.052**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.0017 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	ND	0.010	ppm(v/v)	0.0020
tert-Butyl alcohol	ND	0.010	ppm(v/v)	0.0010
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00074 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	**0.025**	**0.025**	**ppm(v/v)**	**0.0022**
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.0011 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.0020**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

(Continued on next page)

URS Corporation

Client Sample ID: SG-6-5.5

GC/MS Volatiles

Lot-Sample #...: E4L280291-001 **Work Order #...:** G1WJA1AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.010	ppm(v/v)	0.0010
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	0.00050
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	ND	0.0020	ppm(v/v)	0.00060
Toluene	**0.0043**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	**0.0016 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
1,3,5-Trimethylbenzene	**0.0012 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0050**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.0022**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0072**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-6-5.5

GC Volatiles

Lot-Sample #...:	E4L280291-001	**Work Order #...:**	G1WJA1AE	**Matrix.....:**	AE
Date Sampled...:	12/21/04	**Date Received..:**	12/28/04		
Prep Date.....:	01/05/05	**Analysis Date..:**	01/05/05		
Prep Batch #...:	5005417				
Dilution Factor:	1.65				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**4.0**	**1.6**	**ppm(v/v)**	**0.50**

URS Corporation

Client Sample ID: SG-9-5.5

GC/MS Volatiles

Lot-Sample #...: E4L280291-002 **Work Order #...:** G1WJC1AD **Matrix.....:** AE
Date Sampled...: 12/21/04 **Date Received..:** 12/28/04
Prep Date.....: 01/07/05 **Analysis Date..:** 01/07/05
Prep Batch #...: 5007401
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.057**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.0012 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.0036 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	**0.0042 JDX**	**0.010**	**ppm(v/v)**	**0.0010**
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00068 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	ND	0.025	ppm(v/v)	0.0022
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.00069 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.00074 JDX**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

(Continued on next page)

URS Corporation

Client Sample ID: SG-9-5.5

GC/MS Volatiles

Lot-Sample #...: E4L280291-002 **Work Order #...:** G1WJC1AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.010	ppm(v/v)	0.0010
Methylene chloride	**0.0013 JDX**	***0.0020***	**ppm(v/v)**	**0.00080**
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	0.00050
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	ND	0.0020	ppm(v/v)	0.00060
Toluene	**0.0036**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0024**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.00086 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0033**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-9-5.5

GC Volatiles

Lot-Sample #...:	E4L280291-002	**Work Order #...:**	G1WJC1AE	**Matrix.....:**	AE
Date Sampled...:	12/21/04	**Date Received..:**	12/28/04		
Prep Date.....:	01/05/05	**Analysis Date..:**	01/05/05		
Prep Batch #...:	5005417				
Dilution Factor:	2.01				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	ND	2.0	ppm(v/v)	0.60

QC DATA ASSOCIATION SUMMARY

E4L280291

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AE	EPA-19 TO-3		5005417	
	AE	EPA-21 TO-14A		5007401	
002	AE	EPA-19 TO-3		5005417	
	AE	EPA-21 TO-14A		5007401	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L280291 **Work Order #...:** G2CLR1AA **Matrix.....:** AIR
MB Lot-Sample #: M5A070000-401

Prep Date.....: 01/06/05 **Instrument ID..:** MSB
Analysis Date..: 01/06/05 **Prep Batch #...:** 5007401
Dilution Factor: 1

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
tert-Butyl alcohol	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Diisopropyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethanol	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L280291 **Work Order #...:** G2CLR1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Naphthalene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Difluoroethane (Freon	ND	0.0040	ppm(v/v)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E4L280291 **Work Order #...:** G16QK1AA **Matrix.....:** AIR
MB Lot-Sample #: M5A050000-417

Prep Date.....: 01/05/05 **Instrument ID..:** GC7
Analysis Date..: 01/05/05 **Prep Batch #...:** 5005417
Dilution Factor: 1

Analyst ID.....: 358011

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
GRO (C4 - C12)	ND	1.0	ppm(v/v)	EPA-19 TO-3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E4L280291 **Work Order #...:** G2CLR1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A070000-401 G2CLR1AD-LCSD
Prep Date.....: 01/06/05 **Analysis Date..:** 01/06/05
Prep Batch #...: 5007401
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 117751

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**102**	**(70 - 125)**			**EPA-21 TO-14A**
	104	**(70 - 125)**	**1.4**	**(0-20)**	**EPA-21 TO-14A**
Methylene chloride	**99**	**(75 - 120)**			**EPA-21 TO-14A**
	99	**(75 - 120)**	**0.52**	**(0-20)**	**EPA-21 TO-14A**
1,1,2,2-Tetrachloroethane	**103**	**(65 - 130)**			**EPA-21 TO-14A**
	103	**(65 - 130)**	**0.23**	**(0-20)**	**EPA-21 TO-14A**
Toluene	**98**	**(75 - 125)**			**EPA-21 TO-14A**
	98	**(75 - 125)**	**0.12**	**(0-20)**	**EPA-21 TO-14A**
Trichloroethene	**101**	**(70 - 125)**			**EPA-21 TO-14A**
	101	**(70 - 125)**	**0.31**	**(0-20)**	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E4L280291 **Work Order #...:** G2CLR1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A070000-401 G2CLR1AD-LCSD
Prep Date.....: 01/06/05 **Analysis Date..:** 01/06/05
Prep Batch #...: 5007401
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	**0.0500**	**0.0512**	**ppm(v/v)**	**102**		**EPA-21 TO-14A**
	0.0500	**0.0520**	**ppm(v/v)**	**104**	**1.4**	**EPA-21 TO-14A**
Methylene chloride	**0.0500**	**0.0494**	**ppm(v/v)**	**99**		**EPA-21 TO-14A**
	0.0500	**0.0497**	**ppm(v/v)**	**99**	**0.52**	**EPA-21 TO-14A**
1,1,2,2-Tetrachloroethane	**0.0500**	**0.0516**	**ppm(v/v)**	**103**		**EPA-21 TO-14A**
	0.0500	**0.0515**	**ppm(v/v)**	**103**	**0.23**	**EPA-21 TO-14A**
Toluene	**0.0500**	**0.0489**	**ppm(v/v)**	**98**		**EPA-21 TO-14A**
	0.0500	**0.0490**	**ppm(v/v)**	**98**	**0.12**	**EPA-21 TO-14A**
Trichloroethene	**0.0500**	**0.0504**	**ppm(v/v)**	**101**		**EPA-21 TO-14A**
	0.0500	**0.0505**	**ppm(v/v)**	**101**	**0.31**	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E4L280291 **Work Order #...:** G16QK1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A050000-417 G16QK1AD-LCSD
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5005417
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
GRO (C4 - C12)	**110 LW**	**(75 - 125)**			**EPA-19 TO-3**
	107 LW	**(75 - 125)**	**2.6**	**(0-20)**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E4L280291 **Work Order #...:** G16QK1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A050000-417 G16QK1AD-LCSD
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5005417
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
GRO (C4 - C12)	**10.3**	**11.4 LW**	**ppm(v/v)**	**110**		**EPA-19 TO-3**
	10.3	**11.1 LW**	**ppm(v/v)**	**107**	2.6	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

ARCO SITE #5387

E4L280291 TO-14 Page 1 of 2

PLEASE FAX A COMPLETED COPY.

Chain of Custody Record

Project Name: ARCO 5387-SVS Investigation
BP BU/AR Region/Enfos Segment:
State or Lead Regulatory Agency: Alameda County Health Care Services
Requested Due Date (mm/dd/yy):

On-site Time:	Temp:
Off-site Time:	Temp:
Sky Conditions:	CLEAR & SUNNY
Meteorological Events:	
Wind Speed:	Direction:

Lab Name:	Severn Trent Labs, Inc. (STL)	BP/AR Facility No.:	ARCO 5387	Consultant/Contractor:	URS Corporation
Address:	1220 Quarry Lane	BP/AR Facility Address:	20200 Hesperian Blvd., Hayward, CA	Address:	1333 Broadway, Suite 800
	Pleasonton, CA 94566	Site Lat/Long:			Oakland, CA 94612
Lab PM:	Afsaneh Salimpour	California Global ID No.:	T0600101368	Consultant/Contractor Project No.:	38486988.0063601
Tele/Fax:	925-484-1919	Enfos Project No.:	G09S2-0520	Consultant/Contractor PM:	Scott Robinson
BP/AR PM Contact:	Paul Supple	Provision or RCOP (circle one)		Tele/Fax:	510-874-3280
Address:	P.O. Box 6549	Phase/WBS:	CLOSURE	Report Type & QC Level:	
	Moraga, CA 94549	Sub Phase/Task:	ANALYTICAL	E-mail EDD To:	NO EDD
Tele/Fax:		Cost Element:		Invoice to:	Consultant or BP or Atlantic Richfield Co. (circle one)

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: BTEX 8021	Requested Analysis: BTEX/TPH	Requested Analysis: BTEX/Oxy/TPH	Requested Analysis: EPA 8260	Requested Analysis: EPA 8270	Requested Analysis: TO-14 (full suite-approx. 60 compounds). Please see Comments	Requested Analysis: Leak Test Tracer gas(es) (I.e., shaving cream propellents)	Requested Analysis: TPH/GRO EPA Method TO-3	Requested Analysis: BTEX AND MTBE: TO14A-15	Sample Point Lat/Long and Comments
1	SG-6-5.5'	1005	12/21/04			X													X	X	X	X	Full suite TO-14 chemicals,
2	SG-9-5.5	1106	"			X													X	X	X	X	including alkanes, aromatics,
3																							naphthalenes, etc.
4																							(approx. 60 compounds)
5																							* TRACER GAS -
6																							ETHANE, 1,1-DIFLUORO
7																							CAS-NO.: 75376
8																							
9																							
10																							

		Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name:	SRUJESH THARA / KEVIN UNO						
Sampler's Company:	URS CORPORATION	Srujesh Thara / URS Corp	12/21/04	1630		12/21/04	1630
Shipment Date:	12/21/04		12/22/04	1800	STL-SF	12/22/04	1734
Shipment Method:		Tracy S Bull / STL-SF	12/22/04	1345	STL	12/23/04	1030
Shipment Tracking No:							

Special Instructions: SUMMA CANISTERS

Custody Seals In Place Yes No Temp Blank Yes No Cooler Temperature on Receipt N/A °F/C Trip Blank Yes No

Distribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Pink Copy - Consultant/Contractor

BP COC Rev. 4 10/1/04

2

E4L280291

SEVERN TRENT STL

January 11, 2005

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921
www.stl-inc.com

STL LOT NUMBER: **E4L300194**
PO/CONTRACT: G09J2-0520

Scott Robinson
URS Corporation
1333 Broadway
Suite 800
Oakland, CA 94612

Dear Scott Robinson,

This report contains the analytical results for the two samples received under chain of custody by STL Los Angeles on December 29, 2004. These samples are associated with your ARCO #5387 project.

STL Los Angeles certifies that the test results provided in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number for STL Los Angeles is 01118CA / E87652.

Any matrix related anomaly is footnoted within the report. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. All applicable quality control procedures met method-specified acceptance criteria.

This report shall not be reproduced except in full, without the written approval of the laboratory.

This report contains 000020 pages.

If you have any questions, please feel free to call me at (714) 258-8610.

Sincerely,

Beth Riley
Project Manager

cc: Project File

ANALYTICAL REPORT

PROJECT NO. 38486988.0063601

ARCO #5387

Lot #: E4L300194

Scott Robinson

URS Corporation

SEVERN TRENT LABORATORIES, INC.

Beth Riley
Project Manager

January 11, 2005

EXECUTIVE SUMMARY - Detection Highlights

E4L300194

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SG-6-9.5 12/21/04 15:33 001				
Acetone	0.14	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	0.0013	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
2-Butanone (MEK)	0.0052	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
tert-Butyl alcohol	0.0021	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Carbon disulfide	0.0027	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00063	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethanol	0.0055	0.025	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Ethylbenzene	0.0014	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
4-Ethyltoluene	0.0064	0.0020	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	0.00086	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Toluene	0.0039	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.0083	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	0.0031	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	0.0086	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	0.0044	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.013	0.0020	ppm(v/v)	EPA-21 TO-14A
SG-9-9.5 12/21/04 14:48 002				
Acetone	0.076	0.010	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	0.0035	0.010	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Dichlorodifluoromethane	0.00057	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			
Tetrachloroethene	0.010	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0012	0.0020	ppm(v/v)	EPA-21 TO-14A
	Qualifiers: JDX			

ANALYTICAL METHODS SUMMARY

E4L300194

PARAMETER	ANALYTICAL METHOD
TPH by TO-3	EPA-19 TO-3
Volatile Organics by TO-14A	EPA-21 TO-14A

References:

EPA-19 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA/600/4-89/017, January 1988

EPA-21 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", Second Edition, EPA/625/R-96/010b, January 1999

SAMPLE SUMMARY

E4L300194

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G11GT	001	SG-6-9.5	12/21/04	15:33
G11G2	002	SG-9-9.5	12/21/04	14:48

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

URS Corporation

Client Sample ID: SG-6-9.5

GC/MS Volatiles

Lot-Sample #...: E4L300194-001 **Work Order #...:** G11GT1AD **Matrix.....:** AE
Date Sampled...: 12/21/04 **Date Received..:** 12/29/04
Prep Date.....: 01/07/05 **Analysis Date..:** 01/07/05
Prep Batch #...: 5007401
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.14**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	**0.0013 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.0052 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	**0.0021 JDX**	**0.010**	**ppm(v/v)**	**0.0010**
Carbon disulfide	**0.0027 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00063 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	**0.0055 JDX**	**0.025**	**ppm(v/v)**	**0.0022**
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	**0.0014 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
4-Ethyltoluene	**0.0064**	**0.0020**	**ppm(v/v)**	**0.00070**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

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URS Corporation

Client Sample ID: SG-6-9.5

GC/MS Volatiles

Lot-Sample #...: E4L300194-001 **Work Order #...:** G11GT1AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.010	ppm(v/v)	0.0010
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	**0.00086 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	ND	0.0020	ppm(v/v)	0.00060
Toluene	**0.0039**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	**0.0083**	**0.0020**	**ppm(v/v)**	**0.00080**
1,3,5-Trimethylbenzene	**0.0031**	**0.0020**	**ppm(v/v)**	**0.00080**
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	**0.0086**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.0044**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.013**	**0.0020**	**ppm(v/v)**	**0.00080**
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL). but > MDL.

URS Corporation

Client Sample ID: SG-6-9.5

GC Volatiles

Lot-Sample #...:	E4L300194-001	**Work Order #...:**	G11GT1AE	**Matrix.....:**	AE
Date Sampled...:	12/21/04	**Date Received..:**	12/29/04		
Prep Date.....:	01/05/05	**Analysis Date..:**	01/05/05		
Prep Batch #...:	5005417				
Dilution Factor:	1.73				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	ND	1.7	ppm(v/v)	0.52

URS Corporation

Client Sample ID: SG-9-9.5

GC/MS Volatiles

Lot-Sample #...: E4L300194-002 **Work Order #...:** G11G21AD **Matrix.....:** AE
Date Sampled...: 12/21/04 **Date Received..:** 12/29/04
Prep Date.....: 01/07/05 **Analysis Date..:** 01/07/05
Prep Batch #...: 5007401
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**0.076**	**0.010**	**ppm(v/v)**	**0.0020**
Benzene	ND	0.0020	ppm(v/v)	0.00080
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
Bromoform	ND	0.0020	ppm(v/v)	0.00050
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
2-Butanone (MEK)	**0.0035 JDX**	**0.010**	**ppm(v/v)**	**0.0020**
tert-Butyl alcohol	ND	0.010	ppm(v/v)	0.0010
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Chloroform	ND	0.0020	ppm(v/v)	0.00080
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00070
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
Dichlorodifluoromethane	**0.00057 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Diisopropyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethanol	ND	0.025	ppm(v/v)	0.0022
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	0.00020
Ethylbenzene	ND	0.0020	ppm(v/v)	0.00050
4-Ethyltoluene	ND	0.0020	ppm(v/v)	0.00070
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010

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URS Corporation

Client Sample ID: SG-9-9.5

GC/MS Volatiles

Lot-Sample #...: E4L300194-002 **Work Order #...:** G11G21AD **Matrix.....:** AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Hexanone	ND	0.010	ppm(v/v)	0.0010
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	0.00050
Naphthalene	ND	0.0050	ppm(v/v)	0.00050
Styrene	ND	0.0020	ppm(v/v)	0.00060
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Tetrachloroethene	**0.010**	**0.0020**	**ppm(v/v)**	**0.00060**
Toluene	**0.0012 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	0.0010
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Trichloroethene	ND	0.0020	ppm(v/v)	0.00050
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
m-Xylene & p-Xylene	ND	0.0020	ppm(v/v)	0.0010
o-Xylene	ND	0.0020	ppm(v/v)	0.00060
Xylenes (total)	ND	0.0020	ppm(v/v)	0.00080
1,1-Difluoroethane (Freon 152A)	ND	0.0040	ppm(v/v)	0.0027

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value< lowest standard (MQL), but > MDL.

URS Corporation

Client Sample ID: SG-9-9.5

GC Volatiles

Lot-Sample #...:	E4L300194-002	**Work Order #...:**	G11G21AE	**Matrix.....:**	AE
Date Sampled...:	12/21/04	**Date Received..:**	12/29/04		
Prep Date.....:	01/05/05	**Analysis Date..:**	01/05/05		
Prep Batch #...:	5005417				
Dilution Factor:	1.76				
Analyst ID.....:	358011	**Instrument ID..:**	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	ND	1.8	ppm(v/v)	0.53

QC DATA ASSOCIATION SUMMARY

E4L300194

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AE	EPA-19 TO-3		5005417	
	AE	EPA-21 TO-14A		5007401	
002	AE	EPA-19 TO-3		5005417	
	AE	EPA-21 TO-14A		5007401	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L300194 **Work Order #...:** G2CLR1AA **Matrix.....:** AIR
MB Lot-Sample #: M5A070000-401

Prep Date.....: 01/06/05 **Instrument ID..:** MSB
Analysis Date..: 01/06/05 **Prep Batch #...:** 5007401
Dilution Factor: 1

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
tert-Butyl alcohol	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Diisopropyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethanol	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tert-butyl ethyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E4L300194 **Work Order #...:** G2CLR1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Naphthalene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Difluoroethane (Freon	ND	0.0040	ppm(v/v)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E4L300194 **Work Order #...:** G16QK1AA **Matrix.....:** AIR
MB Lot-Sample #: M5A050000-417

Prep Date.....: 01/05/05 **Instrument ID..:** GC7
Analysis Date..: 01/05/05 **Prep Batch #...:** 5005417
Dilution Factor: 1

Analyst ID.....: 358011

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
GRO (C4 - C12)	ND	1.0	ppm(v/v)	EPA-19 TO-3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E4L300194 **Work Order #...:** G2CLR1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A070000-401 G2CLR1AD-LCSD
Prep Date.....: 01/06/05 **Analysis Date..:** 01/06/05
Prep Batch #...: 5007401
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 117751

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	102	(70 - 125)			**EPA-21 TO-14A**
	104	(70 - 125)	1.4	(0-20)	**EPA-21 TO-14A**
Methylene chloride	99	(75 - 120)			**EPA-21 TO-14A**
	99	(75 - 120)	0.52	(0-20)	**EPA-21 TO-14A**
1,1,2,2-Tetrachloroethane	103	(65 - 130)			**EPA-21 TO-14A**
	103	(65 - 130)	0.23	(0-20)	**EPA-21 TO-14A**
Toluene	98	(75 - 125)			**EPA-21 TO-14A**
	98	(75 - 125)	0.12	(0-20)	**EPA-21 TO-14A**
Trichloroethene	101	(70 - 125)			**EPA-21 TO-14A**
	101	(70 - 125)	0.31	(0-20)	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E4L300194 **Work Order #...:** G2CLR1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A070000-401 G2CLR1AD-LCSD
Prep Date.....: 01/06/05 **Analysis Date..:** 01/06/05
Prep Batch #...: 5007401
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	0.0500	0.0512	ppm(v/v)	102		EPA-21 TO-14A
	0.0500	0.0520	ppm(v/v)	104	1.4	EPA-21 TO-14A
Methylene chloride	0.0500	0.0494	ppm(v/v)	99		EPA-21 TO-14A
	0.0500	0.0497	ppm(v/v)	99	0.52	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	0.0500	0.0516	ppm(v/v)	103		EPA-21 TO-14A
	0.0500	0.0515	ppm(v/v)	103	0.23	EPA-21 TO-14A
Toluene	0.0500	0.0489	ppm(v/v)	98		EPA-21 TO-14A
	0.0500	0.0490	ppm(v/v)	98	0.12	EPA-21 TO-14A
Trichloroethene	0.0500	0.0504	ppm(v/v)	101		EPA-21 TO-14A
	0.0500	0.0505	ppm(v/v)	101	0.31	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E4L300194 **Work Order #...:** G16QK1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A050000-417 G16QK1AD-LCSD
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5005417
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
GRO (C4 - C12)	**110 LW**	**(75 - 125)**			**EPA-19 TO-3**
	107 LW	**(75 - 125)**	**2.6**	**(0-20)**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E4L300194 **Work Order #...:** G16QK1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5A050000-417 G16QK1AD-LCSD
Prep Date.....: 01/05/05 **Analysis Date..:** 01/05/05
Prep Batch #...: 5005417
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
GRO (C4 - C12)	**10.3**	**11.4 LW**	**ppm(v/v)**	**110**		**EPA-19 TO-3**
	10.3	**11.1 LW**	**ppm(v/v)**	**107**	**2.6**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

ARCO SITE #5387

E4L 300194 Page 1 of 1

Chain of Custody Record

Project Name: ARCO 5387-SVS Investigation
BP BU/AR Region/Enfos Segment:
State or Lead Regulatory Agency: Alameda County Health Care Services
Requested Due Date (mm/dd/yy):

On-site Time:	Temp:
Off-site Time:	Temp:
Sky Conditions: CLEAR	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name:	Severn Trent Labs, Inc. (STL)	BP/AR Facility No.:	ARCO 5387	Consultant/Contractor:	URS Corporation
Address:	1220 Quarry Lane	BP/AR Facility Address:	20200 Hesperian Blvd., Hayward, CA	Address:	1333 Broadway, Suite 800
	Pleasonton, CA 94566	Site Lat/Long:			Oakland, CA 94612
Lab PM:	Afsaneh Salimpour	California Global ID No.:	T0600101368	Consultant/Contractor Project No.:	38486988.0063601
Tele/Fax:	925-484-1919	Enfos Project No.:	G09JZ-0520	Consultant/Contractor PM:	Scott Robinson
BP/AR PM Contact:	Paul Supple	Provision or RCOP (circle one)		Tele/Fax:	510-874-3280
Address:	P.O. Box 6549	Phase/WBS:	CLOSURE	Report Type & QC Level:	
	Moraga, CA 94549	Sub Phase/Task:	ANALYTICAL	E-mail EDD To:	NO EDD
Tele/Fax:		Cost Element:		Invoice to: Consultant or BP or Atlantic Richfield Co. (circle one)	

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: BTEX 8021	BTEX/TPH	BTEX/Oxy/TPH	EPA 8260	EPA 8270	TO-14 (full suite-approx. 60 compounds). Please see Comments	Leak Test Tracer gas(es) * (I.e., shaving cream propellents)	TPH/GRO EPA Method TO-3	BTEX AND MTBE: TO-14A	EL TO-15	Sample Point Lat/Long and Comments
1	SG-6-9.5	1533	12/21/04			X													X	X	X	X		Full suite TO-14 chemicals,
2	SG-9-9.5	1548	12/21/04			X													X	X	X	X		including alkanes, aromatics,
3																								naphthalenes, etc.
4																								(approx. 60 compounds)
5																								* TRACER GAS-
6																								ETHANE 1,1-DIFLUORO
7																								CAS - 75376
8																								
9																								
10																								

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: SRIJESH THAPA / KEVIN UNO	Srijesh Thapa / URS Corporation	12/28/04	1311		12/28/04	1311
Sampler's Company: URS CORPORATION - OAKLAND		122904	1435	D. Harrington / STL - SF	12/29/04	1435
Shipment Date: 12/28/04					12/29/04	1030
Shipment Method:						
Shipment Tracking No:						

Special Instructions: SUMMA CANISTERS

Custody Seals In Place Yes No / Temp Blank Yes No / Cooler Temperature on Receipt NA °F/C Trip Blank Yes No /

Distribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Pink Copy - Consultant/Contractor

BP COC Rev. 4 10/1/04

2

E4L300194