UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Laboratory

Environmental Services Branch
10625 Fallstone Road, Houston, TX 77099
Phone: (281)983-2100 Fax: (281)983-2248

Final Analytical Report

Site Name ----------Oil Trust Fund

Sample Collection Date(s)-- 05/20/10

Contact---------- Rich Mayer (6PD-F)

Report Date---------- 06/16/10

Project #---------- 10REG170

Work Order(s)----------1006007

Analyses included in this report:

ABN 8270 Routine List	Metals ICP 6010B
Metals Mercury 7470A/7471A	P/P 8015 DRO/ORO
VOA 8260 Hexadecane Solv Dil	

Report Narrative

METALS ICP:

Batch# B0F1003:

BLK1: Copper is present in the blank above the reporting level; the result is qualified and may be biased high.

MS1/MSD1: Thallium recovery is low; the results are qualified and may be biased low.

SRM1: Potassium, sodium, and thallium results are less than the reporting limit. Silver recovery is high but will have no affect on the sample results.

Organics:

Samples were received in the laboratory after the holding time had expired.

DRO/ORO:

ORO is qualified as estimated in both samples because the alternate source check for the calibration failed QC limits.

Semi-volatiles:

Report Narrative (cont'd)

Several analytes fail in the BS, MS and MSD. Of those Naphthalene was found in the source sample and had low recoveries. The amount spiked was inadequate to properly calculate recoveries and RPD. No bias was placed on source results. The following analytes had failures that were significant but not found in the samples:

The reporting limits were raised for 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, and Benzoic acid in both samples due to low failures in the BS. The reporting limit for Benzo(g,h,i)perylene was raised in source sample 1006007-01 due to low failure in the MS and MSD. The reporting limits were raised in both samples for Benzaldehyde and Caprolactam due to high recoveries in the MS/MSD from interferences that would prevent identification at the reporting limit. The reporting limits were not raised for analytes with low recoveries >50% or for other analytes with high recoveries.

Volatiles:

Methylcyclohexane is qualified as high biased in both samples due to high failure of the continuing calibration that day of analysis. Also, this analyte fails high in the MS. Toluene has no recovery in the MS. The amount spiked was inadequate to properly calculate recoveries and RPDs. No bias was placed on source results.

There are lots of failures on the MSD that are not present in the MS. This is because there was an unknown problem that affected the surrogate, internal standards, and targets, causing poor recoveries. Because the samples did not have surrogate or internal standard failures like the MSD, only the MS was used to qualify data. No additional qualifiers were added due to failures. Compounds that are qualified as estimated in the MS and MSD are outside the calibration range.

Standard procedures for quality assurance and quality control were followed in the analysis and reporting of the sample results. The results apply only to the samples tested. This final report should only be reproduced in full.

Reporting limits are adjusted for sample size and matrix interference.

Report Approvals:

Richard McMillin Region 6 Laboratory Manager	David Neleigh Region 6 Laboratory Branch Chief

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Region 6 Environmental Services Branch Laboratory

10625 Fallstone Road
Houston, Texas 77099

Sample Receipt and Disposal

Site Name: Oil Trust Fund Project Number: 10REG170

Data Management Coordinator: Christy Warren

/ /

Data Management Coordinator Signature Date

Date Transmitted: _____/_____/_____

Please have the U.S. EPA Project Manager/Officer call the Data Management Coordinator at 3-2137 for any comments or questions.

Please sign and date this form below and return it with any comments to:

Christy Warren
Data Management Coordinator
Region 6 Laboratory
6MD-HS

_____/_____/_____

Received by and Date

Comments:

The laboratory routinely disposes of samples 90 days after all analyses have been completed. If you have a need to hold these samples in custody longer than 90 days, please sign below.

_____ _____

Signature Date

Please provide a reason for holding:

Environmental Protection Agency

Region 6 Laboratory

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ANALYTICAL REPORT FOR SAMPLES

Station ID	Laboratory ID	Sample Type	Date Collected	Date Received
MC252 Source Oil - 026	1006007-01	Non-Aqueous Liquid	5/20/10 11:15	06/09/10 10:25
MC252 Source Oil - 029	1006007-02	Non-Aqueous Liquid	5/20/10 11:15	06/09/10 10:25

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Volatiles by EPA Method 8260 - GC/MS

Lab ID: 1006007-01 **Station ID: MC252 Source Oil - 026**

Batch: B0F1001 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Volume: 1 ml Sample Qualifiers: **HTS**

Surrogates

Analyte	Result µg/l	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
Surr: 1,2-Dichloroethane-d4	2,540,000		102	70-130	06/10/10	06/10/10
Surr: Toluene-d8	2,740,000		109	70-130	"	"
Surr: 4-Bromofluorobenzene	2,750,000		110	70-130	"	"

Targets

Analyte (CAS Number)	Result µg/l	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
trans-1,2-Dichloroethene (156-60-5)	U		100,000	10	06/10/10	06/10/10
cis-1,2-Dichloroethene (156-59-2)	U		100,000	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		100,000	"	"	"
1,1-Dichloroethane (75-34-3)	U		100,000	"	"	"
Chloroform (67-66-3)	U		100,000	"	"	"
1,2-Dichloroethane (107-06-2)	U		100,000	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		100,000	"	"	"
Cyclohexane (110-82-7)	**7,580,000**		400,000	40	"	06/14/10
Carbon tetrachloride (56-23-5)	U		100,000	10	"	06/10/10
Benzene (71-43-2)	**2,200,000**		100,000	"	"	"
Trichloroethene (79-01-6)	U		100,000	"	"	"
Methylcyclohexane (108-87-2)	**13,000,000**	**K**	400,000	40	"	06/14/10
1,2-Dichloropropane (78-87-5)	U		100,000	10	"	06/10/10
Bromodichloromethane (75-27-4)	U		100,000	"	"	"
cis-1,3-Dichloropropene (10061-01-5)	U		100,000	"	"	"
trans-1,3-Dichloropropene (10061-02-6)	U		100,000	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		100,000	"	"	"
Dibromochloromethane (124-48-1)	U		100,000	"	"	"
Bromoform (75-25-2)	U		100,000	"	"	"
Toluene (108-88-3)	**6,770,000**		200,000	20	"	06/10/10
Tetrachloroethene (127-18-4)	U		100,000	10	"	06/10/10
1,2-Dibromoethane (106-93-4)	U		100,000	"	"	"
Chlorobenzene (108-90-7)	U		100,000	"	"	"
Ethylbenzene (100-41-4)	**1,020,000**		100,000	"	"	"
meta-/para-Xylene (na)	**5,160,000**		100,000	"	"	"
ortho-Xylene (95-47-6)	**1,840,000**		100,000	"	"	"
Styrene (100-42-5)	U		100,000	"	"	"
Isopropylbenzene (98-82-8)	**282,000**		100,000	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		100,000	"	"	"

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Volatiles by EPA Method 8260 - GC/MS

Lab ID: 1006007-01 **Station ID: MC252 Source Oil - 026**

Batch: B0F1001 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Volume: 1 ml Sample Qualifiers: **HTS**

Targets (Continued)

Analyte (CAS Number)	Result µg/l	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,3-Dichlorobenzene (541-73-1)	U		100,000	10	06/10/10	06/10/10
1,4-Dichlorobenzene (106-46-7)	U		100,000	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		100,000	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		250,000	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		100,000	"	"	"

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Volatiles by EPA Method 8260 - GC/MS

Lab ID: 1006007-01 **Station ID: MC252 Source Oil - 026**

Batch: B0F1001 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Volume: 1 ml Sample Qualifiers: **HTS**

Tentatively Identified Compounds

Compound (CAS)	Result µg/l	Analyte Qualifiers	Retention Time	Dilution	Prepared	Analyzed
Hexane (110-54-3)	**25,000,000**		3.53	40	06/10/10	06/14/10
Cyclopentane, methyl- (000096-37-7)	**8,300,000**		4.51	"	"	"
Pentane, 3-ethyl- (000617-78-7)	**6,000,000**		5.73	"	"	"
Heptane (142-82-5)	**9,700,000**		6.32	"	"	"
Heptane, 2-methyl- (592-27-8)	**6,300,000**		7.74	"	"	"
Octane (111-65-9)	**9,400,000**		8.40	"	"	"
Nonane (111-84-2)	**14,000,000**		10.06	"	"	"
Decane (124-18-5)	**10,000,000**		11.51	"	"	"
Undecane (1120-21-4)	**9,700,000**		12.81	"	"	"
Dodecane (112-40-3)	**10,000,000**		13.99	"	"	"

Total # of TICs: 10

The compounds listed are *tentatively* identified by the best match with the NIST or Wiley mass spectral data base or by manual interpretation. The concentrations are estimated based on a Response Factor of 1.0 to the nearest internal standard. A minimum of the top 10 most significant peaks that are at least 10% in area of the nearest internal standard are reported, excluding those found in the laboratory blank.

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Semivolatiles by EPA Method 8270 - GC/MS

Lab ID: 1006007-01 **Station ID: MC252 Source Oil - 026**

Batch: B0F0902 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.1027 g Sample Qualifiers: **HTS**

Surrogates

Analyte	Result µg/kg	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
Surr: 2-Fluorophenol	1,620,000		111	10-153	06/09/10	06/09/10
Surr: Phenol-d5	1,300,000		88.8	16-138	"	"
Surr: 2-Chlorophenol-d4	1,100,000		75.0	16-135	"	"
Surr: 1,2-Dichlorobenzene-d4	842,000		86.4	28-127	"	"
Surr: Nitrobenzene-d5	856,000		87.9	20-142	"	"
Surr: 2-Fluorobiphenyl	762,000		78.2	40-129	"	"
Surr: 2,4,6-Tribromophenol	1,060,000		72.7	10-151	"	"
Surr: Terphenyl-d14	686,000		70.4	29-129	"	"

Targets

Analyte (CAS Number)	Result µg/kg	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Acenaphthene (83-32-9)	U		38,900	1	06/09/10	06/09/10
Acenaphthylene (208-96-8)	U		38,900	"	"	"
Acetophenone (98-86-2)	U		97,400	"	"	"
Anthracene (120-12-7)	U		38,900	"	"	"
Atrazine (1912-24-9)	U		97,400	"	"	"
Benzaldehyde (100-52-7)	U	RL	682,000	"	"	"
Benzoic acid (65-85-0)	U	RL	389,000	"	"	"
Benzo (a) anthracene (56-55-3)	U		97,400	"	"	"
Benzo (a) pyrene (50-32-8)	U		97,400	"	"	"
Benzo (b) fluoranthene (205-99-2)	U		97,400	"	"	"
Benzo (g,h,i) perylene (191-24-2)	U	RL	195,000	"	"	"
Benzo (k) fluoranthene (207-08-9)	U		97,400	"	"	"
Benzyl alcohol (100-51-6)	U		97,400	"	"	"
1,1'-Biphenyl (92-52-4)	**124,000**		97,400	"	"	"
Bis(2-chloroethoxy)methane (111-91-1)	U		97,400	"	"	"
Bis(2-chloroethyl)ether (111-44-4)	U		97,400	"	"	"
Bis(2-chloroisopropyl)ether (108-60-1)	U		97,400	"	"	"
Bis(2-ethylhexyl)phthalate (117-81-7)	U		97,400	"	"	"
4-Bromophenyl phenyl ether (101-55-3)	U		97,400	"	"	"
Butyl benzyl phthalate (85-68-7)	U		97,400	"	"	"
Carbazole (86-74-8)	U		97,400	"	"	"
Caprolactam (105-60-2)	U	RL	876,000	"	"	"
4-Chloroaniline (106-47-8)	U		97,400	"	"	"
2-Chloronaphthalene (91-58-7)	U		97,400	"	"	"

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Semivolatiles by EPA Method 8270 - GC/MS

Lab ID: 1006007-01 **Station ID: MC252 Source Oil - 026**

Batch: B0F0902 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.1027 g Sample Qualifiers: **HTS**

Targets (Continued)

Analyte (CAS Number)	Result µg/kg	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
2-Chlorophenol (95-57-8)	U		97,400	1	06/09/10	06/09/10
4-Chlorophenyl phenyl ether (7005-72-3)	U		97,400	"	"	"
4-Chloro-3-methylphenol (59-50-7)	U		97,400	"	"	"
Chrysene (218-01-9)	U		97,400	"	"	"
Dibenzofuran (132-64-9)	U		97,400	"	"	"
Dibenz (a,h) anthracene (53-70-3)	U		97,400	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		97,400	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		97,400	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		97,400	"	"	"
3,3´-Dichlorobenzidine (91-94-1)	U		97,400	"	"	"
2,4-Dichlorophenol (120-83-2)	U		97,400	"	"	"
Diethyl phthalate (84-66-2)	U		97,400	"	"	"
2,4-Dimethylphenol (105-67-9)	U		97,400	"	"	"
Dimethyl phthalate (131-11-3)	U		97,400	"	"	"
2,4-Dinitrophenol (51-28-5)	U	RL	1,560,000	"	"	"
2,4-Dinitrotoluene (121-14-2)	U		97,400	"	"	"
2,6-Dinitrotoluene (606-20-2)	U		97,400	"	"	"
4,6-Dinitro-2-methylphenol (534-52-1)	U	RL	1,560,000	"	"	"
Di-n-butyl phthalate (84-74-2)	U		97,400	"	"	"
Di-n-octyl phthalate (117-84-0)	U		97,400	"	"	"
Fluoranthene (206-44-0)	U		38,900	"	"	"
Fluorene (86-73-7)	**116,000**		38,900	"	"	"
Hexachlorobenzene (118-74-1)	U		97,400	"	"	"
Hexachlorobutadiene (87-68-3)	U		97,400	"	"	"
Hexachlorocyclopentadiene (77-47-4)	U		97,400	"	"	"
Hexachloroethane (67-72-1)	U		97,400	"	"	"
Indeno (1,2,3-cd) pyrene (193-39-5)	U		97,400	"	"	"
Isophorone (78-59-1)	U		97,400	"	"	"
2-Methylnaphthalene (91-57-6)	**1,540,000**		38,900	"	"	"
2-Methylphenol (95-48-7)	U		97,400	"	"	"
3 &/or 4-Methylphenol (106-44-5)	U		97,400	"	"	"
Naphthalene (91-20-3)	**1,190,000**		38,900	"	"	"
2-Nitroaniline (88-74-4)	U		156,000	"	"	"
3-Nitroaniline (99-09-2)	U		156,000	"	"	"
4-Nitroaniline (100-01-6)	U		156,000	"	"	"
Nitrobenzene (98-95-3)	U		97,400	"	"	"

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Semivolatiles by EPA Method 8270 - GC/MS

Lab ID: 1006007-01 **Station ID: MC252 Source Oil - 026**

Batch: B0F0902 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.1027 g Sample Qualifiers: **HTS**

Targets (Continued)

Analyte (CAS Number)	Result µg/kg	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
2-Nitrophenol (88-75-5)	U		97,400	1	06/09/10	06/09/10
4-Nitrophenol (100-02-7)	U		253,000	"	"	"
N-Nitrosodiphenylamine (86-30-6)	U		97,400	"	"	"
N-Nitrosodi-n-propylamine (621-64-7)	U		97,400	"	"	"
Pentachlorophenol (87-86-5)	U		97,400	"	"	"
Phenanthrene (85-01-8)	**231,000**		38,900	"	"	"
Phenol (108-95-2)	U		97,400	"	"	"
Pyrene (129-00-0)	U		38,900	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		97,400	"	"	"
2,4,5-Trichlorophenol (95-95-4)	U		97,400	"	"	"
2,4,6-Trichlorophenol (88-06-2)	U		97,400	"	"	"

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Semivolatiles by EPA Method 8270 - GC/MS

Lab ID: 1006007-01 **Station ID: MC252 Source Oil - 026**

Batch: B0F0902 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.1027 g Sample Qualifiers: **HTS**

Tentatively Identified Compounds

Compound (CAS)	Result µg/kg	Analyte Qualifiers	Retention Time	Dilution	Prepared	Analyzed
Nonane (111-84-2)	**2,900,000**		2.80	1	06/09/10	06/09/10
Decane (124-18-5)	**3,600,000**		3.49	"	"	"
Trimethylbenzene isomer (NA)	**3,600,000**		3.49	"	"	"
Undecane (1120-21-4)	**4,300,000**		4.18	"	"	"
Dodecane (112-40-3)	**7,700,000**		4.83	"	"	"
Tridecane (629-50-5)	**8,000,000**		5.46	"	"	"
Tetradecane (629-59-4)	**4,700,000**		6.05	"	"	"
Pentadecane (629-62-9)	**4,100,000**		6.60	"	"	"
Heptadecane (629-78-7)	**3,800,000**		7.62	"	"	"
Nonadecane (629-92-5)	**3,200,000**		8.55	"	"	"

Total # of TICs: 10

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DRO/ORO by EPA Method 8015 (GC-FID)

Lab ID: 1006007-01 **Station ID: MC252 Source Oil - 026**

Batch: B0F0901 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.106 g Sample Qualifiers: **HTS**

Surrogates

Analyte	Result mg/kg	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
Surr: o-Terphenyl	7,640		101	70-130	06/09/10	06/09/10

Targets

Analyte (CAS Number)	Result mg/kg	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Diesel Range Organics (068334-30-5)	**289,000**		9,430	1	06/09/10	06/09/10
Oil Range Organics (NA)	**54,200**	**J**	9,430	"	"	06/10/10

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Metals by EPA Method 6010B - ICP

Lab ID: 1006007-01 **Station ID: MC252 Source Oil - 026**

Batch: B0F1003 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.758 g Sample Qualifiers:

Targets

Analyte (CAS Number)	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	U		6.6	1	06/10/10	06/11/10
Antimony (7440-36-0)	U		4.0	"	"	"
Arsenic (7440-38-2)	U		6.6	"	"	"
Barium (7440-39-3)	U		0.7	"	"	"
Beryllium (7440-41-7)	U		0.3	"	"	"
Cadmium (7440-43-9)	U		0.3	"	"	"
Calcium (7440-70-2)	U		9.9	"	"	"
Chromium (7440-47-3)	U		0.7	"	"	"
Cobalt (7440-48-4)	**1.6**		1.3	"	"	"
Copper (7440-50-8)	**1.3**	**B**	1.3	"	"	"
Iron (7439-89-6)	U		1.6	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Magnesium (7439-95-4)	U		9.9	"	"	"
Manganese (7439-96-5)	U		0.3	"	"	"
Nickel (7440-02-2)	U		1.3	"	"	"
Potassium (7440-09-7)	U		66.0	"	"	"
Selenium (7782-49-2)	U		6.6	"	"	"
Silver (7440-22-4)	U		0.7	"	"	"
Sodium (7440-23-5)	U		33.0	"	"	"
Thallium (7440-28-0)	U	L	6.6	"	"	"
Vanadium (7440-62-2)	U		1.3	"	"	"
Zinc (7440-66-6)	**1.3**		1.3	"	"	"

Metals by EPA Method 7470A/7471A - CVAAS

Lab ID: 1006007-01 **Station ID: MC252 Source Oil - 026**

Batch: B0F1004 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.107 g Sample Qualifiers:

Targets

Analyte (CAS Number)	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.06	1	06/10/10	06/10/10

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Volatiles by EPA Method 8260 - GC/MS

Lab ID: 1006007-02 **Station ID: MC252 Source Oil - 029**

Batch: B0F1001 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Volume: 1 ml Sample Qualifiers: **HTS**

Surrogates

Analyte	Result µg/l	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
Surr: 1,2-Dichloroethane-d4	2,620,000		105	70-130	06/10/10	06/10/10
Surr: Toluene-d8	2,730,000		109	70-130	"	"
Surr: 4-Bromofluorobenzene	2,660,000		106	70-130	"	"

Targets

Analyte (CAS Number)	Result µg/l	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
trans-1,2-Dichloroethene (156-60-5)	U		100,000	10	06/10/10	06/10/10
cis-1,2-Dichloroethene (156-59-2)	U		100,000	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		100,000	"	"	"
1,1-Dichloroethane (75-34-3)	U		100,000	"	"	"
Chloroform (67-66-3)	U		100,000	"	"	"
1,2-Dichloroethane (107-06-2)	U		100,000	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		100,000	"	"	"
Cyclohexane (110-82-7)	**7,180,000**		400,000	40	"	06/14/10
Carbon tetrachloride (56-23-5)	U		100,000	10	"	06/10/10
Benzene (71-43-2)	**2,100,000**		100,000	"	"	"
Trichloroethene (79-01-6)	U		100,000	"	"	"
Methylcyclohexane (108-87-2)	**12,100,000**	**K**	400,000	40	"	06/14/10
1,2-Dichloropropane (78-87-5)	U		100,000	10	"	06/10/10
Bromodichloromethane (75-27-4)	U		100,000	"	"	"
cis-1,3-Dichloropropene (10061-01-5)	U		100,000	"	"	"
trans-1,3-Dichloropropene (10061-02-6)	U		100,000	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		100,000	"	"	"
Dibromochloromethane (124-48-1)	U		100,000	"	"	"
Bromoform (75-25-2)	U		100,000	"	"	"
Toluene (108-88-3)	**5,290,000**		400,000	40	"	06/14/10
Tetrachloroethene (127-18-4)	U		100,000	10	"	06/10/10
1,2-Dibromoethane (106-93-4)	U		100,000	"	"	"
Chlorobenzene (108-90-7)	U		100,000	"	"	"
Ethylbenzene (100-41-4)	**972,000**		100,000	"	"	"
meta-/para-Xylene (na)	**4,900,000**		100,000	"	"	"
ortho-Xylene (95-47-6)	**1,750,000**		100,000	"	"	"
Styrene (100-42-5)	U		100,000	"	"	"
Isopropylbenzene (98-82-8)	**269,000**		100,000	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		100,000	"	"	"

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Volatiles by EPA Method 8260 - GC/MS

Lab ID: 1006007-02 **Station ID: MC252 Source Oil - 029**

Batch: B0F1001 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Volume: 1 ml Sample Qualifiers: **HTS**

Targets (Continued)

Analyte (CAS Number)	Result µg/l	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,3-Dichlorobenzene (541-73-1)	U		100,000	10	06/10/10	06/10/10
1,4-Dichlorobenzene (106-46-7)	U		100,000	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		100,000	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		250,000	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		100,000	"	"	"

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Volatiles by EPA Method 8260 - GC/MS

Lab ID: 1006007-02 **Station ID: MC252 Source Oil - 029**

Batch: B0F1001 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Volume: 1 ml Sample Qualifiers: **HTS**

Tentatively Identified Compounds

Compound (CAS)	Result µg/l	Analyte Qualifiers	Retention Time	Dilution	Prepared	Analyzed
Hexane (110-54-3)	**29,000,000**		3.57	40	06/10/10	06/14/10
Cyclopentane, methyl- (000096-37-7)	**20,000,000**		4.52	"	"	"
Hexane, 3-methyl- (589-34-4)	**8,700,000**		5.75	"	"	"
Heptane (142-82-5)	**11,000,000**		6.32	"	"	"
Heptane, 2-methyl- (592-27-8)	**9,700,000**		7.75	"	"	"
Octane (111-65-9)	**8,600,000**		8.40	"	"	"
Nonane (111-84-2)	**13,000,000**		10.06	"	"	"
Decane (124-18-5)	**13,000,000**		11.51	"	"	"
Undecane (1120-21-4)	**12,000,000**		12.82	"	"	"
Dodecane (112-40-3)	**15,000,000**		14.00	"	"	"

Total # of TICs: 10

The compounds listed are *tentatively* identified by the best match with the NIST or Wiley mass spectral data base or by manual interpretation. The concentrations are estimated based on a Response Factor of 1.0 to the nearest internal standard. A minimum of the top 10 most significant peaks that are at least 10% in area of the nearest internal standard are reported, excluding those found in the laboratory blank.

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Semivolatiles by EPA Method 8270 - GC/MS

Lab ID: 1006007-02 **Station ID: MC252 Source Oil - 029**

Batch: B0F0902 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.1062 g Sample Qualifiers: **HTS**

Surrogates

Analyte	Result µg/kg	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
Surr: 2-Fluorophenol	1,770,000		126	10-153	06/09/10	06/09/10
Surr: Phenol-d5	1,320,000		93.3	16-138	"	"
Surr: 2-Chlorophenol-d4	1,110,000		78.9	16-135	"	"
Surr: 1,2-Dichlorobenzene-d4	863,000		91.7	28-127	"	"
Surr: Nitrobenzene-d5	813,000		86.4	20-142	"	"
Surr: 2-Fluorobiphenyl	771,000		81.8	40-129	"	"
Surr: 2,4,6-Tribromophenol	1,110,000		78.6	10-151	"	"
Surr: Terphenyl-d14	717,000		76.2	29-129	"	"

Targets

Analyte (CAS Number)	Result µg/kg	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Acenaphthene (83-32-9)	U		37,700	1	06/09/10	06/09/10
Acenaphthylene (208-96-8)	U		37,700	"	"	"
Acetophenone (98-86-2)	U		94,200	"	"	"
Anthracene (120-12-7)	U		37,700	"	"	"
Atrazine (1912-24-9)	U		94,200	"	"	"
Benzaldehyde (100-52-7)	U	RL	659,000	"	"	"
Benzoic acid (65-85-0)	U	RL	377,000	"	"	"
Benzo (a) anthracene (56-55-3)	U		94,200	"	"	"
Benzo (a) pyrene (50-32-8)	U		94,200	"	"	"
Benzo (b) fluoranthene (205-99-2)	U		94,200	"	"	"
Benzo (g,h,i) perylene (191-24-2)	U		94,200	"	"	"
Benzo (k) fluoranthene (207-08-9)	U		94,200	"	"	"
Benzyl alcohol (100-51-6)	U		94,200	"	"	"
1,1'-Biphenyl (92-52-4)	**133,000**		94,200	"	"	"
Bis(2-chloroethoxy)methane (111-91-1)	U		94,200	"	"	"
Bis(2-chloroethyl)ether (111-44-4)	U		94,200	"	"	"
Bis(2-chloroisopropyl)ether (108-60-1)	U		94,200	"	"	"
Bis(2-ethylhexyl)phthalate (117-81-7)	U		94,200	"	"	"
4-Bromophenyl phenyl ether (101-55-3)	U		94,200	"	"	"
Butyl benzyl phthalate (85-68-7)	U		94,200	"	"	"
Carbazole (86-74-8)	U		94,200	"	"	"
Caprolactam (105-60-2)	U	RL	847,000	"	"	"
4-Chloroaniline (106-47-8)	U		94,200	"	"	"
2-Chloronaphthalene (91-58-7)	U		94,200	"	"	"

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Semivolatiles by EPA Method 8270 - GC/MS

Lab ID: 1006007-02 **Station ID: MC252 Source Oil - 029**

Batch: B0F0902 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.1062 g Sample Qualifiers: **HTS**

Targets (Continued)

Analyte (CAS Number)	Result µg/kg	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
2-Chlorophenol (95-57-8)	U		94,200	1	06/09/10	06/09/10
4-Chlorophenyl phenyl ether (7005-72-3)	U		94,200	"	"	"
4-Chloro-3-methylphenol (59-50-7)	U		94,200	"	"	"
Chrysene (218-01-9)	U		94,200	"	"	"
Dibenzofuran (132-64-9)	U		94,200	"	"	"
Dibenz (a,h) anthracene (53-70-3)	U		94,200	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		94,200	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		94,200	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		94,200	"	"	"
3,3´-Dichlorobenzidine (91-94-1)	U		94,200	"	"	"
2,4-Dichlorophenol (120-83-2)	U		94,200	"	"	"
Diethyl phthalate (84-66-2)	U		94,200	"	"	"
2,4-Dimethylphenol (105-67-9)	U		94,200	"	"	"
Dimethyl phthalate (131-11-3)	U		94,200	"	"	"
2,4-Dinitrophenol (51-28-5)	U	RL	1,510,000	"	"	"
2,4-Dinitrotoluene (121-14-2)	U		94,200	"	"	"
2,6-Dinitrotoluene (606-20-2)	U		94,200	"	"	"
4,6-Dinitro-2-methylphenol (534-52-1)	U	RL	1,510,000	"	"	"
Di-n-butyl phthalate (84-74-2)	U		94,200	"	"	"
Di-n-octyl phthalate (117-84-0)	U		94,200	"	"	"
Fluoranthene (206-44-0)	U		37,700	"	"	"
Fluorene (86-73-7)	**119,000**		37,700	"	"	"
Hexachlorobenzene (118-74-1)	U		94,200	"	"	"
Hexachlorobutadiene (87-68-3)	U		94,200	"	"	"
Hexachlorocyclopentadiene (77-47-4)	U		94,200	"	"	"
Hexachloroethane (67-72-1)	U		94,200	"	"	"
Indeno (1,2,3-cd) pyrene (193-39-5)	U		94,200	"	"	"
Isophorone (78-59-1)	U		94,200	"	"	"
2-Methylnaphthalene (91-57-6)	**1,620,000**		37,700	"	"	"
2-Methylphenol (95-48-7)	U		94,200	"	"	"
3 &/or 4-Methylphenol (106-44-5)	U		94,200	"	"	"
Naphthalene (91-20-3)	**1,300,000**		37,700	"	"	"
2-Nitroaniline (88-74-4)	U		151,000	"	"	"
3-Nitroaniline (99-09-2)	U		151,000	"	"	"
4-Nitroaniline (100-01-6)	U		151,000	"	"	"
Nitrobenzene (98-95-3)	U		94,200	"	"	"

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Semivolatiles by EPA Method 8270 - GC/MS

Lab ID: 1006007-02 **Station ID: MC252 Source Oil - 029**

Batch: B0F0902 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.1062 g Sample Qualifiers: **HTS**

Targets (Continued)

Analyte (CAS Number)	Result µg/kg	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
2-Nitrophenol (88-75-5)	U		94,200	1	06/09/10	06/09/10
4-Nitrophenol (100-02-7)	U		245,000	"	"	"
N-Nitrosodiphenylamine (86-30-6)	U		94,200	"	"	"
N-Nitrosodi-n-propylamine (621-64-7)	U		94,200	"	"	"
Pentachlorophenol (87-86-5)	U		94,200	"	"	"
Phenanthrene (85-01-8)	**237,000**		37,700	"	"	"
Phenol (108-95-2)	U		94,200	"	"	"
Pyrene (129-00-0)	U		37,700	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		94,200	"	"	"
2,4,5-Trichlorophenol (95-95-4)	U		94,200	"	"	"
2,4,6-Trichlorophenol (88-06-2)	U		94,200	"	"	"

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Semivolatiles by EPA Method 8270 - GC/MS

Lab ID: 1006007-02 **Station ID: MC252 Source Oil - 029**

Batch: B0F0902 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.1062 g Sample Qualifiers: **HTS**

Tentatively Identified Compounds

Compound (CAS)	Result µg/kg	Analyte Qualifiers	Retention Time	Dilution	Prepared	Analyzed
Decane (124-18-5)	**3,500,000**		3.49	1	06/09/10	06/09/10
Trimethylbenzene isomer (NA)	**3,500,000**		3.49	"	"	"
Undecane (1120-21-4)	**5,100,000**		4.18	"	"	"
Dodecane (112-40-3)	**7,600,000**		4.84	"	"	"
Tridecane (629-50-5)	**8,000,000**		5.46	"	"	"
Tetradecane (629-59-4)	**6,300,000**		6.05	"	"	"
Pentadecane (629-62-9)	**5,800,000**		6.60	"	"	"
Hexadecane (544-76-3)	**3,800,000**		7.13	"	"	"
Heptadecane (629-78-7)	**4,100,000**		7.63	"	"	"
Nonadecane (629-92-5)	**3,300,000**		8.55	"	"	"

Total # of TICs: 10

The compounds listed are *tentatively* identified by the best match with the NIST or Wiley mass spectral data base or by manual interpretation. The concentrations are estimated based on a Response Factor of 1.0 to the nearest internal standard. A minimum of the top 10 most significant peaks that are at least 10% in area of the nearest internal standard are reported, excluding those found in the laboratory blank.

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DRO/ORO by EPA Method 8015 (GC-FID)

Lab ID: 1006007-02 **Station ID: MC252 Source Oil - 029**

Batch: B0F0901 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.105 g Sample Qualifiers: **HTS**

Surrogates

Analyte	Result mg/kg	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
Surr: o-Terphenyl	7,410		97.2	70-130	06/09/10	06/09/10

Targets

Analyte (CAS Number)	Result mg/kg	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Diesel Range Organics (068334-30-5)	**263,000**		9,520	1	06/09/10	06/09/10
Oil Range Organics (NA)	**45,400**	**J**	9,520	"	"	06/10/10

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Metals by EPA Method 6010B - ICP

Lab ID: 1006007-02 **Station ID: MC252 Source Oil - 029**

Batch: B0F1003 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.757 g Sample Qualifiers:

Targets

Analyte (CAS Number)	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	U		6.6	1	06/10/10	06/11/10
Antimony (7440-36-0)	U		4.0	"	"	"
Arsenic (7440-38-2)	U		6.6	"	"	"
Barium (7440-39-3)	U		0.7	"	"	"
Beryllium (7440-41-7)	U		0.3	"	"	"
Cadmium (7440-43-9)	U		0.3	"	"	"
Calcium (7440-70-2)	U		9.9	"	"	"
Chromium (7440-47-3)	U		0.7	"	"	"
Cobalt (7440-48-4)	**2.3**		1.3	"	"	"
Copper (7440-50-8)	U		1.3	"	"	"
Iron (7439-89-6)	U		1.7	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Magnesium (7439-95-4)	U		9.9	"	"	"
Manganese (7439-96-5)	U		0.3	"	"	"
Nickel (7440-02-2)	U		1.3	"	"	"
Potassium (7440-09-7)	U		66.1	"	"	"
Selenium (7782-49-2)	U		6.6	"	"	"
Silver (7440-22-4)	U		0.7	"	"	"
Sodium (7440-23-5)	U		33.0	"	"	"
Thallium (7440-28-0)	U		6.6	"	"	"
Vanadium (7440-62-2)	U		1.3	"	"	"
Zinc (7440-66-6)	U		1.3	"	"	"

Metals by EPA Method 7470A/7471A - CVAAS

Lab ID: 1006007-02 **Station ID: MC252 Source Oil - 029**

Batch: B0F1004 Date Collected: 05/20/10
Sample Type: Non-Aqueous Liquid Sample Weight: 0.124 g Sample Qualifiers:

Targets

Analyte (CAS Number)	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.05	1	06/10/10	06/10/10

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B0F1001 **Sample Type: Non-Aqueous Liquid**

Blank (B0F1001-BLK1)

Prepared: 6/10/2010 Analyzed: 6/10/2010

Surrogates

ANALYTE	Result µg/l	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: 1,2-Dichloroethane-d4	211,000		250,000	84.3	70-130
Surr: Toluene-d8	234,000		250,000	93.6	70-130
Surr: 4-Bromofluorobenzene	245,000		250,000	97.9	70-130

Blank (B0F1001-BLK1)

Prepared: 6/10/2010 Analyzed: 6/10/2010

Targets

ANALYTE	Result µg/l	Analyte Qualifiers	Reporting Limit
trans-1,2-Dichloroethene	U		10,000
cis-1,2-Dichloroethene	U		10,000
Methyl tert-butyl ether	U		10,000
1,1-Dichloroethane	U		10,000
Chloroform	U		10,000
1,2-Dichloroethane	U		10,000
1,1,1-Trichloroethane	U		10,000
Cyclohexane	U		10,000
Carbon tetrachloride	U		10,000
Benzene	U		10,000
Trichloroethene	U		10,000
Methylcyclohexane	U		10,000
1,2-Dichloropropane	U		10,000
Bromodichloromethane	U		10,000
cis-1,3-Dichloropropene	U		10,000
trans-1,3-Dichloropropene	U		10,000
1,1,2-Trichloroethane	U		10,000
Dibromochloromethane	U		10,000
Bromoform	U		10,000
Toluene	U		10,000

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B0F1001 **Sample Type: Non-Aqueous Liquid**

Blank (B0F1001-BLK1)

Prepared: 6/10/2010 Analyzed: 6/10/2010

Targets (Continued)

ANALYTE	Result µg/l	Analyte Qualifiers	Reporting Limit
Tetrachloroethene	U		10,000
1,2-Dibromoethane	U		10,000
Chlorobenzene	U		10,000
Ethylbenzene	U		10,000
meta-/para-Xylene	U		10,000
ortho-Xylene	U		10,000
Styrene	U		10,000
Isopropylbenzene	U		10,000
1,1,2,2-Tetrachloroethane	U		10,000
1,3-Dichlorobenzene	U		10,000
1,4-Dichlorobenzene	U		10,000
1,2-Dichlorobenzene	U		10,000
1,2-Dibromo-3-chloropropane	U		25,000
1,2,4-Trichlorobenzene	U		10,000

Blank (B0F1001-BLK2)

Prepared: 6/14/2010 Analyzed: 6/14/2010

Surrogates

ANALYTE	Result µg/l	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: 1,2-Dichloroethane-d4	223,000		250,000	89.4	70-130
Surr: Toluene-d8	227,000		250,000	90.7	70-130
Surr: 4-Bromofluorobenzene	250,000		250,000	100	70-130

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B0F1001 **Sample Type: Non-Aqueous Liquid**

Blank (B0F1001-BLK2)

Prepared: 6/14/2010 Analyzed: 6/14/2010

Targets

ANALYTE	Result µg/l	Analyte Qualifiers	Reporting Limit
trans-1,2-Dichloroethene	U		10,000
cis-1,2-Dichloroethene	U		10,000
Methyl tert-butyl ether	U		10,000
1,1-Dichloroethane	U		10,000
Chloroform	U		10,000
1,2-Dichloroethane	U		10,000
1,1,1-Trichloroethane	U		10,000
Cyclohexane	U		10,000
Carbon tetrachloride	U		10,000
Benzene	U		10,000
Trichloroethene	U		10,000
Methylcyclohexane	U		10,000
1,2-Dichloropropane	U		10,000
Bromodichloromethane	U		10,000
cis-1,3-Dichloropropene	U		10,000
trans-1,3-Dichloropropene	U		10,000
1,1,2-Trichloroethane	U		10,000
Dibromochloromethane	U		10,000
Bromoform	U		10,000
Toluene	U		10,000
Tetrachloroethene	U		10,000
1,2-Dibromoethane	U		10,000
Chlorobenzene	U		10,000
Ethylbenzene	U		10,000
meta-/para-Xylene	U		10,000
ortho-Xylene	U		10,000
Styrene	U		10,000
Isopropylbenzene	U		10,000
1,1,2,2-Tetrachloroethane	U		10,000
1,3-Dichlorobenzene	U		10,000

Environmental Protection Agency
Region 6 Laboratory
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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B0F1001 **Sample Type: Non-Aqueous Liquid**

Blank (B0F1001-BLK2)
Prepared: 6/14/2010 Analyzed: 6/14/2010

Targets (Continued)

ANALYTE	Result µg/l	Analyte Qualifiers	Reporting Limit
1,4-Dichlorobenzene	U		10,000
1,2-Dichlorobenzene	U		10,000
1,2-Dibromo-3-chloropropane	U		25,000
1,2,4-Trichlorobenzene	U		10,000

LCS (B0F1001-BS1)
Prepared: 6/10/2010 Analyzed: 6/10/2010

Surrogates

ANALYTE	Result µg/l	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: 1,2-Dichloroethane-d4	263,000		250,000	105	70-130
Surr: Toluene-d8	255,000		250,000	102	70-130
Surr: 4-Bromofluorobenzene	260,000		250,000	104	70-130

LCS (B0F1001-BS1)
Prepared: 6/10/2010 Analyzed: 6/10/2010

Targets

ANALYTE	Result µg/l	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
trans-1,2-Dichloroethene	271,000		10,000	250,000	108	70-130
cis-1,2-Dichloroethene	270,000		10,000	250,000	108	70-130
Methyl tert-butyl ether	275,000		10,000	250,000	110	70-130
1,1-Dichloroethane	245,000		10,000	250,000	97.9	70-130
Chloroform	250,000		10,000	250,000	100	70-130
1,2-Dichloroethane	264,000		10,000	250,000	105	70-130
1,1,1-Trichloroethane	259,000		10,000	250,000	103	70-130
Cyclohexane	256,000		10,000	250,000	103	70-130
Carbon tetrachloride	268,000		10,000	250,000	107	70-130

Environmental Protection Agency
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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B0F1001 **Sample Type: Non-Aqueous Liquid**

LCS (B0F1001-BS1)

Prepared: 6/10/2010 Analyzed: 6/10/2010

Targets (Continued)

ANALYTE	Result µg/l	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
Benzene	266,000		10,000	250,000	106	70-130
Trichloroethene	274,000		10,000	250,000	110	70-130
Methylcyclohexane	292,000		10,000	250,000	117	70-130
1,2-Dichloropropane	264,000		10,000	250,000	106	70-130
Bromodichloromethane	280,000		10,000	250,000	112	70-130
cis-1,3-Dichloropropene	288,000		10,000	250,000	115	70-130
trans-1,3-Dichloropropene	278,000		10,000	250,000	111	70-130
1,1,2-Trichloroethane	256,000		10,000	250,000	102	70-130
Dibromochloromethane	272,000		10,000	250,000	109	70-130
Bromoform	294,000		10,000	250,000	117	70-130
Toluene	252,000		10,000	250,000	101	70-130
Tetrachloroethene	248,000		10,000	250,000	99.2	70-130
1,2-Dibromoethane	263,000		10,000	250,000	105	70-130
Chlorobenzene	250,000		10,000	250,000	100	70-130
Ethylbenzene	250,000		10,000	250,000	100	70-130
meta-/para-Xylene	497,000		10,000	500,000	99.5	70-130
ortho-Xylene	239,000		10,000	250,000	95.7	70-130
Styrene	265,000		10,000	250,000	106	70-130
Isopropylbenzene	253,000		10,000	250,000	101	70-130
1,1,2,2-Tetrachloroethane	258,000		10,000	250,000	103	70-130
1,3-Dichlorobenzene	255,000		10,000	250,000	102	70-130
1,4-Dichlorobenzene	273,000		10,000	250,000	109	70-130
1,2-Dichlorobenzene	278,000		10,000	250,000	111	70-130
1,2-Dibromo-3-chloropropane	276,000		25,000	250,000	111	70-130
1,2,4-Trichlorobenzene	279,000		10,000	250,000	111	70-130

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B0F1001 **Sample Type: Non-Aqueous Liquid**

LCS (B0F1001-BS2)

Prepared: 6/14/2010 Analyzed: 6/14/2010

Surrogates

ANALYTE	Result µg/l	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: 1,2-Dichloroethane-d4	222,000		250,000	88.8	70-130
Surr: Toluene-d8	248,000		250,000	99.3	70-130
Surr: 4-Bromofluorobenzene	246,000		250,000	98.6	70-130

LCS (B0F1001-BS2)

Prepared: 6/14/2010 Analyzed: 6/14/2010

Targets

ANALYTE	Result µg/l	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
trans-1,2-Dichloroethene	213,000		10,000	250,000	85.1	70-130
cis-1,2-Dichloroethene	208,000		10,000	250,000	83.1	70-130
Methyl tert-butyl ether	222,000		10,000	250,000	88.9	70-130
1,1-Dichloroethane	197,000		10,000	250,000	78.9	70-130
Chloroform	198,000		10,000	250,000	79.2	70-130
1,2-Dichloroethane	211,000		10,000	250,000	84.5	70-130
1,1,1-Trichloroethane	245,000		10,000	250,000	98.1	70-130
Cyclohexane	244,000		10,000	250,000	97.5	70-130
Carbon tetrachloride	258,000		10,000	250,000	103	70-130
Benzene	249,000		10,000	250,000	99.7	70-130
Trichloroethene	262,000		10,000	250,000	105	70-130
Methylcyclohexane	292,000		10,000	250,000	117	70-130
1,2-Dichloropropane	244,000		10,000	250,000	97.7	70-130
Bromodichloromethane	245,000		10,000	250,000	98.2	70-130
cis-1,3-Dichloropropene	260,000		10,000	250,000	104	70-130
trans-1,3-Dichloropropene	246,000		10,000	250,000	98.5	70-130
1,1,2-Trichloroethane	227,000		10,000	250,000	90.7	70-130
Dibromochloromethane	245,000		10,000	250,000	98.2	70-130
Bromoform	265,000		10,000	250,000	106	70-130
Toluene	256,000		10,000	250,000	102	70-130

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B0F1001 **Sample Type: Non-Aqueous Liquid**

LCS (B0F1001-BS2)

Prepared: 6/14/2010 Analyzed: 6/14/2010

Targets (Continued)

ANALYTE	Result µg/l	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
Tetrachloroethene	259,000		10,000	250,000	104	70-130
1,2-Dibromoethane	256,000		10,000	250,000	102	70-130
Chlorobenzene	254,000		10,000	250,000	102	70-130
Ethylbenzene	258,000		10,000	250,000	103	70-130
meta-/para-Xylene	517,000		10,000	500,000	103	70-130
ortho-Xylene	246,000		10,000	250,000	98.5	70-130
Styrene	267,000		10,000	250,000	107	70-130
Isopropylbenzene	261,000		10,000	250,000	104	70-130
1,1,2,2-Tetrachloroethane	221,000		10,000	250,000	88.3	70-130
1,3-Dichlorobenzene	262,000		10,000	250,000	105	70-130
1,4-Dichlorobenzene	277,000		10,000	250,000	111	70-130
1,2-Dichlorobenzene	280,000		10,000	250,000	112	70-130
1,2-Dibromo-3-chloropropane	252,000		25,000	250,000	101	70-130
1,2,4-Trichlorobenzene	291,000		10,000	250,000	116	70-130

Matrix Spike (B0F1001-MS1)

Source: 1006007-01 Prepared: 6/14/2010 Analyzed: 6/14/2010

Surrogates

ANALYTE	Result µg/l	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: 1,2-Dichloroethane-d4	2,450,000		2.50E6	98.1	70-130
Surr: Toluene-d8	2,890,000		2.50E6	116	70-130
Surr: 4-Bromofluorobenzene	2,630,000		2.50E6	105	70-130

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B0F1001 **Sample Type: Non-Aqueous Liquid**

Matrix Spike (B0F1001-MS1)

Source: 1006007-01 Prepared: 6/14/2010 Analyzed: 6/14/2010

Targets

ANALYTE	Result µg/l	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
trans-1,2-Dichloroethene	2,020,000		100,000	2.50E6		80.9	70-130
cis-1,2-Dichloroethene	1,840,000		100,000	2.50E6		73.8	70-130
Methyl tert-butyl ether	1,970,000		100,000	2.50E6		78.9	70-130
1,1-Dichloroethane	1,850,000		100,000	2.50E6		74.0	70-130
Chloroform	2,290,000		100,000	2.50E6		91.8	70-130
1,2-Dichloroethane	1,960,000		100,000	2.50E6		78.4	70-130
1,1,1-Trichloroethane	2,360,000		100,000	2.50E6		94.6	70-130
Cyclohexane	10,700,000	J	100,000	2.50E6	7.58E6	126	70-130
Carbon tetrachloride	2,640,000		100,000	2.50E6		105	70-130
Benzene	4,140,000		100,000	2.50E6	2.20E6	77.7	70-130
Trichloroethene	2,580,000		100,000	2.50E6		103	70-130
Methylcyclohexane	16,400,000	J	100,000	2.50E6	13.0E6	139 #	70-130
1,2-Dichloropropane	2,450,000		100,000	2.50E6		98.1	70-130
Bromodichloromethane	2,450,000		100,000	2.50E6		97.9	70-130
cis-1,3-Dichloropropene	2,230,000		100,000	2.50E6		89.3	70-130
trans-1,3-Dichloropropene	1,900,000		100,000	2.50E6		76.2	70-130
1,1,2-Trichloroethane	2,020,000		100,000	2.50E6		81.0	70-130
Dibromochloromethane	2,110,000		100,000	2.50E6		84.4	70-130
Bromoform	2,280,000		100,000	2.50E6		91.1	70-130
Toluene	6,450,000	J	100,000	2.50E6	6.77E6	NR #	70-130
Tetrachloroethene	2,520,000		100,000	2.50E6		101	70-130
1,2-Dibromoethane	2,140,000		100,000	2.50E6		85.6	70-130
Chlorobenzene	2,280,000		100,000	2.50E6		91.4	70-130
Ethylbenzene	3,230,000		100,000	2.50E6	1.02E6	88.5	70-130
meta-/para-Xylene	8,920,000		100,000	5.00E6	5.16E6	75.1	70-130
ortho-Xylene	3,840,000		100,000	2.50E6	1.84E6	80.0	70-130
Styrene	2,460,000		100,000	2.50E6		98.5	70-130
Isopropylbenzene	2,610,000		100,000	2.50E6	282,000	93.1	70-130
1,1,2,2-Tetrachloroethane	2,050,000		100,000	2.50E6		81.8	70-130
1,3-Dichlorobenzene	2,300,000		100,000	2.50E6		92.2	70-130

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B0F1001 **Sample Type: Non-Aqueous Liquid**

Matrix Spike (B0F1001-MS1)

Source: 1006007-01 Prepared: 6/14/2010 Analyzed: 6/14/2010

Targets (Continued)

ANALYTE	Result µg/l	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
1,4-Dichlorobenzene	2,470,000		100,000	2.50E6		98.6	70-130
1,2-Dichlorobenzene	2,420,000		100,000	2.50E6		96.8	70-130
1,2-Dibromo-3-chloropropane	2,000,000		250,000	2.50E6		80.0	70-130
1,2,4-Trichlorobenzene	2,720,000		100,000	2.50E6		109	70-130

Matrix Spike Dup (B0F1001-MSD1)

Source: 1006007-01 Prepared: 6/14/2010 Analyzed: 6/14/2010

Surrogates

ANALYTE	Result µg/l	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: 1,2-Dichloroethane-d4	2,110,000		2.50E6	84.3	70-130
Surr: Toluene-d8	4,430,000		2.50E6	177 #	70-130
Surr: 4-Bromofluorobenzene	6,810,000	J	2.50E6	272 #	70-130

Matrix Spike Dup (B0F1001-MSD1)

Source: 1006007-01 Prepared: 6/14/2010 Analyzed: 6/14/2010

Targets

ANALYTE	Result µg/l	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	1,230,000		100,000	2.50E6		49.1 #	70-130	48.9 #	30
cis-1,2-Dichloroethene	2,070,000		100,000	2.50E6		82.6	70-130	11.3	30
Methyl tert-butyl ether	1,730,000		100,000	2.50E6		69.1 #	70-130	13.3	30
1,1-Dichloroethane	1,780,000		100,000	2.50E6		71.1	70-130	3.89	30
Chloroform	2,130,000		100,000	2.50E6		85.3	70-130	7.32	30
1,2-Dichloroethane	1,910,000		100,000	2.50E6		76.3	70-130	2.69	30
1,1,1-Trichloroethane	1,800,000		100,000	2.50E6		71.8	70-130	27.3	30
Cyclohexane	1,970,000		100,000	2.50E6	7.58E6	NR #	70-130	138 #	30
Carbon tetrachloride	1,400,000		100,000	2.50E6		56.1 #	70-130	61.2 #	30

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Volatiles by EPA Method 8260 - GC/MS - Quality Control

Batch: B0F1001 **Sample Type: Non-Aqueous Liquid**

Matrix Spike Dup (B0F1001-MSD1)

Source: 1006007-01 Prepared: 6/14/2010 Analyzed: 6/14/2010

Targets (Continued)

ANALYTE	Result µg/l	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit
Benzene	2,690,000		100,000	2.50E6	2.20E6	19.6	#	70-130	42.5	#	30
Trichloroethene	1,500,000		100,000	2.50E6		60.1	#	70-130	52.6	#	30
Methylcyclohexane	2,490,000		100,000	2.50E6	13.0E6	NR	#	70-130	147	#	30
1,2-Dichloropropane	1,960,000		100,000	2.50E6		78.2		70-130	22.6		30
Bromodichloromethane	1,750,000		100,000	2.50E6		69.8	#	70-130	33.5	#	30
cis-1,3-Dichloropropene	1,490,000		100,000	2.50E6		59.8	#	70-130	39.6	#	30
trans-1,3-Dichloropropene	792,000		100,000	2.50E6		31.7	#	70-130	82.4	#	30
1,1,2-Trichloroethane	533,000		100,000	2.50E6		21.3	#	70-130	117	#	30
Dibromochloromethane	342,000		100,000	2.50E6		13.7	#	70-130	144	#	30
Bromoform	2,650,000		100,000	2.50E6		106		70-130	15.3		30
Toluene	10,500,000	J	100,000	2.50E6	6.77E6	150	#	70-130	48.1	#	30
Tetrachloroethene	2,420,000		100,000	2.50E6		96.8		70-130	3.91		30
1,2-Dibromoethane	2,550,000		100,000	2.50E6		102		70-130	17.5		30
Chlorobenzene	2,650,000		100,000	2.50E6		106		70-130	14.8		30
Ethylbenzene	3,540,000		100,000	2.50E6	1.02E6	101		70-130	9.17		30
meta-/para-Xylene	9,820,000		100,000	5.00E6	5.16E6	93.2		70-130	9.65		30
ortho-Xylene	5,270,000	J	100,000	2.50E6	1.84E6	137	#	70-130	31.4	#	30
Styrene	5,200,000	J	100,000	2.50E6		208	#	70-130	71.4	#	30
Isopropylbenzene	3,840,000		100,000	2.50E6	282,000	142	#	70-130	38.1	#	30
1,1,2,2-Tetrachloroethane	20,300,000	J	100,000	2.50E6		813	#	70-130	163	#	30
1,3-Dichlorobenzene	4,070,000		100,000	2.50E6		163	#	70-130	55.3	#	30
1,4-Dichlorobenzene	5,130,000	J	100,000	2.50E6		205	#	70-130	70.2	#	30
1,2-Dichlorobenzene	5,630,000	J	100,000	2.50E6		225	#	70-130	79.7	#	30
1,2-Dibromo-3-chloropropane	11,400,000	J	250,000	2.50E6		454	#	70-130	140	#	30
1,2,4-Trichlorobenzene	3,950,000		100,000	2.50E6		158	#	70-130	36.8	#	30

Environmental Protection Agency
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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B0F0902 **Sample Type: Non-Aqueous Liquid**

Blank (B0F0902-BLK1)
Prepared: 6/9/2010 Analyzed: 6/9/2010

Surrogates

ANALYTE	Result µg/kg	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: 2-Fluorophenol	1,320,000		1.41E6	93.9	10-153
Surr: Phenol-d5	1,440,000		1.41E6	102	16-138
Surr: 2-Chlorophenol-d4	1,360,000		1.41E6	96.4	16-135
Surr: 1,2-Dichlorobenzene-d4	965,000		939,000	103	28-127
Surr: Nitrobenzene-d5	933,000		939,000	99.3	20-142
Surr: 2-Fluorobiphenyl	967,000		939,000	103	40-129
Surr: 2,4,6-Tribromophenol	948,000		1.41E6	67.3	10-151
Surr: Terphenyl-d14	764,000		939,000	81.3	29-129

Blank (B0F0902-BLK1)
Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets

ANALYTE	Result µg/kg	Analyte Qualifiers	Reporting Limit
Acenaphthene	U		37,600
Acenaphthylene	U		37,600
Acetophenone	U		93,900
Anthracene	U		37,600
Atrazine	U		93,900
Benzaldehyde	U		93,900
Benzoic acid	U		188,000
Benzo (a) anthracene	U		93,900
Benzo (a) pyrene	U		93,900
Benzo (b) fluoranthene	U		93,900
Benzo (g,h,i) perylene	U		93,900
Benzo (k) fluoranthene	U		93,900
Benzyl alcohol	U		93,900
1,1'-Biphenyl	U		93,900
Bis(2-chloroethoxy)methane	U		93,900
Bis(2-chloroethyl)ether	U		93,900

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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B0F0902 **Sample Type: Non-Aqueous Liquid**

Blank (B0F0902-BLK1)
Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets (Continued)

ANALYTE	Result µg/kg	Analyte Qualifiers	Reporting Limit
Bis(2-chloroisopropyl)ether	U		93,900
Bis(2-ethylhexyl)phthalate	U		93,900
4-Bromophenyl phenyl ether	U		93,900
Butyl benzyl phthalate	U		93,900
Carbazole	U		93,900
Caprolactam	U		93,900
4-Chloroaniline	U		93,900
2-Chloronaphthalene	U		93,900
2-Chlorophenol	U		93,900
4-Chlorophenyl phenyl ether	U		93,900
4-Chloro-3-methylphenol	U		93,900
Chrysene	U		93,900
Dibenzofuran	U		93,900
Dibenz (a,h) anthracene	U		93,900
1,2-Dichlorobenzene	U		93,900
1,3-Dichlorobenzene	U		93,900
1,4-Dichlorobenzene	U		93,900
3,3´-Dichlorobenzidine	U		93,900
2,4-Dichlorophenol	U		93,900
Diethyl phthalate	U		93,900
2,4-Dimethylphenol	U		93,900
Dimethyl phthalate	U		93,900
2,4-Dinitrophenol	U		376,000
2,4-Dinitrotoluene	U		93,900
2,6-Dinitrotoluene	U		93,900
4,6-Dinitro-2-methylphenol	U		376,000
Di-n-butyl phthalate	U		93,900
Di-n-octyl phthalate	U		93,900
Fluoranthene	U		37,600
Fluorene	U		37,600

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Region 6 Laboratory
10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B0F0902 **Sample Type: Non-Aqueous Liquid**

Blank (B0F0902-BLK1)

Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets (Continued)

ANALYTE	Result µg/kg	Analyte Qualifiers	Reporting Limit
Hexachlorobenzene	U		93,900
Hexachlorobutadiene	U		93,900
Hexachlorocyclopentadiene	U		93,900
Hexachloroethane	U		93,900
Indeno (1,2,3-cd) pyrene	U		93,900
Isophorone	U		93,900
2-Methylnaphthalene	U		37,600
2-Methylphenol	U		93,900
3 &/or 4-Methylphenol	U		93,900
Naphthalene	U		37,600
2-Nitroaniline	U		150,000
3-Nitroaniline	U		150,000
4-Nitroaniline	U		150,000
Nitrobenzene	U		93,900
2-Nitrophenol	U		93,900
4-Nitrophenol	U		244,000
N-Nitrosodiphenylamine	U		93,900
N-Nitrosodi-n-propylamine	U		93,900
Pentachlorophenol	U		93,900
Phenanthrene	U		37,600
Phenol	U		93,900
Pyrene	U		37,600
1,2,4-Trichlorobenzene	U		93,900
2,4,5-Trichlorophenol	U		93,900
2,4,6-Trichlorophenol	U		93,900

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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B0F0902 **Sample Type: Non-Aqueous Liquid**

LCS (B0F0902-BS1)

Prepared: 6/9/2010 Analyzed: 6/9/2010

Surrogates

ANALYTE	Result µg/kg	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: 2-Fluorophenol	1,330,000		1.44E6	92.4	10-153
Surr: Phenol-d5	1,430,000		1.44E6	99.5	16-138
Surr: 2-Chlorophenol-d4	1,360,000		1.44E6	94.7	16-135
Surr: 1,2-Dichlorobenzene-d4	967,000		961,000	101	28-127
Surr: Nitrobenzene-d5	926,000		961,000	96.4	20-142
Surr: 2-Fluorobiphenyl	933,000		961,000	97.1	40-129
Surr: 2,4,6-Tribromophenol	1,270,000		1.44E6	88.3	10-151
Surr: Terphenyl-d14	732,000		961,000	76.2	29-129

LCS (B0F0902-BS1)

Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets

ANALYTE	Result µg/kg	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
Acenaphthene	452,000		38,400	480,000	94.1	70-130
Acenaphthylene	465,000		38,400	480,000	96.9	70-130
Acetophenone	460,000		96,100	480,000	95.7	70-130
Anthracene	450,000		38,400	480,000	93.7	70-130
Atrazine	451,000		96,100	480,000	94.0	70-130
Benzaldehyde	447,000		96,100	480,000	93.0	70-130
Benzoic acid	205,000		192,000	480,000	42.6 #	70-130
Benzo (a) anthracene	472,000		96,100	480,000	98.4	70-130
Benzo (a) pyrene	468,000		96,100	480,000	97.4	70-130
Benzo (b) fluoranthene	486,000		96,100	480,000	101	70-130
Benzo (g,h,i) perylene	299,000		96,100	480,000	62.3 #	70-130
Benzo (k) fluoranthene	461,000		96,100	480,000	95.9	70-130
Benzyl alcohol	518,000		96,100	480,000	108	70-130
1,1'-Biphenyl	404,000		96,100	480,000	84.2	70-130
Bis(2-chloroethoxy)methane	478,000		96,100	480,000	99.4	70-130
Bis(2-chloroethyl)ether	494,000		96,100	480,000	103	70-130

Environmental Protection Agency
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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B0F0902 **Sample Type: Non-Aqueous Liquid**

LCS (B0F0902-BS1)

Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets (Continued)

ANALYTE	Result µg/kg	Analyte Qualifiers	Reporting Limit	Spike Level	%REC		%REC Limits
Bis(2-chloroisopropyl)ether	508,000		96,100	480,000	106		70-130
Bis(2-ethylhexyl)phthalate	428,000		96,100	480,000	89.2		70-130
4-Bromophenyl phenyl ether	456,000		96,100	480,000	94.9		70-130
Butyl benzyl phthalate	476,000		96,100	480,000	99.0		70-130
Carbazole	499,000		96,100	480,000	104		70-130
Caprolactam	366,000		96,100	480,000	76.2		70-130
4-Chloroaniline	505,000		96,100	480,000	105		70-130
2-Chloronaphthalene	446,000		96,100	480,000	92.8		70-130
2-Chlorophenol	491,000		96,100	480,000	102		70-130
4-Chlorophenyl phenyl ether	455,000		96,100	480,000	94.7		70-130
4-Chloro-3-methylphenol	506,000		96,100	480,000	105		70-130
Chrysene	455,000		96,100	480,000	94.7		70-130
Dibenzofuran	445,000		96,100	480,000	92.6		70-130
Dibenz (a,h) anthracene	342,000		96,100	480,000	71.1		70-130
1,2-Dichlorobenzene	487,000		96,100	480,000	101		70-130
1,3-Dichlorobenzene	447,000		96,100	480,000	93.0		70-130
1,4-Dichlorobenzene	500,000		96,100	480,000	104		70-130
3,3´-Dichlorobenzidine	697,000		96,100	480,000	145	#	70-130
2,4-Dichlorophenol	457,000		96,100	480,000	95.2		70-130
Diethyl phthalate	478,000		96,100	480,000	99.4		70-130
2,4-Dimethylphenol	500,000		96,100	480,000	104		70-130
Dimethyl phthalate	470,000		96,100	480,000	97.8		70-130
2,4-Dinitrophenol	122,000		384,000	480,000	25.4	#	70-130
2,4-Dinitrotoluene	473,000		96,100	480,000	98.5		70-130
2,6-Dinitrotoluene	467,000		96,100	480,000	97.2		70-130
4,6-Dinitro-2-methylphenol	117,000		384,000	480,000	24.4	#	70-130
Di-n-butyl phthalate	493,000		96,100	480,000	103		70-130
Di-n-octyl phthalate	478,000		96,100	480,000	99.6		70-130
Fluoranthene	447,000		38,400	480,000	93.2		70-130
Fluorene	445,000		38,400	480,000	92.7		70-130

Environmental Protection Agency
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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B0F0902 **Sample Type: Non-Aqueous Liquid**

LCS (B0F0902-BS1)

Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets (Continued)

ANALYTE	Result µg/kg	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
Hexachlorobenzene	438,000		96,100	480,000	91.2	70-130
Hexachlorobutadiene	471,000		96,100	480,000	98.1	70-130
Hexachlorocyclopentadiene	329,000		96,100	480,000	68.5 #	70-130
Hexachloroethane	512,000		96,100	480,000	107	70-130
Indeno (1,2,3-cd) pyrene	334,000		96,100	480,000	69.6 #	70-130
Isophorone	476,000		96,100	480,000	99.1	70-130
2-Methylnaphthalene	466,000		38,400	480,000	96.9	70-130
2-Methylphenol	491,000		96,100	480,000	102	70-130
3 &/or 4-Methylphenol	497,000		96,100	480,000	103	70-130
Naphthalene	468,000		38,400	480,000	97.4	70-130
2-Nitroaniline	474,000		154,000	480,000	98.7	70-130
3-Nitroaniline	552,000		154,000	480,000	115	70-130
4-Nitroaniline	517,000		154,000	480,000	108	70-130
Nitrobenzene	483,000		96,100	480,000	101	70-130
2-Nitrophenol	453,000		96,100	480,000	94.4	70-130
4-Nitrophenol	462,000		250,000	480,000	96.2	70-130
N-Nitrosodiphenylamine	445,000		96,100	480,000	92.6	70-130
N-Nitrosodi-n-propylamine	518,000		96,100	480,000	108	70-130
Pentachlorophenol	310,000		96,100	480,000	64.5 #	70-130
Phenanthrene	458,000		38,400	480,000	95.3	70-130
Phenol	494,000		96,100	480,000	103	70-130
Pyrene	440,000		38,400	480,000	91.6	70-130
1,2,4-Trichlorobenzene	461,000		96,100	480,000	96.0	70-130
2,4,5-Trichlorophenol	436,000		96,100	480,000	90.7	70-130
2,4,6-Trichlorophenol	447,000		96,100	480,000	93.1	70-130

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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B0F0902 **Sample Type: Non-Aqueous Liquid**

Matrix Spike (B0F0902-MS1)

Source: 1006007-01 Prepared: 6/9/2010 Analyzed: 6/9/2010

Surrogates

ANALYTE	Result µg/kg	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: 2-Fluorophenol	1,710,000		1.42E6	120	10-153
Surr: Phenol-d5	1,390,000		1.42E6	97.6	16-138
Surr: 2-Chlorophenol-d4	1,210,000		1.42E6	84.7	16-135
Surr: 1,2-Dichlorobenzene-d4	914,000		950,000	96.2	28-127
Surr: Nitrobenzene-d5	891,000		950,000	93.8	20-142
Surr: 2-Fluorobiphenyl	850,000		950,000	89.5	40-129
Surr: 2,4,6-Tribromophenol	1,410,000		1.42E6	99.3	10-151
Surr: Terphenyl-d14	767,000		950,000	80.7	29-129

Matrix Spike (B0F0902-MS1)

Source: 1006007-01 Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets

ANALYTE	Result µg/kg	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
Acenaphthene	436,000		38,000	475,000		91.8	70-130
Acenaphthylene	446,000		38,000	475,000		94.0	70-130
Acetophenone	1,100,000		95,000	475,000		231 #	70-130
Anthracene	453,000		38,000	475,000		95.4	70-130
Atrazine	474,000		95,000	475,000		99.9	70-130
Benzaldehyde	1,130,000		95,000	475,000		239 #	70-130
Benzoic acid	227,000		190,000	475,000		47.8 #	70-130
Benzo (a) anthracene	507,000		95,000	475,000	11,500	104	70-130
Benzo (a) pyrene	465,000		95,000	475,000		97.9	70-130
Benzo (b) fluoranthene	516,000		95,000	475,000		109	70-130
Benzo (g,h,i) perylene	258,000		95,000	475,000		54.4 #	70-130
Benzo (k) fluoranthene	457,000		95,000	475,000		96.2	70-130
Benzyl alcohol	591,000		95,000	475,000		125	70-130
1,1'-Biphenyl	625,000		95,000	475,000	124,000	105	70-130
Bis(2-chloroethoxy)methane	489,000		95,000	475,000		103	70-130
Bis(2-chloroethyl)ether	504,000		95,000	475,000		106	70-130

Environmental Protection Agency
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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B0F0902 **Sample Type: Non-Aqueous Liquid**

Matrix Spike (B0F0902-MS1)

Source: 1006007-01 Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets (Continued)

ANALYTE	Result µg/kg	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC		%REC Limits
Bis(2-chloroisopropyl)ether	470,000		95,000	475,000		98.9		70-130
Bis(2-ethylhexyl)phthalate	447,000		95,000	475,000		94.2		70-130
4-Bromophenyl phenyl ether	462,000		95,000	475,000		97.4		70-130
Butyl benzyl phthalate	461,000		95,000	475,000		97.0		70-130
Carbazole	547,000		95,000	475,000		115		70-130
Caprolactam	1,010,000		95,000	475,000		212	#	70-130
4-Chloroaniline	529,000		95,000	475,000		111		70-130
2-Chloronaphthalene	514,000		95,000	475,000		108		70-130
2-Chlorophenol	443,000		95,000	475,000		93.4		70-130
4-Chlorophenyl phenyl ether	439,000		95,000	475,000		92.4		70-130
4-Chloro-3-methylphenol	461,000		95,000	475,000		97.2		70-130
Chrysene	526,000		95,000	475,000	42,800	102		70-130
Dibenzofuran	436,000		95,000	475,000	18,900	87.9		70-130
Dibenz (a,h) anthracene	311,000		95,000	475,000		65.4	#	70-130
1,2-Dichlorobenzene	454,000		95,000	475,000		95.6		70-130
1,3-Dichlorobenzene	444,000		95,000	475,000		93.6		70-130
1,4-Dichlorobenzene	483,000		95,000	475,000		102		70-130
3,3´-Dichlorobenzidine	925,000		95,000	475,000		195	#	70-130
2,4-Dichlorophenol	408,000		95,000	475,000		86.0		70-130
Diethyl phthalate	469,000		95,000	475,000		98.7		70-130
2,4-Dimethylphenol	474,000		95,000	475,000		99.9		70-130
Dimethyl phthalate	503,000		95,000	475,000		106		70-130
2,4-Dinitrophenol	107,000		380,000	475,000		22.4	#	70-130
2,4-Dinitrotoluene	533,000		95,000	475,000		112		70-130
2,6-Dinitrotoluene	449,000		95,000	475,000		94.5		70-130
4,6-Dinitro-2-methylphenol	139,000		380,000	475,000		29.4	#	70-130
Di-n-butyl phthalate	485,000		95,000	475,000		102		70-130
Di-n-octyl phthalate	463,000		95,000	475,000		97.6		70-130
Fluoranthene	443,000		38,000	475,000		93.4		70-130
Fluorene	535,000		38,000	475,000	116,000	88.1		70-130

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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B0F0902 **Sample Type: Non-Aqueous Liquid**

Matrix Spike (B0F0902-MS1)

Source: 1006007-01 Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets (Continued)

ANALYTE	Result µg/kg	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC		%REC Limits
Hexachlorobenzene	446,000		95,000	475,000		94.0		70-130
Hexachlorobutadiene	395,000		95,000	475,000		83.1		70-130
Hexachlorocyclopentadiene	300,000		95,000	475,000		63.2	#	70-130
Hexachloroethane	774,000		95,000	475,000		163	#	70-130
Indeno (1,2,3-cd) pyrene	301,000		95,000	475,000		63.5	#	70-130
Isophorone	398,000		95,000	475,000		83.8		70-130
2-Methylnaphthalene	2,040,000		190,000	475,000	1.54E6	104		70-130
2-Methylphenol	517,000		95,000	475,000	8,760	107		70-130
3 &/or 4-Methylphenol	488,000		95,000	475,000		103		70-130
Naphthalene	1,510,000		190,000	475,000	1.19E6	66.6	#	70-130
2-Nitroaniline	491,000		152,000	475,000		103		70-130
3-Nitroaniline	860,000		152,000	475,000		181	#	70-130
4-Nitroaniline	605,000		152,000	475,000		127		70-130
Nitrobenzene	490,000		95,000	475,000		103		70-130
2-Nitrophenol	452,000		95,000	475,000		95.2		70-130
4-Nitrophenol	437,000		247,000	475,000		92.1		70-130
N-Nitrosodiphenylamine	511,000		95,000	475,000		108		70-130
N-Nitrosodi-n-propylamine	455,000		95,000	475,000		95.8		70-130
Pentachlorophenol	270,000		95,000	475,000		56.8	#	70-130
Phenanthrene	769,000		38,000	475,000	231,000	113		70-130
Phenol	491,000		95,000	475,000	12,100	101		70-130
Pyrene	464,000		38,000	475,000	14,000	94.7		70-130
1,2,4-Trichlorobenzene	425,000		95,000	475,000		89.5		70-130
2,4,5-Trichlorophenol	485,000		95,000	475,000		102		70-130
2,4,6-Trichlorophenol	451,000		95,000	475,000		95.0		70-130

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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B0F0902 **Sample Type: Non-Aqueous Liquid**

Matrix Spike Dup (B0F0902-MSD1)

Source: 1006007-01 Prepared: 6/9/2010 Analyzed: 6/9/2010

Surrogates

ANALYTE	Result µg/kg	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: 2-Fluorophenol	1,500,000		1.43E6	105	10-153
Surr: Phenol-d5	1,320,000		1.43E6	92.1	16-138
Surr: 2-Chlorophenol-d4	1,100,000		1.43E6	76.9	16-135
Surr: 1,2-Dichlorobenzene-d4	866,000		952,000	90.9	28-127
Surr: Nitrobenzene-d5	847,000		952,000	88.9	20-142
Surr: 2-Fluorobiphenyl	817,000		952,000	85.8	40-129
Surr: 2,4,6-Tribromophenol	1,390,000		1.43E6	97.1	10-151
Surr: Terphenyl-d14	675,000		952,000	70.9	29-129

Matrix Spike Dup (B0F0902-MSD1)

Source: 1006007-01 Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets

ANALYTE	Result µg/kg	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Acenaphthene	433,000		38,100	476,000		90.9	70-130	0.68	30
Acenaphthylene	434,000		38,100	476,000		91.1	70-130	2.78	30
Acetophenone	1,050,000		95,200	476,000		221 #	70-130	4.27	30
Anthracene	438,000		38,100	476,000		92.0	70-130	3.34	30
Atrazine	464,000		95,200	476,000		97.5	70-130	2.15	30
Benzaldehyde	1,030,000		95,200	476,000		216 #	70-130	9.78	30
Benzoic acid	238,000		190,000	476,000		50.0 #	70-130	4.78	30
Benzo (a) anthracene	496,000		95,200	476,000	11,500	102	70-130	2.14	30
Benzo (a) pyrene	451,000		95,200	476,000		94.7	70-130	3.00	30
Benzo (b) fluoranthene	473,000		95,200	476,000		99.4	70-130	8.60	30
Benzo (g,h,i) perylene	212,000		95,200	476,000		44.6 #	70-130	19.7	30
Benzo (k) fluoranthene	507,000		95,200	476,000		106	70-130	10.4	30
Benzyl alcohol	553,000		95,200	476,000		116	70-130	6.77	30
1,1'-Biphenyl	605,000		95,200	476,000	124,000	101	70-130	3.21	30
Bis(2-chloroethoxy)methane	465,000		95,200	476,000		97.6	70-130	5.14	30
Bis(2-chloroethyl)ether	481,000		95,200	476,000		101	70-130	4.73	30

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Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B0F0902 **Sample Type: Non-Aqueous Liquid**

Matrix Spike Dup (B0F0902-MSD1)

Source: 1006007-01 Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets (Continued)

ANALYTE	Result µg/kg	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit
Bis(2-chloroisopropyl)ether	452,000		95,200	476,000		94.8		70-130	3.93	30
Bis(2-ethylhexyl)phthalate	404,000		95,200	476,000		84.8		70-130	10.2	30
4-Bromophenyl phenyl ether	445,000		95,200	476,000		93.4		70-130	3.87	30
Butyl benzyl phthalate	413,000		95,200	476,000		86.8		70-130	10.9	30
Carbazole	543,000		95,200	476,000		114		70-130	0.73	30
Caprolactam	1,110,000		95,200	476,000		233	#	70-130	9.83	30
4-Chloroaniline	514,000		95,200	476,000		108		70-130	2.82	30
2-Chloronaphthalene	499,000		95,200	476,000		105		70-130	2.83	30
2-Chlorophenol	402,000		95,200	476,000		84.5		70-130	9.70	30
4-Chlorophenyl phenyl ether	430,000		95,200	476,000		90.3		70-130	1.95	30
4-Chloro-3-methylphenol	431,000		95,200	476,000		90.5		70-130	6.79	30
Chrysene	504,000		95,200	476,000	42,800	96.8		70-130	4.33	30
Dibenzofuran	434,000		95,200	476,000	18,900	87.1		70-130	0.63	30
Dibenz (a,h) anthracene	266,000		95,200	476,000		55.9	#	70-130	15.5	30
1,2-Dichlorobenzene	440,000		95,200	476,000		92.4		70-130	3.16	30
1,3-Dichlorobenzene	423,000		95,200	476,000		88.8		70-130	4.94	30
1,4-Dichlorobenzene	477,000		95,200	476,000		100		70-130	1.14	30
3,3´-Dichlorobenzidine	879,000		95,200	476,000		185	#	70-130	5.13	30
2,4-Dichlorophenol	397,000		95,200	476,000		83.3		70-130	2.93	30
Diethyl phthalate	431,000		95,200	476,000		90.6		70-130	8.34	30
2,4-Dimethylphenol	457,000		95,200	476,000		96.0		70-130	3.76	30
Dimethyl phthalate	490,000		95,200	476,000		103		70-130	2.67	30
2,4-Dinitrophenol	123,000		381,000	476,000		25.9	#	70-130	14.7	30
2,4-Dinitrotoluene	536,000		95,200	476,000		113		70-130	0.71	30
2,6-Dinitrotoluene	445,000		95,200	476,000		93.5		70-130	0.82	30
4,6-Dinitro-2-methylphenol	146,000		381,000	476,000		30.7	#	70-130	4.81	30
Di-n-butyl phthalate	475,000		95,200	476,000		99.7		70-130	2.05	30
Di-n-octyl phthalate	458,000		95,200	476,000		96.1		70-130	1.20	30
Fluoranthene	439,000		38,100	476,000		92.1		70-130	1.05	30
Fluorene	521,000		38,100	476,000	116,000	84.9		70-130	2.63	30

Environmental Protection Agency
Region 6 Laboratory
10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Semivolatiles by EPA Method 8270 - GC/MS - Quality Control

Batch: B0F0902 **Sample Type: Non-Aqueous Liquid**

Matrix Spike Dup (B0F0902-MSD1)

Source: 1006007-01 Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets (Continued)

ANALYTE	Result µg/kg	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Hexachlorobenzene	431,000		95,200	476,000		90.4	70-130	3.53	30
Hexachlorobutadiene	380,000		95,200	476,000		79.8	70-130	3.74	30
Hexachlorocyclopentadiene	274,000		95,200	476,000		57.6 #	70-130	8.92	30
Hexachloroethane	744,000		95,200	476,000		156 #	70-130	3.95	30
Indeno (1,2,3-cd) pyrene	256,000		95,200	476,000		53.7 #	70-130	16.4	30
Isophorone	378,000		95,200	476,000		79.4	70-130	5.06	30
2-Methylnaphthalene	1,940,000		190,000	476,000	1.54E6	84.2	70-130	4.74	30
2-Methylphenol	502,000		95,200	476,000	8,760	103	70-130	3.00	30
3 &/or 4-Methylphenol	464,000		95,200	476,000		97.4	70-130	5.11	30
Naphthalene	1,470,000		190,000	476,000	1.19E6	57.1 #	70-130	2.97	30
2-Nitroaniline	475,000		152,000	476,000		99.7	70-130	3.30	30
3-Nitroaniline	833,000		152,000	476,000		175 #	70-130	3.22	30
4-Nitroaniline	583,000		152,000	476,000		122	70-130	3.72	30
Nitrobenzene	467,000		95,200	476,000		98.0	70-130	4.96	30
2-Nitrophenol	433,000		95,200	476,000		91.0	70-130	4.18	30
4-Nitrophenol	435,000		248,000	476,000		91.3	70-130	0.59	30
N-Nitrosodiphenylamine	505,000		95,200	476,000		106	70-130	1.29	30
N-Nitrosodi-n-propylamine	422,000		95,200	476,000		88.6	70-130	7.57	30
Pentachlorophenol	259,000		95,200	476,000		54.4 #	70-130	3.96	30
Phenanthrene	748,000		38,100	476,000	231,000	108	70-130	2.85	30
Phenol	465,000		95,200	476,000	12,100	95.1	70-130	5.45	30
Pyrene	409,000		38,100	476,000	14,000	82.9	70-130	12.6	30
1,2,4-Trichlorobenzene	412,000		95,200	476,000		86.5	70-130	3.08	30
2,4,5-Trichlorophenol	471,000		95,200	476,000		98.9	70-130	2.90	30
2,4,6-Trichlorophenol	419,000		95,200	476,000		88.0	70-130	7.32	30

Environmental Protection Agency
Region 6 Laboratory
10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

DRO/ORO by EPA Method 8015 (GC-FID) - Quality Control

Batch: B0F0901 **Sample Type: Non-Aqueous Liquid**

Blank (B0F0901-BLK1)
Prepared: 6/9/2010 Analyzed: 6/9/2010

Surrogates

ANALYTE	Result mg/kg	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: o-Terphenyl	8,450		7,840	108	70-130

Blank (B0F0901-BLK1)
Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets

ANALYTE	Result mg/kg	Analyte Qualifiers	Reporting Limit
Diesel Range Organics	U		9,800
Oil Range Organics	U		9,800

LCS (B0F0901-BS1)
Prepared: 6/9/2010 Analyzed: 6/9/2010

Surrogates

ANALYTE	Result mg/kg	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: o-Terphenyl	7,680		7,550	102	70-130

LCS (B0F0901-BS1)
Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets

ANALYTE	Result mg/kg	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
Diesel Range Organics	165,000		9,430	189,000	87.6	70-130

Environmental Protection Agency
Region 6 Laboratory
10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

DRO/ORO by EPA Method 8015 (GC-FID) - Quality Control

Batch: B0F0901 **Sample Type: Non-Aqueous Liquid**

Matrix Spike (B0F0901-MS1)

Source: 1006007-01 Prepared: 6/9/2010 Analyzed: 6/9/2010

Surrogates

ANALYTE	Result mg/kg	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: o-Terphenyl	7,840		7,340	107	70-130

Matrix Spike (B0F0901-MS1)

Source: 1006007-01 Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets

ANALYTE	Result mg/kg	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
Diesel Range Organics	455,000		9,170	183,000	289,000	90.2	70-130

Matrix Spike Dup (B0F0901-MSD1)

Source: 1006007-01 Prepared: 6/9/2010 Analyzed: 6/9/2010

Surrogates

ANALYTE	Result mg/kg	Analyte Qualifier	Spike Level	%REC	%REC Limits
Surr: o-Terphenyl	7,380		7,340	101	70-130

Matrix Spike Dup (B0F0901-MSD1)

Source: 1006007-01 Prepared: 6/9/2010 Analyzed: 6/9/2010

Targets

ANALYTE	Result mg/kg	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Diesel Range Organics	441,000		9,170	183,000	289,000	82.6	70-130	3.09	30

Environmental Protection Agency
Region 6 Laboratory
10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Metals by EPA Method 6010B - ICP - Quality Control

Batch: B0F1003 **Sample Type: Solid**

Blank (B0F1003-BLK1)

Prepared: 6/10/2010 Analyzed: 6/11/2010

Targets

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit
Aluminum	U		10.0
Antimony	U		6.0
Arsenic	U		10.0
Barium	U		1.0
Beryllium	U		0.5
Cadmium	U		0.5
Calcium	U		15.0
Chromium	U		1.0
Cobalt	U		2.0
Copper	6.5		2.0
Iron	U		2.5
Lead	U		3.0
Magnesium	U		15.0
Manganese	U		0.5
Nickel	U		2.0
Potassium	U		100
Selenium	U		10.0
Silver	U		1.0
Sodium	U		50.0
Thallium	U		10.0
Vanadium	U		2.0
Zinc	U		2.0

LCS (B0F1003-BS1)

Prepared: 6/10/2010 Analyzed: 6/11/2010

Targets

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
Aluminum	200		10.0	200	100	75-125

Environmental Protection Agency
Region 6 Laboratory
10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Metals by EPA Method 6010B - ICP - Quality Control

Batch: B0F1003 **Sample Type: Solid**

LCS (B0F1003-BS1)

Prepared: 6/10/2010 Analyzed: 6/11/2010

Targets (Continued)

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
Antimony	82.3		6.0	80.0	103	75-125
Arsenic	400		10.0	400	100	75-125
Barium	383		1.0	400	95.8	75-125
Beryllium	10.1		0.5	10.0	101	75-125
Cadmium	9.5		0.5	10.0	94.8	75-125
Calcium	19,900		15.0	20,000	99.5	75-125
Chromium	79.8		1.0	80.0	99.7	75-125
Cobalt	38.2		2.0	40.0	95.5	75-125
Copper	83.0		2.0	80.0	104	75-125
Iron	195		2.5	200	97.5	75-125
Lead	77.9		3.0	80.0	97.4	75-125
Magnesium	20,300		15.0	20,000	102	75-125
Manganese	77.6		0.5	80.0	97.0	75-125
Nickel	76.0		2.0	80.0	95.0	75-125
Potassium	21,200		100	20,000	106	75-125
Selenium	196		10.0	200	97.9	75-125
Silver	11.0		1.0	10.0	110	75-125
Thallium	75.5		10.0	80.0	94.3	75-125
Sodium	20,000		50.0	20,000	100	75-125
Vanadium	78.3		2.0	80.0	97.9	75-125
Zinc	191		2.0	200	95.6	75-125

Matrix Spike (B0F1003-MS1)

Source: 1006007-02 Prepared: 6/10/2010 Analyzed: 6/11/2010

Targets

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
Aluminum	125		6.2	123		101	75-125
Antimony	41.2		3.7	49.3		83.6	75-125

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Region 6 Laboratory
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Phone:(281)983-2100 Fax:(281)983-2248

Metals by EPA Method 6010B - ICP - Quality Control

Batch: B0F1003 **Sample Type: Solid**

Matrix Spike (B0F1003-MS1)

Source: 1006007-02 Prepared: 6/10/2010 Analyzed: 6/11/2010

Targets (Continued)

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
Arsenic	246		6.2	247		99.6	75-125
Barium	236		0.6	247		95.9	75-125
Beryllium	6.3		0.3	6.17		102	75-125
Cadmium	5.8		0.3	6.17		93.5	75-125
Calcium	12,200		9.2	12,300		99.2	75-125
Chromium	48.9		0.6	49.3		99.2	75-125
Cobalt	24.8		1.2	24.7	2.3	91.4	75-125
Copper	50.7		1.2	49.3		103	75-125
Iron	104		1.5	123		84.4	75-125
Lead	47.7		1.8	49.3		96.6	75-125
Magnesium	12,500		9.2	12,300		102	75-125
Manganese	48.1		0.3	49.3		97.5	75-125
Nickel	46.7		1.2	49.3		94.7	75-125
Potassium	13,100		61.7	12,300		106	75-125
Selenium	122		6.2	123		98.9	75-125
Silver	6.7		0.6	6.17		109	75-125
Sodium	12,400		30.8	12,300		101	75-125
Thallium	21.0		6.2	49.3		42.6 #	75-125
Vanadium	48.5		1.2	49.3		98.2	75-125
Zinc	117		1.2	123		95.0	75-125

Matrix Spike Dup (B0F1003-MSD1)

Source: 1006007-02 Prepared: 6/10/2010 Analyzed: 6/11/2010

Targets

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Aluminum	127		6.2	123		103	75-125	2.17	20
Antimony	42.8		3.7	49.4		86.6	75-125	3.73	20
Arsenic	250		6.2	247		101	75-125	1.77	20

Environmental Protection Agency
Region 6 Laboratory
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Phone:(281)983-2100 Fax:(281)983-2248

Metals by EPA Method 6010B - ICP - Quality Control

Batch: B0F1003 **Sample Type: Solid**

Matrix Spike Dup (B0F1003-MSD1)

Source: 1006007-02 Prepared: 6/10/2010 Analyzed: 6/11/2010

Targets (Continued)

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Barium	240		0.6	247		97.2	75-125	1.49	20
Beryllium	6.4		0.3	6.17		103	75-125	1.17	20
Cadmium	5.9		0.3	6.17		94.8	75-125	1.45	20
Calcium	12,400		9.3	12,300		101	75-125	1.57	20
Chromium	49.6		0.6	49.4		100	75-125	1.38	20
Cobalt	25.3		1.2	24.7	2.3	93.3	75-125	1.95	20
Copper	51.5		1.2	49.4		104	75-125	1.68	20
Iron	108		1.5	123		87.4	75-125	3.63	20
Lead	48.1		1.9	49.4		97.4	75-125	0.92	20
Magnesium	12,800		9.3	12,300		103	75-125	1.78	20
Manganese	48.7		0.3	49.4		98.6	75-125	1.28	20
Nickel	47.2		1.2	49.4		95.6	75-125	1.13	20
Potassium	13,400		61.7	12,300		108	75-125	2.02	20
Selenium	123		6.2	123		99.5	75-125	0.73	20
Silver	6.9		0.6	6.17		111	75-125	2.00	20
Thallium	18.6		6.2	49.4		37.6 #	75-125	12.4	20
Sodium	12,700		30.9	12,300		103	75-125	1.83	20
Vanadium	49.3		1.2	49.4		99.9	75-125	1.82	20
Zinc	117		1.2	123		95.0	75-125	0.11	20

Reference (B0F1003-SRM1)

Prepared: 6/10/2010 Analyzed: 6/11/2010

Targets

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Aluminum	122		9.9	115		106	47.6-152		
Antimony	82.8		5.9	66.0		125	41.8-157		
Arsenic	271		9.9	253		107	60.8-139		
Barium	1.7		1.0	1.60		108	62.5-137		

Environmental Protection Agency
Region 6 Laboratory
10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Metals by EPA Method 6010B - ICP - Quality Control

Batch: B0F1003 **Sample Type: Solid**

Reference (B0F1003-SRM1)

Prepared: 6/10/2010 Analyzed: 6/11/2010

Targets (Continued)

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit
Beryllium	5.5		0.5	4.90		112		61.2-138		
Cadmium	10.9		0.5	10.9		100		70.6-128		
Calcium	51,100		14.9	44,200		116		68.6-131		
Chromium	29.3		1.0	27.1		108		68.3-131		
Cobalt	41.6		2.0	37.4		111		64.7-135		
Copper	1,920		2.0	1,770		108		74.6-126		
Iron	6,940		2.5	6,470		107		66.2-133		
Lead	63.8		3.0	56.9		112		72.7-127		
Magnesium	31,500		14.9	29,200		108		70.2-129		
Manganese	64.5		0.5	61.0		106		68.2-132		
Nickel	17.3		2.0	16.3		106		55.2-145		
Potassium	U		99.0	39.7		NR	#	0-215		#
Selenium	11.3		9.9	10.0		113		41-159		
Silver	10.7		1.0	5.90		182	#	45.8-154		
Sodium	U		49.5	72.5		NR	#	0-298		#
Thallium	U		9.9	9.50		NR	#	30.5-169		#
Vanadium	20.2		2.0	17.6		115		65.9-134		
Zinc	47.3		2.0	47.5		99.6		43.2-156		

Environmental Protection Agency
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10625 Fallstone Road, Houston, TX 77099
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Metals by EPA Method 7470A/7471A - CVAAS - Quality Control

Batch: B0F1004 **Sample Type: Solid**

Blank (B0F1004-BLK1)

Prepared: 6/10/2010 Analyzed: 6/10/2010

Targets

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit
Mercury	U		0.06

LCS (B0F1004-BS1)

Prepared: 6/10/2010 Analyzed: 6/10/2010

Targets

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Spike Level	%REC	%REC Limits
Mercury	0.4		0.06	0.400	112	75-125

Matrix Spike (B0F1004-MS1)

Source: 1006007-01 Prepared: 6/10/2010 Analyzed: 6/10/2010

Targets

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
Mercury	0.4		0.06	0.381		102	75-125

Matrix Spike Dup (B0F1004-MSD1)

Source: 1006007-01 Prepared: 6/10/2010 Analyzed: 6/10/2010

Targets

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	0.3		0.06	0.354		95.1	75-125	14.3	20

Environmental Protection Agency
Region 6 Laboratory
10625 Fallstone Road, Houston, TX 77099
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Metals by EPA Method 7470A/7471A - CVAAS - Quality Control

Batch: B0F1004 **Sample Type: Solid**

Reference (B0F1004-SRM1)

Prepared: 6/10/2010 Analyzed: 6/10/2010

Targets

ANALYTE	Result mg/kg wet	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mercury	3.7		0.6	3.59		103	51.8-148		

Environmental Protection Agency

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

CHAIN-OF-CUSTODY / TRACKING SUMMARY

REFERENCE MATERIAL: MC252 Source Oil A

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed and accurate.

Page: 1 of 2

COC # 20100608-SOA-Oil

Originator Information		Required Packager Information (if samples are opened)		Required Recipient Information	
Contact:	Johnny Mitchell	Contact:		Contact:	Christy Warren
Organization:	TestAmerica	Organization:		Organization:	USEPA Houston Lab
Address:	1597 HWY 311	Address:		Address:	10625 Fallstone Rd
City:	HOUMA	City:		City:	Houston
State, Zip:	LA, 70395	State, Zip:		State, Zip:	TX, 77099
Phone/Fax:	615.418.9892	Phone/Fax:		Phone/Fax:	
Email:	johnny.mitchell@testamericainc.com	Email:		Email:	
		Send Confirmation of Receipt (Signed COC) To:	MC252_SourceCOC@envstd.com	Send Confirmation of Receipt (Signed COC) To:	MC252_SourceCOC@envstd.com

Source Material Information (Material Codes: Enterprise Oil = SO, Oil From Surface Waters - OFS, Dispersant = CDX, Top Kill Drilling Mud = TKDM)

ITEM #	Source Sample ID	Sample Time	Sample Date	# of Containers	Total Volume	Material Code	Your Reference Material ID	Sample Time	Sample Date	# of Containers	Total Volume	Comments
1	MC252 Source Oil 024	1115	5.20.10	1	1L	SO	SOA20100608-026	16:40	6.8.10	1	1L	
2	MC252 Source Oil-029	1115	5.20.10	1	1L	SO	SOA 20100608-029	16:40	6.8.10	1	1L	
3												
4												
5												
6												
7												
8												
9												
10												
							Totals					

Reference Material Receipt Instructions:	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Intact Upon Receipt?
1. Sign and Date the COC to acknowledge reciept of the shipment.	[illegible] / TestAmerica	6.8.10	16:40	[illegible] / AECOM	6/8/10	16:40	Y N
	[illegible] / AECOM	6/9/10	1751	[illegible] / TestAmerica	6-8-10	1751	Y N
2. Complete Reference Material Tracking Inventory.	[illegible] / TestAmerica	6-9-10	1850	[illegible] / AECOM	6-9-10	18:26	Y N
3. Send a copy of the signed COC and inventory to: MC252_SourceCOC@envstd.com.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Y N
	[illegible]			[illegible]	6/9/10	10:25	Y N

Last Updated On: 6/8/2010 10:19 AM

Environmental Protection Agency

Region 6 Laboratory

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Notes and Definitions

The units for surrogates on VOA solid samples are reported in µg/L instead of the expected µg/Kg for a solid sample. The difference is because the surrogate spiking procedure is a post sample preparation addition, and the units are based on the concentration of the surrogate in the diluted extract, not the solid sample.

T	The compounds listed are tentatively identified by the best match with the NIST or Wiley mass spectral data base or by manual interpretation. The concentrations are estimated based on a Response Factor of 1.0 to the nearest internal standard.
RL	The reporting limit for this analyte was raised because absence or presence at the routine or lower value could not be verified"
L	The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
K	The identification of the analyte is acceptable; the reported value may be biased high. The actual value is expected to be less than the reported value.
J	The identification of the analyte is acceptable; the reported value is an estimate.
B	Blank Related - The concentration found in the sample was less than 10X the concentration found in the associated extraction, digestion and/or analysis blank. Presence in the sample is therefore suspect.
A	This sample was extracted at a single acid pH.
HTS	Sample was prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.

AES	Atomic Emission Spectrometer
CVAA	Cold Vapor Atomic Absorption
ECD	Electron Capture Detector
GC	Gas Chromatograph
GFAA	Graphite Furnace Atomic Absorption
ICP	Inductively Coupled Plasma
MS	Mass Spectrometer
NA	Not Applicable
NPD	Nitrogen Phosphorous Detector
NR	Not Reported
TCLP	Toxicity Characteristic Leaching Procedure
U	Undetected
#	Out of QC limits

Initial pressure in air analyses is the pressure at which the canister was received in psia (pounds *per* square inch absolute pressure).

The pH reported for Volatile liquid samples was tested using a 0-14 pH indicator strip for the purpose of verifying chemical preservation.

The statistical software used for the reporting of toxicity data is ToxCalc 5.0.32, Environmental Toxicity Data Analysis System 1994-2007 Tidepool Scientific Software.