Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010524-016
Lab Order:	0105118	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/24/01
Lab ID:	0105118-16A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
GAS/BTEX, SOIL		EPA 8015/8021				Analyst: jlw
Gasoline	61300.0	53800		µg/Kg-dry	500	5/29/01
Surr: Trifluorotoluene	101.9	50-150		%REC	500	5/29/01
PERCENT MOISTURE		SM2540				Analyst: etw
% Moisture	7	0.		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010524-018
Lab Order:	0105118	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/24/01
Lab ID:	0105118-18A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**NW TPH-DX**				Analyst: **smc**
Diesel	62.6	27	AC	mg/Kg-dry	1	5/30/01
Oil	166.0	67.6	AD	mg/Kg-dry	1	5/30/01
Surr: O-Terphenyl	80.0	50-150		%REC	1	5/30/01
GAS/BTEX, SOIL		**EPA 8015/8021**				Analyst: **jlw**
Gasoline	1310.0	676		µg/Kg-dry	1	5/29/01
Surr: Trifluorotoluene	77.6	50-150		%REC	1	5/29/01
PERCENT MOISTURE		**SM2540**				Analyst: **etw**
% Moisture	26	0.		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010524-025
Lab Order:	0105118	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/24/01
Lab ID:	0105118-25A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
GAS/BTEX, SOIL		EPA 8015/8021				Analyst: jlw
Gasoline	ND	500		µg/Kg	1	5/29/01
Surr: Trifluorotoluene	90.0	50-150		%REC	1	5/29/01
PERCENT MOISTURE		SM2540				Analyst: etw
% Moisture		0.		wt%	1	5/30/01
% Moisture	8	0.		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010524-027
Lab Order:	0105118	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/24/01
Lab ID:	0105118-27A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**NW TPH-DX**				Analyst: **smc**
Diesel	ND	24.7		mg/Kg-dry	1	6/4/01
Oil	ND	61.7		mg/Kg-dry	1	6/4/01
Surr: O-Terphenyl	99.0	50-150		%REC	1	6/4/01
GAS/BTEX, SOIL		**EPA 8015/8021**				Analyst: **jlw**
Benzene	ND	3.09		µg/Kg-dry	1	5/31/01
Ethylbenzene	ND	3.09		µg/Kg-dry	1	5/31/01
Toluene	ND	3.09		µg/Kg-dry	1	5/31/01
Xylenes, Total	ND	9.26		µg/Kg-dry	1	5/31/01
Gasoline	ND	617		µg/Kg-dry	1	5/31/01
Surr: Trifluorotoluene	115.0	70-130		%REC	1	5/31/01
PERCENT MOISTURE		**SM2540**				Analyst: **etw**
% Moisture	19	0.		wt%	1	6/1/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010524-034
Lab Order:	0105118	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/24/01
Lab ID:	0105118-34A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		NW TPH-DX				Analyst: smc
Diesel	ND	26		mg/Kg-dry	1	6/4/01
Oil	ND	64.9		mg/Kg-dry	1	6/4/01
Surr: O-Terphenyl	90.0	50-150		%REC	1	6/4/01
GAS/BTEX, SOIL		EPA 8015/8021				Analyst: jlw
Gasoline	ND	641		µg/Kg-dry	1	5/29/01
Surr: Trifluorotoluene	85.2	50-150		%REC	1	5/29/01
PERCENT MOISTURE		SM2540				Analyst: etw
% Moisture	23	0.		wt%	1	6/1/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010524-041
Lab Order:	0105118	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/24/01
Lab ID:	0105118-41A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		NW TPH-DX				Analyst: smc
Diesel	ND	24.7		mg/Kg-dry	1	6/4/01
Oil	ND	61.7		mg/Kg-dry	1	6/4/01
Surr: O-Terphenyl	87.0	50-150		%REC	1	6/4/01
GAS/BTEX, SOIL		EPA 8015/8021				Analyst: jlw
Gasoline	ND	617		µg/Kg-dry	1	5/29/01
Surr: Trifluorotoluene	85.2	50-150		%REC	1	5/29/01
PERCENT MOISTURE		SM2540				Analyst: etw
% Moisture	19	0.		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Method Blank

Sample ID: MBlank | Batch ID: 04 BG S-5/30/ | Test Code: 8015/8021 | Units: µg/L | Analysis Date 5/29/01 | Prep Date:
Client ID: 0105118 | Run ID: CRICK_010529A | SeqNo: 77825

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	500									
Trifluorotoluene	90.4	0	100	0	90.4%	50	150	0			

Sample ID: MBlank | Batch ID: 04 BG S-6/4/0 | Test Code: 8015/8021 | Units: µg/Kg | Analysis Date 5/31/01 | Prep Date:
Client ID: 0105118 | Run ID: CRICK_010531A | SeqNo: 78281

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Ethylbenzene	ND	0.5									
Gasoline	ND	100									
Toluene	ND	0.5									
Xylenes, Total	ND	1.5									
Trifluorotoluene	112	0	100	0	112.0%	70	130	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001296

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Method Blank

Sample ID: MBlank | Batch ID: 05 8260 S-6/1 | Test Code: EPA 8260B | Units: µg/L | Analysis Date 5/30/01 | Prep Date:
Client ID: | 0105118 | Run ID: HORATIO_010530A | SeqNo: 78091

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1									
1,1,1-Trichloroethane	ND	1									
1,1,2,2-Tetrachloroethane	ND	1									
1,1,2-Trichloroethane	ND	1									
1,1-Dichloroethane	ND	1.5									
1,1-Dichloroethene	ND	1									
1,1-Dichloropropene	ND	1									
1,2,3-Trichlorobenzene	ND	1.8									
1,2,3-Trichloropropane	ND	1									
1,2,4-Trichlorobenzene	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,2-Dibromo-3-chloropropane	ND	2									
1,2-Dibromoethane	ND	1									
1,2-Dichlorobenzene	ND	1									
1,2-Dichloroethane	ND	1									
1,2-Dichloropropane	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,3-Dichlorobenzene	ND	1									
1,3-Dichloropropane	ND	1									
1,4-Dichlorobenzene	ND	1									
2,2-Dichloropropane	ND	1.9									
2-Butanone	ND	20									
2-Chloroethyl vinyl ether	ND	5									
2-Chlorotoluene	ND	1									
2-Hexanone	ND	20									
4-Chlorotoluene	ND	1									
4-Isopropyltoluene	ND	1									
4-Methyl-2-pentanone	ND	1									
Acetone	ND	20									

Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

Confidential Business Information

BRIX 001297

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Method Blank

Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	5
Carbon disulfide	ND	1
Carbon tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	5
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2-Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	2
Iodomethane	ND	1
Isopropylbenzene	ND	1
m,p-Xylene	ND	2
Methyl tert-butyl ether	ND	2
Methylene chloride	ND	10
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Naphthalene	ND	2
o-Xylene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Toluene	ND	1

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001298

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Method Blank

trans-1,2-Dichloroethene	ND	1									
trans-1,3-Dichloropropene	ND	1									
Trichloroethene	ND	1									
Trichlorofluoromethane	ND	2									
Vinyl acetate	ND	1									
Vinyl chloride	ND	1.2									
4-Bromofluorobenzene	49	0	50	0	98.0%	86	115	0			
Dibromofluoromethane	49.1	0	50	0	98.2%	86	118	0			
Toluene-d8	51.7	0	50	0	103.4%	88	110	0			

Sample ID. MB-2759 Batch ID: 2759 Test Code: EPA 8015 Units: mg/Kg Analysis Date 5/30/01 Prep Date: 5/29/01
Client ID: 0105118 Run ID: BUTTERCUP_010530A SeqNo: 77967

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	20									
Oil	ND	50									
O-Terphenyl	54	0	50	0	108.0%	50	150	0			

Sample ID: MB-2762 Batch ID: 2762 Test Code: EPA 8015 Units: mg/Kg Analysis Date 5/30/01 Prep Date: 5/30/01
Client ID: 0105118 Run ID: BUDU_010530A SeqNo: 77995

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	50									
Gasoline	ND	20									
Oil	ND	100									
O-Terphenyl	96	0	100	0	96.0%	50	150	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Method Blank

Sample ID: MB-2766 | Batch ID: 2766 | Test Code: EPA 6010B | Units: mg/Kg | Analysis Date 6/1/01 | Prep Date: 5/31/01
Client ID: 0105118 | Run ID: ICP_010601A | SeqNo: 78106

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	ND	1									
Chromium	ND	1									
Lead	ND	1									

Sample ID: MB-2773 | Batch ID: 2773 | Test Code: EPA 8015 | Units: mg/Kg | Analysis Date 6/4/01 | Prep Date: 6/1/01
Client ID: 0105118 | Run ID: BUTTERCUP_010604A | SeqNo: 78538

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	20									
Oil	ND	50									
O-Terphenyl	46	0	50	0	92.0%	50	150	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Duplicate

Sample ID: 0105111-03A DUP Batch ID: 04 BG S-5/30/ Test Code: 8015/8021 Units: µg/Kg-dry Analysis Date 5/29/01 Prep Date:
Client ID: 0105118 Run ID: CRICK_010529A SeqNo: 77831

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	575	0	0	0.0%	0	0	0	0.0%	20	
Trifluorotoluene	104	0	115	0	90.7%	50	150	0	0.0%	20	

Sample ID: 0105118-41A DUP Batch ID: 04 BG S-5/30/ Test Code: 8015/8021 Units: µg/Kg-dry Analysis Date 5/29/01 Prep Date:
Client ID: 5074-010524-041 0105118 Run ID: CRICK_010529A SeqNo: 77844

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	617	0	0	0.0%	0	0	0	0.0%	20	
Trifluorotoluene	102	0	123	0	83.2%	50	150	0	0.0%	20	

Sample ID: 0105118-27A DUP Batch ID: 04 BG S-6/4/0 Test Code: 8015/8021 Units: µg/Kg-dry Analysis Date 5/31/01 Prep Date:
Client ID: 5074-010524-027 0105118 Run ID: CRICK_010531A SeqNo: 78285

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	3.09	0	0	0.0%	0	0	0	0.0%	20	
Ethylbenzene	ND	3.09	0	0	0.0%	0	0	0	0.0%	20	
Gasoline	ND	617	0	0	0.0%	0	0	0	0.0%	20	
Toluene	ND	3 09	0	0	0.0%	0	0	0	0 0%	20	
Xylenes, Total	ND	9.26	0	0	0.0%	0	0	0	0.0%	20	
Trifluorotoluene	140.7	0	123	0	114.4%	50	150	0	0.0%	20	

Sample ID: 0105131-29A DUP Batch ID: 04 BG S-6/4/0 Test Code: 8015/8021 Units: µg/Kg-dry Analysis Date 5/31/01 Prep Date:
Client ID: 0105118 Run ID: CRICK_010531A SeqNo: 78292

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	712.6	617	0	0	0.0%	0	0	1142	46.3%	20	T
Trifluorotoluene	712.6	0	593	0	120.2%	50	150	0	0.0%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

BRIX 001301

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Sample Duplicate

Sample ID: 0105121-07B DUP Batch ID: 05 8260 S-6/1 Test Code: EPA 8260B Units: µg/Kg Analysis Date 5/30/01 Prep Date:
Client ID: 0105118 Run ID: HORATIO_010530A SeqNo: 78095

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
1,2-Dibromoethane	ND	5	0	0	0.0%	0	0	0	0.0%	20	
1,2-Dichloroethane	ND	5	0	0	0.0%	0	0	0	0.0%	20	
1,3,5-Trimethylbenzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
Benzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
Ethylbenzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
m,p-Xylene	ND	10	0	0	0.0%	0	0	0	0.0%	20	
Methyl tert-butyl ether	ND	10	0	0	0.0%	0	0	0	0.0%	20	
n-Propylbenzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
Naphthalene	ND	25	0	0	0.0%	0	0	0	0.0%	20	
o-Xylene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
Toluene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
4-Bromofluorobenzene	53.3	0	50	0	106.6%	74	121	0	0.0%	0	
Dibromofluoromethane	48.5	0	50	0	97.0%	80	120	0	0.0%	0	
Toluene-d8	52	0	50	0	104.0%	81	117	0	0.0%	0	

Sample ID: 0105118-02A DUP Batch ID: 2759 Test Code: EPA 8015 Units: mg/Kg-dry Analysis Date 5/30/01 Prep Date: 5/29/01
Client ID: 5074-010524-002 0105118 Run ID: BUTTERCUP_010530A SeqNo: 77973

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	24.7	0	0	0.0%	0	0	0	0.0%	20	
Oil	ND	61.7	0	0	0.0%	0	0	0	0.0%	20	
O Terphenyl	48.15	0	61.7	0	78.0%	50	150	0	0.0%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Duplicate

Sample ID: 0105125-06A DUP Batch ID: 2762 Test Code: EPA 8015 Units: mg/Kg-dry Analysis Date 5/30/01 Prep Date: 5/30/01
Client ID: 0105118 Run ID: BUDU_010530A SeqNo: 78008

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	73.5	0	0	0.0%	0	0	0	0.0%	20	
Gasoline	ND	29.4	0	0	0.0%	0	0	0	0.0%	20	
Oil	ND	147	0	0	0.0%	0	0	0	0.0%	20	
O-Terphenyl	141.2	0	147	0	96.0%	50	150	0	0.0%	0	

Sample ID: 0105118-08A DUP Batch ID: 2766 Test Code: EPA 6010B Units: mg/Kg Analysis Date 6/1/01 Prep Date: 5/31/01
Client ID: 5074-010524-008 0105118 Run ID: ICP_010601A SeqNo: 78112

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	ND	1	0	0	0.0%	0	0	0	0.0%	20	
Chromium	15.1	1	0	0	0.0%	0	0	16.5	8.9%	20	
Lead	5.46	1	0	0	0.0%	0	0	5.89	7.6%	20	

Sample ID: 0105118-41A DUP Batch ID: 2773 Test Code: EPA 8015 Units: mg/Kg-dry Analysis Date 6/4/01 Prep Date: 6/1/01
Client ID: 5074-010524-041 0105118 Run ID: BUTTERCUP_010604A SeqNo: 78544

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	24.7	0	0	0.0%	0	0	0	0.0%	20	
Oil	ND	61.7	0	0	0.0%	0	0	0	0.0%	20	
O-Terphenyl	56.79	0	61.7	0	92.0%	50	150	0	0.0%	20	

Sample ID: 0105131-18A DUP Batch ID: 2773 Test Code: EPA 8015 Units: mg/Kg-dry Analysis Date 6/4/01 Prep Date: 6/1/01
Client ID: 0105118 Run ID: BUTTERCUP_010604A SeqNo: 78548

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	21.7	0	0	0.0%	0	0	0	0.0%	20	
Oil	ND	54.3	0	0	0.0%	0	0	0	0.0%	20	
O-Terphenyl	50.54	0	54.3	0	93.0%	50	150	0	0.0%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0105111-01A MS | Batch ID: 04 BG S-5/30/ | Test Code: 8015/8021 | Units: µg/Kg-dry | Analysis Date 5/29/01 | Prep Date:
Client ID: | 0105118 | Run ID: CRICK_010529A | SeqNo: 77828

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	3240	543	3260	0	99.4%	80	120	0			
Trifluorotoluene	498	0	543	0	91.7%	50	150	0			

Sample ID: 0105118-10A MS | Batch ID: 04 BG S-5/30/ | Test Code: 8015/8021 | Units: µg/Kg-dry | Analysis Date 5/29/01 | Prep Date:
Client ID: 5074-010524-010 | 0105118 | Run ID: CRICK_010529A | SeqNo: 77838

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	4360	543	4350	0	100.3%	80	120	0			
Trifluorotoluene	495	0	543	0	91.2%	50	150	0			

Sample ID: 0105118-05A MS | Batch ID: 04 BG S-6/4/0 | Test Code: 8015/8021 | Units: µg/Kg | Analysis Date 5/31/01 | Prep Date:
Client ID: 5074-010524-005 | 0105118 | Run ID: CRICK_010531A | SeqNo: 78287

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	169	2.72	163	0	103.7%	85	115	0			
Ethylbenzene	169	2.72	163	0	103.7%	85	115	0			
Gasoline	3500	543	3260	0	107.4%	80	120	0			
Toluene	169	2.72	163	0	103.7%	85	115	0			
Xylenes, Total	512.5	8.15	489	0	104.8%	85	115	0			
Trifluorotoluene	587	0	543	0	108.1%	70	130	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001304

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0105121-36B MS | Batch ID: 05 8260 S-6/1 | Test Code: EPA 8260B | Units: µg/Kg | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105118 | Run ID: HORATIO_010530A | SeqNo: 78098

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	238.5	5	250	0	95.4%	0	234	0			
Benzene	233.5	5	250	0	93.4%	37	151	0			
Chlorobenzene	266	5	250	0	106.4%	37	160	0			
Toluene	247	5	250	0	98.8%	47	150	0			
Trichloroethene	246	5	250	0	98.4%	71	157	0			
4-Bromofluorobenzene	276	0	250	0	110.4%	74	121	0			
Dibromofluoromethane	248	0	250	0	99.2%	80	120	0			
Toluene-d8	271	0	250	0	108.4%	81	117	0			

Sample ID: 0105118-02B MS | Batch ID: 2766 | Test Code: EPA 6010B | Units: mg/Kg | Analysis Date 6/1/01 | Prep Date: 5/31/01
Client ID: 5074-010524-002 | 0105118 | Run ID: ICP_010601A | SeqNo: 78109

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	41.9	1	50	0	83.8%	75	125	0			
Chromium	58.6	1	50	10.3	96.6%	75	125	0			
Lead	47.7	1	50	4.4	86.6%	75	125	0			

Sample ID: 0105118-02B MSD | Batch ID: 2766 | Test Code: EPA 6010B | Units: mg/Kg | Analysis Date 6/1/01 | Prep Date: 5/31/01
Client ID: 5074-010524-002 | 0105118 | Run ID: ICP_010601A | SeqNo: 78110

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	42	1	50	0	84.0%	75	125	41.9	0.2%	20	
Chromium	60.2	1	50	10.3	99.8%	75	125	58.6	2.7%	20	
Lead	48.4	1	50	4.4	88.0%	75	125	47.7	1.5%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS | Batch ID: 04 BG S-5/30/ | Test Code: 8015/8021 | Units: µg/Kg | Analysis Date 5/29/01 | Prep Date:
Client ID: 0105118 | Run ID: CRICK_010529A | SeqNo: 77845

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	813	500	800	0	101.6%	80	120	0			
Trifluorotoluene	91.8	0	100	0	91.8%	50	150	0			

Sample ID: LCS | Batch ID: 04 BG S-6/4/0 | Test Code: 8015/8021 | Units: µg/Kg | Analysis Date 5/31/01 | Prep Date:
Client ID: 0105118 | Run ID: CRICK_010531A | SeqNo: 78282

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	156.5	2.5	150	0	104.3%	85	115	0			
Ethylbenzene	157	2.5	150	0	104.7%	85	115	0			
Gasoline	4060	500	4000	0	101.5%	80	120	0			
Toluene	157	2.5	150	0	104.7%	85	115	0			
Xylenes, Total	478	7.5	450	0	106.2%	85	115	0			
Trifluorotoluene	550	0	500	0	110.0%	50	150	0			

Sample ID: LCS | Batch ID: 05 8260 S-6/1 | Test Code: EPA 8260B | Units: µg/Kg | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105118 | Run ID: HORATIO_010530A | SeqNo: 78092

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	225	5	250	0	90.0%	0	234	0			
Benzene	228	5	250	0	91.2%	37	151	0			
Chlorobenzene	236	5	250	0	94.4%	37	160	0			
Toluene	239	5	250	0	95.6%	47	150	0			
Trichloroethene	233	5	250	0	93.2%	71	157	0			
4-Bromofluorobenzene	261.5	0	250	0	104.6%	74	121	0			
Dibromofluoromethane	234.5	0	250	0	93.8%	80	120	0			
Toluene-d8	256.5	0	250	0	102.6%	81	117	0			

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS-2759 | Batch ID: 2759 | Test Code: EPA 8015 | Units: mg/Kg | Analysis Date 5/30/01 | Prep Date: 5/29/01
Client ID: 0105118 | Run ID: BUTTERCUP_010530A | SeqNo: 77968

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	42.95	20	50	0	85.9%	70	130	0			

Sample ID: LCSD-2759 | Batch ID: 2759 | Test Code: EPA 8015 | Units: mg/Kg | Analysis Date 5/30/01 | Prep Date: 5/29/01
Client ID: 0105118 | Run ID: BUTTERCUP_010530A | SeqNo: 77969

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	43.9	20	50	0	87.8%	70	130	42.95	2.2%	20	

Sample ID: LCS-2766 | Batch ID: 2766 | Test Code: EPA 6010B | Units: mg/Kg | Analysis Date 6/1/01 | Prep Date: 5/31/01
Client ID: 0105118 | Run ID: ICP_010601A | SeqNo: 78107

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	47.5	1	50	0	95.0%	80	120	0			
Chromium	47.9	1	50	0	95.8%	80	120	0			
Lead	47.7	1	50	0	95.4%	80	120	0			

Sample ID: LCS-2773 | Batch ID: 2773 | Test Code: EPA 8015 | Units: mg/Kg | Analysis Date 6/4/01 | Prep Date: 6/1/01
Client ID: 0105118 | Run ID: BUTTERCUP_010604A | SeqNo: 78539

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	42.5	20	50	0	85.0%	70	130	0			

Sample ID: LCSD-2773 | Batch ID: 2773 | Test Code: EPA 8015 | Units: mg/Kg | Analysis Date 6/4/01 | Prep Date: 6/1/01
Client ID: 0105118 | Run ID: BUTTERCUP_010604A | SeqNo: 78540

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	49.15	20	50	0	98.3%	70	130	42.5	14.5%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 04 BG S-5/30/ | Test Code: 8015/8021 | Units: µg/L | Analysis Date 5/29/01 | Prep Date:
Client ID: 0105118 | Run ID: CRICK_010529A | SeqNo: 77826

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	847	500	800	0	105.9%	80	120	0			
Trifluorotoluene	84.4	0	100	0	84.4%	50	150	0			

Sample ID: CCV | Batch ID: 04 BG S-6/4/0 | Test Code: 8015/8021 | Units: µg/L | Analysis Date 5/31/01 | Prep Date:
Client ID: 0105118 | Run ID: CRICK_010531A | SeqNo: 78280

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.6	0.5	40	0	104.0%	85	115	0			
Ethylbenzene	41.9	0.5	40	0	104.8%	85	115	0			
Gasoline	1010	100	1000	0	101.0%	80	120	0			
Toluene	41.7	0.5	40	0	104.3%	85	115	0			
Xylenes, Total	127	1.5	120	0	105.8%	85	115	0			
Trifluorotoluene	107	0	100	0	107.0%	70	130	0			

Sample ID: CCV | Batch ID: 05 8260 S-6/1 | Test Code: EPA 8260B | Units: µg/L | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105118 | Run ID: HORATIO_010530A | SeqNo: 78090

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 Dichloroethene	104	1	100	0	104.0%	80	120	0			
1,2-Dichloropropane	110	1	100	0	110.0%	80	120	0			
Chloroform	101	1	100	0	101.0%	80	120	0			
Ethylbenzene	113	1	100	0	113.0%	80	120	0			
Toluene	108	1	100	0	108.0%	80	120	0			
Vinyl chloride	113	1.2	100	0	113.0%	80	120	0			
4-Bromofluorobenzene	51.3	0	50	0	102.6%	86	115	0			
Dibromofluoromethane	49.2	0	50	0	98.4%	86	118	0			
Toluene-d8	50.8	0	50	0	101.6%	88	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 2759 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105118 | Run ID: BUTTERCUP_010530A | SeqNo: 77965

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	421	20	400	0	105.3%	85	115	0			
Oil	417	50	400	0	104.3%	85	115	0			

Sample ID: CCV | Batch ID: 2759 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105118 | Run ID: BUTTERCUP_010530A | SeqNo: 77966

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	375	20	400	0	93.8%	85	115	0			
Oil	361	50	400	0	90.3%	85	115	0			

Sample ID: CCV | Batch ID: 2759 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105118 | Run ID: BUTTERCUP_010530A | SeqNo: 78068

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	434	20	400	0	108.5%	85	115	0			
Oil	442	50	400	0	110.5%	85	115	0			

Sample ID: CCV | Batch ID: 2773 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 6/4/01 | Prep Date:
Client ID: 0105118 | Run ID: BUTTERCUP_010604A | SeqNo: 78536

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	388	20	400	0	97.0%	85	115	0			
Oil	357	50	400	0	89.3%	85	115	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 2773 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 6/4/01 | Prep Date:

Client ID: 0105118 | Run ID: BUTTERCUP_010604A | SeqNo: 78537

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	401	20	400	0	100.3%	85	115	0			
Oil	439	50	400	0	109.8%	85	115	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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BRIX 001310

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105118
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Initial Calibration Verification Standard

Sample ID: ICVLOW | Batch ID: 2766 | Test Code: EPA 6010B | Units: mg/L | Analysis Date 6/1/01 | Prep Date: 5/31/01

Client ID: 0105118 | Run ID: ICP_010601A | SeqNo: 78104

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	.485	0.002	0.5	0	97.0%	90	110	0			
Chromium	.476	0.005	0.5	0	95.2%	90	110	0			
Lead	.491	0.005	0.5	0	98.2%	90	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

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Soil

HAHN AND ASSOCIATES, INC.
Environmental Management
434 NW Sixth Avenue, Suite 203 • Portland OR 97209
(503) 796-0717 • Fax (503) 227-2209

Laboratory: ESL
Lab Project No.: 0105121

CHAIN OF CUSTODY

Chain of Custody No. 4

Project Manager	Guy Tanz
Project No.	5074
Project Name	Brix Maritime Facility
Collected by	Jay Greifer

Liquid with Sediment Sample: ____ Test Filtrate ____ Test Sediment ____ Test Both
Multi-Phase Sample: ____ Test One (which) ____ Test Separately ____ Shake

Samples Received at 4C (Y or N)
Appropriate Containers Used (Y or N)
Provide Verbal Results (Y or N)
Provide Preliminary Fax Results

Sample Number Prefix: 5074-010525 –

Lab ID	Sample #	Date	Time	Sample Description	Soil	Water	Other	Number of Containers	HCID by NW TPH Hydrocarbon Identification	NW TPH-G	NW TPH-Dx	BTEX and naphthalene by EPA Method 8021B	BTEX, EDB, EDC, MTBE, naphthalene, 1,2,4- and 1,3,5-trimethylbenzene, iso- and n-propylbenzene by EPA Method 8260B	Polynuclear Aromatic Hydrocarbons (PAHs) by EPA 8270 SIM	Total Lead by EPA Method 6010/200.7	Dissolved Lead (PE) by EPA Method 6010/200.7	RUSH	Remarks
-01	043	5-25-01	816	B24E 3	X			1										
-02	044		826	7														
-03	045		833	11														
-04	046		840	15														
-05	047		849	19														
-06	048		912	23 1/2						*	*							
-07	049		921	27						*	*		*	*	*			
-08	050		1132	B27E 3														
-09	051		1007	B26E 2														
-10	052		1010	4														
-11	053		1040	6						*	*							
-12	054		1106	8														
-13	055		1114	10														
-14	056		1136	12														
-15	057		1151	14														
-16	058		1207	16														
-17	059		1227	18						*	*							
-18	060		1248	20														
-19	061		1309	22						*	*							
-20	062		1328	24														
-21	063		1416	B29E 7														
-22	064		1421	12														
-23	065		1428	15						*	*							
-24	066		1433	19														
-25	067		1441	23						*	*							
-26	065		1445	27														

Relinquished by	Company	Date	Time	Received by	Company
[signature]	HAHN & ASSOC	5/25/01	1600	GUY TANZ	HAI
GUY TANZ	HAI	5/29/01	1125	[signature]	ESL

BRIX 001312

HAHN AND ASSOCIATES, INC.
Environmental Management
434 NW Sixth Avenue, Suite 203 • Portland OR 97209
(503) 796-0717 • Fax (503) 227-2209

Laboratory: ESL
Lab Project No.: 010512

CHAIN OF CUSTODY

Chain of Custody No. 6

Project Manager	Guy Tanz
Project No.	5074
Project Name	Brix Maritime Facility
Collected by	Jay Greifer

Liquid with Sediment Sample: ____ Test Filtrate ____ Test Sediment ____ Test Both
Multi-Phase Sample: ____ Test One (which) ____ Test Separately ____ Shake

Samples Received at 4C (Y or N)
Appropriate Containers Used (Y or N)
Provide Verbal Results (Y or N)
Provide Preliminary Fax Results

Sample Number Prefix: 5074-016525-

Lab ID	Sample #	Date	Time	Sample Description	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers	HCID by NW TPH Hydrocarbon Identification	NW TPH-G	NW TPH-Dx	BTEX and naphthalene by EPA Method 8021B	BTEX, EDB, EDC, MTBE, naphthalene, 1,2,4- and 1,3,5-trimethylbenzene, iso- and n-propylbenzene by EPA Method 8260B	Polynuclear Aromatic Hydrocarbons (PAHs) by EPA 8270 SIM	Total Lead by EPA Method 6010/200.7	Dissolved Lead (FF) by EPA Method 6010/200.7	RUSH	Remarks
-27	069	525-01	1501	B25C4	X			1										
-28	070		1504	6						*	*		*	*	*			
-29	071		1508	9														
-30	072		1509	12						*	*							
-31	073		1513	16														
-32	074		1518	20														
-33	075		1526	23						*	*							
-34	076		1541	27 1/2														
-35	077		1601	B25C4														
-36	078		1605	6						*	*		*	*	*			
-37	079		1611	10														
-38	080		1612	12						*	*							
-39	081		1615	16														
-40	082		1628	20														
-41	083		1646	23														

Relinquished by	Company	Date	Time	Received by	Company
[signature]	HAHN & ASSOC	5/25/01	1600	GUY TANZ	HAI
Guy TANZ	HAI	5/29/01	1125	[signature]	ESL

BRIX 001313

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Environmental Services Laboratory, Inc.

E S L

17400 SW Upper Boones Ferry Road, Suite 270 • Portland, OR 97224 • (503) 670-8520

June 07, 2001

Mr. Guy Tanz
Hahn and Associates
434 NW Sixth Avenue
Suite 203
Portland, OR 97209
TEL: (503)796-0717
FAX (503) 227-2209

RE: 5074/Brix Maritime Facility Order No.: 0105121

Dear Mr. Guy Tanz,

Environmental Services Laboratory received 41 samples on 5/29/01 for the analyses presented in the following report.

The Samples were analyzed for the following tests:

GAS/BTEX, Soil (8015/8021)
ICP Metals (EPA 6010B)
NWTPH-Dx Soil (EPA 8015)
PAH BY SIM, Soil (8270-SIM)
PERCENT MOISTURE (SM 2540)
Volatiles by GC/MS (EPA 8260B)

There were no analytical problems encountered, and all data met laboratory QC criteria, unless noted in a Case Narrative. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without the written approval of the Laboratory.
The following checked data sections are included in this report, and numbered to indicate total pages within each report section.

✓ Base Sample Report ✓ Method Blank Report ✓ Sample Duplicate Report
✓ Matrix Spike/Matrix Spike Duplicate Report ✓ Laboratory Control Spike/Spike Duplicate Report ✓ Continuing Calibration Verification Report ✓ Initial Calibration Verification Report

If you have any questions regarding these test results, please feel free to call.

Sincerely,

June 07, 2001

Mr. Guy Tanz
Hahn and Associates
434 NW Sixth Avenue
Suite 203
Portland, OR 97209
TEL: (503)796-0717
FAX (503) 227-2209

RE: 5074/Brix Maritime Facility

Order No.: 0105121

Dear Mr. Guy Tanz,
Nichole Karl
Project Manager

Nichole Karl

Technical Review

Keith Hunter

BRIX 001315

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-048
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-06A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: **smc**
Diesel	ND	26.0		mg/Kg-dry	1	5/30/01
Oil	ND	64.9		mg/Kg-dry	1	5/30/01
Surr: O-Terphenyl	93.0	50-150		%REC	1	5/30/01
GAS/BTEX, SOIL		**8015/8021**				Analyst: **jlw**
Gasoline	ND	649		µg/Kg-dry	1	5/30/01
Surr: Trifluorotoluene	84.8	50-150		%REC	1	5/30/01
PERCENT MOISTURE		**SM 2540**				Analyst: **etw**
% Moisture	23	0		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-049
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-07A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: smc
Diesel	ND	30.3		mg/Kg-dry	1	5/30/01
Oil	ND	75.8		mg/Kg-dry	1	5/30/01
Surr: O-Terphenyl	91.0	50-150		%REC	1	5/30/01
GAS/BTEX, SOIL		**8015/8021**				Analyst: jlw
Gasoline	ND	758		µg/Kg-dry	1	5/30/01
Surr: Trifluorotoluene	84.6	50-150		%REC	1	5/30/01
PERCENT MOISTURE		**SM 2540**				Analyst: etw
% Moisture	34	0		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

APPENDIX B

LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION: MAY 2001 SOIL SAMPLES

Confidential Business Information

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-049
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-07B	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS		**EPA 6010B**				Analyst: lmc
Lead	3.28	1.00		mg/Kg	1	6/1/01
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: tmh
1,2,4-Trimethylbenzene	ND	5.00		µg/Kg	1	5/30/01
1,2-Dibromoethane	ND	5.00		µg/Kg	1	5/30/01
1,2-Dichloroethane	ND	5.00		µg/Kg	1	5/30/01
1,3,5-Trimethylbenzene	ND	5.00		µg/Kg	1	5/30/01
Benzene	ND	5.00		µg/Kg	1	5/30/01
Ethylbenzene	ND	5.00		µg/Kg	1	5/30/01
Isopropylbenzene	ND	5.00		µg/Kg	1	5/30/01
m,p-Xylene	ND	10.0		µg/Kg	1	5/30/01
Methyl tert-butyl ether	ND	10.0		µg/Kg	1	5/30/01
n-Propylbenzene	ND	5.00		µg/Kg	1	5/30/01
Naphthalene	ND	25.0		µg/Kg	1	5/30/01
o-Xylene	ND	5.00		µg/Kg	1	5/30/01
Toluene	ND	5.00		µg/Kg	1	5/30/01
Surr: 4-Bromofluorobenzene	103.4	74-121		%REC	1	5/30/01
Surr: Dibromofluoromethane	99.8	80-120		%REC	1	5/30/01
Surr: Toluene-d8	104.0	81-117		%REC	1	5/30/01
PAH BY SIM, SOIL		**8270-SIM**				Analyst: ams
Acenaphthene	ND	50.0		µg/Kg	1	6/1/01
Acenaphthylene	ND	50.0		µg/Kg	1	6/1/01
Anthracene	ND	50.0		µg/Kg	1	6/1/01
Benz(a)anthracene	ND	50.0		µg/Kg	1	6/1/01
Benzo(a)pyrene	ND	50.0		µg/Kg	1	6/1/01
Benzo(b)fluoranthene	ND	50.0		µg/Kg	1	6/1/01
Benzo(g,h,i)perylene	ND	50.0		µg/Kg	1	6/1/01
Benzo(k)fluoranthene	ND	50.0		µg/Kg	1	6/1/01
Chrysene	ND	50.0		µg/Kg	1	6/1/01
Dibenz(a,h)anthracene	ND	50.0		µg/Kg	1	6/1/01
Fluoranthene	ND	50.0		µg/Kg	1	6/1/01
Fluorene	ND	50.0		µg/Kg	1	6/1/01
Indeno(1,2,3-cd)pyrene	ND	50.0		µg/Kg	1	6/1/01
Naphthalene	ND	50.0		µg/Kg	1	6/1/01
Phenanthrene	ND	50.0		µg/Kg	1	6/1/01
Pyrene	ND	50.0		µg/Kg	1	6/1/01
Surr: 2-Fluorobiphenyl	81.0	30-115		%REC	1	6/1/01
Surr: 4-Terphenyl-d14	93.0	18-137		%REC	1	6/1/01
Surr: Nitrobenzene-d5	77.0	23-120		%REC	1	6/1/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-053
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-11A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		EPA 8015				Analyst: smc
Diesel	460	22.7	AC	mg/Kg-dry	1	5/30/01
Oil	1,360	56.8	AF	mg/Kg-dry	1	5/30/01
Surr: O-Terphenyl	00.0	50-150	MI	%REC	1	5/30/01
GAS/BTEX, SOIL		8015/8021				Analyst: jlw
Gasoline	ND	568		µg/Kg-dry	1	5/30/01
Surr: Trifluorotoluene	83.5	50-150		%REC	1	5/30/01
PERCENT MOISTURE		SM 2540				Analyst: etw
% Moisture	12	0		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-059
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-17A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: **smc**
Diesel	ND	21.7		mg/Kg-dry	1	5/30/01
Oil	ND	54.3		mg/Kg-dry	1	5/30/01
Surr: O-Terphenyl	98.0	50-150		%REC	1	5/30/01
GAS/BTEX, SOIL		**8015/8021**				Analyst: **jlw**
Gasoline	ND	543		µg/Kg-dry	1	5/30/01
Surr: Trifluorotoluene	81.6	50-150		%REC	1	5/30/01
PERCENT MOISTURE		**SM 2540**				Analyst: **etw**
% Moisture	8.0	0		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-061
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-19A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: **smc**
Diesel	ND	27.8		mg/Kg-dry	1	5/30/01
Oil	ND	69.4		mg/Kg-dry	1	5/30/01
Surr: O-Terphenyl	89.0	50-150		%REC	1	5/30/01
GAS/BTEX, SOIL		**8015/8021**				Analyst: **jlw**
Gasoline	ND	694		µg/Kg-dry	1	5/30/01
Surr: Trifluorotoluene	80.5	50-150		%REC	1	5/30/01
PERCENT MOISTURE		**SM 2540**				Analyst: **etw**
% Moisture	28	0		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-065
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-23A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		EPA 8015				Analyst: smc
Diesel	ND	21.7		mg/Kg-dry	1	5/30/01
Oil	ND	54.3		mg/Kg-dry	1	5/30/01
Surr: O-Terphenyl	89.0	50-150		%REC	1	5/30/01
GAS/BTEX, SOIL		8015/8021				Analyst: jlw
Gasoline	ND	543		µg/Kg-dry	1	5/30/01
Surr: Trifluorotoluene	86.5	50-150		%REC	1	5/30/01
PERCENT MOISTURE		SM 2540				Analyst: etw
% Moisture	8.0	0		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-067
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-25A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: **smc**
Diesel	ND	24.7		mg/Kg-dry	1	6/4/01
Oil	ND	61.7		mg/Kg-dry	1	6/4/01
Surr: O-Terphenyl	102.0	50-150		%REC	1	6/4/01
GAS/BTEX, SOIL		**8015/8021**				Analyst: **jlw**
Gasoline	ND	617		µg/Kg-dry	1	5/31/01
Surr: Trifluorotoluene	84.2	50-150		%REC	1	5/31/01
PERCENT MOISTURE		**SM 2540**				Analyst: **etw**
% Moisture	19	0		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-070
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-28A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: **smc**
Diesel	560	256	AC	mg/Kg-dry	10	5/30/01
Oil	8,330	641	AF	mg/Kg-dry	10	5/30/01
Surr: O-Terphenyl	00.0	50-150	X	%REC	10	5/30/01
GAS/BTEX, SOIL		**8015/8021**				Analyst: **jlw**
Gasoline	829	641		µg/Kg-dry	1	5/30/01
Surr: Trifluorotoluene	76.8	50-150		%REC	1	5/30/01
PERCENT MOISTURE		**SM 2540**				Analyst: **etw**
% Moisture	22	0		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	Client Sample ID:	5074-010525-070
Lab Order:	0105121	Tag Number:	
Project:	5074/Brix Maritime Facility	Collection Date:	5/25/01
Lab ID:	0105121-28B	Matrix:	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS		**EPA 6010B**				Analyst: lmc
Lead	3.03	1.00		mg/Kg	1	6/1/01
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: tmh
1,2,4-Trimethylbenzene	ND	5.00		µg/Kg	1	5/30/01
1,2-Dibromoethane	ND	5.00		µg/Kg	1	5/30/01
1,2-Dichloroethane	ND	5.00		µg/Kg	1	5/30/01
1,3,5-Trimethylbenzene	ND	5.00		µg/Kg	1	5/30/01
Benzene	ND	5.00		µg/Kg	1	5/30/01
Ethylbenzene	ND	5.00		µg/Kg	1	5/30/01
Isopropylbenzene	ND	5.00		µg/Kg	1	5/30/01
m,p-Xylene	ND	10.0		µg/Kg	1	5/30/01
Methyl tert-butyl ether	ND	10.0		µg/Kg	1	5/30/01
n-Propylbenzene	ND	5.00		µg/Kg	1	5/30/01
Naphthalene	ND	25.0		µg/Kg	1	5/30/01
o-Xylene	ND	5.00		µg/Kg	1	5/30/01
Toluene	ND	5.00		µg/Kg	1	5/30/01
Surr: 4-Bromofluorobenzene	130.0	74-121	MI	%REC	1	5/30/01
Surr: Dibromofluoromethane	105.2	80-120		%REC	1	5/30/01
Surr: Toluene-d8	103.4	81-117		%REC	1	5/30/01
PAH BY SIM, SOIL		**8270-SIM**				Analyst: ams
Acenaphthene	ND	50.0		µg/Kg	1	6/1/01
Acenaphthylene	ND	50.0		µg/Kg	1	6/1/01
Anthracene	ND	50.0		µg/Kg	1	6/1/01
Benz(a)anthracene	ND	50.0		µg/Kg	1	6/1/01
Benzo(a)pyrene	ND	50.0		µg/Kg	1	6/1/01
Benzo(b)fluoranthene	ND	50.0		µg/Kg	1	6/1/01
Benzo(g,h,i)perylene	ND	50.0		µg/Kg	1	6/1/01
Benzo(k)fluoranthene	ND	50.0		µg/Kg	1	6/1/01
Chrysene	ND	50.0		µg/Kg	1	6/1/01
Dibenz(a,h)anthracene	ND	50.0		µg/Kg	1	6/1/01
Fluoranthene	ND	50.0		µg/Kg	1	6/1/01
Fluorene	ND	50.0		µg/Kg	1	6/1/01
Indeno(1,2,3-cd)pyrene	ND	50.0		µg/Kg	1	6/1/01
Naphthalene	ND	50.0		µg/Kg	1	6/1/01
Phenanthrene	ND	50.0		µg/Kg	1	6/1/01
Pyrene	ND	50.0		µg/Kg	1	6/1/01
Surr: 2-Fluorobiphenyl	85.0	30-115		%REC	1	6/1/01
Surr: 4-Terphenyl-d14	100.0	18-137		%REC	1	6/1/01
Surr: Nitrobenzene-d5	86.0	23-120		%REC	1	6/1/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-072
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-30A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: smc
Diesel	2,340	465	AC	mg/Kg-dry	20	5/30/01
Oil	22,200	1,160	AF	mg/Kg-dry	20	5/30/01
Surr: O-Terphenyl	00.0	50-150	X	%REC	20	5/30/01
GAS/BTEX, SOIL		**8015/8021**				Analyst: jlw
Gasoline	4,240	581		µg/Kg-dry	1	5/30/01
Surr: Trifluorotoluene	103.2	50-150		%REC	1	5/30/01
PERCENT MOISTURE		**SM 2540**				Analyst: etw
% Moisture	14	0		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-075
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-33A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		EPA 8015				Analyst: smc
Diesel	2,070	435	AC	mg/Kg-dry	20	5/30/01
Oil	19,900	1,090	AF	mg/Kg-dry	20	5/30/01
Surr: O-Terphenyl	00.0	50-150	X	%REC	20	5/30/01
GAS/BTEX, SOIL		8015/8021				Analyst: jlw
Gasoline	4,610	543		µg/Kg-dry	1	5/30/01
Surr: Trifluorotoluene	123.6	50-150		%REC	1	5/30/01
PERCENT MOISTURE		SM 2540				Analyst: etw
% Moisture	8.0	0		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-078
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-36A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: **smc**
Diesel	ND	28.2		mg/Kg-dry	1	5/30/01
Oil	ND	70.4		mg/Kg-dry	1	5/30/01
Surr: O-Terphenyl	82.0	50-150		%REC	1	5/30/01
GAS/BTEX, SOIL		**8015/8021**				Analyst: **jlw**
Gasoline	ND	704		µg/Kg-dry	1	5/30/01
Surr: Trifluorotoluene	81.4	50-150		%REC	1	5/30/01
PERCENT MOISTURE		**SM 2540**				Analyst: **etw**
% Moisture	29	0		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-078
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-36B	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS		**EPA 6010B**				Analyst: lmc
Lead	3.75	1.00		mg/Kg	1	6/1/01
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: tmh
1,2,4-Trimethylbenzene	ND	5.00		µg/Kg	1	5/30/01
1,2-Dibromoethane	ND	5.00		µg/Kg	1	5/30/01
1,2-Dichloroethane	ND	5.00		µg/Kg	1	5/30/01
1,3,5-Trimethylbenzene	ND	5.00		µg/Kg	1	5/30/01
Benzene	ND	5.00		µg/Kg	1	5/30/01
Ethylbenzene	ND	5.00		µg/Kg	1	5/30/01
Isopropylbenzene	13.2	5.00		µg/Kg	1	5/30/01
m,p-Xylene	ND	10.0		µg/Kg	1	5/30/01
Methyl tert-butyl ether	ND	10.0		µg/Kg	1	5/30/01
n-Propylbenzene	20.5	5.00		µg/Kg	1	5/30/01
Naphthalene	ND	25.0		µg/Kg	1	5/30/01
o-Xylene	ND	5.00		µg/Kg	1	5/30/01
Toluene	ND	5.00		µg/Kg	1	5/30/01
Surr: 4-Bromofluorobenzene	110.3	74-121		%REC	1	5/30/01
Surr: Dibromofluoromethane	98.6	80-120		%REC	1	5/30/01
Surr: Toluene-d8	106.1	81-117		%REC	1	5/30/01
PAH BY SIM, SOIL		**8270-SIM**				Analyst: ams
Acenaphthene	ND	50.0		µg/Kg	1	6/1/01
Acenaphthylene	ND	50.0		µg/Kg	1	6/1/01
Anthracene	ND	50.0		µg/Kg	1	6/1/01
Benz(a)anthracene	ND	50.0		µg/Kg	1	6/1/01
Benzo(a)pyrene	ND	50.0		µg/Kg	1	6/1/01
Benzo(b)fluoranthene	ND	50.0		µg/Kg	1	6/1/01
Benzo(g,h,i)perylene	ND	50.0		µg/Kg	1	6/1/01
Benzo(k)fluoranthene	ND	50.0		µg/Kg	1	6/1/01
Chrysene	ND	50.0		µg/Kg	1	6/1/01
Dibenz(a,h)anthracene	ND	50.0		µg/Kg	1	6/1/01
Fluoranthene	ND	50.0		µg/Kg	1	6/1/01
Fluorene	ND	50.0		µg/Kg	1	6/1/01
Indeno(1,2,3-cd)pyrene	ND	50.0		µg/Kg	1	6/1/01
Naphthalene	ND	50.0		µg/Kg	1	6/1/01
Phenanthrene	ND	50.0		µg/Kg	1	6/1/01
Pyrene	ND	50.0		µg/Kg	1	6/1/01
Surr: 2-Fluorobiphenyl	84.0	30-115		%REC	1	6/1/01
Surr: 4-Terphenyl-d14	94.0	18-137		%REC	1	6/1/01
Surr: Nitrobenzene-d5	83.0	23-120		%REC	1	6/1/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Confidential Business Information

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-080
Lab Order:	0105121	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/25/01
Lab ID:	0105121-38A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: **smc**
Diesel	ND	23.8		mg/Kg-dry	1	5/30/01
Oil	ND	59.5		mg/Kg-dry	1	5/30/01
Surr: O-Terphenyl	95.0	50-150		%REC	1	5/30/01
GAS/BTEX, SOIL		**8015/8021**				Analyst: **jlw**
Gasoline	ND	595		µg/Kg-dry	1	5/30/01
Surr: Trifluorotoluene	84.3	50-150		%REC	1	5/30/01
PERCENT MOISTURE		**SM 2540**				Analyst: **etw**
% Moisture	16	0		wt%	1	5/30/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Method Blank

Sample ID: MBlank Batch ID: 04 BG S-6/1/0 Test Code: 8015/8021 Units: µg/L Analysis Date 5/30/01 Prep Date:

Client ID: 0105121 Run ID: CRICK_010530A SeqNo: 78072

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	500									
Trifluorotoluene	86.6	0	100	0	86.6%	50	150	0			

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

BRIX 001331

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Method Blank

Sample ID: MBlank | Batch ID: 05 8260 S-6/1 | Test Code: EPA 8260B | Units: µg/L | Analysis Date 5/30/01 | Prep Date:
Client ID: | 0105121 | Run ID: HORATIO_010530A | SeqNo: 78091

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1									
1,1,1-Trichloroethane	ND	1									
1,1,2,2-Tetrachloroethane	ND	1									
1,1,2-Trichloroethane	ND	1									
1,1-Dichloroethane	ND	1.5									
1,1-Dichloroethene	ND	1									
1,1-Dichloropropene	ND	1									
1,2,3-Trichlorobenzene	ND	1.8									
1,2,3-Trichloropropane	ND	1									
1,2,4-Trichlorobenzene	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,2-Dibromo-3-chloropropane	ND	2									
1,2-Dibromoethane	ND	1									
1,2-Dichlorobenzene	ND	1									
1,2-Dichloroethane	ND	1									
1,2-Dichloropropane	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,3-Dichlorobenzene	ND	1									
1,3-Dichloropropane	ND	1									
1,4-Dichlorobenzene	ND	1									
2,2-Dichloropropane	ND	1.9									
2-Butanone	ND	20									
2-Chloroethyl vinyl ether	ND	5									
2-Chlorotoluene	ND	1									
2-Hexanone	ND	20									
4-Chlorotoluene	ND	1									
4-Isopropyltoluene	ND	1									
4-Methyl-2-pentanone	ND	1									
Acetone	ND	20									

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Method Blank

Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	5
Carbon disulfide	ND	1
Carbon tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	5
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2-Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	2
Iodomethane	ND	1
Isopropylbenzene	ND	1
m,p-Xylene	ND	2
Methyl tert-butyl ether	ND	2
Methylene chloride	ND	10
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Naphthalene	ND	2
o-Xylene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Toluene	ND	1

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001333

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Method Blank

trans-1,2 Dichloroethene	ND	1									
trans-1,3-Dichloropropene	ND	1									
Trichloroethene	ND	1									
Trichlorofluoromethane	ND	2									
Vinyl acetate	ND	1									
Vinyl chloride	ND	1.2									
4-Bromofluorobenzene	49	0	50	0	98.0%	86	115	0			
Dibromofluoromethane	49.1	0	50	0	98.2%	86	118	0			
Toluene-d8	51.7	0	50	0	103.4%	88	110	0			

Sample ID: **MB-2761** Batch ID: **2761** Test Code: **EPA 8015** Units: **mg/Kg** Analysis Date **5/30/01** Prep Date: **5/30/01**
Client ID: **0105121** Run ID: **BUTTERCUP_010530B** SeqNo: **77978**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	20									
Oil	ND	50									
O-Terphenyl	44	0	50	0	88.0%	50	150	0			

Sample ID: **MB-2766** Batch ID: **2766** Test Code: **EPA 6010B** Units: **mg/Kg** Analysis Date **6/1/01** Prep Date: **5/31/01**
Client ID: **0105121** Run ID: **ICP_010601A** SeqNo: **78106**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	ND	1									
Chromium	ND	1									
Lead	ND	1									

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001334

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Method Blank

Sample ID: MB-2769 | Batch ID: 2769 | Test Code: 8270-SIM | Units: µg/Kg | Analysis Date 6/1/01 | Prep Date: 5/31/01
Client ID: 0105121 | Run ID: HEISENBURG_010601A | SeqNo: 78171

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	50									
Acenaphthylene	ND	50									
Anthracene	ND	50									
Benz(a)anthracene	ND	50									
Benzo(a)pyrene	ND	50									
Benzo(b)fluoranthene	ND	50									
Benzo(g,h,i)perylene	ND	50									
Benzo(k)fluoranthene	ND	50									
Chrysene	ND	50									
Dibenz(a,h)anthracene	ND	50									
Fluoranthene	ND	50									
Fluorene	ND	50									
Indeno(1,2,3-cd)pyrene	ND	50									
Naphthalene	ND	50									
Phenanthrene	ND	50									
Pyrene	ND	50									
2-Fluorobiphenyl	455	0	500	0	91.0%	30	115	0			
4-Terphenyl-d14	515	0	500	0	103.0%	18	137	0			
Nitrobenzene-d5	360	0	500	0	72.0%	23	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Confidential Business Information

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Duplicate

Sample ID: **0105121-11A DUP** Batch ID: **04 BG S-6/1/0** Test Code: **8015/8021** Units: **µg/Kg-dry** Analysis Date **5/30/01** Prep Date:

Client ID: **5074-010525-053** **0105121** Run ID: **CRICK_010530A** SeqNo: **78077**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	568	0	0	0.0%	0	0	0	0.0%	20	
Trifluorotoluene	87.4	0	114	0	76.9%	50	150	0	0.0%	20	

Sample ID: **0105121-33A DUP** Batch ID: **04 BG S-6/1/0** Test Code: **8015/8021** Units: **µg/Kg-dry** Analysis Date **5/30/01** Prep Date:

Client ID: **5074-010525-075** **0105121** Run ID: **CRICK_010530A** SeqNo: **78086**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	3410	543	0	0	0.0%	0	0	4610	29.9%	20	Q
Trifluorotoluene	431	0	540	0	79.8%	50	150	0	0.0%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001336

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Sample Duplicate

Sample ID: 0105121-07B DUP Batch ID: 05 8260 S-6/1 Test Code: EPA 8260B Units: µg/Kg Analysis Date 5/30/01 Prep Date:
Client ID: 5074-010525-049 0105121 Run ID: HORATIO_010530A SeqNo: 78095

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
1,2-Dibromoethane	ND	5	0	0	0.0%	0	0	0	0.0%	20	
1,2-Dichloroethane	ND	5	0	0	0.0%	0	0	0	0.0%	20	
1,3,5-Trimethylbenzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
Benzene	ND	5	0	0	0 0%	0	0	0	0.0%	20	
Ethylbenzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
m,p-Xylene	ND	10	0	0	0.0%	0	0	0	0.0%	20	
Methyl tert-butyl ether	ND	10	0	0	0.0%	0	0	0	0.0%	20	
n-Propylbenzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
Naphthalene	ND	25	0	0	0.0%	0	0	0	0.0%	20	
o-Xylene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
Toluene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
4-Bromofluorobenzene	53.3	0	50	0	106.6%	74	121	0	0.0%	0	
Dibromofluoromethane	48.5	0	50	0	97.0%	80	120	0	0.0%	0	
Toluene-d8	52	0	50	0	104.0%	81	117	0	0.0%	0	

Sample ID: 0105121-07A DUP Batch ID: 2761 Test Code: EPA 8015 Units: mg/Kg-dry Analysis Date 5/30/01 Prep Date: 5/30/01
Client ID: 5074-010525-049 0105121 Run ID: BUTTERCUP_010530B SeqNo: 77982

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	30.3	0	0	0.0%	0	0	0	0.0%	20	
Oil	ND	75.8	0	0	0.0%	0	0	0	0.0%	20	
O-Terphenyl	68.18	0	75.8	0	90.0%	50	150	0	0.0%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

BRIX 001337

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Sample Duplicate

Sample ID: 0105121-23A DUP Batch ID: 2761 Test Code: EPA 8015 Units: mg/Kg-dry Analysis Date 5/30/01 Prep Date: 5/30/01
Client ID: 5074-010525-065 0105121 Run ID: BUTTERCUP_010530B SeqNo: 77987

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	21.7	0	0	0.0%	0	0	0	0.0%	20	
Oil	ND	54.3	0	0	0.0%	0	0	0	0.0%	20	
O-Terphenyl	53.8	0	54.3	0	99.0%	50	150	0	0.0%	20	

Sample ID: 0105118-08A DUP Batch ID: 2766 Test Code: EPA 6010B Units: mg/Kg Analysis Date 6/1/01 Prep Date: 5/31/01
Client ID: 0105121 Run ID: ICP_010601A SeqNo: 78112

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	ND	1	0	0	0.0%	0	0	0	0.0%	20	
Chromium	15.1	1	0	0	0.0%	0	0	16.5	8.9%	20	
Lead	5.46	1	0	0	0.0%	0	0	5.89	7.6%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Sample Duplicate

Sample ID: 0105121-07B DUP Batch ID: 2769 Test Code: 8270-SIM Units: µg/Kg Analysis Date 6/1/01 Prep Date: 5/31/01
Client ID: 5074-010525-049 0105121 Run ID: HEISENBURG_010601A SeqNo: 78175

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Acenaphthylene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Anthracene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Benz(a)anthracene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Benzo(a)pyrene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Benzo(b)fluoranthene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Benzo(g,h,i)perylene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Benzo(k)fluoranthene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Chrysene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Dibenz(a,h)anthracene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Fluoranthene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Fluorene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Indeno(1,2,3-cd)pyrene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Naphthalene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Phenanthrene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Pyrene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
2-Fluorobiphenyl	385	0	500	0	77.0%	30	115	0	0.0%	30	
4-Terphenyl-d14	465	0	500	0	93.0%	18	137	0	0.0%	30	
Nitrobenzene-d5	410	0	500	0	82.0%	23	120	0	0.0%	30	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001339

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0105121-25A MS** Batch ID: **04 BG S-6/1/0** Test Code: **8015/8021** Units: **µg/Kg-dry** Analysis Date **5/30/01** Prep Date:
Client ID: **5074-010525-067** **0105121** Run ID: **CRICK_010530A** SeqNo: **78082**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	3600	617	3700	0	97.3%	80	120	0			
Trifluorotoluene	556	0	617	0	90.0%	50	150	0			

Sample ID: **0105121-36B MS** Batch ID: **05 8260 S-6/1** Test Code: **EPA 8260B** Units: **µg/Kg** Analysis Date **5/30/01** Prep Date:
Client ID: **5074-010525-078** **0105121** Run ID: **HORATIO_010530A** SeqNo: **78098**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	238.5	5	250	0	95.4%	0	234	0			
Benzene	233.5	5	250	0	93.4%	37	151	0			
Chlorobenzene	266	5	250	0	106.4%	37	160	0			
Toluene	247	5	250	0	98.8%	47	150	0			
Trichloroethene	246	5	250	0	98.4%	71	157	0			
4-Bromofluorobenzene	276	0	250	0	110.4%	74	121	0			
Dibromofluoromethane	248	0	250	0	99.2%	80	120	0			
Toluene-d8	271	0	250	0	108.4%	81	117	0			

Sample ID: **0105121-06A MS** Batch ID: **2761** Test Code: **EPA 8015** Units: **mg/Kg-dry** Analysis Date **5/30/01** Prep Date: **5/30/01**
Client ID: **5074-010525-048** **0105121** Run ID: **BUTTERCUP_010530B** SeqNo: **78059**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	53.9	26	64.9	0	83.0%	70	130	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0105118-02B MS Batch ID: 2766 Test Code: EPA 6010B Units: mg/Kg Analysis Date 6/1/01 Prep Date: 5/31/01
Client ID: 0105121 Run ID: ICP_010601A SeqNo: 78109

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	41.9	1	50	0	83.8%	75	125	0			
Chromium	58.6	1	50	10.3	96.6%	75	125	0			
Lead	47.7	1	50	4.4	86.6%	75	125	0			

Sample ID: 0105118-02B MSD Batch ID: 2766 Test Code: EPA 6010B Units: mg/Kg Analysis Date 6/1/01 Prep Date: 5/31/01
Client ID: 0105121 Run ID: ICP_010601A SeqNo: 78110

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	42	1	50	0	84.0%	75	125	41.9	0.2%	20	
Chromium	60.2	1	50	10.3	99.8%	75	125	58.6	2.7%	20	
Lead	48.4	1	50	4.4	88.0%	75	125	47.7	1.5%	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID. **0105121-28B MS** Batch ID: **2769** Test Code: **8270-SIM** Units: **µg/Kg** Analysis Date **6/1/01** Prep Date: **5/31/01**

Client ID: **5074-010525-070** **0105121** Run ID: **HEISENBURG_010601A** SeqNo: **78177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	475	50	500	0	95.0%	47	145	0			
Acenaphthylene	470	50	500	0	94.0%	33	145	0			
Anthracene	445	50	500	0	89.0%	27	133	0			
Benz(a)anthracene	490	50	500	0	98.0%	33	143	0			
Benzo(a)pyrene	490	50	500	0	98.0%	17	163	0			
Benzo(b)fluoranthene	370	50	500	0	74.0%	24	159	0			
Benzo(g,h,i)perylene	375	50	500	0	75.0%	1	219	0			
Benzo(k)fluoranthene	570	50	500	0	114.0%	11	162	0			
Chrysene	480	50	500	0	96.0%	17	168	0			
Dibenz(a,h)anthracene	410	50	500	0	82.0%	1	227	0			
Fluoranthene	465	50	500	0	93.0%	26	137	0			
Fluorene	470	50	500	0	94.0%	59	121	0			
Indeno(1,2,3-cd)pyrene	445	50	500	0	89.0%	1	171	0			
Naphthalene	480	50	500	0	96.0%	21	133	0			
Phenanthrene	485	50	500	0	97.0%	54	120	0			
Pyrene	635	50	500	0	127.0%	52	115	0			S
2-Fluorobiphenyl	420	0	500	0	84.0%	30	115	0			
4-Terphenyl-d14	545	0	500	0	109.0%	18	137	0			
Nitrobenzene-d5	400	0	500	0	80.0%	23	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

BRIX 001342

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS | Batch ID: 04 BG S-6/1/0 | Test Code: 8015/8021 | Units: µg/Kg | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105121 | Run ID: CRICK_010530A | SeqNo: 78089

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	796	500	800	0	99.5%	80	120	0			
Trifluorotoluene	82.7	0	100	0	82.7%	50	150	0			

Sample ID: LCS | Batch ID: 05 8260 S-6/1 | Test Code: EPA 8260B | Units: µg/Kg | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105121 | Run ID: HORATIO_010530A | SeqNo: 78092

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	225	5	250	0	90.0%	0	234	0			
Benzene	228	5	250	0	91.2%	37	151	0			
Chlorobenzene	236	5	250	0	94.4%	37	160	0			
Toluene	239	5	250	0	95.6%	47	150	0			
Trichloroethene	233	5	250	0	93.2%	71	157	0			
4-Bromofluorobenzene	261.5	0	250	0	104.6%	74	121	0			
Dibromofluoromethane	234.5	0	250	0	93.8%	80	120	0			
Toluene-d8	256.5	0	250	0	102.6%	81	117	0			

Sample ID: LCS-2761 | Batch ID: 2761 | Test Code: EPA 8015 | Units: mg/Kg | Analysis Date 5/30/01 | Prep Date: 5/30/01
Client ID: 0105121 | Run ID: BUTTERCUP_010530B | SeqNo: 77979

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	42.6	20	50	0	85.2%	70	130	0			

Sample ID: LCSD-2761 | Batch ID: 2761 | Test Code: EPA 8015 | Units: mg/Kg | Analysis Date 5/30/01 | Prep Date: 5/30/01
Client ID: 0105121 | Run ID: BUTTERCUP_010530B | SeqNo: 77980

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	41.65	20	50	0	83.3%	70	130	42.6	2.3%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

BRIX 001343

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS-2766 | Batch ID: 2766 | Test Code: EPA 6010B | Units: mg/Kg | Analysis Date 6/1/01 | Prep Date: 5/31/01
Client ID: 0105121 | Run ID: ICP_010601A | SeqNo: 78107

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	47.5	1	50	0	95.0%	80	120	0			
Chromium	47.9	1	50	0	95.8%	80	120	0			
Lead	47.7	1	50	0	95.4%	80	120	0			

Sample ID: LCS-2769 | Batch ID: 2769 | Test Code: 8270-SIM | Units: µg/Kg | Analysis Date 6/1/01 | Prep Date: 5/31/01
Client ID: 0105121 | Run ID: HEISENBURG_010601A | SeqNo: 78172

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	430	50	500	0	86.0%	47	145	0			
Acenaphthylene	410	50	500	0	82.0%	33	145	0			
Anthracene	350	50	500	0	70.0%	27	133	0			
Benz(a)anthracene	400	50	500	0	80.0%	33	143	0			
Benzo(a)pyrene	255	50	500	0	51.0%	17	163	0			
Benzo(b)fluoranthene	420	50	500	0	84.0%	24	159	0			
Benzo(g,h,i)perylene	390	50	500	0	78.0%	1	219	0			
Benzo(k)fluoranthene	440	50	500	0	88.0%	11	162	0			
Chrysene	445	50	500	0	89.0%	17	168	0			
Dibenz(a,h)anthracene	465	50	500	0	93.0%	1	227	0			
Fluoranthene	405	50	500	0	81.0%	26	137	0			
Fluorene	420	50	500	0	84.0%	59	121	0			
Indeno(1,2,3-cd)pyrene	495	50	500	0	99.0%	1	171	0			
Naphthalene	470	50	500	0	94.0%	21	133	0			
Phenanthrene	410	50	500	0	82.0%	54	120	0			
Pyrene	480	50	500	0	96.0%	52	115	0			
2-Fluorobiphenyl	425	0	500	0	85.0%	30	115	0			
4-Terphenyl-d14	470	0	500	0	94.0%	18	137	0			
Nitrobenzene-d5	310	0	500	0	62.0%	23	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: LCSD-2769 Batch ID: 2769 Test Code: 8270-SIM Units: µg/Kg Analysis Date 6/1/01 Prep Date: 5/31/01
Client ID: 0105121 Run ID: HEISENBURG_010601A SeqNo: 78173

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	445	50	500	0	89.0%	47	145	430	3.4%	30	
Acenaphthylene	415	50	500	0	83.0%	33	145	410	1.2%	30	
Anthracene	375	50	500	0	75.0%	27	133	350	6.9%	30	
Benz(a)anthracene	390	50	500	0	78.0%	33	143	400	2.5%	30	
Benzo(a)pyrene	320	50	500	0	64.0%	17	163	255	22.6%	30	
Benzo(b)fluoranthene	410	50	500	0	82.0%	24	159	420	2.4%	30	
Benzo(g,h,i)perylene	420	50	500	0	84.0%	1	219	390	7.4%	30	
Benzo(k)fluoranthene	435	50	500	0	87.0%	11	162	440	1.1%	30	
Chrysene	430	50	500	0	86.0%	17	168	445	3.4%	30	
Dibenz(a,h)anthracene	445	50	500	0	89.0%	1	227	465	4.4%	30	
Fluoranthene	400	50	500	0	80.0%	26	137	405	1.2%	30	
Fluorene	405	50	500	0	81.0%	59	121	420	3.6%	30	
Indeno(1,2,3-cd)pyrene	475	50	500	0	95.0%	1	171	495	4.1%	30	
Naphthalene	540	50	500	0	108.0%	21	133	470	13.9%	30	
Phenanthrene	400	50	500	0	80.0%	54	120	410	2.5%	30	
Pyrene	500	50	500	0	100.0%	52	115	480	4.1%	30	
2-Fluorobiphenyl	425	0	500	0	85.0%	30	115	0	0.0%	30	
4-Terphenyl-d14	460	0	500	0	92.0%	18	137	0	0.0%	30	
Nitrobenzene-d5	420	0	500	0	84.0%	23	120	0	0.0%	30	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001345

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 04 BG S-6/1/0 | Test Code: 8015/8021 | Units: µg/L | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105121 | Run ID: CRICK_010530A | SeqNo: 78073

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	1030	500	1000	0	103.0%	80	120	0			
Trifluorotoluene	81.1	0	100	0	81.1%	50	150	0			

Sample ID: CCV | Batch ID: 05 8260 S-6/1 | Test Code: EPA 8260B | Units: µg/L | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105121 | Run ID: HORATIO_010530A | SeqNo: 78090

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	104	1	100	0	104.0%	80	120	0			
1,2-Dichloropropane	110	1	100	0	110.0%	80	120	0			
Chloroform	101	1	100	0	101.0%	80	120	0			
Ethylbenzene	113	1	100	0	113.0%	80	120	0			
Toluene	108	1	100	0	108.0%	80	120	0			
Vinyl chloride	113	1.2	100	0	113.0%	80	120	0			
4-Bromofluorobenzene	51.3	0	50	0	102.6%	86	115	0			
Dibromofluoromethane	49.2	0	50	0	98.4%	86	118	0			
Toluene-d8	50.8	0	50	0	101.6%	88	110	0			

Sample ID: CCV | Batch ID: 2761 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105121 | Run ID: BUTTERCUP_010530A | SeqNo: 77965

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	421	20	400	0	105.3%	85	115	0			
Oil	417	50	400	0	104.3%	85	115	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001346

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 2761 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105121 | Run ID: BUTTERCUP_010530A | SeqNo: 77966

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	375	20	400	0	93.8%	85	115	0			
Oil	361	50	400	0	90.3%	85	115	0			

Sample ID: CCV | Batch ID: 2761 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105121 | Run ID: BUTTERCUP_010530B | SeqNo: 77976

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	388	20	400	0	97.0%	85	115	0			
Oil	453	50	400	0	113.3%	85	115	0			

Sample ID: CCV | Batch ID: 2761 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105121 | Run ID: BUTTERCUP_010530B | SeqNo: 77977

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	441	20	400	0	110.3%	85	115	0			
Oil	443	50	400	0	110.8%	85	115	0			

Sample ID: CCV | Batch ID: 2761 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 5/30/01 | Prep Date:
Client ID. 0105121 | Run ID: BUTTERCUP_010530B | SeqNo: 78057

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	390	20	400	0	97.5%	85	115	0			
Oil	452	50	400	0	113.0%	85	115	0			

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

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BRIX 001347

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 2761 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 5/30/01 | Prep Date:
Client ID: 0105121 | Run ID: BUTTERCUP_010530A | SeqNo: 78068

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	434	20	400	0	108.5%	85	115	0			
Oil	442	50	400	0	110.5%	85	115	0			

Sample ID: CCV | Batch ID: 2761 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 6/4/01 | Prep Date:
Client ID: 0105121 | Run ID: BUTTERCUP_010604A | SeqNo: 78536

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	388	20	400	0	97.0%	85	115	0			
Oil	357	50	400	0	89.3%	85	115	0			

Sample ID: CCV | Batch ID: 2761 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 6/4/01 | Prep Date:
Client ID: 0105121 | Run ID: BUTTERCUP_010604A | SeqNo: 78537

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	401	20	400	0	100.3%	85	115	0			
Oil	439	50	400	0	109.8%	85	115	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 2769 | Test Code: 8270-SIM | Units: µg/L | Analysis Date 6/1/01 | Prep Date:

Client ID: 0105121 | Run ID: HEISENBURG_010601A | SeqNo: 78170

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.79	0.1	2	0	89.5%	80	120	0			
Acenaphthylene	1.72	0.1	2	0	86.0%	80	120	0			
Anthracene	1.72	0.1	2	0	86.0%	80	120	0			
Benz(a)anthracene	1.73	0.1	2	0	86.5%	80	120	0			
Benzo(a)pyrene	1.77	0.1	2	0	88.5%	80	120	0			
Benzo(b)fluoranthene	1.85	0.1	2	0	92.5%	80	120	0			
Benzo(g,h,i)perylene	1.8	0.1	2	0	90.0%	80	120	0			
Benzo(k)fluoranthene	1.82	0.1	2	0	91.0%	80	120	0			
Chrysene	1.78	0.1	2	0	89.0%	80	120	0			
Dibenz(a,h)anthracene	1.89	0.1	2	0	94.5%	80	120	0			
Fluoranthene	1.66	0.1	2	0	83.0%	80	120	0			
Fluorene	1.75	0.1	2	0	87.5%	80	120	0			
Indeno(1,2,3-cd)pyrene	2.02	0.1	2	0	101.0%	80	120	0			
Naphthalene	2.17	0.1	2	0	108.5%	80	120	0			
Phenanthrene	1.75	0.1	2	0	87.5%	80	120	0			
Pyrene	2.02	0.1	2	0	101.0%	80	120	0			
2-Fluorobiphenyl	1.78	0	2	0	89.0%	30	115	0			
4-Terphenyl-d14	2.07	0	2	0	103.5%	18	137	0			
Nitrobenzene-d5	1.77	0	2	0	88.5%	23	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

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Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105121
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Initial Calibration Verification Standard

Sample ID: ICVLOW | Batch ID: 2766 | Test Code: EPA 6010B | Units: mg/L | Analysis Date 6/1/01 | Prep Date: 5/31/01

Client ID: 0105121 | Run ID: ICP_010601A | SeqNo: 78104

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	.485	0.002	0.5	0	97.0%	90	110	0			
Chromium	.476	0.005	0.5	0	95.2%	90	110	0			
Lead	.491	0.005	0.5	0	98.2%	90	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

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HAHN AND ASSOCIATES, INC.
Environmental Management
434 NW Sixth Avenue, Suite 203 • Portland OR 97209
(503) 796-0717 • Fax (503) 227-2209

Laboratory ESL
Lab Project No. ~~0105121~~ 0106055

CHAIN OF CUSTODY

Chain of Custody No. 4

Project Manager	Guy Tanz
Project No.	5074
Project Name	Brix Maritime Facility
Collected by	Jay Greifer

Liquid with Sediment Sample: ____ Test Filtrate ____ Test Sediment ____ Test Both
Multi-Phase Sample: ____ Test One (which) ____ Test Separately ____ Shake

Samples Received at 4C (Y or N)
Appropriate Containers Used (Y or N)
Provide Verbal Results (Y or N)
Provide Preliminary Fax Results

Sample Number Prefix: 5074-010525 –

Lab ID	Sample #	Date	Time	Sample Description	Soil	Water	Other	Number of Containers	HCID by NW TPH Hydrocarbon Identification	NW TPH-G	NW TPH-Dx	BTEX and naphthalene by EPA Method 8021B	BTEX, EDB, EDC, MTBE, naphthalene, 1,2,4- and 1,3,5-trimethylbenzene, iso- and n-propylbenzene by EPA Method 8260B	Polynuclear Aromatic Hydrocarbons (PAHs) by EPA 8270 SIM	Total Lead by EPA Method 6010/2007	Dissolved Lead (PP) by EPA Method 6010/2007	RUSH	Remarks
-01	043	5-25-01	816	B24e 3	X			1										
-02	044		826	7														
-03	045		833	11														
-04	046		848	15														
-05	047		849	19														
-06	048		912	23 1/2					*	*								
-07	049		921	27					*	*			*	*	*			
-08	050		1132	B27e 3					X	X			X	X				
-09	051		1007	B26e 2														
-10	052		1010	4														
-11	053		1040	6					*	*								
-12	054		1106	9														
-13	055		1114	10														
-14	056		1136	12														
-15	057		1151	14														
-16	058		1207	16														
-17	059		1227	18					*	*								
-18	060		1248	20														
-19	061		1309	22					*	*								
-20	062		1328	24														
-21	063		1416	B29e 7														
-22	064		1421	12														
-23	065		1428	15					*	*								
-24	066		1433	19														
-25	067		1441	23					*	*								
-26	068		1445	27														

Relinquished by	Company	Date	Time	Received by	Company
[signature]	HAHN & ASSOC	5/25/01	1600	GUY TANZ	HAI
GUY TANZ	HAI	5/29/01	1125	[signature]	ESL

BRIX 001351

Confidential Business Information

Environmental Services Laboratory, Inc.

E S L

17400 SW Upper Boones Ferry Road, Suite 270 • Portland, OR 97224 • (503) 670-8520

June 20, 2001

Mr. Guy Tanz
Hahn and Associates
434 NW Sixth Avenue
Suite 203
Portland, OR 97209
TEL: (503)796-0717
FAX (503) 227-2209

RE: 5074/Brix Maritme Facility Order No.: 0106055

Dear Mr. Guy Tanz,

Environmental Services Laboratory received 1 sample on 6/12/01 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
GAS/BTEX, Soil (8015/8021)
NWTPH-Dx Soil (EPA 8015)
PAH BY SIM, Soil (8270-SIM)
PERCENT MOISTURE (SM 2540)
Volatiles by GC/MS (EPA 8260B)

There were no analytical problems encountered, and all data met laboratory QC criteria, unless noted in a Case Narrative. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without the written approval of the Laboratory.
The following checked data sections are included in this report, and numbered to indicate total pages within each report section.

__Base Sample Report __Method Blank Report __Sample Duplicate Report __Matrix Spike/Matrix Spike Duplicate Report __Laboratory Control Spike/Spike Duplicate Report __Continuing Calibration Verification Report __Initial Calibration Verification Report

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Nichole Karl

Nichole Karl

Keith Hunter

Technical Review

Environmental Services Laboratory

Date: *20-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-050
Lab Order:	0106055	**Tag Number:**	
Project:	5074/Brix Maritme Facility	**Collection Date:**	5/25/01
Lab ID:	0106055-01A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: smc
Diesel	468	225	AC	mg/Kg-dry	10	6/19/01
Oil	6,010	562	AF	mg/Kg-dry	10	6/19/01
Surr: O-Terphenyl	00.0	50-150	X	%REC	10	6/19/01
GAS/BTEX, SOIL		**8015/8021**				Analyst: tmh
Gasoline	ND	562		µg/Kg-dry	1	6/13/01
Surr: Trifluorotoluene	78.7	70-130		%REC	1	6/13/01
PERCENT MOISTURE		**SM 2540**				Analyst: etw
% Moisture	11.0	0		wt%	1	6/14/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *20-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010525-050
Lab Order:	0106055	**Tag Number:**	
Project:	5074/Brix Maritme Facility	**Collection Date:**	5/25/01
Lab ID:	0106055-01B	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		EPA 8260B				Analyst: tmh
1,2,4-Trimethylbenzene	ND	5.00		µg/Kg	1	6/13/01
1,3,5-Trimethylbenzene	ND	5.00		µg/Kg	1	6/13/01
Benzene	ND	5.00		µg/Kg	1	6/13/01
Ethylbenzene	ND	5.00		µg/Kg	1	6/13/01
Isopropylbenzene	ND	5.00		µg/Kg	1	6/13/01
m,p-Xylene	ND	10.0		µg/Kg	1	6/13/01
Methyl tert-butyl ether	ND	10.0		µg/Kg	1	6/13/01
n-Propylbenzene	ND	5.00		µg/Kg	1	6/13/01
Naphthalene	ND	25.0		µg/Kg	1	6/13/01
o-Xylene	ND	5.00		µg/Kg	1	6/13/01
Toluene	ND	5.00		µg/Kg	1	6/13/01
Surr: 4-Bromofluorobenzene	122.4	74-121	S	%REC	1	6/13/01
Surr: Dibromofluoromethane	101.2	80-120		%REC	1	6/13/01
Surr: Toluene-d8	103.0	81-117		%REC	1	6/13/01
PAH BY SIM, SOIL		8270-SIM				Analyst: ams
Acenaphthene	ND	50.0		µg/Kg	1	6/14/01
Acenaphthylene	ND	50.0		µg/Kg	1	6/14/01
Anthracene	ND	50.0		µg/Kg	1	6/14/01
Benz(a)anthracene	ND	50.0		µg/Kg	1	6/14/01
Benzo(a)pyrene	ND	50.0		µg/Kg	1	6/14/01
Benzo(b)fluoranthene	ND	50.0		µg/Kg	1	6/14/01
Benzo(g,h,i)perylene	ND	50.0		µg/Kg	1	6/14/01
Benzo(k)fluoranthene	ND	50.0		µg/Kg	1	6/14/01
Chrysene	ND	50.0		µg/Kg	1	6/14/01
Dibenz(a,h)anthracene	ND	50.0		µg/Kg	1	6/14/01
Fluoranthene	ND	50.0		µg/Kg	1	6/14/01
Fluorene	ND	50.0		µg/Kg	1	6/14/01
Indeno(1,2,3-cd)pyrene	ND	50.0		µg/Kg	1	6/14/01
Naphthalene	ND	50.0		µg/Kg	1	6/14/01
Phenanthrene	ND	50.0		µg/Kg	1	6/14/01
Pyrene	ND	50.0		µg/Kg	1	6/14/01
Surr: 2-Fluorobiphenyl	84.0	30-115		%REC	1	6/14/01
Surr: 4-Terphenyl-d14	86.0	18-137		%REC	1	6/14/01
Surr: Nitrobenzene-d5	74.0	23-120		%REC	1	6/14/01

Qualifiers:

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* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
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Environmental Services Laboratory

Date: *20-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT

Method Blank

Sample ID: **MBlank** Batch ID: **04 BG S-6/14/** Test Code: **8015/8021** Units: **µg/L** Analysis Date **6/13/01** Prep Date:

Client ID. **0106055** Run ID: **CRICK_010613A** SeqNo: **79124**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Ethylbenzene	ND	0.5									
Gasoline	ND	100									
Methyl tert-Butyl Ether	ND	5									
Naphthalene	ND	2									
Toluene	ND	0.5									
Xylenes, Total	ND	1.5									
Trifluorotoluene	118	0	100	0	118.0%	70	130	0			

Qualifiers: ND - Not Detected at the Reporting Limit
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R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001355

CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT
Method Blank

Sample ID: MBlank | Batch ID: 05 8260 S-6/1 | Test Code: EPA 8260B | Units: µg/L | Analysis Date 6/13/01 | Prep Date:
Client ID: | 0106055 | Run ID: HORATIO_010613A | SeqNo: 79081

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1									
1,1,1-Trichloroethane	ND	1									
1,1,2,2-Tetrachloroethane	ND	1									
1,1,2-Trichloroethane	ND	1									
1,1-Dichloroethane	ND	1.5									
1,1-Dichloroethene	ND	1									
1,1-Dichloropropene	ND	1									
1,2,3-Trichlorobenzene	ND	1.8									
1,2,3-Trichloropropane	ND	1									
1,2,4-Trichlorobenzene	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,2-Dibromo-3-chloropropane	ND	2									
1,2-Dibromoethane	ND	1									
1,2-Dichlorobenzene	ND	1									
1,2-Dichloroethane	ND	1									
1,2 Dichloropropane	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,3-Dichlorobenzene	ND	1									
1,3 Dichloropropane	ND	1									
1,4-Dichlorobenzene	ND	1									
2,2-Dichloropropane	ND	1.9									
2-Butanone	ND	20									
2-Chloroethyl vinyl ether	ND	5									
2-Chlorotoluene	ND	1									
2-Hexanone	ND	20									
4-Chlorotoluene	ND	1									
4-Isopropyltoluene	ND	1									
4-Methyl-2-pentanone	ND	1									
Acetone	ND	20									

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

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CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT

Method Blank

Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	5
Carbon disulfide	ND	1
Carbon tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	5
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2-Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	2
Iodomethane	ND	1
Isopropylbenzene	ND	1
m,p-Xylene	ND	2
Methyl tert-butyl ether	ND	2
Methylene chloride	ND	10
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Naphthalene	ND	2
o-Xylene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Toluene	ND	1

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

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BRIX 001357

CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT
Method Blank

trans-1,2-Dichloroethene	ND	1						
trans-1,3-Dichloropropene	ND	1						
Trichloroethene	ND	1						
Trichlorofluoromethane	ND	2						
Vinyl acetate	ND	1						
Vinyl chloride	ND	1.2						
4-Bromofluorobenzene	48.4	0	50	0	96.8%	86	115	0
Dibromofluoromethane	46.8	0	50	0	93.6%	86	118	0
Toluene-d8	50.4	0	50	0	100.8%	88	110	0

Sample ID: **MB-2805** Batch ID: **2805** Test Code: **EPA 8015** Units: **mg/Kg** Analysis Date **6/14/01** Prep Date: **6/13/01**
Client ID: **0106055** Run ID: **BUTTERCUP_010614C** SeqNo: **79543**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	20									
Oil	ND	50									
O-Terphenyl	48	0	50	0	96.0%	50	150	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001358

CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT
Method Blank

Sample ID: MB-2806 | Batch ID: 2806 | Test Code: 8270-SIM | Units: µg/Kg | Analysis Date 6/14/01 | Prep Date: 6/13/01
Client ID: 0106055 | Run ID: HEISENBURG_010614A | SeqNo: 79341

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	50									
Acenaphthylene	ND	50									
Anthracene	ND	50									
Benz(a)anthracene	ND	50									
Benzo(a)pyrene	ND	50									
Benzo(b)fluoranthene	ND	50									
Benzo(g,h,i)perylene	ND	50									
Benzo(k)fluoranthene	ND	50									
Chrysene	ND	50									
Dibenz(a,h)anthracene	ND	50									
Fluoranthene	ND	50									
Fluorene	ND	50									
Indeno(1,2,3-cd)pyrene	ND	50									
Naphthalene	ND	50									
Phenanthrene	ND	50									
Pyrene	ND	50									
2-Fluorobiphenyl	425	0	500	0	85.0%	30	115	0			
4-Terphenyl-d14	400	0	500	0	80.0%	18	137	0			
Nitrobenzene-d5	385	0	500	0	77.0%	23	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

Environmental Services Laboratory

Date: *20-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT

Sample Duplicate

Sample ID: 0106061-03B DUP Batch ID: 04 BG S-6/14/ Test Code: 8015/8021 Units: µg/Kg-dry Analysis Date 6/13/01 Prep Date:
Client ID: 0106055 Run ID: CRICK_010613A SeqNo: 79129

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	15.4	0	0	0.0%	0	0	0	0.0%	20	
Ethylbenzene	808.6	15.4	0	0	0.0%	0	0	1105	31.0%	20	Q
Gasoline	108000	3090	0	0	0.0%	0	0	129000	17.7%	20	
Naphthalene	475.3	61.7	0	0	0.0%	0	0	2090	125.9%	20	Q
Toluene	15.4	15.4	0	0	0.0%	0	0	37.04	82.5%	20	T
Xylenes, Total	1009	46.3	0	0	0.0%	0	0	1188	16.3%	20	
Trifluorotoluene	2657	0	3090	0	86.0%	50	150	0	0.0%	20	

Sample ID: 0106055-01B DUP Batch ID: 05 8260 S-6/1 Test Code: EPA 8260B Units: µg/Kg Analysis Date 6/13/01 Prep Date:
Client ID: 5074-010525-050 0106055 Run ID: HORATIO_010613A SeqNo: 79084

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
1,3,5-Trimethylbenzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
Benzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
Ethylbenzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
Isopropylbenzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
m,p-Xylene	ND	10	0	0	0.0%	0	0	0	0.0%	20	
Methyl tert-butyl ether	ND	10	0	0	0.0%	0	0	0	0.0%	20	
n-Propylbenzene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
Naphthalene	ND	25	0	0	0.0%	0	0	0	0.0%	20	
o-Xylene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
Toluene	ND	5	0	0	0.0%	0	0	0	0.0%	20	
4-Bromofluorobenzene	61.6	0	50	0	123.2%	74	121	0	0.0%	0	S
Dibromofluoromethane	48.4	0	50	0	96.8%	80	120	0	0.0%	0	
Toluene-d8	53.2	0	50	0	106.4%	81	117	0	0.0%	0	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

BRIX 001360

CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Sample Duplicate

Sample ID: 0106005-20A DUP Batch ID: 2805 Test Code: EPA 8015 Units: mg/Kg-dry Analysis Date 6/13/01 Prep Date: 6/13/01
Client ID: 0106055 Run ID: BUTTERCUP_010613A SeqNo: 79164

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	23	0	0	0.0%	0	0	0	0.0%	20	
Oil	ND	57.5	0	0	0.0%	0	0	0	0.0%	20	
O-Terphenyl	55.17	0	57.5	0	96.0%	50	150	0	0.0%	20	

Sample ID: 0106009-14B DUP Batch ID: 2806 Test Code: 8270-SIM Units: µg/Kg Analysis Date 6/14/01 Prep Date: 6/13/01
Client ID: 0106055 Run ID: HEISENBURG_010614A SeqNo: 79345

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Acenaphthylene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Anthracene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Benz(a)anthracene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Benzo(a)pyrene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Benzo(b)fluoranthene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Benzo(g,h,i)perylene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Benzo(k)fluoranthene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Chrysene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Dibenz(a,h)anthracene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Fluoranthene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Fluorene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Indeno(1,2,3-cd)pyrene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Naphthalene	18200	50	0	0	0.0%	0	0	13000	33.3%	30	Q
Phenanthrene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
Pyrene	ND	50	0	0	0.0%	0	0	0	0.0%	30	
2-Fluorobiphenyl	420	0	500	0	84.0%	30	115	0	0.0%	30	
4-Terphenyl-d14	395	0	500	0	79.0%	18	137	0	0.0%	30	
Nitrobenzene-d5	ND	0	500	0	0.0%	23	120	0	0.0%	30	MI

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001361

Environmental Services Laboratory

Date: *20-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0106055-01A MS Batch ID: 04 BG S-6/14/ Test Code: 8015/8021 Units: µg/Kg-dry Analysis Date 6/13/01 Prep Date:
Client ID: 5074-010525-050 0106055 Run ID: CRICK_010613A SeqNo: 79127

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	3365	562	3370	0	99.9%	80	120	0			
Trifluorotoluene	485.4	0	562	0	86.4%	70	130	0			

Sample ID. 0106063-01A MS Batch ID: 04 BG S-6/14/ Test Code: 8015/8021 Units: µg/Kg Analysis Date 6/13/01 Prep Date:
Client ID: 0106055 Run ID: CRICK_010613A SeqNo: 79137

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	208.5	2.5	200	0	104.3%	85	115	0			
Ethylbenzene	199	2.5	200	0	99.5%	85	115	0			
Toluene	205.5	2.5	200	0	102.8%	85	115	0			
Xylenes, Total	600	7.5	600	0	100.0%	85	115	0			
Trifluorotoluene	555	0	500	0	111.0%	70	130	0			

Sample ID: 0106062-06B MS Batch ID: 05 8260 S-6/1 Test Code: EPA 8260B Units: µg/Kg Analysis Date 6/13/01 Prep Date:
Client ID: 0106055 Run ID: HORATIO_010613A SeqNo: 79093

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	206.5	5	250	0	82.6%	0	234	0			
Benzene	227	5	250	0	90.8%	37	151	0			
Chlorobenzene	261.5	5	250	0	104.6%	37	160	0			
Toluene	226	5	250	0	90.4%	47	150	0			
Trichloroethene	281.5	5	250	0	112.6%	71	157	0			
4-Bromofluorobenzene	289.5	0	250	0	115.8%	74	121	0			
Dibromofluoromethane	236.5	0	250	0	94.6%	80	120	0			
Toluene-d8	265.5	0	250	0	106.2%	81	117	0			

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

BRIX 001362

CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: 0106055-01A MS | Batch ID: 2805 | Test Code: EPA 8015 | Units: mg/Kg-dry | Analysis Date 6/19/01 | Prep Date: 6/13/01
Client ID: 5074-010525-050 | 0106055 | Run ID: BUTTERCUP_010619A | SeqNo: 79776

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	526.4	225	56.2	468	104.0%	70	130	0			

Sample ID: 0106009-16B MS | Batch ID: 2806 | Test Code: 8270-SIM | Units: µg/Kg | Analysis Date 6/14/01 | Prep Date: 6/13/01
Client ID: | 0106055 | Run ID: HEISENBURG_010614A | SeqNo: 79347

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	395	50	500	0	79.0%	47	145	0			
Acenaphthylene	380	50	500	0	76.0%	33	145	0			
Anthracene	335	50	500	0	67.0%	27	133	0			
Benz(a)anthracene	375	50	500	0	75.0%	33	143	0			
Benzo(a)pyrene	335	50	500	0	67.0%	17	163	0			
Benzo(b)fluoranthene	320	50	500	0	64.0%	24	159	0			
Benzo(g,h,i)perylene	285	50	500	0	57.0%	1	219	0			
Benzo(k)fluoranthene	405	50	500	0	81.0%	11	162	0			
Chrysene	400	50	500	0	80.0%	17	168	0			
Dibenz(a,h)anthracene	320	50	500	0	64.0%	1	227	0			
Fluoranthene	430	50	500	0	86.0%	26	137	0			
Fluorene	355	50	500	0	71.0%	59	121	0			
Indeno(1,2,3-cd)pyrene	310	50	500	0	62.0%	1	171	0			
Naphthalene	395	50	500	0	79.0%	21	133	0			
Phenanthrene	325	50	500	0	65.0%	54	120	0			
Pyrene	355	50	500	0	71.0%	52	115	0			
2-Fluorobiphenyl	370	0	500	0	74.0%	30	115	0			
4-Terphenyl-d14	345	0	500	0	69.0%	18	137	0			
Nitrobenzene-d5	290	0	500	0	58.0%	23	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

Confidential Business Information

Environmental Services Laboratory

Date: *20-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS | Batch ID: 04 BG S-6/14/ | Test Code: 8015/8021 | Units: µg/Kg | Analysis Date 6/13/01 | Prep Date:
Client ID: 0106055 | Run ID: CRICK_010613A | SeqNo: 79125

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.4	2.5	40	0	103.5%	85	115	0			
Ethylbenzene	42.3	2.5	40	0	105.8%	85	115	0			
Gasoline	974	500	1000	0	97.4%	80	120	0			
Naphthalene	39.7	10	40	0	99.3%	85	115	0			
Toluene	42	2.5	40	0	105.0%	85	115	0			
Xylenes, Total	129	7.5	120	0	107.5%	85	115	0			
Trifluorotoluene	112	0	100	0	112.0%	50	150	0			

Sample ID: LCS | Batch ID: 05 8260 S-6/1 | Test Code: EPA 8260B | Units: µg/Kg | Analysis Date 6/13/01 | Prep Date:
Client ID: 0106055 | Run ID: HORATIO_010613A | SeqNo: 79082

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	213.5	5	250	0	85.4%	0	234	0			
Benzene	206	5	250	0	82.4%	37	151	0			
Chlorobenzene	215.5	5	250	0	86.2%	37	160	0			
Toluene	227.5	5	250	0	91.0%	47	150	0			
Trichloroethene	215.5	5	250	0	86.2%	71	157	0			
4-Bromofluorobenzene	254	0	250	0	101.6%	74	121	0			
Dibromofluoromethane	239.5	0	250	0	95.8%	80	120	0			
Toluene-d8	256.5	0	250	0	102.6%	81	117	0			

Sample ID: LCS-2805 | Batch ID: 2805 | Test Code: EPA 8015 | Units: mg/Kg | Analysis Date 6/13/01 | Prep Date: 6/13/01
Client ID: 0106055 | Run ID: BUTTERCUP_010613A | SeqNo: 79154

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	51	20	50	0	102.0%	70	130	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001364

CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID. LCSD-2805 | Batch ID: 2805 | Test Code: EPA 8015 | Units: mg/Kg | Analysis Date 6/13/01 | Prep Date: 6/13/01
Client ID: 0106055 | Run ID: BUTTERCUP_010613A | SeqNo: 79155

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	49.55	20	50	0	99.1%	70	130	51	2.9%	20	

Sample ID: LCS-2806 | Batch ID: 2806 | Test Code: 8270-SIM | Units: µg/Kg | Analysis Date 6/14/01 | Prep Date: 6/13/01
Client ID: 0106055 | Run ID: HEISENBURG_010614A | SeqNo: 79342

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	425	50	500	0	85.0%	47	145	0			
Acenaphthylene	410	50	500	0	82.0%	33	145	0			
Anthracene	365	50	500	0	73.0%	27	133	0			
Benz(a)anthracene	400	50	500	0	80.0%	33	143	0			
Benzo(a)pyrene	240	50	500	0	48.0%	17	163	0			
Benzo(b)fluoranthene	370	50	500	0	74.0%	24	159	0			
Benzo(g,h,i)perylene	340	50	500	0	68.0%	1	219	0			
Benzo(k)fluoranthene	430	50	500	0	86.0%	11	162	0			
Chrysene	415	50	500	0	83.0%	17	168	0			
Dibenz(a,h)anthracene	380	50	500	0	76.0%	1	227	0			
Fluoranthene	465	50	500	0	93.0%	26	137	0			
Fluorene	400	50	500	0	80.0%	59	121	0			
Indeno(1,2,3-cd)pyrene	380	50	500	0	76.0%	1	171	0			
Naphthalene	425	50	500	0	85.0%	21	133	0			
Phenanthrene	365	50	500	0	73.0%	54	120	0			
Pyrene	375	50	500	0	75.0%	52	115	0			
2-Fluorobiphenyl	390	0	500	0	78.0%	30	115	0			
4-Terphenyl-d14	355	0	500	0	71.0%	18	137	0			
Nitrobenzene-d5	340	0	500	0	68.0%	23	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001365

CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: LCSD-2806 Batch ID: 2806 Test Code: 8270-SIM Units: µg/Kg Analysis Date 6/14/01 Prep Date: 6/13/01

Client ID: 0106055 Run ID: HEISENBURG_010614A SeqNo: 79343

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	405	50	500	0	81.0%	47	145	425	4.8%	30	
Acenaphthylene	390	50	500	0	78.0%	33	145	410	5.0%	30	
Anthracene	330	50	500	0	66.0%	27	133	365	10.1%	30	
Benz(a)anthracene	385	50	500	0	77.0%	33	143	400	3.8%	30	
Benzo(a)pyrene	205	50	500	0	41.0%	17	163	240	15.7%	30	
Benzo(b)fluoranthene	340	50	500	0	68.0%	24	159	370	8.5%	30	
Benzo(g,h,i)perylene	305	50	500	0	61.0%	1	219	340	10.9%	30	
Benzo(k)fluoranthene	420	50	500	0	84.0%	11	162	430	2.4%	30	
Chrysene	405	50	500	0	81.0%	17	168	415	2.4%	30	
Dibenz(a,h)anthracene	365	50	500	0	73.0%	1	227	380	4.0%	30	
Fluoranthene	450	50	500	0	90.0%	26	137	465	3.3%	30	
Fluorene	385	50	500	0	77.0%	59	121	400	3.8%	30	
Indeno(1,2,3-cd)pyrene	355	50	500	0	71.0%	1	171	380	6.8%	30	
Naphthalene	400	50	500	0	80.0%	21	133	425	6.1%	30	
Phenanthrene	350	50	500	0	70.0%	54	120	365	4.2%	30	
Pyrene	360	50	500	0	72.0%	52	115	375	4.1%	30	
2-Fluorobiphenyl	380	0	500	0	76.0%	30	115	0	0.0%	30	
4-Terphenyl-d14	350	0	500	0	70.0%	18	137	0	0.0%	30	
Nitrobenzene-d5	330	0	500	0	66.0%	23	120	0	0.0%	30	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

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BRIX 001366

Environmental Services Laboratory

Date: *20-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 04 BG S-6/14/ | Test Code: 8015/8021 | Units: µg/L | Analysis Date 6/13/01 | Prep Date:
Client ID: 0106055 | Run ID: CRICK_010613A | SeqNo: 79123

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	31.8	2.5	30	0	106.0%	85	115	0			
Ethylbenzene	32.3	2.5	30	0	107.7%	85	115	0			
Gasoline	633	500	600	0	105.5%	80	120	0			
Naphthalene	31.7	10	30	0	105.7%	85	115	0			
Toluene	32.4	2.5	30	0	108.0%	85	115	0			
Xylenes, Total	98.5	7.5	90	0	109.4%	85	115	0			
Trifluorotoluene	116	0	100	0	116.0%	70	130	0			

Sample ID: CCV | Batch ID: 05 8260 S-6/1 | Test Code: EPA 8260B | Units: µg/L | Analysis Date 6/13/01 | Prep Date:
Client ID: 0106055 | Run ID: HORATIO_010613A | SeqNo: 79080

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	97.7	1	100	0	97.7%	80	120	0			
1,2-Dichloropropane	104	1	100	0	104.0%	80	120	0			
Chloroform	92.7	1	100	0	92.7%	80	120	0			
Ethylbenzene	110	1	100	0	110.0%	80	120	0			
Toluene	103	1	100	0	103.0%	80	120	0			
Vinyl chloride	94.4	1.2	100	0	94.4%	80	120	0			
4-Bromofluorobenzene	53.5	0	50	0	107.0%	86	115	0			
Dibromofluoromethane	47	0	50	0	94.0%	86	118	0			
Toluene-d8	50.6	0	50	0	101.2%	88	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

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CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 2805 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 6/19/01 | Prep Date:
Client ID: 0106055 | Run ID: BUTTERCUP_010619A | SeqNo: 79770

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	350	20	400	0	87.5%	85	115	0			
Oil	359	50	400	0	89.8%	85	115	0			

Sample ID: CCV | Batch ID: 2805 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 6/19/01 | Prep Date:
Client ID: 0106055 | Run ID: BUTTERCUP_010619A | SeqNo: 79771

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	414	20	400	0	103.5%	85	115	0			
Oil	435	50	400	0	108.8%	85	115	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

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BRIX 001368

CLIENT: Hahn and Associates
Work Order: 0106055
Project: 5074/Brix Maritme Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 2806 | Test Code: 8270-SIM | Units: µg/L | Analysis Date 6/14/01 | Prep Date:

Client ID: 0106055 | Run ID: HEISENBURG_010614A | SeqNo: 79340

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.83	0.1	2	0	91.5%	80	120	0			
Acenaphthylene	1.83	0.1	2	0	91.5%	80	120	0			
Anthracene	1.75	0.1	2	0	87.5%	80	120	0			
Benz(a)anthracene	1.86	0.1	2	0	93.0%	80	120	0			
Benzo(a)pyrene	1.86	0.1	2	0	93.0%	80	120	0			
Benzo(b)fluoranthene	1.67	0.1	2	0	83.5%	80	120	0			
Benzo(g,h,i)perylene	1.61	0.1	2	0	80.5%	80	120	0			
Benzo(k)fluoranthene	1.78	0.1	2	0	89.0%	80	120	0			
Chrysene	1.74	0.1	2	0	87.0%	80	120	0			
Dibenz(a,h)anthracene	1.78	0.1	2	0	89.0%	80	120	0			
Fluoranthene	1.93	0.1	2	0	96.5%	80	120	0			
Fluorene	1.86	0.1	2	0	93.0%	80	120	0			
Indeno(1,2,3-cd)pyrene	1.75	0.1	2	0	87.5%	80	120	0			
Naphthalene	1.81	0.1	2	0	90.5%	80	120	0			
Phenanthrene	1.68	0.1	2	0	84.0%	80	120	0			
Pyrene	1.65	0.1	2	0	82.5%	80	120	0			
2-Fluorobiphenyl	1.74	0	2	0	87.0%	30	115	0			
4-Terphenyl-d14	1.67	0	2	0	83.5%	18	137	0			
Nitrobenzene-d5	1.71	0	2	0	85.5%	23	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

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BRIX 001369

ENVIRONMENTAL SERVICES LABORATORY -- GLOSSARY OF FLAGS

Qualifier	Description
AA	This sample was analyzed after the holding time had expired.
AB	The hydrocarbon pattern in this sample is not typical of gasoline.
AC	The hydrocarbon pattern in this sample is not typical of diesel.
AD	The hydrocarbon pattern in this sample is not typical of oil.
AE	The hydrocarbon pattern in this sample extends into the gasoline range.
AF	The hydrocarbon pattern in this sample extends into the diesel range.
AG	The hydrocarbon pattern in this sample extends into the oil range.
A	This analysis was performed on a VOA sample containing headspace.
B	Analyte detected in the Method Blank above the reporting level.
C	The Relative Percent Difference (RPD) for the primary result and confirmation result was greater than 40%. The higher result was reported.
D	The sample was supplied in an inappropriate container, according to method criteria.
E	This value is above the quantitation limit. It is considered an estimate.
H	The Matrix Spike/Matrix Spike Duplicate (MS/MSD) result was outside control limits. The Laboratory Control Standard/Duplicate (LCS/LCSD) result was in control validating the batch.
J	The result is above the Method Detection Limit (MDL) and below the Reporting Level (RL). It is considered an estimate.
M	The MS/MSD recoveries are not calculable due to a high amount of analyte in sample.
MI	This indicates a high level of matrix interference affecting the spike or surrogate recovery.
N	See case narrative.
O	Detection Limits are elevated due to sample dilution. See case narrative.
Q	Further inspection of the sample confirms a non-homogenous sample matrix affecting RPD result.
R	The RPD result is outside method control limits. See other qualifiers or case narrative
S	The spike recovery is outside method control limits. See other qualifiers or case narrative.
T	The RPD between the sample result and duplicate result was greater than 20%. The original result was less than three times the reporting level, therefore the RPD is not applicable.
X	Unable to quantitate surrogate recovery due to sample dilution.

Rev. 04/25/00

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HAHN AND ASSOCIATES, INC.
Environmental Management
434 NW Sixth Avenue, Suite 203 • Portland OR 97209
(503) 796-0717 • Fax (503) 227-2209

Laboratory ESL
Lab Project No. 0105131

CHAIN OF CUSTODY
Chain of Custody No. 2

Project Manager: Guy Tanz
Project No.: 5074
Project Name: Brix Maritime Facility
Collected by: Jay Greifer

Liquid with Sediment Sample: ____ Test Filtrate ____ Test Sediment ____ Test Both
Multi-Phase Sample: ____ Test One (which) ____ Test Separately ____ Shake

Samples Received at 4C (Y or N)
Appropriate Containers Used (Y or N)
Provide Verbal Results (Y or N)
Provide Preliminary Fax Results

Sample Number Prefix: 5074-010529-

Lab ID	Sample #	Date	Time	Sample Description	Soil	Water	Other	Number of Containers	HCID by NW TPH Hydrocarbon Identification	NW TPH-G	NW TPH-Dx	BTEX and naphthalene by EPA Method 8021B	BTEX, EDB, EDC, MTBE, naphthalene, 1,2,4- and 1,3,5-trimethylbenzene, iso- and n-propylbenzene by EPA Method 8260B	Polynuclear Aromatic Hydrocarbons (PAHs) by EPA 8270 SIM	Total Lead by EPA Method 6010/200.7	Dissolved Lead (FP) by EPA Method 6010/200.7	RUSH	Remarks
-01	084	5/29/01	747	B14e 4	X			1										
-02	085		756	8														
-03	086		804	12														
-04	087		814	16														
-05	088		823	20														
-06	089		838	23														
-07	090		850	28														
-08	091		930	B15e 4														
-09	092		937	8														
-10	093		944	12														
-11	094		1000	16														
-12	095		1011	20														
-13	096		1023	24														
-14	097		1036	25														
-15	098		1037	28														
-16	099		1135	B16e 4														
-17	201		1137	8														
-18	202		1140	12						X								
-19	203		1144	16														
-20	204		1152	20														
-21	205		1201	23½														
-22	206		1210	24½					X	X								
-23	207		1211	27														
-24	208		1351	B18e 4														
-25	209		1356	8														
-26	210		1401	12														

Relinquished by	Company	Date	Time	Received by	Company
[signature]	HAHN & ASSOC	5/30/01	9:30	[signature]	ESL
Relinquished by	Company	Date	Time	Received by	Company

BRIX 001371

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HAHN AND ASSOCIATES, INC.
Environmental Management
434 NW Sixth Avenue, Suite 203 • Portland OR 97209
(503) 796-0717 • Fax (503) 227-2209

Laboratory: ESL
Lab Project No.: 0105131

CHAIN OF CUSTODY

Chain of Custody No. 9

Project Manager	Guy Tanz
Project No.	5074
Project Name	Brix Maritime Facility
Collected by	Jay Greifer

Liquid with Sediment Sample: ____ Test Filtrate ____ Test Sediment ____ Test Both
Multi-Phase Sample: ____ Test One (which) ____ Test Separately ____ Shake

Samples Received at 4C (Y or N)
Appropriate Containers Used (Y or N)
Provide Verbal Results (Y or N)
Provide Preliminary Fax Results

Sample Number Prefix: 5074-010529-

Lab ID	Sample #	Date	Time	Sample Description	Soil	Water	Other	Number of Containers	HCID by NW TPH Hydrocarbon Identification	NW TPH-G	NW TPH-Dx	BTEX and naphthalene by EPA Method 8021B	BTEX, EDB, EDC, MTBE, naphthalene, 1,2,4- and 1,3,5-trimethylbenzene, iso- and n-propylbenzene by EPA Method 8260B	Polynuclear Aromatic Hydrocarbons (PAHs) by EPA 8270 SIM	Total Lead by EPA Method 6010/200.7	Dissolved Lead (FF) by EPA Method 6010/200.7	RUSH	Remarks
27	211	5-26-01	1411	B15@15½	X			1		X	X							
28	212		1419	20														
29	213		1428	24						X	X							
30	214		1440	28														
31	215		1547	B17@4														
32	216		1550	8														
33	217		1553	12						X								
34	218		1601	16														
35	219		1612	20														
36	220		1621	23						X	X							
37	221	??																

EXTRA SAMPLE NOT LISTED (SW)

Relinquished by	Company	Date	Time	Received by	Company
[signature]	HAHN & ASSOC	5/30/01	4:30	[signature]	ESL
Relinquished by	Company	Date	Time	Received by	Company

BRIX 001372

Environmental Services Laboratory, Inc.

E S L

17400 SW Upper Boones Ferry Road, Suite 270 • Portland, OR 97224 • (503) 670-8520

June 07, 2001

Mr. Guy Tanz
Hahn and Associates
434 NW Sixth Avenue
Suite 203
Portland, OR 97209
TEL: (503)796-0717
FAX (503) 227-2209

RE: 5074/Brix Maritime Facility Order No.: 0105131

Dear Mr. Guy Tanz,

Environmental Services Laboratory received 37 samples on 5/30/01 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
GAS/BTEX, Soil (8015/8021)
NWTPH-Dx Soil (EPA 8015)
PERCENT MOISTURE (SM 2540)

There were no analytical problems encountered, and all data met laboratory QC criteria, unless noted in a Case Narrative. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without the written approval of the Laboratory.
The following checked data sections are included in this report, and numbered to indicate total pages within each report section.

✓ Base Sample Report ✓ Method Blank Report ✓ Sample Duplicate Report
✓ Matrix Spike/Matrix Spike Duplicate Report ✓ Laboratory Control Spike/Spike Duplicate Report ✓ Continuing Calibration Verification Report __ Initial Calibration Verification Report

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Nichole Karl

Nichole Karl
Project Manager

Keith Hunter

Technical Review

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010529-202
Lab Order:	0105131	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/29/01
Lab ID:	0105131-18A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: **smc**
Diesel	ND	21.7		mg/Kg-dry	1	6/4/01
Oil	ND	54.3		mg/Kg-dry	1	6/4/01
Surr: O-Terphenyl	56.0	50-150		%REC	1	6/4/01
PERCENT MOISTURE		**SM 2540**				Analyst: **etw**
% Moisture	8.00	0		wt%	1	6/1/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010529-206
Lab Order:	0105131	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/29/01
Lab ID:	0105131-22A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		EPA 8015				Analyst: smc
Diesel	ND	28.2		mg/Kg-dry	1	6/4/01
Oil	121	70.4		mg/Kg-dry	1	6/4/01
Surr: O-Terphenyl	99.0	50-150		%REC	1	6/4/01
GAS/BTEX, SOIL		8015/8021				Analyst: jlw
Gasoline	ND	704		µg/Kg-dry	1	5/31/01
Surr: Trifluorotoluene	75.6	70-130		%REC	1	5/31/01
PERCENT MOISTURE		SM 2540				Analyst: etw
% Moisture	29.0	0		wt%	1	6/1/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010529-211
Lab Order:	0105131	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/29/01
Lab ID:	0105131-27A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: smc
Diesel	ND	21.3		mg/Kg-dry	1	6/4/01
Oil	ND	53.2		mg/Kg-dry	1	6/4/01
Surr: O-Terphenyl	102.0	50-150		%REC	1	6/4/01
GAS/BTEX, SOIL		**8015/8021**				Analyst: jlw
Gasoline	ND	532		µg/Kg-dry	1	5/31/01
Surr: Trifluorotoluene	87.1	70-130		%REC	1	5/31/01
PERCENT MOISTURE		**SM 2540**				Analyst: etw
% Moisture	6.00	0		wt%	1	6/1/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010529-213
Lab Order:	0105131	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/29/01
Lab ID:	0105131-29A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: **smc**
Diesel	ND	24.7		mg/Kg-dry	1	6/4/01
Oil	ND	61.7		mg/Kg-dry	1	6/4/01
Surr: O-Terphenyl	83.0	50-150		%REC	1	6/4/01
GAS/BTEX, SOIL		**8015/8021**				Analyst: **jlw**
Gasoline	1,140	617		µg/Kg-dry	1	5/31/01
Surr: Trifluorotoluene	91.4	70-130		%REC	1	5/31/01
PERCENT MOISTURE		**SM 2540**				Analyst: **etw**
% Moisture	19.0	0		wt%	1	6/4/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010529-217
Lab Order:	0105131	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/29/01
Lab ID:	0105131-33A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		EPA 8015				Analyst: smc
Diesel	ND	21.5		mg/Kg-dry	1	6/4/01
Oil	ND	53.8		mg/Kg-dry	1	6/4/01
Surr: O-Terphenyl	89.0	50-150		%REC	1	6/4/01
PERCENT MOISTURE		SM 2540				Analyst: etw
% Moisture	7.00	0		wt%	1	6/1/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010529-220
Lab Order:	0105131	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/29/01
Lab ID:	0105131-36A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX SOIL		**EPA 8015**				Analyst: **smc**
Diesel	ND	22.0		mg/Kg-dry	1	6/4/01
Oil	ND	54.9		mg/Kg-dry	1	6/4/01
Surr: O-Terphenyl	88.0	50-150		%REC	1	6/4/01
GAS/BTEX, SOIL		**8015/8021**				Analyst: **jlw**
Gasoline	10,900	2,750		µg/Kg-dry	5	5/31/01
Surr: Trifluorotoluene	88.3	70-130		%REC	5	5/31/01
PERCENT MOISTURE		**SM 2540**				Analyst: **etw**
% Moisture	9.00	0		wt%	1	6/1/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105131
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Method Blank

Sample ID: MBlank | Batch ID: 04 BG S-6/4/0 | Test Code: 8015/8021 | Units: µg/Kg | Analysis Date 5/31/01 | Prep Date:
Client ID: 0105131 | Run ID: CRICK_010531A | SeqNo: 78281

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Ethylbenzene	ND	0.5									
Gasoline	ND	100									
Toluene	ND	0.5									
Xylenes, Total	ND	1.5									
Trifluorotoluene	112	0	100	0	112.0%	70	130	0			

Sample ID: MB-2773 | Batch ID: 2773 | Test Code: EPA 8015 | Units: mg/Kg | Analysis Date 6/4/01 | Prep Date: 6/1/01
Client ID: 0105131 | Run ID: BUTTERCUP_010604A | SeqNo: 78538

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	20									
Oil	ND	50									
O-Terphenyl	46	0	50	0	92.0%	50	150	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105131
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Duplicate

Sample ID: 0105118-27A DUP Batch ID: 04 BG S-6/4/0 Test Code: 8015/8021 Units: µg/Kg-dry Analysis Date 5/31/01 Prep Date:
Client ID: 0105131 Run ID: CRICK_010531A SeqNo: 78285

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	3.09	0	0	0.0%	0	0	0	0.0%	20	
Ethylbenzene	ND	3.09	0	0	0.0%	0	0	0	0.0%	20	
Gasoline	ND	617	0	0	0.0%	0	0	0	0.0%	20	
Toluene	ND	3.09	0	0	0.0%	0	0	0	0.0%	20	
Xylenes, Total	ND	9.26	0	0	0.0%	0	0	0	0.0%	20	
Trifluorotoluene	140.7	0	123	0	114.4%	50	150	0	0.0%	20	

Sample ID: 0105131-29A DUP Batch ID: 04 BG S-6/4/0 Test Code: 8015/8021 Units: µg/Kg-dry Analysis Date 5/31/01 Prep Date:
Client ID: 5074-010529-213 0105131 Run ID: CRICK_010531A SeqNo: 78292

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	712.6	617	0	0	0.0%	0	0	1142	46.3%	20	T
Trifluorotoluene	712.6	0	593	0	120.2%	50	150	0	0.0%	20	

Sample ID: 0105118-41A DUP Batch ID: 2773 Test Code: EPA 8015 Units: mg/Kg-dry Analysis Date 6/4/01 Prep Date: 6/1/01
Client ID: 0105131 Run ID: BUTTERCUP_010604A SeqNo: 78544

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	24.7	0	0	0.0%	0	0	0	0.0%	20	
Oil	ND	61.7	0	0	0.0%	0	0	0	0.0%	20	
O-Terphenyl	56.79	0	61.7	0	92.0%	50	150	0	0.0%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

BRIX 001381

CLIENT: Hahn and Associates
Work Order: 0105131
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Duplicate

Sample ID: 0105131-18A DUP Batch ID: 2773 Test Code: EPA 8015 Units: mg/Kg-dry Analysis Date 6/4/01 Prep Date: 6/1/01

Client ID: 5074-010529-202 0105131 Run ID: BUTTERCUP_010604A SeqNo: 78548

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	21.7	0	0	0.0%	0	0	0	0.0%	20	
Oil	ND	54.3	0	0	0.0%	0	0	0	0.0%	20	
O-Terphenyl	50.54	0	54.3	0	93.0%	50	150	0	0.0%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

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BRIX 001382

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105131
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0105118-05A MS** Batch ID: **04 BG S-6/4/0** Test Code: **8015/8021** Units: **µg/Kg** Analysis Date **5/31/01** Prep Date:

Client ID: **0105131** Run ID: **CRICK_010531A** SeqNo: **78287**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	169	2.72	163	0	103.7%	85	115	0			
Ethylbenzene	169	2.72	163	0	103.7%	85	115	0			
Gasoline	3500	543	3260	0	107.4%	80	120	0			
Toluene	169	2.72	163	0	103.7%	85	115	0			
Xylenes, Total	512.5	8.15	489	0	104.8%	85	115	0			
Trifluorotoluene	587	0	543	0	108.1%	70	130	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105131
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS | Batch ID: 04 BG S-6/4/0 | Test Code: 8015/8021 | Units: µg/Kg | Analysis Date 5/31/01 | Prep Date:
Client ID: 0105131 | Run ID: CRICK_010531A | SeqNo: 78282

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	156.5	2.5	150	0	104.3%	85	115	0			
Ethylbenzene	157	2.5	150	0	104.7%	85	115	0			
Gasoline	4060	500	4000	0	101.5%	80	120	0			
Toluene	157	2.5	150	0	104.7%	85	115	0			
Xylenes, Total	478	7.5	450	0	106.2%	85	115	0			
Trifluorotoluene	550	0	500	0	110.0%	50	150	0			

Sample ID: LCS-2773 | Batch ID: 2773 | Test Code: EPA 8015 | Units: mg/Kg | Analysis Date 6/4/01 | Prep Date: 6/1/01
Client ID: 0105131 | Run ID: BUTTERCUP_010604A | SeqNo: 78539

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	42.5	20	50	0	85.0%	70	130	0			

Sample ID: LCSD-2773 | Batch ID: 2773 | Test Code: EPA 8015 | Units: mg/Kg | Analysis Date 6/4/01 | Prep Date: 6/1/01
Client ID: 0105131 | Run ID: BUTTERCUP_010604A | SeqNo: 78540

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	49.15	20	50	0	98.3%	70	130	42.5	14.5%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

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Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105131
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 04 BG S-6/4/0 | Test Code: 8015/8021 | Units: µg/L | Analysis Date 5/31/01 | Prep Date:
Client ID: 0105131 | Run ID: CRICK_010531A | SeqNo: 78280

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.6	0.5	40	0	104.0%	85	115	0			
Ethylbenzene	41.9	0.5	40	0	104.8%	85	115	0			
Gasoline	1010	100	1000	0	101.0%	80	120	0			
Toluene	41.7	0.5	40	0	104.3%	85	115	0			
Xylenes, Total	127	1.5	120	0	105.8%	85	115	0			
Trifluorotoluene	107	0	100	0	107.0%	70	130	0			

Sample ID: CCV | Batch ID: 2773 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 6/4/01 | Prep Date:
Client ID: 0105131 | Run ID: BUTTERCUP_010604A | SeqNo: 78536

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	388	20	400	0	97.0%	85	115	0			
Oil	357	50	400	0	89.3%	85	115	0			

Sample ID: CCV | Batch ID: 2773 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 6/4/01 | Prep Date:
Client ID: 0105131 | Run ID: BUTTERCUP_010604A | SeqNo: 78537

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	401	20	400	0	100.3%	85	115	0			
Oil	439	50	400	0	109.8%	85	115	0			

Sample ID: CCV | Batch ID: 2773 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 6/4/01 | Prep Date:
Client ID: 0105131 | Run ID: BUTTERCUP_010604B | SeqNo: 78628

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	401	20	400	0	100.3%	85	115	0			
Oil	427	50	400	0	106.8%	85	115	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105131
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 2773 | Test Code: EPA 8015 | Units: mg/L | Analysis Date 6/4/01 | Prep Date:

Client ID: 0105131 | Run ID: BUTTERCUP_010604B | SeqNo: 78629

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	413	20	400	0	103.3%	85	115	0			
Oil	388	50	400	0	97.0%	85	115	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

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APPENDIX C

LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION: MAY 2001 GROUNDWATER SAMPLES

Confidential Business Information

HAHN AND ASSOCIATES, INC.
Environmental Management
434 NW Sixth Avenue, Suite 203 • Portland OR 97209
(503) 796-0717 • Fax (503) 227-2209

Laboratory ESL

Lab Project No. 0105130

CHAIN OF CUSTODY

Chain of Custody No. 8

Project Manager: Guy Tanz
Project No.: 5074
Project Name: Brix Maritime Facility
Collected by: Jay Greifer

Liquid with Sediment Sample: ____ Test Filtrate ____ Test Sediment ____ Test Both
Multi-Phase Sample: ____ Test One (which) ____ Test Separately ____ Shake

Samples Received at 4C (Y or N)
Appropriate Containers Used (Y or N)
Provide Verbal Results (Y or N)
Provide Preliminary Fax Results

Sample Number Prefix: 5074-010529-

Lab ID	Sample #	Date	Time	Sample Description	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers	HCID by NW TPH Hydrocarbon Identification	NW TPH-G	NW TPH-Dx	BTEX and naphthalene by EPA Method 8021B	BTEX, EDB, EDC, MTBE, naphthalene, 1,2,4- and 1,3,5-trimethylbenzene, iso- and n-propylbenzene by EPA Method 8260B	Polynuclear Aromatic Hydrocarbons (PAHs) by EPA 8270 SIM	Total Lead by EPA Method 6010/200.7	Dissolved Lead (FF) by EPA Method 6010/200.7	RUSH	Remarks
-01	104	5-29-01	1114	TWP-B15		X		6					X	X		X		
-02	105		1115	TWP-B15 DUP		X		4					X					4 VOA
-03	106		1336	EB-106		X		5										" + 1 LA HCL
-04	107		1518	TWP-B18		X		6					X	X		X		
-05	108		1539	TWP-B-14		X		1					X					1-40ml VV
-06	109		1735	TWP-B-17		X		6					X	X		X		

Relinquished by	Company	Date	Time	Received by	Company
[signature]	HAHN & ASSOC	5/30/01	9:30	[signature]	ESL

BRIX 001388

Environmental Services Laboratory, Inc.

E S L

17400 SW Upper Boones Ferry Road, Suite 270 • Portland, OR 97224 • (503) 670-8520

June 07, 2001

Mr. Guy Tanz
Hahn and Associates
434 NW Sixth Avenue
Suite 203
Portland, OR 97209
TEL: (503)796-0717
FAX (503) 227-2209

RE: 5074/Brix Maritime Facility Order No.: 0105130

Dear Mr. Guy Tanz,

Environmental Services Laboratory received 6 samples on 5/30/01 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
ICP Metals (EPA 6010B)
PAH BY SIM, Aqueous (8270-SIM)
Volatiles by GC/MS (EPA 8260B)

There were no analytical problems encountered, and all data met laboratory QC criteria, unless noted in a Case Narrative. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without the written approval of the Laboratory.
The following checked data sections are included in this report, and numbered to indicate total pages within each report section.

✓Base Sample Report ✓Method Blank Report ✓Sample Duplicate Report
✓Matrix Spike/Matrix Spike Duplicate Report ✓Laboratory Control Spike/Spike Duplicate Report ✓Continuing Calibration Verification Report ✓Initial Calibration Verification Report

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Nichole Karl

Nichole Karl
Project Manager

Keith Hunter

Technical Review

Confidential Business Information

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010529-104
Lab Order:	0105130	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/29/01
Lab ID:	0105130-01A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS		**EPA 6010B**				Analyst: lmc
Lead, Diss	ND	0.00500		mg/L	1	6/5/01
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: tmh
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	5/31/01
1,2-Dibromoethane	ND	1.00		µg/L	1	5/31/01
1,2-Dichloroethane	ND	1.00		µg/L	1	5/31/01
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	5/31/01
Benzene	ND	1.00		µg/L	1	5/31/01
Ethylbenzene	ND	1.00		µg/L	1	5/31/01
Isopropylbenzene	ND	1.00		µg/L	1	5/31/01
m,p-Xylene	ND	2.00		µg/L	1	5/31/01
Methyl tert-butyl ether	ND	2.00		µg/L	1	5/31/01
n-Propylbenzene	ND	1.00		µg/L	1	5/31/01
Naphthalene	ND	2.00		µg/L	1	5/31/01
o-Xylene	ND	1.00		µg/L	1	5/31/01
Toluene	ND	1.00		µg/L	1	5/31/01
Surr: 4-Bromofluorobenzene	100.6	86-115		%REC	1	5/31/01
Surr: Dibromofluoromethane	96.8	86-118		%REC	1	5/31/01
Surr: Toluene-d8	102.0	88-110		%REC	1	5/31/01
PAH BY SIM, AQUEOUS		**8270-SIM**				Analyst: ams
Acenaphthene	ND	0.100		µg/L	1	5/31/01
Acenaphthylene	ND	0.100		µg/L	1	5/31/01
Anthracene	ND	0.100		µg/L	1	5/31/01
Benz(a)anthracene	ND	0.100		µg/L	1	5/31/01
Benzo(a)pyrene	ND	0.100		µg/L	1	5/31/01
Benzo(b)fluoranthene	ND	0.100		µg/L	1	5/31/01
Benzo(g,h,i)perylene	0.130	0.100		µg/L	1	5/31/01
Benzo(k)fluoranthene	ND	0.100		µg/L	1	5/31/01
Chrysene	ND	0.100		µg/L	1	5/31/01
Dibenz(a,h)anthracene	ND	0.100		µg/L	1	5/31/01
Fluoranthene	0.140	0.100		µg/L	1	5/31/01
Fluorene	ND	0.100		µg/L	1	5/31/01
Indeno(1,2,3-cd)pyrene	ND	0.100		µg/L	1	5/31/01
Naphthalene	ND	0.100		µg/L	1	5/31/01
Phenanthrene	0.110	0.100		µg/L	1	5/31/01
Pyrene	0.260	0.100		µg/L	1	5/31/01
Surr: 2-Fluorobiphenyl	77.0	43-116		%REC	1	5/31/01
Surr: 4-Terphenyl-d14	82.0	33-141		%REC	1	5/31/01
Surr: Nitrobenzene-d5	67.0	35-114		%REC	1	5/31/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010529-105
Lab Order:	0105130	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/29/01
Lab ID:	0105130-02A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		EPA 8260B				Analyst: tmh
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	5/31/01
1,2-Dibromoethane	ND	1.00		µg/L	1	5/31/01
1,2-Dichloroethane	ND	1.00		µg/L	1	5/31/01
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	5/31/01
Benzene	ND	1.00		µg/L	1	5/31/01
Ethylbenzene	ND	1.00		µg/L	1	5/31/01
Isopropylbenzene	ND	1.00		µg/L	1	5/31/01
m,p-Xylene	ND	2.00		µg/L	1	5/31/01
Methyl tert-butyl ether	ND	2.00		µg/L	1	5/31/01
n-Propylbenzene	ND	1.00		µg/L	1	5/31/01
Naphthalene	ND	2.00		µg/L	1	5/31/01
o-Xylene	ND	1.00		µg/L	1	5/31/01
Toluene	ND	1.00		µg/L	1	5/31/01
Surr: 4-Bromofluorobenzene	96.8	86-115		%REC	1	5/31/01
Surr: Dibromofluoromethane	101.0	86-118		%REC	1	5/31/01
Surr: Toluene-d8	101.0	88-110		%REC	1	5/31/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	Client Sample ID:	5074-010529-107
Lab Order:	0105130	Tag Number:	
Project:	5074/Brix Maritime Facility	Collection Date:	5/29/01
Lab ID:	0105130-04A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS		**EPA 6010B**				Analyst: lmc
Lead, Diss	ND	0.00500		mg/L	1	6/5/01
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: tmh
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	5/31/01
1,2-Dibromoethane	ND	1.00		µg/L	1	5/31/01
1,2-Dichloroethane	ND	1.00		µg/L	1	5/31/01
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	5/31/01
Benzene	ND	1.00		µg/L	1	5/31/01
Ethylbenzene	ND	1.00		µg/L	1	5/31/01
Isopropylbenzene	ND	1.00		µg/L	1	5/31/01
m,p-Xylene	ND	2.00		µg/L	1	5/31/01
Methyl tert-butyl ether	ND	2.00		µg/L	1	5/31/01
n-Propylbenzene	ND	1.00		µg/L	1	5/31/01
Naphthalene	ND	2.00		µg/L	1	5/31/01
o-Xylene	ND	1.00		µg/L	1	5/31/01
Toluene	ND	1.00		µg/L	1	5/31/01
Surr: 4-Bromofluorobenzene	99.6	86-115		%REC	1	5/31/01
Surr: Dibromofluoromethane	99.0	86-118		%REC	1	5/31/01
Surr: Toluene-d8	100.8	88-110		%REC	1	5/31/01
PAH BY SIM, AQUEOUS		**8270-SIM**				Analyst: ams
Acenaphthene	0.189	0.111		µg/L	1	5/31/01
Acenaphthylene	ND	0.111		µg/L	1	5/31/01
Anthracene	ND	0.111		µg/L	1	5/31/01
Benz(a)anthracene	0.189	0.111		µg/L	1	5/31/01
Benzo(a)pyrene	0.467	0.111		µg/L	1	5/31/01
Benzo(b)fluoranthene	0.311	0.111		µg/L	1	5/31/01
Benzo(g,h,i)perylene	0.778	0.111		µg/L	1	5/31/01
Benzo(k)fluoranthene	0.300	0.111		µg/L	1	5/31/01
Chrysene	0.300	0.111		µg/L	1	5/31/01
Dibenz(a,h)anthracene	ND	0.111		µg/L	1	5/31/01
Fluoranthene	0.400	0.111		µg/L	1	5/31/01
Fluorene	ND	0.111		µg/L	1	5/31/01
Indeno(1,2,3-cd)pyrene	0.578	0.111		µg/L	1	5/31/01
Naphthalene	ND	0.111		µg/L	1	5/31/01
Phenanthrene	0.278	0.111		µg/L	1	5/31/01
Pyrene	0.611	0.111		µg/L	1	5/31/01
Surr: 2-Fluorobiphenyl	80.0	43-116		%REC	1	5/31/01
Surr: 4-Terphenyl-d14	81.0	33-141		%REC	1	5/31/01
Surr: Nitrobenzene-d5	72.0	35-114		%REC	1	5/31/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	**Client Sample ID:**	5074-010529-108
Lab Order:	0105130	**Tag Number:**	
Project:	5074/Brix Maritime Facility	**Collection Date:**	5/29/01
Lab ID:	0105130-05A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		EPA 8260B				Analyst: tmh
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	5/31/01
1,2-Dibromoethane	ND	1.00		µg/L	1	5/31/01
1,2-Dichloroethane	ND	1.00		µg/L	1	5/31/01
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	5/31/01
Benzene	ND	1.00		µg/L	1	5/31/01
Ethylbenzene	ND	1.00		µg/L	1	5/31/01
Isopropylbenzene	ND	1.00		µg/L	1	5/31/01
m,p-Xylene	ND	2.00		µg/L	1	5/31/01
Methyl tert-butyl ether	2.39	2.00		µg/L	1	5/31/01
n-Propylbenzene	ND	1.00		µg/L	1	5/31/01
Naphthalene	ND	2.00		µg/L	1	5/31/01
o-Xylene	ND	1.00		µg/L	1	5/31/01
Toluene	2.06	1.00		µg/L	1	5/31/01
Surr: 4-Bromofluorobenzene	100.2	86-115		%REC	1	5/31/01
Surr: Dibromofluoromethane	97.0	86-118		%REC	1	5/31/01
Surr: Toluene-d8	101.0	88-110		%REC	1	5/31/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT:	Hahn and Associates	Client Sample ID:	5074-010529-109
Lab Order:	0105130	Tag Number:	
Project:	5074/Brix Maritime Facility	Collection Date:	5/29/01
Lab ID:	0105130-06A	Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS		**EPA 6010B**				Analyst: lmc
Lead, Diss	ND	0.00500		mg/L	1	6/5/01
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: tmh
1,2,4-Trimethylbenzene	627	10.0		µg/L	1	5/31/01
1,2-Dibromoethane	ND	1.00		µg/L	1	5/31/01
1,2-Dichloroethane	ND	1.00		µg/L	1	5/31/01
1,3,5-Trimethylbenzene	190	10.0		µg/L	1	5/31/01
Benzene	125	1.00		µg/L	1	5/31/01
Ethylbenzene	723	10.0		µg/L	1	5/31/01
Isopropylbenzene	115	1.00		µg/L	1	5/31/01
m,p-Xylene	395	20.0		µg/L	1	5/31/01
Methyl tert-butyl ether	ND	2.00		µg/L	1	5/31/01
n-Propylbenzene	420	10.0		µg/L	1	5/31/01
Naphthalene	65.1	2.00		µg/L	1	5/31/01
o-Xylene	25.4	1.00		µg/L	1	5/31/01
Toluene	6.20	1.00		µg/L	1	5/31/01
Surr: 4-Bromofluorobenzene	108.0	86-115		%REC	1	5/31/01
Surr: Dibromofluoromethane	99.8	86-118		%REC	1	5/31/01
Surr: Toluene-d8	102.6	88-110		%REC	1	5/31/01
PAH BY SIM, AQUEOUS		**8270-SIM**				Analyst: ams
Acenaphthene	0.947	0.105		µg/L	1	5/31/01
Acenaphthylene	0.232	0.105		µg/L	1	5/31/01
Anthracene	0.326	0.105		µg/L	1	5/31/01
Benz(a)anthracene	0.295	0.105		µg/L	1	5/31/01
Benzo(a)pyrene	0.316	0.105		µg/L	1	5/31/01
Benzo(b)fluoranthene	0.200	0.105		µg/L	1	5/31/01
Benzo(g,h,i)perylene	0.284	0.105		µg/L	1	5/31/01
Benzo(k)fluoranthene	0.221	0.105		µg/L	1	5/31/01
Chrysene	0.347	0.105		µg/L	1	5/31/01
Dibenz(a,h)anthracene	ND	0.105		µg/L	1	5/31/01
Fluoranthene	0.811	0.105		µg/L	1	5/31/01
Fluorene	0.674	0.105		µg/L	1	5/31/01
Indeno(1,2,3-cd)pyrene	0.242	0.105		µg/L	1	5/31/01
Naphthalene	34.7	0.105		µg/L	1	5/31/01
Phenanthrene	1.51	0.105		µg/L	1	5/31/01
Pyrene	1.04	0.105		µg/L	1	5/31/01
Surr: 2-Fluorobiphenyl	72.0	43-116		%REC	1	5/31/01
Surr: 4-Terphenyl-d14	67.0	33-141		%REC	1	5/31/01
Surr: Nitrobenzene-d5	60.0	35-114		%REC	1	5/31/01

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Method Blank

Sample ID: **MBlank** Batch ID: **05 8260 A-6/1** Test Code: **EPA 8260B** Units: **µg/L** Analysis Date **5/31/01** Prep Date:

Client ID: **0105130** Run ID: **HORATIO_010531A** SeqNo: **78125**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1									
1,1,1-Trichloroethane	ND	1									
1,1,2,2-Tetrachloroethane	ND	1									
1,1,2-Trichloroethane	ND	1									
1,1-Dichloroethane	ND	1.5									
1,1-Dichloroethene	ND	1									
1,1-Dichloropropene	ND	1									
1,2,3-Trichlorobenzene	ND	1.8									
1,2,3-Trichloropropane	ND	1									
1,2,4-Trichlorobenzene	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,2-Dibromo-3-chloropropane	ND	2									
1,2-Dibromoethane	ND	1									
1,2-Dichlorobenzene	ND	1									
1,2-Dichloroethane	ND	1									
1,2 Dichloropropane	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,3 Dichlorobenzene	ND	1									
1,3-Dichloropropane	ND	1									
1,4-Dichlorobenzene	ND	1									
2,2-Dichloropropane	ND	1.9									
2-Butanone	ND	20									
2-Chloroethyl vinyl ether	ND	5									
2-Chlorotoluene	ND	1									
2-Hexanone	ND	20									
4-Chlorotoluene	ND	1									
4-Isopropyltoluene	ND	1									

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Method Blank

4-Methyl-2-pentanone	ND	1
Acetone	ND	20
Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	5
Carbon disulfide	ND	1
Carbon tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	5
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2-Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	2
Iodomethane	ND	1
Isopropylbenzene	ND	1
m,p-Xylene	ND	2
Methyl tert-butyl ether	ND	2
Methylene chloride	ND	10
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Naphthalene	ND	2
o-Xylene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001396

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Method Blank

Tetrachloroethene	ND	1						
Toluene	ND	1						
trans-1,2-Dichloroethene	ND	1						
trans-1,3-Dichloropropene	ND	1						
Trichloroethene	ND	1						
Trichlorofluoromethane	ND	2						
Vinyl acetate	ND	1						
Vinyl chloride	ND	1.2						
4-Bromofluorobenzene	49.5	0	50	0	99.0%	86	115	0
Dibromofluoromethane	48.5	0	50	0	97.0%	86	118	0
Toluene-d8	50.1	0	50	0	100.2%	88	110	0

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Method Blank

Sample ID: MB-2770 | Batch ID: 2770 | Test Code: 8270-SIM | Units: µg/L | Analysis Date 5/31/01 | Prep Date: 5/31/01
Client ID: 0105130 | Run ID: HEISENBURG_010531A | SeqNo: 78156

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.1									
Acenaphthylene	ND	0.1									
Anthracene	ND	0.1									
Benz(a)anthracene	ND	0.1									
Benzo(a)pyrene	ND	0.1									
Benzo(b)fluoranthene	ND	0.1									
Benzo(g,h,i)perylene	ND	0.1									
Benzo(k)fluoranthene	ND	0.1									
Chrysene	ND	0.1									
Dibenz(a,h)anthracene	ND	0.1									
Fluoranthene	ND	0.1									
Fluorene	ND	0.1									
Indeno(1,2,3-cd)pyrene	ND	0.1									
Naphthalene	ND	0.1									
Phenanthrene	ND	0.1									
Pyrene	ND	0.1									
2-Fluorobiphenyl	.86	0	1	0	86.0%	43	116	0			
4-Terphenyl-d14	.92	0	1	0	92.0%	33	141	0			
Nitrobenzene-d5	.77	0	1	0	77.0%	35	114	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001398

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Method Blank

Sample ID: MB-2775 | Batch ID: 2775 | Test Code: EPA 6010B | Units: mg/L | Analysis Date 6/5/01 | Prep Date: 6/4/01
Client ID: 0105130 | Run ID: ICP_010605A | SeqNo: 78422

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.005									
Barium	ND	0.005									
Cadmium	ND	0.002									
Chromium	ND	0.005									
Lead	ND	0.005									
Selenium	ND	0.005									
Silver	ND	0.005									

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Duplicate

Sample ID: **0105119-04A DUP** Batch ID: **05 8260 A-6/1** Test Code: **EPA 8260B** Units: **µg/L** Analysis Date **5/31/01** Prep Date:

Client ID: **0105130** Run ID: **HORATIO_010531A** SeqNo: **78131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,1,1-Trichloroethane	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,1,2,2-Tetrachloroethane	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,1,2-Trichloroethane	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,1-Dichloroethane	ND	1.5	0	0	0.0%	0	0	0	0.0%	20	
1,1-Dichloroethene	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,1-Dichloropropene	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,2,3-Trichlorobenzene	ND	1.8	0	0	0.0%	0	0	0	0.0%	20	
1,2,3-Trichloropropane	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,2,4-Trichlorobenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,2,4-Trimethylbenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,2-Dibromo-3-chloropropane	ND	2	0	0	0.0%	0	0	0	0.0%	20	
1,2-Dibromoethane	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,2-Dichlorobenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,2-Dichloroethane	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,2-Dichloropropane	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,3,5-Trimethylbenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,3-Dichlorobenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,3-Dichloropropane	ND	1	0	0	0.0%	0	0	0	0.0%	20	
1,4 Dichlorobenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20	
2,2-Dichloropropane	ND	1.9	0	0	0.0%	0	0	0	0.0%	20	
2-Butanone	ND	20	0	0	0.0%	0	0	0	0.0%	20	
2-Chloroethyl vinyl ether	ND	5	0	0	0.0%	0	0	0	0.0%	20	
2-Chlorotoluene	ND	1	0	0	0.0%	0	0	0	0.0%	20	
2-Hexanone	ND	20	0	0	0.0%	0	0	0	0.0%	20	
4-Chlorotoluene	ND	1	0	0	0.0%	0	0	0	0.0%	20	
4-Isopropyltoluene	ND	1	0	0	0.0%	0	0	0	0.0%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001400

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Duplicate

4-Methyl-2-pentanone	ND	1	0	0	0.0%	0	0	0	0.0%	20
Acetone	ND	20	0	0	0.0%	0	0	0	0.0%	20
Benzene	ND	1	0	0	0.0%	0	0	0	0.0%	20
Bromobenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20
Bromochloromethane	ND	1	0	0	0.0%	0	0	0	0.0%	20
Bromodichloromethane	ND	1	0	0	0.0%	0	0	0	0.0%	20
Bromoform	ND	1	0	0	0.0%	0	0	0	0.0%	20
Bromomethane	ND	5	0	0	0.0%	0	0	0	0.0%	20
Carbon disulfide	ND	1	0	0	0.0%	0	0	0	0.0%	20
Carbon tetrachloride	ND	1	0	0	0.0%	0	0	0	0.0%	20
Chlorobenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20
Chloroethane	ND	5	0	0	0.0%	0	0	0	0.0%	20
Chloroform	7.19	1	0	0	0.0%	0	0	7.19	0.0%	20
Chloromethane	ND	2	0	0	0.0%	0	0	0	0.0%	20
cis-1,2-Dichloroethene	ND	1	0	0	0.0%	0	0	0	0.0%	20
cis-1,3-Dichloropropene	ND	1	0	0	0.0%	0	0	0	0.0%	20
Dibromochloromethane	ND	1	0	0	0.0%	0	0	0	0.0%	20
Dibromomethane	ND	1	0	0	0.0%	0	0	0	0.0%	20
Dichlorodifluoromethane	ND	2	0	0	0.0%	0	0	0	0.0%	20
Ethylbenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20
Hexachlorobutadiene	ND	2	0	0	0.0%	0	0	0	0.0%	20
Iodomethane	ND	1	0	0	0.0%	0	0	0	0.0%	20
Isopropylbenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20
m,p-Xylene	ND	2	0	0	0.0%	0	0	0	0.0%	20
Methyl tert-butyl ether	ND	2	0	0	0.0%	0	0	0	0.0%	20
Methylene chloride	ND	10	0	0	0.0%	0	0	0	0.0%	20
n-Butylbenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20
n-Propylbenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20
Naphthalene	ND	2	0	0	0.0%	0	0	0	0.0%	20
o-Xylene	ND	1	0	0	0.0%	0	0	0	0.0%	20
sec-Butylbenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20
Styrene	ND	1	0	0	0.0%	0	0	0	0.0%	20
tert-Butylbenzene	ND	1	0	0	0.0%	0	0	0	0.0%	20

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001401

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Duplicate

Tetrachloroethene	ND	1	0	0	0.0%	0	0	0	0.0%	20
Toluene	ND	1	0	0	0.0%	0	0	0	0.0%	20
trans-1,2-Dichloroethene	ND	1	0	0	0.0%	0	0	0	0.0%	20
trans-1,3-Dichloropropene	ND	1	0	0	0.0%	0	0	0	0.0%	20
Trichloroethene	ND	1	0	0	0.0%	0	0	0	0.0%	20
Trichlorofluoromethane	ND	2	0	0	0.0%	0	0	0	0.0%	20
Vinyl acetate	ND	1	0	0	0.0%	0	0	0	0.0%	20
Vinyl chloride	ND	1.2	0	0	0.0%	0	0	0	0.0%	20
4-Bromofluorobenzene	48.6	0	50	0	97.2%	86	115	0	0.0%	0
Dibromofluoromethane	47.9	0	50	0	95.8%	86	118	0	0.0%	0
Toluene-d8	50.3	0	50	0	100.6%	88	110	0	0.0%	0

Sample ID: **0105119-04A DUP** Batch ID: **2775** Test Code: **EPA 6010B** Units: **mg/L** Analysis Date **6/5/01** Prep Date: **6/4/01**

Client ID: **0105130** Run ID: **ICP_010605A** SeqNo: **78428**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.005	0	0	0.0%	0	0	0	0.0%	20	
Barium	.536	0.005	0	0	0.0%	0	0	0.538	0.4%	20	
Cadmium	ND	0.002	0	0	0.0%	0	0	0	0.0%	20	
Chromium	ND	0.005	0	0	0.0%	0	0	0	0.0%	20	
Lead	ND	0.005	0	0	0.0%	0	0	0	0.0%	20	
Selenium	ND	0.005	0	0	0.0%	0	0	0	0.0%	20	
Silver	ND	0.005	0	0	0.0%	0	0	0	0.0%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Confidential Business Information

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0105135-02A MS** Batch ID: **05 8260 A-6/1** Test Code: **EPA 8260B** Units: **µg/L** Analysis Date **5/31/01** Prep Date:

Client ID: **0105130** Run ID: **HORATIO_010531A** SeqNo: **78139**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	46.1	1	50	0	92.2%	0	234	0			
Benzene	43.2	1	50	0	86.4%	37	151	0			
Chlorobenzene	45.6	1	50	0	91.2%	37	160	0			
Toluene	46.7	1	50	0	93.4%	47	150	0			
Trichloroethene	45.3	1	50	0	90.6%	71	157	0			
4-Bromofluorobenzene	49.5	0	50	0	99.0%	86	115	0			
Dibromofluoromethane	48.1	0	50	0	96.2%	86	118	0			
Toluene-d8	50.7	0	50	0	101.4%	88	110	0			

Sample ID: **0105129-01A MS** Batch ID: **2775** Test Code: **EPA 6010B** Units: **mg/L** Analysis Date **6/5/01** Prep Date: **6/4/01**

Client ID: **0105130** Run ID: **ICP_010605A** SeqNo: **78425**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	.513	0.005	0.5	0	102.6%	75	125	0			
Barium	.489	0.005	0.5	0	97.8%	75	125	0			
Cadmium	.484	0.002	0.5	0	96.8%	75	125	0			
Chromium	.499	0.005	0.5	0	99.8%	75	125	0			
Lead	.484	0.005	0.5	0	96.8%	75	125	0			
Selenium	.489	0.005	0.5	0	97.8%	75	125	0			
Silver	.496	0.005	0.5	0	99.2%	75	125	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Sample Matrix Spike Duplicate

Sample ID: 0105129-01A MSD Batch ID: 2775 Test Code: EPA 6010B Units: mg/L Analysis Date 6/5/01 Prep Date: 6/4/01

Client ID: 0105130 Run ID: ICP_010605A SeqNo: 78426

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	.514	0.005	0.5	0	102.8%	75	125	0.513	0.2%	20	
Barium	.487	0.005	0.5	0	97.4%	75	125	0.489	0.4%	20	
Cadmium	.483	0.002	0.5	0	96.6%	75	125	0.484	0.2%	20	
Chromium	.498	0.005	0.5	0	99.6%	75	125	0.499	0.2%	20	
Lead	.484	0.005	0.5	0	96.8%	75	125	0.484	0.0%	20	
Selenium	.49	0.005	0.5	0	98.0%	75	125	0.489	0.2%	20	
Silver	.496	0.005	0.5	0	99.2%	75	125	0.496	0.0%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS** Batch ID: **05 8260 A-6/1** Test Code: **EPA 8260B** Units: **µg/L** Analysis Date **5/31/01** Prep Date:

Client ID: **0105130** Run ID: **HORATIO_010531A** SeqNo: **78126**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	46.3	1	50	0	92.6%	0	234	0			
Benzene	43.6	1	50	0	87.2%	37	151	0			
Chlorobenzene	46.8	1	50	0	93.6%	37	160	0			
Toluene	53.4	1	50	0	106.8%	47	150	0			
Trichloroethene	45.9	1	50	0	91.8%	71	157	0			
4-Bromofluorobenzene	51.1	0	50	0	102.2%	86	115	0			
Dibromofluoromethane	59.1	0	50	0	118.2%	86	118	0			S
Toluene-d8	51.2	0	50	0	102.4%	88	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001405

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS-2770 | Batch ID: 2770 | Test Code: 8270-SIM | Units: µg/L | Analysis Date 5/31/01 | Prep Date: 5/31/01

Client ID: 0105130 | Run ID: HEISENBURG_010531A | SeqNo: 78157

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	.79	0.1	1	0	79.0%	47	145	0			
Acenaphthylene	.76	0.1	1	0	76.0%	33	145	0			
Anthracene	.77	0.1	1	0	77.0%	27	133	0			
Benz(a)anthracene	.76	0.1	1	0	76.0%	33	143	0			
Benzo(a)pyrene	.74	0.1	1	0	74.0%	17	163	0			
Benzo(b)fluoranthene	.74	0.1	1	0	74.0%	24	159	0			
Benzo(g,h,i)perylene	.87	0.1	1	0	87.0%	1	219	0			
Benzo(k)fluoranthene	.74	0.1	1	0	74.0%	11	162	0			
Chrysene	.79	0.1	1	0	79.0%	17	168	0			
Dibenz(a,h)anthracene	.86	0.1	1	0	86.0%	1	227	0			
Fluoranthene	.77	0.1	1	0	77.0%	26	137	0			
Fluorene	.78	0.1	1	0	78.0%	59	121	0			
Indeno(1,2,3-cd)pyrene	.97	0.1	1	0	97.0%	1	171	0			
Naphthalene	.79	0.1	1	0	79.0%	21	133	0			
Phenanthrene	.78	0.1	1	0	78.0%	54	120	0			
Pyrene	.82	0.1	1	0	82.0%	52	115	0			
2-Fluorobiphenyl	.87	0	1	0	87.0%	43	116	0			
4-Terphenyl d14	.9	0	1	0	90.0%	33	141	0			
Nitrobenzene-d5	.8	0	1	0	80.0%	35	114	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001406

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: LCSD-2770 Batch ID: 2770 Test Code: 8270-SIM Units: µg/L Analysis Date 5/31/01 Prep Date: 5/31/01
Client ID: 0105130 Run ID: HEISENBURG_010531A SeqNo: 78158

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	.76	0.1	1	0	76.0%	47	145	0.79	3.9%	30	
Acenaphthylene	.73	0.1	1	0	73.0%	33	145	0.76	4.0%	30	
Anthracene	.78	0.1	1	0	78.0%	27	133	0.77	1.3%	30	
Benz(a)anthracene	.77	0.1	1	0	77.0%	33	143	0.76	1.3%	30	
Benzo(a)pyrene	.77	0.1	1	0	77.0%	17	163	0.74	4.0%	30	
Benzo(b)fluoranthene	.77	0.1	1	0	77.0%	24	159	0.74	4.0%	30	
Benzo(g,h,i)perylene	.89	0.1	1	0	89.0%	1	219	0.87	2.3%	30	
Benzo(k)fluoranthene	.76	0.1	1	0	76.0%	11	162	0.74	2.7%	30	
Chrysene	.8	0.1	1	0	80.0%	17	168	0.79	1.3%	30	
Dibenz(a,h)anthracene	.88	0.1	1	0	88.0%	1	227	0.86	2.3%	30	
Fluoranthene	.79	0.1	1	0	79.0%	26	137	0.77	2.6%	30	
Fluorene	.74	0.1	1	0	74.0%	59	121	0.78	5.3%	30	
Indeno(1,2,3-cd)pyrene	.98	0.1	1	0	98.0%	1	171	0.97	1.0%	30	
Naphthalene	.75	0.1	1	0	75.0%	21	133	0.79	5.2%	30	
Phenanthrene	.77	0.1	1	0	77.0%	54	120	0.78	1.3%	30	
Pyrene	.85	0.1	1	0	85.0%	52	115	0.82	3.6%	30	
2-Fluorobiphenyl	.84	0	1	0	84.0%	43	116	0	0.0%	30	
4-Terphenyl-d14	.93	0	1	0	93.0%	33	141	0	0.0%	30	
Nitrobenzene-d5	.84	0	1	0	84.0%	35	114	0	0.0%	30	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS-2775 | Batch ID: 2775 | Test Code: EPA 6010B | Units: mg/L | Analysis Date 6/5/01 | Prep Date: 6/4/01

Client ID: 0105130 | Run ID: ICP_010605A | SeqNo: 78423

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	.509	0.005	0.5	0	101.8%	80	120	0			
Barium	.484	0.005	0.5	0	96.8%	80	120	0			
Cadmium	.482	0.002	0.5	0	96.4%	80	120	0			
Chromium	.498	0.005	0.5	0	99.6%	80	120	0			
Lead	.486	0.005	0.5	0	97.2%	80	120	0			
Selenium	.487	0.005	0.5	0	97.4%	80	120	0			
Silver	.494	0.005	0.5	0	98.8%	80	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Confidential Business Information

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 05 8260 A-6/1 | Test Code: EPA 8260B | Units: µg/L | Analysis Date 5/31/01 | Prep Date:

Client ID: 0105130 | Run ID: HORATIO_010531A | SeqNo: 78124

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1	20	0	105.0%	80	120	0			
1,2-Dichloropropane	22.2	1	20	0	111.0%	80	120	0			
Chloroform	20.1	1	20	0	100.5%	80	120	0			
Ethylbenzene	22	1	20	0	110.0%	80	120	0			
Toluene	21.6	1	20	0	108.0%	80	120	0			
Vinyl chloride	22.1	1.2	20	0	110.5%	80	120	0			
4-Bromofluorobenzene	50.4	0	50	0	100.8%	86	115	0			
Dibromofluoromethane	48.5	0	50	0	97.0%	86	118	0			
Toluene-d8	50.5	0	50	0	101.0%	88	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001409

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV | Batch ID: 2770 | Test Code: 8270-SIM | Units: µg/L | Analysis Date 5/31/01 | Prep Date:

Client ID: 0105130 | Run ID: HEISENBURG_010531A | SeqNo: 78155

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	.91	0.1	1	0	91.0%	80	120	0			
Acenaphthylene	.87	0.1	1	0	87.0%	80	120	0			
Anthracene	.86	0.1	1	0	86.0%	80	120	0			
Benz(a)anthracene	.88	0.1	1	0	88.0%	80	120	0			
Benzo(a)pyrene	.86	0.1	1	0	86.0%	80	120	0			
Benzo(b)fluoranthene	.93	0.1	1	0	93.0%	80	120	0			
Benzo(g,h,i)perylene	.91	0.1	1	0	91.0%	80	120	0			
Benzo(k)fluoranthene	.9	0.1	1	0	90.0%	80	120	0			
Chrysene	.89	0.1	1	0	89.0%	80	120	0			
Dibenz(a,h)anthracene	.94	0.1	1	0	94.0%	80	120	0			
Fluoranthene	.83	0.1	1	0	83.0%	80	120	0			
Fluorene	.88	0.1	1	0	88.0%	80	120	0			
Indeno(1,2,3-cd)pyrene	1	0.1	1	0	100.0%	80	120	0			
Naphthalene	.87	0.1	1	0	87.0%	80	120	0			
Phenanthrene	.89	0.1	1	0	89.0%	80	120	0			
Pyrene	1.04	0.1	1	0	104.0%	80	120	0			
2-Fluorobiphenyl	.91	0	1	0	91.0%	43	116	0			
4-Terphenyl-d14	1.09	0	1	0	109.0%	33	141	0			
Nitrobenzene-d5	.89	0	1	0	89.0%	35	114	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

BRIX 001410

Environmental Services Laboratory

Date: *07-Jun-01*

CLIENT: Hahn and Associates
Work Order: 0105130
Project: 5074/Brix Maritime Facility

QC SUMMARY REPORT

Initial Calibration Verification Standard

Sample ID: ICVLOW | Batch ID: 2775 | Test Code: EPA 6010B | Units: mg/L | Analysis Date 6/5/01 | Prep Date: 6/4/01

Client ID: 0105130 | Run ID: ICP_010605A | SeqNo: 78420

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	.51	0.005	0.5	0	102.0%	90	110	0			
Barium	.494	0.005	0.5	0	98.8%	90	110	0			
Cadmium	.487	0.002	0.5	0	97.4%	90	110	0			
Chromium	.495	0.005	0.5	0	99.0%	90	110	0			
Lead	.493	0.005	0.5	0	98.6%	90	110	0			
Selenium	.492	0.005	0.5	0	98.4%	90	110	0			
Silver	.492	0.005	0.5	0	98.4%	90	110	0			

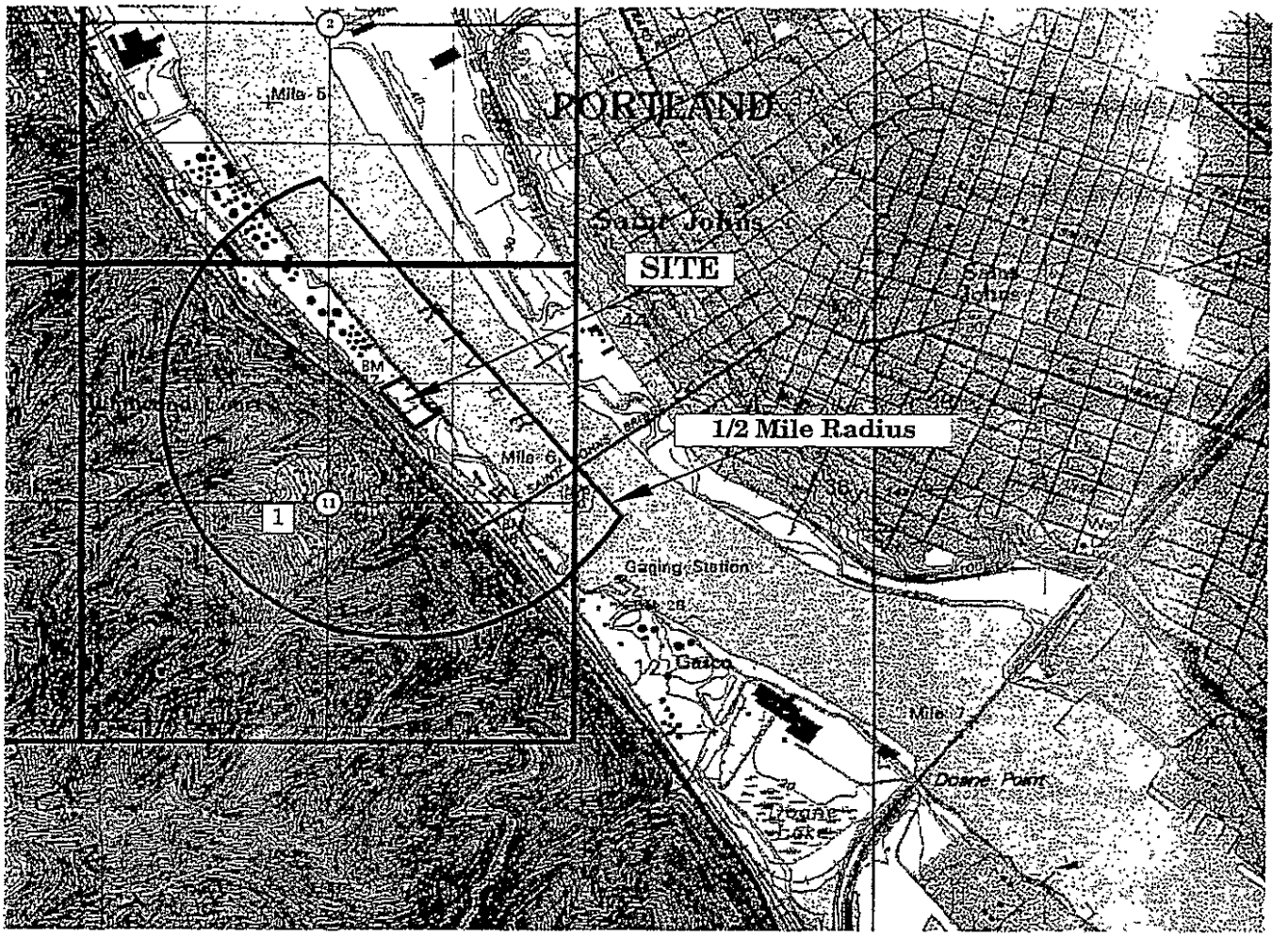
Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Confidential Business Information

APPENDIX D

WATER WELL SURVEY DOCUMENTATION

Confidential Business Information



N

0 2000 4000

Scale in Feet

Source: Linton, Oregon U.S.G.S. 7.5-Minute Quadrangle, 1990
Contour Interval: 10 feet

LEGEND

- 6 Domestic Well
- (11) Section Number
- Section Line

Note: Well locations are approximate and have not been field checked.

HAI Project No. 5074	**HAHN and ASSOCIATES** INCORPORATED	**Water Well Location Map**	**FIGURE**
August 2001	ENVIRONMENTAL MANAGEMENT 434 NW SIXTH AVENUE, SUITE 203 PORTLAND, OREGON 97209 503/796-0717	Risk Based Assessment Brix Maritime Company Facility 9030 NW St. Helens Road Portland, Oregon	**D1**

BRIX 001413

Confidential Business Information

Mult 047 SEP 1 8 1990 1N/1W/11 ca

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.765)

WATER RESOURCES DEPT SALEM, OREGON (START CARD) # 16068

(1) OWNER: Well Number:
Name George A. Buford / Lisa Dale Wilson
Address 8451 N. W. Whitney
City Portland State OR Zip 97231

(2) TYPE OF WORK:
☑ New Well ☐ Deepen ☐ Recondition ☐ Abandon

(3) DRILL METHOD
☑ Rotary Air ☐ Rotary Mud ☐ Cable
☐ Other

(4) PROPOSED USE:
☑ Domestic ☐ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes ☐ No ☑ Depth of Completed Well 530 ft.
Explosives used Yes ☐ No ☑ Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
10	[illegible]	112	Cement +	0	112	31
			Bentonite			
6	112	530				

How was seal placed: Method ☐ A ☐ B ☑ C ☐ D ☐ E
☐ Other
Backfill placed from ft. to ft. Material
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	6	+1	224	250	☑	☐	☑	☐
Liner:	None							

Final location of shoe(s) 224

(7) PERFORATIONS/SCREENS: None
☐ Perforations Method
☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailer ☑ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
17		510	1 hr.

Temperature of water Depth Artesian Flow Found
Was a water analysis done? ☐ Yes By whom
Did any strata contain water not suitable for intended use? ☐ Too little
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County Multnomah Latitude Longitude
Township 1N N or S. Range 1W E or W. WM.
Section 11 NE ¼ SW ¼
Tax Lot R-90720-6460 Lot Block Subdivision
Street Address of Well (or nearest address) 3650 N.W. Mansfield, Portland

(10) STATIC WATER LEVEL:
450 ft. below land surface. Date 9-12-90
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found 520

From	To	Estimated Flow Rate	SWL
520	530	17	450

(12) WELL LOG: Ground elevation

Material	From	To	SWL
Top Soil	0	2	
Dark Brn Clay	2	6	
Brn Clay	6	42	
Red Clay	42	72	
Weathered Rock	72	80	
Grey Broken Rock	80	205	
Soft Black Rock	205	252	
Grey Rock	252	265	
Brn Rock	265	273	
Soft Grey Rock	273	305	
Brn Rock	305	322	
Grey Rock	322	330	
Brn Rock	330	370	
Grey Rock	370	520	
Soft Seamy Grey Rock	520	530	450

RECEIVED
OCT - 8 1990
WATER RESOURCES DEPT
SALEM, OREGON

Date started 9-6-90 Completed 9-12-90

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.
WWC Number
Signed Date

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. all work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.
WWC Number 715
Signed Dan Feaker Date 9-13-90

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9805C 3/88

BRIX 001414

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PROGRESS REPORT – SECOND QUARTER 2003

BRIX MARITIME COMPANY
PORTLAND, OREGON

Prepared for

Brix Maritime Company

Prepared by

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224

July 15, 2003

ANCHOR ENVIRONMENTAL, L.L.C.

PROGRESS REPORT – SECOND QUARTER 2003

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PORTLAND, OREGON

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6650 SW Redwood Lane, Suite 110
Portland, OR 97224

July 15, 2003

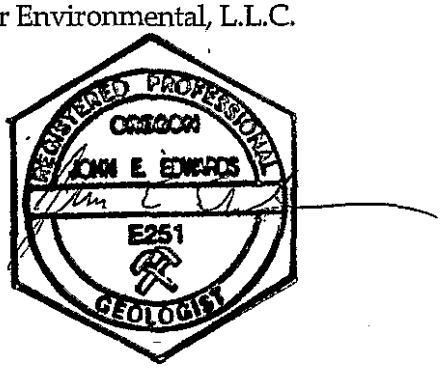
Progress Report – Second Quarter 2003

Brix Maritime Company

Portland, Oregon

The material and data in this report were prepared under the supervision and direction of the undersigned.

John J. Renda, R.G.
Anchor Environmental, L.L.C.



John Edwards, R.G. C.E.G.
Anchor Environmental, L.L.C.

1 INTRODUCTION 1

2 ACTIONS TAKEN DURING THE SECOND QUARTER 1

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1 INTRODUCTION

This Progress Report was prepared in accordance with Section II(H) of the Oregon Department of Environmental Quality (DEQ) Voluntary Agreement for Remedial Investigation and Source Control Measures (ECSI 2464 No. LQDVC-NWR-02-03). This report covers the work completed during the quarter ending June 30, 2003 for the Brix Maritime site in Portland, Oregon (Figure 1) and is divided into the following subject areas:

- Actions Taken During the Second Quarter
- Actions Scheduled for the Third Quarter
- Data Generated in the Second Quarter
- Summaries of Problems and Actions Taken To Resolve Problems

2 ACTIONS TAKEN DURING THE SECOND QUARTER

- Anchor submitted the first quarter 2003 progress report to DEQ on April 15, 2003.
- Water levels were measured in monitoring wells MW-1 through MW-5 and at the river staff gauge on April 29, and May 22, 2003.
- Monitoring wells MW-6 and MW-7 were installed on June 19, 2003.
- Monitoring wells MW-6 and MW-7 were developed on June 25, 2003.
- Monitoring wells MW-6 and MW-7 were surveyed vertically and horizontally on June 26, 2003.

3 ACTIONS SCHEDULED FOR THE THIRD QUARTER

- Water levels will be measured in all onsite monitoring wells and at the river staff gauge in July, August, and September 2003.
- Monitoring wells MW-1 through MW-7 will be sampled on July 7, 2003 (completed).
- Anchor will prepare and submit second quarter progress to DEQ.

4 DATA GENERATED IN THE SECOND QUARTER

4.1 Well Installation

Monitoring wells MW-6 and MW-7 were installed on June 19, 2003. The locations of the monitoring wells are shown in Figure 2. Well logs are provided in Appendix A. The well logs show lithologic descriptions, well construction details, soil sample collection depth, and photo-ionization detector (PID) readings. Monitoring well installation

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methods and materials were consistent with the monitoring plan submitted by Hahn and Associates on March 18, 2002, with modifications approved by DEQ in a letter dated July 12, 2002. The well construction was further modified by using a finer grained silica sand filter pack (20X40 instead of 10X20) around the well screen to help reduce the turbidity of the groundwater samples.

At location MW-6, the borehole was advanced to a total depth of 25.0 feet below ground surface (bgs). The split spoon sampler was advanced to 26.0 feet. The contact of the fill with the pre-fill soil surface was estimated to be at approximately 25.5 feet bgs. Monitoring well MW-6 was installed with the screen interval at 10.1 to 25.1 feet bgs.

At location MW-7, the borehole was advanced to a total depth of 25 feet bgs. The split spoon sampler was advanced to 26.5 feet. The contact of the fill with the pre-fill soil surface was estimated to be at approximately 25.5 feet bgs. Monitoring well MW-7 was installed with the screen interval at 9.8 to 24.8 feet bgs.

4.2 Well Development

Monitoring wells MW-6 and MW-7 were developed on June 25, 2003. Development consisted of surging and bailing with disposable bailers and pumping with a peristaltic pump. Approximately 10 casing volumes were purged from each well during development. Copies of the well development forms are in Appendix B.

4.3 Hydrology Data and Potentiometric Surface Map

Water levels were measured in all onsite monitoring wells and at the river staff gauge on April 29, May 22, and July 7, 2003. Water levels and groundwater elevations based on the 1988 North American Vertical Datum (NAVD 88) are presented in Table 1.

A groundwater potentiometric surface map, using the July 7, 2003 measurements is shown on Figure 2. The July 7, 2003 measurements are the first full round of water level measurements that include newly installed monitoring wells MW-6 and MW-7. As expected, the contour pattern indicates that shallow groundwater flows roughly west to east from the upland portion of the site to the river.

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During the April and May water level measurements and during well installation in June, the river bank was examined for petroleum hydrocarbon seeps or sheens. No seeps or sheens were observed.

4.4 Sampling and Analytical Testing

4.4.1 Soil

Split spoon samples were collected at 5-foot intervals during boring advancement to a depth of 20 feet. Continuous soil samples were obtained below the 20 foot depth at MW-6 and at MW-7 the sampling interval was increased to 2.5-foot intervals to better define the pre-fill contact.

Soil samples from the pre-fill contact (MW-6 at the 24.5 to 26 feet bgs interval and MW-7 at the 25.0 to 26.5 feet bgs interval) were submitted for laboratory analysis. All submitted soil samples were analyzed for volatile organic compounds (VOCs) by EPA method 8260B; total petroleum hydrocarbons (TPH) by method NWTPH-Dx and NWTPH-Gx; polycyclic aromatic hydrocarbons (PAHs) by EPA method 8270C-SIM; and total lead by EPA method 7241.

4.4.1.1 Soil Sampling Results

The soil test results are not yet available from the laboratory. The soil test results will be presented in the third quarter 2003 progress report.

4.4.2 Groundwater

Groundwater samples were collected on July 7, 2003. The groundwater lab test results will be presented in the third quarter 2003 progress report.

5 SUMMARIES OF PROBLEMS AND ACTIONS TAKEN TO RESOLVE PROBLEMS

No problems were encountered.

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TABLES

Table 1
Hydrology Data
Brix Maritime
Portland, Oregon

Anchor Environmental, L.L.C. — Site: Brix Maritime

Project No. : 990056-01

Well	Reference Elevation (Feet NAVD88)	Screen Interval (Feet NAVD88)	Date (MM/DD/YY)	Time (2400)	DTW (feet)	Water Elevation (Feet NAVD88)	Comments
Monitoring Wells							
MW-1	41.81	34.7-19.7	02/28/03	12:20	18.89	22.92	
MW-1	41.81	34.7-19.7	03/31/03	16:35	19.43	22.38	
MW-1	41.81	34.7-19.7	04/29/03	10:25	19.69	22.12	
MW-1	41.81	34.7-19.7	05/22/03	15:00	20.22	21.59	
MW-1	41.81	34.7-19.7	07/07/03	10:45	21.08	20.73	
MW-2	42.13	32.5-17.5	02/28/03	12:10	19.88	22.25	
MW-2	42.13	32.5-17.5	03/31/03	15:50	20.36	21.77	
MW-2	42.13	32.5-17.5	04/29/03	9:30	20.64	21.49	
MW-2	42.13	32.5-17.5	05/22/03	14:35	21.06	21.07	
MW-2	42.13	32.5-17.5	07/07/03	10:40	22.17	19.96	
MW-3	41.93	32.6-17.6	07/29/02	13:00	22.91	19.02	
MW-3	41.93	32.6-17.6	08/22/02	7:15	23.50	18.43	Oil detected in well, thickness estimated at 0.02 foot
MW-3	41.93	32.6-17.6	09/30/02	7:00	23.37	18.56	Oil detected in well, thickness estimated at 0.02 foot
MW-3	41.93	32.6-17.6	10/30/02	15:50	23.68	18.25	DTP = 23.49 (0.19 foot thick)
MW-3	41.93	32.6-17.6	11/27/02	16:30	23.30	18.63	DTP = 23.16 (0.14 foot thick)
MW-3	41.93	32.6-17.6	12/30/02	16:30	21.99	19.94	Oil noted on probe, product too thin to measure with interface probe
MW-3	41.93	32.6-17.6	02/28/03	12:15	19.75	22.18	Oil noted on probe, product too thin to measure with interface probe
MW-3	41.93	32.6-17.6	03/31/03	16:20	20.24	21.69	No oil noted on probe
MW-3	41.93	32.6-17.6	04/29/03	10:02	20.50	21.43	No oil noted on probe
MW-3	41.93	32.6-17.6	05/22/03	14:45	20.94	20.99	No oil noted on probe
MW-3	41.93	32.6-17.6	07/07/03	10:52	22.21	19.72	No oil noted on probe
MW-4	23.55	19.1-9.1	07/29/02	12:55	11.62	11.93	
MW-4	23.55	19.1-9.1	08/22/02	7:25	11.77	11.78	
MW-4	23.55	19.1-9.1	09/30/02	6:50	11.94	11.61	
MW-4	23.55	19.1-9.1	10/30/02	15:55	12.06	11.49	
MW-4	23.55	19.1-9.1	11/27/02	16:35	11.85	11.70	
MW-4	23.55	19.1-9.1	12/30/02	16:35	10.24	13.31	
MW-4	23.55	19.1-9.1	02/28/03	12:35	4.34	19.21	
MW-4	23.55	19.1-9.1	03/31/03	16:45	4.59	18.96	
MW-4	23.55	19.1-9.1	04/29/03	9:50	5.46	18.09	
MW-4	23.55	19.1-9.1	05/22/03	14:50	8.59	14.96	
MW-4	23.55	19.1-9.1	07/07/03	10:33	10.69	12.86	
MW-5	41.66	34.6-19.6	02/28/03	12:28	19.45	22.21	
MW-5	41.66	34.6-19.6	03/31/03	16:10	19.99	21.67	
MW-5	41.66	34.6-19.6	04/29/03	10:10	20.25	21.41	
MW-5	41.66	34.6-19.6	05/22/03	14:55	20.75	20.91	
MW-5	41.66	34.6-19.6	07/07/03	11:00	21.93	19.73	
MW-6	41.21	31.1-16.1	07/07/03	11:10	20.26	20.95	
MW-7	40.95	31.2-16.2	07/07/03	10:30	21.21	19.74	
River Gauge[1]							
River	4.33	NA	10/30/02	16:00	2.75	7.08	
River	4.33	NA	11/27/02	16:40	3.10	7.43	
River	4.33	NA	12/30/02	16:20	7.50	11.83	
River	4.33	NA	02/28/03	12:00	6.10	10.43	
River	4.33	NA	03/31/03	16:00	8.00	12.33	
River	4.33	NA	04/29/03	9:40	8.00	12.33	
River	4.33	NA	05/22/03	14:40	6.50	10.83	
River	4.33	NA	07/07/03	10:47	4.00	8.33	

Note: DTW = Depth to Water; DTP = Depth to Product; NA = Not Applicable

1 - The river gauge is marked in 1-foot increments, field measurements are estimated to the closest 0.1 foot.

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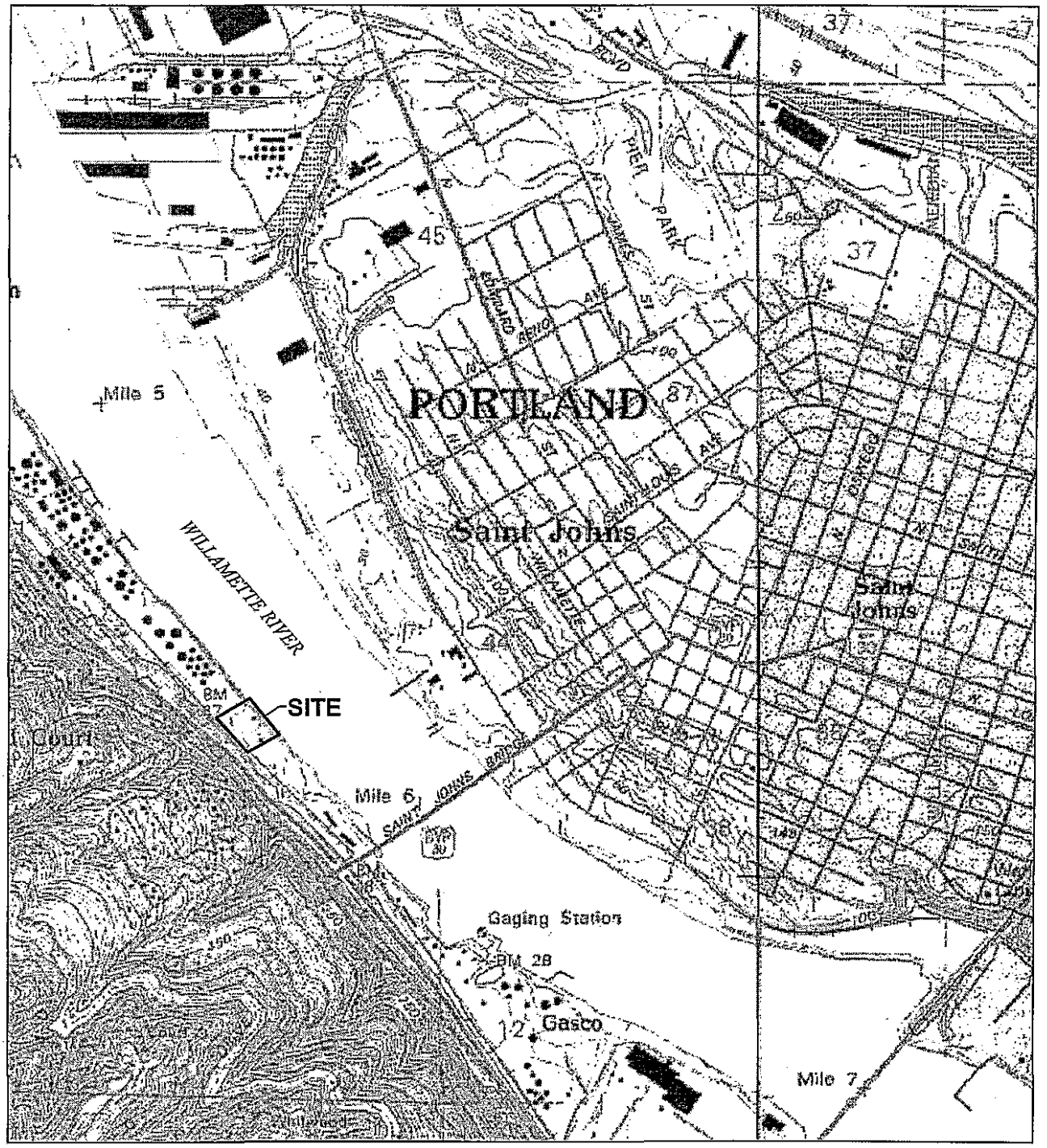
BRIX001450

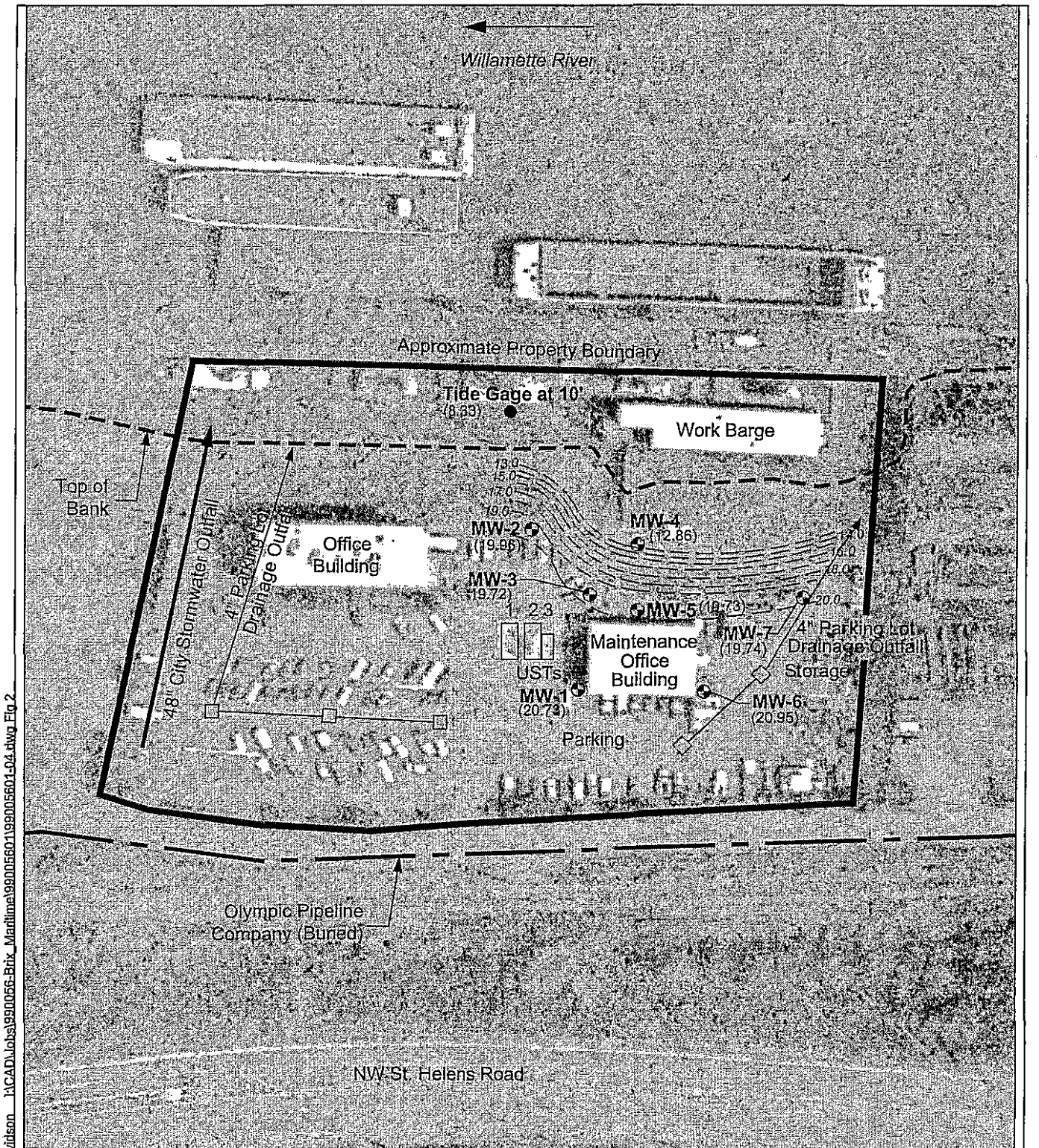
FIGURES



Apr 01, 2003 4:09pm cdavidson I:\CAD\Jobs\990056-Brix_Maritime\99005601\99005601-03.dwg FIG 1

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 1
Site Location Map
Brix Maritime
Portland, Oregon



MW-1 Monitoring Well Location and Number

(22.92) Groundwater Elevation in Feet (NAVD 88)

— 19.5 — Potentiometric Surface Contour in Feet

Stormwater Catch Basin

0 100
Scale in Feet

Source: Aerial photograph acquired from WAC, Corp. 1991.

Jul 10, 2003 11:04am rdavidson \\CAD\Jobs\990056-Brix_Maritime\99005601\99005601-04.dwg Fig 2

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 2
Well Location and Potentiometric Surface Map (July 7, 2003)
Brix Maritime
Portland, Oregon

Appendix A – Well Logs

LOG OF EXPLORATORY BORING

PROJECT NAME	**Brix Maritime**	BORING NO.	**MW-6**
LOCATION	**Portland, Oregon**	PAGE	**1 of 2**
DRILLED BY	**Cascade Drilling**	REFERENCE ELEV.	**41.21**
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**26.0'**
LOGGED BY	**John Renda**	DATE COMPLETED	**6/19/03**

PID (in ppm)	RECOVERY (feet)	BLOWS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: ASPHALT
0.9	0.5	4 7 12		5				**5.0 to 6.0 feet: SAND (SP);** medium to dark gray; fine to medium sand; subangular to subrounded; trace fine to medium gravel; subangular to subrounded; moist.
								6.0 to 6.5 feet: SANDY SILT (SM); gray; low to medium plasticity fines; fine to medium sand; subangular to subrounded; moist.
6.1	0.5	6 10 17		10				**10.0 to 11.5 feet: SAND (SP);** dark gray to black; fine to medium sand; subangular to subrounded; moist.
2.6	1.2	15 18 20		15				**15.0 to 16.5 feet: SAND (SP);** same as above.
			▽	20				

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

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LOG OF EXPLORATORY BORING

PROJECT NAME	**Brix Maritime**	BORING NO.	**MW-6**
LOCATION	**Portland, Oregon**	PAGE	**2 of 2**
DRILLED BY	**Cascade Drilling**	REFERENCE ELEV.	**41.21**
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**26.0'**
LOGGED BY	**John Renda**	DATE COMPLETED	**6/19/03**

PID (in ppm)	RECOVERY (feet)	BLOWS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		5						**20.0 to 21.0 feet: SAND (SP)**; same as above; wet.
12.6	1.5	6						
		9						**21.0 to 21.5 feet: SILT (ML)**; gray; nonplastic to low plasticity fines with fine to medium sand interbeds; wet.
		2						**21.5 to 25.5 feet: SILTY SAND (SM)**; dark gray to black; 70 to 80 percent fine sand; 20 to 30 percent low to medium plasticity fines; wet.
6.4	1.0	1						
		3						
		1						
2.7	1.5	2						
		3						
		2						
3.3	1.5	3		25				
		5						**25.5 to 26.0 feet: SILTY (ML)**; gray; low to medium plasticity fines; trace fine sand; trace root hairs; moist.
								Boring terminated at 25.0 feet.
								Split-spoon sampler advanced to 26.0 feet.
				30				
				35				
				40				

WELL COMPLETION DETAILS

0 to 10.1 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe.

10.1 to 25.1 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machined slots.

25.1 to 25.6 feet: 2-inch-diameter threaded end cap.

0 to 1.0 foot: Concrete.

1.0 to 7.8 feet: Bentonite chips hydrated with potable water.

7.8 to 26.0 feet: 20-40 Colorado Silica Sand.

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

BRIX.gds:2.07/08/03.BRIX...990056-01

LOG OF EXPLORATORY BORING

PROJECT NAME	**Brix Maritime**	BORING NO.	**MW-7**
LOCATION	**Portland, Oregon**	PAGE	**1 of 2**
DRILLED BY	**Cascade Drilling**	REFERENCE ELEV.	**40.95**
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**26.5'**
LOGGED BY	**John Renda**	DATE COMPLETED	**6/19/03**

PID (in ppm)	RECOVERY (feet)	BLOWS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: ASPHALT
1.0	0.5	5 14 11		5				**5.0 to 6.5 feet: SILTY SAND (SM);** gray; 60 to 70 percent fine to medium sand; subangular to subrounded; 20 to 30 percent nonplastic to low plasticity fines; moist.
0.2	0.5	5 13 19		10				**10.0 to 11.5 feet: SAND (SP);** medium brown; fine to medium sand; subangular to subrounded; moist.
1.3	1.0	6 15 17		15				**15.0 to 16.5 feet: SAND (SP);** same as above.
				20				

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

BRIX.gds:2.07/08/03.BRIX...990056-01

LOG OF EXPLORATORY BORING

PROJECT NAME	**Brix Maritime**	BORING NO.	**MW-7**
LOCATION	**Portland, Oregon**	PAGE	**2 of 2**
DRILLED BY	**Cascade Drilling**	REFERENCE ELEV.	**40.95**
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**26.5'**
LOGGED BY	**John Renda**	DATE COMPLETED	**6/19/03**

PID (in ppm)	RECOVERY (feet)	BLOWS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
8.2	0.5	12 14 24	∇					**20.0 to 21.5 feet: SILTY SAND (SM)**; gray; 70 to 80 percent fine to medium sand; subangular to subrounded; 20 to 30 percent low to medium plasticity fines; wood chunk; wet.
0.8	1.0	6 11 7						**22.5 to 24.0 feet: SAND (SP)**; gray; fine to medium sand; subangular to subrounded; 10 to 15 percent nonplastic to low plasticity fines; wet.
				25				**25.0 to 25.5 feet: SAND (SP)**; same as above.
1.5	1.0	2 2 2						**25.5 to 26.5 feet: SILT (ML)**; gray; medium plasticity fines; trace fine to medium sand; trace root hairs; moist.
								Boring terminated at 25.0 feet. Split-spoon sampler advanced to 26.5 feet.
				30				**WELL COMPLETION DETAILS** 0 to 9.8 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 9.8 to 24.8 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machined slots. 24.8 to 25.3 feet: 2-inch-diameter threaded end cap. 0 to 1.0 foot: Concrete. 1.0 to 8.1 feet: Bentonite chips hydrated with potable water. 8.1 to 26.5 feet: 20-40 Colorado Silica Sand.
				35				
				40				

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

BRIX.gds:2.07/08/03.BRIX...990056-01

Appendix B – Well Development Records

WELL DEVELOPMENT FORM

ANCHOR ENVIRONMENTAL, L.L.C.

Project No.		Date: 6/25/03 Well: MW-7	
Site Location: BRIX Maritime		Initial DTB: 25.00	Final DTB: 25.01
Name: St. Helens HIGHWAY / PDX		Initial DTW: 20.89	Final DTW: 20.93
Development Method: SURGE/BAIL/P-PUMP		Pore Volume: 0.67 gal.	
Total Water Removed: 7.0		Casing Diameter: 2"	
Water Contained ? YES		Meter #: 23069	
Estimate of specific capacity or recharge to well: 0.2gpm			

Time	Cum. Vol. Removed	Sand/Silt (ml/1000ml)	Temp.	EC	pH	DTW (TOC)	Appearance/Comments
1300	—	—	—	—	—	20.89	Began surging w/ bailer, silty
							surge 20 minutes
1335	0	—	—	—	—	—	Begin pumping
1340	0.7	>500	21.74	389	6.46	20.91	Cloudy / brown-grey
1345	1.4	>500	21.03	391	6.43	20.88	extreme cloudy / grey
1350	2.1	500	20.69	397	6.44	20.89	"
1355	2.8	300	20.60	464	6.41	20.94	cloudy / brown
1400	3.5	200	20.60	457	6.42	20.95	Cloudy / tan
1415	4.2	100	20.60	452	6.46	20.95	Slight cloudy / tan
1425	4.9	50	19.53	456	6.40	20.96	Slight cloudy / tan
1435	5.6	<10	18.83	447	6.37	20.96	Clear / slight tan tint
1445	6.3	<10	18.80	445	6.35	20.96	
1455	7.0	<10	18.85	440	6.33	20.96	

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WELL DEVELOPMENT FORM

ANCHOR ENVIRONMENTAL, L.L.C.

Project No.		Date: 6/25/03 Well: MW-6	
Site Location: Brix Maritime		Initial DTB: 25.00	Final DTB: 25.60
Name: St. Helens HWY / PDX		Initial DTW: 20.03	Final DTW: 21.13
Development Method: Surge/Bail		Pore Volume: 0.80	
Total Water Removed:		Casing Diameter: 2"	
Water Contained ? YES		Meter #: 23069	
Estimate of specific capacity or recharge to well: ?			

Time	Cum. Vol. Removed	Sand/Silt (ml/1000ml)	Temp.	EC	pH	DTW (TOC)	Appearance/Comments
1510	0	—	—	—	—		Began surging
							surged 20 minutes w/ Bailer
1530	0	—	—	—	—	20.10	Began bailing well
1540	0.8	500	15.44	414	6.35	21.46	opt. Cloudy / tan
1550	1.6	450	15.45	415	6.29	22.38	Cloudy / tan
1600	2.4	400	15.11	423	6.29	23.96	Cloudy / tan
1605	3.2	300	15.14	423	6.28	24.50	Cloudy tan
1612	4.0	200	15.12	422	6.27	24.60	Cloudy / tan
			lct. Recharge				
1620	4.8	80					Cloudy / tan
			15.15	425	6.26	22.10	
1629	5.6	40	↓	↓	↓		Slight cloudy / tan
						23.46	
1634	6.4	<10	15.13	428	6.25	↓	slight cloudy / tan
						24.57	
1639	7.2	<10	15.09	425	6.23	↓	Clear / tan tint
						24.61	
1645	8.0	<10	15.06	426	6.23	↓	Clear / tan tint

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PROGRESS REPORT – THIRD QUARTER 2003

BRIX MARITIME COMPANY
PORTLAND, OREGON

Prepared for

Brix Maritime Company

Prepared by

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224

October 15, 2003

ANCHOR ENVIRONMENTAL L.L.C.

PROGRESS REPORT – THIRD QUARTER 2003

BRIX MARITIME COMPANY
PORTLAND, OREGON

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OCT 2 0 2003
GARVEY SCHUBERT
& BARER

Prepared for

Brix Maritime Company

Prepared by

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224

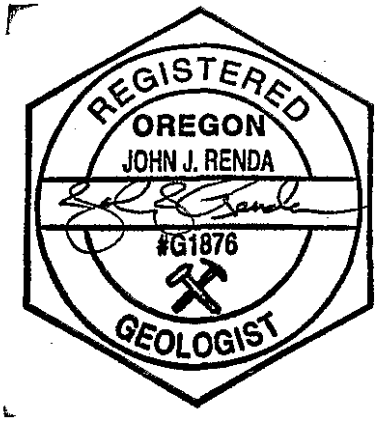
October 15, 2003

Progress Report – Third Quarter 2003

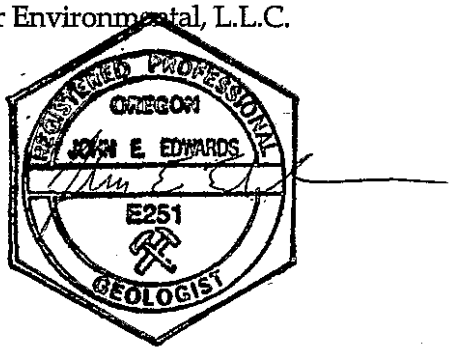
Brix Maritime Company

Portland, Oregon

The material and data in this report were prepared under the supervision and direction of the undersigned.



John J. Renda, R.G.
Anchor Environmental, L.L.C.



John Edwards, R.G. C.E.G.
Anchor Environmental, L.L.C.

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1 INTRODUCTION

This Progress Report was prepared in accordance with Section II(H) of the Oregon Department of Environmental Quality (DEQ) Voluntary Agreement for Remedial Investigation and Source Control Measures (ECSI 2464 No. LQDVC-NWR-02-03). This report covers the work completed during the quarter ending September 30, 2003 for the Brix Maritime site in Portland, Oregon (Figure 1) and is divided into the following subject areas:

- Actions Taken During the Third Quarter
- Actions Scheduled for the Fourth Quarter
- Data Generated in the Third Quarter
- Summaries of Problems and Actions Taken To Resolve Problems

2 ACTIONS TAKEN DURING THE THIRD QUARTER

- Anchor submitted the Second Quarter 2003 progress report to DEQ on July 15, 2003.
- Water levels were measured in monitoring wells MW-1 through MW-7 and at the river staff gauge on July 7, July 30, August 28, and September 30, 2003.
- Monitoring wells MW-1, MW-2, MW-3, MW-4, MW-6, and MW-7 were sampled on July 7, 2003 (MW-5 was not sampled because it was dry).
- Anchor met with DEQ on September 5, 2003 to discuss findings from the two new monitoring wells (MW-6 and MW-7) and to discuss the the status of the Remedial Investigation (RI) and Source Control Evaluation.
- Anchor submitted a September 30, 2003 letter discussing the information covered at the September 5, 2003 meeting and including Brix plans for future RI investigations.

3 ACTIONS SCHEDULED FOR THE FOURTH QUARTER

- Water levels will be measured in all onsite monitoring wells and at the river staff gauge in October, November, and December 2003.
- Monitoring wells MW-1 through MW-7 will be sampled in October 2003 if there is sufficient water in the wells.
- Anchor will prepare and submit the Third Quarter Progress Report (this report) to DEQ.
- Anchor will prepare and submit a draft RI Work Plan to DEQ by November 14, 2003.

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4 DATA GENERATED IN THE THIRD QUARTER

4.1 Hydrology Data and Potentiometric Surface Map

Water levels were measured in all onsite monitoring wells and at the river staff gauge on July 7, July 30, August 28, and September 30, 2003. Water levels and groundwater elevations based on the 1988 North American Vertical Datum (NAVD 88) are presented in Table 1.

A groundwater potentiometric surface map, using the July 7, 2003 measurements, is shown on Figure 2. The July 7, 2003 measurements are the first full round of water level measurements that include newly installed monitoring wells MW-6 and MW-7. As expected, the contour pattern indicates that shallow groundwater flows west to east from the upland portion of the site to the river.

During the July, August, and September water level measurements, the river bank was examined for petroleum hydrocarbon seeps or sheens. No petroleum hydrocarbon seeps or sheens were observed.

4.2 Groundwater Sampling

Monitoring wells MW-1, MW-2, MW-3, MW-4, MW-6, and MW-7 were sampled on July 7, 2003. MW-5 was dry at the time of sampling. Field sampling procedures, field parameters, field sampling data sheets, and chain of custody documentation are in Appendix A.

4.3 Groundwater Analytical Testing

Groundwater samples were collected from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-6, and MW-7 on July 7, 2003. The groundwater samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline by NWTPH-Gx; TPH as diesel and heavy oils by NWTPH-Dx; Polycyclic Aromatic Hydrocarbons (PAHs) by U.S. Environmental Protection Agency (USEPA) Method 8270-SIM; Volatile Organic Compounds (VOCs) by USEPA Method 8260+MTBE; and both total and dissolved lead by USEPA method 200.8. The analytical results are presented in Tables 2 through 5. A copy of the laboratory report is in Appendix B.

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4.4 Data Validation

Review of the sampling and laboratory records showed no apparent discrepancies between samples collected in the field and those analyzed in the laboratory. The data are judged to be acceptable, as qualified, for their intended use. The data validation review of the laboratory records is summarized in Appendix C.

5 SUMMARIES OF PROBLEMS AND ACTIONS TAKEN TO RESOLVE PROBLEMS

No problems were encountered.

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TABLE 3
Polycyclic Aromatic Hydrocarbons
Brix Maritime
Portland, Oregon

Sample Designation	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4	MW-4 Dup	MW-5	MW-5 dup	MW-6	MW-7	MW-1 (15-16.5)	MW-2 (10-11.5)	MW-4 (10-11.5)	MW-5 (5-6.5)	MW-5 (15-16.5)	MW-5 (22.5-24)	MW-6 (24.5-26)	MW-7 (25.0-26.5)
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Date Sampled	02/28/03	07/07/03	02/28/03	07/07/03	07/30/02	02/28/03	07/07/03	07/29/02	02/28/03	07/07/03	07/07/03	02/28/03	02/28/03	07/07/03	07/07/03	02/11/03	02/11/03	07/17/02	02/11/03	02/11/03	02/11/03	06/19/03	06/19/03
LPAHs																							
Naphthalene	23 D	23 D	0.082	0.02 U	0.36	0.75	0.34	0.039	18 D	0.16	0.12	19 D	17 D	0.02 U	0.02 U	22000 D	26	41	5 U	4.8 U	1800 D	83	5 U
Acenaphthylene	0.19	0.02 U	0.023	0.02 U	0.02 U	0.22	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.10	0.40	0.02 U	0.02 U	4.8 U	11	11	5 U	4.8 U	38	39	5 U
Acenaphthene	0.43	0.38	0.02 U	0.02 U	0.26	1.3	0.16	0.51	0.60	0.11	0.11	1.3	1.3	0.02 U	0.02 U	52	11	7.1 U	52	4.8 U	38	50	5 U
Dibenzofuran	0.12	0.067	0.02 U	0.02 U	0.025	0.11	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.2	0.19	0.02 U	0.02 U	14	5 U	7.1 U	11	4.8 U	17	10	5 U
Fluorene	0.36	0.27	0.02 U	0.02 U	0.09	1.0	0.1	0.02 U	0.02 U	0.02 U	0.02 U	1.2	1.3	0.02 U	0.02 U	110	10	7.3	53	4.8 U	51	40	5 U
Phenanthrene	1.8	0.56	0.15	0.02 U	0.11	2.9	0.2	0.043	0.02 U	0.02 U	0.02 U	2.3	3.1	0.02 U	0.02 U	240	150	55	440	9.2	490	340	13
Anthracene	0.53	0.11	0.032	0.02 U	0.02 U	0.55	0.039	0.02 U	0.02 U	0.02 U	0.02 U	0.55	0.93	0.02 U	0.02 U	59	48	11	54	5.5	82	88	7
2-Methylnaphthalene	9.0	7.9	0.02 U	0.02 U	0.28	1.8	0.34	0.02 U	0.80	0.02 U	0.02 U	31 D	31 D	0.02 U	0.02 U	24000 D	11.0	8.4	5.0 U	4.8 U	910	29	5 U
Total LPAH	35.43	32.29	0.29		1.13	8.63	1.18	0.59	19.40	0.27	0.23	55.64	55.22			46475	267.0	133.7	610.0	14.7	3426	679	50
HPAHs																							
Fluoranthene	4.3	0.5	0.29	0.02 U	0.056	4.9	0.22	0.033	0.024	0.02 U	0.02 U	3.1 J	6.5 J	0.02 U	0.02 U	120	220	66	78	29	720	500	86
Pyrene	13 D	1.2	0.42	0.02 U	0.058	7.6 D	0.22	0.046	0.055	0.021	0.02 U	4.3 J	9.1 J	0.02 U	0.02 U	160	410	83	77	63	850	550	76
Benz(a)anthracene	2.1	0.22	0.11	0.02 U	0.02 U	2.1 D	0.06	0.02 U	0.02 U	0.02 U	0.02 U	0.72 J	2.80 J	0.02 U	0.02 U	54	120	18	9	16	330	290	63
Chrysene	2.7	0.27	0.17	0.02 U	0.02 U	2.3 D	0.071	0.02 U	0.02 U	0.02 U	0.02 U	0.96 J	3.4 J	0.02 U	0.02 U	60	150	29	14	26	560	360	61
Benzo(b)fluoranthene	1.4	0.088	0.14	0.02 U	0.022	1.8 D	0.038	0.02 U	0.02 U	0.02 U	0.02 U	0.44 J	2.2 J	0.02 U	0.02 U	32	94	23	12	16	830	190	37
Benzo(k)fluoranthene	1.1	0.098	0.13	0.02 U	0.02 U	1.7 D	0.065	0.02 U	0.02 U	0.02 U	0.02 U	0.42 J	1.9 J	0.02 U	0.02 U	39	95	20	13	18	650	280	54
Benzo(a)pyrene	2.0	0.11	0.19	0.02 U	0.02 U	2.3 D	0.053	0.02 U	0.02 U	0.02 U	0.02 U	0.65 J	3.6 J	0.02 U	0.02 U	36	150	34	14	23	920	440	66
Indeno(1,2,3-cd)pyrene	1.5	0.023	0.20	0.02 U	0.02 U	1.5 D	0.041	0.02 U	0.02 U	0.02 U	0.02 U	0.49 J	2.5 J	0.02 U	0.02 U	30	120	33	21	23	2000 D	330	40
Dibenz(a,h)anthracene	0.17	0.02 U	0.02 U	0.02 U	0.02 U	0.20 U	0.20 U	0.02 U	0.02 U	0.02 U	0.02 U	0.044 J	0.27 J	0.02 U	0.02 U	4.8 U	13	7.1 U	5.0 U	4.8 U	150	56	9
Benzo(g,h,i)perylene	1.5	0.028	0.22	0.02 U	0.02 U	1.9 D	0.039	0.02 U	0.02 U	0.02 U	0.02 U	0.52 J	2.7 J	0.02 U	0.02 U	41	120	49	22	25	2300 D	360	34
Total HPAHs	29.77	2.53	1.87		0.14	26.10	0.80	0.08	0.08	0.021		11.64	34.97			577	1492	355	260	239	9310	3356	526

NOTE: µg/L = micrograms per liter or parts per billion.
µg/kg = micrograms per kilogram or parts per billion.
J = estimated concentration.
U = not detected at or above the indicated method reporting limit.

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Table 4
Volatile Organic Compounds
Brix Maritime
Portland, Oregon

Sample Designation	Matrix	Date Sampled	Dichlorodifluoromethane	Chloromethane	Vinyl Chloride	Bromomethane	Chloroethane	Trichlorofluoromethane	Acetone	1,1-Dichloroethene	Methyl tert-Butyl Ether	Carbon Disulfide	Methylene Chloride	*trans*-1, 2-dichloroethene	1,1-Dichloroethane	2-Butanone	2,2-Dichloropropane	*cis*-1, 2-dichloroethene	Chloroform	Bromochloromethane	1,1,1-Trichloroethane	1,1-Dichloropropene	Carbon Tetrachloride
MW-1	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-1	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	07/30/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	07/29/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4 Dup	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-5	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-5 Dup	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-1 (15-16.5)	Soil	02/11/03	110 U	110 U	110 U	110 U	110 U	110 U	4200 U	110 U	110 U	11 U	420 U	110 U	110 U	4200 U	110 U	110 U	110 U	110 U	110 U	110 U	110 U
MW-2 (10-11.5)	Soil	02/11/03	0.87 U	1.3 U	0.77 U	0.99 U	0.97 U	0.91 U	13 U	0.86 U	0.79 U	1.9 U	1.2 U	0.91 U	0.97 U	11 U	1 U	1.1 U	0.71 U	0.65 U	0.71 U	0.91 U	0.74 U
MW-4 (10-11.5)	Soil	07/17/02	6.8 UJ	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	**70**	6.8 U	6.8 U	6.8 U	14 U	6.8 U	6.8 U	27 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U
MW-5 (5-6.5)	Soil	02/11/03	5.5 UJ	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	55 U	5.5 U	5.5 U	5.5 U	11 U	5.5 U	5.5 U	22 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U
MW-5 (15-16.5)	Soil	02/11/03	5.4 UJ	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	54 U	5.4 U	5.4 U	5.4 U	11 U	5.4 U	5.4 U	22 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
MW-5 (22.5-24)	Soil	02/11/03	7.5 UJ	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U	**85**	7.5 U	7.5 U	7.5 U	15 U	7.5 U	7.5 U	30 U	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U
MW-6 (24.5-26)	Soil	06/19/03	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	67 U	6.7 U	6.7 U	6.7 U	14 U	6.7 U	6.7 U	27 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U
MW-7 (25-26.5)	Soil	06/19/03	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	67 U	7.2 U	7.2 U	7.2 U	15 U	7.2 U	7.2 U	29 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U

NOTE: Water concentrations are in µg/L. Soil concentrations are in µg/kg. U = not detected at or above the indicated method reporting limit. J = estimated concentration.

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Table 4
Volatile Organic Compounds
Brix Maritime
Portland, Oregon

Sample Designation	Matrix	Date Sampled	1,2-Dichloroethane	Benzene	Trichloroethene	1,2-Dichloropropane	Bromodichloromethane	Dibromomethane	2-Hexanone	cis-1,3-Dichloropropene	Toluene	trans 1,3-Dichloropropene	1,1,2-Trichloroethane	4-Methyl-2-pentanone	1,3 Dichloropropane	Tetrachloroethene	Dibromochloromethane	1,2 Dibromoethane	Chlorobenzene	1,1,1,2-Tetrachloroethane	Ethylbenzene	m,p-Xylenes	o-Xylene	Styrene	Bromoform
MW-1	Water	02/28/03	0.5 U	**5.7**	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	**0.71**	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**37**	**50**	**12**	0.5 U	0.5 U
MW-1	Water	07/07/03	0.5 U	**1.3**	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	**1.1**	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**11**	**18**	**2**	0.5 U	0.5 U
MW-2	Water	02/28/03	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	07/07/03	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	07/30/02	0.5 U	**0.73**	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	**14**	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**0.51**	**3.5**	**2**	0.5 U	0.5 U
MW-3	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	**0.63**	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**1.2**	**1.2**	0.5 U	0.5 U
MW-3	Water	07/07/03	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	**0.8**	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**1.2**	**1.1**	0.5 U	0.5 U
MW-4	Water	07/29/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	02/28/03	0.5 U	**0.76**	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**2.3**	**1.4**	**1.2**	0.5 U	0.5 U
MW-4	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4 Dup	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-5	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**15**	**12**	**0.97**	0.5 U	0.5 U
MW-5 Dup	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**16**	**14**	**1.10**	0.5 U	0.5 U
MW-6	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-1 (15-16.5)	Soil	02/11/03	110 U	110 U	110 U	110 UJ	110 U	110 U	4200 U	110 UJ	110 U	110 U	110 U	4200 U	110 U	110 U	110 UJ	420 U	110 U	110 U	**1000**	**1600**	**440**	110 U	110 U
MW-2 (10-11.5)	Soil	02/11/03	0.83 U	0.98 U	0.35 U	0.89 UJ	0.66 U	0.89 U	7.6 U	0.94 UJ	1.1 U	0.74 U	0.86 U	6.8 U	0.65 U	0.39 U	0.74 UJ	0.98 U	0.87 U	0.63 U	0.71 U	1.9 U	0.86 U	0.91 U	0.81 U
MW-4 (10-11.5)	Soil	07/17/02	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	27 U	6.8 U	6.8 U	6.8 U	6.8 U	27 U	6.8 U	6.8 U	6.8 U	27 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U
MW-5 (5-6.5)	Soil	02/11/03	5.5 U	5.5 U	5.5 U	5.5 UJ	5.5 U	5.5 U	22 U	5.5 UJ	5.5 U	5.5 U	5.5 U	22 U	5.5 U	5.5 U	5.5 UJ	22 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U
MW-5 (15-16.5)	Soil	02/11/03	5.4 U	5.4 U	5.4 U	5.4 UJ	5.4 U	5.4 U	22 U	5.4 UJ	5.4 U	5.4 U	5.4 U	22 U	5.4 U	5.4 U	5.4 UJ	22 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
MW-5 (22.5-24)	Soil	02/11/03	7.5 U	7.5 U	7.5 U	7.5 UJ	7.5 U	7.5 U	30 U	7.5 UJ	7.5 U	7.5 U	7.5 U	30 U	7.5 U	7.5 U	7.5 UJ	30 U	7.5 U	7.5 U	**2500**	**2700**	**33**	7.5 U	7.5 U
MW-6 (24.5-26)	Soil	06/19/03	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	27 U	6.7 U	6.7 U	6.7 U	6.7 U	27 U	6.7 U	6.7 U	6.7 U	27 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U
MW-7 (25-26.5)	Soil	06/19/03	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	29 U	7.2 U	7.2 U	7.2 U	7.2 U	29 U	7.2 U	7.2 U	7.2 U	29 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U

NOTE: Water concentrations are in µg/L. Soil concentrations are in µg/kg. U = not detected at or above the indicated method reporting limit. J = estimated concentration.

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Table 4
Volatile Organic Compounds
Brix Maritime
Portland, Oregon

Sample Designation	Matrix	Date Sampled	Isopropylbenzene	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	Bromobenzene	n-Propylbenzene	2-Chlorotoluene	4-Chlorotoluene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	1,3-Dichlorobenzene	4-Isopropyltoluene	1,4-Dichlorobenzene	n-Butylbenzene	1,2-Dichlorobenzene	1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	Naphthalene	Hexachlorobutadiene
MW-1	Water	02/28/03	**19**	0.5 U	0.5 U	0.5 U	**65** D	2 U	2 U	**26**	2 U	**140** D	**10**	0.5 U	2 U	0.5 U	**21**	0.5 U	0.5 U	2 U	2 U	**31**	2 U
MW-1	Water	07/07/03	**31**	0.5 U	0.5 U	0.5 U	**64** D	2 U	2 U	**9.3**	2 U	**46**	**8.2**	0.5 U	2 U	0.5 U	**14**	0.5 U	0.5 U	2 U	2 U	**22**	2 U
MW-2	Water	02/28/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-2	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	07/30/02	0.5 U	0.5 U	0.5 U	0.5 U	**2.2**	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	02/28/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4	Water	07/29/02	2 U	0.5 U	0.5 U	0.5 U	**2.3**	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4	Water	02/28/03	**29**	0.5 U	0.5 U	0.5 U	**35**	2 U	2 U	**2.2**	2 U	**3.8**	2 U	0.5 U	2 U	0.5 U	**3.1**	0.5 U	0.5 U	2 U	2 U	**45**	2 U
MW-4	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4 Dup	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-5	Water	02/28/03	**24**	0.5 U	0.5 U	0.5 U	**110** D	2 U	2 U	**26**	2 U	**75** D	**27**	0.5 U	2 U	0.5 U	**87** D	0.5 U	0.5 U	2 U	2 U	**23**	2 U
MW-5 Dup	Water	02/28/03	**25**	0.5 U	0.5 U	0.5 U	**110** D	2 U	2 U	**30**	2 U	**99** D	**30**	0.5 U	**2.3**	0.5 U	**110** D	0.5 U	0.5 U	2 U	2 U	**25**	2 U
MW-6	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-7	Water	02/28/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-1 (15-16.5)	Soil	02/11/03	**3000**	110 U	110 U	420 U	**18000**	420 U	420 U	7800 U	420 U	**59000**	7300 U	110 U	**1800**	110 U	**29000**	110 U	420 U	420 U	420 U	**64000**	420 U
MW-2 (10-11.5)	Soil	02/11/03	0.84 U	0.91 U	0.76 U	1 U	0.89 U	0.91 U	0.92 U	4.7 U	0.92 U	1.1 U	0.92 U	0.88 U	0.89 U	1.1 U	0.93 U	0.81 U	1.1 U	0.95 U	1.2 U	1.1 U	0.93 U
MW-4 (10-11.5)	Soil	07/17/02	6.8 U	6.8 U	6.8 U	6.8 U	27 U	27 U	27 U	27 U	27 U	27 U	27 U	6.8 U	27 U	6.8 U	27 U	6.8 U	6.8 U	27 U	27 U	27 U	27 U
MW-5 (5-6.5)	Soil	02/11/03	5.5 U	5.5 U	5.5 U	5.5 U	22 U	22 U	22 U	22 U	22 U	22 U	22 U	5.5 U	22 U	5.5 U	22 U	5.5 U	5.5 U	22 U	22 U	22 U	22 U
MW-5 (15-16.5)	Soil	02/11/03	5.4 U	5.4 U	5.4 U	5.4 U	22 U	22 U	22 U	22 U	22 U	22 U	22 U	5.4 U	22 U	5.4 U	22 U	5.4 U	5.4 U	22 U	22 U	22 U	22 U
MW-5 (22.5-24)	Soil	02/11/03	**7000**	7.5 U	7.5 U	7.5 U	30 U	65 U	30 U	970 U	30 U	**20000**	**180**	7.5 U	**33**	7.5 U	2500 U	7.5 U	7.5 U	30 U	30 U	**4900**	30 U
MW-6 (24.5-26)	Soil	06/19/03	27 U	6.7 U	6.7 U	6.7 U	27 U	65 U	27 U	27 U	27 U	27 U	27 U	6.7 U	27 U	6.7 U	27 U	6.7 U	6.7 U	27 U	27 U	27 U	27 U
MW-7 (25-26.5)	Soil	06/19/03	29 U	7.2 U	7.2 U	7.2 U	29 U	65 U	29 U	29 U	29 U	29 U	29 U	7.2 U	29 U	7.2 U	29 U	7.2 U	7.2 U	29 U	29 U	29 U	29 U

NOTE: Water concentrations are in µg/L. Soil concentrations are in µg/kg. U = not detected at or above the indicated method reporting limit. J = estimated concentration.

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Table 5
Lead
Brix Maritime
Portland, Oregon

Location	Matrix	Date Sampled	Total Lead (ppb)		Dissolved Lead (ppb)	
MW-1	Water	02/28/03	288		0.03	
MW-1	Water	07/07/03	1.34		0.05	
MW-2	Water	02/28/03	57.6		0.04	
MW-2	Water	07/07/03	0.04		0.05	
MW-3	Water	07/30/02	0.88		0.13	
MW-3	Water	02/28/03	65.9		0.05	
MW-3	Water	07/07/03	0.36		0.08	
MW-4	Water	07/29/02	0.36		0.02	U
MW-4	Water	02/28/03	0.70		0.02	U
MW-4	Water	07/07/03	0.78	J	0.02	
MW-4 Duplicate	Water	07/07/03	0.18	J	0.03	
MW-5	Water	02/28/03	131		0.06	
MW-5 Duplicate	Water	02/28/03	116		0.03	
MW-6	Water	07/07/03	0.1		0.02	U
MW-7	Water	07/07/03	0.17		0.02	U
MW-1 (15-16.5)	Soil	02/11/03	4200			
MW-2 (10-11.5)	Soil	02/11/03	15900			
MW-4 (10-11.5)	Soil	07/17/02	21000			
MW-5 (15-16.5)	Soil	02/11/03	4000			
MW-5 (22.5-24)	Soil	02/11/03	32500			
MW-5 (5-6.5)	Soil	02/11/03	5400			
MW-6 (24.5-26)	Soil	06/19/03	16300	J		
MW-7 (25-26.5)	Soil	06/19/03	12800	J		

Note: U = not detected at method reporting limit. ppb = parts per billion. J = estimated
Water concentrations are in µg/L. Soil concentrations are in µg/kg.

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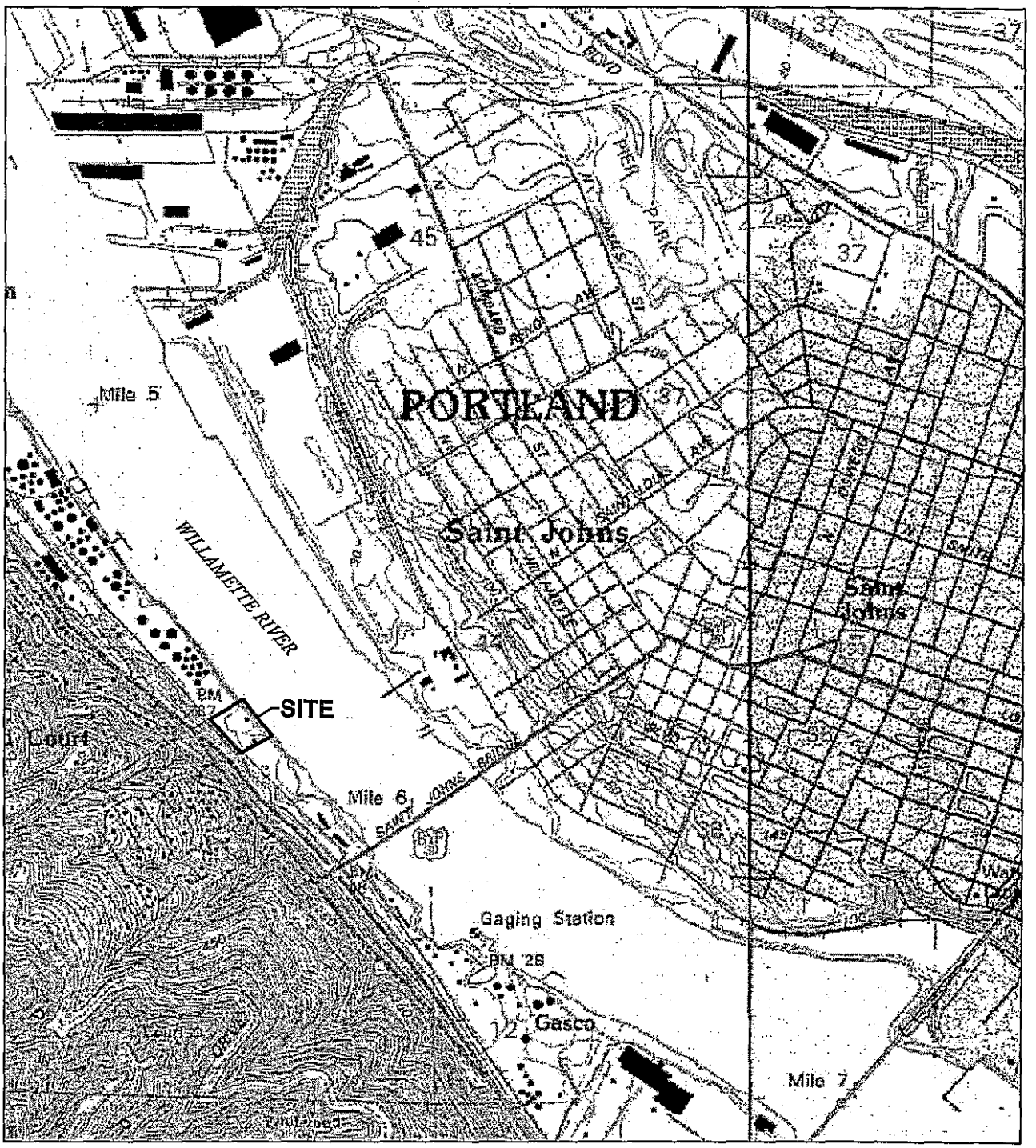
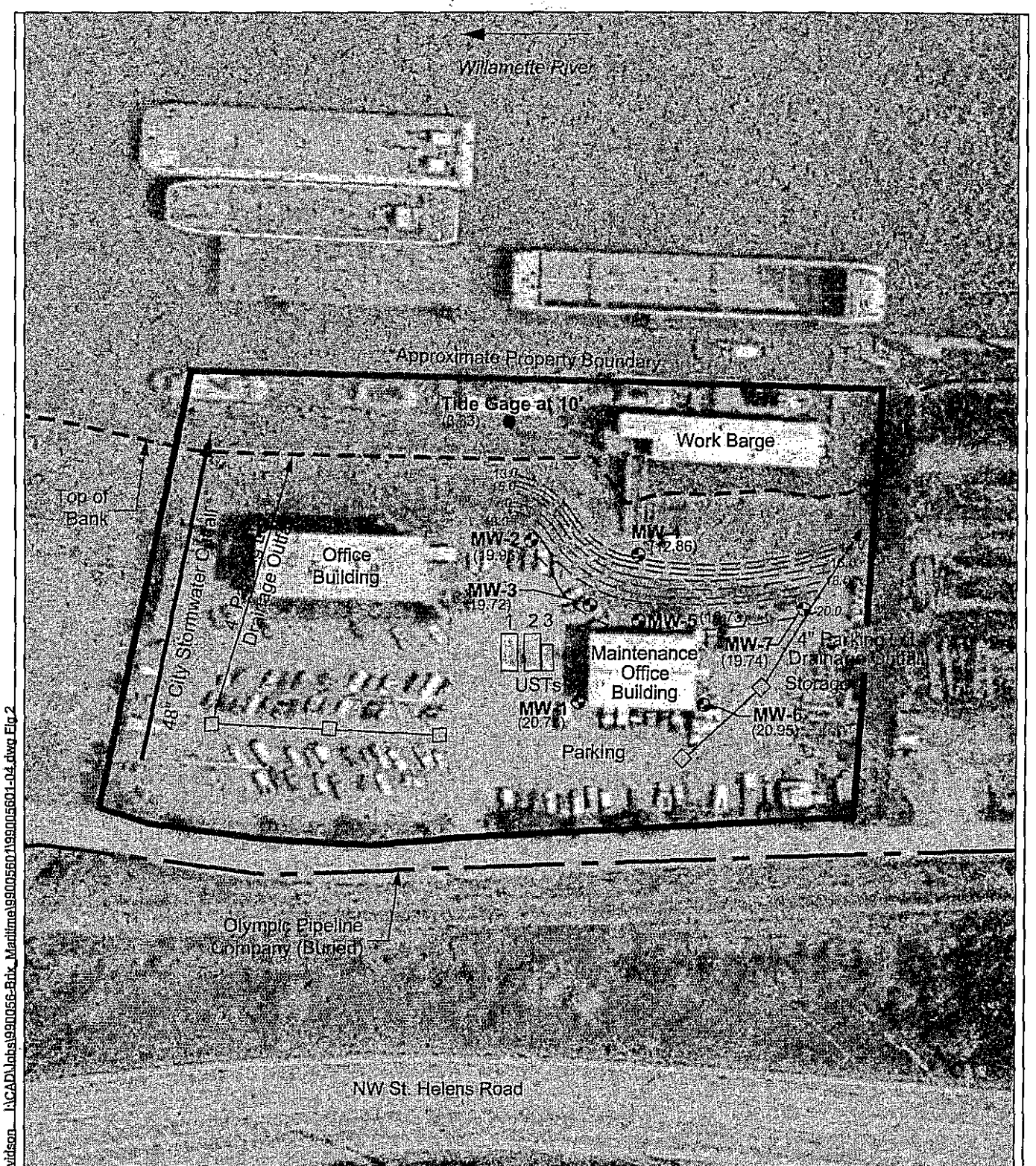
FIGURES



Apr 01, 2003 4:09pm cdavidson h:\CAD\Jobs\990056-Brix_Maritime\990056011990056011-03.dwg FIG 1

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 1
Site Location Map
Brix Maritime
Portland, Oregon



Source: Aerial photograph acquired from WAC, Corp. 1991.

Jul 10, 2003 11:04am cdavidson I:\CAD\Jobs\990056-Brix_Maritime\990056019900560 1-04.dwg Fig 2

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 2
Well Location and Potentiometric Surface Map (July 7, 2003)
Brix Maritime
Portland, Oregon

Appendix A
Field Sampling Data Package

ANCHOR ENVIRONMENTAL, L.L.C.

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128

Memorandum

To: File 990056-01

From: Timothy Stone

Date: July 18, 2003

Re: July 2003 Groundwater Sample Collection at Brix Maritime, Portland, Oregon

OVERVIEW

On July 7, 2003, Anchor measured groundwater elevations in seven monitoring wells and recorded the river elevation from the staff gauge located at the site. In addition, groundwater samples were collected from six of the seven monitoring wells. Seven water samples (including one duplicate sample) were submitted for analysis of VOCs by U.S. Environmental Protection Agency (USEPA) Method 8260+MTBE; gasoline by NWTPH-Gx; diesel and heavy oils by NWTPH-Dx; PAHs by USEPA Method 8270-SIM; total lead; and dissolved lead. A trip blank was submitted for VOCs.

PURGING AND SAMPLING

Before sampling, wells were purged of at least three casing volumes, until field parameters (temperature, pH, and specific conductivity) stabilized, or the wells purged dry. Temperature, pH, and specific conductivity values were measured and recorded after each casing volume was removed. Field sampling parameters are presented within the attached table.

No sample was collected from MW-5. Depth to water in the well was below the base of the screen (within the well sump) and therefore considered to be dry.

A minimum of three volumes was purged from each well using a peristaltic pump equipped with new pump tubing, and connected to polyethylene tubing dedicated to each well. Pumping rates were reduced, and samples were then collected directly from the dedicated pump tubing. Samples for dissolved lead were field filtered using an in-line high-capacity 0.45 micron filter prior to field preservation with nitric acid.

Quality control consisted of collecting and analyzing one duplicate sample from MW-4. A trip blank was submitted for VOC analysis by USEPA Method 8260 + MTBE.

SAMPLE HANDLING AND SHIPPING

Eight samples were placed in iced shipping containers and transported by courier to Columbia Analytical Services (CAS), Kelso, Washington, under chain of custody documentation.

Attachments: Table of Sampling Field Parameters
Field Sampling Data Sheets
Chain-of-Custody Documentation

Table
Sampling Field Parameters
Brix Maritime
July 2003

Well	Blind Code	Date Sampled	Depth to Water (feet)	Pore Volumes Purged	Gallons Removed	pH	Specific Conductance µS	Temperature °C	Dissolved Oxygen mg/L
Monitoring Wells									
MW-1	MW-1-070703	7/7/2003	21.08	3	0.6	6.14	813	16.73	0.58
MW-2	MW-2-070703	7/7/2003	22.17	3	1.2	6.25	555	15.99	0.65
MW-3	MW-3-070703	7/7/2003	22.21	3	1.2	6.31	529	15.20	0.27
MW-4	MW-4-070703	7/7/2003	10.69	4	2.8	6.25	457	16.74	0.22
MW-5	no sample	NA	21.93*	NA	NA	NA	NA	NA	NA
MW-6	MW-6-070703	7/7/2003	20.26	3	2.4	6.35	408	15.88	0.24
MW-7	MW-7-070703	7/7/2003	21.21	3	2.1	6.45	371	15.15	0.26
QA/QC									
MW-4 (DUP)	MW-44-070703	7/7/2003	10.69	4	2.8	6.25	457	16.14	0.22

NA=not applicable

*Water level below lowest point of screened interval (sump only)

\\union\portland\Projects\BRIX\Sampling\T 2003\Brix Table0703.xls

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime
WELL ID: MW-1
SITE ADDRESS: Portland, Oregon
BLIND ID: MW-1-070703
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?					TEMPERATURE: °F 79 °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] - [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
7/7/03	10:45	22.10	—	21.08	—	1.02	X1	0.16
/ /	:						X3	0.50

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	√ if used
VOA Glass	7/7/03	10:00	B	6	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly.	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 10

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G) + MTBE
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: 15:30 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	B	0.6	6.14	813	16.73		0.58	Clear/light yellow tint
2	B	0.4	6.14	812	16.72		0.65	Clear/yellow tint
1	B	0.2	6.13	810	16.81		0.62	Cloudy/yellow tint
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: JIM STONE (PRINTED NAME) Jim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime
WELL ID: MW-2
SITE ADDRESS: Portland, Oregon
BLIND ID: MW-2-070703
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN		?	TEMPERATURE:	°F 78	°C			

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
7/7/03	10:40	24.18	—	22.17	—	2.01	X1	0.33
/ /	:						X3	0.99

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) | Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	√ [√ if used]
VOA Glass	7/7/03	14:10	B	6	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 10

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G) + MTBE
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA | Purge Start Time: ~~12:55~~ 1340 | Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	B	1.2	6.20	555	15.99		0.65	
2	B	0.8	6.26	568	16.05		0.94	
1	B	0.4	6.27	568	16.13		0.96	Clear/Colorless
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) Tim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime WELL ID: MW-3
SITE ADDRESS: Portland, Oregon BLIND ID: MW-3-070703
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN		?				TEMPERATURE:	°F 79.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
7/7/03	10:52	24.60		22.21		2.39	X1	0.39
/ /	:						X3	1.17

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	7/7/03	15:00	B	36	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly.	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 10

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G) + MTBE
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 14:20 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	B	1.2	6.31	529	15.20		0.27	↑
2	B	0.8	6.30	529	15.20		0.27	
1	B	0.4	6.27	528	15.19		0.30	Clear/Colorless
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: JIM STONE (PRINTED NAME) Jim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime WELL ID: MW-4
SITE ADDRESS: Portland, Oregon BLIND ID: MW-4-070703
DUP ID: MW-~~44~~-070703124

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN			?	TEMPERATURE:	°F 28	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
7/7/03	10:33	14.70		10.69		4.01	X1	0.65
/ /	:						X3	1.96

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√ [√ if used]
VOA Glass	7/7/03	12:35	B	6	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 10 20

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G) + MTBE
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 12:00 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		2.8	6.25	457	16.14		0.22	
3	B	2.1	6.24	457	16.16		0.24	
2	B	1.4	6.17	449	16.32		0.26	
1	B	0.7	6.22	456	16.51		0.35	Clear / Colorless
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone (PRINTED NAME) Tim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime WELL ID: MW-5
SITE ADDRESS: Portland, Oregon BLIND ID: ~~MW~~ * NO Samp
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE:	°F	79.	°C			

[Circle appropriate units]

HYDROLOGY/~~LEVEL~~ MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
7/7/03	11:00	22.20		21.93		0.27	X1	
/ /	:			**			X3	

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	√ [√ if used]
VOA Glass	/ /	:	B	16	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly.	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 20

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G) + MTBE
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 15:15 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	B							
2	B							
1	B	*						
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

* Not enough volume to measure parameter / Not enough volume to collect samples

SAMPLER: IM TONE (PRINTED NAME) Im Tone (SIGNATURE)

** below screen // SUMP = 0.5 foot (WILL NOT RECHARGE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime WELL ID: MW-6
SITE ADDRESS: Portland, Oregon BLIND ID: MW-6-070703
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE:	°F 84.	°C				

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
7/7/03	11:10	25.00		20.26		4.74	X1	0.77
/ /	:						X3	2.32

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	√ [if used]
VOA Glass	7/7/03	13:30	B	36	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 10

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G) + MTBE
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_2) (NO_3) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 12:55 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	B	2.4	6.35	408	15.88		0.24	
2	B	1.6	6.36	408	15.87		0.26	
1	B	0.8	6.35	404	15.96		0.39	clear / colorless
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: JIM STONE (PRINTED NAME) (SIGNATURE)

1115 STAFF Gauge 4' Water

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime WELL ID: MW-7
SITE ADDRESS: Portland, Oregon BLIND ID: MW-7-070703
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN		?				TEMPERATURE: °F 78 °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
7/7/03	10:30	24.95		21.21		3.74	X1	0.61
/ /	:						X3	1.83

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	7/7/03	11:50	B	6	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 110

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G) + MTBE
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 11:20 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	B	2.1	6.45	371	15.15		0.26	clear / colorless
2	B	1.4	6.46	369	15.14		0.31	clear / colorless
1	B	0.7	6.47	366	15.19		0.24	slight cloudy / grey tint
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) Tim Stone (SIGNATURE)

Columbia Analytical Services INC.
An Employee - Owned Company

CHAIN OF CUSTODY

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

SR#: _____

PAGE 1 OF 1 COC # _____

PROJECT NAME: BRIX MARITIME
PROJECT NUMBER:
PROJECT MANAGER: JOHN RENDA
COMPANY/ADDRESS: ANCHOR ENV / PDX, OR
CITY/STATE/ZIP:
E-MAIL ADDRESS: JRENDA@ANCHORENV.COM
PHONE #: 503-670-1108 FAX#: 503-670-1128
SAMPLER'S SIGNATURE: [signature]

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625 ☐ 8270 ☐ 8270LL ☐	Volatile Organics 624 ☐ (8260 ☒)	Hydrocarbons (*see below) Gas ☒ Diesel ☒ Oil ☒	☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	Oil & Grease/TRPH 1664 HEM ☐ 1664 SGT ☐	PCB's Aroclors ☐ Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics - 8151M Tri ☐ Tetra ☐ PCP ☐	PAHS 8310 ☐ SIM ☒	Metals, Total or Dissolved (See list below)	Cyanide ☐ Hex-Chrom ☐	pH, Cond., Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS (circle)	NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3	TOX 9020 ☐ AOX 1650 ☐ 506 ☐					REMARKS
MW-7-070703	7/7/03	1150		H_2O	11		X	X						X	X										
-4-		1235			10		X	X						X	X										
-44-		1245			10		X	X						X	X										
-6-		1330			10		X	X						X	X										
-2-		1410			10		X	X						X	X										
-3-		1500			10		X	X						X	X										
-1-		1600			10		X	X						X	X										
TRIP BLANK		NA			2		X																		

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
X II. Report Dup., MS, MSD as required
___ III. Data Validation Report (includes all raw data).
___ IV. CLP Deliverable Report
___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

_____
Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
[signature]	7/8/03-1200						
Signature	Date/Time	Signature	Date/Time	Signature	Date/Time	Signature	Date/Time
Tim Stone	ANCHOR-PDX						
Printed Name	Firm	Printed Name	Firm	Printed Name	Firm	Printed Name	Firm

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Appendix B
Laboratory Report

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC
An Employee - Owned Company

August 4, 2003 Service Request No: K2304969

John Renda
Anchor Environmental
6650 SW Redwood Lane Suite 110
Portland, OR 97224

RE: BRIX Maritime/990056-01

Dear John:

Enclosed are the results of the sample(s) submitted to our laboratory on July 8, 2003. For your reference, these analyses have been assigned our service request number K2304969.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281.

Respectfully submitted,

Columbia Analytical Services, Inc.

Gregory Salatto for
Abbie Spielman
Project Chemist

AS/srw

NELAP Accredited ACIL Seal of Excellence Award

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BRIX001493

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

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BRIX001494

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

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BRIX001495

Case Narrative

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Anchor Environmental	**Service Request No.:**	K2304969
Project:	BRIX Maritime	**Date Received:**	7/8/03
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include Laboratory Duplicate (DUP), Matrix Spike (MS), Matrix/Duplicate Matrix Spike (MS/DMS), and Laboratory Control Sample (LCS).

Sample Receipt

Eight water samples were received for analysis at Columbia Analytical Services on 7/8/03. No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Metals

No anomalies associated with the analysis of these samples were observed.

Diesel Range Organics by NWTPH-Dx

No anomalies associated with the analysis of these samples were observed.

Gasoline Range Organics by NWTPH-Gx

No anomalies associated with the analysis of these samples were observed.

Volatile Organic Compounds by EPA Method 8260B

Lab Control Sample Exceptions:
The advisory criterion was exceeded for the following analyte(s) in Laboratory Control Sample (LCS) KWG0310639-3: Trichlorofluoromethane, Carbon Disulfide, Chloroform, 1,1,1-Trichloroethane (TCA), Bromodichloromethane, and 1,1,1,2-Tetrachloroethane. As per the CAS/Kelso Standard Operating Procedure (SOP) for this method, these compounds are not included in the subset of analytes used to control the analysis. The recovery information reported for these analytes is for advisory purposes only (i.e. to provide additional detail related to the performance of each individual compound). No further corrective action was required.

Initial Calibration Exceptions:
The primary evaluation criterion was exceeded for the following analytes in Initial Calibration (ICAL) ID CAL2736: Styrene, and Naphthalene. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 8.6%. The calibration meets the alternative evaluation criteria. Note that CAS/Kelso policy does not allow the use of averaging if any analyte in the ICAL exceeds 30% RSD.

No other anomalies associated with the analysis of these samples were observed.

Approved by Ali Sprutman Date 8/1/03

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Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Initial Calibration Exceptions:
The primary evaluation criterion was exceeded for the following analytes in Initial Calibration (ICAL) ID CAL2761: Naphthalene, Benzo (a) pyrene, Indeno (1,2,3-cd) pyrene, Dibenz (a, h) anthracene. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 9.3%. The calibration meets the alternative evaluation criteria. Note that CAS/Kelso policy does not allow the use of averaging if any analyte in the ICAL exceeds 30% RSD.

The primary evaluation criterion was exceeded for the following analytes in Initial Calibration (ICAL) ID CAL2787: Carbazole, Benzo (k) fluoranthene, Benzo (a) Pyrene, Perylene, Indeno (1,2,3-cd) pyrene, Dibenz (a, h) anthracene. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 10.6%. The calibration meets the alternative evaluation criteria. Note that CAS/Kelso policy does not allow the use of averaging if any analyte in the ICAL exceeds 30% RSD.

No other anomalies associated with the analysis of these samples were observed.

Approved by [signature] Date 8/1/03

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Chain of Custody Documentation

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BRIX001499

Columbia Analytical Services INC.
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CHAIN OF CUSTODY

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SR#: K2304969

PAGE 1 OF 1 COC #

PROJECT NAME: BRIX MARITIME
PROJECT NUMBER:
PROJECT MANAGER: JOHN RENDA
COMPANY/ADDRESS: ANCHOR ENV / PDX, OR
CITY/STATE/ZIP:
E-MAIL ADDRESS: JRENDA@ANCHORENV.COM
PHONE #: 503-670-1108 FAX#: 503-670-1128
SAMPLER'S SIGNATURE: [signature]

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐	Volatile Organics 624☐ 8260☒ → +MTBE	Hydrocarbons (*see below) Gas☒ Diesel☒ Oil☒ *	☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCB's Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081A☐ 8141A☐ 8151A☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	PAHS 8310☐ SIM☒	Metals, Total or Dissolved (See list below)	Cyanide☐ Hex-Chrom☐	pH, Cond., Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS (circle)	NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3	TOX 9020☐ AOX 1650☐ 506☐					REMARKS
MW-7-070703	7/7/03	1150	1	H_2O	11		X	X						X	X										
-4-		1235	2		10		X	X						X	X										
-44-		1245	3		10		X	X						X	X										
-6-		1330	4		10		X	X						X	X										
-2-		1410	5		10		X	X						X	X										
-3-		1500	6		10		X	X						X	X										
-1-		1600	7		10		X	X						X	X										
TRIP BLANK		NA	8		2		X																		

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
X II. Report Dup., MS, MSD as required
___ III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
___ V. EDD

INVOICE INFORMATION

P.O. #
Bill To: J. RENDA @ ANCHOR-PDX

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg
Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER:_____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

* NWTPH - Dx
NWTPH - GX

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
Signature: [signature]	Date/Time: 7/8/03-1200	Signature: [signature]	Date/Time: 7/8/03 1000	Signature	Date/Time	Signature	Date/Time
Printed Name: Tom Stone	Firm: ANCHOR-PDX	Printed Name: H Raynter	Firm: CAS	Printed Name	Firm	Printed Name	Firm

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Cooler Receipt And Preservation Form

Project/Client ARCHOR Work Order K23 4969

Cooler received on 7/8/03 and opened on 7/8/03 by [illegible]

C

1. Were custody seals on outside of cooler? If yes, how many and where? 3 F — Y N
2. Were seals intact and signature & date correct? — Y N
3. Is the shipper's airbill available and filed? If no, record airbill number: _____ — Y N
4. COC #

Temperature of cooler(s) upon receipt:	0.7	0.5	1.0	
Temperature Blank:	0.6	0.4	N/P	

5. Were custody papers properly filled out (ink, signed, etc.)? — Y N
6. Type of packing material present INSERT, STYRO
7. Did all bottles arrive in good condition (unbroken)? — Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? — Y N
9. Did all bottle labels and tags agree with custody papers? — Y N
10. Were the correct types of bottles used for the tests indicated? — Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? — Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? — Y N
13. Did the bottles originate from CAS/K or a branch laboratory? — Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? — ~~Y N~~
15. Was Cl2/Res negative? — Y ~~N~~

Explain any discrepancies: _____

RESOLUTION: _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

CRFREV.DOC3/5/2003

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BRIX001501

Metals

Confidential Business Information

BRIX001502

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Anchor Environmental

Service Request: K2304969

Project No.: 990056-01

Project Name: BRIX Maritime

Sample No.	Lab Sample ID.
MW-7-070703	K2304969-001
MW-7-070703	K2304969-001 DISS
MW-7-070703D	K2304969-001D
MW-7-070703S	K2304969-001S
MW-4-070703	K2304969-002
MW-4-070703	K2304969-002 DISS
MW-44-070703	K2304969-003
MW-44-070703	K2304969-003 DISS
MW-6-070703	K2304969-004
MW-6-070703	K2304969-004 DISS
MW-2-070703	K2304969-005
MW-2-070703	K2304969-005 DISS
MW-3-070703	K2304969-006
MW-3-070703	K2304969-006 DISS
MW-1-070703	K2304969-007
MW-1-070703	K2304969-007 DISS
Method Blank	K2304969-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: Total and Dissolved Metals

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature]

Date: 7/22/03

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METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Anchor Environmental	Service Request:	K2304969
Project No.:	990056-01	Date Collected:	07/07/03
Project Name:	BRIX Maritime	Date Received:	07/08/03
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MW-7-070703 Lab Code: K2304969-001

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.17		

% Solids: 0.0

Comments:

Form I 12 IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Anchor Environmental	Service Request:	K2304969
Project No.:	990056-01	Date Collected:	07/07/03
Project Name:	BRIX Maritime	Date Received:	07/08/03
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MW-7-070703 Lab Code: K2304969-001 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.02	U	

% Solids: 0.0

Comments: Dissolved Metals

Form I 13IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2304969
Date Collected: 07/07/03
Date Received: 07/08/03
Units: µG/L
Basis: NA

Sample Name: MW-4-070703
Lab Code: K2304969-002

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.78		

% Solids: 0.0

Comments:

Confidential Business Information

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Anchor Environmental	Service Request:	K2304969
Project No.:	990056-01	Date Collected:	07/07/03
Project Name:	BRIX Maritime	Date Received:	07/08/03
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MW-4-070703 Lab Code: K2304969-002 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.02		

% Solids: 0.0

Comments: Dissolved Metals

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METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Anchor Environmental	Service Request:	K2304969
Project No.:	990056-01	Date Collected:	07/07/03
Project Name:	BRIX Maritime	Date Received:	07/08/03
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MW-44-070703 Lab Code: K2304969-003

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.18		

% Solids: 0.0

Comments:

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METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2304969
Date Collected: 07/07/03
Date Received: 07/08/03
Units: µG/L
Basis: NA

Sample Name: MW-44-070703
Lab Code: K2304969-003 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.03		

% Solids: 0.0

Comments: Dissolved Metals

Confidential Business Information

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Anchor Environmental	Service Request:	K2304969
Project No.:	990056-01	Date Collected:	07/07/03
Project Name:	BRIX Maritime	Date Received:	07/08/03
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MW-6-070703 Lab Code: K2304969-004

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.10		

% Solids: 0.0

Comments:

Form I T8IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Anchor Environmental	Service Request:	K2304969
Project No.:	990056-01	Date Collected:	07/07/03
Project Name:	BRIX Maritime	Date Received:	07/08/03
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MW-6-070703 Lab Code: K2304969-004 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.02	U	

% Solids: 0.0

Comments: Dissolved Metals

Form I IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2304969
Date Collected: 07/07/03
Date Received: 07/08/03
Units: µG/L
Basis: NA

Sample Name: MW-2-070703
Lab Code: K2304969-005

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.04		

% Solids: 0.0

Comments:

Confidential Business Information

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Anchor Environmental	Service Request:	K2304969
Project No.:	990056-01	Date Collected:	07/07/03
Project Name:	BRIX Maritime	Date Received:	07/08/03
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MW-2-070703 Lab Code: K2304969-005 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.05		

% Solids: 0.0

Comments: Dissolved Metals

Confidential Business Information

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2304969
Date Collected: 07/07/03
Date Received: 07/08/03
Units: µG/L
Basis: NA

Sample Name: MW-3-070703
Lab Code: K2304969-006

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.36		

% Solids: 0.0

Comments:

Form I IN

Confidential Business Information

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Anchor Environmental	Service Request:	K2304969
Project No.:	990056-01	Date Collected:	07/07/03
Project Name:	BRIX Maritime	Date Received:	07/08/03
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MW-3-070703 Lab Code: K2304969-006 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.08		

% Solids: 0.0

Comments: Dissolved Metals

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Anchor Environmental	Service Request:	K2304969
Project No.:	990056-01	Date Collected:	07/07/03
Project Name:	BRIX Maritime	Date Received:	07/08/03
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MW-1-070703 Lab Code: K2304969-007

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	1.34		

% Solids: 0.0

Comments:

Confidential Business Information

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Anchor Environmental	Service Request:	K2304969
Project No.:	990056-01	Date Collected:	07/07/03
Project Name:	BRIX Maritime	Date Received:	07/08/03
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MW-1-070703 Lab Code: K2304969-007 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.05		

% Solids: 0.0

Comments: Dissolved Metals

Confidential Business Information

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2304969
Date Collected:
Date Received:
Units: µG/L
Basis: NA

Sample Name: Method Blank
Lab Code: K2304969-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	7/14/03	7/15/03	0.02	U	

% Solids: 0.0

Comments:

Confidential Business Information

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2304969
Units: µg/L
Basis: NA
% Solids: 0.0

Sample Name: MW-7-070703S
Lab Code: K2304969-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Lead	70 - 130	20.0		0.17		20.0	99		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

Confidential Business Information

METALS
-6-
DUPLICATES

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2304969
Units: µg/L
Basis: NA
% Solids: 0.0

Sample Name: MW-7-070703D
Lab Code: K2304969-001D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Lead	20	0.17		0.17		2		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

Confidential Business Information

Diesel and Residual Range Organics

Confidential Business Information

BRIX001521

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Diesel and Residual Range Organics

Sample Name:	MW-7-070703	**Units:**	ug/L
Lab Code:	K2304969-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	250	1	07/10/03	07/14/03	KWG0310297	
Residual Range Organics (RRO)	ND	U	500	1	07/10/03	07/14/03	KWG0310297	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	97	50-150	07/14/03	Acceptable
n-Triacontane	89	50-150	07/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Diesel and Residual Range Organics

Sample Name:	MW-4-070703	**Units:**	ug/L
Lab Code:	K2304969-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	250	1	07/10/03	07/14/03	KWG0310297	
Residual Range Organics (RRO)	**520**	O	500	1	07/10/03	07/14/03	KWG0310297	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	86	50-150	07/14/03	Acceptable
n-Triacontane	81	50-150	07/14/03	Acceptable

Comments:

Confidential Business Information BRIX001523

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Diesel and Residual Range Organics

Sample Name:	MW-44-070703	**Units:**	ug/L
Lab Code:	K2304969-003	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	250	1	07/10/03	07/14/03	KWG0310297	
Residual Range Organics (RRO)	ND	U	500	1	07/10/03	07/14/03	KWG0310297	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	87	50-150	07/14/03	Acceptable
n-Triacontane	83	50-150	07/14/03	Acceptable

Comments:

Confidential Business Information BRIX001524

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Diesel and Residual Range Organics

Sample Name:	MW-6-070703	**Units:**	ug/L
Lab Code:	K2304969-004	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	250	1	07/10/03	07/14/03	KWG0310297	
Residual Range Organics (RRO)	ND	U	500	1	07/10/03	07/14/03	KWG0310297	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	85	50-150	07/14/03	Acceptable
n-Triacontane	81	50-150	07/14/03	Acceptable

Comments:

Confidential Business Information BRIX001525

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Diesel and Residual Range Organics

Sample Name:	MW-2-070703	**Units:**	ug/L
Lab Code:	K2304969-005	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	250	1	07/10/03	07/14/03	KWG0310297	
Residual Range Organics (RRO)	ND	U	500	1	07/10/03	07/14/03	KWG0310297	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	84	50-150	07/14/03	Acceptable
n-Triacontane	78	50-150	07/14/03	Acceptable

Comments:

Confidential Business Information BRIX001526

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Diesel and Residual Range Organics

Sample Name:	MW-3-070703	**Units:**	ug/L
Lab Code:	K2304969-006	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	1900	Y	250	1	07/10/03	07/14/03	KWG0310297	
Residual Range Organics (RRO)	8500	O	500	1	07/10/03	07/14/03	KWG0310297	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	92	50-150	07/14/03	Acceptable
n-Triacontane	88	50-150	07/14/03	Acceptable

Comments:

Confidential Business Information BRIX001527

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Diesel and Residual Range Organics

Sample Name:	MW-1-070703	**Units:**	ug/L
Lab Code:	K2304969-007	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	270	L	250	1	07/10/03	07/14/03	KWG0310297	
Residual Range Organics (RRO)	ND	U	500	1	07/10/03	07/14/03	KWG0310297	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	96	50-150	07/14/03	Acceptable
n-Triacontane	89	50-150	07/14/03	Acceptable

Comments:

Confidential Business Information BRIX001528

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0310297-5	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	250	1	07/10/03	07/14/03	KWG0310297	
Residual Range Organics (RRO)	ND	U	500	1	07/10/03	07/14/03	KWG0310297	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	84	50-150	07/14/03	Acceptable
n-Triacontane	75	50-150	07/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime/990056-01
Sample Matrix: Water

Service Request: K2304969

Surrogate Recovery Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
MW-7-070703	K2304969-001	97	89
MW-4-070703	K2304969-002	86	81
MW-44-070703	K2304969-003	87	83
MW-6-070703	K2304969-004	85	81
MW-2-070703	K2304969-005	84	78
MW-3-070703	K2304969-006	92	88
MW-1-070703	K2304969-007	96	89
Batch QCDUP	KWG0310297-6	96	90
Method Blank	KWG0310297-5	84	75
Batch QC	K2304998-001	94	89
Lab Control Sample	KWG0310297-3	97	90
Duplicate Lab Control Sample	KWG0310297-4	87	81

Surrogate Recovery Control Limits (%)

Sur1 =	o-Terphenyl	50-150
Sur2 =	n-Triacontane	50-150

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

Confidential Business Information
BRIX001530

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Extracted:**	07/10/2003
Sample Matrix:	Water	**Date Analyzed:**	07/14/2003

Duplicate Sample Summary
Diesel and Residual Range Organics

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K2304998-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx	**Extraction Lot:**	KWG0310297

Analyte Name	MRL	Sample Result	Batch QCDUP KWG0310297-6 Duplicate Sample Result	Average	Relative Percent Difference	RPD Limit
Diesel Range Organics (DRO)	300	ND	ND	ND	-	30
Residual Range Organics (RRO)	590	ND	ND	ND	-	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Extracted:**	07/10/2003
Sample Matrix:	Water	**Date Analyzed:**	07/14/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Diesel and Residual Range Organics

Extraction Method:	EPA 3510C	**Units:**	ug/L
Analysis Method:	NWTPH-Dx	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0310297

	Lab Control Sample KWG0310297-3 Lab Control Spike			Duplicate Lab Control Sample KWG0310297-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Diesel Range Organics (DRO)	1800	1600	112	1500	1600	94	51-143	18	30
Residual Range Organics (RRO)	1480	1600	93	1240	1600	77	60-131	18	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Gasoline Range Organics

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Gasoline Range Organics

Sample Name:	MW-7-070703	**Units:**	ug/L
Lab Code:	K2304969-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	50	1	07/15/03	07/15/03	KWG0310827	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	100	50-150	07/15/03	Acceptable

Comments:

Confidential Business Information BRIX001534

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Gasoline Range Organics

Sample Name:	MW-4-070703	**Units:**	ug/L
Lab Code:	K2304969-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	50	1	07/15/03	07/15/03	KWG0310827	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	100	50-150	07/15/03	Acceptable

Comments:

Confidential Business Information BRIX001535

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Gasoline Range Organics

Sample Name:	MW-44-070703	**Units:**	ug/L
Lab Code:	K2304969-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	50	1	07/15/03	07/15/03	KWG0310827	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	100	50-150	07/15/03	Acceptable

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Gasoline Range Organics

Sample Name:	MW-6-070703	**Units:**	ug/L
Lab Code:	K2304969-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	50	1	07/15/03	07/15/03	KWG0310827	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	109	50-150	07/15/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Gasoline Range Organics

Sample Name:	MW-2-070703	**Units:**	ug/L
Lab Code:	K2304969-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	50	1	07/15/03	07/15/03	KWG0310827	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	105	50-150	07/15/03	Acceptable

Comments:

Confidential Business Information BRIX001538

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Gasoline Range Organics

Sample Name:	MW-3-070703	**Units:**	ug/L
Lab Code:	K2304969-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	50	1	07/15/03	07/15/03	KWG0310827	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	102	50-150	07/15/03	Acceptable

Comments:

Confidential Business Information BRIX001539

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Gasoline Range Organics

Sample Name:	MW-1-070703	**Units:**	ug/L
Lab Code:	K2304969-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	1300	H	50	1	07/15/03	07/15/03	KWG0310827	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	99	50-150	07/15/03	Acceptable

Comments:

Confidential Business Information BRIX001540

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0310827-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	50	1	07/15/03	07/15/03	KWG0310827	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	105	50-150	07/15/03	Acceptable

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime/990056-01
Sample Matrix: Water

Service Request: K2304969

Surrogate Recovery Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: NWTPH-Gx

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
MW-7-070703	K2304969-001	100
MW-4-070703	K2304969-002	100
MW-44-070703	K2304969-003	100
MW-6-070703	K2304969-004	109
MW-2-070703	K2304969-005	105
MW-3-070703	K2304969-006	102
MW-1-070703	K2304969-007	99
Method Blank	KWG0310827-4	105
MW-6-070703MS	KWG0310827-1	110
MW-6-070703DMS	KWG0310827-2	116
Lab Control Sample	KWG0310827-3	110

Surrogate Recovery Control Limits (%)

Sur1 = 1,4-Difluorobenzene 50-150

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

Confidential Business Information
BRIX001542

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Extracted:**	07/15/2003
Sample Matrix:	Water	**Date Analyzed:**	07/15/2003

Matrix Spike/Duplicate Matrix Spike Summary
Gasoline Range Organics

Sample Name:	MW-6-070703	**Units:**	ug/L
Lab Code:	K2304969-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx	**Extraction Lot:**	KWG0310827

		MW-6-070703MS KWG0310827-1 Matrix Spike			MW-6-070703DMS KWG0310827-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Gasoline Range Organics (GRO)	ND	1070	1000	107	991	1000	99	64-131	8	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Confidential Business Information
BRIX001543

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Extracted:**	07/15/2003
Sample Matrix:	Water	**Date Analyzed:**	07/15/2003

Lab Control Spike Summary
Gasoline Range Organics

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	NWTPH-Gx	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0310827

	Lab Control Sample KWG0310827-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Gasoline Range Organics (GRO)	1040	1000	104	73-124

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Volatile Organic Compounds
Method 8260

Confidential Business Information

BRIX001545

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-7-070703	**Units:**	ug/L
Lab Code:	K2304969-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Chloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Vinyl Chloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Chloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Trichlorofluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Acetone	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
1,1-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Methyl tert-Butyl Ether	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Carbon Disulfide	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Methylene Chloride	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
trans-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1-Dichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
2-Butanone (MEK)	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
2,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
cis-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Chloroform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Carbon Tetrachloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Benzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Trichloroethene (TCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromodichloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Dibromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
2-Hexanone	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
cis-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Toluene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
trans-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1,2-Trichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
1,3-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-7-070703	**Units:**	ug/L
Lab Code:	K2304969-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Dibromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
Chlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Ethylbenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
m,p-Xylenes	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
o-Xylene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Styrene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromoform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Isopropylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2,3-Trichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
n-Propylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
2-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
4-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,3,5-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
tert-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2,4-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
sec-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,3-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
4-Isopropyltoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,4-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
n-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2,4-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2,3-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
Naphthalene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
Hexachlorobutadiene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-7-070703	**Units:**	ug/L
Lab Code:	K2304969-001	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	112	78-124	07/15/03	Acceptable
Toluene-d8	99	87-118	07/15/03	Acceptable
4-Bromofluorobenzene	93	81-113	07/15/03	Acceptable

Comments:

Confidential Business Information BRIX001548

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-4-070703	**Units:**	ug/L
Lab Code:	K2304969-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Chloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Vinyl Chloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Chloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Trichlorofluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Acetone	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
1,1-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Methyl tert-Butyl Ether	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Carbon Disulfide	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Methylene Chloride	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
trans-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1-Dichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
2-Butanone (MEK)	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
2,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
cis-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Chloroform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Carbon Tetrachloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Benzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Trichloroethene (TCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromodichloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Dibromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
2-Hexanone	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
cis-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Toluene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
trans-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1,2-Trichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
1,3-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-4-070703	**Units:**	ug/L
Lab Code:	K2304969-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Dibromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
Chlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Ethylbenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
m,p-Xylenes	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
o-Xylene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Styrene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromoform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Isopropylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2,3-Trichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
n-Propylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
2-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
4-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,3,5-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
tert-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2,4-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
sec-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,3-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
4-Isopropyltoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,4-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
n-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2,4-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2,3-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
Naphthalene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
Hexachlorobutadiene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	

Comments:

Confidential Business Information

BRIX001550

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-4-070703	**Units:**	ug/L
Lab Code:	K2304969-002	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	109	78-124	07/15/03	Acceptable
Toluene-d8	99	87-118	07/15/03	Acceptable
4-Bromofluorobenzene	93	81-113	07/15/03	Acceptable

Comments:

Confidential Business Information

BRIX001551

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-44-070703	**Units:**	ug/L
Lab Code:	K2304969-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Chloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Vinyl Chloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Chloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Trichlorofluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Acetone	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
1,1-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Methyl tert-Butyl Ether	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Carbon Disulfide	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Methylene Chloride	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
trans-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1-Dichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
2-Butanone (MEK)	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
2,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
cis-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Chloroform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Carbon Tetrachloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Benzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Trichloroethene (TCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromodichloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Dibromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
2-Hexanone	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
cis-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Toluene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
trans-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1,2-Trichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
1,3-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-44-070703	**Units:**	ug/L
Lab Code:	K2304969-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Dibromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
Chlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Ethylbenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
m,p-Xylenes	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
o-Xylene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Styrene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromoform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Isopropylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2,3-Trichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
n-Propylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
2-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
4-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,3,5-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
tert-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2,4-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
sec-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,3-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
4-Isopropyltoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,4-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
n-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2,4-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2,3-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
Naphthalene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
Hexachlorobutadiene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-44-070703	**Units:**	ug/L
Lab Code:	K2304969-003	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	110	78-124	07/15/03	Acceptable
Toluene-d8	98	87-118	07/15/03	Acceptable
4-Bromofluorobenzene	92	81-113	07/15/03	Acceptable

Comments:

Confidential Business Information BRIX001554

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-6-070703	**Units:**	ug/L
Lab Code:	K2304969-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Chloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Vinyl Chloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Chloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Trichlorofluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Acetone	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
1,1-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Methyl tert-Butyl Ether	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Carbon Disulfide	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Methylene Chloride	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
trans-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1-Dichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
2-Butanone (MEK)	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
2,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
cis-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Chloroform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Carbon Tetrachloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Benzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Trichloroethene (TCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromodichloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Dibromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
2-Hexanone	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
cis-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Toluene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
trans-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1,2-Trichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	07/15/03	07/15/03	KWG0310604	
1,3-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	

Comments:

Confidential Business Information BRIX001555

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Collected:	07/07/2003
Sample Matrix:	Water	Date Received:	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-6-070703	Units:	ug/L
Lab Code:	K2304969-004	Basis:	NA
Extraction Method:	EPA 5030B	Level:	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Dibromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
Chlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Ethylbenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
m,p-Xylenes	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
o-Xylene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Styrene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromoform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Isopropylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2,3-Trichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
Bromobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
n-Propylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
2-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
4-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,3,5-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
tert-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2,4-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
sec-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,3-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
4-Isopropyltoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,4-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
n-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310604	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2,4-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
1,2,3-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
Naphthalene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	
Hexachlorobutadiene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310604	

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-6-070703	**Units:**	ug/L
Lab Code:	K2304969-004	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	113	78-124	07/15/03	Acceptable
Toluene-d8	100	87-118	07/15/03	Acceptable
4-Bromofluorobenzene	91	81-113	07/15/03	Acceptable

Comments:

Confidential Business Information BRIX001557

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-2-070703	**Units:**	ug/L
Lab Code:	K2304969-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Vinyl Chloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Trichlorofluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Acetone	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Methyl tert-Butyl Ether	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Carbon Disulfide	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Methylene Chloride	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
trans-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
2-Butanone (MEK)	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
2,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
cis-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloroform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Carbon Tetrachloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Benzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Trichloroethene (TCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromodichloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Dibromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
2-Hexanone	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
cis-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Toluene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
trans-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,2-Trichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
1,3-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	

Comments:

Confidential Business Information BRIX001558

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Collected:	07/07/2003
Sample Matrix:	Water	Date Received:	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-2-070703	Units:	ug/L
Lab Code:	K2304969-005	Basis:	NA
Extraction Method:	EPA 5030B	Level:	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Dibromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Chlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Ethylbenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
m,p-Xylenes	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
o-Xylene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Styrene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromoform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Isopropylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2,3-Trichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
n-Propylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
2-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
4-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,3,5-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
tert-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,4-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
sec-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,3-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
4-Isopropyltoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,4-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
n-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,4-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,3-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Naphthalene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Hexachlorobutadiene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	

Comments:

Confidential Business Information BRIX001559

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-2-070703	**Units:**	ug/L
Lab Code:	K2304969-005	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	112	78-124	07/15/03	Acceptable
Toluene-d8	99	87-118	07/15/03	Acceptable
4-Bromofluorobenzene	94	81-113	07/15/03	Acceptable

Comments:

Confidential Business Information BRIX001560

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-3-070703	**Units:**	ug/L
Lab Code:	K2304969-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Vinyl Chloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Trichlorofluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Acetone	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Methyl tert-Butyl Ether	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Carbon Disulfide	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Methylene Chloride	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
trans-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
2-Butanone (MEK)	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
2,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
cis-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloroform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Carbon Tetrachloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Benzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Trichloroethene (TCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromodichloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Dibromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
2-Hexanone	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
cis-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Toluene	**0.80**		0.50	1	07/15/03	07/15/03	KWG0310639	
trans-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,2-Trichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
1,3-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	

Comments:

Confidential Business Information BRIX001561

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Collected:	07/07/2003
Sample Matrix:	Water	Date Received:	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-3-070703	Units:	ug/L
Lab Code:	K2304969-006	Basis:	NA
Extraction Method:	EPA 5030B	Level:	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Dibromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Chlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Ethylbenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
m,p-Xylenes	**1.2**		0.50	1	07/15/03	07/15/03	KWG0310639	
o-Xylene	**1.1**		0.50	1	07/15/03	07/15/03	KWG0310639	
Styrene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromoform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Isopropylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2,3-Trichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
n-Propylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
2-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
4-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,3,5-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
tert-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,4-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
sec-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,3-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
4-Isopropyltoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,4-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
n-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,4-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,3-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Naphthalene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Hexachlorobutadiene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-3-070703	**Units:**	ug/L
Lab Code:	K2304969-006	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	110	78-124	07/15/03	Acceptable
Toluene-d8	97	87-118	07/15/03	Acceptable
4-Bromofluorobenzene	99	81-113	07/15/03	Acceptable

Comments:

Confidential Business Information

BRIX001563

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-1-070703	**Units:**	ug/L
Lab Code:	K2304969-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Vinyl Chloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Trichlorofluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Acetone	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Methyl tert-Butyl Ether	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Carbon Disulfide	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Methylene Chloride	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
trans-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
2-Butanone (MEK)	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
2,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
cis-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloroform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Carbon Tetrachloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Benzene	**1.3**		0.50	1	07/15/03	07/15/03	KWG0310639	
Trichloroethene (TCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromodichloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Dibromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
2-Hexanone	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
cis-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Toluene	**1.1**		0.50	1	07/15/03	07/15/03	KWG0310639	
trans-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,2-Trichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
1,3-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	

Comments:

Confidential Business Information BRIX001564

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Collected:	07/07/2003
Sample Matrix:	Water	Date Received:	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-1-070703	Units:	ug/L
Lab Code:	K2304969-007	Basis:	NA
Extraction Method:	EPA 5030B	Level:	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Dibromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Chlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Ethylbenzene	**11**		0.50	1	07/15/03	07/15/03	KWG0310639	
m,p-Xylenes	**18**		0.50	1	07/15/03	07/15/03	KWG0310639	
o-Xylene	**2.0**		0.50	1	07/15/03	07/15/03	KWG0310639	
Styrene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromoform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Isopropylbenzene	**31**		2.0	1	07/15/03	07/15/03	KWG0310639	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2,3-Trichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
n-Propylbenzene	**64**	D	10	5	07/16/03	07/16/03	KWG0310639	
2-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
4-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,3,5-Trimethylbenzene	**9.3**		2.0	1	07/15/03	07/15/03	KWG0310639	
tert-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,4-Trimethylbenzene	**46**		2.0	1	07/15/03	07/15/03	KWG0310639	
sec-Butylbenzene	**8.2**		2.0	1	07/15/03	07/15/03	KWG0310639	
1,3-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
4-Isopropyltoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,4-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
n-Butylbenzene	**14**		2.0	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,4-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,3-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Naphthalene	**22**		2.0	1	07/15/03	07/15/03	KWG0310639	
Hexachlorobutadiene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	

Comments:

Confidential Business Information

BRIX001565

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	MW-1-070703	**Units:**	ug/L
Lab Code:	K2304969-007	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	111	78-124	07/15/03	Acceptable
Toluene-d8	100	87-118	07/15/03	Acceptable
4-Bromofluorobenzene	104	81-113	07/15/03	Acceptable

Comments:

Confidential Business Information

BRIX001566

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	K2304969-008	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Vinyl Chloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Trichlorofluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Acetone	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Methyl tert-Butyl Ether	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Carbon Disulfide	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Methylene Chloride	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
trans-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
2-Butanone (MEK)	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
2,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
cis-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloroform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Carbon Tetrachloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Benzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Trichloroethene (TCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromodichloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Dibromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
2-Hexanone	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
cis-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Toluene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
trans-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,2-Trichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
1,3-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	

Comments:

Confidential Business Information

BRIX001567

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	K2304969-008	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Dibromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Chlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Ethylbenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
m,p-Xylenes	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
o-Xylene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Styrene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromoform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Isopropylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2,3-Trichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
n-Propylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
2-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
4-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,3,5-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
tert-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,4-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
sec-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,3-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
4-Isopropyltoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,4-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
n-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,4-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,3-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Naphthalene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Hexachlorobutadiene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	

Comments:

Confidential Business Information BRIX001568

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Volatile Organic Compounds

Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	K2304969-008	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	111	78-124	07/15/03	Acceptable
Toluene-d8	99	87-118	07/15/03	Acceptable
4-Bromofluorobenzene	95	81-113	07/15/03	Acceptable

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Collected:	NA
Sample Matrix:	Water	Date Received:	NA

Volatile Organic Compounds

Sample Name:	Method Blank	Units:	ug/L
Lab Code:	KWG0310604-4	Basis:	NA
Extraction Method:	EPA 5030B	Level:	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Chloromethane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Vinyl Chloride	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Bromomethane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Chloroethane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Trichlorofluoromethane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Acetone	ND	U	20	1	07/14/03	07/14/03	KWG0310604	
1,1-Dichloroethene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Methyl tert-Butyl Ether	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Carbon Disulfide	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Methylene Chloride	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
trans-1,2-Dichloroethene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
1,1-Dichloroethane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
2-Butanone (MEK)	ND	U	20	1	07/14/03	07/14/03	KWG0310604	
2,2-Dichloropropane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
cis-1,2-Dichloroethene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Chloroform	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Bromochloromethane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
1,1-Dichloropropene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Carbon Tetrachloride	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Benzene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Trichloroethene (TCE)	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
1,2-Dichloropropane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Bromodichloromethane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Dibromomethane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
2-Hexanone	ND	U	20	1	07/14/03	07/14/03	KWG0310604	
cis-1,3-Dichloropropene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Toluene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
trans-1,3-Dichloropropene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
1,1,2-Trichloroethane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	07/14/03	07/14/03	KWG0310604	
1,3-Dichloropropane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0310604-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Dibromochloromethane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
Chlorobenzene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Ethylbenzene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
m,p-Xylenes	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
o-Xylene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Styrene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Bromoform	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Isopropylbenzene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
1,2,3-Trichloropropane	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
Bromobenzene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
n-Propylbenzene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
2-Chlorotoluene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
4-Chlorotoluene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
1,3,5-Trimethylbenzene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
tert-Butylbenzene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
1,2,4-Trimethylbenzene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
sec-Butylbenzene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
1,3-Dichlorobenzene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
4-Isopropyltoluene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
1,4-Dichlorobenzene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
n-Butylbenzene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
1,2-Dichlorobenzene	ND	U	0.50	1	07/14/03	07/14/03	KWG0310604	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
1,2,4-Trichlorobenzene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
1,2,3-Trichlorobenzene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
Naphthalene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	
Hexachlorobutadiene	ND	U	2.0	1	07/14/03	07/14/03	KWG0310604	

Comments:

Confidential Business Information BRIX001571

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0310604-4	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	110	78-124	07/14/03	Acceptable
Toluene-d8	100	87-118	07/14/03	Acceptable
4-Bromofluorobenzene	93	81-113	07/14/03	Acceptable

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Collected:	NA
Sample Matrix:	Water	Date Received:	NA

Volatile Organic Compounds

Sample Name:	Method Blank	Units:	ug/L
Lab Code:	KWG0310639-4	Basis:	NA
Extraction Method:	EPA 5030B	Level:	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Vinyl Chloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Trichlorofluoromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Acetone	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Methyl tert-Butyl Ether	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Carbon Disulfide	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Methylene Chloride	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
trans-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
2-Butanone (MEK)	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
2,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
cis-1,2-Dichloroethene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Chloroform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Carbon Tetrachloride	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Benzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Trichloroethene (TCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromodichloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Dibromomethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
2-Hexanone	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
cis-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Toluene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
trans-1,3-Dichloropropene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,2-Trichloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	07/15/03	07/15/03	KWG0310639	
1,3-Dichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	

Comments:

Confidential Business Information

BRIX001573

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0310639-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Dibromochloromethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Chlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Ethylbenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
m,p-Xylenes	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
o-Xylene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Styrene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromoform	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Isopropylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2,3-Trichloropropane	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
Bromobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
n-Propylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
2-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
4-Chlorotoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,3,5-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
tert-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,4-Trimethylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
sec-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,3-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
4-Isopropyltoluene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,4-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
n-Butylbenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2-Dichlorobenzene	ND	U	0.50	1	07/15/03	07/15/03	KWG0310639	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,4-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
1,2,3-Trichlorobenzene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Naphthalene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	
Hexachlorobutadiene	ND	U	2.0	1	07/15/03	07/15/03	KWG0310639	

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0310639-4	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	111	78-124	07/15/03	Acceptable
Toluene-d8	99	87-118	07/15/03	Acceptable
4-Bromofluorobenzene	94	81-113	07/15/03	Acceptable

Comments:

Confidential Business Information

BRIX001575

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime/990056-01
Sample Matrix: Water

Service Request: K2304969

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
MW-7-070703	K2304969-001	112	99	93
MW-4-070703	K2304969-002	109	99	93
MW-44-070703	K2304969-003	110	98	92
MW-6-070703	K2304969-004	113	100	91
MW-2-070703	K2304969-005	112	99	94
MW-3-070703	K2304969-006	110	97	99
MW-1-070703	K2304969-007	111	100	104
Trip Blank	K2304969-008	111	99	95
Method Blank	KWG0310604-4	110	100	93
Method Blank	KWG0310639-4	111	99	94
MW-2-070703MS	KWG0310639-1	111	104	104
MW-2-070703DMS	KWG0310639-2	110	105	104
Lab Control Sample	KWG0310604-3	107	104	104
Lab Control Sample	KWG0310639-3	111	105	107

Surrogate Recovery Control Limits (%)

Sur1 =	Dibromofluoromethane	78-124
Sur2 =	Toluene-d8	87-118
Sur3 =	4-Bromofluorobenzene	81-113

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

Confidential Business Information
BRIX001576

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Extracted:**	07/15/2003
Sample Matrix:	Water	**Date Analyzed:**	07/15/2003

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	MW-2-070703	**Units:**	ug/L
Lab Code:	K2304969-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0310639

		MW-2-070703MS KWG0310639-1 Matrix Spike			MW-2-070703DMS KWG0310639-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,1-Dichloroethene	ND	12.3	10.0	123	11.5	10.0	115	67-157	7	30
Benzene	ND	10.6	10.0	106	10.2	10.0	102	76-138	3	30
Trichloroethene (TCE)	ND	11.2	10.0	112	10.6	10.0	106	66-149	6	30
Toluene	ND	10.6	10.0	106	10.3	10.0	103	82-131	2	30
Chlorobenzene	ND	10.1	10.0	101	9.65	10.0	97	70-131	5	30
1,2-Dichlorobenzene	ND	9.21	10.0	92	9.00	10.0	90	70-126	2	30
Naphthalene	ND	9.30	10.0	93	10.0	10.0	100	50-149	8	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Extracted:	07/14/2003
Sample Matrix:	Water	Date Analyzed:	07/14/2003

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	Units:	ug/L
Analysis Method:	8260B	Basis:	NA
		Level:	Low
		Extraction Lot:	KWG0310604

	Lab Control Sample KWG0310604-3 Lab Control Spike			
Analyte Name	Result	Expected	%Rec	%Rec Limits
Dichlorodifluoromethane	10.7	10.0	107	33-189
Chloromethane	7.75	10.0	78	66-128
Vinyl Chloride	9.95	10.0	100	76-135
Bromomethane	10.4	10.0	104	30-188
Chloroethane	9.18	10.0	92	79-131
Trichlorofluoromethane	11.2	10.0	112	73-127
Acetone	56.2	50.0	112	60-157
1,1-Dichloroethene	10.8	10.0	108	79-137
Methyl tert-Butyl Ether	9.91	10.0	99	78-128
Carbon Disulfide	22.9	20.0	115	68-118
Methylene Chloride	10.1	10.0	101	68-135
trans-1,2-Dichloroethene	10.1	10.0	101	88-127
1,1-Dichloroethane	10.2	10.0	102	89-133
2-Butanone (MEK)	53.9	50.0	108	78-144
2,2-Dichloropropane	11.6	10.0	116	71-138
cis-1,2-Dichloroethene	10.5	10.0	105	90-126
Chloroform	11.0	10.0	110	88-117
Bromochloromethane	10.9	10.0	109	80-133
1,1,1-Trichloroethane (TCA)	11.3	10.0	113	83-122
1,1-Dichloropropene	10.7	10.0	107	87-137
Carbon Tetrachloride	11.9	10.0	119	87-131
1,2-Dichloroethane (EDC)	11.3	10.0	113	73-130
Benzene	9.88	10.0	99	90-120
Trichloroethene (TCE)	10.3	10.0	103	83-131
1,2-Dichloropropane	10.0	10.0	100	87-121
Bromodichloromethane	11.0	10.0	110	84-114
Dibromomethane	10.9	10.0	109	76-130
2-Hexanone	47.7	50.0	95	68-135
cis-1,3-Dichloropropene	10.4	10.0	104	90-126
Toluene	9.92	10.0	99	89-119
trans-1,3-Dichloropropene	9.94	10.0	99	77-113
1,1,2-Trichloroethane	9.77	10.0	98	81-116
4-Methyl-2-pentanone (MIBK)	49.5	50.0	99	79-138
1,3-Dichloropropane	10.4	10.0	104	76-129
Tetrachloroethene (PCE)	10.2	10.0	102	82-123
Dibromochloromethane	10.8	10.0	108	83-119

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Confidential Business Information
BRIX001578

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Extracted:	07/14/2003
Sample Matrix:	Water	Date Analyzed:	07/14/2003

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	Units:	ug/L
Analysis Method:	8260B	Basis:	NA
		Level:	Low
		Extraction Lot:	KWG0310604

Analyte Name	Lab Control Sample KWG0310604-3 Lab Control Spike Result	Expected	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	10.6	10.0	106	74-130
Chlorobenzene	9.83	10.0	98	86-115
1,1,1,2-Tetrachloroethane	11.4	10.0	114	88-118
Ethylbenzene	10.3	10.0	103	89-124
m,p-Xylenes	20.6	20.0	103	90-122
o-Xylene	10.4	10.0	104	88-126
Styrene	10.2	10.0	102	91-123
Bromoform	10.9	10.0	109	76-125
Isopropylbenzene	9.51	10.0	95	82-123
1,1,2,2-Tetrachloroethane	8.86	10.0	89	78-117
1,2,3-Trichloropropane	10.3	10.0	103	75-127
Bromobenzene	9.74	10.0	97	76-129
n-Propylbenzene	10.2	10.0	102	83-128
2-Chlorotoluene	9.79	10.0	98	74-131
4-Chlorotoluene	9.91	10.0	99	87-119
1,3,5-Trimethylbenzene	9.96	10.0	100	85-128
tert-Butylbenzene	10.2	10.0	102	83-129
1,2,4-Trimethylbenzene	10.0	10.0	100	88-129
sec-Butylbenzene	10.2	10.0	102	84-133
1,3-Dichlorobenzene	9.28	10.0	93	87-116
4-Isopropyltoluene	9.39	10.0	94	81-126
1,4-Dichlorobenzene	9.49	10.0	95	86-115
n-Butylbenzene	9.36	10.0	94	79-134
1,2-Dichlorobenzene	9.30	10.0	93	85-113
1,2-Dibromo-3-chloropropane	9.27	10.0	93	55-136
1,2,4-Trichlorobenzene	9.60	10.0	96	76-130
1,2,3-Trichlorobenzene	10.1	10.0	101	70-134
Naphthalene	9.77	10.0	98	71-137
Hexachlorobutadiene	10.1	10.0	101	77-129

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Confidential Business Information
BRIX001579

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Extracted:**	07/15/2003
Sample Matrix:	Water	**Date Analyzed:**	07/15/2003

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0310639

	Lab Control Sample KWG0310639-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dichlorodifluoromethane	15.1	10.0	151	33-189
Chloromethane	9.94	10.0	99	66-128
Vinyl Chloride	11.5	10.0	115	76-135
Bromomethane	13.1	10.0	131	30-188
Chloroethane	10.4	10.0	104	79-131
Trichlorofluoromethane	12.9	10.0	129 *	73-127
Acetone	60.6	50.0	121	60-157
1,1-Dichloroethene	12.1	10.0	121	79-137
Methyl tert-Butyl Ether	11.0	10.0	110	78-128
Carbon Disulfide	25.7	20.0	128 *	68-118
Methylene Chloride	10.6	10.0	106	68-135
trans-1,2-Dichloroethene	11.2	10.0	112	88-127
1,1-Dichloroethane	11.2	10.0	112	89-133
2-Butanone (MEK)	58.6	50.0	117	78-144
2,2-Dichloropropane	12.7	10.0	127	71-138
cis-1,2-Dichloroethene	11.2	10.0	112	90-126
Chloroform	12.0	10.0	120 *	88-117
Bromochloromethane	11.8	10.0	118	80-133
1,1,1-Trichloroethane (TCA)	12.5	10.0	125 *	83-122
1,1-Dichloropropene	11.7	10.0	117	87-137
Carbon Tetrachloride	13.0	10.0	130	87-131
1,2-Dichloroethane (EDC)	12.4	10.0	124	73-130
Benzene	10.8	10.0	108	90-120
Trichloroethene (TCE)	11.1	10.0	111	83-131
1,2-Dichloropropane	10.4	10.0	104	87-121
Bromodichloromethane	12.3	10.0	123 *	84-114
Dibromomethane	11.9	10.0	119	76-130
2-Hexanone	52.1	50.0	104	68-135
cis-1,3-Dichloropropene	11.3	10.0	113	90-126
Toluene	10.7	10.0	107	89-119
trans-1,3-Dichloropropene	10.7	10.0	107	77-113
1,1,2-Trichloroethane	10.5	10.0	105	81-116
4-Methyl-2-pentanone (MIBK)	54.0	50.0	108	79-138
1,3-Dichloropropane	11.0	10.0	110	76-129
Tetrachloroethene (PCE)	11.1	10.0	111	82-123
Dibromochloromethane	11.8	10.0	118	83-119

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Confidential Business Information
BRIX001580

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Extracted:	07/15/2003
Sample Matrix:	Water	Date Analyzed:	07/15/2003

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	Units:	ug/L
Analysis Method:	8260B	Basis:	NA
		Level:	Low
		Extraction Lot:	KWG0310639

Analyte Name	Lab Control Sample KWG0310639-3 Lab Control Spike Result	Expected	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	11.2	10.0	112	74-130
Chlorobenzene	10.5	10.0	105	86-115
1,1,1,2-Tetrachloroethane	12.0	10.0	120 *	88-118
Ethylbenzene	11.3	10.0	113	89-124
m,p-Xylenes	22.4	20.0	112	90-122
o-Xylene	11.2	10.0	112	88-126
Styrene	11.3	10.0	113	91-123
Bromoform	11.9	10.0	119	76-125
Isopropylbenzene	10.3	10.0	103	82-123
1,1,2,2-Tetrachloroethane	9.56	10.0	96	78-117
1,2,3-Trichloropropane	10.8	10.0	108	75-127
Bromobenzene	10.2	10.0	102	76-129
n-Propylbenzene	10.4	10.0	104	83-128
2-Chlorotoluene	10.0	10.0	100	74-131
4-Chlorotoluene	10.3	10.0	103	87-119
1,3,5-Trimethylbenzene	10.5	10.0	105	85-128
tert-Butylbenzene	10.6	10.0	106	83-129
1,2,4-Trimethylbenzene	11.1	10.0	111	88-129
sec-Butylbenzene	10.9	10.0	109	84-133
1,3-Dichlorobenzene	9.85	10.0	99	87-116
4-Isopropyltoluene	10.1	10.0	101	81-126
1,4-Dichlorobenzene	10.1	10.0	101	86-115
n-Butylbenzene	10.7	10.0	107	79-134
1,2-Dichlorobenzene	9.66	10.0	97	85-113
1,2-Dibromo-3-chloropropane	9.94	10.0	99	55-136
1,2,4-Trichlorobenzene	11.6	10.0	116	76-130
1,2,3-Trichlorobenzene	12.7	10.0	127	70-134
Naphthalene	12.8	10.0	128	71-137
Hexachlorobutadiene	10.9	10.0	109	77-129

Results flagged with an asterisk (*) indicate values outside control criteria.

ercent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Confidential Business Information
BRIX001581

Polynuclear Aromatic Hydrocarbons
Method 8270

Confidential Business Information

BRIX001582

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Collected:	07/07/2003
Sample Matrix:	Water	Date Received:	07/08/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-7-070703	Units:	ug/L
Lab Code:	K2304969-001	Basis:	NA
Extraction Method:	EPA 3520C	Level:	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
2-Methylnaphthalene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenzofuran	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Fluorene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Phenanthrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benz(a)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Chrysene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(b)fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(k)fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(a)pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenz(a,h)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(g,h,i)perylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	76	34-115	07/21/03	Acceptable
Fluorene-d10	83	43-96	07/21/03	Acceptable
Fluoranthene-d10	94	20-131	07/21/03	Acceptable
Terphenyl-d14	116	13-146	07/21/03	Acceptable

Comments:

Confidential Business Information BRIX001583

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Collected:	07/07/2003
Sample Matrix:	Water	Date Received:	07/08/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-4-070703	Units:	ug/L
Lab Code:	K2304969-002	Basis:	NA
Extraction Method:	EPA 3520C	Level:	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.16**		0.020	1	07/10/03	07/21/03	KWG0310292	
2-Methylnaphthalene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthene	**0.11**		0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenzofuran	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Fluorene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Phenanthrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Pyrene	**0.021**		0.020	1	07/10/03	07/21/03	KWG0310292	
Benz(a)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Chrysene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(b)fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(k)fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(a)pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenz(a,h)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(g,h,i)perylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	70	34-115	07/21/03	Acceptable
Fluorene-d10	75	43-96	07/21/03	Acceptable
Fluoranthene-d10	81	20-131	07/21/03	Acceptable
Terphenyl-d14	64	13-146	07/21/03	Acceptable

Comments:

Confidential Business Information

BRIX001584

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Collected:	07/07/2003
Sample Matrix:	Water	Date Received:	07/08/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-44-070703	Units:	ug/L
Lab Code:	K2304969-003	Basis:	NA
Extraction Method:	EPA 3520C	Level:	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.12**		0.020	1	07/10/03	07/21/03	KWG0310292	
2-Methylnaphthalene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthene	**0.11**		0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenzofuran	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Fluorene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Phenanthrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benz(a)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Chrysene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(b)fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(k)fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(a)pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenz(a,h)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(g,h,i)perylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	74	34-115	07/21/03	Acceptable
Fluorene-d10	76	43-96	07/21/03	Acceptable
Fluoranthene-d10	78	20-131	07/21/03	Acceptable
Terphenyl-d14	61	13-146	07/21/03	Acceptable

Comments:

Confidential Business Information

BRIX001585

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-6-070703	**Units:**	ug/L
Lab Code:	K2304969-004	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
2-Methylnaphthalene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenzofuran	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Fluorene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Phenanthrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benz(a)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Chrysene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(b)fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(k)fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(a)pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenz(a,h)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(g,h,i)perylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	75	34-115	07/21/03	Acceptable
Fluorene-d10	77	43-96	07/21/03	Acceptable
Fluoranthene-d10	88	20-131	07/21/03	Acceptable
Terphenyl-d14	99	13-146	07/21/03	Acceptable

Comments:

Confidential Business Information

BRIX001586

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	07/07/2003
Sample Matrix:	Water	**Date Received:**	07/08/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-2-070703	**Units:**	ug/L
Lab Code:	K2304969-005	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
2-Methylnaphthalene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenzofuran	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Fluorene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Phenanthrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benz(a)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Chrysene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(b)fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(k)fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(a)pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenz(a,h)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(g,h,i)perylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	79	34-115	07/21/03	Acceptable
Fluorene-d10	85	43-96	07/21/03	Acceptable
Fluoranthene-d10	94	20-131	07/21/03	Acceptable
Terphenyl-d14	117	13-146	07/21/03	Acceptable

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Collected:	07/07/2003
Sample Matrix:	Water	Date Received:	07/08/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-3-070703	Units:	ug/L
Lab Code:	K2304969-006	Basis:	NA
Extraction Method:	EPA 3520C	Level:	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	0.34		0.020	1	07/10/03	07/21/03	KWG0310292	
2-Methylnaphthalene	0.34		0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthene	0.16		0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenzofuran	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Fluorene	0.10		0.020	1	07/10/03	07/21/03	KWG0310292	
Phenanthrene	0.20		0.020	1	07/10/03	07/21/03	KWG0310292	
Anthracene	0.039		0.020	1	07/10/03	07/21/03	KWG0310292	
Fluoranthene	0.22		0.020	1	07/10/03	07/21/03	KWG0310292	
Pyrene	0.22		0.020	1	07/10/03	07/21/03	KWG0310292	
Benz(a)anthracene	0.055		0.020	1	07/10/03	07/21/03	KWG0310292	
Chrysene	0.071		0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(b)fluoranthene	0.038		0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(k)fluoranthene	0.065		0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(a)pyrene	0.053		0.020	1	07/10/03	07/21/03	KWG0310292	
Indeno(1,2,3-cd)pyrene	0.041		0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenz(a,h)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(g,h,i)perylene	0.039		0.020	1	07/10/03	07/21/03	KWG0310292	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	69	34-115	07/21/03	Acceptable
Fluorene-d10	72	43-96	07/21/03	Acceptable
Fluoranthene-d10	74	20-131	07/21/03	Acceptable
Terphenyl-d14	43	13-146	07/21/03	Acceptable

Comments:

Confidential Business Information

BRIX001588

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2304969
Project:	BRIX Maritime/990056-01	Date Collected:	07/07/2003
Sample Matrix:	Water	Date Received:	07/08/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-1-070703	Units:	ug/L
Lab Code:	K2304969-007	Basis:	NA
Extraction Method:	EPA 3520C	Level:	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	23	D	0.20	10	07/10/03	07/25/03	KWG0310292	
2-Methylnaphthalene	7.9		0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthene	0.38		0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenzofuran	0.067		0.020	1	07/10/03	07/21/03	KWG0310292	
Fluorene	0.27		0.020	1	07/10/03	07/21/03	KWG0310292	
Phenanthrene	0.56		0.020	1	07/10/03	07/21/03	KWG0310292	
Anthracene	0.11		0.020	1	07/10/03	07/21/03	KWG0310292	
Fluoranthene	0.49		0.020	1	07/10/03	07/21/03	KWG0310292	
Pyrene	1.2		0.020	1	07/10/03	07/21/03	KWG0310292	
Benz(a)anthracene	0.22		0.020	1	07/10/03	07/21/03	KWG0310292	
Chrysene	0.27		0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(b)fluoranthene	0.088		0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(k)fluoranthene	0.098		0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(a)pyrene	0.11		0.020	1	07/10/03	07/21/03	KWG0310292	
Indeno(1,2,3-cd)pyrene	0.023		0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenz(a,h)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(g,h,i)perylene	0.028		0.020	1	07/10/03	07/21/03	KWG0310292	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	74	34-115	07/21/03	Acceptable
Fluorene-d10	78	43-96	07/21/03	Acceptable
Fluoranthene-d10	90	20-131	07/21/03	Acceptable
Terphenyl-d14	96	13-146	07/21/03	Acceptable

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0310292-4	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
2-Methylnaphthalene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Acenaphthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenzofuran	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Fluorene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Phenanthrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benz(a)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Chrysene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(b)fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(k)fluoranthene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(a)pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Dibenz(a,h)anthracene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	
Benzo(g,h,i)perylene	ND	U	0.020	1	07/10/03	07/21/03	KWG0310292	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	74	34-115	07/21/03	Acceptable
Fluorene-d10	77	43-96	07/21/03	Acceptable
Fluoranthene-d10	89	20-131	07/21/03	Acceptable
Terphenyl-d14	122	13-146	07/21/03	Acceptable

Comments:

Confidential Business Information

BRIX001590

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime/990056-01
Sample Matrix: Water

Service Request: K2304969

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
MW-7-070703	K2304969-001	76	83	94	116
MW-4-070703	K2304969-002	70	75	81	64
MW-44-070703	K2304969-003	74	76	78	61
MW-6-070703	K2304969-004	75	77	88	99
MW-2-070703	K2304969-005	79	85	94	117
MW-3-070703	K2304969-006	69	72	74	43
MW-1-070703	K2304969-007	74	78	90	96
Method Blank	KWG0310292-4	74	77	89	122
MW-7-070703MS	KWG0310292-1	83	87	98	97
MW-7-070703DMS	KWG0310292-2	82	84	93	98
Lab Control Sample	KWG0310292-3	79	81	91	98

Surrogate Recovery Control Limits (%)

Sur1 =	Biphenyl-d10	34-115
Sur2 =	Fluorene-d10	43-96
Sur3 =	Fluoranthene-d10	20-131
Sur4 =	Terphenyl-d14	13-146

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

Confidential Business Information
BRIX001591

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Extracted:**	07/10/2003
Sample Matrix:	Water	**Date Analyzed:**	07/21/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-7-070703	**Units:**	ug/L
Lab Code:	K2304969-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0310292

Analyte Name	Sample Result	MW-7-070703MS KWG0310292-1 Matrix Spike			MW-7-070703DMS KWG0310292-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Naphthalene	ND	6.92	10.0	69	6.91	10.0	69	30-97	0	30
2-Methylnaphthalene	ND	7.52	10.0	75	7.60	10.0	76	33-96	1	30
Acenaphthylene	ND	8.52	10.0	85	8.33	10.0	83	39-104	2	30
Acenaphthene	ND	8.06	10.0	81	7.85	10.0	79	34-99	3	30
Dibenzofuran	ND	8.05	10.0	80	7.79	10.0	78	16-110	3	30
Fluorene	ND	8.73	10.0	87	8.36	10.0	84	36-105	4	30
Phenanthrene	ND	8.20	10.0	82	7.79	10.0	78	31-106	5	30
Anthracene	ND	9.30	10.0	93	8.71	10.0	87	24-111	6	30
Fluoranthene	ND	9.28	10.0	93	8.69	10.0	87	16-121	6	30
Pyrene	ND	8.34	10.0	83	8.29	10.0	83	11-125	1	30
Benz(a)anthracene	ND	8.89	10.0	89	8.55	10.0	86	14-125	4	30
Chrysene	ND	8.61	10.0	86	8.25	10.0	82	16-117	4	30
Benzo(b)fluoranthene	ND	9.39	10.0	94	8.99	10.0	90	16-124	4	30
Benzo(k)fluoranthene	ND	8.10	10.0	81	7.76	10.0	78	14-127	4	30
Benzo(a)pyrene	ND	9.06	10.0	91	8.52	10.0	85	19-126	6	30
Indeno(1,2,3-cd)pyrene	ND	8.53	10.0	85	7.46	10.0	75	10-137	13	30
Dibenz(a,h)anthracene	ND	7.39	10.0	74	6.48	10.0	65	16-124	13	30
Benzo(g,h,i)perylene	ND	7.46	10.0	75	6.72	10.0	67	15-119	10	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

BRIX001592

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2304969
Project:	BRIX Maritime/990056-01	**Date Extracted:**	07/10/2003
Sample Matrix:	Water	**Date Analyzed:**	07/21/2003

Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3520C	**Units:**	ug/L
Analysis Method:	8270C SIM	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0310292

	Lab Control Sample KWG0310292-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Naphthalene	3.51	5.00	70	37-95
2-Methylnaphthalene	3.85	5.00	77	26-110
Acenaphthylene	4.23	5.00	85	44-103
Acenaphthene	3.99	5.00	80	41-97
Dibenzofuran	3.97	5.00	79	17-130
Fluorene	4.27	5.00	85	46-102
Phenanthrene	3.97	5.00	79	47-101
Anthracene	4.44	5.00	89	45-104
Fluoranthene	4.56	5.00	91	51-112
Pyrene	4.40	5.00	88	45-111
Benz(a)anthracene	4.60	5.00	92	50-111
Chrysene	4.51	5.00	90	51-108
Benzo(b)fluoranthene	5.07	5.00	101	54-114
Benzo(k)fluoranthene	4.35	5.00	87	51-117
Benzo(a)pyrene	4.77	5.00	95	51-119
Indeno(1,2,3-cd)pyrene	4.44	5.00	89	43-127
Dibenz(a,h)anthracene	3.86	5.00	77	47-119
Benzo(g,h,i)perylene	3.91	5.00	78	44-115

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Appendix C
Data Validation Review

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LABORATORY DATA REVIEW

BRIX Maritime

July 2003

This report presents a review of the samples collected from BRIX Maritime on June 19th and July 7th, 2003. Samples were analyzed by Columbia Analytical Services, Inc. (CAS), in Kelso, Washington. Laboratory SDGs K2304602 and K2304969 were reviewed.

Data Qualifications

The following comments refer to the laboratory's performance in meeting the quality control (QC) specifications outlined in the analytical procedures and the Quality Assurance Project Plan (QAPP). Analytical results were reviewed using *USEPA National Functional Guidelines for Inorganics Data Review* (USEPA, 2002), and *USEPA National Functional Guidelines for Organics Data Review* (USEPA, 1999), and applying laboratory and method QC criteria.

The laboratory Sample Receipt Form states that the cooler temperatures were within ±4°C upon arrival at the laboratory. Sample transport and handling were acceptable.

Unless specifically noted in this report, laboratory results were within QC criteria.

Holding Times

All sample analyses were conducted within recommended holding times. No data were qualified due to these results.

Method Reporting Limits (MRLs)

The MRLs were acceptable.

Method Blanks

Method blanks were analyzed at the required frequency for all analyses. Method blanks were free of contamination. No data were qualified due to these results.

Trip and Field Blanks

One trip blank was submitted with the samples and analyzed for VOCs. The trip blank was free of contamination. No data were qualified due to these results.

No field blanks were collected. No data were qualified due to these results.

Field Duplicates

One field duplicate was submitted with the samples; MW-4-070703 / MW-44-070703. The field duplicate results were comparable with the following exception. The relative percent difference (RPD%) for total lead was high. As the laboratory duplicate RPD% was within the control limits only total lead for the field duplicate pair are qualified as estimated (J).

Field duplicate results for dissolved lead, TPH, VOCs and PAHs were comparable. No other data were qualified.

Surrogate Recoveries

Surrogate recoveries were reported for all organic analyses. Surrogate percent recoveries were within the control limits; no data were qualified due to these results.

Laboratory Duplicate Results

The laboratory analyzed duplicates at the required frequency. The lead laboratory duplicate for batch K2304602 was outside the control limits; associated results are qualified as estimated (J).

Matrix Spike/Matrix Spike Duplicate Results

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were conducted at the required frequency. The lead matrix spike %R for batch K2304602 was above the control limits; associated results are qualified as estimated (J).

Laboratory Control Sample Results

Laboratory control sample (LCS) analyses were conducted at the required frequency. Six of the analytes in LCS-KWG0310639 had %Rs slightly above the laboratory control limits. The methylene chloride LCS and LCSD %Rs were slightly below the laboratory control limits. As the remaining %Rs and MS/MSD %Rs were within the control limits; no data were qualified.

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Completeness

The results reported by the laboratory were checked against chain-of-custody entries to determine if all of the requested analyses were completed. All requested analyses were conducted.

Overall Assessment

The data are judged to be acceptable, as qualified, for their intended use.

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REFERENCES

USEPA. 1986. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. EPA 530/SW-846.

USEPA. 2002. USEPA National Functional Guidelines for Inorganics Data Review. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency. EPA 540/R-01/008. July.

USEPA. 1999. USEPA National Functional Guidelines for Organics Data Review. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency. EPA 540/R-99/008. October.

ANCHOR
ENVIRONMENTAL, L.L.C.

RECEIVED
NOV 06 2003
GARVEY SCHUBERT
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Letter of Transmittal

To: Rod Struck

From: John Renda

Date: November 3, 2003

Re: Brix Maritime 3rd Quarter 2003 Progress Report

Project: Brix Maritime

We are sending the following items:

Copies	Description
1	Table 1
1	Table 2

These are transmitted:

☐ For your information ☐ For action specified below ☐ For review and comment ☒ For your use ☐ As requested

Comments:

Enclosed please find Tables 1 and 2 that were inadvertently omitted from the 3rd Quarter 2003 Progress Report for Brix Maritime Company. These tables were included in the electronic version sent to DEQ.

cc: Frank Williamson, Foss Maritime Company
Don Scaramastra, Garvey Schubert & Barer
David Templeton, Anchor Environmental

Table 1
Hydrology Data
Brix Maritime
Portland, Oregon

Anchor Environmental, L.L.C. — Site: Brix Maritime
Project No.: 990056-01

Well	Reference Elevation (Feet NAVD88)	Screen Interval (Feet NAVD88)	Date (MM/DD/YY)	Time (2400)	DTW (feet)	Water Elevation (Feet NAVD88)	Comments
Monitoring Wells							
MW-1	41.81	34.7-19.7	02/28/03	12:20	18.89	22.92	
MW-1	41.81	34.7-19.7	03/31/03	16:35	19.43	22.38	
MW-1	41.81	34.7-19.7	04/29/03	10:25	19.69	22.12	
MW-1	41.81	34.7-19.7	05/22/03	15:00	20.22	21.59	
MW-1	41.81	34.7-19.7	07/07/03	10:45	21.08	20.73	
MW-1	41.81	34.7-19.7	07/30/03	17:10	21.13	20.68	
MW-1	41.81	34.7-19.7	08/28/03	16:00	21.24	20.57	
MW-1	41.81	34.7-19.7	09/30/03	0:00	21.15	20.66	
MW-2	42.13	32.5-17.5	02/28/03	12:10	19.88	22.25	
MW-2	42.13	32.5-17.5	03/31/03	15:50	20.36	21.77	
MW-2	42.13	32.5-17.5	04/29/03	9:30	20.64	21.49	
MW-2	42.13	32.5-17.5	05/22/03	14:35	21.06	21.07	
MW-2	42.13	32.5-17.5	07/07/03	10:40	22.17	19.96	
MW-2	42.13	32.5-17.5	07/30/03	16:22	22.50	19.63	
MW-2	42.13	32.5-17.5	08/28/03	15:20	22.84	19.29	
MW-2	42.13	32.5-17.5	09/30/03	16:10	23.07	19.06	
MW-3	41.93	32.6-17.6	07/29/02	13:00	22.91	19.02	
MW-3	41.93	32.6-17.6	08/22/02	7:15	23.50	18.43	Oil detected in well, thickness estimated at 0.02 foot
MW-3	41.93	32.6-17.6	09/30/02	7:00	23.37	18.56	Oil detected in well, thickness estimated at 0.02 foot
MW-3	41.93	32.6-17.6	10/30/02	15:50	23.68	18.25	DTP = 23.49 (0.19 foot thick)
MW-3	41.93	32.6-17.6	11/27/02	16:30	23.30	18.63	DTP = 23.16 (0.14 foot thick)
MW-3	41.93	32.6-17.6	12/30/02	16:30	21.99	19.94	Oil noted on probe, product too thin to measure with interface probe
MW-3	41.93	32.6-17.6	02/28/03	12:15	19.75	22.18	Oil noted on probe, product too thin to measure with interface probe
MW-3	41.93	32.6-17.6	03/31/03	16:20	20.24	21.69	No oil noted on probe
MW-3	41.93	32.6-17.6	04/29/03	10:02	20.50	21.43	No oil noted on probe
MW-3	41.93	32.6-17.6	05/22/03	14:45	20.94	20.99	No oil noted on probe
MW-3	41.93	32.6-17.6	07/07/03	10:52	22.21	19.72	No oil noted on probe
MW-3	41.93	32.6-17.6	07/30/03	16:15	22.62	19.31	No oil noted on probe
MW-3	41.93	32.6-17.6	08/28/03	15:50	22.95	18.98	Oil noted on probe, product too thin to measure with interface probe
MW-3	41.93	32.6-17.6	09/30/03	17:00	23.15	18.78	DTP = 23.04 (0.11 foot thick)
MW-4	23.55	19.1-9.1	07/29/02	12:55	11.62	11.93	
MW-4	23.55	19.1-9.1	08/22/02	7:25	11.77	11.78	
MW-4	23.55	19.1-9.1	09/30/02	6:50	11.94	11.61	
MW-4	23.55	19.1-9.1	10/30/02	15:55	12.06	11.49	
MW-4	23.55	19.1-9.1	11/27/02	16:35	11.85	11.70	
MW-4	23.55	19.1-9.1	12/30/02	16:35	10.24	13.31	
MW-4	23.55	19.1-9.1	02/28/03	12:35	4.34	19.21	
MW-4	23.55	19.1-9.1	03/31/03	16:45	4.59	18.96	
MW-4	23.55	19.1-9.1	04/29/03	9:50	5.46	18.09	
MW-4	23.55	19.1-9.1	05/22/03	14:50	8.59	14.96	
MW-4	23.55	19.1-9.1	07/07/03	10:33	10.69	12.86	
MW-4	23.55	19.1-9.1	07/30/03	16:30	11.03	12.52	
MW-4	23.55	19.1-9.1	08/28/03	15:30	11.40	12.15	
MW-4	23.55	19.1-9.1	09/30/03	16:15	11.74	11.81	
MW-5	41.66	34.6-19.6	02/28/03	12:28	19.45	22.21	
MW-5	41.66	34.6-19.6	03/31/03	16:10	19.99	21.67	
MW-5	41.66	34.6-19.6	04/29/03	10:10	20.25	21.41	
MW-5	41.66	34.6-19.6	05/22/03	14:55	20.75	20.91	
MW-5	41.66	34.6-19.6	07/07/03	11:00	21.93	19.73	
MW-5	41.66	34.6-19.6	07/30/03	16:55	22.08	19.58	
MW-5	41.66	34.6-19.6	08/28/03	15:45	22.08	19.58	
MW-5	41.66	34.6-19.6	09/30/03	16:40	22.13	19.53	
MW-6	41.21	31.1-16.1	07/07/03	11:10	20.26	20.95	
MW-6	41.21	31.1-16.1	07/30/03	16:38	20.57	20.64	
MW-6	41.21	31.1-16.1	08/28/03	15:40	21.02	20.19	
MW-6	41.21	31.1-16.1	09/30/03	15:40	21.02	20.19	
MW-7	40.95	31.2-16.2	07/07/03	10:30	21.21	19.74	
MW-7	40.95	31.2-16.2	07/30/03	16:45	21.76	19.19	
MW-7	40.95	31.2-16.2	08/28/03	15:35	22.32	18.63	
MW-7	40.95	31.2-16.2	09/30/03	16:30	22.67	18.28	
River Gauge[1]							
River	4.33	NA	10/30/02	16:00	2.75	7.08	
River	4.33	NA	11/27/02	16:40	3.10	7.43	
River	4.33	NA	12/30/02	16:20	7.50	11.83	
River	4.33	NA	02/28/03	12:00	6.10	10.43	
River	4.33	NA	03/31/03	16:00	8.00	12.33	
River	4.33	NA	04/29/03	9:40	8.00	12.33	
River	4.33	NA	05/22/03	14:40	6.50	10.83	
River	4.33	NA	07/07/03	10:47	4.00	8.33	
River	4.33	NA	07/30/03	17:15	3.50	7.83	
River	4.33	NA	08/28/03	15:15	3.30	7.63	
River	4.33	NA	09/30/03	16:22	2.10	6.43	

Note: DTW = Depth to Water; DTP = Depth to Product; NA = Not Applicable

1 - The river gauge is marked in 1-foot increments, field measurements are estimated to the closest 0.1 foot.

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BRIX001600

Table 2
Total Petroleum Hydrocarbons
Brix Maritime
Portland, Oregon

Location (sample depth in ft bgs)	Matrix	Date Date Sampled	Diesel Range Organics		Residual Range Organics		Gasoline Range Organics	
MW-1	Water	07/07/03	0.27	L	0.5	U	1300	H
MW-2	Water	07/07/03	0.25	U	0.5	U	0.05	U
MW-3	Water	07/30/02	3.4	Y	1.6	O		
MW-3	Water	07/07/03	1.9	Y	8.5	O	0.05	U
MW-4	Water	07/29/02	0.26	U	0.52	U		
MW-4	Water	07/07/03	0.25	U	0.52	O	0.05	U
MW-4 Duplicate	Water	07/07/03	0.25	U	0.52	U	0.05	U
MW-6	Water	07/07/03	0.25	U	0.5	U	0.05	U
MW-7	Water	07/07/03	0.25	U	0.5	U	0.05	U
MW-1 (15-16.5)	Soil	02/11/03	360	L	110	U		
MW-2 (10-11.5)	Soil	02/11/03	40	H	130	U		
MW-4 (10-11.5)	Soil	07/17/02	35	U	140	U		
MW-5 (5-6.5)	Soil	02/11/03	28	U	110	U		
MW-5 (15-16.5)	Soil	02/11/03	27	U	110	U		
MW-5 (22.5-24)	Soil	02/11/03	96	H	390	O		
MW-6 (24.5-26)	Soil	06/19/03	34	U	140	U	6.6	U
MW-7 (25-26.5)	Soil	06/19/03	36	U	150	U	7.2	U

Notes: Water concentrations are in mg/L. Soil concentrations are in mg/kg.

ft bgs = feet below ground surface.

U = Not detected at method reporting limit.

O = The fingerprint resembles oil, but does not match the calibration standard.

L = The fingerprint resembles a petroleum product, but the elution pattern indicates the presence of lighter weight constituents than the calibration standard.

H = The fingerprint resembles a petroleum product, but the elution pattern indicates the presence of heavier weight constituents than the calibration standard.

Y = The fingerprint resembles a petroleum product in the correct carbon range, but the elution pattern does not match the calibration standard.

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PROGRESS REPORT – FOURTH QUARTER 2003

BRIX MARITIME COMPANY
PORTLAND, OREGON

Prepared for

Brix Maritime Company

Prepared by

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224

January 15, 2004

ANCHOR ENVIRONMENTAL, L.L.C.

PROGRESS REPORT – FOURTH QUARTER 2003

BRIX MARITIME COMPANY
PORTLAND, OREGON

Prepared for

Brix Maritime Company

Prepared by

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224

January 15, 2004

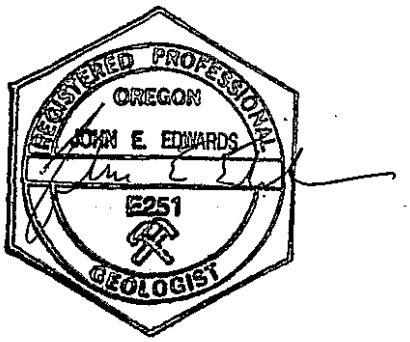
Progress Report – Fourth Quarter 2003

Brix Maritime Company

Portland, Oregon

The material and data in this report were prepared under the supervision and direction of the undersigned.

John J. Renda, R.G.
Anchor Environmental, L.L.C.



John Edwards, R.G. C.E.G.
Anchor Environmental, L.L.C.

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3 ACTIONS SCHEDULED FOR THE FIRST QUARTER 1

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1 INTRODUCTION

This Progress Report was prepared in accordance with Section II(H) of the Oregon Department of Environmental Quality (DEQ) Voluntary Agreement for Remedial Investigation and Source Control Measures (ECSI 2464 No. LQDVC-NWR-02-03). This report covers the work completed during the quarter ending December 31, 2003 for the Brix Maritime site in Portland, Oregon (Figure 1) and is divided into the following subject areas:

- Actions Taken During the Fourth Quarter
- Actions Scheduled for the First Quarter
- Data Generated in the Fourth Quarter
- Summaries of Problems and Actions Taken To Resolve Problems

2 ACTIONS TAKEN DURING THE FOURTH QUARTER

- Anchor submitted the Third Quarter 2003 progress report to DEQ on October 15, 2003.
- Water levels were measured in monitoring wells MW-1 through MW-7 and at the river staff gauge on October 16, December 3, and December 26, 2003.
- Monitoring wells MW-1, MW-2, MW-3, MW-4, MW-6, and MW-7 were sampled on October 16, 2003 (MW-5 was not sampled because it was dry).

Anchor submitted a Remedial Investigation Work Plan on November 26, 2003.

3 ACTIONS SCHEDULED FOR THE FIRST QUARTER

- Water levels will be measured in all onsite monitoring wells and at the river staff gauge in January, February, and March 2003.
- Monitoring wells MW-1 through MW-7 will be sampled in January 2003.
- Anchor will prepare and submit the Fourth Quarter Progress Report (this report) to DEQ.

4 DATA GENERATED IN THE FOURTH QUARTER

4.1 Hydrology Data and Potentiometric Surface Map

Water levels were measured in all onsite monitoring wells and at the river staff gauge on October 16, December 3, and December 26, 2003. Water levels and groundwater elevations based on the 1988 North American Vertical Datum (NAVD 88) are presented in Table 1.

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A groundwater potentiometric surface map, using the December 26, 2003 measurements, is shown on Figure 2. As expected, the contour pattern indicates that shallow groundwater flows west to east from the upland portion of the site to the river.

During the monthly water level measurements, the river bank was examined for petroleum hydrocarbon seeps or sheens. No petroleum hydrocarbon seeps or sheens were observed.

4.2 Groundwater Sampling

Monitoring wells MW-1, MW-2, MW-3, MW-4, MW-6, and MW-7 were sampled on October 16, 2003. MW-5 was dry at the time of sampling. Field sampling procedures, field parameters, field sampling data sheets, and chain of custody documentation are in Appendix A.

4.3 Groundwater Analytical Testing

Groundwater samples were collected from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-6, and MW-7 on October 16, 2003. The groundwater samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline by NWTPH-Gx; TPH as diesel and heavy oils by NWTPH-Dx; Polycyclic Aromatic Hydrocarbons (PAHs) by U.S. Environmental Protection Agency (USEPA) Method 8270-SIM; Volatile Organic Compounds (VOCs) by USEPA Method 8260+MTBE; and both total and dissolved lead by USEPA method 200.8. The analytical results are presented in Tables 2 through 5. A copy of the laboratory report is in Appendix B.

4.4 Data Validation

Review of the sampling and laboratory records showed no apparent discrepancies between samples collected in the field and those analyzed in the laboratory. The data are judged to be acceptable, as qualified, for their intended use. The data validation review of the laboratory records is summarized in Appendix C.

5 SUMMARIES OF PROBLEMS AND ACTIONS TAKEN TO RESOLVE PROBLEMS

No problems were encountered.

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TABLES

Table 1
Hydrology Data
Brix Maritime
Portland, Oregon

Anchor Environmental, L.L.C. — Site: Brix Maritime

Project No.: 990056-01

Well	Reference Elevation (Feet NAVD88)	Screen Interval (Feet NAVD88)	Date (MM/DD/YY)	Time (2400)	DTW (feet)	Water Elevation (Feet NAVD88)	Comments
Monitoring Wells							
MW-1	41.81	34.7-19.7	02/28/03	12:20	18.89	22.92	
MW-1	41.81	34.7-19.7	03/31/03	16:35	19.43	22.38	
MW-1	41.81	34.7-19.7	04/29/03	10:25	19.69	22.12	
MW-1	41.81	34.7-19.7	05/22/03	15:00	20.22	21.59	
MW-1	41.81	34.7-19.7	07/07/03	10:45	21.08	20.73	
MW-1	41.81	34.7-19.7	07/30/03	17:10	21.13	20.68	
MW-1	41.81	34.7-19.7	08/28/03	16:00	21.24	20.57	
MW-1	41.81	34.7-19.7	09/30/03	16:45	21.15	20.66	
MW-1	41.81	34.7-19.7	10/16/03	8:06	21.10	20.71	
MW-1	41.81	34.7-19.7	12/03/03	10:42	21.06	20.75	
MW-1	41.81	34.7-19.7	12/26/03	7:40	20.46	21.35	
MW-2	42.13	32.5-17.5	02/28/03	12:10	19.88	22.25	
MW-2	42.13	32.5-17.5	03/31/03	15:50	20.36	21.77	
MW-2	42.13	32.5-17.5	04/29/03	9:30	20.64	21.49	
MW-2	42.13	32.5-17.5	05/22/03	14:35	21.06	21.07	
MW-2	42.13	32.5-17.5	07/07/03	10:40	22.17	19.96	
MW-2	42.13	32.5-17.5	07/30/03	16:22	22.50	19.63	
MW-2	42.13	32.5-17.5	08/28/03	15:20	22.84	19.29	
MW-2	42.13	32.5-17.5	09/30/03	16:10	23.07	19.06	
MW-2	42.13	32.5-17.5	10/16/03	7:47	23.06	19.07	
MW-2	42.13	32.5-17.5	12/03/03	10:20	22.54	19.59	
MW-2	42.13	32.5-17.5	12/26/03	7:20	21.58	20.55	
MW-3	41.93	32.6-17.6	07/29/02	13:00	22.91	19.02	
MW-3	41.93	32.6-17.6	08/22/02	7:15	23.50	18.43	Oil detected in well, thickness estimated at 0.02 foot
MW-3	41.93	32.6-17.6	09/30/02	7:00	23.37	18.56	Oil detected in well, thickness estimated at 0.02 foot
MW-3	41.93	32.6-17.6	10/30/02	15:50	23.68	18.25	DTP = 23.49 (0.19 foot thick)
MW-3	41.93	32.6-17.6	11/27/02	16:30	23.30	18.63	DTP = 23.16 (0.14 foot thick)
MW-3	41.93	32.6-17.6	12/30/02	16:30	21.99	19.94	Oil noted on probe, product too thin to measure with interface probe
MW-3	41.93	32.6-17.6	02/28/03	12:15	19.75	22.18	Oil noted on probe, product too thin to measure with interface probe
MW-3	41.93	32.6-17.6	03/31/03	16:20	20.24	21.69	No oil noted on probe
MW-3	41.93	32.6-17.6	04/29/03	10:02	20.50	21.43	No oil noted on probe
MW-3	41.93	32.6-17.6	05/22/03	14:45	20.94	20.99	No oil noted on probe
MW-3	41.93	32.6-17.6	07/07/03	10:52	22.21	19.72	No oil noted on probe
MW-3	41.93	32.6-17.6	07/30/03	16:15	22.62	19.31	No oil noted on probe
MW-3	41.93	32.6-17.6	08/28/03	15:50	22.95	18.98	Oil noted on probe, product too thin to measure with interface probe
MW-3	41.93	32.6-17.6	09/30/03	17:00	23.15	18.78	DTP = 23.04 (0.11 foot thick)
MW-3	41.93	32.6-17.6	10/16/03	8:15	22.40	19.53	No oil noted on probe
MW-3	41.93	32.6-17.6	12/03/03	10:50	22.21	19.72	Sheen, product too thin to measure
MW-3	41.93	32.6-17.6	12/26/03	7:45	21.44	20.49	No oil noted on probe
MW-4	23.55	19.1-9.1	07/29/02	12:55	11.62	11.93	
MW-4	23.55	19.1-9.1	08/22/02	7:25	11.77	11.78	
MW-4	23.55	19.1-9.1	09/30/02	6:50	11.94	11.61	
MW-4	23.55	19.1-9.1	10/30/02	15:55	12.06	11.49	
MW-4	23.55	19.1-9.1	11/27/02	16:35	11.85	11.70	
MW-4	23.55	19.1-9.1	12/30/02	16:35	10.24	13.31	
MW-4	23.55	19.1-9.1	02/28/03	12:35	4.34	19.21	
MW-4	23.55	19.1-9.1	03/31/03	16:45	4.59	18.96	
MW-4	23.55	19.1-9.1	04/29/03	9:50	5.46	18.09	
MW-4	23.55	19.1-9.1	05/22/03	14:50	8.59	14.96	
MW-4	23.55	19.1-9.1	07/07/03	10:33	10.69	12.86	
MW-4	23.55	19.1-9.1	07/30/03	16:30	11.03	12.52	
MW-4	23.55	19.1-9.1	08/28/03	15:30	11.40	12.15	
MW-4	23.55	19.1-9.1	09/30/03	16:15	11.74	11.81	
MW-4	23.55	19.1-9.1	10/16/03	7:52	11.40	12.15	
MW-4	23.55	19.1-9.1	12/03/03	10:30	10.59	12.96	
MW-4	23.55	19.1-9.1	12/26/03	7:25	9.50	14.05	
MW-5	41.66	34.6-19.6	02/28/03	12:28	19.45	22.21	
MW-5	41.66	34.6-19.6	03/31/03	16:10	19.99	21.67	
MW-5	41.66	34.6-19.6	04/29/03	10:10	20.25	21.41	
MW-5	41.66	34.6-19.6	05/22/03	14:55	20.75	20.91	
MW-5	41.66	34.6-19.6	07/07/03	11:00	21.93	19.73	
MW-5	41.66	34.6-19.6	07/30/03	16:55	22.08	19.58	
MW-5	41.66	34.6-19.6	08/28/03	15:45	22.08	19.58	
MW-5	41.66	34.6-19.6	09/30/03	16:40	22.13	19.53	
MW-5	41.66	34.6-19.6	10/16/03	8:03	22.10	19.56	
MW-5	41.66	34.6-19.6	12/03/03	10:40	22.13	19.53	
MW-5	41.66	34.6-19.6	12/26/03	7:36	21.35	20.31	
MW-6	41.21	31.1-16.1	07/07/03	11:10	20.26	20.95	
MW-6	41.21	31.1-16.1	07/30/03	16:38	20.57	20.64	
MW-6	41.21	31.1-16.1	08/28/03	15:40	21.02	20.19	
MW-6	41.21	31.1-16.1	09/30/03	15:40	21.02	20.19	
MW-6	41.21	31.1-16.1	10/16/03	8:00	20.93	20.28	
MW-6	41.21	31.1-16.1	12/03/03	10:36	21.53	19.68	
MW-6	41.21	31.1-16.1	12/26/03	7:50	19.24	21.97	
MW-7	40.95	31.2-16.2	07/07/03	10:30	21.21	19.74	
MW-7	40.95	31.2-16.2	07/30/03	16:45	21.76	19.19	
MW-7	40.95	31.2-16.2	08/28/03	15:35	22.32	18.63	
MW-7	40.95	31.2-16.2	09/30/03	16:30	22.67	18.28	
MW-7	40.95	31.2-16.2	10/16/03	7:55	22.72	18.23	
MW-7	40.95	31.2-16.2	12/03/03	10:33	22.90	18.05	
MW-7	40.95	31.2-16.2	12/26/03	7:32	20.32	20.63	
River Gauge[1]							
River	4.33	NA	10/30/02	16:00	2.75	7.08	
River	4.33	NA	11/27/02	16:40	3.1	7.43	
River	4.33	NA	12/30/02	16:20	7.5	11.83	
River	4.33	NA	02/28/03	12:00	6.1	10.43	
River	4.33	NA	03/31/03	16:00	8.0	12.33	
River	4.33	NA	04/29/03	9:40	8.0	12.33	
River	4.33	NA	05/22/03	14:40	6.5	10.83	
River	4.33	NA	07/07/03	10:47	4.0	8.33	
River	4.33	NA	07/30/03	17:15	3.5	7.83	
River	4.33	NA	08/28/03	15:15	3.3	7.63	
River	4.33	NA	09/30/03	16:22	2.1	6.43	
River	4.33	NA	10/16/03	7:42	2.2	6.53	
River	4.33	NA	12/03/03	10:23	3.5	7.83	
River	4.33	NA	12/26/03	7:27	6.7	11.03	

Note: DTW = Depth to Water; DTP = Depth to Product; NA = Not Applicable

1 - The river gauge is marked in 1-foot increments, field measurements are estimated to the closest 0.1 foot.

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Table 2
Total Petroleum Hydrocarbons
Brix Maritime
Portland, Oregon

Location (sample depth in ft bgs)	Matrix	Date Date Sampled	Diesel Range Organics		Residual Range Organics		Gasoline Range Organics	
MW-1	Water	07/07/03	0.27	L	0.5	U	1.3	H
MW-1	Water	10/16/03	0.73	L	0.5	U	8.1	H
MW-2	Water	07/07/03	0.25	U	0.5	U	0.05	U
MW-2	Water	10/16/03	0.27	U	0.53	U	0.05	U
MW-3	Water	07/30/02	3.4	Y	1.6	O		
MW-3	Water	07/07/03	1.9	Y	8.5	O	0.05	U
MW-3	Water	10/16/03	0.92	Y	1.8	O	0.059	Y
MW-4	Water	07/29/02	0.26	U	0.52	U		
MW-4	Water	07/07/03	0.25	U	0.52	O	0.05	U
MW-4 Duplicate	Water	07/07/03	0.25	U	0.52	U	0.05	U
MW-4	Water	10/16/03	0.25	U	0.5	O	0.65	Y
MW-4 Duplicate	Water	10/16/03	0.25	U	0.5	U	0.66	Y
MW-6	Water	07/07/03	0.25	U	0.5	U	0.05	U
MW-6	Water	10/16/03	0.27	U	0.53	U	0.05	U
MW-7	Water	07/07/03	0.25	U	0.5	U	0.05	U
MW-7	Water	10/16/03	0.27	U	0.53	U	0.05	U
MW-1 (15-16.5)	Soil	02/11/03	360	L	110	U		
MW-2 (10-11.5)	Soil	02/11/03	40	H	130	U		
MW-4 (10-11.5)	Soil	07/17/02	35	U	140	U		
MW-5 (5-6.5)	Soil	02/11/03	28	U	110	U		
MW-5 (15-16.5)	Soil	02/11/03	27	U	110	U		
MW-5 (22.5-24)	Soil	02/11/03	96	H	390	O		
MW-6 (24.5-26)	Soil	06/19/03	34	U	140	U	6.6	U
MW-7 (25-26.5)	Soil	06/19/03	36	U	150	U	7.2	U

Notes: Water concentrations are in mg/L. Soil concentrations are in mg/kg.
ft bgs = feet below ground surface.
U = Not detected at method reporting limit.
O = The fingerprint resembles oil, but does not match the calibration standard.
L = The fingerprint resembles a petroleum product, but the elution pattern indicates the presence of lighter weight constituents than the calibration standard.
H = The fingerprint resembles a petroleum product, but the elution pattern indicates the presence of heavier weight constituents than the calibration standard.
Y = The fingerprint resembles a petroleum product in the correct carbon range, but the elution pattern does not match the calibration standard.

TABLE 3
Polycyclic Aromatic Hydrocarbons
Brix Maritime
Portland, Oregon

Sample Designation	MW-1	MW-1	MW-1	MW-2	MW-2	MW-2	MW-3	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4	MW-4 Dup	MW-4	MW-4 Dup	MW-5	MW-5 dup	MW-6	MW-6	MW-7	MW-7
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Date Sampled	02/28/03	07/07/03	10/16/03	02/28/03	07/07/03	10/16/03	07/30/02	02/28/03	07/07/03	10/16/03	07/29/02	02/28/03	07/07/03	07/07/03	10/16/03	10/16/03	02/28/03	02/28/03	07/07/03	10/16/03	07/07/03	10/16/03
LPAHs											**LPAHs**											
Naphthalene	23 D	23 D	160 D	0.082	0.02 U	0.023	0.36	0.75	0.34	0.34	0.039	18 D	0.16	0.12	0.11	0.12	19 D	17 D	0.02 U	0.02 U	0.02 U	0.02 U
Acenaphthylene	0.19	0.02 U	0.02 U	0.023	0.02 U	0.022 U	0.02 U	0.22	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.10	0.40	0.02 U	0.02 U	0.02 U	0.02 U
Acenaphthene	0.43	0.38	0.34	0.02 U	0.02 U	0.022 U	0.26	1.3	0.16	0.21	0.51	0.60	0.11	0.11	0.36	0.40	1.3	1.3	0.02 U	0.02 U	0.02 U	0.02 U
Dibenzofuran	0.12	0.067	0.085	0.02 U	0.02 U	0.022 U	0.025	0.11	0.02 U	0.021	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.2	0.19	0.02 U	0.02 U	0.02 U	0.02 U
Fluorene	0.36	0.27	0.24	0.02 U	0.02 U	0.022 U	0.09	1.0	0.1	0.11	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	1.2	1.3	0.02 U	0.02 U	0.02 U	0.02 U
Phenanthrene	1.8	0.56	0.42	0.15	0.02 U	0.031	0.11	2.9	0.2	0.14	0.043	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	2.3	3.1	0.02 U	0.02 U	0.02 U	0.02 U
Anthracene	0.53	0.11	0.065	0.032	0.02 U	0.022 U	0.02 U	0.55	0.039	0.022	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.55	0.93	0.02 U	0.02 U	0.02 U	0.02 U
2-Methylnaphthalene	9.0	7.9	42.0 D	0.02 U	0.02 U	0.022 U	0.28	1.8	0.34	0.31	0.02 U	0.80	0.02 U	0.02 U	0.02 U	0.02 U	31 D	31 D	0.02 U	0.02 U	0.02 U	0.02 U
Total LPAH	35.43	32.29	203.15	0.29		0.05	1.13	8.63	1.18	1.13	0.59	19.40	0.27	0.23	0.47	0.52	55.64	55.22				
HPAHs											**HPAHs**											
Fluoranthene	4.3	0.5	0.3	0.29	0.02 U	0.070	0.056	4.9	0.22	0.077	0.033	0.024	0.02 U	0.02 U	0.02 U	0.02 U	3.1 J	6.5 J	0.02 U	0.02 U	0.02 U	0.02 U
Pyrene	13 D	1.2	0.9	0.42	0.02 U	0.091	0.058	7.6 D	0.22	0.082	0.046	0.055	0.021	0.02 U	0.02	0.024	4.3 J	9.1 J	0.02 U	0.02 U	0.02 U	0.02 U
Benz(a)anthracene	2.1	0.22	0.16	0.11	0.02 U	0.023	0.02 U	2.1 D	0.06	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.72 J	2.80 J	0.02 U	0.02 U	0.02 U	0.02 U
Chrysene	2.7	0.27	0.24	0.17	0.02 U	0.042	0.02 U	2.3 D	0.071	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.96 J	3.4 J	0.02 U	0.02 U	0.02 U	0.02 U
Benzo(b)fluoranthene	1.4	0.088	0.073	0.14	0.02 U	0.036	0.022	1.8 D	0.038	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.44 J	2.2 J	0.02 U	0.02 U	0.02 U	0.02 U
Benzo(k)fluoranthene	1.1	0.098	0.096	0.13	0.02 U	0.035	0.02 U	1.7 D	0.065	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.42 J	1.9 J	0.02 U	0.02 U	0.02 U	0.02 U
Benzo(a)pyrene	2.0	0.11	0.097	0.19	0.02 U	0.022 U	0.02 U	2.3 D	0.053	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.65 J	3.6 J	0.02 U	0.02 U	0.02 U	0.02 U
Indeno(1,2,3-cd)pyrene	1.5	0.023	0.036	0.20	0.02 U	0.073	0.02 U	1.5 D	0.041	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.49 J	2.5 J	0.02 U	0.02 U	0.02 U	0.02 U
Dibenz(a,h)anthracene	0.17	0.02 U	0.02 U	0.02 U	0.02 U	0.022 U	0.02 U	0.20 U	0.20 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.044 J	0.27 J	0.02 U	0.02 U	0.02 U	0.02 U
Benzo(g,h,i)perylene	1.5	0.028	0.043	0.22	0.02 U	0.090	0.02 U	1.9 D	0.039	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.52 J	2.7 J	0.02 U	0.02 U	0.02 U	0.02 U
Total HPAHs	29.77	2.53	1.98	1.87		0.46	0.14	26.10	0.80	0.16	0.08	0.08	0.021			0.024	11.64	34.97				

NOTE: µg/L = micrograms per liter or parts per billion.
µg/kg = micrograms per kilogram or parts per billion.
J = estimated concentration.
U = not detected at or above the indicated method reporting limit.

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Table 4
Volatile Organic Compounds
Brix Maritime
Portland, Oregon

Sample Designation	Matrix	Date Sampled	Dichlorodifluoromethane	Chloromethane	Vinyl Chloride	Bromomethane	Chloroethane	Trichlorofluoromethane	Acetone	1,1-Dichloroethene	Methyl tert-Butyl Ether	Carbon Disulfide	Methylene Chloride	*trans*-1, 2-dichloroethene	1,1-Dichloroethane	2-Butanone	2,2-Dichloropropane	*cis*-1, 2-dichloroethene	Chloroform	Bromochloromethane	1,1,1-Trichloroethane	1,1-Dichloropropene	Carbon Tetrachloride
MW-1	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-1	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-1	Water	10/16/03	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
MW-2	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	07/30/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	07/29/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4 Dup	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4 Dup	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-5	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-5 Dup	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-1 (15-16.5)	Soil	02/11/03	110 U	110 U	110 U	110 U	110 U	110 U	4200 U	110 U	110 U	11 U	420 U	110 U	110 U	4200 U	110 U	110 U	110 U	110 U	110 U	110 U	110 U
MW-2 (10-11.5)	Soil	02/11/03	0.87 U	1.3 U	0.77 U	0.99 U	0.97 U	0.91 U	13 U	0.86 U	0.79 U	1.9 U	1.2 U	0.91 U	0.97 U	11 U	1 U	1.1 U	0.71 U	0.65 U	0.71 U	0.91 U	0.74 U
MW-4 (10-11.5)	Soil	07/17/02	6.8 UJ	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	**70**	6.8 U	6.8 U	6.8 U	14 U	6.8 U	6.8 U	27 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U
MW-5 (5-6.5)	Soil	02/11/03	5.5 UJ	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	55 U	5.5 U	5.5 U	5.5 U	11 U	5.5 U	5.5 U	22 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U
MW-5 (15-16.5)	Soil	02/11/03	5.4 UJ	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	54 U	5.4 U	5.4 U	5.4 U	11 U	5.4 U	5.4 U	22 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
MW-5 (22.5-24)	Soil	02/11/03	7.5 UJ	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U	**85**	7.5 U	7.5 U	7.5 U	15 U	7.5 U	7.5 U	30 U	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U
MW-6 (24.5-26)	Soil	06/19/03	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	67 U	6.7 U	6.7 U	6.7 U	14 U	6.7 U	6.7 U	27 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U
MW-7 (25-26.5)	Soil	06/19/03	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	67 U	7.2 U	7.2 U	7.2 U	15 U	7.2 U	7.2 U	29 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U

NOTE: Water concentrations are in µg/L. Soil concentrations are in µg/kg. U = not detected at or above the indicated method reporting limit. J = estimated concentration.

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BRIX001801

Table 4
Volatile Organic Compounds
Brix Maritime
Portland, Oregon

Sample Designation	Matrix	Date Sampled	1,2-Dichloroethane	Benzene	Trichloroethene	1,2-Dichloropropane	Bromodichloromethane	Dibromomethane	2-Hexanone	cis-1,3-Dichloropropene	Toluene	trans 1,3-Dichloropropene	1,1,2-Trichloroethane	4-Methyl-2-pentanone	1,3 Dichloropropane	Tetrachloroethene	Dibromochloromethane	1,2 Dibromoethane	Chlorobenzene	1,1,1,2-Tetrachloroethane	Ethylbenzene	m,p-Xylenes	o-Xylene	Styrene	Bromoform
MW-1	Water	02/28/03	0.5 U	**5.7**	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	**0.71**	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**37**	**50**	**12**	0.5 U	0.5 U
MW-1	Water	07/07/03	0.5 U	**1.3**	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	**1.1**	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**11**	**18**	**2**	0.5 U	0.5 U
MW-1	Water	10/16/03	2.5 U	**32** D	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	**13** D	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	2.5 U	**270** D	**360** D	**110** D	2.5 U	2.5 U
MW-2	Water	02/28/03	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	07/07/03	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	10/16/03	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**0.86**	0.5 U	0.5 U	0.5 U
MW-3	Water	07/30/02	0.5 U	**0.73**	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**14**	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**0.51**	**3.5**	**2**	0.5 U	0.5 U
MW-3	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	**0.63**	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**1.2**	**1.2**	0.5 U	0.5 U
MW-3	Water	07/07/03	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	**0.8**	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**1.2**	**1.1**	0.5 U	0.5 U
MW-3	Water	10/16/03	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	**1.9**	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**0.51**	**2.5**	**1.5**	0.5 U	0.5 U
MW-4	Water	07/29/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	02/28/03	0.5 U	**0.76**	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**2.3**	**1.4**	**1.2**	0.5 U	0.5 U
MW-4	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4 Dup	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**0.93**	0.5 U	0.5 U	0.5 U
MW-4 Dup	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**0.94**	0.5 U	0.5 U	0.5 U
MW-5	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**15**	**12**	**0.97**	0.5 U	0.5 U
MW-5 Dup	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**16**	**14**	**1.10**	0.5 U	0.5 U
MW-6	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**0.74**	0.5 U	0.5 U	0.5 U
MW-7	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**0.82**	0.5 U	0.5 U	0.5 U
MW-1 (15-16.5)	Soil	02/11/03	110 U	110 U	110 U	110 UJ	110 U	110 U	4200 U	110 UJ	110 U	110 U	110 U	4200 U	110 U	110 U	110 UJ	420 U	110 U	110 U	**1000**	**1600**	**440**	110 U	110 U
MW-2 (10-11.5)	Soil	02/11/03	0.83 U	0.98 U	0.35 U	0.89 UJ	0.66 U	0.89 U	7.6 U	0.94 UJ	1.1 U	0.74 U	0.86 U	6.8 U	0.65 U	0.39 U	0.74 UJ	0.98 U	0.87 U	0.63 U	0.71 U	1.9 U	0.86 U	0.91 U	0.81 U
MW-4 (10-11.5)	Soil	07/17/02	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	27 U	6.8 U	6.8 U	6.8 U	6.8 U	27 U	6.8 U	6.8 U	6.8 U	27 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U
MW-5 (5-6.5)	Soil	02/11/03	5.5 U	5.5 U	5.5 U	5.5 UJ	5.5 U	5.5 U	22 U	5.5 UJ	5.5 U	5.5 U	5.5 U	22 U	5.5 U	5.5 U	5.5 UJ	22 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U
MW-5 (15-16.5)	Soil	02/11/03	5.4 U	5.4 U	5.4 U	5.4 UJ	5.4 U	5.4 U	22 U	5.4 UJ	5.4 U	5.4 U	5.4 U	22 U	5.4 U	5.4 U	5.4 UJ	22 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
MW-5 (22.5-24)	Soil	02/11/03	7.5 U	7.5 U	7.5 U	7.5 UJ	7.5 U	7.5 U	30 U	7.5 UJ	7.5 U	7.5 U	7.5 U	30 U	7.5 U	7.5 U	7.5 UJ	30 U	7.5 U	7.5 U	**2500**	**2700**	**33**	7.5 U	7.5 U
MW-6 (24.5-26)	Soil	06/19/03	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	27 U	6.7 U	6.7 U	6.7 U	6.7 U	27 U	6.7 U	6.7 U	6.7 U	27 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U
MW-7 (25-26.5)	Soil	06/19/03	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	29 U	7.2 U	7.2 U	7.2 U	7.2 U	29 U	7.2 U	7.2 U	7.2 U	29 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U

NOTE: Water concentrations are in µg/L. Soil concentrations are in µg/kg. U = not detected at or above the indicated method reporting limit. J = estimated concentration.

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BRIX001802

Table 4
Volatile Organic Compounds
Brix Maritime
Portland, Oregon

Sample Designation	Matrix	Date Sampled	Isopropylbenzene	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	Bromobenzene	n-Propylbenzene	2-Chlorotoluene	4-Chlorotoluene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	1,3-Dichlorobenzene	4-Isopropyltoluene	1,4-Dichlorobenzene	n-Butylbenzene	1,2-Dichlorobenzene	1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	Naphthalene	Hexachlorobutadiene
MW-1	Water	02/28/03	19	0.5 U	0.5 U	0.5 U	65 D	2 U	2 U	26	2 U	140 D	10	0.5 U	2 U	0.5 U	21	0.5 U	0.5 U	2 U	2 U	31	2 U
MW-1	Water	07/07/03	31	0.5 U	0.5 U	0.5 U	64 D	2 U	2 U	9.3	2 U	46	8.2	0.5 U	2 U	0.5 U	14	0.5 U	0.5 U	2 U	2 U	22	2 U
MW-1	Water	10/16/03	75 D	2.5 U	2.5 U	10 U	250 D	10 U	10 U	280 D	10 U	1200 D	28 D	2.5 U	10 U	2.5 U	150 Ui	2.5 U	10 U	10 U	10 U	460 D	10 U
MW-2	Water	02/28/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-2	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-2	Water	10/16/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	07/30/02	0.5 U	0.5 U	0.5 U	0.5 U	2.2	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	02/28/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	10/16/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4	Water	07/29/02	2 U	0.5 U	0.5 U	0.5 U	2.3	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4	Water	02/28/03	29	0.5 U	0.5 U	0.5 U	35	2 U	2 U	2.2	2 U	3.8	2 U	0.5 U	2 U	0.5 U	3.1	0.5 U	0.5 U	2 U	2 U	45	2 U
MW-4	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4 Dup	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4	Water	10/16/03	7.1	0.5 U	0.5 U	0.5 U	5.5	2 U	2 U	2 U	2 U	2 U	4.4	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4 Dup	Water	10/16/03	7.5	0.5 U	0.5 U	0.5 U	6.3	2 U	2 U	2 U	2 U	2 U	4.8	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-5	Water	02/28/03	24	0.5 U	0.5 U	0.5 U	110 D	2 U	2 U	26	2 U	75 D	27	0.5 U	2 U	0.5 U	87 D	0.5 U	0.5 U	2 U	2 U	23	2 U
MW-5 Dup	Water	02/28/03	25	0.5 U	0.5 U	0.5 U	110 D	2 U	2 U	30	2 U	99 D	30	0.5 U	2.3	0.5 U	110 D	0.5 U	0.5 U	2 U	2 U	25	2 U
MW-6	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-6	Water	10/16/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-7	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-7	Water	10/16/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-1 (15-16.5)	Soil	02/11/03	3000	110 U	110 U	420 U	18000	420 U	420 U	7800 U	420 U	59000	7300 U	110 U	1800	110 U	29000	110 U	420 U	420 U	420 U	64000	420 U
MW-2 (10-11.5)	Soil	02/11/03	0.84 U	0.91 U	0.76 U	1 U	0.89 U	0.91 U	0.92 U	4.7 U	0.92 U	1.1 U	0.92 U	0.88 U	0.89 U	1.1 U	0.93 U	0.81 U	1.1 U	0.95 U	1.2 U	1.1 U	0.93 U
MW-4 (10-11.5)	Soil	07/17/02	6.8 U	6.8 U	6.8 U	6.8 U	27 U	27 U	27 U	27 U	27 U	27 U	27 U	6.8 U	27 U	6.8 U	27 U	6.8 U	6.8 U	27 U	27 U	27 U	27 U
MW-5 (5-6.5)	Soil	02/11/03	5.5 U	5.5 U	5.5 U	5.5 U	22 U	22 U	22 U	22 U	22 U	22 U	22 U	5.5 U	22 U	5.5 U	22 U	5.5 U	5.5 U	22 U	22 U	22 U	22 U
MW-5 (15-16.5)	Soil	02/11/03	5.4 U	5.4 U	5.4 U	5.4 U	22 U	22 U	22 U	22 U	22 U	22 U	22 U	5.4 U	22 U	5.4 U	22 U	5.4 U	5.4 U	22 U	22 U	22 U	22 U
MW-5 (22.5-24)	Soil	02/11/03	7000	7.5 U	7.5 U	7.5 U	30 U	65 U	30 U	970 U	30 U	20000	180	7.5 U	33	7.5 U	2500 U	7.5 U	7.5 U	30 U	30 U	4900	30 U
MW-6 (24.5-26)	Soil	06/19/03	27 U	6.7 U	6.7 U	6.7 U	27 U	65 U	27 U	27 U	27 U	27 U	27 U	6.7 U	27 U	6.7 U	27 U	6.7 U	6.7 U	27 U	27 U	27 U	27 U
MW-7 (25-26.5)	Soil	06/19/03	29 U	7.2 U	7.2 U	7.2 U	29 U	65 U	29 U	29 U	29 U	29 U	29 U	7.2 U	29 U	7.2 U	29 U	7.2 U	7.2 U	29 U	29 U	29 U	29 U

NOTE: Water concentrations are in µg/L. Soil concentrations are in µg/kg. U = not detected at or above the indicated method reporting limit. J = estimated concentration.

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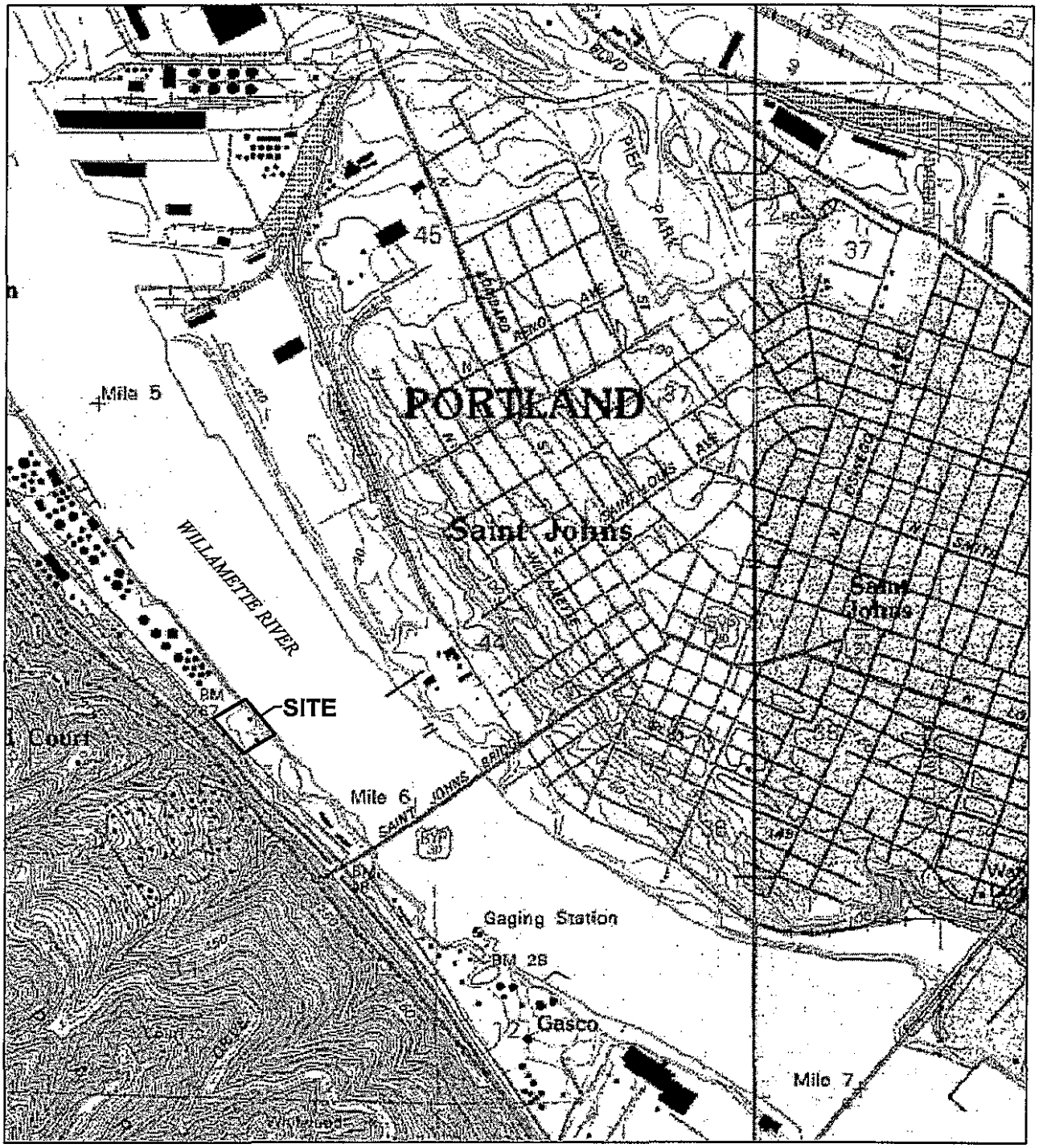
BRIX001803

Table 5
Lead in Groundwater
Brix Maritime
Portland, Oregon

Location	Matrix	Date Sampled	Total Lead (ppb)		Dissolved Lead (ppb)	
MW-1	Water	02/28/03	288		0.03	
MW-1	Water	07/07/03	1.34		0.05	
MW-1	Water	10/16/03	1.41		0.06	
MW-2	Water	02/28/03	57.6		0.04	
MW-2	Water	07/07/03	0.04		0.05	
MW-2	Water	10/16/03	25.9		0.58	
MW-3	Water	07/30/02	0.88		0.13	
MW-3	Water	02/28/03	65.9		0.05	
MW-3	Water	07/07/03	0.36		0.08	
MW-3	Water	10/16/03	0.22		0.05	
MW-4	Water	07/29/02	0.36		0.02	U
MW-4	Water	02/28/03	0.70		0.02	U
MW-4	Water	07/07/03	0.78	J	0.02	
MW-4 Duplicate	Water	07/07/03	0.18	J	0.03	
MW-4	Water	10/16/03	0.46		0.03	
MW-4 Duplicate	Water	10/16/03	0.54		0.02	U
MW-5	Water	02/28/03	131		0.06	
MW-5 Duplicate	Water	02/28/03	116		0.03	
MW-6	Water	07/07/03	0.1		0.02	U
MW-6	Water	10/16/03	0.03		0.07	
MW-7	Water	07/07/03	0.17		0.02	U
MW-7	Water	10/16/03	0.02	U	0.03	

Note: U = not detected at method reporting limit. ppb = parts per billion. J = estimated
Water concentrations are in µg/L. Soil concentrations are in µg/kg.

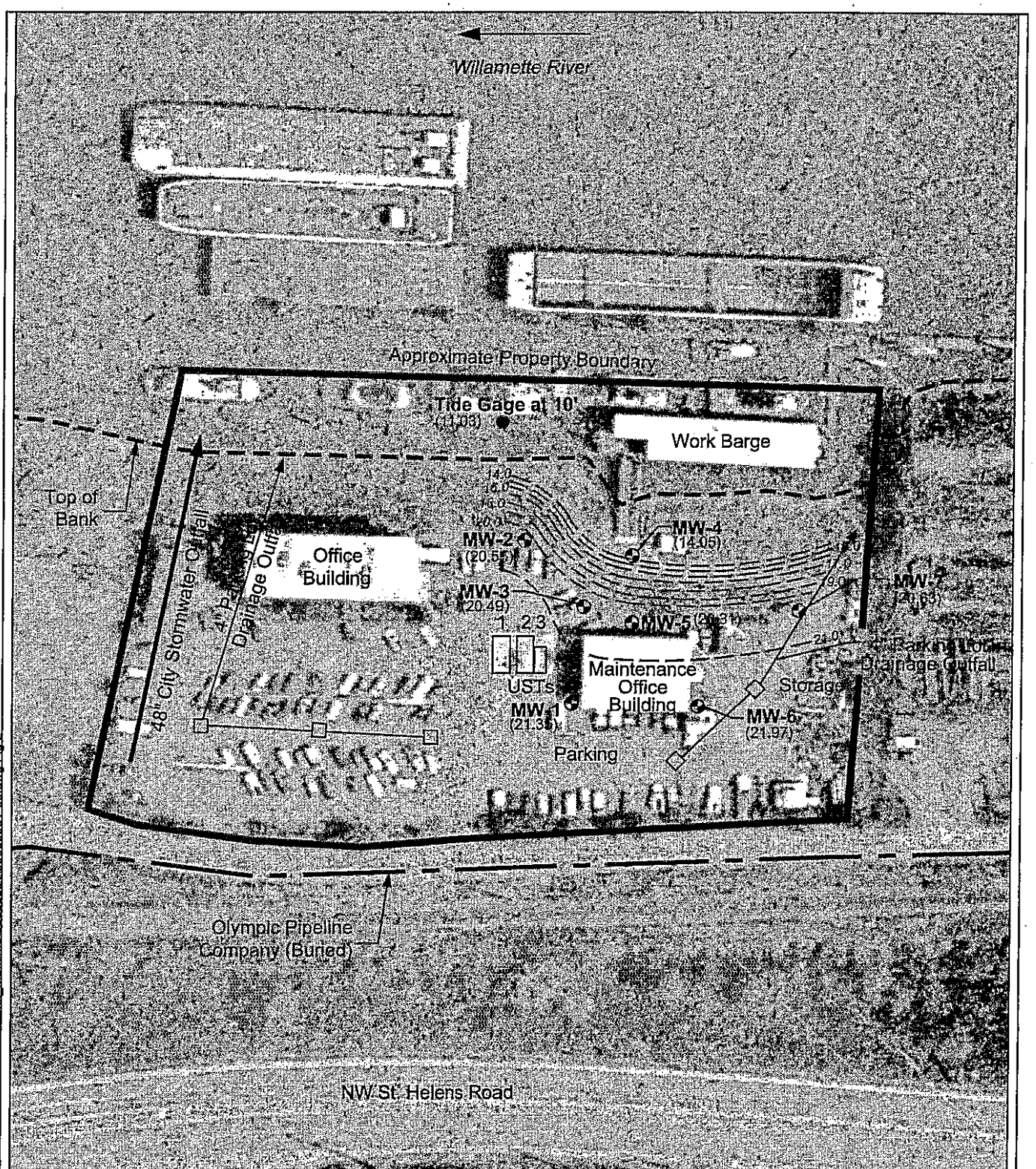
FIGURES



Apr 01, 2003 4:09pm cdavidson h:\CAD\Jobs\990056-Brix_Maritime\99005601\99005601-03.dwg FIG 1

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 1
Site Location Map
Brix Maritime
Portland, Oregon



MW-1 Monitoring Well Location and Number

(22.92) Groundwater Elevation in Feet (NAVD 88)

— 14 — Potentiometric Surface Contour in Feet

□ Stormwater Catch Basin

0 100
Scale in Feet

Source: Aerial photograph acquired from WAC, Corp. 1991.

Jan 14, 2004 10:53am cdavidson K:\Jobs\990056-Brix_Maritime\990056011990056001-06.dwg Fig 2

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 2
Well Location and Potentiometric Surface Map (December 26, 2003)
Brix Maritime
Portland, Oregon

Appendix A
Field Sampling Data Package

ANCHOR ENVIRONMENTAL, L.L.C.

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128

Memorandum

To: File 990056-01

From: John J. Renda

Date: October 25, 2003

Re: October 2003 Groundwater Sample Collection at Brix Maritime, Portland, Oregon

OVERVIEW

On October 16, 2003, Anchor measured groundwater elevations in seven monitoring wells and recorded the river elevation from the staff gauge located at the site. In addition, groundwater samples were collected from six of the seven monitoring wells. Seven water samples (including one duplicate sample) were submitted for analysis of VOCs by U.S. Environmental Protection Agency (USEPA) Method 8260+MTBE; gasoline by NWTPH-Gx; diesel and heavy oils by NWTPH-Dx; PAHs by USEPA Method 8270-SIM; total lead; and dissolved lead. A trip blank was submitted for VOCs.

PURGING AND SAMPLING

Before sampling, wells were purged of at least three casing volumes, until field parameters (temperature, pH, and specific conductivity) stabilized, or the wells purged dry. Temperature, pH, and specific conductivity values were measured and recorded after each casing volume was removed. Field sampling parameters are presented within the attached table.

No sample was collected from MW-5. Depth to water in the well was below the base of the screen (within the well sump) and therefore considered to be dry.

A minimum of three volumes was purged from each well using a peristaltic pump equipped with new pump tubing, and connected to polyethylene tubing dedicated to each well. Pumping rates were reduced, and samples were then collected directly from the dedicated pump tubing. Samples for dissolved lead were field filtered using an in-line high-capacity 0.45 micron filter prior to field preservation with nitric acid.

Quality control consisted of collecting and analyzing one duplicate sample from MW-4. A trip blank was submitted for VOC analysis by USEPA Method 8260 + MTBE.

SAMPLE HANDLING AND SHIPPING

Eight samples were placed in iced shipping containers and transported by courier to Columbia Analytical Services (CAS), Kelso, Washington, under chain of custody documentation.

Attachments: Table of Sampling Field Parameters
Field Sampling Data Sheets
Chain-of-Custody Documentation

Table
Sampling Field Parameters
Brix Maritime
October 2003

Well	Blind Code	Date Sampled	Depth to Water (feet)	Pore Volumes Purged	Gallons Removed	pH	Specific Conductance µS	Temperature °C	Oxidation Reduction Potential mV	Dissolved Oxygen mg/L
Monitoring Wells										
MW-1	BM-101603-6	10/16/2003	21.10	4	0.8	6.13	957	15.79	-95.60	0.28
MW-2	BM-101603-1	10/16/2003	23.06	3	0.6	6.32	365	15.75	63.70	2.52
MW-3	BM-101603-7	10/16/2003	22.40	3	1.5	6.19	436	15.78	-90.30	0.35
MW-4	BM-101603-3	10/16/2003	11.40	4	2.5	6.51	705	17.42	-174.50	0.47
MW-5	no sample	NA	22.10*	NA	NA	NA	NA	NA	NA	NA
MW-6	BM-101603-5	10/16/2003	20.93	3	2.2	6.19	393	15.36	-92.70	0.19
MW-7	BM-101603-2	10/16/2003	22.72	3	1.5	6.31	378	15.53	-106.10	0.71
QA/QC										
MW-4 (DUP)	BM-101603-4	10/16/2003	11.40	4	2.5	6.51	705	17.42	-174.50	0.47

NA=not applicable

*Water level below lowest point of screened interval (sump only)

\\union\portland\Projects\BRIX\Sampling\T 2003\Brix Table1003.xls

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Depth to Water Measurements
Brix Maritime
Portland, Oregon

Anchor Environmental, L.L.C.			Site: Brix Maritime		
			Project No. : 990056-01		
Well	Date (MM/DD/YY)	Time (2400)	DTW (feet)	DTP (feet)	Comments
MW-1	10/16/03	0806	21.10	22.12	gasoline-like odor
MW-2		0747	23.06	24.30	
MW-3		0815	22.40	24.70	No oil, no sheen
MW-4		0752	11.40	14.80	
MW-5		0803	22.10	22.25	gasoline-like odor
MW-6		0800	20.93	25.10	
MW-7		0755	22.72	25.05	
River Gauge		0742	2.2		

Note: DTW = Depth to Water; DTP = Depth to Product

Confidential Business Information

BRIX001812

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: WELL ID: MW-1

SITE ADDRESS: BLIND ID: BM-101603-6

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER: SUNNY CLOUDY RAIN ? TEMPERATURE: °F 60 . °C [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
10/16/03	08:06	22.12	/	21.10	/	1.02	X1	0.17
/ /	:	.	/ .	.	/ .		X3	0.51

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	√ [√ if used]
VOA Glass	10/16/03	14:00	B	36	40 ml	HCl	YES	NO	—	✓
Amber Glass	/ /	:	B	4	250, 500, 1L	None HCl H_2SO_4	YES	NO	—	✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	B	1	250, 500, 1L	HNO_3	YES	NO	—	✓
Red Diss. Poly	/ /	:	B	1	250, 500, 1L	HNO_3	YES	YES	—	✓
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 12

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: : ORP mV Pump/Bailer Inlet Depth: 22

Meas. [Casing]	Method § [Select A-G]	Purged (gal) [Cumulative Totals]	pH	E Cond (µS)	°F Temp (°C) [Circle units]	Other	Diss O_2 (mg/l)	Water Quality [Clarity, Color]
4	B	.8	6.13	957	15.79	-95.6	0.28	Clear, Colorless
3	B	.6	6.13	954	15.80	-93.5	0.33	Clear, Colorless
2	B	.4	6.14	942	15.83	-86.0	0.57	Clear, pale yellow
1	B	.2	6.18	922	16.05	-68.3	1.74	Clear, pale yellow
0		0.00	.		.		.	

SAMPLER: JOHN J RENDA (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime WELL ID: MW-2
SITE ADDRESS: Portland, OR BLIND ID: BM-101603-1
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE: °F 55 . °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
10/16/03	07:47	24.30	/	23.06	/	1.24	X1	0.2
/ /	:	.	/ .	.	/ .		X3	0.6

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	√ [√ if used]
VOA Glass	10/16/03	09:10	B	36	40 ml	HCl	YES	NO		
Amber Glass	/ /	:	B	4	250, 500, 1L	(None) (HCl) (H₂SO₄)	YES	NO		
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	B	1	250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:	B	1	250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 12

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-D) (TPH-418.1) (Oil &Grease)
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth: 24

Meas. [Casing]	Method § [Select A-G]	Purged (gal) [Cumulative Totals]	pH	E Cond (µS)	°F Temp (°C) [Circle units]	Other	Diss O_2 (mg/l)	Water Quality [Clarity, Color]
4		.	.		.		.	
3	B	.6	6.32	365	15.75	63.7	2.52	Clear, Colorless
2	B	.4	6.35	363	15.88	62.7	2.90	Clear, Colorless
1	B	.2	6.55	376	15.74	53.6	4.12	Silty, tan
0		0.00	.		.		.	

Turbidity increased during sample collection as well went dry

SAMPLER: John J Renda (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime WELL ID: MW-3
SITE ADDRESS: Portland, OR BLIND ID: BM-101603-7
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE: °F 60. °C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
10/16/03	08:15	24.70	/	22.40	/	2.30	X1	0.37
/ /	:	.	.	.	.		X3	1.11

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√ [√ if used]
VOA Glass	10/16/03	15:00	B	6 (40 ml)	HCl	YES	NO	—	✓
Amber Glass	/ /	:	B	4	250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO	—	✓
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:	B	1	250, 500, 1L HNO_3	YES	NO	—	✓
Red Diss. Poly	/ /	:	B	1	250, 500, 1L HNO_3	YES	YES	—	✓
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): 12

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth: 24.5

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp/°C	Other (ORP)	Diss O_2 (mg/l)	Water Quality
4	.	.	.		.		.	
3	B	1.5	6.19	436	15.78	-90.3	0.35	Clear, Colorless
2	B	1.0	6.19	435	15.79	-87.9	0.43	Clear, Colorless
1	B	.5	6.17	433	15.84	-82.6	0.80	Clear, Colorless
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: John J Renda (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime WELL ID: MW-4
SITE ADDRESS: Portland, OR BLIND ID: BM-101603-3
DUP ID: BM-101603-4 NA 12

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F 55 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
10/16/03	07:52	14.80	/	11.40	/	3.4	X1	0.55
/ /	:	.	.	.	.		X3	1.65

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	10/16/03	11:45	B	14	40 ml	HCl	YES	NO	—	✓
Amber Glass	/ /	:	B	8	250, 500, 1L	None, HCl, H_2SO_4	YES	NO	—	✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	B	2	250, 500, 1L	HNO_3	YES	NO	—	✓
Red Diss. Poly	/ /	:	B	2	250, 500, 1L	HNO_3	YES	YES	—	✓
	/ /	:		~~2~~	250, 500, 1L		YES			

Total Bottles (include duplicate count): 24

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth: 14.5

Meas. [Casing]	Method § [Select A-G]	Purged (gal) [Cumulative Totals]	pH	E Cond (µS)	°F Temp (°C) [Circle units]	ORP (mV) Other	Diss O_2 (mg/l)	Water Quality [Clarity, Color]
4	B	2.5	6.51	705	17.42	-194.5	0.47	Clear, Colorless
3	B	2.0	6.50	696	17.47	-173.1	0.55	Clear, Colorless
2	B	1.2	6.49	685	17.55	-168.8	0.38	Clear, Colorless
1	B	.6	6.51	673	17.62	-165.7	1.80	Clear, Colorless
0		0.00	.		.		.	

Cleared well sump at start of purge. Sump filled with black organic material. Small worm-like organisms floating on water surface

SAMPLER: John J Rouda (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime WELL ID: MW-6
SITE ADDRESS: Portland, OR BLIND ID: BM-101603-5
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F 60 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
10/16/03	08:00	25.10	/	20.93	/	4.17	X1	0.68
/ /	:	.	.	.	/		X3	2.04

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	10/16/03	13:00	B	36	40 ml	HCl	YES	NO	—	✓
Amber Glass	/ /	:	B	4	250, 500, 1L	None, HCl, H_2SO_4	YES	NO	—	✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	B	1	250, 500, 1L	HNO_3	YES	NO	—	✓
Red Diss. Poly	/ /	:	B	1	250, 500, 1L	HNO_3	YES	YES	—	✓
	/ /	:		~~1~~	~~250, 500, 1L~~		YES			

Total Bottles (include duplicate count): 12

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: : ORP mV Pump/Bailer Inlet Depth: 25

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	B	2.2	6.19	393	15.36	-92.7	0.19	Clear, Colorless
2	B	1.5	6.18	384	15.39	-88.9	0.31	Clear, Colorless
1	B	0.7	6.17	389	15.45	-71.4	2.05	Clear, Colorless
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: JOAN J RENDA (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime WELL ID: MW-7
SITE ADDRESS: PORTLAND, OR BLIND ID: BM-101603-2
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F 55 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/16/03	07:55	25.05	.	22.72	.	2.33	X1	0.38
/ /	:	.	.	.	.		X3	1.14

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/16/03	10:30	B	36	40 ml	(HCl)	(YES)	(NO)	—	✓
Amber Glass	/ /	:	B	4	250, (500) 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)	—	✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	B	1	250, (500) 1L	(HNO_3)	(YES)	(NO)	—	✓
Red Diss. Poly	/ /	:	B	1	250, (500) 1L	(HNO_3)	(YES)	(YES)	—	✓
	/ /	:		X	250, (500) 1L		YES			

Total Bottles (include duplicate count): 12

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: : ORP mV Pump/Bailer Inlet Depth: 25

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp (°C)	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	B	1.5	6.31	378	15.53	-106.1	0.71	Clear, Colorless
2	B	1.0	6.31	383	15.53	-95.7	0.83	Clear, Colorless
1	B	.5	6.32	396	15.57	-106.4	1.82	Clear, Colorless
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: JOHN J RENDA (PRINTED NAME) (SIGNATURE)

CHAIN OF CUSTODY

Columbia Analytical Services INC.
An Employee - Owned Company

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

SR#: _____

PAGE 1 OF 1 COC # _____

PROJECT NAME: BRIX Maritime
PROJECT NUMBER: 990056-01
PROJECT MANAGER: JOHN RENDA
COMPANY/ADDRESS: 6650 SW REDWOOD LANE, SUITE 110
CITY/STATE/ZIP: PORTLAND, OR 97224
E-MAIL ADDRESS: JRENDA@ANCHORENV.COM
PHONE #: 503-670-1108 FAX#: 503-670-1128
SAMPLER'S SIGNATURE: [signature]

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐	Volatile Organics 624☐ 8260☐ 8021☐ BTEX☐	Hydrocarbons (see below) Gas☐ Diesel☒ Oil☐ ☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCB's Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081A☐ 8141A☐ 8151A☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	PAHs 8310☐ SIM☒	Metals (Total or Dissolved) (See list below)	Cyanide☐ Hex-Chrom☐	pH, Cond, Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS (circle)	NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3	TOX 9020☐ AOX 1650☐ 506☐	REMARKS
BM-101603-1	10/16/03	0910		H_2O	12		X	X					X	X					
-2		1030			12		X	X					X	X					
-3		1145			12		X	X					X	X					
-4		1200			12		X	X					X	X					
-5		1300			12		X	X					X	X					
-6		1400			12		X	X					X	X					
-7		1500			12		X	X					X	X					
TRIP BLANK					2		X												

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
X II. Report Dup., MS, MSD as required
___ III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date _____

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe (Pb) Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe (Pb) Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI (NORTHWEST) OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature] Date/Time: 10/17/03 0900	Signature: Date/Time:	Signature: Date/Time:	Signature: Date/Time:
Printed Name: Firm:	Printed Name: Firm:	Printed Name: Firm:	Printed Name: Firm:

RCOC #1 06/03

Confidential Business Information

Appendix B
Laboratory Report

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

November 7, 2003 Service Request No: K2308188

John Renda
Anchor Environmental
6650 SW Redwood Lane Suite 110
Portland, OR 97224

RE: BRIX Maritime / 990056-01

Dear John:

Enclosed are the results of the sample(s) submitted to our laboratory on October 17, 2003. For your reference, these analyses have been assigned our service request number K2308188.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281.

Respectfully submitted,

Columbia Analytical Services, Inc.

Abbie Spielman
Project Chemist

AS/jeb

NELAP Accredited ACIL Seal of Excellence Award

Confidential Business Information BRIX001821

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Confidential Business Information

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

000003

Case Narrative

000004

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Anchor Environmental	**Service Request No.:**	K2308188
Project:	BRIX Maritime	**Date Received:**	10/17/03
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include Laboratory Duplicate (DUP), Matrix Spike (MS), Matrix/Duplicate Matrix Spike (MS/DMS), and Laboratory Control Sample (LCS).

Sample Receipt

Eight water samples were received for analysis at Columbia Analytical Services on 10/17/03. No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Total Metals

No anomalies associated with the analysis of these samples were observed.

Diesel Range Organics by NWTPH-Dx

No anomalies associated with the analysis of these samples were observed.

Gasoline Range Organics by NWTPH-Gx

No anomalies associated with the analysis of these samples were observed.

Volatile Organic Compounds by EPA Method 8260B

Elevated Method Reporting Limits:
Sample BM-101603-6 required dilution due to the presence of elevated levels of target analyte. The reporting limits are adjusted to reflect the dilution.

Lab Control Sample Exceptions:
The advisory criterion was exceeded for Methyl tert-Butyl Ether in Laboratory Control Sample (LCS) KWG0317282-3. As per the CAS/Kelso Standard Operating Procedure (SOP) for this method, these compounds are not included in the subset of analytes used to control the analysis. The recovery information reported for these analytes is for advisory purposes only (i.e. to provide additional detail related to the performance of each individual compound). No further corrective action was required.

Initial Calibration Exceptions:
The primary evaluation criterion was exceeded for Dichlorodifluoromethane in Initial Calibration (ICAL) ID CAL3029. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 6.3%. The calibration meets the alternative evaluation criteria. Note that CAS/Kelso policy does not allow the use of averaging if any analyte in the ICAL exceeds 30% RSD.

000005

Approved by Athi Spirl Date 11/7/03

No other anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Elevated Method Reporting Limits
Sample BM-101603-6 required dilution due to the presence of elevated levels of target analyte. The reporting limits are adjusted to reflect the dilution.

Surrogate Exceptions:
The control criteria was just exceeded for the Fluorene-d10 surrogate in sample BM-101603-4 (36% versus a lower limit of 37%). All other surrogate for this sample and the associated batch were within acceptance limits, which indicates the analysis was in control. No further corrective action was taken.

No other anomalies associated with the analysis of these samples were observed.

Approved by [signature] Date 11/7/05

000006

Chain of Custody Documentation

083007

Columbia Analytical Services INC.
An Employee - Owned Company

CHAIN OF CUSTODY

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

SR#: 1C2308188

PAGE 1 OF 1 COC #

PROJECT NAME: BRIX Maritime
PROJECT NUMBER: 990056-01
PROJECT MANAGER: JOHN RENDA
COMPANY/ADDRESS: 6650 SW REDWOOD LANE, SUITE 110
CITY/STATE/ZIP: PORTLAND, OR 97224
E-MAIL ADDRESS: JRENDA@ANCHORENV.COM
PHONE #: 503-670-1108 FAX#: 503-670-1128
SAMPLER'S SIGNATURE: [signature]

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625 ☐ 8270 ☐ 8270LL ☐	Volatile Organics 624 ☐ 8260 ☒	Hydrocarbons (*see below) Gas ☒ Diesel ☒ Oil ☐ BTEX ☐	☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	Oil & Grease/TRPH 1664 HEM ☐ 1664 SGT ☐	PCB's Aroclors ☐ Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics - 8151M Tri ☐ Tetra ☐ PCP ☐	PAHS 8310 ☐ SIM ☒	Metals (Total or Dissolved) (See list below)	Cyanide ☐ Hex-Chrom ☐	pH, Cond., Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS (circle)	NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3	TOX 9020 ☐ AOX 1650 ☐ 506 ☐					REMARKS
BM-101603-1	10/16/03	0910	1	H_2O	12		X	X						X	X										
-2		1030	2		12		X	X						X	X										
-3		1145	3		12		X	X						X	X										
-4		1200	4		12		X	X						X	X										
-5		1300	5		12		X	X						X	X										
-6		1400	6		12		X	X						X	X										
-7		1500	7		12		X	X						X	X										
TRIP BLANK					2		X																		Recd 4

000008

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
X II. Report Dup., MS, MSD as required
___ III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
___ V. EDD

INVOICE INFORMATION

P.O. # ___
Bill To: ___

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: ___ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
[signature]	10/17/03 0900	[signature]	10/17/03 1430				
Signature	Date/Time	Signature	Date/Time	Signature	Date/Time	Signature	Date/Time
		[signature]	CAS				
Printed Name	Firm	Printed Name	Firm	Printed Name	Firm	Printed Name	Firm

RCOC #1 06/03

Confidential Business Information

BRIX001828

CHS COURIER

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client Anchor Env. Work Order K23 08788

Cooler received on 10 17 03 and opened on 101703 by DW

1. Were custody seals on outside of cooler? Y N
   If yes, how many and where? 1 Front
2. Were seals intact and signature, & date correct? Y N
3. Is the shipper's airbill available and filed? If no, record airbill number: _____ ~~Y N~~
4. COC #

Temperature of cooler(s) upon receipt:	3.4	2.6	1.7	
Temperature Blank:	4.0	3.7	0.8	

5. Were custody papers properly filled out (ink, signed, etc.)? Y N
6. Type of packing material present ICE, mesh sleeve
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? Y N
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? Y N

Explain any discrepancies: _____

RESOLUTION: _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

000009

CRFREV.DOC3/5/2003

Metals

000010

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Anchor Environmental

Service Request: K2308188

Project No.: 990056-01

Project Name: BRIX Maritime

Sample No.	Lab Sample ID.
BM-101603-1	K2308188-001
BM-101603-1 DISS	K2308188-001 DISS
BM-101603-2	K2308188-002
BM-101603-2 DISS	K2308188-002 DISS
BM-101603-3	K2308188-003
BM-101603-3 DISS	K2308188-003 DISS
BM-101603-4	K2308188-004
BM-101603-4 DISS	K2308188-004 DISS
BM-101603-5	K2308188-005
BM-101603-5 DISS	K2308188-005 DISS
BM-101603-6	K2308188-006
BM-101603-6 DISS	K2308188-006 DISS
BM-101603-6D	K2308188-006D
BM-101603-6 DISSD	K2308188-006D DISS
BM-101603-6S	K2308188-006S
BM-101603-6 DISSS	K2308188-006S DISS
BM-101603-7	K2308188-007
BM-101603-7 DISS	K2308188-007 DISS
Method Blank	K2308188-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: Total and Dissolved Metals

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Date: 11/6/03

000011

COVER PAGE - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Anchor Environmental	Service Request:	K2308188
Project No.:	990056-01	Date Collected:	10/16/03
Project Name:	BRIX Maritime	Date Received:	10/17/03
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: BM-101603-1 Lab Code: K2308188-001

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	25.9		

% Solids: 0.0

Comments:

000012

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Date Collected: 10/16/03
Date Received: 10/17/03
Units: µG/L
Basis: NA

Sample Name: BM-101603-1 DISS
Lab Code: K2308188-001 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	0.58		

% Solids: 0.0

Comments: Dissolved Metals

000013

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Date Collected: 10/16/03
Date Received: 10/17/03
Units: µG/L
Basis: NA

Sample Name: BM-101603-2
Lab Code: K2308188-002

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	0.02	U	

% Solids: 0.0

Comments:

000014

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Date Collected: 10/16/03
Date Received: 10/17/03
Units: µG/L
Basis: NA

Sample Name: BM-101603-2 DISS
Lab Code: K2308188-002 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	0.03		

% Solids: 0.0

Comments: Dissolved Metals

000015

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Date Collected: 10/16/03
Date Received: 10/17/03
Units: µG/L
Basis: NA

Sample Name: BM-101603-3
Lab Code: K2308188-003

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	0.46		

% Solids: 0.0

Comments:

000016

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Date Collected: 10/16/03
Date Received: 10/17/03
Units: µG/L
Basis: NA

Sample Name: BM-101603-3 DISS
Lab Code: K2308188-003 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	0.03		

% Solids: 0.0

Comments: Dissolved Metals

000017

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Date Collected: 10/16/03
Date Received: 10/17/03
Units: µG/L
Basis: NA

Sample Name: BM-101603-4
Lab Code: K2308188-004

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	0.54		

% Solids: 0.0

Comments:

000018

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Date Collected: 10/16/03
Date Received: 10/17/03
Units: µG/L
Basis: NA

Sample Name: BM-101603-4 DISS
Lab Code: K2308188-004 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	0.02	U	

% Solids: 0.0

Comments: Dissolved Metals

090019

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Date Collected: 10/16/03
Date Received: 10/17/03
Units: µG/L
Basis: NA

Sample Name: BM-101603-5
Lab Code: K2308188-005

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	0.03		

% Solids: 0.0

Comments:

000020

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Date Collected: 10/16/03
Date Received: 10/17/03
Units: µG/L
Basis: NA

Sample Name: BM-101603-5 DISS
Lab Code: K2308188-005 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	0.07		

% Solids: 0.0

Comments: Dissolved Metals

000021

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Date Collected: 10/16/03
Date Received: 10/17/03
Units: µG/L
Basis: NA

Sample Name: BM-101603-6
Lab Code: K2308188-006

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	1.41		

% Solids: 0.0

Comments:

099022

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Date Collected: 10/16/03
Date Received: 10/17/03
Units: µG/L
Basis: NA

Sample Name: BM-101603-6 DISS
Lab Code: K2308188-006 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	0.06		

% Solids: 0.0

Comments: Dissolved Metals

000023

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Anchor Environmental	Service Request:	K2308188
Project No.:	990056-01	Date Collected:	10/16/03
Project Name:	BRIX Maritime	Date Received:	10/17/03
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: BM-101603-7 Lab Code: K2308188-007

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	0.22		

% Solids: 0.0

Comments:

000024

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Date Collected: 10/16/03
Date Received: 10/17/03
Units: µG/L
Basis: NA

Sample Name: BM-101603-7 DISS
Lab Code: K2308188-007 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	0.05		

% Solids: 0.0

Comments: Dissolved Metals

000025

Form I - IN

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Date Collected:
Date Received:
Units: µG/L
Basis: NA

Sample Name: Method Blank
Lab Code: K2308188-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	1	10/29/03	11/4/03	0.02	U	

% Solids: 0.0

Comments:

000026

Form I - IN

METALS
-5a-
SPIKE SAMPLE RECOVERY

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Units: µg/L
Basis: NA
% Solids: 0.0

Sample Name: BM-101603-6 DISSS
Lab Code: K2308188-006S DISS

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Lead	70 - 130	20.1		0.06		20.0	100		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

000027

Form V (PART 1) - IN

METALS
-5a-
SPIKE SAMPLE RECOVERY

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Units: µg/L
Basis: NA
% Solids: 0.0

Sample Name: BM-101603-6S
Lab Code: K2308188-006S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Lead	70 - 130	21.4		1.41		20.0	100		200.8

000028

An empty field in the Control Limit column indicates the control limit is not applicable.

Form V (PART 1) - IN

METALS
-6-
DUPLICATES

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Units: µg/L
Basis: NA
% Solids: 0.0

Sample Name: BM-101603-6 DISSD
Lab Code: K2308188-006D DISS

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Lead		0.06		0.05		7		200.8

000029

An empty field in the Control Limit column indicates the control limit is not applicable.

Form VI - IN

METALS
-6-
DUPLICATES

Client: Anchor Environmental
Project No.: 990056-01
Project Name: BRIX Maritime
Matrix: WATER

Service Request: K2308188
Units: µg/L
Basis: NA
% Solids: 0.0

Sample Name:BM-101603-6D
Lab Code: K2308188-006D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Lead	20	1.41		1.47		4		200.8

000030

An empty field in the Control Limit column indicates the control limit is not applicable.

Form VI - IN

Diesel and Residual Range Organics

000031

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Diesel and Residual Range Organics

Sample Name:	BM-101603-1	**Units:**	ug/L
Lab Code:	K2308188-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	270	1	10/22/03	10/23/03	KWG0316882	
Residual Range Organics (RRO)	ND	U	530	1	10/22/03	10/23/03	KWG0316882	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	92	50-150	10/23/03	Acceptable
n-Triacontane	100	50-150	10/23/03	Acceptable

Comments:

000032

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Diesel and Residual Range Organics

Sample Name:	BM-101603-3	**Units:**	ug/L
Lab Code:	K2308188-003	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	250	1	10/22/03	10/23/03	KWG0316882	
Residual Range Organics (RRO)	ND	U	500	1	10/22/03	10/23/03	KWG0316882	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	89	50-150	10/23/03	Acceptable
n-Triacontane	99	50-150	10/23/03	Acceptable

Comments:

000034

Confidential Business Information BRIX001853

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Diesel and Residual Range Organics

Sample Name:	BM-101603-4	**Units:**	ug/L
Lab Code:	K2308188-004	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	250	1	10/22/03	10/23/03	KWG0316882	
Residual Range Organics (RRO)	ND	U	500	1	10/22/03	10/23/03	KWG0316882	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	84	50-150	10/23/03	Acceptable
n-Triacontane	94	50-150	10/23/03	Acceptable

Comments: 000035

Confidential Business Information BRIX001854

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Diesel and Residual Range Organics

Sample Name:	BM-101603-5	**Units:**	ug/L
Lab Code:	K2308188-005	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	270	1	10/22/03	10/23/03	KWG0316882	
Residual Range Organics (RRO)	ND	U	530	1	10/22/03	10/23/03	KWG0316882	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	88	50-150	10/23/03	Acceptable
n-Triacontane	99	50-150	10/23/03	Acceptable

Comments: 000036

Confidential Business Information BRIX001855

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Diesel and Residual Range Organics

Sample Name:	BM-101603-6	**Units:**	ug/L
Lab Code:	K2308188-006	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	730	L	250	1	10/22/03	10/23/03	KWG0316882	
Residual Range Organics (RRO)	ND	U	500	1	10/22/03	10/23/03	KWG0316882	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	86	50-150	10/23/03	Acceptable
n-Triacontane	96	50-150	10/23/03	Acceptable

Comments: 000037

Confidential Business Information BRIX001856

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Diesel and Residual Range Organics

Sample Name:	BM-101603-7	**Units:**	ug/L
Lab Code:	K2308188-007	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	920	Y	260	1	10/22/03	10/24/03	KWG0316882	
Residual Range Organics (RRO)	1800	O	520	1	10/22/03	10/24/03	KWG0316882	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	82	50-150	10/24/03	Acceptable
n-Triacontane	94	50-150	10/24/03	Acceptable

Comments: 099038

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0316882-4	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	250	1	10/22/03	10/23/03	KWG0316882	
Residual Range Organics (RRO)	ND	U	500	1	10/22/03	10/23/03	KWG0316882	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	84	50-150	10/23/03	Acceptable
n-Triacontane	91	50-150	10/23/03	Acceptable

Comments: 000039

Confidential Business Information BRIX001858

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime/990056-01
Sample Matrix: Water

Service Request: K2308188

Surrogate Recovery Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
BM-101603-1	K2308188-001	92	100
BM-101603-2	K2308188-002	83	95
BM-101603-3	K2308188-003	89	99
BM-101603-4	K2308188-004	84	94
BM-101603-5	K2308188-005	88	99
BM-101603-6	K2308188-006	86	96
BM-101603-7	K2308188-007	82	94
BM-101603-1DUP	KWG0316882-1	70	79
BM-101603-5DUP	KWG0316882-2	76	86
Method Blank	KWG0316882-4	84	91
Lab Control Sample	KWG0316882-3	86	92

Surrogate Recovery Control Limits (%)

Sur1 =	o-Terphenyl	50-150
Sur2 =	n-Triacontane	50-150

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

000040

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Extracted:**	10/22/2003
Sample Matrix:	Water	**Date Analyzed:**	10/23/2003

Duplicate Sample Summary
Diesel and Residual Range Organics

Sample Name:	BM-101603-1	**Units:**	ug/L
Lab Code:	K2308188-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx	**Extraction Lot:**	KWG0316882

Analyte Name	MRL	Sample Result	BM-101603-1DUP KWG0316882-1 Duplicate Sample Result	Average	Relative Percent Difference	RPD Limit
Diesel Range Organics (DRO)	270	ND	ND	ND	-	30
Residual Range Organics (RRO)	530	ND	ND	ND	-	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000041

Confidential Business Information BRIX001860

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Extracted:**	10/22/2003
Sample Matrix:	Water	**Date Analyzed:**	10/23/2003

Duplicate Sample Summary
Diesel and Residual Range Organics

Sample Name:	BM-101603-5	**Units:**	ug/L
Lab Code:	K2308188-005	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx	**Extraction Lot:**	KWG0316882

Analyte Name	MRL	Sample Result	BM-101603-5DUP KWG0316882-2 Duplicate Sample Result	Average	Relative Percent Difference	RPD Limit
Diesel Range Organics (DRO)	270	ND	ND	ND	-	30
Residual Range Organics (RRO)	530	ND	ND	ND	-	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000042

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Extracted:**	10/22/2003
Sample Matrix:	Water	**Date Analyzed:**	10/23/2003

Lab Control Spike Summary
Diesel and Residual Range Organics

Extraction Method:	EPA 3510C	**Units:**	ug/L
Analysis Method:	NWTPH-Dx	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0316882

	Lab Control Sample KWG0316882-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Diesel Range Organics (DRO)	1610	1600	101	51-143
Residual Range Organics (RRO)	1480	1600	93	60-131

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000043

Confidential Business Information BRIX001862

Gasoline Range Organics

000044

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Gasoline Range Organics

Sample Name:	BM-101603-1	**Units:**	ug/L
Lab Code:	K2308188-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	50	1	10/21/03	10/21/03	KWG0316785	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	103	50-150	10/21/03	Acceptable

Comments:

000045

Confidential Business Information

BRIX001864

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Gasoline Range Organics

Sample Name:	BM-101603-2	**Units:**	ug/L
Lab Code:	K2308188-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	50	1	10/21/03	10/21/03	KWG0316785	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	104	50-150	10/21/03	Acceptable

Comments:

000046

Confidential Business Information BRIX001865

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Gasoline Range Organics

Sample Name:	BM-101603-3	**Units:**	ug/L
Lab Code:	K2308188-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	650	Y	50	1	10/21/03	10/21/03	KWG0316785	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	103	50-150	10/21/03	Acceptable

Comments:

000047

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Gasoline Range Organics

Sample Name:	BM-101603-4	**Units:**	ug/L
Lab Code:	K2308188-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	660	Y	50	1	10/21/03	10/21/03	KWG0316785	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	104	50-150	10/21/03	Acceptable

Comments:

000048

Confidential Business Information BRIX001867

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Gasoline Range Organics

Sample Name:	BM-101603-5	**Units:**	ug/L
Lab Code:	K2308188-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	50	1	10/21/03	10/21/03	KWG0316785	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	102	50-150	10/21/03	Acceptable

Comments:

000049

Confidential Business Information

BRIX001868

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Gasoline Range Organics

Sample Name:	BM-101603-6	**Units:**	ug/L
Lab Code:	K2308188-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	8100	H	50	1	10/21/03	10/21/03	KWG0316785	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	105	50-150	10/21/03	Acceptable

Comments:

000050

Confidential Business Information BRIX001869

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Gasoline Range Organics

Sample Name:	BM-101603-7	**Units:**	ug/L
Lab Code:	K2308188-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	59	Y	50	1	10/22/03	10/22/03	KWG0316785	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	102	50-150	10/22/03	Acceptable

Comments:

000051

Confidential Business Information

BRIX001870

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0316785-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	50	1	10/21/03	10/21/03	KWG0316785	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	104	50-150	10/21/03	Acceptable

Comments:

000052

Confidential Business Information BRIX001871

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime/990056-01
Sample Matrix: Water

Service Request: K2308188

Surrogate Recovery Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: NWTPH-Gx

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
BM-101603-1	K2308188-001	103
BM-101603-2	K2308188-002	104
BM-101603-3	K2308188-003	103
BM-101603-4	K2308188-004	104
BM-101603-5	K2308188-005	102
BM-101603-6	K2308188-006	105
BM-101603-7	K2308188-007	102
Method Blank	KWG0316785-4	104
Batch QC	K2308187-002	104
Batch QCMS	KWG0316785-1	106
Batch QCDMS	KWG0316785-2	105
Lab Control Sample	KWG0316785-3	106

Surrogate Recovery Control Limits (%)

Sur1 = 1,4-Difluorobenzene 50-150

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

000053

Confidential Business Information

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Extracted:**	10/21/2003
Sample Matrix:	Water	**Date Analyzed:**	10/21/2003

Matrix Spike/Duplicate Matrix Spike Summary
Gasoline Range Organics

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K2308187-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx	**Extraction Lot:**	KWG0316785

		Batch QCMS KWG0316785-1 Matrix Spike			Batch QCDMS KWG0316785-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Gasoline Range Organics (GRO)	ND	559	500	112	505	500	101	64-131	10	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000054

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Extracted:**	10/21/2003
Sample Matrix:	Water	**Date Analyzed:**	10/21/2003

Lab Control Spike Summary
Gasoline Range Organics

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	NWTPH-Gx	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0316785

	Lab Control Sample KWG0316785-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Gasoline Range Organics (GRO)	514	500	103	73-124

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000055

Volatile Organic Compounds
Method 8260

000056

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-1	**Units:**	ug/L
Lab Code:	K2308188-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Vinyl Chloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichlorofluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Acetone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methyl tert-Butyl Ether	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Disulfide	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methylene Chloride	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
trans-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
2-Butanone (MEK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
2,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
cis-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Tetrachloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Benzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichloroethene (TCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromodichloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
2-Hexanone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
cis-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Toluene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
trans-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,2-Trichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
1,3-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	

Comments: 000057

Confidential Business Information BRIX001876

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2308188
Project:	BRIX Maritime/990056-01	Date Collected:	10/16/2003
Sample Matrix:	Water	Date Received:	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-1	Units:	ug/L
Lab Code:	K2308188-001	Basis:	NA
Extraction Method:	EPA 5030B	Level:	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2-Dibromoethane (EDB)	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Chlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1,1,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Ethylbenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
n,p-Xylenes	**0.86**		0.50	1	10/28/03	10/28/03	KWG0317282	
-Xylene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Styrene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromoform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
sopropylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,1,2,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2,3-Trichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
-Propylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,3,5-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
ert-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2,4-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
ec-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,3-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Isopropyltoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,4-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2-Dibromo-3-chloropropane	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2,4-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2,3-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Naphthalene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Hexachlorobutadiene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	

Comments: 000058

Confidential Business Information

Client: Anchor Environmental
Project: BRIX Maritime/990056-01
Sample Matrix: Water

Service Request: K2308188
Date Collected: 10/16/2003
Date Received: 10/17/2003

Volatile Organic Compounds

Sample Name: BM-101603-1
Lab Code: K2308188-001

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	100	78-124	10/28/03	Acceptable
Toluene-d8	102	87-118	10/28/03	Acceptable
4-Bromofluorobenzene	84	81-113	10/28/03	Acceptable

Comments:

000059

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2308188
Project:	BRIX Maritime/990056-01	Date Collected:	10/16/2003
Sample Matrix:	Water	Date Received:	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-2	Units:	ug/L
Lab Code:	K2308188-002	Basis:	NA
Extraction Method:	EPA 5030B	Level:	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Vinyl Chloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichlorofluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Acetone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
,1-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methyl tert-Butyl Ether	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Disulfide	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methylene Chloride	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
rans-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1-Dichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Butanone (MEK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
is-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1,1-Trichloroethane (TCA)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Tetrachloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2-Dichloroethane (EDC)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Benzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichloroethene (TCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromodichloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Hexanone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
is-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Toluene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
rans-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1,2-Trichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Methyl-2-pentanone (MIBK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
,3-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	

omments: 000060

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-2	**Units:**	ug/L
Lab Code:	K2308188-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Chlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Ethylbenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
m,p-Xylenes	**0.82**		0.50	1	10/28/03	10/28/03	KWG0317282	
o-Xylene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Styrene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromoform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Isopropylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2,3-Trichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
n-Propylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
2-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
4-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,3,5-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
tert-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2,4-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
sec-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,3-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
4-Isopropyltoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,4-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
n-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2,4-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2,3-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Naphthalene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Hexachlorobutadiene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	

000061

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2308188
Project:	BRIX Maritime/990056-01	Date Collected:	10/16/2003
Sample Matrix:	Water	Date Received:	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-2	Units:	ug/L
Lab Code:	K2308188-002	Basis:	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	100	78-124	10/28/03	Acceptable
Toluene-d8	102	87-118	10/28/03	Acceptable
4-Bromofluorobenzene	85	81-113	10/28/03	Acceptable

000062

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-3	**Units:**	ug/L
Lab Code:	K2308188-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Vinyl Chloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichlorofluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Acetone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methyl tert-Butyl Ether	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Disulfide	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methylene Chloride	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
trans-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
2-Butanone (MEK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
2,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
cis-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Tetrachloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Benzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichloroethene (TCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromodichloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
2-Hexanone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
cis-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Toluene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
trans-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,2-Trichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
1,3-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	

000063

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-3	**Units:**	ug/L
Lab Code:	K2308188-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2-Dibromoethane (EDB)	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Chlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1,1,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Ethylbenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
n,p-Xylenes	**0.93**		0.50	1	10/28/03	10/28/03	KWG0317282	
-Xylene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Styrene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromoform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
sopropylbenzene	**7.1**		2.0	1	10/28/03	10/28/03	KWG0317282	
,1,2,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2,3-Trichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
-Propylbenzene	**5.5**		2.0	1	10/28/03	10/28/03	KWG0317282	
-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,3,5-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
ert-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2,4-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
ec-Butylbenzene	**4.4**		2.0	1	10/28/03	10/28/03	KWG0317282	
,3-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Isopropyltoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,4-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2-Dibromo-3-chloropropane	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2,4-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2,3-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Naphthalene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Hexachlorobutadiene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	

omments: 000064

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-3	**Units:**	ug/L
Lab Code:	K2308188-003	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	98	78-124	10/28/03	Acceptable
Toluene-d8	103	87-118	10/28/03	Acceptable
4-Bromofluorobenzene	91	81-113	10/28/03	Acceptable

Comments: 000065

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-4	**Units:**	ug/L
Lab Code:	K2308188-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Vinyl Chloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichlorofluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Acetone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
,1-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methyl tert-Butyl Ether	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Disulfide	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methylene Chloride	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
rans-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1-Dichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Butanone (MEK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
is-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1,1-Trichloroethane (TCA)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Tetrachloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2-Dichloroethane (EDC)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Benzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichloroethene (TCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromodichloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Hexanone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
is-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Toluene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
rans-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1,2-Trichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Methyl-2-pentanone (MIBK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
,3-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	

Comments: 000066

Confidential Business Information

Client: Anchor Environmental
Project: BRIX Maritime/990056-01
Sample Matrix: Water

Service Request: K2308188
Date Collected: 10/16/2003
Date Received: 10/17/2003

Volatile Organic Compounds

Sample Name: BM-101603-4
Lab Code: K2308188-004

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Chlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Ethylbenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
m,p-Xylenes	**0.94**		0.50	1	10/28/03	10/28/03	KWG0317282	
o-Xylene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Styrene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromoform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Isopropylbenzene	**7.5**		2.0	1	10/28/03	10/28/03	KWG0317282	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2,3-Trichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
n-Propylbenzene	**6.3**		2.0	1	10/28/03	10/28/03	KWG0317282	
2-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
4-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,3,5-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
tert-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2,4-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
sec-Butylbenzene	**4.8**		2.0	1	10/28/03	10/28/03	KWG0317282	
1,3-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
4-Isopropyltoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,4-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
n-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2,4-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2,3-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Naphthalene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Hexachlorobutadiene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	

Comments: 000067

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2308188
Project:	BRIX Maritime/990056-01	Date Collected:	10/16/2003
Sample Matrix:	Water	Date Received:	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-4	Units:	ug/L
Lab Code:	K2308188-004	Basis:	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	98	78-124	10/28/03	Acceptable
Toluene-d8	103	87-118	10/28/03	Acceptable
4-Bromofluorobenzene	92	81-113	10/28/03	Acceptable

Comments:

000068

Confidential Business Information

BRIX001887

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-5	**Units:**	ug/L
Lab Code:	K2308188-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Vinyl Chloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichlorofluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Acetone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methyl tert-Butyl Ether	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Disulfide	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methylene Chloride	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
trans-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
2-Butanone (MEK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
2,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
cis-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Tetrachloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Benzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichloroethene (TCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromodichloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
2-Hexanone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
cis-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Toluene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
trans-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,2-Trichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
1,3-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	

Comments: 000069

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2308188
Project:	BRIX Maritime/990056-01	Date Collected:	10/16/2003
Sample Matrix:	Water	Date Received:	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-5	Units:	ug/L
Lab Code:	K2308188-005	Basis:	NA
Extraction Method:	EPA 5030B	Level:	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Chlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Ethylbenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
m,p-Xylenes	**0.74**		0.50	1	10/28/03	10/28/03	KWG0317282	
o-Xylene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Styrene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromoform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Isopropylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2,3-Trichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
n-Propylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
2-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
4-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,3,5-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
tert-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2,4-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
sec-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,3-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
4-Isopropyltoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,4-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
n-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2,4-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2,3-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Naphthalene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Hexachlorobutadiene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	

Comments: 000070

Confidential Business Information BRIX001889

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-5	**Units:**	ug/L
Lab Code:	K2308188-005	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	98	78-124	10/28/03	Acceptable
Toluene-d8	102	87-118	10/28/03	Acceptable
4-Bromofluorobenzene	89	81-113	10/28/03	Acceptable

Comments: 000071

Confidential Business Information BRIX001890

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2308188
Project:	BRIX Maritime/990056-01	Date Collected:	10/16/2003
Sample Matrix:	Water	Date Received:	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-6	Units:	ug/L
Lab Code:	K2308188-006	Basis:	NA
Extraction Method:	EPA 5030B	Level:	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Chloromethane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Vinyl Chloride	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Bromomethane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Chloroethane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Trichlorofluoromethane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Acetone	ND	U	100	5	10/28/03	10/28/03	KWG0317282	
,1-Dichloroethene	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Methyl tert-Butyl Ether	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Carbon Disulfide	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Methylene Chloride	ND	U	10	5	10/28/03	10/28/03	KWG0317282	
rans-1,2-Dichloroethene	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
,1-Dichloroethane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
-Butanone (MEK)	ND	U	100	5	10/28/03	10/28/03	KWG0317282	
,2-Dichloropropane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
is-1,2-Dichloroethene	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Chloroform	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Bromochloromethane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
,1,1-Trichloroethane (TCA)	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
,1-Dichloropropene	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Carbon Tetrachloride	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
,2-Dichloroethane (EDC)	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Benzene	32	D	2.5	5	10/28/03	10/28/03	KWG0317282	
Trichloroethene (TCE)	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
,2-Dichloropropane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Bromodichloromethane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Dibromomethane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
-Hexanone	ND	U	100	5	10/28/03	10/28/03	KWG0317282	
is-1,3-Dichloropropene	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Toluene	13	D	2.5	5	10/28/03	10/28/03	KWG0317282	
rans-1,3-Dichloropropene	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
,1,2-Trichloroethane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
-Methyl-2-pentanone (MIBK)	ND	U	100	5	10/28/03	10/28/03	KWG0317282	
,3-Dichloropropane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	

omments: 000072

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-6	**Units:**	ug/L
Lab Code:	K2308188-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Dibromochloromethane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
1,2-Dibromoethane (EDB)	ND	U	10	5	10/28/03	10/28/03	KWG0317282	
Chlorobenzene	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
1,1,1,2-Tetrachloroethane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Ethylbenzene	**270**	D	2.5	5	10/28/03	10/28/03	KWG0317282	
m,p-Xylenes	**360**	D	2.5	5	10/28/03	10/28/03	KWG0317282	
o-Xylene	**110**	D	2.5	5	10/28/03	10/28/03	KWG0317282	
Styrene	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Bromoform	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Isopropylbenzene	**75**	D	10	5	10/28/03	10/28/03	KWG0317282	
1,1,2,2-Tetrachloroethane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
1,2,3-Trichloropropane	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
Bromobenzene	ND	U	10	5	10/28/03	10/28/03	KWG0317282	
n-Propylbenzene	**250**	D	10	5	10/28/03	10/28/03	KWG0317282	
2-Chlorotoluene	ND	U	10	5	10/28/03	10/28/03	KWG0317282	
4-Chlorotoluene	ND	U	10	5	10/28/03	10/28/03	KWG0317282	
1,3,5-Trimethylbenzene	**280**	D	10	5	10/28/03	10/28/03	KWG0317282	
tert-Butylbenzene	ND	U	10	5	10/28/03	10/28/03	KWG0317282	
1,2,4-Trimethylbenzene	**1200**	D	100	50	10/28/03	10/28/03	KWG0317282	
sec-Butylbenzene	**28**	D	10	5	10/28/03	10/28/03	KWG0317282	
1,3-Dichlorobenzene	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
4-Isopropyltoluene	ND	U	10	5	10/28/03	10/28/03	KWG0317282	
1,4-Dichlorobenzene	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
n-Butylbenzene	ND	Ui	150	5	10/28/03	10/28/03	KWG0317282	
1,2-Dichlorobenzene	ND	U	2.5	5	10/28/03	10/28/03	KWG0317282	
1,2-Dibromo-3-chloropropane	ND	U	10	5	10/28/03	10/28/03	KWG0317282	
1,2,4-Trichlorobenzene	ND	U	10	5	10/28/03	10/28/03	KWG0317282	
1,2,3-Trichlorobenzene	ND	U	10	5	10/28/03	10/28/03	KWG0317282	
Naphthalene	**460**	D	100	50	10/28/03	10/28/03	KWG0317282	
Hexachlorobutadiene	ND	U	10	5	10/28/03	10/28/03	KWG0317282	

000073

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2308188
Project:	BRIX Maritime/990056-01	Date Collected:	10/16/2003
Sample Matrix:	Water	Date Received:	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-6	Units:	ug/L
Lab Code:	K2308188-006	Basis:	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	97	78-124	10/28/03	Acceptable
Toluene-d8	101	87-118	10/28/03	Acceptable
4-Bromofluorobenzene	90	81-113	10/28/03	Acceptable

Comments:

000074

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-7	**Units:**	ug/L
Lab Code:	K2308188-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Vinyl Chloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichlorofluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Acetone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methyl tert-Butyl Ether	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Disulfide	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methylene Chloride	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
trans-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
2-Butanone (MEK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
2,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
cis-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Tetrachloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Benzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichloroethene (TCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromodichloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
2-Hexanone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
cis-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Toluene	**1.9**		0.50	1	10/28/03	10/28/03	KWG0317282	
trans-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,2-Trichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
1,3-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	

Comments: 000075

Confidential Business Information BRIX001894

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-7	**Units:**	ug/L
Lab Code:	K2308188-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2-Dibromoethane (EDB)	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Chlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1,1,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Ethylbenzene	**0.51**		0.50	1	10/28/03	10/28/03	KWG0317282	
m,p-Xylenes	**2.5**		0.50	1	10/28/03	10/28/03	KWG0317282	
-Xylene	**1.5**		0.50	1	10/28/03	10/28/03	KWG0317282	
tyrene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromoform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
sopropylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,1,2,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2,3-Trichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
-Propylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,3,5-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
ert-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2,4-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
ec-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,3-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Isopropyltoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,4-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
2-Dibromo-3-chloropropane	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
2,4-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
2,3-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
aphthalene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
exachlorobutadiene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	

000076

omments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	BM-101603-7	**Units:**	ug/L
Lab Code:	K2308188-007	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	99	78-124	10/28/03	Acceptable
Toluene-d8	101	87-118	10/28/03	Acceptable
4-Bromofluorobenzene	90	81-113	10/28/03	Acceptable

000077

Comments:

Confidential Business Information BRIX001896

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	Service Request:	K2308188
Project:	BRIX Maritime/990056-01	Date Collected:	10/16/2003
Sample Matrix:	Water	Date Received:	10/17/2003

Volatile Organic Compounds

Sample Name:	TRIP BLANK	Units:	ug/L
Lab Code:	K2308188-008	Basis:	NA
Extraction Method:	EPA 5030B	Level:	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Vinyl Chloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichlorofluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Acetone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
,1-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methyl tert-Butyl Ether	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Disulfide	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methylene Chloride	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
rans-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1-Dichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Butanone (MEK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
is-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1,1-Trichloroethane (TCA)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Tetrachloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2-Dichloroethane (EDC)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Benzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichloroethene (TCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromodichloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Hexanone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
is-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Toluene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
rans-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1,2-Trichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Methyl-2-pentanone (MIBK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
,3-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	

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omments:

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	TRIP BLANK	**Units:**	ug/L
Lab Code:	K2308188-008	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Chlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Ethylbenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
m,p-Xylenes	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
o-Xylene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Styrene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromoform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Isopropylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2,3-Trichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
n-Propylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
2-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
4-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,3,5-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
tert-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2,4-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
sec-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,3-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
4-Isopropyltoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,4-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
n-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2,4-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
1,2,3-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Naphthalene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Hexachlorobutadiene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	

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Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Volatile Organic Compounds

Sample Name:	TRIP BLANK	**Units:**	ug/L
Lab Code:	K2308188-008	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	100	78-124	10/28/03	Acceptable
Toluene-d8	102	87-118	10/28/03	Acceptable
4-Bromofluorobenzene	90	81-113	10/28/03	Acceptable

Comments: 000080

Confidential Business Information BRIX001899

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Anchor Environmental
Project: BRIX Maritime/990056-01
Sample Matrix: Water

Service Request: K2308188
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0317282-4

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Vinyl Chloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichlorofluoromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Acetone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methyl tert-Butyl Ether	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Disulfide	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Methylene Chloride	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
trans-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
2-Butanone (MEK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
2,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
cis-1,2-Dichloroethene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Chloroform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Carbon Tetrachloride	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Benzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Trichloroethene (TCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromodichloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromomethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
2-Hexanone	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
cis-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Toluene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
trans-1,3-Dichloropropene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,1,2-Trichloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	10/28/03	10/28/03	KWG0317282	
1,3-Dichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	

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Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0317282-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Dibromochloromethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Chlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,1,1,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Ethylbenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
n,p-Xylenes	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Xylene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Styrene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromoform	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
sopropylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,1,2,2-Tetrachloroethane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2,3-Trichloropropane	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
Bromobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
-Propylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
-Chlorotoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,3,5-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
ert-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2,4-Trimethylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
ec-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,3-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Isopropyltoluene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,4-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
-Butylbenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2-Dichlorobenzene	ND	U	0.50	1	10/28/03	10/28/03	KWG0317282	
,2-Dibromo-3-chloropropane	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2,4-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
,2,3-Trichlorobenzene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Naphthalene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	
Hexachlorobutadiene	ND	U	2.0	1	10/28/03	10/28/03	KWG0317282	

000082

omments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0317282-4	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	102	78-124	10/28/03	Acceptable
Toluene-d8	104	87-118	10/28/03	Acceptable
4-Bromofluorobenzene	90	81-113	10/28/03	Acceptable

Comments:

000083

Confidential Business Information BRIX001902

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime/990056-01
Sample Matrix: Water

Service Request: K2308188

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
3M-101603-1	K2308188-001	100	102	84
3M-101603-2	K2308188-002	100	102	85
3M-101603-3	K2308188-003	98	103	91
3M-101603-4	K2308188-004	98	103	92
3M-101603-5	K2308188-005	98	102	89
3M-101603-6	K2308188-006	97	101	90
3M-101603-7	K2308188-007	99	101	90
TRIP BLANK	K2308188-008	100	102	90
Method Blank	KWG0317282-4	102	104	90
3M-101603-6MS	KWG0317282-1	98	100	93
3M-101603-6DMS	KWG0317282-2	101	104	92
Lab Control Sample	KWG0317282-3	99	100	91

urrogate Recovery Control Limits (%)

ur1 =	Dibromofluoromethane	78-124
ur2 =	Toluene-d8	87-118
ur3 =	4-Bromofluorobenzene	81-113

000084

esults flagged with an asterisk (*) indicate values outside control criteria.
esults flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Extracted:**	10/28/2003
Sample Matrix:	Water	**Date Analyzed:**	10/28/2003

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	BM-101603-6	**Units:**	ug/L
Lab Code:	K2308188-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0317282

		BM-101603-6MS KWG0317282-1 Matrix Spike			BM-101603-6DMS KWG0317282-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,1-Dichloroethene	ND	452	500	90	433	500	87	67-157	4	30
Benzene	32	498	500	93	469	500	87	76-138	6	30
Trichloroethene (TCE)	ND	429	500	86	416	500	83	66-149	3	30
Toluene	13	449	500	87	439	500	85	82-131	2	30
Chlorobenzene	ND	445	500	89	421	500	84	70-131	6	30
1,2-Dichlorobenzene	ND	452	500	90	427	500	85	70-126	6	30
Naphthalene	460	920	500	93	927	500	94	50-149	1	30

000085

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Extracted:**	10/27/2003
Sample Matrix:	Water	**Date Analyzed:**	10/27/2003

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0317282

	Lab Control Sample KWG0317282-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dichlorodifluoromethane	15.2	10.0	152	33-189
Chloromethane	9.55	10.0	96	66-128
Vinyl Chloride	11.7	10.0	117	76-135
Bromomethane	8.92	10.0	89	30-188
Chloroethane	10.6	10.0	106	79-131
Trichlorofluoromethane	10.9	10.0	109	73-127
Acetone	46.5	50.0	93	60-157
,1-Dichloroethene	10.6	10.0	106	79-137
Methyl tert-Butyl Ether	7.10	10.0	71 *	78-128
Carbon Disulfide	22.4	20.0	112	68-118
Methylene Chloride	10.9	10.0	109	68-135
rans-1,2-Dichloroethene	10.4	10.0	104	88-127
,1-Dichloroethane	10.4	10.0	104	89-133
-Butanone (MEK)	50.5	50.0	101	78-144
,2-Dichloropropane	10.2	10.0	102	71-138
is-1,2-Dichloroethene	10.1	10.0	101	90-126
Chloroform	10.2	10.0	102	88-117
Bromochloromethane	10.8	10.0	108	80-133
,1,1-Trichloroethane (TCA)	10.8	10.0	108	83-122
,1-Dichloropropene	10.3	10.0	103	87-137
Carbon Tetrachloride	10.9	10.0	109	87-131
,2-Dichloroethane (EDC)	9.76	10.0	98	73-130
Benzene	10.4	10.0	104	90-120
Trichloroethene (TCE)	10.5	10.0	105	83-131
,2-Dichloropropane	9.64	10.0	96	87-121
Bromodichloromethane	10.0	10.0	100	84-114
Dibromomethane	10.0	10.0	100	76-130
-Hexanone	44.5	50.0	89	68-135
is-1,3-Dichloropropene	9.34	10.0	93	90-126
oluene	9.83	10.0	98	89-119
ans-1,3-Dichloropropene	8.77	10.0	88	77-113
,1,2-Trichloroethane	9.98	10.0	100	81-116
-Methyl-2-pentanone (MIBK)	47.1	50.0	94	79-138
,3-Dichloropropane	9.64	10.0	96	76-129
etrachloroethene (PCE)	10.8	10.0	108	82-123
Dibromochloromethane	10.3	10.0	103	83-119

000086

esults flagged with an asterisk (*) indicate values outside control criteria.

ercent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Extracted:**	10/27/2003
Sample Matrix:	Water	**Date Analyzed:**	10/27/2003

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0317282

	Lab Control Sample KWG0317282-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	9.99	10.0	100	74-130
Chlorobenzene	9.50	10.0	95	86-115
1,1,1,2-Tetrachloroethane	9.74	10.0	97	88-118
Ethylbenzene	10.2	10.0	102	89-124
m,p-Xylenes	19.8	20.0	99	90-122
o-Xylene	9.87	10.0	99	88-126
Styrene	9.60	10.0	96	91-123
Bromoform	10.1	10.0	101	76-125
Isopropylbenzene	8.85	10.0	89	82-123
1,1,2,2-Tetrachloroethane	8.52	10.0	85	78-117
1,2,3-Trichloropropane	9.65	10.0	97	75-127
Bromobenzene	9.77	10.0	98	76-129
n-Propylbenzene	9.35	10.0	94	83-128
2-Chlorotoluene	9.00	10.0	90	74-131
4-Chlorotoluene	8.77	10.0	88	87-119
1,3,5-Trimethylbenzene	9.38	10.0	94	85-128
tert-Butylbenzene	9.91	10.0	99	83-129
1,2,4-Trimethylbenzene	9.71	10.0	97	88-129
sec-Butylbenzene	9.57	10.0	96	84-133
1,3-Dichlorobenzene	9.43	10.0	94	87-116
4-Isopropyltoluene	9.04	10.0	90	81-126
1,4-Dichlorobenzene	9.54	10.0	95	86-115
n-Butylbenzene	9.04	10.0	90	79-134
1,2-Dichlorobenzene	9.23	10.0	92	85-113
1,2-Dibromo-3-chloropropane	7.79	10.0	78	55-136
1,2,4-Trichlorobenzene	9.57	10.0	96	76-130
1,2,3-Trichlorobenzene	9.86	10.0	99	70-134
Naphthalene	9.12	10.0	91	71-137
Hexachlorobutadiene	9.95	10.0	100	77-129

000087

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Polynuclear Aromatic Hydrocarbons
Method 8270

000088

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	BM-101603-1	**Units:**	ug/L
Lab Code:	K2308188-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.023**		0.022	1	10/23/03	10/29/03	KWG0317017	
2-Methylnaphthalene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Acenaphthylene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Acenaphthene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Dibenzofuran	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Fluorene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Phenanthrene	**0.031**		0.022	1	10/23/03	10/29/03	KWG0317017	
Anthracene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Fluoranthene	**0.070**		0.022	1	10/23/03	10/29/03	KWG0317017	
Pyrene	**0.091**		0.022	1	10/23/03	10/29/03	KWG0317017	
Benz(a)anthracene	**0.023**		0.022	1	10/23/03	10/29/03	KWG0317017	
Chrysene	**0.042**		0.022	1	10/23/03	10/29/03	KWG0317017	
Benzo(b)fluoranthene	**0.036**		0.022	1	10/23/03	10/29/03	KWG0317017	
Benzo(k)fluoranthene	**0.035**		0.022	1	10/23/03	10/29/03	KWG0317017	
Benzo(a)pyrene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Indeno(1,2,3-cd)pyrene	**0.073**		0.022	1	10/23/03	10/29/03	KWG0317017	
Dibenz(a,h)anthracene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Benzo(g,h,i)perylene	**0.090**		0.022	1	10/23/03	10/29/03	KWG0317017	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	37	37-107	10/29/03	Acceptable
Fluoranthene-d10	78	18-137	10/29/03	Acceptable
Terphenyl-d14	86	18-153	10/29/03	Acceptable

Comments: 000089

Confidential Business Information BRIX001908

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	BM-101603-2	**Units:**	ug/L
Lab Code:	K2308188-002	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
2-Methylnaphthalene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Acenaphthylene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Acenaphthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Dibenzofuran	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Fluorene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Phenanthrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Pyrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benz(a)anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Chrysene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(b)fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(k)fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(a)pyrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Dibenz(a,h)anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(g,h,i)perylene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	51	37-107	10/29/03	Acceptable
Fluoranthene-d10	83	18-137	10/29/03	Acceptable
Terphenyl-d14	115	18-153	10/29/03	Acceptable

Comments: 000090

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	BM-101603-3	**Units:**	ug/L
Lab Code:	K2308188-003	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.11**		0.022	1	10/23/03	10/29/03	KWG0317017	
2-Methylnaphthalene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Acenaphthylene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Acenaphthene	**0.36**		0.022	1	10/23/03	10/29/03	KWG0317017	
Dibenzofuran	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Fluorene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Phenanthrene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Anthracene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Fluoranthene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Pyrene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Benz(a)anthracene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Chrysene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Benzo(b)fluoranthene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Benzo(k)fluoranthene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Benzo(a)pyrene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Indeno(1,2,3-cd)pyrene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Dibenz(a,h)anthracene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	
Benzo(g,h,i)perylene	ND	U	0.022	1	10/23/03	10/29/03	KWG0317017	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	58	37-107	10/29/03	Acceptable
Fluoranthene-d10	86	18-137	10/29/03	Acceptable
Terphenyl-d14	94	18-153	10/29/03	Acceptable

Comments:

000091

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	BM-101603-4	**Units:**	ug/L
Lab Code:	K2308188-004	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.12**		0.020	1	10/23/03	10/29/03	KWG0317017	
2-Methylnaphthalene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Acenaphthylene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Acenaphthene	**0.40**		0.020	1	10/23/03	10/29/03	KWG0317017	
Dibenzofuran	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Fluorene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Phenanthrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Pyrene	**0.024**		0.020	1	10/23/03	10/29/03	KWG0317017	
Benz(a)anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Chrysene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(b)fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(k)fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(a)pyrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Dibenz(a,h)anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(g,h,i)perylene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	36	37-107	10/29/03	Outside Control Limits
Fluoranthene-d10	77	18-137	10/29/03	Acceptable
Terphenyl-d14	92	18-153	10/29/03	Acceptable

000092

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	BM-101603-5	**Units:**	ug/L
Lab Code:	K2308188-005	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
2-Methylnaphthalene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Acenaphthylene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Acenaphthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Dibenzofuran	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Fluorene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Phenanthrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Pyrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benz(a)anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Chrysene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(b)fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(k)fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(a)pyrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Dibenz(a,h)anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(g,h,i)perylene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	60	37-107	10/29/03	Acceptable
Fluoranthene-d10	88	18-137	10/29/03	Acceptable
Terphenyl-d14	122	18-153	10/29/03	Acceptable

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Comments:

Confidential Business Information BRIX001912

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	BM-101603-6	**Units:**	ug/L
Lab Code:	K2308188-006	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**160**	D	0.99	50	10/23/03	10/30/03	KWG0317017	
2-Methylnaphthalene	**42**	D	0.99	50	10/23/03	10/30/03	KWG0317017	
Acenaphthylene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Acenaphthene	**0.34**		0.020	1	10/23/03	10/29/03	KWG0317017	
Dibenzofuran	**0.085**		0.020	1	10/23/03	10/29/03	KWG0317017	
Fluorene	**0.24**		0.020	1	10/23/03	10/29/03	KWG0317017	
Phenanthrene	**0.42**		0.020	1	10/23/03	10/29/03	KWG0317017	
Anthracene	**0.065**		0.020	1	10/23/03	10/29/03	KWG0317017	
Fluoranthene	**0.33**		0.020	1	10/23/03	10/29/03	KWG0317017	
Pyrene	**0.90**		0.020	1	10/23/03	10/29/03	KWG0317017	
Benz(a)anthracene	**0.16**		0.020	1	10/23/03	10/29/03	KWG0317017	
Chrysene	**0.24**		0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(b)fluoranthene	**0.073**		0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(k)fluoranthene	**0.096**		0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(a)pyrene	**0.097**		0.020	1	10/23/03	10/29/03	KWG0317017	
Indeno(1,2,3-cd)pyrene	**0.036**		0.020	1	10/23/03	10/29/03	KWG0317017	
Dibenz(a,h)anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(g,h,i)perylene	**0.043**		0.020	1	10/23/03	10/29/03	KWG0317017	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	73	37-107	10/29/03	Acceptable
Fluoranthene-d10	93	18-137	10/29/03	Acceptable
Terphenyl-d14	113	18-153	10/29/03	Acceptable

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Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	10/16/2003
Sample Matrix:	Water	**Date Received:**	10/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	BM-101603-7	**Units:**	ug/L
Lab Code:	K2308188-007	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.34**		0.020	1	10/23/03	10/29/03	KWG0317017	
2-Methylnaphthalene	**0.31**		0.020	1	10/23/03	10/29/03	KWG0317017	
Acenaphthylene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Acenaphthene	**0.21**		0.020	1	10/23/03	10/29/03	KWG0317017	
Dibenzofuran	**0.021**		0.020	1	10/23/03	10/29/03	KWG0317017	
Fluorene	**0.11**		0.020	1	10/23/03	10/29/03	KWG0317017	
Phenanthrene	**0.14**		0.020	1	10/23/03	10/29/03	KWG0317017	
Anthracene	**0.022**		0.020	1	10/23/03	10/29/03	KWG0317017	
Fluoranthene	**0.077**		0.020	1	10/23/03	10/29/03	KWG0317017	
Pyrene	**0.082**		0.020	1	10/23/03	10/29/03	KWG0317017	
Benz(a)anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Chrysene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(b)fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(k)fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(a)pyrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Dibenz(a,h)anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(g,h,i)perylene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	71	37-107	10/29/03	Acceptable
Fluoranthene-d10	83	18-137	10/29/03	Acceptable
Terphenyl-d14	86	18-153	10/29/03	Acceptable

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Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K2308188
Project:	BRIX Maritime/990056-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0317017-3	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
2-Methylnaphthalene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Acenaphthylene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Acenaphthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Dibenzofuran	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Fluorene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Phenanthrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Pyrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benz(a)anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Chrysene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(b)fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(k)fluoranthene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(a)pyrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Dibenz(a,h)anthracene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	
Benzo(g,h,i)perylene	ND	U	0.020	1	10/23/03	10/29/03	KWG0317017	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	73	37-107	10/29/03	Acceptable
Fluoranthene-d10	88	18-137	10/29/03	Acceptable
Terphenyl-d14	90	18-153	10/29/03	Acceptable

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Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime/990056-01
Sample Matrix: Water

Service Request: K2308188

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1		Sur2	Sur3
BM-101603-1	K2308188-001	37		78	86
BM-101603-2	K2308188-002	51		83	115
BM-101603-3	K2308188-003	58		86	94
BM-101603-4	K2308188-004	36	*	77	92
BM-101603-5	K2308188-005	60		88	122
BM-101603-6	K2308188-006	73		93	113
BM-101603-7	K2308188-007	71		83	86
Method Blank	KWG0317017-3	73		88	90
Lab Control Sample	KWG0317017-1	75		89	85
Duplicate Lab Control Sample	KWG0317017-2	73		85	78

Surrogate Recovery Control Limits (%)

Sur1 =	Fluorene-d10	37-107
Sur2 =	Fluoranthene-d10	18-137
Sur3 =	Terphenyl-d14	18-153

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Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime/990056-01
Sample Matrix: Water

Service Request: K2308188
Date Extracted: 10/23/2003
Date Analyzed: 10/29/2003 - 10/30/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0317017

	Lab Control Sample KWG0317017-1 Lab Control Spike			Duplicate Lab Control Sample KWG0317017-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	3.38	5.00	68	3.32	5.00	66	44-101	2	30
2-Methylnaphthalene	3.34	5.00	67	3.32	5.00	66	36-106	1	30
Acenaphthylene	3.54	5.00	71	3.55	5.00	71	49-114	0	30
Acenaphthene	3.56	5.00	71	3.52	5.00	70	48-107	1	30
Dibenzofuran	3.45	5.00	69	3.42	5.00	68	40-115	1	30
Fluorene	3.54	5.00	71	3.53	5.00	71	55-111	0	30
Phenanthrene	3.71	5.00	74	3.59	5.00	72	56-108	3	30
Anthracene	3.34	5.00	67	3.34	5.00	67	42-117	0	30
Fluoranthene	3.93	5.00	79	3.82	5.00	76	61-123	3	30
Pyrene	3.99	5.00	80	3.94	5.00	79	53-123	1	30
Benz(a)anthracene	3.77	5.00	75	3.72	5.00	74	53-123	1	30
Chrysene	4.06	5.00	81	3.93	5.00	79	57-118	3	30
Benzo(b)fluoranthene	4.08	5.00	82	3.96	5.00	79	57-132	3	30
Benzo(k)fluoranthene	4.41	5.00	88	4.15	5.00	83	54-126	6	30
Benzo(a)pyrene	3.48	5.00	70	3.80	5.00	76	38-142	9	30
Indeno(1,2,3-cd)pyrene	4.86	5.00	97	4.76	5.00	95	49-139	2	30
Dibenz(a,h)anthracene	5.65	5.00	113	5.33	5.00	107	47-138	6	30
Benzo(g,h,i)perylene	5.07	5.00	101	4.74	5.00	95	50-125	7	30

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ults flagged with an asterisk (*) indicate values outside control criteria.

ent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Appendix C
Data Validation Review

ANCHOR ENVIRONMENTAL, L.L.C.

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LABORATORY DATA REVIEW

BRIX Maritime

October 2003

This report presents a review of the samples collected from BRIX Maritime on October 16, 2003. Samples were analyzed by Columbia Analytical Services, Inc. (CAS), in Kelso, Washington. Laboratory report # K2308188 was reviewed.

Data Qualifications

The following comments refer to the laboratory's performance in meeting the quality control (QC) specifications outlined in the analytical procedures and the Quality Assurance Project Plan (QAPP). Analytical results were reviewed using *USEPA National Functional Guidelines for Inorganics Data Review* (USEPA, 2002), and *USEPA National Functional Guidelines for Organics Data Review* (USEPA, 1999), and applying laboratory and method QC criteria.

The laboratory Sample Receipt Form states that the cooler temperatures were within ±4°C upon arrival at the laboratory. Sample transport and handling were acceptable.

Unless specifically noted in this report, laboratory results were within QC criteria.

Holding Times

All sample analyses were conducted within recommended holding times. No data were qualified due to these results.

Method Reporting Limits (MRLs)

The MRLs were acceptable.

Method Blanks

Method blanks were analyzed at the required frequency for all analyses. Method blanks were free of contamination. No data were qualified due to these results.

Trip and Field Blanks

One trip blank was submitted with the samples and analyzed for VOCs. The trip blank was free of contamination. No data were qualified due to these results.

No field blanks were collected. No data were qualified due to these results.

Field Duplicates

One field duplicate was submitted with the samples; BM-101603-3 / BM-101603-4. The field duplicate results were comparable. No data were qualified due to these results.

Surrogate Recoveries

Surrogate recoveries were reported for all organic analyses. Surrogate percent recoveries were within the control limits; no data were qualified due to these results.

Laboratory Duplicate Results

The laboratory analyzed duplicates at the required frequency. Laboratory duplicate results were within the control limits; no data were qualified due to these results.

Matrix Spike/Matrix Spike Duplicate Results

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were conducted at the required frequency. MS/MSD results were within the control limits; no data were qualified due to these results.

Laboratory Control Sample Results

Laboratory control sample (LCS) analyses were conducted at the required frequency. The Methyl tert-Butyl Ether LCS had a %R slightly below the laboratory control limits. As the remaining %Rs and MS/MSD %Rs were within the control limits; no data were qualified.

Completeness

The results reported by the laboratory were checked against chain-of-custody entries to determine if all of the requested analyses were completed. All requested analyses were conducted.

Overall Assessment

The data are judged to be acceptable, as qualified, for their intended use.

REFERENCES

USEPA. 1986. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. EPA 530/SW-846.

USEPA. 2002. USEPA National Functional Guidelines for Inorganics Data Review. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency. EPA 540/R-01/008. July.

USEPA. 1999. USEPA National Functional Guidelines for Organics Data Review. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency. EPA 540/R-99/008. October.