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SOMA Environmental

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To: Eva Chu / ACDEH

From: Roger Papler

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Pages: 7 (including cover page)

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Date: 29 Sept 2003

Re: 2552: GW Analytical TWB-3 to TWB-6

Site: 15101 Freedom Ave.

Urgent **For Review** **Please Comment** **Please Reply** **Please Recycle**

As indicated in my voice mail of 28 September, groundwater was encountered and sampled from TWB-3 even with the borehole advanced to 28' bgs. First encountered groundwater on-site was between 25 and 30 feet bgs. Analytical results indicate no MIBE or BTEX detected and a trace of TPH-g at 150 ug/L with a detection limit of 50 ug/L.



Curtis & Tompkins Laboratories Analytical Report

Lab #: 167647	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	
Matrix: Water	Batch#: 84626
Units: ug/L	Received: 09/17/03
Diln Fac: 1.000	

Field ID: ~~TWS-5~~ Sampled: 09/16/03
 Type: SAMPLE Analyzed: 09/18/03
 Lab ID: 167647-003

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (PID)	98	57-150	8015B
Bromofluorobenzene (FID)	132	65-144	8015B
Trifluorotoluene (PID)	79	54-149	EPA 8021B
Bromofluorobenzene (PID)	109	58-143	EPA 8021B

Field ID: ~~TWS-5~~ Sampled: 09/17/03
 Type: SAMPLE Analyzed: 09/18/03
 Lab ID: 167647-004

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	96	57-150	8015B
Bromofluorobenzene (FID)	131	65-144	8015B
Trifluorotoluene (PID)	77	54-149	EPA 8021B
Bromofluorobenzene (PID)	106	58-143	EPA 8021B

H= Heavier hydrocarbons contributed to the quantitation
 Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit
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Curtis & Tompkins Laboratories Analytical Report			
Lab #:	167647	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552		
Matrix:	Water	Batch#:	84626
Units:	ug/L	Received:	09/17/03
Diln Fac:	1.000		

Type: BLANK Analyzed: 09/18/03
 Lab ID: QC226154

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m, p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	92	57-150	8015B
Bromofluorobenzene (FID)	123	65-144	8015B
Trifluorotoluene (PID)	74	54-149	EPA 8021B
Bromofluorobenzene (PID)	98	58-143	EPA 8021B

H= Heavier hydrocarbons contributed to the quantitation
 Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit
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Gasoline Oxygenates by GC/MS			
Lab #:	167647	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	84647
Units:	ug/L	Received:	09/17/03
Diln Fac:	1.000		

Field ID:	TWB-3	Sampled:	09/17/03
Type:	SAMPLE	Analyzed:	09/18/03
Lab ID:	167647-001		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-121
1,2-Dichloroethane-d4	91	77-129
Toluene-d8	104	80-120
Bromofluorobenzene	103	80-123

Field ID:	TWB-4A	Sampled:	09/16/03
Type:	SAMPLE	Analyzed:	09/18/03
Lab ID:	167647-002		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	1.8	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-121
1,2-Dichloroethane-d4	88	77-129
Toluene-d8	101	80-120
Bromofluorobenzene	106	80-123

NA= Not Analyzed
 ND= Not Detected
 RL= Reporting Limit
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Gasoline Oxygenates by GC/MS			
Lab #:	167647	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	84647
Units:	ug/L	Received:	09/17/03
Diln Fac:	1.000		

Field ID: TWB-5
 Type: SAMPLE
 Lab ID: 167647-003

Sampled: 09/16/03
 Analyzed: 09/19/03

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	2.0	0.5
1,2-Dibromoethane	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-121
1,2-Dichloroethane-d4	88	77-129
Toluene-d8	101	80-120
Bromofluorobenzene	108	80-123

Field ID: TWB-6
 Type: SAMPLE
 Lab ID: 167647-004

Sampled: 09/17/03
 Analyzed: 09/19/03

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-121
1,2-Dichloroethane-d4	89	77-129
Toluene-d8	102	80-120
Bromofluorobenzene	109	80-123

NA= Not Analyzed
 ND= Not Detected
 RL= Reporting Limit
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Gasoline Oxygenates by GC/MS			
Lab #:	167647	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	84647
Units:	ug/L	Received:	09/17/03
Diln Fac:	1.000		

Type: BLANK
Lab ID: QC226252

Analyzed: 09/18/03

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-121
1,2-Dichloroethane-d4	87	77-129
Toluene-d8	101	80-120
Bromofluorobenzene	110	80-123

Type: BLANK

Lab ID: QC226253

Analyte	Result
tert-Butyl Alcohol (TBA)	NA
MTBE	NA
Isopropyl Ether (DIPE)	NA
Ethyl tert-Butyl Ether (ETBE)	NA
Methyl tert-Amyl Ether (TAME)	NA
1,2-Dichloroethane	NA
1,2-Dibromoethane	NA

Surrogate	Result
Dibromofluoromethane	NA
1,2-Dichloroethane-d4	NA
Toluene-d8	NA
Bromofluorobenzene	NA

NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit
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Curtis & Tompkins Laboratories Analytical Report

Lab #: 167652	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	
Matrix: Soil	Batch#: 84634
Basis: as received	Received: 09/17/03
Diln Fac: 1.000	

Field ID: TWB-3@20-20.5	Sampled: 09/17/03
Type: SAMPLE	Analyzed: 09/18/03
Lab ID: 167652-001	

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	8015B
Benzene	ND	5.2	ug/Kg	EPA 8021B
Toluene	ND	5.2	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.2	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.2	ug/Kg	EPA 8021B
o-Xylene	ND	5.2	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	56-144	8015B
Bromofluorobenzene (FID)	116	51-142	8015B
Trifluorotoluene (PID)	85	45-150	EPA 8021B
Bromofluorobenzene (PID)	101	42-138	EPA 8021B

Field ID: TWB-4A@33-33.5	Sampled: 09/16/03
Type: SAMPLE	Analyzed: 09/18/03
Lab ID: 167652-002	

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	8015B
Benzene	ND	5.3	ug/Kg	EPA 8021B
Toluene	ND	5.3	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.3	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.3	ug/Kg	EPA 8021B
o-Xylene	ND	5.3	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	100	56-144	8015B
Bromofluorobenzene (FID)	116	51-142	8015B
Trifluorotoluene (PID)	86	45-150	EPA 8021B
Bromofluorobenzene (PID)	101	42-138	EPA 8021B

Curtis & Tompkins Laboratories Analytical Report

Lab #: 167652	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	
Matrix: Soil	Batch#: 84634
Basis: as received	Received: 09/17/03
Diln Fac: 1.000	

Field ID: TWB-5@32-32.5 Sampled: 09/16/03
 Type: SAMPLE Analyzed: 09/18/03
 Lab ID: 167652-006

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	8015B
Benzene	ND	5.3	ug/Kg	EPA 8021B
Toluene	ND	5.3	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.3	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.3	ug/Kg	EPA 8021B
o-Xylene	ND	5.3	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	56-144	8015B
Bromofluorobenzene (FID)	110	51-142	8015B
Trifluorotoluene (PID)	83	45-150	EPA 8021B
Bromofluorobenzene (PID)	98	42-138	EPA 8021B

Field ID: TWB-6@20-20.5 Sampled: 09/17/03
 Type: SAMPLE Analyzed: 09/19/03
 Lab ID: 167652-009

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	8015B
Benzene	ND	5.2	ug/Kg	EPA 8021B
Toluene	ND	5.2	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.2	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.2	ug/Kg	EPA 8021B
o-Xylene	ND	5.2	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	93	56-144	8015B
Bromofluorobenzene (FID)	110	51-142	8015B
Trifluorotoluene (PID)	79	45-150	EPA 8021B
Bromofluorobenzene (PID)	95	42-138	EPA 8021B

Curtis & Tompkins Laboratories Analytical Report

Lab #: 167652	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	
Matrix: Soil	Batch#: 84634
Basis: as received	Received: 09/17/03
Diln Fac: 1.000	

Field ID: TWB-6@28-30	Sampled: 09/17/03
Type: SAMPLE	Analyzed: 09/19/03
Lab ID: 167652-010	

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.96	mg/Kg	8015B
Benzene	ND	4.8	ug/Kg	EPA 8021B
Toluene	ND	4.8	ug/Kg	EPA 8021B
Ethylbenzene	ND	4.8	ug/Kg	EPA 8021B
m,p-Xylenes	ND	4.8	ug/Kg	EPA 8021B
o-Xylene	ND	4.8	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	94	56-144	8015B
Bromofluorobenzene (FID)	110	51-142	8015B
Trifluorotoluene (PID)	80	45-150	EPA 8021B
Bromofluorobenzene (PID)	95	42-138	EPA 8021B

Field ID: TWB-6@38-39	Sampled: 09/17/03
Type: SAMPLE	Analyzed: 09/19/03
Lab ID: 167652-011	

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	8015B
Benzene	ND	5.4	ug/Kg	EPA 8021B
Toluene	ND	5.4	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.4	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.4	ug/Kg	EPA 8021B
o-Xylene	ND	5.4	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	56-144	8015B
Bromofluorobenzene (FID)	111	51-142	8015B
Trifluorotoluene (PID)	81	45-150	EPA 8021B
Bromofluorobenzene (PID)	95	42-138	EPA 8021B

Type: BLANK	Analyzed: 09/18/03
Lab ID: QC226184	

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	8015B
Benzene	ND	5.0	ug/Kg	EPA 8021B
Toluene	ND	5.0	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.0	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.0	ug/Kg	EPA 8021B
o-Xylene	ND	5.0	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	56-144	8015B
Bromofluorobenzene (FID)	110	51-142	8015B
Trifluorotoluene (PID)	82	45-150	EPA 8021B
Bromofluorobenzene (PID)	96	42-138	EPA 8021B

ND= Not Detected
 RL= Reporting Limit
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Curtis & Tompkins Laboratories Analytical Report

Lab #:	167652	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8021B
Type:	LCS	Basis:	as received
Lab ID:	QC226185	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84634
Units:	ug/Kg	Analyzed:	09/18/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
Benzene	50.00	47.49	95	80-121
Toluene	50.00	47.78	96	80-120
Ethylbenzene	50.00	45.37	91	79-120
m,p-Xylenes	100.0	101.0	101	76-120
o-Xylene	50.00	48.59	97	80-120

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		85	45-150
Bromofluorobenzene (PID)		98	42-138

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167652	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	8015B
Type:	LCS	Basis:	as received
Lab ID:	QC226186	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84634
Units:	mg/Kg	Analyzed:	09/18/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	5.000	5.494	110	80-120
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		108	56-144
Bromofluorobenzene (FID)		113	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Curtis & Tompkins Laboratories Analytical Report

Lab #: 167652	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: 8015B
Field ID: TWB-3@20-20.5	Diln Fac: 1.000
MSS Lab ID: 167652-001	Batch#: 84634
Matrix: Soil	Sampled: 09/17/03
Units: mg/Kg	Received: 09/17/03
Basis: as received	Analyzed: 09/18/03

Type: MS Lab ID: QC226224

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.09400	10.00	10.49	105	24-134
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		116	56-144
Bromofluorobenzene (FID)		119	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC226225

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.75	8.692	81	24-134	26	32
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		96	56-144
Bromofluorobenzene (FID)		99	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Gasoline Oxygenates by GC/MS

Lab #: 167652	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Matrix: Soil	Batch#: 84630
Units: ug/Kg	Received: 09/17/03
Basis: as received	Analyzed: 09/18/03

Field ID: TWB-3@20-20.5	Diln Fac: 0.9804
Type: SAMPLE	Sampled: 09/17/03
Lab ID: 167652-001	

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
1,2-Dichloroethane	ND	4.9
1,2-Dibromoethane	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	95	74-128
1,2-Dichloroethane-d4	87	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	97	76-125

Field ID: TWB-4A@33-33.5	Diln Fac: 1.000
Type: SAMPLE	Sampled: 09/16/03
Lab ID: 167652-002	

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dibromoethane	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	97	74-128
1,2-Dichloroethane-d4	87	76-130
Toluene-d8	95	80-120
Bromofluorobenzene	99	76-125

NA= Not Analyzed
 ND= Not Detected
 RL= Reporting Limit
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Gasoline Oxygenates by GC/MS

Lab #: 167652	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Matrix: Soil	Batch#: 84630
Units: ug/Kg	Received: 09/17/03
Basis: as received	Analyzed: 09/18/03

Field ID: TWB-5@32-32.5 Diln Fac: 0.8772
 Type: SAMPLE Sampled: 09/16/03
 Lab ID: 167652-006

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	88
MTBE	ND	4.4
Isopropyl Ether (DIPE)	ND	4.4
Ethyl tert-Butyl Ether (ETBE)	ND	4.4
Methyl tert-Amyl Ether (TAME)	ND	4.4
1,2-Dichloroethane	ND	4.4
1,2-Dibromoethane	ND	4.4

Surrogate	%REC	Limits
Dibromofluoromethane	95	74-128
1,2-Dichloroethane-d4	88	76-130
Toluene-d8	95	80-120
Bromofluorobenzene	98	76-125

Field ID: TWB-6@20-20.5 Diln Fac: 0.8929
 Type: SAMPLE Sampled: 09/17/03
 Lab ID: 167652-009

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	89
MTBE	ND	4.5
Isopropyl Ether (DIPE)	ND	4.5
Ethyl tert-Butyl Ether (ETBE)	ND	4.5
Methyl tert-Amyl Ether (TAME)	ND	4.5
1,2-Dichloroethane	ND	4.5
1,2-Dibromoethane	ND	4.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	74-128
1,2-Dichloroethane-d4	89	76-130
Toluene-d8	94	80-120
Bromofluorobenzene	100	76-125

NA= Not Analyzed
 ND= Not Detected
 RL= Reporting Limit
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Gasoline Oxygenates by GC/MS

Lab #:	167652	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	84630
Units:	ug/Kg	Received:	09/17/03
Basis:	as received	Analyzed:	09/18/03

Field ID:	TWB-6@28-30	Diln Fac:	0.9434
Type:	SAMPLE	Sampled:	09/17/03
Lab ID:	167652-010		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
1,2-Dichloroethane	ND	4.7
1,2-Dibromoethane	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	97	74-128
1,2-Dichloroethane-d4	90	76-130
Toluene-d8	96	80-120
Bromofluorobenzene	99	76-125

Field ID:	TWB-6@38-39	Diln Fac:	0.9615
Type:	SAMPLE	Sampled:	09/17/03
Lab ID:	167652-011		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	96
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
1,2-Dichloroethane	ND	4.8
1,2-Dibromoethane	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	86	74-128
1,2-Dichloroethane-d4	87	76-130
Toluene-d8	93	80-120
Bromofluorobenzene	112	76-125

Gasoline Oxygenates by GC/MS

Lab #: 167652	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Matrix: Soil	Batch#: 84630
Units: ug/Kg	Received: 09/17/03
Basis: as received	Analyzed: 09/18/03

Type: BLANK Diln Fac: 1.000
 Lab ID: QC226167

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	NA	
MTBE	ND	5.0
Isopropyl Ether (DIPE)	NA	
Ethyl tert-Butyl Ether (ETBE)	NA	
Methyl tert-Amyl Ether (TAME)	NA	
1,2-Dichloroethane	ND	5.0
1,2-Dibromoethane	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	91	74-128
1,2-Dichloroethane-d4	83	76-130
Toluene-d8	94	80-120
Bromofluorobenzene	97	76-125

Type: BLANK Diln Fac: 1.000
 Lab ID: QC226168

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dibromoethane	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	92	74-128
1,2-Dichloroethane-d4	87	76-130
Toluene-d8	96	80-120
Bromofluorobenzene	97	76-125

NA= Not Analyzed
 ND= Not Detected
 RL= Reporting Limit
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Gasoline Oxygenates by GC/MS

Lab #:	167652	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	LCS	Basis:	as received
Lab ID:	QC226164	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84630
Units:	ug/Kg	Analyzed:	09/18/03

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)		NA		
MTBE	50.00	41.69	83	73-121
Isopropyl Ether (DIPE)		NA		
Ethyl tert-Butyl Ether (ETBE)		NA		
Methyl tert-Amyl Ether (TAME)		NA		

Surrogate	%REC	Limits
Dibromofluoromethane	85	74-128
1,2-Dichloroethane-d4	78	76-130
Toluene-d8	94	80-120
Bromofluorobenzene	95	76-125

Gasoline Oxygenates by GC/MS

Lab #: 167652	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Matrix: Soil	Diln Fac: 1.000
Units: ug/Kg	Batch#: 84630
Basis: as received	Analyzed: 09/18/03

Type: BS Lab ID: QC226165

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	250.0	247.3	99	70-130
MTBE		NA		
Isopropyl Ether (DIPE)	50.00	44.53	89	70-130
Ethyl tert-Butyl Ether (ETBE)	50.00	44.15	88	70-130
Methyl tert-Amyl Ether (TAME)	50.00	42.24	84	70-130

Surrogate	Result
Dibromofluoromethane	NA
1,2-Dichloroethane-d4	NA
Toluene-d8	NA
Bromofluorobenzene	NA

Type: BSD Lab ID: QC226166

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	250.0	251.1	100	70-130	2	20
MTBE		NA				
Isopropyl Ether (DIPE)	50.00	45.90	92	70-130	3	20
Ethyl tert-Butyl Ether (ETBE)	50.00	45.33	91	70-130	3	20
Methyl tert-Amyl Ether (TAME)	50.00	43.52	87	70-130	3	20

Surrogate	Result
Dibromofluoromethane	NA
1,2-Dichloroethane-d4	NA
Toluene-d8	NA
Bromofluorobenzene	NA

Gasoline Oxygenates by GC/MS

Lab #:	167652	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	167659-001	Batch#:	84630
Matrix:	Soil	Sampled:	09/18/03
Units:	ug/Kg	Received:	09/18/03
Basis:	as received	Analyzed:	09/19/03

Type: MS Lab ID: QC226257

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	<0.2100	50.00	42.83	86	48-133

Surrogate	%REC	Limits
Dibromofluoromethane	93	74-128
1,2-Dichloroethane-d4	84	76-130
Toluene-d8	96	80-120
Bromofluorobenzene	99	76-125

Type: MSD Lab ID: QC226258

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	50.00	45.82	92	48-133	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	74-128
1,2-Dichloroethane-d4	86	76-130
Toluene-d8	95	80-120
Bromofluorobenzene	102	76-125