ENVIRONMENTAL ENGINEERING, INC
2680 Bishop Drive • Suite 203 • San Ramon, CA 94583
TEL (925) 244-6600 • FAX (925) 244-6601

Continued -

Tank Closure and Replacement Report

Chevron Station
3519 Castro Valley Boulevard
Castro Valley, California

November 13, 2003

Project 2762

Prepared for

Mr. Mirazim Shakoori
Chevron Station
3519 Castro Valley Boulevard
Castro Valley, California

Prepared by
SOMA Environmental Engineering, Inc.
2680 Bishop Drive, Suite 203
San Ramon, California

Appendix D

BSK Compaction Report

BSK

1181 Quarry Lane, Building 300
Pleasanton, CA 94566
(925) 462-4000 • FAX (925) 462-6283

September 12, 2003

BSK JOB NO. G03-238-10P

SOMA Environmental
ATTN.: Mr. Roger Papler
2680 Bishop Drive, Suite 203
San Ramon, CA 94583

Subject: **SUMMARY REPORT**
Earthwork Observation/Testing Services
Recently Removed UST Excavations Backfill
Chevron Station (Former BP Oil Service Station No. 11105)
3519 Castro Valley Boulevard
Castro Valley, California
(Period Covered: 09/03/03 to 09/12/03)

Dear Mr. Papler:

As requested and authorized, we have performed earthwork testing/observation services during the backfilling of two excavations—an excavation for an existing UST cluster, and an excavation resulting from the removal of waste oil tanks—at the subject site.

Our activities were coordinated by you and you were apprized of the results at the time of testing. The larger tank cluster excavation was approximately 12 feet deep and backfilled with properly compacted fill consisting of (top to bottom) 2-½ feet of class II aggregate base over 2 feet of imported silty sand over 2-½ feet of on-site silty clay soil (removed from the excavation for the new UST) over a layer of geotextile fabric over 5 feet of 1-½-inch drain rock. The waste oil tank excavation was approximately 7 feet deep, and the compacted backfill consisted of 4-½ feet of class II aggregate base over 1-½ feet of on-site soil over 1 foot of 1-½-inch drain rock. An access ramp, excavated for backfilling the UST cluster excavation, was also backfilled in the same manner as the excavation and capped with 2 feet of the same aggregate base. Both excavation areas will be paved with 3 inches of asphalt concrete at a later date.

Based on our observations and results of nuclear density tests detailed in this summary report, the materials used, and the placement and compaction of the materials for backfilling of the subject excavations, were in compliance with the project requirements.

Enclosed are summaries of our daily field activities and results of field compaction and laboratory tests performed during this reporting period. This report concludes our earthwork testing and observation services for the subject project. If you have questions, please contact us.

Respectfully submitted,
BSK Associates

Y. Alex Eskandari, P.E.
Manager, Geotechnical Services
C 38101

REGISTERED PROFESSIONAL ENGINEER
Y. ALEX ESKANDARI
No. C38101
Exp. 03/31/05
CIVIL
STATE OF CALIFORNIA

YAE:ga
(G:\Geotech\Projects\2003 JOBS\G03-238-10P (Bp UST Excavation Backfill)\G03-238-10P (Summary report).wpd)

Enclosures:
Summaries of Field Activities and Test Results (10 pages)
Terms and Limitations (1 page)

Distribution: SOMA Environmental – ATTN.: Mr. Roger Papler (3 copies)

SUMMARY OF LABORATORY TEST DATA

Silty SAND – Imported Material for UST Excavation Backfill

Test:	Moisture/Density Curve Determination
Method:	ASTM D 1557 (4" Mold, Serial No. 04200131)
Date Sampled:	09/03/03 (*delivered by Mr. Gene Conti of Delcon materials, on behalf of SOMA Environmental*)
Date Tested:	09/04/03 (*by Julius U. Go*)
Sample Provenance/Location:	Sample from Delcon Materials, Stockton
Material Description:	Brown Silty SAND
Maximum Dry Density:	112.0 pcf
Optimum Moisture:	16.0 percent

SUMMARY OF FIELD ACTIVITIES

ACTIVITIES: Collected a bulk sample of site material (from new UST excavation) to be used as backfill for the old UST cluster excavation. Transported the sample to the BSK laboratory in Pleasanton for moisture-density curve determination. Returned to the project site. Observed and monitored backfill operation for the UST excavation. The excavation was approximately 12 feet deep. The bottom 5 to 5-½ feet of the excavation was filled with 1-½" drain rock. The drain rock was tamped and vibrated before it was blanketed with a resistance fabric. The backfilling then continued by placing 2-½ feet of on-site material (excavated earlier from the location of the new UST) and 2 feet of import fill. Performed nuclear field density tests on the on-site material and imported fill material placed as backfill. Observed that the imported fill material was too dry (3 to 4 percent below optimum moisture) as it arrived on site. More water was then added to the material.

SUMMARY OF LABORATORY TEST DATA

Sandy Silty CLAY – On-Site Material for UST Excavation Backfill

Test:	Moisture/Density Curve Determination
Method:	ASTM D 1557 (4" Mold, Serial No. 04200131)
Date Sampled:	09/05/03 (*by Gilbert A. Minerales*)
Date Tested:	09/05/03 (*by Gilbert A. Minerales*)
Sample Location:	On-Site material excavated from new UST Location
Material Description:	Olive brown, sand, silty CLAY
Maximum Dry Density:	119.5 pcf
Optimum Moisture:	14.5 percent

BSK

NUCLEAR FIELD DENSITY TESTS RESULTS

Test No.	Test Location	Depth Below Top of Pavement (feet)	Field Moisture (Percent)	Optimum Moisture (Percent)	Maximum Dry Density (pcf)	Field Compaction (Percent)	Required Compaction (Percent)
UST Excavation Backfill (On-Site Soil)							
1	See Attached Site plan	5.0	17.4	14.5	119.5	92	90
2	" "	5.0	17.8	14.5	119.5	87	90
$2R_1$	" "	5.0	17.6	14.5	119.5	90	90
3	" "	4.0	16.8	14.5	119.5	92	90
4	" "	4.0	16.5	14.5	119.5	92	90
5	" "	4.0	17.6	14.5	119.5	91	90
UST Excavation Backfill (Imported Soil)							
[redacted]	See Attached Site plan	3.0	13.2	16.0	112.0	87	90
$6R_1$	" "	3.0	15.1	16.0	112.0	91	90

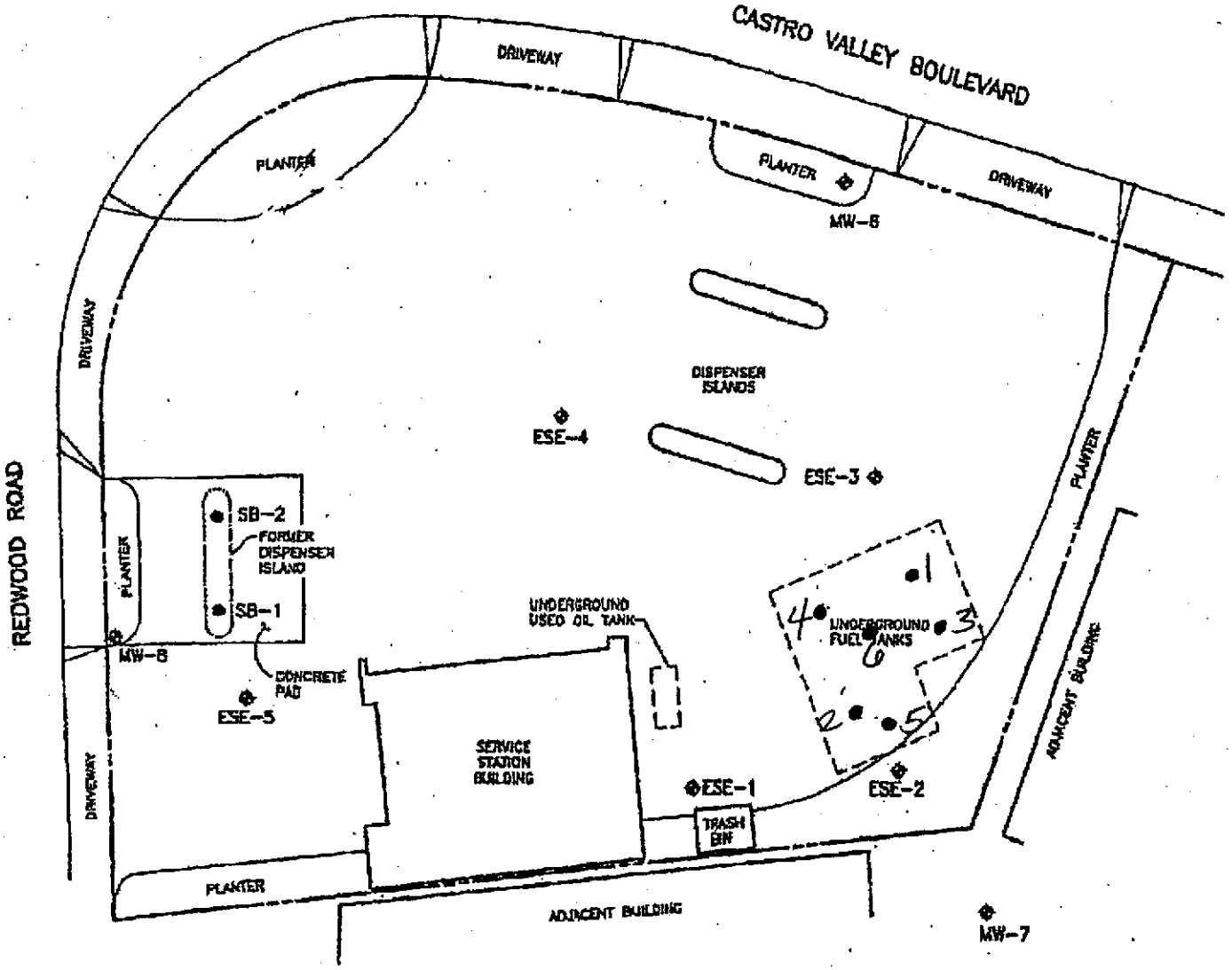
Note: R_1 indicates first retest

FIELD TECHNICIAN: Gilbert A. Minerales

WORK PERFORMED ON: Friday, 09/05/03

TIME: 8 (*regular*) + 2 (*overtime*) Hours

FIELD REPRESENTATIVE: Roger Papler (SOMA Environmental)



N

0 20 40

SCALE IN FEET

LEGEND

- GROUNDWATER MONITORING WELL
- SOIL BORING LOCATION

FIGURE 2

SITE PLAN

BP OIL SERVICE STATION NO. 11105
3519 CASTRO VALLEY BOULEVARD
CASTRO VALLEY, CALIFORNIA

PROJECT NO. 10-136

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LEGEND

● - 3 Denotes Nuclear Field Density Test
Date Performed: 09/05/2003 (FRIDAY)

SITE PLAN

Earthwork Testing/Observation
BSK Job No. G03-238-10P

BSK & Associates

NUCLEAR FIELD DENSITY TESTS RESULTS

SUMMARY OF FIELD ACTIVITIES

Test No.	Test Location	Depth Below Top of Pavement (feet)	Field Moisture (Percent)	Optimum Moisture (Percent)	Maximum Dry Density (pcf)	Field Compaction (Percent)	Required Compaction (Percent)
UST Excavation Backfill (Imported Soil)							
1	See Attached Site plan	2.5	15.4	16.0	112.0	92	90
2	" "	2.5	14.9	16.0	112.0	91	90
3	" "	2.5	16.3	16.0	112.0	94	90
UST Excavation Backfill (Class II Aggregate Base)							
4	See Attached Site plan	1.5	5.2	5.5	143.0	89	95
[redacted]	" "	1.5	5.7	5.5	143.0	93	95
$4R_1$	" "	1.5	6.4	5.5	143.0	95	95
$5R_1$	" "	1.5	6.9	5.5	143.0	96	95
6	" "	0.8	6.8	5.5	143.0	95	95
7	" "	1.0	7.4	5.5	143.0	96	95
8	" "	0.3	6.7	5.5	143.0	93	95
9	" "	0.3	7.6	5.5	143.0	96	95
10	" "	0.3	6.2	5.5	143.0	92	95
$8R_1$	" "	0.3	7.4	5.5	143.0	96	95
$10R_1$	" "	0.3	7.0	5.5	143.0	95	95

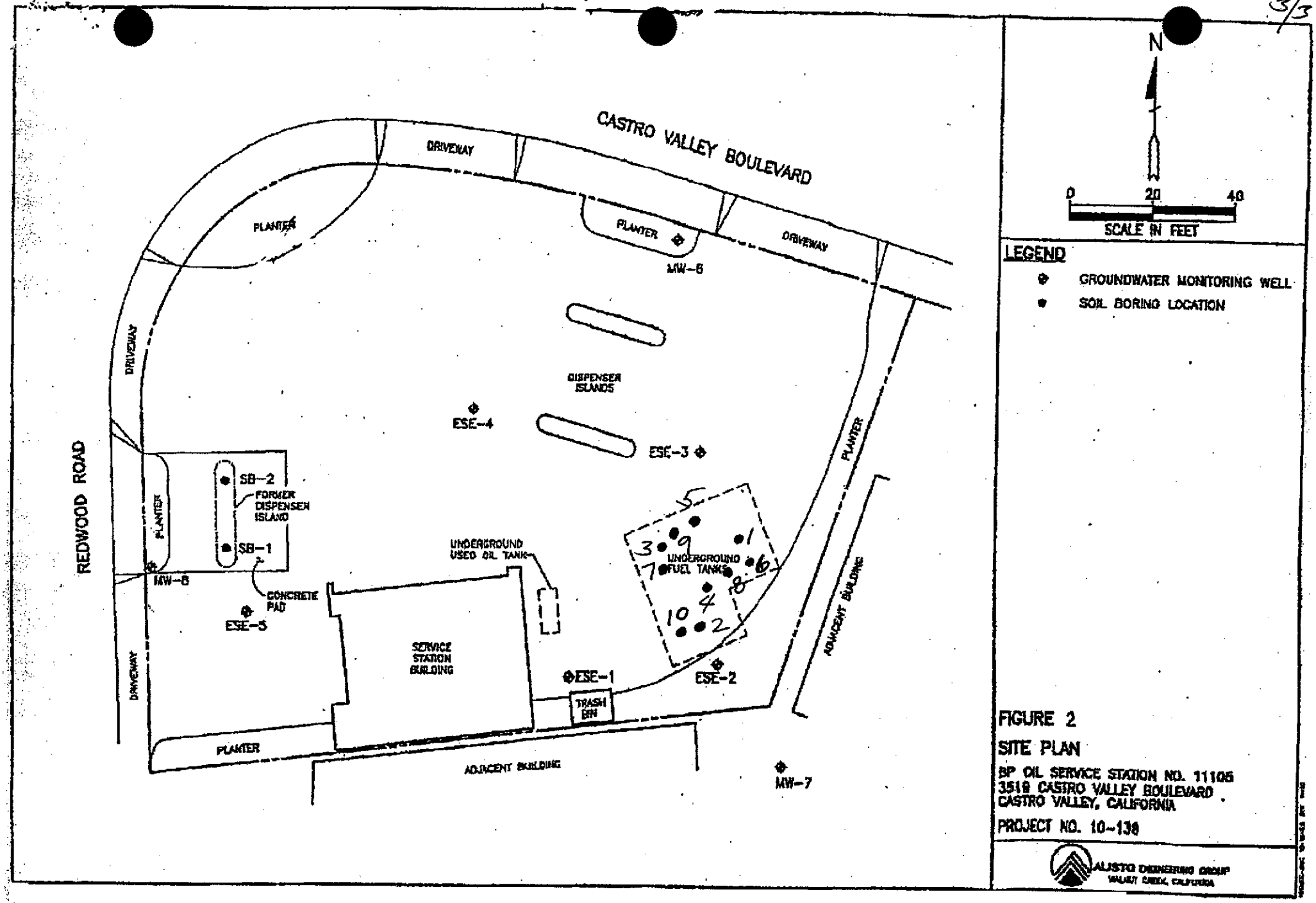
Note: R_1 indicates first retest

ACTIVITIES: Visited the project site as scheduled. Performed nuclear field density tests on imported fill material and class II aggregate base (AB) material for the UST excavation backfill. Moisture-density curve data for class II aggregate base material was provided by the contractor (material and data are from Mission Valley Quarry). The top 2 feet of the backfill consisted of class II aggregate base, and the AB will be capped with 3 inches of asphalt concrete (AC) pavement.

[redacted] **LD TECHNICIAN:** Gilbert A. Minerales **WORK PERFORMED ON:** Monday, 09/08/03

TIME: 8 Hours **FIELD REPRESENTATIVE:** Roger Papler (SOMA Environmental)

BSK



LEGEND

● - 3 Denotes Nuclear Field Density Test
Date Performed: 07/08/2003 (MONDAY)

SITE PLAN

Earthwork Testing/Observation
BSK Job No. G03-238-10P

BSK & Associates

NUCLEAR FIELD DENSITY TESTS RESULTS

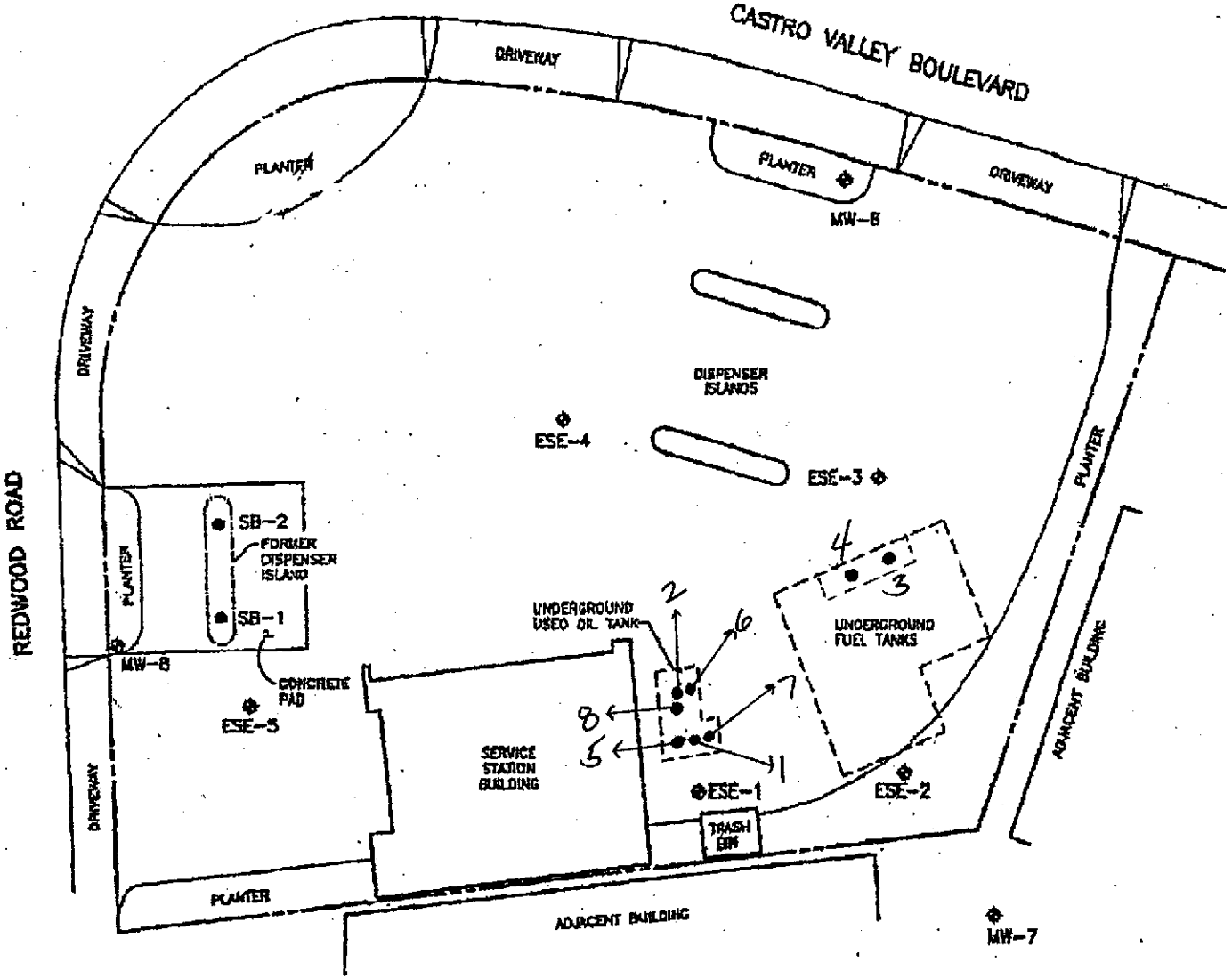
SUMMARY OF FIELD ACTIVITIES

Test No.	Test Location	Depth Below Top of Pavement (feet)	Field Moisture (Percent)	Optimum Moisture (Percent)	Maximum Dry Density (pcf)	Field Compaction (Percent)	Required Compaction (Percent)
Waste-Oil Tank Excavation Backfill (On-Site Soil)							
1	See Attached Site plan	4.5	15.1	14.5	119.5	93	90
2	" "	4.5	14.8	14.5	119.5	92	90
UST Excavation Backfill – Ramp Area (Class II Aggregate Base)							
3	See Attached Site plan	1.0	6.6	5.5	143.0	96	95
4	" "	0.3	7.1	5.5	143.0	95	95
Waste-Oil Tank Excavation Backfill (Class II Aggregate Base)							
5	See Attached Site plan	3.0	7.3	5.5	143.0	97	95
6	" "	3.0	6.6	5.5	143.0	95	95
7	" "	2.0	6.5	5.5	143.0	96	95
8	" "	2.0	6.8	5.5	143.0	96	95

ACTIVITIES: Performed nuclear field density tests on class II aggregate base (AB) material and on-site soil material placed as backfill for the Waste-Oil Tank excavation, and for the access ramp area for UST cluster area. The dimensions of the access ramp area to be backfilled were approximately 2 feet in depth, 3 feet in width and 6 feet in length. This area was backfilled with class II AB material.

FIELD TECHNICIAN: Gilbert A. Minerales **WORK PERFORMED ON:** Wednesday, 09/10/03

TIME: 4 Hours **FIELD REPRESENTATIVE:** Roger Papler (SOMA Environmental)



N

0 20 40

SCALE IN FEET

LEGEND

- GROUNDWATER MONITORING WELL
- SOIL BORING LOCATION

FIGURE 2

SITE PLAN

BP OIL SERVICE STATION NO. 11105
3519 CASTRO VALLEY BOULEVARD
CASTRO VALLEY, CALIFORNIA

PROJECT NO. 10-138

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LEGEND

● - 3 Denotes Nuclear Field Density Test
Date Performed: 09/10/2003 (WEDNESDAY)

SITE PLAN

Earthwork Testing/Observation
BSK Job No. G03-238-10P

BSK & Associates

NUCLEAR FIELD DENSITY TESTS RESULTS

SUMMARY OF FIELD ACTIVITIES

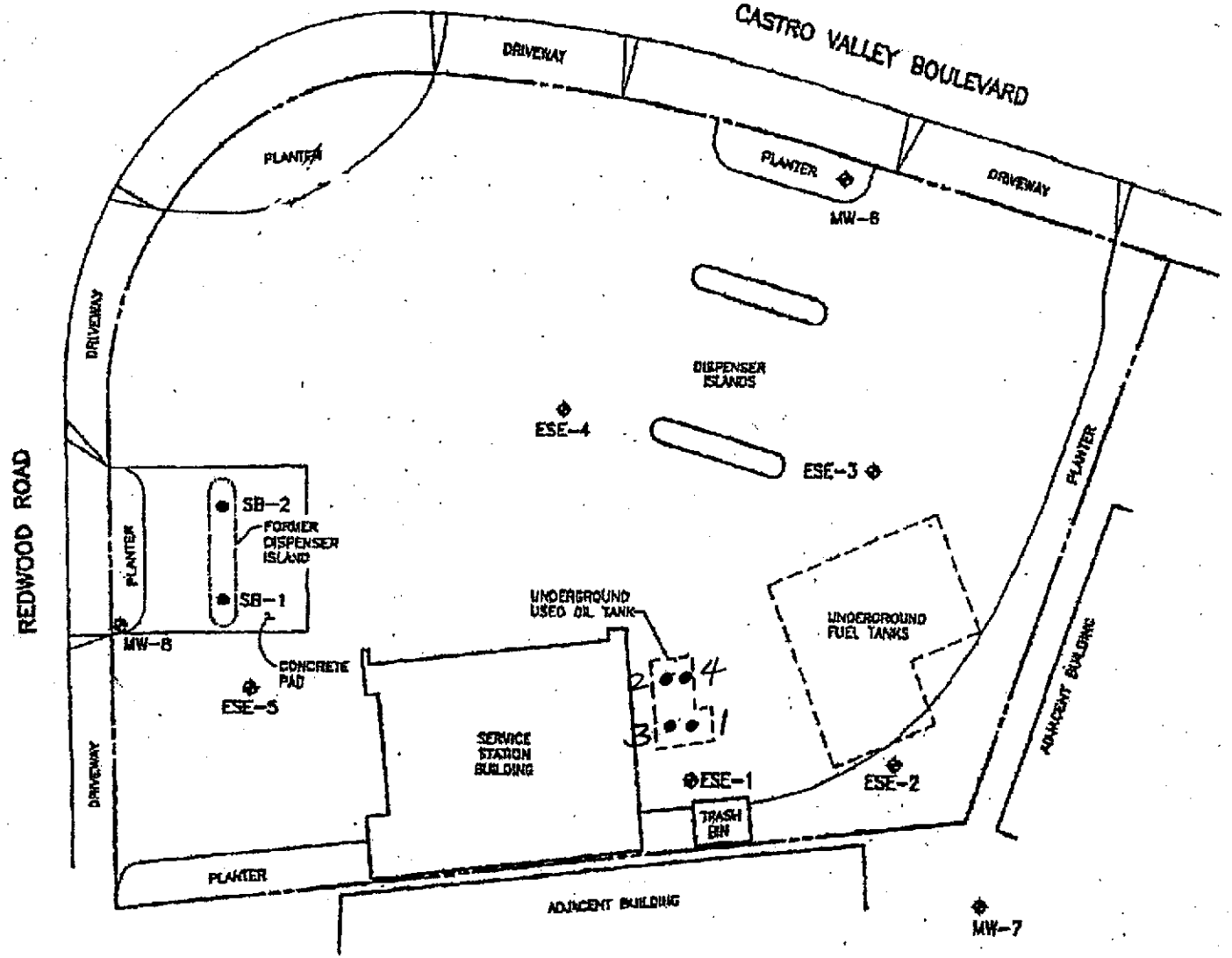
Test No.	Test Location	Depth Below Top of Pavement (feet)	Field Moisture (Percent)	Optimum Moisture (Percent)	Maximum Dry Density (pcf)	Field Compaction (Percent)	Required Compaction (Percent)
Waste-Oil Tank Excavation Backfill (Class II Aggregate Base)							
1	See Attached Site plan	1.0	6.2	5.5	143.0	95	95
2	" "	1.0	6.6	5.5	143.0	96	95
3	" "	0.3	5.7	5.5	143.0	94	95
4	" "	0.3	5.3	5.5	143.0	93	95
$3R_1$	" "	0.3	6.8	5.5	143.0	96	95
$4R_1$	" "	0.3	6.4	5.5	143.0	95	95

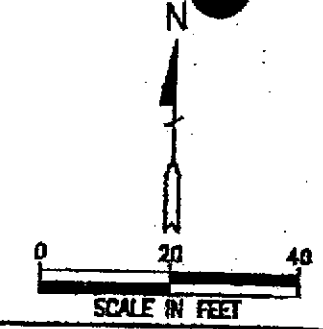
[redacted]e: R_1 indicates first retest

ACTIVITIES: Performed nuclear field density tests on class II aggregate base (AB) material placed as backfill for the Waste-Oil Tank excavation.

FIELD TECHNICIAN: Gilbert A. Minerales **WORK PERFORMED ON:** Friday, 09/12/03

TIME: 4 Hours **FIELD REPRESENTATIVE:** Roger Papler (SOMA Environmental)





LEGEND

- GROUNDWATER MONITORING WELL
- SOIL BORING LOCATION

FIGURE 2

SITE PLAN

BP OIL SERVICE STATION NO. 11105
3518 CASTRO VALLEY BOULEVARD
CASTRO VALLEY, CALIFORNIA

PROJECT NO. 10-136

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LEGEND

● - 3 Denotes Nuclear Field Density Test
Date Performed: 09/12/2003 (FRIDAY)

SITE PLAN
Earthwork Testing/Observation
BSK Job No. G03-238-10P

BSK & Associates

SUMMARY REPORT
Earthwork Testing/Observation Services
UST Excavations Backfill
BP Oil Service Station No. 11105
35[redacted]tro Valley Boulevard
Ca[redacted]alley, California
(Period Covered: 09/03/03 to 09/12/03)

Terms and Limitations

Compaction test results reported herein provide an indication of the degree of compaction of materials for specific, prescribed locations but do not necessarily reflect the overall character of the prepared materials. Test results should be considered accurate only at the locations and depths indicated. All results are submitted to the project engineer and representing job inspector for their review and evaluation.

Interpretation of test results as to the adequacy of compacted materials remains solely the responsibility of the project engineer and no engineering evaluations, unless specifically stated, are provided herein as to the adequacy of compacted material.

Respectfully submitted,
BSK Associates

Appendix E

Well Decommissioning Documentation

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-6633 Jason Yee
FAX (510)782-1939
APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

WELL DECOMMISSIONING

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 3519 Castro Valley Blvd.
Castro Valley, CA

California Coordinates Source _____ Accuracy± _____ ft.
CCN _____ ft. CCE _____ ft.
APN _____

PERMIT NUMBER W03-0875
WELL NUMBER _____
APN _____

CLIENT
Name Mirazim Shakoori
Address 3519 CV Blvd. Phone 510.889.0570
City Castro Valley CA Zip _____

APPLICANT
Name SOMA Environmental Engineering
Roger Papler Fax 925.244.6601
Address 2860 Bishop Dr. Phone 925.244.6600
City San Ramon CA Zip 94583

TYPE OF PROJECT:

Well Construction	☐	Geotechnical Investigation	☐
Well Destruction	☒	Contamination Investigation	☐
Cathodic Protection	☐	Other _____	☐

PROPOSED WELL USE:

Domestic	☐	Irrigation	☐
Municipal	☐	Remediation	☐
Industrial	☐	Groundwater Monitoring	☐
Dewatering	☐	Other _____	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Hollow Stem Auger	☒
Cable Tool	☐	Direct Push	☐	Other _____	☐

DRILLING COMPANY Woodward Drilling
DRILLER'S LICENSE NO. C57 710 078

WELL SPECIFICATIONS: One possibly three
Drill Hole Diameter 8 in. Maximum
Casing Diameter 2 in. Depth 30 ft.
Surface Seal Depth _____ ft. Number 1 2 3

SOIL BORINGS:
Number of Borings _____ Maximum
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE 3 Oct 2003
ESTIMATED COMPLETION DATE 3 Oct 2003

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.
APPLICANT'S SIGNATURE _____ Date 9/26/03

PERMIT CONDITIONS

Circled Permit Requirements Apply

GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date. Acpwt
2. Submit to ~~Zone 7~~ within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects. Acpwt
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal diameter is four inches greater than the well casing diameter.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
3. Grout placed by tremie.
4. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
5. A sample port is required on the discharge pipe near the wellhead.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
3. Grout placed by tremie.

D. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION. See attached. Acpwt

G. SPECIAL CONDITIONS: Submit to ~~Zone 7~~ within 60 days after completion of permitted work the well installation report including all soil and water laboratory analysis results.

Approved _____ Date 9/29/03

ESE-4

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-6633 James Yoo
FAX (510) 782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

WELL DECOMMISSIONING

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 3519 Castro Valley Blvd
Castro Valley, CA

CLIENT
Name Mirazim Shakoori
Address 3519 CV BLVD Phone 510-809-0570
City Castro Valley, CA Zip

APPLICANT
Name SOMA ENVIRONMENTAL ENGINEERING
Roger Papler Fax 925-244-6601
Address 2860 Bishop Drive Phone 925-244-6600
City San Ramon, CA Zip 94583

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☐
Monitoring	☐	Well Destruction	☒

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other	☐

DRILLING METHOD: EXCAVATION *

Mud Rotary	☐	Air Rotary	☐	Auger	☐
Cable	☐	Other	☐		

DRILLER'S NAME

DRILLER'S LICENSE NO.

WELL PROJECTS
Drill Hole Diameter ____ in. Maximum
Casing Diameter 2 in. Depth 22 ft.
Surface Seal Depth ____ ft. Owner's Well Number ESE-4

GEOTECHNICAL PROJECTS
Number of Borings ____ Maximum
Hole Diameter ____ in. Depth ____ ft.

STARTING DATE September 3, 2003
COMPLETION DATE September 3, 2003

FOR OFFICE USE

PERMIT NUMBER
WELL NUMBER
APN

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and Industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC
Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED ____ DATE ____

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE ____ DATE 8 Aug 03

PLEASE PRINT NAME R W Papler

Rev.9-18-02

* Well located within new UST pit @ final depth of 18'. add'l excavation of ESE to 5' below subgrade (i.e. to ~23') removed all well construction materials.

Appendix F

Soil and Groundwater Analytical Laboratory Reports

and

Chain of Custody Documentation

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

SOMA Environmental Engineering Inc.
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Date: 17-OCT-03
Lab Job Number: 167973
Project ID: 2762
Location: Shakoori/CV

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

1617163 PD

CHAIN OF CUSTODY FORM

Curtis & Tompkins, Ltd.
Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

C&T LOGIN # 167973

Sampler: TONY PERINI

Report To: TONY PERINI

Company: SOMA ENVIRONMENTAL

Telephone: 925-244-6600

Fax: 925-244-6601

Project No: 2762

Project Name: 3519 Castro Valley Blvd

Project P.O.:

Turnaround Time: standard

Analyses: TPHg 8015 | BTEX/MTBE 8021 | MTBE confirmation 8260B | LEAD 6010A

Laboratory Number	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO	Preservative: HNO_3	Preservative: ICE	Preservative: none	Field Notes	TPHg 8015	BTEX/MTBE 8021	MTBE confirmation 8260B	LEAD 6010A
1	ESE-3WA1	10/3/03 1010	✓			1-6" sleeve				✓	✓	composite sample	✓	✓	✓	✓
2	ESE-3WA2	10/3/03 1010	✓			1-6" sleeve				✓	✓	↓				

For Laboratory Use

Received: ☒ Cold ☐ Ambient ☒ On Ice ☒ Intact

1-3

Notes: EDF output required
composite both samples
into one sample

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
TONY PERINI / Tony Perini	10/3/03 11:30 AM		10-3-03 11:30 am

Signature

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167973	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Field ID:	COMP ESE-3WA	Batch#:	85101
Matrix:	Soil	Sampled:	10/03/03
Basis:	as received	Received:	10/03/03
Diln Fac:	1.000	Analyzed:	10/06/03

Type: SAMPLE Lab ID: 167973-003

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	8015B
MTBE	ND	22	ug/Kg	EPA 8021B
Benzene	ND	5.5	ug/Kg	EPA 8021B
Toluene	ND	5.5	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.5	ug/Kg	EPA 8021B
m,p-Xylenes	8.0	5.5	ug/Kg	EPA 8021B
o-Xylene	ND	5.5	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	103	56-144	8015B
Bromofluorobenzene (FID)	136	51-142	8015B
Trifluorotoluene (PID)	78	45-150	EPA 8021B
Bromofluorobenzene (PID)	104	42-138	EPA 8021B

Type: BLANK Lab ID: QC228010

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	8015B
MTBE	ND	20	ug/Kg	EPA 8021B
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)	89	56-144	8015B
Bromofluorobenzene (FID)	111	51-142	8015B
Trifluorotoluene (PID)	68	45-150	EPA 8021B
Bromofluorobenzene (PID)	86	42-138	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167973	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Type:	LCS	Basis:	as received
Lab ID:	QC228011	Diln Fac:	1.000
Matrix:	Soil	Batch#:	85101
Units:	mg/Kg	Analyzed:	10/06/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.00	9.786	98	80-120
MTBE		NA		
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		112	56-144
Bromofluorobenzene (FID)		130	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167973	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8021B
Type:	LCS	Basis:	as received
Lab ID:	QC228012	Diln Fac:	1.000
Matrix:	Soil	Batch#:	85101
Units:	ug/Kg	Analyzed:	10/06/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
MTBE	100.0	107.8	108	74-121
Benzene	100.0	106.1	106	80-121
Toluene	100.0	94.33	94	80-120
Ethylbenzene	100.0	95.18	95	79-120
m,p-Xylenes	200.0	199.1	100	76-120
o-Xylene	100.0	100.0	100	80-120

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		70	45-150
Bromofluorobenzene (PID)		89	42-138

NA= Not Analyzed

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167973	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	167941-006	Batch#:	85101
Matrix:	Soil	Sampled:	10/01/03
Units:	mg/Kg	Received:	10/02/03
Basis:	as received	Analyzed:	10/07/03

Type: MS Lab ID: QC228088

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.09655	10.20	9.443	92	24-134
MTBE			NA		
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		110	56-144
Bromofluorobenzene (FID)		130	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC228089

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.31	9.829	94	24-134	3	32
MTBE		NA				
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		114	56-144
Bromofluorobenzene (FID)		133	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed
RPD= Relative Percent Difference

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Lead

Lab #:	167973	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Field ID:	COMP ESE-3WA	Batch#:	85115
Matrix:	Soil	Sampled:	10/03/03
Units:	mg/Kg	Received:	10/03/03
Basis:	as received	Prepared:	10/06/03

Type	Lab ID	Result	RL	Analyzed
SAMPLE	167973-003	4.0	0.14	10/09/03
BLANK	QC228069	ND	0.15	10/07/03

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Lead

Lab #:	167973	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Batch#:	85115
Units:	mg/Kg	Prepared:	10/06/03
Basis:	as received	Analyzed:	10/07/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC228070	100.0	86.00	86	71-120		
BSD	QC228071	100.0	93.00	93	71-120	8	20

RPD= Relative Percent Difference

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Lead

Lab #:	167973	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	85115
MSS Lab ID:	167944-001	Sampled:	09/30/03
Matrix:	Soil	Received:	10/02/03
Units:	mg/Kg	Prepared:	10/06/03
Basis:	as received	Analyzed:	10/07/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC228072	6.085	71.17	56.94	71	23-137		
MSD	QC228073		74.07	60.74	74	23-137	3	40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

SOMA Environmental Engineering Inc.
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Date: 17-OCT-03
Lab Job Number: 167974
Project ID: 2762
Location: Shakoori/CV

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

CHAIN OF CUSTODY FORM

Curtis & Tompkins, Ltd.
Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

C&T LOGIN # 161974

Analyses

Sampler: Tony Perini
Report To: Tony Perini
Company: SOMA ENVIRONMENTAL
Telephone: 925-244-6600
Fax: 925-244-6601

Project No: 2762
Project Name: 3579 Castro Valley Blvd
Project P.O.:
Turnaround Time: STANDARD

Laboratory Number	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO	Preservative: HNO_3	Preservative: ICE	Field Notes	TPHg 8015	MTBE/BTEX 8021B	MTBE confirmation 8260
	ESE-3 WA	10/3/03 1030		✓		3-VOAs	✓			✓	Grab Sample	✓	✓	✓

For Laboratory Use

Received: On Ice / Ambient / Chilled

Notes:
EDF output required

RELINQUISHED BY:		RECEIVED BY:	
Tony Perini	11:30 AM 10/3/03 DATE/TIME	10-3-03	1130 DATE/TIME
	DATE/TIME		DATE/TIME
	DATE/TIME		DATE/TIME

Signature

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	167974	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Field ID:	ESE-3WA	Batch#:	85068
Matrix:	Water	Sampled:	10/03/03
Units:	ug/L	Received:	10/03/03
Diln Fac:	1.000	Analyzed:	10/03/03

Type: SAMPLE Lab ID: 167974-001

Analyte	Result	RL	Analysis
Gasoline C7-C12	110	50	8015B
MTBE	3.3	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	0.59	0.50	EPA 8021B
m,p-Xylenes	1.2	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	101	57-150	8015B
Bromofluorobenzene (FID)	108	65-144	8015B
Trifluorotoluene (PID)	74	54-149	EPA 8021B
Bromofluorobenzene (PID)	83	58-143	EPA 8021B

Type: BLANK Lab ID: QC227885

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	2.0	EPA 8021B
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)	98	57-150	8015B
Bromofluorobenzene (FID)	103	65-144	8015B
Trifluorotoluene (PID)	73	54-149	EPA 8021B
Bromofluorobenzene (PID)	79	58-143	EPA 8021B

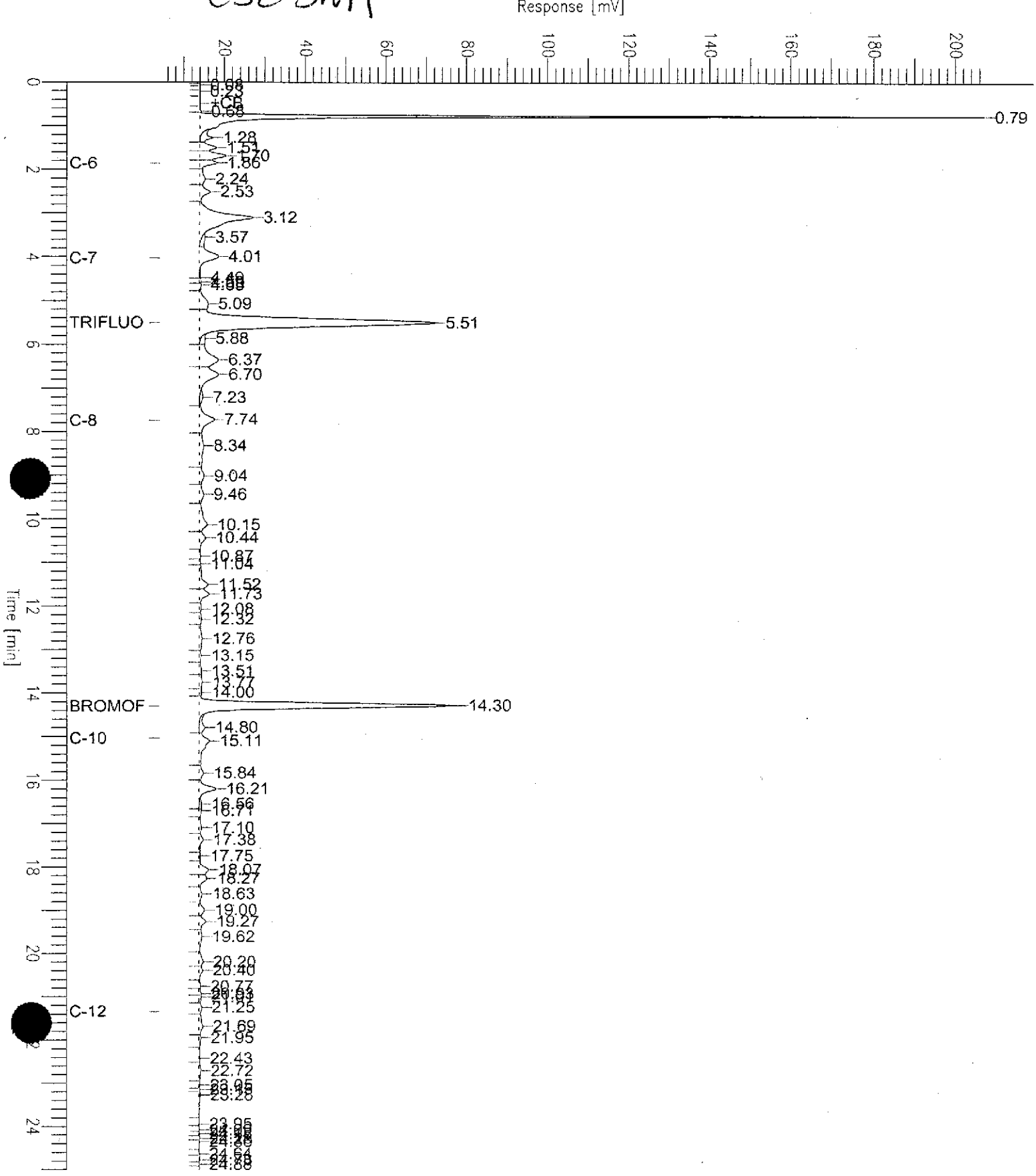
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 167974-001,85068
FileName : G:\GC05\DATA\276G008.raw
M[redacted] : TVHBTXE
S[redacted] Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 4 mV

Sample #: a7 Page 1 of 1
Date : 10/3/03 07:12 PM
Time of Injection: 10/3/03 06:47 PM
Low Point : 4.21 mV High Point : 207.32 mV
Plot Scale: 203.1 mV

ESE-3WA

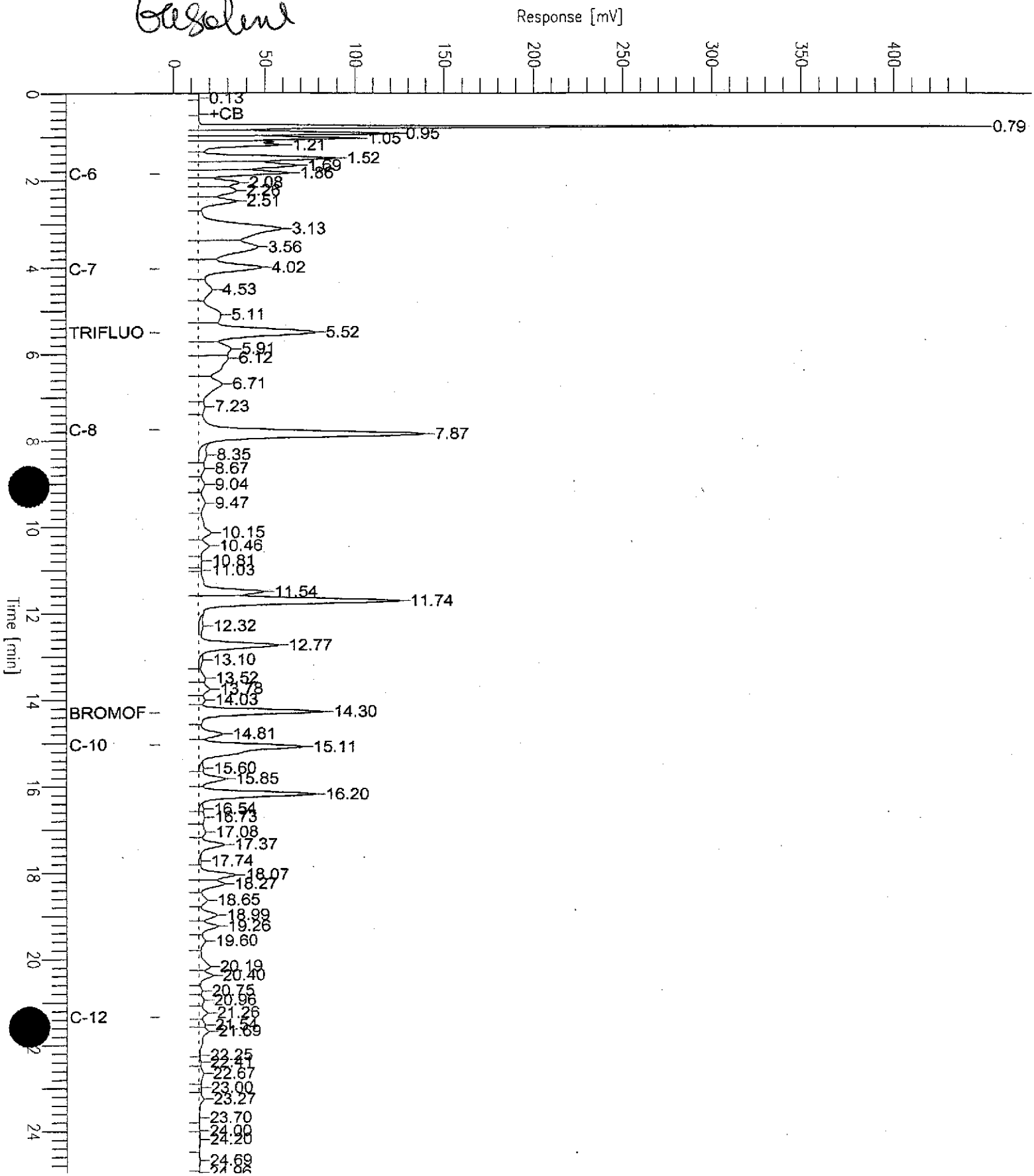


Chromatogram

Sample Name : ccv/lcs,qc227886,85068,03ws1625,2.5/5000
FileName : G:\GC05\DATA\276G002.raw
M : TVHBTXE
S Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -8 mV

Sample #: Page 1 of 1
Date : 10/3/03 03:41 PM
Time of Injection: 10/3/03 03:15 PM
Low Point : -7.79 mV High Point : 449.15 mV
Plot Scale: 456.9 mV

Gasoline



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Total Volatile Hydrocarbons

Lab #:	167974	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC227886	Batch#:	85068
Matrix:	Water	Analyzed:	10/03/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,083	108	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	57-150
Bromofluorobenzene (FID)	120	65-144

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Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	167974	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC227887	Batch#:	85068
Matrix:	Water	Analyzed:	10/03/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	9.662	97	63-133
Benzene	10.00	10.38	104	78-123
Toluene	10.00	9.798	98	79-120
Ethylbenzene	10.00	9.759	98	80-120
m,p-Xylenes	20.00	20.95	105	76-120
o-Xylene	10.00	10.50	105	80-121

Surrogate	%REC	Limits
Trifluorotoluene (PID)	76	54-149
Bromofluorobenzene (PID)	83	58-143

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Total Volatile Hydrocarbons

Lab #:	167974	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Batch#:	85068
MSS Lab ID:	167952-002	Sampled:	10/01/03
Matrix:	Water	Received:	10/02/03
Units:	ug/L	Analyzed:	10/03/03
Diln Fac:	1.000		

Type: MS Lab ID: QC227906

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	506.5	2,000	2,489	99	76-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	130	57-150
Bromofluorobenzene (FID)	134	65-144

Type: MSD Lab ID: QC227907

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,553	102	76-120	3	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	140	57-150
Bromofluorobenzene (FID)	141	65-144

RPD= Relative Percent Difference

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Purgeable Aromatics by GC/MS

Lab #:	167974	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Field ID:	ESE-3WA	Batch#:	85139
Lab ID:	167974-001	Sampled:	10/03/03
Matrix:	Water	Received:	10/03/03
Units:	ug/L	Analyzed:	10/07/03
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	77-129
Toluene-d8	97	80-120
Bromofluorobenzene	108	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167974	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC228161	Batch#:	85139
Matrix:	Water	Analyzed:	10/07/03
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	77-129
Toluene-d8	98	80-120
Bromofluorobenzene	105	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167974	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	85139
Units:	ug/L	Analyzed:	10/07/03
Diln Fac:	1.000		

Type: BS Lab ID: QC228158

Analyte	Spiked	Result	%REC	Limits
MTBE	50.00	47.61	95	69-124

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	77-129
Toluene-d8	102	80-120
Bromofluorobenzene	98	80-123

Type: BSD Lab ID: QC228159

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	50.00	50.14	100	69-124	5	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	77-129
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-123

RPD= Relative Percent Difference

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2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

SOMA Environmental Engineering Inc.
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Date: 22-SEP-03
Lab Job Number: 167514
Project ID: 2762
Location: 3519 Castro Valley Blvd

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

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Page 1 of 1

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Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

C&T LOGIN # 167514

Sampler: Eugene Fierro
Project No: 2762
Report To: Roger Papler
Project Name: 3519 Castro Valley Blvd
Company: SOMA Env.
Project P.O.: 2762
Telephone: (925) 244-6600
Turnaround Time: Standard
Fax: (925) 244-6601

Laboratory Number	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO	HNO_3	ICE	Field Notes	Analyses: TPH g	BTEX	MTBE	Total Pb
-1	Pumps 1+2	Sept 11, 2003 1:10p	X			1 brass				X		X	X	X	X
-2	Pumps 3+4	1:15p	X			1 brass				X		X	X	X	X
-3	Pumps 5+6	1:20p	X			1 brass				X		X	X	X	X
-4	Pumps 7+8	1:25p	X			1 brass				X		X	X	X	X
-5	intersection	1:30p	X			1 brass				X		X	X	X	X
For Laboratory Use															

Preservation Correct? ☑ Yes ☐ No ☐ N/A

Received On ice ☑ Cold ☐ Ambient ☐ Intact

Notes: EDF

RELINQUISHED BY: Eugene Fierro Sept 11 2003 4:30p DATE/TIME

RECEIVED BY: 9-11-03 4:05 DATE/TIME

DATE/TIME

DATE/TIME

DATE/TIME

DATE/TIME

Signature

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167514		
Client:	SOMA Environmental Engineering Inc.	Location:	3519 Castro Valley Blvd
Project#:	2762	Prep:	EPA 5030B
Matrix:	Soil	Sampled:	09/11/03
Basis:	as received	Received:	09/11/03
Diln Fac:	1.000	Analyzed:	09/12/03
Batch#:	84451		

Field ID: PUMPS 1 & 2 Lab ID: 167514-001
Type: SAMPLE

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	4.5 H Y	1.1	mg/Kg	8015B
MTBE	ND	22	ug/Kg	EPA 8021B
Benzene	ND	5.5	ug/Kg	EPA 8021B
Toluene	5.5 C	5.5	ug/Kg	EPA 8021B
Ethylbenzene	16	5.5	ug/Kg	EPA 8021B
m,p-Xylenes	10	5.5	ug/Kg	EPA 8021B
o-Xylene	9.7 C	5.5	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	104	56-144	8015B
Bromofluorobenzene (FID)	118	51-142	8015B
Trifluorotoluene (PID)	81	45-150	EPA 8021B
Bromofluorobenzene (PID)	93	42-138	EPA 8021B

Field ID: PUMPS 3 & 4 Lab ID: 167514-002
Type: SAMPLE

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	8015B
MTBE	ND	22	ug/Kg	EPA 8021B
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)	98	56-144	8015B
Bromofluorobenzene (FID)	112	51-142	8015B
Trifluorotoluene (PID)	80	45-150	EPA 8021B
Bromofluorobenzene (PID)	92	42-138	EPA 8021B

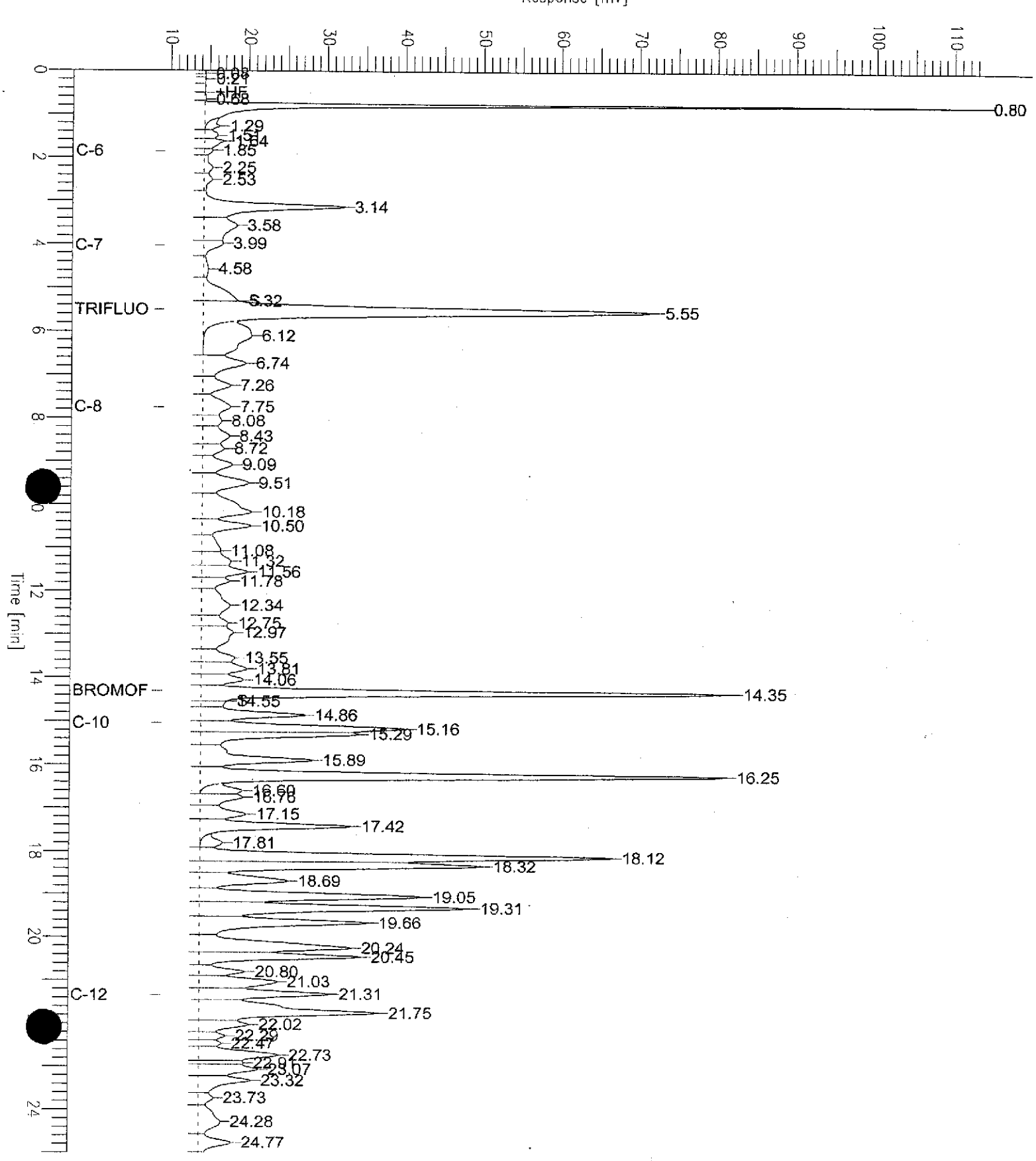
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 167514-001,84451
FileName : G:\GC05\DATA\255G004.raw
Method : TVHBTXE
St[illegible] Time : 0.00 min End Time : 25.00 min
Sc[illegible] Factor: 1.0 Plot Offset: 9 mV

Sample #: a Page 1 of 1
Date : 9/13/03 10:25 AM
Time of Injection: 9/12/03 12:24 PM
Low Point : 9.32 mV High Point : 113.61 mV
Plot Scale: 104.3 mV

PUMPS 1 & 2



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167514	Location:	3519 Castro Valley Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Matrix:	Soil	Sampled:	09/11/03
Basis:	as received	Received:	09/11/03
Diln Fac:	1.000	Analyzed:	09/12/03
Batch#:	84451		

Field ID: PUMPS 5 & 6 Lab ID: 167514-003
Type: SAMPLE

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	8015B
MTBE	ND	22	ug/Kg	EPA 8021B
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)	97	56-144	8015B
Bromofluorobenzene (FID)	115	51-142	8015B
Trifluorotoluene (PID)	79	45-150	EPA 8021B
Bromofluorobenzene (PID)	97	42-138	EPA 8021B

Field ID: PUMPS 7 & 8 Lab ID: 167514-004
Type: SAMPLE

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	8015B
MTBE	ND	21	ug/Kg	EPA 8021B
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)	103	56-144	8015B
Bromofluorobenzene (FID)	119	51-142	8015B
Trifluorotoluene (PID)	84	45-150	EPA 8021B
Bromofluorobenzene (PID)	98	42-138	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167514	Location:	3519 Castro Valley Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Matrix:	Soil	Sampled:	09/11/03
Basis:	as received	Received:	09/11/03
Diln Fac:	1.000	Analyzed:	09/12/03
Batch#:	84451		

Field ID: INTERSECTION Lab ID: 167514-005
Type: SAMPLE

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	8015B
MTBE	ND	22	ug/Kg	EPA 8021B
Benzene	ND	5.5	ug/Kg	EPA 8021B
Toluene	ND	5.5	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.5	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.5	ug/Kg	EPA 8021B
o-Xylene	ND	5.5	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	99	56-144	8015B
Bromofluorobenzene (FID)	117	51-142	8015B
Trifluorotoluene (PID)	82	45-150	EPA 8021B
Bromofluorobenzene (PID)	96	42-138	EPA 8021B

Type: BLANK Lab ID: QC225450

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	8015B
MTBE	ND	20	ug/Kg	EPA 8021B
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)	99	56-144	8015B
Bromofluorobenzene (FID)	112	51-142	8015B
Trifluorotoluene (PID)	81	45-150	EPA 8021B
Bromofluorobenzene (PID)	93	42-138	EPA 8021B

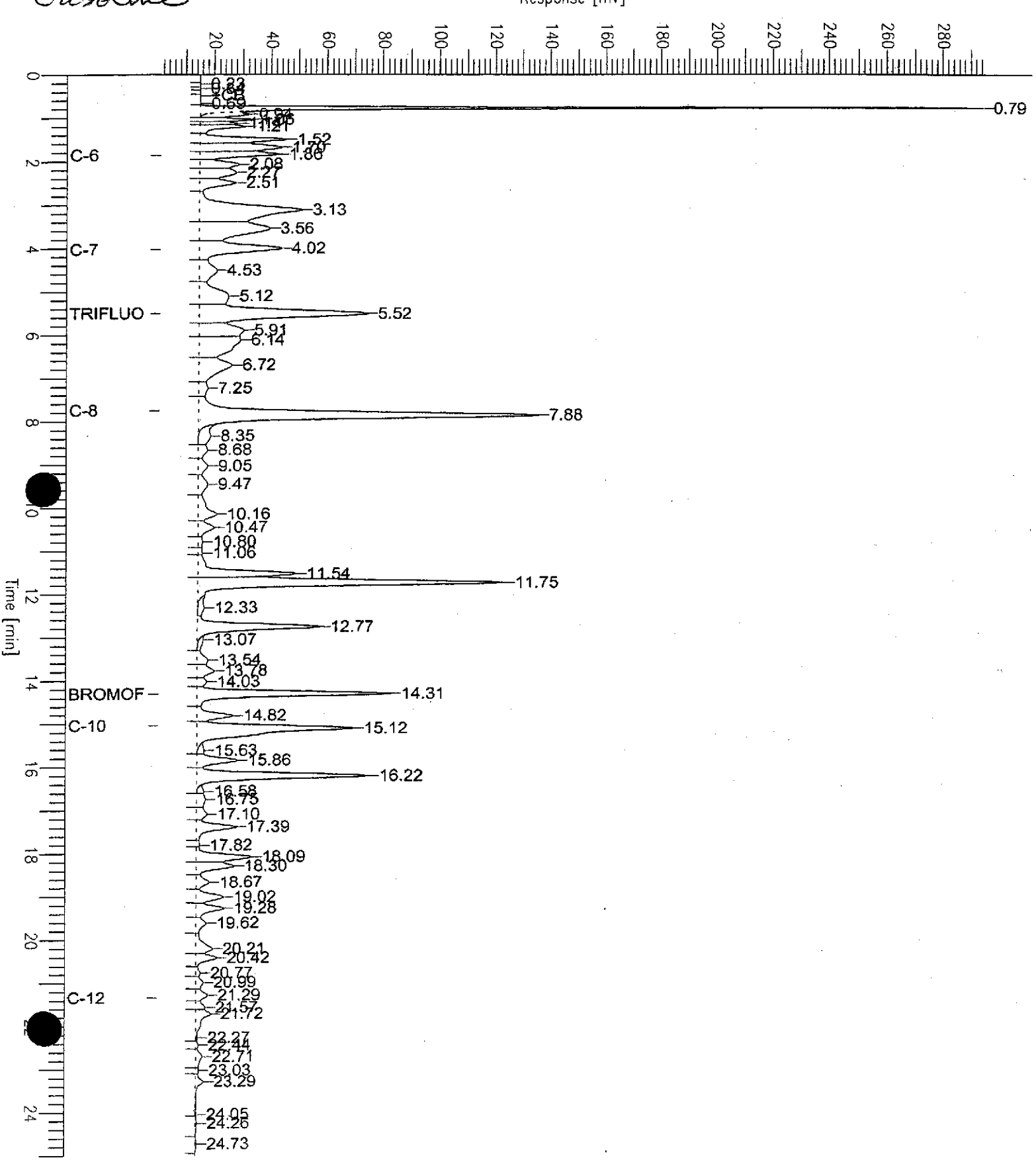
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : ccv/lcs,qc225452,84451,03ws1335,2.5/5000
FileName : G:\GC05\DATA\255g002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 1 mV

Sample #: Page 1 of 1
Date : 9/12/03 10:27 AM
Time of Injection: 9/12/03 09:43 AM
Low Point : 0.93 mV High Point : 294.44 mV
Plot Scale: 293.5 mV

Gasoline



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Total Volatile Hydrocarbons

Lab #:	167514	Location:	3519 Castro Valley Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Type:	LCS	Basis:	as received
Lab ID:	QC225452	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84451
Units:	mg/Kg	Analyzed:	09/12/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	5.000	5.119	102	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	56-144
Bromofluorobenzene (FID)	120	51-142

Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	167514	Location:	3519 Castro Valley Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8021B
Type:	LCS	Basis:	as received
Lab ID:	QC225451	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84451
Units:	ug/Kg	Analyzed:	09/12/03

Analyte	Spiked	Result	%REC	Limits
MTBE	50.00	52.32	105	74-121
Benzene	50.00	52.76	106	80-121
Toluene	50.00	49.63	99	80-120
Ethylbenzene	50.00	48.07	96	79-120
m,p-Xylenes	100.0	100.3	100	76-120
o-Xylene	50.00	49.86	100	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	84	45-150
Bromofluorobenzene (PID)	96	42-138

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	167514	Location:	3519 Castro Valley Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Field ID:	PUMPS 3 & 4	Diln Fac:	1.000
MSS Lab ID:	167514-002	Batch#:	84451
Matrix:	Soil	Sampled:	09/11/03
Units:	mg/Kg	Received:	09/11/03
Basis:	as received	Analyzed:	09/12/03

Type: MS Lab ID: QC225535

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.07831	10.00	8.079	80	24-134

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	56-144
Bromofluorobenzene (FID)	127	51-142

Type: MSD Lab ID: QC225536

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.87	9.024	82	24-134	3	32

Surrogate	%REC	Limits
Trifluorotoluene (FID)	121	56-144
Bromofluorobenzene (FID)	134	51-142

RPD= Relative Percent Difference

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Lead

Lab #:	167514	Location:	3519 Castro Valley Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	84471
Matrix:	Soil	Sampled:	09/11/03
Units:	mg/Kg	Received:	09/11/03
Basis:	as received	Prepared:	09/12/03
Diln Fac:	1.000	Analyzed:	09/16/03

Field ID	Type	Lab ID	Result	RL
PUMPS 1 & 2	SAMPLE	167514-001	9.1	0.12
PUMPS 3 & 4	SAMPLE	167514-002	6.9	0.15
PUMPS 5 & 6	SAMPLE	167514-003	7.6	0.13
PUMPS 7 & 8	SAMPLE	167514-004	18	0.12
INTERSECTION	SAMPLE	167514-005	7.7	0.15
	BLANK	QC225538	ND	0.15

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Lead

Lab #:	167514	Location:	3519 Castro Valley Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84471
Units:	mg/Kg	Prepared:	09/12/03
Basis:	as received	Analyzed:	09/16/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC225539	100.0	96.50	97	71-120		
BSD	QC225540	100.0	93.50	94	71-120	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Lead

Lab #:	167514	Location:	3519 Castro Valley Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	84471
MSS Lab ID:	167468-041	Sampled:	09/09/03
Matrix:	Soil	Received:	09/10/03
Units:	mg/Kg	Prepared:	09/12/03
Basis:	as received	Analyzed:	09/16/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC225541	5.789	80.65	72.18	82	23-137		
MSD	QC225542		80.00	70.40	81	23-137	2	40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

SOMA Environmental Engineering Inc.
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Date: 16-SEP-03
Lab Job Number: 167412
Project ID: 2762
Location: Shakoori

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

Curtis & Tompkins, Ltd.

Laboratory Number: **167412**
Client: **SOMA Environmental Engineering Inc.**
Project: **2762**
Request Date: **09/08/2003**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for one soil sample requested from the above referenced project on September 8, 2003. The sample was received cold and intact.

Total Volatile Hydrocarbons:

The recoveries for the surrogate bromofluorobenzene in the sample and the matrix spikes exceeds control limits due to the coelution of the surrogate peak with other hydrocarbon peaks. The associated surrogates trifluorotoluene are acceptable.

No other analytical problems were encountered.

Total Extractable Hydrocarbons:

No analytical problems were encountered.

Metals:

No analytical problems were encountered.

CHAIN OF CUSTODY FORM

Curtis & Tompkins, Ltd.
Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

C&T LOGIN # 167412

Project No: 2762
Project Name: Shakoori/CN + 3519 ZV Blvd
Project P.O.: —
Turnaround Time: 24hr TAT

Sampler: R W Pepper
Report To: Joyce Bobek
Company: SOMA Env. Eng
Telephone: (925) 244-6600
Fax: (925) 244-6601

Analyses

Laboratory Number	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO	Preservative: HNO_3	Preservative: ICE		Field Notes	TPH-g 8015	BTEX & MTBE 8021	TPH-d	Total Pb
-1	Comp-2	5 Sept 2003			X	4				X		soil comp-2 & New UST Area @ 5-15' bgs	X	X	X	X

Laboratory For Use

Notes: ERF

Preservation Correct?
☐ Yes ☐ No ☒ N/A

RELINQUISHED BY:		RECEIVED BY:	
[signature]	DATE/TIME 8 Sept 2003 / 805A		DATE/TIME
	DATE/TIME		DATE/TIME
	DATE/TIME	[signature]	DATE/TIME 9-8-03 0805

Received ☒ On Ice
☒ Cold ☐ Ambient ☒ Intact

Signature

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	167412	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Field ID:	COMP-2R	Batch#:	84299
Matrix:	Soil	Sampled:	09/05/03
Basis:	as received	Received:	09/08/03
Diln Fac:	1.000		

Type: SAMPLE
Lab ID: 167412-001
Analyzed: 09/09/03

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	21 H Y	2.0	mg/Kg	8015B
MTBE	ND	41	ug/Kg	EPA 8021B
Benzene	ND	10	ug/Kg	EPA 8021B
Toluene	24 C	10	ug/Kg	EPA 8021B
Ethylbenzene	54 C	10	ug/Kg	EPA 8021B
m,p-Xylenes	10 C	10	ug/Kg	EPA 8021B
o-Xylene	ND	10	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	106	56-144	8015B
Bromofluorobenzene (FID)	156 *	51-142	8015B
Trifluorotoluene (PID)	80	45-150	EPA 8021B
Bromofluorobenzene (PID)	97	42-138	EPA 8021B

Type: BLANK
Lab ID: QC224838
Analyzed: 09/08/03

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	8015B
MTBE	ND	20	ug/Kg	EPA 8021B
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)	93	56-144	8015B
Bromofluorobenzene (FID)	108	51-142	8015B
Trifluorotoluene (PID)	76	45-150	EPA 8021B
Bromofluorobenzene (PID)	90	42-138	EPA 8021B

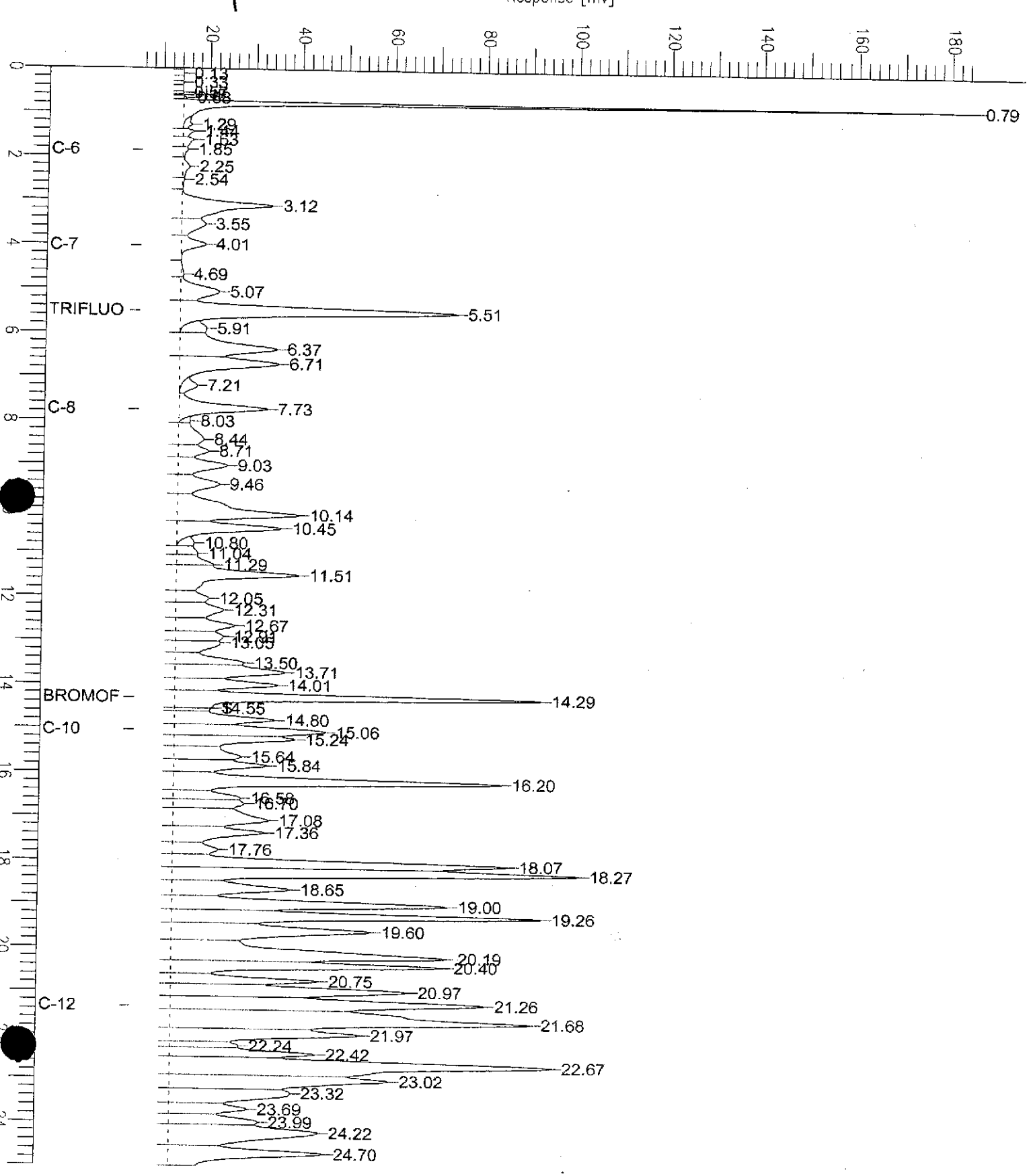
*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 167412-001,84299
FileName : G:\GC05\DATA\251G027.raw
Method : TVHBTXE
Start Time : 0.00 min
[redacted] Factor: 1.0
End Time : 25.00 min
Plot Offset: 6 mV

Sample #: c
Date : 9/9/03 08:53 AM
Time of Injection: 9/9/03 02:09 AM
Low Point : 5.50 mV
Plot Scale: 179.5 mV

Comp-2R

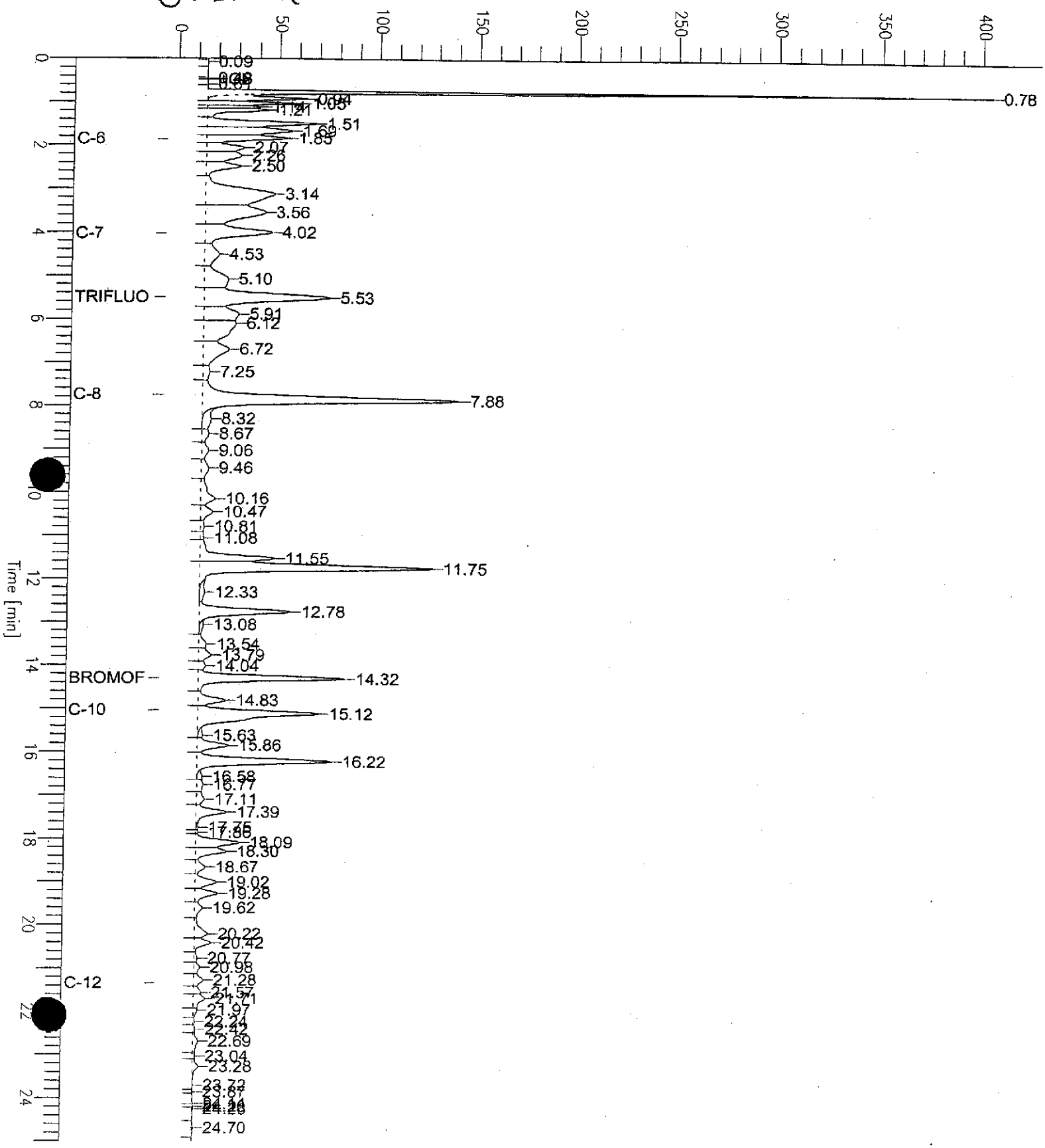


Chromatogram

Sample Name : ccv/lcs,qc224840,84299,03wsl335,2.5/5000
FileName : G:\GC05\DATA\251G002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -5 mV

Sample #: Page 1 of 1
Date : 9/8/03 11:43 AM
Time of Injection: 9/8/03 11:18 AM
Low Point : -5.32 mV High Point : 404.93 mV
Plot Scale: 410.2 mV

Gasoline



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Curtis & Tompkins Laboratories Analytical Report

Lab #:	167412	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8021B
Type:	LCS	Basis:	as received
Lab ID:	QC224839	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84299
Units:	ug/Kg	Analyzed:	09/08/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
MTBE	50.00	55.24	110	74-121
Benzene	50.00	56.70	113	80-121
Toluene	50.00	51.88	104	80-120
Ethylbenzene	50.00	54.32	109	79-120
m,p-Xylenes	100.0	109.1	109	76-120
o-Xylene	50.00	54.43	109	80-120

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		86	45-150
Bromofluorobenzene (PID)		103	42-138

NA= Not Analyzed

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167412	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Type:	LCS	Basis:	as received
Lab ID:	QC224840	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84299
Units:	mg/Kg	Analyzed:	09/08/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	5.000	5.464	109	80-120
MTBE		NA		
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		116	56-144
Bromofluorobenzene (FID)		126	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167412	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	167361-001	Batch#:	84299
Matrix:	Soil	Sampled:	09/04/03
Units:	mg/Kg	Received:	09/04/03
Basis:	as received	Analyzed:	09/08/03

Type: MS Lab ID: QC224918

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1088	10.53	6.912	65	24-134
MTBE			NA		
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		120	56-144
Bromofluorobenzene (FID)		179 *	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC224919

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.64	6.577	61	24-134	6	32
MTBE		NA				
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		118	56-144
Bromofluorobenzene (FID)		178 *	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

* alue outside of QC limits; see narrative
NA= Not Analyzed
RPD= Relative Percent Difference

4.0

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Total Extractable Hydrocarbons

Lab #:	167412	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	SHAKER TABLE
Project#:	2762	Analysis:	EPA 8015B
Field ID:	COMP-2R	Batch#:	84318
Matrix:	Soil	Sampled:	09/05/03
Units:	mg/Kg	Received:	09/08/03
Basis:	as received	Prepared:	09/08/03
Diln Fac:	1.000		

Type:	SAMPLE	Analyzed:	09/09/03
Lab ID:	167412-001		

Analyte	Result	RL
Diesel C10-C24	4.8 H L Y	1.0

Surrogate	%REC	Limits
Hexacosane	98	36-141

Type:	BLANK	Analyzed:	09/10/03
Lab ID:	QC224928	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	1.0

Surrogate	%REC	Limits
Hexacosane	110	36-141

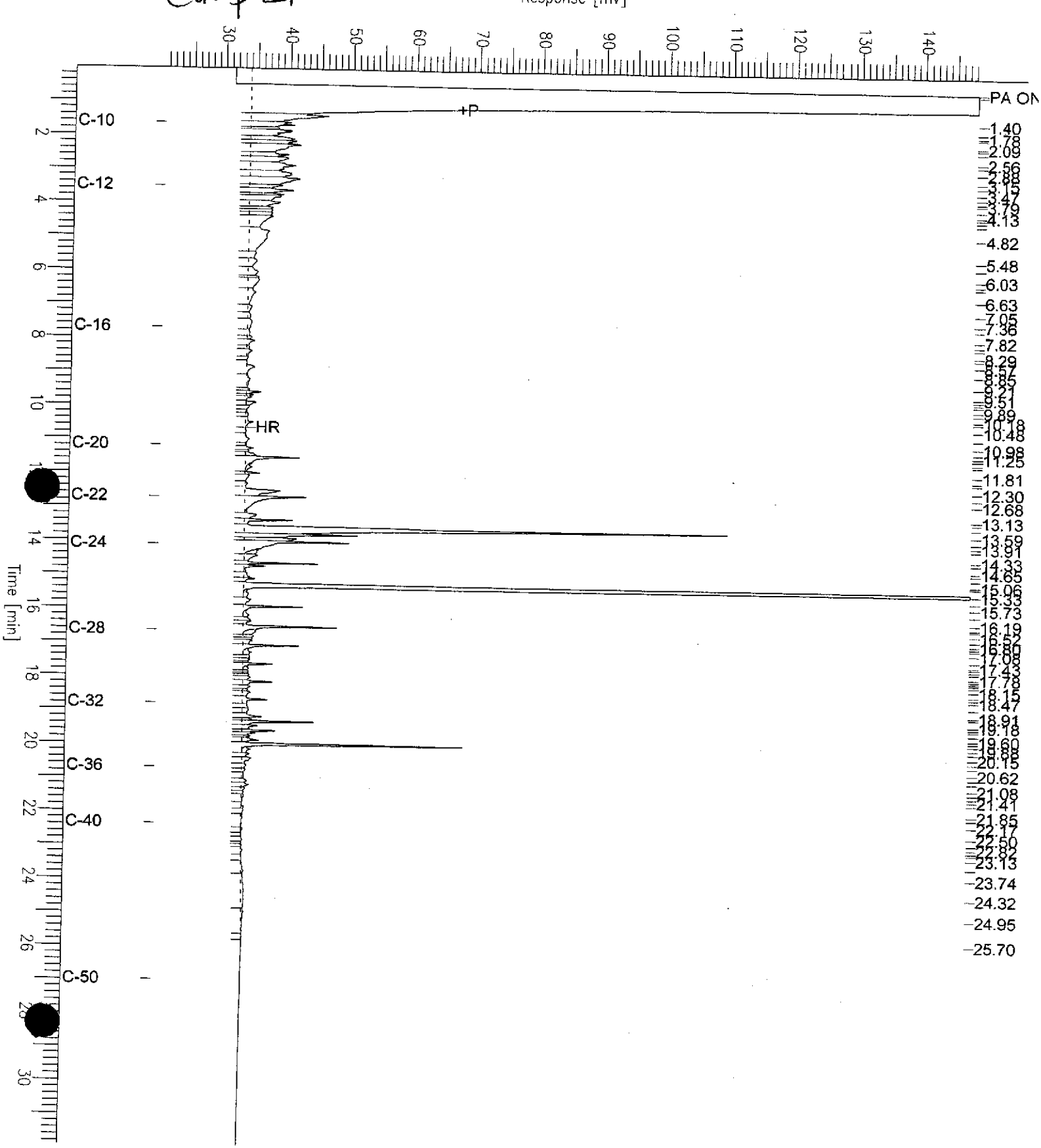
H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 167412-001,84318
FileName : G:\GC13\CHB\251B036.RAW
Method : BTEH251.MTH
Start Time : 0.01 min
S[redacted] Factor: 0.0
End Time : 31.91 min
Plot Offset: 20 mV

Sample #: 84318
Date : 9/9/03 09:46 AM
Time of Injection: 9/9/03 08:48 AM
Low Point : 20.44 mV
Plot Scale: 127.8 mV
High Point : 148.27 mV

Comp 2R

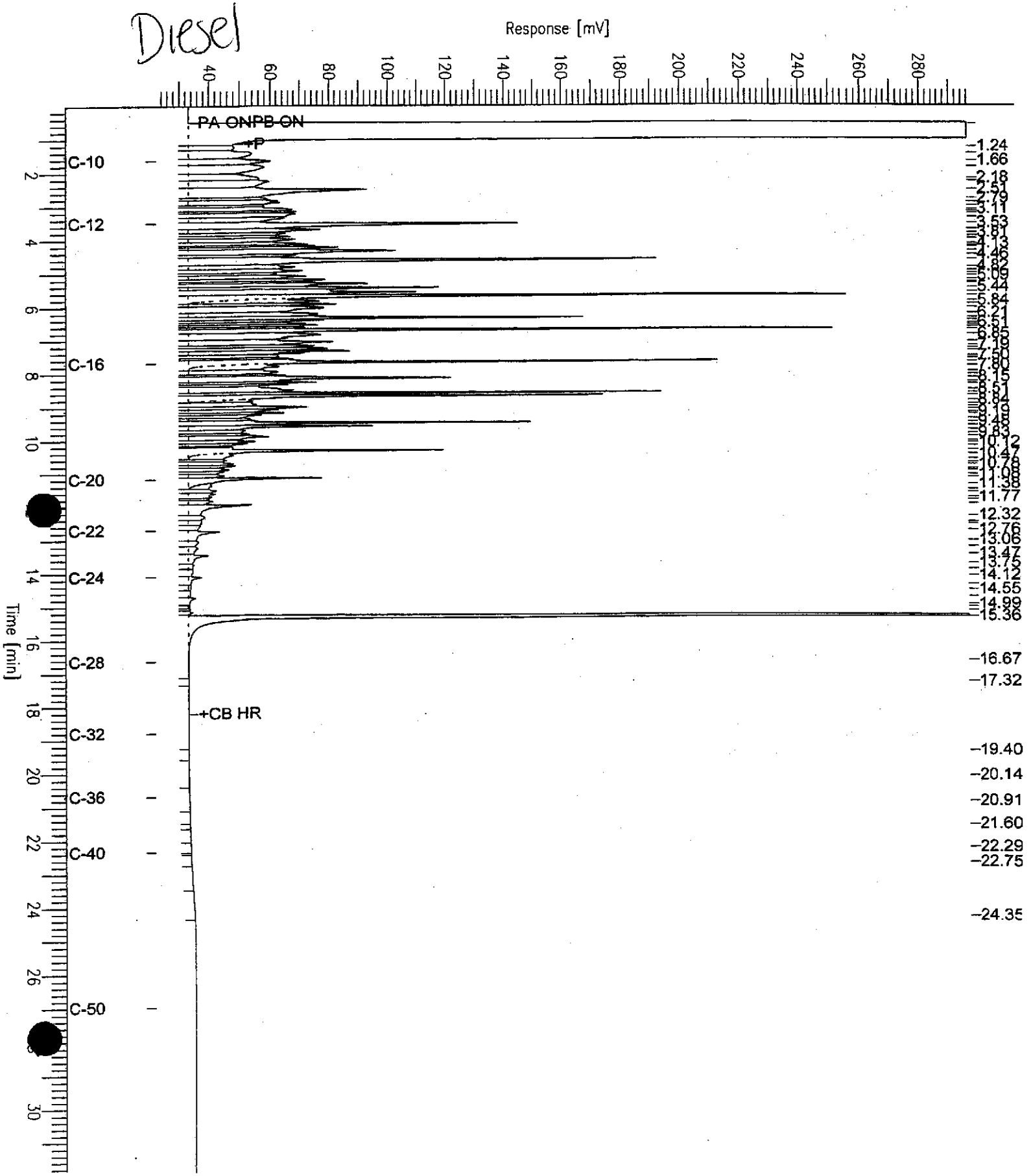


Chromatogram

Sample Name : ccv,03ws1374,dsl
FileName : G:\GC13\CHB\251B002.RAW
Method : BTEH251.MTH
Start Time : 0.01 min
Scale Factor: 0.0
End Time : 31.91 min
Plot Offset: 22 mV

Sample #: 500mg/L
Date : 9/8/03 10:30 AM
Time of Injection: 9/8/03 09:51 AM
Low Point : 22.13 mV
Plot Scale: 273.9 mV
High Point : 296.06 mV

Diesel



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Total Extractable Hydrocarbons

Lab #:	167412	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	SHAKER TABLE
Project#:	2762	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC224929	Batch#:	84318
Matrix:	Soil	Prepared:	09/08/03
Units:	mg/Kg	Analyzed:	09/09/03
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.08	47.15	94	49-129

Surrogate	%REC	Limits
Hexacosane	104	36-141

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	167412	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	SHAKER TABLE
Project#:	2762	Analysis:	EPA 8015B
Field ID:	COMP-2R	Batch#:	84318
MSS Lab ID:	167412-001	Sampled:	09/05/03
Matrix:	Soil	Received:	09/08/03
Units:	mg/Kg	Prepared:	09/08/03
Basis:	as received	Analyzed:	09/11/03
Diln Fac:	1.000		

Type: MS Lab ID: QC224930

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	4.794	50.01	57.25	105	32-134

Surrogate	%REC	Limits
Hexacosane	98	36-141

Type: MSD Lab ID: QC224931

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.97	69.19	129	32-134	19	48

Surrogate	%REC	Limits
Hexacosane	103	36-141

RPD= Relative Percent Difference

10.0

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Lead

Lab #:	167412	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	84332
Field ID:	COMP-2R	Sampled:	09/05/03
Matrix:	Soil	Received:	09/08/03
Units:	mg/Kg	Prepared:	09/08/03
Basis:	as received	Analyzed:	09/09/03
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	167412-001	5.3	0.11
BLANK	QC224982	ND	0.15

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Lead

Lab #:	167412	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84332
Units:	mg/Kg	Prepared:	09/08/03
Basis:	as received	Analyzed:	09/09/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC224983	100.0	86.50	87	71-120		
BSD	QC224984	100.0	85.50	86	71-120	1	20

RPD= Relative Percent Difference

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Lead

Lab #:	167412	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	84332
MSS Lab ID:	167210-001	Sampled:	08/27/03
Matrix:	Soil	Received:	08/27/03
Units:	mg/Kg	Prepared:	09/08/03
Basis:	as received	Analyzed:	09/09/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC224985	516.0	90.09	313.1	-225	NM 23-137		
MSD	QC224986		96.62	292.3	-232	NM 23-137	8	40

NM= Not Meaningful
RPD= Relative Percent Difference

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ANALYTICAL REPORT

Prepared for:

SOMA Environmental Engineering Inc.
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Date: 22-SEP-03
Lab Job Number: 167570
Project ID: 2762
Location: Shakoori/CV

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

Curtis & Tompkins, Ltd.

Laboratory Number: **167570**
Client: **SOMA Environmental Engineering Inc.**
Project: **2762**
Request Date: **09/15/2003**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for two soil samples requested from the above referenced project on September 15, 2003. The samples were received cold and intact.

Total Volatile Hydrocarbons (EPA 8015B):

The recoveries for the surrogate trifluorotoluene in sample PL-4@4' exceed control limits due to the coelution of the surrogate peak with other hydrocarbon peaks. The associated surrogate bromofluorobenzene recoveries are acceptable.

No other analytical problems were encountered.

SOIL

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Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

C&T LOGIN #: ______

Sampler: Roy Zarrinbakhsh

Project No: 27[illegible]
Project Name: [illegible] 3519 [illegible] Blvd
Project P.O.: —
Turnaround Time: [illegible]

Report To: [illegible]
Company: [illegible]
Telephone: (9[illegible]) 2[illegible]-[illegible]
Fax: (9[illegible]) [illegible]

Analyses: TPH g [illegible] | BTEX & MTBE [illegible] | MTBE / [illegible]

Laboratory Number	Sample ID.	Sampling Date Time	Soil	Water	Waste	# of Containers	HCL	H_2SO	HNO_3	ICE	Field Notes	TPH g	BTEX & MTBE	MTBE			
	P1-1a@4'	15 Sept 2003 12:30pm	x			1				x	Product Line-1a at 4'	x	x				
	P1-1b@4'	12:30	x			1				x	product Line-1b at 4'	x	x			#[illegible]	
	P1-2a@4'	1:00pm	x			1				x	product Line-2a at 4'	x	x				
	P1-2b@4'	1:00pm	x			1				x	-2b at 4'	x	x			#[illegible]	

For Laboratory Use

Notes: EDF Required

RELINQUISHED BY:		RECEIVED BY:	
X [signature]	DATE/TIME 9.15.03 2:22pm		DATE/TIME
	DATE/TIME		DATE/TIME
	DATE/TIME	[signature]	DATE/TIME 9.15.03 2:22 pm

Signature

Sep 18 03 11:43a

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	167570	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Matrix:	Soil	Sampled:	09/15/03
Basis:	as received	Received:	09/15/03
Batch#:	84485		

Field ID: PL-1 @ 4' Lab ID: 167570-001
Type: SAMPLE

Analyte	Result	RL	Units	Diln Fac	Analyzed	Analysis
Gasoline C7-C12	530 H Y	25	mg/Kg	25.00	09/16/03	8015B
MTBE	ND	43	ug/Kg	1.000	09/15/03	EPA 8021B
Benzene	ND	11	ug/Kg	1.000	09/15/03	EPA 8021B
Toluene	ND	11	ug/Kg	1.000	09/15/03	EPA 8021B
Ethylbenzene	340 C	11	ug/Kg	1.000	09/15/03	EPA 8021B
m,p-Xylenes	74	11	ug/Kg	1.000	09/15/03	EPA 8021B
o-Xylene	450 C	11	ug/Kg	1.000	09/15/03	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Analyzed	Analysis
Trifluorotoluene (FID)	117	56-144	25.00	09/16/03	8015B
Bromofluorobenzene (FID)	220 *	>LR b 51-142	25.00	09/16/03	8015B
Trifluorotoluene (PID)	82	45-150	1.000	09/15/03	EPA 8021B
Bromofluorobenzene (PID)	140 *	42-138	1.000	09/15/03	EPA 8021B

Field ID: PL-2 @ 4' Diln Fac: 1.000
Type: SAMPLE Analyzed: 09/15/03
Lab ID: 167570-002

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	8015B
MTBE	ND	22	ug/Kg	EPA 8021B
Benzene	ND	5.5	ug/Kg	EPA 8021B
Toluene	ND	5.5	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.5	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.5	ug/Kg	EPA 8021B
o-Xylene	ND	5.5	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	56-144	8015B
Bromofluorobenzene (FID)	117	51-142	8015B
Trifluorotoluene (PID)	80	45-150	EPA 8021B
Bromofluorobenzene (PID)	95	42-138	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit
>LR= Response exceeds instrument's linear range

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	167570	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Matrix:	Soil	Sampled:	09/15/03
Basis:	as received	Received:	09/15/03
Batch#:	84485		

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC225598	Analyzed:	09/15/03

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	8015B
MTBE	ND	20	ug/Kg	EPA 8021B
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)	100	56-144	8015B
Bromofluorobenzene (FID)	109	51-142	8015B
Trifluorotoluene (PID)	81	45-150	EPA 8021B
Bromofluorobenzene (PID)	91	42-138	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit
>LR= Response exceeds instrument's linear range

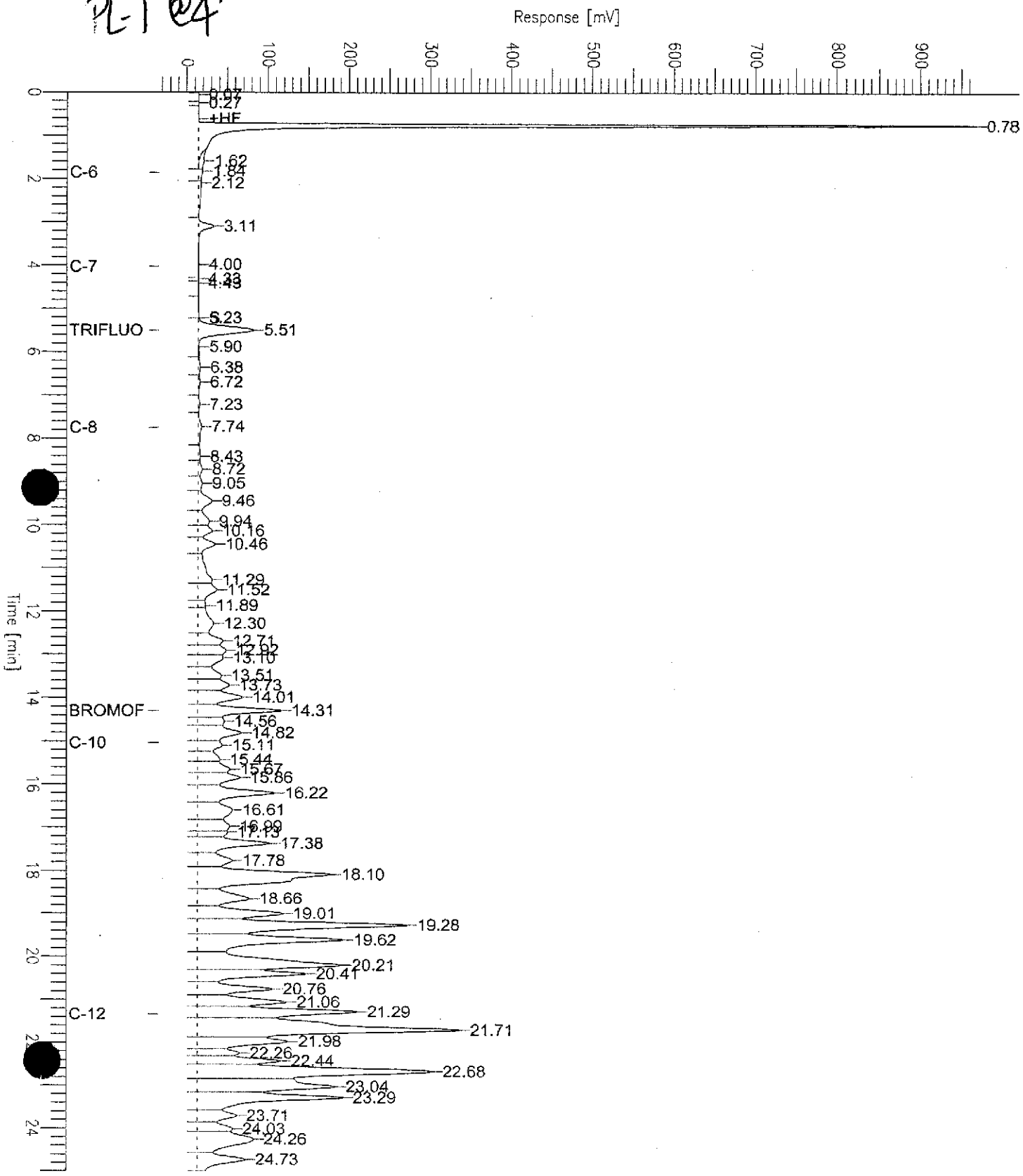
1.0

Chromatogram

Sa[redacted] Name : 167570-001,84485,tvh only
Fi[redacted]me : G:\GC05\DATA\258G015.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -33 mV

Sample #: a Page 1 of 1
Date : 9/16/03 10:44 AM
Time of Injection: 9/16/03 08:56 AM
Low Point : -33.22 mV High Point : 969.03 mV
Plot Scale: 1002.2 mV

PL-1 @4'

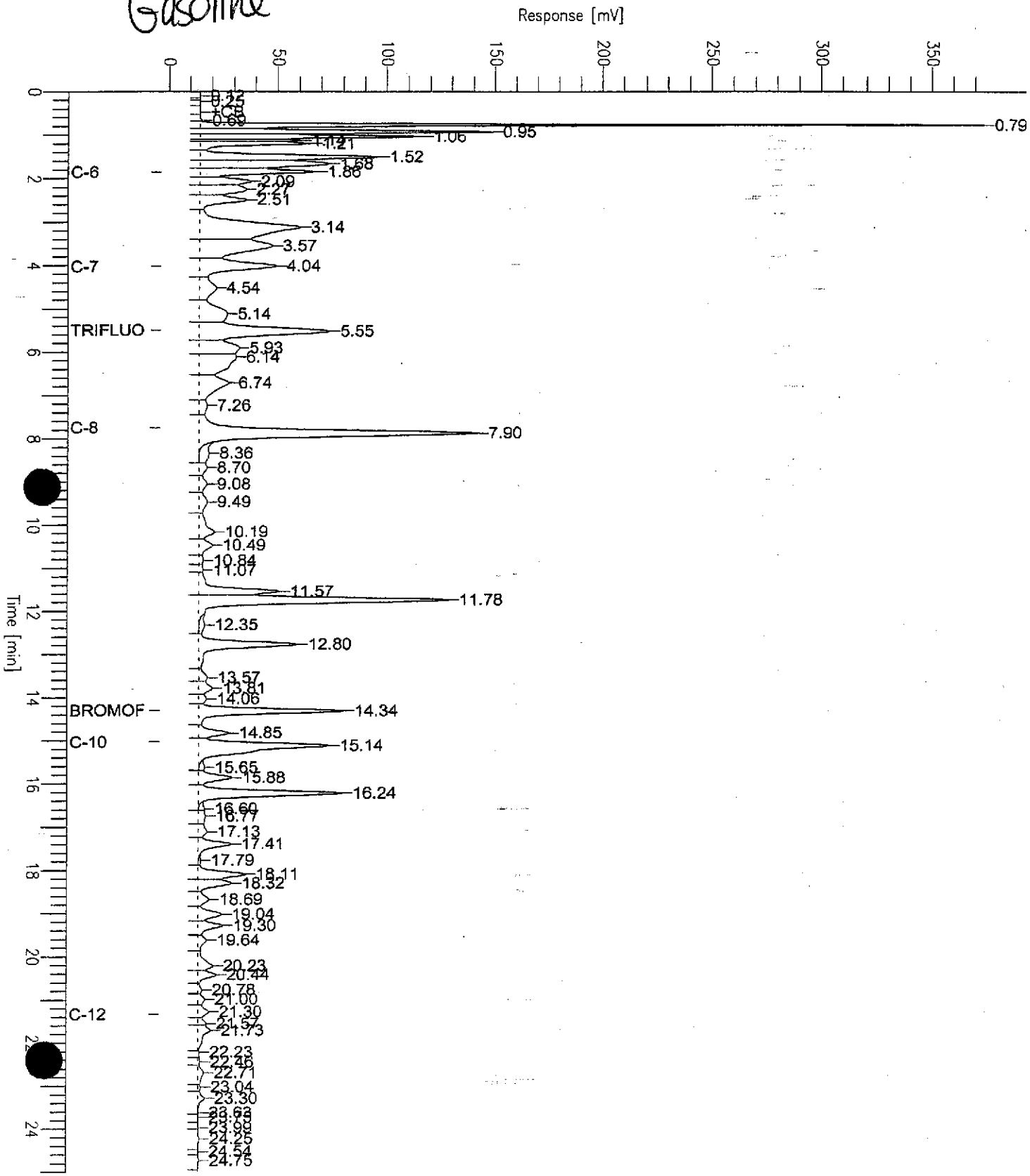


Chromatogram

Sa[redacted]Name : ccv/lcs,qc225600,84485,03ws1335,2.5/5000
Fi[redacted]e : G:\GC05\DATA\258g002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -4 mV

Sample #: Page 1 of 1
Date : 9/15/03 04:31 PM
Time of Injection: 9/15/03 10:09 AM
Low Point : -3.68 mV High Point : 374.00 mV
Plot Scale: 377.7 mV

Gasoline



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Total Volatile Hydrocarbons

Lab #:	167570	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Type:	LCS	Basis:	as received
Lab ID:	QC225600	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84485
Units:	mg/Kg	Analyzed:	09/15/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	5.000	5.526	111	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	111	56-144
Bromofluorobenzene (FID)	116	51-142

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Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	167570	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8021B
Type:	BS	Basis:	as received
Lab ID:	QC225599	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84485
Units:	ug/Kg	Analyzed:	09/15/03

Analyte	Spiked	Result	%REC	Limits
MTBE	50.00	55.55	111	74-121
Benzene	50.00	52.57	105	80-121
Toluene	50.00	49.47	99	80-120
Ethylbenzene	50.00	49.99	100	79-120
m,p-Xylenes	100.0	105.7	106	76-120
o-Xylene	50.00	51.75	104	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	80	45-150
Bromofluorobenzene (PID)	90	42-138

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Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	167570	Location:	Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8021B
Type:	BSD	Basis:	as received
Lab ID:	QC225719	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84485
Units:	ug/Kg	Analyzed:	09/15/03

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	100.0	91.04	91	74-121	20	20
Benzene	100.0	95.32	95	80-121	10	20
Toluene	100.0	89.37	89	80-120	10	20
Ethylbenzene	100.0	90.64	91	79-120	10	20
m,p-Xylenes	200.0	196.0	98	76-120	8	20
o-Xylene	100.0	93.97	94	80-120	10	20

Surrogate	%REC	Limits
Trifluorotoluene (PID)	75	45-150
Bromofluorobenzene (PID)	89	42-138

RPD= Relative Percent Difference

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A N A L Y T I C A L R E P O R T

Prepared for:

SOMA Environmental Engineering Inc.
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Date: 21-SEP-03
Lab Job Number: 167390 SOILS
Project ID: 2762
Location: Shakoori

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

Curtis & Tompkins, Ltd.

Laboratory Number: **167390**
Client: **SOMA Environmental Engineering Inc**
Project: **2762**
Request Date: **09/5/2003**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for one water and six soil samples requested from the above referenced project on September 5, 2003. The samples were received cold and intact.

Total Volatile Hydrocarbons:

The recoveries for the surrogate bromofluorobenzene in the matrix spikes of batch 84299 exceed control limits due to coelution of the surrogate peaks with other hydrocarbon peaks. The associated surrogate recoveries are acceptable.

No other analytical problems were encountered.

Total Extractable Hydrocarbons:

No analytical problems were encountered.

Purgeable Organics (EPA 8260):

No analytical problems were encountered.

Metals:

In the matrix spikes, the recoveries and relative percent differences for chromium, nickel and lead exceed acceptance limits and are not meaningful (NM). The parent sample is not a SOMA sample and the associated blank spikes are acceptable demonstrating the laboratory procedure was in control.

No other analytical problems were encountered.

2011

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Curtis & Tompkins, Ltd.
Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

C&T LOGIN # 167390

Project No: 2762	Sampler: Roger Papler
Project Name: Shakoori / CV: ? 3519 CV Blvd	Report To: Joyce B
Project P.O.: —	Company: SOMA Env Eng
Turnaround Time: standard	Telephone: (925) 244-4600
	Fax: (925) 244-4601

Analyses: TPH-g 8015; BTEX & MTBE 8021; TPH-d 8015; Volatile Organic Compds 8260B; O&Grease TEH w/silica gel cu; LUFT 5 Metals; Chlorinated HC 8260B (8010)

	Laboratory Number	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO	HNO_3	ICE		Field Notes	TPH-g 8015	BTEX & MTBE 8021	TPH-d 8015	Volatile Organic Compds 8260B	O&Grease TEH w/silica gel cu	LUFT 5 Metals	Chlorinated HC 8260B				
-2	For Laboratory Use	UST-NE@9.5'	4 Sept 2003	x			1				x		Existing UST Pit - NE sidewall	x	x	x								
-3		UST-NW@9.5'		x			1				x		NW sidewall	x	x	x								
-4		UST-SE@8'		x			1				x		SE sidewall	x	x	x								
-5		UST-SW@8'		x			1				x		SW sidewall	x	x	x								
-6		UST-SW@10'		x			1				x		SW sidewall	x	x	x								
-7		WOT-W@5.5'		x			1				x		WOT Pit sidewall at 5.5'	x	x	x	x	x	x	x				

Notes: EDF

RELINQUISHED BY:		RECEIVED BY:	
[signature]	DATE/TIME 5 Sept 2003 @ 11:00 A	[signature] Eugene ...	DATE/TIME Sept 5, 2003 11:00am
	DATE/TIME		DATE/TIME
[signature]	DATE/TIME Sept 5, 2003 12:00	[signature]	DATE/TIME 9/5/03 12:15pm

Signature

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Matrix:	Soil	Batch#:	84299
Basis:	as received	Sampled:	09/04/03
Diln Fac:	1.000	Received:	09/05/03

Field ID: UST-NE@9.5 Lab ID: 167390-002
Type: SAMPLE Analyzed: 09/08/03

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.96	mg/Kg	8015B
MTBE	59	19	ug/Kg	EPA 8021B
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)	100	56-144	8015B
Bromofluorobenzene (FID)	119	51-142	8015B
Trifluorotoluene (PID)	81	45-150	EPA 8021B
Bromofluorobenzene (PID)	98	42-138	EPA 8021B

Field ID: UST-NW@9.5 Lab ID: 167390-003
Type: SAMPLE Analyzed: 09/08/03

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	2.0 H	0.93	mg/Kg	8015B
MTBE	69	19	ug/Kg	EPA 8021B
Benzene	ND	4.7	ug/Kg	EPA 8021B
Toluene	ND	4.7	ug/Kg	EPA 8021B
Ethylbenzene	7.1	4.7	ug/Kg	EPA 8021B
m,p-Xylenes	ND	4.7	ug/Kg	EPA 8021B
o-Xylene	ND	4.7	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	111	56-144	8015B
Bromofluorobenzene (FID)	126	51-142	8015B
Trifluorotoluene (PID)	89	45-150	EPA 8021B
Bromofluorobenzene (PID)	100	42-138	EPA 8021B

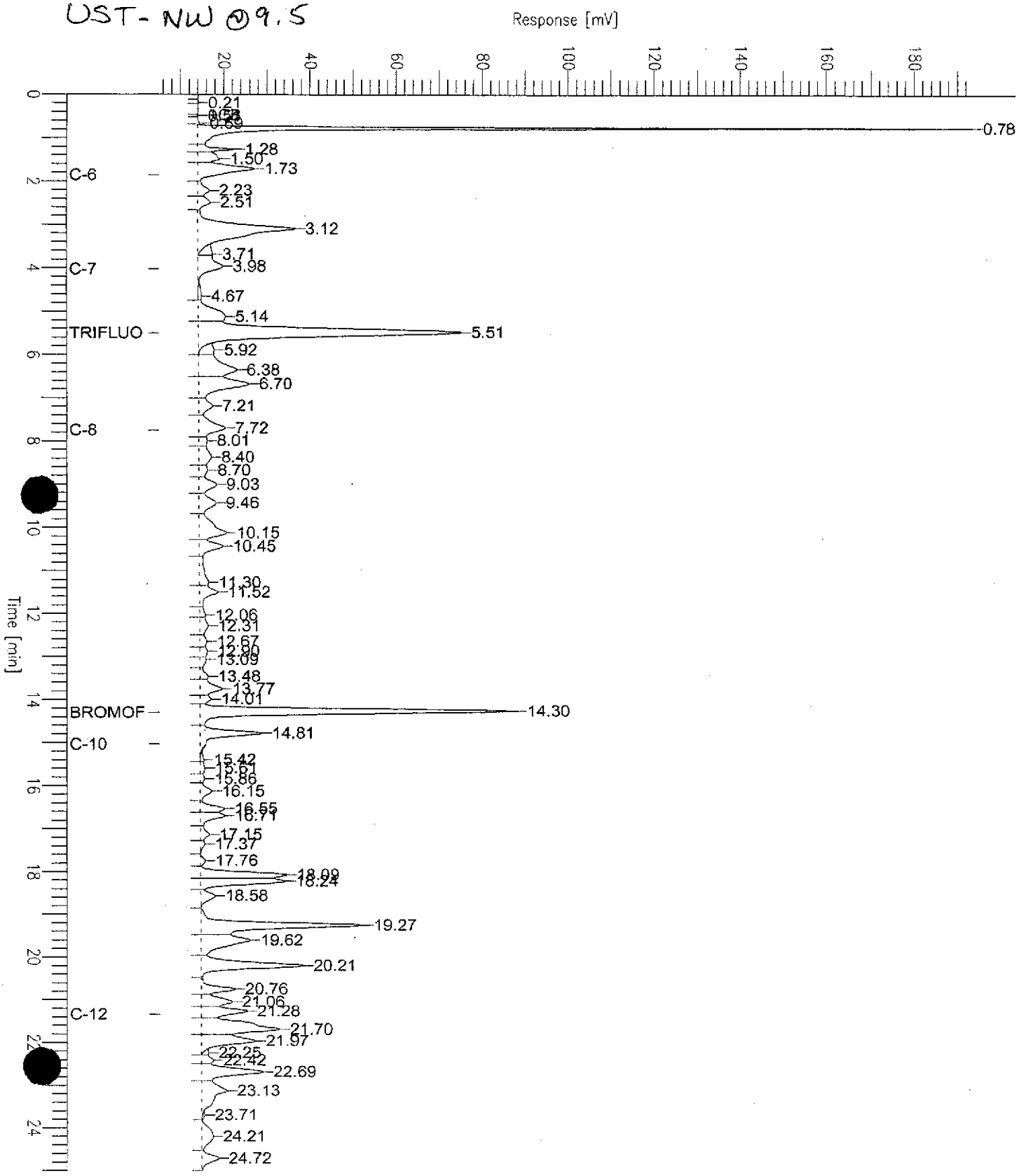
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sa[redacted] Name : 167390-003,84299
Fi[redacted]e : G:\GC05\DATA\251G020.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 5 mV

Sample #: a Page 1 of 1
Date : 9/8/03 10:40 PM
Time of Injection: 9/8/03 10:15 PM
Low Point : 5.01 mV High Point : 193.71 mV
Plot Scale: 188.7 mV

UST-NW @9.5



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Matrix:	Soil	Batch#:	84299
Basis:	as received	Sampled:	09/04/03
Diln Fac:	1.000	Received:	09/05/03

Field ID: UST-SE@8 Lab ID: 167390-004
Type: SAMPLE Analyzed: 09/08/03

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	8015B
MTBE	ND	21	ug/Kg	EPA 8021B
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)	99	56-144	8015B
Bromofluorobenzene (FID)	118	51-142	8015B
Trifluorotoluene (PID)	79	45-150	EPA 8021B
Bromofluorobenzene (PID)	98	42-138	EPA 8021B

Field ID: UST-SW@8 Lab ID: 167390-005
Type: SAMPLE Analyzed: 09/09/03

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	17 H	0.97	mg/Kg	8015B
MTBE	71	19	ug/Kg	EPA 8021B
Benzene	ND	4.9	ug/Kg	EPA 8021B
Toluene	44 C	4.9	ug/Kg	EPA 8021B
Ethylbenzene	280	4.9	ug/Kg	EPA 8021B
m,p-Xylenes	94	4.9	ug/Kg	EPA 8021B
o-Xylene	18 C	4.9	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	136	56-144	8015B
Bromofluorobenzene (FID)	139	51-142	8015B
Trifluorotoluene (PID)	100	45-150	EPA 8021B
Bromofluorobenzene (PID)	108	42-138	EPA 8021B

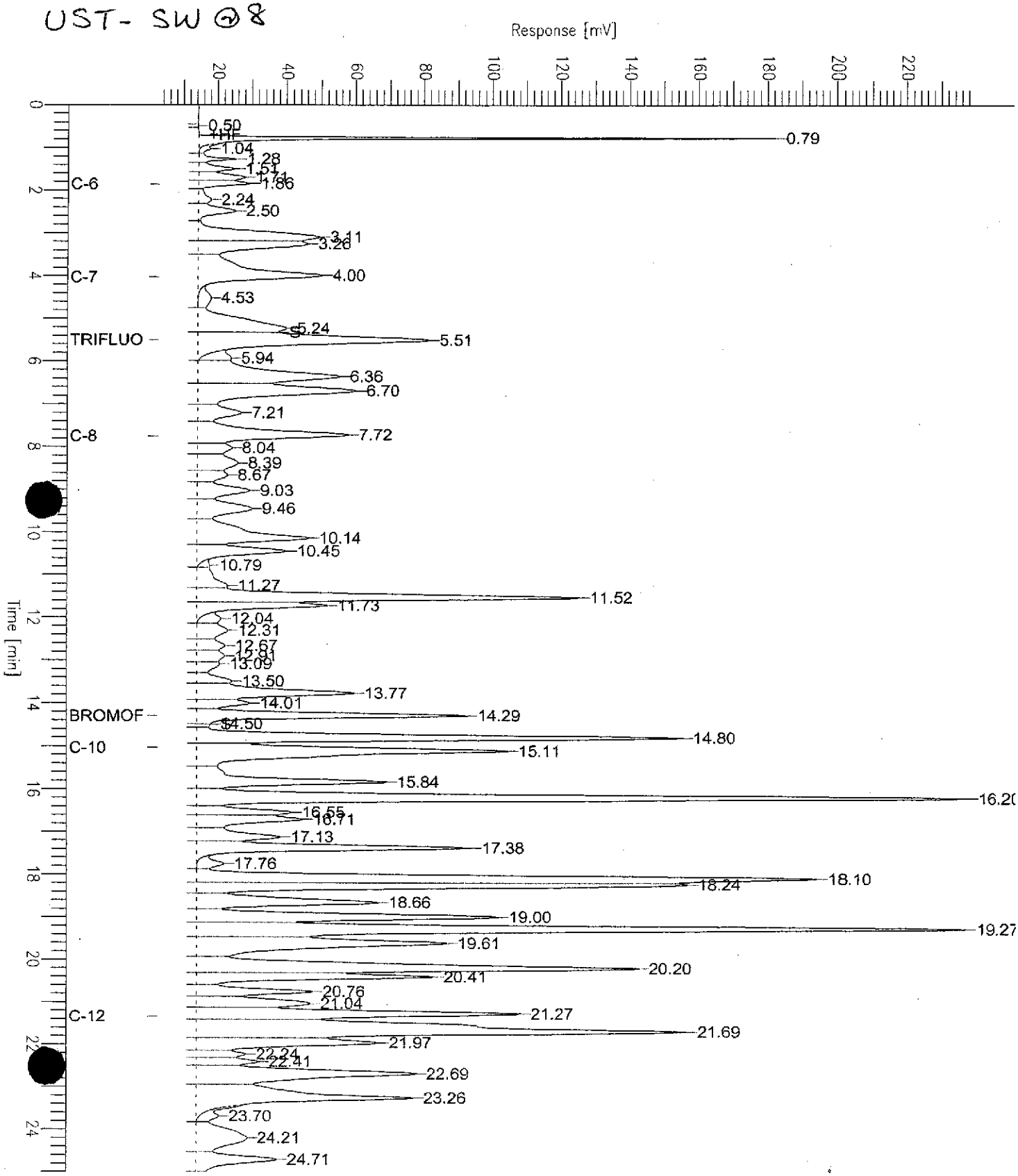
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sa[redacted] Name : 167390-005,84299
Fi[redacted]e : G:\GC05\DATA\251G024.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 3 mV

Sample #: a Page 1 of 1
Date : 9/9/03 08:53 AM
Time of Injection: 9/9/03 12:29 AM
Low Point : 2.88 mV High Point : 238.27 mV
Plot Scale: 235.4 mV

UST- SW @ 8



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Matrix:	Soil	Batch#:	84299
Basis:	as received	Sampled:	09/04/03
Diln Fac:	1.000	Received:	09/05/03

Field ID: UST-SW@10 Lab ID: 167390-006
Type: SAMPLE Analyzed: 09/08/03

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	8015B
MTBE	75	21	ug/Kg	EPA 8021B
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)	103	56-144	8015B
Bromofluorobenzene (FID)	122	51-142	8015B
Trifluorotoluene (PID)	81	45-150	EPA 8021B
Bromofluorobenzene (PID)	101	42-138	EPA 8021B

Field ID: WOT-W@5.5 Lab ID: 167390-007
Type: SAMPLE Analyzed: 09/08/03

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.97	mg/Kg	8015B
MTBE	ND	19	ug/Kg	EPA 8021B
Benzene	ND	4.9	ug/Kg	EPA 8021B
Toluene	ND	4.9	ug/Kg	EPA 8021B
Ethylbenzene	ND	4.9	ug/Kg	EPA 8021B
m,p-Xylenes	ND	4.9	ug/Kg	EPA 8021B
o-Xylene	ND	4.9	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	99	56-144	8015B
Bromofluorobenzene (FID)	121	51-142	8015B
Trifluorotoluene (PID)	80	45-150	EPA 8021B
Bromofluorobenzene (PID)	99	42-138	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Matrix:	Soil	Batch#:	84299
Basis:	as received	Sampled:	09/04/03
Diln Fac:	1.000	Received:	09/05/03

Type: BLANK
Lab ID: QC224838

Analyzed: 09/08/03

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	8015B
MTBE	ND	20	ug/Kg	EPA 8021B
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)	93	56-144	8015B
Bromofluorobenzene (FID)	108	51-142	8015B
Trifluorotoluene (PID)	76	45-150	EPA 8021B
Bromofluorobenzene (PID)	90	42-138	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
ND= Not Detected
RL= Reporting Limit

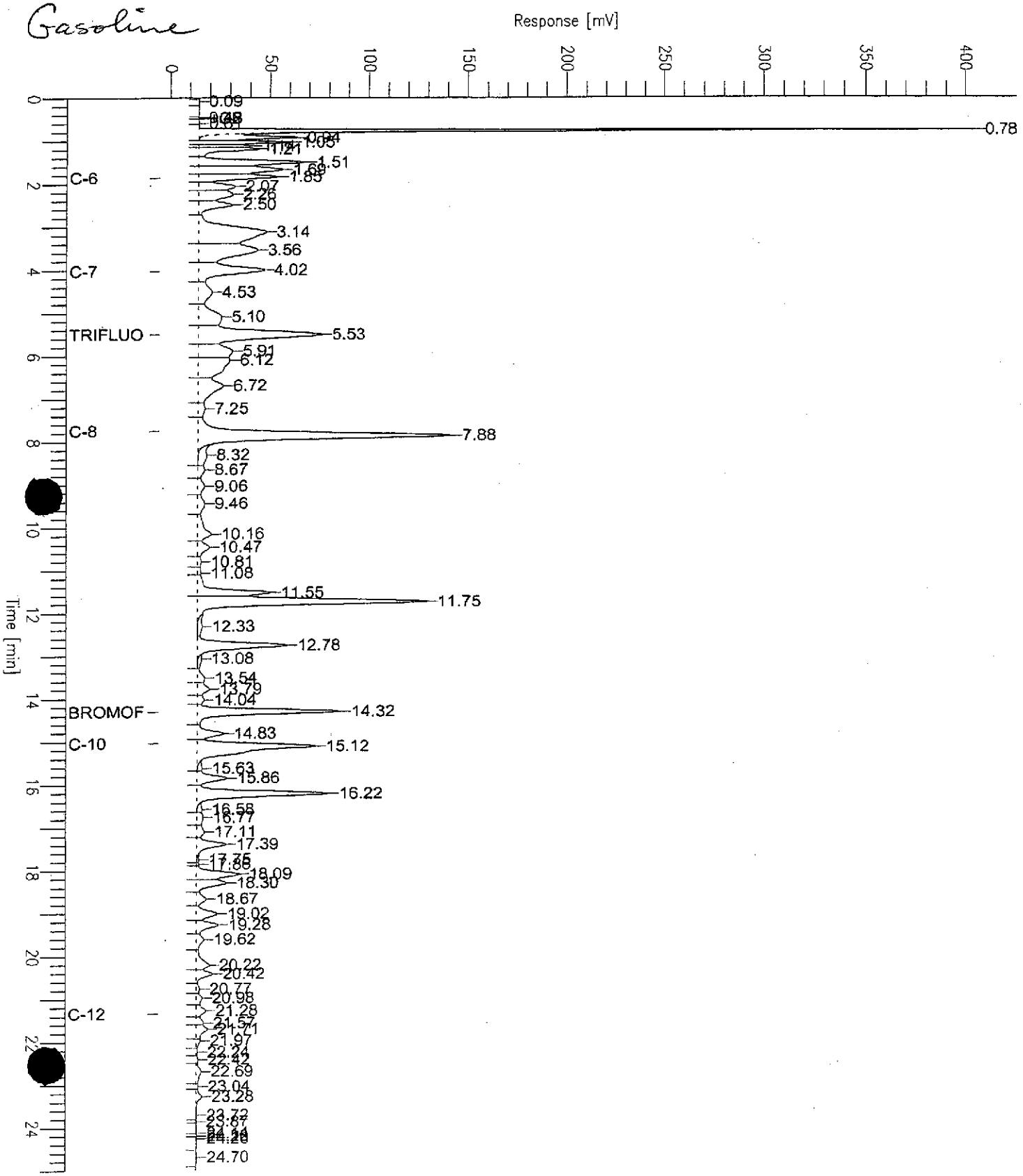
6.1

Chromatogram

Sam[redacted] Name : ccv/lcs,qc224840,84299,03ws1335,2.5/5000
Fi[redacted] : G:\GC05\DATA\251G002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -5 mV

Sample #: Page 1 of 1
Date : 9/8/03 11:43 AM
Time of Injection: 9/8/03 11:18 AM
Low Point : -5.32 mV High Point : 404.93 mV
Plot Scale: 410.2 mV

Gasoline



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8021B
Type:	LCS	Basis:	as received
Lab ID:	QC224839	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84299
Units:	ug/Kg	Analyzed:	09/08/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
MTBE	50.00	55.24	110	74-121
Benzene	50.00	56.70	113	80-121
Toluene	50.00	51.88	104	80-120
Ethylbenzene	50.00	54.32	109	79-120
m,p-Xylenes	100.0	109.1	109	76-120
o-Xylene	50.00	54.43	109	80-120

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		86	45-150
Bromofluorobenzene (PID)		103	42-138

NA= Not Analyzed

7.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Type:	LCS	Basis:	as received
Lab ID:	QC224840	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84299
Units:	mg/Kg	Analyzed:	09/08/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	5.000	5.464	109	80-120
MTBE		NA		
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		116	56-144
Bromofluorobenzene (FID)		126	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed

8.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	167361-001	Batch#:	84299
Matrix:	Soil	Sampled:	09/04/03
Units:	mg/Kg	Received:	09/04/03
Basis:	as received	Analyzed:	09/08/03

Type: MS Lab ID: QC224918

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1088	10.53	6.912	65	24-134
MTBE			NA		
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		120	56-144
Bromofluorobenzene (FID)		179 *	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC224919

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.64	6.577	61	24-134	6	32
MTBE		NA				
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		118	56-144
Bromofluorobenzene (FID)		178 *	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

* Value outside of QC limits; see narrative
NA Not Analyzed
RPD= Relative Percent Difference

9.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	SHAKER TABLE
Project#:	2762	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	09/04/03
Units:	mg/Kg	Received:	09/05/03
Basis:	as received	Prepared:	09/08/03
Diln Fac:	1.000	Analyzed:	09/10/03
Batch#:	84318		

Field ID: UST-NE@9.5 Lab ID: 167390-002
Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	ND	1.0

Surrogate	%REC	Limits
Hexacosane	122	36-141

Field ID: UST-NW@9.5 Lab ID: 167390-003
Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	ND	1.0

Surrogate	%REC	Limits
Hexacosane	119	36-141

Field ID: UST-SE@8 Lab ID: 167390-004
Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	ND	1.0

Surrogate	%REC	Limits
Hexacosane	103	36-141

Field ID: UST-SW@8 Lab ID: 167390-005
Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	36 L Y	1.0

Surrogate	%REC	Limits
Hexacosane	92	36-141

Field ID: UST-SW@10 Lab ID: 167390-006
Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	ND	1.0

Surrogate	%REC	Limits
Hexacosane	102	36-141

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

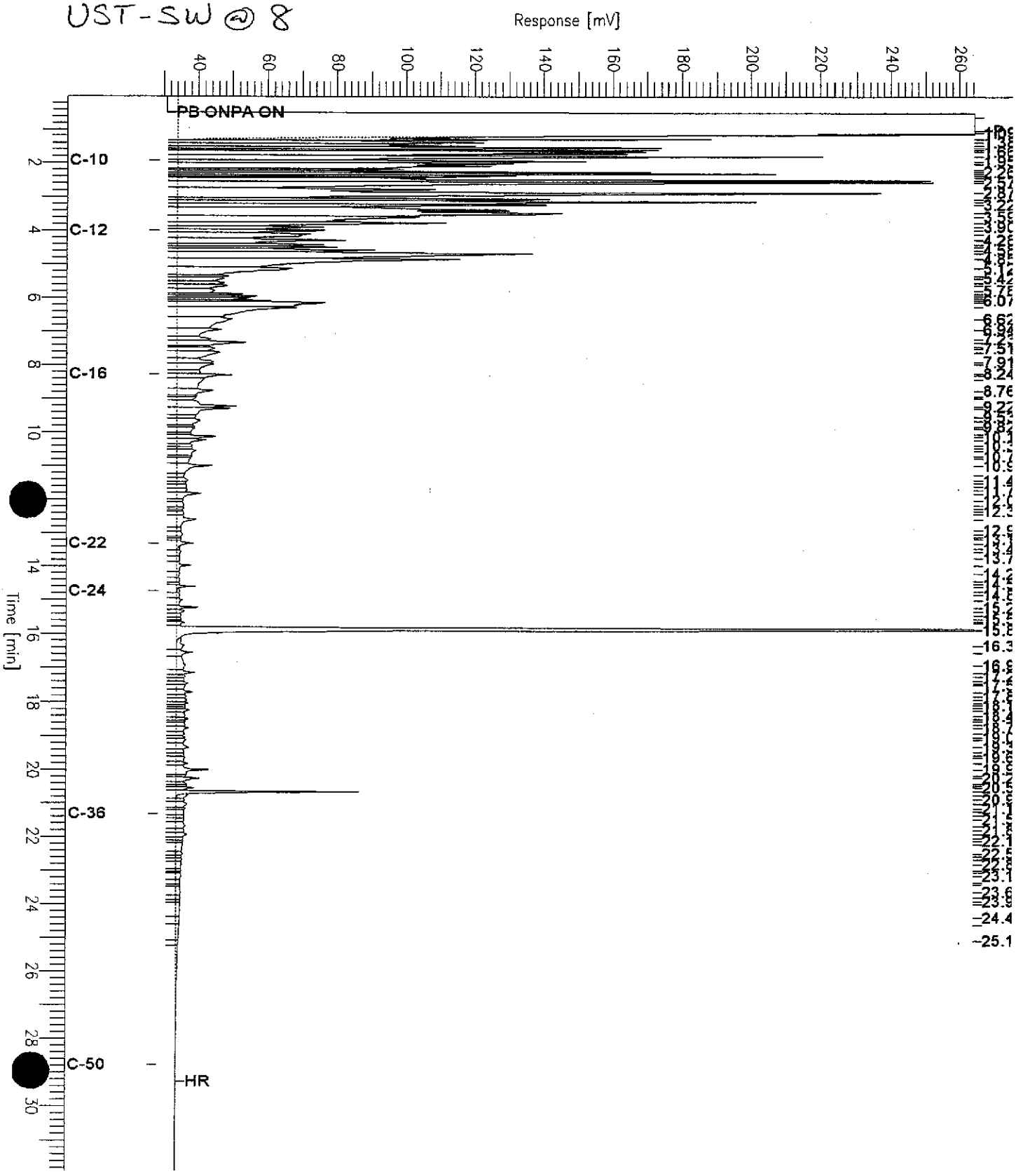
17.0

Chromatogram

Sample Name : 167390-005,84318
File Name : G:\GC15\CHB\252B039.RAW
Method : BTEH244.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 29 mV

Sample #: 84318 Page 1 of 1
Date : 9/10/03 05:11 PM
Time of Injection: 9/10/03 04:37 PM
Low Point : 28.66 mV High Point : 264.40 mV
Plot Scale: 235.7 mV

UST-SW @ 8



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	SHAKER TABLE
Project#:	2762	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	09/04/03
Units:	mg/Kg	Received:	09/05/03
Basis:	as received	Prepared:	09/08/03
Diln Fac:	1.000	Analyzed:	09/10/03
Batch#:	84318		

Field ID:	WOT-W@5.5	Lab ID:	167390-007
Type:	SAMPLE	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	0.99

Surrogate	%REC	Limits
Hexacosane	89	36-141

Type:	BLANK	Cleanup Method:	EPA 3630C
Lab ID:	QC224928		

Analyte	Result	RL
Diesel C10-C24	ND	1.0

Surrogate	%REC	Limits
Hexacosane	110	36-141

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

17.0

Chromatogram

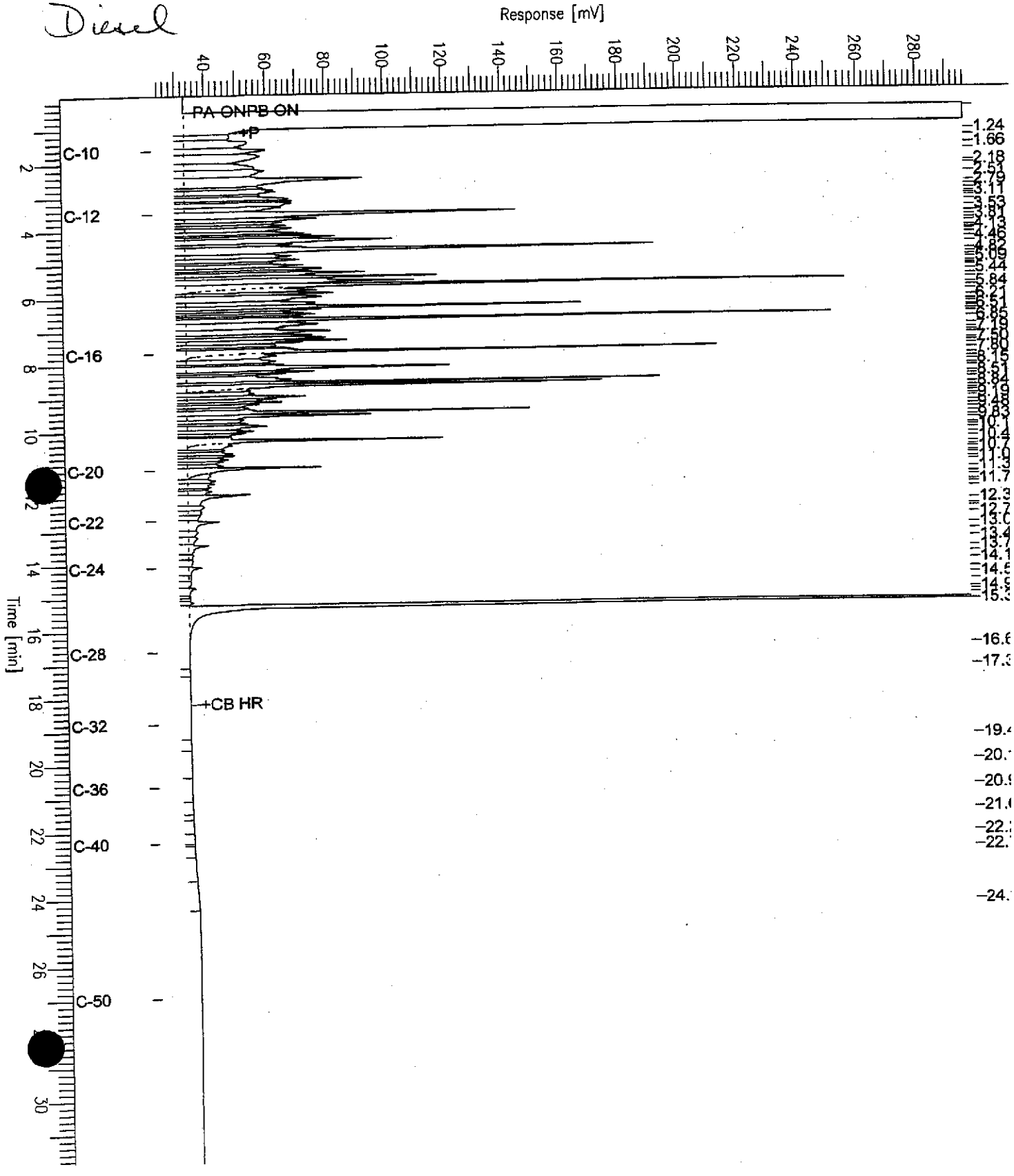
Sample Name : ccv,03ws1374,ds1
File : G:\GC13\CHB\251B002.RAW
Method : BTEH251.MTH
Start Time : 0.01 min
Scale Factor: 0.0

End Time : 31.91 min
Plot Offset: 22 mV

Sample #: 500mg/L
Date : 9/8/03 10:30 AM
Time of Injection: 9/8/03 09:51 AM
Low Point : 22.13 mV
Plot Scale: 273.9 mV

High Point : 296.06 mV

Diesel



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	SHAKER TABLE
Project#:	2762	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC224929	Batch#:	84318
Matrix:	Soil	Prepared:	09/08/03
Units:	mg/Kg	Analyzed:	09/09/03
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.08	47.15	94	49-129

Surrogate	%REC	Limits
Hexacosane	104	36-141

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	SHAKER TABLE
Project#:	2762	Analysis:	EPA 8015B
Field ID:	COMP-2R	Batch#:	84318
MSS Lab ID:	167412-001	Sampled:	09/05/03
Matrix:	Soil	Received:	09/08/03
Units:	mg/Kg	Prepared:	09/08/03
Basis:	as received	Analyzed:	09/11/03
Diln Fac:	1.000		

Type: MS Lab ID: QC224930

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	4.794	50.01	57.25	105	32-134

Surrogate	%REC	Limits
Hexacosane	98	36-141

Type: MSD Lab ID: QC224931

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.97	69.19	129	32-134	19	48

Surrogate	%REC	Limits
Hexacosane	103	36-141

RPD: Relative Percent Difference

19.0

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Field ID:	EX UST PIT	Batch#:	84418
Lab ID:	167390-001	Sampled:	09/04/03
Matrix:	Water	Received:	09/05/03
Units:	ug/L	Analyzed:	09/11/03
Diln Fac:	100.0		

Analyte	Result	RL
MTBE	12,000	50

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	77-129
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-123

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Field ID:	WOT-W@5.5	Diln Fac:	0.9091
Lab ID:	167390-007	Batch#:	84254
Matrix:	Soil	Sampled:	09/04/03
Units:	ug/Kg	Received:	09/05/03
Basis:	as received	Analyzed:	09/05/03

Analyte	Result	RL
Freon 12	ND	9.1
Chloromethane	ND	9.1
Vinyl Chloride	ND	9.1
Bromomethane	ND	9.1
Chloroethane	ND	9.1
Trichlorofluoromethane	ND	4.5
Acetone	ND	18
Freon 113	ND	4.5
1,1-Dichloroethene	ND	4.5
Methylene Chloride	ND	18
Carbon Disulfide	ND	4.5
[illegible]	ND	4.5
[illegible]ns-1,2-Dichloroethene	ND	4.5
Vinyl Acetate	ND	45
1,1-Dichloroethane	ND	4.5
2-Butanone	ND	9.1
cis-1,2-Dichloroethene	ND	4.5
2,2-Dichloropropane	ND	4.5
Chloroform	ND	4.5
Bromochloromethane	ND	4.5
1,1,1-Trichloroethane	ND	4.5
1,1-Dichloropropene	ND	4.5
Carbon Tetrachloride	ND	4.5
1,2-Dichloroethane	ND	4.5
Benzene	ND	4.5
Trichloroethene	ND	4.5
1,2-Dichloropropane	ND	4.5
Bromodichloromethane	ND	4.5
Dibromomethane	ND	4.5
4-Methyl-2-Pentanone	ND	9.1
cis-1,3-Dichloropropene	ND	4.5
Toluene	ND	4.5
trans-1,3-Dichloropropene	ND	4.5
1,1,2-Trichloroethane	ND	4.5
2-Hexanone	ND	9.1
1,3-Dichloropropane	ND	4.5
Tetrachloroethene	ND	4.5

ND = Not Detected
RL = Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Field ID:	WOT-W@5.5	Diln Fac:	0.9091
Lab ID:	167390-007	Batch#:	84254
Matrix:	Soil	Sampled:	09/04/03
Units:	ug/Kg	Received:	09/05/03
Basis:	as received	Analyzed:	09/05/03

Analyte	Result	RL
Dibromochloromethane	ND	4.5
1,2-Dibromoethane	ND	4.5
Chlorobenzene	ND	4.5
1,1,1,2-Tetrachloroethane	ND	4.5
Ethylbenzene	ND	4.5
m,p-Xylenes	ND	4.5
o-Xylene	ND	4.5
Styrene	ND	4.5
Bromoform	ND	4.5
Isopropylbenzene	ND	4.5
1,1,2,2-Tetrachloroethane	ND	4.5
[illegible]3-Trichloropropane	ND	4.5
Propylbenzene	ND	4.5
Bromobenzene	ND	4.5
1,3,5-Trimethylbenzene	ND	4.5
2-Chlorotoluene	ND	4.5
4-Chlorotoluene	ND	4.5
tert-Butylbenzene	ND	4.5
1,2,4-Trimethylbenzene	ND	4.5
sec-Butylbenzene	ND	4.5
para-Isopropyl Toluene	ND	4.5
1,3-Dichlorobenzene	ND	4.5
1,4-Dichlorobenzene	ND	4.5
n-Butylbenzene	ND	4.5
1,2-Dichlorobenzene	ND	4.5
1,2-Dibromo-3-Chloropropane	ND	4.5
1,2,4-Trichlorobenzene	ND	4.5
Hexachlorobutadiene	ND	4.5
Naphthalene	ND	4.5
1,2,3-Trichlorobenzene	ND	4.5

Surrogate	%REC	Limits
Dibromofluoromethane	93	74-128
1,2-Dichloroethane-d4	104	76-130
Toluene-d8	104	80-120
Bromofluorobenzene	100	76-125

ND = Not Detected
RL = Reporting Limit

1.0

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC225324	Batch#:	84418
Matrix:	Water	Analyzed:	09/11/03
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	108	77-129
Toluene-d8	97	80-120
Bromofluorobenzene	100	80-123

ND = Not Detected
RL = Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC225323	Batch#:	84418
Matrix:	Water	Analyzed:	09/11/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	50.00	42.36	85	69-124

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	95	77-129
Toluene-d8	93	80-120
Bromofluorobenzene	100	80-123

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	84418
MSS Lab ID:	167453-002	Sampled:	09/09/03
Matrix:	Water	Received:	09/09/03
Units:	ug/L	Analyzed:	09/11/03
Diln Fac:	1.000		

Type: MS Lab ID: QC225389

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	<0.1100	50.00	40.39	81	67-127

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	77-129
Toluene-d8	104	80-120
Bromofluorobenzene	92	80-123

Type: MSD Lab ID: QC225390

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	50.00	42.21	84	67-127	4	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	77-129
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC224682	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84254
Units:	ug/Kg	Analyzed:	09/05/03

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC224682	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84254
Units:	ug/Kg	Analyzed:	09/05/03

Analyte	Result	RL
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
[illegible],3-Trichloropropane	ND	5.0
[illegible]ylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	98	74-128
1,2-Dichloroethane-d4	97	76-130
Toluene-d8	100	80-120
Bromofluorobenzene	100	76-125

ND= Not Detected
RL= Reporting Limit

3.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Type:	LCS	Basis:	as received
Lab ID:	QC224680	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84254
Units:	ug/Kg	Analyzed:	09/05/03

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	53.88	108	72-125
Benzene	50.00	52.04	104	78-120
Trichloroethene	50.00	51.86	104	76-127
Toluene	50.00	51.25	102	79-120
Chlorobenzene	50.00	48.19	96	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	108	74-128
1,2-Dichloroethane-d4	102	76-130
Toluene-d8	103	80-120
[illegible]mofluorobenzene	103	76-125

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Field ID:	COMP. 2	Diln Fac:	0.9615
MSS Lab ID:	167344-001	Batch#:	84254
Matrix:	Soil	Sampled:	09/04/03
Units:	ug/Kg	Received:	09/04/03
Basis:	as received	Analyzed:	09/05/03

Type: MS Lab ID: QC224721

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.2400	48.08	49.69	103	53-135
Benzene	<0.3800	48.08	47.02	98	55-121
Trichloroethene	0.6082	48.08	47.87	98	46-149
Toluene	<0.4700	48.08	47.53	99	44-129
Chlorobenzene	<0.3800	48.08	44.97	94	48-121

Surrogate	%REC	Limits
Dibromofluoromethane	106	74-128
1,2-Dichloroethane-d4	99	76-130
Toluene-d8	102	80-120
Bromofluorobenzene	99	76-125

Type: MSD Lab ID: QC224722

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	48.08	49.21	102	53-135	1	20
Benzene	48.08	47.78	99	55-121	2	20
Trichloroethene	48.08	48.67	100	46-149	2	20
Toluene	48.08	48.01	100	44-129	1	20
Chlorobenzene	48.08	44.67	93	48-121	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	74-128
1,2-Dichloroethane-d4	98	76-130
Toluene-d8	102	80-120
Bromofluorobenzene	102	76-125

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

California LUFT Metals

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Field ID:	WOT-W@5.5	Batch#:	84342
Matrix:	Soil	Sampled:	09/04/03
Units:	mg/Kg	Received:	09/05/03
Basis:	as received	Prepared:	09/09/03
Diln Fac:	1.000		

Type: SAMPLE
Lab ID: 167390-007

Analyzed: 09/11/03

Analyte	Result	RL
Cadmium	ND	0.25
Chromium	31	0.49
Lead	6.3	0.15
Nickel	36	0.98
Zinc	50	0.98

Type: BLANK
Lab ID: QC225023

Analyzed: 09/10/03

Analyte	Result	RL
Cadmium	ND	0.25
Chromium	ND	0.50
Lead	ND	0.15
Nickel	ND	1.0
Zinc	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California LUFT Metals

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	84342
Units:	mg/Kg	Prepared:	09/09/03
Basis:	as received	Analyzed:	09/10/03
Diln Fac:	1.000		

Type: BS Lab ID: QC225024

Analyte	Spiked	Result	%REC	Limits
Cadmium	10.00	8.700	87	72-120
Chromium	100.0	91.00	91	74-120
Lead	100.0	86.50	87	71-120
Nickel	25.00	22.10	88	72-120
Zinc	25.00	22.50	90	68-120

Type: BSD Lab ID: QC225025

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	10.00	8.750	88	72-120	1	20
Chromium	100.0	92.50	93	74-120	2	20
Lead	100.0	87.50	88	71-120	1	20
Nickel	25.00	22.40	90	72-120	1	20
Zinc	25.00	22.80	91	68-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

California LUFT Metals

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	84342
MSS Lab ID:	167212-001	Sampled:	08/28/03
Matrix:	Soil	Received:	08/28/03
Units:	mg/Kg	Prepared:	09/09/03
Basis:	as received	Analyzed:	09/10/03
Diln Fac:	1.000		

Type: MS Lab ID: QC225026

Analyte	MSS Result	Spiked	Result	%REC	Limits
Cadmium	<0.01900	9.615	6.971	73	47-120
Chromium	35.32	96.15	173.6	144 *	35-131
Lead	17.98	96.15	89.42	74	23-137
Nickel	53.20	24.04	117.8	269 NM	32-136
Zinc	55.67	24.04	91.83	150 NM	20-147

Type: MSD Lab ID: QC225027

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	9.346	6.869	74	47-120	1	24
Chromium	93.46	115.0	85	35-131	39 *	29
Lead	93.46	89.25	76	23-137	2	40
Nickel	23.36	73.83	88 NM	32-136	45 *	35
Zinc	23.36	94.86	168 NM	20-147	4	32

* Value outside of QC limits; see narrative
NM= Not Meaningful
RPD= Relative Percent Difference

22.0

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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

SOMA Environmental Engineering Inc.
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Date: 21-SEP-03
Lab Job Number: 167390
Project ID: 2762 LIQUID
Location: Shakoori

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

Laboratory Number: **167390**
Client: **SOMA Environmental Engineering Inc**
Project: **2762**
Request Date: **09/5/2003**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for one water and six soil samples requested from the above referenced project on September 5, 2003. The samples were received cold and intact.

Total Volatile Hydrocarbons:

The recoveries for the surrogate bromofluorobenzene in the matrix spikes of batch 84299 exceed control limits due to coelution of the surrogate peaks with other hydrocarbon peaks. The associated surrogate recoveries are acceptable.

No other analytical problems were encountered.

Total Extractable Hydrocarbons:

No analytical problems were encountered.

Purgeable Organics (EPA 8260):

No analytical problems were encountered.

Metals:

In the matrix spikes, the recoveries and relative percent differences for chromium, nickel and lead exceed acceptance limits and are not meaningful (NM). The parent sample is not a SOMA sample and the associated blank spikes are acceptable demonstrating the laboratory procedure was in control.

No other analytical problems were encountered.

GW

CHAIN OF CUSTODY FORM

Page 1 of 1

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Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

C&T LOGIN # 167390

Sampler: Roger Kaplan

Project No: 2762

Project Name: Shakoori / CV: 3519 CV Blvd

Project P.O.: —

Turnaround Time: Standard

Report To: Joyce B

Company: SOMA Env Eng

Telephone: (925) 244-6600

Fax: (925) 244-6601

Laboratory Number	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Field Notes	Analyses: TPH g 8015	Analyses: BTEX & MTBE 8260
-1	Ex. UST Pit	4 Sept 2003			X	3	X			X	New Existing UST Pit	X	X
For Laboratory Use Only													

Notes: EDF

RELINQUISHED BY:

	DATE/TIME
	4 Sept 2003 @ 11:00
	Sept 5, 2003 12:00
X	9/4/03 @ 15:02

RECEIVED BY:

	DATE/TIME
X Eugene Kennedy	Sept 5, 2003 11:00am
X	7/5/03 1215pm

Signature

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Field ID:	EX UST PIT	Sampled:	09/04/03
Matrix:	Water	Received:	09/05/03
Units:	ug/L		

Type: SAMPLE Lab ID: 167390-001

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Analysis
Gasoline C7-C12	1,300	50	1.000	84291	09/07/03	8015B
MTBE	14,000	50	25.00	84338	09/09/03	EPA 8021B
Benzene	110	0.50	1.000	84291	09/07/03	EPA 8021B
Toluene	220	0.50	1.000	84291	09/07/03	EPA 8021B
Ethylbenzene	18	0.50	1.000	84291	09/07/03	EPA 8021B
m,p-Xylenes	110	0.50	1.000	84291	09/07/03	EPA 8021B
o-Xylene	61	0.50	1.000	84291	09/07/03	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	118	57-150	1.000	84291	09/07/03	8015B
Bromofluorobenzene (FID)	124	65-144	1.000	84291	09/07/03	8015B
Trifluorotoluene (PID)	96	54-149	1.000	84291	09/07/03	EPA 8021B
Bromofluorobenzene (PID)	95	58-143	1.000	84291	09/07/03	EPA 8021B

T BLANK Batch#: 84291
L ID: QC224795 Analyzed: 09/07/03
Diln Fac: 1.000

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)	98	57-150	8015B
Bromofluorobenzene (FID)	104	65-144	8015B
Trifluorotoluene (PID)	78	54-149	EPA 8021B
Bromofluorobenzene (PID)	86	58-143	EPA 8021B

Type: BLANK Batch#: 84338
Lab ID: QC225009 Analyzed: 09/09/03
Diln Fac: 1.000

Analyte	Result	RL	Analysis
MTBE	ND	2.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	57-150	8015B
Bromofluorobenzene (FID)	120	65-144	8015B
Trifluorotoluene (PID)	76	54-149	EPA 8021B
Bromofluorobenzene (PID)	97	58-143	EPA 8021B

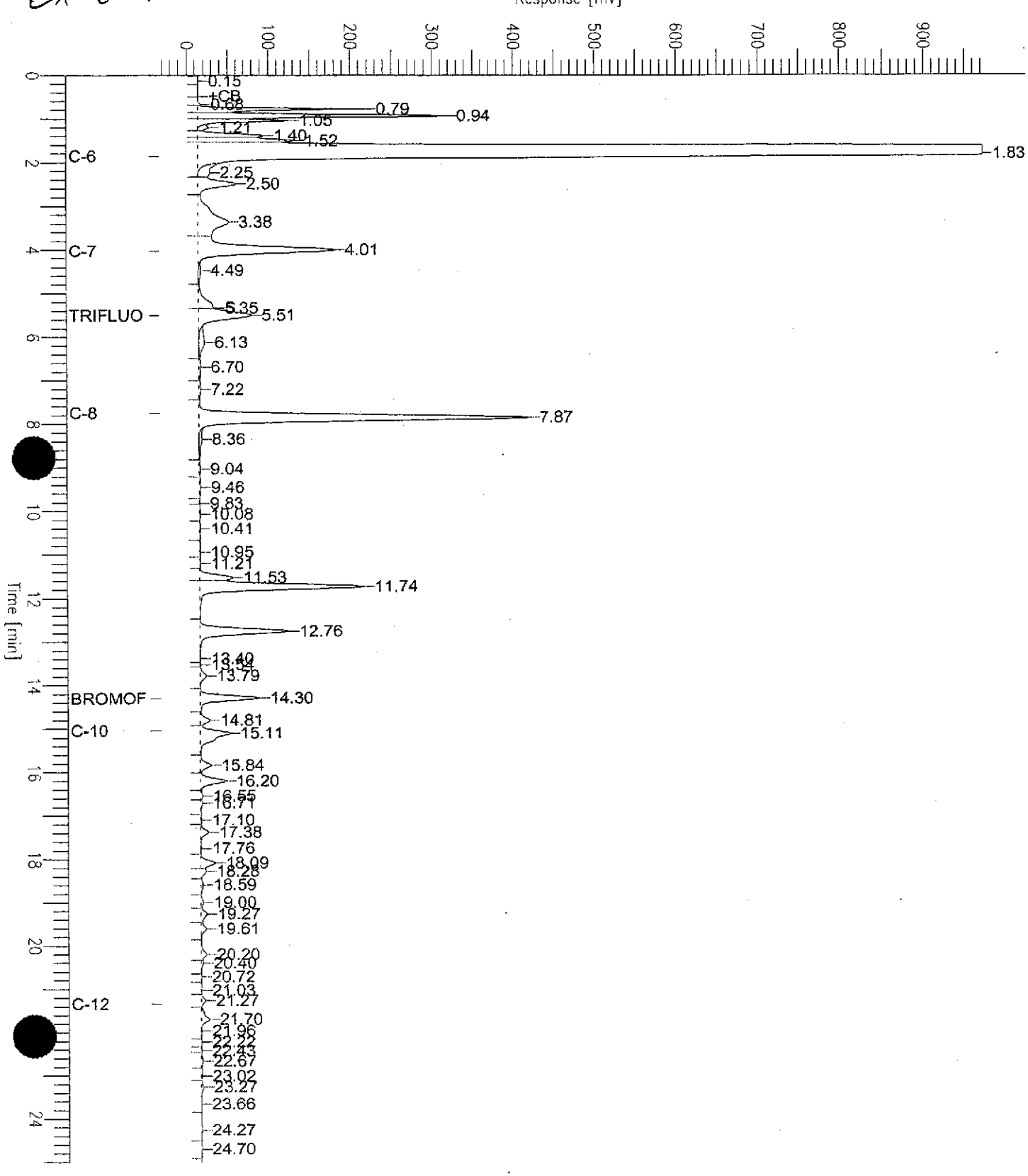
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 167390-001,84291
FileName : G:\GC05\DATA\249G019.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -34 mV

Sample #: bl.0 Page 1 of 1
Date : 9/10/03 06:55 PM
Time of Injection: 9/7/03 07:57 AM
Low Point : -33.67 mV High Point : 972.70 mV
Plot Scale: 1006.4 mV

EX UST PIT

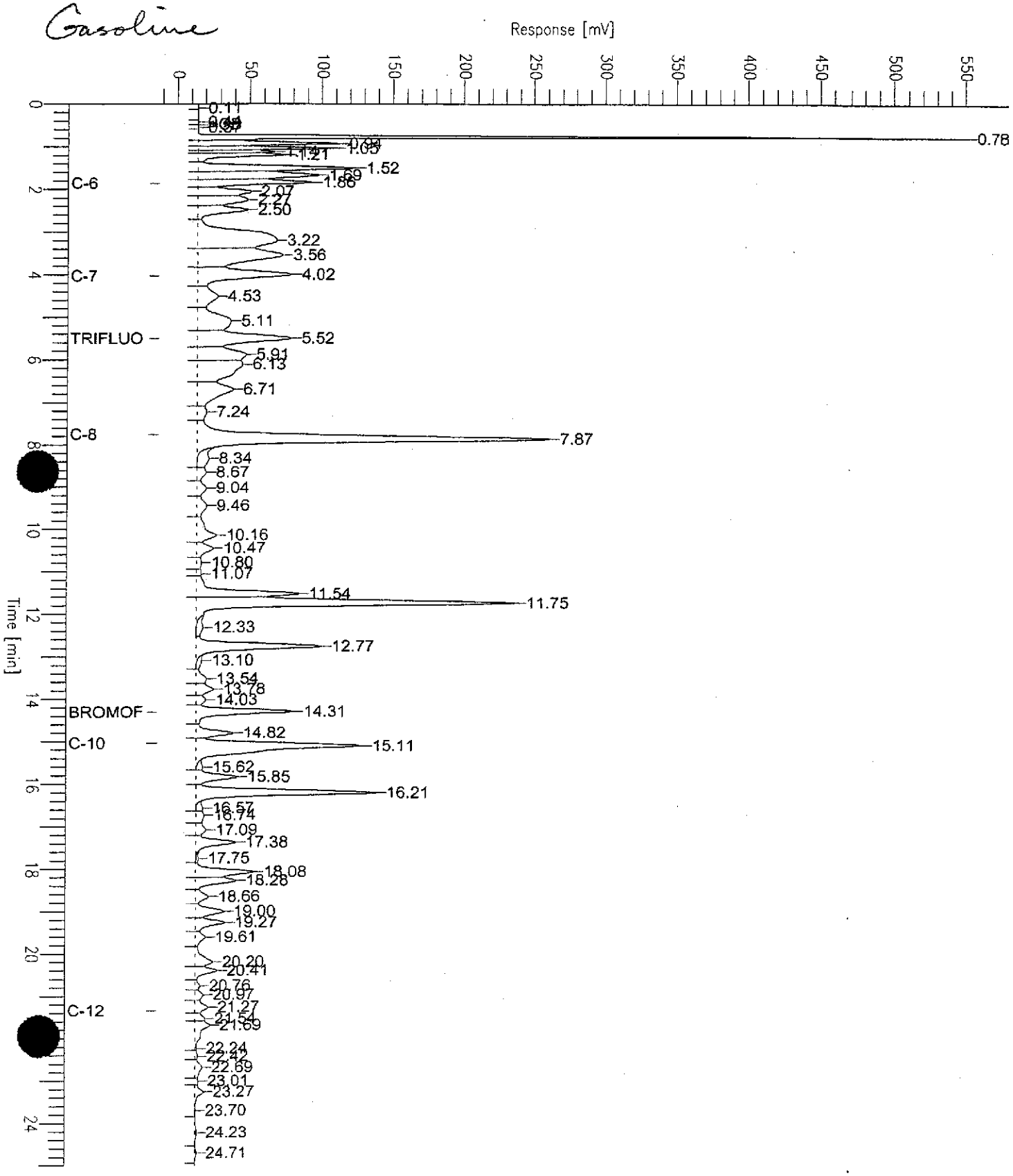


Chromatogram

Sample Name : lcs,qc224796,84291,03ws1335,5/5000
FileName : g:\gc05\data\249g005.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -13 mV

Sample #: Page 1 of 1
Date : 9/8/03 08:22 AM
Time of Injection: 9/7/03 12:09 AM
Low Point : -12.66 mV High Point : 551.07 mV
Plot Scale: 563.7 mV

Gasoline



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Total Volatile Hydrocarbons

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC224796	Batch#:	84291
Matrix:	Water	Analyzed:	09/07/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,110	106	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	125	57-150
Bromofluorobenzene (FID)	122	65-144

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Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC224797	Batch#:	84291
Matrix:	Water	Analyzed:	09/06/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	20.32	102	78-123
Toluene	20.00	18.20	91	79-120
Ethylbenzene	20.00	18.79	94	80-120
m,p-Xylenes	40.00	38.57	96	76-120
o-Xylene	20.00	18.94	95	80-121

Surrogate	%REC	Limits
Trifluorotoluene (PID)	78	54-149
Bromofluorobenzene (PID)	86	58-143

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Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC225010	Batch#:	84338
Matrix:	Water	Analyzed:	09/09/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	9.251	93	63-133

Surrogate	%REC	Limits
Trifluorotoluene (PID)	78	54-149
Bromofluorobenzene (PID)	98	58-143

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Total Volatile Hydrocarbons

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Batch#:	84291
MSS Lab ID:	167404-001	Sampled:	09/05/03
Matrix:	Water	Received:	09/05/03
Units:	ug/L	Analyzed:	09/07/03
Diln Fac:	1.000		

Type: MS Lab ID: QC224798

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	36.70	2,000	2,088	103	76-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	57-150
Bromofluorobenzene (FID)	136	65-144

Type: MSD Lab ID: QC224799

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,083	102	76-120	0	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	111	57-150
Bromofluorobenzene (FID)	121	65-144

RPD= Relative Percent Difference

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Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	167390	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8021B
Field ID:	ZZZZZZZZZZ	Batch#:	84338
MSS Lab ID:	167421-001	Sampled:	09/08/03
Matrix:	Water	Received:	09/08/03
Units:	ug/L	Analyzed:	09/09/03
Diln Fac:	1.000		

Type: MS Lab ID: QC225113

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	2.658	20.00	21.60	95	38-149

Surrogate	%REC	Limits
Trifluorotoluene (PID)	83	54-149
Bromofluorobenzene (PID)	89	58-143

Type: MSD Lab ID: QC225114

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	19.73	85	38-149	9	38

Surrogate	%REC	Limits
Trifluorotoluene (PID)	86	54-149
Bromofluorobenzene (PID)	91	58-143

RPD= Relative Percent Difference

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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

SOMA Environmental Engineering Inc.
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Date: 15-SEP-03
Lab Job Number: 167344
Project ID: 2762
Location: 3519 CV Blvd Shakoori/CV

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

Curtis & Tompkins, Ltd.

Laboratory Number: **167344**
Client: **SOMA Environmental Engineering Inc.**
Project: **2762**
Request Date: **09/04/2003**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for one soil sample requested from the above referenced project on September 9, 2003. The sample was received cold and intact.

An EDF was not performed on this SDG because the samples were collected incorrectly. The entire job could not be canceled because the results were due to the client when cancellation was requested.

Total Volatile Hydrocarbons:

The recovery for the surrogate bromofluorobenzene in the sample exceeded control limits. The associated surrogate trifluorotoluene was acceptable.

No other analytical problems were encountered.

Purgeable Organics (EPA 8260):

No analytical problems were encountered.

Metals:

No analytical problems were encountered.

CHAIN OF CUSTODY FORM

Page 1 of 1

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Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

C&T LOGIN # 167344

Analyses

Sampler: Eugene Fuerte

Project No: 2762

Report To: Joyce B

Project Name: Shakoori/GW: 3519 GW BWA

Company: SOMA Env. Eng

Project P.O.: —

Telephone: (925) 244-6600

Turnaround Time: 24 hr TAT

Fax: (925) 244-6601

Laboratory Number	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO	HNO_3	ICE	Field Notes	TPH-g 8015	BTEX + MtBE 8260	TPH-d 8015	Total Pb
1	Comp. 2	4 Sept 2003	X			4				X	Soil Comp: NAW UST Area G-14	X	X	X	X

For Laboratory Use

Preservation Correct? ☑ Yes ☐ No ☐ N/A

Received ☐ On Ice ☐ Cold ☐ Ambient ☐ Intact

Notes: EDF
Analyze Pb w/ STLC if Pb over 5 ppm

RELINQUISHED BY:	RECEIVED BY:
Signature	Signature
Sept. 4, 2003 DATE/TIME	9-4-03 10:55 am DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	167344	Location:	3519 CV Blvd Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Field ID:	COMP. 2	Batch#:	84202
Matrix:	Soil	Sampled:	09/04/03
Units:	mg/Kg	Received:	09/04/03
Basis:	as received	Analyzed:	09/04/03
Diln Fac:	1.000		

Type: SAMPLE Lab ID: 167344-001

Analyte	Result	RL
Gasoline C7-C12	ND	0.99

Surrogate	%REC	Limits
Trifluorotoluene (FID)	94	56-144
Bromofluorobenzene (FID)	140	51-142

Type: BLANK Lab ID: QC224471

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Trifluorotoluene (FID)	88	56-144
Bromofluorobenzene (FID)	121	51-142

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	167344	Location:	3519 CV Blvd Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Type:	LCS	Basis:	as received
Lab ID:	QC224473	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84202
Units:	mg/Kg	Analyzed:	09/04/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.00	10.87	109	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	56-144
Bromofluorobenzene (FID)	143 *	51-142

*= Value outside of QC limits; see narrative

16.0

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	167344	Location:	3519 CV Blvd Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	167318-004	Batch#:	84202
Matrix:	Soil	Sampled:	09/03/03
Units:	mg/Kg	Received:	09/03/03
Basis:	as received	Analyzed:	09/04/03

Type: MS Lab ID: QC224490

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1340	10.42	8.310	78	24-134

Surrogate	%REC	Limits
Trifluorotoluene (FID)	134	56-144
Bromofluorobenzene (FID)	126	51-142

Type: MSD Lab ID: QC224491

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.615	7.818	80	24-134	2	32

Surrogate	%REC	Limits
Trifluorotoluene (FID)	135	56-144
Bromofluorobenzene (FID)	127	51-142

RPD= Relative Percent Difference

17.0

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Purgeable Aromatics by GC/MS

Lab #:	167344	Location:	3519 CV Blvd Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Field ID:	COMP. 2	Diln Fac:	0.9615
Lab ID:	167344-001	Batch#:	84254
Matrix:	Soil	Sampled:	09/04/03
Units:	ug/Kg	Received:	09/04/03
Basis:	as received	Analyzed:	09/05/03

Analyte	Result	RL
MTBE	ND	4.8
Benzene	ND	4.8
Toluene	ND	4.8
Chlorobenzene	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
[illegible]-Dichlorobenzene	ND	4.8

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	76-130
Toluene-d8	100	80-120
Bromofluorobenzene	101	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167344	Location:	3519 CV Blvd Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC224681	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84254
Units:	ug/Kg	Analyzed:	09/05/03

Analyte	Result	RL
MTBE	ND	5.0
Benzene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	76-130
Toluene-d8	102	80-120
Bromofluorobenzene	103	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167344	Location:	3519 CV Blvd Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Type:	LCS	Basis:	as received
Lab ID:	QC224680	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84254
Units:	ug/Kg	Analyzed:	09/05/03

Analyte	Spiked	Result	%REC	Limits
Benzene	50.00	52.04	104	78-120
Toluene	50.00	51.25	102	79-120
Chlorobenzene	50.00	48.19	96	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	76-130
Toluene-d8	103	80-120
Bromofluorobenzene	103	76-125

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Purgeable Aromatics by GC/MS

Lab #:	167344	Location:	3519 CV Blvd Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8260B
Field ID:	COMP. 2	Diln Fac:	0.9615
MSS Lab ID:	167344-001	Batch#:	84254
Matrix:	Soil	Sampled:	09/04/03
Units:	ug/Kg	Received:	09/04/03
Basis:	as received	Analyzed:	09/05/03

Type: MS Lab ID: QC224721

Analyte	MSS Result	Spiked	Result	%REC	Limits
Benzene	<0.3800	48.08	47.02	98	55-121
Toluene	<0.4700	48.08	47.53	99	44-129
Chlorobenzene	<0.3800	48.08	44.97	94	48-121

Surrogate	%REC	Limits
[illegible]-Dichloroethane-d4	99	76-130
[illegible]uene-d8	102	80-120
Bromofluorobenzene	99	76-125

Type: MSD Lab ID: QC224722

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	48.08	47.78	99	55-121	2	20
Toluene	48.08	48.01	100	44-129	1	20
Chlorobenzene	48.08	44.67	93	48-121	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	76-130
Toluene-d8	102	80-120
Bromofluorobenzene	102	76-125

RPD= Relative Percent Difference

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Lead

Lab #:	167344	Location:	3519 CV Blvd Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	84236
Field ID:	COMP. 2	Sampled:	09/04/03
Matrix:	Soil	Received:	09/04/03
Units:	mg/Kg	Prepared:	09/05/03
Basis:	as received	Analyzed:	09/05/03
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	167344-001	4.6	0.14
BLANK	QC224605	ND	0.15

ND= Not Detected
RL= Reporting Limit

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Lead

Lab #:	167344	Location:	3519 CV Blvd Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84236
Units:	mg/Kg	Prepared:	09/05/03
Basis:	as received	Analyzed:	09/05/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC224606	100.0	92.95	93	71-120		
BSD	QC224607	100.0	95.30	95	71-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Lead

Lab #:	167344	Location:	3519 CV Blvd Shakoori/CV
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	STANDARD	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Field ID:	COMP. 2	Batch#:	84236
MSS Lab ID:	167344-001	Sampled:	09/04/03
Matrix:	Soil	Received:	09/04/03
Units:	mg/Kg	Prepared:	09/05/03
Basis:	as received	Analyzed:	09/05/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC224608	12.81	75.19	75.08	83	23-137		
MSD	QC224609		88.50	91.15	89	23-137	5	40

RPD= Relative Percent Difference

8.C

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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

SOMA Environmental Engineering Inc.
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Date: 09-SEP-03
Lab Job Number: 167323
Project ID: 2762
Location: Shakoori

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

Curtis & Tompkins, Ltd.

Laboratory Number: **167323**
Client: **SOMA Environmental Engineering Inc.**
Project: **2762-Shakoori**
Request Date: **09/03/2003**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for one soil sample requested from the above referenced project on September 3, 2003. The sample was received cold and intact.

Total Volatile Hydrocarbons:

The recovery for the surrogate trifluorotoluene in the sample exceeds control limits due to the coelution of the surrogate peak with hydrocarbon peaks.

No other analytical problems were encountered.

Metals:

No analytical problems were encountered.

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Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

C&T LOGIN # 167323

Analyses

Sampler: Eugene Fierro

Project No: 27762

Report To: Joyce B

Project Name: Shakoori / CV: 3519 CV Blvd

Company : SOMA

Project P.O.: —

Telephone: (925) 244-6600

Turnaround Time: 24hr

Fax: (925) 244-6601

Laboratory Number	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste		# of Containers	Preservative: HCL	Preservative: H_2SO	Preservative: HNO_3	Preservative: ICE		Field Notes	TPH-g 8015	BTEX & MTBE	TPH-d	Total Pb							
-1	Comp-1	2 Sept 2003	X				4				✓		New UST Area - NW 4x 0.5'	X	X		X							

For Laboratory Use

Received ☒ On Ice ☒ Cold ☐ Ambient ☒ Intact

Preservation Correct? ☒ Yes ☐ No ☐ N/A

Notes: 24hr TAT
Run STLC Pb if total Pb more than _ ppm

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
Eugene J. Fierro	Sept. 2, 2003		9-3-03 2:50 pm

Signature

Curtis & Tompkins, Ltd.

Laboratory Number: **167168**
Client: **SOMA Environmental Engineering Inc.**
Project: **2752-1800 W 10th Street**
Request Date: **08/26/2003**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for one water and two soil samples requested from the above referenced project on August 26, 2003. The samples were received cold and intact.

Total Extractable Hydrocarbons:

The matrix spikes were not reported for the soil batch 84059. The recoveries were not meaningful due to the concentration of diesel in the parent sample rendering the spiked amount insignificant.

No other analytical problems were encountered.

Purgeable Organics (EPA 8260):

No analytical problems were encountered.

Metals:

In batch 84087, the recoveries for nickel in the matrix spike dup and the relative percent difference (RPD) exceed acceptance limits. The matrix spikes were run at a dilution and therefore the antimony recoveries were diluted out (DO). The parent sample was not a SOMA sample and the associated blank spikes recoveries and RPDs were acceptable.No analytical problems were encountered.

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167323	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Field ID:	COMP-1	Diln Fac:	1.000
Matrix:	Soil	Sampled:	09/03/03
Basis:	as received	Received:	09/03/03

Type: SAMPLE Lab ID: 167323-001

Analyte	Result	RL	Units	Batch#	Analyzed	Analysis
Gasoline C7-C12	8.8	1.1	mg/Kg	84164	09/03/03	8015B
MTBE	ND	18	ug/Kg	84202	09/04/03	EPA 8021B
Benzene	ND	5.4	ug/Kg	84164	09/03/03	EPA 8021B
Toluene	ND	5.4	ug/Kg	84164	09/03/03	EPA 8021B
Ethylbenzene	32	5.4	ug/Kg	84164	09/03/03	EPA 8021B
m,p-Xylenes	23	5.4	ug/Kg	84164	09/03/03	EPA 8021B
o-Xylene	16	5.4	ug/Kg	84164	09/03/03	EPA 8021B

Surrogate	%REC	Limits	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	160 *	56-144	84164	09/03/03	8015B
Bromofluorobenzene (FID)	131	51-142	84164	09/03/03	8015B
Trifluorotoluene (PID)	109	45-150	84164	09/03/03	EPA 8021B
Bromofluorobenzene (PID)	109	42-138	84164	09/03/03	EPA 8021B

Type: BLANK Batch#: 84164
Lab ID: QC224324 Analyzed: 09/03/03

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.20	mg/Kg	8015B
Benzene	ND	1.0	ug/Kg	EPA 8021B
Toluene	ND	1.0	ug/Kg	EPA 8021B
Ethylbenzene	ND	1.0	ug/Kg	EPA 8021B
m,p-Xylenes	ND	1.0	ug/Kg	EPA 8021B
o-Xylene	ND	1.0	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	99	56-144	8015B
Bromofluorobenzene (FID)	107	51-142	8015B
Trifluorotoluene (PID)	88	45-150	EPA 8021B
Bromofluorobenzene (PID)	96	42-138	EPA 8021B

Type: BLANK Batch#: 84202
Lab ID: QC224471 Analyzed: 09/04/03
Units: ug/Kg

Analyte	Result	RL	Analysis
MTBE	ND	20	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	88	56-144	8015B
Bromofluorobenzene (FID)	121	51-142	8015B
Trifluorotoluene (PID)	70	45-150	EPA 8021B
Bromofluorobenzene (PID)	99	42-138	EPA 8021B

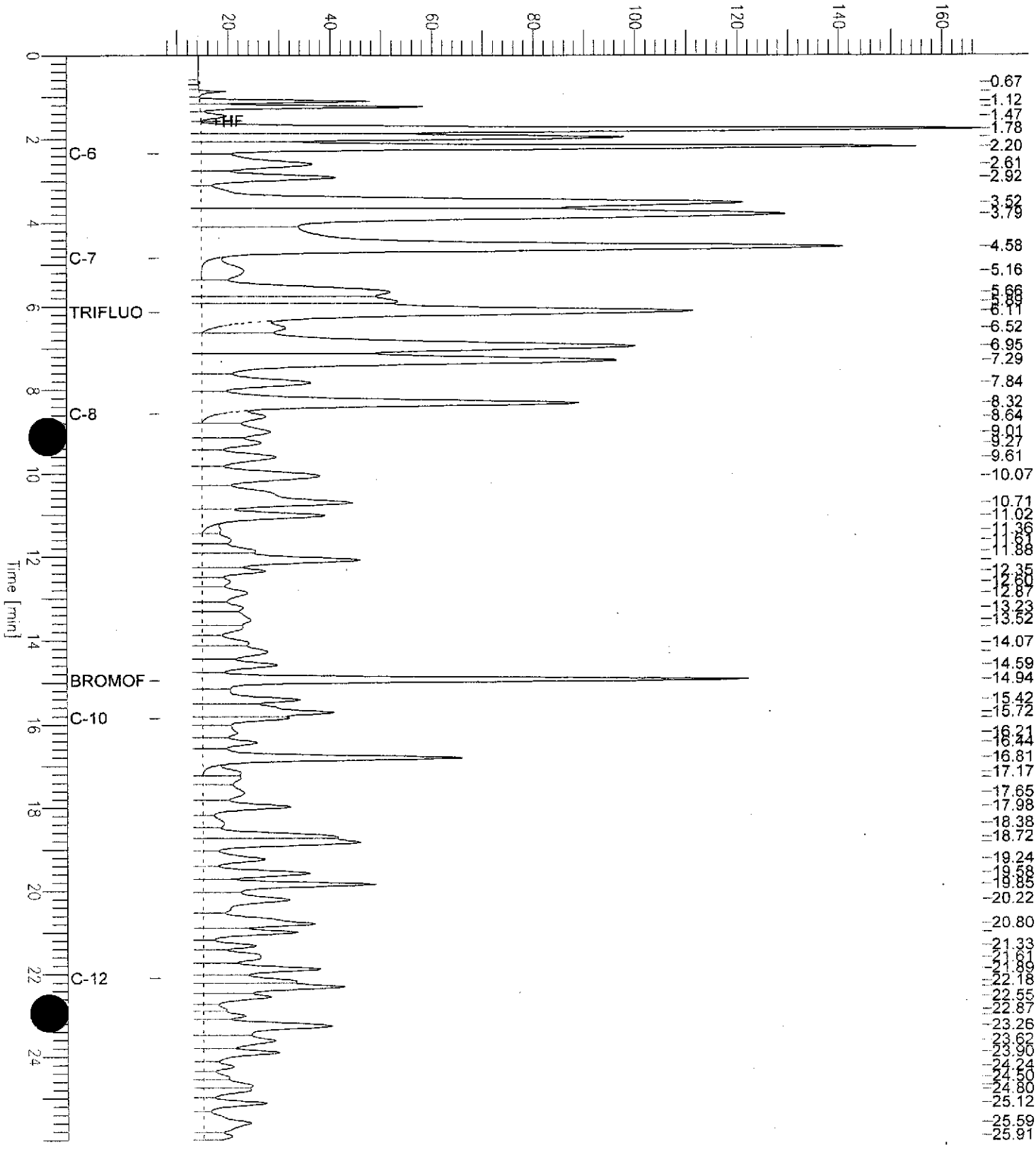
* Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

GC07 TVH 'A' Data File RTX 502

Sample Name : 167323-001,84164,tvh+mbtxe
FileName : G:\GC07\DATA\245A017.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 6 mV

Sample #: a Page 1 of 1
Date : 9/4/03 08:56 AM
Time of Injection: 9/3/03 07:11 PM
Low Point : 6.41 mV High Point : 167.49 mV
Plot Scale: 161.1 mV

COMP-1

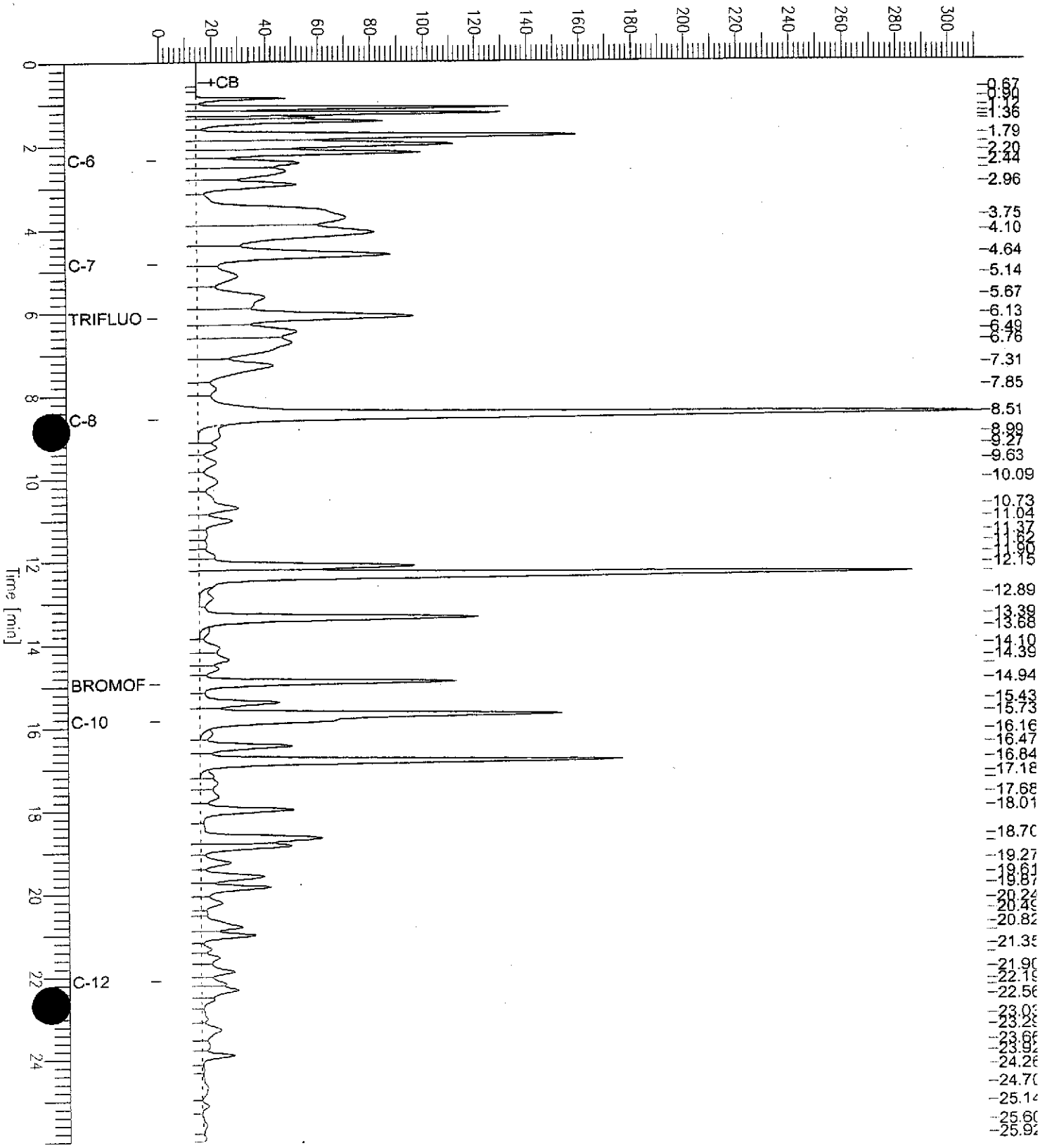


GC07 TVH 'A' Data File RTX 502

Sample Name : ccv/lcs,qc224326,84164,03ws1335,5/5000
FileName : G:\GC07\DATA\245A003.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: -1 mV

Sample #: Page 1 of 1
Date : 9/3/03 10:18 AM
Time of Injection: 9/3/03 09:52 AM
Low Point : -0.64 mV High Point : 311.19 mV
Plot Scale: 311.8 mV

Gasoline



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Curtis & Tompkins Laboratories Analytical Report

Lab #:	167323	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	EPA 8021B
Type:	LCS	Basis:	as received
Lab ID:	QC224325	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84164
Units:	ug/Kg	Analyzed:	09/03/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
Benzene	100.0	95.45	95	80-121
Toluene	100.0	93.82	94	80-120
Ethylbenzene	100.0	93.27	93	79-120
m,p-Xylenes	200.0	185.0	92	76-120
o-Xylene	100.0	91.79	92	80-120

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		89	45-150
Bromofluorobenzene (PID)		96	42-138

NA= Not Analyzed

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167323	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Type:	LCS	Basis:	as received
Lab ID:	QC224326	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84164
Units:	mg/Kg	Analyzed:	09/03/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.00	10.97	110	80-120
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		120	56-144
Bromofluorobenzene (FID)		115	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	167323	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Type:	BS	Basis:	as received
Lab ID:	QC224472	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84202
Units:	ug/Kg	Analyzed:	09/04/03

Analyte	Spiked	Result	%REC	Limits	Analysis
MTBE	100.0	92.55	93	74-121	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	92	56-144	8015B
Bromofluorobenzene (FID)	129	51-142	8015B
Trifluorotoluene (PID)	73	45-150	EPA 8021B
Bromofluorobenzene (PID)	106	42-138	EPA 8021B

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	167323	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762		
Type:	BSD	Basis:	as received
Lab ID:	QC224514	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84202
Units:	ug/Kg	Analyzed:	09/04/03

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analysis
MTBE	100.0	85.14	85	74-121	8	20	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	85	56-144	8015B
Bromofluorobenzene (FID)	127	51-142	8015B
Trifluorotoluene (PID)	69	45-150	EPA 8021B
Bromofluorobenzene (PID)	106	42-138	EPA 8021B

RPD= Relative Percent Difference

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	167323	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2762	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	167293-001	Batch#:	84164
Matrix:	Soil	Sampled:	09/02/03
Units:	mg/Kg	Received:	09/02/03
Basis:	as received	Analyzed:	09/03/03

Type: MS Lab ID: QC224444

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.4167	9.804	5.600	53	24-134
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		121	56-144
Bromofluorobenzene (FID)		108	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC224445

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.20	5.813	53	24-134	0	32
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		121	56-144
Bromofluorobenzene (FID)		109	51-142
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Not Analyzed
RPD= Relative Percent Difference

7.1

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Lead

Lab #:	167323	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	84199
Field ID:	COMP-1	Sampled:	09/03/03
Matrix:	Soil	Received:	09/03/03
Units:	mg/Kg	Prepared:	09/03/03
Basis:	as received	Analyzed:	09/04/03
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	167323-001	10	0.14
BLANK	QC224457	ND	0.15

ND= Not Detected
RL= Reporting Limit

1.1

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Lead

Lab #:	167323	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84199
Units:	mg/Kg	Prepared:	09/03/03
Basis:	as received	Analyzed:	09/04/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC224458	100.0	80.50	81	71-120		
BSD	QC224459	100.0	80.50	81	71-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Lead

Lab #:	167323	Location:	Shakoori
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2762	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	84199
MSS Lab ID:	167209-008	Sampled:	08/27/03
Matrix:	Soil	Received:	08/27/03
Units:	mg/Kg	Prepared:	09/03/03
Basis:	as received	Analyzed:	09/04/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC224460	13.69	92.17	81.57	74	23-137		
MSD	QC224461		90.50	81.45	75	23-137	1	40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

SOMA Environmental Engineering Inc.
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Date: 04-SEP-03
Lab Job Number: 167056
Project ID: 2672
Location: 3519 Castro Valley Blvd.

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

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Page ____ of ____

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Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

C&T LOGIN # 167856

Sampler: Eugene Fierro
Report To: Roger Papler
Company: SoMA Env.
Telephone: (925) 244-6600
Fax: (925) 244-6601

Project No: 2670
Project Name: 3519 Castro Valley Blvd.
Project P.O.:
Turnaround Time: 24 hrs - Pb Standard - rest

Laboratory Number	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO	HNO_3	ICE	Field Notes	Analyses: Total Pb	TPH-g	BTEX	MTBE	STLC
For Laboratory Use																
-1	excavation SB1	Aug 20, 2003	X			4 tubes				X		X	X	X	X	X
-2																
-3																
-4																
-5																
-6	excavation SB2		X			4 tubes				X		X	X	X	X	X
-7																
-8																
-9																
-10																

Received: On ice ☐ Cold ☐ Ambient ☑ Intact

Preservation Correct? ☑ Yes ☐ No ☐ N/A

Notes: EDF. Pb - 24 hrs.
only if total Pb exceeds 50 ppm, please rus STLC
Please composite all soils into single sample for SB1 and SB2

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
Signature	Aug 20 2003 1:45pm	8-20-03	1:55pm
	DATE/TIME		DATE/TIME
	DATE/TIME		DATE/TIME

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167056	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2672		
Matrix:	Soil	Sampled:	08/20/03
Basis:	as received	Received:	08/20/03
Batch#:	83918	Analyzed:	08/22/03

Field ID: SB1 COMP
Type: SAMPLE
Lab ID: 167056-005
Diln Fac: 1.000

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	8015B
MTBE	230	21	ug/Kg	EPA 8021B
Benzene	20 C	5.2	ug/Kg	EPA 8021B
Toluene	ND	5.2	ug/Kg	EPA 8021B
Ethylbenzene	9.8	5.2	ug/Kg	EPA 8021B
m,p-Xylenes	13	5.2	ug/Kg	EPA 8021B
o-Xylene	ND	5.2	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	103	56-144	8015B
Bromofluorobenzene (FID)	104	51-142	8015B
Trifluorotoluene (PID)	96	45-150	EPA 8021B
Bromofluorobenzene (PID)	102	42-138	EPA 8021B

Field ID: SB2 COMP
Type: SAMPLE
Lab ID: 167056-010
Diln Fac: 25.00

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	390	25	mg/Kg	8015B
MTBE	ND	500	ug/Kg	EPA 8021B
Benzene	ND	130	ug/Kg	EPA 8021B
Toluene	ND	130	ug/Kg	EPA 8021B
Ethylbenzene	2,800	130	ug/Kg	EPA 8021B
m,p-Xylenes	6,600	130	ug/Kg	EPA 8021B
o-Xylene	3,200	130	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	136	56-144	8015B
Bromofluorobenzene (FID)	128	51-142	8015B
Trifluorotoluene (PID)	119	45-150	EPA 8021B
Bromofluorobenzene (PID)	111	42-138	EPA 8021B

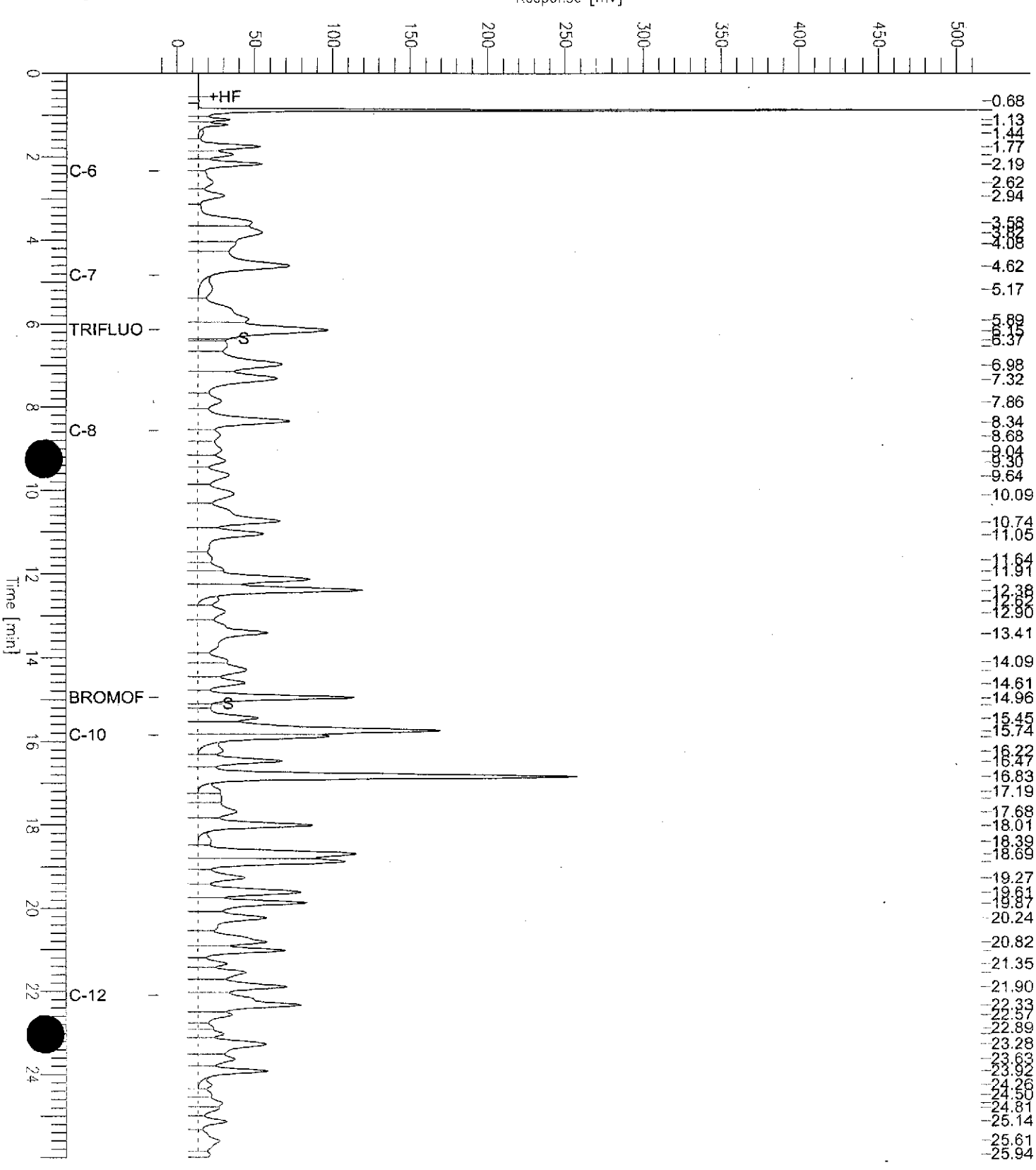
C = Presence confirmed, but RPD between columns exceeds 40%.
ND= Not Detected
RL= Reporting Limit

GC07 TVH 'A' Data File RTX 502

Sam[redacted]Name : 167056-010,83918
FileName : G:\GC07\DATA\234A013.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: -11 mV

Sample #: Page 1 of 1
Date : 8/23/03 11:54 AM
Time of Injection: 8/22/03 05:44 PM
Low Point : -11.28 mV High Point : 516.41 mV
Plot Scale: 527.7 mV

SB2 COMP



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167056	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2672		
Matrix:	Soil	Sampled:	08/20/03
Basis:	as received	Received:	08/20/03
Batch#:	83918	Analyzed:	08/22/03

Type: BLANK
Lab ID: QC223256

Diln Fac: 1.000

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	8015B
MTBE	ND	20	ug/Kg	EPA 8021B
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)	96	56-144	8015B
Bromofluorobenzene (FID)	97	51-142	8015B
Trifluorotoluene (PID)	88	45-150	EPA 8021B
Bromofluorobenzene (PID)	94	42-138	EPA 8021B

[redacted]presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167056	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2672		
Type:	LCS	Basis:	as received
Lab ID:	QC223257	Diln Fac:	1.000
Matrix:	Soil	Batch#:	83918
Units:	ug/Kg	Analyzed:	08/22/03

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12		NA			
MTBE	50.00	47.43	95	74-121	EPA 8021B
Benzene	50.00	48.23	96	80-121	EPA 8021B
Toluene	50.00	46.66	93	80-120	EPA 8021B
Ethylbenzene	50.00	43.67	87	79-120	EPA 8021B
m,p-Xylenes	100.0	97.14	97	76-120	EPA 8021B
o-Xylene	50.00	47.44	95	80-120	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	56-144	8015B
Bromofluorobenzene (FID)	97	51-142	8015B
Trifluorotoluene (PID)	87	45-150	EPA 8021B
Bromofluorobenzene (PID)	94	42-138	EPA 8021B

NA= Not Analyzed

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	167056	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2672		
Type:	LCS	Basis:	as received
Lab ID:	QC223258	Diln Fac:	1.000
Matrix:	Soil	Batch#:	83918
Units:	mg/Kg	Analyzed:	08/22/03

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	5.000	5.198	104	80-120	8015B
MTBE		NA			
Benzene		NA			
Toluene		NA			
Ethylbenzene		NA			
m,p-Xylenes		NA			
o-Xylene		NA			

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	107	56-144	8015B
Bromofluorobenzene (FID)	100	51-142	8015B
Trifluorotoluene (PID)	100	45-150	EPA 8021B
Bromofluorobenzene (PID)	93	42-138	EPA 8021B

NA= Not Analyzed

11.0

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	167056	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2672		
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	167113-001	Batch#:	83918
Matrix:	Soil	Sampled:	08/21/03
Units:	mg/Kg	Received:	08/22/03
Basis:	as received	Analyzed:	08/22/03

Type: MS Lab ID: QC223353

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	0.1757	10.64	7.932	73	24-134	8015B
MTBE			NA			
Benzene			NA			
Toluene			NA			
Ethylbenzene			NA			
m,p-Xylenes			NA			
o-Xylene			NA			

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	128	56-144	8015B
Bromofluorobenzene (FID)	104	51-142	8015B
Trifluorotoluene (PID)	93	45-150	EPA 8021B
Bromofluorobenzene (PID)	96	42-138	EPA 8021B

Type: MSD Lab ID: QC223354

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analysis
Gasoline C7-C12	10.53	7.849	73	24-134	0	32	8015B
MTBE		NA					
Benzene		NA					
Toluene		NA					
Ethylbenzene		NA					
m,p-Xylenes		NA					
o-Xylene		NA					

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	133	56-144	8015B
Bromofluorobenzene (FID)	111	51-142	8015B
Trifluorotoluene (PID)	115	45-150	EPA 8021B
Bromofluorobenzene (PID)	103	42-138	EPA 8021B

NA= Not Analyzed
RPD= Relative Percent Difference

12.0

Curtis & Tompkins, Ltd.

Lead

Lab #:	167056	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2672	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	83879
Matrix:	Soil	Sampled:	08/20/03
Units:	mg/Kg	Received:	08/20/03
Basis:	as received	Prepared:	08/21/03
Diln Fac:	1.000	Analyzed:	08/21/03

Field ID	Type	Lab ID	Result	RL
SB1 COMP	SAMPLE	167056-005	7.2	0.14
SB2 COMP	SAMPLE	167056-010	8.2	0.12
	BLANK	QC223099	ND	0.15

ND= Not Detected
RL= Reporting Limit

1.0

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Lead

Lab #:	167056	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050
Project#:	2672	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	83879
MSS Lab ID:	167066-001	Sampled:	08/20/03
Matrix:	Soil	Received:	08/20/03
Units:	mg/Kg	Prepared:	08/21/03
Basis:	as received	Analyzed:	08/21/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC223102	14.81	78.13	85.16	90	23-137		
MSD	QC223103		78.74	83.46	87	23-137	3	40

RPD= Relative Percent Difference