ENVIRONMENTAL ENGINEERING, INC
6620 Owens Drive, Suite A • Pleasanton, CA 94588-3334
TEL (925)734-6400 • FAX(925)734-6401

December 26, 2007

Mr. Jerry Wickham
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Subject: Addendum to Remedial Soil Excavation
5565 Tesla Road,
Livermore, California
Fuel Leak Case #RO0002585

Dear Mr. Wickham:

On behalf of Mr. Aris Krimetz, authorized representative for the property located at 5565 Tesla Road, Livermore, California (the Site), SOMA Environmental Engineering, Inc. (SOMA) has prepared this letter report documenting post excavation backfilling activities. This letter is an addendum to the Remedial Excavation Report dated November 1, 2007.

Clean Fill Profiling

A source of clean fill was available at a residential construction site situated in the City of Livermore, California, across the street from the subject Site. On November 29, 2007, SOMA collected five composite samples (Stockpile 1 through 5) for profiling. Five laboratory pre-cleaned sample jars were filled, labeled, and submitted under the proper COC documentation to Curtis & Tompkins, Ltd., a California Department of Health Services accredited environmental laboratory. The laboratory analyzed each sample for metals using EPA Test Method 6010 (LUFT 5 Metals); and for total petroleum hydrocarbons as diesel (TPH-d) and motor oil (TPH-mo) using EPA Method 8015. To reduce matrix interference during TPH analysis, sample extracts underwent silica gel cleanup method, specific to polar compound contamination. The laboratory analysis report is included as Attachment A. Figure 1 illustrates locations of the clean soil stockpile and the profile samples.

Review of the laboratory results showed that the fill was clean and suitable to use in backfilling. Photographs illustrating the clean fill site are cataloged in Attachment B. With the exception of sample Stockpile 1, all constituents were either below the laboratory reporting limit, or below the Environmental Screening Levels (ESLs) set forth by the California Regional Water Quality Control Board (CRWQCB). Sample Stockpile 1 exhibited elevated levels of chromium at 87 milligrams per kilogram (mg/kg). As such,

soil used in the backfilling activities was collected from the area opposite of sample Stockpile 1. Figure 1 illustrates the location of the clean fill used for the backfilling activities.

The following table summarizes results of the clean fill profile sampling:

Sample ID	Sampling Date	Cadmium	Chromium	Lead	Nickel	Zinc	TPH-d	TPH-mo
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Stockpile 1	**11/29/2007**	<0.25	**87**	5	150	33	<0.99	<5
Stockpile 2	**11/29/2007**	<0.25	44	6.2	110	38	<1	5.7
Stockpile 3	**11/29/2007**	<0.25	48	6.3	140	40	<1	6.8
Stockpile 4	**11/29/2007**	<0.25	36	5.6	92	34	1.6Y	17
Stockpile 5	**11/29/2007**	<0.25	43	5	110	33	1.5Y	6.9
ESL (Commercial/Industrial)		**7.4**	**58**	**750**	**150**	**600**	**83**	**2,500**
ESL (Residential)		**1.7**	**58**	**150**	**150**	**600**	**83**	**410**

Notes:

ESL- Environmental Screening Levels (Groundwater is current or potential drinking water source, shallow soils <= 3m bgs), California Regional Water Quality Control Board SF Region, November 2007

< Less than Laboratory Reporting Limit

Y-Sample resembles a chromatographic pattern which does not resemble standard

Clean Fill Transportation, Backfilling, and Compaction

On December 5, 2007, under SOMA's oversight, clean fill was transported and temporarily stockpiled on-site. Figure 2 illustrates the temporary clean fill stockpile located near the remedial excavation Area 4. Backfilling activities also took place on December 5, 2007. During backfilling, all clean fill was saturated to achieve optimum moisture content and compacted in 1 to 2 foot lifts into the previously excavated areas. Photographs illustrating backfilling and compaction activities are cataloged in Attachment B.

Furthermore, on December 5, 2007, a trench shoring system, which was installed in the southern portion of the Area 4, was disassembled and removed off-site. At the conclusion of backfilling activities, the excavation areas were leveled and the general excavation vicinity cleaned.

Thank you very much for your time in reviewing our report. If you have questions or require additional information or clarification, please do not hesitate to contact me at (925) 734-6400.

Sincerely,

Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

cc: Mr. Aris Krimetz

Attachments:

Figure 1: Site Map Showing Clean Fill Stockpiles and Profile Sample Locations
Figure 2: Site Map Showing Temporary Location of the Clean Fill Stockpile

Attachment A: Laboratory Analytical Report
Attachment B: Photo Documentation

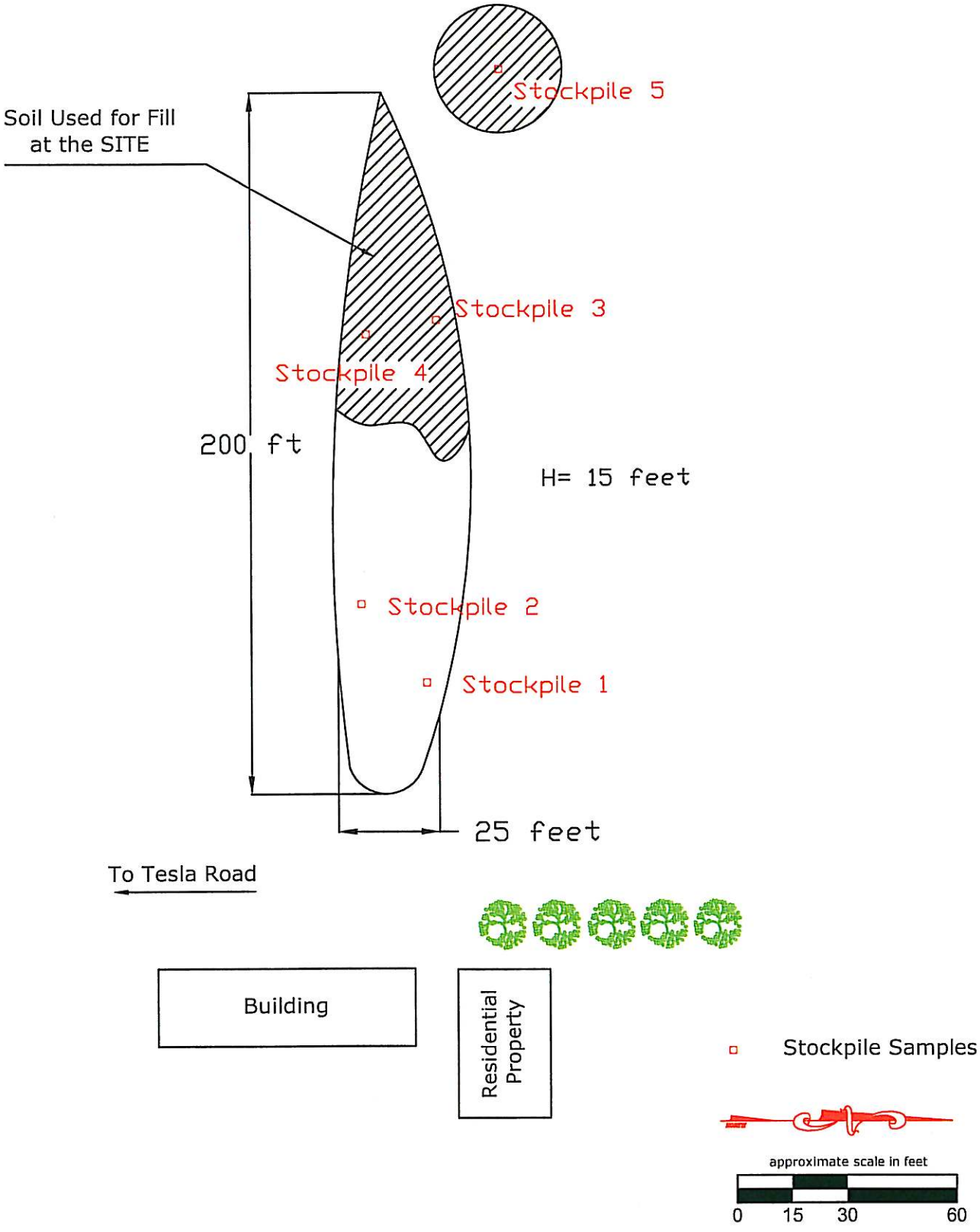


Figure 1: Site Map Showing Clean Fill Stockpiles and Profile Sample Locations

ENVIRONMENTAL ENGINEERING, INC

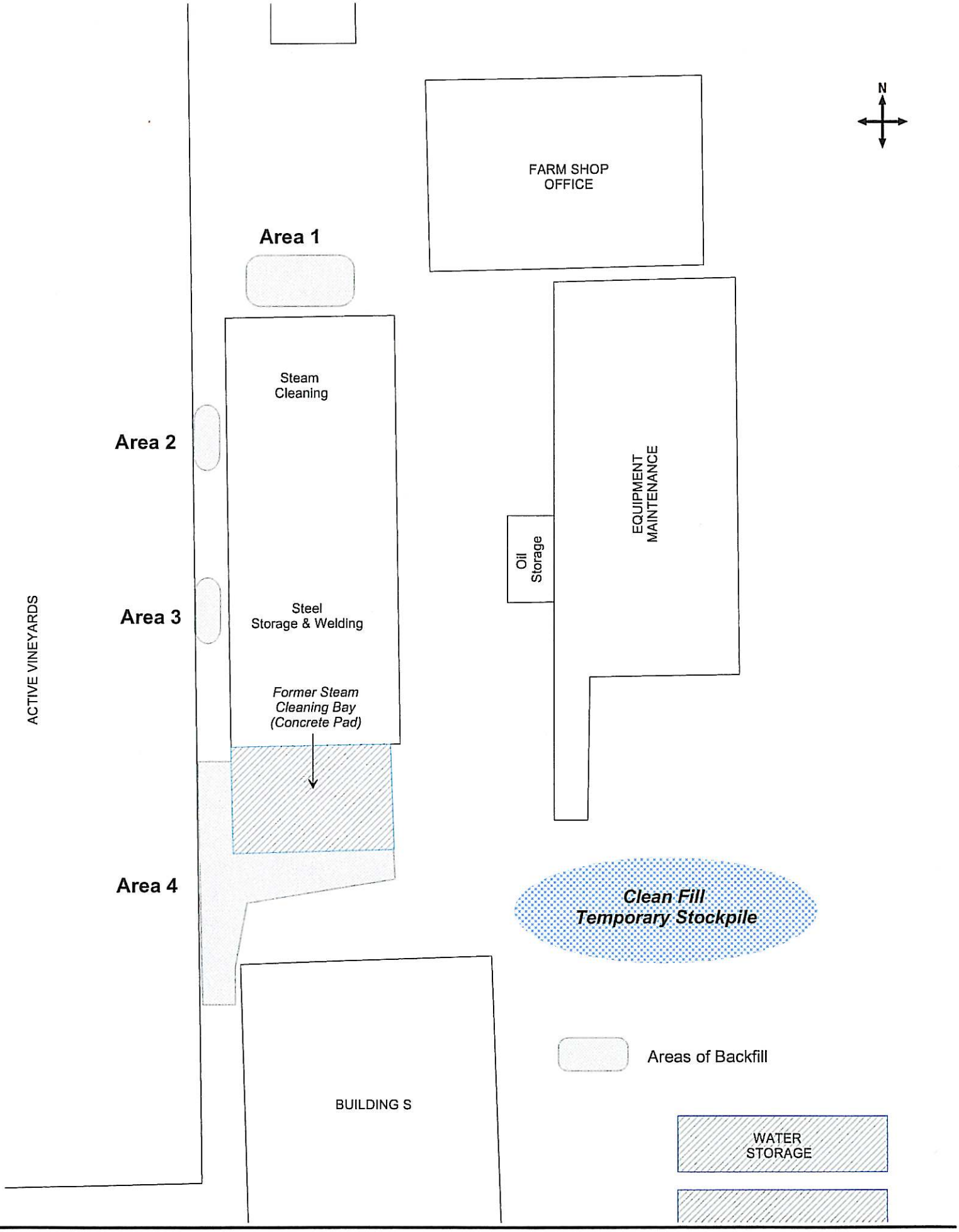


Figure 2: Site Map Showing Temporary Location of the Clean Fill Stockpile

SOMA
ENVIRONMENTAL ENGINEERING, INC.
SAN RAMON CA (925) 244 6600

Attachment A:
Laboratory Analytical Report

CHAIN OF CUSTODY

Page 1 of 1

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

C&T LOGIN # 199546

Project No: 2842

Project Name: 5565 Tesla Rd, Livermore

Turnaround Time: 24 Hour TAT

Sampler: Elena Manzo
Report To: Elena Manzo
Company : SOMA Environmental
Telephone: 925-734-6400
Fax: 925-734-6401

Lab No.	Sample ID	Sampling Date	Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Preservative: none	Analyses: TPH-d, TPH-mo: 8015B, silica gel cleanup	Analyses: LUFT 5 metals
-1	Stockpile 1	11/29/07	957	X			1 802 jar				X	X	X	X
-2	" 2		1005	X							X	X	X	X
-3	" 3		1010	X							X	X	X	X
-4	" 4		1015	X							X	X	X	X
-5	" 5		1020	X							X	X	X	X

Notes:
Silica gel cleanup method

RELINQUISHED BY:

11/29/07 11:11 DATE/TIME	11/29/07 1255 DATE/TIME
11/29/07 1355 DATE/TIME	11/29/07 1358 DATE/TIME
DATE/TIME	DATE/TIME

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

Laboratory Job Number 199546
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2842
Location : Wente
Level : II

Sample ID	Lab ID
STOCKPILE 1	199546-001
STOCKPILE 2	199546-002
STOCKPILE 3	199546-003
STOCKPILE 4	199546-004
STOCKPILE 5	199546-005

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. This report may be reproduced only in its entirety.

Signature: _____ Date: 12/13/2007
Project Manager

Signature: _____ Date: 12/14/2007
Operations Manager

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**199546**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2842**
Location:	**Wente**
Request Date:	**11/29/07**
Samples Received:	**11/29/07**

This hardcopy data package contains sample and QC results for five soil samples, requested for the above referenced project on 11/29/07. The samples were received intact.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Metals (EPA 6010B):
Low recovery was observed for zinc in the MSD for batch 132232; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	199546	Location:	Wente
Client:	SOMA Environmental Engineering Inc.	Prep:	SHAKER TABLE
Project#:	2842	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	11/29/07
Units:	mg/Kg	Received:	11/29/07
Basis:	as received	Prepared:	11/29/07
Diln Fac:	1.000	Analyzed:	11/30/07
Batch#:	132225		

Field ID: STOCKPILE 1 Lab ID: 199546-001
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	75	46-128

Field ID: STOCKPILE 2 Lab ID: 199546-002
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	5.7	5.0

Surrogate	%REC	Limits
Hexacosane	70	46-128

Field ID: STOCKPILE 3 Lab ID: 199546-003
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	6.8	5.0

Surrogate	%REC	Limits
Hexacosane	75	46-128

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	199546	Location:	Wente
Client:	SOMA Environmental Engineering Inc.	Prep:	SHAKER TABLE
Project#:	2842	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	11/29/07
Units:	mg/Kg	Received:	11/29/07
Basis:	as received	Prepared:	11/29/07
Diln Fac:	1.000	Analyzed:	11/30/07
Batch#:	132225		

Field ID: STOCKPILE 4 Lab ID: 199546-004
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.6 Y	1.0
Motor Oil C24-C36	17	5.0

Surrogate	%REC	Limits
Hexacosane	82	46-128

Field ID: STOCKPILE 5 Lab ID: 199546-005
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.5 Y	1.0
Motor Oil C24-C36	6.9	5.0

Surrogate	%REC	Limits
Hexacosane	75	46-128

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC417474

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	83	46-128

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	199546	Location:	Wente
Client:	SOMA Environmental Engineering Inc.	Prep:	SHAKER TABLE
Project#:	2842	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC417475	Batch#:	132225
Matrix:	Soil	Prepared:	11/29/07
Units:	mg/Kg	Analyzed:	11/30/07
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.71	40.65	82	55-131

Surrogate	%REC	Limits
Hexacosane	85	46-128

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	199546	Location:	Wente
Client:	SOMA Environmental Engineering Inc.	Prep:	SHAKER TABLE
Project#:	2842	Analysis:	EPA 8015B
Field ID:	STOCKPILE 5	Batch#:	132225
MSS Lab ID:	199546-005	Sampled:	11/29/07
Matrix:	Soil	Received:	11/29/07
Units:	mg/Kg	Prepared:	11/29/07
Basis:	as received	Analyzed:	11/30/07
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC417476

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	1.520	49.96	41.95	81	31-150

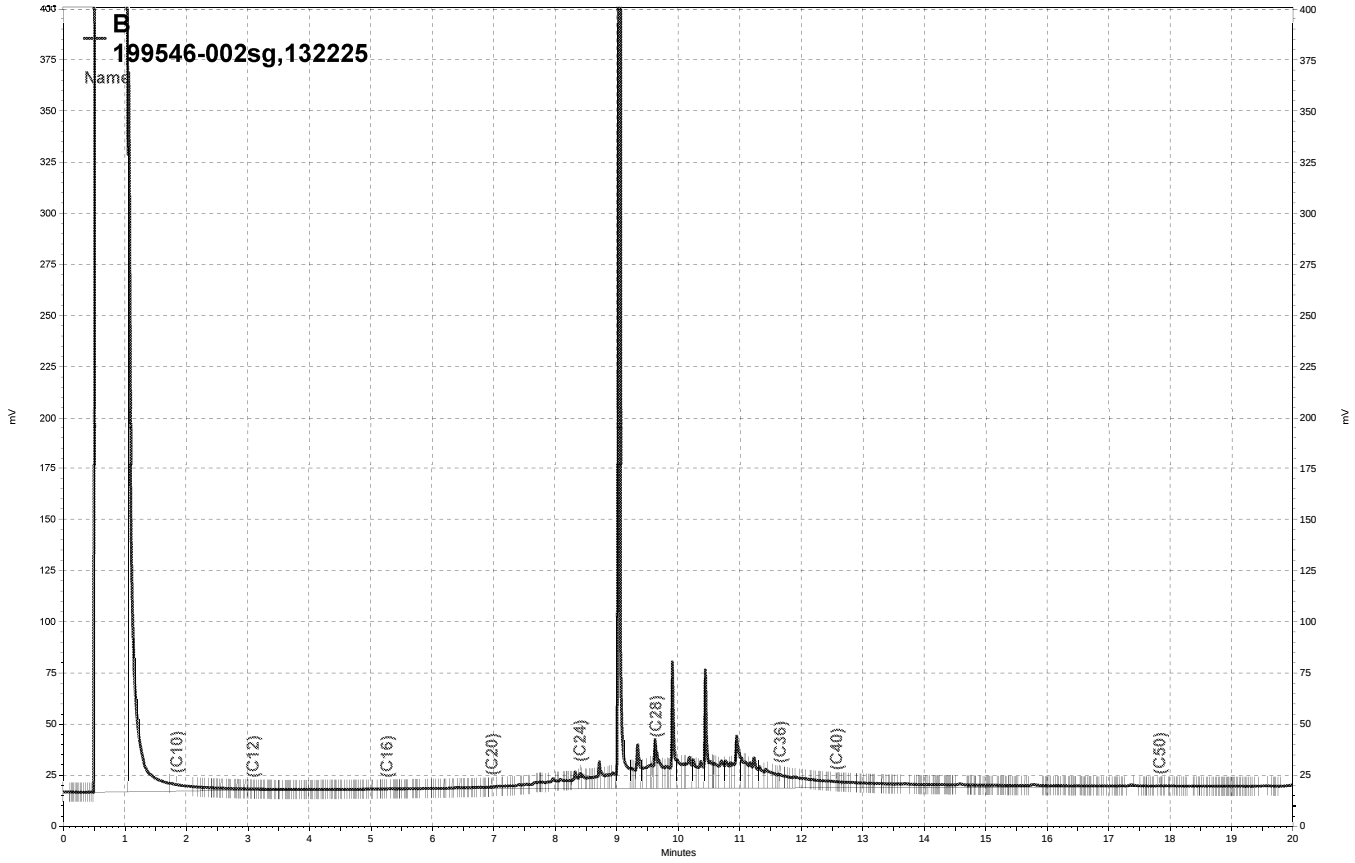
Surrogate	%REC	Limits
Hexacosane	78	46-128

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC417477

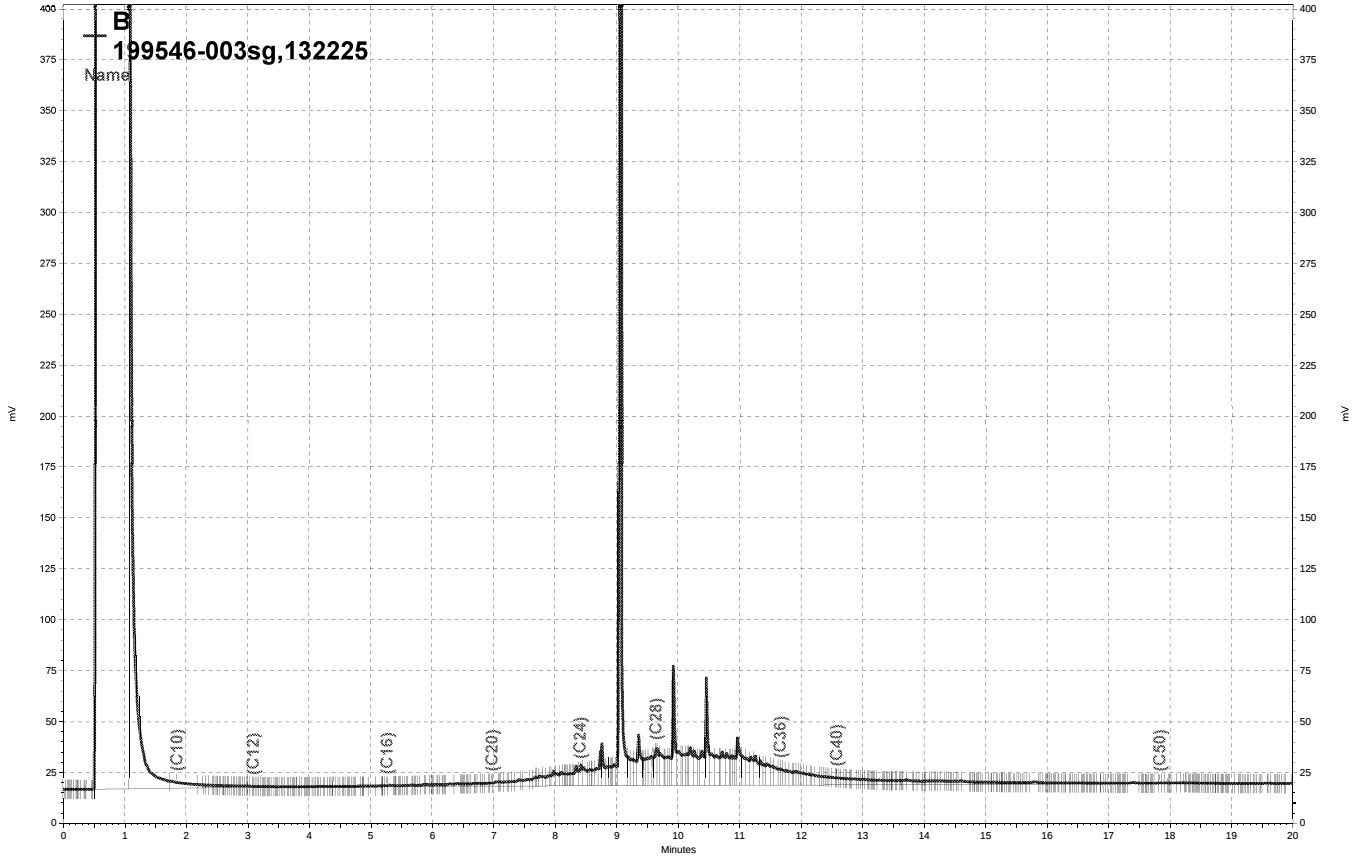
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.97	50.96	99	31-150	19	42

Surrogate	%REC	Limits
Hexacosane	78	46-128

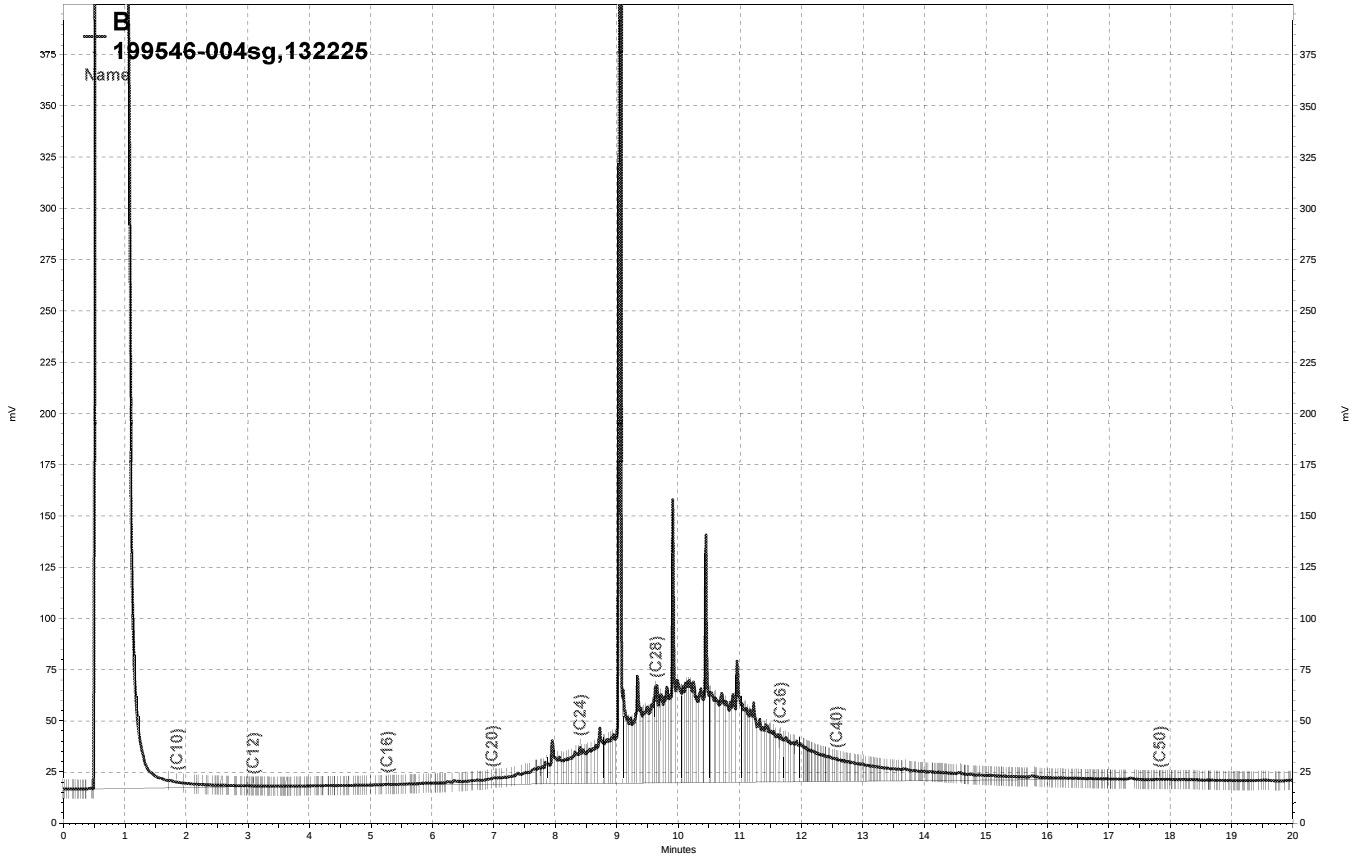
RPD= Relative Percent Difference



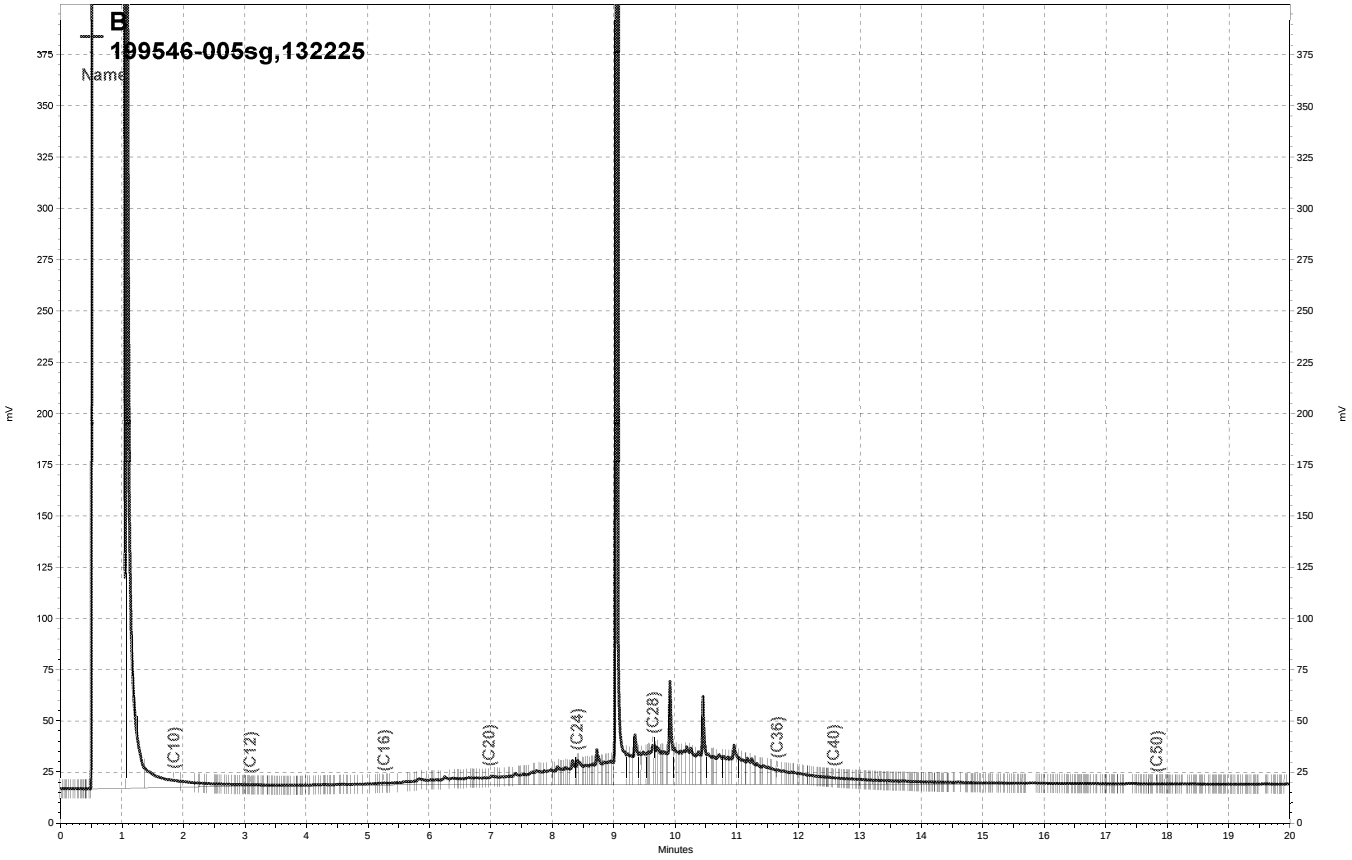
\\Lims\gdrive\ezchrom\Projects\GC14B\Data\333b032, B



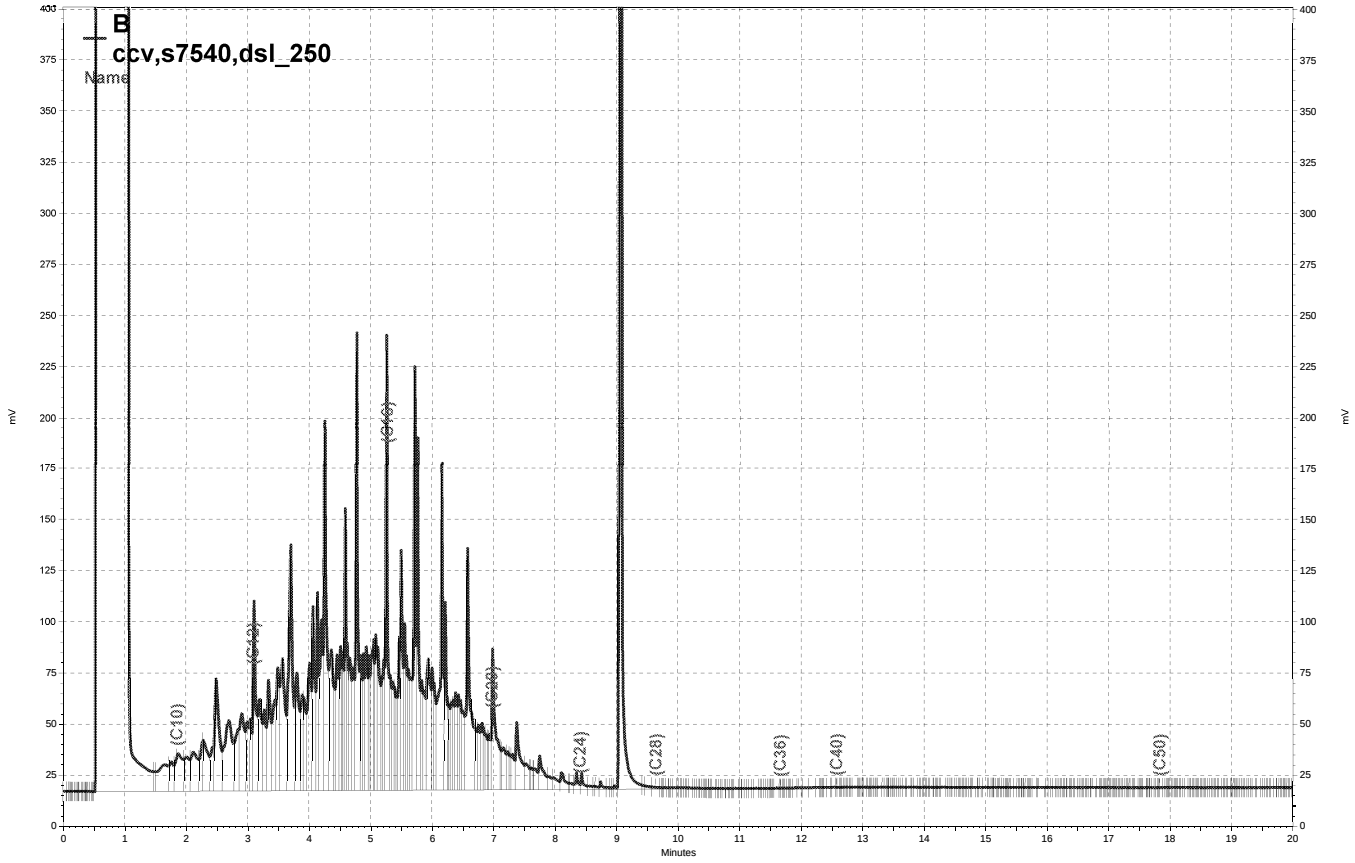
\\Lims\gdrive\ezchrom\Projects\GC14B\Data\333b033, B



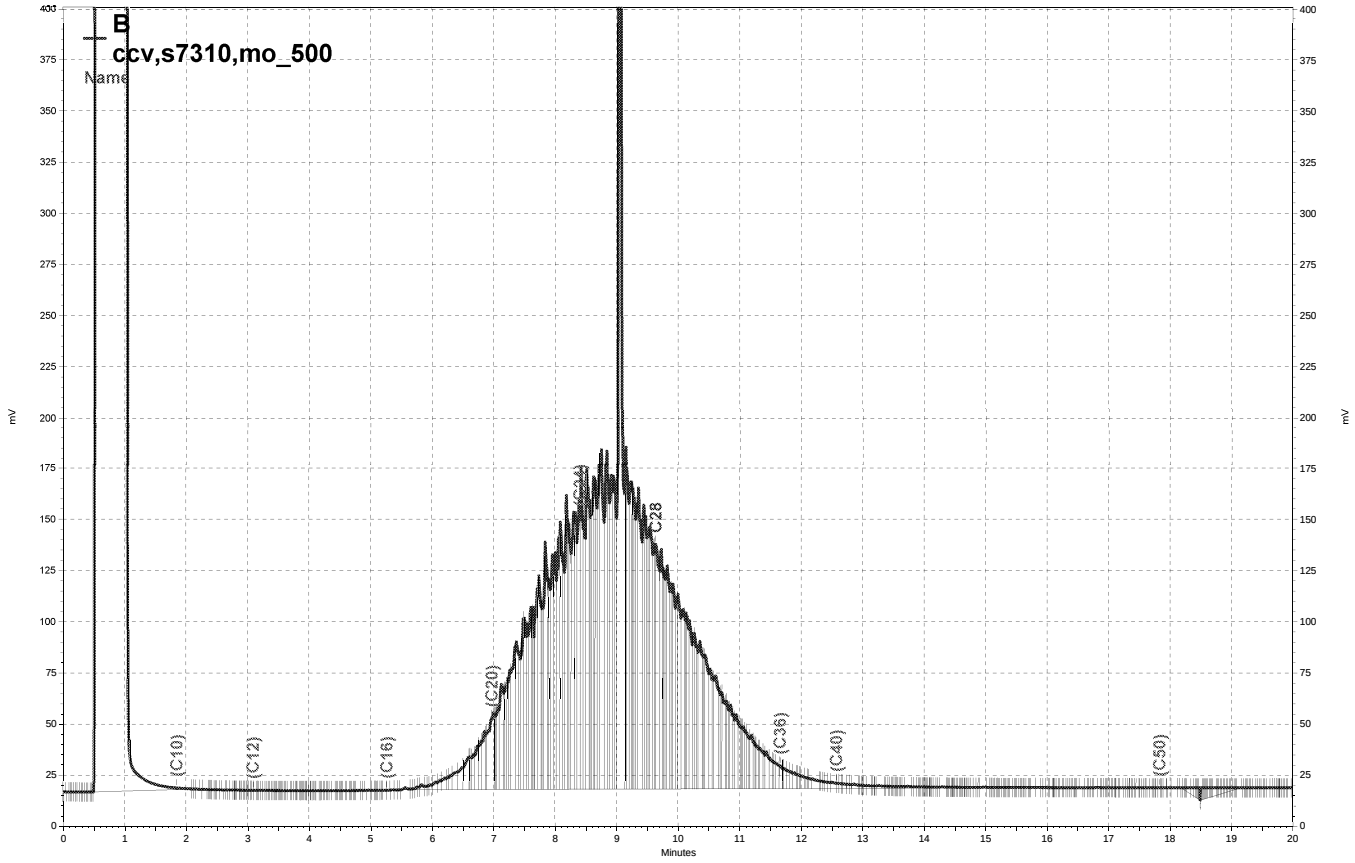
\\Lims\gdrive\ezchrom\Projects\GC14B\Data\333b034, B



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\333b028, B



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\333b024, B



\\Lims\gdrive\ezchrom\Projects\GC14B\Data\333b025, B

Curtis & Tompkins, Ltd.

California LUFT Metals

Lab #:	199546	Location:	Wente
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050B
Project#:	2842	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	132232
Units:	mg/Kg	Sampled:	11/29/07
Basis:	as received	Received:	11/29/07
Diln Fac:	1.000	Prepared:	11/29/07

Field ID: STOCKPILE 1 Lab ID: 199546-001
Type: SAMPLE Analyzed: 11/29/07

Analyte	Result	RL
Cadmium	ND	0.25
Chromium	87	0.25
Lead	5.0	0.25
Nickel	150	0.25
Zinc	33	1.0

Field ID: STOCKPILE 2 Lab ID: 199546-002
Type: SAMPLE Analyzed: 11/30/07

Analyte	Result	RL
Cadmium	ND	0.25
Chromium	44	0.25
Lead	6.2	0.25
Nickel	110	0.25
Zinc	38	1.0

Field ID: STOCKPILE 3 Lab ID: 199546-003
Type: SAMPLE Analyzed: 11/30/07

Analyte	Result	RL
Cadmium	ND	0.25
Chromium	48	0.25
Lead	6.3	0.25
Nickel	140	0.25
Zinc	40	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California LUFT Metals

Lab #:	199546	Location:	Wente
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050B
Project#:	2842	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	132232
Units:	mg/Kg	Sampled:	11/29/07
Basis:	as received	Received:	11/29/07
Diln Fac:	1.000	Prepared:	11/29/07

Field ID: STOCKPILE 4 Lab ID: 199546-004
Type: SAMPLE Analyzed: 11/30/07

Analyte	Result	RL
Cadmium	ND	0.25
Chromium	36	0.25
Lead	5.6	0.25
Nickel	92	0.25
Zinc	34	1.0

Field ID: STOCKPILE 5 Lab ID: 199546-005
Type: SAMPLE Analyzed: 11/30/07

Analyte	Result	RL
Cadmium	ND	0.25
Chromium	43	0.25
Lead	5.0	0.25
Nickel	110	0.25
Zinc	33	1.0

Type: BLANK Analyzed: 11/29/07
Lab ID: QC417495

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

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California LUFT Metals

Lab #:	199546	Location:	Wente
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050B
Project#:	2842	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	132232
Units:	mg/Kg	Prepared:	11/29/07
Basis:	as received	Analyzed:	11/29/07
Diln Fac:	1.000		

Type: BS Lab ID: QC417496

Analyte	Spiked	Result	%REC	Limits
Cadmium	10.00	9.125	91	80-120
Chromium	100.0	89.01	89	80-120
Lead	100.0	86.96	87	80-120
Nickel	25.00	21.76	87	80-120
Zinc	25.00	22.36	89	80-120

Type: BSD Lab ID: QC417497

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	10.00	9.053	91	80-120	1	20
Chromium	100.0	88.43	88	80-120	1	20
Lead	100.0	85.31	85	80-120	2	20
Nickel	25.00	21.57	86	80-120	1	20
Zinc	25.00	22.14	89	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California LUFT Metals

Lab #:	199546	Location:	Wente
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050B
Project#:	2842	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	132232
MSS Lab ID:	199530-001	Sampled:	11/05/07
Matrix:	Soil	Received:	11/06/07
Units:	mg/Kg	Prepared:	11/29/07
Basis:	as received	Analyzed:	11/29/07
Diln Fac:	1.000		

Type: MS Lab ID: QC417498

Analyte	MSS Result	Spiked	Result	%REC	Limits
Cadmium	0.1366	9.259	7.940	84	74-120
Chromium	31.92	92.59	103.8	78	65-120
Lead	81.21	92.59	188.0	115	53-123
Nickel	30.75	23.15	43.45	55	43-142
Zinc	83.74	23.15	95.59	51	42-147

Type: MSD Lab ID: QC417499

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	8.929	7.455	82	74-120	3	20
Chromium	89.29	97.60	74	65-120	3	20
Lead	89.29	145.1	72	53-123	24	28
Nickel	22.32	42.67	53	43-142	0	26
Zinc	22.32	89.27	25 *	42-147	6	27

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Attachment B:
Photo Documentation

Plate 1: *Clean fill stockpile (view north)*

Plate 2: *Clean fill stockpile, the side that was used for backfill (view northeast)*

Plate 3: *Clean fill being loaded for the transport (view west)*

Plate 4: *Clean fill stockpile, adjacent to the Area 4*

Plate 5: *Clean fill being moved to the excavation areas*

Plate 6: *Area 4 backfilled 1/3 of the way (view south)*

Plate 7: *Area 4 being backfilled (view north)*

Plate 8: *Area 4 being compacted (view west)*

Plate 8: *Area 4 being compacted (view west)*

Plate 8: *Final grading and re-compaction (view east)*