

ENVIRONMENTAL
PROTECTION

MICRO ANALYTICAL LABORATORIES, INC.
METALS IN SOLID SAMPLES • EPA 6010

6/24/99 9:51

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1116
ARS, Inc.
701 Southampton, Suite 105
Benicia, CA 94510

PROJECT:
**UNION PACIFIC
FRUITVALE
TRANSITE VILLAGE
OAKLAND, CA**

Micro Log In **70446**
Total Samples **20**
Date Sampled **6/24/99**
Date Received **6/24/1999**
Date Analyzed **6/24/1999**

Client Sample No. PIT 1	ABANDONED RAILROAD TRACK PITS.		
Micro Sample No. 70446-01			
Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	50	2.5	
Lead (Pb)	41	2.5	

Client Sample No. PIT 2-A	ABANDONED RAILROAD TRACK PITS.		
Micro Sample No. 70446-02			
Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	34	2.5	
Lead (Pb)	34	2.5	

Client Sample No. PIT 2-B	ABANDONED RAILROAD TRACK PITS.		
Micro Sample No. 70446-03			
Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	12	2.5	
Lead (Pb)	18	2.5	

Technical Supervisor: *F. Ramezanzadeh* 6/28/1999 Analyst: FR
Farid Ramezanzadeh, M.S.

Metals are analyzed by Inductively Coupled Plasma Atomic Emission Spectrometry. Explanation: $\mu\text{g} / \text{m}^3$ = micrograms per cubic meter of air. ND = None Detected (concentration is less than detection limit). Analytical references: NIOSH Method 7300, 1994; EPA SW-646, 3rd Edition, 1986. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client.

6900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

MICRO ANALYTICAL LABORATORIES, INC.
 METALS IN SOLID SAMPLES - EPA 6010

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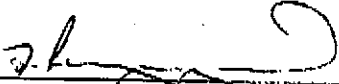
PROJECT:
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 Micro Log In 70446
 Total Samples 20
 Date Sampled 6/24/99
 Date Received 6/24/1999
 Date Analyzed 6/24/1999

Client Sample No. <u>PIT 3-A</u>		ABANDONED RAILROAD TRACK PITS.	
Micro Sample No. 70446-04			
Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	194	2.5	
Lead (Pb)	341	2.5	

Client Sample No. <u>PIT 3-B</u>		ABANDONED RAILROAD TRACK PITS.	
Micro Sample No. 70446-05			
Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	8.9	2.5	
Lead (Pb)	19	2.5	

Client Sample No. <u>PIT 4-A</u>		ABANDONED RAILROAD TRACK PITS.	
Micro Sample No. 70446-06			
Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	240	2.5	
Lead (Pb)	111	2.5	

Technical Supervisor:  6/28/1999 Analyst: FR
 Farid Ramezanzadeh, M.S.

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Micro Log In 70446
Total Samples 20
Date Sampled 6/24/99
Date Received 6/24/1999
Date Analyzed 6/24/1999

Client Sample No. PIT 4-B ABANDONED RAILROAD TRACK PITS.
Micro Sample No. 70446-07

Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	115	2.5	
Lead (Pb)	15	2.5	

Client Sample No. PIT 5 ABANDONED RAILROAD TRACK PITS.
Micro Sample No. 70446-08

Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	127	2.5	
Lead (Pb)	687	2.5	

Client Sample No. PIT 6 ABANDONED RAILROAD TRACK PITS.
Micro Sample No. 70446-09

Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	57	2.5	
Lead (Pb)	66	2.5	

Technical Supervisor:  6/28/1999 Analyst: FR
Farid Ramezanzadeh, M.S.

Metals are analyzed by Inductively Coupled Plasma Atomic Emission Spectrometry. Explanation: $\mu\text{g} / \text{m}^3$ = micrograms per cubic meter of air. ND = None Detected (concentration is less than detection limit). Analytical references: NIOSH Method 7300, 1994; EPA SW-846, 3rd Edition, 1986. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client.

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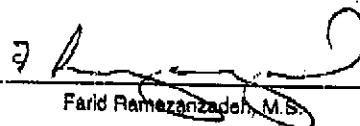
PROJECT:
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 FRUITVALE
 TRANSITE VILLAGE
 OAKLAND, CA

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 Date Analyzed 6/24/1999

Client Sample No. <input type="text" value="FIT7"/>		ABANDONED RAILROAD TRACK PITS.	
Micro Sample No. 70446-10			
Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	198	2.5	
Lead (Pb)	1,495	2.5	

Client Sample No. <input type="text" value="FIT8"/>		ABANDONED RAILROAD TRACK PITS.	
Micro Sample No. 70446-11			
Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	100	2.5	
Lead (Pb)	144	2.5	

Client Sample No. <input type="text" value="FIT9"/>		ABANDONED RAILROAD TRACK PITS.	
Micro Sample No. 70446-12			
Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	199	2.5	
Lead (Pb)	41	2.5	

Technical Supervisor:  6/25/1999 Analyst: FR
 Farid Ramezanzadeh, M.S.

Metals are analyzed by Inductively Coupled Plasma Atomic Emission Spectrometry. Explanation: $\mu\text{g} / \text{m}^3$ = micrograms per cubic meter of air. ND = None Detected (concentration is less than detection limit). Analytical references: NIOSH Method 7300, 1994; EPA SW-646, 3rd Edition, 1986. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client.
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Date Analyzed 6/24/1999

Client Sample No. PIT 10 ABANDONED RAILROAD TRACK PITS.
Micro Sample No. 70446-13

Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	70	2.5	
Lead (Pb)	66	2.5	

Client Sample No. PIT 11 ABANDONED RAILROAD TRACK PITS.
Micro Sample No. 70446-14

Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	28	2.5	
Lead (Pb)	43	2.5	

Client Sample No. PIT 12 ABANDONED RAILROAD TRACK PITS.
Micro Sample No. 70446-15

Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	195	2.5	
Lead (Pb)	145	2.5	

Technical Supervisor:  6/28/1999 Analyst: FR
Farid Ramezanzadeh, M.S.

Metals are analyzed by Inductively Coupled Plasma Atomic Emission Spectrometry. Explanation: $\mu\text{g} / \text{m}^3$ = micrograms per cubic meter of air. ND = None Detected (concentration is less than detection limit). Analytical references: NIOSH Method 7300, 1994; EPA SW-846, 3rd Edition, 1988. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client.

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FRUITVALE
TRANSITE VILLAGE
OAKLAND, CA**

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Micro Log In 70446
Total Samples 20
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Date Received 6/24/1999
Date Analyzed 6/24/1999

Client Sample No. PIT 13 ABANDONED RAILROAD TRACK PITS.
Micro Sample No. 70446-16

Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	167	2.5	
Lead (Pb)	105	2.5	

Client Sample No. PIT 14 ABANDONED RAILROAD TRACK PITS.
Micro Sample No. 70446-17

Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	57	2.5	
Lead (Pb)	59	2.5	

Client Sample No. PIT 15 ABANDONED RAILROAD TRACK PITS.
Micro Sample No. 70446-18

Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	127	2.5	
Lead (Pb)	339	2.5	

Technical Supervisor: F. Ramezani 6/28/1999 Analyst: FR
Farid Ramezani, M.S.

Metals are analyzed by Inductively Coupled Plasma Atomic Emission Spectrometry. Explanation: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter of air. ND = None Detected (concentration is less than detection limit). Analytical references: NIOSH Method 7300, 1984; EPA SW-846, 3rd Edition, 1986. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client.

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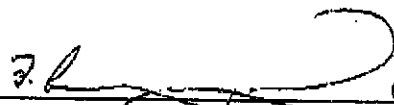
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701 Southampton, Suite 105
Benicia, CA 94510

PROJECT:
UNION PACIFIC
FRUITVALE
TRANSITE VILLAGE
OAKLAND, CA

Micro Log In 70446
Total Samples 20
Date Sampled 6/24/99
Date Received 6/24/1999
Date Analyzed 6/24/1999

Client Sample No.	PIT 17 & 18	ABANDONED RAILROAD TRACK PITS.	
Micro Sample No.	70446-19		
Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	71	2.5	
Lead (Pb)	980	2.5	

Client Sample No.	PIT 21	ABANDONED RAILROAD TRACK PITS.	
Micro Sample No.	70446-20		
Analyte	Concentration (mg / Kg)	Detection Limit (mg / Kg)	Comments
Arsenic (As)	< 2.5	2.5	
Lead (Pb)	443	2.5	

Technical Supervisor:  6/28/1999 Analyst: FR
Farid Ramazan Zadeh, M.S.

Metals are analyzed by Inductively Coupled Plasma Atomic Emission Spectrometry. Explanation: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter of air. ND = None Detected (concentration is less than detection limit). Analytical references: NIOSH Method 7300, 1994; EPA SW-846, 3rd Edition, 1986. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

Chain of Custody Form
 1116
 Name / Client / Address:

MICRO ANALYTICAL LABORATORIES, INC.
 5900 Hollis Street, Suite M, Emeryville, California 94608
 (510) 653-0824 - (510) 653-1361 - FAX

70446

Michael Kara
 ARS, Inc
 701 Southampton, Suite 105
 Benicia, CA 94510
 Tel. (707) 748-4205
 Fax (707) 748-4207

Project
 Union Pacific
 Fruitvale Transit Village
 Oakland, CA

Asbestos TEM PLM PCM
 Lead Only TTLC (Total) STLC TCLP
 Metals (Specify) TTLC (Total) STLC TCLP
 Other lead + Arsenic (total)
 Number of Samples 20

P.O. No.

Turn Around Time normal

Matrix Type Bulk Dust Paint Soil Wipe Air Water Other

Micro ID #	Client ID#	Location / Description	Date Sampled	Time Sampled Start / Stop / Total Minutes	Average LPM	Total Liters	Filter Pore Size
01	Pit 1	Abandoned railroad track pits	6/21/99	:			
02	Pit 2-A	↓	↓	:			
03	Pit 2-B			:			
04	Pit 3-A			:			
05	Pit 3-B			:			
06	Pit 4-A			:			
07	Pit 4-B			:			
08	Pit 5			:			
09	Pit 6			:			
10	Pit 7			:			

Instructions:

Sample Return: YES NO If "YES" is checked, samples will be returned to the client or archived at Micro Analytical if required.
 If "NO" is checked, solid samples will be disposed of within six months (one month for liquid samples, lab suspensions, and digestates).

Sampler's Signature / Name

6/21/99
 16:50

Drop Box / Counter

Received By

6/24/99 4:00 PM

Relinquished By

Date / Time

Date / Time

Relinquished By

Date / Time

Received By

Date / Time

Chain of Custody Form
1116

MICRO ANALYTICAL LABORATORIES, INC.

Name / Client / Address:

5900 Hollis Street, Suite M, Emeryville, California 94608
(510) 653-0824 • (510) 653-1361 • FAX

70446

Michael Kara

Project

ARS, Inc.

Union Pacific
Transit Village
Fruitvale East

Asbestos

TEM PLM PCM

701 Southampton, Suite 105

Oakland, CA

Lead Only

TTLG (Total) STLC TCLP

Benicia, CA 94510

Metals

(Specify) TTLG (Total) STLC TCLP

Tel. (707) 748-4205

P.O. No.

Other Lead + Arsenic (Total)

Fax (707) 748-4207

Number of Samples 20

Matrix Type Bulk Dust Paint Soil Wipe Air Water Other

Turn Around Time normal

Micro ID #	Client ID #	Location / Description	Date Sampled	Time Sampled Start / Stop / Total Minutes	Average LPM	Total Liters	Filter Pore Size
11	Pit 8	Abandoned railroad track pits	6/24/99	:	:		
12	Pit 9			:	:		
13	Pit 10			:	:		
14	Pit 11			:	:		
15	Pit 12			:	:		
16	Pit 13			:	:		
17	Pit 14			:	:		
18	Pit 15			:	:		
19	Pit 17+18			:	:		
20	Pit 21			:	:		

Instructions:

Sample Return: YES NO

If "YES" is checked, samples will be returned to the client or archived at Micro Analytical if required.

If "NO" is checked, solid samples will be disposed of within six months (one month for liquid samples, lab suspensions, and digestates).

Sampler's Signature / Name

Relinquished By

6/24/99

Date / Time

Drop Box / Courier

Received By

6/24/99 4:00 P.M.

Date / Time

Relinquished By

Date / Time

Received By

Date / Time

Applied Remedial Services

701 Southampton Road, Suite 105

Benicia, CA 94540

Attn.: Mr. Elias Rashmawi

Project: Union Pacific

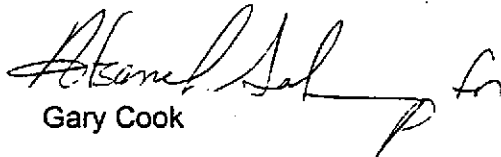
Dear Elias,

Attached is our report for your samples received on Friday June 25, 1999.

This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after July 25, 1999 unless you have requested otherwise. We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

Sincerely,



Gary Cook

Total Extractable Petroleum Hydrocarbons (TEPH)

Applied Remedial Services

☒ 701 Southampton Road, Suite 105
Benicia, CA 94540

Attn: Elias Rashmawi

Phone: (707) 748-4205 Fax: (707) 748-4207

Project #:

Project: Union Pacific

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
PIT-4A	Soil	06/24/1999 08:30	2
PIT-16	Soil	06/24/1999 12:00	5
PIT-19	Soil	06/24/1999 12:30	6

To: **Applied Remedial Services**

Test Method: 8015M

Attn.: Elias Rashmawi

Prep Method: 3550/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID: PIT-4A	Lab Sample ID: 1999-06-0385-002
Project: Union Pacific	Received: 06/25/1999 17:44
Sampled: 06/24/1999 08:30	Extracted: 06/29/1999 09:00
Matrix: Soil	QC-Batch: 1999/06/29-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	11	1.0	mg/Kg	1.00	06/30/1999 00:55	ld
Motor Oil	ND	50	mg/Kg	1.00	06/30/1999 00:55	
Kerosene	ND	1.0	mg/Kg	1.00	06/30/1999 00:55	
Paint Thinner	ND	1.0	mg/Kg	1.00	06/30/1999 00:55	
Mineral spirits	ND	10	mg/Kg	1.00	06/30/1999 00:55	
Surrogate(s) o-Terphenyl	93.2	60-130	%	1.00	06/30/1999 00:55	

To: **Applied Remedial Services**

Test Method: 8015M

Attn.: Elias Rashmawi

Prep Method: 3550/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID: PIT-16	Lab Sample ID: 1999-06-0385-005
Project: Union Pacific	Received: 06/25/1999 17:44
Sampled: 06/24/1999 12:00	Extracted: 06/29/1999 09:00
Matrix: Soil	QC-Batch: 1999/06/29-02.10
Sample/Analysis Flag: sdo (See Legend & Note section)	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	6300	50	mg/Kg	50.00	07/02/1999 12:48	Id
Motor Oil	22000	2500	mg/Kg	50.00	07/02/1999 12:48	
Kerosene	ND	50	mg/Kg	50.00	07/02/1999 12:48	
Paint Thinner	ND	50	mg/Kg	50.00	07/02/1999 12:48	
Mineral spirits	ND	500	mg/Kg	50.00	07/02/1999 12:48	
Surrogate(s) o-Terphenyl	NA	60-130	mg/Kg	50.00	07/02/1999 12:48	

To: **Applied Remedial Services**

Test Method: 8015M

Attn.: Elias Rashmawi

Prep Method: 3550/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID: PIT-19	Lab Sample ID: 1999-06-0385-006
Project: Union Pacific	Received: 06/25/1999 17:44
Sampled: 06/24/1999 12:30	Extracted: 06/29/1999 09:00
Matrix: Soil	QC-Batch: 1999/06/29-02.10
Sample/Analysis Flag: shc (See Legend & Note section)	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	2800	20	mg/Kg	20.00	07/02/1999 12:03	ld
Motor Oil	6000	1000	mg/Kg	20.00	07/02/1999 12:03	
Kerosene	ND	20	mg/Kg	20.00	07/02/1999 12:03	
Paint Thinner	ND	20	mg/Kg	20.00	07/02/1999 12:03	
Mineral spirits	ND	200	mg/Kg	20.00	07/02/1999 12:03	
Surrogate(s) o-Terphenyl	472.0	60-130	%	20.00	07/02/1999 12:03	

To: **Applied Remedial Services**
Attn.: Elias Rashmawi

Test Method: 8015M
Prep Method: 3550/8015M

Batch QC Report
Total Extractable Petroleum Hydrocarbons (TEPH)

Method Blank	Soil	QC Batch # 1999/06/29-02.10
MB: 1999/06/29-02.10-001		Date Extracted: 06/29/1999 10:51

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	06/29/1999 20:43	
Motor Oil	ND	50	mg/Kg	06/29/1999 20:43	
Kerosene	ND	1	mg/Kg	06/29/1999 20:43	
Paint Thinner	ND	1	mg/Kg	06/29/1999 20:43	
Mineral spirits	ND	10	mg/Kg	06/29/1999 20:43	
Surrogate(s)					
o-Terphenyl	84.5	60-130	%	06/29/1999 20:43	

To: **Applied Remedial Services**

Test Method: 8015M

Attn: Elias Rashmawi

Prep Method: 3550/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 1999/06/29-02.10	
LCS:	1999/06/29-02.10-002	Extracted:	06/28/1999 10:51	Analyzed:	06/30/1999 06:22
LCSD:	1999/06/29-02.10-003	Extracted:	06/28/1999 10:51	Analyzed:	06/30/1999 07:07

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Diesel	65.5	62.1	83.3	83.3	78.6	74.5	5.4	60-130	25		
Surrogate(s)											
o-Terphenyl	19.5	18.5	20.0	20.0	97.5	92.5		60-130			

To: **Applied Remedial Services**

Test Method: 8015M

Attn.: Elias Rashmawi

Prep Method: 3550/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Matrix Spike (MS / MSD)

Soil

QC Batch # 1999/06/29-02.10

Sample ID: PIT-4A

Lab Sample ID: 1999-06-0385-002

MS: 1999/06/29-02.10-004 Extracted: 06/29/1999 10:51 Analyzed: 06/30/1999 01:31 Dilution: 1.0

MSD: 1999/06/29-02.10-005 Extracted: 06/29/1999 10:51 Analyzed: 06/30/1999 02:07 Dilution: 1.0

Compound	Conc. [mg/Kg]			Exp. Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD		Recovery	RPD	MS	MSD
Diesel	81.2	85.3	10.7	83.2	83.2	84.7	89.7	5.7	60-130	25		
Surrogate(s)												
o-Terphenyl	18.2	18.2		20.0	20.0	91.0	91.0		60-130			

To: Applied Remedial Services

Attn: Elias Rashmawi

Test Method: 8015M

Prep Method: 3550/8015M

Legend & Notes

Total Extractable Petroleum Hydrocarbons (TEPH)

Analysis Flags

sdo

Surrogate(s) diluted out

shc

Surrogate recoveries biased high due to hydrocarbon co-elution

Analyte Flags

ld

Hydrocarbon reported is in the late Diesel range, and does not match our Diesel standard

Phenol analysis by 8270A

Applied Remedial Services

☒ 701 Southampton Road, Suite 105
Benicia, CA 94540

Attn: Elias Rashmawi

Phone: (707) 748-4205 Fax: (707) 748-4207

Project #:

Project: Union Pacific

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
PIT-6,7,12,13,14	Soil	06/24/1999 09:00	4

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-06-0385

To: **Applied Remedial Services**

Test Method: 8270A

Attn.: Elias Rashmawi

Prep Method: 3550/8270A

Phenol analysis by 8270A

Sample ID: PIT-6,7,12,13,14	Lab Sample ID: 1999-06-0385-004
Project: Union Pacific	Received: 06/25/1999 17:44
Sampled: 06/24/1999 09:00	Extracted: 06/30/1999 14:47
Matrix: Soil	QC-Batch: 1999/06/30-01.11
Sample/Analysis Flag: lrm (See Legend & Note section)	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Phenol	ND	0.50	mg/Kg	5.00	07/01/1999 17:09	
2-Chlorophenol	ND	0.50	mg/Kg	5.00	07/01/1999 17:09	
2-Methylphenol	ND	0.50	mg/Kg	5.00	07/01/1999 17:09	
4-Methylphenol	ND	1.0	mg/Kg	5.00	07/01/1999 17:09	
2-Nitrophenol	ND	0.50	mg/Kg	5.00	07/01/1999 17:09	
2,4-Dimethylphenol	ND	0.50	mg/Kg	5.00	07/01/1999 17:09	
2,4-Dichlorophenol	ND	0.50	mg/Kg	5.00	07/01/1999 17:09	
4-Chloro-3-methylphenol	ND	1.0	mg/Kg	5.00	07/01/1999 17:09	
2,4,6-Trichlorophenol	ND	0.50	mg/Kg	5.00	07/01/1999 17:09	
2,4,5-Trichlorophenol	ND	0.50	mg/Kg	5.00	07/01/1999 17:09	
2,4-Dinitrophenol	ND	2.5	mg/Kg	5.00	07/01/1999 17:09	
4-Nitrophenol	ND	2.5	mg/Kg	5.00	07/01/1999 17:09	
2-Methyl-4,6-dinitrophenol	ND	2.5	mg/Kg	5.00	07/01/1999 17:09	
Pentachlorophenol	ND	2.5	mg/Kg	5.00	07/01/1999 17:09	
Surrogate(s)						
Phenol-d5	76.1	10-110	%	5.00	07/01/1999 17:09	
2-Fluorophenol	69.2	25-100	%	5.00	07/01/1999 17:09	
2,4,6-Tribromophenol	70.9	10-123	%	5.00	07/01/1999 17:09	

1220 Quarry Lane * Pleasanton, CA 94566-4756

Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

To: **Applied Remedial Services**

Test Method: 8270A

Attn.: Elias Rashmawi

Prep Method: 3550/8270A

Batch QC Report
Phenol analysis by 8270A

Method Blank	Soil	QC Batch # 1999/06/30-01.11
MB: 1999/06/30-01.11-001		Date Extracted: 06/30/1999

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Phenol	ND	0.10	mg/Kg	06/30/1999 20:18	
2-Chlorophenol	ND	0.10	mg/Kg	06/30/1999 20:18	
2-Methylphenol	ND	0.10	mg/Kg	06/30/1999 20:18	
4-Methylphenol	ND	0.20	mg/Kg	06/30/1999 20:18	
2-Nitrophenol	ND	0.10	mg/Kg	06/30/1999 20:18	
2,4-Dimethylphenol	ND	0.10	mg/Kg	06/30/1999 20:18	
2,4-Dichlorophenol	ND	0.10	mg/Kg	06/30/1999 20:18	
4-Chloro-3-methylphenol	ND	0.20	mg/Kg	06/30/1999 20:18	
2,4,6-Trichlorophenol	ND	0.10	mg/Kg	06/30/1999 20:18	
2,4,5-Trichlorophenol	ND	0.10	mg/Kg	06/30/1999 20:18	
2,4-Dinitrophenol	ND	0.50	mg/Kg	06/30/1999 20:18	
4-Nitrophenol	ND	0.50	mg/Kg	06/30/1999 20:18	
2-Methyl-4,6-dinitrophenol	ND	0.50	mg/Kg	06/30/1999 20:18	
Pentachlorophenol	ND	0.50	mg/Kg	06/30/1999 20:18	
Surrogate(s)					
Phenol-d5	61.0	24-113	%	06/30/1999 20:18	
2-Fluorophenol	63.4	25-121	%	06/30/1999 20:18	
2,4,6-Tribromophenol	65.8	19-122	%	06/30/1999 20:18	

To: **Applied Remedial Services**

Test Method: 8270A

Attn: Elias Rashmawi

Prep Method: 3550/8270A

Batch QC Report

Phenol analysis by 8270A

Laboratory Control Spike (LCS/LCSD)	Soil	QC Batch # 1999/06/30-01.11
LCS: 1999/06/30-01.11-002	Extracted: 06/30/1999	Analyzed: 06/30/1999 21:09
LCSD: 1999/06/30-01.11-003	Extracted: 06/30/1999	Analyzed: 06/30/1999 22:00

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Phenol	1.24	1.33	2.00	2.00	62.0	66.5	7.0	20-90	35		
2-Chlorophenol	1.28	1.35	2.00	2.00	64.0	67.5	5.3	27-123	35		
4-Chloro-3-methylphenol	1.36	1.52	2.00	2.00	68.0	76.0	11.1	28-103	33		
4-Nitrophenol	1.59	1.78	2.00	2.00	79.5	89.0	11.3	17-109	35		
Pentachlorophenol	1.35	1.45	2.00	2.00	67.5	72.5	7.1	11-114	35		
Surrogate(s)											
Phenol-d5	31.1	33.6	50	50	62.2	67.2		24-113			
2-Fluorophenol	33.7	34.1	50	50	67.4	68.2		25-121			
2,4,6-Tribromophenol	36.5	40.5	50	50	73.0	81.0		19-122			

To: Applied Remedial Services

Attn: Elias Rashmawi

Test Method: 8270A

Prep Method: 3550/8270A

Legend & Notes

Phenol analysis by 8270A

Analysis Flags

lrm

Reporting limits were raised due to matrix interference.

Lead by Flame AA

Applied Remedial Services

✉ 701 Southampton Road, Suite 105
Benicia, CA 94540

Attn: Elias Rashmawi

Phone: (707) 748-4205 Fax: (707) 748-4207

Project #:

Project: Union Pacific

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
PIT-19	Soil	06/24/1999 12:30	6

To: **Applied Remedial Services**

Test Method: 6010A

Attn.: Elias Rashmawi

Prep Method: 3050A

Lead by Flame AA

Sample ID: PIT-19	Lab Sample ID: 1999-06-0385-006
Project: Union Pacific	Received: 06/25/1999 17:44
Sampled: 06/24/1999 12:30	Extracted: 06/29/1999 06:58
Matrix: Soil	QC-Batch: 1999/06/29-01.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	630	5.0	mg/Kg	1.00	06/29/1999 16:31	

To: **Applied Remedial Services**

Test Method: 6010A

Attn.: Elias Rashmawi

Prep Method: 3050A

Batch QC Report

Lead by Flame AA

Method Blank	Soil	QC Batch # 1999/06/29-01.15
MB: 1999/06/29-01.15-048		Date Extracted: 06/29/1999 06:58

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Lead	ND	1.0	mg/Kg	06/29/1999 15:00	

To: **Applied Remedial Services**

Test Method: 6010A

Attn: Elias Rashmawi

Prep Method: 3050A

Batch QC Report

Lead by Flame AA

Laboratory Control Spike (LCS/LCSD)	Soil	QC Batch # 1999/06/29-01.15
LCS: 1999/06/29-01.15-049	Extracted: 06/29/1999 06:58	Analyzed: 06/29/1999 15:04
LCSD: 1999/06/29-01.15-050	Extracted: 06/29/1999 06:58	Analyzed: 06/29/1999 15:08

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Lead	103	104	100	100	103.0	104.0	1.0	80-120	20		

CAM 17 Metals

Applied Remedial Services

701 Southampton Road, Suite 105
Benicia, CA 94540

Attn: Elias Rashmawi

Phone: (707) 748-4205 Fax: (707) 748-4207

Project #:

Project: Union Pacific

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
PIT-4A	Soil	06/24/1999 08:30	2
PIT-6,7,12,13,14	Soil	06/24/1999 09:00	4
PIT-16	Soil	06/24/1999 12:00	5

To: **Applied Remedial Services**Test Method: 6010A
7471A

Attn.: Elias Rashmawi

Prep Method: 3050A
7471A

CAM 17 Metals

Sample ID: PIT-4A	Lab Sample ID: 1999-06-0385-002
Project: Union Pacific	Received: 06/25/1999 17:44
Sampled: 06/24/1999 08:30	Extracted: 06/29/1999 06:58
Matrix: Soil	QC-Batch: 1999/06/29-01.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	1.00	06/29/1999 16:20	
Arsenic	170	1.0	mg/Kg	1.00	06/29/1999 16:20	
Barium	110	1.0	mg/Kg	1.00	06/29/1999 16:20	
Beryllium	ND	0.50	mg/Kg	1.00	06/29/1999 16:20	
Cadmium	ND	0.50	mg/Kg	1.00	06/29/1999 16:20	
Chromium	49	1.0	mg/Kg	1.00	06/29/1999 16:20	
Cobalt	9.4	1.0	mg/Kg	1.00	06/29/1999 16:20	
Copper	30	1.0	mg/Kg	1.00	06/29/1999 16:20	
Lead	40	1.0	mg/Kg	1.00	06/29/1999 16:20	
Molybdenum	ND	1.0	mg/Kg	1.00	06/29/1999 16:20	
Nickel	65	1.0	mg/Kg	1.00	06/29/1999 16:20	
Selenium	ND	2.0	mg/Kg	1.00	06/29/1999 16:20	
Silver	ND	1.0	mg/Kg	1.00	06/29/1999 16:20	
Thallium	ND	1.0	mg/Kg	1.00	06/29/1999 16:20	
Vanadium	28	1.0	mg/Kg	1.00	06/29/1999 16:20	
Zinc	59	1.0	mg/Kg	1.00	06/29/1999 16:20	
Mercury	1.4	0.050	mg/Kg	1.00	06/30/1999	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-06-0385

To: **Applied Remedial Services**

Test Method: 6010A
7471A

Attn.: Elias Rashmawi

Prep Method: 3050A
7471A

CAM 17 Metals

Sample ID: PIT-6,7,12,13,14	Lab Sample ID: 1999-06-0385-004
Project: Union Pacific	Received: 06/25/1999 17:44
Sampled: 06/24/1999 09:00	Extracted: 06/29/1999 06:58
Matrix: Soil	QC-Batch: 1999/06/29-01.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	1.00	06/29/1999 16:23	
Arsenic	95	1.0	mg/Kg	1.00	06/29/1999 16:23	
Barium	180	1.0	mg/Kg	1.00	06/29/1999 16:23	
Beryllium	ND	0.50	mg/Kg	1.00	06/29/1999 16:23	
Cadmium	ND	0.50	mg/Kg	1.00	06/29/1999 16:23	
Chromium	56	1.0	mg/Kg	1.00	06/29/1999 16:23	
Cobalt	9.5	1.0	mg/Kg	1.00	06/29/1999 16:23	
Copper	41	1.0	mg/Kg	1.00	06/29/1999 16:23	
Lead	78	1.0	mg/Kg	1.00	06/29/1999 16:23	
Molybdenum	ND	1.0	mg/Kg	1.00	06/29/1999 16:23	
Nickel	65	1.0	mg/Kg	1.00	06/29/1999 16:23	
Selenium	ND	2.0	mg/Kg	1.00	06/29/1999 16:23	
Silver	ND	1.0	mg/Kg	1.00	06/29/1999 16:23	
Thallium	ND	1.0	mg/Kg	1.00	06/29/1999 16:23	
Vanadium	31	1.0	mg/Kg	1.00	06/29/1999 16:23	
Zinc	89	1.0	mg/Kg	1.00	06/29/1999 16:23	
Mercury	0.17	0.050	mg/Kg	1.00	06/30/1999	

To: **Applied Remedial Services**Test Method: 6010A
7471A

Attn.: Elias Rashmawi

Prep Method: 3050A
7471A

CAM 17 Metals

Sample ID: PIT-16	Lab Sample ID: 1999-06-0385-005
Project: Union Pacific	Received: 06/25/1999 17:44
Sampled: 06/24/1999 12:00	Extracted: 06/29/1999 06:58
Matrix: Soil	QC-Batch: 1999/06/29-01.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	1.00	06/29/1999 16:27	
Arsenic	12	1.0	mg/Kg	1.00	06/29/1999 16:27	
Barium	250	1.0	mg/Kg	1.00	06/29/1999 16:27	
Beryllium	ND	0.50	mg/Kg	1.00	06/29/1999 16:27	
Cadmium	0.59	0.50	mg/Kg	1.00	06/29/1999 16:27	
Chromium	42	1.0	mg/Kg	1.00	06/29/1999 16:27	
Cobalt	9.6	1.0	mg/Kg	1.00	06/29/1999 16:27	
Copper	63	1.0	mg/Kg	1.00	06/29/1999 16:27	
Lead	250	1.0	mg/Kg	1.00	06/29/1999 16:27	
Molybdenum	ND	1.0	mg/Kg	1.00	06/29/1999 16:27	
Nickel	71	1.0	mg/Kg	1.00	06/29/1999 16:27	
Selenium	ND	2.0	mg/Kg	1.00	06/29/1999 16:27	
Silver	ND	1.0	mg/Kg	1.00	06/29/1999 16:27	
Thallium	ND	1.0	mg/Kg	1.00	06/29/1999 16:27	
Vanadium	33	1.0	mg/Kg	1.00	06/29/1999 16:27	
Zinc	610	1.0	mg/Kg	1.00	06/29/1999 16:27	
Mercury	6.5	0.50	mg/Kg	10.00	06/30/1999	

To: **Applied Remedial Services**

Test Method: 7471A

Attn.: Elias Rashmawi

6010A

Prep Method: 3050A

7471A

Batch QC Report

CAM 17 Metals

Method Blank**Soil****QC Batch # 1999/06/29-01.15**

MB: 1999/06/29-01.15-048

Date Extracted: 06/29/1999 06:58

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Arsenic	ND	1.0	mg/Kg	06/29/1999 15:00	
Barium	ND	1.0	mg/Kg	06/29/1999 15:00	
Beryllium	ND	0.50	mg/Kg	06/29/1999 15:00	
Cadmium	ND	0.50	mg/Kg	06/29/1999 15:00	
Chromium	ND	1.0	mg/Kg	06/29/1999 15:00	
Cobalt	ND	1.0	mg/Kg	06/29/1999 15:00	
Copper	ND	1.0	mg/Kg	06/29/1999 15:00	
Lead	ND	1.0	mg/Kg	06/29/1999 15:00	
Molybdenum	ND	1.0	mg/Kg	06/29/1999 15:00	
Nickel	ND	1.0	mg/Kg	06/29/1999 15:00	
Selenium	ND	2.0	mg/Kg	06/29/1999 15:00	
Silver	ND	1.0	mg/Kg	06/29/1999 15:00	
Thallium	ND	1.0	mg/Kg	06/29/1999 15:00	
Vanadium	ND	1.0	mg/Kg	06/29/1999 15:00	
Zinc	ND	1.0	mg/Kg	06/29/1999 15:00	

To: **Applied Remedial Services**

Test Method: 7471A
6010A

Attn.: Elias Rashmawi

Prep Method: 3050A
7471A

**Batch QC Report
CAM 17 Metals**

Method Blank	Soil	QC Batch # 1999/06/29-01.16
MB: 1999/06/29-01.16-001		Date Extracted: 06/30/1999

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	06/30/1999	

To: Applied Remedial Services

Test Method: 6010A
7471A

Attn: Elias Rashmawi

Prep Method: 3050A
7471A

Batch QC Report

CAM 17 Metals

Laboratory Control Spike (LCS/LCSD)		Soil	QC Batch # 1999/06/29-01.15	
LCS:	1999/06/29-01.15-049	Extracted: 06/29/1999 06:58	Analyzed:	06/29/1999 15:04
LCSD:	1999/06/29-01.15-050	Extracted: 06/29/1999 06:58	Analyzed:	06/29/1999 15:08

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Arsenic	111	113	100	100	111.0	113.0	1.8	80-120	20		
Barium	107	108	100	100	107.0	108.0	0.9	80-120	20		
Beryllium	108	109	100	100	108.0	109.0	0.9	80-120	20		
Cadmium	111	112	100	100	111.0	112.0	0.9	80-120	20		
Chromium	114	114	100	100	114.0	114.0	0.0	80-120	20		
Cobalt	106	107	100	100	106.0	107.0	0.9	80-120	20		
Copper	105	105	100	100	105.0	105.0	0.0	80-120	20		
Lead	103	104	100	100	103.0	104.0	1.0	80-120	20		
Molybdenum	110	111	100	100	110.0	111.0	0.9	80-120	20		
Nickel	105	106	100	100	105.0	106.0	0.9	80-120	20		
Selenium	104	105	100	100	104.0	105.0	1.0	80-120	20		
Silver	112	112	100	100	112.0	112.0	0.0	80-120	20		
Thallium	115	116	100	100	115.0	116.0	0.9	80-120	20		
Vanadium	112	112	100	100	112.0	112.0	0.0	80-120	20		
Zinc	99.7	99.7	100	100	99.7	99.7	0.0	80-120	20		

To: **Applied Remedial Services**

Test Method: 6010A
7471A

Attn: Elias Rashmawi

Prep Method: 3050A
7471A

Batch QC Report

CAM 17 Metals

Laboratory Control Spike (LCS/LCSD)	Soil	QC Batch # 1999/06/29-01.16
LCS: 1999/06/29-01.16-002	Extracted: 06/30/1999	Analyzed: 06/30/1999
LCSD: 1999/06/29-01.16-003	Extracted: 06/30/1999	Analyzed: 06/30/1999

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Mercury	0.501	0.545	0.500	0.500	100.2	109.0	8.4	85-115	20		



Sequoia
Analytical

06-0385

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308

July 15, 1999

Gary Cook
Chromalab, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: Samples/M907132

Dear Gary Cook

Enclosed are the results of analyses for sample(s) received by the laboratory on June 29, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Hale
Project Manager

CA ELAP Certificate Number 1210





Chromalab, Inc. 1220 Quarry Lane Pleasanton, CA 94566	Project: Samples Project Number: 1999-06-0385/ Union Pacific Project Manager: Gary Cook	Sampled: 6/24/99 Received: 6/29/99 Reported: 7/15/99
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ANALYTICAL REPORT FOR M907132

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
1999-06-0385	M907132-01	Soil	6/24/99

Where was the sample taken? pic





Chromalab, Inc. 1220 Quarry Lane Pleasanton, CA 94566	Project: Samples Project Number: 1999-06-0385/ Union Pacific Project Manager: Gary Cook	Sampled: 6/24/99 Received: 6/29/99 Reported: 7/15/99
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**Chlorinated Herbicides by EPA Method 8150B
Sequoia Analytical - Morgan Hill**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
1999-06-0385				M907132-01			Soil	
2,4-D	9070160	7/6/99	7/8/99		40.0	ND	ug/kg	
2,4-DB	"	"	"		40.0	ND	"	
2,4,5-T	"	"	"		40.0	ND	"	
2,4,5-TP (Silvex)	"	"	"		40.0	ND	"	
Dalapon	"	"	"		40.0	ND	"	
Dicamba	"	"	"		40.0	ND	"	
Dichlorprop	"	"	"		40.0	ND	"	
Dinoseb	"	"	"		40.0	ND	"	
MCPA	"	"	"		20000	ND	"	
MCPP	"	"	"		20000	ND	"	
Surrogate: Dichlorophenylacetic acid	"	"	"	30.0-150		112	%	





Chromalab, Inc. 1220 Quarry Lane Pleasanton, CA 94566	Project: Samples Project Number: 1999-06-0385/ Union Pacific Project Manager: Gary Cook	Sampled: 6/24/99 Received: 6/29/99 Reported: 7/15/99
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**Chlorinated Herbicides by EPA Method 8150B/Quality Control
Sequoia Analytical - Morgan Hill**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9070160			Date Prepared: 7/6/99			Extraction Method: EPA 3550A				
Blank			9070160-BLK1							
2,4-D	7/8/99			ND	ug/kg	40.0				
2,4-DB	"			ND	"	40.0				
2,4,5-T	"			ND	"	40.0				
2,4,5-TP (Silvex)	"			ND	"	40.0				
Dalapon	"			ND	"	40.0				
Dicamba	"			ND	"	40.0				
Dichlorprop	"			ND	"	40.0				
Dinoseb	"			ND	"	40.0				
MCPA	"			ND	"	20000				
MCPP	"			ND	"	20000				
Surrogate: Dichlorophenylacetic acid	"	167		148	"	30.0-150	88.6			
LCS			9070160-BS1							
2,4-D	7/8/99	83.3		111	ug/kg	30.0-150	133			
2,4,5-T	"	83.3		103	"	30.0-150	124			
2,4,5-TP (Silvex)	"	83.3		101	"	30.0-150	121			
Surrogate: Dichlorophenylacetic acid	"	167		148	"	30.0-150	88.6			
LCS Dup			9070160-BSD1							
2,4-D	7/8/99	83.3		108	ug/kg	30.0-150	130	50.0	2.28	
2,4,5-T	"	83.3		95.7	"	30.0-150	115	50.0	7.53	
2,4,5-TP (Silvex)	"	83.3		94.7	"	30.0-150	114	50.0	5.96	
Surrogate: Dichlorophenylacetic acid	"	167		170	"	30.0-150	102			





Chromalab, Inc. 1220 Quarry Lane Pleasanton, CA 94566	Project: Samples Project Number: 1999-06-0385/ Union Pacific Project Manager: Gary Cook	Sampled: 6/24/99 Received: 6/29/99 Reported: 7/15/99
---	---	--

Notes and Definitions

#	Note
---	------

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- Recov. Recovery
- RPD Relative Percent Difference



From:
ChromaLab, Inc. (CL)
 1220 Quarry Lane
 Pleasanton, CA 94566-4756

To:
 Sequoia Analytical
 885 Jarvis Drive
 Morgan Hill, CA 95037
 Phone: (650) 364-9600
 Fax: (650) 364-2048
 Contact: Kayvan Kimyai
 Phone: (408) 776-9600

M 907132

Project Manager: Gary Cook
 Phone: (925) 484-1919
 Fax: (925) 484-1096
 Email:

Ext: 105

CL Submission #: **1999-06-0385**

Project #:
 Project Name: UNION PACIFIC

CL PO #:

Client Sample ID	CL#	Sampled	Matrix	Method	Due
PIT-1,2A,2B,3A,3B	001	06/24/1999 07:00	Soil	8150	07/02/1999 17:00
Subcontract - 8150 Chlorinated Herbicides					

** Please homogenize sample prior to extraction. - DSH*

Std TAT

RELINQUISHED BY: <i>Denise Harrington</i> Signature D. Harrington 1050 Printed Name Chromalab 6/29/99 Company	1. RELINQUISHED BY: <i>Steve Teu</i> Signature Steve Teu 10:50 Printed Name Sequoia 6/29/99 Company	2. RELINQUISHED BY: <i>Steve Teu</i> Signature Printed Name Date Company
RECEIVED BY: <i>RM</i> Signature LE Printed Name SD Company	1. RECEIVED BY: <i>[Signature]</i> Signature CHAU Printed Name Company	2. RECEIVED BY: Signature Printed Name Date Company

CHROMALAB, INC.

77-06-0500

120 Quarry Lane • Pleasanton, California 94566-4756
510/484-1919 • Facsimile 510/484-1096

Print thinner
TEPH
dies
MO
leaves
Toppin

46660
Chain of Custody

Environmental Services (SDB) (DOHS 1094)

DATE 6/24/99 PAGE 1 OF 2

PROJ. MGR <u>Elias Rashmawi</u> COMPANY <u>Applied Remedial Services</u> ADDRESS <u>701 South Hampton Rd. #105</u> <u>Benicia, Ca</u>				ANALYSIS REPORT																					
SAMPLERS (SIGNATURE)		(PHONE NO.)		(FAX NO.)		TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	8015 Modified Industrial Solvents	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (ICLP, STLC)	Herbicide 8150	8270 phenols	NUMBER OF CONTAINERS
SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.																					
Pit 1	6/24/99	7am	Soil																						
Pit 2A		715																							
Pit 2B		730																							
Pit 3A		800																							
Pit 3B		815																							
Pit 4-A		830														X		X							
Pit 4-B		845																							
Pit 6		9:00																							
Pit 7		9:30																							

Composit 5:1

PROJECT INFORMATION		SAMPLE RECEIPT			
PROJECT NAME: <u>Union Pacific</u>	TOTAL NO. OF CONTAINERS <u>14</u>				
PROJECT NUMBER	HEAD SPACE				
P.O. #	REC'D GOOD CONDITION/COLD				
TAT	CONFORMS TO RECORD				
<u>STANDARD 5-DAY</u>	24	48	72	OTHER	
SPECIAL INSTRUCTIONS/COMMENTS: <u>40°C</u>					

RELINQUISHED BY 1. <u>John ARS 1130</u> (SIGNATURE) (TIME) <u>JAY KARA 6-25-99</u> (PRINTED NAME) (DATE) <u>A.R.S</u> (COMPANY)	RELINQUISHED BY 2.	RELINQUISHED BY 3. <u>[Signature] 1744</u> (SIGNATURE) (TIME) <u>[Signature] 6-25-99</u> (PRINTED NAME) (DATE) <u>Chromalab</u> (COMPANY)
RECEIVED BY 1. <u>[Signature] 1130</u> (SIGNATURE) (TIME) <u>[Signature] 6-25-99</u> (PRINTED NAME) (DATE) <u>Chromalab</u> (COMPANY)	RECEIVED BY 2.	RECEIVED BY (LABORATORY) 3. <u>Denise Harrington</u> (SIGNATURE) (TIME) <u>D. Harrington 1744</u> (PRINTED NAME) (DATE) <u>Chromalab 6/25/99</u> (LAB)

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756
510/484-1919 • Facsimile 510/484-1096

Chain of Custody

46660

DATE 6/21/99 PAGE 2 OF 2

PROJ. MGR Elias Rashmani
 COMPANY Applied Remedial Services
 ADDRESS 701 Southampton Rd., #105
Berkeley, Ca
 SAMPLERS (SIGNATURE) _____ (PHONE NO.) _____
 _____ (FAX NO.) _____

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, 8+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	BOISM - TEPH Paint thinner, Kerosene, Methylene, Turpentine	LUFT	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (ICLP, STLC)	8270 Phenols	NUMBER OF CONTAINERS	
Pit 12	6/21/99	10am	soil	/																					
Pit 13		11am																							
Pit 14		11:30																							
Pit 16		12:00													X			X							
Pit 19		12:30													X					X					

Samples +

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJECT NAME: <u>Union Pacific</u>	TOTAL NO. OF CONTAINERS <u>14</u>	HEAD SPACE	
PROJECT NUMBER <u> </u>	REC'D GOOD CONDITION/COLD	CONFORMS TO RECORD	
P.O. #	TAT	STANDARD 5-DAY	24 48 72 OTHER

RELINQUISHED BY		RELINQUISHED BY		RELINQUISHED BY	
(SIGNATURE) <u>[Signature]</u>	(TIME) <u>1130</u>	(SIGNATURE)	(TIME)	(SIGNATURE) <u>[Signature]</u>	(TIME) <u>1744</u>
(PRINTED NAME) <u>FAY KARA</u>	(DATE) <u>6-25-99</u>	(PRINTED NAME)	(DATE)	(PRINTED NAME) <u>[Signature]</u>	(DATE) <u>6/25/99</u>
(COMPANY) <u>A.R.S.</u>		(COMPANY)		(COMPANY)	
RECEIVED BY		RECEIVED BY		RECEIVED BY (LABORATORY)	
(SIGNATURE)	(TIME)	(SIGNATURE)	(TIME)	(SIGNATURE) <u>Debbie Harrington</u>	(TIME) <u> </u>
(PRINTED NAME)	(DATE)	(PRINTED NAME)	(DATE)	(PRINTED NAME) <u>D. Harrington</u>	(DATE) <u>1744</u>
(COMPANY)		(COMPANY)		(LAB) <u>Chromalab</u>	(DATE) <u>6/25/99</u>

SPECIAL INSTRUCTIONS/COMMENTS:

DATA SHEET

TOTAL THRESHOLD LIMIT CONCENTRATION (TTLC)

Sample: Micro Analytical - ARS Union Pacific; 70637-1; Soil Digestate

Element	Regulatory Limit (mg/kg)	Detected Level (mg/kg)	Method Detection Limit (mg/kg)	Method Blank (mg/kg)	Mean Percent Recovery
Arsenic	500	210	5.0	< MDL (ND)	107%
Antimony	500	19	5.0	< MDL (ND)	106%
Barium	10,000	230	25	< MDL (ND)	111%
Beryllium	75	< MDL (ND)	0.25	< MDL (ND)	103%
Cadmium	100	0.65	0.50	< MDL (ND)	101%
Chromium* (III/VI)	2,500/500	65	2.5	< MDL (ND)	96%
Cobalt	8,000	13	0.50	< MDL (ND)	107%
Copper	2,500	140	0.50	< MDL (ND)	103%
Lead	1,000	450	2.5	< MDL (ND)	104%
Molybdenum	3,500	< MDL (ND)	5.0	< MDL (ND)	108%
Nickel	2,000	80	0.50	< MDL (ND)	104%
Selenium	100	4.6	2.5	< MDL (ND)	110%
Silver	500	< MDL (ND)	2.5	< MDL (ND)	105%
Thallium	700	< MDL (ND)	0.50	< MDL (ND)	94%
Vanadium	2,400	< MDL (ND)	0.50	< MDL (ND)	109%
Zinc	5,000	1,000	0.25	< MDL (ND)	103%

Source: California Administrative Code of Environmental Health, Title 22, Division 4*
 Reported as Cr (III) plus Cr (VI)
 (ND) = None Detected

CALCOAST ANALYTICAL

Materials Chemistry

Certified by
*California Department of Health Services
City of Los Angeles, Dept. of Building & Safety*

July 7, 1999

Micro Analytical Laboratories
5900 Hollis St., Suite M
Emeryville, CA 94608

Attn: Mr. Farid Ramezanzadeh

Ref: Lab File No. 0707-3A/B-99(a):

1. SAMPLES:

One (1) container of liquid;

Project: ARS Union Pacific, Fruitvale Transit Village
Sample: 70636-1; STLC Extract

Received: July 6, 1999

2. ANALYSIS REQUIRED:

Determination of the total arsenic (As) content.

3. METHODS OF ANALYSIS:

EPA Method 7061; SW-846

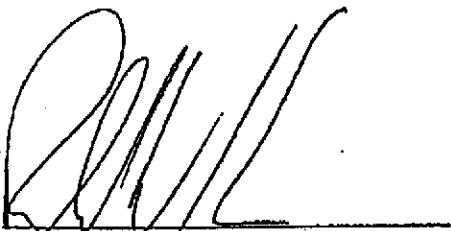
COATINGS • BUILDING MATERIALS • HAZARDOUS WASTE
SPECTROSCOPY • CHROMATOGRAPHY • MICROSCOPY

TELEPHONE (510) 652-2979
FAX (510) 652-3085

P.O. BOX 8702 • EMERYVILLE, CA 94662
4072 WATTS STREET • EMERYVILLE, CA 94608

4. RESULTS:

Element	Regulatory Limit (mg/L)	Detected Level (mg/L)	Method Detection Limit (mg/L)	Method Blank (mg/L)	Mean Percent Recovery (mg/L)
Arsenic	5.0	71	0.05	< MDL (ND)	110%



Ronald W. Shrewsbury
Analytical Chemist

RWS: swr

SAMPLES SUBMITTED FOR TESTING WILL BE HELD 30 DAYS FROM REPORT DATE AT WHICH TIME THEY WILL BE RETURNED TO CLIENT OR DESTROYED. CLIENT WILL BE RESPONSIBLE FOR ALL SHIPPING, HANDLING, AND DISPOSAL CHARGES. SAMPLES WILL BE STORED UPON WRITTEN INSTRUCTIONS AND FEE ARRANGEMENTS.

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