

*TCLP - Oak Ctrl
& Cresote Tr.
SVOC (TC compds
only)*

CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLE(S) AQ02065-AQ02069
SAMPLE AUTHORIZATION NO.: 06SC0262
SAMPLES INCLUDED IN THIS ANALYTICAL BATCH : AQ02065, AQ02066, AQ02067, AQ02068 AND AQ02069
2. SAMPLES WERE COLLECTED ON 5/17/2007 AT UCCE RICHMOND FIELD STATION, RICHMOND, CA
3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS MARTIN SNIDER
4. SAMPLES WERE: TCLP EXTRACTIPON WAS PERFORMED AT ECL BERKELEY ON 5/30 & 5/31/2007
RECEIVED ON 6/1/2007 BY ENVIRONMENTAL CHEMISTRY LABORATORY-
LOS ANGELES BRANCH
EXTRACTED ON 6/6/2007 BY EPA METHOD 3510 (SEPARATORY FUNNEL LIQ/LIQ
EXTRACTION)
ANALYZED ON 6/11/2007 BY EPA METHOD 8270C (SEMIVOLATILE ORGANIC COMPOUNDS
BY GC/MS)
DATA PACKAGE WAS COMPLETED ON 6/20/2007
5. DURING THE COURSE OF THESE ANALYSES, NO PROBLEM WAS ENCOUNTERED.
6. ALL QC PARAMETERS / INDICATORS WERE LARGELY WITHIN CONTROL LIMITS. MATRIX SPIKE/MATRIX SPIKE
DUPLICATE ANALYSES WERE PERFORMED ON BOTH CONTROL COMPOSITE AND CRESOTE COMPOSITE
SAMPLES.
DAILY CONTINUING CALIBRATION CHECK FOR 2,4-DINITROTOLUENE WAS OUTSIDE OF ACCEPTANCE LIMIT.
ALTHOUGH THE CONTROL LIMITS FOR THE PERCENT RECOVERIES OF MATRIX SPIKE COMPOUNDS IN THE
LIQUID/LIQUID EXTRACTION OF THE TCLP EXTRACTS HAVE NOT BEEN ESTABLISHED, THE RECOVERY LEVELS
OF THE MS/MSD SAMPLES WERE COMPARABLE TO THE METHOD STANDARD RECOVERY SAMPLE WITH THE
EXCEPTION OF PENTACHLOROPHENOL. ONLY ONE SURROGATE COMPOUND WAS RECOVERED OUTSIDE
THE CONTROL LIMIT IN ONE SAMPLE.
DUPLICATE SAMPLES WERE PREPARED BY MIXING EACH SAMPLE AND ITS DUPLICATE.
7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.
8. SAMPLE HOLDING TIME WAS MET.

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
ENVIRONMENTAL CHEMISTRY LABORATORY-LOS ANGELES BRANCH
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 5797 OR (213) 977-7928

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EPA 8270C FOR SAMPLES AQ02065 - AQ02069

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TOTAL PAGES = 9

ENVIRONMENTAL CHEMISTRY LABORATORY		1. Authorization Number 06SC0262	ECL No.: A002065 To A002069	2. Page 1 of 1		
SAMPLE ANALYSIS REQUEST						
3. Requestor: (to Receive Results) a. Name: <u>Martin Snider</u> b. Address: <u>700 Heinz Ave., Suite 100</u> (street number) <u>Berkeley, CA 94710</u> (city, state, zip) c. Phone: <u>(510) 849-5258</u> (area code first) d. Fax: <u>(510) 540-2305</u> (area code first) e. Email: <u>msnider</u> @dtsc.ca.gov		4. Program/Activity: HWM-RPD 5. TAT Level: <u>1</u> *Unit Chief's Signature: (if TAT level = 1) <u>Ms Snider KCT</u>				
6. Sampling Information: a. Date/Time Sampled: <u>05/17/07</u> (mm/dd/yy) b. Location: EPA ID No. _____ (#:# AM/PM) Site: <u>UCCE Richmond Field Station</u> Address: <u>1301 South 46th Street, Bldg. 478</u> (street number) <u>Richmond, CA 94804</u> (city, state, zip) GPS-Lat: _____ GPS-Long: _____ GPS-Alt: _____ GPS-Depth: _____		7. Codes (select from drop down list or fill in if applicable) a. Office _____ b. INDEX _____ c. PCA <u>22090</u> d. MPC _____ e. SITE _____ f. County _____				
8. Samples: a. ID b. Collector's No. c. ECL No. d. Matrix e. Container Size f. Number of containers g. Preservative / Field Information						
1	<u>TCLP BLANK</u>	<u>A002065</u>	<u>TCLP extract</u>	<u>2 L PTFE</u>	<u>1</u>	<u>TCLP Extractant #1</u>
2	<u>OAK CONTROL 1</u>	<u>A002066</u>	↓	↓	<u>1</u>	<u>CONTROL COMPOSITE</u>
3	<u>OAK CONTROL 2</u>	<u>A002067</u>	↓	↓	<u>1</u>	<u>CONTROL COMPOSITE DUP</u>
4	<u>HWCRESOTE 1</u>	<u>A002068</u>	↓	↓	<u>1</u>	<u>CRBOSOTE COMPOSITE</u>
5	<u>HWCRESOTE 2</u>	<u>A002069</u>	↓	↓	<u>1</u>	<u>CRBOSOTE COMPOSITE DUP</u>
6						
7						
8						
9						
9. Analysis Requested: Enter sample IDs and sample ID ranges separated by commas. For example, 1-3, 5-7, 9						
a. Inorganic Analysis		Sample(s) ID	b. Organic Analysis		Sample(s) ID	
			GCMS--Semivolatiles(8270C)			
Other Metals:						
c. TCLP Analysis			d. Other Analysis			
Semivolatiles (do TCLP regardless)						
e. Comments for Multiphasic Samples/Analysis Priority:						
10. Analysis Objective: <u>Waste Characterization</u>						
11. Detection Limit Requirements: (Check ECL User's Manual to assure default DL is sufficient.) <u>TC rule reg. levels</u>						
12. Supplemental Requests: Enter sample IDs as described in Item 9 Desired Analysis Sample(s) ID Initials: Date:			13. ECL Lab Remarks: Samples prepared in field (cut) 5/17/07. TCLP extraction done 5/30-5/31 at BCL Berk. Ext. for 8270 within 7 days			
14. Chain of Custody:						
	Name	Title	Signature	Inclusive Dates of Custody		
a.	<u>Martin Snider</u>	<u>RSII</u>		<u>5/21/2007</u>	to	<u>5/31/2007</u>
b.	<u>PETER WONG</u>	<u>RSII</u>	<u>[Signature]</u>	<u>6/1/07</u>	to	
c.					to	
d.					to	

FIELD

LAB

COC

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
 ENVIRONMENTAL CHEMISTRY LABORATORY-LOS ANGELES BRANCH
 1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
 TELEPHONE (213) 580-5797 OR (213) 977-7928

REQUESTER: MARTIN SNIDER

SCL NO. AQ02065-AQ02069

SAMPLE LOCATION: UCCE RICHMOND FIELD STATION
 1301 SOUTH 46TH STREET BLDG 478
 RICHMOND, CA 94804

DATE REPORTED: 6/20/2007

METHODS: EPA METHOD 8270C SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS
 EPA METHOD 3510 SEPARATORY FUNNEL LIQ/LIQ EXTRACTION

SVOCs BY GC/MS

ANALYTE	QUANTITATION LIMIT										
	SCL NO.		AQ02065	AQ02066	AQ02068			AQ02065	AQ02066	AQ02068	
	COL. NO.	METHOD	TCLP	OAK	HWCRO		METHOD	TCLP	OAK	HWCRO	
		BLANK	BLANK	CONTROL 1	SOTE-1		BLANK	BLANK	CRTL 1	SOTE-1	
	MATRIX	WATER	TCLP EXTRACT	TCLP EXTRACT	TCLP EXTRACT		WATER	TCLP EXTRACT	TCLP EXTRACT	TCLP EXTRACT	
UNIT	MG/L	MG/L	MG/L	MG/L		MG/L	MG/L	MG/L	MG/L		
o-CRESOL (2-METHYLPHENOL)		ND	ND	ND	0.11		0.04	0.04	0.04	0.04	
m+p-CRESOL (3 & 4-METHYLPHENOLS)		ND	ND	ND	0.31		0.04	0.04	0.04	0.04	
1,4-DICHLOROBENZENE		ND	ND	ND	ND		0.04	0.04	0.04	0.04	
2,4-DINITROTOLUENE		ND	ND	ND	ND		0.04	0.04	0.04	0.04	
HEXACHLOROBENZENE		ND	ND	ND	ND		0.04	0.04	0.04	0.04	
HEXACHLOROBUTADIENE		ND	ND	ND	ND		0.04	0.04	0.04	0.04	
HEXACHLOROETHANE		ND	ND	ND	ND		0.04	0.04	0.04	0.04	
TROBENZENE		ND	ND	ND	ND		0.04	0.04	0.04	0.04	
PENTACHLOROPHENOL		ND	ND	ND	ND		0.50	0.50	0.50	0.50	
2,4,5-TRICHLOROPHENOL		ND	ND	ND	ND		0.04	0.04	0.04	0.04	
2,4,6-TRICHLOROPHENOL		ND	ND	ND	ND		0.04	0.04	0.04	0.04	

NOTES:

ND=NOT DETECTED MG=MILLIGRAM L=LITER
 QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)
 M & P-METHYL PHENOLS CO-ELUTE IN THE ANALYSIS, REPORTED AS TOTAL OF THE TWO ISOMERS.

FOR SCL #AQ02068, PHENOL 2,4-DIMETHYLPHENOL, NAPHTHALENE, 2-METHYL NAPHTHALENE, ACENAPHTHALENE, DIBENZOFURAN, FLUORENE, PHENANTHRENE AND CARBAZOLE WERE DETECTED AT QUANTIFIABLE LEVELS

SAMPLE PREPARATION

ANALYST

SUPERVISOR

K. Sinn JUNE 20, 2007
 KENNTH SINN DATE

K. Sinn 6-20-07
 KENNETH SINN DATE

R. Chin 6/20/07
 RUSS CHIN DATE

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QUALITY CONTROL (QC) REPORT
 DEPARTMENT OF TOXIC SUBSTANCES CONTROL
 ENVIRONMENTAL CHEMISTRY LABORATORY-LOS ANGELES BRANCH
 1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
 TELEPHONE (213) 580-5797 OR (213) 977-9728

PAGE 1 OF 5

REQUESTER: MARTIN SNIDER DATE SAMPLE RECEIVED: 6/1/2007
 SAMPLING LOCATION: UCCE RICHMOND FIELD STATION DATE SAMPLE PREPARED: 6/6/2007
 1301 SOUTH 46TH ST. BLDG. 478
 RICHMOND, CA 94804 DATE SAMPLE ANALYZED: 6/11/2007
 METHODS: EPA METHOD 8270C SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS
 EPA METHOD 3510 SEPARATORY FUNNEL LIQ/LIQ EXTRACTION

QC REPORT FOR A: METHOD STANDARD RECOVERY
 B: LABORATORY CONTROL SAMPLE
 C: SAMPLE DUPLICATE ANALYSIS

ANALYTE	A		B	
	METHOD STANDARD		LABORATORY CONTROL SAMPLE	
	RECOVERY	CONTROL LIMIT	FOUND	CONTROL LIMIT
	%	%	UG/L	UG/L
1,4-DICHLOROBENZENE	60.5	SEE	265	SEE
2,4-DINITROTOLUENE	61.4	NOTE	259	NOTE
O-CRESOL (2-METHYLPHENOL)	73.3	BELOW	315	BELOW
M+P-CRESOL (3+4-METHYLPHENOL)	75.6		650	
PENTACHLOROPHENOL	46.4		663	
2,4,5-TRICHLOROPHENOL	60.9		262	
2,4,6-TRICHLOROPHENOL	72.7		265	

C			
SAMPLE DUPLICATE ANALYSIS			
PERFORMED ON : SCL NO. AQ02066			
MATRIX : TCLP EXTRACT			
	RUN 1	RUN 2	RPD
COMPOUND	UG/L	UG/L	%
SEE NOTE BELOW			

NOT ANALYZED (SEE NOTES)

NOTE: ALTHOUGH THE CONTROL LIMITS FOR THE PERCENT RECOVERIES OF MATRIX SPIKE COMPOUNDS IN THE LIQUID/LIQUID EXTRACTION OF THE TCLP EXTRACTS HAVE NOT BEEN ESTABLISHED, THE RECOVERY LEVELS OF THE MS/MSD SAMPLES WERE COMPARABLE TO THE METHOD STANDARD RECOVERY SAMPLE WITH THE EXCEPTION OF PENTACHLOROPHENOL.

SAMPLE DUPLICATE ANALYSIS WAS PERFORMED. NO DATA WERE COLLECTED SINCE NO TARGET ANALYTES WERE DETECTED IN SAMPLE.

SAMPLE PREPARATION	ANALYST	SUPERVISOR
<i>K. Sinn</i> JUNE 20, 2007	<i>K. Sinn</i> 6-20-07	<i>R. Chin</i> 6/20/07
KENNETH SINN DATE	KENNETH SINN DATE	RUSS CHIN DATE

QUALITY CONTROL (QC) REPORT
 DEPARTMENT OF TOXIC SUBSTANCES CONTROL
 ENVIRONMENTAL CHEMISTRY LABORATORY-LOS ANGELES BRANCH
 1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
 TELEPHONE (213) 580-5797 OR (213) 977-9728

REQUESTER: MARTIN SNIDER
 DATE SAMPLE RECEIVED: 6/1/2007
 SAMPLING LOCATION: UCCE RICHMOND FIELD STATION
 1301 SOUTH 46TH ST. BLDG. 478
 RICHMOND, CA 94804
 DATE SAMPLE PREPARED: 6/6/2007
 DATE SAMPLE ANALYZED: 6/11/2007
 METHODS: EPA METHOD 8270C SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS
 EPA METHOD 3510 SEPARATORY FUNNEL LIQ/LIQ EXTRACTION

QC REPORT FOR

A: METHOD STANDARD RECOVERY
 B: LABORATORY CONTROL SAMPLE
 C: SAMPLE DUPLICATE ANALYSIS

ANALYTE	A		B	
	METHOD STANDARD		LABORATORY CONTROL SAMPLE	
	RECOVERY	CONTROL LIMIT	FOUND	CONTROL LIMIT
	%	%	UG/L	UG/L
1,4-DICHLORO BENZENE	60.5	SEE	265	
2,4-DINITROTOLUENE	61.4	NOTE	259	
O-CRESOL (2-METHYLPHENOL)	73.3	BELOW	315	
M+P-CRESOL (3+4-METHYLPHENOL)	75.6		650	
PENTACHLOROPHENOL	46.4		663	
2,4,5-TRICHLOROPHENOL	60.9		262	
2,4,6-TRICHLOROPHENOL	72.7		265	

C			
SAMPLE DUPLICATE ANALYSIS			
PERFORMED ON : SCL NO. AQ02068			
MATRIX : TCLP EXTRACT			
	RUN 1	RUN 2	RPD
COMPOUND	UG/L	UG/L	%
O-CRESOL	107	130	19.4
M+P CRESOL	312	373	17.8

NOT ANALYZED (SEE NOTES)

NOTE: ALTHOUGH THE CONTROL LIMITS FOR THE PERCENT RECOVERIES OF MATRIX SPIKE COMPOUNDS IN THE LIQUID/LIQUID EXTRACTION OF THE TCLP EXTRACTS HAVE NOT BEEN ESTABLISHED, THE RECOVERY LEVELS OF THE MS/MSD SAMPLES WERE COMPARABLE TO THE METHOD STANDARD RECOVERY SAMPLE WITH THE EXCEPTION OF PENTACHLOROPHENOL.

SAMPLE PREPARATION

ANALYST

SUPERVISOR

Kenneth Sinn
 KENNETH SINN DATE JUNE 20, 2007

Kenneth Sinn
 KENNETH SINN DATE 6-20-07

Russ Chin
 RUSS CHIN DATE 6/20/07

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QUALITY CONTROL (QC) REPORT
 DEPARTMENT OF TOXIC SUBSTANCES CONTROL
 ENVIRONMENTAL CHEMISTRY LABORATORY-LOS ANGELES BRANCH
 1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
 TELEPHONE (213) 580-5797 OR (213) 977-7928

REQUESTER: MARTIN SNIDER DATE SAMPLE RECEIVED: 6/1/2007

SAMPLING LOCATION: UCCE RICHMOND FIELD STATION DATE SAMPLE PREPARED: 6/6/2007
 1301 SOUTH 46TH STREET BLDG 478
 RICHMOND, CA 94804 DATE SAMPLE ANALYZED: 6/11/2007

METHODS: EPA METHOD 8270C SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS
 EPA METHOD 3510 SEPARATORY FUNNEL LIQ./LIQ. EXTRACTION

QC REPORT FOR MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD) PERCENT RECOVERY

MATRIX SPIKE PERFORMED ON AQ02066 NOT ANALYZED (SEE NOTES)

TYPE OF MATRIX TCLP EXTRACT

COMPOUND	AMOUNT OF ANALYTE IN SAMPLE UG/L	AMOUNT OF ANALYTE ADDED UG/L	MATRIX SPIKE		MATRIX SPIKE DUPLICATE		AVE % REC	CONTROL LIMITS FOR % REC	R % D BETWEEN MS/MSD	CONTROL LIMITS FOR RPD
			AMOUNT RECOVERED UG/L	%REC	AMOUNT RECOVERED UG/L	%REC				
			UG/L	%	UG/L	%				
1,4-DICHLOROBENZENE	<40	400	222	55.5	247	61.8	58.6	SEE	10.7	25
2,4-DINITROTOLUENE	<40	400	232	58	261	65.2	61.6	NOTE	11.6	25
O-CRESOL(2-METHYLPHENOL)	<40	400	268	67	303	75.7	71.4	BELOW	12.2	25
(M+P)-CRESOL	<40	800	544	68	620	77.5	72.8		13	25
PENTACHLOROPHENOL	<500	1200	829	69.1	904	75.3	72.2		8.3	25
2,4,5-TRICHLOROPHENOL	<40	400	233	58.3	262	65.5	61.9		11.6	25
2,4,6-TRICHLOROPHENOL	<40	400	241	60.3	265	66.2	63.3		9.3	25

NOTE: CONTROL LIMITS HAVE NOT BEEN ESTABLISHED FOR SPIKING INTO TCLP EXTRACTS

SAMPLE PREPARATION

ANALYST

SUPERVISOR

Kenneth Sinn
 KENNETH SINN DATE JUNE 20, 2007

Kenneth Sinn
 KENNETH SINN DATE 6-20-07

Russ Chin
 RUSS CHIN DATE 6/20/07

QUALITY CONTROL (QC) REPORT
 DEPARTMENT OF TOXIC SUBSTANCES CONTROL
 ENVIRONMENTAL CHEMISTRY LABORATORY-LOS ANGELES BRANCH
 1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
 TELEPHONE (213) 580-5797 OR (213) 977-7928

REQUESTER: MARTIN SNIDER DATE SAMPLE RECEIVED: 6/1/2007
 SAMPLING LOCATION: UCCE RICHMOND FIELD STATION DATE SAMPLE PREPARED: 6/6/2007
 1301 SOUTH 46TH STREET BLDG 478
 RICHMOND, CA 94804 DATE SAMPLE ANALYZED: 6/11/2007
 METHODS: EPA METHOD 8270C SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS
 EPA METHOD 3510 SEPARATORY FUNNEL LIQ./LIQ. EXTRACTION

QC REPORT FOR MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD) PERCENT RECOVERY

MATRIX SPIKE PERFORMED ON AQ02068 NOT ANALYZED (SEE NOTES)
 TYPE OF MATRIX TCLP EXTRACT

COMPOUND	AMOUNT OF ANALYTE IN SAMPLE UG/L	AMOUNT OF ANALYTE ADDED UG/L	MATRIX SPIKE		MATRIX SPIKE DUPLICATE		AVE % REC	CONTROL LIMITS FOR % REC	R % D BETWEEN MS/MSD	CONTROL LIMITS FOR RPD
			AMOUNT RECOVERED UG/L	%REC	AMOUNT RECOVERED UGML	%REC				
			UG/L	%	UGML	%				
1,4-DICHLOROBENZENE	<40	400	208	52	221	55.2	53.6	SEE	5.9	25
2,4-DINITROTOLUENE	<40	400	264	66	256	64	65	NOTE	3.1	25
O-CRESOL(2-METHYLPHENOL)	107	400	318	79.5	307	76.7	78.1	BELOW	3.5	25
(M+P)-CRESOL	312	800	662	79	635	79.4	79.2		0.5	25
PENTACHLOROPHENOL	<500	1200	872	72.7	857	71.4	72.1		1.8	25
2,4,5-TRICHLOROPHENOL	<40	400	248	62	247	61.8	61.9		0.3	25
2,4,6-TRICHLOROPHENOL	<40	400	258	64.5	254	63.5	64		1.6	25

NOTE: CONTROL LIMITS HAVE NOT BEEN ESTABLISHED FOR SPIKING INTO TCLP EXTRACTS

SAMPLE PREPARATION

ANALYST

SUPERVISOR

Kenneth Sinn
 KENNETH SINN DATE JUNE 20 2007

Kenneth Sinn
 KENNETH SINN DATE 6-20-07

Russ Chin
 RUSS CHIN DATE 6/20/07

QUALITY CONTROL (QC) REPORT
 DEPARTMENT OF TOXIC SUBSTANCES CONTROL
 ENVIRONMENTAL CHEMISTRY LABORATORY-LOS ANGELES BRANCH
 1449 WEST TEMPLE STREET, LOS ANGELES CA 90026
 TELEPHONE (213) 580-5797 OR (213) 977-7928

REQUESTER: MARTIN SNIDER
 DATE SAMPLE RECEIVED: 6/1/2007
 SAMPLING LOCATION: UCCE RICHMOND FIELD STATION
 1301 SOUTH 46TH STREET BLDG 478
 RICHMOND, CA 94804
 DATE SAMPLE PREPARED: 6/6/2007
 DATE SAMPLE ANALYZED: 6/11/2007
 METHODS: EPA METHOD 8270C SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS
 EPA METHOD 3510 SEPARATORY FUNNEL LIQ/LIQ EXTRACTUIN

QC REPORT FOR SURROGATE SPIKE % RECOVERY

QC SAMPLES OR SAMPLE NO.	2-FLUORORPHENOL			PHENOL - d6			NITROBENZENE - d5			2 - FLUOROBIPHENYL			2,4,6-TRIBROMOPHENOL		
	ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED		ADDED	RECOVERED	
	UG/L	UG/L	% REC	UG/L	UG/L	% REC	UG/L	UG/L	% REC	UG/L	UG/L	% REC	UG/L	UG/L	% REC
TCLP BLANK	800	629	78.6	800	498	62.2	400	379	94.8	400	342	85.5	800	756	94.5
METHOD STANDARD	800	623	77.9	800	492	61.5	400	371	92.8	400	332	83	800	794	99.2
AQ02066	800	651	81.4	800	493	61.6	400	391	97.8	400	365	91.3	800	881	110
AQ02066 DUP	800	600	75	800	451	56.4	400	355	88.7	400	346	86.5	800	817	102
AQ02068	800	590	73.8	800	470	58.8	400	346	86.5	400	349	87.3	800	747	93.4
AQ02068 DUP	800	660	82.5	800	510	63.8	400	365	91.2	400	356	89	800	832	104
LCS	800	701	87.6	800	555	69.4	400	380	95	400	356	89	800	856	107
AQ02066 MTX SPK	800	558	69.8	800	432	54	400	335	83.8	400	322	80.5	800	757	94.6
AQ02066 MSD	800	626	78.3	800	501	62.7	400	362	90.5	400	361	90.2	800	820	103
AQ02068 MTX SPK	800	638	79.8	800	521	65.1	400	328	82	400	287	71.9*	800	784	98.1
AQ02068 MSD	800	599	74.9	800	463	57.9	400	344	85.9	400	323	80.9	800	781	97.7
CONTROL LIMIT FOR %REC	71.5-122			40.5-123			72.9-118			74.2-112			60.4-110		

* OUTSIDE OF CONTROL LIMIT

SAMPLE PREPARATION

ANALYST

SUPERVISOR

K. Sinn
 KENNETH SINN
 DATE

K. Sinn 6-20-07
 KENNETH SINN
 DATE

R. Chin
 RUSS CHIN
 DATE

*SUOC results on
TCLP extracts of
HW control & creosote
treated wood.
Includes TC and non-TC compds.*

CASE NARRATIVE

NOTE: THIS IS AN AMENDED REPORT THAT INCLUDED EPA METHOD 8270C TARGET ANALYTES

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLES AQ02065-AQ02069

SAMPLE AUTHORIZATION NO.: 06SC0262

SAMPLES INCLUDED IN THIS ANALYTICAL BATCH : AQ02065, AQ02066, AQ02067, AQ02068 AND AQ02069

2. SAMPLES WERE COLLECTED ON 5/17/2007 AT UCCE RICHMOND FIELD STATION, RICHMOND, CA

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS MARTIN SNIDER

4. SAMPLES WERE:

RECEIVED ON 6/1/2007 BY ENVIRONMENTAL CHEMISTRY LABORATORY-
LOS ANGELES BRANCH

EXTRACTED ON 6/6/2007 BY EPA METHOD 3510 (SEPARATORY FUNNEL LIQ/LIQ
EXTRACTION)

ANALYZED ON 6/11/2007 BY EPA METHOD 8270C (SEMIVOLATILE ORGANIC COMPOUNDS
BY GC/MS)

DATA PACKAGE WAS COMPLETED ON 7/5/2007

5. DURING THE COURSE OF THESE ANALYSES, NO PROBLEM WAS ENCOUNTERED.

6. ALL QC PARAMETERS / INDICATORS WERE LARGELY WITHIN CONTROL LIMITS.

SOME COMPOUNDS WERE RECOVERED BELOW THE CONTROL LIMITS FOR THE METHOD STANDARD AND
AND LABORATORY CONTROL SAMPLES.

FOR THE MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSIS, SOME COMPOUNDS WERE RECOVERED BELOW
THE CONTROL LIMITS ESTABLISHED FOR WATER SAMPLES. THESE LIMITS MAY NOT BE APPLICABLE TO THE
TCLP EXTRACT SAMPLES.

ONE SURROGATE COMPOUND WAS RECOVERED OUTSIDE THE CONTROL LIMIT FOR ONE SAMPLE.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. SAMPLE HOLDING TIME WAS MET.

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
ENVIRONMENTAL CHEMISTRY LABORATORY-LOS ANGELES BRANCH
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 5797 OR (213) 977-7928

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EPA 8270C FOR SAMPLES AQ02065-AQ02069

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DEPARTMENT OF TOXIC SUBSTANCES CONTROL
 ENVIRONMENTAL CHEMISTRY LABORATORY-LOS ANGELES BRANCH
 1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
 TELEPHONE (213) 580-5797 OR (213) 977-7928

REQUESTER: MARTIN SNIDER

SCL NO. AQ02065-AQ02069

SAMPLE LOCATION: UCCE RICHMOND FIELD STATION
 1301 SOUTH 46TH STREET BLDG 478
 RICHMOND, CA 94804

DATE REPORTED: 7/5/2007

METHODS: EPA METHOD 8270C SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS
 EPA METHOD 3510 SEPARATORY FUNNEL LIQ/LIQ EXTRACTION

SVOCs BY GC/MS

ANALYTE	SCL NO.	METHOD	AQ02065	AQ02066	AQ02068	METHOD	AQ02065	AQ02066	AQ02068	QUANTITATION LIMIT			
	COL. NO.		TCLP	OAK	HWCRES-		TCLP	OAK	HWCRES-	TCLP	OAK	HWCRES-	TCLP
		BLANK	CONTROL 1	SOTE-1		BLANK	CONTROL 1	SOTE-1		BLANK	CONTROL 1	SOTE-1	
	MATRIX	WATER	TCLP	TCLP	TCLP	WATER	TCLP	TCLP	TCLP	WATER	TCLP	TCLP	TCLP
	UNIT	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
1,3-DICHLOROENZENE		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
BIS(2-CHLOROETHYL)ETHER		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
1,4-DICHLOROENZENE (TCLP)		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
1,2-DICHLOROENZENE		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
HEXACHLOROETHANE (TCLP)		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
BIS(2-CHLOROISOPROPYL)ETHER		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
N-NITROSO-DI-N-PROPYLAMINE		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
ROENZENE (TCLP)		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
ISOPHORONE		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
1,2,4-TRICHLOROENZENE		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
BIS(2-CHLOROETHOXY)METHANE		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
HEXACHLOROBUTADIENE (TCLP)		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
HEXACHLOROCYCLOPENTADIENE		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
2-CHLORONAPHTHALENE		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
DIMETHYLPHTHALATE		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
2,6-DINITROTOLUENE		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
4-CHLOROPHENYL PHENYL ETHER		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
2,4-DINITROTOLUENE (TCLP)		ND	ND	ND	ND		0.04	0.04	0.04	0.04			
DIETHYL PHTHALATE		ND	ND	ND	ND		0.04	0.04	0.04	0.04			

NOTES: ND=NOT DETECTED MG/L=MILLIGRAM PER LITER

QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

* = ANALYTE WAS QUANTITATED BELOW THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE

** = ANALYTE WAS QUANTITATED ABOVE THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

ANALYTES IN BOLD FOLLOWED BY "(TCLP)" ARE ON TC RULE LIST.

SAMPLE PREPARATION

ANALYST

SUPERVISOR

K. Sinn 7-9-07
 NETH SINN DATE

K. Sinn 7-9-07
 KENNETH SINN DATE

R. Chin 7/5/07
 RUSS CHIN DATE

SVOCs BY GC/MS

ANALYTE	SCL NO.					QUANTITATION LIMIT				
	COL. NO.	METHOD	AQ02065	AQ02066	AQ02068	METHOD	AQ02065	AQ02066	AQ02068	
		BLANK	TCLP	OAK	HWCRES-	BLANK	TCLP	OAK	HWCRES-	
	MATRIX	WATER	TCLP	TCLP	TCLP	WATER	TCLP	TCLP	TCLP	
	UNIT	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	
N-NITROSODIPHENYLAMINE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
4-BROMOPHENYL PHENYL ETHER		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
HEXACHLORO BENZENE (TCLP)		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
DI-N-BUTYL PHTHALATE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
BUTYL BENZYL PHTHALATE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
BIS(2-ETHYL HEXYL)PHTHALATE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
3,3-DICHLOROBENZIDINE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
DI-N-OCTYL PHTHALATE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
NAPHTHALENE		ND	ND	ND	2.3**	0.04	0.04	0.04	0.04	
ACENAPHTHALENE		ND	ND	ND	0.32	0.04	0.04	0.04	0.04	
ACENAPHTHENE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
FLUORENE		ND	ND	ND	0.14	0.04	0.04	0.04	0.04	
PHENANTHRENE		ND	ND	ND	0.20	0.04	0.04	0.04	0.04	
ANTHRACENE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
FLUORANTHENE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
PYRENE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
BENZO(A)ANTHRACENE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
CHRYSENE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
BENZO(B)FLUORANTHENE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
BENZO(K)FLUORANTHENE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
BENZO(A)PYRENE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
IDENO(1,2,3-CD)PYRENE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
DIBENZ(A,H)ANTHRACENE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
BENZO(GHI)PERYLENE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	

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ANALYTES IN BOLD FOLLOWED BY "(TCLP)" ARE ON TC RULE LIST.

SAMPLE PREPARATION

ANALYST

SUPERVISOR

Kenneth Sinn 7-9-07
 KENNETH SINN DATE

Kenneth Sinn 7-9-07
 KENNETH SINN DATE

Russ Chin 7/5/07
 RUSS CHIN DATE

VOCs BY GC/MS

ANALYTE	SCL NO.	METHOD BLANK	AQ02065	AQ02066	AQ02068	METHOD BLANK	AQ02065	AQ02066	AQ02068	QUANTITATION LIMIT
	COL. NO.		TCLP	OAK	HWCRES-		TCLP	OAK	HWCRES-	
	MATRIX		BLANK	CONTROL 1	SOTE-1		CONTROL 1	SOTE-1	SOTE-1	
			WATER	TCLP EXTRACT	TCLP EXTRACT		TCLP EXTRACT	TCLP EXTRACT	TCLP EXTRACT	
UNIT	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	
2-CHLOROPHENOL		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
PHENOL		ND	ND	ND	0.21	0.04	0.04	0.04	0.04	
2-NITROPHENOL		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
2,4-DIMETHYL PHENOL		ND	ND	ND	0.08	0.04	0.04	0.04	0.04	
2,4-DICHLOROPHENOL		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
4-CHLORO-3-METHYL PHENOL		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
2,4,6-TRICHLOROPHENOL (TCLP)		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
2,4-DINITROPHENOL		ND	ND	ND	ND	0.50	0.50	0.50	0.50	
2-METHYL-4,6-DINITROPHENOL		ND	ND	ND	ND	0.50	0.50	0.50	0.50	
4-NITRO PHENOL		ND	ND	ND	ND	0.50	0.50	0.50	0.50	
PENTACHLORO PHENOL (TCLP)		ND	ND	ND	ND	0.50	0.50	0.50	0.50	
BENZYL ALCOHOL		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
3-METHYLPHENOL (TCLP)		ND	ND	ND	0.11	0.04	0.04	0.04	0.04	
4 &/OR 3-METHYLPHENOL (TCLP)		ND	ND	ND	0.31	0.04	0.04	0.04	0.04	
CARBAZOLE		ND	ND	ND	0.20	0.04	0.04	0.04	0.04	
4-CHLOROANILINE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
2-METHYL NAPHTHALENE		ND	ND	ND	0.31	0.04	0.04	0.04	0.04	
2,4,5-TRICHLOROPHENOL (TCLP)		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
2-NITROANILINE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
DIBENZOFURAN		ND	ND	ND	0.14	0.04	0.04	0.04	0.04	
3-NITROANILINE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
4-NITROANILINE		ND	ND	ND	ND	0.04	0.04	0.04	0.04	
TENTATIVELY IDENTIFIED COMPOUNDS:										
TRACES OF VARIOUS PAHS AND HETEROCYCLICS WERE DETECTED.										

NOTES: ND=NOT DETECTED MG/L=MILLIGRAM PER LITER

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ANALYTES IN BOLD FOLLOWED BY "(TCLP)" ARE ON TC RULE LIST.

SAMPLE PREPARATION

ANALYST

SUPERVISOR

K. Sinn 7-9-07
 KENNETH SINN DATE

K. Sinn 7-9-07
 KENNETH SINN DATE

R. Chin 7/5/07
 RUSS CHIN DATE

QUALITY CONTROL (QC) REPORT
 DEPARTMENT OF TOXIC SUBSTANCES CONTROL
 ENVIRONMENTAL CHEMISTRY LABORATORY-LOS ANGELES BRANCH
 1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
 TELEPHONE (213) 580-5797 OR (213) 977-7928

REQUESTER: MARTIN SNIDER DATE SAMPLE RECEIVED: 6/1/2007
 SAMPLING LOCATION: UCCE RICHMOND FIELD STATION DATE SAMPLE PREPARED: 6/6/2007
 1301 SOUTH 46TH ST., BLDG. 478
 RICHMOND, CA 94804 DATE SAMPLE ANALYZED: 6/11/2007
 METHODS: EPA METHOD 8270C SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS
 EPA METHOD 3510 SEPARATORY FUNNEL LIQ./LIQ. EXTRACTION

QC REPORT FOR MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD) PERCENT RECOVERY

MATRIX SPIKE PERFORMED ON AQ02066

NOT ANALYZED (SEE NOTES)

TYPE OF MATRIX TCLP EXTRACT

COMPOUND	AMOUNT OF ANALYTE IN SAMPLE UG/L	AMOUNT OF ANALYTE ADDED UG/L	MATRIX SPIKE		MATRIX SPIKE DUPLICATE		AVE % REC	CONTROL LIMITS FOR % REC	R % D BETWEEN MS/MSD	CONTROL LIMITS FOR RPD
			AMOUNT RECOVERED UG/L	%REC	AMOUNT RECOVERED UG/L	%REC				
			UG/L	%	UG/L	%				
PHENOL	<40	800	340	42.5*	409	51.1*	46.8*	57.0-119	18	25
2-CHLOROPHENOL	<40	800	548	68.5*	607	75.9*	72.2*	81.9-119	10	25
1,4-DICHLOROBENZENE	<40	400	222	55.5	247	61.8	58.7	24.1-134	11	25
N-NITROSO-DI-N-PROPYLAMINE	<40	400	288	72.0*	327	81.8	76.9	76.1-121	13	25
1,2,4-TRICHLOROBENZENE	<40	400	208	52.0	233	58.3	55.2	46.8-123	11	25
4-CHLORO-3-METHYL PHENOL	<40	800	555	69.4*	607	75.9	72.7	71.6-120	8.9	25
ACENAPHTHENE	<40	400	255	63.8*	289	72.3	68.1	66.9-119	12	25
4-NITROPHENOL	<500	800	329	41.1	386	48.3	44.7	38.2-116	16	25
2,4-DINITROTOLUENE	<40	400	232	58.0*	261	65.3	61.7*	62.7-125	12	25
PENTACHLOROPHENOL	<500	1200	829	69.1	904	75.3	72.2	66.3-124	8.6	25
PYRENE	<40	400	289	72.3	322	80.5	76.4	66.8-129	11	25

NOTE: * = OUTSIDE OF CONTROL LIMIT.

CONTROL LIMITS WERE ESTABLISHED FOR WATER SAMPLES. LIMITS USED MAY NOT BE APPLICABLE TO TCLP EXTRACT SAMPLES.

SAMPLE PREPARATION

ANALYST

SUPERVISOR

Kenneth Sinn 7-9-07
 KENNETH SINN DATE

Kenneth Sinn 7-9-07
 KENNETH SINN DATE

Russ Chin 7/5/07
 RUSS CHIN DATE

QUALITY CONTROL (QC) REPORT
 DEPARTMENT OF TOXIC SUBSTANCES CONTROL
 ENVIRONMENTAL CHEMISTRY LABORATORY-LOS ANGELES BRANCH
 1449 WEST TEMPLE STREET, LOS ANGELES CA 90026
 TELEPHONE (213) 580-5797 OR (213) 977-7928

REQUESTER: MARTIN SNIDER
 DATE SAMPLE RECEIVED: 6/1/2007

SAMPLING LOCATION: UCCE RICHMOND FIELD STATION
 1301 SOUTH 46TH ST., BLDG. 478
 RICHMOND, CA 94804
 DATE SAMPLE PREPARED: 6/6/2007
 DATE SAMPLE ANALYZED: 6/11/2007

METHODS: EPA METHOD 8270C SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS
 EPA METHOD 3510 SEPARATORY FUNNEL LIQ/LIQ EXTRACTUIN

QC REPORT FOR SURROGATE SPIKE % RECOVERY

QC SAMPLES OR SAMPLE NO.	2-FLUORORPHENOL			PHENOL - d6			NITROBENZENE - d5			2 - FLUOROBIPHENYL			2,4,6-TRIBROMOPHENOL		
	ADDED		RECOVERED	ADDED		RECOVERED	ADDED		RECOVERED	ADDED		RECOVERED	ADDED		RECOVERED
	UG/L	UG/L	% REC	UG/L	UG/L	% REC	UG/L	UG/L	% REC	UG/L	UG/L	% REC	UG/L	UG/L	% REC
TCLP BLANK	800	629	78.6	800	498	62.2	400	379	94.8	400	342	85.5	800	756	94.5
METHOD STANDARD	800	623	77.9	800	492	61.5	400	371	92.8	400	332	83.0	800	794	99.2
AQ02066	800	651	81.4	800	493	61.6	400	391	97.8	400	365	91.3	800	881	110
AQ02068	800	590	73.8	800	470	58.8	400	346	86.5	400	349	87.3	800	747	93.4
AQ02068 DUP	800	660	82.5	800	510	63.8	400	365	91.2	400	356	89.0	800	832	104
LCS	800	701	87.6	800	555	69.4	400	380	95.0	400	356	89.0	800	856	107
AQ02066 MS	800	558	69.8*	800	432	54.0	400	335	83.8	400	322	80.5	800	757	94.6
AQ02066 MSD	800	626	78.3	800	501	62.7	400	362	90.5	400	361	90.2	800	820	103
CONTROL LIMIT FOR %REC	71.5-122			40.5-123			72.9-118			74.2-112			60.4-110		

NOTE: * = OUTSIDE OF CONTROL LIMIT.

CONTROL LIMITS WERE ESTABLISHED FOR WATER SAMPLES. LIMITS USED MAY NOT BE APPLICABLE TO TCLP EXTRACT SAMPLES.

SAMPLE PREPARATION

ANALYST

SUPERVISOR

 7-9-07
 KENNETH SINN DATE

 7-9-07
 KENNETH SINN DATE

 7/5/07
 RUSS CHIN DATE