Previous

Environmental Science & Engineering 12-31-91 ** FIELD LOGSHEET *** FIELD GROUP: AL
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

3/6

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS CM	[illegible]	TEMP	SITE TYPE	DEPTH FEET
*8	M-005A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1						
*9	M-006A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1						
*10	M-007A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1						
*11	M-007C-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1						
*12	M-008A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1						
*13	M-009A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP	2/7/92	1530	ALQ3.1	7.80	700		19.2°C		
*14	M-010A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1						

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 C Wong/TJ Smith/JMM/2.7.92/1800		[illegible] 2.7.92/1800
2		VPlum ESE 2-8 1600
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

Environmental Science & Engineering 12-31-91 FIELD LOGSHEET *** FIELD GROUP: AI
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 3/6

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*57	M-102A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP	2/7/92	1230	ALQ3.1	7.75	500	17°	BG	—
*58	M-103A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP	2/7/92	1200	ALQ3.1	8.16	350	15.1	BG	strong H2S odor
*59	M-103B-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP	2.7.92	1000	ALQ3.1	7.40	30000	16.2	BG	strong H2S odor
*60	M-104A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*61	M-104C-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*62	M-105A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*63	M-105B-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					

VOA, K → nitric acid to 2pH
G,S → sulfuric acid to 2pH
I → sodium hydroxide to 12pH

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-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: **I**-IGNITABLE **C**-CORROSIVE **R**-REACTIVE **T**-TOXIC WASTE **H**-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	[illegible] TJ Smith JMM 2.7.92 1800	Federal Express	2.7.92 1800
2		V-Plan 00 ESE	2-8 1600
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? no

Environmental Science & Engineering 12-31-91 ** FIELD LOGSHEET *** FIELD GROUP: AL
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

3/6

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*64	M-106A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*65	M-107A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*66	M-108A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*67	M-108B-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*68	M-109A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP	2/7/92	1515	ALQ3.1	8.02	1200	15.3°C	RG	
*69	M-110A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*70	M-111A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					

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-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 [illegible] T.J. Smith 2-7-92 1800		[illegible] 2-7-92 1800
2		[illegible] 2-8 1600
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

Environmental Science & Engineering 12-31-91 *** FIELD LOGSHEET *** FIELD GROUP: AL

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

3/6

CSE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*92	EB		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*93	EB		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*94	EB		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP	2/7/92	0950	ALQ3.1	10.09		12.5°C	BG	
*95	EB		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*96	EB		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*97	EB		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*98	EB		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					

acid/base added:
O,S → sulfuric to 2pH
NF,R → nitric to 2pH
E → sodium hydroxide to 12pH

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-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C Hong/DSmith/2-7-92/1800 @ JMM	Federal Express	2-7-92/1800
2			Pam Oos/ESE 2-8 1600
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? X Samples Iced? Y Preservations Audited? Y Problems? Y

#94-EC, one broke during shipping (FD)

Environmental Science & Engineering 12-31-91 *** FIELD LOGSHEET *** FIELD GROUP: AL

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

3/6

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*120	TB		VP VP VP VP VP			ALTB2					
*121	TB		VP VP VP VP VP			ALTB2					
*122	TB		VP VP VP VP VP	2/7/92		ALTB3					
*123	TB		VP VP VP VP VP			ALTB2					
*124	TB		VP VP VP VP VP			ALTB2					
*125	TB		VP VP VP VP VP			ALTB2					
*126	TB		VP VP VP VP VP			ALTB2					

Requested by ESE
Shipped Unopened

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Ufoff/TJ Smith/jmm/2.7.92/1800		Federal Express/2.7.92/18??
2			Pam Do ESE 2-8 1600
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? W Problems? W

Environmental Science & Engineering 12-31-91 *** FIELD LOGSHEET *** FIELD GROUP: ALQ3
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

3/13

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*64	M-106A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP	2/8/92	1305	ALQ3.1	7.65	40	15°C	BG	✓
*65	M-107A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP	2/8/92	1005	ALQ3.1	7.52	70	16°C	BG	✓
*66	M-108A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*67	M-108B-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*68	M-109A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*69	M-110A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP	2/8/92	0930	ALQ3.1	7.30	2000	15.2	BG	✓
*70	M-111A-		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP	2/8/92	1200	ALQ3.1	7.66	1000	16.1	BG	✓

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C.Fong/T.L.Smith/ESE/2.8.92/1630		Federal Express/2.8.92/1630
2			V. Pierce ESE 2-10 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

Environmental Science & Engineering 12-31-91 *** FIELD LOGSHEET *** FIELD GROUP: ALQ3
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

3/13

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*71	DUP		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*72	DUP		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*73	DUP		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*74	DUP		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*75	DUP		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*76	DUP		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*77	DUP		B C EC EC F MS MS MS NF O O O R EC S TEMVP VP VP VP VP	2.8.92		ALQ3.1					

Hg resample 2.8.92

BG

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-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C Forg/T.J. Smith/JMM/2.8.92/1630		Federal Express/2.8.92/1630
2			V Pham ESE 2-10 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

Environmental Science & Engineering 12-31-91 ** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

3/13

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*78	DUP		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP EC	2-8-92		ALQ3.1				BG	
*79	DUP		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*80	DUP		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*81	DUP		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*82	DUP		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*83	DUP		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					
*84	DUP		B C EC EC F MS MS MS NF O O O R S TEMVP VP VP VP VP			ALQ3.1					

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-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C Hong / T.J. Smith / ESE / 2-8-92 / 1630		Federal Express / 2-8-92 / 1630
2			Palm Ops ESE 2-10 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? ✓ Samples Iced? ✓ Preservations Audited? ✓ Problems? ~

Environmental Science & Engineering 12-31-91 *** FIELD LOGSHEET *** FIELD GROUP: ALQ3
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 3/13

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*120	TB		VP VP VP VP VP			ALTB2					
*121	TB		VP VP VP VP VP			ALTB2					
*122	TB		VP VP VP VP VP			ALTB2					
*123	TB		VP VP VP VP VP	2/8/92		ALTB2					
*124	TB		VP VP VP VP VP			ALTB2					
*125	TB		VP VP VP VP VP			ALTB2					
*126	TB		VP VP VP VP VP			ALTB2					

Prepacked by ESE, shipped suspended

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C Hong / T. Smith / JMM / 2.8.92 / 1630	Federal Express	2.8.92 / 1630
2		V Pham CAS ESE	2-10 / 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? N

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

4/24

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*65	M-107A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*66	M-108A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3.24.92	1405	ALQ3.1	8.33	~~8.54~~ Cf	1350	17.3°C	BG ✓
*67	M-108B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1	ACID/BASES added in field!				
*68	M-109A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*69	M-110A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*70	M-111A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*71	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*72	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Tong / JMM / Mar 24 '92 / 1700		Federal Express / 3.24.92 / 1700
2			V-Plan 00 ESE 3-25 / 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

4/24

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	HZD TEMP C	DEPTH FEET
*81	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1			
*82	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1			
*83	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1			
*84	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1			
*85	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1			
*86	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1			
*87	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP	3.24.92	0935	ALQ3.1	5.75	25°C	Ομμhos BG ✓ Acids/Base added in field
*88	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1			

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD: IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Tong/JMM/3.24.92/1700		Federal Express/3.24.92/1700
2			VPSEM Oo ESE 3-25 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? 5°C Y Preservations Audited? Y Problems? Y

One 'O' broke only 1 is recd for *87. during shipping.

WD WD

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 4/24

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	TIDE TYPE	DEPTH FEET
*105	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*106	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*107	TB		VP VP VP VP VP	3/24/92		ALTB2	bottles filled by ESE. ctn opened in field & stayed w/all volatile samples in same cooler as shipped in. clf				
*108	TB		VP VP VP VP VP			ALTB2					
*109	TB		VP VP VP VP VP			ALTB2					
*110	TB		VP VP VP VP VP			ALTB2					
*111	TB		VP VP VP VP VP			ALTB2					
*112	TB		VP VP VP VP VP			ALTB2					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong / JMM / 3.24.92 / 1700		Federal Express / 3.24.92 / 1700
2		V. Pierce Obs ESE 3-25 / 500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? N
5°C

Environme al Science & Engineering 02-26-92 ** IELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 4/24

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP CONE UMHOS/CM	H2O TEMP C	CONT TYPE	DEPTH FEET
*57	M-102A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*58	M-103A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*59	M-103B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*60	M-104A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/25/92	1525	ALQ3.1	8.51	680	16.1°C	BG	
*61	M-104C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/25/92	1630	ALQ3.1	6.93	22000	17.0°C	BG	
*62	M-105A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*63	M-105B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*64	M-106A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: **I**-IGNITABLE **C**-CORROSIVE **R**-REACTIVE **T**-TOXIC WASTE **H**-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Fong / JMM / 3.25.92 / 1800		Federal Express / 3.25.92 / 1800
2			V. Puem OD ESE 3-26 1300
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? Y
5°C
*61 -- MS : one broke during shipping
(MD)

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 4/24

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*65	M-107A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*66	M-108A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*67	M-108B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/25/92	1030	ALQ3.1	6.65	33900	19.6°C	BG	
*68	M-109A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*69	M-110A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*70	M-111A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*71	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/25/92		ALQ3.1					
*72	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Fong / JMM / 3.25.92 / 1800		Federal Express / 3.25.92 / 1800
2			V Prem Oo ESE 3-26 1300
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON __/__/__
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? Y
5°C
*67 - NF, cap came off during shipping (VPD)

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ 4 | 24
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

CASE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SPECIFIC CONDUCTANCE UMHOS/CM	H2S TEMP C	SITE TYPE	DEPTH FEET
*105	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*106	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*107	TB		VP VP VP VP VP			ALTB2					
*108	TB		VP VP VP VP VP	3/25/92		ALTB2					
*109	TB		VP VP VP VP VP			ALTB2					
*110	TB		VP VP VP VP VP			ALTB2					
*111	TB		VP VP VP VP VP			ALTB2					
*112	TB		VP VP VP VP VP			ALTB2					

opened - set w/ all volatile samples

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
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-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
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RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Forg / JMM / 3-25-92 / 1800		Federal Express / 3-25-92 / 1800
2		Plum Ops ESE 3-26 1300
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? N

5°C

Environ(al Science & Engineering 02-26-92 *(FIELD LOGSHEET *** FIELD GROUP: AL(
PROJECT . BER 3914042 0201 PROJECT NAME: JMM/AL :DA NAS-CTO-107 LAB COORD. JACKIE HARGR(

4/24

:SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP	CTR TYPE	DEPTH FEET
*1	M-001A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/26/92	1500	ALQ3.1	7.75	800	17.0°C	DA	~
*2	M-001B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*3	M-001E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*4	M-002A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*5	M-002E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*6	M-003A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*7	M-004A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*8	M-005A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

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-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
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-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

:ELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong / JMM / 3-26-92 / 1700		Federal Express / 3-26-92 / 1700
2		W. Plem Occ ESE 3-27 1500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5°C Preservations Audited? Y Problems? N

Environme..al Science & Engineering 02-26-92 ** IELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 4/24

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SC UMHO	NO. M	TEMP C	TYPE	DEPTH FEET
*41	M-024A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*42	M-024E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*43	M-025A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*44	M-025C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*45	M-025E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*46	M-026A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/26/92	1215	ALQ3.1	7.35	1300		16.6°C	DA	✓
*47	M-026E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/26/92	1230	ALQ3.1	3805 → 7.60			18.0°C	DA	✓
*48	M-027A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/26/92	0930	ALQ3.1	7.15	1900		17.4°C	DA	✓

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-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Fang/JMM/3.26.92/1700		Federal Express/3.26.92/1700
2			V. From Cad ESE 3.27 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y .5°C Preservations Audited? Y Problems? N

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 4/24

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP. COND. UMH	H2O TEMP °C	TIDE TYPE	DEPTH FEET
*49	M-027B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*50	M-027C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*51	M-027E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/26/92	1000	ALQ3.1	7.6	4900	18.8°C	DA	—
*52	M-028A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*53	M-028E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*54	M-029A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*55	M-029E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*56	M-101A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: **I**-IGNITABLE **C**-CORROSIVE **R**-REACTIVE **T**-TOXIC WASTE **H**-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong | JMM | 3.26.92 | 1700		Federal Express | 3.26.92 | 1700
2		Viem Ong ESE 3-27 1500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5°C Preservations Audited? Y Problems? N

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ.
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 4/24

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible] UMHO	[illegible] F	[illegible] TEMP	[illegible] TYPE	DEPTH FEET
*105	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1						
*106	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1						
*107	TB		VP VP VP VP VP			ALTB2						
*108	TB		VP VP VP VP VP			ALTB2						
*109	TB		VP VP VP VP VP	3/26/92		ALTB3						
*110	TB		VP VP VP VP VP			ALTB2						
*111	TB		VP VP VP VP VP			ALTB2						
*112	TB		VP VP VP VP VP			ALTB2						

Did not open w/ volatiles in field → shipped only (miscommunication)

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
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-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong | JMM | 3.26.92 | 1700		Federal Express | 3.26.92 | 1700
2		V Perm Ord ESE 3-27 1500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? NJ Problems? N
5°C

Environ(al Science & Engineering 02-26-92 *(FIELD LOGSHEET *** FIELD GROUP: AL(
PROJECT . 3ER 3914042 0201 PROJECT NAME: JMM/AL :DA NAS-CTO-107 LAB COORD. JACKIE HARGRO

4/24

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible] UMHOS	H2O TEMP	[illegible] TYPE	DEPTH FEET
*1	M-001A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*2	M-001B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/27/92	1120	ALQ3.1	7.15	24000	18.9	DA	✓
*3	M-001E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/27/92	0900	ALQ3.1	7.30	2500	17.8	DA	✓
*4	M-002A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*5	M-002E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*6	M-003A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*7	M-004A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*8	M-005A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)				VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)		
1	Cindy Fong	ESE	3.27.92	1500	Federal Express	3.27.92	1500
2					V. Allen CAL ESE	3.28	1500
3							

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N
5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

4/24

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible] UMHO	[illegible] °C	TEMP	[illegible]	DEPTH FEET
*49	M-027B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*50	M-027C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*51	M-027E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*52	M-028A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*53	M-028E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*54	M-029A-		B C EC EC ~~F~~ 4 MS MS MS NF O O O R S TEM VP VP VP VP VP	3/27/92	1325	ALQ3.1	8.10	1180		17.0	DA	✓
*55	M-029E-		~~B C EC EC F~~ 4 MS MS MS NF O O O R S TEM VP VP VP VP VP	3/27/92	1245	ALQ3.1	8.44	1300		17.7.	DA	✓
*56	M-101A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong / JMM / 3·27·92 / 1500		Federal Express / 3·27·92 / 1500
2		V. Keim CAD ESE 3-28 1500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

56

Environm.. ..l Science & Engineering 02-26-92 *** IELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

4/24

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*81	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*82	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*83	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*84	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*85	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*86	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*87	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*88	EB		B C EC EC F MS MS NF O O R S TEM VP VP VP VP VP	3/27/92	0745	ALQ3.1	7		0		

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong / JMM / 3.27.92 / 1500	Federal Express	3.27.92 / 1500
2		V Pham (ESE) 3-25 1500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5°C Preservations Audited? Y Problems? N

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 4/24

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	TEMP	DEPTH FEET
*105		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1			
*106		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1			
*107		TB	VP VP VP VP VP			ALTB2			
*108		TB	VP VP VP VP VP			ALTB2			
*109		TB	VP VP VP VP VP			ALTB2			
*110		TB	VP VP VP VP VP	3/27/92		ALTB2			
*111		TB	VP VP VP VP VP			ALTB2			
*112		TB	VP VP VP VP VP			ALTB2			

opened & sat w/ all volatile samples

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Fong/JMM/3.27.92/1500		Federal Express/3.27.92/1500
2			1st Plain Chg ESE 3.28 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___
SAMPLE CUSTODIAN: Custody Seals Intact? ✓ Samples Iced? ✓ Preservations Audited? ✓ Problems? N

5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: AL
PROJECT . 3ER 3914042 0201 PROJECT NAME: JMM/AL :DA NAS-CTO-107 LAB COORD. JACKIE HARGR

5/1

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible] UMHOS	H2O TEMP	[illegible] TYPE	DEPTH FEET
*1	M-001A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*2	M-001B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*3	M-001E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*4	M-002A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/30/92	1505	ALQ3.1	7.04	3900	15.3°C	DA	✓
*5	M-002E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/30/92	1430	ALQ3.1	7.00	13000	16.0°C	DA	✓
*6	M-003A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*7	M-004A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*8	M-005A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Fang/JMM/3.30.92/1700		Federal Express/[illegible] 3.30.92/1700
2			V. Poem ESE 3-31 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? ✓ Samples Iced? ✓ Preservations Audited? ✓ Problems? N

5°C

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ 5/1

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS	H2O TEMP C	SI TYPE	DEPTH FEET
*105	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*106	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*107	TB		VP VP VP VP VP			ALTB2					
*108	TB		VP VP VP VP VP			ALTB2					
*109	TB		VP VP VP VP VP			ALTB2					
*110	TB		VP VP VP VP VP			ALTB2					
*111	TB		VP VP VP VP VP	3/30/92		ALTB3					
*112	TB		VP VP VP VP VP			ALTB2					

TB traveled w/ VOA's in field!

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong / JMM / 3.30.92 / 1700		Federal Express / 3.30.92 / 1700
2		V Pham Cas ESE 3-31 1500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? N

5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALQ EDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/1

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SPECIFIC CONDUCTANCE UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*41	M-024A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/31/92	1455	ALQ3.1	6.53	4650	17.9°C	WBL	green
*42	M-024E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/31/92	1415	ALQ3.1	6.67	6000	20.5°C	WBL	
*43	M-025A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/31/92	0930	ALQ3.1	7.50	10000	17.4°C	DA	✓
*44	M-025C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*45	M-025E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/31/92	1130	ALQ3.1	7.38	1000	19.3°C	DA	✓
*46	M-026A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*47	M-026E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*48	M-027A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong / JMM / 3-31-92 / 1800		Federal Express / 3-31-92 / 1800
2		V. Plum (ESE) 4-1 1300
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

5°C

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/1

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	H2O TEMP	DEPTH FEET
*65	M-107A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1			
*66	M-108A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1			
*67	M-108B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1			
*68	M-109A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1			
*69	M-110A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1			
*70	M-111A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1			
*71	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1			
*72	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	3/31/92		ALQ3.1			

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	ELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Vinoy Fong / JMM / 3.31.92 / 1800		Federal Express / 3.31.92 / 1800
2			UPlem Con ESE 4-1 1300
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N
5°C.

Environm[illegible]l Science & Engineering 02-26-92 *** IELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/1

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP. COND. UMHOS/CM	H2O TEMP. C	SITE TYPE	DEPTH FEET
*89		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP	3/31/92	0830	ALQ3.1	7	0	—	— prior to pumping MD25A	
*90		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*91		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*92		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*93		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*94		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*95		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*96		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong / 2nnn / 3.31.92 / 1800	Federal Express	/ 3.31.92 / 1800
2		VPacific Ops ESE 4-1 1300
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

5°C.

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/1

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	H2O TEMP	DEPTH FEET
*105	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1			
*106	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1			
*107	TB		VP VP VP VP VP			ALTB2			
*108	TB		VP VP VP VP VP			ALTB2			
*109	TB		VP VP VP VP VP			ALTB2			
*110	TB		VP VP VP VP VP			ALTB2			
*112	TB		VP VP VP VP VP	3/31/92		ALTB2			
*112	TB		VP VP VP VP VP			ALTB2			

Kept open w/ all volatile in field

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Fong/JMM/3.31.92/1800		Federal Express/3.31.92/1800
2			V Plum Ops ESE 4-1 1300
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? N

5°C

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ.
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/1

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHO	H2O TEMP C	SAMPLE TYPE	DEPTH FEET
*33	M-021A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*34	M-021C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*35	M-021E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*36	M-022A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/1/92	0900	ALQ3.1	7.14	16000	15.5°C	WBL	✓
*37	M-023B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*38	M-022E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/1/92	1100	ALQ3.1	6.80	27000	18.6°C	WBL	✓
*39	M-023A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/1/92	1300	ALQ3.1	7.02	22000	17.8°C	WBL	strong sewage odor - stains everything BLACK!
*40	M-023E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/1/92	1145	ALQ3.1	6.93	31000	18.7°C	WBL	✓

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Fong / JMM / 4.1.92 / 1700		Federal Express / 4.1.92 / 1700
2			✓ Sean Odd ESE 4-2 1300
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? Yes IF YES, ANTICIPATED # 6 TO SHIP ON 4/2/92
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

KEEP up the sending of ice & peanut pillows. Much appreciated by these JMM Field samplers.
Also, as requested - please send Sodium Hydroxide & Nitric Acid. Thanks
by DLC a day or so ago.

Cfong

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ 5/1
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

CSE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	TE TYPE	DEPTH FEET	
*113	TB		VP VP VP VP VP			ALTB2						
*114	TB		VP VP VP VP VP			ALTB2						
*115	TB		VP VP VP VP VP	4/1/92		ALTB2						TB opened in field — trenched w/ VOA samples
*116	TB		VP VP VP VP VP			ALTB2						
*117	TB		VP VP VP VP VP			ALTB2						
*118	TB		VP VP VP VP VP			ALTB2						
*119	TB		VP VP VP VP VP			ALTB2						
*120	TB		VP VP VP VP VP			ALTB2						

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong/JMM/4.1.92/1700		Federal Express/4.1.92/1700
2		V. Pecon CAS ESE 4-2 1300
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? N

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/1

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHO	H2O TEMP C	DATE TYPE	DEPTH FEET
*25	M-017A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*26	M-018A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*27	M-018E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*28	M-019A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*29	M-019E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*30	M-020A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/2/92	1415	ALQ3.1	7.45	24000	16.1°C	WBL	
*31	M-020B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*32	M-020E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/2/92	1230	ALQ3.1	7.03	30000	17.4°C	WBL	

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Tong / JMM / 4.2.92 / 1700		Federal Express / 4.2.92 / 1700
2			V. Pham ESE 4-3 1300
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ-
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/1

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMH	H2S	TEMP C	% TYPE	DEPTH FEET
*33	M-021A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/2/92	1430	ALQ3.1	8.01	27000		19.4	WBZ	
*34	M-021C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*35	M-021E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*36	M-022A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*37	M-023B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*38	M-022E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*39	M-023A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*40	M-023E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD: IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Forg / JMM / 4.2.92 / 1700	Federal Express	/ 4.2.92 / 1700
2			Prem Oza ESE 4-3 1300
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON / /
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N
5°C

Environ... al Science & Engineering 02-26-92 *** IELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/1

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*73	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/2/92		ALQ3.1					
*74	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*75	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*76	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*77	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*78	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*79	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*80	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Tong/JMM/4.2.92/1700		Federal Express/[illegible]/4.2.92/1700
2			
3			VPrem Oo ESE 4-3 1300

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/1

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	TEMP	TIDE TYPE	DEPTH FEET
*89		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1				
*90		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP	4/2/92	1330	ALQ3.1	7.36	21.5°C	cond: 0	
*91		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1				
*92		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1				
*93		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1				
*94		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1				
*95		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1				
*96		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1				

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD: IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Tong / JMM / 4-2-92 / 1700		Federal Express / 4-2-92 / 1700
2		
3		V-Prem Oo ESE 4-3 1500

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N
5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: AI

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/1

CASE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	HZG TEMP	SITE TYPE	DEPTH FEET
*113	TB		VP VP VP VP VP			ALTB2					
*114	TB		VP VP VP VP VP			ALTB2					
*115	TB		VP VP VP VP VP			ALTB2					
*116	TB		VP VP VP VP VP	4/2/92	—	ALTB2					
*117	TB		VP VP VP VP VP			ALTB2					
*118	TB		VP VP VP VP VP			ALTB2					
*119	TB		VP VP VP VP VP			ALTB2					
*120	TB		VP VP VP VP VP			ALTB2					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Fong / JMM / 4-2-92 / 1700		Federal Express / 4-2-92 / 1700
2			
3			V Prem Oo ESE 4-3 1300

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N/A Problems? N

5°C

Environm[illegible]al Science & Engineering 02-26-92 *[illegible] FIELD LOGSHEET *** FIELD GROUP: AL
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5 | 1

CSE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*25	M-017A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/3/92	1320	ALQ3.1	7.15	31500	16.9°C	WBL	
*26	M-018A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/3/92	1210	ALQ3.1	7.10	24000	17.8°C	WBL	
*27	M-018E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*28	M-019A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/3/92	0935	ALQ3.1	7.00	24000	15.7°C	WBL	
*29	M-019E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/3/92	1130	ALQ3.1	6.92	33000	17.4°C	WBL	
*30	M-020A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*31	M-020B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*32	M-020E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE, RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong/JMM/4.3.92/1600		Federal Express/4.3.92/1600
2		V. Pham CLO ESE 4-5 1100
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

Environmental Science & Engineering 02-26-92 FIELD LOGSHEET *** FIELD GROUP: A

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/AL...EDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/1

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP CONT UMHO	H2O TEMP C	SITE TYPE	DEPTH FEET
*33	M-021A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*34	M-021C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*35	M-021E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/2/92	0930	ALQ3.1	7.01	28000	16.6°C	WBL	
*36	M-022A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*37	M-023B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*38	M-022E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*39	M-023A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*40	M-023E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Zorg/JMM/4.3.92/1600	Federal Express	/4.3.92/1600
2			V. Pham CO ESE 4-5 1100
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

Environmental Science & Engineering 12-31-91 *** FIELD LOGSHEET *** FIELD GROUP: ~~ALQ3~~ ALQ4

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*148	TB		VP VP VP VP VP			ALTB2					
*149	TB		VP VP VP VP VP			ALTB2					
*150			B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*151	MWE-1		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4-3-92	1045	ALQ3.1 4	6.5	1250			
*152	MWE-2		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4-3-92	930	ALQ3.1 4	6.0	985			
*153	MWE-3		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4-3-92	1725	ALQ3.1 4	6.0	115			
*154	MWE-4		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4-3-92	1430	ALQ3.1 4	6.5	1525			

No TEM, No Red per D. Martin 4/6/92

Jmt 4/6/92

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE, TIME, FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 C. Lee / JMM / 4-03-92 / 4:25	Fed Ex	V. Pham / ESE 4-5 1100
2		
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

Y Collect No Radio Field Analysis until Palmtop notification

'R', 'S', and 'O' not preserved in lab (WD)

Environmental Science & Engineering 12-31-91 ** IELD LOGSHEET *** FIELD GROUP: [redacted]

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

CASE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*155	MWE-5		(B) C EC EE E MS MS MS NE O O O R S TEM VP VP VP VP VP	4-3-92	16:45	ALQ 3.1 4	7.0	395			
*156	MWE-6		(B) C EC EE E MS MS MS NE O O O R S TEM VP VP VP VP VP	4-3-92	16:[illegible]	ALQ 3.1 4	7.0	1100			

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	[redacted] 4-03 92 1[illegible]	Fed Ex	VPlum Doo ESE 4-5 1100
2			
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? X

W. Cook & D. Rucker

Hold analyses until D. Martin notification

O' R' and S' not preserved in lab. VPD

Environmental Science & Engineering 12-31-91 *** FIELD LOGSHEET *** FIELD GROUP: ~~1103~~ AL x 4

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5 | 1

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	REF TEMP C	GRAB TYPE	DEPTH FEET
*134 (114)	TB		VP VP VP VP VP	4-3-92	—	ALTB2					
*135 (113)	TB		VP VP VP VP VP	↓	—	ALTB2					
*136	TB		VP VP VP VP VP			ALTB2					
*137	TB		VP VP VP VP VP			ALTB2					
*138	TB		VP VP VP VP VP			ALTB2					
*139	TB		VP VP VP VP VP			ALTB2					
*140	TB		VP VP VP VP VP			ALTB2					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 [illegible] 4-3-92 4:25	Fed Ex	V. Pierson ESE 4-5 1100
2		
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? ✓ Problems? N

Environmental Science & Engineering 02-26-92 FIELD LOGSHEET *** FIELD GROUP: A

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/AL EDA NAS-CTO-107 LAB COORD. JACKIE HARGE

5/1

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHO	H2O TEMP C	SITE TYPE	DEPTH FEET
*113	TB		VP VP VP VP VP			ALTB2					
*114	TB		VP VP VP VP VP			ALTB2					
*115	TB		VP VP VP VP VP			ALTB2					
*116	TB		VP VP VP VP VP	4/3/92	—	ALTB3					
*117	TB		VP VP VP VP VP			ALTB2					
*118	TB		VP VP VP VP VP			ALTB2					
*119	TB		VP VP VP VP VP			ALTB2					
*120	TB		VP VP VP VP VP			ALTB2					

opened in field - stayed w/ VOAs

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD: IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Tong/JMM/4.3.92/1600		Federal Express/4.3.92/1600
2		V. Pham DOD ESE 4-5 1100
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? N/ Samples Iced? Y/ Preservations Audited? N/ Problems? N

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ-
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMH/CM	H2O TEMP C	TURB TYPE	DEPTH FEET
*17	M-012A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*18	M-012B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*19	M-013A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*20	M-013C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*21	M-014A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*22	M-014B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*23	M-015A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*24	M-016A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/6/92	1215	ALQ3.1	6.79	22000	19.1	WBK	X

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Thomas Smith/JMM/4/6/92/1800		Fed Ex 4/6/92 1800
2			V. Pham 2ND ESE 4-7 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5°C Preservations Audited? Y Problems? N

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	CASE TYPE	DEPTH FEET
*25	M-017A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*26	M-018A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*27	M-018E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/6/92	1100	ALQ3.1	7.15	31000	16.8	WBL	
*28	M-019A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*29	M-019E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*30	M-020A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*31	M-020B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*32	M-020E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Thomas Smith/JMM/4/6/92/1800		Fed Ex 4/6/92 1800
2		V. Pham/ESE 4-7 1500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

5°C

Environme. al Science & Engineering 02-26-92 ** IELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP. CONT. UMHOS/CM	H2O TEMP C	TIDE TYPE	DEPTH FEET
*49	M-027B-		B C EC EC F MS MS MS NF O O O R S ~~TEM VP VP VP VP VP~~			ALQ3.1					
*50	M-027C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/6/92	1400	ALQ3.1	6.91	21000	14.8	DA	—
*51	M-027E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*52	M-028A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*53	M-028E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*54	M-029A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*55	M-029E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*56	M-101A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: **I**-IGNITABLE **C**-CORROSIVE **R**-REACTIVE **T**-TOXIC WASTE **H**-OTHER ACUTE HAZARD: IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	ELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Thomas Smith/JMM/4/6/92 1800	Fed Ex	4/6/92 1800
2			
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N
5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP. CND. UMHOS/CM	H2O TEMP. C	SITE TYPE	DEPTH FEET
*73		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*74		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/6/92	-	ALQ3.1					
*75		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*76		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*77		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*78		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*79		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*80		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Thomas Smith/JMM/4/6/92/1806	Fed Ex	4/6/92 1800
2		
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5°C Preservations Audited? Y Problems? N

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible] UMHOS/CM	[illegible]	TEMP [illegible]	[illegible] TYPE	DEPTH FEET
*89	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1						
*90	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1						
*91	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP	4/4/92	900	ALQ3.1	8	0	/			- Before Sampling mDTBE
*92	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1						
*93	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1						
*94	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1						
*95	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1						
*96	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1						

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Thomas Smith/JMM/4/4/92/1800		FedEx 4/4/92 1800
2		
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N
5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: AL

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/8

CASE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHO/CM	HZG TEMP F	SITE TYPE	DEPTH FEET
*113	TB		VP VP VP VP VP			ALTB2					
*114	TB		VP VP VP VP VP			ALTB2					
*115	TB		VP VP VP VP VP			ALTB2					
*116	TB		VP VP VP VP VP			ALTB2					
*117	TB		VP VP VP VP VP			ALTB2					
*118	TB		(VP) (VP) (VP) (VP) (VP)	4/6/92	—	(ALTB3)					
*119	TB		VP VP VP VP VP			ALTB2					
*120	TB		VP VP VP VP VP			ALTB2					

Keep open w/ all Volatils in field

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: **I**-IGNITABLE **C**-CORROSIVE **R**-REACTIVE **T**-TOXIC WASTE **H**-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Thomas Smith / JMM / 4/6/92 1800	Fed Ex	4/6/92 1800
2			
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? N

5°C

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible] UMH	[illegible]	TEMP	[illegible] TYPE	DEPTH FEET
*17	M-012A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*18	M-012B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*19	M-013A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/7/92	1400	ALQ3.1	7.65	300		18.1 ~~Rec~~	WBL	
*20	M-013C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*21	M-014A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/7/92	1145	ALQ3.1	7.55	100		17.2	WBL	
*22	M-014B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*23	M-015A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/7/92	1015	ALQ3.1	7.12	400		16.8	WBL	
*24	M-016A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong / JMM / 4-7-92 / 1600		Federal Express / 4-7-92 / 1600
2		√ Plein Dep ESE 4-8 13°C
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? √ Samples Iced? √ Preservations Audited? √ Problems? N
5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible] UMHO	[illegible] TEMP	[illegible] TYPE	DEPTH FEET
*49	M-027B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/7/92	1255	ALQ3.1	6.52	16400	18.9	DA	~
*50	M-027C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*51	M-027E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*52	M-028A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*53	M-028E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*54	M-029A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*55	M-029E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*56	M-101A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Fong / JMM / 4.7.92 / 1600		Federal Express / 4-7-92 / 1600
2			W Pow Ons ESE 4-8 1300
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? ___ Samples Iced? ___ Preservations Audited? ___ Problems? N

5°C

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALC
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible] UMH	[illegible]	[illegible]	DEPTH FEET
*113	TB		VP VP VP VP VP			ALTB2					
*114	TB		VP VP VP VP VP			ALTB2					
*115	TB		VP VP VP VP VP			ALTB2					
*116	TB		VP VP VP VP VP			ALTB2					
*117	TB		VP VP VP VP VP			ALTB2					
*118	TB		VP VP VP VP VP			ALTB2					
*119	TB		VP VP VP VP VP			ALTB2					
*139	TB		VP VP VP VP VP	4/7/92	—	ALTB3					

opened in field - traveled w/ VOA's

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 C. Fors / JMM / 4.7.92 / 1600	Federal Express	/ 4.7.92 / 1600
2		/ JMM ESE 4-8 800
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? N
5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: AL

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/6

CASE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SPECIFIC COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*9	M-006A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*10	M-007A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*11	M-007C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*12	M-008A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*13	M-009A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*14	M-010A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/8/92	1445	ALQ3.1	7.22	3300	17.5°C	WBL	
*15	M-010B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*16	M-011A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/8/92	1230	ALQ3.1	6.65	7500	17.1°C	WBL	

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Tong | JMM | 4.8.92 | 1700		Federal Express | 4.8.92 | 1700
2			V. Van Do ESE 49 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? Y

5°C

*14-S was cut open

VD

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ4
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHO/CM	H2O TEMP °C	SITE TYPE	DEPTH FEET
*17	M-012A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/8/92	0945	ALQ3.1	6.83	210	16.0°C	WBL	✓
*18	M-012B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*19	M-013A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*20	M-013C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*21	M-014A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*22	M-014B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*23	M-015A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*24	M-016A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Fong / JMM / 4-8-92 / 1700		Federal Express / 4-8-92 / 1700
2			V. Rem Doo ESE 4-9 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5°C Preservations Audited? Y Problems? N

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*41	M-024A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*42	M-024E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*43	M-025A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*44	M-025C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/8/92	1208	ALQ3.1	7.07	6000	17.7°C	DA	
*45	M-025E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*46	M-026A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*47	M-026E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*48	M-027A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong / JMM / 4.8.92 / 1700	Federal Express	/ 4.8.92 / 1700
2		VPam Oo ESE 4-9 1500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ4
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible] UMHO/CM	HZD TEMP C	[illegible] TYPE	DEPTH FEET
*73		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*74		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*75		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/8/92	—	ALQ3.1					
*76		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*77		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*78		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*79		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*80		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: **I**-IGNITABLE **C**-CORROSIVE **R**-REACTIVE **T**-TOXIC WASTE **H**-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

ELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong / JMM / 4-8-92 / 1700		Federal Express / 4-8-92 / 1700
2		VRam Oo ESE 4-9 1500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N
5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: AL

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*89		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*90		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*91		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*92		EB	B C EC EC F MS MS NF O O R S X TEM VP VP VP VP VP	4/8/92	1115	ALQ3.1	7.85	D	18.8°C.	DA	
*93		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*94		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*95		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*96		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Frey / JMM / 4-8-92 / ~~1400~~ 1700	Federal Express	/ 4-8-92 / 1700
2		w/ Plan 200 ESE 49 1500	
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

5°C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ4
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/8

CSE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	COND UMHO/CM	H2O TEMP C	TE TYPE	DEPTH FEET
*113	TB		VP VP VP VP VP			ALTB2					
*114	TB		VP VP VP VP VP			ALTB2					
*115	TB		VP VP VP VP VP			ALTB2					
*116	TB		VP VP VP VP VP			ALTB2					
*117	TB		VP VP VP VP VP			ALTB2					
*118	TB		VP VP VP VP VP			ALTB2					
*119	TB		VP VP VP VP VP			ALTB2					
*120	TB		VP VP VP VP VP	4-8-92		ALTB2					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Fong / JMM / 4-8-92 / 1700	Federal Express	
2		V Ramos ESE 4-9 1500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? __ IF YES, ANTICIPATED # __ TO SHIP ON __/__/__
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? N
5°C.

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: AL

PROJECT #: BER 3914042 0201 PROJECT NAME: JMM/AL EDA NAS-CTO-107 LAB COORD. JACKIE HARGR

5/8

CASE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible]	[illegible] TEMP	[illegible] TYPE	DEPTH FEET
*1	M-001A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*2	M-001B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*3	M-001E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*4	M-002A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*5	M-002E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*6	M-003A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*7	M-004A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*8	M-005A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/9/92	1245	ALQ3.1	7.33	1000	17.0°C	DA	/

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Fong / JMM / 4.9.92 / 1600		Federal Express / 4.9.92 / 1600
2			V. Pierre Co ESE 4-10 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5°C Preservations Audited? Y Problems? N

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ4
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible] UMH	[illegible]	TEMP C	[illegible] TYPE	DEPTH FEET
*9	M-006A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/9/92	1045	ALQ3.1	6.85	700		16.8°C	DA	✓
*10	M-007A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*11	M-007C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/9/92	1050	ALQ3.1	7.00	22000		17.5°C	DA	✓
*12	M-008A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*13	M-009A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*14	M-010A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*15	M-010B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*16	M-011A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Fong / JMM / 4-9-92 / 1600	Federal Express	/ 4-9-92 / 1600
2			V/Pam Doo ESE 4-10 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? ✓ Samples Iced? ✓ 5°C Preservations Audited? ✓ Problems? ✓
* 9-MS, one not filled all (WD)

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ4
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/A1 EDA NAS-CTO-107 LAB COORD. JACKIE HARGR

5/8

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP CONC UMHOS/CM	H2O TEMP C	TE TYPE	DEPTH FEET
*1	M-001A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*2	M-001B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*3	M-001E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*4	M-002A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*5	M-002E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*6	M-003A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/10/92	1230	ALQ3.1	6.95	600	17.9°C	DA	
*7	M-004A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*8	M-005A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Fong / 4.10.92 / JMM / 1700		Federal Express
2			V-Plum OD ESE 4+2 1100
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5°C Preservations Audited? Y Problems? N

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/8

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*121		TB	VP VP VP VP VP	4/9/92	—	ALTB3	opened in field- traveled w/ VOA's				
*122		TB	VP VP VP VP VP			ALTB2					
*123		TB	VP VP VP VP VP			ALTB2					
*124		TB	VP VP VP VP VP			ALTB2					
*125		TB	VP VP VP VP VP			ALTB2					
*126		TB	VP VP VP VP VP			ALTB2					
*150			B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*151	MWE-1		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Forg / JMM / 4.9.92 / 1600		FedexExpress / 4.9.92 / 1600
2			W/ Pam Do ESE 4-10 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? N
5°C

Environ.) al Science & Engineering 02-26-92 *.) IELD LOGSHEET *** FIELD GROUP: AL
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/8

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP. COND UMHOS/CM	H2O TEMP C	TE EXPL	DEPTH FEET
*9	M-006A-	N	B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*10	M-007A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/10/92	1045	ALQ3.1	7.50	400	16.1°C	DA	✓
*11	M-007C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*12	M-008A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*13	M-009A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*14	M-010A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*15	M-010B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/10/92	1400	ALQ3.1	7.44	12000	19.5	WBL	✓
*16	M-011A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Forg / JMM / 4-10-92 / 1700		Federal Express
2			VPeterson ESE 4-12 1100
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON __/__/__
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? Y
5°C

*10-R; cubi top was not on tight. only 1/2 filled

WPD

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/8

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	HOC TEMP C	SITE TYPE	DEPTH FEET
*89	!	EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*90	!	EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*91		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*92		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*93		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP	4/10/92	0900	ALQ3.1	8	0	✓	prior to MW77A	✓
*94		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*95		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*96		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Fong/JMM/4.10.92/1700	Federal Express	
2			Pam Doss ESE 4-12 1100
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5°C Preservations Audited? Y Problems? N

Environ. al Science & Engineering 02-26-92 * IELD LOGSHEET *** FIELD GROUP: AL

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/8

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*121		TB	VP VP VP VP VP			ALTB2					
*122		TB	VP VP VP VP VP	4/10/92	—	ALTB3					
*123		TB	VP VP VP VP VP			ALTB2					
*124		TB	VP VP VP VP VP			ALTB2					
*125		TB	VP VP VP VP VP			ALTB2					
*126		TB	VP VP VP VP VP			ALTB2					
*150			B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*151	MWE-1		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Forg | JMM | 4.10.92 | 1700	Federal Express	
2			Alison Ods ESE 4-12 1100
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5°C Preservations Audited? N Problems? N

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGRO

5/15

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible] UMHOS/CM	WATER TEMP	[illegible] TYPE	DEPTH FEET
*1	M-001A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*2	M-001B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*3	M-001E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*4	M-002A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*5	M-002E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*6	M-003A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*7	M-004A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/13/92	1200	ALQ3.1	7.20	2200	1808	DA	
*8	M-005A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Tong / JMM / 4.13.92 / 1700		Federal Express / 4.13.92 / 1700
2			V. Leon Old ESE 4-14 / 1500
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5C Preservations Audited? Y Problems? N

SEND MORE ICE PACKS! SEND SULFURIC ACID!
SEND NITRIC ACID!

Thanks
CT

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/15

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP CONDUCT UMHOS/CM	H2O TEMP C	SAMPLE TYPE	DEPTH FEET
*57	M-102A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*58	M-103A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*59	M-103B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*60	M-104A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*61	M-104C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*62	M-105A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/13/92	1430	ALQ3.1	7.52	280	16.8	BG	
*63	M-105B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/13/92	1200	ALQ3.1	6.42	36000	15.6	BG	
*64	M-106A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: **I**-IGNITABLE **C**-CORROSIVE **R**-REACTIVE **T**-TOXIC WASTE **H**-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cindy Eng./JMM/4.13.92/1700		Federal Express/4.13.92/1700
2		From the ESE 4-14 1500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5°C Preservations Audited? Y Problems? N

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/15

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible] UMHO	[illegible] F	HZ [illegible]	TEMP C	[illegible] TYPE	DEPTH FEET
*73	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1							
*74	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1							
*75	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1							
*76	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/13/92		ALQ3.1							
*77	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1							
*78	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1							
*79	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1							
*80	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1							

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Fox / JMM / 4.13.92 / 1700	Federal Express	/ 4.13.92 / 1700
2			
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N
5°C.

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/15

CASE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	TIDE TYPE	DEPTH FEET
*121	TB		VP VP VP VP VP			ALTB2					
*122	TB		VP VP VP VP VP			ALTB2					
*123	TB		VP VP VP VP VP	4/13/92	—	ALTB2					
*124	TB		VP VP VP VP VP			ALTB2					
*125	TB		VP VP VP VP VP			ALTB2					
*126	TB		VP VP VP VP VP			ALTB2					
*150			B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*151	MWE-1		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 C.Fong/JMM/4.13.92/1700		Federal Express/4 13 92/1700
2		
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? ___

5C

Environmental Science & Engineering 02-26-92 **: IELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/15

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SI TYPE	DEPTH FEET
*49	M-027B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*50	M-027C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*51	M-027E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*52	M-028A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*53	M-028E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*54	M-029A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*55	M-029E-		B C EC EC F MS MS MS NF O O O R S ~~TEM VP VP VP VP VP~~			ALQ3.1					
*56	M-101A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/14/92	1100	ALQ3.1	7.43	3000	17.9	BG	

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Thomas Smith, JMM 4/14/92, 1800	Fed EX	4/14/92 1800
2	V-Prem Das ESE	4-15 1300
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N
5°C

Environ[illegible]l Science & Engineering 02-26-92 ***[illegible]IELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/15

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHO[illegible]	HOS TEMP (	[illegible] TYPE	DEPTH FEET
*89		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*90		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*91		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*92		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*93		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*94		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP	4/14/92	0915	ALQ3.1	9.03	O	17.3	BG	
*95		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*96		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Thomas Smith JMM 4/14/92 1800	Fed Ex	JMM 4/14/92 1800
2		VFun Do ESE 4-15 1300
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5°C Preservations Audited? Y Problems? N

Environmental Science & Engineering 02-26-92 *** IELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/15

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	[illegible] UMHO/CM	H2S TEMP	SITE TYPE	DEPTH FEET
*121	TB		VP VP VP VP VP			ALTB2					
*122	TB		VP VP VP VP VP			ALTB2					
*123	TB		VP VP VP VP VP			ALTB2					
*124	TB		VP VP VP VP VP	4/14/92		ALTB3					
*125	TB		VP VP VP VP VP			ALTB2					
*126	TB		VP VP VP VP VP			ALTB2					
*150			B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*151	MWE-1		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

bottles filled by ESE. Can opened in field & stayed w/all Volatiles samples in same cooler as shipped in. TXS

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Thomas Smith SMW 4/14/92 1800	FedEX 4/14/92 1800	
2			Vern Ose ESE 4-15 1300
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? N
5°C

Environ.) l Science & Engineering 02-26-92 *:) IELD LOGSHEET *** FIELD GROUP: AL( )

PROJECT N..BER 3914042 0201 PROJECT NAME: JMM/ALA..EDA NAS-CTO-107 LAB COORD. JACKIE HARGRO..

5/15

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP. CONE UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*57	M-102A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*58	M-103A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*59	M-103B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*60	M-104A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*61	M-104C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*62	M-105A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*63	M-105B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*64	M-106A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4.17.92	1445	ALQ3.1	7.8	85	18.4	BG	

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Forga / JMM / 4-17-92 / 1800		Federal Express / 4-17-92 / 1800
2			Pam Cox ESE 4-18 1400
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

Send Peanut Pillows!!!

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ4
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 4/17

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMH	H2O TEMP	FE TYPE	DEPTH FEET
*65	M-107A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/17/92	1615	ALQ3.1	6.8	450	17.3	BG	—
*66	M-108A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*67	M-108B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*68	M-109A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*69	M-110A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*70	M-111A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*71	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*72	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD: IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Force | JMM | 4.17.92 | 1800	Fed. Express	4.17.92 | 1800
2			V Fenn CES 4-18 1400
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

SEND PEANUT Pillows 5°C !!!!

Environmental Science & Engineering 02-26-92 FIELD LOGSHEET *** FIELD GROUP: A1

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/15

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	HZE TEMP C	SITE TYPE	DEPTH FEET
*121		TB	VP VP VP VP VP			ALTB2					
*122		TB	VP VP VP VP VP			ALTB2					
*123		TB	VP VP VP VP VP			ALTB2					
*124		TB	VP VP VP VP VP			ALTB2					
*125		TB	VP VP VP VP VP	4/17/92	—	ALTB2	opened in field, traveled w/field VOAs				
*126		TB	VP VP VP VP VP			ALTB2					
*150			B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*151	MWE-1		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Cindy Eng / JMM / 4-17-92 / 1800	Federal Express	/ 4-17-92 / 1800
2			Ellen Cd ESE 4-18 1400
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? no

SEND PEANUT Pillows !!!!!!!

Environmental Science & Engineering .02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ4
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/22

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SE TYPE	DEPTH FEET
*57	M-102A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/21/92	1615	ALQ3.1	6.89	250	18.2°C	BG	/
*58	M-103A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*59	M-103B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*60	M-104A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*61	M-104C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*62	M-105A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*63	M-105B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*64	M-106A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: **I**-IGNITABLE **C**-CORROSIVE **R**-REACTIVE **T**-TOXIC WASTE **H**-OTHER ACUTE HAZARD: IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 C. Fong | JMM | 4.21.92 | 1830		Federal Express | 4.21.92 | 1830
2		V. Pasa DoD ESE 4-22 1300
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON __/__/__
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

Environmental Science & Engineering · 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/22

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP ° C	SITE TYPE	DEPTH FEET
*17	M-012A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*18	M-012B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/21/92	1630	ALQ3.1	6.97	35000	19.0	WBL	
*19	M-013A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*20	M-013C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*21	M-014A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*22	M-014B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*23	M-015A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*24	M-016A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: **I**-IGNITABLE **C**-CORROSIVE **R**-REACTIVE **T**-TOXIC WASTE **H**-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 C. Forg / JMM / 4.21.92 / 1830		Federal Express / 4.21.92 / 1830
2		V. Plum Ops ESE 4-22 1300
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N

SEND PILLOW PACKS!

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ4
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/22

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*89	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*90	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*91	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*92	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*93	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*94	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*95	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP	4/21/92	1000	ALQ3.1	8.1	0	—	BG	✓
*96	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Tong | JMM | 4.21.92 | 1830		Federal Express | 4.21.92 | 1830
2			V. Pleasant ESE 4-22 1300
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? ✓ Samples Iced? ✓ Preservations Audited? ✓ Problems? ✓
one 'O' broke during shipping. (VPD)

Environmental Science & Engineering, 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: AL
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/22

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*121		TB	VP VP VP VP VP			ALTB2					
*122		TB	VP VP VP VP VP			ALTB2					
*123		TB	VP VP VP VP VP			ALTB2					
*124		TB	VP VP VP VP VP			ALTB2					
*125		TB	VP VP VP VP VP			ALTB2					
*126		TB	VP VP VP VP VP 4/21/92			ALTB3 opened in field transf w/ VOA					
*150			B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*151	MWE-1		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Fong / JMM / 4.21.92 / 1830		Federal Express / 4.21.92 / 1830
2			V. Pierce ODD ESE / 4-22 / 1300
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? N/ Samples Iced? Y/ Preservations Audited? N Problems? N

Environme .1 Science & Engineering .02-26-92 ** IELD LOGSHEET *** FIELD GROUP: AL(
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/22

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*9	M-006A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*10	M-007A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*11	M-007C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*12	M-008A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/22/92	1045	ALQ3.1	7.10	250	16.5°C	DA	/
*13	M-009A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*14	M-010A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*15	M-010B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*16	M-011A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

ELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 C. Fong [JMM] 4-22-92 1730		Fed Express / 4/22/92 / 1730
2		VFlem Ond ESE 4-23 1500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? ✓ Samples Iced? ✓ Preservations Audited? ✓ Problems? N

5°C

Environmental Science & Engineering .02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALA

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/22

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS M	H2O TEMP C	SITE TYPE	DEPTH FEET
*17	M-012A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*18	M-012B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*19	M-013A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*20	M-013C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/22/92	1115	ALQ3.1	6.45	34000	18.9°C	WBL	
*21	M-014A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*22	M-014B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/22/92	1430	ALQ3.1	6.58	31500	19.0	WBL	
*23	M-015A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*24	M-016A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Tong/JMM/4-22-92/1730		Fed. Express/4-22-92/1730
2			VPrem Oak ESE 4-23 1300
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 5°C Preservations Audited? Y Problems? Y

SEND Pillow Packs!
SEND Trip Blanks!

*22-EC, one [redacted] broke during shipping

Environmental Science & Engineering 02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/22

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*65	M-107A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*66	M-108A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*67	M-108B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*68	M-109A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*69	M-110A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/22/92	1515	ALQ3.1	1000 pH 7.46		19.1°C	BG	
*70	M-111A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/22/92	1230	ALQ3.1	8.04	2300	19.3	BG	
*71	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*72	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Fong / JMM / 4-22-92 / 1730		Federal Express / 4-22-92 / 1730
2			V. Pham QA ESE 4-23 1300
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? X Problems? N
5°C

Environmental Science & Engineering · 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: AL

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/22

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*9	M-006A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*10	M-007A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*11	M-007C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*12	M-008A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*13	M-009A-		B C EC EC F MS MS MS NF O O R S TEM VP VP VP VP VP	4/23/92	1000	ALQ3.1	6.90	3500	16.6°C	DA	
*14	M-010A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*15	M-010B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*16	M-011A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD: IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 Cubrog/JMM/4.23.92/1800		FedEx/4.23.92/1800
2		V Plum Co ESE 4-24 1400
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? Y

6°C

*13-O one broke during shipping (MD)

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ4
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/22

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	FD TYPE	DEPTH FEET
*25	M-017A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*26	M-018A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*27	M-018E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*28	M-019A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*29	M-019E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*30	M-020A-		B C EC EC F MS MS MS NF O O O R S ~~TEM VP VP VP VP VP~~			ALQ3.1					
*31	M-020B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/23/92	1610	ALQ3.1	6.13	12000	17.80°C	WBL	
*32	M-020E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Fong | JMM | 4.23.92 | 1800	FedEx	4.23.92 | 1800
2		1-Prem Oo ESE	4-24 1900
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N
6°C

Environmental Science & Engineering .02-26-92 ** FIELD LOGSHEET *** FIELD GROUP: ALQ
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/22

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*57	M-102A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*58	M-103A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/23/92	1230	ALQ3.1	7.52	290	17.2C	BG	
*59	M-103B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/23/92	1130	ALQ3.1	6.33	39500	19.8°C	Strong BG H_2S odor	
*60	M-104A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*61	M-104C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*62	M-105A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*63	M-105B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*64	M-106A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 C. Forg / JMM / 4.23.92 / 1800		Fed Ex / 4.23.92 / 1800
2		V. Pueh Ooi ESE 4-24 1500
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 6°C Preservations Audited? Y Problems? Y

*58-MS one broke during shipping (VOA)

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ4
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/22

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHO	H2O TEMP C	FIELD TYPE	DEPTH FEET
*73	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*74	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*75	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*76	DUP		B C C EC EC EC F MS MS MS NF O O O R S ~~TEM VP VP VP VP VP~~			ALQ3.1					
*77	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/23/92		ALQ3.1					
*78	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*79	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*80	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD: IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Fong / JMM / 4.23.92 / 1500	Fed Ex	/ 4.23.92 / 1800
2		V-Plan Con ESE	4-24 1400
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 6°C Preservations Audited? Y Problems? Y

*77 - MS: one broke during shipping. (JPO)

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/22

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*89		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*90		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*91		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*92		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*93		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*94		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*95		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*96		EB	B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP	4/23/92	1020	ALQ3.1	8.55	0	15.0°C		

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)				VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)		
1	C. Ross	JMM	4.23.92	1800	Fed Ex	1800	4.23.92
2					N. Poem ODS ESE	4-24	1500
3							

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 6°C Preservations Audited? Y Problems? N

Environmental Science & Engineering 04-22-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ4
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/22

ESE #	SITE/STA	HAZ?	FRACTIONS (CIRCLE)	DATE	TIME	PARAMETER LIST	
*127	TB		VP VP VP VP	4/23/92	✓	ALTB3	shipped w/ VOAs unopened
*128	TB		VP VP VP VP			ALTB3	
*129	TB		VP VP VP VP			ALTB3	
*130	TB		VP VP VP VP			ALTB3	
*131	TB		VP VP VP VP			ALTB3	
*132	TB		VP VP VP VP			ALTB3	
*133	TB		VP VP VP VP			ALTB3	

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE, TIME, FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Fong | JMM | 4-23-92 | 1800		FedEx 4-23-92 1800
2			V. Pham COD ESE 4-24 1400
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y 6°C Preservations Audited? N Problems? N

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: AP 5/22

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*33	M-021A-		B C EC EC F MS MS MS NF O O O R S ~~TEM~~ VP VP VP VP VP			ALQ3.1					
*34	M-021C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/24/92	1530	ALQ3.1	6.23	7800	18.5	WBL	/
*35	M-021E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*36	M-022A-		B C EC EC F MS MS MS NF O O O R S ~~TEM~~ VP VP VP VP VP			ALQ3.1					
*37	M-023B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/24/92	1115	ALQ3.1	~~10000~~ TDS 6.25	~~10000~~ TDS	18.7	WBL	/
*38	M-022E-		B C ~~EC EC~~ F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*39	M-023A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*40	M-023E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	Thomas Smith JMM 4/24/92 1800		Fed EX 4/24/92 18
2			V Plem Ooo ESE 4-25 1900
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? Y

6°C

*37 - MS, one broke during shipping (JMM)

Environmental Science & Engineering 04-22-92 ** FIELD LOGSHEET *** FIELD GROUP: AIC 4 5/22

PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/AL EDA NAS-CTO-107 LAB COORD. JACKIE HARGR

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	
*127		TE	VP VP VP VP			ALTB3	shipped w/ VOAs unopened
*128		TE	VP VP VP VP	4-24-92	—	ALTB3	Shipped w/ VOAs opened
*129		TE	VP VP VP VP			ALTB3	
*130		TE	VP VP VP VP			ALTB3	
*131		TE	VP VP VP VP			ALTB3	
*132		TE	VP VP VP VP			ALTB2	
*133		TE	VP VP VP VP			ALTB2	

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE, TIME, FIELD DATA IF REQUIRED. HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)				VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)			
1	TXS	JMM	4-24-92	1800	FedEx	4-24-92	[redacted]	1830
2					VPrem Ods	ESE	4-25	1900
3								

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___

SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? N

6°C

Environmental Science & Engineering ·02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: AL
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/29

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS CM	H2O TEMP C	SITE TYPE	DEPTH FEET
*65	M-107A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*66	M-108A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*67	M-108B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*68	M-109A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/27/92	1030	ALQ3.1	7.73	1000	19.4°C	BG	
*69	M-110A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*70	M-111A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*71	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*72	DUP		B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Fong / JMM / 4.27.92 / 1730		Fed Ex / 4.27.92 / 1730
2			W. Green Cas ESE 4-28 1600
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON __/__/__
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N
5°C

Environmental Science & Engineering · 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ4
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5 | 21

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP COND UMHOS/CM	H2O TEMP C	TIDE	DEPTH FEET	
*49	M-027B-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*50	M-027C-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*51	M-027E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*52	M-028A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/27/92	1248	ALQ3.1	6.32	1100	19.2°C			strong acid odor!
*53	M-028E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4.27.92	1530	ALQ3.1	6.42	1500	19.0°C	DA		strong acid odor!
*54	M-029A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*55	M-029E-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						
*56	M-101A-		B C EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1						

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Fong / JMM / 4.27.92 / 1730		Fed.Ex / [illegible] / 4.27.92 / 1730
2			V. Pham ESE 4-28 1600
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N
5°C

Environmental Science & Engineering .02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: AL
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/29

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP. CONC. UMHO/CM	H2O TEMP C	TIDE TYPE	DEPTH FEET
*73		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*74		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*75		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*76		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*77		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					
*78		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/27/92		ALQ3.1					
*79		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP	4/27/92	1243	ALQ3.1	6.37	1100	18.8	DA	strong odor
*80		DUP	B C C EC EC EC F MS MS MS NF O O O R S TEM VP VP VP VP VP			ALQ3.1					

Note: 5 VOA's off top of the purging 1 well volume from MOZRA

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I-IGNITABLE C-CORROSIVE R-REACTIVE T-TOXIC WASTE H-OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
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RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1 C. Fong / JMM / 4-27-92 / 1730	Fed. Ex	4-27-92 / 1730
2	W. Pum Oo	ESE 4-28 1600
3		

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? Y Problems? N
5C

Environmental Science & Engineering 02-26-92 *** FIELD LOGSHEET *** FIELD GROUP: ALQ4
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE 5/29

SE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	FIELD PH STD UNITS	SP CONE UMHO	H2O TEMP	EE TYPE	DEPTH FEET
*97	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP	4/27/92	1135	ALQ3.1	6.58	0	22.5°C	DA	✓
*98	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*99	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*100	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*101	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*102	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*103	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					
*104	EB		B C EC EC F MS MS NF O O R S S TEM VP VP VP VP VP			ALQ3.1					

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
-HAZARD CODES: I=IGNITABLE C=CORROSIVE R=REACTIVE T=TOXIC WASTE H=OTHER ACUTE HAZARD; IDENTIFY SPECIFICS IF KNOWN
-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Long | JMM | 4-27-92 | 1730		FedEx | 4-27-92 | 1730
2			V. Pham Ch ESE 4-28 1600
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? ✓ Samples Iced? ✓ 5°C Preservations Audited? ✓ Problems? N

Environmental Science & Engineering 04-22-92 FIELD LOGSHEET *** FIELD GROUP: A
PROJECT NUMBER 3914042 0201 PROJECT NAME: JMM/ALAMEDA NAS-CTO-107 LAB COORD. JACKIE HARGROVE

5/29

ESE #	SITE/STA	HAZ?	FRACTIONS(CIRCLE)	DATE	TIME	PARAMETER LIST	
*127	TB		VP VP VP VP			ALTB3	
*128	TB		VP VP VP VP			ALTB3	
*129	TB		VP VP VP VP	4/27/92		ALTB3	opened in field, transferred to VOAs
*130	TB		VP VP VP VP			ALTB3	
*131	TB		VP VP VP VP			ALTB3	
*132	TB		VP VP VP VP			ALTB3	
*133	TB		VP VP VP VP			ALTB3	

NOTE -CHANGE OR ENTER SITE ID AS NECESSARY; UP TO 9 ALPHANUMERIC CHARACTERS MAY BE USED
-CIRCLE FRACTIONS COLLECTED. ENTER DATE,TIME,FIELD DATA (IF REQUIRED), HAZARD CODE AND NOTES
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-PLEASE RETURN COMPLETED LOGSHEETS WITH SAMPLES TO Environmental Science & Engineering, Inc.

	RELINQUISHED BY: (NAME/ORGANIZATION/DATE/TIME)	VIA:	REC'D BY (NAME/ORGANIZATION/DATE/TIME)
1	C. Fong / JMM / 4-27-92 / 1730	Federal Express	/ 4-27-92 / 1730
2			V. Flom CO ESE 4-28 1600
3			

SAMPLER: MORE SAMPLES TO BE SHIPPED? ___ IF YES, ANTICIPATED # ___ TO SHIP ON ___/___/___
SAMPLE CUSTODIAN: Custody Seals Intact? Y Samples Iced? Y Preservations Audited? N Problems? N

5°C

APPENDIX I – REPORTING AND QC LIMITS

FINAL
QUALITY CONTROL SUMMARY REPORT
SOLID WASTE WATER QUALITY ASSESSMENT
TEST AND DATA SUMMARY REPORT FOR
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
PHASES 5 AND 6

DATED 30 APRIL 1993

REPORTING AND QC LIMITS

VOLATILE ORGANIC COMPOUNDS (VOCs) REPORTING LIMITS, CLP-RAS AND SAS METHODS(a)

Volatiles	Water (µg/L)	Soil/Sediment (µg/Kg)
Chloromethane	2	10
Bromomethane	2	10
Vinyl Chloride	0.5 (b)	10
Chloroethane	2	10
Methylene Chloride	1	5
Acetone	2	10
Carbon Disulfide	1	5
1,1-Dichloroethene	1	5
1,1-Dichloroethane	1	5
1,2-Dichloroethene	1	5
Chloroform	1	5
1,2-Dichloroethane	0.5 (b)	5
2-Butanone	2	10
1,1,1-Trichloroethane	1	5
Carbon Tetrachloride	0.5 (b)	5
Vinyl Acetate	2	10
Bromodichloroethane	1	5
1,2-Dichloropropane	1	5
cis-1,3-Dichloropropene	1	5
Trichloropropene	1	5
Dibromochloromethane	1	5
1,1,2-Trichloromethane	1	5
Benzene	1	5
trans-1,3-Dichloropropene	0.5 (b)	5
Bromoform	1	5
4-Methyl-2-pentanone	2	10
2-Hexanone	2	10
Tetrachloroethene	1	5
Toluene	1	5
1,1,2,2-Tetrachloroethane	1	5
Chlorobenzene	1	5
Ethylbenzene	1	5
Styrene	1	5
Total Xylenes	1	5

Notes:

(a) Reporting limits are equivalent to CLP Contract Required Quantitation Limits (CRQL).

(b) A detection limit of 0.5 µg/L is required to meet the Califronia MCL. However, this limit may not be achievable.

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs) REPORTING LIMITS, CLP RAS (a)

Semivolatiles	Water (µg/L)	Soil/Sediment (µg/Kg) (b)
Phenol	10	330
bis (2-Chloroethyl) Ether	10	330
2-Cholorophenol	10	330
1,3-Dicholorbenzene	10	330
1,4-Dichlorobenzene	5(c)	330
Benzyl Alcohol	10	330
1,2-Dichlorobenzene	10	330
2-Methylphenol	10	330
bis (2-Chloroisopropyl) Ether	10	330
4-Methylphenol	10	330
N-nitroso-di-n-propylamine	10	330
Hexachloroethane	10	330
Nitrobenzene	10	330
Isophorone	10	330
2-Nitrophenol	10	330
2,4-Dimethylphenol	10	330
Benzoic Acid	50	1600
bis (2-Chloroethoxy) methane	10	330
2,4-Dichlorophenol	10	330
1,2,4-Trichlorobenzene	10	330
Napthalene	10	330
4-Chloroaniline	10	330
Hexachlorobutadiene	10	330
4-chloro-3-methylphenol (para-Chloro-meta-cresol)	10	330
2-Methylnapthalene	10	330
Hexachlorocyclopentadiene	10	330
2,4,6-Trichlorophenol	10	330
2,4,5-Trichlorophenol	50	1600
2-Chloronaphthalene	10	330
2-Nitroaniline	50	1600
Dimethylphthalate	10	330
Acenaphthylene	10	330
2,6-Dinitrotoluene	10	330
3-Nitroaniline	50	1600
Acenaphthene	10	330
2,4-Dinitrophenol	50	1600
4-Nitrophenol	50	1600
Dibenzofuran	10	330
2,4-Dinitrotoluene	10	330
Diethylphthalate	10	330
4-Chlorophenyl-phenyl Ether	10	330
Fluorene	10	330
4-Nitroaniline	50	1600
4,6-Dinitro-2-methylphenol	50	1600
N-Nitrosodiphenylamine	10	330

SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs) REPORTING LIMITS, CLP RAS (a)

Semivolatiles	Water (µg/L)	Soil/Sediment (µg/Kg) (b)
4-Bromophenyl-phenylether	10	330
Hexachlorobenzene	10	330
Pentachlorophenol	50	1600
Phenanthrene	10	330
Anthracene	10	330
Di-n-butylphthalate	10	330
Fluoranthene	10	330
Pyrene	10	330
Butylbenzylphthalate	10	330
3.3-Dichlorobenzidiene	20	660
Benzo(a)anthracene	10	330
Chrysene	10	330
bis (2-Ethylhexyl) phthalate	10	330
Di-n-octylphthalate	10	330
Benzo(b)fluoranthene	10	330
Benzon(k)fluoranthene	10	330
Benzo(a)pyrene	10	330
Indeno(1,2,3-cd)pyrene	10	330
Dibenzo(a,h)anthracene	10	330
Benzo(g,h,i)pyrylene	10	330

Notes:

(a) CLP contract required quantitation limits are listed. Specific Quanititation limits are highly matrix dependant. The quantitation limits listed herein are provided for guidance and may not always be achievable

(b) Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on dry weight basis is required by the CLP protocols, will be higher.

(c) A reporting limit of 5µg/L is required for 1,4-dichlorobenzene to meet California MCL. The CLP limit is 10 µg/L.

ORGANOCHLORINE PESTICIDES AND PCBs REPORTING LIMITS, CLP RAS (a)

Compound	Water (µg/L)	Soil/Sediment (µg/Kg) (b)
OC Pesticides		
alpha-BHC	0.05	8.00
beta-BHC	0.05	8.00
delta-BHC	0.05	8.00
gamma-BHC (Lindane)	0.05	8.00
Heptachlor	0.05	8.00
Aldrin	0.05	8.00
Heptachlor Epoxide	0.05	8.00
Endosulfan I	0.05	8.00
Dieldrin	0.10	16.00
4,4-DDE	0.10	16.00
Endrin	0.10	16.00
Endosulfan II	0.10	16.00
4,4-DDD	0.10	16.00
Endosulfan sulfate	0.10	16.00
4,4-DDT	0.10	16.00
Methoxychlor	0.50	80.00
Endrin Ketone	0.10	16.00
alpha-Chlordane	0.50	80.00
gamma-Chlordane	0.50	80.00
Toxaphene	1.00	160.00
PCBs		
Arochlor-1016	0.50	80.00
Arochlor-1221	0.50	80.00
Arochlor-1232	0.50	80.00
Arochlor-1242	0.50	80.00
Arochlor-1248	0.50	80.00
Arochlor-1254	1.00	160.00
Arochlor-1260	1.00	160.00

Notes:

(a) CLP contract required quantitation limits are listed. Specific Quanititation limits are highly matrix dependant. The quantitation limits listed herein are provided for guidance and may not always be achievable

(b) Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on dry weight basis is required by the CLP protocols, will be higher.

METALS TARGET ANALYTE LIST DETECTION LIMITS, CLP-RAS

Compound	Contract Required Detection Limit (a) (µg/L)
Aluminum	200
Antimony	60
Arsenic	10
Barium	200
Beryllium	5
Cadmium	5
Calcium	5000
Chromium	10
Cobalt	50
Copper	25
Iron	100
Lead	3
Magnesium	5000
Manganese	15
Mercury	0.2
Nickel	40
Potassium	5000
Selenium	5
Silver	10
Sodium	5000
Thallium	10
Vanadium	50
Zinc	20

Notes:

(a) The CRDLs are the instrument detection limits obtained in pure water that must be met using the procedure described in the CLP Statement of Work.

REPORTING LIMITS FOR INORGANIC AND PHYSICAL MEASUREMENTS

Parameter	Contract Required Detection Limit (a) Water (mg/L)
Bicarbonate, Carbonate, and Alkalinity	2.00
Total Dissolved Solids (TDS)	20.00
Total Organic Carbon (TOC)	1.00
Nitrate and Nitrite	0.10
Cyanide	0.01
Anions	
Chloride	1.00
Sulfate	1.00
Fluoride	0.10

Notes:

(a) Detection limits may vary with the selection of the subcontract laboratory.

MISCELLANEOUS ORGANIC PARAMETERS REPORTING LIMITS

Compound	Method	Water (µg/L)	Soil/Sediment (µg/Kg)
Total Recoverable Petroleum Hydrocarbons	418.1	0.17	20.00
Oil and Grease	413.2	21.00	NA

VOLATILE COMPOUNDS - CLP-RAS METHOD
MATRIX SPIKE/MATRIX DUPLICATE AND SURROGATE SPIKE RECOVERY LIMITS

Fraction	Matrix Spike Compound	Water		Soil/Sediment	
		Recovery	RPD	Recovery	RPD
VOC	1,1-Dichloroethene	61-145	14	59-172	22
VOC	Trichloroethene	71-120	14	62-137	24
VOC	Chlorobenzene	75-130	13	60-133	21
VOC	Toluene	76-125	13	59-139	21
VOC	Benzene	76-127	11	66-142	21

Fraction	Surrogate Compound	Water	Soil/Sediment
VOC	Toluene - d8	88-110	81-117
VOC	4-Bromofluorobenzene	86-115	74-121
VOC	1,2-Dichloroethane - d4	76-114	70-121

SEMIVOLATILE COMPOUNDS - CLP-RAS METHOD
MATRIX SPIKE/MATRIX DUPLICATE AND SURROGATE SPIKE RECOVERY LIMITS

		Water		Soil/Sediment	
Fraction	Matrix Spike Compound	Recovery	RPD	Recovery	RPD
Base/Neutral	1,2,4-Trichlorobenzene	39-98	28	38-107	23
Base/Neutral	Acenaphthalene	46-118	31	31-137	19
Base/Neutral	2,4-Dinitrotoluene	24-96	38	28-89	47
Base/Neutral	Pyrene	26-127	31	35-142	36
Base/Neutral	N-Nitroso-Di-n-Propylamine	41-116	38	41-126	38
Base/Neutral	1,4-Dichlorobenzene	36-97	28	28-104	27
Acid	Pentachlorophenol	9-103	50	17-109	47
Acid	Phenol	12.0-89	42	26-90	35
Acid	2-Chlorophenol	27-123	40	25-102	50
Acid	4-Chloro-3-Methylphenol	23-97	42	26-103	33
Acid	4-Nitrophenol	10.0-80	50	11-114	50

Fraction	Surrogate Compound	Water	Soil/Sediment
Base/Neutral	Nitrobenzene-d5	35-114	23-120
Base/Neutral	2-Fluorobiphenyl	43-116	30-115
Base/Neutral	p-Terphenyl-d14	33-141	18-137
Acid	Phenol-d5	10.0-94	24-113
Acid	2-Fluorophenol	21-100	25-121
Acid	2,4,6-Tribromophenol	10-123	19-122

ORGANOCHLORINE PESTICIDES/PCBs - CLP-RAS METHOD
MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND SURROGATE SPIKE RECOVERY LIMITS*

Fraction	Matrix Spike Compound	Water		Soil/Sediment	
		Recovery	RPD	Recovery	RPD
Pesticides	Lindane	56-123	15	46-127	50
Pesticides	Heptachlor	40-131	20	35-130	31
Pesticides	Aldrin	40-120	22	34-132	43
Pesticides	Dieldrin	51-126	18	31-134	38
Pesticides	Endrin	56-121	21	42-139	45
Pesticides	4,4-DDT	38-127	27	23-134	50

Fraction	Surrogate Compound	Water	Soil/Sediment
Pesticides	Dibutylchlorendate	24-154	20-150

Notes:

*These limits are for advisory purposes only. They are not used to determine if a sample should be re-analyzed. When sufficient data becomes available, the USEPA may set performance based contract required windows.

METALS - CLP-RAS METHOD
CONTROL LIMITS (a)

Matrix Spike Compound	Water		Soil/Sediment	
	Recovery (%)	RPD (%)	Recovery (%)	RPD (%)
Metals	72-125	20	75-125	35

Notes:

(a) Recovery and RPD Limits are based on a spiked sample and duplicate samples, respectively.

MISCELLANEOUS MATRIX SPIKE AND DUPLICATE SAMPLE CONTROL LIMITS

Parameter	Method Number	Soil and Water	
		Recovery (%)	RPD (%)
Total Petroleum Hydrocarbons (purgeables & extractables)	8015 mod.	50-150	50
Total Organic Carbon (c)	415.1/CLP-SAS/ CLP-TOC	85-115(b)/ 80-120	10(b)/15
TDS (c)	160.1/CLP-SAS	85-115	10(b)
Chloride, Fluoride, Sulfate (d)	300.0/CLP-SAS	85-115	10(b)
Bicarbonate, Carbonate, Alkalinity (c)	403/CLP-SAS	90-110	10(b)
Nitrate and Nitrite	352.2/CLP-SAS	85-115	10(b)

Notes:

(a) Precision and accuracy limits listed above will be used until the laboratory has collected enough data to establish its own control limits.

(b) Limits apply only to water samples.

(c) Percent reovery applies to the use of a mineral reference sample as per CLP-SAS protocol.

(d) Percent recovery also applies to the use of LCS as per CLP-SAS protocol.

(e) Both water and soil limits are presented, respectively.

APPENDIX J – QC DATA BATCH ASSESSMENT

FINAL
QUALITY CONTROL SUMMARY REPORT
SOLID WASTE WATER QUALITY ASSESSMENT
TEST AND DATA SUMMARY REPORT FOR
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
PHASES 5 AND 6

DATED 30 APRIL 1993

QC DATA BATCH ASSESSMENT

APPENDIX J

1.0 QUALITY CONTROL RESULTS

This section provides a summary of the field and laboratory quality control sample results which were used to meet the DQOs of the project. The analytical results have been summarized and reported in the Analytical Data Report (ESE, 1991d). The following section describes the evaluation of the QC samples by matrix type per batch analyzed with each analysis and their acceptability based on the DQO defined in Section 1 of this report. The QC results for the water and soil samples are evaluated against the control limits which are established in the JMM Addendum 1991 following USEPA CLP Statement of Work (SOW) (EPA, 1988) and the QAPjP (Canonie, 1990).

Data that did not meet acceptability limits were qualified. These data have been 'flagged' with EPA qualifier letters. Data that has been qualified as estimates have a "J" suffix next to the analyte or compound value. Estimated data are usable for limited purposes for this project. Data that were qualified as undetected due to blank contamination have an "UJ" qualifier. These data were found to be less than the multiplier of the blank sample. Sample data that were rejected have the "R" suffix attached to the sample result. There was a limited amount of data that were qualified as being rejected due to low surrogate recoveries.

1.1 SOIL SAMPLES

Soil samples, including surface soils, were collected between April 24 through June 3, 1991.

1.1.1 Volatile Organic Compounds

All soil VOC samples analyzed had acceptable surrogate and MS/MSD recoveries; data that were qualified were based on method blank contamination. If the field samples contained positive results of the method blank contaminants, the data were assessed based on whether contaminants were from the site or from the laboratory. Batches with method blank contamination are discussed here. Batch G19877 method blank contained acetone at 5.7 µg/kg and methylene chloride at 13 µg/kg. Positive values that were less than the multiplied amount were qualified as non-detected estimates (UJ).

In batch G20343, the method blank analyzed on 5/10/91 contains low amounts of methylene chloride at 1.5 µg/L, acetone at 2.2 µg/L, toluene at 0.52 µg/L. The batch method blank from 5/13/91 contained amounts of methylene chloride at 2.7 µg/L and acetone at 2.2 µg/L. Values that were less than the multiplied amount were qualified as non-detected estimates (UJ).

Many lab contaminants were found in the method blank of batch G20397: 3.8 µg/kg methylene chloride, 19 µg/kg acetone, 1.3 µg/kg 2-Hexanone, 1.3 µg/kg methyl ethyl keytone, 0.45 µg/kg toluene, and 0.22 µg/kg

styrene. Positive results that were less than ten times the method blank contamination of the common contaminants and five times the remaining contaminants were qualified as non-detected estimates.

Toluene was found at 0.23 µg/L in QC batch G20401; the remaining QC is acceptable, no MS/MSD were analyzed on this batch because it consisted of only one field QC sample. Field QC samples are not spiked because they cannot demonstrate matrix trends as field samples do. Positive results that were less than five times the method blank contamination contaminant were qualified as non-detected estimates.

Batch G20700 method blank contains acetone at 7.8µg/kg, chloroform at 0.24 µg/kg, benzene at 0.24 µg/kg, and 1,1,2,2-tetrachloroethane (TCA) at 0.37 µg/kg; the remaining QC was acceptable. Positive results that were less than five times the method blank contamination contaminant were qualified as non-detected estimates.

Batches that contain only acetone in their method blanks as a contaminant are G20345 had 7.6 µg/kg, batch G20347 method blank contained 8.9 µg/kg, G20701 at 7.4 µg/kg, G20705 contains 13 µg/L, G20793 had 25 µg/kg, G20807 contained 12 µg/kg, and batch G20978 contains 5.5 µg/kg. Positive results that were less than ten times the method blank contamination were qualified as non-detected estimates.

Batches G19909, G20346, G20498, G20499, G20524, G20580, G20628, and G20996 had acceptable method blanks, surrogates, and MS/MSD recoveries.

1.1.2 Semivolatile Organic Compounds

Sample batches G20398, G20400, G20908, and G21067 had acceptable QC. All these batches, except G20908, consisted of equipment blanks; therefore, MS/MSD were not performed on field QC samples.

The method blank of batch G20399 contained 0.46 µg/L of bis (2-ethyl hexyl) phthalate and the remaining QC was found to be acceptable. MS/MSD samples were not analyzed on this batch because it only consisted of field QC samples.

The method blank was clean in batch G20413. The LCS of the batch had pentachlorophenol (PCP) fail with 23%, the lower acceptable limit is 50%. Most of the MS/MSD compounds failed to meet the recovery criteria limits. Both 4-Nitrophenol and PCP had zero recovery in the MS/MSD samples. For samples M-001A-013, M-028A-007, and M-028A-000, the laboratory felt that diluting these samples by 50 times, these compounds were diluted out of normal recovery ranges. Sample M-001A-013 the base-neutral non-detected values were qualified as rejected based on nitrobenzene and terphenyl recoveries. M-028-007 had low recoveries of nitrobenzene, 2,4,6-TBP, and terphenyl. Positive results of base/neutral as estimates and non-detects base/neutral compounds as rejected values (i.e., acid fractions rejected). In sample M-028A-000 all non-detects were rejected; positive results are qualified as

estimated values. The remaining samples of the batch had high 2-fluorobiphenyl recoveries, but not qualified on the CLP allowance of one compound, per fraction not within the objective. Additionally, it is believed that the matrix contains high molecular compounds that interfere with recoveries. Samples M-001E-005, M-029E-002dup, and M-026A-000 were reanalyzed and failed surrogate recoveries a second time, indicating matrix affect. Therefore, sample data were qualified as estimates.

In QC batch G20525 method blank showed no laboratory contamination. The LCS had acceptable recoveries except PCP at 29% with a lower limit of 50%. Phenol, 2-chlorophenol, 1,2,4-Trichlorobenzene 2,4-DNT and PCP did not meet criteria limits of the MS/MSD samples; but RPD were acceptable. One sample with failed recoveries was C-203dup had a high 120% recovery of 2-fluorobiphenyl with an upper limit of 115%; this does not greatly impact sample data because of the CLP allowance. Due to the LCS PCP recovery, any positive results and non-detects were qualified as estimates.

All QC was acceptable in batch G20656 except in the LCS PCP had a recovery of 23% with a lower limit of 50%; the MS had a low recovery of 40% and the MSD met criteria at 60%. The set of samples did not have PCP positive results, non-detects were qualified as estimates.

Batch G20771 contained only two equipment rinsate samples. The method blank contained 1.8 µg/L of bis (2-ethyl hexyl) phthalate; both equipment rinsates contained values that are qualified as estimates. The LCS was acceptable. No MS/MSD were analyzed because this QC batch only contained field QC samples. One of the nitrobenzene surrogate recoveries was found at a 120% with an upper limit of 114%. The sample met the CLP allowance of one acid/one base to be out of criteria limits; sample data were not qualified.

The method blank of batch G20773 did not contain any laboratory contaminants. The LCS had a low PCP recovery of 20% and a low Pyrene recovery of 39%. In the MS, 2-chlorophenol, 1,2,4-TCB, and 2,4-DNT had recoveries at 2% greater than limits; in the MSD, both PCP and Pyrene had low recoveries of 31% and 40% with lower limits of 50% and 44%, respectively. High RPD resulted from the fluctuations of the recoveries. Both positive and non-detected results are qualified as estimates for the two compounds. The following samples had high Terphenyl-D(14) recoveries: A-204, A-205, A-206, A-207, and A-208; samples were not qualified based on the CLP allowance of one acid and/or one base surrogate recovery greater than 10% to fail recovery limits.

QC batch G20816 had an acceptable method blank. The LCS had a high recovery of 4-chloro 3-methyl phenol of 121% with a high limit of 93%, pyrene was found at a low 33% with a lower limit of 44%. In the MS; 4-chloro 3-methyl phenol recovery of 113% with an upper limit of 93%, PCP was found at 46% with a lower limit of 50%, pyrene had a low recovery of 33% with a lower limit of 44%; the MSD had 1,2,4-TCB @ 100% with a upper limit of 98%, 4-chloro 3-methyl phenol at 118% and pyrene at 33%. Both positive and non-detect results of pyrene were qualified as estimated values. There was no positive results of PCP, 1,2,4-TCB or 4-chloro-3-methyl

phenol found within the samples; therefore, the data were not qualified. The surrogate recoveries of the batch were acceptable.

Both the method blank and the LCS was found acceptable in batch G20821. The MS had a low pyrene recovery of 32% with a lower limit of 44%. Additionally, the MSD had low recoveries of 1,2,4-TCB, 4-chloro 3-methyl phenol, 4-nitrophenol, PCP, and pyrene. Surrogate recoveries of the samples were acceptable. The sample E205dup data were qualified as estimates for both positive and non-detected results.

In batch G20852 the method blank was free of laboratory contamination. The LCS resulted with a high 4-chloro 3-methyl phenol recovery of 103% with an upper limit of 93% and a low recovery of pyrene at 39% with a lower limit of 44%. The H-210dup MS sample had no reported recovery for phenol, 4-chloro 3-methyl phenol was found 103% and pyrene at 40%; the MSD had PCP found at 49% with a lower limit of 50% and pyrene at 37%. The sample was qualified as estimates for the four compounds. Positive and non-detect values of 4-chloro-3-methyl phenol and pyrene were qualified as estimated values of these two compounds found within the field samples. Sample I-206 had extremely low surrogate recoveries, the laboratory analyzed the sample twice with similar recoveries. Phenol-d(5) was found at 0.68%, 2-fluorophenol at 5.2%, nitrobenzene-d(5) at 4.5%, terphenyl-d(14) at 6.77%, 2-fluorobiphenyl at 7.1%, and 2,4,6-tribromophenol at 2.8%. Surrogates were confirmed that they were spiked, but perhaps the samples were not spiked properly or a matrix affect caused low recoveries. Due to the low recoveries in sample I-206, any positive results are qualified as estimates and non-detected data were rejected.

The method blank, LCS, RPDs, and surrogate recoveries were acceptable in batch G20869. PCP in both the MS/MSD was found at 21% and 19% with a lower limit of 50%. Sample F-202dup was used as the QC for spikes. The undetected PCP is qualified as an estimate. 2,4-DNT had a slightly high recovery of 85% with an upper limit of 81%. Surrogate recoveries were acceptable.

In batch G20887 the method blank was free from laboratory contaminants. The LCS had a slightly high recovery of 4-chloro-3-methyl phenol of 94% with 93% upper limit; this slightly elevated recovery does not impact data and a low pyrene recovery of 39%. The MS/MSD sample J-201dup recoveries were found high for 4-chloro-3-methyl phenol, 4-nitrophenol, and 2,4-DNT. Low recoveries were found with both PCP and pyrene. A high RPD value of 93 was found for PCP. Sample results for J-201dup were qualified as estimates. Surrogate recoveries were acceptable and the remaining sample data were not qualified.

Batch G20907 was comprised of a soil equipment blank and several water samples. The method blank was found acceptable. The LCS had a slightly high recovery of 4-chloro-3-methyl phenol of 99% with an upper limit of 97%. The MS resulted with a low recovery of N-nitrosodi-N-propylamine at 39% with a lower limit of 41%. The MSD had a high recovery of 4-Nitrophenol at 83% with an upper limit of 80%. These variable recoveries did not affect sample quality for the soil equipment rinsate blank.

The method blank, LCS, RPD, and MS/MSD were acceptable in batch G20925. Sample F-210 had a slightly high 2-fluorobiphenyl recovery of 120% with an upper limit of 115%. Sample F-210 was not qualified because of the CLP allowance of one surrogate per each fraction to be out of criteria limits.

In batch G20979, the method blank was acceptable. The LCS compound recoveries of phenol was found 30% with a lower limit of 34%, N-Nitrosodi-N-propylamine at 14% with a lower limit of 51%, and zero recovery of PCP with a lower limit of 50%. The MS had low recoveries of phenol at 27% with a lower limit of 34%, N-Nitrosodi-N-propylamine at 22% with a lower limit of 51%, and PCP recovery was found at 38% with a lower limit 50. The MSD had low Nitrosodi-N-propylamine recovery of 23% with a lower limit of 51% and low recovery of PCP at 41% with a lower limit of 50%. Phenol, PCP, and N-Nitrosodi-N-propylamine was not detected in the field samples, but the non-detects were qualified as estimates due to the low recoveries. The surrogate recoveries were acceptable.

Bis (2-ethyl hexyl) phthalate was detected in the method blank of batch G21004 at 150 µg/kg. Values found below 10 times the amount of the method blank were qualified as undetected estimates. Due to extraction failures, no MS/MSD data was available. The LCS recoveries were acceptable. Surrogate recoveries for sample M-209 were low, ranging between 11.8% and 16.5%; and it was reanalyzed, but surrogates failed again. The sample was not re-extracted because it was beyond the holding time. Both positive and non-detected results are qualified as estimates for sample M-209. The remaining samples within this batch had acceptable recoveries and were not qualified.

In batch G21053, the method blank was acceptable. The LCS had a slightly high 106% recovery of 4-nitrophenol. Many of the 310SDdup MS compounds were found above criteria limits; but, the MSD sample apparently was not spiked correctly or spiking compounds were lost during the extraction process. MSD recoveries were found at 10% and under. Sample 310SDdup results were qualified as estimates. Sample M-104A-002 had high surrogate recovery 2-fluorophenol at 130% with an upper limit of 121%, 2-fluorobiphenyl was found at 120% with an upper limit of 115%, and 2,4,6-TBP at 129% with upper limit of 122%; therefore, acid fraction positive results for these compounds would have been qualified as estimates, but only bis (2-ethyl hexyl) phthalate was found in the sample. Sample M-109A-007 had a slightly high recovery of 2,4,6-TBP at 123% with an upper limit of 122%; this recovery does not greatly impact the data. All of sample duplicate 310SD surrogate recoveries were found below 10%, therefore the positive results were qualified as estimates and the non-detected data were qualified as rejected.

In batch G21058, 170µg/kg of Bis (2-ethyl hexyl) phthalate was detected in the method blank. Positive results of the phthalate that were less than 10 times the amount of the method blank were qualified as undetected estimates. The LCS resulted in a low Pyrene recovery of 33% with a lower limit of 44%. Pyrene is also found at a low recovery of 31% for both the MS/MSD. Both positive and non-detect results were qualified as estimates for the

field samples. Surrogate recoveries for sample M-017A-005 were found below 10% possibly due to spiking errors; the laboratory commented that a portion of the sample was lost during the GPC clean-up. Re-extraction of the sample was not performed due to exceeded holding time, the laboratory reanalyzed the sample and duplicated their results. The positive results were qualified as estimates and the non-detected were qualified as rejected.

Both the method blank and LCS were acceptable in batch G21171, but most of the MS/MSD compounds were higher than the upper criteria limits. In the MS, the PCP had a low recovery of 29% with a lower limit of 50%; this gave rise to a high RPD value of 71; therefore, sample data were qualified as estimates for undetected PCP. The batch consisted of one sample, M-104A-002dup.

In batch G21172, the method blank was acceptable. The LCS exceeded upper limits with the following compounds: Phenol; 1,2,4-TCB; 4-chloro-3-methyl phenol; 4-nitrophenol; and 2,4-DNT. PCP had a low recovery of 42% with lower limit of 50%. Compounds with recoveries that exceeded the upper recovery limits in the LCS were qualified as estimates for samples with positive results; these compounds were not detected. Additionally, PCP non-detected sample results were qualified as estimates. Most of the MS sample M-002A-0dup had spike recoveries that exceeded limits. N-nitrosodi-N-propylamine, PCP, and Pyrene had low limits of 45%, 38% and 29% in the MSD; this gave rise to RPD values as high as 150. Sample M-004A had high Nitrobenzene-D(5) recovery of 130% with an upper limit of 120%; this sample was not qualified based on the CLP allowance of one surrogate, per fraction, to fail the objective.

Bis (2-ethyl hexyl) phthalate was detected in the method blank at 71 µg/kg of batch G21388. Samples with values less than 10 times the amount found in the blank were qualified as non detected. The LCS had a low PCP recovery of 33% with a lower limit of 50%. Both positive and non-detected sample results were qualified as estimates. N-nitrosodi-N-propylamine had a slightly low recovery of 50% with a lower limit of 51% and PCP at 44% with a lower limit of 50% in the MS sample M-007C-078dup. None of the spiked compounds were detected in the MSD. Apparently, the sample was not spiked or the compounds were lost during extraction. Sample M-006A-005 MSD had zero recoveries due to possible spiking errors or matrix suppression; but, the field sample surrogate recoveries were acceptable.

The method blank was found to be acceptable in batch G22980. Recoveries of phenol at 100% with upper limit of 82%, 2-chlorophenol at 100% with an upper limit of 92%, 4-chloro-3-methylphenol at 108% with an upper limit of 93%, 2,4-DNT was found at 106% with an upper limit of 81% and pyrene recovery of 164% with an upper limit of 132% exceeded limits of the LCS. The MS/MSD recoveries varied; PCP had low recoveries, while 1,4 dichlorobenzene, 4-chloro-3-methylphenol, 2,4-DNT, and Pyrene were found to have high spike recoveries. Surrogate recoveries were acceptable for the QC samples, but, the only sample in this batch M-016A-004 had 2-Fluorophenol recovery found at 130% with an upper limit of 121%. Due to the MS/MSD and surrogate recoveries sample data were qualified as estimates for undetected PCP. There were no positive results within this batch.

1.1.3 Organochlorine Pesticides and Polychlorinated Biphenyls

Batch G20074 contains only two equipment rinsate blanks; therefore, no MS/MSD was analyzed. Field QC samples are not to be used for laboratory QC samples. The method blank, LCS, and surrogate recoveries were acceptable. Sample data were not qualified. Other batches that were not qualified were G20410, G21124, G21613, and G21624. Batch G20410 had an acceptable method blank and LCS. The MS/MSD recoveries for DDT were high; possibly influenced by target compounds within the sample. Gamma-BHC (lindane) was slightly elevated by 2% in the MSD. All the samples had acceptable surrogate recoveries. Batch G21613 only contained one equipment rinsate blank; therefore, only the method blank and LCS data was available. Batch G20615 had acceptable method blanks and LCS. The MS/MSD spiked compound recoveries, except at least for Heptachlor, were two times higher than recovery limits. MS/MSD samples were possibly spiked incorrectly. All the sample surrogate recoveries were acceptable. The sample data were not qualified.

QC batch G20481 contained seven equipment blanks; therefore, MS/MSD samples were not analyzed because the batch only consisted of field QC samples. LCS was acceptable. The recoveries within ALEB1*2 and ALEB1*7 had low DBC of 30.2% and 40.4% respectively. These sample data may have negative bias and both the positive and non-detected results were qualified as estimates.

Both the method blank and the LCS were acceptable in batch G20487. The MS/MSD sample C-203dup recoveries all exceeded the limits, as high as 30% greater; possibly due to matrix interferences or spiking errors. Sample B-203 had a DBC recovery of only 2.26% with a lower limit of 20% and the positive results were qualified as estimates and non-detects were qualified as rejected. The method blank had a DBC surrogate recovery of 0% indicating a possibility of not being spiked.

Batch G20735 had an acceptable method blank. The LCS contained high recoveries of Aldrin at 136.7% with an upper limit of 132% and Aroclor-1260 was found at 135% with an upper limit of 125%. Positive data for these compounds were qualified as estimates. The MS/MSD samples had high recoveries of g-BHC, Aldrin, Dieldrin, Endrin, and DDT in the MS; and g-BHC was also high in the MSD. Surrogate recoveries of DBC in the following samples exceeded upper acceptability limits: method blank, M-023E-025, M-020B-0, M-021C-0, M-023A-0, and M-024A-0. Positive results of these samples were qualified as estimates.

The method blank, LCS, and MS/MSD were acceptable in batch G20769. Two samples contain low surrogate recoveries: 321SW at 24.3% and 322SW at 35.8%, the positive and non-detect data for these two samples were qualified as estimates. The remaining samples including the soil equipment blanks within the batch had acceptable recoveries and were not qualified.

In batch G20872, samples A-202, A-203, E-201 missed their extraction holding time by seven days. The samples were lost during the first extraction. They were re-sampled and are reported in different batches. The method blank was acceptable. The LCS had a high recovery of Aldrin at 139.1% with an upper limit of 132%. Aldrin was not detected in the samples; therefore, sample data was not qualified. All of the spiking compounds in the MSD had recoveries that exceeded upper acceptability limits, possibly due to slight matrix interferences or spiking errors. The surrogate recoveries were acceptable.

The method blank and LCS were acceptable in batch G20878. Many of the MS/MSD sample G-205 spiked compounds resulted with recoveries that exceeded the upper acceptability limits, possibly due to matrix effect. Positive results samples: F-200, F-203, F-210, G-204 contained DBC recoveries that exceeded 150%. Positive results of these samples were qualified as estimates. Sample G-201 apparently was not spiked with DBC; therefore, positive results were qualified as estimates and non-detects were qualified as rejected.

Holding time exceedences of two and five days occurred in batch G20931, therefore both positive and non-detect results were qualified as estimates. Both the method blank and LCS were acceptable. The MS/MSD had several compounds that exceed the upper acceptability criteria limits. The MS had g-BHC, Aldrin, Dieldrin, Endrin, and 4,4'-DDT out of acceptable criteria. The MSD had recoveries of Endrin and 4,4'-DDT that exceeded upper criteria limits. These variations of the recoveries produced RPD values greater than 25. Sample duplicate F-202 had a high DBC recovery of 153% with an upper limit of 150%; positive results were qualified as estimates.

A minute amount of Aldrin was detected in the method blank at 0.357 µg/kg in batch G20984, but Aldrin was not detected in the field samples. High recovery of Aroclor 1260 was found in the LCS at 194% with an upper limit of 125%, positive results were qualified as estimates. The MS Sample K-209dup DDT recovery was a high 179.3% with an upper limit of 135%. Sample H-204 had a high DBC recovery of 159% with an upper limit of 150%. The following samples had high recoveries as well: H-208 at 167%, I-203 at 168% and I-205 at 160%. These positive sample results are qualified as estimates.

In batch G21103, the QC was acceptable except Aroclor-1260. The LCS had a high Aroclor-1260 recovery of 131% with an upper limit 125%. Positive results of PCB Aroclor-1260 were qualified as estimates. Similarly, batch G21137 had a high Aroclor-1260 of 153% in the LCS and the positive results of the PCB was qualified as estimates.

The LCS of batch G21155 had both Aldrin and Aroclor-1260 with high recovery values of 163.2% and 177% respectively. These compounds were qualified as estimated for positive values. The method blank was acceptable. Most of the MS/MSD compounds had elevated recoveries as well. Surrogate recoveries of DBC were greater than 170% with an acceptable upper limit of 150% in the QC samples and for the following field samples: M-020A-004, M-002A-0, M-011A-0, M-013C-0, M-015A-0, M-016A-0, M-201, M-202, M-203, M-206, M-207,

M-210. These high recoveries may be contributed to the spiking errors of the lab or the lab stated that the instrument may have drifted. Samples have positive bias and positive results were qualified as estimates.

The method blank, LCS and MS/MSD data were acceptable in batch G21161. Several samples contained surrogate recoveries of DBC that exceeded the upper limit of 150: M-007C-078, M-101A-004, M-102A-004, M-106A-003, M-107A-002, M-111A-003, M111A-0, and 301SD. The positive sample results were qualified as estimates. Sample M-027C-090 had a low DBC recovery of 17.3% with a lower limit of 20%; therefore, both positive and non-detected data were qualified as estimates.

The QC data were acceptable in batch G21308 with one exception, sample E-201 had a DBC recovery of 12% with a lower limit of 20%. Both the positive and non-detect data for this sample were qualified as estimated values.

In batch G21616, both method blanks were found acceptable. Both heptachlor and Aroclor-1260 exceeded limits of the LCS. Heptachlor's upper limit is 130% and 131.6% was found. Aroclor-1260 upper limit is 125% and 131% was found, Aroclor-1260 and Heptachlor positive results were qualified as estimated values. The MS/MSD data was acceptable, but produced RPD levels of 57 for gamma BHC, 33 for heptachlor, and 32 for DDT, between the two spiked samples. Surrogate recoveries were found acceptable.

1.1.4 Petroleum Hydrocarbons

All of the total recoverable petroleum hydrocarbon method blanks contain some contamination, except batch G20275, it has acceptable QC, no MS was required for field QC samples.

Listed below are QC batches with method blank contamination. Positive results were greater than five times the amount found in the method blank; therefore, sample data were not qualified. The associated QC of the remaining batches were found acceptable. Petroleum hydrocarbon method blank contamination ranged from 0.415 µg/g to 3.2 µg/g.

1.1.5 Oil and Grease

Batch G20335 contained 0.04 mg/L of oil and grease in the method blank. Positive results were greater than five times the amount found in the method blank; therefore, sample data were not qualified. The remaining QC was acceptable. MS/MSD samples were not analyzed because the batch consisted of only field QC samples.

Batches G20797 and G20814 contained 0.6 µg/g and 0.3 µg/g of oil and grease in the method blanks, respectively. Positive results that were less than five times the amount found in the method blank were qualified as undetected estimates. The remaining QC was acceptable.

1.1.6 Metals

Minute amounts of metals were detected in the method blank of batch G20110. Barium, calcium, iron, sodium, and zinc were found below 1.4 mg/kg. Samples with detectable values of these metals less than five times the amount of the blank concentrations were qualified as undetected estimates. The replicate samples produced high RPD values. The MS and duplicate samples contained the following metal recoveries beyond upper acceptability limits caused by the unspiked concentrations within field samples: aluminum, cadmium, calcium, chromium, copper, iron, manganese, lead, and zinc. These metals may give a positive bias to sample values; therefore, these metals were qualified as estimates for positive results in the field samples.

Batch G20237 contained only equipment rinsate samples. The method blank contained 345 µg/L of calcium, of iron 6.8 µg/L, of sodium 161 µg/L, and 4.2 µg/L of zinc. Positive results of these metals less than five times the amount of the blank concentrations were qualified as estimates (UJ). The LCS, MS and duplicate were acceptable. Replicate samples produced RPD values greater than 20 for calcium, sodium, and zinc.

Calcium was found in the method blank at detections less than 0.12 mg/kg in batch G20276. Samples with detectable values of calcium less than five times the amount of the blank concentrations were qualified as non-detected estimates. While the LCS was acceptable, there were varied RPD values of the replicate samples, MS, and duplicate. Silver, beryllium, and lead had RPD values greater than 20 on the replicate samples; this may possibly be due to the unspiked concentration found in the samples. Due to the varied MS recoveries, positive results for aluminum, beryllium, calcium, chromium, iron, and magnesium were qualified as estimates; both positive and non-detect results were qualified as estimates for silver, manganese, and lead.

The method blank in batch G20389 contained both iron and zinc at 0.014 µg/kg or less; the positive results of these metals less than five times the amount of the blank concentrations were qualified as undetected estimates. Replicate sample recoveries of silver, barium, beryllium, lead, and manganese produced RPD values that exceeded the limit of 20. The MS and duplicate had several metals out of acceptable limits due to the large concentrations of the target elements within the field samples. Positive results of aluminum, iron, and lead were qualified as estimates. Both positive and non-detect results were qualified as estimates for antimony, calcium, cadmium, chromium, and zinc.

Batch G20469 method blanks contained minute amounts of aluminum, barium, calcium, iron, manganese, magnesium, vanadium, and zinc that ranged from 0.002 mg/kg to 0.456 mg/kg. Positives results of these metals

less than five times the amount of the blank concentration were qualified as undetected estimates. The LCS and replicate samples were acceptable. Many of the MS and duplicate samples contained varied recoveries due to the high analyte concentrations found within the field samples used for QC. Both positive and non-detect results were qualified as estimates for barium, chromium, copper, and manganese. Positive results of aluminum, iron, and calcium were qualified as estimates.

The method blank of batch G20512 contained concentrations less than 0.74 mg/kg of copper, iron, potassium, zinc, calcium, and sodium. Positives results of these metals less than five times the amount of the blank concentrations were qualified as estimates. The LCS and replicate samples were acceptable. Sample E-205dup was the field sample used for the MS and duplicate. It had several metal recoveries that were not acceptable due to the detectable concentrations of analytes found within the sample. Both positive and non-detect results were qualified as estimates for aluminum, antimony, calcium, copper, chromium, iron, sodium, nickel, and zinc.

Iron, sodium, and zinc were detected at low concentrations within the method blank of batch G20548. Positive results of these metals less than five times the amount of the blank concentrations were qualified as undetected estimates. The batch had an acceptable LCS and replicate samples had acceptable RPDs below 35%. The MS and duplicate recovery values that were out of limits were caused by the high detectable concentration of metals found in the field samples. As a result, aluminum, calcium, manganese, iron, and chromium values were qualified estimates for positive results. Antimony, in the second MS and duplicate samples had a low recovery of 73% with lower limit of 79%; this may give a possible negative bias to the sample data; therefore, both positive and non-detected values were qualified estimated.

Both the method blank and LCS were acceptable in batch G20755. The MS and spike duplicate contained high recoveries of aluminum, calcium, iron, manganese, and zinc due to the detectable analyte concentrations found within the field samples; these metals were qualified estimates for positive results.

Within batch G20782, Method blank MB*1 contained 251 µg/L of calcium and MB*2 contained 41.1 µg/L. Positive results of calcium less than five times the amount of the blank concentration were qualified as undetected estimates. The LCS were acceptable. Most of the MS/MSD compounds of the two duplicate samples had erratic recoveries primarily due to a matrix affect, some analytes as calcium and sodium had high recoveries due to the high concentrations of these analytes within the field samples; these two metals were qualified as estimates for any positive samples. Both positive and non-detect results were qualified as estimates for barium, beryllium, cadmium, copper, chromium, iron, magnesium, manganese, nickel, vanadium, and zinc.

In batch G20866, the method blank MB*1 contained 0.006 µg/g of silver. Positive results of silver less than five times the amount of the blank concentrations were qualified as undetected estimates. The LCS was acceptable. The replicate sample had a beryllium RPD value of 95.2%. Two sets of MS/MSD had varying

recoveries: 310Sdup MS contained recoveries lower than acceptable limits of aluminum, calcium, iron, and manganese due to the interferences of the high unspiked values found within the field sample. Antimony values were as low as 58 with a lower acceptability limit of 79 possibly due to a matrix affect. Sample M-104A-002dup MS had low aluminum, iron, and manganese recoveries. Barium and calcium had high recoveries due to the detectable analyte concentrations found in the samples. Antimony recoveries were acceptable in this MS/MSD set. Both positive and non-detect results were qualified as estimates for antimony, beryllium, chromium, and manganese. Positive results for aluminum, calcium, iron, and barium were qualified as estimates.

Minute amounts of aluminum, calcium and iron were found in the method blank of batch G20930. Positive results of these metals less than five times the amount of the blank concentrations were qualified as undetected estimates. Replicate recoveries for barium and beryllium produced RPD values greater than 20 possibly due to the lack of homogeneity. The LCSs were found to be acceptable. The MS and duplicates produced varying recoveries. Recoveries of aluminum, iron, and manganese had exceeded upper acceptability limits due to the high concentrations found within the field samples. Positive results were qualified as estimates. Nickel and vanadium were found below the acceptable recovery limits possibly due to a matrix effect. Both positive and non-detect results of vanadium and nickel were qualified as estimates. The second set of QC using a CTO 121 sample showed additional variances that do not affect samples from this CTO.

The method blanks of G20961 contained several metal values: calcium at 279 µg/L, sodium was found at 77.7 µg/L, and zinc at 4.6 µg/L. The second method blank contained calcium at 128 µg/L, potassium at 605 µg/L, sodium at 110 µg/L, and zinc at 2.9 µg/L. Positive results of these metals less than five times the amount of the blank concentrations were qualified as estimates. Replicate produced a high RPD value of 132% for zinc possibly due to non homogeneity. The LCS was acceptable. The first set of MS had slightly low magnesium recovery of 85.6% with a lower limit of 86%; this does not greatly affect the data, but sodium displayed a low erratic recovery of 51.3% due to the high concentration within the field sample. Both positive and non-detect results of sodium were qualified as estimates. The second set of MS had a high recovery of sodium of 116% this did not greatly affect the reported data.

1.1.7 Arsenic

Batches G20198, G20331, G20333, and G21292 had acceptable method blanks, LCS, RPDs, and MS; samples within these batches were not qualified.

The method blank and LCS of batch G20570 were acceptable, but one MS and spike duplicate had recoveries below criteria limits. Many of the post digestion recoveries were high due to possible matrix interferences. Positive values within samples: E-201, E-202, E-206, E-207, E-208, E-210, F-201 through F-206, F-210, G-204, and H-202 were qualified as estimates.

In batch G20582, the method blank, replicates, and LCS were acceptable. The MS and spike duplicate contained one high value of 143% recovery with an upper limit of 120%; the second set of MS and duplicate samples had recoveries below the limit of 72%. The post digestion spike recoveries were acceptable and the sample values were not qualified.

The method blank, LCS, MS and spike duplicates were acceptable in batch G20586. The following samples had low post digestion recoveries: M-007A-0 at 64.5% and M-109A-0 at 76.4% with a lower limit of 85%. These two samples had both positive and non-detect data qualified as estimates. There were only one set of replicates and MS present; this does not affect data quality.

In batch G20813, the method blank, LCS, MS and spike duplicates were acceptable. The post digestion spike recovery for sample L-204 has a slightly high recovery of 120% with an upper limit of 115%. The positive value was qualified as an estimate.

The method blank, LCS, MS and spike duplicates were acceptable in batch G20905. The post digestion spike recovery of sample N-201dup had a low recovery of 81.3% with a lower limit of 85%; this may be due to a matrix effect. The positive value of this sample was qualified as an estimate.

Both the method blank and LCS were acceptable in batch G20926. One of the MS and spike duplicate set had extremely low recoveries of 2.0% and 40% with an lower limit of 72%. Samples 302SW through 314SW had low post digestion spike recoveries; this may be due to dilutions because of background interferences or simply a matrix effect. These samples had both positive and non-detect data qualified as estimates. The equipment rinsate QC data were acceptable.

The MB, LCS, and replicates were acceptable in batch G20990. All the MS and spike duplicate recovery values were below the lower acceptable spiking level of 72%; this may be due to a possible spiking error or matrix effect. All post digestion spike recoveries were acceptable and the sample data were not qualified.

The QC was acceptable in batch G21250 except sample M-007C-078dup had a high post digestion recovery of arsenic at 133% with an upper limit 115%; the positive value was qualified as an estimate.

The method blank and LCS were acceptable in batch G21639. One of the replicates produced an RPD of 56.4 possibly due to non homogeneity. The replicate, MS and spike duplicate samples were used from samples of Alameda CTO 121; three of the four values were not acceptable. Samples from this CTO had acceptable post digestion spike recoveries and sample data were not qualified.

1.1.8 Lead

QC batches G20284, G20416, G20416, and G20938 were acceptable and data were not qualified.

The method blank of batch G20188 contained 0.003 mg/kg of lead. Positive results were greater than five times the amount found in the method blank; therefore, sample data were not qualified. Both the replicate and spike into matrix recoveries were acceptable. One value for sample M-026E-020dup MS recovery was found at 45.8% which produced a high RPD value of 72%. All post digestion spike recoveries were acceptable; therefore sample data were not qualified.

Batch G20414 had acceptable method blanks, LCS, and post digestion spike recoveries. The MS sample was not reported. The MS and spike duplicate samples had high detectable concentrations of lead; it was later analyzed on ICAP in batch G20389. Data were not qualified based on the remaining acceptable QC.

The method blank, LCS, the replicate RPD, and MS were acceptable in batch G20577. The following samples contain low post digestion spike recoveries: M-021C-092 at 79.1%, M-106A-0 at 71.7%, and M-109A-0 was at 60.1% with a lower limit of 85%. The three samples had both positive and non-detected values of lead qualified as estimates.

In batch G20740, the method blank, replicates, and LCS were acceptable. One MS sample resulted with a recovery of 160% with an upper limit of 125% all others were met; the data was not qualified due to the acceptable post digestion spike recoveries.

In batch G20829, the concentrations of the MS and spike duplicate were too high to be analyzed by AA, the spike samples were not reported with this batch of samples. Sample K-203 was analyzed within K-204, L-203, L-204 QC batch. The remaining QC was acceptable and the data were not qualified.

Method blank and LCS were acceptable in batch G20928. Replicates produced a high RPD of 39.7 and sample results were qualified as estimates. The MS of sample L-204dup produced a high recovery of 148% with an upper limit of 125%. Based on the remaining acceptable QC; the data were not qualified.

In batch G21023, the method blank, LCS and replicates were acceptable. Sample M-007C-078dup MSD had a low recovery of 63.4% with a lower limit of 71%. Both the MS/MSD of sample B07A-07-013 had erratic recoveries due to the high concentration found in the unspiked field sample. Post digestion spike recoveries were slightly low for sample M-007C-078 and its duplicate, as well as, sample M-007 and its duplicate. The four samples had both positive and non-detected sample results qualified as estimates. Other samples with low recoveries are from Alameda CTO 121.

The method blank, LCS, and MS were acceptable in batch G21310. One of the replicate sets resulted with a high RPD value of 62 because one of the analyses did not produce detected amounts, and the other analysis had a positive results of 3.8 mg/kg. The soil equipment rinsate from CTO 107 soil samples had acceptable QC data. Sample M-002A had a post digestion recovery of 64.8% with a lower limit of 71%; the positive result was qualified as an estimate.

1.1.9 Mercury

Batches G20183, G20239, G20517, G20617, G20645, G21257, and G20765 had acceptable method blanks, LCS, replicates, MS and duplicates; the data were not qualified.

All the QC data of batch G20304 was acceptable except one replicate; B-209dup had an RPD value of 50.7; the positive result was qualified as an estimated value.

In batch G20418, one LCS spike contained a recovery of 80% with a lower limit of 83%. The MS and duplicate samples demonstrated acceptable recoveries. The remaining QC samples met acceptable recoveries and limits and sample data were not qualified.

The LCS and method blank of batch G20546 were acceptable. One set of the MS and spike duplicates had recoveries below acceptable limit of 83% for sample H-201dup, but it had acceptable RPD. The replicate for the same sample produced a high RPD of 57%; therefore the sample result was qualified as an estimate.

The method blank and one of the LCSs were acceptable; the second LCS of batch G20571 had a recovery of 80% with a lower criteria limit of 83%. All of the MS and spike duplicate recoveries were found in the 60% range with a lower criteria limit of 83%. Both positive and non-detect results of mercury were qualified as estimates.

Batch G20733 contained acceptable method blanks, LCS, and replicates; the MS and spike duplicate had recoveries below the lower limit of 83%. The data were not qualified for the equipment rinsate.

The method blank, LCS, and RPD were acceptable in batch G20903. Both the MS and spike duplicate sample 323SW had low recoveries of mercury at 61.2% and 58.2% with a lower limit of 83%; possibly due to matrix effect. The undetected sample data were qualified as an estimate for sample 3235W. Equipment rinsate samples had acceptable QC.

1.1.10 Selenium

The QC data of batch G20106 was acceptable. Most of the samples had post-digestion spike recoveries below the acceptability limit of 85%; only samples M-026E-020dup, A-208, and A-209 had acceptable recoveries, the remaining samples were qualified estimates for both positive and non-detect results.

All QC recoveries were met in batch G20264, the data were not qualified.

Batch G20332 contained acceptable method blank and LCS recoveries. The MS and associated spike duplicate contained recoveries below the acceptability limit of 85%. Additionally, the post digestion spike recoveries were below the 85% limit for all the field samples due to a possible matrix affect. Both positive and non-detect sample results were qualified as estimated values.

Both sets of the MS and duplicate recoveries were found below the lower limit of 71%. The two LCS samples had acceptable recoveries of 110%. All the samples within batch G20433 had post digestion spikes that were below the 85% criteria except for samples D-205dup, G-208, F-201, and F-202. All the field samples, except the four listed, were qualified as estimates for both positive and non-detected values.

The method blank, LCS and replicate were acceptable in batch G20437. Both MS and one spike duplicate failed to achieve recovery limits of 85%. Additionally, many of the post digestion spike recoveries were below acceptable limits. Both positive and non-detected data were qualified as estimates.

Batch G20515 contained acceptable method blank and LCS data. Both sets of MS and duplicates were below the lower acceptability limit of 71%. Additionally, many of the post digestion spike recoveries were below 85% Low recoveries may be attributed to matrix interferences. The positive and non-detect data were qualified as estimates.

The LCS, method blank, and replicates of batch G20601 were acceptable. Both sets of the MS and spike duplicates produced recoveries below the lower limit of 85%. Additionally, 26 out of 35 field samples had post digestion recoveries below the lower limit of 85%. Both positive and non-detect data were qualified as estimates.

Batch G20742 contained acceptable method blanks, replicates, and LCS. The second set of MS samples from the surface waters had 0% recovery. Most of the post digestion spike recoveries of the field samples are below the lower limit of 71%. This may be due to dilutions of the samples. Both positive and non-detect results were qualified as estimates.

The method blank, LCS, and replicates were acceptable for batch G20851. Sample J-201dup MS resulted in a recovery of 32.5% with a lower limit of 71% and the spike duplicate had zero recovery. It is apparent that the MSD may have not been spiked. The following samples had low post digestion spike recoveries: L-206, L-209, L-210, M-201, M-203, M-207, M-210, N-201,N-202, N-205,N-208, J201dup, K-209dup, N-201dup, and N-207dup. Both positive and non-detect data were qualified as estimates.

Batch G20939 had acceptable method blanks, replicates, and LCS. All the MS and associated duplicates were found below the criteria limit of 71%. The following samples had low post digestion recoveries: M-004A-004, M-005A-003, M-027C-090, 302SD, 303SD, 304SD, 305SD, 306SD, 307SD, 308SD, 309SD, 310SD, and 310SDdup. Both positive and non-detect data were qualified as estimates for the listed samples.

The method blank, LCS, and replicate QC were acceptable in batch G21282. The second set of MS and associated spike duplicate resulted with a low recoveries of 28.5% and 31%. The following samples had low post digestion spike recoveries and were qualified as estimates for both positive and non-detect results: M-002E, M-010A, M-027A, M-027E, and M-101A.

Batch G21587, method blank, LCS, and replicate data was acceptable. The MS and associated spike duplicate recoveries were found well below acceptable limit of 71%. A majority of the field samples contained post digestion spike recoveries that were lower than acceptability limits; therefore, both positive and non-detectable data were qualified as estimates.

1.1.11 Thallium

Batches G20107, G20364, G20442, G20575, and G20597 contained acceptable QC; therefore, sample data were not qualified.

The method blank and LCS were acceptable in batch G20415. The MS and spike duplicate for sample C-203dup contained low thallium recoveries of 70.3% and 71.8% with a lower limit of 74%. The second set of MS QC samples met criteria. Post digestion spike recoveries in samples E-206, G202, G203, G206, G208, G-209, G210, H200, H201, H202, C-203dup and D-205dup were low. There may be a slight negative bias sample data; therefore, both positive and non-detected results of these samples were qualified as estimates.

The QC of batch G20440 were acceptable except for a portion of the post digestion spike recoveries. The following samples contained low post digestion spikes: M-022A-005, M-022E-035, M-022A-005dup, B-201, B-203, B-204, B205, and B-206; therefore, both positive and non-detected data were qualified as estimates.

In batch G20859, the method blank, LCS, and replicates were acceptable. One of the two MS duplicates for sample J-201dup had zero percent recovery; apparently this sample was not spiked. The first set of MS/MSD and MS were within limits. All the post digestion spike recoveries were acceptable. The sample data were not qualified.

The method blank, LCS, replicates, and RPDs were acceptable in batch G20914. The MS and duplicates for one set were acceptable; but, the MS duplicate of the second set had recoveries below 359. All the field samples had low post digestion spike recoveries except two equipment rinsates. Both positive and non-detect results of the field samples were qualified as estimates.

Batch G21063 had acceptable method blank, LCS, replicates, and RPD data. One set of the MS and spike duplicate had recoveries of 72% and 73% that resulted below acceptability limits of 74%; however, the validity of the data was not affected. The following samples have low post digestion spike recoveries and the positive and non-detect results were qualified as estimates: M-009A-003, M-011A-004, M-013C-070, 301SD, 302SD, 303SD, 304SD, 305SD, 306SD, 307SD, 308SD, 309SD, 310SD, 312SD, and 310SDdup.

All the QC criteria was met in batch G21299 except several post digestion spike recoveries. Several samples from the H_2O water samples had low recoveries: M-001A-004, M-001B-, M-002A, M-002E, M-010A, M-012B, M-014B, M-027B, M-027C, and M-027E. Both positive and non-detected results were qualified as estimates. The equipment blank of this QC batch was acceptable.

QC data was acceptable of batch G21622; the samples that contained low post digestion recoveries were from Alameda CTO 121, not this data group.

1.1.12 pH

All seven pH data batches exceeded the one day holding time as much as 27 days. This holding time is applicable for water matrices and it is only advisory for soil matrices; the data were not qualified. The replicate samples were acceptable.

1.1.13 Percent Solids

The QC was acceptable for batch G19961 and data were not qualified.

1.1.14 Percent Moisture

Ten of the twelve QC batches produced acceptable data that were not qualified. Batch G20196 had one RPD out of ten replicates with 30.4 reading for sample D-201. This sample had a moisture percentage of under 5.5 which made it difficult to reproduce. Sample data were qualified as estimates for D-201.

Batch G20510 had nine out of ten replicates meet criteria limits. Sample, N-207dup had similar matrix as described in batch G20196, lending to a high RPD of 33.3; the sample was qualified as an estimate.

1.1.15 Total Organic Carbon

Many of the TOC QC batches contained RPD values greater than 20%. The high RPD were primarily due to the low concentration of carbon within the samples. One batch, G20750, contained method blanks with minute amounts of carbon of 1.1 mg/L or less. Samples within batch G20750 were qualified based on the blank contamination. If the sample values were less than five times the amount found in the method blank, then the sample value was qualified as an undetected estimate.

1.1.16 Radium 228

Batches G20325, G20443, G21843, G21983, G21989, G22005, and G22006 contained acceptable QC; therefore, sample data were not qualified.

The method blank and the LCS was acceptable in batch G20468. The MS contained a 117% recovery with an upper limit of 115%; this has no significant impact on data. Sample data were not qualified. Batches with similar QC results are G21195, G21454, G21937, G21952, G21962, and G21988.

The following batches had low detectable amounts of radium 228 in the method blanks: G20443, G20468, G20612, G21954, G21957, G21965, and G21967. Positive sample results within these QC batches were qualified as undetected estimates if the sample amount was less than five times the amount found within the method blank.

1.1.17 Radium 226

Acceptable QC results were found in batches G20337, G20461, G21327, G21396, G21539 and G22003. The remaining QC batches had acceptable recoveries, but the method blanks had low amounts of radium 226 detected. Positive sample results within the fourteen remaining QC batches were qualified as undetected estimates if the sample amount was less than five times the amount found within the method blank.

1.1.18 Gross Alpha & Beta

Batches G20340, G20446, G21231, G21443, G21487, G21556, and G21990 demonstrated acceptable QC. The remaining QC batches had recoveries that met the objective or recoveries that did not affect data validity, but the method blanks had low amounts of gross alpha or beta detected. Positive sample results within the fourteen remaining QC batches were qualified as undetected estimates if the sample amount was less than five times the amount found within the method blank.

1.1.19 Asbestos

Soil asbestos was analyzed by polarized light microscopy (PLM). The soil data were acceptable based on the duplicate recoveries.

1.2 SURFACE AND SOURCE WATER SAMPLES

The source water was collected on April 25, 1991. The surface water samples were collected May 22 through 29, 1991.

1.2.1 Volatile Organic Compounds

All QC data within batch G29909 were acceptable; therefore, data were not qualified.

The method blank, LCS, MS/MSD, and RPD were acceptable in batch G20591. The following samples had toluene recoveries 1% and 2% below the lower acceptability limit of 85; both positive and non-detected data were qualified as estimates: 303SW, 306SW, and 308SW.

The method blank in batch G20592 contained 5.0 µg/L of acetone. Samples with detectable values of common laboratory contaminants less than ten times the amount of the blank concentration were qualified as non-detected estimates. The remaining QC and surrogate recoveries were acceptable.

The QC data within batch G20593 were acceptable with one exception. Sample 313SW had 1,2-dichloroethane surrogate recovery of 120% with an upper limit of 114; the positive result was qualified as an estimate.

In batch G20625, the method blank, LCS, MS/MSD and RPDs were acceptable. The following samples have varied surrogate recovery results: 323SW had a low toluene-d(8) recovery of 84% with a lower limit of 85%,

sample data were not qualified because the LCS was in control and the recovery was only 1% less than the limit; 321SW had both BFB and 1,2-dichloroethane resulted with high recoveries of 160% and 150%, respectively. Positive results were qualified as estimates. Additionally, 321SW had a toluene-d(8) recovery of 55 with a lower limit of 85; the non-detect toluene were qualified as estimated data. Positive values of sample 322SW were qualified as estimates due to high surrogate recoveries.

1.2.2 Semivolatile Organic Compounds

Batch G19880 had acceptable QC; however, no MS/MSD was analyzed based on the fact of source sample was considered as a field QC sample. Data were not qualified. Batch G20998 had acceptable QC.

The method blank was acceptable in batch G20907; but, the LCS had a slightly high recovery of 4-chloro-3-methyl phenol at 99% with an upper limit of 97%. The MS/MSD sample 320SW had slight recovery variances. N-Nitrosodi-N-proplyamine had a recovery of 39% with a lower limit of 41 and 4-nitrophenol had a slightly high recovery of 83% with an upper limit of 80. There were no positive values found in sample 320SW. All the surrogate recoveries were acceptable, except sample 323SW had a 7.1% recovery of 2-fluorophenol. The non-detect acid fractions values were qualified as rejected. The sample was not reanalyzed based upon the CLP allowance of one acid/base to be outside of acceptance criteria.

1.2.3 Organochlorine Pesticides and Polychlorinated Biphenyls

Batch G19819 was acceptable. There was a miscalculation reported by the laboratory, the actual recovery is 85.2%. Batch G20769 also had acceptable QC, except samples 321SW and 322SW resulted in low DBC recoveries of 24.3 and 35.8, respectively; both positive and non-detected values within the samples were qualified as estimates.

1.2.4 Petroleum Hydrocarbons

Both batches, G20828 and G20955 had acceptable QC, except 0.1 mg/L of total recoverable petroleum hydrocarbons was found in the method blank of batch G20828. Positive results within the field samples were greater than five times the amount found in the method blank; therefore, sample data were not qualified.

1.2.5 Metals

The method blank in batch G19849 contained 109 µg/L of sodium. Samples with detectable values of sodium less than five times the amount of the blank concentrations were qualified as estimates. All other QC was acceptable.

Batch G20782 had calcium at 251 µg/L in the method blank. Samples with detectable values of calcium less than five times the amount of the blank concentrations were qualified as estimates. The LCS recoveries were acceptable. High replicate RPDs were found for magnesium, nickel and antimony. The serial dilution produced RPD values greater than acceptability limits of barium, calcium, silver, aluminum, chromium, nickel, antimony, vanadium, cobalt, and copper; these values were qualified as estimates. The MS and spike duplicate had erratic recoveries due to possible matrix interferences.

The two method blanks in batch G20961 had four metal contaminants. Calcium was detected at 279 µg/L, potassium at 605 µg/L, sodium at 77.7 µg/L, and zinc at 4.9 µg/L. Samples with detectable values of these metals less than five times the amount of the blank concentrations were qualified as undetected estimates. All the LCS values were acceptable. The MS and spike duplicates and associated RPDs of sodium were found both higher and lower than the acceptability limits due to the high concentrations within the samples. Sodium results were qualified as estimates. The zinc replicate of sample M-005A duplicate resulted in a RPD of 132; therefore zinc was qualified as an estimated value. Sample M-014A duplicate had an RPD value of 54 for zinc; the value of zinc was qualified as an estimate.

1.2.6 Arsenic

Both batches G19854 and G21292 had acceptable QC data. One of the replicate RPD values was slightly high 22.6% in batch G20926. One set of the MS and spike duplicates had low recoveries. Additionally, a majority of the field samples, 302SW through 312SW; had low post digestion spike recoveries; both positive and non-detected values were qualified as estimates.

1.2.7 Lead

In batch G21310, the QC was acceptable, with the exception of the post digestion spike recovery of well sample M-002A was qualified as an estimate due to the 65% recovery. Batch G20740 had acceptable QC results, exception one high MS recovery of 160%. The post digestion spike recoveries of the samples were acceptable and data were not qualified. Batch G19863 had acceptable QC.

1.2.8 Mercury

Batch G19864 had acceptable QC. The MS and spike duplicate had low recoveries of 61.2% and 58.2% in batch G20903. There was possible matrix suppression; therefore, both positive and non-detect values of the sample were qualified as estimates. Similar results were found in batch G20773. The MS and spike duplicate had low recoveries of 76.8% and 74.0%; both positive and non-detect values of the sample were qualified as estimates.

1.2.9 Selenium

Both batches G21282 and G20742 contained MS and spike duplicate recoveries that were below acceptable limits. There was possible matrix suppression of the spiked analyte. Both positive and non-detected data of the samples were qualified as estimates. Surface water samples that were qualified as estimates due to low post digestion spike recoveries were: 301SW, 302SW, 303SWdup, 304SW through 312SW, 315SW, 317SW, 318SW, and 321SW. All QC was acceptable in batch G19856.

1.2.10 Thallium

All the QC samples had acceptable values in batch G19937. Both batches G21299 and G20914 had acceptable QC, but several post digestion spike recoveries were found lower than the allowable limit. Sample 323SW of batch G21299 and all of the surface water samples of batch G20914 had recoveries below the acceptable limit of 74; therefore, both positive and non-detect values were qualified as estimates.

1.2.11 Cyanide

The method blank, LCS, and spike into matrix were acceptable; but, no replicate or duplicates were analyzed in batch G19916. The source sample was considered as a QC criterion. The data were not qualified.

1.2.12 Acidity

Both batches, G20436 and G20664 had method blanks that contained values of 1.2 mg/L. Positive values were qualified as undetected estimates if the sample values were less than five times the amount found in the method blank. Both batches contained acceptable LCS; but, the MS and spike duplicate resulted in recoveries below the acceptable limit of 92. Positive and non-detect data were qualified as estimated values for 303SWdup, 311SWdup, 320SW, and 323SW.

1.2.13 Alkalinity

All the QC samples had acceptable recoveries, but batches G20681 and G20775 had method blanks with 1.0 mg/L CaCO3. Positive values were qualified as estimates if the sample values were less than five times the amount found in the method blank.

1.2.14 Common Anions

The three common anions, chloride, fluoride, and sulfate, were detected at low levels within the method blank. Positive values were qualified as non-detected estimates if the sample values were less than five times the amount found in the method blank. The remaining QC was acceptable.

1.2.15 Hardness

Both batches had acceptable QC.

1.2.16 Nitrate and Nitrite

The method blanks in both batches G20353 and G20497 contained 0.003 mg/L of nitrogen. Positive values were qualified as undetected estimates if the sample values were less than five times the amount of nitrogen found in the method blank. Batch G20353 had slightly low MS recoveries of 90.8 and 85.6 with an upper acceptability limit of 92; therefore, the non-detect data was qualified as estimate values, for samples 311SWdup and 310SW.

1.2.17 Total Organic Carbon

The highest amount of carbon found in the method blanks was at 1.1 mg/L. Positive values were qualified as undetected estimates if the sample values were less than five times the amount found in the method blank. The reference sample, LCS, and MS were acceptable in batch G20750.

1.2.18 Total Dissolved Solids

Batch G19840 had acceptable QC. Batch G20603 exceeded holding time due to the analyst errors. The method blank contained 3 mg/L of solids. All data, both positive and non-detects were qualified as estimates.

1.2.19 Total Suspended Solids

The method blank in batch G20392 contained 3 mg/L of solid matter. The remaining QC samples were acceptable. Positive results were greater than five times the amount found in the method blank; therefore, sample data were not qualified. Batch G20463 had acceptable QC.

1.2.20 Gross Alpha and Beta

Batch G19946 had an acceptable method blank and LCS. Sample data were not qualified.

1.2.21 Radium 226 and 228

In the batch G19929, the method blank contained slight detections of the radioisotopes. The method blank indicated possible sample biases. Positive results were qualified as undetected estimates if the sample values were less than five times the method blank amount. The replicates, MS, and RPD values were acceptable.

1.3 FIRST QUARTER GROUNDWATER SAMPLES

The first quarter of groundwater samples were taken between February 17 through March 19, 1991.

1.3.1 Volatile Organic Compounds

Most of the VOC QC batches contained method blanks with detected levels of acetone. Samples with detectable values of common laboratory contaminants less than ten times the amount of the blank concentrations were qualified as non-detected estimates. Batches that had sample data qualified based on laboratory contamination are as follows: G20948, G21051, G21182, G21184, G21189, G21258, and G21333.

Batch G21051 had acceptable LCS and MS/MSD recoveries, but the 1,1-Dichloroethene MS/MSD RPD was slightly high at 32%. The validity of the data was not greatly jeopardized, but 1,1-dichloroethene was qualified as an estimate for sample M-014Adup.

In batch G21182, sample M-023-A had a high BFB surrogate recovery of 120% with an upper limit of 115%. The high recovery indicates possible positive bias to the compound. The sample did not have positive values that were affected by this recovery.

In addition to acetone, methylene chloride was detected in the method blank of batch G21194 at 8.7 µg/L. Samples with detectable values of both acetone and methylene chloride less than ten times the amount of the blank concentrations were qualified as non-detected estimates.

Sample MWE-5 was used as the QC spike for batch G22341. All QC was met, except this sample produced a slightly high chlorobenzene RPD of 14%; CLP limits state 13% as the upper limit. Chlorobenzene was qualified as an estimate in sample MWE-5.

1.3.2 Semivolatile Organic Compounds

The method blanks of batch G21054 showed no laboratory contamination. The LCS had several high recoveries. Recoveries of 4-chloro-3-methyl phenol was found at 115% with an upper limit of 97% and PCP was recovered at 105%. Similar results were obtained in the MS/MSD samples. Positive results for these compounds would have been qualified as estimates but there were no positive results of the two compounds. All the sample surrogate recoveries were acceptable, with the exception of M-001B. The sample was analyzed twice with duplicating results. The laboratory felt that the sample had oxidized during the extraction process. Both the positive and non-detected data were qualified as estimates.

Five of the LCS compounds exceeded the acceptable recovery limits of batch G23042. Phenol; 1,4-DBC; 1,2,4-TCB; 4-nitrophenol; and 2,4,-DNT had high recoveries. Based on the high LCS, positive sample results were qualified as estimates. MS/MSD samples were not analyzed due to insufficient QC sample volumes. The method blank was acceptable. Samples affected were MWE1 through MWE5; blind QC samples.

The method blank in batch G21337 contained 1.0 µg/L bis (2-ethyl hexyl) phthalate. Samples with detectable values of the phthalate less than ten times the amount of the blank concentration were qualified as undetected estimates. Both 4-chloro-3-methyl phenol and PCP LCS recoveries were found at 120% and 110%; greater than the upper acceptable limits. Additionally, these two compound recoveries exceeded upper acceptability limit in the MS/MSD. Positive results were qualified as estimates for these compounds. Sample M-014-B had a 2-fluorophenol recovery of 8.5; sample M-010A had a low 2,4,6-Tribromophenol recovery of 7.5; and no surrogate recoveries were reported for sample M-028Adup due to a dilution of 40 times sample concentration. The acid fractions of M-014B and M-010A were qualified as estimates for positive values and rejected for non-detected data. M-028Adup positive results were qualified as estimates; non detects were rejected.

Bis (2-ethyl hexyl) phthalate was detected in the method blank of batch G21628 at 0.26 µg/L. Samples with detectable values of the phthalate less than ten times the amount of the blank concentration were qualified as undetected estimates. The LCS recovery of 110% PCP was higher than the upper limit of 103%. PCP recoveries of the MS/MSD also exceeded upper criteria limits. PCP was not found in the field samples; therefore, it was not qualified. Sample M-012B had nitrobenzene-d(5) and 2-fluorobiphenyl recoveries of 28% and 24%, respectively. The sample was analyzed twice with similar results. The sample data for base/neutral compounds were qualified as estimates. The surrogate recovery of 2-fluorophenol was also low in sample M-026E; sample data were not qualified based on the CLP allowance.

Bis (2-ethyl hexyl) phthalate was detected at 0.57 µg/L in batch G21742. Samples with detectable values of the phthalate less than ten times the amount of the blank concentration were qualified as undetected estimates. The LCS for the batch was acceptable. PCP recovery of the MS was greater than the upper acceptable limit of

103% indicating possible matrix affects; PCP values were not detected in sample M-021Adup. M-007C had low recoveries of 2-fluorophenol and 2,4,6-TBP; acid-fraction data were flagged as estimates for both positive and non-detected values.

There were no anomalies associated with batch G21744; therefore, data within this batch were not qualified.

In batch G21785, one of the method blanks contained 1.3 µg/L of phenol. Samples with detectable values of phenol less than five times the amount of the blank concentration were qualified as undetected estimates. The LCS contained slightly elevated recoveries of 1,2,4-TCB at 102%, 4-chloro-3-methyl phenol 98%, and 2,4-DNT at 100%. The spike recoveries of the MS/MSD sample M-013C duplicate resulted lower than acceptability limit allow. The sample compounds failed when it was reanalyzed; indicating probable matrix inferences. M-013dup, and its associated spike samples also had failed surrogates below 10%. Therefore; sample data for non-detects were qualified as rejected.

Bis (2-ethyl hexyl) phthalate was also detected in batch G21818 at 0.61 µg/L. Samples with detectable values of the phthalate less than ten times the amount of the blank concentration were qualified as undetected estimates. Three of the LCS recoveries exceeded the upper acceptability limits: PCP, pyrene, and 2,4-DNT recoveries were 120%, 144%, and 120%, respectively. Additionally, pyrene recoveries exceeded acceptable limits in the MS/MSD samples. Positive pyrene results for the sample data would have been qualified as estimates but there was no positive pyrene results. Two samples had 2-fluorophenol recovery results of 19% and 18%; M-016A and M-018E, respectively. The two samples met the CLP criteria of the allowance of one of each fraction allowed to fail recovery limits.

The method blank, LCS, MS/MSD, and associated RPDs were acceptable in QC batch G21950. Surrogate recoveries for sample M-015A duplicate were poor; phenol compounds were undetected. This sample was analyzed twice resulting in similar recovery deficiencies. The laboratory stated that it was possibly due to an extraction error. The sample was not re-extracted beyond SVOC holding time. The positive acid fraction compounds were qualified as estimates and the non-detected acid fraction compounds were rejected.

1.3.3 Pesticides and Polychlorinated Biphenyls

All the QC requirements were met in all of the batches except two. Batch G21474 LCS Aldrin recovery of 34.5% was lower than the acceptability limit of 40%. The MS/MSD recoveries and associated RPDs were acceptable. Sample M-008A surrogate recovery for DBC resulted in a low 28.7% with lower acceptable limits of 46%. No positive results were found in the sample, but the non-detect data were qualified as estimates. The remaining surrogate recoveries of the samples were within acceptable limits.

Batch G21959 had acceptable QC results, with one exception. Sample M-106A had a slightly low DBC recovery of 43.5% with a lower limit of 46%; both positive and non-detected results were qualified as estimates.

1.3.4 Petroleum Hydrocarbons

The total recoverable petroleum hydrocarbon method blank and LCS were acceptable in batch G21293. M-005A duplicate was the field sample used for the MS/MSD; it resulted with a low recovery of 63.5%. The low recovery indicates possible matrix interference; therefore, both positive and non-detected data of the sample were qualified as estimates.

Batches G21503 and G21570 had acceptable method blanks, LCS, and MS. Both the batches had insufficient sample volume to spike a duplicate. The data were not qualified.

Batch G21687 had acceptable method blanks and LCS. No MS/MSD was analyzed due to insufficient sample volumes. Additionally, the sample was analyzed out of extraction holding time. JMM resampled the well and the data was reported within batch G22001. Data were not qualified in the batch.

Batches that had acceptable QC, which include MS data, are as follows: G21500, G21673, G21765, and G22658.

1.3.5 Metals

The two method blanks in batch G20961 had four metal contaminants. Calcium was detected at 279 µg/L, potassium at 605 µg/L, sodium at 77.7 µg/L, and zinc at 4.9 µg/L. Samples with detectable values of these metals less than five times the amount of the blank concentrations were qualified as undetected estimates. All the LCS values were acceptable. The MS and spike duplicates and associated RPDs of sodium were found both higher and lower than the acceptability limits due to the high unspiked value within the samples. Sodium results were qualified as estimates. The replicate of sample M-005A duplicate gave rise to a RPD of 132 for zinc. Sample M-014A duplicate had a high RPD value of zinc at 54. Erratic recoveries were due to the value found in the analysis and the non detect in the second analysis; zinc was qualified as an estimate.

Batch G22913 method blank contained some metal contamination. Qualification of estimates were based on the concentrations of calcium at 14.4 µg/L, sodium at 101 µg/L, and zinc at 5.3 µg/L. Samples with detectable values of these metals less than five times the amount of the blank concentrations were qualified as estimates. The LCS samples were acceptable. The MS and spike duplicate samples demonstrated low recoveries of silver due to possible matrix interferences. Additionally, sodium was found at high recovery levels of 220% and 320% due to the high concentrations found within the field samples of CTO 121. Samples from this project were not qualified.

The method blank in batch G21727 had concentrations of calcium at 36 µg/L, iron at 14.7 µg/L, magnesium at 82.2 µg/L, and sodium at 739 µg/L. Samples with detectable values of these metals less than five times the amount of the blank concentrations were qualified as non detected estimates. The LCS, replicates, and associated RPDs were acceptable. Multiple QC limits were not achieved in the MS and spike duplicate samples primarily due to large matrix interferences of the unspiked values found within the field samples. The MS and spike duplicate had RPD values greater than acceptable limits for calcium, potassium, and magnesium. Both positive and non-detected results were qualified as estimates.

Calcium, iron, barium and sodium were detected within the method blanks of batch G21960. Samples with detectable values of these metals less than five times the amount of the blank concentrations were qualified as undetected estimates. The LCS of the batch was acceptable. Sample M-013C duplicate was spiked as the MS and spike duplicate. Many of the metals had recoveries below acceptable due to possible matrix interferences. Cobalt, chromium, nickel, antimony, and vanadium were qualified as estimates for both positive and non-detected results. Calcium, sodium, and potassium had recoveries greater than acceptable limits that gave rise to possible positive bias; these metals were qualified as estimates for positive values.

The method blank in batch in G22157 contained detectable concentrations of barium, calcium, iron, and zinc. Samples with detectable values of these metals less than five times the amount of the blank concentrations were qualified as undetected estimates. The LCS of the batch was acceptable. The replicate samples had high RPDs for barium, iron, and zinc of 49, 105, and 129. Sample M-015A MS and spike duplicate had unacceptable sodium recoveries due to interferences caused by the high concentration of sodium found within the field sample. The varied recoveries of sodium produced a RPD of 218. Sodium was qualified as an estimated value in this sample.

1.3.6 Arsenic

All the method blank, LCS, and MS and associated duplicates were acceptable in batch G21292. Only sample 323-SW had a low post digestion recovery of 79.5% with a lower acceptable limit of 85%. Possible matrix suppression occurred within the sample; therefore, the result was qualified as an estimate. Batches G21690 and G22090 had similar results. The QC was acceptable, except for several post digestion spike recoveries. The following samples had both positive and non-detect results qualified as estimates: M-029A, M-015A, M-020E, M-024A, M-103B, and M-111A. No anomalies were reported in batch G22916.

1.3.7 Lead

All the method blank, LCS, and MS and associated duplicates were acceptable in batch G21310. Several post digestion spike recoveries were lower than the acceptable limits. The following samples had both positive and non-detect results qualified as estimates: M-001A-004, M-002A, M-002E, M-004A, M-027C, and M-101A.

Samples from a different CTO were used as the MS and spike duplicate in batch G22872. Matrix interferences demonstrated by the spike and duplicate do not reflect upon CTO 107 samples. The remaining batch QC was acceptable; therefore, samples from this project were not qualified.

Batch G21748 contained acceptable method blank, replicate and LCS QC. The MS and spike duplicate utilized sample M-M-021A duplicate. The recoveries were both low indicating sample matrix interferences. Samples that demonstrated failed post digestion spike recoveries were: M-029A, M-023E, M-026A and M-021A duplicate. Lead values for these samples were qualified as estimates. Similar anomalies occurred in batch G22075. The MS and spike duplicate failed recovery criteria, but this was primarily due to sample dilutions of 1 to 5 that diluted out the spiked analytes. Samples with qualified results due to post digestion spike recoveries were: M-009A, M-013C, M-016A, M-018A, M-018E, M-019A, M-019E, M-020A, M-020B, M-020E, M-24A, M-024E, M-103B, M-020dup, M-013Cdup, and M-104C.

1.3.8 Mercury

All QC data of batches G21325 and G22742 were acceptable; data were not qualified.

Samples within batch G21133 with positive results were qualified as estimates due to the high recoveries greater than 125% found in the MS and spike duplicate samples. The method blank, LCS, and RPD was acceptable. The replicate samples did not have any detectable levels of mercury found. Sample 323SW demonstrated low recovery; the non-detected value was qualified as estimate.

All the QC was acceptable in batches G21325, G22742, and G21693; the data were not qualified.

The method blank and LCS were acceptable in batch G20903. Sample 323SW had low recoveries of 62% and 58% due to possible matrix interferences. This sample was qualified as an estimate for the mercury value.

Batch G21282 had acceptable method blanks, LCS, and RPD. The replicates did not have any detectable levels of mercury found. The MS and spike duplicate M-028A had low spike recoveries due to possible matrix interferences. This problem is duplicated within the low post digestion spike recoveries of the field samples. Both positive and non-detected data were qualified as estimates.

1.3.9 Selenium

Poor selenium recoveries were found in batch G22920. The low recoveries were found in samples from another Alameda project, CTO 137. Samples from this project resulted in acceptable recovery limits; therefore, they were not qualified. The method blank, LCS, and replicates were acceptable.

Both the MS and spike duplicate set and post digestion spike recoveries of sample M-021Adup were lower than acceptable limits allow. The recoveries indicate a possible matrix suppression of the spiked analyte. Selenium values for detected and non-detected values were qualified as estimates. The method blank, LCS, and replicates were acceptable within batch G21749. The same situation was found with batch G22076. The spike recoveries of the MS and post digestion spike recoveries indicate some matrix problems; therefore, both positive and non-detected data were qualified as estimates.

1.3.10 Thallium

All the QC samples in batch G21299 met specified limits, except many of the post digestion spike recoveries of the field samples. The low recoveries indicate a possible matrix suppression of the spiked analyte. Both positive and non-detected data were qualified as estimates for the following samples: M-001A-004, M-001B, M-001E-007, M-002A, M-002E, M-004A, M-010A, M-012B, M-014B, M-027B, M-027C, M-027E, M-028E, M-101A, and the duplicate sample of M-028A.

Two thallium post digestion spike recoveries were found below acceptability limits of 85% in batch G22923. The MS/MSD were found at zero recovery. The low recoveries were found in samples from another Alameda project, CTO 137. Samples from this project resulted in acceptable recovery limits; therefore, they were not qualified. The method blank, LCS, and replicates were acceptable.

1.3.11 Cyanide

Four of the six cyanide batches resulted in acceptable QC and data were not qualified. Batch G21370 method blank contained 0.2 µg/L of cyanide which could be a possible instrument artifact. Positive results of the field samples were greater than five times the amount found in the method blank; therefore, sample data were not qualified. The LCS and MS samples were acceptable.

Batch G21707 method blank, replicates, and LCS were acceptable. The MS duplicate sample had a high spike recovery of 120% with an upper limit of 115%. The elevated recovery may be due to possible matrix interferences; therefore, any positive results of this QC batch were qualified as estimates.

1.3.12 Acidity

The QC samples of batch G22370 were acceptable. The method blank contained acidic values of 1.1 and 1.7 mg/L. Positive results that were less than five times the amount found in the method blank within this batch were qualified as undetected estimates. Batches G21017, G21409 and G21646 had method blanks with acidic values and the positive values were qualified as undetected estimates if the amount was less than five times the value of the method blank. All of these batches contained spike recoveries below 92% that qualified both positive and non-detected data as estimated values. Sample M-020Adup had recoveries below 10%; the positive amount in the sample was qualified as an estimate.

1.3.13 Alkalinity

All the QC batches for alkalinity contained small amounts of alkalinity values. The replicates and the spikes resulted with acceptable recoveries. Positive data were qualified as undetected estimates if the sample value was less than five times the amount found in the method blank, based on the method blank values.

1.3.14 Chemical Oxygen Demand

The method blank, LCS, replicates, and RPDs were acceptable in batch G21187. MS M-021A duplicate resulted in high recoveries of 129% and 137% with an upper control limit of 115%. The RPD precision was met. Positive results within this batch were qualified as estimates. Similar results occurred within batch G21589; which also had acceptable QC; but, the spike duplicate of sample M-020A results were higher than acceptable limits of 123%. Positive results of this sample were qualified as estimates. Batches G21842 and G22531 had acceptable QC and data were not qualified.

1.3.15 Common Anions

The analytes analyzed under the term of common anions were fluoride, chloride, and sulfate. All the associated method blank data contained detected concentrations of these analytes. Positive results within this batch were qualified as undetected estimates if the sample value is less than five times the amount found in the method blank. Additionally, batch G21926 contains high spike recoveries greater than 107% of fluoride in both the LCS and MS/MSD samples; but, this analyte was already qualified because of an estimate for positive values based upon the method blank contamination.

1.3.16 Hardness

All the QC sample data for hardness were found in the acceptable limits of the method. Sample data were not qualified.

1.3.17 Nitrate and Nitrite

All but one of the QC batches contain both nitrate/nitrite of varying levels in the method blanks. Positive results within these batches were qualified as undetected estimates if the sample amount was less than five times the amount in the method blank. Batch G22819 had acceptable method blank, LCS, and RPDs, but the spiked sample MWE-6 had high recoveries of 108 and 109 with an upper limit of 104%; positive values within the sample were qualified as estimates.

1.3.18 Specific Conductivity

All the method blanks contained low conductivity readings. Positive results that were less than five times the amount of the method blank of the samples were qualified as undetected estimates. The remaining QC data of reference and replicate samples were acceptable.

1.3.19 Total Dissolved Residue

All the QC criteria was met in batches G20923, G20952, G20986, G20987, G21281, and G21284. Only two batches had qualified data based on the levels of residue found within the method blanks of G21192 and G21193. Samples with detectable values less than five times the amount of the blank concentrations were qualified as undetected estimates.

1.3.20 Total Organic Carbon

Most of the method blanks within the TOC QC batches contained carbon. Batch G21278 had acceptable QC, but method blank contamination. Samples with detectable values less than five times the amount of the blank concentrations were qualified as undetected estimates. Other batches with method blank contamination were qualified in the same manner. Additionally, some batches contained varied spike recoveries. Batches G21279 and G21566 had high MS recoveries greater than 113%, positive results were qualified as estimates. Two spike recoveries were below the 87% acceptable criteria in batch G22811. These data were not qualified because the samples that did not meet the criteria were from another project.

1.3.21 Radiochemistry

All of the gross alpha and gross beta batches contained acceptable QC data and field samples were not qualified. Additionally, radium 228 batches contained acceptable accuracy and precision.

Radium 226 batch G22744 contained method blanks with detected levels of the radio-isotopes. Positive results below five times the amount in the method blanks within this batch were qualified as undetected estimates. Additionally, this batch had acceptable spike recoveries, but had RPD values greater than 20.

1.3.22 Asbestos

All QC duplicate samples were acceptable and sample data were not qualified.

1.4 SECOND QUARTER GROUNDWATER SAMPLES

The second quarter groundwater samples were collected between September 19 through October 14, 1991.

1.4.1 Volatile Organic Compounds

Batches G23185, G23188, G23420, G23500, and G24261 had acceptable QC; therefore, data were not qualified. The remaining batches contained method blanks with detectable concentrations of acetone and some methylene chloride.

Batch G23186 contained acetone at 6.3 µg/L. Samples with detectable values of common laboratory contaminants less than ten times the amount of the blank concentrations were qualified as undetected estimates. The remaining QC was acceptable. Similarly, batch G23499 had acetone detected at 1.2 µg/L. The LCS, MS/MSD samples, and RPDs were acceptable.

Batch G24317 consisted of four method blanks with various contaminants. Evaluation of the method blanks were based on the highest detected values for any compound. Method blank MB*1014 had detectable levels of acetone at 1.7 µg/L; MB*1 contained 2.9 µg/L acetone; MB*1017 had methylene chloride at 1.3 µg/L and acetone at 5.0 µg/L; MB*1023 had 2.4 µg/L of acetone; MB*1024 had 4.5 of acetone; and MB*1025 contained 3.8 µg/L of acetone. Samples were qualified based on 5.0 µg/L of acetone and 1.3 µg/L of methylene chloride. Samples with detectable values of these common laboratory contaminants less than ten times the amount of the blank concentrations were qualified as undetected estimates.

1.4.2 Semivolatile Organic Compounds

The method blank of batch G23680 contained 1.6 µg/L phenol and 2.3 µg/L bis (2-ethyl hexyl) phthalate. Samples with detectable values of phthalate contaminants less than ten times the amount of the blank concentrations were qualified as non-detected estimates. Phenol is not considered one of the common laboratory contaminants; therefore, the five time multiplier was applied for any positive values found within the samples. Phenol was not detected in the field samples. The LCS percent recoveries were acceptable except for 4-Nitrophenol. This compound had a recovery of 90% as compared to the control limit of 80%. Additionally, most of the MS/MSD compounds had recoveries that exceeded upper limits due to possible spiking errors; sample M-001Bdup only had a positive result of bis (2-ethyl hexyl) phthalate. Sample M-001Bdup had a slightly elevated phenol-D(5) recovery of 99% with an upper limit of 94%, this falls within CLP allowances of one acid one base allowed out without any action taken.

The LCS of batch G23780 had phenol, 4-nitrophenol, 2,4-DNT, and pyrene that exceeded the acceptable limits. The majority of compounds in the MS and MSD sample M-103B exceeded the acceptability limits, as well. The only positive result of bis (2-ethyl hexyl) phthalate was qualified as an estimate for sample M-103B. The method blank was acceptable. Samples M103B, MWE-2 and MWE-3 had a slightly high phenol-d(5) recovery; sample MWE-4 had high 2-fluorophenol and phenol-d(5) recoveries of 110% each, these samples were re-analyzed and failed twice. Samples may have a positive bias based upon recoveries found within the QC spikes and field samples; therefore, positive results of MWE-4 were qualified as estimates for the acid fraction.

Batch G23844 method blank contained 64 µg/L of bis (2ethyl hexyl) phthalate. Samples with detectable values of the common laboratory contaminant less than ten times the amount of the blank concentrations were qualified as non-detected estimates. The LCS compound 4-nitrophenol had a high recovery of 93% vs. upper limit of 80%. Most of the MS/MSD compounds have recoveries that exceed limits; the sample used was from another project of Alameda NAS. Surrogate recoveries for CTO 107 were within criteria limits; data were not qualified.

The method blank of G24009 was free from laboratory contaminants. The LCS spike of pyrene had a recovery of 128% with an upper limit of 127%; data were not qualified based on this recovery. The MS/MSD sample M-027B had a low 2-chlorophenol recovery of 14% and 11% and the pyrene recovery had exceeded criteria limits of 164% and 130%; additionally, 1,4-DCB, 1,2,4-TCB, and 2,4-DNT had recoveries that exceeded upper limits in the MS only. Samples M-027B had a low recovery of 2-fluorophenol at 3.8% and 2,4,6-TBP at 5.2%; M-027C and M-027Bdup had the same results. The acid compounds were qualified as estimates in the samples listed; non-detected acid fraction was qualified as rejected. The remaining field samples in the batch had acceptable recoveries.

Bis (2-ethyl hexyl) phthalate was detected in batch G24015 method blank at 5.3 µg/L. Samples with detectable values of the common laboratory contaminant less than ten times the amount of the blank concentrations were qualified as undetected estimates. The LCS recoveries were acceptable. The MS sample M-022Edup recovery

of PCP was found at 108% with an upper limit of 103%; the RPDs met criteria. There was not a positive PCP result found. The surrogate recoveries of the field samples were acceptable and data were not qualified.

In batch G24018, the method blank contained 2.7 µg/L of bis (2-ethyl hexyl) phthalate. Samples with detectable values of the common laboratory contaminant less than ten times the amount of the blank concentrations were qualified as undetected estimates. The LCS contained a PCP recovery of 110% with an upper limit of 103%. Data were not qualified as estimates for because there were not any positive PCP results. M-108dup MS had high recoveries of 2,4-DNT at 101% with an upper limit 96%, PCP was found at 108% with an upper limit of 103%. The MSD contained high recoveries of 4-chloro-3-methyl phenol at 100% with an upper limit of 97%, 2,4-DNT at 106% with an upper limit of 96%, and PCP at 115% with an upper limit of 103%. All of the field sample surrogate recoveries were acceptable.

The method blank contained 2.3 µg/L of bis (2-ethyl hexyl) phthalate in batch G24033. Samples with detectable values of the common laboratory contaminant less than ten times the amount of the blank concentrations were qualified as undetected estimates. The batch LCS was acceptable. The M-019Adup MS had high recoveries of 4-Nitrophenol at 91% with an upper limit of 80% and 2,4-DNT at 102% with an upper limit of 96%. Sample M-019Adup only had bis (2-ethyl hexyl) phthalate detected. Surrogate recoveries were below acceptable limits for sample M016A for nitrobenzene, 2,4,6-TBP, and 2-fluorophenol; this sample was reanalyzed with similar results. Non-detected acid compounds of M-016A were qualified as estimates.

The method blank and LCS of batch G24105 were acceptable. The M-029Edup MS had high recoveries of pyrene at 136% with an upper limit of 127%. 4-chloro-3-methyl phenol recovery resulted in a high recovery at 100% with an upper limit of 97% and pyrene was found at 134% with upper limit at 127% in the MSD; high PCP RPD of 65. The positive pyrene result was qualified as an estimate. Surrogate recoveries for sample M-028A had low recovery of phenol-d(5) of 7.3%, Nitrobenzene-D(5) at zero, 2,4,6-TBP at zero, and terphenyl with zero recoveries; these compounds were possibly diluted out (100X). Positive results were qualified as estimates, while the non-detected data were rejected. Sample M-105B had a low recovery of 2-fluorophenol of 17% with a lower limit of 21%; the sample was not qualified due to the CLP allowance of one surrogate to fail. In sample M-007C, low recoveries occurred with 2-fluorophenol at 6.9% with a lower limit of 21% and 2,4,6-TBP was found at 9.5% with a lower limit of 10%; the acid fractions were qualified as rejected for the non-detected values.

1.4.3 Organochlorine Pesticides and Polychlorinated Biphenyls

In batch G23883, the MS recoveries were acceptable, but the MSD compound recoveries (5 out of 6) were below acceptable limits. The recoveries were primarily due to 40 mls of the MSD sample which were lost due to faulty glassware. The method blank, LCS, and field sample surrogate recoveries were acceptable. The data were not qualified.

All the QC samples were acceptable in batch G23919. Samples M-001A had a DBC recovery of 38.4% and M-001E had 39.9% with a lower limit of 46%. Both positive and non-detect data were qualified as estimates for these two samples.

In batch G24148, the method blank and LCS met acceptable criteria. MS/MSD had acceptable recoveries, but DDT had a high RPD of 47.3%. DDT was qualified as an estimate for the spiked sample. The following samples had DBC surrogate recoveries below 46%: M-022Edup MS and the associated field sample, M-022A, M-022E, M-023A, M-023E, and M-026A. These samples were qualified with estimated data for both detectable and non-detected compounds.

All QC is acceptable in batch G24192, except for Aroclor 1260 which was found at 56% in the LCS with a lower limit of 70%. Sample data may be positively biased for this PCB; therefore, positive results of Aroclor 1260 were qualified as estimates.

Batch G24006 contained acceptable method blank, LCS, and MS/MSD recoveries. Two samples, M-014A and M-015A had low DBC recoveries of 20.8% and 18.7% with a lower limit of 46%. Both positive and non-detect result were qualified as estimates for the two samples.

All the QC associated with batch G24425 were acceptable; therefore, sample data were not qualified.

1.4.4 Petroleum Hydrocarbons

Batches G23150, G23285, G23338, and G23435 resulted in acceptable QC; therefore, data were not qualified.

The method blank of batch G23034 contained 0.06mg/L of total recoverable petroleum hydrocarbon. Samples with detectable values of the petroleum laboratory contaminant less than five times the amount of the blank concentrations were qualified as undetected estimates. The LCS and MS/MSD samples were acceptable.

Both G23891 and G24123 method blanks contained 0.03 mg/L of petroleum hydrocarbons from possible instrument artifacts. Samples with detectable values of the laboratory contaminant less than five times the amount of the blank concentrations were qualified as estimates. The LCS and MS/MSD samples were acceptable.

1.4.5 Metals

The two method blanks of batch G23513 contained calcium, iron, magnesium and manganese. Samples with detectable values of the laboratory contaminant less than five times the amount of the blank concentrations

were qualified as undetected estimates. The two sets of LCS recoveries were acceptable, but the MS of sample M-001Bdup had erratic recoveries. High recoveries of calcium, magnesium, manganese, and sodium were possibly due to the high concentration of these analytes within the unspiked sample. Positive sample results for these analytes were qualified as estimates. Cobalt, potassium, nickel, antimony, vanadium and zinc were found lower than acceptable limits. Both positive and non-detected sample results for these analytes from sample M-001Bdup were qualified as estimates.

Method blanks of batch G24124 contained various metals. Samples with positive results of the metals listed were qualified based upon five times these values: 218 µg/L of calcium, 20.9 µg/L of iron, 56.5 µg/L of magnesium, 1.1 µg/L of manganese, 604 µg/L potassium, 323 µg/L of sodium and 4.9 µg/L of zinc. LCS recoveries were acceptable. Most of the MS for samples M-016A and M-027C had erratic recoveries due to primarily matrix interferences; these samples had large amounts of metals. Silver and aluminum had RPD values of 37 and 25 for replicate samples. Post digestion spike recoveries were reported for samples M-016A and M-027C only, these samples had low recoveries for many of the metals. All corresponding sample data were qualified as estimates.

Batch G24199 method blanks contained many metal contaminants. The highest levels of the metals are calcium 92.2 µg/L, barium at 11.4 µg/L, 25 µg/l of iron, 148 µg/L of sodium, and 5.8 µg/L of zinc. Positive results that were less than five times the amount of the analytes in the method blank were qualified as undetected estimates. The LCS was acceptable. The MS percent recoveries had several metals that had erratic recoveries due to the high concentrations of the analytes within the field samples. The replicates of the analytes were acceptable except for nickel which had an RPD of 30.2. All nickel results were qualified as estimates. Post digestion spikes were performed on the MS samples M-022Edup and M-0278dup. Sample M-022E had a iron recovery of 118.4% with an upper limit of 115% and sample M-0278 had a manganese recovery of 149.8%. Positive results for these analytes were qualified as estimates for these samples.

1.4.6 Arsenic

The QC samples and method blanks were acceptable in batch G23765. But, the post digestion spike recoveries for samples of CTO 107: M002E, M004A, M005A had slightly low recoveries of 83.8%, 83%, 83.2%, respectively with a lower limit of 85%. These samples may contain a negative bias; therefore, both positive and non-detects of arsenic were qualified as usable estimates.

The method blank and LCS of batch G24205 were acceptable. One of the MS samples (M-006Adup) had a slightly high recovery of 121% with an upper limit of 120%. Several of the post digestion spike recoveries had slightly high recoveries: M-010A at 122%, M-014A at 119%, M-015A at 119%, and M-102A at 119%. Positive results of these samples were qualified as estimates.

Arsenic was detected in the method blanks of batch G24210 which contained 0.8 µg/L and 1.1 µg/L. Positive results that were less than five times the amount of the analytes in the method blank were qualified as undetected estimates. The two LCS and replicate samples were acceptable. The MS percent recoveries for samples M-019A and its duplicate had high recoveries of 122% and 150% with an upper limit of 120%. Both samples had positive results qualified as an estimate. All but one of the post digestion spikes had acceptable recoveries. Sample M-027C may have a negative bias based on the post digestion spike recovery, the non-detected value was qualified as an estimated value.

Both the method blanks of batch G24278 contained 0.8 µg/L and 0.5 µg/L of arsenic. Positive results that were less than five times the amount of the analytes in the method blank were qualified as undetected estimates. The MS, LCS, and replicate samples were acceptable. Only one sample, M-029A, had a slightly high recovery of 117% with an upper limit of 115%. Arsenic was not detected in this sample, therefore, it was not qualified.

1.4.7 Lead

All QC data were acceptable in batch G23729, but the post digestion spike recoveries of some samples from CTO 107 were lower than the 85% recovery limit. Both positive and non-detected results for samples: M-001A, M-001B, M-002A, M-002E, and M-004A were qualified as estimates.

The method blank and the LCS were acceptable in batch G24133. The MS for sample M-001Bdup had a low recovery of only 29% based on a lower limit of 71%. The RPD from the replicate of this sample was 133 due to the difference of reporting limits of 2.0 µg/L and 10.0 µg/L between the two runs. The result of sample M-001dup was qualified as an estimate. Post digestion spike recoveries of the following samples were low possibly due to matrix affects: M-010A, M-010B, M-011A, M-012B, M-013C, M-014B, M-016A, M-017A, M018A, M-018E, M-101A, M-001Bdup, and M-010Adup. Both positive and non-detected results for these samples were qualified as estimates.

Batch G24190 had acceptable method blanks and LCS. The two MS samples M-019A and M-019Adup had zero recoveries; possibly they were not spiked or the analyte was diluted out of the sample. The following samples have low post digestion spike recoveries: M-019A, M-019E, M-020A, M-021A, M-026A, and M-019Adup. The positive and non-detected results of these samples were qualified as estimates.

The method blank, LCS, and replicates were acceptable within batch G24272. Both the MS samples M-022Edup and M-0278dup had low recoveries of 67.5% and 64% with a lower limit of 71%. The following samples have low post digestion spike recoveries: M-027E, M-103B, M-104C, M-105B, M108B, M022Edup, and M0278dup. Both the positive and non-detected results of these samples were qualified as estimates.

1.4.8 Mercury

Batch G23421 had acceptable QC data; therefore, the sample data were not qualified.

The method blank and LCS were acceptable in batch G23446. The second set of MS and duplicates resulted in low recoveries of 70% and 80% for sample M010Adup compared to the lower limit of 83%. The replicates of this sample produced a high RPD value 85.7, because one of the sample values were 0.5 µg/L and the replicate was found at <0.2, the found amount is close to the detection limit. These data were not qualified.

Batch G23804 method blank, replicates, and LCS were acceptable. Both the MS samples had low recoveries of 36% and 66% compared to the lower limit of 83%. No post digestion spike recoveries were reported to help identify matrix interferences. The positive and non-detected results of the entire batch were qualified as estimates.

All the QC samples of batch G24117 were acceptable, with one exception. MS samples, M-029E, had a low recovery of 78% with a lower limit of 83%. Sample data for the sample were qualified as an estimate.

1.4.9 Selenium

In batch G23725, the QC samples were acceptable. The post digestion spike recoveries for the following samples from CTO 107 were lower than the lower acceptability limit of 85%: M001B, M002A, M002E, and M004A. These sample data were qualified as estimates for both positive and non-detected data. The remaining samples that are out of limits are from CTO 121.

The QC samples were acceptable in batch G24126. Post digestion spike recoveries were below the acceptable limit of 85% for a majority of the samples. Samples: M-007A, M-010A, M-010B, M-011A, M-012B, M-013C, M-014A, M-014B, M-016A, M-017A, M-018A, M-018E, M-101A, M-102A, M-001Bdup, and M-010Adup all contained low recoveries. The analytical laboratory theorized that the samples had background interferences from the sample matrix. Both the positive and non-detected results of these samples were qualified as estimates.

In batch G24202, the method blank, LCS, and replicates were acceptable. One MS sample for M-019Adup had a low recovery of 42% compared to the lower limit 71%. Many of the post digestion spikes also had recoveries below the acceptable limit of 85%: M-019A, M-019E, M-020A, M020E, M-021A, M-021E, M-022A, M-022E, M-023A, M-023E, M-025A, M-026A, M-027A, and M-019Adup. These samples had both the positive and non-detected results qualified as estimates.

The method blank, LCS, and replicates were acceptable within batch G24277. One of the MS samples had a low recovery of 67.5% with a lower limit of 71%. Many of the post digestion spikes had low recoveries. The positive and non-detected results of the samples were qualified as estimates.

1.4.10 Thallium

Batch G23802 had acceptable method blank and LCS results. One of the MS samples had a low recovery of 60.0% with a lower limit of 74%. Both sets of replicates had a recovery of <2.7 with zero RPD. The following CTO 107 samples had low post digestion spike recoveries: M-001A, M-001E, M-002A, and M-004A; which indicate possible negative bias. These sample data were qualified as estimates for both positive and non-detected results.

One of the method blanks in batch G24211 contained 0.1 µg/L of thallium. Samples with positive results of the metal were qualified as non-detected estimates based upon five times the amount found within the method blank. M-001Bdup MS sample had a low recovery of 17.6% compared to the lower recovery limit of 74%. The LCS and replicates were acceptable in batch G24211. The following samples had low post digestion spike recoveries: M-007C, M-012B, M-014B, M-016A, M-017A, M-018A, and M-018E. The samples may have a negative bias to the sample data. Both the positive and non-detected data were qualified as estimates. The following samples had slightly elevated post digestion spike recoveries: M-015A, M-102A, M-006Adup, and the two equipment rinsates. Only positive values within these samples were qualified as estimates.

The method blank, LCS and replicate samples were acceptable in batch G24242. Both the MS samples had low recoveries: M-019A at 0% and M-019Adup at 22.4% with a lower recovery limit of 74%. Additionally, all of the field samples had low post digestion spike recoveries except the two equipment rinsate samples. This indicates possible matrix interferences. Both positive and non-detected sample data were qualified as estimated values.

Batch G24285 had acceptable method blank, LCS and replicates. One of the MS samples had a slightly high recovery of 130% with an upper recovery limit of 128%. Most of the sample post digestion spike recoveries were low. Both positive and non-detected sample data were qualified as estimated values.

1.4.11 Cyanide

The method blank in batch G23377 contained 0.2 µg/L of cyanide. Samples with detectable values of the laboratory contaminant less than five times the amount of the blank concentrations were qualified as undetected estimates. The replicate, MS, and LCS samples were acceptable. Batch G23572 had acceptable QC; therefore, the data were not qualified.

The method blank, replicate, and MS samples of batch G23912 were acceptable. The LCS had a low recovery of 76.9% with a lower recovery limit of 85%. No other anomalies were identified; therefore, sample data were not qualified.

1.4.12 Acidity

In batch G23244, the six method blanks all contain a small amount of acidity, <1.5mg/L. Positive results that were less than five times the amount of the analytes in the method blank were qualified as undetected estimates. All of the six LCS were acceptable, but the three sets of MS and duplicates have low recoveries; one in particular, QC sample M006Adup had low recoveries of 20.1% and 18.8% with a lower limit of 92%. Both the positive and non-detected sample results were qualified as estimates.

The four method blanks contained acidity readings under 1.0 mg/L. Positive results that were less than five times the amount of the analytes in the method blank were qualified as undetected estimates. The LCS of batch G23397 were acceptable, but the two sets of MS and duplicates had low recoveries: 73%, 82%, 79.4%, and 77.4% with a lower limit of 92%. Both positive and non-detected values were qualified as estimates due to the possible negative bias of the batch.

In batch G23653, the four method blanks contained acidity readings under 1.8 mg/L. Positive results that were less than five times the amount of the analytes in the method blank were qualified as undetected estimates. The LCS was acceptable, but the MS and duplicates had low recoveries: 76.2% and 77.6% for sample M-108dup and 78.4% and 83.4% for M-029Edup. The lower acceptability limit is 92%. Both positive and non-detected values were qualified as estimates due to the possible negative bias of the batch.

1.4.13 Alkalinity

All of the batches contain method blanks with 1.0 mg/L of reported alkalinity. Positive results were qualified as undetected estimates if the amount was less than five times the amount found in the method blanks. Additionally, batch G23837 had one high MS recovery at 109.9% with an upper limit of 109%, the associated RPD was acceptable. These data were qualified based upon the method blank bias.

1.4.14 Chemical Oxygen Demand

The MS spike duplicate had a low recovery of 84.8% with lower limit of 85% in batch G23024. Data were not qualified. The LCS and method blank were acceptable. Similar results occurred within batch G23198.

One of the MS recovery values was 83.8% with a lower limit of 85%. The sample data were qualified as an estimate.

All QC data were acceptable in batch G23300, data were not qualified.

The LCS, method blank, and replicates were acceptable in batch G23651. The MS and duplicate contained low recoveries of 69.3% and 65.5% with a lower limit of 85%. Both positive and non-detects may have negative bias to the data; therefore, sample data were qualified as estimates.

One MSD for sample M029Edup had a slightly elevated recovery of 119.1% with an upper limit of 112%. Sample M-108Adup had three sets of replicates analyzed, only the last replicate met the RPD limit of 15%. Sample M-029Edup had an RPD value of 16.9. Positive sample data were qualified as estimates. The remaining QC data of the batch were acceptable.

1.4.15 Common Anions

All three batches of anions have method blanks that contain detectable values of chloride, fluoride, and sulfate. Positive results of the samples were qualified as undetected estimates if the sample data were less than five times the amount found within the blank. The remaining QC of batches G23613, G23728, and G23819 were acceptable.

1.4.16 Hardness

Batches G23065, G23274, and G23516 had acceptable method blanks, LCS, MS and duplicates. Sample data were not qualified.

In batch G23562, the method blank contained 4.0 mg/L. Positive sample data were qualified as undetected estimates if the sample value was less than five times the amount found within the method blank. The remaining QC was acceptable.

1.4.17 Nitrate and Nitrite

Batch G24157 method blank contained 0.005 mg/L. Positive results were qualified as undetected estimates if the sample values were less than five times the amount found within the method blank. The LCS and MS duplicates were acceptable.

All three method blanks contained 0.002 mg/l within batch G24158. Positive results of nitrate/nitrite less than five times the amount of the method blanks. The LCS was acceptable. One MSD had a slightly high recovery of 105% with an upper limit of 104%, but the RPD was acceptable.

Batches G23587 and G24325 contain acceptable QC; therefore, sample data were not qualified.

1.4.18 Specific Conductivity

Method blank MB*1 contains 1.42 umhos/cm and method blank MB*2 contains 1.53 umhos/cm; no replicate was reported with batch G23675 due to an analyst error. Positive sample data were qualified as undetected estimates if the sample value was less than five times the amount found within the method blank.

All method blanks within batch G23697 contained small amounts of conductivity of under 1.54 umhos/cm. Positive sample data were qualified as undetected estimates if the sample value was greater than five times the amount found within the method blank.

The method blank of batch G23713 contained 1.51 umhos/cm; the positive sample data were qualified as undetected estimates if the sample value was less than five times the amount found within the method blank. The remaining QC data were acceptable.

1.4.19 Total Dissolved Solids

Nine of the ten TDS QC batches had acceptable method blanks, replicates, and RPDs. Data within these batches were not qualified. Batch G23537 had 8 mg/L of TDS and the positive sample results less than five times the amount in the method blank within this batch were qualified as undetected estimates.

1.4.20 Total Organic Carbon

The QC requirements were met for batches G23884 and G23928, except sample M-0278dup MS had a slightly low recovery of 85.5% with a lower limit of 87%. Sample data of M-0278dup were qualified.

1.4.21 Gross Alpha and Beta

All four of the gross alpha and gross beta batches had acceptable QC data and sample values were not qualified.

1.4.22 Radium 226

Batch G24062 had acceptable method blank, LCS, and replicate data. The three remaining QC batches had small amounts of radium 226 (under 0.2 pci/L) within the method blanks. Positive sample data were qualified as undetected estimates if the sample value was less than five times the amount found within the method blank. The remaining QC was acceptable.

1.4.23 Radium 228

Batch G23591 had acceptable method blank, LCS, and replicate data. The four remaining QC batches had small amounts of radium 228 within the method blanks. Positive sample data were qualified as undetected estimates if the sample value was less than five times the amount found within the method blank and non-detected for values below the multiplied amount. One batch, G24313 had one MS recovery of 63.9% with a lower limit of 76%; therefore, creating a high RPD of 37.9. It was reported that the analyst had lost some of the sample in the transfer step that only affected the MS sample. Sample data were qualified based on the method blank contamination only.

1.4.24 Asbestos

All the QC data were acceptable.

1.5 THIRD QUARTER GROUNDWATER SAMPLES

Third quarter groundwater samples were sampled between January 14 through February 27, 1992.

1.5.1 Volatile Organic Compounds

The method blank of batch G25450 contained 0.27 µg/L of methylene chloride and 0.21 µg/L of chloroform. Positive values of the two compounds found within the samples were qualified as undetected estimates if the sample amount was less than five times the amount in the method blank. The remaining QC data were acceptable. Similarly, batch G25494 contained 0.31 µg/l of methylene chloride and 0.11 µg/l of chloroform. The data within this batch were qualified as estimates based upon the method blank contamination.

In batch G25451, the method blank contained 0.23 µg/L of methylene chloride and 1.0 µg/L of acetone. Samples with detectable values of these common laboratory contaminants less than ten times the amount of the blank concentrations were qualified as undetected estimates.

Batches G25528 and G25550 contained methylene chloride at 0.17 µg/L and 0.28 µg/L, respectively. Samples with detectable values of these common laboratory contaminants less than ten times the amount of the blank concentrations were qualified as undetected estimates. The remaining QC data were acceptable.

All QC data were acceptable in batch G25809; therefore, sample data were acceptable.

Acetone was in the method blanks of the following batches: G25885 at 3.6 µg/L, G25914 at 2.8 µg/L, and G25977 at 2.8 µg/L. Samples with detectable values of the common laboratory contaminant less than ten times the amount of the blank concentrations were qualified as undetected estimates and non-detected for values below the multiplied amount. The remaining QC were acceptable.

1.5.2 Semivolatile Organic Compounds

The method blank of batch G25572 had 4.4 µg/L of bis (2-ethyl hexyl) phthalate. Samples with detectable values of the common laboratory contaminant less than ten times the amount of the blank concentrations were qualified as non-detected estimates. The LCS had high 98% recovery of 2,4-DNT with an upper limit of 96%. This does not greatly affect data quality. The MS/MSD sample M-012B had one high PCP recovery of 109% with upper limit of 103%. PCP was not detected in sample M-012B; therefore, it was not qualified. Sample surrogate recoveries were acceptable.

The method blank, LCS, and RPD data were acceptable in batch G25583. The MS sample M-007A had a high pyrene recovery of 130% with an upper limit of 127%. SVOC were not detected in Sample M-007A; data were not qualified. Sample surrogate recoveries were within acceptable limits; therefore, sample data were not qualified.

Batch G25599 method blank contained 2.7 µg/L bis (2-ethyl hexyl) phthalate. Samples with detectable values of the common laboratory contaminant less than ten times the amount of the blank concentrations were qualified as non-detected estimates. The LCS recoveries were acceptable. The MS sample M-021E had high recoveries of phenol at 91% with an upper limit of 89% and 4-chloro-3-methyl phenol at 100% with an upper limit of 97%. SVOCs were not detected in sample M-021E; therefore, data were not qualified. Sample surrogate recoveries were within acceptable limits.

Batch G25667 method blank contained 0.95 µg/L bis (2-ethyl hexyl) phthalate. Samples with detectable values of the common laboratory contaminant less than ten times the amount of the blank concentrations were qualified as non-detected estimates. The LCS had a high 4-nitrophenol recovery of 85% with an upper limit of 80%. There were no positive sample results for 4-nitrophenol; therefore, the samples were not qualified. No MS/MSD samples were reported in this QC batch. Sample surrogate recoveries were acceptable.

The method blank in batch G25701 contained 6.2 µg/L bis (2-ethyl hexyl) phthalate. Samples with detectable values of the common laboratory contaminant less than ten times the amount of the blank concentrations were qualified as undetected estimates. The LCS had a high 2,4-DNT recovery of 140% with an upper limit of 96%. The MS sample had 110% recovery of 4-nitrophenol with an upper limit of 80%; MSD had a phenol recovery of 90% with an upper limit of 89% and 120% recovery of 4-nitrophenol with an upper 80%. There were not any positive acid compounds found. An equipment blank had elevated recoveries of 2-fluorobiphenyl of 120% with an upper limit of 116% and 2,4,6-TBP of 160% with an upper limit of 123%. The sample was not re-extracted due to the CLP allowance of one acid/one base compound outside of acceptable limits. No positive results were found in the equipment blank.

In batch G26054, the method blank contained 1.5 µg/L bis (2-ethyl hexyl) phthalate. Samples with detectable values of the common laboratory contaminant less than ten times the amount of the blank concentrations were qualified as undetected estimates. The LCS had a high 4-chloro-3-methylphenol recovery of 100% with an upper limit of 97%. The MSD M-027E had a high 4-chloro-3-methylphenol of 100% with an upper limit of 97% and PCP of 109% with an upper limit of 103%. No positive results of the two compounds were present. Sample surrogate recoveries were acceptable.

The method blank, LCS, MS and MSD samples in batch G26114 were acceptable. Sample surrogate recoveries were within acceptable method limits.

Batch G26571 method blank contained 3.8 µg/L bis (2-ethyl hexyl) phthalate. Samples with detectable values of the common laboratory contaminant less than ten times the amount of the blank concentrations were qualified as undetected estimates. The LCS has a high phenol recovery of 100% with an upper limit of 89% and 2,4-DNT recovery at 104% with an upper limit of 96%. The MSD sample M-110A had a high phenol recovery of 100% with an upper limit of 89%, 4-chloro-3-methylphenol with a recovery 109% with an upper limit of 97%, 4-nitrophenol recovery of 127% with an upper limit of 80%, 2,4-DNT at 120% with 96%, and PCP at 118% with an upper limit of 103%. There were no positive results for these compounds. Several samples had high surrogate recoveries. Sample M-109A had slightly high phenol-d(5) of 98% with an upper limit of 94%. Sample M-007C had slightly high phenol-d(5) of 95% with an upper limit of 94%. Sample M-110A had slightly high phenol-d(5) of 100% with a limit of 94% as well as one of the equipment blanks. Phenol was not detected in these samples. Sample MWE-1 has a phenol recovery of 5.5%. The acid fraction of the sample was rejected due to the low 5.5% surrogate recovery, but 2-fluorobiphenyl; 2,4,6-TBP; and terphenyl-D(14) are higher than the upper acceptable limits; this occurs in samples MWE-2 and MWE-6, as well. Positive acid results of these samples were qualified as estimates.

In batch G26602, sample MWE-5 missed the extraction holding time by one day, therefore sample results are qualified as estimates. The method blank contained 4.7 µg/L bis (2-ethyl hexyl) phthalate. Samples with

detectable values of the common laboratory contaminant less than ten times the amount of the blank concentrations were qualified as undetected estimates. The LCS had high recoveries of 4-nitrophenol at 97% with a limit 80% and the PCP recovery was found at 110% with an upper limit of 103%. The M-107A MS/MSD samples had high recoveries of PCP at 140% and 150% with an upper limit of 93%. There were no positive results for the two compounds. The surrogate recoveries in sample MWE-5 were very high for all spiking compounds; however, this sample already had all data qualified based on the holding time; the remaining sample surrogates were acceptable.

1.5.3 Organochlorine Pesticides and Polychlorinated Biphenyls

Batches G25618, G225822, G26007, G26075, G26280, G26450, and G26403 had acceptable QC data; therefore, sample data were not qualified.

Both the method blank and LCS were acceptable in batch G26437. The MS recovery for dieldrin was found at -293% and endrin at 0%. The MSD sample M-107A recovery resulted with dieldrin at -291%. Positive results of endrin and dieldrin were qualified as estimates. Non-detects of endrin were rejected. Sample M-009A had a low DBC recovery of 45.3% with a lower recovery of 46%; both positive and non-detected data were qualified as estimates.

1.5.4 Petroleum Hydrocarbons

Petroleum batches G25777, G25934, and G26064 had acceptable QC data results; sample data were not qualified.

In batch G25782, the method blank contained 0.6 mg/L of petroleum hydrocarbons. Positive sample results were qualified as undetected estimates if the value was less than five times the amount found within the method blank. The remaining QC data were acceptable.

Batches G26322 and G26323 method blanks contained 0.1 mg/L. Positive sample results were qualified as undetected estimates if the value was less than five times the amount found within the method blank. The remaining QC was acceptable for the two batches.

The method blank of batch G26492 contained 0.03 mg/L. Positive sample results were qualified as undetected estimates if the value was less than five times the amount found within the method blank. The remaining QC data were acceptable.

1.5.5 Metals

In batch G25518, the method blank contained calcium at 47.2 µg/L, iron at 12.4 µg/L, and sodium at 39.5 µg/L. Positive sample results were qualified as undetected estimates if the value was less than five times the amount found within the method blank. The LCS, replicates, and dilution summaries were acceptable. Sodium in the MS sample had a low recovery of 72% with a lower limit of 75% due to the high concentration found within the field sample (>4X the amount spiked), this does not greatly affect sample data, therefore, data were not qualified.

The method blank in batch G25546 contained 66.3 µg/L of calcium, 10.8 µg/L of iron, 116 µg/L of sodium, and 548 µg/L of potassium. Positive sample results were qualified as undetected estimates if the value was less than five times the amount found within the method blank. The LCS and replicates were acceptable. Two sets of MS were analyzed; sample M-001AMS was acceptable, but sample M-012Bdup had calcium, magnesium, and sodium recoveries that exceeded the limit of 125% due to the high concentration found in the field sample. These three metals were qualified as estimates for the positive results. Cobalt, chromium, iron, nickel, antimony, and vanadium demonstrated low recoveries (lower than 75%) both positive and non detected results were qualified as estimates.

In batch G25609, the method blank contained calcium at 69.7 µg/L, sodium at 87.7 µg/L, and zinc at 12.5 µg/L. Positive sample results of these metals were qualified as undetected estimates if the value was less than five times the amount found within the method blank. Sample M-021Edup was used for the MS; calcium, magnesium, potassium, and sodium had recoveries that exceeded the 125% limit due to the high concentrations found within the sample. Positive results of these metals were qualified as estimates for the sample. Additionally, cobalt chromium, and nickel had low recoveries and these analytes are qualified as estimates for both positive values and non-detects. The replicates were acceptable with the exception of zinc had a RPD of 124; positive results within the batch were qualified as estimates. The sample dilution had a 14.3 RPD for potassium. Potassium was qualified as estimate values.

Two method blanks within batch G25847 had metals detected. The highest levels of contaminants were aluminum at 44.6 µg/L, calcium at 381 µg/L, iron at 38.4 µg/L, potassium at 676 µg/L, magnesium at 60.2 µg/L, sodium at 143 µg/L, nickel at 5.7 µg/L, and barium at 1.2 µg/L. Positive sample results of these metals were qualified as undetected estimates if the value was less than five times the amount found within the method blank. The LCS was acceptable. Two samples were used for the MS/MSDs: M-024A and M-007Cdup; both field samples show recoveries that were sporadic due to the found concentrations in the field samples. Iron, potassium, sodium, barium, cobalt, chromium, copper, manganese, and nickel had both positive and non-detected data qualified as estimates. Calcium and magnesium positive results were qualified as estimates. Serial dilution for potassium had a high RPD value of 23.3 with a limit of ten. Potassium was qualified as estimated values for all field samples.

The method blank of batch G26012 contained aluminum at 82.3 µg/L, calcium at 226 µg/L, iron at 54.7 µg/L, and manganese at 4.8 µg/L. Positive sample results of these metals were qualified as undetected estimates if the value was less than five times the amount found within the method blank. The LCS and MS were acceptable. Replicate analyses RPDs were exceeded by aluminum, barium, iron, and manganese; these analytes are qualified as estimates.

Batch G26013 method blank contained detectable amounts of calcium at 42 µg/L, iron at 8.7 µg/L, sodium at 91.3 µg/L, and zinc at 7.2 µg/L. Positive sample results of these metals were qualified as undetected estimated if the value was less than five times the amount found within the method blank. The LCS data had acceptable recoveries. The MS had one high recovery of sodium at 130% with upper limit of 125%. Replicate RPD value for zinc exceeded the acceptable limit by 3%. Both zinc and sodium positive results were qualified as estimates.

1.5.6 Arsenic

The LCS, replicates, and RPD were acceptable in batch G25562. The method blank contained 0.2 µg/L of arsenic. Positive sample results of arsenic were qualified as undetected estimates if the value was less than five times the amount found within the method blank. All other QC data were acceptable.

All the QC sample recoveries and method blanks were acceptable in batch G25862. Samples M-007C, M-025C, M-104C, and M-108B had low post digestion spike recoveries; both positive and non-detect results for these samples were qualified as estimated values.

In batch G25923, the method blank contained 0.5 µg/L of arsenic. Positive sample results of arsenic were qualified as undetected estimates if the value was less than five times the amount found within the method blank. Samples M-101A and M-103B had low post digestion spike recoveries; both positive and non-detected results were qualified as estimates.

Batches G25637, G25665, and G26326 contained acceptable QC data; therefore, sample data were not qualified.

1.5.7 Lead

The method blank of batch G25553 contained 0.2 µg/L of lead. Positive sample results of lead were qualified as undetected estimates if the value was less than five times the amount found within the method blank. One sample, M-011A, had a low lead post digestion recovery and the non-detected value was qualified as an estimate.

In batch G25615, the method blank contained 1.7 µg/L of lead. Positive sample results of lead were qualified as undetected estimates if the value was less than five times the amount found within the method blank. The LCS was acceptable. The MS had a high recovery of 148.5% with an upper limit of 125%. The replicate resulted in a high RPD of 32.3, both values were non-detected and had no affect on the data. The following samples had recoveries that exceeded upper criteria limits: M-001B, M-002A, M-003A, M-004A, M-006A, M-014A, M-015A, and M-007Adup. The positive results found within the samples were qualified as estimated values.

The method blank, LCS, and replicate in batch G25628 were acceptable. The following two samples had low post dig recoveries: M-025A and M-022E. Both positive and non-detected data were qualified as estimates. One sample, M-021C, had a high post digestion spike recovery. The positive amount of 1.6 µg/L was qualified as an estimated value.

In batch G26085, the method blank contained 0.1 µg/L of lead. Positive sample results of lead were qualified as undetected estimates if the value was less than five times the amount found within the method blank. The LCS data were acceptable. One of the MSDs had a high recovery of 214% with an upper limit of 125%; which indicated a possible spiking error, since the MS for the sample was found within the acceptable range. Both samples M-024E and M-105B had low post digestion spike recoveries. The non-detected results were qualified as estimates.

The LCS of batch G26154 was acceptable; but, the method blank contained 0.6 µg/L of lead. Positive sample results of lead were qualified as undetected estimates if the value was less than five times the amount found within the method blank. The only MS, M-107Adup sample resulted in a high recovery of 134.5%. Additionally, two samples, M-107A and M-110A, had high recoveries of lead at 122% and 125%; positive values of these samples were qualified as estimates.

Batch G26176 method blank contained 3.4 µg/L of lead. Positive sample results of lead were qualified as undetected estimates if the value was less than five times the amount found within the method blank. The LCS and replicate samples were acceptable. The MS, M-105Adup had a low recovery of 61.5%. There were also several samples that had low post dig recoveries: M-025C, M-029A, M-029E, M-105A. As a result, both positive and non-detected data were qualified as estimates for the samples.

1.5.8 Mercury

In batch G25515, the method blanks, LCS, and replicate samples were acceptable. Both MS samples had low mercury recoveries. Both positive and non-detected results were qualified as estimates for M-001E and M-012B.

The method blank in batch G25694 contained 0.004 µg/L of mercury. Positive results were greater than five times the amount found in the method blank; therefore, sample data were not qualified. The MS recovery was found at a low 40%, as a result, both positive and non-detect results were qualified as estimates for M-021Edup.

One of the MS samples of batch G25835 had a recovery of 1% lower than recovery limits. Sample M-024A result was qualified as an estimate. Batches G25840 and G26040 had acceptable QC; therefore, data were not qualified.

1.5.9 Selenium

In batch G25534, the method blank, LCS, MS, and replicate samples were acceptable. The following samples had low post digestion spike recoveries; therefore, both positive and non-detected were qualified as estimates: M-001B, M-002A, M-004A, M-010B, M-012B, and M-014A.

The method blank, LCS, and replicate samples were acceptable in batch G25626. One of the two MS samples M-012Bdup resulted in a low recovery of 67.5% with a lower limit of 75%; the sample result was qualified as an estimate value. The following samples have low recoveries; therefore, both positive and non-detected values were qualified as estimates: M-001E, M-002E, M-005A, M-010A, M-011A, M-013C, M-014B, M-016A, M-017A, M-018A, M-018E, M-019A, M-019E, and M-012Bdup.

All the QC data were acceptable in batch G25688, with the exception of the MS sample recoveries. The MS sample M-021Edup had a low recovery of 62.5% with a lower limit 75%. The following samples were qualified as estimates for both positive and non-detected values: M-020A, M-020B, M-020E, M-021A, M-021E and its dup, M-022A, M-023E, M-025A, M-025E, M-026A, M-026E, M-022E and dup, and M-023A.

The method blank LCS and replicates were acceptable in batch G25913. The MS sample M-105Adup had a low recovery of 32%, but the remaining QC samples were acceptable. All but two of the field samples, M-025C and M-029A, have recoveries lower than acceptable limits; therefore, remaining sample data were qualified as estimates for both positive and non-detected data.

The method blank and LCS were acceptable in batch G25930. One MS and spike duplicate set was found below recovery limits at 41% and 45%; the second set of MS and spike duplicate had zero recoveries that indicated possible spiking errors or matrix interferences. The MS sample used, M-007Cdup had a low post digestion spike recovery. Both positive and non-detected results were qualified as estimates for the following samples: M-024A, M-024E, M-027A, M-027B, M-027E, M-028E, M-101A, M-103B, M-105B and M-007Cdup.

In batch G26252, the method blank, LCS, and replicate were acceptable. The one MS sample M-107Adup had a low recovery of 65.5% which indicated possible matrix interferences. All post digestion spike recoveries were acceptable; but due to the low MS recovery, sample data were qualified as estimates for M-107Adup.

1.5.10 Thallium

Batch G25586 had acceptable QC for both the method blank and LCS. The MS sample M-007A had a slightly low recovery of 74.8% with a lower limit of 75%; this did not significantly affect data quality. All samples, except M-014A had low post digestion spike recoveries; these samples had both positive and non-detect data qualified as an estimate.

The method blank, replicates, and LCS were acceptable. The MS samples, M-001A and M-012Bdup, demonstrated low recoveries of 46.6% and 42% with a lower limit of 75%. The remaining QC samples in batch G25662 were acceptable. All of the field samples had low post digestion spike recoveries; therefore, the matrix suppressed recovery values. All of the field samples were qualified as estimates for both positive and non-detected values. The three equipment rinsate samples had acceptable recoveries and were not qualified.

The method blank, replicates, and LCS were acceptable. The MS sample, M-021Edup, demonstrated a low recovery of 56% with a lower limit of 75%. The remaining QC samples in batch G25690 were acceptable. All of the field samples had low post digestion spike recoveries; therefore, the field samples were qualified as estimates for both positive and non-detected values. The equipment rinsate sample had an acceptable recovery and was not qualified.

In batch G26043, the method blank and LCS were acceptable. Both sets of the MS/MSD samples had low recoveries of 60%, 57%, and 47% with lower limit of 75%; both M-024A and M-007Cdup were qualified as estimates. Samples that had low post digestion spike recoveries were: M-009A, M-024A, M-024E, M-027A, M-027B, M-027C, M-027E, M-028A, M-101A, M-102A, M-103B, M-105B, M-108A, M-109A, and M-007Cdup. These samples had both the positive and non-detected values qualified as estimates. The remaining samples within the batch were acceptable and were not qualified.

All the QC samples were acceptable in batch G26044. All the field samples resulted in low post digestion spike recoveries except sample M-105Adup; these sample data were qualified as estimates for both positive and non-detected values.

The method blank, replicate, and LCS were acceptable in batch G26324. The MS sample, M-107Adup, had a low recovery of 67.8% with a lower limit of 75%. All of the field samples had low post digestion spike recoveries; therefore, these sample data were qualified as estimates for both positive and non-detected results.

1.5.11 Cyanide

The method blank of Batch G25656 contained 0.04 µg/L of cyanide. Samples with detectable values of cyanide less than five times the amount of the blank concentrations were qualified as undetected estimates. The LCS and replicate sample recoveries were acceptable. One of the MS samples, M-021E, contained a low recovery of 42.6% with a lower acceptability limit of 75%; the second MS had acceptable recoveries; therefore; sample M-021E was qualified as an estimated value.

All the QC recoveries were acceptable in batch G25567. The method blank contained 0.004 µg/L of cyanide. Samples with detectable values of cyanide less than five times the amount of the blank concentrations were qualified as undetected estimates.

In batch G25876, the method blank contained 1.2 µg/L of cyanide. Samples with positive values less than five times the amount of the method blank were qualified as undetected estimates. The LCS and MS recoveries were acceptable. The replicate produced a RPD of 26.1; both analytical runs were found undetected; therefore, <5.0 and <6.5 gave rise to a slightly elevated RPD. The slightly elevated RPD did not affect the validity of sample data.

Batches G25566, G25877, and G26037 had acceptable QC data results. In batch G26037, the laboratory indicated that the peak found in sample M-103B is suspect and should be considered an estimated value.

1.5.12 Acidity

The method blank of batch G25543 contained 0.9 mg/L CaCO3. Samples with detectable values of the laboratory contaminant less than five times the amount of the blank concentrations were qualified as undetected estimates. The LCS data were acceptable. The MS and spike duplicate had low recoveries of 82 and 83 percent; therefore, sample M-001A value was qualified as an estimate.

The QC samples in batch G25544 were acceptable, with one exception that the method blank contained 0.8 mg/L. Samples with detectable values of the laboratory contaminant less than five times the amount of the blank concentrations were qualified as undetected estimates.

Batch G25582 method blank contained 0.9 mg/L. Samples with detectable values of the laboratory contaminant less than five times the amount of the blank concentrations were qualified as undetected estimates. The LCS data were acceptable. One of the MSD recoveries was found at 80%, the corresponding MS was acceptable at 101%; the second set of MS/MSD sample recoveries were acceptable.

The method blank in batch G25911 contained 0.7 mg/L of CaCO3. Samples with detectable values of the laboratory contaminant less than five times the amount of the blank concentrations were qualified as undetected estimates. The LCS recoveries were acceptable. The one set of MS/MSD recoveries were slightly lower than the lower limit of acceptability. Data were not greatly impacted by the 87.9% and 91.7% recoveries in comparison to the 91.9% recovery limit.

In batch G25920, the LCS recoveries were acceptable, but the method blank contained 0.8 mg/L of CaCO3. Samples with detectable values of the laboratory contaminant less than five times the amount of the blank concentrations were qualified as undetected estimates. All three sets of MS/MSD recoveries were slightly lower than the lower limit of acceptability.

1.5.13 Alkalinity

All of the alkalinity QC batches contained method blank contamination at detected levels of 8.0 mg/L CaCO3 and less. Samples with detectable values of the laboratory contaminant less than five times the amount of the blank concentrations were qualified as undetected estimates. The remainder of the QC data were acceptable. In batch G25776, the MS and spike duplicate samples were not analyzed on CTO 107 samples, this did not greatly affect the validity of the data of this project.

1.5.14 Chemical Oxygen Demand

The method blanks, LCS, and replicates were acceptable in batches G25592, G25953, and G26219. Several of the MS/MSDs, M-012B and M-021E, of batch G25592 had slightly low recoveries compared to the lower limit of 90%, some recoveries were found as low as 87.7%; these samples were qualified as estimates for COD values. Similarly, the MSD in batch G25953 had a slightly low recovery of 83.6% with a lower limit of 90%; therefore, sample value of M-007C was qualified as an estimate.

Batches G25969 and G26139 had acceptable QC data; therefore, sample data were not qualified.

In batch G26219, the method blanks, LCS, and replicates were acceptable. The MS/MSD sample was taken from batch G26139 on 2/24/92 this one sample was analyzed on 2/27/92. The sample data were not qualified.

1.5.15 Common Anions

All of the anion batches contained method blank contamination. Positive results were greater than five times the amounts of the three analytes found in the method blank; therefore, sample data were not qualified. The

LCS and reference samples were acceptable. In batch G25708, the fourth sulfate spike was slightly below the 95% limit. The data within this QC batch were not qualified.

1.5.16 Hardness

All five hardness QC batches contained acceptable QC data; samples were not qualified.

1.5.17 Nitrate and Nitrite

Batch G26030 did not have a set of MS/MSD recoveries reported due to a column failure; the data were not qualified.

The MS and spike duplicate in batch G26050 both resulted in high recoveries due to possible matrix interferences; therefore, the sample data of M-007A may be positively biased and was qualified as estimated.

The QC data of batch G26177 were acceptable although two matrix spikes have slightly elevated recoveries of 105% and 106% with an upper limit of 104%. Sample data of samples M-021E and M-026E were qualified as estimates.

The method blank in batch G26257 contained 0.002 mg/L of nitrate and nitrite. Positive results were greater than five times the amount found in the method blank; therefore, sample data were not qualified. The remaining QC data were acceptable.

All the QC samples and recoveries were acceptable; therefore, samples within batch G26258 were not qualified.

1.5.18 Specific Conductivity

All nine specific conductivity QC batches contained method blank contamination of 2.03 umhos/cm or less. Samples had detectable values of conductivity greater than five times the amount of the blank concentrations; therefore data were not qualified. In batch G26189, the replicate sample was taken from a different project. Sample data were not qualified based on the sample location.

1.5.19 Total Dissolved Residue

Batches G25464, G25465, G25829, and G25831 had acceptable QC data; samples were not qualified. The four remaining batches contained dissolved residue within the method blanks at levels of 7 mg/L or less.

Positive results were greater than five times the amount found in the method blank; therefore, sample data were not qualified.

1.5.20 Total Organic Carbon

In batch G25540, the QC data were found acceptable; therefore, sample data were not qualified.

The largest amount of carbon detected in the method blank was found at 1.4 mg/L in batch G25743. Samples with detectable values of total carbon less than five times the amount of the blank concentrations were qualified as undetected estimates. The remaining QC data were acceptable.

The method blank and LCS of batch G26082 were acceptable. One set of the MS samples, M-110A, had recoveries of 117% and 125.5% with an upper limit of 113%. This indicated possible positive bias for this sample and were qualified as estimated. The two remaining spiked samples had acceptable recoveries and were not qualified.

Batch G26317 contained one method blank with 0.3 mg/L of total carbon content. Samples with detectable values of total carbon less than five times the amount of the blank concentrations were qualified as undetected estimates. The remaining QC data were acceptable.

One of the method blanks in batch G26318 contained a carbon content of 0.3 mg/L. Samples with detectable values of the laboratory contaminant less than five times the amount of the blank concentrations were qualified as undetected estimates. No MS and spike duplicates were reported in batch G26318; it was analyzed the same day as batch G26317 and both batches together were below 20 samples.

1.5.21 Gross Alpha and Beta

The method blank in batch G25533 contained 0.4 pci/L of gross beta. Positive results were greater than five times the amount found in the method blank; therefore, sample data were not qualified. The LCS and MS/MSD were acceptable.

In batch G25574, the method blank contained 0.3pCi/L gross alpha. Samples had detectable values of gross alpha greater than five times the amount of the blank concentrations; therefore, data were not qualified. The LCS and MS/MSD recoveries were acceptable.

Batch G25730 method blank contained 3.9pCi/L gross alpha. Samples had detectable values of gross alpha greater than five times the amount of the blank concentrations; therefore, data were not qualified. The LCS and MS/MSD recoveries were acceptable.

The method blank in batch G25857 contained 0.4 pCi/L of gross beta. Samples had detectable values of gross beta greater than five times the amount of the blank concentrations; therefore, data were not qualified. The LCS and MS/MSD were acceptable.

Batch G25858 method blank contained 0.3 pCi/L gross alpha. Samples had detectable values of gross alpha greater than five times the amount of the blank concentrations; therefore, data were not qualified. The LCS and MS/MSD recoveries were acceptable.

Batches G25944, G26046, G26096, and G26472 had acceptable QC results; therefore, samples were not qualified.

1.5.22 Radium 226

Batches G25480, G25573, and G26545 had low detectable radium 226 results of 0.4 pCi/L or less found within the method blank. Samples with detectable values of radium 226 less than five times the amount of the blank concentrations were qualified as undetected estimates. The LCS and MS/MSD were acceptable.

The LCS and MS/MSD recoveries in batch G25672 were acceptable, but the method blank contained 0.03 pCi/L. Samples with detectable values of radium 226 less than five times the amount of the blank concentrations were qualified as undetected estimates. The MS/MSD RPD was slightly elevated at 21.5 with an upper limit of 20; this did not greatly affect sample validity. Similar results occurred in batch G25992. The RPD was slightly higher (21.8) than acceptable criteria limits allow, but data were not qualified based on the elevated RPD.

The method blank and LCS of batch G26166 were acceptable. The MSD had a high recovery of 123.2% with an upper limit of 117%. The radiochemistry analyst stated that the high result was possibly due to radio-inhomogeneity, all other sample QC criteria has been met. Sample M-105A was qualified as an estimate. The QC data of batch G26458 were acceptable; sample data were not qualified.

1.5.23 Radium 228

In batches G25476 and G25984, the method blank and LCS were acceptable. The MS had a low recovery of 47.7% with a lower recovery limit of 84%; this gave rise to a high RPD of 70.8. Sample data of M-007A may have a negative bias; sample result was qualified as an estimated value.

The method blank in batch G25673 contained 0.7 pCi/L. Samples with detectable values of radium 228 less than five times the amount of the blank concentrations were qualified as undetected estimates. The LCS recovery was acceptable. The MSD had a low recovery of 71.4% with a lower limit of 84%. The filter in the MSD did not completely dissolve creating a low recovery and a high RPD value of 25.1. Due to possible negative bias; both positive and non-detected results were qualified as estimates. Similar results were found in batch G25983 and this data were qualified as estimated.

Batches G25826, G26374, and G26381 had acceptable QC samples; therefore, sample data were not qualified.

The method blank in batch G26593 contained 0.4 pCi/L of radium 228. Samples with detectable values of radium 228 less than five times the amount of the blank concentrations were qualified as undetected estimates. The LCS and MS/MSD recoveries were acceptable.

1.5.24 Asbestos

All the QC data were found to be acceptable; therefore, data were not qualified.

1.6 FOURTH QUARTER GROUNDWATER SAMPLES

Fourth quarter groundwater samples were collected March 24 through April 27, 1992. The data assessment will be included after review.