

**INSTALLATION RESTORATION
PROGRAM (IRP)
SITE INVESTIGATION REPORT FOR
IRP SITES NO.1 and NO.2**

**VOLUME II
APPENDICES A-F**

**162nd COMBAT COMMUNICATIONS GROUP
and 149th COMBAT COMMUNICATIONS SQUADRON
CALIFORNIA AIR NATIONAL GUARD
NORTH HIGHLANDS AIR NATIONAL GUARD STATION
SACRAMENTO, CALIFORNIA**

SEPTEMBER 1995



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**HQ ANG/CEVR
ANDREWS AFB, MARYLAND**

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SEPTEMBER 1995

Prepared For
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APPENDIX A

SOIL VAPOR SAMPLING RESULTS

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OPERATIONAL TECHNOLOGIES
Project # 1315-117
AIR NATIONAL GUARD – SACRAMENTO, CA

TEG PROJECT #940620C

EPA METHODS 8010, 8020 (BTEX) & TPH (mod 8015) ANALYSES OF SOIL VAPOR in ppmV

HOLE NUMBER:		BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
SAMPLE NUMBER:							
COLLECTION DATE:		6/20/94	6/21/94	6/22/94	6/23/94	6/24/94	6/27/94
COLLECTION TIME:		13:55	7:42	7:01	7:51	7:55	8:05
1,1 DICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
METHYLENE CHLORIDE	(ppmV)	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
CHLOROFORM	(ppmV)	nd	nd	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE	(ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROPROPANE	(ppmV)	nd	nd	nd	nd	nd	nd
BROMODICHLOROMETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
cis-1,3 DICHLOROPROPENE	(ppmV)	nd	nd	nd	nd	nd	nd
trans-1,3 DICHLOROPROPENE	(ppmV)	nd	nd	nd	nd	nd	nd
1,1,2 TRICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
BENZENE	(ppmV)	nd	nd	nd	nd	nd	nd
TOLUENE	(ppmV)	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	(ppmV)	nd	nd	nd	nd	nd	nd
TOTAL XYLENES	(ppmV)	nd	nd	nd	nd	nd	nd
TPH	(ppmV)	nd	nd	nd	nd	nd	nd

REPORTING LIMITS FOR ABOVE: 8010/8020 COMPOUNDS = 0.01 Parts per Million by Volume (ppmV); TPH = 1 ppmV
'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpbak

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OPERATIONAL TECHNOLOGIES
Project # 1315-117
AIR NATIONAL GUARD – SACRAMENTO, CA

TEG PROJECT #940620C

EPA METHODS 8010, 8020 (BTEX) & TPH (mod 8015) ANALYSES OF SOIL VAPOR in ppmV

HOLE NUMBER:		BLANK	BGBH-01	BGBH-01	BGBH-01	BGBH-01	BGBH-01
SAMPLE NUMBER:			SOV-11	SOV-21	SOV-31	SOV-41	SOV-51
COLLECTION DATE:		6/28/94	6/20/94	6/20/94	6/20/94	6/20/94	6/20/94
COLLECTION TIME:		8:50	14:31	15:07	15:40	16:18	16:58
1,1 DICHLOROETHENE	(ppmV)	nd	0.28	0.14	0.63	nd	0.09
METHYLENE CHLORIDE	(ppmV)	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
CHLOROFORM	(ppmV)	nd	nd	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE	(ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROPROPANE	(ppmV)	nd	nd	nd	nd	nd	nd
BROMODICHLOROMETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
cis-1,3 DICHLOROPROPENE	(ppmV)	nd	nd	nd	nd	nd	nd
trans-1,3 DICHLOROPROPENE	(ppmV)	nd	nd	nd	nd	nd	nd
1,1,2 TRICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
BENZENE	(ppmV)	nd	0.06	nd	0.20	nd	nd
TOLUENE	(ppmV)	nd	0.09	nd	0.05	nd	nd
ETHYLBENZENE	(ppmV)	nd	nd	nd	0.06	nd	nd
TOTAL XYLENES	(ppmV)	nd	0.10	0.13	0.03	nd	nd
TPH	(ppmV)	nd	nd	nd	nd	nd	2

REPORTING LIMITS FOR ABOVE: 8010/8020 COMPOUNDS = 0.01 Parts per Million by Volume (ppmV); TPH = 1 ppmV

'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpbak

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OPERATIONAL TECHNOLOGIES
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AIR NATIONAL GUARD – SACRAMENTO, CA

TEG PROJECT #940620C

EPA METHODS 8010, 8020 (BTEX) & TPH (mod 8015) ANALYSES OF SOIL VAPOR in ppmV

HOLE NUMBER:	BGBH-01	BH01-01	BH01-01	BH01-01	BH01-01	BH01-01
SAMPLE NUMBER:	SOV-61	SOV-11	SOV-21	SOV-31	SOV-41	SOV-51
COLLECTION DATE:	6/20/94	6/24/94	6/24/94	6/24/94	6/24/94	6/24/94
COLLECTION TIME:	17:32	9:02	9:30	10:00	10:33	11:08
1,1 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
METHYLENE CHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CHLOROFORM (ppmV)	nd	nd	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROPROPANE (ppmV)	nd	nd	nd	nd	nd	nd
BROMODICHLOROMETHANE (ppmV)	nd	nd	nd	nd	nd	nd
cis-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1,2 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
BENZENE (ppmV)	nd	0.06	nd	nd	nd	nd
TOLUENE (ppmV)	nd	0.10	nd	nd	nd	nd
ETHYLBENZENE (ppmV)	nd	nd	nd	nd	nd	nd
TOTAL XYLENES (ppmV)	nd	0.10	nd	nd	nd	nd
TPH (ppmV)	4	nd	nd	nd	3	3

REPORTING LIMITS FOR ABOVE: 8010/8020 COMPOUNDS = 0.01 Parts per Million by Volume (ppmV); TPH = 1 ppmV
'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpbak

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TEG PROJECT #940620C

EPA METHODS 8010, 8020 (BTEX) & TPH (mod 8015) ANALYSES OF SOIL VAPOR in ppmV

HOLE NUMBER:		BH01-02	BH01-02	BH01-02	BH01-02	BH01-02	BH01-02
SAMPLE NUMBER:		SOV-11	SOV-21	SOV-31	SOV-41	SOV-51	SOV-61
COLLECTION DATE:		6/28/94	6/28/94	6/28/94	6/28/94	6/28/94	6/28/94
COLLECTION TIME:		10:52	11:21	11:52	12:27	12:55	13:25
1,1 DICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
METHYLENE CHLORIDE	(ppmV)	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
CHLOROFORM	(ppmV)	nd	nd	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE	(ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROPROPANE	(ppmV)	nd	nd	nd	nd	nd	nd
BROMODICHLOROMETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
cis-1,3 DICHLOROPROPENE	(ppmV)	nd	nd	nd	nd	nd	nd
trans-1,3 DICHLOROPROPENE	(ppmV)	nd	nd	nd	nd	nd	nd
1,1,2 TRICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
BENZENE	(ppmV)	nd	nd	nd	nd	nd	nd
TOLUENE	(ppmV)	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	(ppmV)	nd	nd	nd	nd	nd	nd
TOTAL XYLENES	(ppmV)	nd	nd	nd	nd	nd	nd
TPH	(ppmV)	nd	nd	nd	nd	nd	nd

REPORTING LIMITS FOR ABOVE: 8010/8020 COMPOUNDS = 0.01 Parts per Million by Volume (ppmV); TPH = 1 ppmV
'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpbak

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EPA METHODS 8010, 8020 (BTEX) & TPH (mod 8015) ANALYSES OF SOIL VAPOR in ppmV

HOLE NUMBER:	BH01-03	BH01-03	BH01-03	BH01-03	BH01-03	BH01-03
SAMPLE NUMBER:	SOV-11	SOV-21	SOV-31	SOV-41	SOV-51	SOV-61
COLLECTION DATE:	6/27/94	6/27/94	6/27/94	6/27/94	6/27/94	6/27/94
COLLECTION TIME:	9:03	9:35	10:06	10:37	11:06	11:36
1,1 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
METHYLENE CHLORIDE (ppmV)	nd	0.11	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CHLOROFORM (ppmV)	nd	nd	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROPROPANE (ppmV)	nd	nd	nd	nd	nd	nd
BROMODICHLOROMETHANE (ppmV)	nd	nd	nd	nd	nd	nd
cis-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1,2 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
BENZENE (ppmV)	0.19	0.08	nd	nd	nd	nd
TOLUENE (ppmV)	0.13	0.12	0.03	nd	nd	nd
ETHYLBENZENE (ppmV)	0.06	0.16	nd	nd	nd	nd
TOTAL XYLENES (ppmV)	0.04	0.15	0.13	nd	nd	nd
TPH (ppmV)	nd	nd	nd	nd	nd	nd

REPORTING LIMITS FOR ABOVE: 8010/8020 COMPOUNDS = 0.01 Parts per Million by Volume (ppmV); TPH = 1 ppmV

'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpbak

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OPERATIONAL TECHNOLOGIES
Project # 1315-117
AIR NATIONAL GUARD – SACRAMENTO, CA

TEG PROJECT #940620C

EPA METHODS 8010, 8020 (BTEX) & TPH (mod 8015) ANALYSES OF SOIL VAPOR in ppmV

HOLE NUMBER:		BH01-03	BH01-04	BH01-04	BH01-04	BH01-04	BH01-04
SAMPLE NUMBER:		SOV-61	SOV-11	SOV-21	SOV-31	SOV-41	SOV-61
COLLECTION DATE:		DUP	6/24/94	6/24/94	6/24/94	6/24/94	6/24/94
COLLECTION TIME:		11:36	13:57	14:27	14:58	15:58	16:36
1,1 DICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
METHYLENE CHLORIDE	(ppmV)	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
CHLOROFORM	(ppmV)	nd	nd	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE	(ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROPROPANE	(ppmV)	nd	nd	nd	nd	nd	nd
BROMODICHLOROMETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
cis-1,3 DICHLOROPROPENE	(ppmV)	nd	nd	nd	nd	nd	nd
trans-1,3 DICHLOROPROPENE	(ppmV)	nd	nd	nd	nd	nd	nd
1,1,2 TRICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd
BENZENE	(ppmV)	nd	nd	nd	nd	nd	nd
TOLUENE	(ppmV)	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	(ppmV)	nd	nd	nd	nd	nd	nd
TOTAL XYLENES	(ppmV)	nd	nd	nd	nd	nd	nd
TPH	(ppmV)	nd	3	nd	nd	nd	nd

REPORTING LIMITS FOR ABOVE: 8010/8020 COMPOUNDS = 0.01 Parts per Million by Volume (ppmV); TPH = 1 ppmV
'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpak

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EPA METHODS 8010, 8020 (BTEX) & TPH (mod 8015) ANALYSES OF SOIL VAPOR in ppmV

HOLE NUMBER:	BH01-05	BH01-05	BH01-05	BH01-05	BH01-05	BH01-05
SAMPLE NUMBER:	SOV-11	SOV-21	SOV-31	SOV-46	SOV-51	SOV-61
COLLECTION DATE:	6/27/94	6/27/94	6/27/94	6/27/94	6/27/94	6/27/94
COLLECTION TIME:	14:25	14:54	15:26	16:06	16:36	17:19
1,1 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
METHYLENE CHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CHLOROFORM (ppmV)	nd	nd	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROPROPANE (ppmV)	nd	nd	nd	nd	nd	nd
BROMODICHLOROMETHANE (ppmV)	nd	nd	nd	nd	nd	nd
cis-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1,2 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
BENZENE (ppmV)	nd	nd	nd	nd	nd	nd
TOLUENE (ppmV)	nd	nd	nd	nd	nd	nd
ETHYLBENZENE (ppmV)	nd	nd	nd	nd	nd	nd
TOTAL XYLENES (ppmV)	nd	nd	nd	nd	nd	nd
TPH (ppmV)	nd	nd	nd	3	nd	nd

REPORTING LIMITS FOR ABOVE: 8010/8020 COMPOUNDS = 0.01 Parts per Million by Volume (ppmV); TPH = 1 ppmV
'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpbak

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OPERATIONAL TECHNOLOGIES
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TEG PROJECT #940620C

EPA METHODS 8010, 8020 (BTEX) & TPH (mod 8015) ANALYSES OF SOIL VAPOR in ppmV

HOLE NUMBER:	BH02-01	BH02-01	BH02-01	BH02-01	BH02-01	BH02-01
SAMPLE NUMBER:	SOV-11	SOV-21	SOV-31	SOV-41	SOV-51	SOV-61
COLLECTION DATE:	6/21/94	6/21/94	6/21/94	6/21/94	6/21/94	6/21/94
COLLECTION TIME:	8:42	9:17	9:45	10:15	10:45	11:13
1,1 DICHLOROETHENE (ppmV)	nd	nd	0.04	nd	0.02	nd
METHYLENE CHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CHLOROFORM (ppmV)	nd	nd	0.01	0.03	nd	0.02
1,1,1 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE (ppmV)	nd	nd	0.10	0.05	nd	0.02
1,2 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROPROPANE (ppmV)	nd	nd	nd	nd	nd	nd
BROMODICHLOROMETHANE (ppmV)	nd	nd	nd	nd	nd	nd
cis-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1,2 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
BENZENE (ppmV)	0.05	nd	nd	nd	nd	nd
TOLUENE (ppmV)	0.04	nd	nd	nd	nd	nd
ETHYLBENZENE (ppmV)	nd	nd	nd	nd	nd	nd
TOTAL XYLENES (ppmV)	0.07	nd	nd	nd	nd	nd
TPH (ppmV)	3	nd	nd	nd	nd	4

REPORTING LIMITS FOR ABOVE: 8010/8020 COMPOUNDS = 0.01 Parts per Million by Volume (ppmV); TPH = 1 ppmV
'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpak

Mark Jerpak 7-18-94

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OPERATIONAL TECHNOLOGIES
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TEG PROJECT #940620C

EPA METHODS 8010, 8020 (BTEX) & TPH (mod 8015) ANALYSES OF SOIL VAPOR in ppmV

HOLE NUMBER:	BH02-01	BH02-02	BH02-02	BH02-02	BH02-02	BH02-02
SAMPLE NUMBER:	SOV-61	SOV-11	SOV-21	SOV-31	SOV-41	SOV-51
COLLECTION DATE:	DUP	6/21/94	6/21/94	6/21/94	6/21/94	6/21/94
COLLECTION TIME:	11:13	13:16	13:47	14:19	14:47	15:15
1,1 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
METHYLENE CHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CHLOROFORM (ppmV)	0.02	nd	nd	nd	0.16	0.01
1,1,1 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE (ppmV)	0.02	nd	nd	nd	0.31	0.02
1,2 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROPROPANE (ppmV)	nd	nd	nd	nd	nd	nd
BROMODICHLOROMETHANE (ppmV)	nd	nd	nd	nd	nd	nd
cis-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1,2 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
BENZENE (ppmV)	nd	0.05	nd	nd	nd	nd
TOLUENE (ppmV)	nd	0.03	nd	nd	nd	nd
ETHYLBENZENE (ppmV)	nd	nd	nd	nd	nd	nd
TOTAL XYLENES (ppmV)	nd	nd	nd	nd	nd	nd
TPH (ppmV)	4	2	6	nd	nd	nd

REPORTING LIMITS FOR ABOVE: 8010/8020 COMPOUNDS = 0.01 Parts per Million by Volume (ppmV); TPH = 1 ppmV

'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpbak

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TEG PROJECT #940620C

EPA METHODS 8010, 8020 (BTEX) & TPH (mod 8015) ANALYSES OF SOIL VAPOR in ppmV

HOLE NUMBER:	BH02-02	BH02-03	BH02-03	BH02-03	BH02-03	BH02-03
SAMPLE NUMBER:	SOV-61	SOV-11	SOV-21	SOV-31	SOV-41	SOV-51
COLLECTION DATE:	6/21/94	6/23/94	6/23/94	6/23/94	6/23/94	6/23/94
COLLECTION TIME:	15:49	13:15	13:47	14:17	14:45	15:21
1,1 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
METHYLENE CHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CHLOROFORM (ppmV)	0.02	0.03	nd	0.03	0.39	nd
1,1,1 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE (ppmV)	nd	nd	nd	nd	0.31	nd
1,2 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROPROPANE (ppmV)	nd	nd	nd	nd	nd	nd
BROMODICHLOROMETHANE (ppmV)	nd	nd	nd	nd	nd	nd
cis-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1,2 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
BENZENE (ppmV)	nd	nd	nd	nd	nd	nd
TOLUENE (ppmV)	nd	0.30	nd	nd	nd	nd
ETHYLBENZENE (ppmV)	nd	0.08	nd	nd	nd	nd
TOTAL XYLENES (ppmV)	nd	0.21	nd	nd	nd	nd
TPH (ppmV)	7	nd	nd	nd	nd	nd

REPORTING LIMITS FOR ABOVE: 8010/8020 COMPOUNDS = 0.01 Parts per Million by Volume (ppmV); TPH = 1 ppmV

'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpak

Mark Jerpak 7-18-94

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TEG PROJECT #940620C

EPA METHODS 8010, 8020 (BTEX) & TPH (mod 8015) ANALYSES OF SOIL VAPOR in ppmV

HOLE NUMBER:	BH02-03	BH02-03	BH02-04	BH02-04	BH02-04	BH02-04
SAMPLE NUMBER:	SOV-61	SOV-61	SOV-11	SOV-21	SOV-31	SOV-41
COLLECTION DATE:	6/23/94	DUP	6/22/94	6/22/94	6/22/94	6/22/94
COLLECTION TIME:	15:55	15:55	8:50	9:22	9:52	10:17
1,1 DICHLOROETHENE (ppmV)	nd	nd	nd	0.01	nd	nd
METHYLENE CHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CHLOROFORM (ppmV)	0.01	0.01	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE (ppmV)	0.01	0.01	nd	nd	nd	nd
1,2 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROPROPANE (ppmV)	nd	nd	nd	nd	nd	nd
BROMODICHLOROMETHANE (ppmV)	nd	nd	nd	nd	nd	nd
cis-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1,2 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
BENZENE (ppmV)	nd	nd	nd	nd	nd	nd
TOLUENE (ppmV)	nd	nd	nd	nd	nd	nd
ETHYLBENZENE (ppmV)	nd	nd	nd	nd	nd	nd
TOTAL XYLENES (ppmV)	nd	nd	nd	nd	nd	nd
TPH (ppmV)	nd	nd	7	2	4	nd

REPORTING LIMITS FOR ABOVE: 8010/8020 COMPOUNDS = 0.01 Parts per Million by Volume (ppmV); TPH = 1 ppmV
'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpbak

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TEG PROJECT #940620C

EPA METHODS 8010, 8020 (BTEX) & TPH (mod 8015) ANALYSES OF SOIL VAPOR in ppmV

HOLE NUMBER:	BH02-04	BH02-04	BH02-04	BH02-04	BH02-04	BH02-04
SAMPLE NUMBER:	SOV-51	SOV-61	SOV-71	SOV-86	SOV-91	SOV-101
COLLECTION DATE:	6/22/94	6/22/94	6/22/94	6/22/94	6/22/94	6/22/94
COLLECTION TIME:	10:47	11:18	11:52	13:50	14:25	15:12
1,1 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
METHYLENE CHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CHLOROFORM (ppmV)	0.09	nd	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE (ppmV)	0.10	nd	nd	0.01	0.15	nd
1,2 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
1,2 DICHLOROPROPANE (ppmV)	nd	nd	nd	nd	nd	nd
BROMODICHLOROMETHANE (ppmV)	0.13	nd	nd	nd	nd	nd
cis-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
trans-1,3 DICHLOROPROPENE (ppmV)	nd	nd	nd	nd	nd	nd
1,1,2 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd
BENZENE (ppmV)	nd	nd	nd	nd	nd	nd
TOLUENE (ppmV)	nd	nd	nd	nd	nd	nd
ETHYLBENZENE (ppmV)	nd	nd	nd	nd	nd	nd
TOTAL XYLENES (ppmV)	nd	nd	nd	nd	nd	nd
TPH (ppmV)	nd	nd	5	5	6	nd

REPORTING LIMITS FOR ABOVE: 8010/8020 COMPOUNDS = 0.01 Parts per Million by Volume (ppmV); TPH = 1 ppmV

'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpak

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CALIBRATION DATA - AREA COUNTS

TEG PROJECT #940620C

	1,1 DCE	Me Cl2	t-1,2 DCE	1,1 DCA	Cl-Form	1,1,1 TCA	C Cl4
Average RF - Midpoint	230.0	313.6	294.4	277.1	345.0	384.6	426.8

Continuing Calibration

6/20/94 AM	249.6 108.5%	332.2 105.9%	326.4 110.9%	311.1 112.3%	374.7 108.6%	412.6 107.3%	426.4 99.9%
6/20/94 PM	239.5 104.1%	349.0 111.3%	316.8 107.6%	312.8 112.9%	369.4 107.1%	382.5 99.5%	430.2 100.8%
6/21/94 AM	262.5 114.1%	300.1 95.7%	266.1 90.4%	292.7 105.6%	344.3 99.8%	362.2 94.2%	458.2 107.4%
6/21/94 PM	229.3 99.7%	351.7 112.1%	321.9 109.3%	310.0 111.9%	331.6 96.1%	383.2 99.6%	433.8 101.6%
6/22/94 AM	222.0 96.5%	341.7 109.0%	303.2 103.0%	307.3 110.9%	341.7 99.0%	343.8 89.4%	433.2 101.5%
6/22/94 PM	247.9 107.8%	348.7 111.2%	278.1 94.5%	298.6 107.8%	355.5 103.0%	374.1 97.3%	458.7 107.5%
6/23/94 AM	261.4 113.7%	255.4 81.4%	259.2 88.0%	255.8 92.3%	335.8 97.3%	368.0 95.7%	474.4 111.1%
6/23/94 PM	201.4 87.6%	320.5 102.2%	334.1 113.5%	270.3 97.5%	372.7 108.0%	379.2 98.6%	434.9 101.9%
6/24/94 AM	246.1 107.0%	297.3 94.8%	267.0 90.7%	269.3 97.2%	367.2 106.4%	350.1 91.0%	378.2 88.6%
6/24/94 PM	241.6 105.0%	322.5 102.8%	291.0 98.8%	308.4 111.3%	377.8 109.5%	366.8 95.4%	370.0 86.7%
6/27/94 AM	227.4 98.9%	342.0 109.1%	320.1 108.7%	295.9 106.8%	366.0 106.1%	344.6 89.6%	444.7 104.2%
6/27/94 PM	244.0 106.1%	328.0 104.6%	321.6 109.2%	299.6 108.1%	351.4 101.9%	343.9 89.4%	466.5 109.3%
6/28/94 AM	238.4 103.7%	339.1 108.1%	317.7 107.9%	297.1 107.2%	319.7 92.7%	347.4 90.3%	395.1 92.6%
6/28/94 PM	237.0 103.0%	324.2 103.4%	271.3 92.2%	300.5 108.4%	384.3 111.4%	352.1 91.6%	379.9 89.0%

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

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CALIBRATION DATA - AREA COUNTS

TEG PROJECT #940620C

	1,2 DCA	TCE	1,2 DCP	Br Cl Meth	c-1,3 DCP	t-1,3 DCP	1,1,2 TCA
Average RF - Midpoint	362.8	358.1	299.0	296.7	292.0	258.8	328.4

Continuing Calibration

6/20/94 AM	402.4 110.9%	310.2 86.6%	333.0 111.4%	328.7 110.8%	328.2 112.4%	248.1 95.9%	357.2 108.8%
6/20/94 PM	399.6 110.2%	383.7 107.1%	331.0 110.7%	323.0 108.9%	316.1 108.2%	280.8 108.5%	340.7 103.8%
6/21/94 AM	401.2 110.6%	370.5 103.5%	266.6 89.2%	268.8 90.6%	289.1 99.0%	247.9 95.8%	328.0 99.9%
6/21/94 PM	369.2 101.8%	367.8 102.7%	308.4 103.2%	302.0 101.8%	312.5 107.0%	290.1 112.1%	335.3 102.1%
6/22/94 AM	378.7 104.4%	406.4 113.5%	323.5 108.2%	297.3 100.2%	290.3 99.4%	269.6 104.2%	366.4 111.6%
6/22/94 PM	340.9 94.0%	403.6 112.7%	302.5 101.2%	285.5 96.2%	276.5 94.7%	260.6 100.7%	369.8 112.6%
6/23/94 AM	340.3 93.8%	340.0 94.9%	245.1 82.0%	283.8 95.6%	283.2 97.0%	219.4 84.8%	292.9 89.2%
6/23/94 PM	389.1 107.3%	397.5 111.0%	287.4 96.1%	316.3 106.6%	325.5 111.5%	275.5 106.5%	356.8 108.7%
6/24/94 AM	311.6 85.9%	389.9 108.9%	261.7 87.5%	286.2 96.5%	285.5 97.8%	263.0 101.6%	347.4 105.8%
6/24/94 PM	329.2 90.8%	356.4 99.5%	292.1 97.7%	296.5 99.9%	301.4 103.2%	272.5 105.3%	332.4 101.2%
6/27/94 AM	328.3 90.5%	371.4 103.7%	328.4 109.8%	305.4 102.9%	314.2 107.6%	248.9 96.2%	357.0 108.7%
6/27/94 PM	388.0 107.0%	374.5 104.6%	321.2 107.4%	317.3 106.9%	296.8 101.6%	289.0 111.7%	350.6 106.8%
6/28/94 AM	384.3 105.9%	349.0 97.5%	335.3 112.1%	313.2 105.6%	293.8 100.6%	233.1 90.1%	304.8 92.8%
6/28/94 PM	322.5 88.9%	369.9 103.3%	293.0 98.0%	304.0 102.5%	290.4 99.4%	286.3 110.6%	320.2 97.5%

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

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CALIBRATION DATA - AREA COUNTS

TEG PROJECT #940620C

	PCE	Benzene	Toluene	Ethylbenz	Xylenes	TPH
Average RF - Midpoint	416.9	80.6	80.9	63.6	253.5	2112.4

Continuing Calibration

6/20/94 AM	403.6 96.8%	83.9 104.1%	76.7 94.8%	62.0 97.5%	249.3 98.3%	2281.5 108.0%
6/20/94 PM	424.0 101.7%	90.9 112.8%	89.3 110.4%	68.5 107.7%	249.8 98.5%	2113.0 100.0%
6/21/94 AM	360.6 86.5%	89.6 111.2%	88.2 109.0%	61.9 97.3%	269.9 106.5%	1774.6 84.0%
6/21/94 PM	478.0 114.7%	74.7 92.7%	78.8 97.4%	67.6 106.3%	257.9 101.7%	2035.7 96.4%
6/22/94 AM	448.8 107.7%	74.9 92.9%	82.4 101.9%	64.3 101.1%	269.3 106.2%	2157.6 102.1%
6/22/94 PM	435.8 104.5%	87.0 107.9%	81.8 101.1%	63.0 99.1%	251.2 99.1%	2100.6 99.4%
6/23/94 AM	440.9 105.8%	74.7 92.7%	74.4 92.0%	67.3 105.8%	242.1 95.5%	2270.6 107.5%
6/23/94 PM	452.9 108.6%	75.1 93.2%	74.3 91.8%	55.6 87.4%	229.3 90.5%	2223.7 105.3%
6/24/94 AM	372.0 89.2%	75.6 93.8%	74.1 91.6%	65.0 102.2%	268.6 106.0%	2249.0 106.5%
6/24/94 PM	392.5 94.1%	85.4 106.0%	88.0 108.8%	69.2 108.8%	270.6 106.7%	2240.8 106.1%
6/27/94 AM	432.2 103.7%	74.5 92.4%	76.3 94.3%	58.1 91.4%	242.6 95.7%	1961.7 92.9%
6/27/94 PM	435.5 104.5%	83.1 103.1%	86.1 106.4%	60.2 94.7%	251.5 99.2%	2004.1 94.9%
6/28/94 AM	449.6 107.8%	78.2 97.0%	81.0 100.1%	64.7 101.7%	243.7 96.1%	2032.6 96.2%
6/28/94 PM	439.1 105.3%	75.8 94.0%	73.6 91.0%	67.0 105.3%	239.5 94.5%	2256.7 106.8%

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB (#1671)

ANALYSES PERFORMED BY: Mr. Leif Jonsson

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APPENDIX B

BORING LOGS

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SECTION B.1 INTRODUCTION

Boring log diagrams have been compiled for each borehole drilled during this study. Diagrams are presented in numerical order. The borehole identification is keyed to the borehole (BH) and site number (i.e., BH01-02). The diagrams combine in one page both a verbal and graphical illustration of the lithology encountered during drilling, water level data encountered during drilling, and surveyed elevation of the ground surface at the borehole location.

The sample description includes the color, texture, mineralogy, moisture and consistency for each sample collected. The proportions of sand, gravel, and fines are visually estimated and described using the following semi-quantitative adjectives:

<u>Adjective</u>	<u>Estimated Percent of Total Sample</u>
Trace	0 - 5
Few	5 - 10
Little	15 - 25
Some	30 - 45
Mostly	50 - 100

Proportional adjectives precede the lithology, such as little gravel (15 - 25% gravel) and trace of silt (0 - 5% silt).

Lithologic symbols are derived and generalized from the Unified Soil Classification System shown in Figure B.1.

In the boring logs that follow, the column headings have the following meanings:

Depth:	Depth in feet below land surface.
Blows/6 in.:	The number of blows required to drive a split-spoon sampler each of the 6-inch intervals.
Field Screening:	The reading of photoionization compounds detected in soil sample by a photoionization detector.
Sampled:	The interval of sample cored below land surface.

Percent Recovery: The percentage of sample recovered in the split-spoon sampler per sampling run.

NORTH HIGHLANDS
SACRAMENTO, CALIFORNIA

O P T E C H
OPERATIONAL TECHNOLOGIES
CORPORATION

LOG OF BORING BGBH-01

Project No.: 1315-117	Sampling Method: California-Style Sampler
Logged By: Bill Hughes	Depth Drilled: 60.0 ft. BLS
Drilling Co.: Tonto Environmental Drilling	Depth To Water: -
Driller: Randy Gustafson	Date Measured: -
Date Drilled: 06/20/94	Surface Elevation: 56.42 ft.
Drilling Method: Hollow Stem Auger	

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
5	14 23	100	X		Sandy silt, yellowish-brown, dry.	0	5.4	-	-
10	13 21	100	X		Sandy silt, yellowish-brown, moderately micaceous, dry.	0	-	-	-
15	12 28	100	X		Silt, yellowish-brown, dry.	0	-	-	-
20	17 24	100	X		Sandy silt, yellowish-brown, dry.	-	-	-	-
25	11 12 15	100	X		Sandy silt, yellowish-brown, dry.	-	-	-	-
30	16 41 38	100	X		Clayey silt, yellowish-brown, dry.	-	-	-	-

**NORTH HIGHLANDS
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**O P T E C H
OPERATIONAL TECHNOLOGIES
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LOG OF BORING BGBH-01

Project No.:	1315-117	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	60.0 ft. BLS
Drilling Co.:	Tonto Environmental Drilling	Depth To Water:	-
Driller:	Randy Gustafson	Date Measured:	-
Date Drilled:	06/20/94	Surface Elevation:	56.42 ft.
Drilling Method:	Hollow Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
12 15		100	X		Silt, yellowish-brown, becoming sand in lower six inches.	0	-	-	-
40 15 16 19		100	X		Arkosic granitic sand, light brown to reddish-gray, medium-grained, dry.	-	-	-	-
45 11 21		100	X		Silt, yellowish-brown, dry.	-	-	-	-
50 13 22 36		100	X		Sandy silt, yellowish-brown, dry.	-	-	-	-
55 15 22		100	X		Silt, yellowish-brown, fine-grained, dry.	-	-	-	-
23 50 15		100	X		Sandy silt, yellowish-brown, with hard nodules, dry.	-	-	-	-
21 60 26		100	X		Sandy silt, reddish-gray, with hard nodules, dry.	-	-	-	-
					Boring Terminated at 60.0 Ft.				
65									

**NORTH HIGHLANDS
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LOG OF BORING BH01-01

Project No.:	1315-117	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	60.0 ft. BLS
Drilling Co.:	Tonto Environmental Drilling	Depth To Water:	-
Driller:	Randy Gustafson	Date Measured:	-
Date Drilled:	06/24/94	Surface Elevation:	56.84 ft.
Drilling Method:	Hollow Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
5	14	67	X		Silt, reddish-gray, dry.	0.6	-	-	-
	26								
10	14	100			Silt, quartz-rich, yellowish-brown, dry.	0	-	-	-
	16								
	16								
15	14	100	X		Silt, yellowish-brown, dry.	0	-	-	-
	22								
	26								
20	27	100	X		Silt, light yellowish-gray, with reddish-yellow pods, moist.	4.7	-	-	-
	32								
	38								
25	10	100	X		Sand, fine-grained, micaceous, yellowish-brown, moist.	0	-	-	-
	12								
30	7	100	X		Sandy silt, reddish-yellow to dark brown, moist.	0	-	-	-
	8								
	9								

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LOG OF BORING BH01-01

Project No.: 1315-117	Sampling Method: California-Style Sampler
Logged By: Bill Hughes	Depth Drilled: 60.0 ft. BLS
Drilling Co.: Tonto Environmental Drilling	Depth To Water: -
Driller: Randy Gustafson	Date Measured: -
Date Drilled: 06/24/94	Surface Elevation: 56.84 ft.
Drilling Method: Hollow Stem Auger	

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
7 22		100	X		Silt to sandy silt, yellowish-brown, moist.	0	-	-	-
40									
8 14 26		100	X		Silt, yellowish-brown, moist.	0	-	-	-
45									
8 10 12		100	X		Sandy silt, yellowish-brown, moist.	0	-	-	-
50									
8 16 20		100	X		Sand, fine-grained, yellowish-brown, moist.	0	-	-	-
55									
7 7 14		100	X		Silty sand to sandy silt, yellowish-brown, moist.	0	-	-	-
60									
		100			Sandy silt to silty sand, yellowish-brown to brown, moist.	0	-	-	-
Boring Terminated at 60.0 Ft.									
65									

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LOG OF BORING BH01-02

Project No.: 1315-117	Sampling Method: California-Style Sampler
Logged By: Bill Hughes	Depth Drilled: 60.0 ft. BLS
Drilling Co.: Tonto Environmental Drilling	Depth To Water: -
Driller: Randy Gustafson	Date Measured: -
Date Drilled: 06/28/94	Surface Elevation: 55.87 ft.
Drilling Method: Hollow Stem Auger	

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
5	12 16 24	100	X		Silty sand, brown, dry.	0	-	-	-
10	6 14 17	100			Sand, medium to coarse-grained, brown, dry.	0	-	-	-
15	13 26	100	X		Sandy silt, brown, dry.	0	-	-	-
20	8 14 19	100	X		Silt, yellowish-brown, dry.	0	-	-	-
25	12 16	100	X		Silt, light reddish-gray to olive brown, dry.	0	-	-	-
30	13 23 25	100	X		Silt, reddish-gray, moist.	2.2	-	-	-

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LOG OF BORING BH01-02

Project No.:	1315-117	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	60.0 ft. BLS
Drilling Co.:	Tonto Environmental Drilling	Depth To Water:	-
Driller:	Randy Gustafson	Date Measured:	-
Date Drilled:	06/28/94	Surface Elevation:	55.87 ft.
Drilling Method:	Hollow Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
10 13		100	X		Sandy silt, yellowish-brown, dry.	1.3	-	-	-
40									
9 15 21		100	X		Sandy silt, yellowish-brown to reddish-yellow, dry.	1.3	-	-	-
45									
15 18		67	X		Silty sand, yellowish-brown, dry.	9.6	-	-	-
50									
32 56 47		100	X		Sandy silt, yellowish-brown, dry.	1.5	-	-	-
55									
12 14		100	X		Sandy silt, yellowish-brown to light brown, dry.	5.7	-	-	-
17 23 31		100			Silt, light reddish-gray, dry.	1.7	-	-	-
60					Boring Terminated at 60.0 Ft.				
65									

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LOG OF BORING BH01-03

Project No.: 1315-117	Sampling Method: California-Style Sampler
Logged By: Bill Hughes	Depth Drilled: 60.0 ft. BLS
Drilling Co.: Tonto Environmental Drilling	Depth To Water: -
Driller: Randy Gustafson	Date Measured: -
Date Drilled: 06/27/94	Surface Elevation: 55.96 ft.
Drilling Method: Hollow Stem Auger	

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
					Silt, light brown to brown, dry.				
5	16 12	100	X		Sand, fine to medium-grained, yellowish-brown, dry.	13.9	-	-	-
10	18 24 28	100			Sand, fine to medium-grained, reddish-brown to light brown, dry.	11.9	-	-	-
15	25 38	100	X		Silt, yellowish-brown, dry.	0.5	-	-	-
20	16 19 23	100			Silt, yellowish-brown, dry.	0	-	-	-
25	15 25	100	X		Sand, fine to medium-grained, yellowish-brown to reddish-gray, dry.	0	-	-	-
30	10 12 15	100	X		Sloughed material.	0	-	-	-

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LOG OF BORING BH01-03

Project No.: 1315-117
Logged By: Bill Hughes
Drilling Co.: Tonto Environmental Drilling
Driller: Randy Gustafson
Date Drilled: 06/27/94
Drilling Method: Hollow Stem Auger

Sampling Method: California-Style Sampler
Depth Drilled: 60.0 ft. BLS
Depth To Water: -
Date Measured: -
Surface Elevation: 55.96 ft.

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
12 15		100	X		Silt, yellowish-brown, dry.	1.1	-	-	-
40									
8 16 19		100	X		Silt, yellowish-brown to brown, dry.	0.6	-	-	-
45									
14 16			X		Silt, yellowish-brown to brown, dry.	0	-	-	-
50									
15 19 27		100	X		Sandy silt, yellowish-brown to brown, dry.	0	-	-	-
55									
9 14		100	X		Silty sand, yellowish-brown to brown, dry.	0	-	-	-
17 21		100			Silty sand, light reddish-brown to brown, dry.	0	-	-	-
12 14 15		100			Silt, light brown to brown, dry.	0.5	-	-	-
60					Boring Terminated at 60.0 Ft.				
65									

NORTH HIGHLANDS
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LOG OF BORING BH01-04

Project No.:	1315-117	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	60.0 ft. BLS
Drilling Co.:	Tonto Environmental Drilling	Depth To Water:	-
Driller:	Randy Gustafson	Date Measured:	-
Date Drilled:	06/24/94	Surface Elevation:	56.14 ft.
Drilling Method:	Hollow Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
5	21 25	100	X		Sandy silt, brown to reddish-gray, dry.	0.6	-	-	-
10	9 11 11	100			Sand, yellowish-brown to brown, loose, dry.	0.4	-	-	-
15	12 18	67	X		Sandy silt, brown, dry.	0.1	-	-	-
20	12 15 27	100	X		Sand, fine-grained, yellowish-brown, dry.	0.1	-	-	-
					Sandy silt, yellowish-brown, dry.				
25	12 15	100	X		Sand, yellowish-brown to brown, dry.	3.9	-	-	-
30	19 27 39	100	X		Silt, yellowish-brown with brown to red nodules, wet.	0	-	-	-

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LOG OF BORING BH01-04

Project No.: 1315-117	Sampling Method: California-Style Sampler
Logged By: Bill Hughes	Depth Drilled: 60.0 ft. BLS
Drilling Co.: Tonto Environmental Drilling	Depth To Water: -
Driller: Randy Gustafson	Date Measured: -
Date Drilled: 06/24/94	Surface Elevation: 56.14 ft.
Drilling Method: Hollow Stem Auger	

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
15 18		100	X		Silt, yellowish-brown to brown, dry.	0	-	-	-
40	17 19 26	100	X		Sandy silt, yellowish-brown to brown, dry.	1.4	-	-	-
45	10 14	100	X		Sandy silt, brown, dry.	1.5	-	-	-
50	10 15 25	100	X		Sand, fine-grained, yellowish-brown, dry.	-	-	-	-
55	8 13	100	X		Sandy silt, yellowish-brown, moist.	0	-	-	-
60	14 14 20	100			Sand, yellowish-brown to brown, moist.	-	-	-	-
					Boring Terminated at 60.0 Ft.				

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LOG OF BORING BH01-05

Project No.: 1315-117	Sampling Method: California-Style Sampler
Logged By: Bill Hughes	Depth Drilled: 60.0 ft. BLS
Drilling Co.: Tonto Environmental Drilling	Depth To Water: -
Driller: Randy Gustafson	Date Measured: -
Date Drilled: 06/27/94	Surface Elevation: 54.98 ft.
Drilling Method: Hollow Stem Auger	

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
5	6 8	100	X		Sandy silt, reddish-brown to brown, dry.	6.0	-	-	-
10		100	X		Sandy silt, brown to reddish-yellow, dry.	8.7	-	-	-
15	13 15 19	100	X		Silt, brown, dry to moist.	1.3	-	-	-
20	5 9 15	100	X		Sandy silt, brown to yellowish-brown, dry.	1.1	-	-	-
25	8 12	100	X		Silt and sandy silt, yellowish-brown, dry.	1.9	-	-	-
30	15 24 32	100	X		Sandy silt, yellowish-brown to brown, dry.	-	-	-	-

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LOG OF BORING BH01-05

Project No.: 1315-117	Sampling Method: California-Style Sampler
Logged By: Bill Hughes	Depth Drilled: 60.0 ft. BLS
Drilling Co.: Tonto Environmental Drilling	Depth To Water: -
Driller: Randy Gustafson	Date Measured: -
Date Drilled: 06/27/94	Surface Elevation: 54.98 ft.
Drilling Method: Hollow Stem Auger	

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
11 11		100	X		Sand, fine-grained, brown, loose, dry.	1.9	-	-	-
40 21 24 29		100			Sand to silty sand, brown to reddish-gray, dry.	10.2	-	-	-
45 15 15		100	X		Sandy silt, yellowish-brown, dry.	1.4	-	-	-
50 7 10 12		100	X		Silt, brown to yellowish-brown, hard, dry.	0.6	-	-	-
55 7 15		100	X		Silt, light reddish-gray, dry.	-	-	-	-
60 17 21 23		100			Silt, reddish-gray, dry.	-	-	-	-
65					Boring Terminated at 60.0 Ft.				

NORTH HIGHLANDS
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O P T E C H
OPERATIONAL TECHNOLOGIES
C O R P O R A T I O N

LOG OF BORING BH02-01

Project No.: 1315-117	Sampling Method: California-Style Sampler
Logged By: Bill Hughes	Depth Drilled: 63.5 ft. BLS
Drilling Co.: Tonto Environmental Drilling	Depth To Water: -
Driller: Randy Gustafson	Date Measured: -
Date Drilled: 06/21/94	Surface Elevation: 56.69 ft.
Drilling Method: Hollow Stem Auger	

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
5	6 9	100	X		Sandy silt, brown to light brown, dry.	-	-	-	-
10	11 22 22	100	X		Silt, reddish-gray, with brown nodules, dry.	-	-	-	-
15	12 21	67	X		Silt, brown to light reddish-gray, dry.	3.7	-	-	-
20	9 15 20	100	X		Silt, yellowish-brown to reddish-gray, moist in bottom.	9.9	-	-	-
25	11 17	67	X		Silt, light reddish-brown with reddish-yellow seams, dry.	0.5	-	-	-
30	19 33 38	100			Silt, yellowish-brown to reddish-gray, dry.	4.5	-	-	-

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LOG OF BORING BH02-01

Project No.:	1315-117	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	63.5 ft. BLS
Drilling Co.:	Tonto Environmental Drilling	Depth To Water:	-
Driller:	Randy Gustafson	Date Measured:	-
Date Drilled:	06/21/94	Surface Elevation:	56.69 ft.
Drilling Method:	Hollow Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
		67	X		Silt, reddish-gray becoming sand, medium-grained in lower 6 inches.	-	-	-	-
40	13 15 19	100	X		Sand, medium-grained to silty, dry.	1.0	-	-	-
45	12 15	67	X		Sand, medium-grained to silty, dry.	0.8	-	-	-
50	7 27 29	100	X		Silt, yellowish-brown, dry.	1.4	-	-	-
55	14 17	67	X		Silt, yellowish-brown, dry.	5.0	-	-	-
60	16 35 27 32 60	100			Sand, fine-grained, olive brown, dry.	1.9	-	-	-
		100			Silty sand, dry.	-	-	-	-
65					Boring Terminated at 63.5 Ft.				

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LOG OF BORING BH02-02

Project No.: 1315-117	Sampling Method: California-Style Sampler
Logged By: Bill Hughes	Depth Drilled: 60.0 ft. BLS
Drilling Co.: Tonto Environmental Drilling	Depth To Water: -
Driller: Randy Gustafson	Date Measured: -
Date Drilled: 06/21/94	Surface Elevation: 56.70 ft.
Drilling Method: Hollow Stem Auger	

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
5	8 11	67	X		Silt, red and sandy silt, yellowish-brown, dry.	0.3	-	-	-
10	12 19 25	100	X		Silt, light brown with few pods, reddish-yellow, dry.	0.1	-	-	-
15	13 17	67	X		Silt, yellowish-brown with little pods, reddish-yellow, dry.	-	-	-	-
20	8 12 14	100	X		Silt, dry.	4.7	-	-	-
25	13 17	67	X		Silt, light reddish-gray with some seams of fine-grained sand, reddish-yellow, dry.	-	-	-	-
30	12 16	100	X		Sand, fine-grained, yellowish brown to silt, grayish-brown, dry.	1.5	-	-	-

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LOG OF BORING BH02-02

Project No.:	1315-117	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	60.0 ft. BLS
Drilling Co.:	Tonto Environmental Drilling	Depth To Water:	-
Driller:	Randy Gustafson	Date Measured:	-
Date Drilled:	06/21/94	Surface Elevation:	56.70 ft.
Drilling Method:	Hollow Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
13	17	67	X		Sandy silt, yellowish-brown to reddish-yellow grading to sand, medium-grained, yellowish-brown at bottom.	0	-	-	-
40	12	100				0.8	-	-	-
45	14	67	X		Sand, medium-grained, micaceous, grayish-brown to olive brown, dry.	-	-	-	-
50	15	100	X			1.5	-	-	-
55	16	67	X		Silt, yellowish-brown with trace of pods, reddish-yellow, dry.	2.4	-	-	-
60	13	100				-	-	-	-
65	25				Boring Terminated at 60.0 Ft.				

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LOG OF BORING BH02-03

Project No.:	1315-117	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	60.0 ft. BLS
Drilling Co.:	Tonto Environmental Drilling	Depth To Water:	-
Driller:	Randy Gustafson	Date Measured:	-
Date Drilled:	06/23/94	Surface Elevation:	57.46 ft.
Drilling Method:	Hollow Stem Auger		

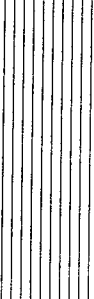
Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
5	22 36	100	X		Silt, yellowish-brown to grayish-brown, dry.	0	-	-	-
10	17 23 28	100	X		Silt to sandy silt, light gray, dry.	0	-	-	-
15	14 27	100	X		Silt, yellowish-brown to light reddish-gray, dry.	0	-	-	-
20	10 11 14	100	X		Silt, yellowish-brown with pods, reddish-yellow, dry.	0	-	-	-
25	8 10	100	X		Silt, yellowish-brown to olive brown, dry.	0	-	-	-
30	20 31 34	100	X		Silt, yellowish-brown, dry.	0	-	-	-

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LOG OF BORING BH02-03

Project No.: 1315-117	Sampling Method: California-Style Sampler
Logged By: Bill Hughes	Depth Drilled: 60.0 ft. BLS
Drilling Co.: Tonto Environmental Drilling	Depth To Water: -
Driller: Randy Gustafson	Date Measured: -
Date Drilled: 06/23/94	Surface Elevation: 57.46 ft.
Drilling Method: Hollow Stem Auger	

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
7 13		100	X		Silt, olive brown to yellowish-brown.	0	-	-	-
40 17 20 22		100			Sand, medium-grained, light reddish-gray, dry.	0	-	-	-
45 12 16		67	X		Sand, dark brown to yellowish-brown, dry.	0	-	-	-
50 10 17 21		100	X		Silt, micaceous, yellowish-brown, dry.	0	-	-	-
55 12 13		100	X		Silt, yellowish-brown to light brown, dry.	0.3	-	-	-
27 56		100			Silt, olive brown, dry.	0	-	-	-
60					Boring Terminated at 60.0 Ft.				
65									

**NORTH HIGHLANDS
SACRAMENTO, CALIFORNIA**

**O P T E C H
OPERATIONAL TECHNOLOGIES
CORPORATION**

LOG OF BORING BH02-04

Project No.:	1315-117	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	110.5 ft. BLS
Drilling Co.:	Tonto Environmental Drilling	Depth To Water:	109.0 ft.
Driller:	Randy Gustafson	Date Measured:	-
Date Drilled:	06/22/94	Surface Elevation:	55.88 ft.
Drilling Method:	Hollow Stem Auger		

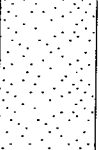
Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
5	14 18	67	X		Sand, medium-grained, yellowish-brown, dry.	0	-	-	-
10	10 32 35	67			Silt, micaceous, yellowish-brown, dry.	0	-	-	-
15	22 29	67	X		Silt, yellowish-brown, dry.	0	-	-	-
20	11 22 25	100	X		Silt, light reddish-gray to reddish-yellow, dry.	0	-	-	-
25		67	X		Silt, reddish-yellow to yellowish-brown, dry.	-	-	-	-
30	37 62	100	X		Sandy silt, micaceous, yellowish-brown to light reddish-gray, with pods of sand, medium-grained, dry.	0	-	-	-
35	13 17	67	X		Sandy silt, yellowish-brown, dry.	0	-	-	-

**NORTH HIGHLANDS
SACRAMENTO, CALIFORNIA**

**O P T E C H
OPERATIONAL TECHNOLOGIES
CORPORATION**

LOG OF BORING BH02-04

Project No.:	1315-117	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	110.5 ft. BLS
Drilling Co.:	Tonto Environmental Drilling	Depth To Water:	109.0 ft.
Driller:	Randy Gustafson	Date Measured:	-
Date Drilled:	06/22/94	Surface Elevation:	55.88 ft.
Drilling Method:	Hollow Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
17 23 25		100	X		Sand, medium-grained, dry.	0	-	-	-
45 14 14		67	X		Sand, medium-grained, dark-brown to olive brown, dry.	0	-	-	-
50 16 22 24					Silt, yellowish-brown, dry.	0	-	-	-
55 19 22		100	X		Silt, light reddish-gray, dry.	-	-	-	-
60 18 24		100	X		Silt, reddish-gray, dry.	-	-	-	-
65 19 30			X		Silt, olive brown to yellowish-brown, dry.	-	-	-	-
70 35 69		100	X		Silt, olive brown, dry.	0.1	-	-	-
75 21 23		67	X		Silt, olive brown, dry.	-	-	-	-

**NORTH HIGHLANDS
SACRAMENTO, CALIFORNIA**

**OPTECH
OPERATIONAL TECHNOLOGIES
CORPORATION**

LOG OF BORING BH02-04

Project No.: 1315-117
Logged By: Bill Hughes
Drilling Co.: Tonto Environmental Drilling
Driller: Randy Gustafson
Date Drilled: 06/22/94
Drilling Method: Hollow Stem Auger

Sampling Method: California-Style Sampler
Depth Drilled: 110.5 ft. BLS
Depth To Water: 109.0 ft.
Date Measured: -
Surface Elevation: 55.88 ft.

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
27 43		100	⊗		Silt, olive brown, micaceous, dry.	1.8	-	-	-
85	27 33 39	100	⊗		Silt and sandy silt, yellowish-brown to olive brown, dry.	-	-	-	-
90	21 23 17	100	■		Sand, fine to medium-grained, light reddish-gray to grayish-brown.	0.9	-	-	-
95	31 37	67	⊗		Silt, olive brown.	.0	-	-	-
100	17 33 56		⊗		Silt, yellowish-brown to olive brown.	-	-	-	-
105	7 11	56	■		Silt, yellowish-brown to olive brown.	-	-	-	-
110	10 11 21	100	■		Sandy silt, yellowish-brown, saturated.	-	-	-	-
115					Boring Terminated at 110.5 Ft.				

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APPENDIX C
FIELD GC SCREENING RESULTS

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SECTION C.1 INTRODUCTION

This section includes Gas Chromatograph (GC) Data Summaries for the soil samples collected during this Site Investigation and the raw GC data generated during the field screening of soil samples collected during the drilling of soil borings.

FIELD GC DATA SUMMARY

SITE: North Highlands

GAIN: 10

CARRIER GAS FLOW: 10.5

GC OVEN TEMP: 30ANALYSIS TIME: 500

WINDOW: 10%

[illegible]

OPERATOR: MYRNA RODRIGUEZ

DATE: JUNE 20, 1994

FIELD GC DATA SUMMARY

SITE: North Highlands
 GAIN: 10
 CARRIER GAS FLOW: 10

GC OVEN TEMP: 40
 ANALYSIS TIME: 500
 WINDOW: 10%

Boring	Sample Interval (ft. BLS)	Sample Mass (grams)	Corrected Concentration (ppb)					
			MTBE	Benzene	Toluene	Ethylbenzene	Xylene	Total BTEX
BH02-01	Surface	10g	Ø	0	0	75.77	69.64	145.41
BH02-01	Surface	10g	Ø	0	0	0	0	0
BH02-01	11.0	10g	Ø	0	0	0	0	0
BH02-01	15.5	10g	Ø	0	0	0	0	0
BH02-01	21.0	10g	Ø	0	0	0	0	0
BH02-01	26.0	10g	Ø	0	0	0	0	0
BH02-01	31.0	10g	Ø	0	0	0	0	0
BH02-01	36.0	10g	Ø	0	39.27	0	0	39.27
BH02-01	41.0	10g	Ø	0	0	0	0	0
BH02-01	45.5	10g	Ø	0	0	0	0	0
BH02-01	51.0	10g	Ø	0	0	0	0	0
BH02-01	55.5	10g	Ø	0	0	0	0	0
BH02-01	62.0	10g	Ø	0	0	0	0	0
BH02-01	63.0	10g	Ø	0	0	0	0	0
BH02-02	5.0	10g	Ø	0	0	0	0	0
BH02-02	12.0	10g	Ø	0	0	0	0	0
BH02-02	16.0	10g	Ø	0	0	0	0	0
BH02-02	22.0	10g	Ø	0	0	0	0	0
BH02-02	32.0	10g	Ø	0	0	0	0	0
BH02-02	42.0	10g	Ø	0	0	0	0	0
BH02-02	55.5	10g	Ø	0	0	0	0	0

OPERATOR: MYRNA RODRIGUEZ

DATE: JUNE 21, 1994

FIELD GC DATA SUMMARY

SITE: North Highlands

GC OVEN TEMP: 40

GAIN: 5

ANALYSIS TIME: 450

CARRIER GAS FLOW: 10

WINDOW: 10%

Boring	Sample Interval (ft. BLS)	Sample Mass (grams)	Corrected Concentration (ppb)					
			MTBE	Benzene	Toluene	Ethylbenzene	Xylene	Total BTEX
BH02-04	1.0 - 2.0	10g	Ø	0	0	0	6.767	6.767
BH02-04	1.0 - 2.0	10g	Ø	0	0	0	0	0
BH02-04	5.5	10g	Ø	0	0	0	0	0
BH02-04	12.0	10g	Ø	0	0	0	0	0
BH02-04	15.0	10g	Ø	0	0	0	0	0
BH02-04	25.5	10g	Ø	0	0	0	0	0
BH02-04	32.0	10g	Ø	0	0	0	0	0
BH02-04	35.5	10g	Ø	0	0	0	0	0
BH02-04	42.0	10g	Ø	0	0	0	0	0
BH02-04	45.5	10g	Ø	0	0	0	0	0
BH02-04	52.0	10g	Ø	0	0	0	0	0
BH02-04	55.5	10g	Ø	0	0	0	0	0
BH02-04	62.0	10g	Ø	0	0	0	0	0
BH02-04	65.5	10g	Ø	0	0	0	0	0
BH02-04	72.0	10g	Ø	0	0	0	0	0
BH02-04	75.5	10g	Ø	0	0	0	0	0
BH02-04	85.5	10g	Ø	0	0	0	0	0
BH02-04	92.0	10g	Ø	0	0	0	0	0
BH02-04	95.5	10g	Ø	0	0	0	0	0
BH02-04	102.0	10g	Ø	0	0	0	0	0
BH02-04	104.5	10g	Ø	0	0	0	0	0

OPERATOR: MYRNA RODRIGUEZ

DATE: JUNE 22, 1994

FIELD GC DATA SUMMARY

SITE: North Highlands

GC OVEN TEMP: 40

GAIN: _____

ANALYSIS TIME: _____

CARRIER GAS FLOW: 11

WINDOW: 10%

[illegible]

OPERATOR: MYRNA RODRIGUEZ

DATE: JUNE 23, 1994

FIELD GC DATA SUMMARY

SITE: North Highlands
 GAIN: 2
 CARRIER GAS FLOW: 10

GC OVEN TEMP: 40
 ANALYSIS TIME: 450
 WINDOW: 10%

Boring	Sample Interval (ft. BLS)	Sample Mass (grams)	Corrected Concentration (ppb)					
			MTBE	Benzene	Toluene	Ethylbenzene	Xylene	Total BTEX
BH01-01	5.5	10g	0	0	0	0	0	0
BH01-01	12.0	10g	0	0	0	0	0	0
BH01-01	15.5	10g	0	0	0	0	0	0
BH01-01	22.0	10g	0	0	0	0	0	0
BH01-01	25.5	10g	0	0	0	0	0	0
BH01-01	32.0	10g	0	0	0	0	0	0
BH01-01	35.5	10g	0	0	0	0	0	0
BH01-01	42.0	10g	0	0	0	0	0	0
BH01-01	45.5	10g	0	0	0	0	0	0
BH01-01	52.0	10g	0	0	0	0	0	0
BH01-01	59.0	10g	0	0	0	0	0	0
BH01-01	55.5?	10g	0	0	0	0	0	0
BH01-04	5.5	10g	0	0	0	0	0	0
BH01-04	12.0	10g	0	0	0	0	0	0
BH01-04	15.5	10g	0	0	0	0	0	0
BH01-04	22.0	10g	0	0	0	0	0	0
BH01-04	25.5	10g	0	0	0	0	0	0
BH01-04	32.0	10g	0	0	0	0	0	0
BH01-04	35.5	10g	0	0	0	0	0	0
BH01-04	42.0	10g	0	0	0	0	0	0
BH01-04	45.5	10g	0	0	0	0	0	0
BH01-04	52.0	10g	0	0	0	0	0	0
BH01-04	55.5	10g	0	0	0	0	0	0
BH01-04	59.0	10g	0	0	0	0	0	0

OPERATOR: MYRNA RODRIGUEZ DATE: JUNE 24, 1994

FIELD GC DATA SUMMARY

SITE: North Highlands
GAIN: 10
CARRIER GAS FLOW: 10

GC OVEN TEMP: 40
ANALYSIS TIME: 450
WINDOW: 10%

[illegible]

OPERATOR: MYRNA RODRIGUEZ

DATE: JULY 6, 1994

FIELD GC DATA SUMMARY

SITE: North Highlands

GC OVEN TEMP: 40

GAIN: 5

ANALYSIS TIME: 450

CARRIER GAS FLOW: 10

WINDOW: 10%

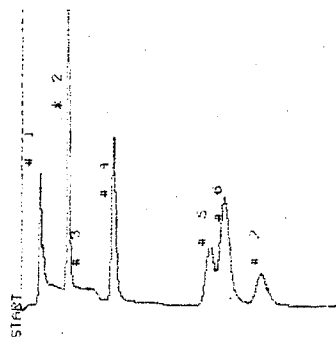
Boring	Sample Interval (ft. BLS)	Sample Mass (grams)	Corrected Concentration (ppb)					
			MTBE	Benzene	Toluene	Ethylbenzene	Xylene	Total BTEX
BH01-03	5.5	10g	Ø	0	0	0	0	0
BH01-03	12.0	10g	Ø	0	0	0	0	0
BH01-03	15.5	10g	Ø	0	0	0	0	0
BH01-03	22.0	10g	Ø	0	0	0	0	0
BH01-03	25.5	10g	Ø	0	0	0	0	0
BH01-03	32.0	10g	Ø	0	0	0	0	0
BH01-03	35.5	10g	Ø	0	0	0	0	0
BH01-03	42.0	10g	Ø	0	0	0	0	0
BH01-03	45.5	10g	Ø	0	0	0	0	0
BH01-03	52.0	10g	Ø	0	0	0	0	0
BH01-03	55.5	10g	Ø	0	0	0	0	0
BH01-03	58.0	10g	Ø	0	0	0	0	0
BH01-03	59.0	10g	Ø	0	0	0	0	0
BH01-05	5.5	10g	Ø	0	0	0	0	0
BH01-05	12.0	10g	Ø	0	0	0	0	0
BH01-05	15.5	10g	Ø	0	0	0	0	0
BH01-05	22.0	10g	Ø	0	0	0	0	0
BH01-05	25.5	10g	Ø	0	0	0	0	0
BH01-05	32.0	10g	Ø	0	0	0	0	0
BH01-05	35.5	10g	Ø	0	0	0	0	0
BH01-05	42.0	10g	Ø	0	0	0	0	0
BH01-05	45.5	10g	Ø	0	35.13	0	0	35.13
BH01-05	52.0	10g	Ø	0	0	0	0	0
BH01-05	55.5	10g	Ø	0	0	0	0	0

OPERATOR: MYRNA RODRIGUEZ

DATE: JUNE 27, 1994

1 PPM STD

PHOTOVAC



STOP 9 500.0
 SAMPLE LIBRARY 1 JUN 20 1994 14:58
 ANALYSIS # 3 1PPM
 INTERNAL TEMP 30 MYRA
 GAIN 10 N-HARMOND

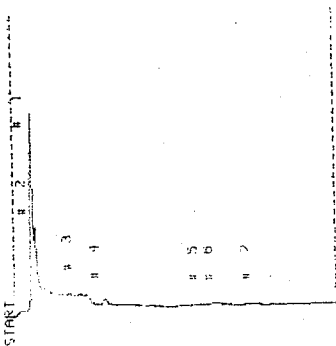
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	23.9	530.3 AU
BENZENE	2	27.0	125.8 P/B
TOLUENE	4	146.8	131.5 P/B
ETHYLBENZENE	5	301.1	35.04 P/B
ETHYLBENZENE	6	324.1	206.1 P/B
O-XYLENE	7	383.2	66.03 P/B

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
	BENZENE	1	74.4	1.000 PPM
	TOLUENE	2	113.6	1.000 PPM
	ETHYLBENZENE	3	214.2	1.000 PPM
	O,P-XYLENE	4	303.4	1.000 PPM
	O-XYLENE	5	402.5	1.000 PPM

BGSB-01 5.0' BLS

PHOTOVAC

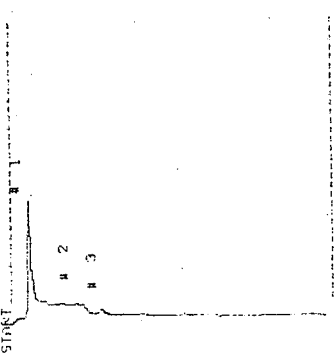


STOP 9 500.0
 SAMPLE LIBRARY 1 JUN 20 1994 15:11
 ANALYSIS # 4 5.0
 INTERNAL TEMP 30 BGSB
 GAIN 10 N-HARMOND

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	29.7	2.3 US
UNKNOWN	2	54.8	635.5 AU
TOLUENE	4	146.4	2.954 P/B
ETHYLBENZENE	6	324.1	3.122 P/B

BGSB-01 11.4' BLS

PHOTOVAC

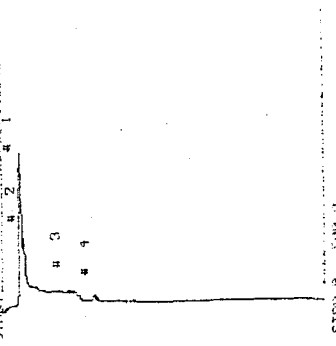


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 ANALYSIS # 5 11.4
 INTERNAL TEMP 31 BGSB-01
 GAIN 10 N-HARMOND

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.8	891.3 AU
TOLUENE	3	146.4	2.163 P/B

BGSB-01 15.5' BLS

PHOTOVAC



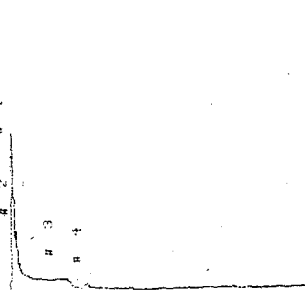
STOP 9 500.0
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 ANALYSIS # 6 15.5
 INTERNAL TEMP 31 BGSB-01
 GAIN 10 N-HARMOND

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	23.9	1.0 AU
UNKNOWN	2	30.9	422.8 P/B
TOLUENE	4	146.8	2.411 P/B

BGSB-01 21.0' BLS

PHOTOVAC

START

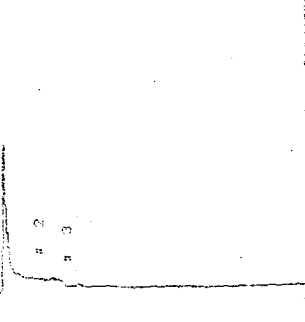


STOP # 500.0
SAMPLE LIBRARY 1 JUN 20 1994 15:43
ANALYSIS # 7 21.0
INTERNAL TEMP 31 BGSB-01
GAIN 10 N.HARTONO
COMPOUND NAME PEAK R.T. AREA/FTD
UNKNOWN 1 24.5 1.3 US
TOLUENE 4 146.0 1.863 FTD

BGSB-01 26.0' BLS

PHOTOVAC

START

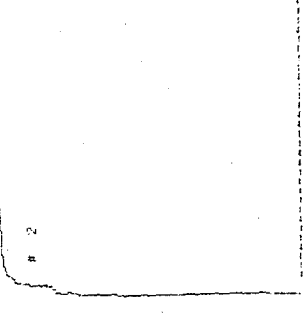


STOP # 500.0
SAMPLE LIBRARY 1 JUN 20 1994 16:17
ANALYSIS # 8 26.0
INTERNAL TEMP 31 BGSB-01
GAIN 10 N.HARTONO
COMPOUND NAME PEAK R.T. AREA/FTD
UNKNOWN 1 29.3 1.4 US

BGSB-01 32.0' BLS

PHOTOVAC

START

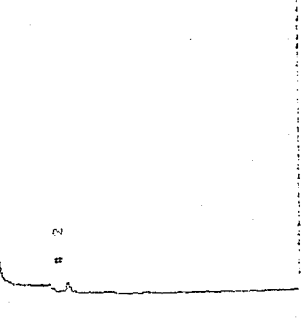


STOP # 500.0
SAMPLE LIBRARY 1 JUN 20 1994 16:26
ANALYSIS # 9 32.0
INTERNAL TEMP 32 BGSB-01
GAIN 10 N.HARTONO
COMPOUND NAME PEAK R.T. AREA/FTD
UNKNOWN 1 29.4 2.5 US

BGSB-01 35.5' BLS

PHOTOVAC

START



STOP # 500.0
SAMPLE LIBRARY 1 JUN 20 1994 16:59
ANALYSIS # 10 35.5
INTERNAL TEMP 31 BGSB-01
GAIN 10 N.HARTONO
COMPOUND NAME PEAK R.T. AREA/FTD
UNKNOWN 1 23.3 1.0 US
TOLUENE 2 146.0 3.362 FTD

BGSB-01 41.0' BLS

PHOTOVAC

START # 2

STOP # 300.0
SAMPLE LIBRARY 1 JUN 20 1994 17:19
ANALYSIS # 11 41.0
INTERNAL TEMP 32 BGSB-01
GAIN 10 N.HIGHLAND

CONFOUR NAME TANK N.T. ANALYST
UNKNOWN 1 23.2 2.0 0.5

BGSB-01 46.0' BLS

PHOTOVAC

START # 1

STOP # 300.0
SAMPLE LIBRARY 1 JUN 20 1994 17:19
ANALYSIS # 12 46.0
INTERNAL TEMP 32 BGSB-01
GAIN 10 N.HIGHLAND

CONFOUR NAME TANK N.T. ANALYST
UNKNOWN 1 23.5 1.8 0.5

BGSB-01 51.0' BLS

PHOTOVAC

START # 1

STOP # 300.0
SAMPLE LIBRARY 1 JUN 20 1994 17:30
ANALYSIS # 13 51.0
INTERNAL TEMP 32 BGSB-01
GAIN 10 N.HIGHLAND

CONFOUR NAME TANK N.T. ANALYST
UNKNOWN 1 23.5 2.0 0.5

BGSB-01 55.0' BLS

PHOTOVAC

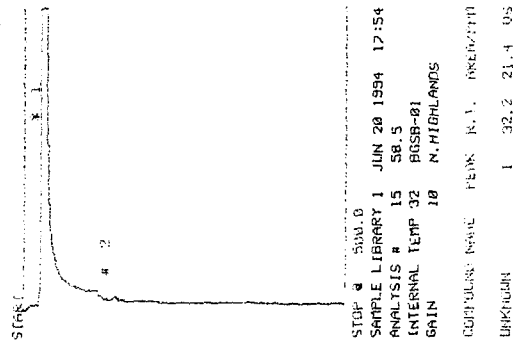
START # 2

STOP # 300.0
SAMPLE LIBRARY 1 JUN 20 1994 17:39
ANALYSIS # 14 55.0
INTERNAL TEMP 32 BGSB-01
GAIN 10 N.HIGHLAND

CONFOUR NAME TANK N.T. ANALYST
UNKNOWN 1 23.9 2.1 0.5
UNKNOWN 2 33.4 303.0 0.5

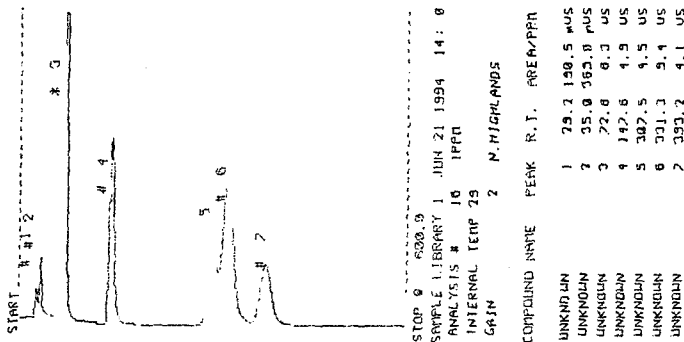
BGSB-01 58.5' BLS

PHOTOVAC



1 PPM STD

PHOTOVAC

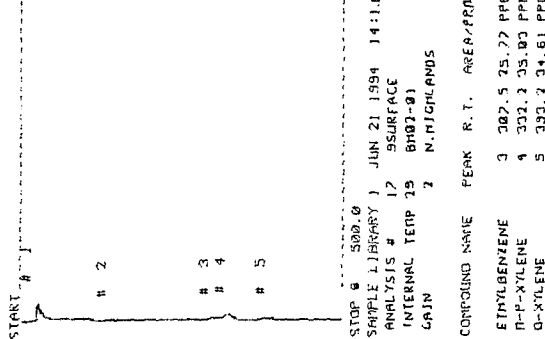


PHOTOVAC

1	COMPOUND	ID #	R.T.	UNIT
	BENZENE	1	29.2	1.000 PPM
	TOLUENE	2	35.0	1.000 PPM
	ETHYLBENZENE	3	302.5	1.000 PPM
	m-P-XYLENE	4	331.3	1.000 PPM
	o-XYLENE	5	393.2	1.000 PPM

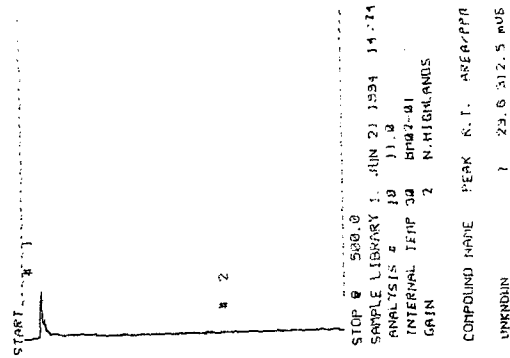
BH02-01 SURFACE

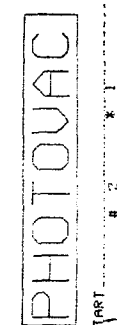
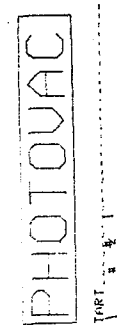
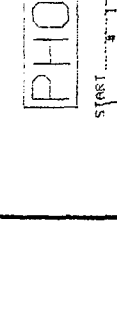
PHOTOVAC



BH02-01 11.0' BLS

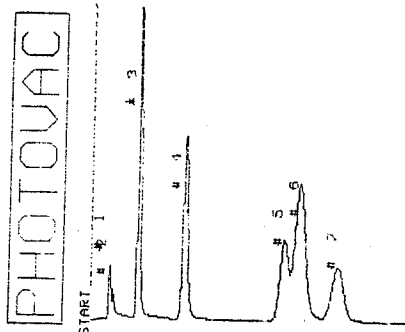
PHOTOVAC



BH02-01 11.0' BLS	BH02-01 SURFACE-B	BH02-01 21.0' BLS	BH02-02 5.0' BLS
 STOP # 500.0 SAMPLE LIBRARY 1 JUN 21 1994 14:00 ANALYSIS # 15 11.0 INTERNAL TEMP 30 BH02-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 25.7 3.3 0.1 UNKNOWN 2 34.9 1.0 0.5	 STOP # 500.0 SAMPLE LIBRARY 1 JUN 21 1994 14:43 ANALYSIS # 20 SURB INTERNAL TEMP 30 BH02-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 29.6 350.2 0.5	 STOP # 500.0 SAMPLE LIBRARY 1 JUN 21 1994 14:52 ANALYSIS # 21 21.0 INTERNAL TEMP 31 BH02-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 29.5 301.1 0.5	 STOP # 500.0 SAMPLE LIBRARY 1 JUN 21 1994 15:12 ANALYSIS # 27 5.0 INTERNAL TEMP 31 BH02-02 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 29.5 325.0 0.5

BH02-02 17.0' BLS	BH02-02 16.0' BLS	BH02-02 22.0' BLS	BH02-02 32.0' BLS
PHOTOVAC START # 2 1 STOP @ 500.0 SAMPLE LIBRARY 1 JUN 21 1994 15:11 ANALYSIS # 23 17.0 INTERNAL TEMP 31 BH02-02 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 20.4 472.1 PPM UNKNOWN 2 21.3 61.5 PPM	PHOTOVAC START # 2 1 STOP @ 500.0 SAMPLE LIBRARY 1 JUN 21 1994 15:20 ANALYSIS # 24 16.0 INTERNAL TEMP 31 BH02-02 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 25.6 416.5 PPM	PHOTOVAC START # 2 1 STOP @ 500.0 SAMPLE LIBRARY 1 JUN 21 1994 15:25 ANALYSIS # 25 22.0 INTERNAL TEMP 32 BH02-02 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 25.5 340.5 PPM	PHOTOVAC START # 2 1 STOP @ 500.0 SAMPLE LIBRARY 1 JUN 21 1994 15:30 ANALYSIS # 26 32.0 INTERNAL TEMP 32 BH02-02 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 25.5 418.4 PPM

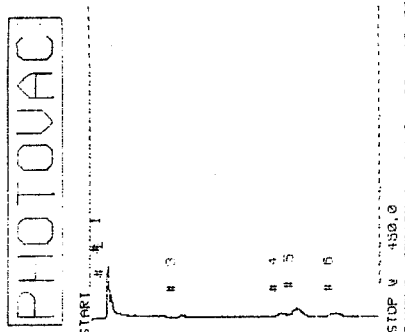
1 PPM STD



STOP @ 500.0
 SAMPLE LIBRARY 1 JUN 21 1994 15:17
 ANALYSIS # 22 1PPM
 INTERNAL TEMP 32
 GAIN 2 N-HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	72.6	372.0 PPM
BENZENE	3	72.7	1.018 PPM
TOLUENE	4	142.6	965.3 PPM
ETHYLBENZENE	5	306.2	800.0 PPM
N-P-XYLENE	6	331.3	855.5 PPM
O-XYLENE	7	352.2	573.0 PPM

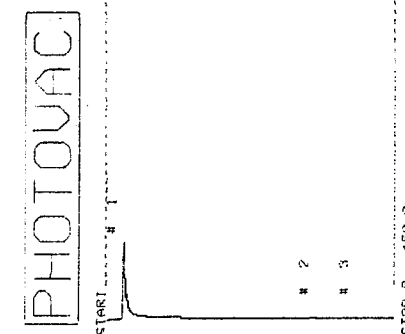
BH02-01 26.0' BLS



STOP @ 450.0
 SAMPLE LIBRARY 1 JUN 21 1994 15:56
 ANALYSIS # 20 26.0
 INTERNAL TEMP 32 BH02-01
 GAIN 2 N-HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	29.5	303.5 PPM
ETHYLBENZENE	4	305.9	32.98 PPM
N-P-XYLENE	5	338.4	44.98 PPM
O-XYLENE	6	391.2	46.49 PPM

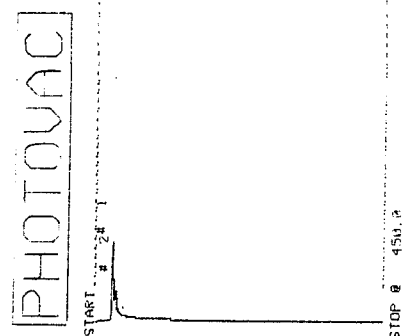
BH02-01 26.0' BLS



STOP @ 450.0
 SAMPLE LIBRARY 1 JUN 21 1994 16:15
 ANALYSIS # 29 26.0
 INTERNAL TEMP 32 BH02-01
 GAIN 2 N-HIGHLANDS

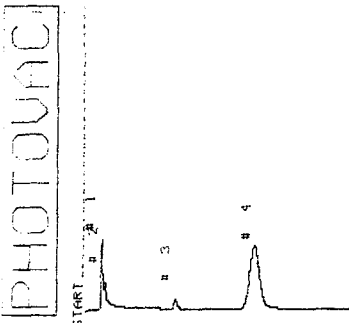
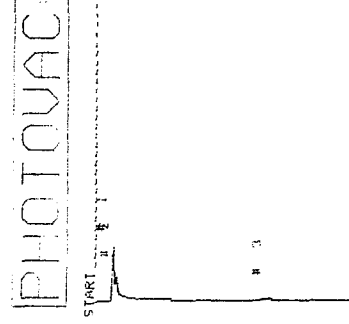
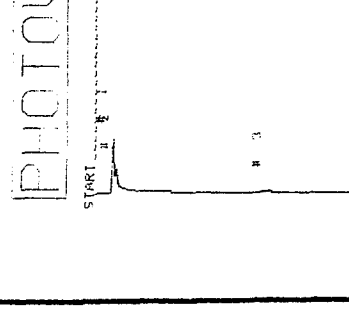
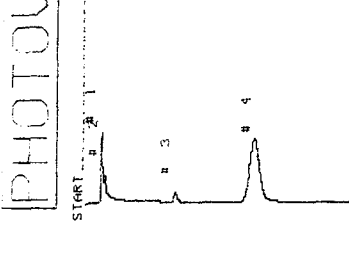
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	29.5	548.0 PPM

BH02-01 31.0' BLS



STOP @ 450.0
 SAMPLE LIBRARY 1 JUN 21 1994 16:13
 ANALYSIS # 30 31.0
 INTERNAL TEMP 32 BH02-01
 GAIN 2 N-HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	29.5	542.0 PPM
UNKNOWN	2	305.9	50.3 PPM

BH02-01 36.0' BLS	 STOP 8 458.0 SAMPLE LIBRARY 1 JUN 21 1994 16:21 ANALYSIS # 31 36.0 INTERNAL TEMP 32 BH02-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 73.5 137.0 PPM TOLUENE 3 142.2 33.32 PPM UNKNOWN 4 272.4 3.2 US	BH02-01 41.0' BLS	BH02-01 45.5' BLS	BH02-01 51.0' BLS
BH02-01 36.0' BLS	 STOP 9 452.0 SAMPLE LIBRARY 1 JUN 21 1994 16:23 ANALYSIS # 32 41.0 INTERNAL TEMP 33 BH02-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 23.5 384.4 PPM UNKNOWN 3 272.4 25.8 PPM	BH02-01 45.5' BLS	BH02-01 51.0' BLS	BH02-01 51.0' BLS
BH02-01 36.0' BLS	 STOP 8 458.0 SAMPLE LIBRARY 1 JUN 21 1994 16:52 ANALYSIS # 33 45.5 INTERNAL TEMP 33 BH02-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 29.5 581.4 PPM	BH02-01 51.0' BLS	BH02-01 51.0' BLS	BH02-01 51.0' BLS
BH02-01 36.0' BLS	 STOP 8 458.0 SAMPLE LIBRARY 1 JUN 21 1994 10:16 ANALYSIS # 34 51.0 INTERNAL TEMP 33 BH02-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 23.5 415.3 PPM	BH02-01 51.0' BLS	BH02-01 51.0' BLS	BH02-01 51.0' BLS

BH02-02 42.0' BLS

PHOTOVAC

STOP 0 450.0
SAMPLE LIBRARY 1 JUN 21 1994 12:1
ANALYSIS # 33 42.0
INTERNAL TEMP 33 BH02-02
GAIN 2 N.HIGHLANDS
COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 25.5 220.4 PPM

BH02-02 55.5' BLS

PHOTOVAC

STOP 0 450.0
SAMPLE LIBRARY 1 JUN 21 1994 17:10
ANALYSIS # 36 55.5
INTERNAL TEMP 33 BH02-02
GAIN 2 N.HIGHLANDS
COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 29.5 418.6 PPM

1 PPM STD

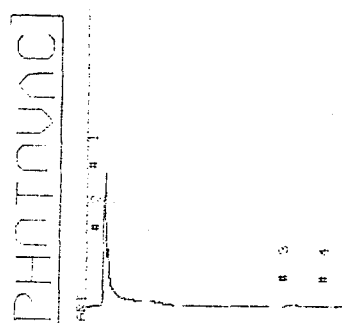
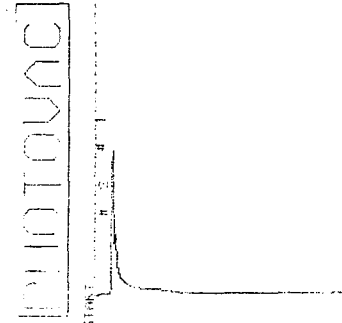
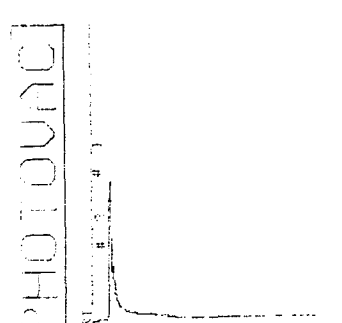
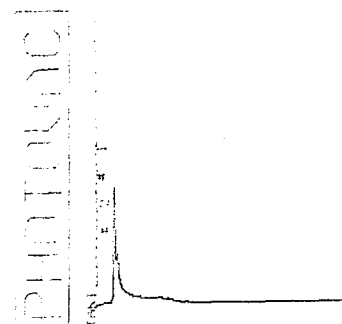
PHOTOVAC

STOP 0 450.0
SAMPLE LIBRARY 1 JUN 22 1994 9:18
ANALYSIS # 3 JPPH
INTERNAL TEMP 25
GAIN 5 N.HIGHLANDS
COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 29.8 873.5 PPM
UNKNOWN 2 72.6 10.1 US
UNKNOWN 3 146.8 6.4 US
UNKNOWN 4 304.3 3.5 US
UNKNOWN 5 328.6 0.3 US
UNKNOWN 6 388.2 3.8 US

AIR BLANK

PHOTOVAC

STOP 0 450.0
SAMPLE LIBRARY 1 JUN 22 1994 9:27
ANALYSIS # 4 AIR BLK
INTERNAL TEMP 26
GAIN 5 N.HIGHLANDS
COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 29.8 2.3 US
BENZENE 7 72.3 12.52 PPM
TOLUENE 3 146.8 52.49 PPM
ETHYLBENZENE 4 304.3 145.9 PPM
M-P-XYLENE 5 322.7 165.2 PPM
O-XYLENE 6 388.2 166.4 PPM

BH02-04 1.0-2.0' BLS	BH02-04 5.5' BLS	BH02-04 12.0' BLS	BH02-04 15.0' BLS
 STOP # 450.0 SAMPLE LIBRARY 1 JUN 22 1994 9:16 ANALYSIS # 6 1.0-2.0 INTERNAL TEMP 26 BH02-04 GAIN 5 N.HIGHLANDS COMPOUND NAME PLOK R.T. AREA/PPM UNKNOWN 1 23.2 946.1 µUS N-P-ATLENE 3 222.2 6.262 PPM	 STOP # 450.0 SAMPLE LIBRARY 1 JUN 22 1994 9:54 ANALYSIS # 2 5.5 INTERNAL TEMP 26 BH02-04 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 23.4 1.0 US	 STOP # 450.0 SAMPLE LIBRARY 1 JUN 22 1994 10:13 ANALYSIS # 8 12.0 INTERNAL TEMP 26 BH02-04 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 23.5 1.0 US	 STOP # 450.0 SAMPLE LIBRARY 1 JUN 22 1994 10:11 ANALYSIS # 9 15.0 INTERNAL TEMP 22 BH02-04 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 23.6 872.2 µUS

BH02-04 25.5' BLS

PHOTOVAC

STOP 9 452.0
SAMPLE LIBRARY 1 JUN 22 1954 10:13
ANALYSIS # 10 25.5
INTERNAL TEMP 22 BH02-04
GAIN 5 N.HIGH-AMPS
CONV. AND NAME PEAK R.T. ORG/APP
UNKNOWN 1 25.6 1.0 US

BH02-04 1.0-2.0'B BLS

PHOTOVAC

STOP 7 134.2
SAMPLE LIBRARY 1 JUN 22 1954 10:27
ANALYSIS # 11 1.0-2.0B
INTERNAL TEMP 22 BH02-04
GAIN 5 N.HIGH-AMPS
CONV. AND NAME PEAK R.T. ORG/APP
UNKNOWN 1 25.5 342.5 μS

BH02-01 55.5' BLS

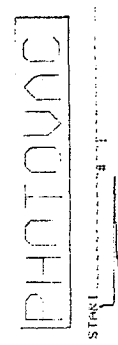
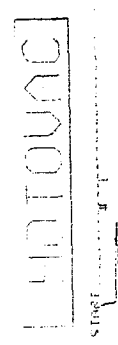
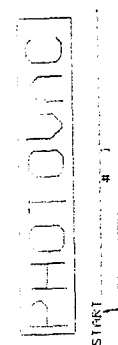
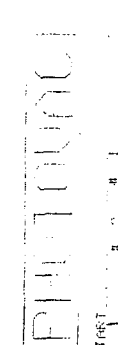
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STOP 8 430.0
SAMPLE LIBRARY 1 JUN 22 1954 10:36
ANALYSIS # 12 55.5
INTERNAL TEMP 22 BH02-01
GAIN 5 N.HIGH-AMPS
CONV. AND NAME PEAK R.T. ORG/APP
UNKNOWN 1 25.6 661.4 μS

BH02-01 62.0' BLS

PHOTOVAC

STOP 9 430.2
SAMPLE LIBRARY 1 JUN 22 1954 10:45
ANALYSIS # 13 62.0
INTERNAL TEMP 22 BH02-01
GAIN 5 N.HIGH-AMPS
CONV. AND NAME PEAK R.T. ORG/APP
UNKNOWN 1 25.8 1.0 US

BH02-01 63.0' BLS	 STOP 9 450.0 SAMPLE ENERGY 1 JUN 22 1994 18:54 ANALYSIS # 14 63.0 INTERNAL TEMP 22 0107-01 GAIN 3 N.HIGHGAIN COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 23.6 983.0 μS	 STOP 9 450.0 SAMPLE ENERGY 1 JUN 22 1994 11:25 ANALYSIS # 15 32.0 INTERNAL TEMP 22 0107-04 GAIN 5 N.HIGHGAIN COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 23.2 804.9 μS	 STOP 9 450.0 SAMPLE ENERGY 1 JUN 22 1994 11:14 ANALYSIS # 16 35.5 INTERNAL TEMP 28 0107-04 GAIN 5 N.HIGHGAIN COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 23.7 832.1 μS	BH02-04 42.0' BLS  STOP 9 450.0 SAMPLE ENERGY 1 JUN 22 1994 11:23 ANALYSIS # 12 42.0 INTERNAL TEMP 28 0107-04 GAIN 5 N.HIGHGAIN COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 23.8 983.2 μS
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BH02-04 45.5' BLS

AIR BLANK

AIR BLANK

1 PPM STD



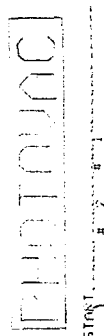
STOP 7 10:00
SAMPLE LOCATION 1 JUN 22 1994 11:26
ANALYSIS # 21 45.5
INTERNAL TEMP 28 BH02-04
GAIN 5 N.HIGHLANDS
COMPOUND NAME PEAK R.T. AREA/PPH
UNKNOWN 1 30.5 5.9 US



STOP 9 10:00
SAMPLE LOCATION 1 JUN 22 1994 11:12
ANALYSIS # 20 AIR BLK
INTERNAL TEMP 20 BH02-04
GAIN 5 N.HIGHLANDS
COMPOUND NAME PEAK R.T. AREA/PPH
UNKNOWN 1 30.5 5.9 US
M-P-XYLENE 3 322.2 5.019 PPH
O-XYLENE 4 388.2 13.42 PPH



STOP 9 10:00
SAMPLE LOCATION 1 JUN 22 1994 11:39
ANALYSIS # 19 AIR BLK
INTERNAL TEMP 28 BH02-04
GAIN 5 N.HIGHLANDS
COMPOUND NAME PEAK R.T. AREA/PPH
UNKNOWN 1 30.5 13.9 US
TOLUENE 3 146.4 18.82 PPH
ETHYLBENZENE 4 304.3 28.42 PPH
M-P-XYLENE 5 322.2 32.94 PPH
O-XYLENE 6 388.2 59.32 PPH



STOP 9 10:00
SAMPLE LOCATION 1 JUN 22 1994 11:50
ANALYSIS # 18 1PPM
INTERNAL TEMP 20 BH02-04
GAIN 5 N.HIGHLANDS
COMPOUND NAME PEAK R.T. AREA/PPH
UNKNOWN 1 29.6 934.1 PPH
BENZENE 2 22.5 815.6 PPH
TOLUENE 3 146.8 259.4 PPH
ETHYLBENZENE 4 304.3 642.5 PPH
M-P-XYLENE 5 322.2 556.6 PPH
O-XYLENE 6 388.2 551.0 PPH

BH02-04 52.0' BLS



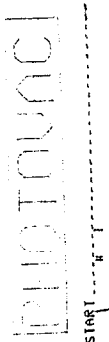
STOP # 450.0
 SAMPLE LIBRARY 1 JUN 22 1994 13:14
 ANALYSTS # 22 52.0
 INTERNAL TEMP 25 BH02-04
 GAIN 5 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 52.0 505.1 μS

BH02-04 55.5' BLS



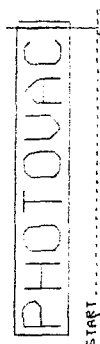
STOP # 450.0
 SAMPLE LIBRARY 1 JUN 22 1994 13:12
 ANALYSTS # 21 55.5
 INTERNAL TEMP 25 BH02-04
 GAIN 5 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 55.5 653.5 μS
 UNKNOWN 4 220.3 1.0 μS

BH02-04 62.0' BLS



STOP # 450.0
 SAMPLE LIBRARY 1 JUN 22 1994 13:16
 ANALYSTS # 24 62.0
 INTERNAL TEMP 25 BH02-04
 GAIN 5 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 62.0 69.8 μS
 UNKNOWN 2 220.3 61.5 μS

BH02-04 65.5' BLS



STOP # 450.0
 SAMPLE LIBRARY 1 JUN 22 1994 13:23
 ANALYSTS # 25 65.5
 INTERNAL TEMP 25 BH02-04
 GAIN 5 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 65.5 4.0 μS
 UNKNOWN 2 24.2 1.3 μS

BH02-04 72.0' BLS

PHOTOVAC

START

STOP 450.0
SAMPLE LIBRARY 1 JUN 22 1994 13:10
ANALYSIS # 26 72.0
INTERNAL TEMP 30 BH02-04
GAIN 5 N.HIGHLANDS

COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 25.6 850.2 PUS

BH02-04 75.5' BLS

PHOTOVAC

START

STOP 450.0
SAMPLE LIBRARY 1 JUN 22 1994 13:16
ANALYSIS # 27 75.5
INTERNAL TEMP 30 BH02-04
GAIN 5 N.HIGHLANDS

COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 25.0 4.4 US
UNKNOWN 2 31.7 1.4 US

BH02-04 85.5' BLS

PHOTOVAC

START

STOP 450.0
SAMPLE LIBRARY 1 JUN 22 1994 18:11
ANALYSIS # 28 85.5
INTERNAL TEMP 31 BH02-04
GAIN 5 N.HIGHLANDS

COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 25.1 78.6 MUS

BH02-04 92.0' BLS

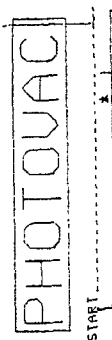
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START

STOP 450.0
SAMPLE LIBRARY 1 JUN 22 1994 16:10
ANALYSIS # 29 92.0
INTERNAL TEMP 32 BH02-04
GAIN 5 N.HIGHLANDS

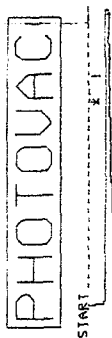
COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 25.3 3.8 US
UNKNOWN 2 34.8 1.3 US

BH02-04 95.5' BLS



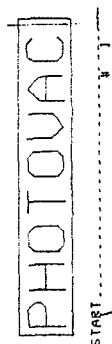
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 SAMPLE LIBRARY 1 JUN 22 1994 16:10
 ANALYSIS # 32 35.5
 INTERNAL TEMP 32 BH02-04
 GAIN 5 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 32.6 28.4 US

BH02-04 102.0' BLS



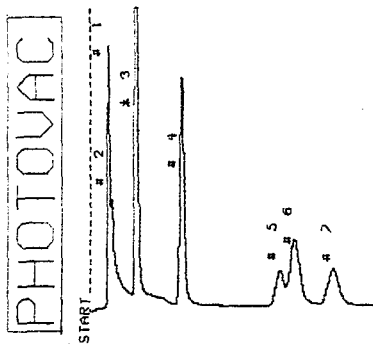
STOP @ 450.0
 SAMPLE LIBRARY 1 JUN 22 1994 16:12
 ANALYSIS # 31 102.0
 INTERNAL TEMP 32 BH02-04
 GAIN 5 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 30.4 14.8 US

BH02-04 104.5' BLS

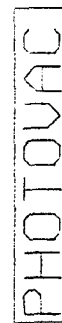


STOP @ 450.0
 SAMPLE LIBRARY 1 JUN 22 1994 16:15
 ANALYSIS # 32 104.5
 INTERNAL TEMP 32 BH02-04
 GAIN 5 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 23.4 1.8 US

1 PPM STD



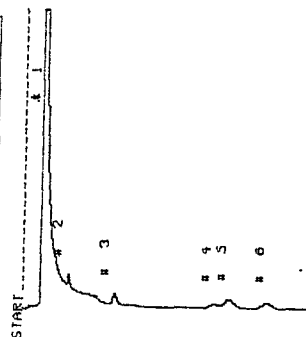
STOP @ 450.0
 SAMPLE LIBRARY 1 JUN 23 1994 10:43
 ANALYSIS # 3 1PPM
 INTERNAL TEMP 22
 GAIN 10 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 23.2 3.0 US
 UNKNOWN 2 34.8 1.5 US
 UNKNOWN 3 22.0 11.6 US
 UNKNOWN 4 146.8 3.2 US
 UNKNOWN 5 303.3 1.6 US
 UNKNOWN 6 326.8 3.1 US
 UNKNOWN 7 382.2 2.1 US



1 COMPOUND ID # R.T. LIMIT
 BENZENE 1 72.6 1.000 PPM
 TOLUENE 2 146.8 1.000 PPM
 ETHYLBENZENE 3 303.3 1.000 PPM
 N-P-XYLENE 4 326.8 1.000 PPM
 O-XYLENE 5 382.2 1.000 PPM

AIR BLANK

PHOTOVAC

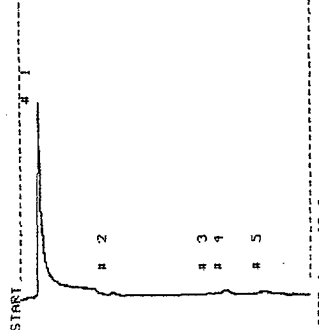


STOP # 450.0
 SAMPLE LIBRARY 1 JUN 23 1994 10:54
 ANALYSIS # 4 AIR BLANK
 INTERNAL TEMP 27
 GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	13.7	US
BENZENE	2	15.2	PPB
TOLUENE	3	40.4	PPB
ETHYLBENZENE	4	53.8	PPB
M-P-XYLENE	5	92.1	PPB
O-XYLENE	6	160.1	PPB

AIR BLANK

PHOTOVAC

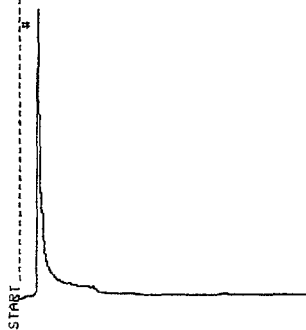


STOP # 450.0
 SAMPLE LIBRARY 1 JUN 23 1994 11:3
 ANALYSIS # 5 AIR BLANK
 INTERNAL TEMP 28
 GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	30.0	US
M-P-XYLENE	4	47.8	PPB
D-XYLENE	5	85.8	PPB

BH02-04 WATER

PHOTOVAC

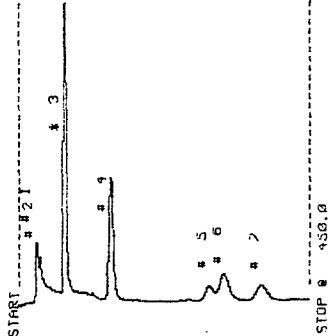


STOP # 450.0
 SAMPLE LIBRARY 1 JUN 23 1994 11:11
 ANALYSIS # 6 WATER
 INTERNAL TEMP 28
 GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	23.2	US

1 PPM STD

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUN 23 1994 15:8
 ANALYSIS # 8 1PPM
 INTERNAL TEMP 31
 GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	23.2	424.1
UNKNOWN	2	34.6	51.2
BENZENE	3	72.4	201.1
TOLUENE	4	146.0	526.0
ETHYLBENZENE	5	301.3	331.1
M-P-XYLENE	6	325.3	410.3
D-XYLENE	7	385.2	412.1

BH02-03 12.0' BLS

PHOTOVAC

START # 2 3 1

STOP @ 450.0
 SAMPLE LIBRARY 1 JUN 23 1994 15:33
 ANALYSIS # 5 12.0
 INTERNAL TEMP 31 BH02-03
 GAIN 10 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 29.6 302.0 μS

BH02-03 15.5' BLS

PHOTOVAC

START # 2 3 1

STOP @ 450.0
 SAMPLE LIBRARY 1 JUN 23 1994 15:41
 ANALYSIS # 10 15.5
 INTERNAL TEMP 32 BH02-03
 GAIN 10 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 23.1 1.0 US
 UNKNOWN 2 34.6 1.6 US

BH02-03 22.0' BLS

PHOTOVAC

START # 2 3 1

STOP @ 450.0
 SAMPLE LIBRARY 1 JUN 23 1994 15:43
 ANALYSIS # 11 22.0
 INTERNAL TEMP 32 BH02-03
 GAIN 10 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 23.3 4.6 US
 UNKNOWN 2 34.0 2.3 US

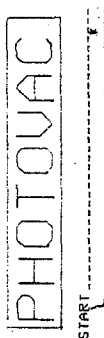
BH02-03 25.5' BLS

PHOTOVAC

START # 2 3 1

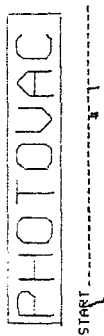
STOP @ 450.0
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 ANALYSIS # 12 25.5
 INTERNAL TEMP 32 BH02-03
 GAIN 10 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 23.3 3.3 US

BH02-03 32.0' BLS



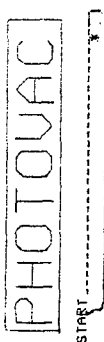
STOP # 430.0
 SAMPLE LIBRARY 1 JUN 23 1994 16:0
 ANALYSIS # 13 32.0
 INTERNAL TEMP 32 BH02-03
 GAIN 10 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 29.3 3.0 US

BH02-03 35.5' BLS



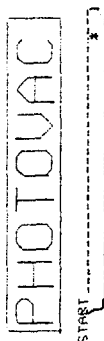
STOP # 430.0
 SAMPLE LIBRARY 1 JUN 23 1994 16:25
 ANALYSIS # 14 35.5
 INTERNAL TEMP 32 BH02-03
 GAIN 10 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 29.2 1.4 US

BH02-03 42.0' BLS



STOP # 430.0
 SAMPLE LIBRARY 1 JUN 23 1994 16:33
 ANALYSIS # 15 42.0
 INTERNAL TEMP 33 BH02-03
 GAIN 10 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 29.4 3.6 US

BH02-03 52.0' BLS



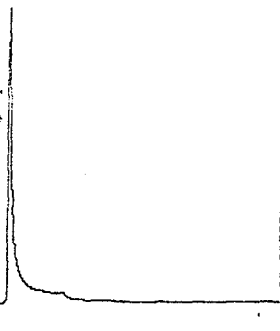
STOP # 430.0
 SAMPLE LIBRARY 1 JUN 23 1994 16:41
 ANALYSIS # 16 52.0
 INTERNAL TEMP 33 BH02-03
 GAIN 10 N.HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 29.2 3.4 US

1 PPM BTX gbyelle

BH02-03 55.5' BLS

PHOTOVAC

START 1



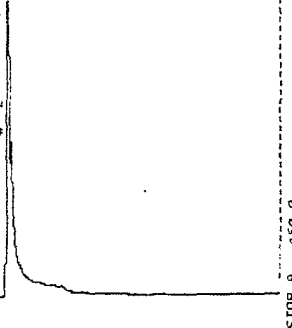
STOP 4 450.0
SAMPLE LIBRARY 1 JUN 23 1994 16:50
ANALYSIS # 12 55.5
INTERNAL TEMP 33 BH02-03
GAIN 10 N. HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	23.5	3.0 US

BH02-03 59.0' BLS

PHOTOVAC

START 2



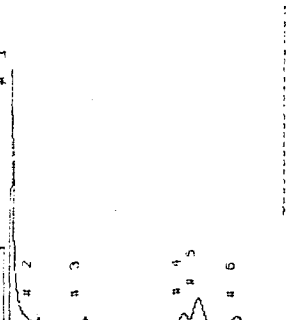
STOP 4 450.0
SAMPLE LIBRARY 1 JUN 23 1994 16:50
ANALYSIS # 10 59.0
INTERNAL TEMP 33 BH02-03
GAIN 10 N. HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	23.8	5.1 US
UNKNOWN	2	34.2	7.1 US

AIR BLANK

PHOTOVAC

START 3



STOP 4 450.0
SAMPLE LIBRARY 1 JUN 21 1994
ANALYSIS # 3 AIR BLK
INTERNAL TEMP 22
GAIN 2 N. HIGHLANDS

COMPOUND NAME	PEAK	R.T.
UNKNOWN	1	30.3
TOLUENE	2	30.3
ETHYLBENZENE	3	30.3
1-P-XYLENE	4	30.3
2-P-XYLENE	5	30.3
3-P-XYLENE	6	30.3

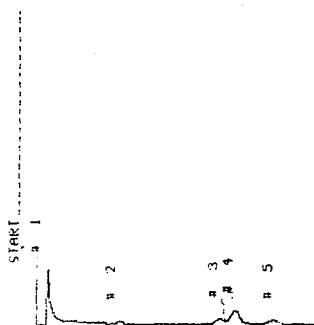
PHOTOVAC

1 COMPOUND ID # R.T. LIMIT

BENZENE	1	72.6	1.000 PH
TOLUENE	2	146.8	1.000 PH
ETHYLBENZENE	3	309.3	1.000 PH
1-P-XYLENE	4	322.2	1.000 PH
2-P-XYLENE	5	388.2	1.000 PH

AIR BLANK

PHOTOVAC

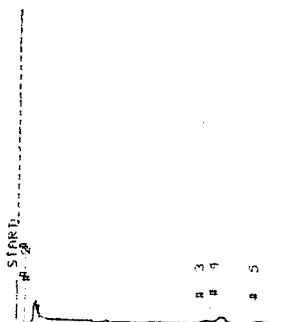


STOP 4 430.0
SAMPLE LIBRARY 1 JUN 24 131
ANALYSIS # 1 AIR BLK
INTERNAL TEMP 27
GAIN 2 N. HIGHLANDS

COMPOUND NAME	PEAK	R.T.	B
UNKNOWN	1	30.1	405.3 mV
ETHYLPHENYLENE	3	304.0	66.42 mV
m-P-XYLENE	4	322.2	20.90 mV
o-XYLENE	5	348.2	20.22 mV

BH01-01 5.5' BLS

PHOTOVAC

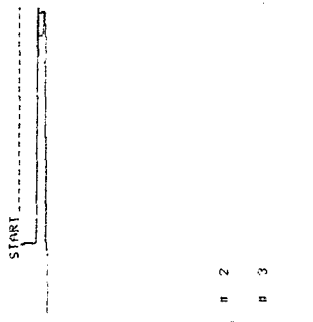


STOP 4 430.0
SAMPLE LIBRARY 1 JUN 24 131
ANALYSIS # 5
INTERNAL TEMP 27
GAIN 2 N. HIGHLANDS

COMPOUND NAME	PEAK	R.T.	B
UNKNOWN	1	23.5	51.5 mV
ETHYLPHENYLENE	3	304.3	30.38 mV
m-P-XYLENE	4	322.2	40.03 mV
o-XYLENE	5	348.2	42.14 mV

BH01-01 5.5' BLS

PHOTOVAC

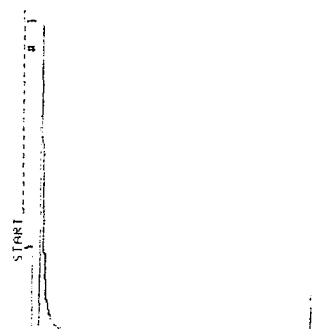


STOP 4 430.0
SAMPLE LIBRARY 1 JUN 24 131
ANALYSIS # 6
INTERNAL TEMP 22
GAIN 2 N. HIGHLANDS

COMPOUND NAME	PEAK	R.T.	B
UNKNOWN	1	29.2	3.5 u

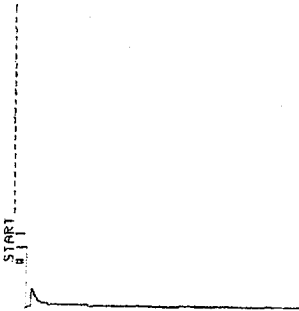
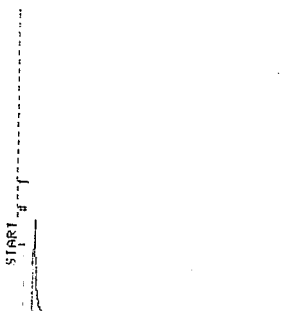
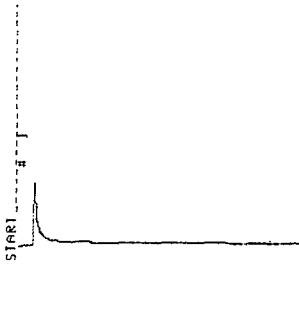
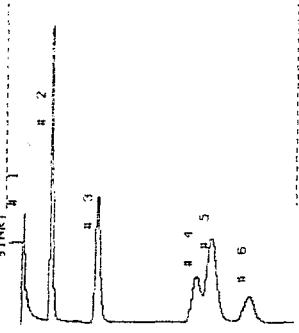
BH01-01 12.0' BLS

PHOTOVAC



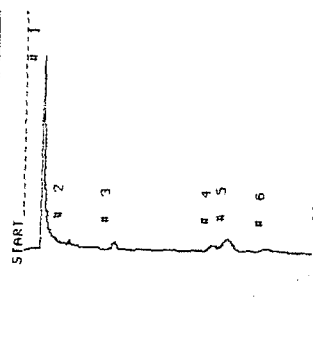
STOP 4 430.0
SAMPLE LIBRARY 1 JUN 24 131
ANALYSIS # 7
INTERNAL TEMP 28
GAIN 2 N. HIGHLANDS

COMPOUND NAME	PEAK	R.T.	B
UNKNOWN	1	29.8	4.0 u

BH01-01 25.5' BLS	BH01-01 22.0' BLS	BH01-01 15.5' BLS	1 PPM STD
PHOTOVAC  STOP # 450.0 SAMPLE LIBRARY 1 JUN 24 191 ANALYSIS # 8 15.5 INTERNAL TEMP 28 BH01-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 29.8 808.6 mV	PHOTOVAC  STOP # 450.0 SAMPLE LIBRARY 1 JUN 24 191 ANALYSIS # 3 22.0 INTERNAL TEMP 28 BH01-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 29.8 808.6 mV	PHOTOVAC  STOP # 450.0 SAMPLE LIBRARY 1 JUN 24 191 ANALYSIS # 10 25.5 INTERNAL TEMP 29 BH01-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 29.8 461.9 mV	PHOTOVAC  STOP # 450.0 SAMPLE LIBRARY 1 JUN 24 191 ANALYSIS # 11 1PPM INTERNAL TEMP 23 BH01-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 29.8 852.6 mV BENZENE 2 23.3 875.4 mV TOLUENE 3 146.8 683.4 mV ETHYLBENZENE 4 303.5 463.1 mV 1-P-XYLENE 5 322.2 443.4 mV O-XYLENE 6 382.2 366.7 mV

AIR BLANK

PHOTOVAC

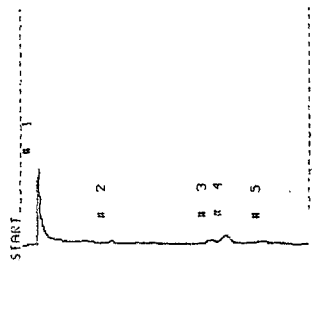


STOP # 450.0
SAMPLE LIBRARY 1 JUN 24 199
ANALYSIS # 12
INTERNAL TEMP 29 BH01-01
GAIN 2 N-HIGHLANDS

COMPOUND NAME	PEAK	R.T. #
UNKNOWN	1	29.8
TOLUENE	2	2.1
ETHYLBENZENE	3	146.4
ETHYLBENZENE	4	29.49
ETHYLBENZENE	5	303.5
ETHYLBENZENE	6	36.46

AIR BLANK

PHOTOVAC

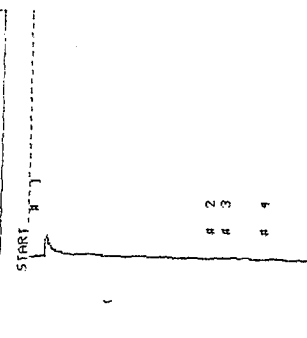


STOP # 450.0
SAMPLE LIBRARY 1 JUN 24 199
ANALYSIS # 13
INTERNAL TEMP 29 BH01-01
GAIN 2 N-HIGHLANDS

COMPOUND NAME	PEAK	R.T. #
UNKNOWN	1	29.8
ETHYLBENZENE	2	582.7
ETHYLBENZENE	3	303.5
ETHYLBENZENE	4	33.05
ETHYLBENZENE	5	326.8
ETHYLBENZENE	6	38.02

BH01-01 42.0' BLS

PHOTOVAC

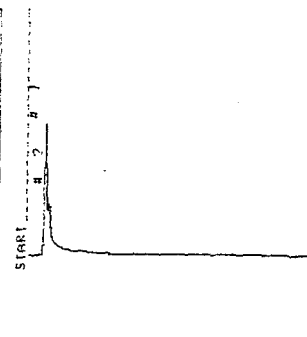


STOP # 450.0
SAMPLE LIBRARY 1 JUN 29 199
ANALYSIS # 14
INTERNAL TEMP 29 BH01-01
GAIN 2 N-HIGHLANDS

COMPOUND NAME	PEAK	R.T. #
UNKNOWN	1	322.7
UNKNOWN	2	5.430
UNKNOWN	3	322.7

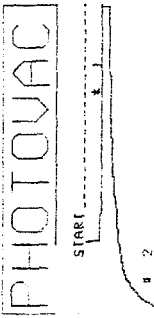
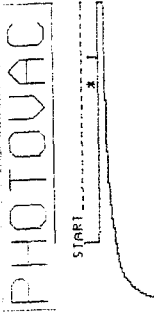
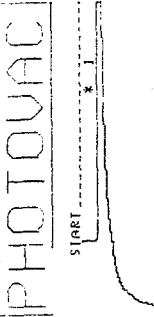
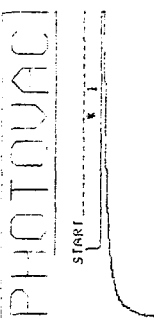
BH01-01 42.0' BLS

PHOTOVAC



STOP # 450.0
SAMPLE LIBRARY 1 JUN 24 199
ANALYSIS # 15
INTERNAL TEMP 30 BH01-01
GAIN 2 N-HIGHLANDS

COMPOUND NAME	PEAK	R.T. #
UNKNOWN	1	30.0
UNKNOWN	2	343.2
UNKNOWN	3	35.4
UNKNOWN	4	63.4

BH01-01 45.5' BLS	BH01-01 52.0' BLS	BH01-01 59.0' BLS	BH01-01 55.5' BLS
 STOP # 450.0 SAMPLE LIBRARY 1 JUN 24 1981 ANALYSIS # 16 45.5 INTERNAL TEMP 30 BH01-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 33.5 38.0 3	 STOP # 450.0 SAMPLE LIBRARY 1 JUN 24 1981 ANALYSIS # 17 52.0 INTERNAL TEMP 30 BH01-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 32.4 12.4 3	 STOP # 450.0 SAMPLE LIBRARY 1 JUN 24 1981 ANALYSIS # 18 59.0 INTERNAL TEMP 30 BH01-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 32.1 18.5 4	 STOP # 450.0 SAMPLE LIBRARY 1 JUN 24 1981 ANALYSIS # 19 55.5 INTERNAL TEMP 30 BH01-01 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 30.2 12.2 3

BH01-01 32.0' BLS

PHOTOVAC

START



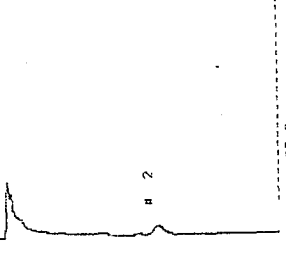
STOP # 450.0
SAMPLE LIBRARY 1 JUN 24 1991
ANALYSIS # 28 32.0
INTERNAL TEMP 30 BH01-01
GAIN 2 N.HIGHLANDS

COMPOUND NAME PEAK R.T. #
UNKNOWN 1 29.8 1.0 u

BH01-01 35.5' BLS

PHOTOVAC

START



STOP # 450.0
SAMPLE LIBRARY 1 JUN 24 1991
ANALYSIS # 21 35.5
INTERNAL TEMP 31 BH01-01
GAIN 2 N.HIGHLANDS

COMPOUND NAME PEAK R.T. #
UNKNOWN 1 29.8 233.5 mV
UNKNOWN 2 220.3 480.5 mV

BH01-04 5.5' BLS

PHOTOVAC

START



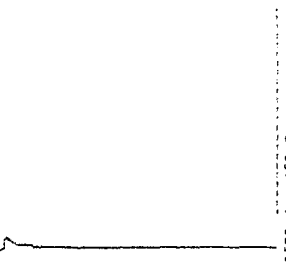
STOP # 450.0
SAMPLE LIBRARY 1 JUN 24 1991
ANALYSIS # 22 5.5
INTERNAL TEMP 31 BH01-04
GAIN 2 N.HIGHLANDS

COMPOUND NAME PEAK R.T. #
UNKNOWN 1 29.0 55.3 mV
UNKNOWN 2 34.2 157.6 mV

BH01-04 12.0' BLS

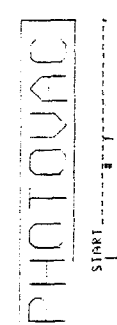
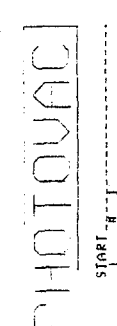
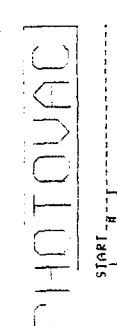
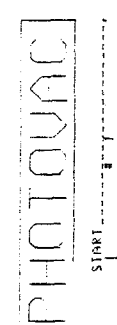
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START



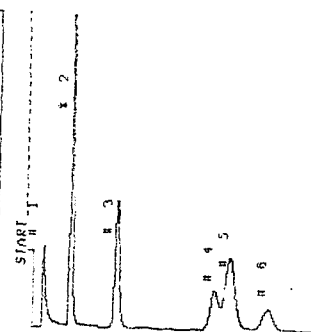
STOP # 450.0
SAMPLE LIBRARY 1 JUN 24 1991
ANALYSIS # 23 12.0
INTERNAL TEMP 32 BH01-04
GAIN 2 N.HIGHLANDS

COMPOUND NAME PEAK R.T. #

BH01-04 15.5' BLS	BH01-04 22.0' BLS	BH01-04 25.5' BLS	BH01-04 32.0' BLS
 STOP # 450.0 SAMPLE LIBRARY 1 JUN 24 1974 ANALYSIS # 24 15.5 INTERNAL TEMP 32 BH01-04 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. 0 UNKNOWN 1 29.7 511.5 mV	 STOP # 450.0 SAMPLE LIBRARY 1 JUN 24 1974 ANALYSIS # 25 22.0 INTERNAL TEMP 32 BH01-04 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. 0 UNKNOWN 1 29.8 511.5 mV	 STOP # 450.0 SAMPLE LIBRARY 1 JUN 24 1974 ANALYSIS # 26 25.5 INTERNAL TEMP 32 BH01-04 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. 0 UNKNOWN 1 29.8 765.9 mV	 STOP # 450.0 SAMPLE LIBRARY 1 JUN 24 1974 ANALYSIS # 27 32.0 INTERNAL TEMP 33 BH01-04 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. 0 UNKNOWN 1 29.7 850.0 mV

1 PPM STD

PHOTOVAC

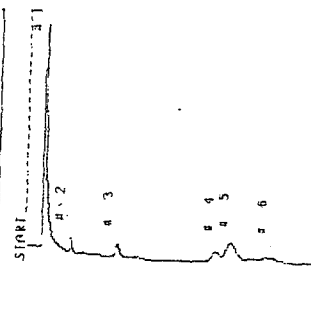


STOP # 450.0
 SAMPLE LIBRARY 1 JUN 24 1991
 ANALYSIS # 26 1 PPM
 INTERNAL TEMP 33 BH01-04
 GAIN 2 N-HIGHLANDS

COMPOUND NAME	PEAK	R.T.
UNKNOWN	1	23.7 536.2 mV
BENZENE	2	72.3 203.8 mV
TOLUENE	3	146.4 631.4 mV
ETHYLBENZENE	4	302.2 426.9 mV
m-P-XYLENE	5	326.8 400.9 mV
O-XYLENE	6	386.2 372.2 mV

AIR BLANK

PHOTOVAC

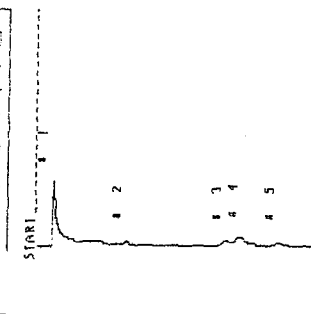


STOP # 450.0
 SAMPLE LIBRARY 1 JUN 24 1991
 ANALYSIS # 23 01R BLK
 INTERNAL TEMP 33 BH01-04
 GAIN 2 N-HIGHLANDS

COMPOUND NAME	PEAK	R.T.
UNKNOWN	1	23.7 2.2 u
BENZENE	2	72.3 22.93 mV
TOLUENE	3	146.0 61.82 mV
ETHYLBENZENE	4	302.2 87.09 mV
m-P-XYLENE	5	325.9 93.12 mV
O-XYLENE	6	386.2 80.43 mV

AIR BLANK

PHOTOVAC

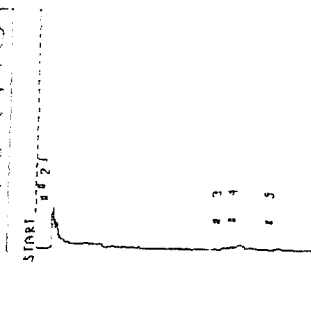


STOP # 450.0
 SAMPLE LIBRARY 1 JUN 24 1991
 ANALYSIS # 30 AIR BLK
 INTERNAL TEMP 33 BH01-04
 GAIN 2 N-HIGHLANDS

COMPOUND NAME	PEAK	R.T.
UNKNOWN	1	23.7 485.0 mV
TOLUENE	2	146.0 16.05 mV
ETHYLBENZENE	3	302.2 44.18 mV
m-P-XYLENE	4	325.9 47.02 mV
O-XYLENE	5	385.2 41.92 mV

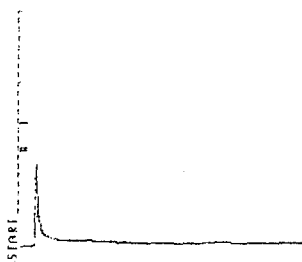
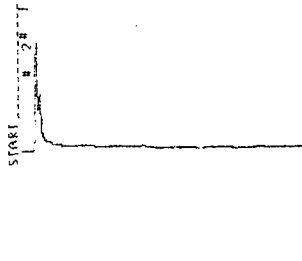
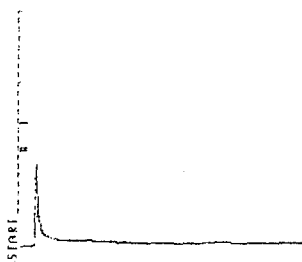
BH01-04 35.5' BLS

PHOTOVAC



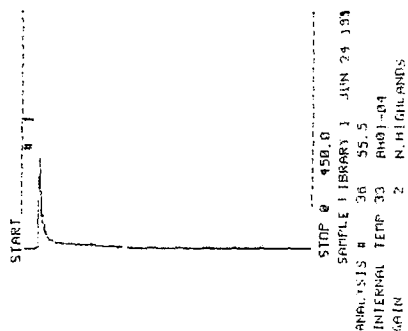
STOP # 450.0
 SAMPLE LIBRARY 1 JUN 24 1991
 ANALYSIS # 31 35.5
 INTERNAL TEMP 33 BH01-04
 GAIN 2 N-HIGHLANDS

COMPOUND NAME	PEAK	R.T.
UNKNOWN	1	23.6 242.3 mV
m-P-XYLENE	4	325.9 12.31 mV
O-XYLENE	5	385.2 24.23 mV

BH01-04 35.5' BLS	BH01-04 42.0' BLS	BH01-04 45.5' BLS	BH01-04 52.0' BLS
PHOTOVAC  STOP @ 450.0 SAMPLE LIBRARY 1 JUN 24 198 ANALYSIS # 32 35.5 INTERNAL TEMP 33 BH01-04 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. 4 UNKNOWN 1 29.6 588.5 mV	PHOTOVAC  STOP @ 450.0 SAMPLE LIBRARY 1 JUN 24 198 ANALYSIS # 33 42.0 INTERNAL TEMP 33 BH01-04 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. 4 UNKNOWN 1 29.5 615.0 mV UNKNOWN 2 34.5 161.1 mV	PHOTOVAC  STOP @ 450.0 SAMPLE LIBRARY 1 JUN 24 198 ANALYSIS # 34 45.5 INTERNAL TEMP 33 BH01-04 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. 8 UNKNOWN 1 29.6 433.3 mV	PHOTOVAC  STOP @ 450.0 SAMPLE LIBRARY 1 JUN 24 198 ANALYSIS # 35 52.0 INTERNAL TEMP 33 BH01-04 GAIN 2 N.HIGHLANDS COMPOUND NAME PEAK R.T. 8 UNKNOWN 1 29.6 312.2 mV

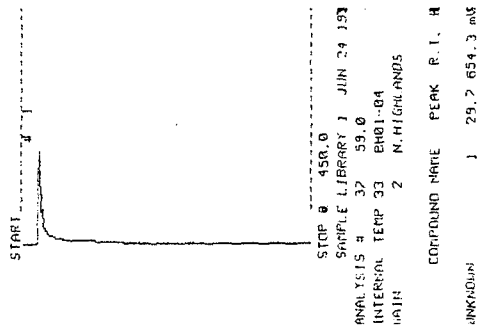
BH01-04 55.5' BLS

PHOTOVAC



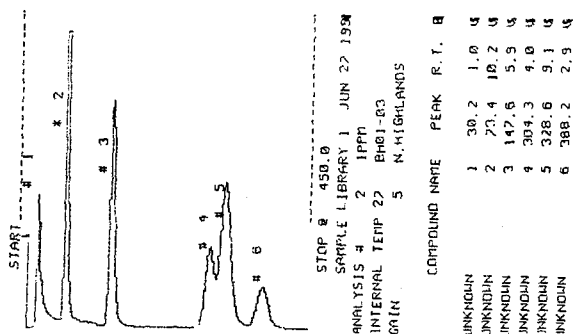
BH01-04 59.0' BLS

PHOTOVAC



1 PPM STD

PHOTOVAC

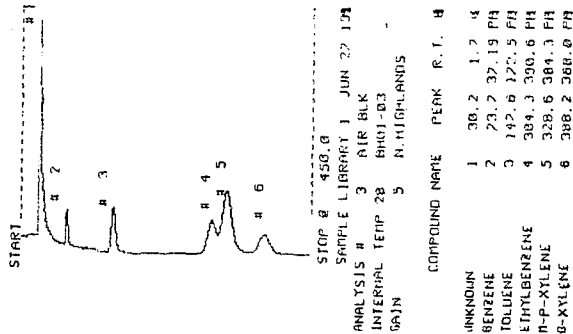


PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
	BENZENE	2	73.4	1.000 PP
	TOLUENE	3	147.6	1.000 PP
	ETHYLBENZENE	4	304.3	1.000 PP
	m-P-XYLENE	5	328.6	1.000 PP
	O-XYLENE	6	388.2	1.000 PP

AIR BLANK

PHOTOVAC



AIR BLANK

PHOTOVAC

STOP 8 450.0

SAMPLE LIBRARY 1 JUN 27 1991

ANALYSIS 4 4 AIR BLK

INTERNAL TEMP 28 BH01-03

GAIN 5 N.HIGHLANDS

COMPOUND NAME PEAK R.T. #

UNKNOWN	1	30.2	511.4	MM
BENZENE	2	73.7	5.410	PH
TOLUENE	3	142.6	85.28	PH
ETHYLBENZENE	4	384.3	259.8	PH
m-P-XYLENE	5	328.6	263.8	PH
o-XYLENE	6	388.2	247.2	PH

AIR BLANK

PHOTOVAC

STOP 8 425.6

SAMPLE LIBRARY 1 JUN 27 1991

ANALYSIS 4 5 AIR BLK

INTERNAL TEMP 28 BH01-03

GAIN 5 N.HIGHLANDS

COMPOUND NAME PEAK R.T. #

UNKNOWN	1	32.3	29.1	U
TOLUENE	3	142.2	42.03	PH
ETHYLBENZENE	4	384.3	225.3	PH
m-P-XYLENE	5	322.2	244.4	PH
o-XYLENE	6	388.2	257.0	PH

AIR BLANK

PHOTOVAC

STOP 8 450.0

SAMPLE LIBRARY 1 JUN 27 1991

ANALYSIS 4 6 AIR BLK

INTERNAL TEMP 23 BH01-03

GAIN 5 N.HIGHLANDS

COMPOUND NAME PEAK R.T. #

UNKNOWN	1	29.8	2.6	U
TOLUENE	2	142.2	15.97	PH
ETHYLBENZENE	3	384.3	126.3	PH
m-P-XYLENE	4	322.2	146.5	PH
o-XYLENE	5	388.2	160.1	PH

AIR BLANK

PHOTOVAC

STOP 8 450.0

SAMPLE LIBRARY 1 JUN 27 1991

ANALYSIS 4 2 AIR BLK

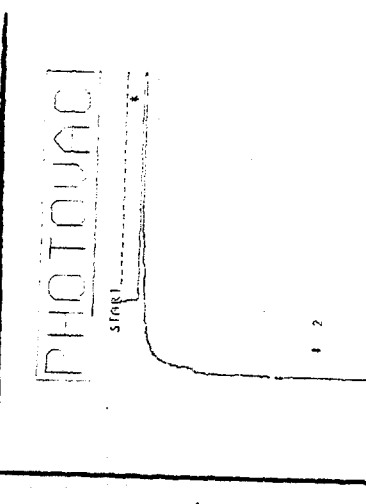
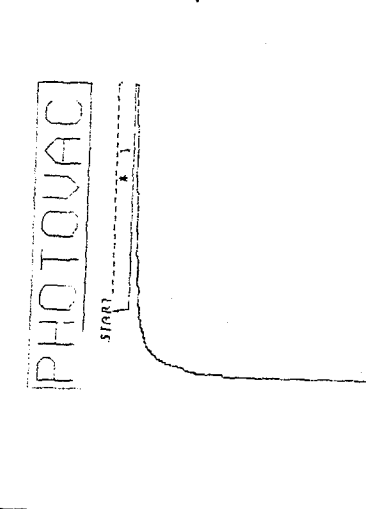
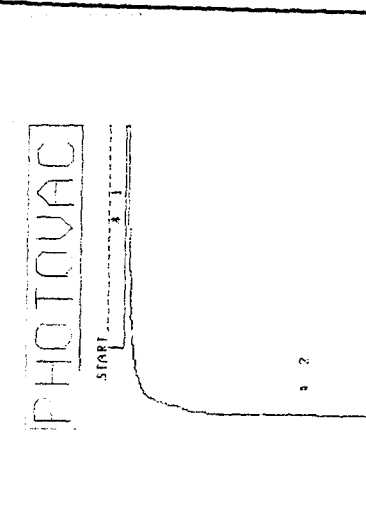
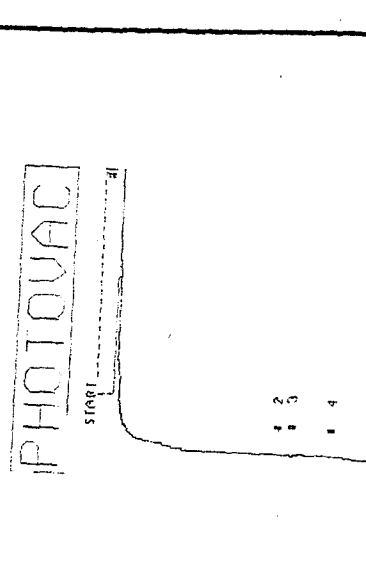
INTERNAL TEMP 23 BH01-03

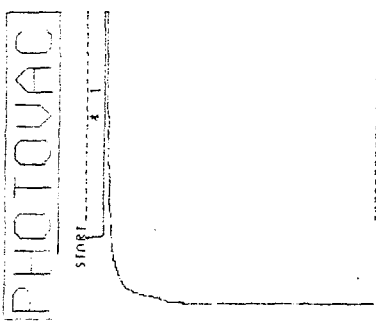
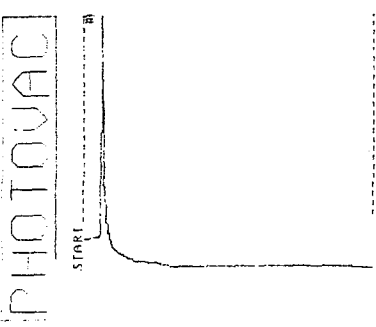
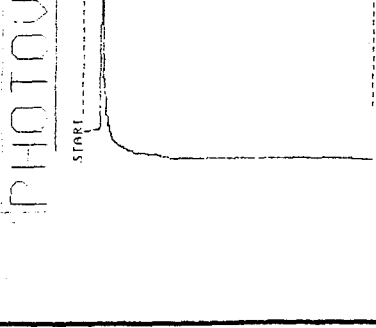
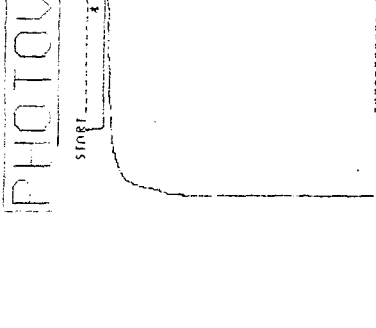
GAIN 5 N.HIGHLANDS

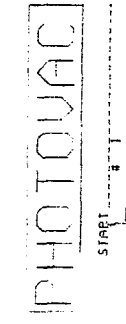
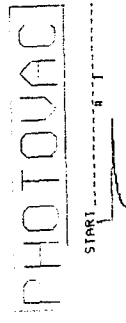
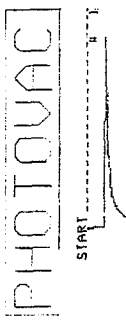
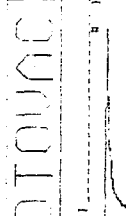
COMPOUND NAME PEAK R.T. #

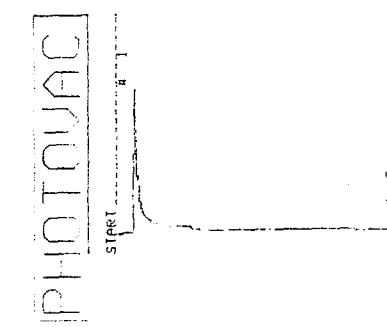
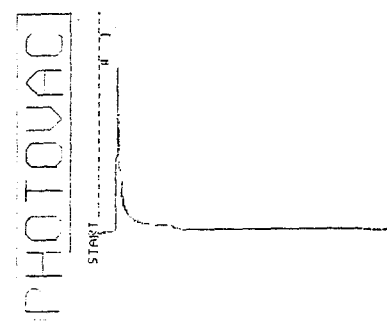
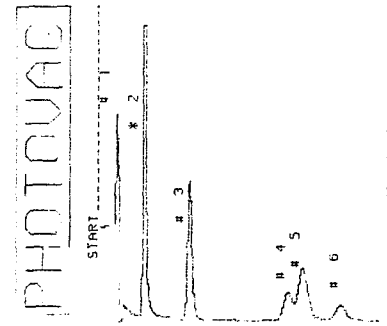
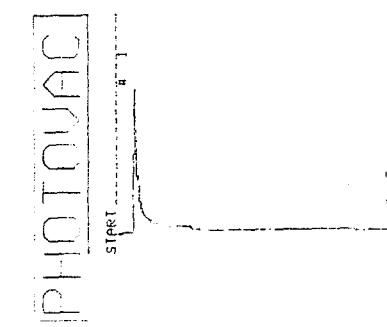
UNKNOWN	1	33.6	45.2	U
m-P-XYLENE	3	322.2	20.35	PH
o-XYLENE	4	388.2	33.52	PH

C 1 38

BH01-03 5.5' BLS	BH01-03 5.5' BLS	BH01-03 12.0' BLS	BH01-03 15.5' BLS
 STOP 9 450.0 SAMPLE LIBRARY 1 JUN 22 1998 ANALYSIS 4 8 5.5 INTERNAL TEMP 23 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 30.1 1.9 u 3 322.2 10.46 PB	 STOP 9 450.0 SAMPLE LIBRARY 1 JUN 22 1998 ANALYSIS 4 9 5.5 INTERNAL TEMP 23 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 30.3 9.2 u	 STOP 9 450.0 SAMPLE LIBRARY 1 JUN 22 1998 ANALYSIS 4 10 12.0 INTERNAL TEMP 23 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 30.2 12.2 u	 STOP 9 450.0 SAMPLE LIBRARY 1 JUN 22 1998 ANALYSIS 4 11 15.5 INTERNAL TEMP 23 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 30.1 2.2 u

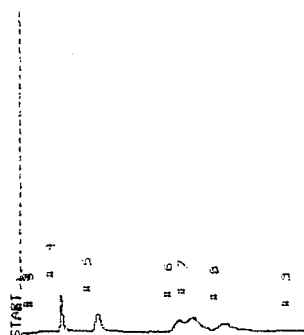
BH01-03 22.0' BLS	BH01-03 25.5' BLS	BH01-03 32.0' BLS	BH01-03 35.5' BLS
 STOP 4 450.0 SAMPLE LIBRARY 1 JUN 22 191 ANALYSIS 4 12 22.0 INTERNAL TEMP 29 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. 4 UNKNOWN 1 30.3 10.5 u	 STOP 2 450.0 SAMPLE LIBRARY 1 JUN 22 191 ANALYSIS 4 13 25.5 INTERNAL TEMP 30 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. 4 UNKNOWN 1 30.1 1.8 u	 STOP 0 450.0 SAMPLE LIBRARY 1 JUN 22 191 ANALYSIS 4 14 32.0 INTERNAL TEMP 30 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. 4 UNKNOWN 1 30.0 1.4 u	 STOP 0 450.0 SAMPLE LIBRARY 1 JUN 22 191 ANALYSIS 4 15 35.5 INTERNAL TEMP 30 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. 4 UNKNOWN 1 29.6 1.9 u UNKNOWN 2 34.9 2.4 u

BH01-03 42.0' BLS	BH01-03 42.0' BLS  STOP @ 450.0 SAMPLE LIBRARY 1 JUN 22 191 ANALYSIS # 16 42.0 INTERNAL TEMP 30 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 30.2 57.9 mV
BH01-03 45.5' BLS	BH01-03 45.5' BLS  STOP @ 450.0 SAMPLE LIBRARY 1 JUN 22 191 ANALYSIS # 17 45.5 INTERNAL TEMP 30 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 30.1 286.0 mV
BH01-03 52.0' BLS	BH01-03 52.0' BLS  STOP @ 450.0 SAMPLE LIBRARY 1 JUN 22 191 ANALYSIS # 18 52.0 INTERNAL TEMP 30 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 30.1 1.4 u
BH01-03 55.5' BLS	BH01-03 55.5' BLS  STOP @ 450.0 SAMPLE LIBRARY 1 JUN 22 191 ANALYSIS # 19 55.5 INTERNAL TEMP 31 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 30.0 1.4 u

BH01-03 58.0' BLS	BH01-03 59.0' BLS	1 PPM STD	AIR BLANK
 STOP # 450.0 SAMPLE LIBRARY 1 JUN 22 191 ANALYSIS # 20 38.0 INTERNAL TEMP 31 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 38.0 1.0 U	 STOP # 450.0 SAMPLE LIBRARY 1 JUN 22 191 ANALYSIS # 21 59.0 INTERNAL TEMP 31 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 30.1 1.2 U	 STOP # 450.0 SAMPLE LIBRARY 1 JUN 22 191 ANALYSIS # 22 1PPM INTERNAL TEMP 31 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 30.2 820.8 mV BENZENE 2 23.4 896.9 PA TOLUENE 3 142.6 593.2 PA ETHYLBENZENE 4 304.3 351.2 PA M-P-XYLENE 5 322.7 343.1 PA O-XYLENE 6 382.2 312.5 PA	 STOP # 450.0 SAMPLE LIBRARY 1 JUN 22 191 ANALYSIS # 23 AIR BLK INTERNAL TEMP 31 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # UNKNOWN 1 31.9 0.1 U BENZENE 2 23.5 31.10 PA TOLUENE 3 142.2 31.76 PA ETHYLBENZENE 4 303.5 147.2 PA M-P-XYLENE 5 322.2 143.4 PA O-XYLENE 6 382.2 143.0 PA

I PPM STD

PHOTOVAC



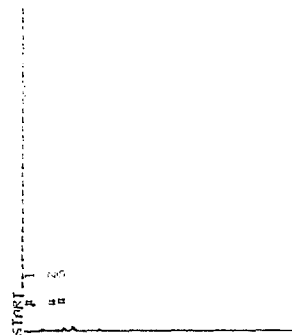
STOP # 450.0
 SAMPLE LIBRARY 1 JUL 1 1994 17:56
 ANALYSIS # 2 MARK HENSON
 INTERNAL TEMP 23 1 PPM BTX
 GAIN 2 N-HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 45.1 468.2 PPM
 UNKNOWN 5 122.1 500.1 PPM
 UNKNOWN 6 253.4 511.0 PPM
 UNKNOWN 7 273.2 851.5 PPM
 UNKNOWN 8 323.3 355.5 PPM

PHOTOVAC

CALIBRATED PEAK 1, BENZENE
 SAMPLE LIBRARY 1 JUL 1 1994 18:14
 ANALYSIS # 2 MARK HENSON
 INTERNAL TEMP 23 1 PPM BTX
 GAIN 2 N-HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 BENZENE 1 45.1 100.0 PPM
 TOLUENE 5 122.1 100.0 PPM
 ETHYLBENZENE 6 253.4 100.0 PPM
 MP-XYLENE 7 273.2 200.0 PPM
 O-XYLENE 8 323.3 100.0 PPM

BH01-05 12.0' BLS

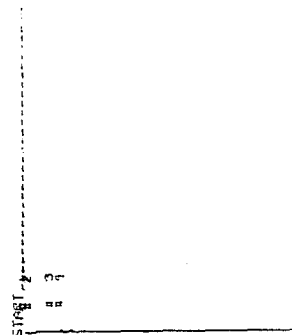
PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 5 1994 10:28
 ANALYSIS # 3 MARK HENSON
 INTERNAL TEMP 23 SAMPLE #2
 GAIN 2 N-HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 BENZENE 2 65.0 25.72 PPM
 UNKNOWN 3 25.4 32.9 PPM

BH01-05 15.5' BLS

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 5 1994 10:32
 ANALYSIS # 4 MARK HENSON
 INTERNAL TEMP 23 SAMPLE #3
 GAIN 2 N-HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 18.0 6.1 PPM

BH01-05 22.0' BLS

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 5 1994 11:0
 ANALYSIS # 5 MARK HENSON
 INTERNAL TEMP 23 SAMPLE #4
 GAIN 2 N-HIGHLANDS
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 3 29.2 17.2 PPM

BH01-05 25.5' BLS

PHOTOVAC

START
2
3

STOP # 450.0
SAMPLE LIBRARY 1 JUL 5 1994 14:36
ANALYSIS # 6 MARK HENSON
INTERNAL TEMP 30 SAMPLE #5
GAIN 2 N. HIGHLANDS
COMPOUND NAME PEAK R.T. AREA/FTU
UNKNOWN 2 81.5 5.4 #US

BH01-05 32.0' BLS

PHOTOVAC

START
1
2

STOP # 1300.0
SAMPLE LIBRARY 1 JUL 5 1994 14:45
ANALYSIS # 7 MARK HENSON
INTERNAL TEMP 30 SAMPLE #6
GAIN 2 N. HIGHLANDS
COMPOUND NAME PEAK R.T. AREA/FTU
UNKNOWN 2 20.7 5.6 #US

BH01-05 35.5' BLS

PHOTOVAC

START
1

STOP # 950.0
SAMPLE LIBRARY 1 JUL 5 1994 15: 3
ANALYSIS # 8 MARK HENSON
INTERNAL TEMP 30 SAMPLE #7
GAIN 2 N. HIGHLANDS
COMPOUND NAME PEAK R.T. AREA/FTU
UNKNOWN 1 31.0 10.9 #US

BH01-05 42.0' BLS

PHOTOVAC

START
1

STOP # 950.0
SAMPLE LIBRARY 1 JUL 5 1994 15:12
ANALYSIS # 9 MARK HENSON
INTERNAL TEMP 30 SAMPLE #8
GAIN 2 N. HIGHLANDS
COMPOUND NAME PEAK R.T. AREA/FTU

BH01-05 45.5' BLS

PHOTOVAC

START

1
2
3

STOP # 450.0
SAMPLE LIBRARY 1 JUL 5 1994 15:20
ANALYSIS # 10 DARK HENSON
INTERNAL TEMP 30 SAMPLE #5
GAIN 2 N. HIGHLANDS

COUNTING RATE FLK N.T. PRESENT

UNKNOWN 1 105.0 4.6 μS
UNKNOWN 2 110.3 35.13 μS
UNKNOWN 3 150.5 5.1 μS

BH01-05 52.0' BLS

PHOTOVAC

START

STOP # 450.0
SAMPLE LIBRARY 1 JUL 5 1994 15:38
ANALYSIS # 11 DARK HENSON
INTERNAL TEMP 30 SAMPLE #10
GAIN 2 N. HIGHLANDS

COUNTING RATE FLK N.T. PRESENT

BH01-05 55.5' BLS

PHOTOVAC

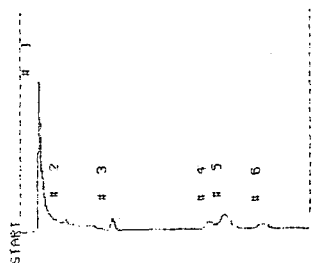
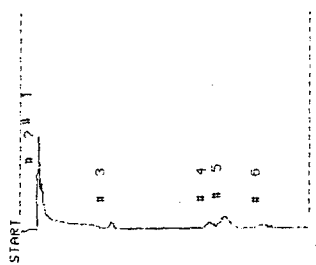
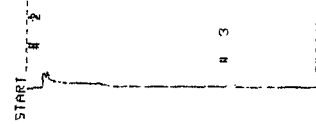
START

1
2

STOP # 450.0
SAMPLE LIBRARY 1 JUL 5 1994 15:48
ANALYSIS # 12 DARK HENSON
INTERNAL TEMP 30 SAMPLE #11
GAIN 2 P

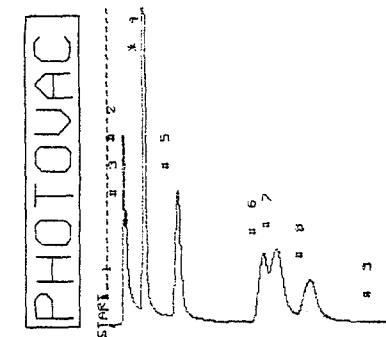
COUNTING RATE FLK N.T. PRESENT

UNKNOWN 2 101.7 10.1 μS

AIR BLANK	AIR BLANK	BH01-05 5.5' BLS	BH01-05 12.0' BLS																																																							
PHOTOVAC  STOP 450.0 SAMPLE LIBRARY 1 JUN 27 191 ANALYSIS # 24 AIR BLK INTERNAL TEMP 31 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # <table><tr><td>UNKNOWN</td><td>1</td><td>30.0</td><td>1.1</td><td>U</td></tr><tr><td>TOLUENE</td><td>3</td><td>142.2</td><td>38.21</td><td>PH</td></tr><tr><td>ETHYL BENZENE</td><td>4</td><td>303.5</td><td>84.92</td><td>PH</td></tr><tr><td>m-P-XYLENE</td><td>5</td><td>322.2</td><td>92.31</td><td>PH</td></tr><tr><td>O-XYLENE</td><td>6</td><td>387.2</td><td>93.03</td><td>PH</td></tr></table>	UNKNOWN	1	30.0	1.1	U	TOLUENE	3	142.2	38.21	PH	ETHYL BENZENE	4	303.5	84.92	PH	m-P-XYLENE	5	322.2	92.31	PH	O-XYLENE	6	387.2	93.03	PH	PHOTOVAC  STOP 450.0 SAMPLE LIBRARY 1 JUN 27 191 ANALYSIS # 25 AIR BLK INTERNAL TEMP 32 BH01-03 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # <table><tr><td>UNKNOWN</td><td>1</td><td>30.0</td><td>653.2</td><td>W</td></tr><tr><td>TOLUENE</td><td>3</td><td>142.2</td><td>16.42</td><td>PH</td></tr><tr><td>ETHYL BENZENE</td><td>4</td><td>303.5</td><td>65.39</td><td>PH</td></tr><tr><td>m-P-XYLENE</td><td>5</td><td>322.2</td><td>21.54</td><td>PH</td></tr><tr><td>O-XYLENE</td><td>6</td><td>387.2</td><td>26.11</td><td>PH</td></tr></table>	UNKNOWN	1	30.0	653.2	W	TOLUENE	3	142.2	16.42	PH	ETHYL BENZENE	4	303.5	65.39	PH	m-P-XYLENE	5	322.2	21.54	PH	O-XYLENE	6	387.2	26.11	PH	PHOTOVAC  STOP 450.0 SAMPLE LIBRARY 1 JUN 27 191 ANALYSIS # 26 5.5 INTERNAL TEMP 33 BH01-05 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. #	PHOTOVAC  STOP 450.0 SAMPLE LIBRARY 1 JUN 27 191 ANALYSIS # 27 12.0 INTERNAL TEMP 33 BH01-05 GAIN 5 N.HIGHLANDS COMPOUND NAME PEAK R.T. # <table><tr><td>UNKNOWN</td><td>1</td><td>30.2</td><td>1.9</td><td>U</td></tr></table>	UNKNOWN	1	30.2	1.9	U
UNKNOWN	1	30.0	1.1	U																																																						
TOLUENE	3	142.2	38.21	PH																																																						
ETHYL BENZENE	4	303.5	84.92	PH																																																						
m-P-XYLENE	5	322.2	92.31	PH																																																						
O-XYLENE	6	387.2	93.03	PH																																																						
UNKNOWN	1	30.0	653.2	W																																																						
TOLUENE	3	142.2	16.42	PH																																																						
ETHYL BENZENE	4	303.5	65.39	PH																																																						
m-P-XYLENE	5	322.2	21.54	PH																																																						
O-XYLENE	6	387.2	26.11	PH																																																						
UNKNOWN	1	30.2	1.9	U																																																						

C - 46

1 PPM STD



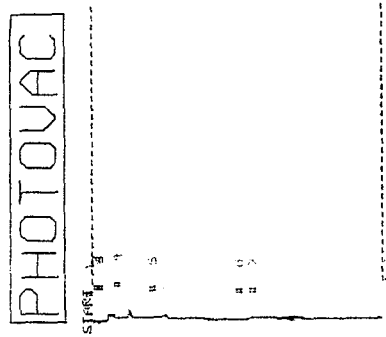
STOP # 450.0
SAMPLE LIBRARY 1 JUL 1 1994 13:56
ANALYSIS # 5 1PPM
INTERNAL TEMP 30
GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	16.5	10.9 μS
UNKNOWN	2	26.6	1.8 μS
UNKNOWN	3	30.2	2.0 μS
UNKNOWN	4	58.3	6.8 μS
UNKNOWN	5	111.1	3.2 μS
UNKNOWN	6	246.2	3.4 μS
UNKNOWN	7	266.0	5.0 μS
UNKNOWN	8	312.3	3.2 μS
UNKNOWN	9	422.5	5.9 μS

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
BENZENE	1	58.3	1.000 PPM	
TOLUENE	2	111.1	1.000 PPM	
ETHYLBENZENE	3	246.2	1.000 PPM	
m-P-XYLENE	4	266.0	1.000 PPM	
p-XYLENE	5	312.3	1.000 PPM	

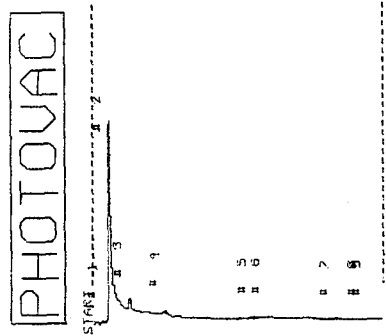
BH01-05 15.5' BLS



STOP # 450.0
SAMPLE LIBRARY 1 JUL 1 1994 14:0
ANALYSIS # 6 15.5
INTERNAL TEMP 30 BH01-05
GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	15.2	8.2 μS
UNKNOWN	2	26.5	34.2 μS
BENZENE	3	53.2	8.511 PPM
m-P-XYLENE	7	270.5	1.302 PPM

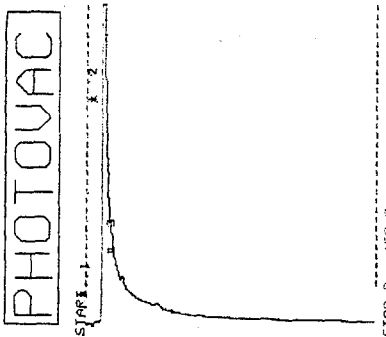
BH01-05 15.5' BLS



STOP # 450.0
SAMPLE LIBRARY 1 JUL 1 1994 14:12
ANALYSIS # 7 15.5
INTERNAL TEMP 30 BH01-05
GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	16.2	15.2 μS
UNKNOWN	2	26.9	2.6 μS
BENZENE	3	58.4	16.93 PPM
TOLUENE	4	112.2	1.358 PPM
m-P-XYLENE	6	298.8	2.572 PPM

AIR BLANK



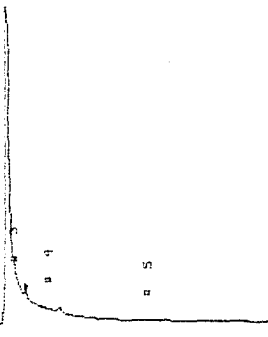
STOP # 450.0
SAMPLE LIBRARY 1 JUL 1 1994 14:26
ANALYSIS # 8 AIR BLK
INTERNAL TEMP 30 BH01-05
GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	16.1	15.5 μS
UNKNOWN	2	27.7	14.4 μS
BENZENE	3	52.3	1.108 PPM

BH01-05 15.5' BLS

PHOTOVAC

START 15.5' BLS



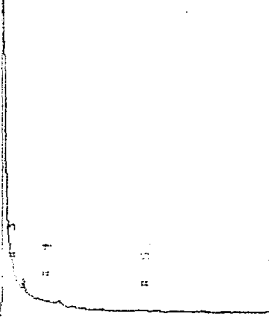
STOP # 450.0
 SAMPLE LIBRARY 1 JUL 1 1994 14:35
 ANALYSIS # 5 15.5
 INTERNAL TEMP 30 BH01-05
 GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/FTU
UNKNOWN	1	15.5	12.2 μS
UNKNOWN	2	26.6	11.1 μS
BENZENE	3	52.7	14.85 μS
TOLUENE	4	111.1	1.260 μS

BH01-05 22.0' BLS

PHOTOVAC

START 22.0' BLS



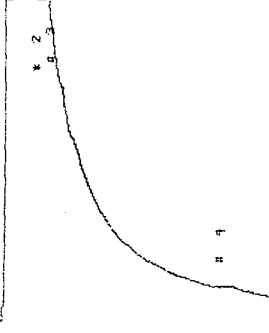
STOP # 450.0
 SAMPLE LIBRARY 1 JUL 1 1994 14:44
 ANALYSIS # 10 22.0
 INTERNAL TEMP 30 BH01-05
 GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/FTU
UNKNOWN	1	16.1	16.2 μS
UNKNOWN	2	26.6	9.2 μS
BENZENE	3	52.8	13.80 μS
p-P-XYLENE	5	265.7	1.167 μS

BH01-05 25.5' BLS

PHOTOVAC

START 25.5' BLS



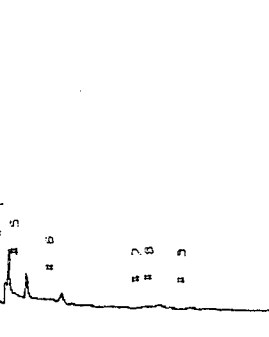
STOP # 450.0
 SAMPLE LIBRARY 1 JUL 1 1994 14:53
 ANALYSIS # 11 25.5
 INTERNAL TEMP 30 BH01-05
 GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/FTU
UNKNOWN	1	17.1	20.7 μS
BENZENE	2	58.3	153.8 μS
TOLUENE	3	112.8	13.72 μS

BH01-05 25.5' BLS

PHOTOVAC

START 25.5' BLS

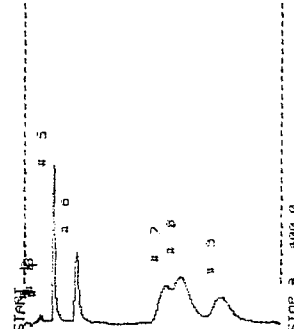


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 1 1994 15:2
 ANALYSIS # 12 25.5
 INTERNAL TEMP 30 BH01-05
 GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/FTU
UNKNOWN	1	9.1	65.4 μS
UNKNOWN	2	17.3	15.7 μS
UNKNOWN	3	22.0	31.1 μS
BENZENE	4	31.3	300.1 μS
TOLUENE	5	55.3	35.11 μS
ETHYL BENZENE	6	113.4	24.42 μS
p-P-XYLENE	7	242.4	1.580 μS
p-P-XYLENE	8	267.2	26.10 μS

1 PPM STD

PHOTOVAC



STOP # 100.0
SAMPLE LIBRARY 1 JAN 1 2000 4:11
ANALYSIS # 6
INTERNAL TEMP 30
GAIN 10

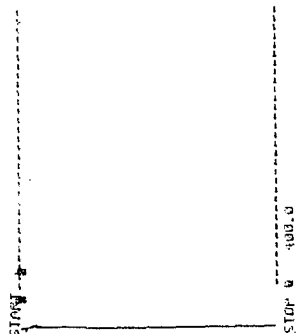
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	18.0	13.1
UNKNOWN	2	22.1	22.1
UNKNOWN	3	23.0	56.0
UNKNOWN	5	46.5	1.7
UNKNOWN	6	85.0	1.4
UNKNOWN	7	223.9	605.2
UNKNOWN	8	246.8	1.1
UNKNOWN	9	303.5	1.6

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
BENZENE	1	46.5	1.000	PPM
TOLUENE	2	85.0	1.000	PPM
ETHYLBENZENE	3	223.5	1.000	PPM
m-P-XYLENE	4	246.8	1.000	PPM
O-XYLENE	5	303.5	1.000	PPM

BH01-02 5.5' BLS

PHOTOVAC

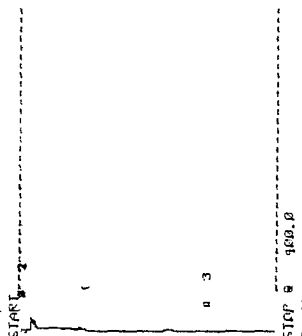


STOP # 100.0
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ANALYSIS # 7
INTERNAL TEMP 30
GAIN 10

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	16.6	13.2

BH01-02 12.0' BLS

PHOTOVAC

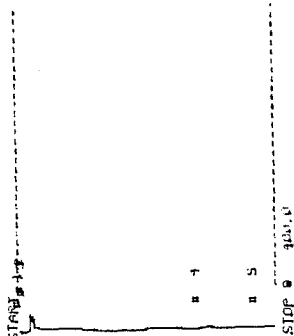


STOP # 100.0
SAMPLE LIBRARY 1 JAN 1 2000 4:23
ANALYSIS # 8
INTERNAL TEMP 30
GAIN 10

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	21.1	121.5
UNKNOWN	2	24.2	82.5

BH01-02 15.5' BLS

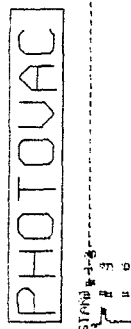
PHOTOVAC



STOP # 100.0
SAMPLE LIBRARY 1 JAN 1 2000 4:30
ANALYSIS # 9
INTERNAL TEMP 30
GAIN 10

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	18.0	15.1
UNKNOWN	2	21.1	121.6
UNKNOWN	3	24.2	102.3

BH01-02 35.5' BLS

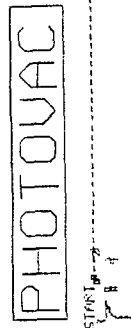


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STOP @ 004.0
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ANALYSIS # 10 22.0
INTERNAL TEMP 50
GAIN 10 N.HIGHLANDS

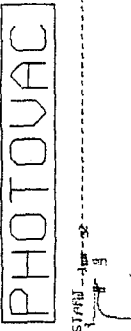
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COMP. CND. NAME	PEAK	R. I.	AREA/WT%
UNKNOWN	1	16.5	14.0 M%S
UNKNOWN	2	20.3	113.7 M%S
UNKNOWN	3	24.3	196.3 M%S
BENZENE	4	42.5	4.583 M%R



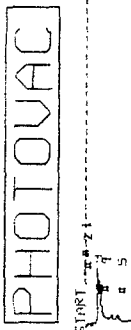
STOP @	100.0				
SAMPLE LIBRARY	1	JAN 1 2000	1.53		
ANALYSIS #	11	25.5			
INTERNAL TEMP	30	PH01-02			
GAIN	10	N-HIGH-ANDS			

CONTAIN, CODE	PEAK R.T. MINUTES
UNKNOWN	1 20.2 219.8 mUs
UNKNOWN	2 24.2 132.6 mUs



STOP # 402.0
SAMPLE LIBRARY 1 JAN 1 2000 5:0
ANALYSIS # 12 32.0
INTERNAL TEMP 30 BHDJ-02
GAIN 10 N. HIGHLANDS

CONCENTRATION	PEAK	R.I.	RETENTION
100000000	1	16.9	15.2 mUS
100000000	2	21.1	30.6 mUS
100000000	3	25.2	42.5 mUS



```

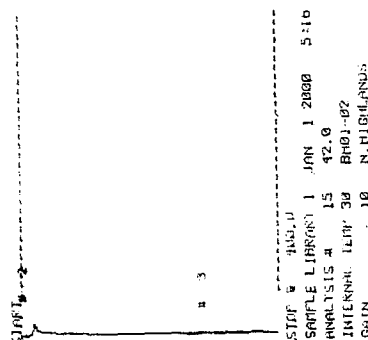
STOP @ 430.0
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ANALYSIS # 13 35.5
INTERNAL TEMP 50 PH01-02
GAIN 10 N.HIGH GAINS

```

DATE	TIME	NAME	REMARKS
10/10/19	1	UNKN	10/10/19
10/10/19	2	UNKN	10/10/19
10/10/19	3	UNKN	10/10/19
10/10/19	4	UNKN	10/10/19
10/10/19	5	UNKN	10/10/19
10/10/19	6	UNKN	10/10/19
10/10/19	7	UNKN	10/10/19
10/10/19	8	UNKN	10/10/19
10/10/19	9	UNKN	10/10/19
10/10/19	10	UNKN	10/10/19

BH01-02 42.0' BLS

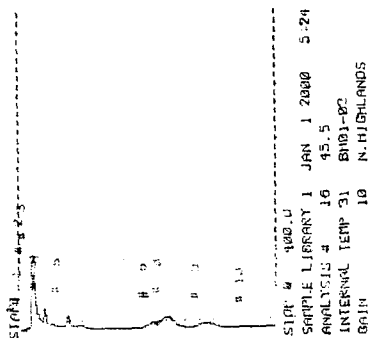
PHOTOVAC



CONTAINER NAME	PEAK	R.T.	AREA/FTD
UNKNOWN	1	15.4	162.2 AUS
UNKNOWN	2	23.3	33.1 AUS

BH01-02 45.5' BLS

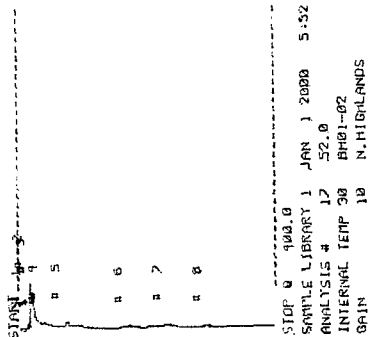
PHOTOVAC



CONTAINER NAME	PEAK	R.T.	AREA/FTD
UNKNOWN	1	15.8	10.8 AUS
UNKNOWN	2	20.9	407.3 AUS
UNKNOWN	3	24.5	1.0 AUS
UNKNOWN	4	42.2	123.9 AUS
UNKNOWN	5	22.2	102.5 FTD
ETHYL BENZENE	6	210.7	55.74 FTD
ETHYL BENZENE	7	217.1	10.71 FTD
ETHYL BENZENE	8	232.5	628.0 FTD
ETHYL BENZENE	9	294.5	163.6 FTD

BH01-02 52.0' BLS

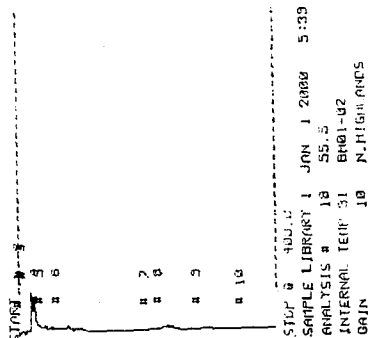
PHOTOVAC



CONTAINER NAME	PEAK	R.T.	AREA/FTD
UNKNOWN	1	15.5	10.0 AUS
UNKNOWN	2	20.8	333.1 AUS
UNKNOWN	3	24.2	132.3 AUS
UNKNOWN	4	42.4	3.003 FTD
UNKNOWN	5	22.9	76.10 FTD
UNKNOWN	6	126.7	15.0 AUS
ETHYL BENZENE	7	233.7	11.12 FTD
ETHYL BENZENE	8	237.5	5.391 FTD

BH01-02 55.5' BLS

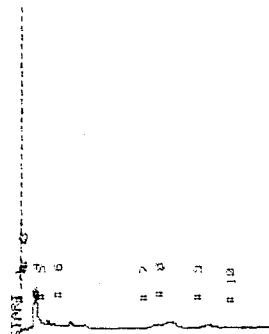
PHOTOVAC



CONTAINER NAME	PEAK	R.T.	AREA/FTD
UNKNOWN	1	16.6	15.2 AUS
UNKNOWN	2	24.5	225.0 AUS
UNKNOWN	3	24.5	248.0 AUS
UNKNOWN	4	42.6	13.30 FTD
UNKNOWN	5	22.0	6.3 AUS
UNKNOWN	6	28.4	50.13 FTD
ETHYL BENZENE	7	213.3	22.80 FTD
ETHYL BENZENE	8	235.1	22.00 FTD
ETHYL BENZENE	9	236.9	3.732 FTD
ETHYL BENZENE	10	363.7	0.7 AUS

BH01-02 59.0' BLS

PHOTOVAC

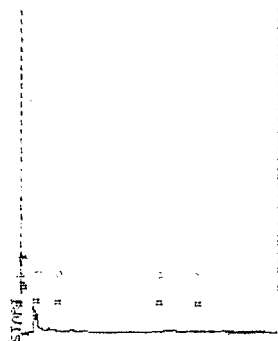


STOP # 100.0
 SAMPLE LIBRARY 1 JAN 1 2000 5:47
 ANALYSIS # 19 59.0
 INTERNAL TEMP 30 BH01-02
 GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/HT
UNKNOWN	1	16.3	13.0 AUS
UNKNOWN	2	21.1	225.3 AUS
UNKNOWN	3	24.5	502.0 AUS
PECELE	4	42.6	18.22 PFB
INDANE	6	28.5	33.36 PFB
ETHYLBENZENE	7	211.5	25.56 PFB
ETHYLBENZENE	8	294.3	123.7 PFB
p-XYLENE	9	206.3	52.07 PFB

BH01-02 45.5' BLS

PHOTOVAC



STOP # 100.0
 SAMPLE LIBRARY 1 JAN 1 2000 5:55
 ANALYSIS # 20 45.5
 INTERNAL TEMP 23 BH01-02
 GAIN 10 N.HIGHLANDS

COMPOUND NAME	PEAK	R.T.	AREA/HT
UNKNOWN	1	12.3	16.3 AUS
UNKNOWN	2	21.2	182.4 AUS
UNKNOWN	3	24.8	101.1 AUS
BENZENE	4	43.0	2.220 PFB
p-T-XYLENE	6	235.5	2.220 PFB
p-XYLENE	7	206.3	4.160 PFB

APPENDIX D

**CHEMICAL ANALYSES RESULTS FOR
QUALITY ASSURANCE/QUALITY CONTROL SAMPLES**

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EXPLANATION OF TABLE ORGANIZATION AND NOMENCLATURE

Each table in the appendix is a matrix which consists of samples (listed in columns) and analyses (listed in rows). In some cases, the matrix consists of more samples (columns) and/or more analyses (rows) than can be presented on a single sheet. The method of presentation used is that for a specific set of parameters (rows) with the results for all the samples (columns) analyzed presented. The table continuation pages are labeled as such for each parameter. For the next set of parameters, the results are given for all the samples analyzed. The physical pages themselves are numbered sequentially as they appear in this appendix.

The following nomenclature is used in the tables:

Parameter:	Parameter for which the analysis was performed.
Location No.:	The sampling location identifier.
Sample Date:	The sampling date.
Lab Sample No.:	The numeric identifier assigned to the sample by the laboratory.
U:	Indicates sample was analyzed for but was not detected.
N/A:	Indicates sample was not analyzed.

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Appendix D

Summary of Volatile Organic Compounds Detected in QA/QC Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in micrograms per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.:	BGBH-01-58' DUP 6/20/94 941536-0004	BH01-03 59' (=58' DUP) 6/27/94 941621-0003	BH02-01-62' DUP 6/21/94 941549-0003	BH02-04 GW 105' DUP 6/23/94 941573-0002
Volatiles Organics Matrix	Soil	Soil	Soil	Soil
Acetone	10U	10U	10U	10U
Benzene	5U	5U	5U	5U
Bromodichloromethane	5U	5U	5U	5U
Bromoform	5U	5U	5U	5U
Bromomethane	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U
Carbon disulfide	8	5U	5U	5U
Carbon tetrachloride	5U	5U	5U	5U
Chlorobenzene	5U	5U	5U	5U
Chlorodibromomethane	5U	5U	5U	5U
Chloroethane	10U	10U	10U	10U
2-Chloroethylvinyl ether	10U	10U	10U	10U
Chloroform	5U	5U	5U	5U
Chloromethane	10U	10U	10U	10U
1,1-Dichloroethane	5U	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U	5U
1,1-Dichloroethene	5U	5U	5U	5U
Total 1,2-Dichloroethenes	5U	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U	5U
cis-1,3-Dichloropropene	5U	5U	5U	5U
trans-1,3-Dichloropropene	5U	5U	5U	5U
Ethylbenzene	5U	5U	5U	5U
2-Hexanone	10U	10U	10U	10U
Methylene Chloride	5U	5U	5U	5U
4-Methyl-2-pentanone	10U	10U	10U	10U
Styrene	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U
Tetrachloroethene	5U	5U	5U	5U
1,1,1-Trichloroethane	5U	5U	5U	5U
1,1,2-Trichloroethane	5U	5U	5U	5U
Trichloroethene	5U	5U	5U	5U
Toluene	5U	5U	5U	5U
Vinyl acetate	10U	10U	10U	10U
Vinyl chloride	10U	10U	10U	10U
Total Xylenes	5U	5U	5U	5U

U - Indicates compound analyzed for but not detected.
DUP - Duplicate

BG - Background
BH - Borehole

Appendix D
Summary of Volatile Organic Compounds Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
(Results in micrograms per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.:		BH01-03 22' MS 6/27/94 941621-0006	BH01-03 22' MSD 6/27/94 941621-0007	BH02-03 42' MS 6/23/94 941585-0005	BH02-03 42' MSD 6/23/94 941585-0006
Volatile Organics	Matrix	Soil	Soil	Soil	Soil
Acetone		10U	10U	10U	10U
Benzene		43	41	42	49
Bromodichloromethane		5U	5U	5U	5U
Bromoform		5U	5U	5U	5U
Bromomethane		10U	10U	10U	10U
2-Butanone		10U	10U	10U	10U
Carbon disulfide		5U	5U	5U	5U
Carbon tetrachloride		5U	5U	5U	5U
Chlorobenzene		44	43	38	45
Chlorodibromomethane		5U	5U	5U	5U
Chloroethane		10U	10U	10U	10U
2-Chloroethylvinyl ether		10U	10U	10U	10U
Chloroform		5U	5U	5U	5U
Chloromethane		10U	10U	10U	10U
1,1-Dichloroethane		5U	5U	5U	5U
1,2-Dichloroethane		5U	5U	5U	5U
1,1-Dichloroethene		43	39	41	47
Total 1,2-Dichloroethenes		5U	5U	5U	5U
1,2-Dichloropropane		5U	5U	5U	5U
cis-1,3-Dichloropropene		5U	5U	5U	5U
trans-1,3-Dichloropropene		5U	5U	5U	5U
Ethylbenzene		5U	5U	5U	5U
2-Hexanone		10U	10U	10U	10U
Methylene Chloride		5U	5U	8	9
4-Methyl-2-pentanone		10U	10U	10U	10U
Styrene		5U	5U	5U	5U
1,1,2,2-Tetrachloroethane		5U	5U	5U	5U
Tetrachloroethene		5U	5U	5U	5U
1,1,1-Trichloroethane		5U	5U	5U	5U
1,1,2-Trichloroethane		5U	5U	5U	5U
Trichloroethene		42	40	40	46
Toluene		43	39	40	46
Vinyl acetate		10U	10U	10U	10U
Vinyl chloride		10U	10U	10U	10U
Total Xylenes		5U	5U	5U	5U

U - Indicates compound analyzed for but not detected.
MS/MSD - Matrix Spike/Matrix Spike Duplicate

BG - Background
BH - Borehole

Appendix D

Summary of Volatile Organic Compounds Detected in QA/QC Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in micrograms per liter unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.: Volatile Organics Matrix	Trip Blank 6/20/94 941536-0006	Trip Blank 1 6/27/94 941549-0006	Trip Blank 2 6/27/94 941549-0007	Trip Blank 1 6/27/94 941569-0005	Trip Blank 6/23/94 941585-0004	Trip Blank 6/28/94 941589-0005	Trip Blank 6/27/94 941621-0008	Trip Blank 6/18/94 941621-0014
Acetone	10U	10U	10U	10U	10U	10U	10U	10U
Benzene	5U	5U	5U	5U	5U	5U	5U	5U
Bromodichloromethane	5U	5U	5U	5U	5U	5U	5U	5U
Bromoform	5U	5U	5U	5U	5U	5U	5U	5U
Bromomethane	10U	10U	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U	10U	10U
Carbon disulfide	5U	5U	5U	5U	5U	5U	5U	5U
Carbon tetrachloride	5U	5U	5U	5U	5U	5U	5U	5U
Chlorobenzene	5U	5U	5U	5U	5U	5U	5U	5U
Chlorodibromomethane	5U	5U	5U	5U	5U	5U	5U	5U
Chloroethane	10U	10U	10U	10U	10U	10U	10U	10U
2-Chloroethylvinyl ether	10U	10U	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5U	5U	5U	5U	5U	5U
Chloromethane	10U	10U	10U	10U	10U	10U	10U	10U
1,1-Dichloroethane	5U	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U	5U	5U	5U	5U	5U
1,1-Dichloroethene	5U	5U	5U	5U	5U	5U	5U	5U
Total 1,2-Dichloroethenes	5U	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U	5U
trans-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U	5U
Ethylbenzene	5U	5U	5U	5U	5U	5U	5U	5U
2-Hexanone	10U	10U	10U	10U	10U	10U	10U	10U
Methylene Chloride	5U	5U	5U	5U	5U	5U	5U	5U
4-Methyl-2-pentanone	10U	10U	10U	10U	10U	10U	10U	10U
Styrene	5U	5U	5U	5U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U	5U	5U	5U	5U
Tetrachloroethene	5U	5U	5U	5U	5U	5U	5U	5U
1,1,1-Trichloroethane	5U	5U	5U	5U	5U	5U	5U	5U
1,1,2-Trichloroethane	5U	5U	5U	5U	5U	5U	5U	5U
Trichloroethene	5U	5U	5U	5U	5U	5U	5U	5U
Toluene	5U	5U	5U	5U	5U	5U	5U	5U
Vinyl acetate	10U	10U	10U	10U	10U	10U	10U	10U
Vinyl chloride	10U	10U	10U	10U	10U	10U	10U	10U
Total Xylenes	5U	5U	5U	5U	5U	5U	5U	5U

Lab Sample No.:	941536-0006	941549-0006	941549-0007	941569-0005	941585-0004	941589-0005	941621-0008	941621-0014
TPH by GC (as diesel)	10U	10U	10U	10U	10U	10U	10U	10U
TPH by GC (as gasoline)	100U	100U	100U	100U	100U	100U	100U	100U

Appendix D
Summary of Volatile Organic Compounds Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
 (Results in micrograms per liter unless otherwise noted.)

Location No.: BGBH-01		Rinsate #1		Equipment Rinsate	
Sample Date:		6/20/94		6/22/94	
Lab Sample No:		941536-0002		941569-0004	
Volatiles	Matrix	Water	Water	Water	Water
Acetone		10U		10U	
Benzene		5U		5U	
Bromodichloromethane		5U		5U	
Bromoform		5U		5U	
Bromomethane		10U		10U	
2-Butanone		10U		10U	
Carbon disulfide		5U		5U	
Carbon tetrachloride		5U		5U	
Chlorobenzene		5U		5U	
Chlorodibromomethane		5U		5U	
Chloroethane		10U		10U	
2-Chloroethylvinyl ether		10U		10U	
Chloroform		5U		6	
Chloromethane		10U		10U	
1,1-Dichloroethane		5U		5U	
1,2-Dichloroethane		5U		5U	
1,1-Dichloroethene		5U		5U	
trans-1,2-Dichloroethene		5U		5U	
1,2-Dichloropropane		5U		5U	
cis-1,3-Dichloropropene		5U		5U	
trans-1,3-Dichloropropene		5U		5U	
Ethylbenzene		5U		5U	
2-Hexanone		10U		10U	
Methylene Chloride		5U		5U	
4-Methyl-2-pentanone		10U		10U	
Styrene		5U		5U	
1,1,2,2-Tetrachloroethane		5U		5U	
Tetrachloroethene		5U		5U	
1,1,1-Trichloroethane		5U		5U	
1,1,2-Trichloroethane		5U		5U	
Trichloroethene		5U		5U	
Toluene		5U		5U	
Vinyl acetate		10U		10U	
Vinyl chloride		10U		10U	
Total Xylenes		5U		5U	

U - Indicates compound analyzed for but not detected.

BG - Background
 BH - Borehole

Appendix D
Summary of Volatile Organic Compounds Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
 (Results in micrograms per liter unless otherwise noted.)

Location No.: BH02-04		Equipment Blank	
Sample Date:		6/23/94	
Lab Sample No.:		941585-0001	
Volatiles	Organics	Matrix	Water
Acetone			10U
Benzene			5U
Bromodichloromethane			5U
Bromoform			5U
Bromomethane			10U
2-Butanone			10U
Carbon disulfide			5U
Carbon tetrachloride			5U
Chlorobenzene			5U
Chlorodibromomethane			5U
Chloroethane			10U
2-Chloroethylvinyl ether			10U
Chloroform			5U
Chloromethane			10U
1,1-Dichloroethane			5U
1,2-Dichloroethane			5U
1,1-Dichloroethene			5U
Total 1,2-Dichloroethenes			5U
1,2-Dichloropropane			5U
cis-1,3-Dichloropropene			5U
trans-1,3-Dichloropropene			5U
Ethylbenzene			5U
2-Hexanone			10U
Methylene Chloride			5U
4-Methyl-2-pentanone			10U
Styrene			5U
1,1,2,2-Tetrachloroethane			5U
Tetrachloroethene			5U
1,1,1-Trichloroethane			5U
1,1,2-Trichloroethane			5U
Trichloroethene			5U
Toluene			5U
Vinyl acetate			10U
Vinyl chloride			10U
Total Xylenes			5U

U - Indicates compound analyzed for but not detected.

BG - Background
 BH - Borehole

Appendix D
Summary of Volatile Organic Compounds Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
 (Results in micrograms per liter unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.:		Field Blank -- Background 6/28/94 941621-0012		Field Blank -- Site No. 1 6/24/94 941589-0003		Field Blank -- Site No. 2 6/28/94 941621-0013	
Volatiles Organics	Matrix	Water	Water	Water	Water	Water	Water
Acetone		10U		11		10U	
Benzene		5U		5U		5U	
Bromodichloromethane		5U		5U		5U	
Bromoform		5U		5U		5U	
Bromomethane		10U		10U		10U	
2-Butanone		10U		10U		10U	
Carbon disulfide		5U		5U		5U	
Carbon tetrachloride		5U		5U		5U	
Chlorobenzene		5U		5U		5U	
Chlorodibromomethane		5U		5U		5U	
Chloroethane		10U		10U		10U	
2-Chloroethylvinyl ether		10U		10U		10U	
Chloroform		5U		5U		5U	
Chloromethane		10U		10U		10U	
1,1-Dichloroethane		5U		5U		5U	
1,2-Dichloroethane		5U		5U		5U	
1,1,1-Trichloroethane		5U		5U		5U	
Total 1,2-Dichloroethenes		5U		5U		5U	
1,2-Dichloropropane		5U		5U		5U	
cis-1,3-Dichloropropene		5U		5U		5U	
trans-1,3-Dichloropropene		5U		5U		5U	
Ethylbenzene		5U		5U		5U	
2-Hexanone		10U		10U		10U	
Methylene Chloride		5U		5U		5U	
4-Methyl-2-pentanone		10U		10U		10U	
Styrene		5U		5U		5U	
1,1,2,2-Tetrachloroethane		5U		5U		5U	
Tetrachloroethene		5U		5U		5U	
1,1,1-Trichloroethane		5U		5U		5U	
1,1,2-Trichloroethane		5U		5U		5U	
Trichloroethene		5U		5U		5U	
Toluene		5U		5U		5U	
Vinyl acetate		10U		10U		10U	
Vinyl chloride		10U		10U		10U	
Total Xylenes		5U		5U		5U	

U - Indicates compound analyzed for but not detected.

BG - Background
 BH - Borehole

Summary of Semivolatile Organic Compounds Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in micrograms per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.:	BGBH-01 58' DUP 6/20/94 941536-0004	BH01-03 59' (=58' DUP) 6/27/94 941621-0003	BH02-01-62' DUP 6/21/94 941549-0003	BH02-04 GW 105' DUP 6/23/94 941573-0002
Semivolatile Organics	Matrix	Soil	Soil	Soil
Acenaphthene	330U	330U	330U	330U
Acenaphthylene	330U	330U	330U	330U
Anthracene	330U	330U	330U	330U
Benzidine	670U	670U	670U	670U
Benzo(a)anthracene	330U	330U	330U	330U
Benzo(b)fluoranthene	330U	330U	330U	330U
Benzo(k)fluoranthene	330U	330U	330U	330U
Benzoic acid	670U	670U	670U	670U
Benzo(ghi)perylene	330U	330U	330U	330U
Benzo(a)pyrene	330U	330U	330U	330U
Benzyl alcohol	330U	330U	330U	330U
Bis(2-chloroethoxy)methane	330U	330U	330U	330U
Bis(2-chloroethyl)ether	330U	330U	330U	330U
Bis(2-chloroisopropyl)ether	330U	330U	330U	330U
Bis(2-ethylhexyl) phthalate	330U	330U	330U	330U
4-Bromophenyl phenyl ether	330U	330U	330U	330U
Butyl benzyl phthalate	330U	330U	330U	330U
4-Chloroaniline	670U	670U	670U	670U
4-Chloro-3-methylphenol	330U	330U	330U	330U
2-Chloronaphthalene	330U	330U	330U	330U
2-Chlorophenol	330U	330U	330U	330U
4-Chlorophenyl phenyl ether	330U	330U	330U	330U
Chrysene	330U	330U	330U	330U
Di-n-butyl phthalate	330U	330U	330U	330U
1,2-Dichlorobenzene	330U	330U	330U	330U
1,3-Dichlorobenzene	330U	330U	330U	330U
1,4-Dichlorobenzene	330U	330U	330U	330U
3,3'-Dichlorobenzidine	330U	330U	330U	330U
2,4-Dichlorophenol	670U	670U	670U	670U
Dibenzo(a,h)anthracene	330U	330U	330U	330U
Dibenzofuran	330U	330U	330U	330U
Diethyl phthalate	330U	330U	330U	330U
2,4-Dimethylphenol	330U	330U	330U	330U
Dimethyl phthalate	330U	330U	330U	330U

U - Indicates compound analyzed for but not detected.
DUP - Duplicate

BG - Background
BH - Borehole

Appendix D
Summary of Semivolatile Organic Compounds Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
 (Results in micrograms per kilogram unless otherwise noted.)

Semivolatile Organics	Location No.: Sample Date: Lab Sample No.:	BGBH-01 58' DUP		BH01-03 59' (=58' DUP)		BH02-01-62' DUP		BH02-04 GW 105' DUP	
		Soil	Matrix	Soil	6/20/94 941536-0004	Soil	6/21/94 941549-0003	Soil	6/23/94 941573-0002
4,6-Dinitro-2-methylphenol		670U		670U		670U		670U	
2,4-Dinitrophenol		330U		330U		330U		330U	
2,4-Dinitrotoluene		330U		330U		330U		330U	
2,6-Dinitrotoluene		330U		330U		330U		330U	
Di-n-octyl phthalate		330U		330U		330U		330U	
Fluorene		330U		330U		330U		330U	
Fluoranthene		330U		330U		330U		330U	
Hexachlorobenzene		330U		330U		330U		330U	
Hexachlorobutadiene		330U		330U		330U		330U	
Hexachlorocyclopentadiene		330U		330U		330U		330U	
Hexachloroethane		330U		330U		330U		330U	
Indeno(1,2,3-cd)pyrene		330U		330U		330U		330U	
Isophorone		330U		330U		330U		330U	
2-Methylnaphthalene		330U		330U		330U		330U	
2-Methylphenol		330U		330U		330U		330U	
4-Methylphenol		330U		330U		330U		330U	
2-Nitroaniline		330U		330U		330U		330U	
3-Nitroaniline		1700U		1700U		1700U		1700U	
4-Nitroaniline		1700U		1700U		1700U		1700U	
2-Nitrophenol		670U		670U		670U		670U	
4-Nitrophenol		670U		670U		670U		670U	
N-Nitrosodimethylamine		1700U		1700U		1700U		1700U	
N-Nitrosodi-n-propylamine		330U		330U		330U		330U	
N-Nitrosodiphenylamine		330U		330U		330U		330U	
Naphthalene		330U		330U		330U		330U	
Nitrobenzene		330U		330U		330U		330U	
Pentachlorophenol		670U		670U		670U		670U	
Phenanthrene		330U		330U		330U		330U	
Phenol		330U		330U		330U		330U	
Pyrene		330U		330U		330U		330U	
1,2,4-Trichlorobenzene		330U		330U		330U		330U	
2,4,5-Trichlorophenol		330U		330U		330U		330U	
2,4,6-Trichlorophenol		330U		330U		330U		330U	

U - Indicates compound analyzed for but not detected.
 DUP - Duplicate

BG - Background
 BH - Borehole

Appendix D

Summary of Semivolatile Organic Compounds Detected in QA/QC Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in micrograms per kilogram unless otherwise noted.)

Semivolatile Organics	Location No.: Sample Date: Lab Sample No.:		BH01-03 22' MS 6/27/94 941621-0006		BH01-03 22' MSD 6/27/94 941621-0007		BH02-03 42' MS 6/23/94 941585-0005		BH02-03 42' MSD 6/23/94 941585-0006	
	Matrix		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Acenaphthene			1800		1700		1300		1700	
Acenaphthylene			330U		330U		330U		330U	
Anthracene			330U		330U		330U		330U	
Benzidine			670U		670U		670U		670U	
Benzo(a)anthracene			330U		330U		330U		330U	
Benzo(b)fluoranthene			330U		330U		330U		330U	
Benzo(k)fluoranthene			330U		330U		330U		330U	
Benzoic acid			670U		670U		670U		670U	
Benzo(ghi)perylene			330U		330U		330U		330U	
Benzo(a)pyrene			330U		330U		330U		330U	
Benzyl alcohol			330U		330U		330U		330U	
Bis(2-chloroethoxy)methane			330U		330U		330U		330U	
Bis(2-chloroethyl)ether			330U		330U		330U		330U	
Bis(2-chloroisopropyl)ether			330U		330U		330U		330U	
Bis(2-ethylhexyl) phthalate			330U		330U		330U		330U	
4-Bromophenyl phenyl ether			330U		330U		330U		330U	
Butyl benzyl phthalate			330U		330U		330U		330U	
4-Chloroaniline			670U		670U		670U		670U	
4-Chloro-3-methylphenol			3100		3000		2300		3000	
2-Chloronaphthalene			330U		330U		330U		330U	
2-Chlorophenol			2800		2800		2000		2600	
4-Chlorophenyl phenyl ether			330U		330U		330U		330U	
Chrysene			330U		330U		330U		330U	
Di-n-butyl phthalate			1900		1900		1100		1700	
1,2-Dichlorobenzene			330U		330U		330U		330U	
1,3-Dichlorobenzene			330U		330U		330U		330U	
1,4-Dichlorobenzene			1700		1600		1100		1500	
3,3'-Dichlorobenzidine			330U		330U		330U		330U	
2,4-Dichlorophenol			670U		670U		670U		670U	
Dibenzo(a,h)anthracene			330U		330U		330U		330U	
Dibenzofuran			330U		330U		330U		330U	
Diethyl phthalate			330U		330U		330U		330U	
2,4-Dimethylphenol			330U		330U		330U		330U	
Dimethyl phthalate			330U		330U		330U		330U	

U - Indicates compound analyzed for but not detected.
MS/MSD - Matrix Spike/Matrix Spike Duplicate

BG - Background
BH - Borehole

Appendix D
Summary of Semivolatile Organic Compounds Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
 (Results in micrograms per kilogram unless otherwise noted.)

Semivolatile Organics	Location No.: Sample Date: Lab Sample No.:	Matrix	BH01-03 22' MS		BH01-03 22' MSD		BH02-03 42' MS		BH02-03 42' MSD	
			6/27/94	941621-0006	6/27/94	941621-0007	6/23/94	941585-0005	6/23/94	941585-0006
			Soil		Soil		Soil		Soil	
4,6-Dinitro-2-methylphenol			670U		670U		670U		670U	
2,4-Dinitrophenol			330U		330U		330U		330U	
2,4-Dinitrotoluene			1400		1400		890		1300	
2,6-Dinitrotoluene			330U		330U		330U		330U	
Di-n-octyl phthalate			330U		330U		330U		330U	
Fluorene			330U		330U		330U		330U	
Fluoranthene			330U		330U		330U		330U	
Hexachlorobenzene			330U		330U		330U		330U	
Hexachlorobutadiene			330U		330U		330U		330U	
Hexachlorocyclopentadiene			330U		330U		330U		330U	
Hexachloroethane			330U		330U		330U		330U	
Indeno(1,2,3-cd)pyrene			330U		330U		330U		330U	
Isophorone			330U		330U		330U		330U	
2-Methylnaphthalene			330U		330U		330U		330U	
2-Methylphenol			330U		330U		330U		330U	
4-Methylphenol			330U		330U		330U		330U	
2-Nitroaniline			330U		330U		330U		330U	
3-Nitroaniline			330U		330U		330U		330U	
4-Nitroaniline			1700U		1700U		1700U		1700U	
2-Nitrophenol			1700U		1700U		1700U		1700U	
4-Nitrophenol			670U		670U		670U		670U	
N-Nitrosodimethylamine			2000		2400		1600		1300	
N-Nitrosodi-n-propylamine			1700U		1700U		1700U		1700U	
N-Nitrosodiphenylamine			1900		1800		1300		1700	
Naphthalene			330U		330U		330U		330U	
Nitrobenzene			330U		330U		330U		330U	
Pentachlorophenol			670U		670U		2100		2800	
Phenanthrene			330U		330U		330U		330U	
Phenol			2900		1400		1200		1700	
Pyrene			2100		2000		1300		1700	
1,2,4-Trichlorobenzene			1800		1700		1300		1700	
2,4,5-Trichlorophenol			330U		330U		330U		330U	
2,4,6-Trichlorophenol			330U		330U		330U		330U	

U - Indicates compound analyzed for but not detected.
 MS/MSD - Matrix Spike/Matrix Spike Duplicate

BG - Background
 BH - Borehole

Summary of Volatile Organic Compounds Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in micrograms per liter unless otherwise noted.)

Semivolatile Organics	Location No.: BGBH-01 Rinsate #1		Equipment Rinsate	
	Sample Date:	6/20/94	6/22/94	
	Lab Sample No:	941536-0002	941569-0004	
	Matr	Water	Water	
Acenaphthene		10U	10U	
Acenaphthylene		10U	10U	
Anthracene		10U	10U	
Benidine		20U	20U	
Benzo(a)anthracene		10U	10U	
Benzo(a)pyrene		10U	10U	
Benzo(b)fluoranthene		10U	10U	
Benzo(ghi)perylene		10U	10U	
Benzo(k)fluoranthene		10U	10U	
Benzoic acid		20U	20U	
Benzyl alcohol		10U	10U	
Bis(2-chloroethoxy)methane		10U	10U	
Bis(2-chloroethyl)ether		10U	10U	
Bis(2-chloroisopropyl)ether		10U	10U	
Bis(2-ethylhexyl) phthalate		10U	10U	
4-Bromophenyl phenyl ether		10U	10U	
Buryl benzyl phthalate		10U	10U	
4-Chloroaniline		20U	20U	
4-Chloro-3-methylphenol		10U	10U	
2-Chloronaphthalene		10U	10U	
2-Chlorophenol		10U	10U	
4-Chlorophenyl phenyl ether		10U	10U	
Chrysene		10U	10U	
Dibenzofuran		10U	10U	
1,2-Dichlorobenzene		10U	10U	
1,3-Dichlorobenzene		10U	10U	
1,4-Dichlorobenzene		10U	10U	
3,3'-Dichlorobenzidine		20U	20U	
2,4-Dichlorophenol		10U	10U	
Dibenzo(a,h)anthracene		10U	10U	
Di-n-butyl phthalate		10U	10U	
Diethyl phthalate		10U	10U	
2,4-Dimethylphenol		10U	10U	
Dimethyl phthalate		10U	10U	

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole

Appendix D

Summary of Volatile Organic Compounds Detected in QA/QC Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in micrograms per liter unless otherwise noted.)

Location No.: BGBH-01		Rinsate #1		Equipment Rinsate	
Sample Date:		6/20/94		6/22/94	
Lab Sample No:		941536-0002		941569-0004	
Semivolatile Organics	Matr	Water	Water	Water	Water
4,6-Dinitro-2-methylphenol		10U		10U	
2,4-Dinitrophenol		10U		10U	
2,4-Dinitrotoluene		10U		10U	
2,6-Dinitrotoluene		10U		10U	
Di-n-octyl phthalate		10U		10U	
Fluorene		10U		10U	
Fluoranthene		10U		10U	
Hexachlorobenzene		10U		10U	
Hexachlorobutadiene		10U		10U	
Hexachlorocyclopentadiene		10U		10U	
Hexachloroethane		10U		10U	
Indeno(1,2,3-cd)pyrene		10U		10U	
Isophorone		10U		10U	
2-Methylnaphthalene		10U		10U	
2-Methylphenol		10U		10U	
4-Methylphenol		10U		10U	
2-Nitroaniline		10U		10U	
3-Nitroaniline		50U		50U	
4-Nitroaniline		50U		50U	
2-Nitrophenol		10U		10U	
4-Nitrophenol		10U		10U	
N-Nitrosodimethylamine		50U		50U	
N-Nitrosodi-n-propylamine		10U		10U	
N-Nitrosodiphenylamine		10U		10U	
Naphthalene		10U		10U	
Nitrobenzene		10U		10U	
Pentachlorophenol		20U		20U	
Phenanthrene		10U		10U	
Phenol		10U		10U	
Pyrene		10U		10U	
1,2,4-Trichlorobenzene		10U		10U	
2,4,5-Trichlorophenol		10U		10U	
2,4,6-Trichlorophenol		10U		10U	

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole

Summary of Semivolatile Organic Compounds Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in micrograms per liter unless otherwise noted.)

Semivolatile Organics	Location No.:		Equipment Blank		Equipment Blank	
	Sample Date:	Matr	6/23/94	Water	6/24/94	Water
	Lab Sample No.:		941585-0001		941589-0004	
Acenaphthene			10U		10U	
Acenaphthylene			10U		10U	
Anthracene			10U		10U	
Benidine			20U		20U	
Benzo(a)anthracene			10U		10U	
Benzo(b)fluoranthene			10U		10U	
Benzo(k)fluoranthene			10U		10U	
Benzoic acid			20U		20U	
Benzo(ghi)perylene			10U		10U	
Benzo(a)pyrene			10U		10U	
Benzyl alcohol			10U		10U	
Bis(2-chloroethoxy)methane			10U		10U	
Bis(2-chloroethyl)ether			10U		10U	
Bis(2-chloroisopropyl)ether			10U		10U	
Bis(2-ethylhexyl) phthalate			10U		10U	
4-Bromophenyl phenyl ether			10U		10U	
Butyl benzyl phthalate			10U		10U	
4-Chloroaniline			20U		20U	
4-Chloro-3-methylphenol			10U		10U	
2-Chloronaphthalene			10U		10U	
2-Chlorophenol			10U		10U	
4-Chlorophenyl phenyl ether			10U		10U	
Chrysene			10U		10U	
Di-n-butyl phthalate			10U		10U	
1,2-Dichlorobenzene			10U		10U	
1,3-Dichlorobenzene			10U		10U	
1,4-Dichlorobenzene			10U		10U	
3,3'-Dichlorobenzidine			10U		10U	
2,4-Dichlorophenol			20U		20U	
Dibenzo(a,h)anthracene			10U		10U	
Dibenzofuran			10U		10U	
Diethyl phthalate			10U		10U	
2,4-Dimethylphenol			10U		10U	
Dimethyl phthalate			10U		10U	

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole

Appendix D
Summary of Semivolatile Organic Compounds Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
(Results in micrograms per liter unless otherwise noted.)

Semivolatile Organics	Location No.:		BGBH-01 21-21.5'		BGBH-01 58'	
	Sample Date:	Matr	6/20/94	Soil	6/20/94	Soil
	Lab Sample No.:		941536-0001		941536-0003	
4,6-Dinitro-2-methylphenol			20U		20U	
2,4-Dinitrophenol			10U		10U	
2,4-Dinitrotoluene			10U		10U	
2,6-Dinitrotoluene			10U		10U	
Di-n-octyl phthalate			10U		10U	
Fluorene			10U		10U	
Fluoranthene			10U		10U	
Hexachlorobenzene			10U		10U	
Hexachlorobutadiene			10U		10U	
Hexachlorocyclopentadiene			10U		10U	
Hexachloroethane			10U		10U	
Indeno(1,2,3-cd)pyrene			10U		10U	
Isophorone			10U		10U	
2-Methylnaphthalene			10U		10U	
2-Methylphenol			10U		10U	
4-Methylphenol			10U		10U	
2-Nitroaniline			10U		10U	
3-Nitroaniline			50U		50U	
4-Nitroaniline			50U		50U	
2-Nitrophenol			20U		20U	
4-Nitrophenol			20U		20U	
N-Nitrosodimethylamine			50U		50U	
N-Nitrosodi-n-propylamine			10U		10U	
N-Nitrosodiphenylamine			10U		10U	
Naphthalene			10U		10U	
Nitrobenzene			10U		10U	
Pentachlorophenol			20U		20U	
Phenanthrene			10U		10U	
Phenol			10U		10U	
Pyrene			10U		10U	
1,2,4-Trichlorobenzene			10U		10U	
2,4,5-Trichlorophenol			10U		10U	
2,4,6-Trichlorophenol			10U		10U	

Appendix D

Summary of Semivolatile Organic Compounds Detected in QA/QC Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in micrograms per liter unless otherwise noted.)

Semivolatile Organics	Location No.:	Field Blank -- Background	Field Blank -- Site No. 1	Field Blank -- Site No. 2
	Sample Date:	6/28/94	6/28/94	6/28/94
Matrix	Lab Sample No.:	941621-0012	941589-0003	941621-0013
	Water	Water	Water	Water
Acenaphthene	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U
Benzidine	20U	20U	20U	20U
Benzo(a)anthracene	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U
Benzoic acid	10U	10U	10U	10U
Benzo(ghi)perylene	10U	10U	10U	10U
Benzo(a)pyrene	20U	20U	20U	20U
Benzyl alcohol	10U	10U	10U	10U
Bis(2-chloroethoxy)methane	10U	10U	10U	10U
Bis(2-chloroethyl)ether	10U	10U	10U	10U
Bis(2-chloroisopropyl)ether	10U	10U	10U	10U
Bis(2-ethylhexyl) phthalate	10U	10U	10U	10U
4-Bromophenyl phenyl ether	10U	10U	10U	10U
Butyl benzyl phthalate	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U
4-Chloro-3-methylphenol	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U
4-Chlorophenyl phenyl ether	10U	10U	10U	10U
Chrysene	10U	10U	10U	10U
Di-n-butyl phthalate	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U
2,4-Dichlorophenol	10U	10U	10U	10U
Dibenzo(a,h)anthracene	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U
Diethyl phthalate	10U	10U	10U	10U
2,4-Dimethylphenol	10U	10U	10U	10U
Dimethyl phthalate	10U	10U	10U	10U

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole

Appendix D
Summary of Semivolatile Organic Compounds Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
 (Results in micrograms per liter unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.:	Field Blank -- Background 6/28/94 941621-0012	Field Blank -- Site No. 2 6/28/94 941621-0013	Field Blank -- Site No. 2 6/28/94 941621-0013
Semivolatile Organics	Matrix	Water	Water
4,6-Dinitro-2-methylphenol		10U	10U
2,4-Dinitrophenol		10U	10U
2,4-Dinitrotoluene		10U	10U
2,6-Dinitrotoluene		10U	10U
Di-n-octyl phthalate		10U	10U
Fluorene		10U	10U
Fluoranthene		10U	10U
Hexachlorobenzene		10U	10U
Hexachlorobutadiene		10U	10U
Hexachlorocyclopentadiene		10U	10U
Hexachloroethane		10U	10U
Indeno(1,2,3-cd)pyrene		10U	10U
Isophorone		10U	10U
2-Methylnaphthalene		10U	10U
2-Methylphenol		10U	10U
4-Methylphenol		10U	10U
2-Nitroaniline		10U	10U
3-Nitroaniline		50U	50U
4-Nitroaniline		50U	50U
2-Nitrophenol		10U	10U
4-Nitrophenol		10U	10U
N-Nitrosodimethylamine		50U	50U
N-Nitrosodi-n-propylamine		10U	10U
N-Nitrosodiphenylamine		10U	10U
Naphthalene		10U	10U
Nitrobenzene		10U	10U
Pentachlorophenol		20U	20U
Phenanthrene		10U	10U
Phenol		10U	10U
Pyrene		10U	10U
1,2,4-Trichlorobenzene		10U	10U
2,4,5-Trichlorophenol		10U	10U
2,4,6-Trichlorophenol		10U	10U

U - Indicates compound analyzed for but not detected.

BG - Background
 BH - Borehole

Appendix D

Summary of Metal/TPH/Oil Grease Analytes Detected in QA/QC Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in milligrams per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No:		BGBH-01 58' DUP 6/20/94 941536-0004	BH01-03 59' (=58' DUP) 6/27/94 941621-0003	BH02-01 62' DUP 6/21/94 941549-0003	BH02-04 GW 105' DUP 6/23/94 941573-0002
Metals	Matrix	Soil	Soil	Soil	Soil
Antimony (Sb)		0.5U	30U	0.5U	3U
Arsenic (As)		0.5U	30U	0.52	1U
Beryllium (Be)		0.5U	1U	0.5U	0.5U
Cadmium (Cd)		0.5U	5U	0.5U	0.5U
Chromium (Cr)		10	35	6.5	26
Copper (Cu)		9.8	26	15	17
Lead (Pb)		3.4	5	2.5	1.7
Nickel (Ni)		10	50U	8.9	42
Silver (Ag)		0.5U	5U	0.5U	1U
Thallium (Tl)		0.5U	30U	0.5U	1U
Zinc (Zn)		19	54	39	30
Mercury (Hg)		0.05	0.2U	0.046	0.014
Selenium (Se)		0.04U	0.2U	0.04U	1U

Lab Sample No.:	941536-0004	941621-0003	941549-0003	941573-0002
TPH by GC (as diesel)	10U	10U	10U	10U
TPH by GC (as gasoline)	500U	500U	500U	500U

Lab Sample No.:	941536-0004	941621-0003	941549-0003	941573-0002
Oil & Grease	12U	12U	12U	5U

U - Indicates compound analyzed for but not detected.
DUP - Duplicate

BG - Background
BH - Borehole

Appendix D
Summary of Metal/TPH/Oil & Grease Analytes Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
 (Results in milligrams per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No:		BH01-03 22' MS 6/27/94 941621-0006	BH01-03 22' MSD 6/27/94 941621-0007	BH02-03 42' MS 6/23/94 941585-0005	BH02-03 42' MSD 6/23/94 941585-0006
Metals	Matrix	Soil	Soil	Soil	Soil
Antimony (Sb)		30U	30U	38	30U
Arsenic (As)		30U	30U	170	87
Beryllium (Be)		66	1U	68	65
Cadmium (Cd)		93	150	103	106
Chromium (Cr)		97	104	101	97
Copper (Cu)		103	105	140	160
Lead (Pb)		85	99	140	110
Nickel (Ni)		5.5	7.9	390	8.7
Silver (Ag)		81	30U	80	65
Thallium (Tl)		140	140	220	250
Zinc (Zn)		0.11	0.12	0.069	0.056
Mercury (Hg)		120	67	120	110
Selenium (Se)		0.2U	0.2U	0.18	0.15U

Lab Sample No.:	941621-0006	941621-0007	941585-0005	941585-0006
TPH by GC (as diesel)	840	880	440	460
TPH by GC (as gasoline)	1000	1100	920	980

Lab Sample No.:	941621-0006	941621-0007	941585-0005	941585-0006
Oil & Grease	140	150	140	150

U - Indicates compound analyzed for but not detected.
 MS/MSD - Matrix Spike/Matrix Spike Duplicate

BG - Background
 BH - Borehole

Summary of Metal/TPH/Oil & Grease Analytes Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in milligrams per liter unless otherwise noted.)

Location No.:		BGBH-01 Rinsate #1		Equipment Rinsate	
Sample Date:		6/20/94		6/22/94	
Lab Sample No:		941536-0002		941569-0004	
Metals	Matrix	Water		Water	
Antimony (Sb)		0.005U		0.005U	
Arsenic (As)		0.005U		0.005U	
Beryllium (Be)		0.005U		0.005U	
Cadmium (Cd)		0.005U		0.005U	
Chromium (Cr)		0.005U		0.005U	
Copper (Cu)		0.01		0.013	
Lead (Pb)		0.005U		0.005U	
Nickel (Ni)		0.005U		0.006	
Silver (Ag)		0.005U		0.005U	
Thallium (Tl)		0.005U		0.005U	
Zinc (Zn)		0.021		0.01	
Mercury (Hg)		0.01U		0.02U	
Selenium (Se)		0.001U		0.001U	

Lab Sample No.:		941536-0002		941569-0004	
TPH by GC (as diesel)		10U		10U	
TPH by GC (as gasoline)		100U		100U	

Lab Sample No.:		941536-0002		941569-0004	
Oil & Grease		10U		10U	

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole

Appendix D

Summary of Metal/TPH/Oil & Grease Analytes Detected in QA/QC Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
 (Results in milligrams per liter unless otherwise noted.)

Location No.: BH02-04		Equipment Blank		Equipment Blank	
Sample Date:		6/23/94		6/24/94	
Lab Sample No:		941585-0001		941589-0004	
Metals	Matrix	Water		Water	
Antimony (Sb)		0.005U		0.005U	
Arsenic (As)		0.005U		0.005U	
Beryllium (Be)		0.005U		0.005U	
Cadmium (Cd)		0.005U		0.005U	
Chromium (Cr)		0.005U		0.005U	
Copper (Cu)		0.005U		0.005U	
Lead (Pb)		0.005U		0.005U	
Nickel (Ni)		0.011		0.009	
Silver (Ag)		0.005U		0.005U	
Thallium (Tl)		0.005U		0.005U	
Zinc (Zn)		0.01U		0.018	
Mercury (Hg)		0.002U		0.002U	
Selenium (Se)		0.015U		0.015U	

Lab Sample No.:		941585-0001		941589-0004	
TPH by GC (as diesel)		10U		10U	
TPH by GC (as gasoline)		100U		100U	

Lab Sample No.:		941585-0001		941589-0004	
Oil & Grease		10U		12U	

U - Indicates compound analyzed for but not detected.

BG - Background
 BH - Borehole

Appendix D

Summary of Metal/TPH/Oil & Grease Analytes Detected in QA/QC Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in milligrams per liter unless otherwise noted.)

Location No.:		Field Blank -- Background		Field Blank -- Site No. 1		Field Blank -- Site No. 2	
Sample Date:		6/28/94		6/24/94		6/28/94	
Lab Sample No:		941621-0012		941589-0003		941621-0013	
Metals	Matrix	Water	Water	Water	Water	Water	Water
Antimony (Sb)		0.3U		0.005U		0.3U	
Arsenic (As)		0.3U		0.005U		0.45	
Beryllium (Be)		0.01U		0.005U		0.01U	
Cadmium (Cd)		1.1		0.005U		0.05U	
Chromium (Cr)		0.21		0.005U		0.05U	
Copper (Cu)		0.21		0.005U		0.05U	
Lead (Pb)		0.05U		0.005U		0.09	
Nickel (Ni)		0.05U		0.005U		0.05U	
Silver (Ag)		0.3U		0.005U		0.3U	
Thallium (Tl)		0.33		0.005U		0.05U	
Zinc (Zn)		0.02U		0.01U		0.02U	
Mercury (Hg)		0.5U		0.004		0.5U	
Selenium (Se)		0.1U		0.015U		0.1U	

Lab Sample No.:		941621-0012		941589-0003		941621-0013	
TPH by GC (as diesel)		10U		10U		10U	
TPH by GC (as gasoline)		100U		100U		100U	

Lab Sample No.:		941621-0012		941589-0003		941621-0013	
Oil & Grease		5U		12U		5U	

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole



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NORTH HIGHLANDS AIR NATIONAL GUARD
SITE INVESTIGATION
SACRAMENTO, CALIFORNIA 1315-117-S002
CORE LABORATORIES, ANAHEIM, CALIFORNIA
DATA VALIDATION BRIEF SUMMARY

SAMPLE:

BH02-04-110'

SOILS

Lab ID# 94157303

VOA/SW8240 = **No compounds detected above the detection limits.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Initial and Continuing calibrations met EPA acceptance criteria.*

**Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.*

SVOA/8270 = **Clean, No hits above the detection limits assigned.*

**Met 14 extraction holding time and 40 day extract holding time.*

**Initial and Continuing calibrations met EPA acceptance criteria.*

**COC information verified.*

**Surrogates and calibrations were valid and within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

TPH-Diesel/Mod8015=

**Met 28 day holding time.*

**COC information verified.*

**No hit above the detection limit of 10 mg/kg.*

**The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

TPH-Gas/Mod8015=

**Met 28 day holding time.*

**COC information verified.*

**No hit above the detection limit of 500 ug/kg.*

**The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

METALS

6010/7000=

**Elements that were detected above the assigned detection limits were Cr, Cu, Pb, Hg, Ni, and Zn. Other elements were not detected above the stated detection limits.*

**All met 6 month holding times.*

**COC information verified.*

OIL/GREASE

SM 5520=

**No hit was detected above the detection limit of 5 mg/kg.*

**Met 28 day holding time.*

**COC information verified.*

BGBH-01-21-21.5'

Lab ID# 941536-0001

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.
*No raw data/chromatograms were provided for this analysis.

METALS
6010/7000= *No analysis was completed on specific elements: Sb, Be, Cu, Ni, Ag, and Zn. COC Specifys these elements only to be run, but analysis was not run.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BGBH-01-21.5-22

Lab ID# 941536-0005

METALS

6010/7000=

**Elements that were detected above the assigned detection limits were Cr, Cu, Ni, and Zn. Other elements were not detected above the stated detection limits.*

**Dilution of 100x was performed.*

**All met 6 month holding times.*

**COC information verified.*

**Why were elements: Sb, Be, Cu, Ni, Ag, Ti, and Zn run only. The COC is very confusing!!*

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.
*No raw data/chromatograms were provided for this analysis.

METALS
6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, Pb, Ni, and Zn. Other elements were not detected above the stated detection limits.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.
*The COC states that the only analysis completed was to be performed on specific elements: Sb, Be, Cu, Ni, Ag, and Zn. They ran all analytes for analysis. Were we charged for all analyses?

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BGBH-01-58' Dup

Lab ID# 941536-0004

VOA/SW8240 = *Hit on Carbon disulfide at 8 ug/kg with a detection limit of 5 ug/kg.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.
*No raw data/chromatograms were provided for this analysis.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, Pb, Hg, Ni, and Zn. Other elements were not detected above the stated detection limits.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.
*The COC states the only analyses completed was to be performed on specific elements: Sb, Be, Cu, Ni, Ag, and Zn. They ran all analytes for analysis. Were we charged for all analyses?

OIL/GREASE

SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH01-01-12'

Lab ID# 941589-0001

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, Pb, Ni, Hg, and Zn. Other elements were not detected above the stated detection limits.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, Pb, Ni, Hg, and Zn. Other elements were not detected above the stated detection limits.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE

SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH01-02-12'

Lab ID# 941621-0010

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*One surrogate was outside QC Limits but allow two out. Calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Elements that were detected above the assigned detection limits were Cu and Zn. Other elements were not detected above the stated detection limits.
*Narrative states detection limits were elevated slightly due to instrument limitations encountered.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH01-02-59'

Lab ID# 941621-0011

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were As, Cd, Cr, Cu, Pb, Tl, and Zn. Other elements were not detected above the stated detection limits.
*Narrative states detection limits were elevated slightly due to instrument limitations encountered.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE

SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH01-03-11'

Lab ID# 941621-0001

*Lab did not receive this sample. This was noted on the Chain of Custody at the time of receipt of samples.

BH01-03-12'

Lab ID# 941621-0009

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*One surrogate was outside QC Limits but allow two out. Calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were As, Cr, Cu, Hg, and Zn. Other elements were not detected above the stated detection limits.
*Narrative states detection limits were elevated slightly due to instrument limitations encountered.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520=

*No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH01-03-22'

Lab ID# 941621-0015

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were Cd, Cr, Cu, Pb, and Zn. Other elements were not detected above the stated detection limits.
*Narrative states detection limits were elevated slightly due to instrument limitations encountered.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520=

*No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH01-03-22' MS

Lab ID# 941621-0006

VOA/SW8240 = *All spiked compounds were detected within QC recovery limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *All spiked compounds were detected within QC recovery limits.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*Spiked compound was recovered within QC Limits.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*Spiked compound was recovered within QC Limits.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected from the spiked elements were Be, Cd, Cr, Cu, Pb, Ag, Tl, Zn, Hg, and Ni. The other three elements were not detected above the stated detection limits.
*Narrative states detection limits were elevated slightly due to instrument limitations encountered.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE

SM 5520= *Spiked amount was within QC Limits.
*Met 28 day holding time.
*COC information verified.

VOA/SW8240 = *All spiked compounds were detected within QC recovery limits.
*All met 14 day holding time.
*COC information verified.
*All RPD's were within QC Limits.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *All spiked compounds were detected within QC recovery limits.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*All RPD's were within QC Limits.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*Spiked compound was recovered within QC Limits.
*RPD was within QC Limits.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*Spiked compound was recovered within QC Limits.
*RPD was within QC Limits.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Elements that were detected from the spiked elements were Cd, Cr, Cu, Pb, Ag, Zn, Hg, and Ni. The other three elements were not detected above the stated detection limits.
*Narrative states detection limits were elevated slightly due to instrument limitations encountered.
*Three RPD's were out of QC Limits due to matrix interference.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *Spiked amount was within QC Limits.
*RPD was within QC limits.
*Met 28 day holding time.
*COC information verified.

BH01-03-58'

Lab ID# 941621-0002

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*Surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were As, Cr, Cu, Ag, Tl, and Zn. Other elements were not detected above the stated detection limits.
*Narrative states detection limits were elevated slightly due to instrument limitations encountered.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE

SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH01-03-59'(=58' Dup) Lab ID# 941621-0003

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*One surrogate was out of QC Limits but allowed two out. Calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, Pb, and Zn. Other elements were not detected above the stated detection limits.
*Narrative states detection limits were elevated slightly due to instrument limitations encountered.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH01-04-12'

Lab ID# 941589-0006

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, Pb, Ni, Hg, and Zn. Other elements were not detected above the stated detection limits.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH01-04-59'

Lab ID# 941589-0007

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were As, Cr, Cu, Pb, Ni, Hg, and Zn. Other elements were not detected above the stated detection limits.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE

SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH01-05-42'

Lab ID# 941621-0004

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, and Zn. Other elements were not detected above the stated detection limits.
*Narrative states detection limits were elevated slightly due to instrument limitations encountered.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE

SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*One surrogate was outside QC Limits but allow two out. Calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, Ti, and Zn. Other elements were not detected above the stated detection limits.
*Narrative states detection limits were elevated slightly due to instrument limitations encountered.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH02-01-32'

Lab ID# 941549-0001

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*Surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Elements that were detected above the assigned detection limits were As, Cr, Cu, Pb, Ni, and Zn. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH02-01-62'

Lab ID# 941549-0002

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*Surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, Pb, Ni, and Zn. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH02-01-62' Dup

Lab ID# 941549-0003

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*Surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Elements that were detected above the assigned detection limits were As, Cr, Cu, Pb, Ni, and Zn. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH02-02-42'

Lab ID# 941549-0004

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*Surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Elements that were detected above the assigned detection limits were As, Cr, Cu, Pb, Ni, and Zn. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH02-02-59'

Lab ID# 941549-0005

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*Surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, Pb, Ni, and Zn. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE

SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, Se, Pb, and Zn. Other elements were not detected above the stated detection limits.
*Narrative states detection limits were elevated slightly due to instrument limitations encountered.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE

SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH02-03-42' MS

Lab ID# 941585-0005

VOA/SW8240 = *All spiked compounds were detected within QC recovery limits.
Methylene Chloride was detected at 8 ug/kg with the detection limit of 5 ug/kg.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *All spiked compounds were detected within QC recovery limits.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*Spiked compound was recovered within QC Limits.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*Spiked compound was recovered within QC Limits.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *All elements were detected from the spiked amount.
*Narrative states detection limits were elevated slightly due to instrument limitations encountered.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE

SM 5520= *Spiked amount was within QC Limits.
*Met 28 day holding time.
*COC information verified.

VOA/SW8240 = *All spiked compounds were detected within QC recovery limits.
Methylene chloride was detected at 9 ug/kg with a detection limit of 5 ug/kg.

*All met 14 day holding time.

*COC information verified.

*All RPD's were within QC Limits.

*All surrogate recoveries were within QC limits.

*Initial and Continuing calibrations met EPA acceptance criteria.

*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *All spiked compounds were detected within QC recovery limits.

*Met 14 extraction holding time and 40 day extract holding time.

*Initial and Continuing calibrations met EPA acceptance criteria.

*All RPD's were within QC Limits.

*COC information verified.

*All surrogates and calibrations were valid and within QC Limits.

*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015=

*Met 28 day holding time.

*COC information verified.

*Spiked compound was recovered within QC Limits.

*RPD was within QC Limits.

*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.

*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015=

*Met 28 day holding time.

*COC information verified.

*Spiked compound was recovered within QC Limits.

*RPD was within QC Limits.

*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.

*Blanks were clean of any hits above the detection limits.

METALS

6010/7000=

*All elements were detected from the spiked amounts except for Sb, and Se.

*Narrative states detection limits were elevated slightly due to instrument limitations encountered.

*Three RPD's were out of QC Limits due to matrix interference.

*Dilution of 100x was performed.

*All met 6 month holding times.

*COC information verified.

OIL/GREASE

SM 5520=

*Spiked amount was within QC Limits.

*RPD was within QC limits.

*Met 28 day holding time.

*COC information verified.

BH02-03-59'

Lab ID# 941585-0003

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were As, Cr, Cu, Pb, Ni, and Zn. Other elements were not detected above the stated detection limits.
*Narrative states detection limits were elevated slightly due to instrument limitations encountered.
*Dilution of 100x was performed.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE

SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH02-04-12'

Lab ID# 941569-0001

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*Surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Elements that were detected above the assigned detection limits were As, Cr, Cu, Pb, Ni, Hg, and Zn. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH02-04-52'

Lab ID# 941569-0002

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*Surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were As, Cr, Cu, Pb, Ni, and Zn. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE

SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH02-04-92'

Lab ID# 941569-0003

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*Surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, Pb, Ni, and Zn. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 12 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH02-04-105'

Lab ID# 941573-0001

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*Surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, Hg, Ni, and Zn. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE

SM 5520= *No hit was detected above the detection limit of 5 mg/kg.
*Met 28 day holding time.
*COC information verified.

BH02-04-105' Dup

Lab ID# 941573-0002

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*Surrogates and calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/kg.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 500 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Elements that were detected above the assigned detection limits were Cr, Cu, Pb, Hg, Ni, and Zn. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 5 mg/kg.
*Met 28 day holding time.
*COC information verified.

BGBH-01 Rinsate#1 Lab ID# 941536-0002

VOA/SW8240 = *Hit on Carbon disulfide at 5 ug/l with a detection limit of 5 ug/l.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoverys were within QC Limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*One acid and one base surrogate recoveries were outside QC Limits. Not enough sample was remaining to re-analyze. Calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/l.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 100 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *The elements that were detected above the assigned detection limit were Cu and Zn. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 10 mg/l.
*Met 28 day holding time.
*COC information verified.

WATERS

Equipment Rinsate Lab ID# 941569-0004

VOA/SW8240 = *Hit on Chloroform at 6 ug/l with a detection limit of 5 ug/l. All other compounds were below the assigned detection limits.

*All met 7 day holding time.

*COC information verified.

*One surrogate recovery (Toluene-d8) was out of QC Limits. No re-analysis or corrective action was noted.

*Initial and Continuing calibrations met EPA acceptance criteria.

*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.

*Met 14 extraction holding time and 40 day extract holding time.

*Initial and Continuing calibrations met EPA acceptance criteria.

*COC information verified.

*Three acids and one base surrogate recoveries were outside QC Range. No Note of corrective action or re-analysis was documented. Calibrations were valid and within QC Limits.

*Blanks were clean of any hits above the detection limits.

*No raw data/chromatograms were included in the package.

TPH-Diesel/Mod8015= *Met 28 day holding time.

*COC information verified.

*No hit above the detection limit of 10 mg/l.

*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.

*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.

*COC information verified.

*No hit above the detection limit of 100 ug/kg.

*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.

*Blanks were clean of any hits above the detection limits.

METALS

6010/7000=

*Elements that were detected above the assigned detection limits were Cu, Ni, and Zn. Other elements were not detected above the stated detection limits.

*All met 6 month holding times.

*COC information verified.

OIL/GREASE

SM 5520=

*No hit was detected above the detection limit of 10 mg/l.

*Met 28 day holding time.

*COC information verified.

Equipment Blank-BH02-04 Lab ID# 941585-0001

VOA/SW8240 = *Hit on 2-Butanone at 10 ug/l with a detection limit of 10 ug/l.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoverys were within QC Limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogate recoveries were within QC Limits. Calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/l.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 100 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000= *Element that was detected above the assigned detection limit was Ni. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520= *No hit was detected above the detection limit of 10 mg/l.
*Met 28 day holding time.
*COC information verified.

Equipment Blank

Lab ID# 941589-0004

VOA/SW8240 = *Hit on Acetone at 11 ug/l with a detection limit of 10 ug/l.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoverys were within QC Limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogate recoveries were within QC Limits. Calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.
*Missing raw data/chromatograms for this analysis.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/l.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 100 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000=

*The elements that were detected above the assigned detection limit were Ni, and Zn, and Hg. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520=

*No hit was detected above the detection limit of 12 mg/l.
*Met 28 day holding time.
*COC information verified.

Field Blank-BG

Lab ID# 941621-0012

VOA/SW8240 = **Acetone should have been reported as a hit at 15 ug/l. Report shows no detection. Form needs correction.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoverys were within QC Limits.*

**Initial and Continuing calibrations met EPA acceptance criteria.*

**Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.*

SVOA/8270 = **Clean, No hits above the detection limits assigned.*

**Met 14 extraction holding time and 40 day extract holding time.*

**Initial and Continuing calibrations met EPA acceptance criteria.*

**COC information verified.*

**All surrogate recoveries were within QC Limits. Calibrations were valid and within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

**No raw data/chromatograms were included in the package.*

TPH-Diesel/Mod8015=

**Met 28 day holding time.*

**COC information verified.*

**No hit above the detection limit of 10 mg/l.*

**The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

TPH-Gas/Mod8015=

**Met 28 day holding time.*

**COC information verified.*

**No hit above the detection limit of 100 ug/kg.*

**The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

METALS

6010/7000=

**Elements that were detected above the assigned detection limits were Cd, Cr, Cu, Ni, and Zn. Other elements were not detected above the stated detection limits.*

**All met 6 month holding times.*

**COC information verified.*

OIL/GREASE

SM 5520=

**No hit was detected above the detection limit of 5 mg/l.*

**Met 28 day holding time.*

**COC information verified.*

Field Blank

Lab ID# 941589-0003

VOA/SW8240 = *Hit on Acetone at 11 ug/l with a detection limit of 10 ug/l.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoverys were within QC Limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogate recoveries were within QC Limits. Calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.
*Missing raw data/chromatograms for this analysis.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/l.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 100 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS
6010/7000=

*The elements that were detected above the assigned detection limit were Ni and Hg. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE
SM 5520=

*No hit was detected above the detection limit of 12 mg/l.
*Met 28 day holding time.
*COC information verified.

Field Blank-Site 2

Lab ID# 941621-0013

VOA/SW8240 = *No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC Limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria surrogate recoveries. No compounds were detected above the detection limits.

SVOA/8270 = *Clean, No hits above the detection limits assigned.
*Met 14 extraction holding time and 40 day extract holding time.
*Initial and Continuing calibrations met EPA acceptance criteria.
*COC information verified.
*All surrogate recoveries were within QC Limits. Calibrations were valid and within QC Limits.
*Blanks were clean of any hits above the detection limits.
*No raw data/chromatograms were included in the package.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/l.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 100 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

METALS

6010/7000= *Elements that were detected above the assigned detection limits were As, and Pb. Other elements were not detected above the stated detection limits.
*All met 6 month holding times.
*COC information verified.

OIL/GREASE

SM 5520= *No hit was detected above the detection limit of 5 mg/l.
*Met 28 day holding time.
*COC information verified.

TRIP BLANK 1

Lab ID# 941549-0006

VOA/SW8240 = **No compounds detected above the detection limits.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Initial and Continuing calibrations met EPA acceptance criteria.*

**Blanks met EPA acceptance criteria for contamination and surrogate recoveries. No compounds were detected above the detection limits.*

TPH-Diesel/Mod8015=

**Met 28 day holding time.*

**COC information verified.*

**No hit above the detection limit of 10 mg/l.*

**The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

TPH-Gas/Mod8015=

**Met 28 day holding time.*

**COC information verified.*

**No hit above the detection limit of 100 ug/kg.*

**The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

TRIP BLANK 2

Lab ID# 941549-0007

VOA/SW8240 = **No compounds detected above the detection limits.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Initial and Continuing calibrations met EPA acceptance criteria.*

**Blanks met EPA acceptance criteria for contamination and surrogate recoveries. No compounds were detected above the detection limits.*

TPH-Diesel/Mod8015=

**Met 28 day holding time.*

**COC information verified.*

**No hit above the detection limit of 10 mg/l.*

**The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

TPH-Gas/Mod8015=

**Met 28 day holding time.*

**COC information verified.*

**No hit above the detection limit of 100 ug/kg.*

**The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

TRIP BLANK

Lab ID# 941569-0005

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria for contamination and surrogate recoveries. No compounds were detected above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/l.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 100 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TRIP BLANKS

Lab ID# 941621-0008

VOA/SW8240 = **No compounds detected above the detection limits.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Initial and Continuing calibrations met EPA acceptance criteria.*

**Blanks met EPA acceptance criteria for contamination and surrogate recoveries. No compounds were detected above the detection limits.*

TPH-Diesel/Mod8015=

**Met 28 day holding time.*

**COC information verified.*

**No hit above the detection limit of 10 mg/l.*

**The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

TPH-Gas/Mod8015=

**Met 28 day holding time.*

**COC information verified.*

**No hit above the detection limit of 100 ug/kg.*

**The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

TRIP BLANK

Lab ID# 941621-0014

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria for contamination and surrogate recoveries. No compounds were detected above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/l.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 100 ug/kg.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TRIP BLANK

Lab ID# 941585-0004

VOA/SW8240 = **No compounds detected above the detection limits.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Initial and Continuing calibrations met EPA acceptance criteria.*

**Blanks met EPA acceptance criteria for contamination and surrogate recoveries. No compounds were detected above the detection limits.*

TPH-Diesel/Mod8015=

**Met 28 day holding time.*

**COC information verified.*

**No hit above the detection limit of 10 mg/l.*

**The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

TPH-Gas/Mod8015=

**Met 28 day holding time.*

**COC information verified.*

**Hit on Gasoline at 160 ug/l with a detection limit of 100 ug/l.*

**The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.*

**Blanks were clean of any hits above the detection limits.*

TRIP BLANK

Lab ID# 941589-0005

VOA/SW8240 = **No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
Blanks met EPA acceptance criteria for contamination and surrogate recoveries. No compounds were detected above the detection limits.

TPH-Diesel/Mod8015= **Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/l.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= **Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 100 ug/l.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
Blanks were clean of any hits above the detection limits.

TRIP BLANK

Lab ID# 941536-0006

VOA/SW8240 = *No compounds detected above the detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Initial and Continuing calibrations met EPA acceptance criteria.
*Blanks met EPA acceptance criteria for contamination and surrogate recoveries. No compounds were detected above the detection limits.

TPH-Diesel/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 10 mg/l.
*The Surrogate recovery was within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

TPH-Gas/Mod8015= *Met 28 day holding time.
*COC information verified.
*No hit above the detection limit of 100 ug/l.
*The Surrogate recovery were within QC Criteria. Calibrations were within QC Limits.
*Blanks were clean of any hits above the detection limits.

APPENDIX E

**CHEMICAL ANALYSES RESULTS
FOR SOIL SAMPLES**

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EXPLANATION OF TABLE ORGANIZATION AND NOMENCLATURE

Each table in the appendix is a matrix which consists of samples (listed in columns) and analyses (listed in rows). In some cases, the matrix consists of more samples (columns) and/or more analyses (rows) than can be presented on a single sheet. The method of presentation used is that for a specific set of parameters (rows) with the results for all the samples (columns) analyzed presented. The table continuation pages are labeled as such for each parameter. For the next set of parameters, the results are given for all the samples analyzed. The physical pages themselves are numbered sequentially as they appear in this appendix.

The following nomenclature is used in the tables:

Parameter:	Parameter for which the analysis was performed.
Location No.:	The sampling location identifier.
Sample Date:	The sampling date.
Lab Sample No.:	The numeric identifier assigned to the sample by the laboratory.
U:	Indicates sample was analyzed for but was not detected.
N/A:	Indicates sample was not analyzed.

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Appendix E
Summary of Volatile Organic Compounds Detected in Soil Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
(Results in micrograms per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.:	BGBH-01 21-21.5 6/20/94 941536-0001	BGBH-01 58 6/20/94 941536-0003	BH01-01 12' 6/24/94 941589-0001	BH01-01 59' 6/24/94 941589-0002	BH01-02 12' 6/28/94 941621-0010	BH01-02 59' 6/28/94 941621-0011	BH01-03 12' 6/27/94 941621-0009
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles Organics	10U	10U	10U	10U	10U	10U	10U
Acetone	5U	5U	5U	5U	5U	5U	5U
Benzene	5U	5U	5U	5U	5U	5U	5U
Bromodichloromethane	5U	5U	5U	5U	5U	5U	5U
Bromoform	10U	10U	10U	10U	10U	10U	10U
Bromomethane	10U	10U	10U	10U	10U	10U	10U
2-Butanone	5U	5U	5U	5U	5U	5U	5U
Carbon disulfide	5U	5U	5U	5U	5U	5U	5U
Carbon tetrachloride	5U	5U	5U	5U	5U	5U	5U
Chlorobenzene	5U	5U	5U	5U	5U	5U	5U
Chlorodibromomethane	10U	10U	10U	10U	10U	10U	10U
Chloroethane	10U	10U	10U	10U	10U	10U	10U
2-Chloroethylvinyl ether	5U	5U	5U	5U	5U	5U	5U
Chloroform	10U	10U	10U	10U	10U	10U	10U
Chloromethane	5U	5U	5U	5U	5U	5U	5U
1,1-Dichloroethane	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U	5U	5U	5U	5U
1,1-Dichloroethene	5U	5U	5U	5U	5U	5U	5U
Total 1,2-Dichloroethenes	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U
trans-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U
Ethylbenzene	10U	10U	10U	10U	10U	10U	10U
2-Hexanone	5U	5U	5U	5U	5U	5U	5U
Methylene Chloride	10U	10U	10U	10U	10U	10U	10U
4-Methyl-2-pentanone	5U	5U	5U	5U	5U	5U	5U
Styrene	5U	5U	5U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U	5U	5U	5U
Tetrachloroethene	5U	5U	5U	5U	5U	5U	5U
1,1,1-Trichloroethane	5U	5U	5U	5U	5U	5U	5U
1,1,2-Trichloroethane	5U	5U	5U	5U	5U	5U	5U
Trichloroethene	5U	5U	5U	5U	5U	5U	5U
Toluene	10U	10U	10U	10U	10U	10U	10U
Vinyl acetate	10U	10U	10U	10U	10U	10U	10U
Vinyl chloride	5U	5U	5U	5U	5U	5U	5U
Total Xylenes	5U	5U	5U	5U	5U	5U	5U

Appendix E
Summary of Volatile Organic Compounds Detected in Soil Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
 (Results in micrograms per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.:	BH01-03 22'	BH01-03 58'	BH01-04 12'	BH01-04 59'	BH01-05 42'	BH01-05 59'	BH02-01 32'
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatile Organics							
Acetone	10U	10U	10U	10U	10U	10U	10U
Benzene	5U	5U	5U	5U	5U	5U	5U
Bromodichloromethane	5U	5U	5U	5U	5U	5U	5U
Bromoform	5U	5U	5U	5U	5U	5U	5U
Bromomethane	10U	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U	10U
Carbon disulfide	5U	5U	5U	5U	5U	5U	5U
Carbon tetrachloride	5U	5U	5U	5U	5U	5U	5U
Chlorobenzene	5U	5U	5U	5U	5U	5U	5U
Chlorodibromomethane	5U	5U	5U	5U	5U	5U	5U
Chloroethane	10U	10U	10U	10U	10U	10U	10U
2-Chloroethylvinyl ether	10U	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5U	5U	5U	5U	5U
Chloromethane	10U	10U	10U	10U	10U	10U	10U
1,1-Dichloroethane	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U	5U	5U	5U	5U
1,1-Dichloroethene	5U	5U	5U	5U	5U	5U	5U
Total 1,2-Dichloroethenes	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U
trans-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U
Ethylbenzene	5U	5U	5U	5U	5U	5U	5U
2-Hexanone	10U	10U	10U	10U	10U	10U	10U
Methylene Chloride	5U	5U	5U	5U	5U	5U	5U
4-Methyl-2-pentanone	10U	10U	10U	10U	10U	10U	10U
Styrene	5U	5U	5U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U	5U	5U	5U
Tetrachloroethene	5U	5U	5U	5U	5U	5U	5U
1,1,1-Trichloroethane	5U	5U	5U	5U	5U	5U	5U
1,1,2-Trichloroethane	5U	5U	5U	5U	5U	5U	5U
Trichloroethene	5U	5U	5U	5U	5U	5U	5U
Toluene	5U	5U	5U	5U	5U	5U	5U
Vinyl acetate	10U	10U	10U	10U	10U	10U	10U
Vinyl chloride	10U	10U	10U	10U	10U	10U	10U
Total Xylenes	5U	5U	5U	5U	5U	5U	5U

U - Indicates compound analyzed for but not detected.

BG - Background
 BH - Borehole

Appendix E

Summary of Volatile Organic Compounds Detected in Soil Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA (Results in micrograms per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.: Matrix	BH02-01-62' 6/21/94 941549-0002	BH02-02-42' 6/21/94 941549-0004	BH02-02-59' 6/21/94 941549-0005	BH02-03-42' 6/23/94 941585-0002	BH02-03-59' 6/23/94 941585-0003	BH02-04-12' 6/22/94 941569-0001	BH02-04-52' 6/22/94 941569-0002	BH02-04-92' 6/22/94 941569-0003
Volatiles Organics	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Acetone	10U	10U	10U	10U	10U	10U	10U	10U
Benzene	5U	5U	5U	5U	5U	5U	5U	5U
Bromodichloromethane	5U	5U	5U	5U	5U	5U	5U	5U
Bromoform	5U	5U	5U	5U	5U	5U	5U	5U
Bromomethane	10U	10U	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U	10U	10U
Carbon disulfide	5U	5U	5U	5U	5U	5U	5U	5U
Carbon tetrachloride	5U	5U	5U	5U	5U	5U	5U	5U
Chlorobenzene	5U	5U	5U	5U	5U	5U	5U	5U
Chlorodibromomethane	5U	5U	5U	5U	5U	5U	5U	5U
Chloroethane	10U	10U	10U	10U	10U	10U	10U	10U
2-Chloroethylvinyl ether	10U	10U	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5U	5U	5U	5U	5U	5U
Chloromethane	10U	10U	10U	10U	10U	10U	10U	10U
1,1-Dichloroethane	5U	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U	5U	5U	5U	5U	5U
1,1,1-Dichloroethane	5U	5U	5U	5U	5U	5U	5U	5U
Total 1,2-Dichloroethanes	5U	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U	5U
trans-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U	5U
Ethylbenzene	5U	5U	5U	5U	5U	5U	5U	5U
2-Hexanone	10U	10U	10U	10U	10U	10U	10U	10U
Methylene Chloride	5U	5U	5U	5U	5U	5U	5U	5U
4-Methyl-2-pentanone	10U	10U	10U	10U	10U	10U	10U	10U
Styrene	5U	5U	5U	5U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U	5U	5U	5U	5U
Tetrachloroethene	5U	5U	5U	5U	5U	5U	5U	5U
1,1,1-Trichloroethane	5U	5U	5U	5U	5U	5U	5U	5U
1,1,2-Trichloroethane	5U	5U	5U	5U	5U	5U	5U	5U
Trichloroethane	5U	5U	5U	5U	5U	5U	5U	5U
Toluene	5U	5U	5U	5U	5U	5U	5U	5U
Vinyl acetate	10U	10U	10U	10U	10U	10U	10U	10U
Vinyl chloride	10U	10U	10U	10U	10U	10U	10U	10U
Total Xylenes	5U	5U	5U	5U	5U	5U	5U	5U

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole

Appendix E
Summary of Volatile Organic Compounds Detected in Soil Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
 (Results in micrograms per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.:	BH02-04 GW 105' 6/23/94 941573-0001	BH02-04 110' 6/23/94 941573-0003
Volatiles Organics Matrix	Soil	Soil
Acetone	10U	10U
Benzene	5U	5U
Bromodichloromethane	5U	5U
Bromoform	5U	5U
Bromomethane	10U	10U
2-Butanone	10U	10U
Carbon disulfide	5U	5U
Carbon tetrachloride	5U	5U
Chlorobenzene	5U	5U
Chlorodibromomethane	5U	5U
Chloroethane	10U	10U
2-Chloroethylvinyl ether	10U	10U
Chloroform	5U	5U
Chloromethane	10U	10U
1,1-Dichloroethane	5U	5U
1,2-Dichloroethane	5U	5U
1,1,1-Trichloroethane	5U	5U
Total 1,2-Dichloroethenes	5U	5U
1,2-Dichloropropane	5U	5U
cis-1,3-Dichloropropene	5U	5U
trans-1,3-Dichloropropene	5U	5U
Ethylbenzene	5U	5U
2-Hexanone	10U	10U
Methylene Chloride	5U	5U
4-Methyl-2-pentanone	10U	10U
Styrene	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U
Tetrachloroethene	5U	5U
1,1,1-Trichloroethane	5U	5U
1,1,2-Trichloroethane	5U	5U
Trichloroethene	5U	5U
Toluene	5U	5U
Vinyl acetate	10U	10U
Vinyl chloride	10U	10U
Total Xylenes	5U	5U

U - Indicates compound analyzed for but not detected.

BG - Background
 BH - Borehole

Appendix E

Summary of Semivolatile Organic Compounds Detected in Soil Samples 162nd CCGP/149th CCSQ, North Highlands ANGS, Sacramento, CA

(Results in micrograms per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.:	BGBH-01 21-21.5' 6/20/94 941536-0001	BGBH-01 58' 6/20/94 941536-0003	BH01-01 12' 6/24/94 941589-0001	BH01-01 59' 6/24/94 941589-0002	BH01-02 12' 6/28/94 941621-0010	BH01-02 59' 6/28/94 941621-0011	BH01-03 12' 6/27/94 941621-0009
Semivolatile Organics	Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Acenaphthene	330U	330U	330U	330U	330U	330U	330U
Acenaphthylene	330U	330U	330U	330U	330U	330U	330U
Anthracene	330U	330U	330U	330U	330U	330U	330U
Benidine	670U	670U	670U	670U	670U	670U	670U
Benzo(a)anthracene	330U	330U	330U	330U	330U	330U	330U
Benzo(b)fluoranthene	330U	330U	330U	330U	330U	330U	330U
Benzo(k)fluoranthene	330U	330U	330U	330U	330U	330U	330U
Benzoic acid	670U	670U	670U	670U	670U	670U	670U
Benzo(ghi)perylene	330U	330U	330U	330U	330U	330U	330U
Benzo(a)pyrene	330U	330U	330U	330U	330U	330U	330U
Benzyl alcohol	330U	330U	330U	330U	330U	330U	330U
Bis(2-chloroethoxy)methane	330U	330U	330U	330U	330U	330U	330U
Bis(2-chloroethyl)ether	330U	330U	330U	330U	330U	330U	330U
Bis(2-chloroisopropyl)ether	330U	330U	330U	330U	330U	330U	330U
Bis(2-ethylhexyl) phthalate	330U	330U	330U	330U	330U	330U	330U
4-Bromophenyl phenyl ether	330U	330U	330U	330U	330U	330U	330U
Butyl benzyl phthalate	330U	330U	330U	330U	330U	330U	330U
4-Chloroaniline	670U	670U	670U	670U	670U	670U	670U
4-Chloro-3-methylphenol	330U	330U	330U	330U	330U	330U	330U
2-Chloronaphthalene	330U	330U	330U	330U	330U	330U	330U
2-Chlorophenol	330U	330U	330U	330U	330U	330U	330U
4-Chlorophenyl phenyl ether	330U	330U	330U	330U	330U	330U	330U
Chrysene	330U	330U	330U	330U	330U	330U	330U
Di-n-butyl phthalate	330U	330U	330U	330U	330U	330U	330U
1,2-Dichlorobenzene	330U	330U	330U	330U	330U	330U	330U
1,3-Dichlorobenzene	330U	330U	330U	330U	330U	330U	330U
1,4-Dichlorobenzene	330U	330U	330U	330U	330U	330U	330U
3,3'-Dichlorobenzidine	330U	330U	330U	330U	330U	330U	330U
2,4-Dichlorophenol	670U	670U	670U	670U	670U	670U	670U
Dibenzo(a,h)anthracene	330U	330U	330U	330U	330U	330U	330U
Dibenzofuran	330U	330U	330U	330U	330U	330U	330U
Diethyl phthalate	330U	330U	330U	330U	330U	330U	330U
2,4-Dimethylphenol	330U	330U	330U	330U	330U	330U	330U
Dimethyl phthalate	330U	330U	330U	330U	330U	330U	330U

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole

Appendix E
Summary of Semivolatile Organic Compounds Detected in Soil Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
 (Results in micrograms per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.:	BGBH-01 21-21.5'	BGBH-01 58'	BH01-01 12'	BH01-01 59'	BH01-02 12'	BH01-02 59'	BH01-03 12'
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Semivolatile Organics							
4,6-Dinitro-2-methylphenol	670U	670U	670U	670U	670U	670U	670U
2,4-Dinitrophenol	330U	330U	330U	330U	330U	330U	330U
2,4-Dinitrotoluene	330U	330U	330U	330U	330U	330U	330U
2,6-Dinitrotoluene	330U	330U	330U	330U	330U	330U	330U
Di-n-octyl phthalate	330U	330U	330U	330U	330U	330U	330U
Fluorene	330U	330U	330U	330U	330U	330U	330U
Fluoranthene	330U	330U	330U	330U	330U	330U	330U
Hexachlorobenzene	330U	330U	330U	330U	330U	330U	330U
Hexachlorobutadiene	330U	330U	330U	330U	330U	330U	330U
Hexachlorocyclopentadiene	330U	330U	330U	330U	330U	330U	330U
Hexachloroethane	330U	330U	330U	330U	330U	330U	330U
Indeno(1,2,3-cd)pyrene	330U	330U	330U	330U	330U	330U	330U
Isophorone	330U	330U	330U	330U	330U	330U	330U
2-Methylnaphthalene	330U	330U	330U	330U	330U	330U	330U
2-Methylphenol	330U	330U	330U	330U	330U	330U	330U
4-Methylphenol	330U	330U	330U	330U	330U	330U	330U
2-Nitroaniline	330U	330U	330U	330U	330U	330U	330U
3-Nitroaniline	330U	330U	330U	330U	330U	330U	330U
4-Nitroaniline	1700U	1700U	1700U	1700U	1700U	1700U	1700U
2-Nitrophenol	1700U	1700U	1700U	1700U	1700U	1700U	1700U
4-Nitrophenol	670U	670U	670U	670U	670U	670U	670U
N-Nitrosodimethylamine	670U	670U	670U	670U	670U	670U	670U
N-Nitrosodi-n-propylamine	1700U	1700U	1700U	1700U	1700U	1700U	1700U
N-Nitrosodiphenylamine	330U	330U	330U	330U	330U	330U	330U
Naphthalene	330U	330U	330U	330U	330U	330U	330U
Nitrobenzene	330U	330U	330U	330U	330U	330U	330U
Pentachlorophenol	670U	670U	670U	670U	670U	670U	670U
Phenanthrene	330U	330U	330U	330U	330U	330U	330U
Phenol	330U	330U	330U	330U	330U	330U	330U
Pyrene	330U	330U	330U	330U	330U	330U	330U
1,2,4-Trichlorobenzene	330U	330U	330U	330U	330U	330U	330U
2,4,5-Trichlorophenol	330U	330U	330U	330U	330U	330U	330U
2,4,6-Trichlorophenol	330U	330U	330U	330U	330U	330U	330U

U - Indicates compound analyzed for but not detected.

BG - Background
 BH - Borehole

Appendix E

Summary of Semivolatile Organic Compounds Detected in Soil Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in micrograms per kilogram unless otherwise noted.)

Semivolatile Organics	Location No.: Sample Date: Lab Sample No.: Matrix	BH01-03 22' 6/27/94	BH01-03 58' 6/27/94	BH01-04 12' 6/24/94	BH01-04 59' 6/24/94	BH01-05 42' 6/27/94	BH01-05 59' 6/27/94	BH02-01-32' 6/21/94
		Soil	Soil	Soil	Soil	Soil	Soil	Soil
Acenaphthene		330U	330U	330U	330U	330U	330U	330U
Acenaphthylene		330U	330U	330U	330U	330U	330U	330U
Anthracene		330U	330U	330U	330U	330U	330U	330U
Benzidine		670U	670U	670U	670U	670U	670U	670U
Benzo(a)anthracene		330U	330U	330U	330U	330U	330U	330U
Benzo(b)fluoranthene		330U	330U	330U	330U	330U	330U	330U
Benzo(k)fluoranthene		330U	330U	330U	330U	330U	330U	330U
Benzoic acid		670U	670U	670U	670U	670U	670U	670U
Benzo(ghi)perylene		330U	330U	330U	330U	330U	330U	330U
Benzo(a)pyrene		330U	330U	330U	330U	330U	330U	330U
Benzyl alcohol		330U	330U	330U	330U	330U	330U	330U
Bis(2-chloroethoxy)methane		330U	330U	330U	330U	330U	330U	330U
Bis(2-chloroethyl)ether		330U	330U	330U	330U	330U	330U	330U
Bis(2-chloroisopropyl)ether		330U	330U	330U	330U	330U	330U	330U
Bis(2-ethylhexyl) phthalate		330U	330U	330U	330U	330U	330U	330U
4-Bromophenyl phenyl ether		330U	330U	330U	330U	330U	330U	330U
Butyl benzyl phthalate		330U	330U	330U	330U	330U	330U	330U
4-Chloroaniline		670U	670U	670U	670U	670U	670U	670U
4-Chloro-3-methylphenol		330U	330U	330U	330U	330U	330U	330U
2-Chloronaphthalene		330U	330U	330U	330U	330U	330U	330U
2-Chlorophenol		330U	330U	330U	330U	330U	330U	330U
4-Chlorophenyl phenyl ether		330U	330U	330U	330U	330U	330U	330U
Chrysene		330U	330U	330U	330U	330U	330U	330U
Di-n-butyl phthalate		330U	330U	330U	330U	330U	330U	330U
1,2-Dichlorobenzene		330U	330U	330U	330U	330U	330U	330U
1,3-Dichlorobenzene		330U	330U	330U	330U	330U	330U	330U
1,4-Dichlorobenzene		330U	330U	330U	330U	330U	330U	330U
3,3'-Dichlorobenzidine		330U	330U	330U	330U	330U	330U	330U
2,4-Dichlorophenol		670U	670U	670U	670U	670U	670U	670U
Dibenzo(a,h)anthracene		330U	330U	330U	330U	330U	330U	330U
Dibenzofuran		330U	330U	330U	330U	330U	330U	330U
Diethyl phthalate		330U	330U	330U	330U	330U	330U	330U
2,4-Dimethylphenol		330U	330U	330U	330U	330U	330U	330U
Dimethyl phthalate		330U	330U	330U	330U	330U	330U	330U

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole

Appendix E
Summary of Semivolatile Organic Compounds Detected in Soil Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
(Results in micrograms per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.:	BH01-03 22'	BH01-03 58'	BH01-04 12'	BH01-04 59'	BH01-05 42'	BH01-05 59'	BH02-01-32'
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Semivolatile Organics							
4,6-Dinitro-2-methylphenol	670U	670U	670U	670U	670U	670U	670U
2,4-Dinitrophenol	330U	330U	330U	330U	330U	330U	330U
2,4-Dinitrotoluene	330U	330U	330U	330U	330U	330U	330U
2,6-Dinitrotoluene	330U	330U	330U	330U	330U	330U	330U
Di-n-octyl phthalate	330U	330U	330U	330U	330U	330U	330U
Fluorene	330U	330U	330U	330U	330U	330U	330U
Fluoranthene	330U	330U	330U	330U	330U	330U	330U
Hexachlorobenzene	330U	330U	330U	330U	330U	330U	330U
Hexachlorobutadiene	330U	330U	330U	330U	330U	330U	330U
Hexachlorocyclopentadiene	330U	330U	330U	330U	330U	330U	330U
Hexachloroethane	330U	330U	330U	330U	330U	330U	330U
Indeno(1,2,3-cd)pyrene	330U	330U	330U	330U	330U	330U	330U
Isophorone	330U	330U	330U	330U	330U	330U	330U
2-Methylnaphthalene	330U	330U	330U	330U	330U	330U	330U
2-Methylphenol	330U	330U	330U	330U	330U	330U	330U
4-Methylphenol	330U	330U	330U	330U	330U	330U	330U
2-Nitroaniline	330U	330U	330U	330U	330U	330U	330U
3-Nitroaniline	1700U	1700U	1700U	1700U	1700U	1700U	1700U
4-Nitroaniline	1700U	1700U	1700U	1700U	1700U	1700U	1700U
2-Nitrophenol	670U	670U	670U	670U	670U	670U	670U
4-Nitrophenol	670U	670U	670U	670U	670U	670U	670U
N-Nitrosodimethylamine	1700U	1700U	1700U	1700U	1700U	1700U	1700U
N-Nitrosodi-n-propylamine	330U	330U	330U	330U	330U	330U	330U
N-Nitrosodiphenylamine	330U	330U	330U	330U	330U	330U	330U
Naphthalene	330U	330U	330U	330U	330U	330U	330U
Nitrobenzene	330U	330U	330U	330U	330U	330U	330U
Pentachlorophenol	670U	670U	670U	670U	670U	670U	670U
Phenanthrene	330U	330U	330U	330U	330U	330U	330U
Phenol	330U	330U	330U	330U	330U	330U	330U
Pyrene	330U	330U	330U	330U	330U	330U	330U
1,2,4-Trichlorobenzene	330U	330U	330U	330U	330U	330U	330U
2,4,5-Trichlorophenol	330U	330U	330U	330U	330U	330U	330U
2,4,6-Trichlorophenol	330U	330U	330U	330U	330U	330U	330U

Appendix E

Summary of Semivolatile Organic Compounds Detected in Soil Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in micrograms per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No.:	BH02-01-62' 6/21/94 941549-0002	BH02-02-42' 6/21/94 941549-0004	BH02-02-59' 6/21/94 941549-0005	BH02-03-42' 6/23/94 941585-0002	BH02-03-59' 6/23/94 941585-0003	BH02-04-12' 6/22/94 941569-0001	BH02-04-52' 6/22/94 941569-0002	BH02-04-92' 6/22/94 941569-0003
Semivolatile Organics	Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Acenaphthene		330U	330U	330U	330U	330U	330U	330U
Acenaphthylene		330U	330U	330U	330U	330U	330U	330U
Anthracene		330U	330U	330U	330U	330U	330U	330U
Benidine		670U	670U	670U	670U	670U	670U	670U
Benzo(a)anthracene		330U	330U	330U	330U	330U	330U	330U
Benzo(b)fluoranthene		330U	330U	330U	330U	330U	330U	330U
Benzo(k)fluoranthene		330U	330U	330U	330U	330U	330U	330U
Benzoic acid		670U	670U	670U	670U	670U	670U	670U
Benzo(ghi)perylene		330U	330U	330U	330U	330U	330U	330U
Benzo(a)pyrene		330U	330U	330U	330U	330U	330U	330U
Benzyl alcohol		330U	330U	330U	330U	330U	330U	330U
Bis(2-chloroethoxy)methane		330U	330U	330U	330U	330U	330U	330U
Bis(2-chloroethyl)ether		330U	330U	330U	330U	330U	330U	330U
Bis(2-chloroisopropyl)ether		330U	330U	330U	330U	330U	330U	330U
Bis(2-ethylhexyl) phthalate		330U	330U	330U	330U	330U	330U	330U
4-Bromophenyl phenyl ether		330U	330U	330U	330U	330U	330U	330U
Buryl benzyl phthalate		330U	330U	330U	330U	330U	330U	330U
4-Chloroaniline		670U	670U	670U	670U	670U	670U	670U
4-Chloro-3-methylphenol		330U	330U	330U	330U	330U	330U	330U
2-Chloronaphthalene		330U	330U	330U	330U	330U	330U	330U
2-Chlorophenol		330U	330U	330U	330U	330U	330U	330U
4-Chlorophenyl phenyl ether		330U	330U	330U	330U	330U	330U	330U
Chrysene		330U	330U	330U	330U	330U	330U	330U
Di-n-butyl phthalate		330U	330U	330U	330U	330U	330U	330U
1,2-Dichlorobenzene		330U	330U	330U	330U	330U	330U	330U
1,3-Dichlorobenzene		330U	330U	330U	330U	330U	330U	330U
1,4-Dichlorobenzene		330U	330U	330U	330U	330U	330U	330U
3,3'-Dichlorobenzidine		330U	330U	330U	330U	330U	330U	330U
2,4-Dichlorophenol		670U	670U	670U	670U	670U	670U	670U
Dibenzo(a,h)anthracene		330U	330U	330U	330U	330U	330U	330U
Dibenzofuran		330U	330U	330U	330U	330U	330U	330U
Diethyl phthalate		330U	330U	330U	330U	330U	330U	330U
2,4-Dimethylphenol		330U	330U	330U	330U	330U	330U	330U
Dimethyl phthalate		330U	330U	330U	330U	330U	330U	330U

BG - Background
BH - Borehole

U - Indicates compound analyzed for but not detected.

Appendix E
Summary of Semivolatile Organic Compounds Detected in Soil Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
 (Results in micrograms per kilogram unless otherwise noted.)

Semivolatile Organics	Location No.: Sample Date: Lab Sample No.:	BH02-01-62' 6/21/94 941549-0002	BH02-02-42' 6/21/94 941549-0004	BH02-02-59' 6/21/94 941549-0005	BH02-03-42' 6/23/94 941585-0002	BH02-03-59' 6/23/94 941585-0003	BH02-04-12' 6/22/94 941569-0001	BH02-04-52' 6/22/94 941569-0002	BH02-04-92' 6/22/94 941569-0003
	Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
4,6-Dinitro-2-methylphenol		670U	670U	670U	670U	670U	670U	670U	670U
2,4-Dinitrophenol		330U	330U	330U	330U	330U	330U	330U	330U
2,4-Dinitrotoluene		330U	330U	330U	330U	330U	330U	330U	330U
2,6-Dinitrotoluene		330U	330U	330U	330U	330U	330U	330U	330U
Di-n-octyl phthalate		330U	330U	330U	330U	330U	330U	330U	330U
Fluorene		330U	330U	330U	330U	330U	330U	330U	330U
Fluoranthene		330U	330U	330U	330U	330U	330U	330U	330U
Hexachlorobenzene		330U	330U	330U	330U	330U	330U	330U	330U
Hexachlorobutadiene		330U	330U	330U	330U	330U	330U	330U	330U
Hexachlorocyclopentadiene		330U	330U	330U	330U	330U	330U	330U	330U
Hexachloroethane		330U	330U	330U	330U	330U	330U	330U	330U
Indeno(1,2,3-cd)pyrene		330U	330U	330U	330U	330U	330U	330U	330U
Isophorone		330U	330U	330U	330U	330U	330U	330U	330U
2-Methylnaphthalene		330U	330U	330U	330U	330U	330U	330U	330U
2-Methylphenol		330U	330U	330U	330U	330U	330U	330U	330U
4-Methylphenol		330U	330U	330U	330U	330U	330U	330U	330U
2-Nitroaniline		330U	330U	330U	330U	330U	330U	330U	330U
3-Nitroaniline		1700U	1700U	1700U	1700U	1700U	1700U	1700U	1700U
4-Nitroaniline		1700U	1700U	1700U	1700U	1700U	1700U	1700U	1700U
2-Nitrophenol		670U	670U	670U	670U	670U	670U	670U	670U
4-Nitrophenol		670U	670U	670U	670U	670U	670U	670U	670U
N-Nitrosodimethylamine		1700U	1700U	1700U	1700U	1700U	1700U	1700U	1700U
N-Nitrosodi-n-propylamine		330U	330U	330U	330U	330U	330U	330U	330U
N-Nitrosodiphenylamine		330U	330U	330U	330U	330U	330U	330U	330U
Naphthalene		330U	330U	330U	330U	330U	330U	330U	330U
Nitrobenzene		330U	330U	330U	330U	330U	330U	330U	330U
Pentachlorophenol		670U	670U	670U	670U	670U	670U	670U	670U
Phenanthrene		330U	330U	330U	330U	330U	330U	330U	330U
Phenol		330U	330U	330U	330U	330U	330U	330U	330U
Pyrene		330U	330U	330U	330U	330U	330U	330U	330U
1,2,4-Trichlorobenzene		330U	330U	330U	330U	330U	330U	330U	330U
2,4,5-Trichlorophenol		330U	330U	330U	330U	330U	330U	330U	330U
2,4,6-Trichlorophenol		330U	330U	330U	330U	330U	330U	330U	330U

U - Indicates compound analyzed for but not detected.

BG - Background
 BH - Borehole

Summary of Semivolatile Organic Compounds Detected in Soil Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in micrograms per kilogram unless otherwise noted.)

Location No.: BH02-04 110'		BH02-04 110'	
Sample Date: 6/23/94		6/23/94	
Lab Sample No.: 941573-0001		941573-0003	
Semivolatile Organics	Matrix	Soil	Soil
Acenaphthene		330U	330U
Acenaphthylene		330U	330U
Anthracene		330U	330U
Benzidine		670U	670U
Benzo(a)anthracene		330U	330U
Benzo(b)fluoranthene		330U	330U
Benzo(k)fluoranthene		330U	330U
Benzoic acid		670U	670U
Benzo(ghi)perylene		330U	330U
Benzo(a)pyrene		330U	330U
Benzyl alcohol		330U	330U
Bis(2-chloroethoxy)methane		330U	330U
Bis(2-chloroethyl)ether		330U	330U
Bis(2-chloroisopropyl)ether		330U	330U
Bis(2-ethylhexyl) phthalate		330U	330U
4-Bromophenyl phenyl ether		330U	330U
Buryl benzyl phthalate		330U	330U
4-Chloroaniline		670U	670U
4-Chloro-3-methylphenol		330U	330U
2-Chloronaphthalene		330U	330U
2-Chlorophenol		330U	330U
4-Chlorophenyl phenyl ether		330U	330U
Chrysene		330U	330U
Di-n-butyl phthalate		330U	330U
1,2-Dichlorobenzene		330U	330U
1,3-Dichlorobenzene		330U	330U
1,4-Dichlorobenzene		330U	330U
3,3'-Dichlorobenzidine		330U	330U
2,4-Dichlorophenol		670U	670U
Dibenzo(a,h)anthracene		330U	330U
Dibenzofuran		330U	330U
Diethyl phthalate		330U	330U
2,4-Dimethylphenol		330U	330U
Dimethyl phthalate		330U	330U

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole

Appendix E

Summary of Semivolatile Organic Compounds Detected in Soil Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in micrograms per kilogram unless otherwise noted.)

Location No.: BH02-04 110'		BH02-04 GW 105'		BH02-04 110'	
Sample Date: 6/23/94		6/23/94		6/23/94	
Lab Sample No.: 941573-0001		941573-0001		941573-0003	
Semivolatile Organics	Matrix	Soil	Soil	Soil	Soil
4,6-Dinitro-2-methylphenol		670U		670U	
2,4-Dinitrophenol		330U		330U	
2,4-Dinitrotoluene		330U		330U	
2,6-Dinitrotoluene		330U		330U	
Di-n-octyl phthalate		330U		330U	
Fluorene		330U		330U	
Fluoranthene		330U		330U	
Hexachlorobenzene		330U		330U	
Hexachlorobutadiene		330U		330U	
Hexachlorocyclopentadiene		330U		330U	
Hexachloroethane		330U		330U	
Indeno(1,2,3-cd)pyrene		330U		330U	
Isophorone		330U		330U	
2-Methylnaphthalene		330U		330U	
2-Methylphenol		330U		330U	
4-Methylphenol		330U		330U	
2-Nitroaniline		330U		330U	
3-Nitroaniline		1700U		1700U	
4-Nitroaniline		1700U		1700U	
2-Nitrophenol		670U		670U	
4-Nitrophenol		670U		670U	
N-Nitrosodimethylamine		1700U		1700U	
N-Nitrosodi-n-propylamine		330U		330U	
N-Nitrosodiphenylamine		330U		330U	
Naphthalene		330U		330U	
Nitrobenzene		330U		330U	
Pentachlorophenol		670U		670U	
Phenanthrene		330U		330U	
Phenol		330U		330U	
Pyrene		330U		330U	
1,2,4-Trichlorobenzene		330U		330U	
2,4,5-Trichlorophenol		330U		330U	
2,4,6-Trichlorophenol		330U		330U	

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole

Appendix E

Summary of Metal/TPH/Oil-Grease Analytes Detected in Soil Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in milligrams per kilogram unless otherwise noted.)

Location No.:	BGBH-01 21-21.5'	BGBH-01 21.5-22'	BGBH-01 58'	BH01-01 12'	BH01-01 59'	BH01-02 12'	BH01-02 59'	BH01-03 12'
Sample Date:	6/20/94	6/20/94	6/20/94	6/24/94	6/24/94	6/28/94	6/28/94	6/27/94
Lab Sample No.:	941536-0001	941536-0005	941536-0003	941589-0001	941621-0002	941621-0010	941621-0011	941621-0009
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals								
Antimony (Sb)	N/A	0.5U	0.5U	0.5U	0.5U	30U	30U	30U
Arsenic (As)	N/A	N/A	0.5U	0.5U	0.5U	30U	73	55
Beryllium (Be)	N/A	0.5U	0.5U	0.5U	0.5U	1U	1U	1U
Cadmium (Cd)	N/A	N/A	0.5U	0.5U	0.5U	5U	61	5U
Chromium (Cr)	N/A	N/A	10	12	15	5U	90	45
Copper (Cu)	N/A	11	8.2	7.6	13	5.5	76	19
Lead (Pb)	N/A	N/A	4	3.4	3.2	5U	68	5U
Nickel (Ni)	N/A	19	12	6	21	50U	50U	50U
Silver (Ag)	N/A	0.5U	0.5U	0.5U	0.5U	5U	5U	5U
Thallium (Tl)	N/A	0.5U	0.5U	0.5U	0.5U	30U	36	5U
Zinc (Zn)	N/A	34	16	14	24	9.2	95	52
Mercury (Hg)	N/A	N/A	0.01U	0.031	0.04	0.2U	0.2U	0.018
Selenium (Se)	N/A	N/A	0.04U	0.15U	0.15U	0.2U	0.2U	0.2U

Lab Sample No.:	941536-0001	941536-0005	941536-0003	941589-0001	941589-0002	941621-0010	941621-0011	941621-0009
TPH by GC (as diesel)	10U	N/A	10U	10U	10U	10U	10U	10U
TPH by GC (as gasoline)	500U	N/A	500U	500U	500U	500U	500U	500U

Lab Sample No.:	941536-0001	941536-0005	941536-0003	941589-0001	941589-0002	941621-0010	941621-0011	941621-0009
Oil & Grease	12U	N/A	12U	12U	12U	12U	12U	12U

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole

Appendix E

Summary of Metal/TPH/Oil-Grease Analytes Detected in Soil Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in milligrams per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No:	BH01-03 22' 6/27/94 941621-0015	BH01-03 58' 6/27/94 941621-0002	BH01-04 12' 6/24/94 941589-0006	BH01-04 59' 6/24/94 941589-0007	BH01-05 42' 6/27/94 941621-0004	BH01-05 59' 6/27/94 941621-0005	BH02-01 32' 6/21/94 941549-0001
Metals	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Antimony (Sb)	30U	30U	0.5U	0.5U	30U	30U	0.5U
Arsenic (As)	30U	31	0.5U	0.81	30U	30U	0.76
Beryllium (Be)	1U	1U	0.5U	0.5U	1U	1U	0.5U
Cadmium (Cd)	5	5U	0.5U	0.5U	5U	5U	0.5U
Chromium (Cr)	11	40	4	12	13	20	11
Copper (Cu)	28	30	3.5	11	15	15	21
Lead (Pb)	9.2	5U	1.8	2.9	5U	5U	5.8
Nickel (Ni)	50U	50U	3	18	50U	50U	14
Silver (Ag)	5U	11	0.5U	0.5U	5U	5U	0.5U
Thallium (Tl)	30U	34	0.5U	0.5U	30U	36	0.5U
Zinc (Zn)	41	62	5.9	20	37	27	67
Mercury (Hg)	0.01U	0.2U	0.027	0.038	0.2U	0.2U	0.2U
Selenium (Se)	0.2U	0.2U	0.15U	0.15U	0.2U	0.2U	0.04U

Lab Sample No.:	941621-0015	941621-0002	941589-0006	941589-0007	941621-0004	941621-0005	941549-0001
TPH by GC (as diesel)	10U	10U	10U	10U	10U	10U	10U
TPH by GC (as gasoline)	500U	500U	500U	500U	500U	500U	500U

Lab Sample No.:	941621-0015	941621-0002	941589-0006	941589-0007	941621-0004	941621-0005	941549-0001
Oil & Grease	12U	N/A	12U	12U	12U	12U	12U

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole

Appendix E

Summary of Metal/TPH/Oil-Grease Analytes Detected in Soil Samples 162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA

(Results in milligrams per kilogram unless otherwise noted.)

Location No.: Sample Date: Lab Sample No:	BH02-01 62' 6/21/94 941549-0002	BH02-02 42' 6/21/94 941549-0004	BH02-02 59' 6/21/94 941549-0005	BH02-03 42' 6/23/94 941585-0002	BH02-03 59' 6/23/94 941585-0003	BH02-04 12' 6/22/94 941569-0001	BH02-04 52' 6/22/94 941569-0002	BH02-04 92' 6/22/94 941569-0003
Metals Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Antimony (Sb)	0.5U	0.5U	0.5U	30U	0.5U	0.5U	0.5U	0.5U
Arsenic (As)	0.5U	1.8	0.5U	30U	0.67	0.99	1	0.5U
Beryllium (Be)	0.5U	0.5U	0.5U	5U	0.5U	0.5U	0.5U	0.5U
Cadmium (Cd)	0.5U	0.5U	0.5U	5U	0.5U	0.5U	0.5U	0.5U
Chromium (Cr)	9.5	4.7	8.3	8.4	10	8.6	11	10
Copper (Cu)	85	9.4	24	13	16	22	21	16
Lead (Pb)	4.3	2.4	3.3	6.5	4	4	3.7	2.6
Nickel (Ni)	15	9.6	15	50U	13	9.1	15	12
Silver (Ag)	0.5U	0.5U	0.5U	30U	0.5U	0.5U	0.5U	0.5U
Thallium (Tl)	0.5U	0.5U	0.5U	29U	0.5U	0.5U	0.5U	0.5U
Zinc (Zn)	66	38	51	29	33	30	28	29
Mercury (Hg)	0.2U	0.2U	0.2U	.01U	0.01U	0.08	0.01U	0.01U
Selenium (Se)	0.039U	0.04U	0.04U	0.23	0.15U	0.04U	0.039U	0.039U

Lab Sample No.:	941536-0001	941536-0005	941536-0003	941589-0001	941589-0002	941621-0010	941621-0011	941621-0009
TPH by GC (as diesel)	10U	10U	10U	10U	10U	10U	10U	10U
TPH by GC (as gasoline)	500U	500U	500U	500U	500U	500U	500U	500U

Lab Sample No.:	941536-0001	941536-0005	941536-0003	941589-0001	941589-0002	941621-0010	941621-0011	941621-0009
Oil & Grease	12U	12U	12U	12U	12U	12U	12U	12U

U - Indicates compound analyzed for but not detected.

BG - Background
BH - Borehole

Appendix E

Summary of Metal/TPH/Oil & Grease Analytes Detected in Soil Samples
162nd CCGP/149th CCSQ, North Highlands ANG, Sacramento, CA
 (Results in milligrams per kilogram unless otherwise noted.)

Location No.: BH02-04 GW 105'		BH02-04 110'	
Sample Date: 6/23/94		6/23/94	
Lab Sample No: 941573-0001		941573-0003	
Metals	Matrix	Soil	Soil
Antimony (Sb)		3U	3U
Arsenic (As)		1U	1U
Beryllium (Be)		0.5U	0.5U
Cadmium (Cd)		0.5U	0.5U
Chromium (Cr)		23	28
Copper (Cu)		16	34
Lead (Pb)		1.5U	3
Nickel (Ni)		41	56
Silver (Ag)		1U	1U
Thallium (Tl)		1U	1U
Zinc (Zn)		27	45
Mercury (Hg)		0.016	0.017
Selenium (Se)		1U	1U

Lab Sample No.: 941573-0001		941573-0003	
TPH by GC (as diesel)		10U	10U
TPH by GC (as gasoline)		500U	500U

Lab Sample No.: 941573-0001		941573-0003	
Oil & Grease		5U	5U

U - Indicates compound analyzed for but not detected.

BG - Background
 BH - Borehole

APPENDIX F

HRS DATA PACKAGE

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PA/SI DATA REQUIREMENTS FOR FEDERAL FACILITY DOCKET SITES
North Highlands ANGTS, Sacramento, CA

1. **Supply copies of all sampling data, on-site and off-site, including location map, detection limits (see definitions below), raw data sheets, QA/QC documents, date(s) sampled, analytical method(s) used, well or boring logs, and sampling technique(s).**

Sampling data including detection limits, raw data sheets, dates sampled, analytical methods used and sampling techniques can be found in Appendix E of the SI Report. QA/QC documents can be found in Appendix D and well or boring logs can be found in Appendix B of the SI Report.

2. **Locate and identify on a map all known or suspected sources (see definition below). Supply all information about source(s) such as: dates of operation, use, or spillage; amounts of material deposited, stored, or spilled; dimensions of source(s); known or suspected hazardous substances (see definition below), etc.**

The above information can be found in Section 2.0 of the SI Report.

3. **Provide a description of all aquifers beneath the site, including description of overlying materials, depth first encountered, thickness, and composition.**

The above information can be found in Section 3.4.1 of the SI Report.

4. **For each source, choose one description from Table 1 that describes the groundwater containment. Provide complete documentation (i.e., engineering diagrams, photographs [originals]) as to why the source meets that description and not any other in the Table.**

This question does not apply since a groundwater investigation has not been conducted.

5. **Provide the location of all drinking water wells in all aquifers beneath the site within a 4-mile radius from the site (property boundary) by HRS distance ring and locate the wells within a one-mile radius on a 7.5 minute topographic map. Provide information on depth of well(s), screening interval(s), depth of aquifer(s)**

encountered, population served for multiple wells (i.e., municipal system), provide the number of wells, location of all wells (regardless of 4-mile limit), average annual pumpage of each well (regardless of 4-mile limit), and total population served by the system. Include information on all standby wells.

There are over 120 drinking water wells surrounding the Station. The base has three operating production wells. The Lincoln and Davis sites are over 20 miles away from the Station. Production wells surrounding the Station belong to the Northridge, Arcade, and Rio Linda water districts and the City of Sacramento. Figure F.1 shows the location of the wells within a one-mile radius. Well logs for these wells were not available. (Source: Environmental Management Division at McClellan AFB)

6. Provide information and location (on 7.5 minute topographic map) of wells within 4 miles that are used to irrigate five or more acres of commercial food or forage crops, or watering of commercial livestock, or ingredient in commercial food preparation, or supply for aquaculture, or supply for a major or designated water recreation area, excluding drinking water use.

Domestic wells are not used for the above purposes. (Source: Environmental Management Division at McClellan AFB)

7. Provide the average number of persons per residence for county (or counties) that site is located in per the U. S. Census Bureau.

The average number of persons in Sacramento County is 1,130,000. (Source: State Census Data Center Department of Finance)

8. Identify and locate all surface water bodies within two miles of the site marking off the drainage routes (shown on a 7.5 minute topographic map) from each source to applicable surface water bodies. Provide the average annual cubic feet per second flow for each surface water body within 15 miles downriver or radius from the point of probable entry into surface water. For lakes, provide information on inflow and outflow.

The surface water body within a 2-mile radius is the Arcade Creek. Figure G.2 shows the drainage route from the site into the creek. Average annual cubic feet per second flow is not available for this intermittent creek. (Source: Corps of Engineers)

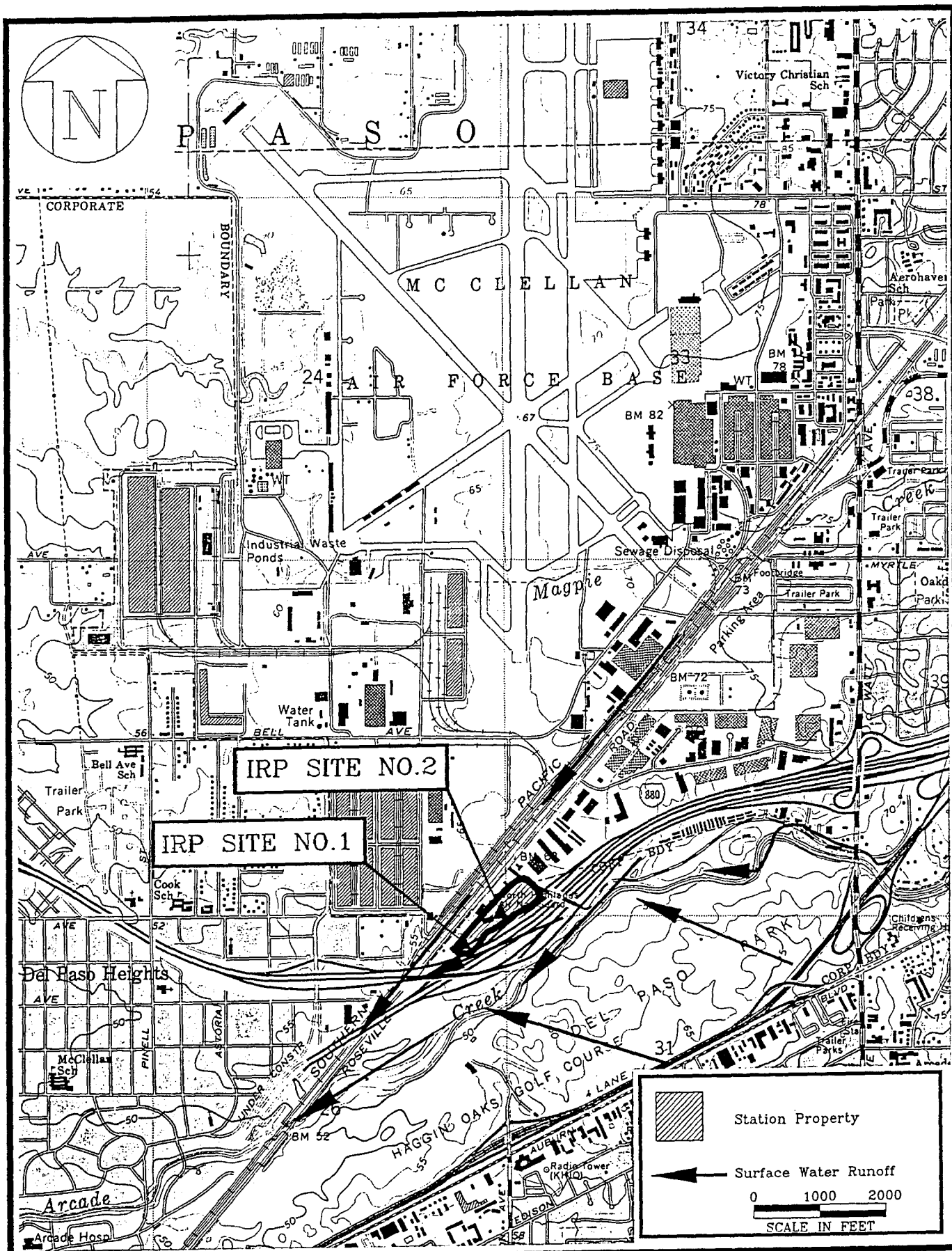


FIGURE F.2

AREA SURFACE WATER
RUNOFF MAP
162nd CCGP & 149th CCSQ
North Highlands ANG
Sacramento, California

OPTTECH
OPERATIONAL TECHNOLOGIES
CORPORATION

NORTH\NGHG1CO

SEPTEMBER 1995

9. For each source, choose one description from Table 2 that describes the surface water containment. Provide complete documentation (i.e., engineering diagrams, photographs [originals]) as to why the source meets that description and not any other in the Table.

No evidence of hazardous substance migration from source areas and:

- (a) Neither of the following present: (1) maintained engineered cover,
or
(2) functioning and maintained run-on control system and runoff management system.

10. Provide the number of acres in each drainage basin.

This information is not available for Arcade Creek. (Source: Corps of Engineers)

11. From Table 3, choose the predominant soil group (surface soil) which comprises the largest total area within each drainage area.

The description that describes this site the best is: Medium-textured soils with moderate infiltration rates (for example, sandy loams)

12. Provide the two year, 24-hour rainfall.

The two year, 24-hour rainfall is 2.1". (Source: Office of Hydrology, Washington, D.C.)

13. From Table 4, choose the floodplain category for each source (supply Federal Emergency Management Agency floodplain map) and determine if each source meets the criteria from Table 5 (engineer's certification).

This site is located outside the 100 year floodplain. (Source: SI Report)

14. Provide the location of all drinking water intakes within 15 downstream miles (rivers) or 15-mile radius (lakes, bays, etc.). Provide information on population served. For multiple intakes (i.e., municipal system), provide information on the

number of intakes, location of all intakes (regardless of 15-mile limit), and total population served by system. Include information on all standby intakes.

There are no drinking water intakes within 15 downstream miles of the site that service the site. Drinking water comes from wells. (Source: Corps of Engineers)

- 15. Provide information and location of intakes within 15 miles downriver (radius in lake or bay) that are used to irrigate five or more acres of commercial food or forage crops, or watering of commercial livestock, or ingredient in commercial food preparation, or supply for aquaculture, or supply for a major or designated water recreation area, excluding drinking water use.**

There are no intakes within 15 downstream miles of the site that service the site. Drinking water comes from wells. (Source: Corps of Engineers)

- 16. Provide any surface water body 15 miles downriver (radius in lakes or bay) used for drinking water.**

Surface water is not used for drinking purposes. (Source: Environmental Management Division, McClellan AFB)

- 17. Provide the average human food chain production (pounds per year) for each surface water body 15 miles downriver or 15-mile radius in lake.**

This does not apply since the surface water body is intermittent (Arcade Creek).

- 18. Within a 4-mile radius from the site and 15 miles downriver, or radius in lake, identify all sensitive environments that exist. Provide original documentation (USF&W, Natural Heritage Database, State agencies, NOAA, etc.). Note that there could be multiple sensitive environments within a sensitive environment.**

Enclosed is a list of possible species that may occur in the area. (Source: Department of the Interior USF&W)

ENCLOSURE A

LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES AND
CANDIDATE SPECIES THAT MAY OCCUR IN THE AREA OR MAY BE AFFECTED BY PROJECTS IN
SACRAMENTO COUNTY, CALIFORNIA
(1-1-95-TA-0020, OCTOBER 5, 1994)

Listed Species

Fish

winter-run chinook salmon, *Oncorhynchus tshawytscha* (E)
delta smelt, *Hypomesus transpacificus* (T)

Reptiles

giant garter snake, *Thamnophis gigas* (T)

Birds

bald eagle, *Haliaeetus leucocephalus* (E)
American peregrine falcon, *Falco peregrinus anatum* (E)
Aleutian Canada goose, *Branta canadensis leucopareia* (T)

Invertebrates

vernal pool tadpole shrimp, *Lepidurus packardii* (E)
valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)
vernal pool fairy shrimp, *Branchinecta lynchi* (T)

Plants

Antioch Dunes evening-primrose, *Oenothera deltoides* ssp. *howellii* (E)

Proposed Species

Fish

Sacramento splittail, *Pogonichthys macrolepidotus* (PT)

Amphibians

California red-legged frog, *Rana aurora draytonii* (PE)

Plants

slender Orcutt grass, *Orcuttia tenuis* (PT)
Sacramento Orcutt grass, *Orcuttia viscida* (PE)

Candidate Species

Fish

green sturgeon, *Acipenser medirostris* (2R)

Sacramento County Continued

Amphibians

California tiger salamander, *Ambystoma californiense* (1)
western spadefoot toad, *Scaphiopus hammondi hammondi* (2R)
foothill yellow-legged frog, *Rana boylei* (2)

Reptiles

northwestern pond turtle, *Clemmys marmorata marmorata* (2)
southwestern pond turtle, *Clemmys marmorata pallida* (2)

Birds

ferruginous hawk, *Buteo regalis* (2)
tricolored blackbird, *Agelaius tricolor* (2)
mountain plover, *Charadrius montanus* (2)
loggerhead shrike, *Lanius ludovicianus* (2)

Mammals

Suisun ornate shrew, *Sorex ornatus sinuosus* (1)
San Francisco dusky-footed woodrat, *Neotoma fuscipes annectens* (2)
San Joaquin Valley woodrat, *Neotoma fuscipes riparia* (2)
Pacific western big-eared bat, *Plecotus townsendii townsendii* (2)
greater western mastiff-bat, *Eumops perotis californicus* (2)

Invertebrates

Sacramento Valley tiger beetle, (*Cicindela hirticollis abrupta*) (2)
Sacramento anthicid beetle, *Anthicus sacramento* (2)

Plants

Suisun aster, *Aster chilensis* var. *lentus* (2)
Tuolumne coyote-thistle, *Eryngium pinnatisectum* (2)
Northern California black walnut, *Juglans californica* var. *hindsii* (2)
legenere, *Legenere limosa* (2)
Mason's lilaeopsis, *Lilaeopsis masonii* (2)
valley sagittaria, *Sagittaria sanfordii* (2)

- (E)--Endangered (T)--Threatened (P)--Proposed (CH)--Critical Habitat
(1)--Category 1: Taxa for which the Fish and Wildlife Service has sufficient biological information to support a proposal to list as endangered or threatened.
(2)--Category 2: Taxa for which existing information indicated may warrant listing, but for which substantial biological information to support a proposed rule is lacking.
(1R)--Recommended for Category 1 status.
(2R)--Recommended for Category 2 status.
(*)--Listing petitioned.
(*)--Possibly extinct.

19. What is the linear frontage of all wetlands 15 miles downriver or 15-mile radius in lake?

This information has not yet been calculated but will be provided at a later date.

20. Provide the location and number of persons residing, working, attending school, or day care within 200 feet. This includes both the Air and Army Guard.

There are approximately 28 people working within 200 feet of the site. During Unit Training Assembly (UTA) weekends, there are approximately 240. (Source: SI Report)

21. Identify all terrestrial sensitive environments that exist on-site. Provide original documentation (USF&W, natural Heritage Database, State Agencies, NOAA, etc.) and locate each on a 7.5 minute topographic map. Note that there could be multiple sensitive environments within a sensitive environment.

Enclosed is a list of possible species that may occur in the area. (Source: Department of the Interior USF&W)

22. For each source, choose one description from Table 8 that describes the accessibility to a human population. Provide complete documentation (i.e., engineering diagrams, photographs [originals]) as to why the source meets that description and not any other in the Table.

The best description for this site is: Surrounded by maintained fence or combination fence and natural barriers.

23. Provide the total number of people in following distance rings from source(s)?

- 0-1/4 mile - 43 persons
- 1/4-1/2 mile - 272 persons
- 1/2-1 mile - 3,264 persons
- 1-2 miles - 18,390 persons

- 2-3 miles - 33,309 persons

- 3-4 miles - 65,164 persons

Use 1990 Census data and/or actual house counts. Document how calculated.

Source: 1990 Census (block group level population aggregates)

Prepared by: GEOQUEST Information Technologies, Inc.

24. For each source, choose one description from Table 9 that describes the gaseous containment. Provide complete documentation (i.e., engineering diagrams, photographs [originals]), as to why the source meets that description and not any other in the Table. From Table 10, choose the appropriate description for each source type. For each source, choose one description from Table 11 that describes the particulate containment. Provide complete documentation (i.e., engineering diagrams, photographs [originals]) as to why the source meets that description and not any other in the Table.

Table 9: Uncontaminated soil cover > 3 feet:

Source substantially devoid of vegetation (for on site), the other site is covered with asphalt.

Table 10: Other types of sources, not elsewhere specified.

Table 11: Uncontaminated soil cover > 3 feet:

Source substantially devoid of vegetation (for on site), the other site is covered with asphalt.

25. Provide the location and area (in acres) of all wetlands within 4 miles of the site.

There are approximately 123.7 acres of wetlands within 4-miles of the site. (Source: Department of the Interior USF&W)

26. Contact EPA Regional Office immediately if any radionuclides are present or suspected at the site and supply all radiological information known to date.

There are no radionuclides present or suspected at the site.

27. For all of the above information, use primary data source and supply two copies or specify where copies may be obtained.

28. Provide any removals or remedial actions taken place at the site.

There have been no removals or remedial actions that have taken place at the site.

29. If information relevant to a question already has been provided to the EPA, your answer may precisely cite the previous submittal by title, date, page, and paragraph number rather than resubmitting the information.

DEFINITIONS

Detection Limit (DL)

Lowest amount that can be distinguished from the normal random "noise" of an analytical instrument or method. For this submission, the detection limit used is the method detection limit (MDL), or, for real-time instruments, the detection limit of the instrument as used in the field.

Hazardous Substance

CERCLA hazardous substances, pollutants, and contaminant as defined in CERCLA sections 101(14) and 101(33).

Method Detection Limit (MDL)

Lowest concentration of an analyte that a method can detect reliably in either a sample or blank.

Sample Quantitation Limit (SQL)

Quantity of a substance that can reasonably be quantified given the methods of analysis and sample characteristics that may affect quantification (for example, dilution, concentration).

Site: Area(s) where a hazardous substance has been deposited, stored, disposed, or placed, or has otherwise come to be located. Such areas may include multiple sources and may include areas between sources.

Source: Any area where a hazardous substance has been deposited, stored, disposed, or placed, plus those soils that have become contaminated from migration of a hazardous substance. Sources do not include those volumes of air, groundwater, surface water, or surface water sediments that have become contaminated by migration, except: in the case of either a groundwater plume with no identified source, or contaminated surface water sediments with no identified source, the plume may be considered a source.

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Table 1

All Sources (Except Surface Impoundments, Land Treatment, Containers, and Tanks)

Evidence of hazardous substance migration from source area (i.e., source area includes source and any associated containment structures).

No liner.

No evidence of hazardous substance migration from source area, a liner, and:

- (a) None of the following present: (1) maintained engineered cover, (2) functioning and maintained run-on control system and runoff management system, or (3) functioning leachate collection and removal system immediately above liner.
- (b) Any one of the three items in (a) present.
- (c) Any two of the items in (a) present.
- (d) All three items in (a) present plus a functioning groundwater monitoring system.
- (e) All items in (d) present plus no bulk or non-containerized liquids nor materials containing free liquids deposited in source area.

No evidence of hazardous substance migration from source area, double liner with functioning leachate collection and removal system above and between liners, functioning groundwater monitoring system, and:

- (f) Only one of the following deficiencies present in containment: (1) bulk or noncontainerized liquids or materials containing free liquids deposited in source area, or (2) no or nonfunctioning or nonmaintained run-on control system and runoff management system, or (3) no or nonmaintained engineered cover.
- (g) None of the deficiencies in (f) present.

Source area inside or under maintained intact structure that provides protection from precipitation so that neither runoff nor leachate is generated, liquid or materials containing free liquids not deposited in source area, and functioning and maintained run-on control present.

Surface Impoundment

Evidence of hazardous substance migration from surface impoundment.

No liner.

Free liquids present with either no diking, unsound diking, or diking that is not regularly inspected and maintained.

No evidence of hazardous substance migration from surface impoundment, free liquids present, sound diking that is regularly inspected and maintained, adequate freeboard, and:

- (a) Liner.
- (b) Liner with functioning leachate collection and removal system below liner, and functioning groundwater monitoring system.
- (c) Double liner with functioning leachate collection and removal system between liners, and functioning groundwater monitoring system.

No evidence of hazardous substance migration from surface impoundment and all free liquids eliminated at closure (either by removal of liquids or solidification of remaining wastes and waste residues).

Land Treatment

Evidence of hazardous substance migration from land treatment zone.

No functioning, maintained, run-on control and runoff management system.

No evidence of hazardous substance migration from land treatment zone and:

- (a) Functioning and maintained run-on control and runoff management system.
- (b) Functioning and maintained run-on control and runoff management system, and vegetative cover established over entire land treatment area.
- (c) Land treatment area maintained in compliance with 40 CFR 264.280.

Containers

All containers buried.

Evidence of hazardous substance migration from container area (i.e., container area includes containers and any associated containment structures).

No liner (or no essentially impervious base) under container area.

No diking (or no similar structure) surrounding container area.

Diking surrounding container area unsound or not regularly inspected and maintained.

No evidence of hazardous substance migration from container area, container area surrounded by sound diking that is regularly inspected and maintained, and:

- (a) Liner (or essentially impervious base) under container area.

- (b) Essentially impervious base under container area with liquids collection and removal system.
- (c) Containment system includes essentially impervious base, liquids collection system, sufficient contain 10 percent of volume of all containers, and functioning and maintained run-on control; plus functioning groundwater monitoring system, and spilled or leaked hazardous substances and accumulated precipitation removed in timely manner to prevent overflow of collection system, at least weekly inspection of containers, hazardous substances in leaking or deteriorating containers transferred to containers in good condition, and containers sealed except when waste is added or removed.
- (d) Free liquids present containment system has sufficient capacity to hold total volume of all containers and to provide adequate freeboard, single liner under container area with functioning leachate collection and removal system below liner, and functioning groundwater monitoring system.
- (e) Same as (d) except: double liner under container area with functioning leachate collection and removal system between liners.

Containers inside or under maintained intact structure that provides protection from precipitation so that neither runoff nor leachate would be generated from any unsealed or ruptured containers, liquids or materials containing free liquids not deposited in any container, and functioning and maintained runoff control present.

No evidence of hazardous substance migration from container area, containers leaking, and all free liquids eliminated at closure (either by removal of liquid or solidification of remaining wastes and waste residues).

Tank

Belowground tank.

Evidence of hazardous substance migration from tank area (i.e., tank area includes tank, ancillary equipment such as piping, and any associated containment structures).

Tank and ancillary equipment not provided with secondary containment, (e.g., liner under tank area, vault system, double wall).

No diking (or no similar structure) surrounding tank and ancillary equipment

Diking surrounding tank and ancillary equipment unsound or not regularly inspected and maintained.

No evidence of hazardous substance migration from tank area, tank and ancillary equipment surrounded by sound diking that is regularly inspected and maintained, and:

- (a) Tank and ancillary equipment provided with secondary containment.
- (b) Tank and ancillary equipment provided with secondary containment with leak detection and collection system.
- (c) Tank and ancillary equipment provided with secondary containment system that detects and collects spilled or leaked hazardous substances and accumulated precipitation and has sufficient capacity to contain 110 percent of volume of largest tank within containment area, spilled or leaked hazardous substances and accumulated precipitation removed in timely manner, at least weekly inspection of tank and secondary containment system, all leaking or unfit-for-use tank systems promptly responded to, and functioning groundwater monitoring system.
- (d) Containment system has sufficient capacity to hold volume of all tanks within tank containment area and to provide adequate freeboard, single liner under that containment area with functioning leachate collection and removal system below liner, and functioning groundwater monitoring system.
- (e) Same as (d) except double liner under tank containment area with functioning leachate collection and removal system between liners.

Tank is aboveground, and inside or under maintained intact structure that provides protection from precipitation so that neither runoff nor leachate would be generated from any material released from tank, liquids or materials containing free liquids not deposited in any tank, and functioning and maintained run-on control present.

Table 2

All Sources (Except Surface Impoundments, Land Treatment, Containers, and Tanks)

Evidence of hazardous substance migration from source area (i.e., source area includes source and any associated containment structures).

No evidence of hazardous substance migration from source areas and:

- (a) Neither of the following present: (1) maintained engineered cover, or (2) functioning and maintained run-on control system and runoff management system.
- (b) Any one of the two items in (a) present.
- (c) Any two of the following present: (1) maintained engineered cover, or (2) functioning and maintained run-on control system and runoff management

system, or (3) liner with functioning leachate collection and removal system immediately above liner.

(d) All items in (c) present.

(e) All items in (c) present, plus no bulk or non-containerized liquids nor materials containing free liquids deposited in source area.

No evidence of hazardous substance migration from source area, double liner with functioning leachate collection and removal system above and between liners, and:

(f) Only one of the following deficiencies present in containment: (1) bulk or noncontainerized liquids or materials containing free liquids deposited in source area, or (2) no or nonfunctioning or nonmaintained run-on control system and runoff management system, or (3) no or nonmaintained engineered cover.

(g) None of the deficiencies in (f) present.

Source area inside or under maintained intact structure that provides protection from precipitation so that neither runoff nor leachate is generated, liquids or materials containing free liquids not deposited in source area, and functioning and maintained run-on control present.

Surface Impoundment

Evidence of hazardous substance migration from surface impoundment.

Free liquids present with either no diking, unsound diking, or diking that is not regularly inspected and maintained.

No evidence of hazardous substance migration from surface impoundment, free liquids present, sound diking that is regularly inspected and maintained, adequate freeboard, and:

(a) No liner.

(b) Liner.

(c) Liner with functioning leachate collection and removal system below liner.

(d) Double liner with functioning leachate collection and removal system between liners.

No evidence of hazardous substance migration from surface impoundment and all free liquids eliminated at closure (either by removal of liquids or solidification of remaining wastes and waste residues).

Land Treatment

Evidence of hazardous substance migration from land treatment zone.

No functioning and maintained run-on control and runoff management system.

No evidence of hazardous substance migration from land treatment zone and:

- (a) Functioning and maintained and maintained run-on control and runoff management system.
- (b) Functioning and maintained run-on control and runoff management system, and vegetative cover established over entire land treatment area.
- (c) Land treatment area maintained in compliance with 40 CFR 264.280.

Containers

All containers buried.

Evidence of hazardous substance migration from container area (i.e., container area includes containers and any associated containment structures).

No diking (or no similar structure) surrounding container area.

Diking surrounding container area unsound or not regularly inspected and maintained.

No evidence of hazardous substance migration from container area and container area surrounded by sound diking that is regularly inspected and maintained.

No evidence of hazardous substance migration from container area, container area surrounded by sound diking that is regularly inspected and maintained, and:

- (a) Essentially impervious base under container area with liquids collection and removal system.
- (b) Containment system includes essentially impervious base, liquids collection system, sufficient capacity to contain 10 percent of volume of all containers, and functioning and maintained run-on control; and spilled or leaked hazardous substances and accumulated precipitation removed in timely manner to prevent overflow of collection system, at least weekly inspection of containers, hazardous substances in leaking or deteriorating containers transferred to containers in good condition, and containers sealed except when waste is added or removed.
- (c) Free liquids present containment system has sufficient capacity to hold total volume of all containers and to provide adequate freeboard, and single liner under container area with functioning leachate collection and removal system below liner.
- (d) Same as (c) except: double liner under container area with functioning leachate collection and removal system between liners. Containers inside or

under maintained intact structure that provides protection from precipitation so that neither runoff nor leachate would be generated from any unsealed or ruptured containers, liquids or materials containing free liquids not deposited in any container, and functioning and maintained run-on control present.

No evidence of hazardous substance migration from container area, containers leaking, and all free liquids eliminated at closure (either by removal of liquids or solidification of remaining wastes and waste residues).

Tank

Belowground tank.

Evidence of hazardous substance migration from tank area (i.e., tank area includes tank, ancillary equipment such as piping, and any associated containment structures).

No diking (or no similar structure) surrounding tank and ancillary equipment.

Diking surrounding tank and ancillary equipment unsound or not regularly inspected and maintained.

No evidence of hazardous substance migration from tank area and tank and ancillary equipment surrounded by sound diking that is regularly inspected and maintained.

No evidence of hazardous substance migration from tank area, tank and ancillary equipment surrounded by sound diking that is regularly inspected and maintained, and:

- (a) Tank and ancillary equipment provided with secondary containment (e.g., liner under tank area, vault system, double wall) with leak detection and collection system.
- (b) Tank and ancillary equipment provided with secondary containment system that detects and collects spilled or leaked hazardous substances and accumulated precipitation and has sufficient capacity to contain 110 percent of volume of largest tank within containment area, spilled or leaked hazardous substances and accumulated precipitation removed in a timely manner, at least weekly inspection of tank and secondary containment system, and all leaking or unfit-for-use tank systems promptly responded to.
- (c) Containment system has sufficient capacity to hold total volume of all tanks within the tank containment area and to provide adequate freeboard, and single liner under tank containment area with functioning leachate collection and removal system below liner.
- (d) Same as (c) except double liner under tank containment area with functioning leachate collection and removal system between liners.

Tank is aboveground, and inside or under maintained intact structure that provides protection from precipitation so that neither runoff nor leachate would be generated from any material released from tank, liquids or materials containing free liquids not deposited in any tank, and functioning and maintained run-on control present.

Table 3
Surface Soil Description

Coarse-textured soils with high infiltration rates (for example, sands, loamy sands).

Medium-textured soils with moderate infiltration rates (for example, sandy loams, loams).

Moderately fine-textured soils with low infiltration rates (for example, silty loams, silts, sandy clay loams).

Fine-textured soils with very low infiltration rates (for example, clays, sandy clays, silty clay loams, clay loams, silty clays); or impermeable surfaces (for example, pavement).

Table 4
Floodplain Categories

Source floods annually.

Source in 10-year floodplain.

Source in 100-year floodplain.

Source in 500-year floodplain.

None of the above.

Table 5
Flood Containment

Documentation that containment at the source is designed, constructed, operated, and maintained to prevent a washout of hazardous substances by the flood being evaluated (see floodplain category).

Table 6
Sensitive Environments

Critical habitat^a for Federal designated endangered or threatened species.
Marine Sanctuary.
National Park.
Designated Federal Wilderness Area.
Areas identified under Coastal Zone Management Act^b.
Sensitive areas identified under National Estuary Program^c or Near Coastal Waters Program^d.
Critical areas identified under the Clean Lakes Program^e.
National Monument^f.
National Seashore Recreational Area.
National Lakeshore Recreational Area.
Habitat known to be used by Federal designated or proposed endangered or threatened species.
National Preserve.
National or State Wildlife Refuge.
Unit of Coastal Barrier Resources System.
Coastal Barrier (undeveloped).
Federal land designated for protection of natural ecosystems.
Administratively Proposed Federal Wilderness Area.
Spawning areas critical^g for the maintenance of fish/shellfish species within river, lake, or coastal tidal waters.
Migratory pathways and feeding areas critical for maintenance of anadromous fish species within river reaches or areas in lakes or coastal tidal waters in which the fish spend extended periods of time.
Terrestrial areas utilized for breeding by large or dense aggregations of animals^h.
National river reach designated as Recreational.
Habitat known to be used by State designated endangered or threatened species.
Habitat known to be used by species under review as to its Federal endangered or threatened status.
Coastal Barrier (partially developed).
Federal designated Scenic or Wild River.
State land designated for wildlife or game management.
State designated Scenic or Wild River.
State designated Natural Areas.
Particular areas, relatively small in size, important to maintenance of unique biotic communities.
State designated areas for protection or maintenance of aquatic lifeⁱ.

^aCritical habitat as defined in 50 CFR 424.02.

^bAreas identified in State Coastal Zone Management plans as requiring protection because of ecological value.

^cNational Estuary Program study areas (Subareas within subareas) identified in Comprehensive Conservation and Management Plans as requiring protection because they support critical life stages of key estuarine species (Section 320 of Clean Water Act, as amended).

^dNear Coastal Waters as defined in Sections 104(b)(3), 304(1), 319, and 320 of Clean Water Act, as amended.

^eClean Lakes Program critical areas (subareas within lakes, or in some cases entire small lakes) identified by State Clean Lake Plans as critical habitats (Section 314 of Clean Water Act, as amended).

^fUse only for air migration pathway.

^gLimit to areas described as being used for intense or concentrated spawning by a given species.

^hFor the air migration pathway, limit to terrestrial vertebrate species. For the surface water migration pathway, limit to terrestrial vertebrate species aquatic or semiaquatic foraging habits.

ⁱAreas designated under Section 305(a) of Clean Water Act, as amended.

Table 7
Terrestrial Sensitive Environments

Terrestrial critical habitat^a for Federal designated endangered or threatened species.

National Park.

Designated Federal Wilderness Area.

National Monument.

Terrestrial habitat known to be used by Federal designated or proposed threatened or endangered species.

National Preserve (terrestrial).

National or State Terrestrial Wildlife Refuge.

Federal land designated for protection of natural ecosystems.

Administratively proposed Federal Wilderness Area.

Terrestrial areas utilized for breeding by large or dense aggregations of animals^b.

Terrestrial habitat known to be used by State designated endangered or threatened species.

Terrestrial habitat known to be used by species under review as to its Federal designated endangered or threatened status.

State lands designated for wildlife or game management.

State designated Natural Areas.

Particular area, relatively small in size, important to maintenance of unique biotic communities.

^aCritical habitat as defined in 50 CFR 42.

^bLimit to vertebrate species.

Table 8
Area of Observed Contamination

Designated recreational area.

Regularly used for public recreation (for example, fishing, hiking, softball).

Accessible and unique recreational area (for example, vacant lots in urban area).

Moderately accessible (may have some access improvements – for example, gravel road), with some public recreation use.

Slightly accessible (for example, extremely rural area with no road improvement), with some public recreation use.

Accessible, with no public recreation use.

Surrounded by maintained fence or combination of maintained fence and natural barriers.

Physically inaccessible to public, with no evidence of public recreation use.

Table 9
Gas Containment Description

All situations except those specifically listed below.

Evidence of biogas release.

Active fire within source.

Gas collection/treatment system functioning, regularly inspected, maintained, and completely covering source.

Source substantially surrounded by engineering windbreak and no other containment specifically described in this table applies.

Source covered with essentially impermeable, regularly inspected, maintained cover.

Uncontaminated soil cover >3 feet:

Source substantially vegetated with little exposed soil.

Source lightly vegetated with much exposed soil.

Source substantially devoid of vegetation.

Uncontaminated soil cover ≥ 1 foot and ≤ 3 feet:

Source heavily vegetated with essentially no exposed soil.

Cover soil resistant to gas migration^a.

Cover soil type not resistant to gas migration^a or unknown.

Source substantially vegetated with little exposed soil and cover soil type resistant to gas migration^a.

Other.

Uncontaminated soil cover <1 foot:

Source heavily vegetated with essentially no exposed soil and cover soil type resistant to gas migration^a.

Other.

Totally or partially enclosed within structurally intact building and no other containment specifically described in this table applies.

Source consists solely of intact, sealed containers:

Totally protected from weather by regularly inspected, maintained cover.

Other.

^aConsider moist fine-grained and saturated coarse-grained soils resistant to gas migration; consider all other soils nonresistant.

Table 10
Source Type

Active fire area.

Burn pit.

Containers or tanks (buried/belowground):

Evidence of biogas release.

No evidence of biogas release.

Containers or tanks, not elsewhere specified.

Contaminated soil (excluding land treatment).

Landfarm/land treatment.

Landfill:

Evidence of biogas release.

No evidence of biogas release.

Pile:

Tailings pile.

Scrap metal or junk pile.

Trash pile.

Chemical waste pile.

Other waste piles.

Surface impoundments (buried/backfilled):

Evidence of biogas release.

No evidence of biogas release.

Surface impoundment (not buried/backfilled):

Dry.

Other.

Other types of sources, not elsewhere specified.

Table 11

Particulate Containment Description

All situations except those specifically listed below.

Source contains only particulate hazardous substances totally covered by liquids.

Source substantially surrounded by engineered windbreak and no other containment specifically described in this table applies.

Source covered with essentially impermeable, regularly inspected, maintained cover.

Uncontaminated soil cover >3 feet:

Source substantially vegetated with little or no exposed soil.

Source lightly vegetated with much exposed soil.

Source substantially devoid of vegetation.

Uncontaminated soil cover ≥ 1 foot and ≤ 3 feet:

Source heavily vegetated with essentially no exposed soil:

Cover soil type resistant to gas migration^a.

Cover soil type not resistant to gas migration^a.

Source substantially vegetated with little exposed soil and cover soil type resistant to gas migration^a.

Other.

Uncontaminated soil cover <1 foot:

Source heavily vegetated with essentially no exposed soil and cover soil type resistant to gas migration^a.

Other.

Totally or partially enclosed within structurally intact building and no other containment specifically described in this table applies.

Source consists solely of containers:

All containers contain only liquids.

All containers intact, sealed, and totally protected from weather by regularly inspected, maintained cover.

All containers intact and sealed.

Other.

^aConsider moist fine-grained and saturated coarse-grained soils resistant to gas migration; consider all other soils nonresistant.