621452

0051995

Environmental Restoration Contractor **ERC Team**

Interoffice Memorandum

OCT 1995

Job No. 22192
Written Response Required? NO
Closes CCN: N/A
OU: 100-FR-3
TSD: N/A
ERA: N/A
Subject Code: 8630

TO: G. W. Avolio, H4-90

DATE: September 26, 1995

COPIES: See Below

FROM: Duane Jacques
Analytical Services/Field Screening
H6-04/372-9400

SUBJECT: **100-FR-3 GROUNDWATER/SOIL GAS SUPPLEMENTAL LFI FIELD SCREENING DATA PACKAGE, REV 0**

45101

NOV 1995 RECEIVED EDMC

REFERENCES:

1. BHI, 1995a, *Field Screening (On-Site Measurements) Quality Assurance Plan*, BHI-EE-08, Bechtel Hanford, Inc., Richland, Washington.

2. BHI, 1995b, *Field Screening Procedures*, BHI-EE-05, Bechtel Hanford, Inc., Richland, Washington.

3. BHI, 1995c, *100-FR-3 Groundwater/Soil-Gas Supplementary Limited Field Investigation Description of Work*, BHI-00322, Rev. 00, Bechtel Hanford, Inc., Richland, Washington.

4. BHI, 1994, *100-FR-3 Soil Gas Survey Field Logbook*, EFL-1166, Bechtel Hanford, Inc., Richland, Washington.

The attached tables and logbook entries provide field screening results for soil gas and groundwater samples analyzed to support the 100-FR-3 Groundwater/Soil-Gas Supplementary Limited Field Investigation (LFI). The sampling and analyses requirements, detection levels, and quality control requirements were conducted in accordance with the referenced description of work (BHI 1995c). The Quality Assurance level for this work corresponds to QA-2 as specified in the reference 1 (BHI 1995a). The samples were managed under SAF B95-052.

Table 1 contains results and field data for soil gas samples collected to support the referenced project. The samples were analyzed using a Photovac 10S Plus portable gas chromatograph, serial number TB920109. The samples were analyzed in accordance with Field Screening Procedure (FSP) 1.6, *Analysis of Volatile Organic Compounds in Soil Gas* (BHI 1995b). Copies of the mobile laboratory data/log sheets and the instrument logbook provide specific information on custody and analysis of the samples.

Table 2 contains results and field data for groundwater samples collected to support the referenced project. The samples were analyzed using a Photovac 10S Plus portable gas chromatograph, serial number TB920109. The samples were analyzed in accordance with Field Screening Procedure (FSP) 1.1, *Aqueous Headspace Analysis of Volatile Organic Compounds in Water* (BHI 1995b). Copies of

the mobile laboratory data/log sheets and the instrument logbook provide specific information on custody and analysis of the samples.

Information concerning sample collection is contained in the referenced field logbook EFL-1166, pages 29 through 111. The field logbook is controlled by BHI document control and can be obtained from that organization. Please contact me if you have any questions on this information.

Duane Jacques

Duane Jacques

Reviewed by: _____ 9/27/95

IDJ:idj

Attachments:
Table 1. 100-FR-3 Groundwater/Soil Gas Supplemental LFI, Soil Gas Data.
Table 2. 100-FR-3 Groundwater/Soil Gas Supplemental LFI, Groundwater Data.
Table 3. 100-FR-3 Groundwater/Soil Gas Supplemental LFI, Coordinates and Elevation Data.
EAL Results and Chain of Custody Sheets.
Chain of Custody Sheets and Results for Groundwater Samples.
100-FR-3 Groundwater/Soil Gas Supplemental LFI, Mobile Laboratory Data/Log Sheets, 20 total pages.
100-FR-3 Groundwater/Soil Gas Supplemental LFI, Photovac 10S Plus GC Instrument Logbook Sheets, 33 total pages.

Copies:
Analytical Services Project Files X2-10, w/a
[redacted], w/a
IDJ - File, w/a
BHI Document Control H4-79, w/a

Table 1. 100-FR-3 Groundwater/Soil Gas Supplemental LFI, Soil Gas Data

Location	HEIS	Date	Sample Depth (m)	TCE (ppb)	PCE (ppb)	Tol (ppb)
2	B0D6G9	4/19/95	5.6	1.7	3.5	<1.0
4	B0D6F6	4/18/95	5.5	<1.0	<1.0	<1.0
4 Dupe	B0D6F7	4/18/95	5.5	<1.0	<1.0	<1.0
5	B0FHD6	5/11/95	6.7	3.5	7.6	6.7
5 Repl	B0FKS8	5/24/95	6.7	3.7	7.6	6.7
6	B0FH97	5/3/95	5.5	<1.0	<1.0	<1.0
7	B0D6J3	4/21/95	6.1	<1.0	2.3	<1.0
8	B0D6G5	4/19/95	2.4	3.8	<1.0	<1.0
11	B0FH99	5/3/95	6.1	6.9	<1.0	<1.0
12	B0FC58	5/1/95	5.5	7.4	<1.0	<1.0
13	B0FC56	5/1/95	4.6	12	<1.0	5.5
15	B0FBZ1	4/24/95	5.9	7.9	<1.0	4.9
16	B0D6J7	4/21/95	4.7	32	<1.0	<1.0
17	B0FHF2	5/11/95	6.8	12	1.5	<1.0
18	B0FHC0	5/10/95	7.1	31	2.1	<1.0
19	B0FC46	4/28/95	5.2	<1.0	<1.0	<1.0
20	B0FBZ4	4/24/95	2.4	<1.0	<1.0	<1.0
20 Deep	B0FBZ3	4/24/95	6.1	<1.0	<1.0	<1.0
21	B0FC03	4/25/95	6.2	9.5	<1.0	6.8
21 Dupe	B0FC04	4/25/95	6.2	9.7	<1.0	6.4
21N	B0FKM9	5/17/95	6.2	6.8	<1.0	<1.0
22	B0FC07	4/25/95	2.4	41	<1.0	<1.0
22	B0FC06	4/25/95	9.6	31	<1.0	<1.0
22W	B0FC18	4/26/95	2.4	64	2.9	5.2
22W	B0FC17	4/26/95	6.1	69	<1.0	6.0
23	B0FC33	4/27/95	3.9	13	<1.0	<1.0
24	B0FC44	5/1/95	1.5	63	17	8.4
25	B0FC02	4/25/95	7.9	1.0	2.3	11
26	B0FKK4	5/15/95	4.3	32	3.8	<1.0
28	B0FC31	4/27/95	5.0	77	<1.0	<1.0
29	B0FKL7	5/16/95	2.5	6.5	<1.0	<1.0
30	B0FKN1	5/17/95	7.6	<1.0	1.4	8.4
31	B0FKK7	5/15/95	4.2	36	4.7	4.9
31N	B0FKN9	5/19/95	4.0	<1.0	<1.0	<1.0
32	B0FKJ2	5/12/95	6.9	8.4	<1.0	<1.0
32 Dup	B0FKJ3	5/12/95	6.9	17	<1.0	10
33	B0FHF8	5/12/95	5.1	40	8.9	13
34	B0G4S1	6/28/95	4.7	31	<1.0	3.4
35	B0FKL9	5/16/95	6.4	<1.0	<1.0	7.4
35 Dup	B0FKM0	5/16/95	6.4	2.6	3.4	<1.0
38	B0FHC6	5/10/95	5.5	3.8	2.1	<1.0
40	B0G4Q7	6/27/95	4.5	<1.0	<1.0	<1.0
40 Dupe	B0G4Q8	6/27/95	4.5	<1.0	<1.0	<1.0
41	B0FKW1	6/22/95	2.4	68	<1.0	<1.0
42	B0FKW2	6/22/95	6.3	35	<1.0	<1.0
42 Dupe	B0FKW3	6/22/95	6.3	30	<1.0	<1.0
43	B0FKX2	6/23/95	6.2	22	<1.0	<1.0
44	B0FKX6	6/23/95	5.7	14	<1.0	<1.0
45	B0G4Q4	6/27/95	3.7	<1.0	<1.0	<1.0
47	B0G4Q1	6/27/95	6.6	<1.0	<1.0	<1.0
49	B0FKX9	6/23/95	4.6	7.2	<1.0	<1.0

Table 2. 100-FR-3 Groundwater/Soil Gas Supplemental LFI, Groundwater Data

Location	HEIS	Date	Sample BGS (m)	TCE (ppb)	PCE (ppb)	Tol (ppb)
2	B0D6G8	4/19/95	10.1	<0.1	<0.1	<0.1
4	B0D6F5	4/18/95	9.1	<0.1	<0.1	<0.1
5	B0FKT1	5/24/95	10.4	<0.1	<0.1	<0.1
7	B0D6H1	4/19/95	11.3	0.5	0.3	0.2
7 Rep	B0D6H7	4/20/95	8.2	<0.1	<0.1	<0.1
8	B0D6G1	4/19/95	10.1	6.7	0.2	0.6
9 Rep	B0D6J2	4/20/95	9.1	0.8	0.1	<0.1
9	B0D6H8	4/21/95	9.1	5.4	<0.1	<0.1
10	B0FHB4	5/9/95	8.5	6.6	0.22	0.47
11	B0FHB8	5/10/95	9.8	9.2	<0.1	0.39
12	B0FH91	5/2/95	8.8	26	<0.1	0.23
12 Dupe	B0FH92	5/2/95	8.8	22	<0.1	0.40
13	B0FC57	5/1/95	6.4	2.0	<0.1	0.4
15	B0D6K6	4/24/95	8.5	0.75	0.2	0.6
15 Dupe	B0D6K7	4/24/95	8.5	0.78	<0.1	1.5
16	B0FHF0	5/11/95	10.1	8.9	<0.1	<0.1
16 Dupe	B0FHF1	5/11/95	10.1	5.4	<0.1	<0.1
18	B0FKL4	5/10/95	10.7	8.8	<0.1	<0.1
19 Dupe	B0FC48	5/1/95	6.1	17	<0.1	0.5
19	B0FC49	5/1/95	6.1	25	<0.1	0.5
21N	B0FKN0	5/16/95	7.0	0.98	<0.1	<0.1
22W	B0FC23	4/27/95	11.0	13	<0.1	0.4
22W Dupe	B0FC24	4/27/95	11.0	12	<0.1	0.96
23	B0FC37	4/28/95	9.1	12	<0.1	0.8
23 Dupe	B0FC38	4/28/95	9.1	13	<0.1	0.6
24	B0FC45	5/1/95	3.0	37	<0.1	0.3
24 Repl	B0FC53	5/1/95	3.0	20	<0.1	<0.1
25	B0FC01	4/25/95	13.1	<0.1	<0.1	0.92
26	B0FKK1	5/15/95	7.0	6.0	0.3	1.8
26 Dup	B0FKK2	5/15/95	7.0	6.3	0.3	0.3
26 Repl	B0FKK6	5/15/95	6.4	2.7	<0.1	<0.1
27	B0FC29	4/27/95	10.1	33	<0.1	1.1
28	B0FC32	4/27/95	6.4	15	<0.1	0.9
28 Resmpl	B0G4S7	6/28/95	6.1	9.3	<0.1	<0.1
29	B0D6D8	4/18/95	8.2	11	<0.1	<0.1
29 Resmpl	B0FKL8	5/16/95	5.8	1.6	<0.1	<0.1
30	B0FKN8	5/17/95	8.8	3.4	<0.1	<0.1
31	B0FKK8	5/15/95	5.8	51.5	<0.1	<0.1
31 Dupe	B0FKL1	5/15/95	5.8	45	<0.1	<0.1
31N	B0FKS1	5/19/95	5.0	11	<0.1	<0.1
31N	B0FKS2	5/19/95	7.6	11	0.35	0.26
31N Dupe	B0FKS4	5/19/95	7.6	8.2	<0.1	<0.1
31SW	B0G4S4	6/28/95	5.2	26	<0.1	<0.1
32	B0FKJ5	5/12/95	8.8	12.4	0.2	0.4
32 Dup	B0FKJ6	5/12/95	8.8	15.9	0.1	0.2
32 Deep	B0FKJ7	5/12/95	11.3	26.2	0.8	0.8
32 Resmpl	B0G4R4	6/27/95	8.8	23	<0.1	<0.1
33	B0FKJ0	5/12/95	8.5	34.9	<0.1	0.1
33 Dupe	B0FKJ1	5/12/95	8.5	22.7	<0.1	<0.1
38	B0FHC7	5/10/95	7.9	1.1	<0.1	0.35
40	B0G4Q9	6/27/95	5.8	<0.1	<0.1	<0.1
41	B0FKV8	6/22/95	4.0	6.3	<0.1	<0.1
41 Rep	B0FKW4	6/22/95	5.2	5.6	<0.1	<0.1
42	B0FKW5	6/22/95	7.6	7.8	<0.1	<0.1
43	B0FKX4	6/23/95	8.2	15	0.16	<0.1
44	B0FKX7	6/23/95	7.6	11	<0.1	<0.1
45	B0G4Q6	6/27/95	5.8	<0.1	<0.1	<0.1
47	B0G4Q3	6/27/95	8.8	<0.1	<0.1	<0.1
49	B0G4P7	6/23/95	7.3	<0.1	<0.1	<0.1
Well 199-F7-1	B0FK54	5/18/95	4.6	24	<0.1	<0.1
Well 199-F7-3	B0FK55	5/23/95	5.8	1.7	<0.1	<0.1
Well 699-77-36	B0FK56	5/16/95	10.7	20	<0.1	<0.1
Well 699-81-38	B0FK60	5/31/95	8.5	0.1	<0.1	<0.1
Well 699-80-43S	B0FK59	6/6/95	7.8	<0.1	<0.1	<0.1
Well 699-74-44	B0FK57	5/31/95	15.0	<0.1	<0.1	<0.1
Well 699-71-30	B0FK58	6/6/95	9.2	<0.1	<0.1	<0.1

Table 3. 100-FR-3 Groundwater/Soil Gas Supplemental LFI, Coordinates and Elevation Data

Grid Location	*Easting WSP Coordinate (m)*	*Northing WSP Coordinate (m)*	*Surface Elevation (m)*	*Groundwater Elevation BGS (m)*
2	577375.465	147937.754	125.403	115.7
4	578104.048	147965.121	123.727	116.5
5	578405.734	147922.899	124.704	116.0
7	577372.756	147574.799	125.140	117.8
8	577742.012	147591.983	124.778	117.1
9	578110.543	147604.823	123.681	116.8
10	578467.270	147598.528	123.748	116.1
11	578864.424	147612.931	123.508	113.8
12	579206.909	147590.331	122.413	113.8
13	579663.557	147686.297	119.373	113.6
15	578117.994	147225.196	122.815	115.3
16	578480.788	147237.361	123.945	115.7
18	579220.312	147264.259	123.938	114.1
19	579620.839	147308.843	118.377	113.4
21N	578324.157	147034.941	121.066	115.2
22W	578693.891	146867.208	125.456	115.6
23	579201.275	146916.311	123.247	114.8
24	579559.333	146974.810	117.006	114.8
25	578117.745	146522.984	124.311	112.5
26	578458.348	146483.683	120.311	115.4
27	578830.912	146574.552	121.712	115.0
28	579230.001	146537.988	120.263	114.6
29	579559.142	146600.074	119.666	114.8
30	578474.526	146089.026	123.026	115.0
31	578874.754	146144.576	119.843	115.2
31N	578652.202	146391.462	119.384	115.3
31SW	578842.4855	146097.8996	119.182	114.8
32	579156.157	146236.557	122.690	114.9
33	579604.663	146185.966	122.392	114.7
38	579142.093	147987.335	122.232	115.2
40	578112.0159	145776.4002	120.183	115.2
41	578545.5164	145797.3769	118.223	115.3
42	578906.3604	145806.478	121.643	114.9
43	579210.0201	145773.6601	122.455	114.8
44	579630.9419	145903.0823	121.462	114.7
45	578201.9601	145499.5905	119.846	115.2
47	578931.2762	145477.9128	123.219	114.9
49	579635.2524	145494.0644	121.264	114.4
Well 199-F7-1	579687.170	147022.430	119.350	114.8
Well 199-F7-3	579884.710	147112.530	120.493	114.7
Well 699-77-36	578847.210	146868.940	126.669	116.0
Well 699-69-38	578262.520	144396.940	129.629	123.9
Well 699-69-45	576157.410	144556.310	148.640	122.2
Well 699-62-43E	576878.220	142492.050	129.571	120.1
Well 699-81-38	578172.35	148241.56	124.887	116.4
Well 699-80-43S	576701.92	147774.69	126.82	119.0
Well 699-74-44	576393.09	146098.78	136.703	121.7
Well 699-71-30	580603.35	145226.91	123.132	113.9

HEADSPACE GAS CHROMATOGRAPHY CHECKLIST

1.	Date: 9/14/95	
2.	a. Minimum 3 point calibration curve:	ok
	b. Date 3 point minimum calibration curve was prepared:	1994
3.	Calibration Check Standard	
	a. Check standard for each analyte:	4/21/95
	b. Date of analysis:	4/21/95
	c. Date of check standard:	4/21/95
	Calculation Check (One Standard)	
	d. Show calculation:	1400 µg/mL 1 µL = 1.4 µg 1.4 µg / 30 mL = 0.048 µg/mL = ppm
	e. Agrees with analyst:	yes [signature]
3.	a. Is a sample dilution required?	NO
	b. If yes, check calculation.	
4.	If data has been converted from ppm to ppb or vice versa, check conversion.	ok
5.	Analyte Identification	MS 4/20/95
	a. Confirmed by MS:	
	b. Confirmed by second column:	
6.	Average temperature of laboratory during analysis:	75° F
7.	a. Reviewer's name:	P S Gisler
	b. Reviewer's signature:	[signature]

921452

Environmental Analytical Laboratory
General Validation/Self Inspection Checklist

Batch Identification 100fR-3 Ground Water/Soil gas Supplemental LFI Field Screening Data Package

Table of Contents

- Table in package and tabs in place for each section — Yes Na Date

Quality requirements

- Surrogates (add NR if not required) — Yes NR N/A
- Matrix spikes (add NR if not required) — Yes Not in Package N/A
- Matrix spike duplicate (add NR if not required) — Yes ~~[illegible]~~ N/A
- Required analyses performed — Yes Date 9/14/95
- Requested analytes addressed — Yes Date 9/14/95

Sample chain of custody

- Custody chain intact — Yes Log Book Date 9/14/95
- Internal chain not required — Yes X Date 9/14/95

Anomaly reports complete

- Complete and signed — Yes None Date

Sample holding time prior to analysis meets requirements — Yes NA Date

- Holding time expiration date — Date NA
- Volatile organic analysis — Date NA
  Analysis date — Date
- Semivolatile organic analyses — Date
  Analysis date — Date
- Other (list) — Date
  Analysis date — Date

- Inorganic and organic checklists included and complete: Yes NA Date _____

  Inorganic Yes _____ N/A _____
  Organic Yes _____ N/A _____
  Radiochemistry Yes _____ N/A _____

- All documents signed and dated Yes ALS Date 9/14/95
- Data package complete Yes ALS Date 9/14/95
- Data package properly filed Yes NA Date _____
- Verify file folder prepared/in place Yes NA Date _____
- Hanford Environmental Information System numbers included (add NR if not required) Yes ALS N/A _____
- Client identification numbers (add NR if not required) Yes ALS N/A _____
- Environmental Analytical Laboratory sample numbers included Yes NA Date _____
- All client requirements identified and met Yes ALS Date 9/14/95
- Initials identifiable to a name Yes NO Date 9/14/95

Obtain Environmental Analytical Laboratory Manager's signature Yes NA Date _____

COMMENTS

1. Did not have Description of work therefore the level of Quality not apparent
   * a) If QA2 No Matrix spike
     b) If QA1 OK

** (2) EAL confirmatory date not apparent

** (3) would signature at bottom of page be better?

* Discussion with analyst QA is QA2 ALS 9/27/95

** Added to Data packages ALS 9/27/95

*** discussed with analyst. This is analysts choice ALS 9/27/95

S7R-D24.D

021452

Data File : E:\HPDATA\50420\~~S9-D29.~~D
Acq Time : 20 Apr 95 5:36 pm
Sample : Site 9 @ 29' depth
Misc :
Quant Time: Apr 21 7:33 1995

B0D6H7

Operator: CM Jones
Inst : VOA 1 INS
Multiplr: 1.00

Site 7 Replicate

Method : C:\HPCHEM\1\METHODS\50420.M
Title : 8240 5-POINT CALIBRATION
Last Update : Fri Apr 21 07:24:37 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) bromochloromethane	7.34	128	610821	50.00 ug/L	-0.02
21) 1,4 difluorobenzene	8.99	114	3812574	50.00 ug/L	-0.02
41) chlorobenzene-d5	13.73	117	3226125	50.00 ug/L	-0.02
System Monitoring Compounds					**%Recovery**
19) 1,2-dichloroethane-d4	8.25	65	1200197	52.59 ug/L	
43) toluene-d8	11.34	98	3962210	50.24 ug/L	
54) 4-bromofluorobenzene	15.77	95	1586818	49.82 ug/L	
Target Compounds					**Qvalue**
9) acetone	4.26	58	12278	3.51 ug/L m	1
42) 4-methyl-2-pentanone	11.22	43	15345	1.05 ug/L m	45
47) 2-hexanone	12.63	43	9320	0.95 ug/L m	36

(#) = qualifier out of range (m) = manual integration
S9-D29.D 50420.M Fri Apr 21 07:34:22 1995 VOA INST 1

Quantitation Report

Data File : E:\HPDATA\50420\~~S7R-D24.D~~ S9-D29.D
Acq Time : 20 Apr 95 5:04 pm
Sample : Site ~~7R~~ 9R @ 24.5' depth
Misc :
Quant Time: Apr 21 7:39 1995

B006H8

Operator: CM Jones
Inst : VOA 1 INS
Multiplr: 1.00

Site 9 Replicate

Method : C:\HPCHEM\1\METHODS\50420.M
Title : 8240 5-POINT CALIBRATION
Last Update : Fri Apr 21 07:24:37 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) bromochloromethane	7.33	128	604859	50.00 ug/L	-0.03
21) 1,4 difluorobenzene	8.99	114	3648483	50.00 ug/L	-0.02
41) chlorobenzene-d5	13.73	117	3119236	50.00 ug/L	-0.02
System Monitoring Compounds					**%Recovery**
19) 1,2-dichloroethane-d4	8.25	65	1150428	50.91 ug/L	
43) toluene-d8	11.34	98	3795159	49.77 ug/L	
54) 4-bromofluorobenzene	15.77	95	1541488	50.05 ug/L	
Target Compounds					**Qvalue**
9) acetone	4.22	58	9652	0.69 ug/L m	1
27) trichloroethene	9.38	95	74352	5.35 ug/L	97
42) 4-methyl-2-pentanone	11.23	43	18716	1.32 ug/L m	80
47) 2-hexanone	12.62	43	7031	0.74 ug/L m	89

(#) = qualifier out of range (m) = manual integration
S7R-D24.D 50420.M Fri Apr 21 07:40:11 1995 VOA INST 1

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RD3EA

Data Turnaround
☐ Priority
☐ Normal

ector I. D. Jacques	Company Contact I. D. Jacques	Telephone No. 539-2153
ect Designation 100-FR-3 Groundwater	Sampling Location ~~I.D.~~ 100-FR-3	SAF No. B95-052
Chest No. NA	Field Logbook No. EFL-1166	Method of Shipment Gov. Vehicle
pped To EAL	Offsite Property No. NA	Bill of Lading/Air Bill No.
sible Sample Hazards/Remarks NA	Preservative	
	Type of Container	40✓ 40✓
	No. of Container(s)	1 1
cial Handling and/or Storage	Volume	30 40+

SAMPLE ANALYSIS

nple No.	Matrix	Date Sampled	Time Sampled		
0D6K3	Water/silt	4-24-95	~~B0~~ 0823	X	
0D6K7	Water/silt	4-24-95	~~B0D6K7~~ 1032		X

ain of Possession	Sign/Print Names	
linquished By D. Jacques Date/Time	Received By Diane G. Call Date/Time	
ane Jacques ERC 4-24-95/1239	Diane G. Call 4-24-95/12:39	
linquished By Date/Time	Received By Date/Time	
linquished By Date/Time	Received By Date/Time	
linquished By Date/Time	Received By Date/Time	

Special Instructions

Analyzed for VOAs. Principle analyte is Trichloroethylene (TCE)

Matrix
S = Soil
SE = Sediment
SO = Solid
SL = Sludge
W = Water
O = Oil
A = Air
DS = Drum Solids
DL = Drum Liquids
T = Tissue
WI = Wipe
L = Liquid
V = Vegetation
X = Other

boratory Section	Received By	Title	Date/Time
nal Sample	Disposal Method	Disposed By	Date/Time

III-EE-011 (1/95)

Data File : E:\HPDATA\50424\50424-02.D
Acq Time : 24 Apr 95 3:05 pm
Sample : B0D6K7 for Duane Jacques
Misc : VOA H2O 40mL w/ zero headspace
Quant Time: Apr 25 7:22 1995

Operator: McCluskey
Inst : VOA 1 INS
Multiplr: 1.00

Site 15 duplicate

Method : C:\HPCHEM\1\METHODS\50420.M
Title : 8240 5-POINT CALIBRATION
Last Update : Fri Apr 21 07:24:37 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) bromochloromethane	7.37	128	701164	50.00 ug/L	0.00
21) 1,4 difluorobenzene	9.02	114	4278837	50.00 ug/L	0.00
41) chlorobenzene-d5	13.75	117	3624209	50.00 ug/L	0.00
System Monitoring Compounds					%Recovery
19) 1,2-dichloroethane-d4	8.28	65	1344174	51.31 ug/L	
43) toluene-d8	11.36	98	4449447	50.22 ug/L	
54) 4-bromofluorobenzene	15.79	95	1793498	50.12 ug/L	
Target Compounds					Qvalue
27) trichloroethene	9.41	95	12741	0.78 ug/L m	72
42) 4-methyl-2-pentanone	11.23	43	37840	2.30 ug/L m	85
44) toluene	11.47	92	56819	1.52 ug/L	99
51) p-xylene	14.21	106	16046	0.58 ug/L	99

(#) = qualifier out of range (m) = manual integration
50424-02.D 50420.M Tue Apr 25 07:29:23 1995 VOA INST 1

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Page 1 of 1

Data Turnaround
☐ Priority
☐ Normal

ector R.B. Kerkow	Company Contact Duane Jacques	Telephone No. 539-~~[illegible]~~ 2153	
ect Designation 100-FR-3 Groundwater	Sampling Location Site # 22-West	SAF No. B95-052	
Chest No. NA	Field Logbook No. EFL-1166	Method of Shipment Gov. Vehicle	
ped To EAL	Offsite Property No.	Bill of Lading/Air Bill No. NA	
sible Sample Hazards/Remarks	Preservative	None	
	Type of Container	VOA	
	No. of Container(s)	1	
cial Handling and/or Storage 4°C	Volume	40ml	

SAMPLE ANALYSIS

nple No.	Matrix	Date Sampled	Time Sampled															
0FC24	Water/Silt	4-27-95	0845	X														
0FC30	Water/Silt	4-27-95	1123	X														

	Sign/Print Names			
inquished By D. Jacques / ane Jacques ERC	Date/Time 4-27-95 1552	Received By Diane G. Call	Date/Time 4-27-95/15:52	
inquished By	Date/Time	Received By	Date/Time	
inquished By	Date/Time	Received By	Date/Time	
inquished By	Date/Time	Received By	Date/Time	

Special Instructions

EAL00399
EAL00400

Matrix
S = Soil
SE = Sediment
SO = Solid
SL = Sludge
W = Water
O = Oil
A = Air
DS = Drum Solids
DL = Drum Liquids
T = Tissue
WI = Wipe
L = Liquid
V = Vegetation
X = Other

oratory Section	Received By	Title	Date/Time
al Sample position	Disposal Method	Disposed By	Date/Time

Data File : E:\HPDATA\50427\BOFC24.D
Acq Time : 27 Apr 95 4:14 pm
Sample : Site 22W EAL00399
Misc :
Quant Time: May 1 7:18 1995

Operator: CM Jones
Inst : VOA 1 INS
Multiplr: 1.00

Site 22W
Duplicate

Method : C:\HPCHEM\1\METHODS\50420.M
Title : 8240 5-POINT CALIBRATION
Last Update : Fri Apr 21 07:24:37 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) bromochloromethane	7.35	128	736046	50.00 ug/L	-0.01
21) 1,4 difluorobenzene	9.00	114	4528349	50.00 ug/L	-0.01
41) chlorobenzene-d5	13.74	117	3840376	50.00 ug/L	-0.02
System Monitoring Compounds					%Recovery
19) 1,2-dichloroethane-d4	8.26	65	1454250	52.88 ug/L	
43) toluene-d8	11.36	98	4712673	50.20 ug/L	
54) 4-bromofluorobenzene	15.78	95	1913307	50.46 ug/L	
Target Compounds					Qvalue
27) trichloroethene	9.39	95	209237	12.13 ug/L	99
42) 4-methyl-2-pentanone	11.22	43	27128	1.56 ug/L #	82
44) toluene	11.46	92	38062	0.96 ug/L #	99

(#) = qualifier out of range (m) = manual integration
BOFC24.D 50420.M Mon May 01 07:19:26 1995 VOA INST 1

traces of xylenes & ethyl benzene

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Page 1 of 1

Data Turnaround
☐ Priority
☐ Normal

tor R.B. Kerkow	Company Contact Duane Jacques	Telephone No. 539-2153
t Designation 100-FR-3 GROUNDWATER	Sampling Location #16 - COMPOSITE	SAF No. B95-052
est No. NA	Field Logbook No.	Method of Shipment GOV. VEHICLE
ed To E.A.L.	Offsite Property No.	Bill of Lading/Air Bill No. NA
le Sample Hazards/Remarks	Preservative	NONE
	Type of Container	VOA
	No. of Container(s)	1
al Handling and/or Storage	Volume	40ml

SAMPLE ANALYSIS

le No.	Matrix	Date Sampled	Time Sampled															
FHF1	CLOUDY WATER	5-11-95	1435	X														

of Possession	Sign/Print Names			
quished By R.B. Kerkow / Mark Kerkow ERC	Date/Time 5-11-95 5:10 1532	Received By Diane H. Call	Date/Time 5-11-95/15:32	
quished By	Date/Time	Received By	Date/Time	
quished By	Date/Time	Received By	Date/Time	
quished By	Date/Time	Received By	Date/Time	

Special Instructions

Matrix
S = Soil
SE = Sediment
SO = Solid
SL = Sludge
W = Water
O = Oil
A = Air
DS = Drum Solids
DL = Drum Liquids
T = Tissue
WI = Wipe
L = Liquid
V = Vegetation
X = Other

atory Section	Received By	Title	Date/Time
Sample sition	Disposal Method	Disposed By	Date/Time

Data File : E:\HPDATA\50511\B0FHF1.D
Acq Time : 11 May 95 4:22 pm
Sample : location #16,35ft, 5-11-95
Misc :
Quant Time: May 11 16:46 1995 B0FHF1

Operator: th bellus
Inst : VOA 1 INS
Multiplr: 1.00

Site 16
Duplicate

Method : C:\HPCHEM\1\METHODS\50420.M
Title : 8240 5-POINT CALIBRATION
Last Update : Fri Apr 21 07:24:37 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) bromochloromethane	7.32	128	852725	50.00 ug/L	-0.04
21) 1,4 difluorobenzene	8.99	114	5107542	50.00 ug/L	-0.03
41) chlorobenzene-d5	13.74	117	4313891	50.00 ug/L	-0.02
System Monitoring Compounds					%Recovery
19) 1,2-dichloroethane-d4	8.25	65	1648311	51.74 ug/L	
43) toluene-d8	11.35	98	5382727	51.04 ug/L	
54) 4-bromofluorobenzene	15.78	95	2127992	49.96 ug/L	
Target Compounds					Qvalue
27) trichloroethene	9.38	95	104919	5.39 ug/L	99
39) cis-1,4-dichloro-2-butene	15.78	75	955233	111.58 ug/L #	12
42) 4-methyl-2-pentanone	11.22	43	11514	0.59 ug/L #	74

(#) = qualifier out of range (m) = manual integration

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Page 1 of 1

Data Turnaround
☐ Priority
☒ Normal

x I.D. JACQUES	Company Contact DUANE JACQUES	Telephone No. 539-2153
Designation 100-FR-3 GROUNDWATER	Sampling Location #31, 19' depth	SAF No. B95-052
st No. NA	Field Logbook No. EFL-1166	Method of Shipment GOVT Vehicle
d To EAL	Offsite Property No. NA	Bill of Lading/Air Bill No. N/A
le Sample Hazards/Remarks	Preservative	NONE
	Type of Container	VOA
	No. of Container(s)	1
l Handling and/or Storage	Volume	40ml

SAMPLE ANALYSIS

e No.	Matrix	Date Sampled	Time Sampled															
KL1	Cloudy WATER	5-15-95	1550	X														

of Possession	Sign/Print Names			
uished By R.B. KERKON / ihand Kerkon	Date/Time 5/15/95 1650	Received By John McClusky	Date/Time 1656 05/15/95	
uished By	Date/Time	Received By	Date/Time	
uished By	Date/Time	Received By	Date/Time	
uished By	Date/Time	Received By	Date/Time	

Special Instructions

Matrix
S = Soil
SE = Sediment
SO = Solid
SL = Sludge
W = Water
O = Oil
A = Air
DS = Drum Solids
DL = Drum Liquids
T = Tissue
WI = Wipe
L = Liquid
V = Vegetation
X = Other

atory Section	Received By	Title	Date/Time
Sample Sition	Disposal Method	Disposed By	Date/Time

Data File : E:\HPDATA\50515\B0FKL1.D
Acq Time : 15 May 95 5:05 pm
Sample : location #31, 19ft, 5-15-95
Misc :
Quant Time: May 16 16:24 1995

021452

Operator: McCluskey
Inst : VOA 1 INS
Multiplr: 1.00

Site 31
duplicate

Method : C:\HPCHEM\1\METHODS\50420.M
Title : 8240 5-POINT CALIBRATION
Last Update : Fri Apr 21 07:24:37 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) bromochloromethane	7.20	128	782930	50.00 ug/L	-0.16
21) 1,4 difluorobenzene	8.88	114	5065361	50.00 ug/L	-0.13
41) chlorobenzene-d5	13.73	117	4395756	50.00 ug/L	-0.03
System Monitoring Compounds					%Recovery
19) 1,2-dichloroethane-d4	8.14	65	1619992	55.38 ug/L	
43) toluene-d8	11.30	98	5381742	50.08 ug/L	
54) 4-bromofluorobenzene	15.78	95	2195127	50.58 ug/L	
Target Compounds					Qvalue
18) acetonitrile	7.37	41	33760	3.27 ug/L #	38
27) trichloroethene	9.29	95	876921	45.44 ug/L	97
39) cis-1,4-dichloro-2-butene	15.78	75	975941	114.95 ug/L #	12
42) 4-methyl-2-pentanone	11.17	43	32198	1.62 ug/L #	84
47) 2-hexanone	12.59	43	21029	1.57 ug/L	94

(#) = qualifier out of range (m) = manual integration

Bechtel Hanford, Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	Page 1 of 1

Data Turnaround
☐ Priority
■ Normal

Collector: K. Lee / A Rizzo	Company Contact: Bob Raidl	Telephone: (509) 372-9641
Project Designation: 00-FR-3 Groundwater Sampling Round 7	Sampling Location: 100 F	SAF No.: B95-052
Ice Chest No.: Bill	Field Logbook No.: EFL. 1054	Method of Shipment: Hand Delivered
Shipped To: Duane Jacques	Offsite Property No.	Bill of Lading/Air Bill No.

Possible Sample Hazards/Remarks	Preservation	HCl									
	Type of Container	Gs									
	No. of Container(s)	1									
Special Handling and/or Storage: Maintain samples between 2°C and 6°C.	Volume	40mL									
SAMPLE ANALYSIS		TCE 24ppb									

Sample No.	Matrix*	Date Sampled	Time Sampled										
30FK54	W	5-18-95	1429	X									

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By: AG Rizzo (ERC)	Date/Time: 5-18-95 0750	Received By: Eric B Whitten	Date/Time: 5-19-95 0785
Relinquished By: Eric B Whitten	Date/Time: 5-19-95 0754	Received By: D.D. Jacques ERC	Date/Time: 5-19-95 0754
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

SPECIAL INSTRUCTIONS
Deliver samples to Duane Jacques.

Matrix*
S = Soil
SE = Sediment
SO = Solid
SL = Sludge
W = Water
O = Oil
A = Air
DS = Drum Solids
DL = Drum Liquids
T = Tissue
WI = Wipe
L = Liquid
V = Vegetation
X = Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

Bechtel Hanford, Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Data Turnaround
☐ Priority
■ Normal

ector K. L. P. R.	Company Contact Bob Raidl	Telephone (509) 372-9641
ect Designation -FR-3 Groundwater Sampling Round 7	Sampling Location 100 F	SAF No. B95-052
Chest No. ER-403	Field Logbook No. ERL-1054	Method of Shipment Hand Delivered
ped To ne Jacques	Offsite Property No. NA	Bill of Lading/Air Bill No. N/A

ible Sample Hazards/Remarks

cial Handling and/or Storage
intain samples between 2°C and 6°C.

Preservation	HCl										
Type of Container	Gs										
No. of Container(s)	1										
Volume	40mL										
SAMPLE ANALYSIS	TCE 1.7ppb										

Sample No.	Matrix*	Date Sampled	Time Sampled											
K55	W	5-23-95	0910	X										

AIN OF POSSESSION	Sign/Print Names		
nquished By	Date/Time	Received By	Date/Time
Chris Ellis	5-23-95 1315	ERC Bob Hitt	1315 5-23-95
nquished By ERC Bob Hitt	Date/Time 0745 5-24-95	Received By Duane Jacques ERC	Date/Time 5/24/95 0746
nquished By	Date/Time	Received By	Date/Time
nquished By	Date/Time	Received By	Date/Time

SPECIAL INSTRUCTIONS
Deliver samples to Duane Jacques.

Matrix*
S = Soil
SE = Sediment
SO = Solid
SL = Sludge
W = Water
O = Oil
A = Air
DS = Drum Solids
DL = Drum Liquids
T = Tissue
WI = Wipe
L = Liquid
V = Vegetation
X = Other

ABORATORY SECTION	Received By	Title	Date/Time
NAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

Bechtel Hanford, Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	Page 1 of 1

Data Turnaround
☐ Priority
■ Normal

ollector: Kiree / A Rizzo	Company Contact: Bob Raidl	Telephone: (509) 372-9641
roject Designation:)0-FR-3 Groundwater Sampling Round 7	Sampling Location: 100 F	SAF No.: B95-052
e Chest No.: ER-20	Field Logbook No.: EFL-1054	Method of Shipment: Hand Delivered
hipped To: uane Jacques	Offsite Property No.	Bill of Lading/Air Bill No.

ossible Sample Hazards/Remarks	Preservation	HCl										
	Type of Container	Gs										
	No. of Container(s)	1										
pecial Handling and/or Storage: Maintain samples between 2°C and 6°C.	Volume	40mL										
SAMPLE ANALYSIS		TCE = 20ppb										

Sample No.	Matrix*	Date Sampled	Time Sampled										
0FK56	W	5-16-95	1126	X									

CHAIN OF POSSESSION	Sign/Print Names		
elinquished By: AG-RRB AG. Rizzo (ERC)	Date/Time: 5-16-95 1315	Received By: ERC Bwhitten	Date/Time: 1315 5-16-95
elinquished By: ERC Bwhitten	Date/Time: 0825 5-17-95	Received By: I.D. Jacques ERC	Date/Time: 5-17-95 0823
elinquished By	Date/Time	Received By	Date/Time
elinquished By	Date/Time	Received By	Date/Time

SPECIAL INSTRUCTIONS
Deliver samples to Duane Jacques.

Matrix*
S = Soil
SE = Sediment
SO = Solid
SL = Sludge
W = Water
O = Oil
A = Air
DS = Drum Solids
DL = Drum Liquids
T = Tissue
WI = Wipe
L = Liquid
V = Vegetation
X = Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

Bechtel Hanford, Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Data Turnaround
☐ Priority
■ Normal

llector K-Lee	Company Contact Bob Raidl	Telephone (509) 372-9641
ject Designation)-FR-3 Groundwater Sampling Round 7	Sampling Location 100 F	SAF No. B95-052
Chest No. GWS 122	Field Logbook No. ERL-1054	Method of Shipment Hand Delivered
pped To ane Jacques	Offsite Property No. N/A	Bill of Lading/Air Bill No. N/A
ssible Sample Hazards/Remarks		
ecial Handling and/or Storage intain samples between 2°C and 6°C.		

Preservation	HCl										
Type of Container	Gs										
No. of Container(s)	1										
Volume	40mL										
SAMPLE ANALYSIS	TCE ~~<0.1~~ ~~ug/L~~	<1.0 ug/L									

Sample No.	Matrix*	Date Sampled	Time Sampled										
FK57	W	5-31-95	1258	X									

HAIN OF POSSESSION	Sign/Print Names		
inquished By	Date/Time	Received By	Date/Time
R 1220 (ERC)	5-31-95 1330	ERC Bob Hen	1330 5-31-95
inquished By ERC	Date/Time 1000	Received By ERC	Date/Time 6-2-95
Bob Hen	6-2-95	Duane Jacques	Duane Jacques 1000
inquished By	Date/Time	Received By	Date/Time
nquished By	Date/Time	Received By	Date/Time

SPECIAL INSTRUCTIONS
Deliver samples to Duane Jacques.

Matrix*
S = Soil
SE = Sediment
SO = Solid
SL = Sludge
W = Water
O = Oil
A = Air
DS = Drum Solids
DL = Drum Liquids
T = Tissue
WI = Wipe
L = Liquid
V = Vegetation
X = Other

ABORATORY SECTION	Received By	Title	Date/Time
NAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

Bechtel Hanford, Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Page ____ of ____

Data Turnaround
☐ Priority
■ Normal

ollector: K. Lee / A Rizzo	Company Contact: Bob Raidl	Telephone: (509) 372-9641
oject Designation: 100-FR-3 Groundwater Sampling Round 7	Sampling Location: 100F	SAF No.: B95-052
e Chest No.: Sample VAN	Field Logbook No.: EFL-1054	Method of Shipment: Hand Delivered
ipped To: Duane Jacques	Offsite Property No.: N/A	Bill of Lading/Air Bill No.: N/A

ssible Sample Hazards/Remarks

ecial Handling and/or Storage: Maintain Samples between 2°c & 6°c

Preservation	HCl											
Type of Container	GS											
No. of Container(s)	~~40ml~~ 1	6695										
Volume	40ml											
SAMPLE ANALYSIS	TCE = ND											

Sample No.	Matrix*	Date Sampled	Time Sampled										
30FK59	W	6.6.95	1320	X									

HAIN OF POSSESSION — Sign/Print Names

Relinquished By	Date/Time	Received By	Date/Time
(ERC) G Rizzo A Rizzo	6.6.95 1400	ERC B Whitten	6-6-95 1400
ERC B Whitten	6-7-95 0922	ERC Duane Jacques	6-7-95 0922

SPECIAL INSTRUCTIONS: Deliver Samples to Duane Jacques

Matrix*
S = Soil
SE = Sediment
SO = Solid
SL = Sludge
W = Water
O = Oil
A = Air
DS = Drum Solids
DL = Drum Liquids
T = Tissue
WI = Wipe
L = Liquid
V = Vegetation
X = Other

LABORATORY SECTION	Received By	Title	Date/Time
INAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

Bechtel Hanford, Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	Page 1 of 1

Data Turnaround
☐ Priority
■ Normal

ollector K. Lee / A Rizzo	Company Contact Bob Raidl	Telephone (509) 372-9641
roject Designation 00-FR-3 Groundwater Sampling Round 7	Sampling Location 100 F	SAF No. B95-052
e Chest No. Sample VAN	Field Logbook No. EFZ-1054	Method of Shipment Hand Delivered
ipped To uane Jacques	Offsite Property No. N/A	Bill of Lading/Air Bill No. N/A

ossible Sample Hazards/Remarks	Preservation	HCl									
	Type of Container	Gs									
	No. of Container(s)	1									
pecial Handling and/or Storage laintain samples between 2°C and 6°C.	Volume	40mL									
SAMPLE ANALYSIS		TCE =	ND								

Sample No.	Matrix*	Date Sampled	Time Sampled										
0FK58	W	6.6.95	1227	X									

CHAIN OF POSSESSION	Sign/Print Names		
elinquished By AGRizzo Acl (ERC)	Date/Time 6.6.95 1400	Received By [signature] ERC B Whitton	Date/Time 6-6-95 1400
elinquished By [signature] ERC B Whitton	Date/Time 0922 6-7-95	Received By Duane Jacques ERC Duane Jacques	Date/Time 0922 6-7-95
elinquished By	Date/Time	Received By	Date/Time
elinquished By	Date/Time	Received By	Date/Time

SPECIAL INSTRUCTIONS
Deliver samples to Duane Jacques.

Matrix*
S = Soil
SE = Sediment
SO = Solid
SL = Sludge
W = Water
O = Oil
A = Air
DS = Drum Solids
DL = Drum Liquids
T = Tissue
WI = Wipe
L = Liquid
V = Vegetation
X = Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

Bechtel Hanford, Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Data Turnaround
☐ Priority
■ Normal

llector: K. Lee / A. Rizzo	Company Contact: Bob Raidl	Telephone: (509) 372-9641
ject Designation:)-FR-3 Groundwater Sampling Round 7	Sampling Location: 100 F	SAF No.: B95-052
Chest No.: GWS 122	Field Logbook No.: EFL-1054	Method of Shipment: Hand Delivered
ipped To: ane Jacques	Offsite Property No.: N/A	Bill of Lading/Air Bill No.: N/A

ssible Sample Hazards/Remarks

cial Handling and/or Storage
intain samples between 2°C and 6°C.

SAMPLE ANALYSIS

Preservation	HCl											
Type of Container	Gs											
No. of Container(s)	1											
Volume	40mL											
	TCE <1.0 ug/L											

Sample No.	Matrix*	Date Sampled	Time Sampled										
7K60	W	5-31-95	~~1147~~ 1137	Y									
			5-31-95										

IAIN OF POSSESSION	Sign/Print Names		
nquished By: A. Rizzo (ERC)	Date/Time: 5-31-95 1330	Received By: ERC / B. Whitten	Date/Time: 1330 5-31-95
nquished By: ERC / B. Whitten	Date/Time: 1000 6-2-95	Received By: ERC / Duane Jacques	Date/Time: 6-2-95 1000
nquished By	Date/Time	Received By	Date/Time
nquished By	Date/Time	Received By	Date/Time

SPECIAL INSTRUCTIONS
Deliver samples to Duane Jacques.

Matrix*
S = Soil
SE = Sediment
SO = Solid
SL = Sludge
W = Water
O = Oil
A = Air
DS = Drum Solids
DL = Drum Liquids
T = Tissue
WI = Wipe
L = Liquid
V = Vegetation
X = Other

ABORATORY SECTION	Received By	Title	Date/Time
NAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

68N-1985 Mobile Laboratory Custody/Log Sheet

Site Name: 100-FR-3

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
29	H_2O	21.0'	4/18/95/0850	IDJ	~~BO~~ JDJ BOD6D8	4-18-95/1128	IDJ	TCE=11ppb,
—	AirCal	—	4/18/95/—	IDJ	BOD6D9	4-18-95/ JDJ	IDJ	cis1,2-DCE Not IDED but OK
29	Ambient	NA	4/18/95/1000	IDJ	BOD6F0	4-18-95/1020	IDJ	traces of toluene, xylene from exhaust
29	Air	13	4/18/95/1005	IDJ	BOD6F1	4-18-95/1036	IDJ	TCE=3.7ppb, PCE=9.8
—	GC Blank	—	4/18/95/1009	IDJ	BOD6F2	4/18/95/1010	IDJ	No detects
—	H_2O Cal	—	4-18-95/0945	IDJ	BOD6F3	4-18-95/1058	IDJ	Cal OK.
—	H_2O Blank	—	4-18-95/0930	IDJ	BOD6F4	4-18-95/1120	IDJ	No detects
4	H_2O	~~24~~ 23.6' JDJ	4-18-95/1315	IDJ	BOD6F5	4-18-95/1320	IDJ	TCE=<1ppb
4	Air	18.2'	4-18-95/1350	IDJ	BOD6F6	4-18-95/1352	IDJ	No detects
4	Air Duplicate	18.2'	4-18-95/1351	IDJ	BOD6F7	4-18-95/1406	IDJ	Duplicate No detects
—	Air Cal Check	—	4-18-95	IDJ	BOD6F8	4-18-95/1420	IDJ	~~DCE~~ JDJ, TCE=1.24(-5%) PCE=1.16(-3%)
—	Water Cal Check	—	4-18-95	IDJ	BOD6F9	4-18-95/1431	IDJ	TCE=47(-2%) PCE=51(-4%)
—	AirCal		4/19/95/0820	IDJ	BOD6G0	4-19-95/0832	IDJ	TCE, PCE cal, DCE-OK
8	H_2O	~~25.8~~ 25.1	4-19-95/0815	~~IDJ~~ RBK JDJ	BOD6G1	4-19-95 1005	IDJ	~~TCM=1.1ppm~~ ~~CCl4=?~~ JDJ TCE= ~~10ppb~~ 6.7 ppb
8	H_2O	~~25.8~~ 25.1	4-19-95/0816	~~IDJ~~ RBK JDJ	BOD6G2	4-19-95	IDJ	duplicate TCE= / Transferred to EAL.
—	GC Air Blank	—	4-19-95/0844	IDJ	BOD6G3	4-19-95/0844	IDJ	No detects

TCE=2.6 24 hrs delay

021452

(1)

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Site Name: 100-FR-3

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
8	Air	22.8	4-19-95/0857	IDJ	B0D6G4	4-19-95 0915	IDJ	TCE = <1
8	Air	8.0	4-1995/0859	IDJ	B0D6G5	4-19-95 0904	IDJ	TCE = 3.8 ppb
—	H_2O Cal	—	4-19-95/0945	IDJ	B0D6G6	4-19-95 0947	IDJ	Good cal
—	H_2O Blank	—	4-19-95/0945	IDJ	B0D6G7	4-19-95 0956	IDJ	TCE = <0.1 PCE = <0.15
2	H_2O GW	31.5	4-19-95/1050	RBK	B0D6G8	4-19-95 1112	IDJ	TCE = <1
2	Deep gas	18.3	4-19-95/1158	IDJ	B0D6G9	4-19-95 1159	IDJ	TCE = 1.7 ppb, PCE = 3.5
2	Ambient Air	NA	4-19-95/1205	IDJ	B0D6H0	4-19-95 1212	IDJ	Acetone = 29 ppb
7	H_2O	32.4	4-19-95/1359	IDJ	B0D6H1	4-19-95 1410	IDJ	~~TCE = 280~~ TCE = <1 PCE = <1
7	Deep Air	26.4	4-19-95/1500	IDJ	B0D6H2	4-19-95 1503	IDJ	TCE = <1.0
7	Deep Air	26.4	4-19-95/1503	IDJ	B0D6H3	4-19-95 1512	IDJ	duplicate, TCE = <1.0
—	Air Cal Check	—	4/19-95/0820	IDJ	B0D6H4	4-19-95 1528	IDJ	TCE = 1.25 (-4%) PCE = 1.16 (-3%)
—	H_2O Cal Check	—	4-19-95/0945	IDJ	B0D6H5	4-19-95 1537	IDJ	TCE = 62 (+11%) PCE = 55 (+8%)
—	Air Cal	—	4-21-95/0845	IDJ	B0D6H6	4-21-95 0855	IDJ	DCE set to 1.1 TCE/PCE - OK
7	H_2O	24.5'	4-20-95/1405	RBK	B0D6H7	4-20-95 1736	CMJ at EAL	Replicate to EAL TCE = <1
9	H_2O	29.0'	4-20-95/1245	RBK	B0D6H8	4-20-95 1504	CMJ @ EAL	Replicate to EAL TCE = 5.4 ppb
—	GC Blank	—	4-21-95/	IDJ	B0D6H9	4-21-95 0922	IDJ	No detects

water in sample tube

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Site Name: 100-FR-3

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
9	Amb. Air	NA	4-21-95 0933	IDJ	B0D6J0	4-21-95 0941	IDJ	JDJ ~~TCE~~ = Non detects
9	Deep Gas	26.2	4-21-95 0935	IDJ	B0D6J1	4-21-95 0953	IDJ	Acetone = 435 ppb PCE = 2.6 ppb
9	H_2O	29.5	4-21-95 0950	RBK	B0D6J2	4-21-95 1219	IDJ	0.8 ppb ~~3.1 ppb~~ JDJ TCE = ~~0.8 ppb~~ Replicate
7	Deep Gas	20.0	4-21-95 1054	IDJ	B0D6J3	4-21-95 1152	IDJ	Acetone = 637 ppb PCE = 2.3 ppb
—	H_2O Cal	—	4-21-95 0955	IDJ	B0D6J4	4-21-95 1125	IDJ	Good cal.
—	H_2O Blank	—	4-21-95 1206	IDJ	B0D6J5	4-21-95 1207	IDJ	No detects
9	H_2O	29.0	4-20-95 1245	IDJ	B0D6J6	4-21-95 1245	IDJ	TCE = 3.1 duplicate of EAL 24hr sold
16	Deep Gas	15.5	4-21-95 1350	IDJ	B0D6J7	4-21-95 1354	IDJ	TCE = JDJ 32 ~~31.5~~ ppb
16	Deep Gas	22.0	4-21-95 1442	IDJ	B0D6J8	4-21-95 1447	IDJ	TCE = 3.9 sample through open tube end
—	Cal Check	—	4-21-95 0845	IDJ	B0D6J9	4-21-95 1522	IDJ	TCE=1.27(-2%) PCE=1.14(-5%)
—	Cal Check	—	4-21-95 0955	IDJ	B0D6K0	4-21-95 1533	IDJ	TCE=49(+2%) PCE=48(±0%)
—	Air Cal	—	4-24-95 0815	IDJ	B0D6K1	4-24-95 0853	IDJ	Cal OK. Set DCE cal
—	H_2O Cal	—	4-24-95 0845	IDJ	B0D6K2	4-24-95 0917	IDJ	Cal OK.
16	H_2O		4-24-95 0823	RBK	B0D6K3	4-24-95 0954	IDJ	TCE=1.6ppb → Taken to EAL
—	Air Blank	—	4-24-95 0905	IDJ	B0D6K4	4-24-95 0905	IDJ	No detects
—	H_2O Blank	—	4-24-95 0800	IDJ	B0D6K5	4-24-95 0938	IDJ	TCE, PCE = <0.1

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Site Name: 100-FR-3 Groundwater

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
15	H_2O	24.7	4-24-95 ~~1~~1030	IDJ	B0D6K6	4-24-95 1049	IDJ	TCE = 0.7 ppb
15	H_2O	24.7	4-24-95 1032	IDJ	B0D6K7			duplicate Taken to EAL
15	Air	19.2	4-24-95 1118	IDJ	B0FBZ1	4-24-95 1127	IDJ	TCE = 7.9 ppb PCE = 4.9 ppb
20	Ambient Air	—	4-24-95 1315	IDJ	B0FBZ2	4-24-95 1317	IDJ	Equipment blank 1,1-DCE = mis IDed Acetone → adjusted flow rate
20	Deep S. Gas	20.1 ft	4-24-95 1322	IDJ	B0FBZ3	4-24-95 1330	IDJ	No detects TCE/PCE
20	Shallow S. gas	8.0	4-24-95 1337	IDJ	B0FBZ4	4-24-95 1340	IDJ	No detects TCE/PCE
—	Cal Air Check	—	4-24-95 0815	IDJ	B0FBZ5	4-24-95 1503	IDJ	TCE = 1.1 (-15%) PCE = 1.0 (-15%)
—	H_2O Cal Check	—	4-24-95 0845	IDJ	B0FBZ6	4-24-95 ~~1503~~ 1515	IDJ	TCE = 50 (+2%) PCE = 48 (-2%)
—	Air Cal	—	4-25-95 0825	IDJ	B0FBZ7	4-25-95 0834	IDJ	Good Cal
—	GC Blank	—	4-25-95 0847	IDJ	B0FBZ8	4-25-95 0847	IDJ	TCE/PCE < detectable
—	H_2O Cal	—	4-25-95 0930	IDJ	B0FBZ9	4-25-95 0935	IDJ	Good Cal
—	H_2O Blank	—	4-25-95 0830	IDJ	~~B0FB7~~ B0FC00	4-25-95 0946	IDJ	Acetone contaminant PCE = <1 ppb
25	H_2O	45'	4-25-95 0945	IDJ	B0FC01	4-25-95 1018	IDJ	Tol = 0.9 TCE = ND
25	Air	26'	4-25-95 1059	IDJ	B0FC02	4-25-95 1107	IDJ	Tol = 11 ppb TCE = 0.0 PCE = 2.3
21	Air	20.5'	4-25-95 1153	IDJ	B0FC03	4-25-95 1157	IDJ	TCE = ~~8.9~~ 9.5 Tol = ~~9.7~~ 6.8
21	Air	20.5	4-25-95 1215	IDJ	B0FC04	4-25-95 1217	IDJ	duplicate TCE = 9.8 ppb Tol = ~~9.3~~ 6.4

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Site Name: 100-FR-3

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
21	Ambient Air	0	4-25-95 1234	IDJ	BOFC05	4-25-95 1238	IDJ	TCE = ND Tol = ND
22	Soil gas	31.6	4-25-95 1503	IDJ	BOFC06	4-25-95 1505	IDJ	TCE = 31 ppb
22	Soil gas	8.0 ft	4-25-95 1519	IDJ	BOFC07	4-25-95 1520	IDJ	TCE = 41 ppb
22	H_2O	35.0	4-25-95 1528	IDJ	BOFC08	4-25-95 1542	IDJ	TCE = 3.6 ppb Tol = 0.6 ppb (-11%)
—	Air Cal Check	—	4-25-95 0825	IDJ	BOFC09	4-25-95 1532	IDJ	DCE = 1.0 (-9%) TCE = 1.16 PCE = 1.04 (-13%)
—	H_2O Cal Check	—	4-25-95 0930	IDJ	BOFC10	4-25-95 1552	IDJ	TCE = 46 (+10%) PCE = 52 (+8%)
—	Air Cal	—	4-26-95 0920	IDJ	BOFC11	4-26-95 0925	IDJ	Good cal
—	GC Amb Air Blank	—	4-26-95 1026	IDJ	BOFC13	4-26-95 1033	IDJ	Acetone = 250 ppb from tubing ~~Ambient Air/Equip Blank~~ stet
—	GC Blank		4-26-95 0936	IDJ	BOFC12	4-26-95 0936	IDJ	GC Blank
Berm-1a	Air	11 feet	4-26-95 1110	IDJ	BOFC14	4-26-95 1114	IDJ	~~Freight~~ formation TCE = 7.7 ~~Acetone = 250 ppb — tubing~~ Tol = 15 contaminant dry
Berm-1b	Soil gas	6.8 ft	4-26-95 1134	IDJ	BOFC15	4-26-95 1138	IDJ	TCE = <1 Benz = 8.0 Toluene = 15 Etbenz = 11
Berm-2	Soil gas	7.4 ft.	4-26-95 1313	IDJ	BOFC16	4-26-95 1317	IDJ	Benz = 19 TCE = 0.29 Tol = 27
Homestead Depression	Soil gas	20.1 ft	4-26-95 1400	IDJ	BOFC17	4-26-95 1403	IDJ	Tol = 6 Etbenz = 23 TCE = 69 ppb cis-1,2-DCE = 4.5
Home Depression	Soil gas	7.8 ft	4-26-95 1430	IDJ	BOFC18	4-26-95 1433	IDJ	Etbenz = 8.4 Tol = 5.2 TCE = 64 ppb PCE = 2.9
Sink Hole	Soil gas	8.1 ft	4-26-95 1454	IDJ	BOFC19	4-26-95 1456	IDJ	Benz = 7.7 Tol = 12 Etb = 28 TCE = 55 PCE = 4.1
—	Cal Check	—	4-26-95 0920	IDJ	BOFC20	4-26-95 1509	IDJ	DCE = 1.12 (+2%) TCE = 1.3 (±0%) PCE = 1.19 (-1%)
Sink Hole	Soil gas	31.5	4-26-95 1525	IDJ	BOFC21	4-26-95 1528	IDJ	cis-1,2-DCE = 8.7 Etbenz = 14.4 TCE = 70 PCE = 3.4 m-Xylene = 22.5 MIBK = 22 Tol = 8.2

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Site Name: 100-FR-3 Groundwater

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
—	H_2O Cal	—	4-27-95 0845	IDJ	BOFC22	0914 4-27-95	IDJ	Included toluene Good Cal.
22 W	H_2O	33.0'	4-27-95 0845	RBK	BOFC23	4-27-95 0940	IDJ	Tol = 0.4 TCE = 13
22 W	H_2O	33.0'	4-27-95 0845	RBK	BOFC24	4-27-95 1614	C Jones	to EAL Duplicate TCE = 12 Tol = 0.96
—	H_2O Blank	—	4-27-95 0917	IDJ	BOFC25	4-27-95 0926	IDJ	Good. Slight PCE carryover 0.2 ppb
—	Air Cal	—	4-27-95 1000	IDJ	BOFC26	4-27-95 1002	IDJ	Good cal.
27	Soil gas	26.6'	4-27-95 1036	IDJ	BOFC27	4-27-95 1052	IDJ	~~[illegible]~~ IDJ ~~[illegible]~~ TCE = 9.8, PCE = 3.5
27	Amb Air	—	4-27-95 1040	IDJ	BOFC28	4-27-95 1103	IDJ	Amb Air/Equipment blank. Acetone = 75 ppb Etb = 7.6
27	H_2O	21.8	4-27-95 1123	RBK	BOFC29	4-27-95 1240	IDJ	t-1,2-DCE = 1.7 ~~1,1-DCE~~ Tol = 1.1 cis-1,2-DCE = 1.3 TCE = 33
27	H_2O	21.8'	4-27-95 1123	RBK	BOFC30	—	CMJ	to EAL duplicate — Did not get analyzed plugged needle
28	Soil Gas	16.5	4-27-95 1311	IDJ	BOFC31	4-27-95 1321	IDJ	~~cis-1,2-DCE~~ IDJ TCE = 77 ppb
28	H_2O	18.7	4-27-95 1406	IDJ	BOFC32	4-27-95 1423	IDJ	t-1,2-DCE = 0.8 cis-1,2-DCE = 0.9 TCE = 15 tol = 0.9
23	Soil Gas	12.8	4-27-95 1445	IDJ	BOFC33	4-27-95 1454	IDJ	TCE = 12.8
—	Air Cal Check	—	4-27-95 1000	IDJ	BOFC34	4-27-95 1506	IDJ	DCE = 1.07 (-3%) TCE = 1.25 (-4% PCE = 1.11 (-7%)
—	H_2O Cal Check	—	4-27-95 0845	IDJ	BOFC35	4-27-95 1517	IDJ	TCE = 53 (+13%) Tol = 56 (+12%) PCE = 52 (+11%)
—	Air Cal	—	4-28-95 0825	IDJ	BOFC36	4-28-95 0848	IDJ	Good Cal.
23	H_2O	27.6'	4-28-95 0845	RBK	BOFC37	4-28-95 1025	IDJ	cis-1,2-DCE = 1.2 Tol = 0.8 TCE = 12

-check HEIS #

Needle B

Needle A

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Site Name: 100-FR-3 Groundwater

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
23	H_2O	27.6	4-28-95 0845	RBK	BOFC38	4-28-95 1037	IDJ	Duplicate cis-1,2-DCE = 1.3 TCE = 13 Tol = 0.6
—	Amb	—	4-28-95 0920	IDJ	BOFC39	4-28-95 0944	IDJ	Ambient / Equipment Blank No detects
23	Soil Gas	10.3'	4-28-95 0930	IDJ	BOFC40	~~4-28-95 Analysis~~ 4-28-95 0931 IDJ	IDJ	TCE = <.1
—	H_2O Cal	—	4-28-95 0900	IDJ	BOFC41	4-28-95 1003	IDJ	Good Cal
—	H_2O Blank	—	4-28-95 0900	IDJ	BOFC42	4-28-95 1014	IDJ	Trace of PCE 0.13
24	H_2O	17.0'	4-28-95 1038	IDJ	BOFC43	4-28-95 1057	IDJ	cis-1,2-DCE = 1.1 TCE = 5.5 Tol = 0.5
~~24~~	~~Soil Gas~~	~~10.1'~~	~~4-28-95 1127~~	~~IDJ~~	~~BOFC44~~	~~4-28-95 1132~~	~~IDJ~~	~~Tol = 5.1 TCE = 7.8 (in ground water)~~ IDJ
24	H_2O	7.2'	4-28-95 1137	IDJ	BOFC45	4-28-95 1157	IDJ	Replicate TCE = 37 ppb
24	Soil Gas	5.0'	~~5-1-95 4-28-95 1240~~ IDJ 0842	IDJ	BOFC44	IDJ ~~4-28-95~~ 5-1-95 ~~1246~~ 0858	IDJ	~~Taken from Water 1249-FT-1~~ IDJ TCE = ~~4.4~~ 63 ppb Tol = 8.4 PCE = 17
19	Soil Gas	17.2	4-28-95 1332	IDJ	BOFC46	4-28-95 1334	IDJ	TCE = <.1
—	Cal Check	—	4-28-95 0825	IDJ	BOFC47	4-28-95 1406	IDJ	DCE = 1.08 (-2%) PCE = 1.16 TCE = 1.24 (-5%) (-8%)
19	H_2O	16.2 IDJ	4-28-95 1445	IDJ	BOFC48	~~4-28-95~~ IDJ 1501	IDJ	cis-1,2-DCE = 0.6 tol = 0.5 TCE = 17
19	H_2O	16.2	4-28-95 1445	IDJ	BOFC49	4-28-95 1512	IDJ	cis-1,2-DCE = 1.1 tol = 0.5 TCE = 25 PCE = 0.16
—	Cal Check	—	4-28-95 0900	IDJ	BOFC50	4-28-95 1523	IDJ	TCE = 54 (+15%) PCE = 54 (+13%)
—	Air Cal	—	5-1-95 0815	IDJ	BOFC51	5-1-95 0825	IDJ	Good Cal
—	Ambient Air	—	5-1-95 0840	IDJ	BOFC52	5-1-95 0847	IDJ	Acetone = 80 ppb Tol = 5 ppb — B

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Site Name: 100-FR-3 Groundwater

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
24 Rep	H_2O	7.3'	5-1-95 0728	IDJ	B0FC53	5-1-95 1005	IDJ	t-1,2-DCE = 0.90 cis-1,2-DCE = 0.95 TCE = 20ppb
—	H_2O Cal	—	5-1-95 0905	IDJ	B0FC54	5-1-95 0937	IDJ	Good Cal
—	H_2O Blank	—	5-1-95 0900	IDJ	B0FC55	5-1-95 0949	IDJ	PCE = 0.14 ppb
13	Soil gas	15.0'	5-1-95 1022	IDJ	B0FC56	5-1-95 1026	IDJ	Tol = 5.5 TCE = 12 ppb
13	H_2O	19.0'	5-1-95 1307	RBK	B0FC57	5-1-95 1320	IDJ	cis-1,2-DCE = 0.3 Tol = 0.4 TCE = 2.0
12	Soil gas	17.9'	5-1-95 1514	IDJ	B0FC58	5-1-95 1525	IDJ	TCE = 7.4 ppb
—	Air Check	—	5-1-95 0815	IDJ	B0FC59	5-1-95 1534	IDJ	PCE = .9[illegible] (-15%) PCE = 0.96 TCE = 1.07 (-18%) (-20%)
—	H_2O Cal Check	—	5-1-95 0905	IDJ	B0FC60	5-1-95 1549	IDJ	TCE = 48 (-14%) PCE = 40 (-17%)
12	H_2O	29.5-1.1 28.4'	1220 5-2-95	IDJ	B0FH91	5-2-95 1347	IDJ	TCE = 26 Tol = 0.23
12	H_2O	28.4	1220 5-2-95	IDJ	B0FH92	5-2-95 1400	IDJ	Duplicate TCE = 22 Tol = 0.40
—	H_2O Cal	—	5-2-95 1245	IDJ	B0FH93	5-2-95 1253	IDJ	Good cal. Baseline is fluctuating more than normal
—	H_2O Blank	—	5-2-95 1245 ~~1234~~	IDJ	B0FH94	5-2-95 1334	IDJ	TCE = 0.22 PCE = 0.96
—	Cal Check	—	5-2-95 1245	IDJ	B0FH95	5-2-95 1513	IDJ	TCE = 43 (-23%) PCE = 37 (-24%)
—	Air Cal	—	5-3-95 1015	IDJ	B0FH96	5-3-95 1032	IDJ	Good Cal
6	~~Air~~ Soil gas	18.0'	5-3-95 ~~1049~~ 1052	IDJ	B0FH98	5-3-95 1113	IDJ	Acetone = 450 ppb TCE = 7.6 ppb Toluene = 8.1 PCE = 8.1 — B
6	~~Air~~ Air	~~18.0'~~	5-3-95 ~~1052~~ 1049	IDJ	B0FH99	5-3-95 1059	IDJ	TCE = Non Detect — A

DDJ DDJ DDJ

MTB up?

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Site Name: 100-FR-3 Groundwater

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
11	Soil gas	19.9'	5-3-95 1304	IDJ	B0FH99	5-3-95 1326	IDJ	~~air trace = 80 ppb~~ DBJ TCE = 6.9 ppb
—	Cal Check	—	5-3-95 1005	IDJ	B0FHB0	5-3-95 1504	IDJ	DCE = 1.10 (±0%) PCE = 1.25 (+4%) TCE = 1.33 (+2%)
—	Air Cal	—	5-9-95 0850	IDJ	B0FHB1	5-9-95 0903	IDJ	Good calibration. RK 5/10/95
—	H_2O Cal	—	5-9-95 0925	IDJ	B0FHB2	5-9-95 0933	IDJ	Good calibration
—	H_2O Blank	—	5-9-95 0915	IDJ	B0FHB3	5-9-95 0949	IDJ	TCE = ND PCE = 1.3 Tol = 0.073
10	H_2O Sample	25.2 ~~22.5~~ RBK	5-9-95 1012	IDJ	B0FHB4	5-9-95 1126	IDJ	Tol = 0.52 PCE = 0.24 TCE = 7.6 27.5 BGS
—	H_2O Cal Check -		5-9-95 0925	IDJ	B0FHB5	5-9-95 1620	IDJ	TCE = 62 (+21%) PCE = 58 (+18%)
—	Air Cal	—	5-10-95 0800	RBK	BØFHB1	5-10-95 0843	RBK	GOOD CALIBRATION
—	H_2O Cal	—	5-10-95 0725	RBK	BØFHB6	5-10-95 1017	RBK	GOOD CALIBRATION
11	H_2O SAMPLE	31.7'	5-10-95 0842	RBK	BØFHB8	5-10-95 1056	RBK	~~DBJ HUDGPATH~~, TCM = 31 TCE = 9.2, tol = .39, PCE = ND
18	Soil gas equip. Blank	—	5-10-95 0928	RBK	BØFHB9	5-10-95 0943	RBK	TCE = ND PCE = ND tol = 3.8
18	Soil gas Sample	23.2'	5-10-95 0926	RBK	BØFHCØ	5-10-95 0931	RBK	TCE = 30.8, PCE = 2.1
18	H_2O Sample	33-34'	5-10-95 1017	RBK	BØFHC2	5-10-95 1109	RBK	TCE = 2.6, tol = .09
18	H_2O Sample DUPE	33-34	5-10-95 1035	RBK	BØFHC3	5-10-95 1124	RBK	TCE = 2.9, tol = .08
38	Soil gas Sample	18'	5-10-95 1240	RBK	B0FHC6	5-10-95 1246	RBK	TCE = 3.8, PCE = 2.1
38	H_2O SAMPLE	26'	5-10-95 1315	IDJ	B0FHC7	5-10-95 1331	RBK	TCE = 1.1, tol = .35

68N-1985 Mobile Laboratory Custody/Log Sheet

Site Name: 100-FR-3 GROUNDWATER

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
38	H2O sample	26'	5-10-95 1315	IDJ	BØFHC8	5-10-95 EAL	CJ	DUPE FOR E.A.L.
18 Rep	H2O sample	34'	5-10-95 1400	IDJ	BØFHC9	5-10-95 1419	RBK	TCE=1.9, tol=.18
CAL check	H2O CAL STD ~~SAMPLE~~	—	5-10-95 0720	RBK	BØFHDØ	5-10-95 1514	RBK	TCE=43, PCE=45
CAL check	VAPOR CAL STD	—	5-10-95 0800	RBK	BØFHD1	5-10-95 1541	RK	cis DCE=1.18, TCE=1.34, PCE=1.23
* H2O CALIBRATION	H2O CAL STD	—	5-11-95 0835	RBK	BØFHD2	5-11-95 0906	RBK	* GOOD CALIBRATION TCE=51 PCE=48
* VAPOR CALIBRATION	VAPOR CAL STD	—	5-11-95 0920	RBK	BØFHD3	5-11-95 0929	RBK	* GOOD CALIBRATION DCE=1100, TCE=1300, PCE=1200
5	Soil gas	22.1'	5-11-95 0935	IDJ	BØFHD6	5-11-95 ~~0959~~ 1011	RBK	TCE=~~ND~~ 3.5 PCE=~~ND~~ 7.6 tol=6.7
—	Ambient Air	—	5-11-95 0940	IDJ	BØFHD5	5-11-95 ~~RBK~~ 0959	RBK	TCE=ND PCE=ND
CAL check VAPOR	VAPOR Cal Std	—	5-11-95 0920	RBK	BØFHD7	5-11-95 1033	RBK	(-4%) (-4%) (-3%) DCE=1.06, TCE=1.25, PCE=1.17
CAL check H2O	H2O Cal Std	—	5-11-95 0835	RBK	BØFHD8	5-11-95 1201	RBK	TCE 51.0, PCE=47.9
16	H2O Sample	35'	5-11-95 1320	IDJ	BØFHD9	5-11-95 1345	RBK	TCM=1082 TCE=7.4 RT DRIFT CCly=368 PCE=.4
16	H2O SAMPLE	35'	5-11-95 1318	IDJ	BØFHFØ	5-11-95 1359	RBK	TCM=574. CCly=204.9 TCE=8.9 RT DRIFT PCE .3
EAL * 16	H2O SAMPLE	35'	5-11-95 1320	IDJ	BØFHF1	5-11-95 EAL	McClusky EAL	Decanted clear liquid from BØFHD9 and BØFHFØ
17	Soil gas Sample	22.2	5-11-95 1428	IDJ	BØFHF2	5-11-95 1431	RBK	TCE=11.7, PCE=1.5
Cal check H2O	H2O Cal Std	—	5-11-95 0835	RBK	BØFHF3	5-11-95 1559	RBK	TCE=56 PCE=52
Cal check VAPOR	VAPOR Cal Std	—	5-11-95 0920	RBK	BØFHF4	5-11-95 1620	RBK	cis DCE=1038, TCE=1191, PCE=1077

TCE -9%
PCE -8%
DCE=+7%
TCE=+3%
PCE=+3%
Needle B A
Needle B A

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Site Name: 100 - FR-3 GROUND WATER

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments	
H2O CALIBRATION	H2O CAL STD	—	5-12-95 0815	RBK	B0FHF5	5-12-95 0855	RBK	GOOD CALIBRATION TCE=48, PCE=48	
VAPOR CALIBRATION	VAPOR cal std	—	5-12-95 0825	RBK	B0FHF6	5-12-95 1027	RBK	GOOD CALIBRATION.	
H2O BLANK	H2O DI	—	5-12-95 0830	RBK	B0FHF7	5-12-95 0908	RBK	CLEAN BLANK. (PCE=<.1)	
33	soil gas	16.7'	5-12-95 1031	RBK	B0FHF8	5-12-95 1038	RBK	TCE=40.2, tol=12.7, PCE 8.9	A soil gas
33	soil gas EQUIP BLANK	SURFACE 0.	5-12-95 1034	RBK	B0FHF9	5-12-95 1051	RBK	TCE=ND tol=3.9, PCE=ND	B ambient
CAL check	Vapor cal std	—	5-12-95 0825	RBK	B0FHG0	5-12-95 1110	RBK	cis DCE=1131 (+3%) TCE=1327 (+2%) PCE=1226 (+2%)	
33	H2O SAMPLE	26.5'	5-12-95 1120	IDJ	B0FKH9	5-12-95 1141	RBK	TCE=5.0, tol=.2,	
33 DUP	H2O SAMPLE	26.5'	5-12-95 1125	IDJ	B0FKJ0	5-12-95 1154	RBK	TCE=34.9, tol=.1	2ND TCE=29.2
33 RES	H2O SAMPLE	26.5	5-12-95 1230	IDJ	B0FKJ1	5-12-95 1239	RBK	TCE=22.7	2ND TCE=21.4
32	soil gas SAMPLE	22.8	5-12-95 1429	IDJ	B0FKJ2	5-12-95 1440	RBK	TCE=8.4	A
32 DUP	soil gas Sample	22.8	5-12-95 1431	IDJ	B0FKJ3	5-12-95 1456	RBK	TCE=17.1, tol 10.1	B
Cal check	VAPOR cal std	—	5-12-95 0825	RBK	B0FKJ4	5-12-95 1519	RBK	cis DCE=1138 (+3%) TCE=1308 (+0%) PCE=1173 (-2%)	
32	H2O SAMPLE	29.5	5-12-95 1515	IDJ	B0FKJ5	5-12-95 1555	RBK	TCE=12.4, tol=.4, PCE=.2	
32 dupl.	H2O SAMPLE	29.5'	5-12-95 1518	IDJ	B0FKJ6	5-12-95 1607	RBK	TCE=15.9, tol=.2, PCE=.1	
32 ~~deeper~~ DEEP	H2O SAMPLE	37.0	5-12-95 1534	IDJ	B0FKJ7	5-12-95 1619	RBK	TCE=26.2, tol=.8, PCE=.8	
Cal check	H2O cal std	—	5-12-95 0815	RBK	~~B0FKJ8~~ B0FKJ8 RK	5-12-95 1635	RBK	TCE=44.2 (-8%), PCE=45.5 (-5%)	

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Site Name: 100-FR-3

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments	
H_2O CALIBRATION	H_2O cal std	—	5-15-95 0830	RBK	B0FKJ9	5-15-95 1028	RBK	Good Cal.	
VAPOR CALIBRATION	VAPOR CAL STD	—	5-15-95 0840	RBK	B0FKK0	5-15-95 0912	RBK	Good Cal.	
26	H_2O sample	23.0'	5-15-95 0905	10J	B0FKK1	5-15-95 1058	RBK	TCE = 6.0, tol = 1.8, PCE = .3	
26 DUP	H_2O sample	24.5'	5-15-95 0915	10J	B0FKK2	5-15-95 1112	RBK	TCE = 6.3, tol. = .3, PCE = .3	
26	Soil gas	14.1'	5-15-95 0940	RBK	B0FKK4	5-15-95 0954	RBK	TCE 31.8, PCE = 3.8	A
26	Amb Air Equip Blank	—	5-15-95 0937	RBK	B0FKK3	5-15-95 0943	RBK	tol. = 10.2	B
26 Rep	Soil gas rep.	Slow Purge 14.0'	5-15-95 1036	10J	B0FKK5	5-15-95 1041	RBK	* TIP MAY BE PLUGGED, PURGE WAS VERY SLOW.	
26 Rep	H_2O SAMPLE	21.0'	5-15-95 1125	10J	B0FKK6 ~~B0K~~ RK	5-15-95 1141	RBK	TCE = 2.7, tol = <.1 PCE = ND	
BARRELS	SOIL GAS	10.0'	5-15-95 1248	RBK	(brl sg)	5-15-95 1250	RBK	TCE = 18.6, tol = 6.4, PCE = ND	
31	Soil gas	13.9'	5-15-95 1452	RBK	B0FKK7	5-15-95 1457	RBK	TCE = 35.9, tol = 4.9, PCE = 4.7	
31	H_2O sample	19.0'	5-15-95 1525	10J	B0FKK8	5-15-95 1531	RBK	TCE = 51.5,	
WATER CAL check	H_2O CAL STD	—	5-15-95 0830	RBK	B0FKK9	5-15-95 1552	RBK	TCE = 51 (-9%), PCE = 42 (-13%)	
VAPOR CAL Check	VAPOR CAL STD	—	5-15-95 0840	RBK	B0FKL0	5-15-95 1605	RBK	DCE = 1079 (-2%), TCE = 1219 (-6%), PCE = 1084 (-10%)	
H_2O CALIBRATION	H_2O CAL STD	—	5-16-95 0815	RBK	B0FKL2	5-16-95 0900	RBK	TCE = 56, PCE = 47 GOOD CAL.	
VAPOR CALIBRATION	VAPOR CAL STD	—	5-16-95 0830	RBK	B0FKL3	5-16-95 0921	RBK	GOOD CAL.	
18	H_2O SAMPLE	35'	5-16-95 0925	10J	B0FKL4	5-16-95 1000	RBK		

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Site Name: 100-FR-3

	Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
A	29 Re-S	Ambient equip blank	—	5-16-95 0931	RBK	B0FKL6	5-16-95 0946	RBK	tol = 6.96 Ebz = 85
B	29 Re-S	VAPOR SAMPLE	8.1'	5-16-95 0933	RBK	B0FKL7	5-16-95 0935	RBK	TCE = 6.5
	29 Re-S	H2O SAMPLE	18.5'	5-16-95 1012	RBK	B0FKL8	5-16-95 1034	RBK	TCE = 1.6
A	35	Soil gas SAMPLE	20.9'	5-16-95 1128	RBK	B0FKL9	5-16-95 1132	RBK	tol = 7.4, Ebz 55.8
B	35 DUP	Soil gas Sample	20.9'	5-16-95 1129	RBK	B0FKM0	5-16-95 1146	RBK	TCE = 2.6, PCE = 3.4, Ebz = 36.8
	29 Re-S a.	H2O Sample	18.5'	5-16-95 1330	~~RB~~ IDJ	B0FKM1	5-16-95 1403	RBK	TCE = 1.2, tol = <.1, PCE = ND
	VAPOR Cal Check	VAPOR CAL STD	—	5-16-95 0840	RBK	B0FKM2	5-16-95 1602	RBK	cis DCE = 1039 (-6%), TCE = 1227 (-6%) PCE = 1034 (-14%)
	H2O Cal check	H2O cal std	—	5-16-95 0830	RBK	B0FKM3	5-16-95 1625	RBK	TCE = 54 (-4%), PCE = 44 (-7%)
	—	gas Cal	—	5-17-95 1000	IDJ	B0FKM4	5-17-95 1014	IDJ	Good Cal.
	—	H2O Cal	—	5-17-95 1030	IDJ	B0FKM5	5-17-95 1049	IDJ	Good Cal.
	21N	Soil gas	14.8	5-17-95 1057	IDJ	B0FKM6	5-17-95 1104	IDJ	TCE = ND — A
	21N	Ambient	—	5-17-95 1058	IDJ	B0FKM7	5-17-95 1117	IDJ	TCE = ND — B
	—	H2O Blank	—	5-17-95 1030	IDJ	B0FKM8	5-17-95 1131	IDJ	TCE = ~~20~~ ND PCE = 0.13
	699-T7-36	Well Sample	50'	5-16-95 1126	KL	B0FK56	5-17-95 1147	IDJ	TCE = 20
	21N	Soil gas	20.3'	5-17-95 1333	RBK	B0FKM9	5-17-95 1337	IDJ	Sampled through probe, 10L purge TCE = 6.8
	21N	H2O	24'	1420	IDJ	B0FKN0	5-17-95	IDJ	TCE = 0.98

Tracy Ryan
372-9419

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Site Name: 100-FR-3

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments	
30	Soil gas	24.9'	5-17-95 1540	RBK	B0FKN1	5-17-95 1547	RBK	TCE=ND, PCE=1.4, tol=8.4	
VAPOR Cal check	VAPOR Cal Std	—	5-17-95 1057	IDJ	B0FKN2	5-17-95 1606	RBK	DCE=1134 (+3%), TCE=1264 (-3%), PCE=1120 (-7%)	
H2O Cal check	H2O Cal Std	—	5-17-95 1630	IDJ	B0FKN3	5-17-95 1617	RBK	TCE=47.8(-1%), PCE=48.2(-4%)	
—	gas Standard	—	5-19-95 0845	IDJ	B0FKN4	5-19-95 0911	IDJ	Good Cal	
—	H2O Standard	—	5-19-95 0915	IDJ	B0FKN5	5-19-95 0930	IDJ	Good Cal	
—	H2O Blank	—	5-19-95 0930	IDJ	B0FKN6	5-19-95 0942	IDJ	TCE=ND PCE=0.19	
30 (1)	H2O	28.3	5-19-95 0950	RBK	B0FKN7	5-19-95 1030	IDJ	TOL=0.15 TCE=2.6	26.4
30 (2)	H2O Dupe	28.3	5-19-95 0955	RBK	B0FKN8	5-19-95 1043	IDJ	TCE=3.4	
199-F7-1	Well H2O	~15	5-18-95 1429	K.L.	B0FK54	5-19-95 1018	IDJ	TCE=24	
31N	Soil gas	13	5-19-95 1104	IDJ	B0FKN9	5-19-95 1114	IDJ	TCE=<1.0	-A
—	Ambient	—	5-19-95 1107	IDJ	B0FKS0	5-19-95 1125	IDJ	Acetone trace ~~All Non-detect~~, PCE=6.4	-B
31N	H2O	16.5	5-19-95 1225 ~~1132~~	IDJ	B0FKS1	5-19-95 1223	IDJ	TCE=11	13.4
31N	H2O	25	5-19-95 1253	IDJ	B0FKS2	5-19-95 1314	IDJ	TCE=11 TOL=0.35 PCE=0.26	
—	H2O Cal Check		5-19-95 0915	IDJ	B0FKS3	5-19-95 1332	IDJ	TCE=55(+8%) PCE=51(+6%)	
31N	Deep H2O	25	5-19-95 1250	IDJ	B0FKS4	5-19-95		to EAL, Composite deep	8.2 ppb
—	H2O Cal Check		5-19-95 0845	IDJ	B0FKS5	5-19-95 1429	IDJ	DCE=1.12(+2%) TCE=1.28(-2%) PCE=1.15(-4%)	

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Site Name: 100-FR-3

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments	
—	Air Cal	—	5-24-95 0835	IDJ	BOFKS6	5-24-95 0839	IDJ	Good Cal	
—	Ambient Air	—	5-24-95 0903	IDJ	BOFKS7	5-24-95 0905	IDJ	Acetone = 40 ppb Tol = 14 ppb	
5	Soil gas	22.0	5-24-95 0926	IDJ	BOFKS8	5-24-95 0932	IDJ	PCE = 3.7 Tol = 9.7 ppb TCE = ND Poor purge	tip probably in place
—	Water Cal	—	5-24-95 0850	IDJ	BOFKS9	5-24-95 0957	IDJ	Good Cal	
—	H_2O Blank	—	5-24-95 0845	IDJ	BOFKT0	5-24-95 1010	IDJ	PCE = 0.12 ppb-wt	
199-F7-3	H_2O	22.0 BTOC	5-23-95 0910	KL	BOFK55	5-24-95 1023	IDJ	TCE = 1.7 ppb ~~PCE = 0.12 ppb~~ DAJ	
5	H_2O	34	5-24-95 1022	RBK	BOFKT1	5-24-95 1036	IDJ	TCE = ND	~~29.4~~ 28.9
—	H_2O Cal Check		5-24-95 0850	IDJ	BOFKT2	5-24-95 1049	IDJ	TCE = 53 (+4%) PCE = 50 (+4%)	
—	Air Cal Check		5-24-95 0835	IDJ	BOFKT3	5-24-95 1128	IDJ	DCE = 1.05 (-5%) PCE = 1.11 (-7%) TCE = 1.22 (-6%)	
699-69-38	H_2O		5-24-95 1310	IDJ	BOFKT4	5-24-95 1419	IDJ	TCE = ND PCE = ND	19 feet
699-69-38	H_2O		5-24-95 1310	IDJ	BOFKT5	5-24-95	IDJ	Not analyzed	19 feet
699-62-43E	H_2O		5-24-95 1400	IDJ	BOFKT6	5-24-95 1430	IDJ	TCE = ND PCE =	29 feet
699-62-43E	H_2O		5-24-95 1400	IDJ	BOFKT7	5-24-95	IDJ	Not analyzed	29 feet
Hydro Shop	Air	11.4	5-24-95 1448	IDJ	BOFKT8	5-24-95 1450	IDJ	Tol = 20 ppb TCE = ND PCE = ND	
—	H_2O Cal	—	6-2-95 1120	RBK	BOFKT9	6-2-95 1255	RBK	GOOD CAL	
	H_2O BLANK	—	6-2-95 1100	RBK	BOFKV0	6-2-95	RBK	ND	

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Site Name: 100-FR-3

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
Well Site ~~BOFK60~~ 44	H_2O	27.3	5-31-95 1137	KL	BOFK60	6-02-95 1325	RBK	TCE 0.1
Well Site 699-74-44	H_2O	49.2	5-31-95 1258	KL	BOFK57	6-02-95 1338	RBK	NO DETECTS
CAL CHECK	H_2O CAL	—	6-2-95 1120	RBK	BOFKV1	6-02-95 1351	RBK	TCE = 46 (-10%), PCE = 44 (-12%)
—	H_2O Cal	—	6-7-95 1230	IDJ	BOFKV2a	6-07-95 ~~1246~~ 1307	IDJ	Good Cal
—	H_2O Blank	—	6-7-95 1230	IDJ	BOFKV3	6-07-95 1401	IDJ	PCE = 0.07 ppb
699-80-43	H_2O	—	6-6-95 1320	KL	BOFK59	6-07-95 1415	IDJ	TCE = ND
699-70-31	H_2O	—	6-6-95 1227	KL	BOFK58	6-07-95 1427	IDJ	TCE = ND
H_2O	Cal Check	—	6-7-95 1230	IDJ	BOFKV4	6-7-95 1442	IDJ	TCE = 47 (-8%) PCE = 39 (-17%)
—	Cal H_2O	—	6-7-95 1230	IDJ	BOFKV2	6-7-95 1457	IDJ	Rerun Cal file * use
—	Air Cal	—	6-7-95 1500	IDJ	BOFKV5	6-7-95 1322	IDJ	Recalled BOFKV5 Good Cal * use
—	Air Cal	—	6-22-95 0845	IDJ	BOFKV6	6-22-95 0852	IDJ	Good cal
—	H_2O Cal	—	6-22-95 0930	IDJ	BOFKV7	6-22-95 0955	IDJ	Good cal
41	H_2O	13.0	6-22-95 0912	IDJ	BOFKV8	6-22-95 1019	IDJ	TCE = 6.3 ppb
41	Ambient Air	—	6-22-95 0915	IDJ	BOFKV9	6-22-95 0919	IDJ	Needle B Acetone = ≈500 ppb
—	H_2O Blank	—	6-22-95 0936	IDJ	BOFKW0	6-22-95 1007	IDJ	TCE = 0.12 ppb PCE = 0.29 ppb
41	Soil Gas	7.9	6-22-95 0932	IDJ	BOFKW1	6-22-95 0936	IDJ	TCE = 68 ppb Needle A

699-81-38

DDJ

68N-1985 Mobile Laboratory Custody/Log Sheet

Site Name: 100-FR-3 H_2O/Soilgas

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
42	Soil gas	20.8	6-22-95 1039	IDJ	B0FKW2	6-22-95 1046	IDJ	Needle A TCE = 35 ppb
42	Soil gas	20.8	6-22-95 1040	IDJ	B0FKW3	6-22-95 1057	IDJ	Needle B dupe TCE = 30 ppb
42	H_2O	25.0	6-22-95 1205	IDJ	B0FKW4	6-22-95 1218	IDJ	TCE = 7.8 ppb
41	H_2O	17.0	6-22-95 1325	IDJ	B0FKW5	6-22-95 1340	IDJ	TCE = 5.6 ppb Replicate
—	Cal Check	H_2O	6-22-95 0930	IDJ	B0FKW6	6-22-95 1539	IDJ	TCE = 53 (-13%) PCE = 41 (-18%)
—	Cal Check	gas	6-22-95 0845	IDJ	B0FKW7	6-22-95 1549	IDJ	TCE = 1.16 (-11%) DCE = 1.010 (-8%) PCE = 0.98 (-18%)
—	Air Cal	gas	6-23-95 0750	IDJ	B0FKW8	6-22-95 0846	IDJ	DCE = 1.1 PCE = 1.2 ppm TCE = 1.3 Good Cal X A
—	H_2O Cal	—	6-23-95 0825	IDJ	B0FKW9	6-23-95 1007	IDJ	TCE = 51 ppb PCE = 50 Good cal X A
—	H_2O Blank	—	6-23-95 0800	IDJ	B0FKX0	6-23-95 1020	IDJ	TCE = ND PCE = 0.15
43	Ambient Air	—	6-23-95 0920	IDJ	B0FKX1	6-23-95 0939	IDJ	~~TCE =~~ Several small peak A from exhaust. PCE ? = 9.5 ppb
43	Soil gas	20.4'	6-23-95 0926	IDJ	B0FKX2	6-23-95 0950	IDJ	Sampled through probe. B TCE = 22 ppb 5 L purge
43	H_2O	27.0	6-23-95 1123	IDJ	B0FKX3	6-23-95 1142	IDJ	Purge H_2O TCE = 12
43	H_2O	27.0	6-23-95 1126	IDJ	B0FKX4	6-23-95 1155	IDJ	Tol = 0.16 TCE = 15 25.2
44	Soil gas	18.7	6-23-95 1318	IDJ	B0FKX5	6-23-95 1337	IDJ	B slow purge High Acetone peak TCE = 26 ppb poor peak
44	Soil gas	18.7	6-23-95 1328	IDJ	B0FKX6	6-23-95 1349	IDJ	A popped tip, good purge TCE = 14 ppb
44	H_2O	25.0	6-23-95 1400	IDJ	B0FKX7	6-23-95 1415	IDJ	TCE = 11 ppb 22.3

68N-1985 Mobile Laboratory Custody/Log Sheet

Site Name: 100-FR-3

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments	
—	Cal Check	—	6-23-95 0825	IDJ	BOFKX8	6-23-95 1448	IDJ	TCE = 48 (-6%) PCE = 46 (-8%)	
49	~~Air~~ Soil ~~15~~ gas	15.0	6-23-95 1532	IDJ	BOFKX9	6-23-95 1539	IDJ	TCE = 7.2 ppb	
—	Air Cal Check		6-23-95 0750	IDJ	BOG4P6	6-23-95 1552	IDJ	DCE = 1.04 (-5%) TCE = 1.17 (-10%) PCE = 1.02 (-15%)	
49	H_2O	24.0	6-23-95 1606	IDJ	BOG4P7	6-23-95 1619	IDJ	TCE = <.1 H_2O	22.6 BGS
—	Air Cal.	—	6-27-95 0755	IDJ	BOG4P8	6-27-95 0814	IDJ	Good cal	
—	H_2O Cal	—	6-27-95 0825	IDJ	BOG4P9	6-27-95 0915	IDJ	TCE = 65 ppb PCE = 49 ppb Good cal.	— up date date
—	H_2O Blank	—	6-27-95 0815	IDJ	BOG4Q0	6-27-95 0930	IDJ	No detects.	
A 47	Soil gas	21.5	06/27/95 0825	RBK	BOG4Q1	6-27-95 0845	IDJ	TCE = <1 PCE = <1	
B 47 AMBIENT	Soil gas	Ø	06/27/95 0828	RBK	BOG4Q2	6-27-95 0832	IDJ	TCE = 5.6 ppb PCE = 11 ppb	
47	H_2O	29'	6-27-95 0925	RBK	BOG4Q3	6-27-95 0947	IDJ	TCE = <.1 PCE = <.1	27.2
45	Soil gas	12.0	6-27-95 1036	IDJ	BOG4Q4	6-27-95 1103	IDJ	Needle A No detects	
45	~~Ambient~~	—	6-27-95 1038	IDJ	BOG4Q5	6-27-95 1048	IDJ	Needle B 1.8 DDJ. PCE = ~~2.5~~ ~~bad peak~~	
45	H_2O	19.0	6-27-95 1107	RBK	BOG4Q6	6-27-95 1310	IDJ	~~TCE = <0.1~~ No detects	15.2
40	Soil gas	14.9	6-27-95 1230	IDJ	BOG4Q7	6-27-95 1245	IDJ	A No detects	
40	Soil gas	14.9	6-27-95 1231	IDJ	BOG4Q8	6-27-95 1258	IDJ	B Duplicate No detects	
40	H_2O	19.0	6-27-95 1300	RBK	BOG4Q9	6-27-95 1323	IDJ	No detects	

68N-1985 Mobile Laboratory Custody/Log Sheet

Site Name: 100-FR-3 TCE Investigation

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
—	Cal Check	—	6-27-95 0755	IDJ	B0G4R0	6-27-95 1337	IDJ	DCE = 1.00 (-9%) TCE = 1.17 (-10%) PCE = 1.07 (-11%)
Drum 1	Air	—	6-27-95 1400	IDJ	B0G4R1	6-27-95 1451	IDJ	~~Acetone = 141~~ ~~MEK = 28~~ Etbenz = 14 ppb
Drum 2	Air	—	6-27-95 1410	IDJ	B0G4R2	6-27-95 1436	IDJ	Etbenz = 15 ppb
Drum 3	Air	—	6-27-95 1415	IDJ	B0G4R3	6-27-95 1422	IDJ	Etbenz = 38 ppb PCE = 1.3 ppb (ghost from calibration check)
32	H_2O	29.0	6-27-95 1520	RBK	B0G4R4	6-27-95 1553	IDJ	TCE = 23 ppb
—	H_2O Cal Check		6-27-95 0825	IDJ	B0G4R5	6-27-95 1522	IDJ	TCE = 65 ppb (±0%) PCE = 48 ppb (-2%)
—	Soil gas ~~CAL STD~~	—	~~6-28-95 0845~~	~~RBK~~	~~B0G4R6~~	~~6-28-95 0845~~	~~RBK~~	BAD CAL. DDJ
—	H_2O CAL STD	—	6-28-95 0900	RBK	B0G4R7	6-28-95 0914	RBK	GOOD CAL.
—	H_2O BLANK	—	6-28-95 0800	RBK	B0G4R8	6-28-95 0925	RBK	
—	Soil gas CAL STD	—	6-28-95 0800	RBK	B0G4R6	6-28-95 0949	RBK	GOOD CAL
—	Soil gas Cal Check	—	6-28-95 0800	RBK	B0G4R9	6-28-95 1021	RBK	DCE = 1.09 (-1%) TCE = 1.303 (+0%) PCE = 1.197 (-0%)
—	H_2O ~~Cal Check~~	—	~~6-28-95 0900~~	~~RBK~~	~~B0G4S0~~	~~6-28-95 1037~~	~~RBK~~	TCE = 44.16 (+5%) ~~PCE =~~ DDJ
A 34	Soil gas	15.3'	6-28-95 1100	RBK	B0G4S1	6-28-95 1110	RBK	TCE = 31.4 ppb PCE = 3.4 ppb
B 34 AMBIENT	Air	—	6-28-95 1102	RBK	B0G4S2	6-28-95 1128	RBK	
31W	H_2O	17.0'	6-28-95 1420	IDJ	B0G4S3	6-28-95 1513	RBK	TCE = 25.4
31W	H_2O	17.0'	6-28-95 1430	IDJ	B0G4S4	6-28-95 1525	RBK	TCE = 26.3

68N-1985 Mobile Laboratory Custody/Log Sheet

Site Name: 100-FR-3 TCE INVESTIGATION

Site/Sample Number	Sample Type	Sample Depth	Sample Date/Time	Sampler (Initials)	HEIS Number	Analysis Date/Time	Analyst (Initials)	Comments
31W	H_2O	20.0'	6-28-95 1445	IDJ	B0G4S5	6-28-95 1537	RBK	TCE = 32.2 ppb.
VAPOR CAL cal check	VAPOR CAL STD	CAL CHECK	6-28-95 0800	RBK	B0G4S6	6-28-95 1551	RBK	DCE = 1083 (-20%) TCE = 1265 (-3%) PCE = 1135 (-5%).
28	H_2O	20.0'	6-28-95 1550	IDJ	B0G4S7	6-28-95 1613	RBK	TCE = 9.3 ppb
H_2O CAL CAL Check	H_2O STD	—	6-28-95 0900	RBK	B0G4S0	6/28/95 1625	RBK	TCE = 40.6 (-3%) PCE = 41.5 (-7%)

4/20/95 Duane Jacques

0900 Arrived at EAL site to analyze 200-ZP-1 samples. Installed 11.7 eV lamp. Set carrier gas to 40 psi. Turned on 10S Plus and warmed up on auto loop.

0920 Transferred 100-FR-3 files to disk

0922 Empty 100-FR-3 waste samples.

1110 Prepared liquid standard (Lo-CCl_4)

TCM = 0.6 ul/30g × 8700 ng/ml × ml/10^3 ul = 0.170 ppm-wt

CCl_4 = 3.2 ul/30g × 780 ng/ml × ml/10^3 ul = 0.083 ppm-wt

TCE = 1.2 ul/30g × 1400 ng/ml × ml/10^3 ul = 0.056 ppm-wt

1120 Analyzed Lo-cal standard.

1130 Analyzed blank.

1145 Prepared Hi-CCl_4 calibration standard.

TCM = 0.4 ul/30g × 8700 ng/ml × ml/10^3 ul = 0.120 ppm-wt

CCl_4 = 100 ul/30g × 780 ng/ml × ml/10^3 ul = 2.60 ppm-wt

TCE = 0.9 ul/30g × 1400 ng/ml × ml/10^3 ul = 0.042 ppm-wt

1148 Analyzed AC-9.

1150 Analyzed SC-4.

1200 Analyzed SC-3.

1206 Analyzed cal check. TCM = 169 (-1%)

CCl_4 = 82 (-1%) TCE = 55 (-2%)

1241 Analyzed Hi-Cal Standard.

1256 Analyzed blank.

1305 Analyzed SC-6.

1313 Analyzed SC-1.

1325 Analyzed Hi-cal check. TCM = 145 (-15%)

CCl_4 = 2900 (+12%) TCE = 53 (+26%)

TCE is out of range.

1335 Transferred files. Shutdown equipment.

4/21/95 Duane Jacques

0740 Arrived at EAL site. Turned on HP air to 50 psi. Load air cal method. Turned on 105 Plus Began warming up on auto loop.

0845 Filled 1 liter tedlar bag w/ 1 ppm cal gas.

0850 Reset carrier gas flow to 5 ml/min. Analyzed cal gas. BOD6H6

0910 Rerun calibration DCE & TCE did not calibrate well. Cal OK. Set cis-1,2,-DCE calibration

0922 Analyzed BOD6H9 GC Blank.

0941 Analyzed BOD6J0

0953 Analyzed BOD6J1

0955 Prepared liquid calibration standard
TCE = 1.0 ml/30g × 1400 ng/ml × ml/10^3 ml = 0.048 ppm-wt
PCE = 6.0 ml/30g × 240 ng/ml × ml/10^3 ml = 0.048 ppm-wt

1102 Analyzed ~~BOD6J2~~ BOD6J3.

1125 Analyzed BOD6J4 Cal Standard (liquid)

1207 Analyzed BOD6J5.

1219 Analyzed BOD6J2.

1245 Analyzed Site 9 EAL sample BOD6J6

1354 Analyzed BOD6J7.

1447 Analyzed BOD6J8

1522 Analyzed BOD6J9 Cal Check ~~DCE~~ DOJ
TCE = 1.27 (-2%) PCE = 1.14 (-5%)

1533 Analyzed BOD6K0 TCE = 49 (+2%)
PCE = 48 (±0%)

1555 Shut off 105 Plus. Left site.

4/24/95 Duane Jacques

0800 Arrived at 100-F study area. 10S Plus warming up with 10.6 eV lamp.
0805 Transferred files to floppy disk
0813 Filled 1L tedlar bag with 1ppm-v cal gas.
0816 Disposed previous day's liquid samples in waste.
0845 Prepared liquid calibration standard
TCE = 1.2ul/30g x 1400 ug/ml x ml/10³ul = 0.056 ppm-wt
PCE = 6.1ul/30g x 240 ug/ml x ml/10³ul = 0.049 ppm-wt
0853 Analyzed air cal. ~~BOD6K0~~ BOD6K1
0905 Analyzed GC blank. BOD6K4
0917 Analyzed liquid cal. BOD6K2 small amount of acetone contamination - quantity not known, estimate < 10 ppb.
0938 Analyzed water blank. BOD6K5, Acetone est < 10 ppb.
0954 Analyzed BOD6K3. MEK = ~~est~~ detected? Tol = <1 MIBK = det
1049 Analyzed BOD6K6.
1127 Analyzed BOFBZ1.
1317 Analyzed BOFBZ2. Ambient Air/Equipment blank. Ided 1,1-DCE. This is a mis-ID of acetone. Increased flow rate
1330 Analyzed BOFBZ3.
1335 Installed new septum.
1340 Analyzed BOFBZ4.
1503 Analyzed BOFBZ5. TCE = 1.1 (-15%) PCE = 1.0 (-15%) DCE = 0.99 (-10%)
1515 Analyzed BOFBZ6. TCE = 57 (+2%) PCE = 48 (-2%)
1530 Shut down 10S Plus. Packed up equipment. Left site

4/25/95 Duane Jacques

0715 Arrived at 100-N Area. Turned on 105 Plus. Set HP air to 40 psi. Began warming up 105 Plus with 10.6 eV lamp on autoloop.

0810 Arrived at 100-F Area site. Transferred files from 4-24-95.

0825 Collected 1ppm DCE, TCE, PCE standard in 1L tedlar bag.

0834 Analyzed 1ppm air standard. BOFBZ7. Good Cal

0850 Empty samples from 4-24-95 into waste container.

0847 Analyzed GC blank. BOFBZ8.

0930 Prepared liquid calibration standard

TCE = 0.9 ml/30g × 1400 mg/ml × ml/10^3ml = 0.042 ppm-wt

PCE = 6.0 ml/30g × 240 mg/ml × ml/10^3ml = 0.048 ppm-wt

0935 Analyzed Water standard. BOFBZ9

0946 Analyzed water blank. BOFC00 Acetone ≈ 50 ppb.

0950 Weather at 100-N Area station Pressure:

Temp: 64°F Humidity ≈ 30% 29.50" rising to steady

Winds: NE @ 17-22,

1018 BOFC01, Site 25 Depth - 47 - 2.0 0945

1107 ~~BO~~ Analyzed BOFC02.

1157 Analyzed BOFC03.

1217 Analyzed BOFC04.

1238 Analyzed BOFC05.

1507 Analyzed BOFC06

1522 Analyzed BOFC07.

1532 Analyzed BOFC09 DCE = 1.0 (-9%) TCE = 1.16 (-11%)

PCE = 1.04 (-13%)

1542 Analyzed BOFC08

1552 Analyzed BOFC10 - TCE = 46 (+10%) PCE = 52 (+8%)

1600 left site

4/26/95 Duane Jacques

0900 Arrive at 100-F Area near tank berm area. Will attempt to investigate soil gas today. 10.5 Plus warming up 10.6 eV lamp.

0920 Colected 1 L of 1 ppm DCE, TCE, PCE cal gas.

0925 Analyzed 1 ppm DCE, TCE, PCE cal gas. BOFC11.

0936 Analyzed GC Blank. BOFC12

1033 Analyzed Ambient Air/Equipment Blank BOFC13

1114 Analyzed BOFC14. Soil gas sample Berm-1a taken from SW corner of berm. Depth = 11.0 feet.

1138 Analyzed BOFC15. Soil gas sample Berm-1b taken from SW corner, Depth = 6.0 ft

1317 Analyzed BOFC16. Soil Gas from Berm-2 located inside berm through center tank stand. Depth = 7.4 feet.

1330 Installed new septum. Moved lab to site near homestead.

1403 Analyzed BOFC17. Located in depression west of Homestead. Depth = 20.1 feet.

1433 Analyzed BOFC18. Homestead Depression Depth = 7.8 ft.

1456 Analyzed BOFC19. Soil gas from 8.1 feet deep South ~~east~~ of sink hole containing solvent can near homestead.

1509 Analyzed BOFC20. Cal Check. DCE = 1.12 (+2%) TCE = 1.3 (±0%) PCE = 1.19 (-1%)

1528 Analyzed BOFC21. Deep probe 31.5 feet. Located South of sink hole near homestead.

1545 Packed up equipment. Left site.

4-27-95 Duane Jacques

0810 Arrived at 100-F Area. Parked along Route 2N. 105 Plus is warming up on autoloop using 10.6eV lamp. Installed new septum

0815 100-N Area Station Weather
Temp = 53°F, Humidity = 78%
Wind W @ 7 mph. Pressure = 29.23 inches falling slightly.

0825 Transferred 105 Plus data files to disk.

0845 Prepared liquid calibration standard.
TCE = 1.0 ul/30g × 1400 ug/ml × ml/10^3 ul = 0.047 ppm-wt
PCE = 5.9 ul/30g × 240 ug/ml × ml/10^3 ul = 0.047 ppm-wt
Toluene = 2.9 ul/30g × 515 ug/ml × ml/10^3 ul = 0.050 ppm-wt

0913 Analyzed Cal Standard. BOFC22

0926 Analyzed water blank BOFC25.

0940 Analyzed BOFC23. Collected from site about 500 ft west of location 22, near sink hole containing solvent can.

1000 Filled 1 L tedlar bag w/ 1 ppm DCE, TCE, PCE.

1002 Analyzed air cal after resetting flow rate. BOFC26.

1052 Analyzed BOFC27.

1103 Analyzed BOFC28.

1240 Analyzed BOFC29.

1321 Analyzed BOFC31.

1423 Analyzed BOFC32

1454 Analyzed BOFC33

1506 Analyzed BOFC34. Air cal check. DCE = 1.07 (-3%)
TCE = 1.25 (-4%) PCE = 1.11 (-7%)
Analyzed BOFC35. H_2O cal check. TCE = 53 (+13%)
Toluene = 56 (+12%) PCE = 52 (+11%)

4-27-95 Duane Jacques

1530 Shut down equipment. Left site

4-28-95 Duane Jacques

0730 Arrived at 100-N Area. Set HP air carrier gas flow to 40 psi. Began warming up 10 S Plus using 10.6 eV lamp on auto loop.

0820 Transferred GC files from 4-27-95.

0825 Filled 1 L tedlar bag with 1 ppm DCE, TCE, PCE standard.

0830 Discarded 4-27-95 water samples & standards into waste container.

0848 Set flow rate. Analyzed air cal standard. BOFC36.

0900 Prepared liquid calibration standard.

$TCE = 1.0\ \mu l / 30g \times 1400\ ug/ml \times ml/10^3 = 0.047$ ppm-wt

$PCE = 6.0\ \mu l / 30g \times 240\ ug/ml \times ml/10^3 = 0.048$ ppm-wt

0931 Analyzed BOFC40. Cold air probably caused syringe leakage.

0944 Analyzed BOFC39. Probable syringe leakage.

0950 Prepared site 23 H_2O samples by removing ≈13 mls from each.

1003 Analyzed BOFC41. Liquid cal standard.

1014 Analyzed BOFC42. Water blank

1025 Analyzed BOFC37. Site 23 in ditch east of rr tracks.

1037 Analyzed BOFC38. Site 23 duplicate.

1057 Analyzed BOFC43.

1132 Analyzed BOFC44. Bad sample, not in vadose

1157 Analyzed BOFC45.

1246 Analyzed BOFC44. Soil gas ~~from~~ INJ 100-FR-3-005

1334 Analyzed BOFC46

1406 Analyzed BOFC47 Cal Check. DCE = 1.08 (-2%)

TCE = 1.24 (-5%) PCE = 1.10 (-8%)

1501 Analyzed BOFC48.

1512 Analyzed BOFC49.

4-28-95 Duane Jacques

1523 Analyzed Cal Check. BOFC50
TCE = 54 (+15%) PCE = 54 (+13%)

1535 Turned off 10 S Plus. Packed up equipment.
Left site.

5-1-95 Duane Jacques

0720 Set HP Air carrier gas to 40 psi. Installed new septum. Turned on 105 Plus and began warming up using autoloop. Installed new septum.

0815 Collected 1ppm DCE, TCE, PCE in 1 L bag.

0825 Set flowrate to 5 ml/min. Analyzed BOFC51. (Cal)

0847 Analyzed Equipment blank. BOFC52.

0850 Empty old stemples / Standards into waste.

0858 Analyze BOFC44. Reuse HEIS number from 4-28-95.

0905 Prepare liquid calibration standard

TCE = 1.2 ml/30g x 1400 ng/ml x ml/10^3 ml = 0.056 ppm-wt

PCE = 6.0 ml/30g x 240 ng/ml x ml/10^3 ml = 0.048 ppm-wt

0937 Analyzed BOFC54. Liquid Calibration standard.

0949 Analyzed BOFC55. Blank

1005 Analyzed BOFC53.

1026 Analyzed BOFC56.

1320 Analyzed BOFC57.

1525 Analyzed BOFC58. Strange sample, baseline went into negative values (-1.0 mV/sec)

1534 Air Cal Check. BOFC59. DCE = 0.94 (-15%) TCE = 1.07 (-18%) PCE = 0.96 (-20%)

1549 H_2O Cal Check. BOFC60. TCE = 48 (-14%) PCE = 40 (-17%)

1600 Shut down equipment. Left site.

5-2-95 Duane Jacques

0935 Arrived at 100-N Area. Installed new septum. Set carrier gas to 40 psi. Warmed up 10S Plus with 10.6 eV lamp using autoloop.

1245 Prepared liquid calibration standard

TCE: 1.2 ml/30g x 1400 ug/ml x mg/10^3ml = 0.056 ppm-wt

PCE = 6.1 ml/30g x 240 ug/ml x mg/10^3ml = 0.049 ppm-wt

1253 Set flow to 5 ml/min. Analyzed Cal Standard B0FH93

1320 Reset flow and re-analyzed cal standard.

1330 Prepared H_2O samples by removing 10 mL from each.

1334 Analyzed water blank. B0FH94.

1347 Analyzed B0FH91.

1400 Analyzed B0FH92.

1513 Cal Check B0FH95. TCE = 43 (-23%) PCE = 37 (-24%)

1530 Shut down equipment. Left site.

5-3-95 Duane Jacques

0815 Exchanged 10.6 eV lamps from GC detector to total VOC detector. Cleaned old GC lamp before installing it in total VOC.

0830 Installed new septum. Set carrier gas to 40 psi and turned on 10S Plus detected. System started OK. Warmed up 10S Plus on auto loop.

1010 Transferring files from 5-1-95 & 5-2-95 to disk.

1012 Dumped 5-2-95 water samples in waste container.

1015 Filled 1L tedlar bag with 1 ppm DCE, TCE, PCE mix.

1030 Set 10S Plus flow to 5 ml/min. Analyzed cal gas. BOFH96.

1059 Analyzed BOFH98.

1113 Analyzed BOFH97. Ambient contains Acetone, Toluene, TCE, PCE. This appears the two syringes could have been mixed up. Am assuming so & changed files.

1310 Came back from lunch 10S Plus battery had gone dead & instrument shutdown. Restarted instrument.

1320 Recalibrated instrument using 1 ppm DCE, TCE, PCE standard.

1326 Analyzed BOFH99. Contains residual DCE, ~~TCE, PCE~~ from recalibration. TCE = 6.9 ppb.

1504 Cal Check. BOFHB0. DCE = 1.1 (±0%)
TCE = 1.33 (+2%) PCE = 1.25 (+4%)

1530 Shut down 10S Plus. Packed up left site.

5-9-95 Duane Jacques

0800 Arrived at 100-F Area, Location 10. 10S Plus is warming up on autoloop using 10.6 eV lamp. HP air carrier gas is set at 40 psi. New septum installed.

0850 Collected 1ppm DCE, TCE, PCE gas mix in 1 L Tedlar bag.

0903 Set 10S Plus flow to 5 ml/min. Analyzed air cal standard - BOFHB1.

0930 Prepared liquid calibration standard

~~TCE = ug/ml x 1400 ug~~ DNJ

TCE = 1.1 ul/30g x 1400 ug/ml x ml/10^3 ul = 0.051 ppm-wt

PCE = 6.0 ul/30g x 240 ug/ml x ml/10^3 ul = 0.048 ppm-wt.

0933 Reset 10S Plus flow rate. Analyzed H_2O cal standard - BOFHB2.

0949 Analyzed blank - BOFHB3.

1126 Analyzed Location 10 H_2O sample. BOFHB4.

1350 Recognized that original cal values were not updated from 5-2-95. Update cal values and reran cal.

1620 Cal Check BOFHB5. TCE = 62 (+21%)

PCE = 58 (+18%)

1640 Shut down 10S Plus. Left site.

5-10-95 R.B. Kerkow

0645 Arrived at 100 N-EAL, unlocked shore-power and Started Photovac 10s plus on auto run with carrier gas at 40psi, 10.6eV lamp. Replaced septa in injection Port #1.

0710 Moved to 100-FR-3 field site, location 6.

0725 Arrived at location 6 and prepared liquid calibration standard as follows.

$$TCE = \frac{1400\,ug}{ml} \times \frac{ml}{10^3\,ul} \times \frac{1.0\,ul}{30\,g} = 46.7\ ppb\text{-}wt$$

$$PCE = \frac{240\,ug}{ml} \times \frac{ml}{10^3\,ul} \times \frac{6.1\,ul}{30\,g} = 48.8\ ppb\text{-}wt$$

0800 Collected 1ppm, DCE, TCE, PCE MIX IN 1 LITER TEDLAR BAG, to be used as Vapor Standard.

0810 adjusted carrier gas flow on 10s plus to 5ml/min.

0822 RAN Ambient air Blank - Vapor Sample - 500ul inj.

0843 Analyzed Vapor Cal Standard as BØFHB1 calibration. for Soil gas Sample.

0854 RAN AMBIENT AIR BLANK as BØFHB7. - Sample

0931 Analyzed Soil gas Sample from location 18 - 23.2 FT as BØFHCØ. - Sample

0943 Analyzed Soil gas Sample, ambient air/equipment Blank from location 18 - 0.0 ft. as BØFHB9. - Sample

1017 Analyzed H_2O cal Standard as BØFHB6 - Calibration

1029 Analyzed Ambient Air Blank as BØFHC1 - Sample

1038 Analyzed Ambient Air Blank as BØFHC1 - Sample.

1056 Analyzed H_2O Sample from location 18 - 31.8 feet. as BØFHB8.

1109 Analyzed H_2O Sample from location 18 - 33 feet as BØFHC2.

5-10-95 contin. R.B. Kerkow

1124 Analyzed H_2O Sample from location 18 - DUPE as BØFHC3.

1221 Analyzed Vapor Cal as Sample BØFHC4 to check calibration. DCE = 1.201 ppm (+9%), TCE = 1.37 ppm (+6%) PCE = 1.27 (+6%)

1235 Analyzed Ambient air Sample as Blank, BØFHC5 to check for residual from cal check.

1246 Analyzed Soil gas Sample from location #38 - 18 foot depth as BØFHC6.

1331 Analyzed H_2O Sample from location #38 - 26 foot depth as BØFHC7. TRANSPORTED BØFHC8 to EAL FOR ANALYSIS.

1419 Analyzed H_2O Sample from location #18 - 34 foot depth as BØFHC9. (location #18 replicate).

1514 Ran H_2O Cal Standard as Sample for Cal. check. BØFHDØ. TCE = 43 (-9%) PCE = 45 (-8%)

1541 Ran Vapor Cal Standard as Sample for Cal. check, BØFHD1. cis 12 DCE = 1.18 (+7%) TCE = 1.34 (+3%) PCE = 1.23 (+3%)

1600 SHUTDOWN 10s Pens and drove mobile lab back to E.A.L. at 100N.

1630 Hooked mobile lab to Shore power at E.A.L., 100N Arena and departed for the day

5-11-95 R.B. Kerkow

0645 Arrived at 100N, E.A.L., unlocked shore power and started Photo Vac 10s plus, adjusted carrier gas flow to 40 psi and 5 ml/min. Set up 10s Plus for loop & auto run. Temperature inside lab van is 70°F.

0730 Departed 100N EAL parking for 100-FR-3 field site

0800 Arrived at 100-FR-3 field site, location 6. Checked 10s Plus carrier gas flow and replaced septa in injection port #1.

0820 Prepared liquid calibration standard for TCE and PCE in 30 ml of D.I. water as follows:

$$TCE = \frac{1400\ \mu g}{ml} \times \frac{ml}{10^3\ \mu l} \times \frac{1.1\ \mu l}{30\ g} = 51.33\ ppb\text{-}wt$$

$$PCE = \frac{240\ \mu g}{ml} \times \frac{ml}{10^3\ \mu l} \times \frac{6.0\ \mu l}{30\ g} = 48.0\ ppb\text{-}wt$$

0835 Relocated mobile lab to location 5.

0906 Ran H_2O Cal Standard with TCE=51 and PCE=48. as BØFHD2

0920 Collected Vapor Calibration Standard in 1 Liter Tedlar bag cis DCE = 1.1 ppm, TCE = 1.3 ppm, PCE = 1.2 ppm and analyzed as BØFHD3 cal standard for Soil gas.

0929 Ran vapor cal std as BØFHD3.

09 Ran ambient air blank as BØFHD4.

~~0959~~ 1011 Analyzed Soil gas sample, location #5 - depth 22.1 ft. as ~~BØFHD5~~ BØFHD6.

~~1011~~ 0959 Analyzed ambient air/equipment blank, location 5 as ~~BØFHD6~~ BØFHD5

5-11-95 (contin) R.B. Kerkin

1033 Cal check of Vapor Cal Standard. Analyzed as BØFHD7.
cis DCE = 1060 (-4%) TCE = 1250 (-4%) PCE = 1170 (-3%)

1201 Cal check of H_2O Cal Standard. Analyzed as BØFHD8.
TCE = 51.0 (0%), PCE = 47.9 (0%).

~~1335~~ 1345 Analyzed Water Sample from Location #16, depth 35' as BØFHD9. TCE Calculated as 7.4ppb (not identified due to RT drift.)

1359 Analyzed Duplicate Water Sample from location #16, 35' depth. as BØFHFØ. TCE Calculated as 8.9ppb (not I.D. due to RT drift).

1431 Analyzed Soil gas Sample from location #17, 22.2' depth as BØFHF2

1435 Prepared Water Sample for E.A.L. lab by drawing clear liquid off of BØFHFØ and BØFHD9 into a 40ml VOA Vial with zero headspace, BØFHF1.

1443 Analyzed headspace from BØFHF1 as RKFHF1.

1458 Analyzed headspace from Sludge combined from BØFHFØ and BØFHD9 as RKFHFØ.

1510 Ran Blank ambient air to check for residual compounds.

~~1530~~ 1520 Packed up mobile lab and drove back to 100N EAL parking lot.

1545 Arrived at EAL parking and hooked up to Shore power. Delivered BØFHF1 to JOHN McCLUSKY FOR ANALYSIS.

1546 Ran H_2O Cal Std as Sample ~~BØFHF3~~ RKFHF3 as Cal check. Changed sample name to RKFHF3 because the flow was off and compounds were NOT identified.

1559 Re-Ran H_2O Cal Std as BØFHF3.
TCE = 56 (+10%) PCE = 52 (+8%)

1620 Ran Vapor Cal Std as BØFHF4 for cal check.
cis DCE = 1638 (-6%), TCE = 1191 (-8%), PCE = 1077 (-10%)

1635 Shutdown IOs plus and departed for the day

5-12-95 R.B. Kerkow

0715 Arrived at 100N, EAL, unhooked shore power and setup Photovac 10s PLUS at 40 PSI carrier gas, 5 ml/min flow and auto run/LOOP. to warm up the instrument. Temperature inside the mobile is 64°F. Replaced Septa in inj #1.

0745 Departed 100N, EAL for 100-FR-3 grid, location #17.

0800 Setup mobile lab at location #17.

0815 Made up liquid calibration standard for TCE, PCE in 30 g of DI water as follows:

$$TCE = \frac{1400\ ug}{ml} \times \frac{ml}{10^3\ ul} \times \frac{1.0}{30g} = 46.7\ ppb\text{-}wt$$

$$PCE = \frac{240\ ug}{ml} \times \frac{ml}{10\ ul} \times \frac{6.0}{30g} = 48\ ppb\text{-}wt$$

0825 Collected VAPOR Cal Standard in 1 Liter tedlar bag. cis/12 DCE = 1100 ppb, TCE = 1300 ppb, PCE = 1200 ppb.

0855 Ran H_2O Calibration Standard as B0FHF5.

0908 Ran H_2O Blank as B0FHF7.

1000 Relocated mobile Lab to location #33.

1037 Ran Vapor Calibration Standard as B0FHF6

1038 Analyzed Soil gas Sample from location #33, 16.7' depth as B0FHF8. TCE = 40.2 ppb, toluene = 12.7 ppb, PCE = 8.9 ppb.

1051 Analyzed Soil gas equipment/ambient air Sample from loc #33 as B0FHF9.

1110 Analyzed Vapor Cal Std. as Sample for Cal. Check B0FHG0, cis DCE = 1131 (+3%), TCE = 1327 (+2%), PCE = 1226 (+2%)

1141 Analyzed H_2O Ground water sample from location #33, depth = 26.5' bgs. as B0FKH9.

1154 Analyzed Duplicate H_2O Sample from location #33, 26.5' depth. as B0FKJ0. TCE = 34.9 ppb.

5-12-95 R. B. Kerkow

1239 Analyzed Resample of H_2O from location #33, 26.5' depth. as BOFKJ1.

1250 Replaced septa in injection port #1 on 10s plus.

1440 Analyzed Soil gas Sample from Location #32, 22.8' depth as BOFKJ2.

1456 Analyzed Soil gas duplicate sample from location #32, 22.8' depth as BOFKJ3

1519 Ran Vapor Cal std. as Sample for Cal. Check as ~~BOFKJ4~~ BOFKJ4. cis DCE = 1138 (+3%)
TCE = 1308 (+0%) PCE = 1173 (-2%)

1555 Analyzed H_2O Sample from location 32, 29.5 ft. depth as BOFKJ5.

1607 Analyzed H_2O Sample duplicate from location 32, 29.5 ft. depth as BOFKJ6. (32 DUP)

1619 Analyzed H_2O Sample location #32, 37.0 ft depth. (32 DEEP) as BOFKJ7.

1635 Ran H_2O Cal Std as sample, BOFKJ8 for Cal. check TCE = 44.2 (-8%), PCE = 45.5 (-5%).

1645 Packed up equipment and returned mobile lab to 100N, EAL parking.

1700 Arrived at 100N, EAL hooked up mobile lab to Shore power and departed for the weekend.

5-15-95 R. B. Kirk

0730 arrived at 100N, EAL, unhooked shore power and setup photovac 10s plus for loop/auto run to start warming it up. LAB temp = 72°F.

0800 arrived at 100-FR-3 field site location #26. checked carrier gas flow rate at 5ml/min on 10s plus and continued to warm it up on loop/auto run.

0810 JOHN McCluskey, EAL chemist delivered results of sample B0FHF1 which was delivered to E.A.L on Thursday 5-11, and analyzed by Tom Bellus on Friday 5-12. RESULTS showed TCE at 5.39 ppb.

0830 Prepared liquid Calibration Standard for TCE, PCE. in 30ml of DI water as follows:

$$TCE = \frac{1400\,\mu g}{ml} \times \frac{ml}{10^3\,\mu l} \times \frac{1.2\,\mu l}{30\,g} = 56\ ppb\text{-}wt$$

$$PCE = \frac{240\,\mu g}{ml} \times \frac{ml}{10^3\,\mu l} \times \frac{6.0\,\mu l}{30\,g} = 48\ ppb\text{-}wt$$

0840 Collected Vapor cal. Std in 1 Liter tedlar bag.
cis 1-2, DCE = 1100 ppb, TCE = 1300 ppb, PCE = 1200.

0912 Ran Vapor Cal Std as B0FKK0

0943 analyzed ~~Soil gas~~ ambient air sample from location 26, ~~14.1 ft~~ 14.1 ft depth, as ~~B0FKK3~~ BOFKK3. ~~B0FKK4~~ BOFKK3.

0954 Analyzed ~~ambient air~~ Soil gas sample / ~~equipment blank~~ depth = 14.1 from location 26 as B0FKK4.

1028 Ran H_2O Cal Standard as B0FKJ9.

1041 Analyzed Soil gas Sample, Location #26 REPLICATE, from 14.0 ft bgs depth as B0FKK5.

1058 Analyzed H_2O Sample from location #26, 23' depth as B0FKK1

5-15-95 R. B. Keeler

1112 Analyzed H_2O Sample from location #26, 24.5' depth as BOFKK2.

1141 Analyzed H_2O Sample from location #26 REPLICATE, 21.0' depth as BOFKK6.

1250 Analyzed Soil gas sample from location of 55 gal drums. Dedicated Soil gas probe at 10' depth. ESE of #26.

1457 Analyzed Soil gas sample from location #31 13.9FT as BOFKK7.

1531 Analyzed H_2O Sample from location #31 depth 19' bgs as BOFKK8.

1552 Ran H_2O Cal. Std. as a Sample for Cal. check, BOFKK9. TCE = 52 (-9%), PCE = 42 (-13%)
Ran VAPOR Cal. Std as a Sample for Cal. Check, BOFKL0. 12 cis DCE = 1079 (-2%), TCE = 1219 (-6%), PCE = 1084 (-10%)

1625 Packed up equipment and departed field Site for the day.

1650 Arrived at 100 N, EAL and hooked up to Shore power. Delivered Sample BOFKL9 to JOHN McCLUSKY. location was #31, depth 19'.

1700 Departed for the day.

5-16-95 R.B. Kerk

0715 Arrived at 100N, EAL. Adjusted carrier gas flow to 40 ~~ml/min~~ PSI and Started Photovac 10sPlus in Loop/Auto run to warm up, disconnected shore power and departed EAL for 100-FR-3 field site.

0745 Arrived at 100-FR-3, location #18, continued to warm up Photovac 10sPlus. Transferred Photovac files from Card to 3½" disk on Pen-Gas.

0815 Prepared liquid Calibration Standard for TCE, PCE in 30 ml of D.I. Water as follows:

$$TCE = \frac{1400\,\mu g}{ml} \times \frac{ml}{10^3\,\mu l} \times \frac{1.2\,\mu l}{30\,g} = \underline{56}\ ppb\text{-}wt.$$

$$PCE = \frac{240\,\mu g}{ml} \times \frac{ml}{10^3\,\mu l} \times \frac{5.9\,\mu l}{30\,g} = \underline{47.2}\ ppb\text{-}wt$$

0830 Collected Vapor Calibration Standard in 1 liter Tedlar bag
cis 1-2, DCE = 1100, TCE = 1300, PCE = 1200.

0900 Ran H_2O Cal Std as BOFKL2 CALIBRATION.

0912 Ran H_2O Blank as BOFKL5.

0921 Ran Vapor Cal Std as BOFKL3 calibration

0935 Analyzed Soil gas sample from location #29 Re-Sample, depth = 8.1' as BOFKL7

0946 Analyzed Ambient air/equipment blank sample from location #29 Re-S, 500 ul syringe, as BOFKL6.

1008 analyzed H_2O Sample from location #18, depth 35' as BOFKL4.

1034 Analyzed H_2O Sample from location #29 Re-sample, depth 18.5' as BOFKL8.

1048	5-16-95 (contin) R. B. Kirkton
~~1034~~	Analyzed H_2O Sample from location #29 Re-sample, depth=18.5' as BØFKL8.
1132	Analyzed Soil gas sample from location #35, depth 20.9' as BØFKL9
1146	Analyzed Soil gas sample from location #35, depth 20.9' DUPLICATE Sample, as BØFKMØ.
1403	Analyzed H_2O sample from location #29 Re-sample, 18.5' Re-Sample again (1330) as BØFKM1.
1602	Ran Vapor Cal. Std as Sample BØFKM2 for end of day cal. check. cis 1-2, DCE = 1039 (-6%) TCE = 1227 (-6%) PCE = 1034 (-14%).
1625	Ran H_2O Cal. Std as Sample BØFKM3 for end of the day cal. check. TCE = 54 (-4%), PCE = 44 (-7%)
1635	Packed up equipment and returned mobile lab to 100N, EAC.

5-17-95 J. D. Jacques

0900 Arrived at 100-N EAL. Turned on 10S Plus. Set carriergas flow to 40 psi. Installed new septum. Set 10S Plus to warm up on autoloop.

1000 Filled 1L Tedlar bag with 1ppm DCE, TCE, PCE gas.

1014 Set 10S Plus flow. Analyzed cal standard gas. BOFKM4.

1019 Emptied samples and cal standard from 5-16-95 into waste water container.

1030 Prepared liquid calibration standard.

$TCE = 1.0\,ml/30g \times 1400\,ug/ml \times ml/10^3\,ml = 0.048$ ppm-wt

$PCE = 6.2\,ml/30g \times 240\,ug/ml \times ml/10^3\,ml = 0.050$ ppm-wt.

1049 Analyzed water cal standard. BOFKM5

1050 Prepared H_2O sample from 699-77-36 by removing ≈12 ml water.

1104 Analyzed BOFKM6. 21W Soil Gas

1117 Analyzed BOFKM7. Ambient Air

1131 Analyzed BOFKM8. Water Blank

1147 Analyzed BOFK56. 699-77-36 Sample.

1337 Analyzed BOFKM9. 21N Soil Gas - Could not attach tubing. Sampled through probe rod using ≈10L purge.

1547 Analyzed BOFKN1, Soil gas Sample, location 30, depth 24.9'.

1604 Analyzed BOFKN2, Vapor Cal Std, as Cal check cis12dce = 1134 (+3%), TCE = 1264 (-3%), PCE = 1120 (-7%)

1617 Analyzed BOFKN3, H_2O Cal Std as Cal check TCE = 47.8 (-1%), PCE = 48.2 (-4%).

1640 Departed site, after shutting down the Photovac 10s Plus, drove the Mobile lab back to 300 area.

5-19-95 L. D. Jacques

0700 Arrived in mobile lab parked at MO-926. Installed new septum. Set carrier gas to 40 psi. Started up 10 S Plus to warm up on autoloop.

0840 Arrived at 100-F Area near location 30.

0845 Filled 1L tedlar bag with 1 ppm DCE, TCE, PCE

0850 Transferred 5-17-95 data files to floppy disk

0855 Emptied water samples into waste containers.

0911 Analyzed air cal standard. BOFKN4.

0915 Prepared liquid calibration standard

$TCE = 1.1\ ml/30g \times 1400\ ug/ml \times ml/10^3\ ul = 0.051$ ppm-wt

$PCE = 6.0\ ml/30g \times 240\ ug/ml \times ml/10^3\ ul = 0.048$ ppm-wt

0930 Analyzed liquid cal standard. BOFKN5

0932 Prepared well water sample BOFK54 by removing ≈12 ml of sample.

0942 Analyzed water blank BOFKN6

1018 Analyzed 199-F7-1 Well sample BOFK54

1030 Analyzed BOFKN7 Location 30 H_2O.

1043 Analyzed BOFKN8. Location 30 Duplicate H_2O.

1114 Analyzed BOFKN9. Location 31N Soil gas.

1125 Analyzed BOFKS0. Ambient air/Equipment blank

301 ~~1203~~ Analyzed BOFKS1. 31N Surface H_2O.

1314 Analyzed BOFKS2. 31N deep H_2O.

1332 Analyzed BOFKS3, Cal Check. TCE = 55 (+8%)
PCE = 51 (+6%)

1429 Analyzed Air Cal Check BOFKS5, DCE = 1.12 (+2%)
TCE = 1.28 (-2%) PCE = 1.15 (-4%)

1440 Transferred 5-19-95 files to disk.

1445 Shutt down 10S Plus.

5/24/95 Duane Jacques

0715 Arrived at MO-926. Installed new septum and turned carrier gas pressure to 40 psi. Turned on 105 Plus and began warming up instrument on autoloop

0815 Arrived at 100-F Area. Setup equipment

0835 Filled 1L tedlar bag with 1ppm-v DCE, TCE, PCE standard.

0839 Analyzed cal standard (air). BOFKS6

0850 Prepared liquid calibration standard.

$TCE = 1.1\,ml/30g \times 1400\,ug/ml \times ml/10^3\,ml = 0.051$ ppm-wt

$PCE = 6.0\,ml/30g \times 240\,ug/ml \times ml/10^3\,ml = 0.048$ ppm-wt.

0905 Analyzed ambient air sample. BOFKS7

0932 Analyzed loc 5 soil gas. BOFKS8

0957 Analyzed H_2O cal standard. BOFKS9

1010 Analyzed water blank BOFKT0

1012 Prepared Well 199-F7-3 sample by removing ≈ 12 ml from vial.

1023 Analyzed 199-F7-3 sample. BOFKS5

1036 Analyzed Location 5 H_2O, BOFKT1

1049 Analyzed Cal Check, BOFKT2, TCE = 53 (+4%)
PCE = 50 (+4%)

1128 Analyzed air cal check. BOFKT3, DCE = 1.05 (-5%)
TCE = 1.22 (-6%) PCE = 1.11 (-7%)

1419 Analyzed water sample from well 699-69-38, BOFKT4

1430 Analyzed water sample from well 699-62-43E, BOFKT6

1450 Analyzed soil gas sample from dedicated probe installed near Gable Mountain hydro shop site, BOFKT8.

1500 Shut down equipment. left site.

6-1-95 Duane Jaeger

1114 Soil Cal Check TCM = 152 (-11%)
CCl4 = 52 (-5%) TCE = 42 (-12%)
Re cal for 200-ZP-1 Pump & Treat Samples
1123 Analyzed Blank for ZP-1 P&T samples
1133 Analyzed AC-9.
1142 Analyzed SC-4.
1153 Analyzed SC-3.
1205 Analyzed Lo Cal Check TCM = 180 (+6%)
CCl4 = 55 (±0%) TCE = 50 (+4%)
1244 Recalibrated to Hi CCl4 Cal Standard
TCM = 145, CCl4 = 2600, TCE = 56 ppb-wt.
RBK ~~1257 Analyzed SC-6~~ BAD INJECTION ? (syringe?)
1307 Analyzed AC-1
1315 Analyzed Blank.
Re Analyzed SC-6
1327 Analyzed Blank
1346 Analyzed Hi Cal as Sample ZH chk-32 for
Cal check TCM = 160 (+10%), CCl4 = 2640 (+2%), TCE = 55.7 (-1%)
1354 Analyzed Blank.
1400 Analyzed BOFN71 (cal std) as Sample for cal check
TCM = 167 (-2%), CCl4 = 53.3 (-3%), TCE = 45.7 (-5%)
1456 ANALYZED BOFN73 sample, 4.5g Soil, No Detects
1510 ANALYZED BOFN74 sample, 3.8g Soil, TRACE CCl4 (0.9 ppb) ~2.0 ppb
1520 ANALYZED BOFN75 Sample, 4.4g. Soil, No Detects
1530 ANALYZED BOFN76 SAMPLE, 4.3g Soil, No Detects
1539 ANALYZED BOFN77 SAMPLE (DUP) 4.6g Soil, No Detects
1549 Analyzed BOFN716 cal check. TCM = 164 (-4%), CCl4 = 46 (-16%), TCE = 43 (-10%)
1610 Departed site for the day.

6-2-95 R.B. Kirk

1100 Arrived at Z-9 site, Installed 10-6 eV lamp in Photovac 10s Plus, installed new Septa, Set carrier gas to 40 PSI / 5 ml flow and Started instrument warming up on Loop/auto purge.

1120 Prepared liquid calibration standard for TCE, PCE in 30 ml D.I. water as follows:

$TCE = \frac{1400\,\mu g}{ml} \times \frac{ml}{10^3\,ml} \times \frac{1.1}{30g} = 51$ ppb-wt

$PCE = \frac{240\,\mu g}{ml} \times \frac{ml}{10^3\,ml} \times \frac{6.2}{30g} = 50$ ppb-wt

1145 Removed 10 ml of Sample volume from BOFK57 and BOFK60 to allow for Head Space in 40 ml VOA Vial.

1255 Calibrated 10s Plus using liquid cal standard TCE = 51, PCE = 50 Ran as BOFKT9.

1308 Analyzed H_2O Blank as BOFKV0.

1325 Analyzed Sample BOFK60, TCE = 0.1 ppb.

1338 Analyzed Sample BOFK57, No Detects.

1351 Analyzed H_2O Cal as Sample for Cal check BOFKV1. TCE = 46 (-10%) PCE = 44 (-12%)

1415 Transferred files to disk.

1430 Shutdown photovac and departed site for the day.

6-7-95 Duane Jaeger

1000 Arrived at Z-9 VES area in 200-W Area. Converted 10S Plus to new software version 1.10. Setup GRID computer to operate 10S Plus

1115 Turned on 10S Plus and began warming up on autoloop. Carrier gas set at 40 psi. Installed new septum.

1230 Prepared liquid calibration standard
TCE = 1.1 ml/30g × 1400 ug/ml × ml/10³ml = 0.051 ppm-wt
PCE = 5.9 ml/30g × 240 ug/ml × ml/10³ml = 0.047 ppm-wt

1245 Set gc carrier gas flow to 5 ml/min. Analyzed calibration standard BOFKV2. Bad calibration fault

1307 Tried calibration again. Bad calibration fault

1334 Tried calibration again. Bad cal. fault cleared

1338 Prepared well water samples by removing about 12 ml sample from each.

1346 Tried calibration again. Successful cal. BOFKV2a

1401 Analyzed water blank. BOFKV3.

1415 Analyzed BOFK59. Well 699-80-43S Sample.

1427 Analyzed BOFK58. Well 699-70-31 Sample

1442 Analyzed BOFKV4 Cal Check TCE = 47 (-8%)
PCE = 39 (-18%)

1455 Recalled BOFKV2. Attempted to calibrate file.

1515 Recalled BOFKJ3. Attempted to calibrate air file.

1545 Shutdown equipment. Left site.

6/22/95 Duane Jacques

0700 Arrived a 200-Z-9 facility. Powered up GC and PC. Set carrier gas pressure to 40 psi. Installed new septum. Turned on 10.6 lamp. Loaded 100-FR-3 file, BOFKV5.gc. Set 10S Plus to warm up on autoloop

0845 Filled 1 liter tedlar bag w/ 1 ppm DCE/TCE/PCE.

0852 Analyzed 1 ppm-v DCE/TCE/PCE air standard.

0919 Analyzed ambient air/equipment blank.

0930 Prepared liquid calibration standard.

TCE = 1.3 ml/30g × 1400 mg/ml × ml/10^3ml = 0.061 ppm-wt

PCE = 6.2 ml/30g × 240 µg/ml × ml/10^3ml = 0.050 ppm-wt

0936 Analyzed soil gas #41, BOFKW1

0955 Analyzed liquid cal standard, BOFKV7

1007 Analyzed H_2O blank. BOFKW0

1019 Analyzed ~~site~~ groundwater #41, BOFKV8

1046 Analyzed soil gas #42, BOFKW2

1057 Analyzed soil gas duplicate #42, BOFKW3

1218 Analyzed groundwater #42, BOFKW4.

1340 Analyzed groundwater #41 replicate, BOFKW5.

1350 Installed new septum

1539 Analyzed H_2O cal check, BOFKW6 TCE = 53 (-13%)
PCE = 41 (-18%)

1549 Analyzed air cal check, BOFKW7 DCE = 1.010 (-8%)
TCE = 1.16 (-11%) PCE = 0.980 (-18%)

1600 Shut down 10S Plus left site.

6/23/95 Duane Jacques

0715 Arrived at 100-N Area to pick up mobile laboratory. Set carrier gas pressure to 40psi. Turned on 10 S Plus & started 10.6 eV lamp. Set instrument to warm up ~~[illegible]~~ on autoloop.

0750 Filled 1 L tedlar bag w/ 1ppm DCE/TCE/PCE Standard.

0825 ~~0830~~ Prepared liquid calibration standard.

ldg TCE = 1.1 ul/30g × 1400 ug/ml × ml/10^3 ul = 0.051 ppm-wt

PCE = 6.2 ul/30g × 240 ug/ml × ml/10^3 ul = 0.050 ppm-wt

0846 Ran 1ppm DCE/TCE/PCE air standard, BOFKW8.

0939 Analyzed ambient air/equipment blank, BOFKX1

0950 Analyzed #43 soil gas, BOFKX2.

1007 Recalled file BOFKV7.gc. Recalibrated, BOFKW9.

1020 Analyzed H_2O blank. BOFKX0.

1142 Analyzed location 43, purge H_2O. BOFKX3.

1155 Analyzed #43 water sample. BOFKX4.

1337 Analyzed #44 soil gas (tight purge). BOFKX5.

1349 Analyzed #44 soil gas (popped tip). BOFKX6.

1415 Analyzed #44 water sample. BOFKX7

1448 Analyzed Cal check BOFKX8. TCE = 48 (-6%)

PCE = 46 (-8%)

1539 Analyzed #49 soil gas, BOFKX9.

1552 Analyzed air cal check. BOG4P6. DCE = 1.04 (-5%)

TCE = 1.17 (-10%) PCE = 1.02 (-15%)

1619 Analyzed #49 groundwater. BOG4P7.

1640 Shut down equipment. Left site

6/27/95 Duane Jacques

0640 Arrived at 100-N Area. Set carrier gas pressure at 40 psi. Installed new septum. Turned on 10S Plus, started lamp, and began warming up instrument on autoloop.

0755 Filled 1L tedlar bag w/ 1ppm DCE, TCE, PCE

0800 Loaded BOFKW8.gc. Updated file for air cal.

0814 Analyzed 1ppm-v air standard, BOG4P8.

0825 Prepared liquid calibration standard

DDJ TCE = 1.4 µl/30g × 1400 ug/ml × ml/10³ µl = 0.065 ppm-wt

PCE = 6.1 µl/30g × 240 ug/ml × ml/10³ µl = 0.049 ppm-wt

0832 Analyzed Ambient air/equipment blank. BOG4Q2.

0845 Analyzed location #47 soil gas, BOG4Q1.

0915 Analyzed H_2O cal. BOG4P9.

0930 Analyzed H_2O blank. BOG4Q0.

0947 Analyzed location #47 water sample, BOG4Q3

1048 Analyzed second ambient air sample collected at location 45, BOG4Q5. DDJ

1103 Analyzed location 45 soil gas. BOG4Q4.

1245 Analyzed location 40 soil gas. BOG4Q7.

1258 Analyzed location 40 duplicate soil gas. BOG4Q8.

1310 Analyzed location 45 water sample, BOG4Q6.

1323 Analyzed location 40 water sample. BOG4Q9.

1337 Analyzed cal check BOG4R0. DCE = 1.00 (-9%)

TCE = 1.17 (-10%) PCE = 1.07 (-11%)

1422 Analyzed air sample from drum 3. BOG4R3.

1436 Analyzed air sample from drum 2. BOG4R2.

1451 Analyzed air sample from drum 1. BOG4R1.

1522 Analyzed H_2O cal check. TCE = 65 (±0%)

PCE = 48 (-2%) BOG4R5.

6/27/95 Duane Jacques

1553 Analyzed #32 H_2O resample. BOG4R4.
1610 Shut down equipment. Left site.

6/28/95 Duane Jacques
0640 Arrived at 100-N Area. Installed new septum. Set carrier gas pressure at 40 psi. Turned on 10S Plus, started lamp, and began warming up instrument on autoloop.
0730 Arrived at 100-FR-3 field site. location #36.
0745 COULD NOT GET THE DRIVER SIDE GENERATOR TO START AND RUN. QUITE AFTER 10 TO 15 SECONDS. (HO-74-4847)
0800 FILLED A TEDLAR BAG WITH CAL STANDARD from THE DCE, TCE, PCE CAL GAS BOTTLE.
0845 RAN CAL GAS STANDARD AS BOG4R6. — ? BAD CAL ?
0900 MADE up H_2O Cal Standard.
TCE = 1400 ug/ml x ml/10^3 ml x 0.9 ml/30g = 0.042 ppm-wt
PCE = 240 ug/ml x ml/10^3 ml x 5.6 ml/30g = 0.045 ppm-wt.
0905 RAN BLANK Air SAMPLE.
0914 RAN H_2O Cal Standard as BOG4R7
0925 RAN H_2O BLANK as BOG4R8
0949 RERAN VAPOR CAL. BOG4R6. GOOD CAL.
1004 RAN BLANK Air SAMPLE.
1021 Ran Cal Check on Vapor Cal #BOG4R9 DCE = 1.090 (-1%) TCE = 1.3 (0%), PCE = 1.197 (0%)
1037 Ran Cal Check on H_2O Cal as BOG450.
1050 ReSet to BOG4R6 and Ran Blank air Sample
1100 RBK Took soil gas Sample at Site #34 ~~BOG450~~ BOG451
1102 RBK took Ambient air Sample at Site #34 BOG452
1110 ANALYZED BOG451

6/28/95 (100-FR-3 Samples) R.B. Kerkow

1128 Analyzed BOG4S2

1141 Ran Air Blank.

1165 Ran H_2O Cal Std as Sample - Cal check
TCE = 43.2 (+3%) PCE = 45.7 (+2%)

1214 Ran H_2O Blank.

1330 Added 1 quart of SAE 40 wt oil to the Driver Side Generator. Re-Started generator - OK.

1430 RBK Picked up 3 H_2O Samples from Duane Jacques at location #31 West.
1) 1420, 17.0' (purge water) BOG4S3
2) 1430, 17.0' (sample) BOG4S4
3) 1445, 20.0' (sample) BOG4S5

1513 Analyzed BOG4S3 TCE = 25.4 ppb

1525 Analyzed BOG4S4 TCE = 26.3 ppb

1537 Analyzed BOG4S5 TCE = 32.2 ppb

1550 Analyzed Vapor Cal Std - Cal check BOG4S6.
DCE = 1083 (-2%) TCE = 1265 (-3%) PCE = 1135 (-5%)

1600 RBK Picked up H_2O Sample from Duane Jacques at #28 sample time 1550, Depth 20.0' BOG4S7.

1613 Analyzed BOG4S7. TCE = 9.3 ppb.

1625 Analyzed H_2O Cal STD as BOG4SØ. Cal Check
~~DE~~ RK TCE = 40.6 (-3%), PCE = 41.6 (-7%)

1640 Turned off Detector on PhotoVac and turned off GC. Set carrier gas to minimal flow.

1645 Departed 100-FR-3 Site, back to 100N/EAL.