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Environmental Restoration Contractor **ERC Team**

Interoffice Memorandum

OCT 1996 RECEIVED J.A. Lerch

Job No. 22192
Written Response Required? NO
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OU: 200-ZP-1
TSD: N/A
ERA: N/A
Subject Code: 8630

TO: J. R. Freeman Pollard, H9-12
J. A. Lerch, B1-35

DATE: October 14, 1996

COPIES: See Below

FROM: Duane Jacques
Analytical Services/Field Services
H9-10/372-9400

SUBJECT: **200-ZP-1 PHASE II PUMP AND TREAT PROCESS MONITORING, FIELD SCREENING RESULTS, AUGUST 1996 THROUGH SEPTEMBER 1996, REV 0**

REFERENCES:

1. BHI, 1996, *On-Site Measurements Quality Assurance Plan*, BHI-00852, REV 0, Bechtel Hanford, Inc., Richland, Washington.

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

3. BHI, 1995, *200-ZP-1 Field Screening Support Logbook*, EL-1273, Bechtel Hanford, Inc., Richland, Washington.

This data package contains field screening results for process water samples analyzed to monitor the 200-ZP-1 Phase II Pump and Treat System during the fourth quarter of FY 1996. The Quality Assurance level for this work corresponds to QA-1 as specified in the reference 1. Samples with HEIS numbers reported in this document were managed under SAF B96-155. Samples reported without HEIS numbers were collected and analyzed to monitor the system during the initial startup period but are not a part of SAF B96-155.

Attachment 1 contains Volatile Organic Compound (VOC) results for process water and process air samples collected from specified portions of the 200-ZP-1 Phase II Pump and Treat System. The water samples were analyzed using two different instruments. Water samples indicated by the instrument "10S Plus" were analyzed using a Photovac 10S Plus portable gas chromatograph operated in accordance with Field Screening Procedure (FSP) 1.1, *Aqueous Headspace Analysis of Volatile Organic Compounds in Water* (BHI 1995b). Information concerning calibration and operation of the gas chromatograph is contained in instrument logbook EL-1315. Water samples indicated by the instrument "HP 5890" were analyzed using a Hewlett Packard 5890 gas chromatograph with an autosampler operated in accordance with FSP 1.1 (BHI 1995b). Information concerning calibration and operation of the gas chromatograph is contained in instrument logbook EL-1329.

The air samples were also analyzed using two different instruments. Air samples indicated by the instrument "10S Plus" were analyzed using a Photovac 10S Plus portable gas chromatograph operated in accordance with Field Screening Procedure (FSP) 1.6, *Analysis of Volatile Organic Compounds in Soil Gas* (BHI 1995b). Information concerning calibration and operation of the gas chromatograph is contained in instrument logbook EL-1315. Air samples indicated by the instrument "B&K 1301" were analyzed using a Bruel and Kjaer 1301 Fourier Transform Infrared (FTIR) gas analyzer operated in accordance with FSP 1.6 (BHI 1995b). Information concerning calibration and operation of the FTIR gas analyzer is contained in field logbook EL-1273. Sample custody information for all samples reported in this document is also contained in field logbook EL-1273.

Please contact me if you have any questions on this information.

Duane Jacques

Duane Jacques, Scientist

IDJ:idj

Attachments:

200-ZP-1 Phase II Pump and Treat Process Monitoring, Field Screening Results, August 1996 through September 1996

Copies:

M. A. Buckmaster, H4-80, w/attachment
R. T. Coffman, H9-11, w/attachment
A. Hopkins, H9-11, w/attachment
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K. M. Singleton, H9-11, w/attachment
S. A. Strope, T7-12, w/attachment
W. S. Thompson, N1-28, w/attachment
BHI Document Control, H4-79, w/original attachment

Attachment 1

200-ZP-1 Phase II Pump and Treat Process Monitoring

Field Screening Results, August 1996 through September 1996

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					WATER ANALYSES			AIR ANALYSES		
Sample Location	*Analytical Instrument*	*HEIS Number*	*Sample/ Analysis Date*	*Sample Time*	*Chloroform (ug/L)*	*Carbon Tetrachloride (ug/L)*	*Trichloroethylene (ug/L)*	*Chloroform (ppmv)*	*Carbon Tetrachloride (ppmv)*	*Trichloroethylene (ppmv)*
Post Tank T-01	10S Plus		8/3/96	7:18	20	85	<2.0			
Post Tank T-02	10S Plus		8/3/96	8:20	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus		8/3/96	8:07	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus		8/3/96	9:39	<4.0	<2.0	<2.0			
Extraction Well #1	10S Plus		8/3/96	10:22	60	1200	<2.0			
Building Air	10S Plus		8/3/96	9:40				<0.10	<0.10	<0.10
Stack Effluent	10S Plus		8/3/96	9:45				<0.10	<0.10	<0.10
Pre Chiller	10S Plus		8/3/96	9:46				<0.10	<0.10	<0.10
Post Chiller	10S Plus		8/3/96	9:47				<0.10	<0.10	<0.10
Extraction Well #2	10S Plus		8/3/96	10:43	49	350	<2.0			
Extraction Well #3	10S Plus		8/3/96	10:50	46	90	<2.0			
Post Tank T-01	10S Plus		8/3/96	11:45	36	280	<2.0			
Post Tank T-02	10S Plus		8/3/96	12:55	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus		8/3/96	12:58	<4.0	<2.0	<2.0			
Stack Effluent	10S Plus		8/3/96	11:56				<0.10	<0.10	<0.10
Pre Chiller	10S Plus		8/3/96	11:57				<0.10	<0.10	<0.10
Post Chiller	10S Plus		8/3/96	11:58				0.66	0.85	<0.10
Post Tank T-02	10S Plus		8/3/96	13:20	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus		8/3/96	13:18	<4.0	<2.0	<2.0			
Stack Effluent	10S Plus		8/3/96	13:15				<0.10	<0.10	<0.10
Pre Chiller	10S Plus		8/3/96	13:16				0.15	1.4	<0.10
Post Chiller	10S Plus		8/3/96	13:17				0.13	1.3	<0.10
Post Tank T-02	10S Plus		8/3/96	13:38	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus		8/3/96	13:35	<4.0	<2.0	<2.0			
Stack Effluent	10S Plus		8/3/96	13:40				<0.10	<0.10	<0.10
Post Chiller	10S Plus		8/3/96	13:42				0.17	1.7	<0.10
Pre Chiller	10S Plus		8/3/96	13:44				0.20	1.6	<0.10
Post Tank T-01	10S Plus		8/3/96	14:35	30	310	<2.0			
Post Tank T-01	10S Plus		8/3/96	14:35	28	310	<2.0			
Extraction Well #1	10S Plus		8/3/96	14:42	28	1300	<2.0			
Extraction Well #2	10S Plus		8/3/96	14:50	22	390	<2.0			
Extraction Well #3	10S Plus		8/3/96	14:45	19	250	<2.0			

Attachment 1

200-ZP-1 Phase II Pump and Treat Process Monitoring

Field Screening Results, August 1996 through September 1996

SAF B96-155

					WATER ANALYSES			AIR ANALYSES		
Sample Location	*Analytical Instrument*	*HEIS Number*	*Sample/ Analysis Date*	*Sample Time*	*Chloroform (ug/L)*	*Carbon Tetrachloride (ug/L)*	*Trichloroethylene (ug/L)*	*Chloroform (ppmv)*	*Carbon Tetrachloride (ppmv)*	*Trichloroethylene (ppmv)*
Stack Effluent	10S Plus		8/4/96	12:30				<0.10	<0.10	<0.10
Post Chiller	10S Plus		8/4/96	12:30				0.25	3.3	<0.10
Pre Chiller	10S Plus		8/4/96	12:30				0.18	3.3	<0.10
Post Tank T-02	10S Plus		8/4/96	12:25	<4.0	2.2	<2.0			
Post valve V-01	10S Plus		8/4/96	12:20	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus		8/4/96	12:00	28	560	<2.0			
Post Tank T-01	10S Plus		8/4/96	12:49	27	560	<2.0			
Extraction Well #2	10S Plus		8/4/96	12:40	40	1200	5.6			
Post valve V-01	10S Plus		8/4/96	12:45	<4.0	<2.0	<2.0			
Post Tank T-02	10S Plus		8/4/96	12:47	<4.0	2.6	<2.0			
Extraction Well #3	10S Plus		8/4/96	12:43	19	440	<2.0			
Post Tank T-01	10S Plus		8/4/96	13:05	24	610	<2.0			
Post valve V-01	10S Plus		8/4/96	13:06	<4.0	<2.0	<2.0			
Post Tank T-02	10S Plus		8/4/96	13:07	<4.0	3.1	<2.0			
Extraction Well #2	10S Plus		8/4/96	13:08	28	1700	3.4			
Extraction Well #3	10S Plus		8/4/96	13:10	19	640	<2.0			
Pre Chiller	10S Plus		8/4/96	13:30				0.24	3.9	<0.10
Post Chiller	10S Plus		8/4/96	13:30				0.20	4.2	<0.10
Post valve V-01	10S Plus		8/4/96	13:56	<4.0	<2.0	<2.0			
Post Tank T-02	10S Plus		8/4/96	13:52	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus		8/4/96	13:50	21	820	<2.0			
Extraction Well #2	10S Plus		8/4/96	14:52	21	1400	6.0			
Extraction Well #3	10S Plus		8/4/96	14:55	15	610	<2.0			
Stack Effluent	10S Plus		8/4/96	13:55				<0.10	0.10	<0.10
Post Chiller	10S Plus		8/4/96	13:55				0.21	5.4	<0.10
Pre Chiller	10S Plus		8/4/96	13:55				0.19	5.3	<0.10
Post Tank T-02	10S Plus		8/4/96	14:45	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus		8/4/96	14:48	19	990	<2.0			
Extraction Well #1	10S Plus		8/4/96	14:05	23	1300	<2.0			
Pre chiller	10S Plus		8/4/96	14:30				<0.10	<0.10	<0.10
Post chiller	10S Plus		8/4/96	14:30				<0.10	<0.10	<0.10
Post Tank T-02	HP 5890		8/4/96	14:45	<2.0	2.0	<2.0			
Post Tank T-01	HP 5890		8/4/96	14:48	36	960	4.8			
Post valve V-01	10S Plus		8/4/96	14:40	<4.0	3.2	<2.0			

200-ZP-1 Phase II Pump and Treat Process Monitoring

Field Screening Results, August 1996 through September 1996

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Sample Location	Analytical Instrument	HEIS Number	Sample/ Analysis Date	Sample Time	WATER ANALYSES Chloroform (ug/L)	Carbon Tetrachloride (ug/L)	Trichloroethylene (ug/L)	AIR ANALYSES Chloroform (ppmv)	Carbon Tetrachloride (ppmv)	Trichloroethylene (ppmv)
Post Tank T-01	10S Plus		8/5/96	9:35	18	1000	<2.0			
Post valve V-01	10S Plus		8/5/96	9:40	<4.0	<2.0	<2.0			
Post Tank T-02	10S Plus		8/5/96	9:37	<4.0	2.5	<2.0			
Post Tank T-01	10S Plus		8/5/96	9:35	23	700	3.4			
Post Tank T-01	HP 5890		8/5/96	9:40	<2.0	<2.0	<2.0			
Post Tank T-02	HP 5890		8/5/96	9:37	<2.0	3.3	<2.0			
Post Tank T-02	10S Plus		8/5/96	9:55	<4.0	4.0	<2.0			
Post valve V-01	10S Plus		8/5/96	10:00	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus		8/5/96	9:58	10	640	<2.0			
Post Tank T-02	10S Plus		8/5/96	10:17	<4.0	2.9	<2.0			
Post valve V-01	10S Plus		8/5/96	10:20	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus		8/5/96	10:19	9.0	440	<2.0			
Post Tank T-02	10S Plus		8/5/96	10:50	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus		8/5/96	10:44	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus		8/5/96	10:46	<4.0	230	<2.0			
Stripper Tower	10S Plus		8/5/96	12:00	<4.0	<2.0	<2.0			
Stack Effluent	10S Plus		8/5/96	13:25				<0.10	<0.10	<0.10
Post Chiller	10S Plus		8/5/96	13:26				<0.10	1.5	<0.10
Pre Chiller	10S Plus		8/5/96	13:27				<0.10	1.4	<0.10
Post Tank T-02	10S Plus		8/5/96	13:36	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus		8/5/96	13:34	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus		8/5/96	13:32	8.1	440	<2.0			
Extraction Well #1	10S Plus		8/5/96	13:25	34	1700	<2.0			
Extraction Well #2	10S Plus		8/5/96	13:27	20	1300	2.6			
Extraction Well #3	10S Plus		8/5/96	13:30	17	600	<2.0			
Stack Effluent	10S Plus		8/5/96	14:46				<0.10	<0.10	<0.10
Post Chiller	10S Plus		8/5/96	14:47				0.13	5.3	<0.10
Pre Chiller	10S Plus		8/5/96	14:48				<0.10	5.3	<0.10
Post Tank T-02	10S Plus		8/5/96	14:52	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus		8/5/96	14:58	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus		8/5/96	14:50	16	1200	<2.0			
Extraction Well #2	10S Plus		8/5/96	14:54	23	2300	9.0			
Extraction Well #3	10S Plus		8/5/96	14:56	12	1200	<2.0			
Post Tank T-02	10S Plus		8/5/96	15:48	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus		8/5/96	15:43	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus		8/5/96	15:47	13	1200	3.1			
Extraction Well #2	10S Plus		8/5/96	15:46	13	1900	6.7			
Extraction Well #3	10S Plus		8/5/96	15:44	13	1100	<2.0			

Attachment 1

200-ZP-1 Phase II Pump and Treat Process Monitoring

Field Screening Results, August 1996 through September 1996

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Sample Location	Analytical Instrument	HEIS Number	Sample/ Analysis Date	Sample Time	WATER ANALYSES Chloroform (ug/L)	Carbon Tetrachloride (ug/L)	Trichloroethylene (ug/L)	AIR ANALYSES Chloroform (ppmv)	Carbon Tetrachloride (ppmv)	Trichloroethylene (ppmv)
Post Tank T-02	HP 5890		8/9/96	13:26	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890		8/9/96	13:23	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890		8/9/96	13:24	16	920	3.2			
Extraction Well #2	HP 5890		8/9/96	13:20	23	2200	13.8			
Extraction Well #3	HP 5890		8/9/96	13:22	26	1300	1.5			
Post Tank T-02	HP 5890		8/9/96	14:19	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890		8/9/96	14:12	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890		8/9/96	14:18	15	1200	5.1			
Extraction Well #2	HP 5890		8/9/96	14:16	20	2200	14			
Extraction Well #3	HP 5890		8/9/96	14:15	17	1700	2.4			
Stack Effluent	B&K 1301		8/9/96	14:24				<1.0	<1.0	<1.0
Post Chiller	B&K 1301		8/9/96	14:22				<1.0	6.0	<1.0
Pre Chiller	B&K 1301		8/9/96	14:20				<1.0	6.4	<1.0
Post Tank T-02	HP 5890		8/9/96	15:06	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890		8/9/96	15:03	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890		8/9/96	15:05	15	1500	6.2			
Post Tank T-02	HP 5890		8/13/96	7:55	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890		8/13/96	9:04	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890		8/13/96	9:02	7.4	470	<2.0			
Extraction Well #2	HP 5890		8/13/96	9:06	15	2400	9.5			
Extraction Well #3	HP 5890		8/13/96	9:08	120	1100	1.1			
Post Tank T-02	HP 5890		8/13/96	9:00	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890		8/13/96	10:09	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890		8/13/96	10:10	10	1200	2.2			
Extraction Well #2	HP 5890		8/13/96	10:07	15	2500	11			
Extraction Well #3	HP 5890		8/13/96	10:05	100	1300	1.5			
Post Tank T-02	HP 5890		8/13/96	10:11	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890		8/13/96	11:41	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890		8/13/96	11:37	9.7	1600	3.5			
Extraction Well #2	HP 5890		8/13/96	11:39	15	2500	11			
Extraction Well #3	HP 5890		8/13/96	11:40	79	1400	2.5			
Post Tank T-02	HP 5890		8/13/96	11:36	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890		8/13/96	13:13	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890		8/13/96	13:09	9.5	1600	3.6			
Well 299-W15-10	HP 5890		8/13/96	13:00	13	2200	10			
Post Tank T-02	HP 5890		8/13/96	13:07	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890		8/13/96	14:18	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890		8/13/96	14:23	10	1800	4.8			
Extraction Well #2	HP 5890		8/13/96	14:20	16	2900	14			
Extraction Well #3	HP 5890		8/13/96	14:21	52	1700	3.8			
Post Tank T-02	HP 5890		8/13/96	14:24	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890		8/13/96	15:31	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890		8/13/96	15:29	11	2100	5.5			
Extraction Well #2	HP 5890		8/13/96	15:32	15	2500	12			
Extraction Well #3	HP 5890		8/13/96	15:34	46	1700	4.1			
Post Tank T-02	HP 5890		8/13/96	15:28	<2.0	<2.0	<2.0			
Stack Effluent	10S Plus		8/13/96	15:22				<0.10	<0.10	<0.10
Post Chiller	10S Plus		8/13/96	15:25				<0.10	8.8	<0.10
Pre Chiller	10S Plus		8/13/96	15:26				<0.10	9.0	<0.10

Attachment 1

200-ZP-1 Phase II Pump and Treat Process Monitoring

Field Screening Results, August 1996 through September 1996

SAF B96-155

					WATER ANALYSES			AIR ANALYSES		
Sample Location	*Analytical Instrument*	*HEIS Number*	*Sample/ Analysis Date*	*Sample Time*	*Chloroform (ug/L)*	*Carbon Tetrachloride (ug/L)*	*Trichloroethylene (ug/L)*	*Chloroform (ppmv)*	*Carbon Tetrachloride (ppmv)*	*Trichloroethylene (ppmv)*
Post Tank T-02	HP 5890	B0HZM3	8/14/96	9:37	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890	B0HZM4	8/14/96	9:35	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0HZM5	8/14/96	9:38	10	2100	5.4			
Extraction Well #2	HP 5890	B0HZM6	8/14/96	9:33	16	2300	10			
Extraction Well #3	HP 5890	B0HZM7	8/14/96	9:31	29	1900	5.1			
Post Tank T-02	HP 5890	B0HZM8	8/14/96	14:04	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890	B0HZM9	8/14/96	14:06	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0HZN0	8/14/96	14:03	10	2200	7.0			
Extraction Well #2	HP 5890	B0HZN1	8/14/96	14:07	14	2400	13			
Extraction Well #3	HP 5890	B0HZN2	8/14/96	14:08	30	1900	6.3			
Stack Effluent	B&K 1301	B0HZY3	8/14/96	14:50				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0HZY4	8/14/96	14:53				<1.0	9.7	<1.0
Pre Chiller	B&K 1301	B0HZY5	8/14/96	14:55				<1.0	10	<1.0
Post Tank T-02	HP 5890	B0HZN3	8/15/96	11:26	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890	B0HZN4	8/15/96	11:29	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0HZN5	8/15/96	11:27	8.7	1900	6.2			
Extraction Well #2	HP 5890	B0HZN6	8/15/96	11:32	14	2000	11			
Extraction Well #3	HP 5890	B0HZN7	8/15/96	11:31	34	1900	5.9			
Stack Effluent	B&K 1301	B0HZY6	8/15/96	11:24				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0HZY7	8/15/96	11:22				<1.0	11	<1.0
Pre Chiller	B&K 1301	B0HZY8	8/15/96	11:23				<1.0	10	<1.0
Post Tank T-02	HP 5890	B0HZN8	8/15/96	14:48	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890	B0HZN9	8/15/96	14:52	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0HZP0	8/15/96	14:49	9.1	2000	6.8			
Extraction Well #2	HP 5890	B0HZP1	8/15/96	14:55	14	2100	11			
Extraction Well #3	HP 5890	B0HZP2	8/15/96	14:54	26	1700	5.6			
Post Tank T-02	HP 5890	B0HZP3	8/16/96	10:47	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890	B0HZP4	8/16/96	10:49	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0HZP5	8/16/96	10:48	9.1	1900	6.2			
Extraction Well #2	HP 5890	B0HZP6	8/16/96	10:52	14	2300	13			
Extraction Well #3	HP 5890	B0HZP7	8/16/96	10:51	34	1900	6.3			
Stack Effluent	B&K 1301	B0HZY9	8/16/96	10:56				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0HZZ0	8/16/96	10:55				<1.0	10	<1.0
Pre Chiller	B&K 1301	B0HZZ1	8/16/96	10:57				<1.0	9.9	<1.0
Post Tank T-02	HP 5890	B0HZP8	8/16/96	14:21	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890	B0HZP9	8/16/96	14:20	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0HZQ0	8/16/96	14:22	9.7	2100	7.0			
Extraction Well #2	HP 5890	B0HZQ1	8/16/96	14:17	13	2200	13			
Extraction Well #3	HP 5890	B0HZQ2	8/16/96	14:18	37	1700	6.0			

200-ZP-1 Phase II Pump and Treat Process Monitoring

Field Screening Results, August 1996 through September 1996

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					WATER ANALYSES			AIR ANALYSES		
Sample Location	*Analytical Instrument*	*HEIS Number*	*Sample/ Analysis Date*	*Sample Time*	*Chloroform (ug/L)*	*Carbon Tetrachloride (ug/L)*	*Trichloroethylene (ug/L)*	*Chloroform (ppmv)*	*Carbon Tetrachloride (ppmv)*	*Trichloroethylene (ppmv)*
Post Tank T-02	HP 5890	B0HZQ3	8/19/96	10:47	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890	B0HZQ4	8/19/96	10:49	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0HZQ5	8/19/96	10:48	9.1	1900	6.2			
Extraction Well #2	HP 5890	B0HZQ6	8/19/96	10:52	14	2300	13			
Extraction Well #3	HP 5890	B0HZQ7	8/19/96	10:51	34	1900	6.3			
Stack Effluent	B&K 1301	B0HZZ2	8/19/96	10:56				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0HZZ3	8/19/96	10:55				<1.0	10	<1.0
Pre Chiller	B&K 1301	B0HZZ4	8/19/96	10:57				<1.0	9.9	<1.0
Post Tank T-02	HP 5890	B0HZQ8	8/19/96	14:21	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890	B0HZQ9	8/19/96	14:20	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0HZR0	8/19/96	14:22	9.7	2100	7.0			
Extraction Well #2	HP 5890	B0HZR1	8/19/96	14:17	13	2200	13			
Extraction Well #3	HP 5890	B0HZR2	8/19/96	14:18	37	1700	6.0			
Post Tank T-02	10S Plus	B0HZR3	8/20/96	10:07	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0HZR4	8/20/96	9:57	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0HZR5	8/20/96	10:04	<10	1800	<5.0			
Extraction Well #1	10S Plus	B0HZR6	8/20/96	10:00	13	2200	<5.0			
Extraction Well #2	10S Plus	B0HZR7	8/20/96	10:01	<10	1800	<5.0			
Extraction Well #3	10S Plus	B0HZR8	8/20/96	10:03	<10	1700	<5.0			
Stack Effluent	B&K 1301	B0HZZ5	8/20/96	9:54				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0HZZ6	8/20/96	9:52				<1.0	12	<1.0
Pre Chiller	B&K 1301	B0HZZ7	8/20/96	9:50				<1.0	12	<1.0
Post Tank T-02	10S Plus	B0HZR9	8/20/96	14:27	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0HZS0	8/20/96	14:29	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0HZS1	8/20/96	14:26	9.7	2000	<5.0			
Extraction Well #1	10S Plus	B0HZS2	8/20/96	14:20	<10	2200	<5.0			
Extraction Well #2	10S Plus	B0HZS3	8/20/96	14:22	<10	1900	<5.0			
Extraction Well #3	10S Plus	B0HZS4	8/20/96	14:24	<10	1700	<5.0			
Post Tank T-02	10S Plus	B0HZS5	8/21/96	11:20	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0HZS6	8/21/96	11:11	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0HZS7	8/21/96	11:19	<10	1800	<5.0			
Extraction Well #1	10S Plus	B0HZS8	8/21/96	11:13	<10	2000	<5.0			
Extraction Well #2	10S Plus	B0HZS9	8/21/96	11:15	13	1900	<5.0			
Extraction Well #3	10S Plus	B0HZT0	8/21/96	11:17	<10	1800	<5.0			
Stack Effluent	B&K 1301	B0HZZ8	8/21/96	11:24				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0HZZ9	8/21/96	11:22				<1.0	12	<1.0
Pre Chiller	B&K 1301	B0J000	8/21/96	11:26				<1.0	11	<1.0
Post Tank T-02	10S Plus	B0HZT1	8/21/96	14:18	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0HZT2	8/21/96	14:09	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0HZT3	8/21/96	14:16	<10	1900	<5.0			
Extraction Well #1	10S Plus	B0HZT4	8/21/96	14:11	<10	2200	<5.0			
Extraction Well #2	10S Plus	B0HZT5	8/21/96	14:13	<10	2000	5.9			
Extraction Well #3	10S Plus	B0HZT6	8/21/96	14:14	<10	1500	<5.0			

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Field Screening Results, August 1996 through September 1996

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					WATER ANALYSES			AIR ANALYSES		
Sample Location	*Analytical Instrument*	*HEIS Number*	*Sample/ Analysis Date*	*Sample Time*	*Chloroform (ug/L)*	*Carbon Tetrachloride (ug/L)*	*Trichloroethylene (ug/L)*	*Chloroform (ppmv)*	*Carbon Tetrachloride (ppmv)*	*Trichloroethylene (ppmv)*
Post Tank T-02	10S Plus	B0HZT7	8/22/96	9:55	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0HZT8	8/22/96	9:59	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0HZT9	8/22/96	9:57	<10	1800	<5.0			
Extraction Well #1	10S Plus	B0HZV0	8/22/96	10:00	27	2100	<5.0			
Extraction Well #2	10S Plus	B0HZV1	8/22/96	10:01	13	1900	<5.0			
Extraction Well #3	10S Plus	B0HZV2	8/22/96	10:02	<10	1600	<5.0			
Stack Effluent	B&K 1301	B0J001	8/22/96	14:21				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J002	8/22/96	14:25				<1.0	11	<1.0
Pre Chiller	B&K 1301	B0J0K9	8/22/96	14:24				<1.0	11	<1.0
Post Tank T-02	10S Plus	B0HZV3	8/22/96	14:23	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0HZV4	8/22/96	14:18	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0HZV5	8/22/96	14:21	<10	1900	<5.0			
Extraction Well #1	10S Plus	B0HZV6	8/22/96	14:13	<10	2200	<5.0			
Extraction Well #2	10S Plus	B0HZV7	8/22/96	14:15	<10	1900	<5.0			
Extraction Well #3	10S Plus	B0HZV8	8/22/96	14:16	<10	1800	<5.0			
Post Tank T-02	10S Plus	B0HZV9	8/23/96	6:29	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0HZW0	8/23/96	6:27	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0HZW1	8/23/96	6:28	<10	1600	<5.0			
Extraction Well #1	10S Plus	B0HZW2	8/23/96	6:20	20	2100	<5.0			
Extraction Well #2	10S Plus	B0HZW3	8/23/96	6:22	21	1900	<5.0			
Extraction Well #3	10S Plus	B0HZW4	8/23/96	6:25	<10	1600	<5.0			
Stack Effluent	B&K 1301	B0J0L0	8/23/96	6:34				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0L1	8/23/96	6:35				<1.0	9.5	<1.0
Pre Chiller	B&K 1301	B0J0L2	8/23/96	6:36				<1.0	9.7	<1.0
Post Tank T-02	HP 5890	B0HZW5	8/26/96	13:05	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890	B0HZW6	8/26/96	13:09	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0HZW7	8/26/96	13:07	8.7	1800	4.9			
Extraction Well #1	HP 5890	B0HZW8	8/26/96	13:11	13	2400	5.4			
Extraction Well #2	HP 5890	B0HZW9	8/26/96	13:12	10	1900	9.0			
Extraction Well #3	HP 5890	B0HZX0	8/26/96	13:13	8.8	1800	3.3			
Stack Effluent	B&K 1301	B0J0L3	8/26/96	13:04				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0L4	8/26/96	13:07				<1.0	11	<1.0
Pre Chiller	B&K 1301	B0J0L5	8/26/96	13:06				<1.0	11	<1.0
Post Tank T-02	HP 5890	B0HZX1	8/27/96	12:34	<2.0	<2.0	<2.0			
Post valve V-01	HP 5890	B0HZX2	8/27/96	12:37	<2.0	3.6	<2.0			
Post Tank T-01	HP 5890	B0HZX3	8/27/96	12:35	9.0	1600	5.7			
Extraction Well #1	HP 5890	B0HZX4	8/27/96	12:41	13	2100	5.7			
Extraction Well #2	HP 5890	B0HZX5	8/27/96	12:40	9.5	1500	5.7			
Extraction Well #3	HP 5890	B0HZX6	8/27/96	12:38	8.8	1800	3.3			
Stack Effluent	B&K 1301	B0J0L6	8/27/96	12:47				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0L7	8/27/96	12:44				<1.0	11	<1.0
Pre Chiller	B&K 1301	B0J0L8	8/27/96	12:43				<1.0	11	<1.0
Post valve V-01	HP 5890	B0HZX7	8/27/96	15:30	<2.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0HZX8	8/27/96	14:46	<2.0	<2.0	<2.0			

Attachment 1

200-ZP-1 Phase II Pump and Treat Process Monitoring

Field Screening Results, August 1996 through September 1996

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					WATER ANALYSES			AIR ANALYSES		
Sample Location	*Analytical Instrument*	*HEIS Number*	*Sample/ Analysis Date*	*Sample Time*	*Chloroform (ug/L)*	*Carbon Tetrachloride (ug/L)*	*Trichloroethylene (ug/L)*	*Chloroform (ppmv)*	*Carbon Tetrachloride (ppmv)*	*Trichloroethylene (ppmv)*
Post Tank T-02	10S Plus	B0HZX9	8/28/96	11:30	<4.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0HZY0	8/28/96	11:30	<2.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0HZY1	8/28/96	11:37	<4.0	<2.0	<2.0			
Post valve V-01	HP 5890	B0HZY2	8/28/96	11:37	<2.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J0Q9	8/28/96	11:32	<10	1700	<5.0			
Extraction Well #1	10S Plus	B0J0R0	8/28/96	11:34	<10	1900	<5.0			
Extraction Well #3	10S Plus	B0J0R1	8/28/96	11:36	<10	1600	<5.0			
Stack Effluent	B&K 1301	B0J0L9	8/28/96	14:10				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0M0	8/28/96	14:06				<1.0	8.8	<1.0
Pre Chiller	B&K 1301	B0J0M1	8/28/96	14:07				<1.0	9.3	<1.0
Post Tank T-02	10S Plus	B0J0R2	8/28/96	14:04	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0J0R3	8/28/96	14:06	<4.0	<2.0	<2.0			
Post Tank T-02	10S Plus	B0J0R4	8/29/96	10:32	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0J0R5	8/29/96	10:40	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J0R6	8/29/96	10:38	<10	1600	<5.0			
Extraction Well #1	10S Plus	B0J0R7	8/29/96	10:44	<10	2100	<5.0			
Extraction Well #3	10S Plus	B0J0R8	8/29/96	10:43	<10	1700	<5.0			
Stack Effluent	B&K 1301	B0J0M2	8/29/96	13:23				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0M3	8/29/96	13:21				<1.0	8.3	<1.0
Pre Chiller	B&K 1301	B0J0M4	8/29/96	13:20				<1.0	8.5	<1.0
Post Tank T-02	10S Plus	B0J0R9	8/29/96	13:14	<4.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J0S0	8/29/96	13:14	<2.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0J0S1	8/29/96	13:12	<4.0	<2.0	<2.0			
Post valve V-01	HP 5890	B0J0S2	8/29/96	13:12	<2.0	4.0	<2.0			
Post Tank T-01	10S Plus	B0J0S3	8/29/96	13:16	<10	1600	<5.0			
Post Tank T-01	HP 5890	B0J0S4	8/29/96	13:16	11	1900	6.2			
Post Tank T-02	10S Plus	B0J0S6	8/30/96	10:32	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0J0S5	8/30/96	9:52	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J0S7	8/30/96	9:54	<10	1700	<5.0			
Extraction Well #1	10S Plus	B0J0S8	8/30/96	9:47	<10	2000	<5.0			
Extraction Well #2	10S Plus	B0J0S9	8/30/96	9:49	<10	1800	<5.0			
Extraction Well #3	10S Plus	B0J0T0	8/30/96	9:51	<10	1600	<5.0			
Stack Effluent	B&K 1301	B0J0M5	8/30/96	12:40				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0M6	8/30/96	12:41				<1.0	12	<1.0
Pre Chiller	B&K 1301	B0J0M7	8/30/96	12:42				<1.0	12	<1.0
Post valve V-01	10S Plus	B0J0T1	8/30/96	12:35	<4.0	<2.0	<2.0			
Post Tank T-02	10S Plus	B0J0T2	8/30/96	12:30	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J0T3	8/30/96	12:32	<10	1700	<5.0			
Extraction Well #2	10S Plus	B0J0T4	8/30/96	12:38	<10	1800	<5.0			

Attachment 1

200-ZP-1 Phase II Pump and Treat Process Monitoring

Field Screening Results, August 1996 through September 1996

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					WATER ANALYSES			AIR ANALYSES		
Sample Location	*Analytical Instrument*	*HEIS Number*	*Sample/ Analysis Date*	*Sample Time*	*Chloroform (ug/L)*	*Carbon Tetrachloride (ug/L)*	*Trichloroethylene (ug/L)*	*Chloroform (ppmv)*	*Carbon Tetrachloride (ppmv)*	*Trichloroethylene (ppmv)*
Post Tank T-02	10S Plus	B0J0T6	9/3/96	11:13	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0J0T5	9/3/96	11:10	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J0T7	9/3/96	11:11	<10	1800	<5.0			
Extraction Well #1	10S Plus	B0J0T8	9/3/96	11:08	<10	2200	<5.0			
Extraction Well #2	10S Plus	B0J0T9	9/3/96	11:06	<10	1900	5.6			
Extraction Well #3	10S Plus	B0J0V0	9/3/96	11:04	<10	1800	<5.0			
Stack Effluent	B&K 1301	B0J0M8	9/3/96	14:16				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0M9	9/3/96	14:14				<1.0	12	<1.0
Pre Chiller	B&K 1301	B0J0N0	9/3/96	14:13				<1.0	12	<1.0
Post valve V-01	10S Plus	B0J0V1	9/3/96	14:22	<4.0	<2.0	<2.0			
Post valve V-01	HP 5890	B0J0V2	9/3/96	14:22	<2.0	<2.0	<2.0			
Post Tank T-02	10S Plus	B0J0V3	9/3/96	14:20	<4.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J0V4	9/3/96	14:20	<2.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J0V5	9/3/96	14:18	<10	1900	<5.0			
Post Tank T-01	HP 5890	B0J0V6	9/3/96	14:18	11	2000	7.4			
Post Tank T-02	10S Plus	B0J0V7	9/4/96	10:12	<4.0	<2.0	<2.0			
Post valve V-01	10S Plus	B0J0V8	9/4/96	10:16	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J0V9	9/4/96	10:14	<10	1800	<5.0			
Extraction Well #1	10S Plus	B0J0W0	9/4/96	10:21	<10	2100	<5.0			
Extraction Well #2	10S Plus	B0J0W1	9/4/96	10:19	<10	1800	<5.0			
Extraction Well #3	10S Plus	B0J0W2	9/4/96	10:17	<10	1700	<5.0			
Stack Effluent	B&K 1301	B0J0N1	9/4/96	13:04				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0N2	9/4/96	13:05				<1.0	11	<1.0
Pre Chiller	B&K 1301	B0J0N3	9/4/96	13:06				<1.0	11	<1.0
Post valve V-01	10S Plus	B0J0W4	9/4/96	13:03	<4.0	<2.0	<2.0			
Post Tank T-02	10S Plus	B0J0W3	9/4/96	12:59	<4.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J0W5	9/4/96	13:01	<10	1700	<5.0			
Post valve V-01	HP 5890	B0J0W7	9/5/96	10:46	<2.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J0W6	9/5/96	10:45	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0J0W8	9/5/96	10:44	10	1900	6.5			
Extraction Well #1	HP 5890	B0J0W9	9/5/96	10:50	18	2500	7.5			
Extraction Well #2	HP 5890	B0J0X0	9/5/96	10:49	13	1800	10			
Extraction Well #3	HP 5890	B0J0X1	9/5/96	10:48	15	1900	4.9			
Stack Effluent	B&K 1301	B0J0N4	9/5/96	10:42				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0N5	9/5/96	10:41				<1.0	11	<1.0
Pre Chiller	B&K 1301	B0J0N6	9/5/96	10:39				<1.0	11	<1.0
Post valve V-01	HP 5890	B0J0X2	9/5/96	13:03	<2.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J0X3	9/5/96	12:59	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0J0X4	9/5/96	13:01	11	1900	7.1			
Post Valve V-01	HP 5890	B0J0X5	9/6/96	11:15	<2.0	2.3	<2.0			
Post Tank T-02	HP 5890	B0J0X6	9/6/96	11:05	<2.0	7.1	<2.0			
Post Tank T-01	HP 5890	B0J0X7	9/6/96	11:02	11	2500	7.2			
Extraction Well #1	HP 5890	B0J0X8	9/6/96	11:11	18	3300	8.2			
Extraction Well #2	HP 5890	B0J0X9	9/6/96	11:12	15	3100	13.3			
Extraction Well #3	HP 5890	B0J0Y0	9/6/96	11:13	13	2900	6.2			
Post valve V-01	HP 5890	B0J0Y1	9/6/96	13:14	<2.0	4.8	<2.0			
Post valve V-01	10S Plus	B0J0Y4	9/6/96	13:14	<4.0	2.1	<2.0			
Post Tank T-02	HP 5890	B0J0Y2	9/6/96	13:10	<2.0	7.7	<2.0			
Post Tank T-02	10S Plus	B0J0Y5	9/6/96	13:10	<4.0	2.7	<2.0			
Post Tank T-01	HP 5890	B0J0Y3	9/6/96	13:12	13	2800	7.8			

Attachment 1

200-ZP-1 Phase II Pump and Treat Process Monitoring

Field Screening Results, August 1996 through September 1996

SAF B96-155

					WATER ANALYSES			AIR ANALYSES		
Sample Location	*Analytical Instrument*	*HEIS Number*	*Sample/ Analysis Date*	*Sample Time*	*Chloroform (ug/L)*	*Carbon Tetrachloride (ug/L)*	*Trichloroethylene (ug/L)*	*Chloroform (ppmv)*	*Carbon Tetrachloride (ppmv)*	*Trichloroethylene (ppmv)*
Post Valve V-01	HP 5890	B0J0Y6	9/9/96	12:50	<2.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J0Y7	9/9/96	12:47	<2.0	3.9	<2.0			
Post Tank T-01	HP 5890	B0J0Y8	9/9/96	12:49	<2.0	190	<2.0			
Extraction Well #1	HP 5890	B0J0Y9	9/9/96	14:54	19	3200	10			
Extraction Well #2	HP 5890	B0J0Z0	9/9/96	14:55	15	2700	13			
Extraction Well #3	HP 5890	B0J0Z1	9/9/96	14:56	13	2600	7.1			
Stack Effluent	B&K 1301	B0J0N7	9/9/96	15:25				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0N8	9/9/96	15:24				<1.0	6.9	<1.0
Pre Chiller	B&K 1301	B0J0N9	9/9/96	15:21				<1.0	6.7	<1.0
Post Valve V-01	HP 5890	B0J0Z3	9/9/96	14:58	<2.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J0Z2	9/9/96	14:53	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0J0Z4	9/9/96	14:51	6.9	1100	3.8			
Post Valve V-01	10S Plus	B0J0Z5	9/10/96	11:48	<4.0	<2.0	<2.0			
Post Valve V-01	HP 5890	B0J102	9/10/96	11:48	<2.0	<2.0	<2.0			
Post Tank T-02	10S Plus	B0J0Z6	9/10/96	11:42	<4.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J103	9/10/96	11:42	<2.0	<2.0	<2.0			
TSL04 Valve	10S Plus	B0J101	9/10/96	11:38	<4.0	<2.0	<2.0			
TSL04 Valve	HP 5890	B0J108	9/10/96	11:38	<2.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J0Z7	9/10/96	11:43	<10	1900	11			
Post Tank T-01	HP 5890	B0J104	9/10/96	11:43	13	1700	7.2			
Extraction Well #1	10S Plus	B0J0Z8	9/10/96	11:45	19	2400	<5.0			
Extraction Well #1	HP 5890	B0J105	9/10/96	11:45	20	2200	8.0			
Extraction Well #2	10S Plus	B0J0Z9	9/10/96	11:46	<10	1900	8.3			
Extraction Well #2	HP 5890	B0J106	9/10/96	11:46	14	1700	11			
Extraction Well #3	10S Plus	B0J100	9/10/96	11:47	<10	1900	<5.0			
Extraction Well #3	HP 5890	B0J107	9/10/96	11:47	13	1800	6.2			
Stack Effluent	B&K 1301	B0J0P0	9/10/96	11:51				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0P1	9/10/96	11:50				<1.0	12	<1.0
Post Valve V-01	10S Plus	B0J109	9/11/96	12:00	<4.0	<2.0	<2.0			
Post Valve V-01	HP 5890	B0J110	9/11/96	12:00	<2.0	<2.0	<2.0			
Post Tank T-02	10S Plus	B0J111	9/11/96	12:10	<4.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J112	9/11/96	12:10	<2.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J113	9/11/96	12:15	<10	2100	6.1			
Post Tank T-01	HP 5890	B0J114	9/11/96	12:15	15	2700	10.1			
Extraction Well #1	10S Plus	B0J115	9/11/96	11:55	16	2200	<5.0			
Extraction Well #1	HP 5890	B0J116	9/11/96	11:55	20	3500	12			
Extraction Well #2	10S Plus	B0J117	9/11/96	11:57	<10	1900	7.6			
Extraction Well #2	HP 5890	B0J118	9/11/96	11:57	15	2700	15			
Extraction Well #3	10S Plus	B0J119	9/11/96	11:59	<10	1800	<5.0			
Extraction Well #3	HP 5890	B0J120	9/11/96	11:59	13	2500	8.1			
Stack Effluent	B&K 1301	B0J0P3	9/11/96	11:51				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0P2	9/11/96	11:50				<1.0	12	<1.0

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Attachment 1

200-ZP-1 Phase II Pump and Treat Process Monitoring

Field Screening Results, August 1996 through September 1996

SAF B96-155

					WATER ANALYSES			AIR ANALYSES		
Sample Location	*Analytical Instrument*	*HEIS Number*	*Sample/ Analysis Date*	*Sample Time*	*Chloroform (ug/L)*	*Carbon Tetrachloride (ug/L)*	*Trichloroethylene (ug/L)*	*Chloroform (ppmv)*	*Carbon Tetrachloride (ppmv)*	*Trichloroethylene (ppmv)*
Post Valve V-01	HP 5890	B0J121	9/12/96	10:38	<2.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J122	9/12/96	10:35	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0J123	9/12/96	10:36	16	3100	12			
Extraction Well #1	HP 5890	B0J124	9/12/96	10:42	21	3800	13			
Extraction Well #2	HP 5890	B0J125	9/12/96	10:41	16	2900	17			
Extraction Well #3	HP 5890	B0J126	9/12/96	10:40	15	3300	10			
Stack Effluent	B&K 1301	B0J0P5	9/12/96	10:33				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0P4	9/12/96	10:31				<1.0	12	<1.0
Post Valve V-01	HP 5890	B0J127	9/12/96	13:53	<2.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J128	9/12/96	13:55	<2.0	<2.0	<2.0			
Post Tank T-01	HP 5890	B0J129	9/12/96	13:56	15	2600	10			
Post Valve V-01	10S Plus	B0J130	9/13/96	9:05	<4.0	<2.0	<2.0			
Post Valve V-01	HP 5890	B0J139	9/13/96	8:45	<2.0	<2.0	<2.0			
Post Tank T-02	10S Plus	B0J131	9/13/96	9:13	<4.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J140	9/13/96	8:48	<2.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J132	9/13/96	9:17	<10	1700	<5.0			
Post Tank T-01	HP 5890	B0J141	9/13/96	8:52	14	2700	10			
Extraction Well #1	HP 5890	B0J142	9/13/96	8:38	24	3700	13			
Extraction Well #2	HP 5890	B0J143	9/13/96	8:39	16	2600	15			
Extraction Well #3	HP 5890	B0J144	9/13/96	8:40	15	2800	9.0			
Post Valve V-01	10S Plus	B0J145	9/16/96	12:43	<4.0	<2.0	<2.0			
Post Valve V-01	HP 5890	B0J151	9/16/96	12:43	<2.0	<2.0	<2.0			
Post Tank T-02	10S Plus	B0J146	9/16/96	12:40	<4.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J152	9/16/96	12:40	<2.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J147	9/16/96	12:38	<10	1600	<5.0			
Extraction Well #1	10S Plus	B0J148	9/16/96	12:46	<10	2000	<5.0			
Extraction Well #2	10S Plus	B0J149	9/16/96	12:47	<10	2000	<5.0			
Extraction Well #3	10S Plus	B0J150	9/16/96	12:48	<10	2500	<5.0			
Stack Effluent	B&K 1301	B0J0P7	9/16/96	12:53				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0P6	9/16/96	12:51				<1.0	10	<1.0
Post Valve V-01	10S Plus	B0J153	9/17/96	13:02	<4.0	<2.0	<2.0			
Post Valve V-01	HP 5890	B0J159	9/17/96	13:02	<2.0	<2.0	<2.0			
Post Tank T-02	10S Plus	B0J154	9/17/96	13:04	<4.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J160	9/17/96	13:04	<2.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J155	9/17/96	13:00	<20	1600	8.9			
Post Tank T-01	HP 5890	B0J161	9/17/96	13:00	14	2200	9.3			
Extraction Well #1	10S Plus	B0J156	9/17/96	12:52	<10	2400	<5.0			
Extraction Well #1	HP 5890	B0J162	9/17/96	12:52	19	3500	12			
Extraction Well #2	10S Plus	B0J157	9/17/96	12:55	<10	1800	<5.0			
Extraction Well #2	HP 5890	B0J163	9/17/96	12:55	27	2700	16			
Extraction Well #3	10S Plus	B0J158	9/17/96	12:57	<10	1900	<5.0			
Extraction Well #3	HP 5890	B0J164	9/17/96	12:57	14	3000	9.3			
Stack Effluent	B&K 1301	B0J0P8	9/17/96	13:06				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0P9	9/17/96	13:08				<1.0	11	<1.0

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Attachment 1

200-ZP-1 Phase II Pump and Treat Process Monitoring

Field Screening Results, August 1996 through September 1996

SAF B96-155

Sample Location	Analytical Instrument	HEIS Number	Sample/ Analysis Date	Sample Time	WATER ANALYSES Chloroform (ug/L)	WATER ANALYSES Carbon Tetrachloride (ug/L)	WATER ANALYSES Trichloroethylene (ug/L)	AIR ANALYSES Chloroform (ppmv)	AIR ANALYSES Carbon Tetrachloride (ppmv)	AIR ANALYSES Trichloroethylene (ppmv)
Post Valve V-01	10S Plus	B0J165	9/18/96	11:14	<4.0	<2.0	<2.0			
Post Valve V-01	HP 5890	B0J171	9/18/96	11:14	<2.0	<2.0	<2.0			
Post Tank T-02	10S Plus	B0J166	9/18/96	11:18	<4.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J172	9/18/96	11:18	<2.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J167	9/18/96	11:15	<10	2100	<5.0			
Post Tank T-01	HP 5890	B0J173	9/18/96	11:15	11	2100	8.0			
Extraction Well #1	10S Plus	B0J168	9/18/96	11:07	<10	2400	<5.0			
Extraction Well #1	HP 5890	B0J174	9/18/96	11:07	16	3200	11			
Extraction Well #2	10S Plus	B0J169	9/18/96	11:10	<10	1800	<5.0			
Extraction Well #2	HP 5890	B0J175*	9/18/96	11:10	11	2300	13			
Extraction Well #3	10S Plus	B0J170	9/18/96	11:12	<10	2000	<5.0			
Extraction Well #3	HP 5890	B0J176	9/18/96	11:12	11	2300	7.0			
Stack Effluent	B&K 1301	B0J0Q0	9/18/96	11:20				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0Q1	9/18/96	11:22				<1.0	13	<1.0
Post Valve V-01	10S Plus	B0J177	9/25/96	9:10	<4.0	<2.0	<2.0			
Post Valve V-01	HP 5890	B0J183	9/25/96	9:10	<2.0	<2.0	<2.0			
Post Tank T-02	10S Plus	B0J178	9/25/96	9:18	<4.0	<2.0	<2.0			
Post Tank T-02	HP 5890	B0J184	9/25/96	9:18	<2.0	<2.0	<2.0			
Post Tank T-01	10S Plus	B0J179	9/25/96	9:24	<10	1800	<5.0			
Post Tank T-01	HP 5890	B0J185	9/25/96	9:24	8.0	2800	5.9			
Extraction Well #1	10S Plus	B0J180	9/25/96	9:38	<10	2000	<5.0			
Extraction Well #1	HP 5890	BoJ186	9/25/96	9:38	12	3400	6.8			
Extraction Well #2	10S Plus	B0J181	9/25/96	9:46	<10	1700	<5.0			
Extraction Well #2	HP 5890	B0J187	9/25/96	9:46	7.8	2400	9.4			
Extraction Well #3	10S Plus	B0J182	9/25/96	9:55	<10	1900	<5.0			
Extraction Well #3	HP 5890	B0J188	9/25/96	9:55	7.5	3000	4.5			
Stack Effluent	B&K 1301	B0J0Q2	9/25/96	8:44				<1.0	<1.0	<1.0
Post Chiller	B&K 1301	B0J0Q3	9/25/96	8:42				<1.0	13	<1.0

Analysts:

R. T. Coffman 10/15/96
R. T. Coffman

J. D. Jacques, 10/14/96
J. D. Jacques

Instruments Used for Water Analysis	Instruments Used for Air Analysis
Photovac 10S Plus GC, Serial # BJDG203 Method: 5 mL/min HP Air, 11.7 eV lamp, injection Logbook: 200-ZP-1 Field Logbook, EL-1273, pgs 38 to 91	Photovac 10S Plus GC, Serial # TA920107 Method: 5 mL/min HP Air, 11.7 eV lamp, 500 mL Sample Loop Logbook: 200-ZP-1 Field Logbook, EL-1273, pgs 38 to 91
Hewlett Packard 5890 GC, Serial # 3235A47685 Method: Dual DB-VRX columns, ECD/FID, 1mL headspace inje Logbook: 200-ZP-1 Field Logbook, EL-1273, pgs 38 to 91	Bruel and Kjaer 1301 FTIR Serial # 1715168 Method: Factory Calibrations, 10 Scans, Sample Loop Logbook: 200-ZP-1 Field Logbook, EL-1273, pgs 38 to 91

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