Environmental Restoration Contractor **ERC Team**

Interoffice Memorandum

JAN 1997 RECEIVED Data Log In

040663

0052028

Job No. 22192
Written Response Required? N0
Closes CCN: N/A
OU: 200-UP-1
TSD: N/A
ERA: N/A
Subject Code: 8630

TO: C. D. Wittreich, H9-12
J. A. Lerch, B1-35

DATE: January 7, 1997

COPIES: See Below

FROM: R. T. Coffman
Onsite Measurement Services
H9-11/372-9373

SUBJECT: **200-UP-1 PUMP AND TREAT PROCESS MONITORING FIELD SCREENING RESULTS, OCTOBER 1996 THROUGH DECEMBER 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, 1996, *200-UP-1 Field Screening Support Logbook*, EL-1334, Bechtel Hanford, Inc., Richland, Washington.

This data package contains field screening results for process water samples analyzed to monitor the 200-UP-1 Pump and Treat System during the first quarter of FY 1997. The Quality Assurance level for this work corresponds to QA-1 as specified in the reference 1. The samples were managed under SAF B97-012.

Attachment 1 contains Volatile Organic Compound (VOC), total uranium results for process water samples collected from specified locations of the 200-UP-1 Pump and Treat System. The VOC results were generated using a Hewlett-Packard 5890 gas chromatograph with a headspace autosampler operated in accordance with Field Screening Procedure (FSP) 1.1, *Aqueous Headspace Analysis of Volatile Organic Compounds in Water* (BHI 1995). Information concerning operation and calibration of the gas chromatograph is contained in the instrument logbook EL-1329.

The total uranium samples were analyzed using a ChemChek KPA-11a Kinetic Phosphorescence Analyzer operated in accordance with FSP 1.22, *Kinetic Phosphorescence Analysis of Total Uranium in Water* (BHI 1995). Information concerning operation and calibration of the ChemChek KPA-11a is contained in the instrument logbook EL-1335.

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

R. T. Coffman

R. T. Coffman, Analyst

RTC:rtc

Attachments:

200-UP-1 Pump and Treat Process Monitoring, Field Screening Results, October 1996 through December 1996

Copies:
M. A. Buckmaster, H0-19,w/attachment
C. W. Denslow, H9-02, w/attachment
G. W. Green, H9-10, w/attachment
A. Hopkins, H9-11, w/attachment
I. D. Jacques, H9-10, w/attachment
T. D. LeFrancois, H9-03, w/attachment
D. A. Myers, H9-11, w/attachment
R. O. Mahood, H9-11, w/attachment
BHI Document Control, H4-79, w/original attachment

200-UP-1 Pump and Treat System Monitoring

Field Screening Results, October 1996 through December 1996

SAF B97-012

Sample Location	*HEIS Number*	*Sample Date*	*Analysis Date*	*Chloroform (ug/L)*	*Carbon Tetrachloride (ug/L)*	*Tichloroethylene (ug/L)*	*Total Uranium (ug/L)*
Injection Well	B0JD73	10/3/96	10/3/96	<2.0	2.1	<2.0	NA
Post Polish GAC	B0JD74	10/3/96	10/3/96	<2.0	2.2	<2.0	NA
Post Lead GAC	B0JD75	10/3/96	10/3/96	7.1	20	<2.0	NA
Pre Lead GAC	B0JD76	10/3/96	10/3/96	8.1	150	8.1	NA
Extraction Well	B0JD77	10/3/96	10/3/96	8.3	140	7.9	NA
Post Lead	B0HYK6	10/1/96	10/10/96	NA	NA	NA	<1.0
Post Lead	B0HYK8	10/3/96	10/10/96	NA	NA	NA	<1.0
Pre Treat	B0HYK5	10/1/96	10/10/96	NA	NA	NA	230
Pre Treat	B0HYK7	10/3/96	10/10/96	NA	NA	NA	270
Injection Well	B0JD78	10/10/96	10/10/96	<2.0	<2.0	<2.0	NA
Post Polish GAC	B0JD79	10/10/96	10/10/96	<2.0	<2.0	<2.0	NA
Post Lead GAC	B0JD80	10/10/96	10/10/96	6.6	26	<2.0	NA
Pre Lead GAC	B0JD81	10/10/96	10/10/96	6.9	150	6.7	NA
Extraction Well	B0JD82	10/10/96	10/10/96	6.2	120	5.7	NA
Post Lead	B0HYL0	10/8/96	10/10/96	NA	NA	NA	<1.0
Post Lead	B0HYL2	10/10/96	10/10/96	NA	NA	NA	<1.0
Pre Treat	B0HYK9	10/8/96	10/10/96	NA	NA	NA	230
Pre Treat	B0HYL1	10/10/96	10/10/96	NA	NA	NA	280
Injection Well	B0JD83	10/17/96	10/17/96	<2.0	<2.0	<2.0	NA
Post Polish GAC	B0JD84	10/17/96	10/17/96	<2.0	<2.0	<2.0	NA
Post Lead GAC	B0JD85	10/17/96	10/17/96	7.9	42	<2.0	NA
Pre Lead GAC	B0JD86	10/17/96	10/17/96	7.5	160	8.2	NA
Extraction Well	B0JD87	10/17/96	10/17/96	7.2	140	7.7	NA
Post Lead	B0HYL3	10/15/96	10/24/96	NA	NA	NA	<1.0
Post Lead	B0HYL5	10/17/96	10/24/96	NA	NA	NA	<1.0
Pre Treat	B0HLY4	10/15/96	10/24/96	NA	NA	NA	270
Pre Treat	B0HYL6	10/17/96	10/24/96	NA	NA	NA	270
Injection Well	B0JD88	10/23/96	10/23/96	2.2	<2.0	<2.0	NA
Post Polish GAC	B0JD89	10/23/96	10/23/96	2.9	3.2	<2.0	NA
Post Lead GAC	B0JD90	10/23/96	10/23/96	8.4	54	<2.0	NA
Post Lead GAC (dupe)	B0JD91	10/23/96	10/23/96	8.3	57	<2.0	NA
Pre Lead GAC	B0JD92	10/23/96	10/23/96	7.5	160	7.3	NA
Extraction Well	B0JD93	10/23/96	10/23/96	7.7	170	7.4	NA
Post Lead	B0HYL8	10/22/96	10/24/96	NA	NA	NA	<1.0
Post Lead	B0HYL9	10/24/96	11/4/96	NA	NA	NA	<1.0
Pre Treat	B0HYL7	10/22/96	10/24/96	NA	NA	NA	270
Pre Treat	B0HYM0	10/24/96	11/4/96	NA	NA	NA	270

200-UP-1 Pump and Treat System Monitoring

Field Screening Results, October 1996 through December 1996

SAF B97-012

Sample Location	*HEIS Number*	*Sample Date*	*Analysis Date*	*Chloroform (ug/L)*	*Carbon Tetrachloride (ug/L)*	*Tichloroethylene (ug/L)*	*Total Uranium (ug/L)*
Injection Well	B0JD94	10/31/96	10/31/96	3.5	8.1	<2.0	NA
Post Polish GAC	B0JD95	10/31/96	10/31/96	4.4	12	<2.0	NA
Post Lead GAC	B0JD96	10/31/96	10/31/96	8.8	90	<2.0	NA
Pre Lead GAC	B0JD97	10/31/96	10/31/96	8.0	180	7.7	NA
Pre Lead GAC (dupe)	B0JD98	10/31/96	10/31/96	7.5	160	7.0	NA
Extraction Well	B0JD99	10/23/96	10/23/96	7.3	160	7.1	NA
Post Lead	B0JKJ6	10/29/96	11/4/96	NA	NA	NA	<1.0
Post Lead	B0JKJ8	10/31/96	11/4/96	NA	NA	NA	<1.0
Pre Treat	B0JKJ5	10/29/96	11/4/96	NA	NA	NA	260
Pre Treat	B0JKJ7	10/31/96	11/4/96	NA	NA	NA	270
Injection Well	B0JDB0	11/7/96	11/7/96	6.0	18	<2.0	NA
Post Lead GAC	B0JDB1	11/7/96	11/7/96	6.6	21	<2.0	NA
Pre Lead GAC	B0JDB2	11/7/96	11/7/96	7.4	150	7.4	NA
Pre Lead GAC (dupe)	B0JDB3	11/7/96	11/7/96	7.6	160	7.6	NA
Extraction Well	B0JDB4	11/7/96	11/7/96	7.2	150	7.3	NA
Post Lead	B0JKK0	11/5/96	11/7/96	NA	NA	NA	<1.0
Post Lead	B0JKK2	11/7/96	11/7/96	NA	NA	NA	<1.0
Pre Treat	B0JKJ9	11/5/96	11/7/96	NA	NA	NA	280
Pre Treat	B0JKK1	11/7/96	11/7/96	NA	NA	NA	260
Injection Well	B0JDB5	11/14/96	11/14/96	<2.0	4.5	<2.0	NA
Injection Well (resample)	B0JDC1	11/14/96	11/14/96	<2.0	4.2	<2.0	NA
Post Polish GAC	B0JDB6	11/14/96	11/14/96	<2.0	4.1	<2.0	NA
Post Polish GAC (resample)	B0JDC2	11/14/96	11/14/96	<2.0	3.9	<2.0	NA
Post Lead GAC	B0JDB7	11/14/96	11/14/96	6.9	33	<2.0	NA
Pre Lead GAC	B0JDB8	11/14/96	11/14/96	6.7	130	6.5	NA
Pre Lead GAC (dupe)	B0JDB9	11/14/96	11/14/96	7.1	150	7..0	NA
Extraction Well	B0JDC0	11/14/96	11/14/96	6.8	140	6.6	NA
Post Lead	B0JKK4	11/12/96	11/14/96	NA	NA	NA	<1.0
Post Lead	B0JKK6	11/14/96	11/14/96	NA	NA	NA	<1.0
Pre Treat	B0JKK3	11/12/96	11/14/96	NA	NA	NA	240
Pre Treat	B0JKK5	11/14/96	11/14/96	NA	NA	NA	260

Attachment 1

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200-UP-1 Pump and Treat System Monitoring

Field Screening Results, October 1996 through December 1996

SAF B97-012

Sample Location	*HEIS Number*	*Sample Date*	*Analysis Date*	*Chloroform (ug/L)*	*Carbon Tetrachloride (ug/L)*	*Tichloroethylene (ug/L)*	*Total Uranium (ug/L)*
Injection Well	B0JDC3	11/21/96	11/21/96	<2.0	<2.0	<2.0	NA
Post Polish GAC	B0JDC4	11/21/96	11/21/96	<2.0	<2.0	<2.0	NA
Post Lead GAC	B0JDC5	11/21/96	11/21/96	<2.0	11	<2.0	NA
Pre Lead GAC	B0JDC6	11/21/96	11/21/96	6.5	140	6.2	NA
Pre Lead GAC (dupe)	B0JDC7	11/21/96	11/21/96	6.4	140	6.1	NA
Extraction Well	B0JDC8	11/21/96	11/21/96	6.1	150	6.3	NA
Post Lead	B0JKK8	11/19/96	11/21/96	NA	NA	NA	<1.0
Post Lead	B0JKL0	11/21/96	11/21/96	NA	NA	NA	<1.0
Pre Treat	B0JKK7	11/19/96	11/21/96	NA	NA	NA	290
Pre Treat	B0JKK9	11/21/96	11/21/96	NA	NA	NA	270
Injection Well	B0JDC9	12/3/96	12/3/96	<2.0	<2.0	<2.0	NA
Post Polish GAC	B0JDD0	12/3/96	12/3/96	<2.0	<2.0	<2.0	NA
Post Lead GAC	B0JDD1	12/3/96	12/3/96	<2.0	7.6	<2.0	NA
Pre Lead GAC	B0JDD2	12/3/96	12/3/96	6.4	140	6.2	NA
Pre Lead GAC (dupe)	B0JP16	12/3/96	12/3/96	5.9	130	5.6	NA
Extraction Well	B0JP17	12/3/96	12/3/96	6.0	140	5.7	NA
Post Lead	B0JKL2	11/26/96	12/10/96	NA	NA	NA	<1.0
Post Lead	B0JKL4	12/3/96	12/10/96	NA	NA	NA	<1.0
Post Lead	B0JKL6	12/5/96	12/10/96	NA	NA	NA	<1.0
Pre Treat	B0JKL1	11/26/96	12/10/96	NA	NA	NA	250
Pre Treat	B0JKL3	12/3/96	12/10/96	NA	NA	NA	210
Pre Treat	B0JKL5	12/5/96	12/10/96	NA	NA	NA	260
Injection Well	B0JP18	12/12/96	12/12/96	<2.0	<2.0	<2.0	NA
Post Polish GAC	B0JP19	12/12/96	12/12/96	<2.0	2.0	<2.0	NA
Post Lead GAC	B0JP20	12/12/96	12/12/96	<2.0	20	<2.0	NA
Pre Lead GAC	B0JP21	12/12/96	12/12/96	7.6	150	7.9	NA
Pre Lead GAC (dupe)	B0JP22	12/12/96	12/12/96	7.5	160	7.8	NA
Extraction Well	B0JP23	12/12/96	12/12/96	7.4	150	7.7	NA
Post Lead	B0JKL8	12/10/96	12/12/96	NA	NA	NA	<1.0
Post Lead	B0JKM0	12/12/96	12/12/96	NA	NA	NA	<1.0
Pre Treat	B0JKL7	12/10/96	12/12/96	NA	NA	NA	300
Pre Treat	B0JKL9	12/12/96	12/12/96	NA	NA	NA	240

Attachment 1

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200-UP-1 Pump and Treat System Monitoring

Field Screening Results, October 1996 through December 1996

SAF B97-012

Sample Location	*HEIS Number*	*Sample Date*	*Analysis Date*	*Chloroform (ug/L)*	*Carbon Tetrachloride (ug/L)*	*Tichloroethylene (ug/L)*	*Total Uranium (ug/L)*
Injection Well	B0JP24	12/19/96	12/19/96	<2.0	<2.0	<2.0	NA
Post Polish GAC	B0JP25	12/19/96	12/19/96	<2.0	<2.0	<2.0	NA
Post Lead GAC	B0JP26	12/19/96	12/19/96	<2.0	21	<2.0	NA
Pre Lead GAC	B0JP27	12/19/96	12/19/96	7.6	180	6.8	NA
Pre Lead GAC (dupe)	B0JP28	12/19/96	12/19/96	7.3	170	6.4	NA
Post Lead	B0JKM2	12/17/96	12/19/96	NA	NA	NA	<1.0
Post Lead	B0JKM4	12/19/96	12/19/96	NA	NA	NA	<1.0
Pre Treat	B0JKM1	12/17/96	12/19/96	NA	NA	NA	280
Pre Treat	B0JKM3	12/19/96	12/19/96	NA	NA	NA	280
Injection Well	B0JP29	12/31/96	12/31/96	<2.0	<2.0	<2.0	NA
Post Polish GAC	B0JP30	12/31/96	12/31/96	<2.0	<2.0	<2.0	NA
Post Lead GAC	B0JP31	12/31/96	12/31/96	2.8	49	<2.0	NA
Pre Lead GAC	B0JP32	12/31/96	12/31/96	7.5	150	7.3	NA
Pre Lead GAC (dupe)	B0JP33	12/31/96	12/31/96	7.7	160	7.4	NA
Extraction Well	B0JP34	12/31/96	12/31/96	7.9	170	7.8	NA
Post Lead	B0JKM6	12/31/96	12/31/96	NA	NA	NA	<1.0
Pre Treat	B0JKM5	12/31/96	12/31/96	NA	NA	NA	270

NA - Not Analyzed

j - Value less than practical quantitation limit

Analyst: R.T. Coffman 1/7/97
R.T. Coffman

Analyst: R.B. Kerkow 1/7/97
R.B. Kerkow

VOA Instrument: Hewlett Packard 5890 GC, Serial # 3235A47685
Method: Dual DB-VRX columns, ECD/FID, 1mL headspace injection
Logbook: 200-UP-1 Field Logbook, EL-1334

Uranium Instrument: ChemChek KPA-11a, Serial # 9445050065
Method: Kinetic Phosphorescence
Logbook: 200-UP-1 Field Logbook, EL-1334