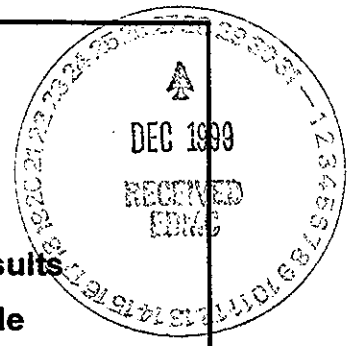
FS-C98004-Field

0052219

DATA DELIVERABLE COVER SHEET

Data Deliverable Cover Sheet



Date: Wednesday, December 30, 1998

Deliverable type (check one): ____ **Preliminary Test Results**
✓ **Final Data Deliverable**

Sample authorization form number: C98-004

Attachments (check all that apply or n/a): ____ **Narrative Summary**
✓ **Test Results**
____ **Chains of Custody**

Total number of pages (including cover sheet): 7 **pages**

Comments:

(Note: If Preliminary results were provided verbally, document information provided below including instrument used and results as Communicated to the project.)

M.G. Bachlu
Analyst Signature

12/30/98
Date

Distribution: Sample Management – Doris Ayres H9- 03
Project (specify) None. Distributed electronically

Requires distribution to listed project personnel by Sample Management.

6-1

MOBILE LABORATORY DATA/LOG SHEET

Site Name: 200-UP-1 Groundwater **Date:** 10/15/97

Sample Number	HEIS Number	Sample Time	Sample Type	Sampler (Initials)	Analysis Time	Analytical Results			Comments
						TCM ug/L	CCl4 ug/L	TCE ug/L	
DI Blank	—	08:35	Water	MAB	10:58	<2.0	<2.0	<2.0	hs013.d
5ug/L Cal. check	—	08:45	Water	MAB	11:09	5.5 **110%**	6.3 **126%**	5.8 **116%**	hs014.d; Cal. table level 1 updated to reflect higher R.F. for CCl4.
DI Blank	—	08:35	Water	MAB	11:20	<2.0	<2.0	<2.0	hs015.d
Trip Blank	B0M645	00:00 10/14/97	Water	MAB	11:52	<2.0	<2.0	<2.0	hs018.d, UP-1
Well # 299-W19-30	B0M613	10:45 10/14/97	Water	MAB	12:03	<2.0	6.4	<2.0	hs019.d, UP-1
Well # 299-W19-28	B0M609	12:25 10/14/97	Water	MAB	12:14	<2.0	89.	<2.0	hs020.d, UP-1
Well # 299-W19-29	B0M611	11:14 10/14/97	Water	MAB	12:25	<2.0	<2.0	<2.0	hs021.d, UP-1
Well # 299-W19-23	B0M603	08:48 10/14/97	Water	MAB	12:36	<2.0	81.	<2.0	hs022.d, UP-1
Well # 299-W19-34A	B0M615	13:18 10/14/97	Water	MAB	12:47	7.8	115.	3.4	hs023.d, UP-1
Well # 299-W19-20	B0M601	09:49 10/14/97	Water	MAB	12:57	<2.0	68.	<2.0	hs024.d, UP-1
Blank	—	08:35	Water	MAB	14:37	<2.0	<2.0	<2.0	hs033.d
3000ug/L Cal. check	—	08:45	Water	MAB	14:48	3124. **104%**	3573. **119%**	3293. **110%**	hs034.d; **Acceptable recovery.**
Blank	—	08:35	Water	MAB	15:00	<2.0	<2.0	<2.0	hs035.d

M.A. Bacchler / M.A. Bacchler
10/15/97

200-ZP-1 Daily Activity Log
Date: 10/15/97

0700	Arrived on-site at laboratory trailer located at Z-9 crib area. Turned on HP 5890 S/N 3235447685 gas chromatograph and HP 7694 headspace analyzer. Loaded methods HSECDFID.MTH (HP 5890) and HSECDFID.HSM (HP 7694). Analyzing process and 200-UP-1 GW samples.
0710	Turned on B&K 1301.
0730	Split flow = 39.5 mL/min. Septum purge = 3.10 mL/min.
0745	Exited laboratory trailer to pick up 200-UP-1 GW samples.
0805	Returned to laboratory trailer.
0815	Prepared calibration standards of 5, 100, 200 ug/L and calibration check standard of 5 ug/L.
0835	Started run, sample sequence table "Z101597.S."
0840	Prepared new 1000 ug/L working standard from # 52893 parent stock of custom VOA mix (2000 ug/mL). 250 uL methanol + 250 uL parent stock.
0845	Prepared calibration standards of 2000, 4000, and 8000 ug/L and calibration check standard of 3000 ug/L.
0855	Revised sample sequence "Z101597.S"
0900	Loaded calibration standards into GC
0930	Exited laboratory trailer to collect process water and air samples.
0942	Started calibration of HP 5890 gas chromatograph.
1010	Returned to laboratory trailer with samples. Process samples from extraction wells E0-3, E0-4, E0-5, and E0-6 collected from manifold house.
1020	Prepared 200-UP-1 GW samples for analysis. Transferred 10 mL of each sample to clean 20 mL HP vial using the syringe transfer method.
1036	Completed calibration of HP 5890 gas chromatograph. Calibration curves are acceptable.
1059	Started analysis of process air samples using the B&K 1301 FTIR S/N 1715168 gas analyzer. For information on this instrument, see logbook EL-1333.
1109	5 ug/L calibration check: DCM = 5.3 (106%), TCM = 5.5 (110%), CCl_4 = 6.3 (126%), TCE = 5.8 (116%), PCE = 5.8 (115%). Recovery not within acceptable range for CCl_4. Updated level 1 of calibration table with the higher responses for this calibration check prior to analysis of samples.
1119	Completed analysis of process air samples. Analysis results are found on the following data sheet.
1130	Started analysis of process water samples.
1152	Started analysis of 200-UP-1 GW samples.
1257	Completed analysis of 200-UP-1 GW samples.
1426	Completed analysis of process water samples.
1448	3000 ug/L calibration check: DCM = 3078 (103%), TCM = 3124 (104%), CCl_4 = 3573 (119%), TCE = 3293 (110%), PCE = 3470 (116%). Acceptable Recoveries.
1520	Loaded standby method and shut down equipment.
1530	Secured laboratory trailer and left site.

M.A. Baechler/M.G. Baechler 10/15/97

200-UP-1 Daily Activity Log
Date: 10/16/97

0900	Arrived on-site at laboratory trailer located at ZP-1. Turned on KPA-11A uranium analyzer for analysis of 200-UP-1 groundwater samples. Placed instrument intake line/filter into uraplex solution.
0915	Ran analysis of deionized water to stabilize background. Sample #1 Intensity = 2025, Sample #2 Intensity = 2386, Sample #3 Intensity = 2566.
0920	Reset low and high calibration ranges. Low range: 1, 5, 10, and 25 ug/L. High range: 50, 500, 1000, 1500 ug/L.
0939	Started calibration of KPA-11A uranium analyzer.
1015	Calibration complete. Calibration curves are acceptable. Analyzing deionized water to flush lines.
1030	Prepared samples for analysis. Sample BOM601 diluted 1:1, 5 mL of sample + 5 mL deionized water.
1054	Started analysis of 200-UP-1 groundwater samples for uranium.
1102	5 ug/L calibration check: 5.5 ug/L, 110% recovery. Acceptable recovery.
1112	1000 ug/L calibration check: 1040 ug/L, 103% recovery. Acceptable recovery.
1119	Completed analysis of samples.
1130	Discarded samples and rinsed cell 4 times.
1147	Prepared new batch of uraplex solution. Mixed one bottle of calmplexant, batch #001 with 500 mL of deionized water. Mixed well until calmplexant dissolved. Placed in refrigerator.
1150	Turned off instrument.

Total Uranium Analysis Data Sheet

Date 10/16/97

HEIS Number	Sample Name	Sample Date	Uranium (ug/L)	% Recovery	Comments
------	DI Blank	------	<1.0	------	
B0M615	299-W19-34A	10/14/97	1.9	------	
B0M603	299-W19-23	10/14/97	1040.	------	Results are much higher than 8/29.
------	5 ug/L Cal. Check	------	5.5	110%	Acceptable recovery.
B0M611	299-W19-29	10/14/97	92.	------	
B0M609	299-W19-28	10/14/97	521.	------	
B0M613	299-W19-30	10/14/97	509.	------	
B0M601	299-W19-20	10/14/97	2000.	------	Diluted 1:1. 5ml/5m DI Water
	1000 ug/L Cal Check	------	995.	100%	Acceptable recovery.
------	DI Blank	------	<1.0	------	
------	DI Blank	------	<1.0	------	

200-ZP-1/200-UP-1 Daily Activity Log
Date: 10/21/97

0810	Arrived on-site at laboratory trailer located at Z-9 crib area. Turned on HP 5890 S/N 3235447685 gas chromatograph and HP 7694 headspace analyzer. Loaded methods HSECDFID.MTH (HP 5890) and HSECDFID.HSM (HP 7694). Analyzing 200-ZP-1 and 200-UP-1 GW samples.
0815	Split flow = 39.7 mL/min. Septum purge = 3.27 mL/min.
0830	Started run, sample sequence table "Z102197.S."
1000	Prepared calibration standards of 5, 100, 200, 2000, 4000, and 8000 ug/L and calibration check standards of 5 and 3000 ug/L.
1015	Loaded calibration standards into GC
1020	Prepared 200-UP-1 and 200-ZP-1 GW samples for analysis. Transferred 10 mL of each sample to clean 20 mL HP vial using the syringe transfer method.
1107	Started calibration of HP 5890 gas chromatograph.
1115	Prepared new 1000 ug/L working standard from # 52893 parent stock of custom VOA mix (2000 ug/mL). 250 uL methanol + 250 uL parent stock. For use 10/22&10/23.
1201	Completed calibration of HP 5890 gas chromatograph. Calibration curves are acceptable.
1235	5 ug/L calibration check: DCM = 5.1 (101%), TCM = 5.6 (113%), CCl_4 = 6.3 (126%), TCE = 5.9 (119%), PCE = 5.7 (115%). Recovery not within acceptable range for CCl_4. Updated level 1 of calibration table with the higher responses for this calibration check prior to analysis of samples.
1321	Started analysis of GW samples.
1500	Completed analysis of GW samples.
1522	3000 ug/L calibration check: DCM = 3039 (101%), TCM = 3147 (105%), CCl_4 = 3664 (122%), TCE = 3395 (113%), PCE = 3611 (120%). Acceptable Recoveries.
1540	Loaded ecd only method and shut down equipment.
1550	Secured laboratory trailer and left site.

M.M. Bachhuber / M.M. Bachhuber
10/21/97

Not Used

MOBILE LABORATORY DATA/LOG SHEET

Site Name: 200-UP-1 Groundwater

Date: 10/21/97

Sample Number	HEIS Number	Sample Time	Sample Type	Sampler (Initials)	Analysis Time	Analytical Results			Comments
						TCM ug/L	CCl4 ug/L	TCE ug/L	
DI Blank	—	08:10	Water	MAB	12:23	<2.0	<2.0	<2.0	hs013.d
5ug/L Cal. check	—	10:00	Water	MAB	12:34	5.6 113%	6.3 126%	5.9 119%	hs014.d; Cal. table level 1 updated to reflect higher R.F. for CCl4.
DI Blank	—	08:10	Water	MAB	12:45	<2.0	<2.0	<2.0	hs015.d
Trip Blank	B0M6C3	07:30 10/16/97	Water	MAB	13:21	<2.0	<2.0	<2.0	hs016.d
Trip Blank	B0M646	07:45 10/16/97	Water	MAB	13:32	<2.0	<2.0	<2.0	hs017.d
Well # 299-W19-37	B0M621	09:26 10/16/97	Water	MAB	13:43	<2.0	7.4	<2.0	hs018.d, UP-1
Well # 299-W19-40	B0M625	13:32 10/15/97	Water	MAB	13:54	5.3	80.	<2.0	hs019.d, UP-1
Well # 299-W19-38	B0M623	12:37 10/15/97	Water	MAB	14:05	2.6	81.	<2.0	hs020.d, UP-1
Well # 299-W19-35	B0M617	10:11 10/16/97	Water	MAB	14:16	<2.0	110.	7.8	hs021.d, UP-1
Well # 299-W19-36	B0M619	09:44 10/16/97	Water	MAB	14:27	<2.0	5.3	<2.0	hs022.d, UP-1
Blank	—	08:10	Water	MAB	15:11	<2.0	<2.0	<2.0	hs026.d
3000ug/L Cal. check	—	10:00	Water	MAB	14:22	3147. 105%	3664. 122%	3395. 113%	hs027.d; Acceptable recovery.
Blank	—	08:10	Water	MAB	15:33	<2.0	<2.0	<2.0	hs028.d

M.A. Lucht M.A. Bailey 10/21/97

NOT USED

200-UP-1 Daily Activity Log
Date: 10/28/97

0950	Arrived on-site at laboratory trailer located at ZP-1. Turned on KPA-11A uranium analyzer for analysis of 200-UP-1 groundwater samples. Placed instrument intake line/filter into uraplex solution.
1000	Ran analysis of deionized water to stabilize background. Sample #1 Intensity = 1862, Sample #2 Intensity = 1149, Sample #3 Intensity = 665.
1015	Reset low and high calibration ranges. Low range: 1, 5, 10, and 25 ug/L. High range: 50, 500, 1000, 1500 ug/L.
1030	Started calibration of KPA-11A uranium analyzer.
1045	Calibration complete. Calibration curves are not acceptable. Recalibrating.
1055	Analyzed deionized water 4 times to stabilize background.
1135	Started re-calibration of KPA-11A uranium analyzer.
1155	Re-calibration complete. Calibration curves acceptable. Analyzed deionized water 4 times to clear high concentration standard from system.
1215	Started analysis of 200-UP-1 groundwater samples for uranium.
1221	25 ug/L calibration check: 25.3 ug/L, 101% recovery. Acceptable recovery.
1233	500 ug/L calibration check: 534 ug/L, 107% recovery. Acceptable recovery.
1240	Completed analysis of samples.
1245	Discarded samples and rinsed cell 4 times.
1300	Turned off instrument.

M.H. Beach
M.G. Beach
10/28/97

Total Uranium Analysis Data Sheet

Date 10/28/97

HEIS Number	Sample Name	Sample Date	Uranium (ug/L)	% Recovery	Comments
—	DI Blank	—	<1.0	—	
BOM619	299-W19-36	10/16/97	27	—	
BOM617	299-W19-35	10/16/97	48	—	
—	25 ug/L Cal. Check	—	25.3	101	Acceptable Recovery
BOM625	299-W19-40	10/15/97	168	—	
BOM623	299-W19-38	10/15/97	162	—	
BOM621	299-W19-37	10/16/97	513	—	
—	DI Blank	—	<1.0	—	
—	500 ug/L Cal. Check	—	534	107	Acceptable Recovery
—	DI Blank	—	<1.0	—	

M.G. Beach M.H. Beach
10/28/97