

START

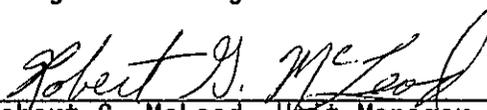
0027010

Meeting Minutes Transmittal - Approved

Unit Managers Meeting
2101-M Pond
740 Stevens Center Building, Room 2519
Richland, Washington

Meeting Held February 10, 1993
From 10:30 to 11:30 a.m.

The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Unit Managers Meeting.



Robert G. McLeod, Unit Manager, RL Date: 3-10-93

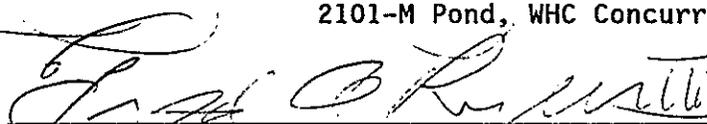
Not Present

Daniel L. Duncan, RCRA Program Manager, EPA Region 10 Date: _____



Elizabeth A. Wiley, Unit Manager, Washington State Department of Ecology Date: 3/10/93

2101-M Pond, WHC Concurrence

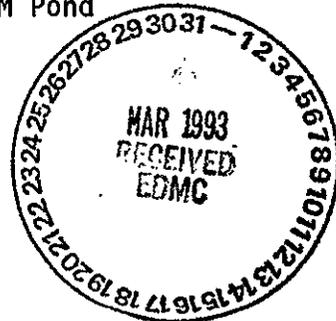


Fred A. Ruck III, Contractor Representative, WHC Date: 3/10/93

Purpose: Discuss Permitting Process

Meeting Minutes are attached. The minutes are comprised of the following:

- Attachment 1 - Agenda
- Attachment 2 - Summary of Discussion and Commitments/Agreements
- Attachment 3 - Attendance List
- Attachment 4 - Action Items
- Attachment 5 - Department of Ecology Notice of Deficiency for 2101-M Pond
- Attachment 6 - Data Summary Tables (Phase II Sampling Results)



9 1 1 9 0 1 0 5 4

Attachment 1

**Unit Managers Meeting
2101-M Pond
740 Stevens Center Building, Room 2519
Richland, Washington**

**Meeting Held February 10, 1993
From 10:30 to 11:30 a.m.**

Agenda

1. Approval of Past UMM Minutes
2. Status Action Items
3. Status NOD Response Table
4. Status Closure Activities
- Phase II Data
5. New Business
6. Set Next Meeting Date

9 2 1 2 9 1 0 0 5 5

Attachment 2

Unit Managers Meeting
2101-M Pond
740 Stevens Center Building, Room 2519
Richland, Washington

Meeting Held February 10, 1993
From 10:30 to 11:30 a.m.

Summary of Discussion and Commitments/Agreements

1. Approval of Past UMM Minutes

The December 15, 1992, Unit Manager Meeting Minutes were reviewed and signed by the Unit Managers. The January 13, 1993, Unit Manager Meeting Minutes will be faxed to Ecology for review.

2. Status Action Items

7-11-91:2, WHC will appraise the Ecological Risk Assessment to determine if it is still necessary. RL/WHC proposed to drop the section out of the next revision if Ecology concurs. Ecology (E. Wiley) stated that she would probably concur. This action will remain open until Ecology reviews the section and forwards their determination.

10-29-92:2, A new Data Chem Laboratory validation package has been prepared by WHC and sent to RL for concurrence and transmittal. The action will be considered closed upon receipt of the new validation package by Ecology.

10-29-92:3, In NOD comment number 116, Ecology accepts the data currently being provided by RL in the quarterly groundwater monitoring reports. This action item is closed.

12-15-92:1, Ecology (T. Michelena) currently has the action associated with this item. This action remains open.

3. Status NOD Response Table

Ecology (E. Wiley) provided RL/WHC with a letter and a set of final comments on the Revision 1 NOD Response Table (Attachment 5). The document included additional comments on the responses to NOD numbers 116, 127, 132, 142, and 36 (renumbered 147). All the other responses in the table are accepted by Ecology and considered closed. The remaining comments were discussed with Ecology, and responses were proposed as follows:

116. Ecology accepts the current quarterly groundwater reports as satisfying this requirement. This comment was discussed, and agreed to by RL/WHC and Ecology. The NOD comment was closed at the January 13, 1993, Unit Manager Meeting.

127. Ecology's requirement was to state if all samples which exceeded holding times were included in Phase II sampling. The proposed response was, Appendix E1, Section 4.4 states the criteria for inclusion of constituents that

9
5
0
1
0
1
0
1
0
6

would be sampled for in the phase II sampling effort. Bullet 3 states "Constituents whose presence in the initial sample results is of questionable validity or are present for unknown reasons." Therefore, any analyses which exceeded holding times were resampled.

132. Ecology's comment was that Table E1-3 did not include cyanide. The proposed response given was, This is true, it is an oversight, cyanide will be added to the table. Cyanide analyses were requested for samples BOOGP2 through BOOGP8, BOOGQ9, and BOOGR1.

142. Ecology's comment was that groundwater must meet MTCA standards for clean closure. The proposed response given was, The original comment had to do with the detection limits used in the groundwater program. It was answered, and shown that the EPA detection limits provided in SW-846 and other approved standard methods are appropriate. The groundwater data to date indicates that the 2101-M Pond has not adversely affected the groundwater. Therefore, the groundwater is not an issue for clean closure of the 2101-M Pond.

36 (renumbered 147). Ecology's comment was that rad counts were needed for radioactive constituents found at the pond. The proposed response given was, There are no radioactive constituents found at the 2101-M Pond. If there is radioactive contamination in the groundwater it is not from the 2101-M Pond, and therefore, would be under CERCLA jurisdiction.

The proposed responses were agreed to and considered closed by RL and Ecology except for comment #142 which will require additional clarification by Ecology management. The re-submittal of the NOD response table by RL/WHC will refer to the date of this Unit Manager's Meeting for the closure date of the NOD comments.

4. Status Closure Activities

- Phase II Data

Data summary tables of Phase II Sampling results (Attachment 6) prepared by WHC (W. Cox) were handed out for discussion. RL, (R. McLeod) and WHC (W. Cox) proposed clean closure with no further action and asked Ecology to provide concurrence. The proposal was based on the sampling results which show there is no health or environmental threat at the pond, and the fact that the pond is in an area (200 East) that is most likely to qualify as industrial under MTCA. For further documentation, WHC will calculate clean up levels using MTCA, method B, industrial when current IRIS RfDs are available.

5. New Business

WHC (F. Ruck) asked if Ecology (E. Wiley) would work toward providing approval of the NOD Response Table and authorizing RL/WHC to revise the closure plan by the next Unit Manager Meeting. Ecology (E. Wiley) agreed to do this.

6. Set Next Meeting Date

The next meeting was set for March 10, 1993 in Richland, Washington.

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Attachment 4

Unit Managers Meeting
2101-M Pond
740 Stevens Center Building, Room 2519
Richland, Washington

Meeting Held February 10, 1993
From 10:30 to 11:30 a.m.

Action Items

<u>Action Item #</u>	<u>Description</u>
7-11-91:2	Forward the completed Ecological Risk Assessment to Ecology by the first week in September 1990. Action: Jim Hoover (WHC). OPEN
10-29-92:2	RL/WHC will reevaluate the Phase II data validation package concerning what information has or has not been reviewed and report the findings to Ecology. Action: J.A. Lerch (WHC) OPEN
10-29-92:3	Ecology will determine what their data validation requirements will be for groundwater sample analysis. Action: E. A. Wiley (Ecology) CLOSED 1/13/93
12-15-92:1	Ecology (Michelena) will work towards elevating the issue resolution topic out of the framework of the 2101-M Pond closure process. Action: T. Michelena (Ecology) OPEN

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Attachment 5

**Unit Managers Meeting
2101-M Pond
740 Stevens Center Building, Room 2519
Richland, Washington**

**Meeting Held February 10, 1993
From 10:30 to 11:30 a.m.**

TITLE - DEPARTMENT OF ECOLOGY NOTICE OF DEFICIENCY FOR 2101-M POND

9 : 1 2 9 1 0 1 0 6 0



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

February 08, 1993

Mr. Robert McLeod
Office of Environmental Assurance,
Permits and Policy
U.S. Department of Energy
P.O. Box 550 A5-15
Richland, Washington 99352

RE: Notice of Deficiency: 2101-M Pond System Closure/Postclosure Plan
(M-20)

Dear Mr. McLeod:

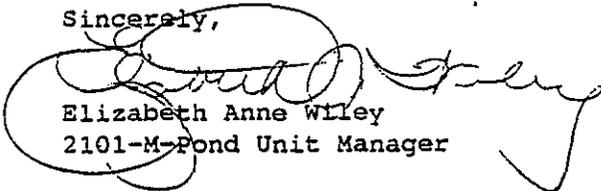
We have reviewed the 2101-M Pond Response Table dated November 18, 1992.
Enclosed please find our comments to the Final NOD Response Table.

Most NOD comments which are in the current table have been addressed, and will
need written documentation that this has been done. The next Unit Managers
meeting will be the appropriate place to determine which issues have been met
thus far.

The main issue presented, was the lack of information received with the data
packages submitted by the Department Of Energy (DOE) after the second set of
sampling at the pond was carried out. Recently, Ecology received the data
which was requested.

Please provide a response to the NOD comments within 90 days of receipt of
this letter.

Sincerely,


Elizabeth Anne Willey
2101-M-Pond Unit Manager

ENCLOSURES

cc: L. Bracken, USDOE/RL
D. Duncan, USEPA
D. Jansen, Ecology
R. Krekel; USDOE/RL
D. Nylander, Ecology
F. Ruck, WHC/RL
T. Venezizno, WHC/RL
S. Wisness, USDOE/RL

RECEIVED

FEB 11 1993

DOE-RL/CCC

193-ERB-237

40.43.2.4

36. B-108/11

RL/WHC Response: There is no evidence of radioactive contamination at the 2101-M Pond as shown in Appendix C-1 and D-2. If there were radioactive contamination in the groundwater, it would not be as a result of activities at the 2101-M Pond and would be remediated under CERCLA authority.

Ecology Comment: Table D2 does list several radioactive constituents above detection limits. There is no indication of how high above detection limits. Please provide Ecology with rad counts for those radioactive constituents found at the Pond, so that we may be able to determine if the pond can be clean closed.

9 . 1 2 3 4 5 6 7 8 9 0 1 2 3

Attachment 6

**Unit Managers Meeting
2101-M Pond
740 Stevens Center Building, Room 2519
Richland, Washington**

**Meeting Held February 10, 1993
From 10:30 to 11:30 a.m.**

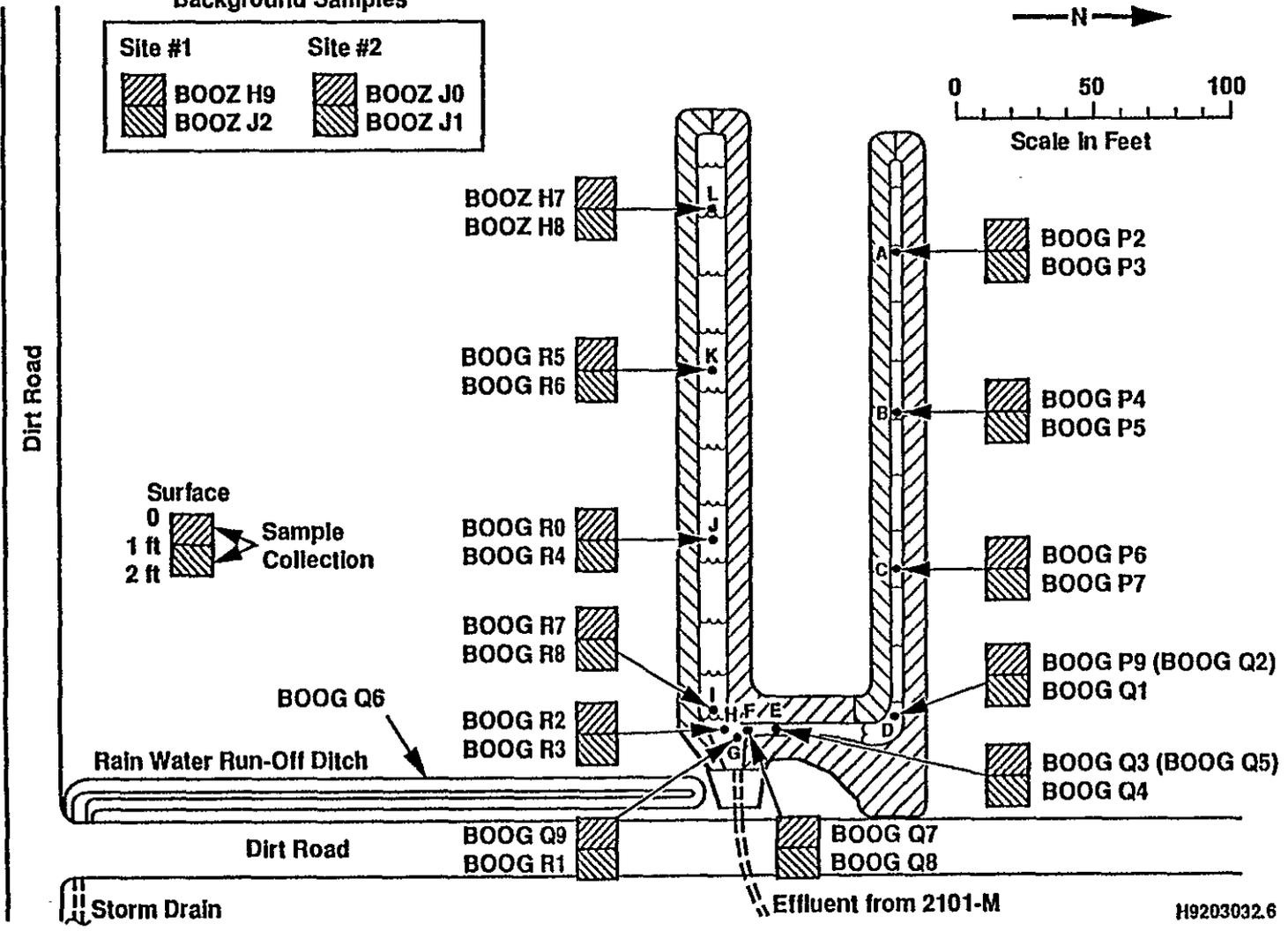
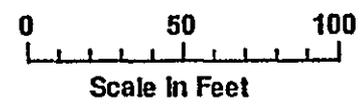
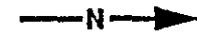
TITLE - DATA SUMMARY TABLES (Phase II Sampling Results)

9 1 1 7 9 1 0 0 0 6 4

9 1 2 9 1 0 0 6 5

Background Samples

Site #1	Site #2
 BOOZ H9	 BOOZ J0
 BOOZ J2	 BOOZ J1



H9203032.6

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**ANALYTES ABOVE DETECTION LIMITS
2101-M POND NORTH ARM**

	surface	1-2ft	surface	1-2ft	surface	1-2ft	
ANALYTE	B00GP2	B00GP3	B00GP4	B00GP5	B00GP6	B00GP7	B00GP8 ¹
Acetone	14	ND	ND	20	28	11	19
Aroclor 1242	.42	ND	ND	ND	ND	ND	ND
Aroclor 1254	ND	ND	ND	ND	.08	ND	ND
24D	ND	.013	ND	.015	ND	.010	ND
245T	ND	ND	.003	ND	ND	ND	ND
245TP	ND	ND	ND	ND	.003	ND	ND
44DDE	ND	ND	ND	ND	.0007	ND	ND
Aluminum	8700	7600	8400	6700	8600	6100	610
Barium	60	70	60	100	50	80	ND
Calcium	3100	3200	3400	3400	3100	3400	ND
Chromium	12	11	13	11	11	8	ND
Cobalt	8	8	9	13	10	11	ND
Copper	800	21	1100	68	1700	49	ND
Iron	19000	17000	19000	23000	22000	22000	1200
Lead	10	4	8	4	13	4	ND
Magnesium	3900	3800	3500	3600	4200	3200	ND
Manganese	160	600	180	510	230	280	50
Nickel	12	9	12	10	13	8	ND
Phosphorus	700	400	700	700	800	700	ND
Potassium	1400	1200	1400	800	1300	700	100
Silver	ND	ND	2	ND	ND	ND	ND
Sodium	250	150	270	230	230	230	ND
Strontium	21	26	21	16	18	19	ND
Thallium	50	ND	ND	ND	ND	ND	ND
Vanadium	43	37	48	62	49	60	ND
Zinc	140	45	200	63	230	99	3
Mercury	.06	ND	.06	ND	.08	ND	ND
Ammonia	1.7	.9	2.3	1.3	3.2	.7	1.5
pH	6.8	6.9	6.6	7.1	7.6	7.4	8.0

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ANALYTES ABOVE DETECTION LIMITS
2101-M POND EAST ARM

	surface	1-2ft	surface	surface	1-2ft	surface
ANALYTE	B00GP9	B00GQ1	B00BQ2 ²	B00GQ3	B00GQ4	B00GQ5 ³
Acetone	ND	24	ND	44	20	ND
Aluminum	8400	5600	8600	7000	8600	7700
Arsenic	NR	NR	NR	NR	NR	2.5
Barium	52	82	47	54	110	59.1
Beryllium	.5	.5	.5	.5	.5	1.5
Cadmium	.5	.7	.5	.7	ND	1.1
Calcium	3300	4300	3000	3800	3800	4650
Chromium	9.8	5	11	8.2	8.8	9.3
Cobalt	10	14	9	12	14	13.1
Copper	1900	54	1600	600	18	1110
Iron	23000	26000	21000	29000	27000	35600
Lead	NR	NR	NR	NR	NR	11.3
Magnesium	4100	4000	4300	3600	4600	3590
Manganese	200	380	170	200	470	241
Nickel	11	7	13	9	12	11.1
Phosphorus	830	940	740	970	770	NA
Potassium	1200	700	1200	700	1000	770
Silver	5.1	.7	6.3	5.3	ND	3.5
Sodium	ND	400	ND	ND	ND	221
Strontium	17	14	16	16	18	NA
Vanadium	53	74	51	74	67	96.4
Zinc	260	170	300	260	120	341
Ammonia	4.5	1.1	2.6	2.4	1.1	<56
pH	8	8.1	7.8	7.3	6.8	7.2
Fluoride	ND	ND	ND	ND	ND	3.5

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**ANALYTES ABOVE DETECTION LIMITS
2101-M POND EFFLUENT DEPRESSION**

	surface	1-2ft	surface	1-2ft	surface	1-2ft
ANALYTE	B00GQ7	B00GQ8	B00GQ9	B00GR1	B00GR2	B00GR3
Acetone	83	29	98	46	160	140
bisphalate	4.8	ND	16	ND	ND	ND
Fluoranthene	ND	ND	1.1	ND	ND	ND
Pyrene	ND	ND	1.7	ND	ND	ND
benzoanthracene	ND	ND	1.8	ND	ND	ND
Chrysene	ND	ND	2.1	ND	ND	ND
benzopyrene	ND	ND	1.9	ND	ND	ND
indenoypyrene	ND	ND	2.4	ND	ND	ND
benzoperylene	ND	ND	2.1	ND	ND	ND
Aroclor 1254	ND	ND	1.1	ND	ND	ND
Aluminum	9100	7700	12000	9100	5200	6200
Arsenic	NR	NR	4	3	NR	NR
Barium	81	88	110	130	41	92
Beryllium	.5	.5	.6	.5	.3	.5
Cadmium	1.6	.7	2.7	.5	.8	ND
Calcium	3900	4100	3500	3800	1900	4700
Chromium	16	9.9	17	11	9.8	7
Cobalt	9	9	10	11	4	11
Copper	1800	570	2500	460	1000	120
Iron	20000	19000	27000	22000	9800	21000
Lead	NR	NR	160	30	NR	NR
Magnesium	4000	3800	5000	4300	2000	3600
Manganese	170	170	200	200	72	220
Nickel	15	10	17	11	8	7
Phosphorus	670	640	700	600	370	680
Potassium	1300	1100	1500	1200	800	900
Silver	32	9.1	31	5	8.5	ND
Strontium	20	18	22	19	12	16
Vanadium	42	43	42	48	21	56
Zinc	360	160	340	110	240	54
Mercury	NR	NR	.85	.21	NR	NR

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DRAFT

ANALYTES ABOVE DETECTION LIMITS
2101-M POND EFFLUENT DEPRESSION

Fluoride	.002	ND	ND	ND	ND	ND
Ammonia	18	9.1	18	14	6.6	7.2
pH	6.9	7.7	6.9	6.9	6.7	6.9

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DRAFT

**ANALYTES ABOVE DETECTION LIMITS
2101-M POND SOUTH ARM**

	surface	1-2ft	surface	1-2ft	surface	1-2ft	surface	1-2ft
Analyte	B00GR0	B00GR4	B00GR5	B00GR6	B00GR7	B00GR8	B00ZH7	B00ZH8
Acetone	100	67	7.1	29	50	28	130	250
Toluene	2.3	ND	ND	ND	ND	ND	ND	ND
Butanoic	ND	ND	ND	2.2*	1.1*	ND	ND	ND
2-butanone	ND	ND	ND	ND	ND	ND	21	ND
Aluminum	6800	5500	5700	6400	6500	6200	5000	5700
Barium	61	53	81	83	93	72	40	42
Beryllium	.4	ND	.4	.5	.4	.4	ND	ND
Cadmium	.3	ND	ND	ND	ND	ND	ND	ND
Calcium	2700	2300	3600	4200	3200	2600	2200	2400
Chromium	8.7	6.9	6	7.3	7.2	7.1	33	11
Cobalt	8	7	11	12	15	9	5	6
Copper	200	94	37	28	67	51	290	300
Iron	15000	14000	23000	24000	21000	16000	10000	12000
Magnesium	3300	2900	3400	3900	3400	3100	2200	2600
Manganese	110	110	400	360	430	340	79	92
Nickel	9	6	8	8	8	7	5	8
Phosphorus	500	430	750	770	580	410	420	450
Potassium	1100	800	800	900	800	800	800	900
Strontium	15	12	15	18	15	14	13	14
Vanadium	38	36	64	68	51	40	34	31
Zinc	83	52	46	47	48	38	52	73
Fluoride	.002	ND	.003	ND	ND	ND	ND	ND
Ammonia	7.3	4.2	1.7	1.3	2.7	2.4	26	NR ⁴
pH	7.1	7	6.8	6.8	6.6	7.1	6.8	6.9

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ANALYTES ABOVE DETECTION LIMITS
RAIN WATER RUN-OFF DITCH

	surface composite
ANALYTE	B00GQ6 ⁵
Aluminum	8300
Barium	80
Beryllium	.4
Cadmium	ND
Calcium	3800
Chromium	9.9
Cobalt	11
Copper	12
Iron	21000
Magnesium	4400
Manganese	350
Nickel	11
Phosphorus	690
Potassium	1500
Silver	ND
Sodium	400
Strontium	21
Vanadium	53
Zinc	67
Fluoride	ND
Ammonia	3
pH	8.5

All units are in ug/g, except for VOAs (ug/Kg) and Q5 which is in mg/Kg

- 1 B00GP8 is an equipment blank
- 2 B00GQ2 is a duplicate of B00GP9
- 3 B00GQ5 is a split of B00GQ3 sent to a different lab
- 4 listed as not requested by the lab, however, lab error
- 5 B00GQ6 is a composite of four samples taken from the run-off ditch
- * Butanoic Acid is a tentatively identified compound and is estimated
- ND Non Detect
- NR Not Requested
- NA Not Analyzed

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Summary of 2101-M Pond Phase II Sample Values
Above Background

ANALYTE	MAXIMUM OBSERVED	SITEWIDE BKGRND THRESHOLD VALUE
Acetone	250ppb	--
Aroclor 1242	.42	--
Aroclor 1254	1.1	--
Benzoanthracene	1.8	--
Benzoperylene	2.1	--
Benzopyrene	1.9	--
Bisphalate	16	--
Butanoic Acid	2.2E	--
2-Butanone	21	--
Cadmium	2.7	.66
Chromium	33	28
Chrysene	2.1	--
Copper	2500	30
Fluoranthene	1.1	--
Indenopyrene	2.4	--
Lead	160	14.9
Manganese	600	580
Pyrene	1.7	--
Silver	32	21
Thallium	50	3.7
Toluene	2.3ppb	--
Zinc	360	79
24D	.015	--
44DDE	.0007	--
245T	.003	--
245TP	.003	--

Unless otherwise noted in table all values are ppm

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ANALYTE	NORTH ARM				DISCHARGE				SOUTH ARM				
	0-6in	18-24in	0-6in	18-24in	0-6in	0-6in	0-6in	18-24in	0-6in	0-6in	18-24in	0-6in	18-24in
	800GP2	800GP3	800GP4	800GP5	800GP6	800GQ7	800GQ9	800GRO	800ZH7	800ZH8			
Acetone										250ppb			
Aroclor 1242	.42												
Aroclor 1254					1.1								
Benzoanthracene					1.8								
Benzoperylene					2.1								
Benzopyrene					1.9								
Bisphalate					16								
Butanoic acid								2.2					
2-Butanone									21				
Cadmium					2.7								
Chromium											33		
Chrysene					2.1								
Copper					2500								
Fluoranthene					1.1								
Indenopyrene					2.4								
Lead					160								
Manganese		600											
Pyrene					1.7								
Silver						32							
Thallium	50												
Toluene								2.3ppb					
Zinc					360								
2,4-D				.015									
4,4,DDE					.0007								
2,4,5,T			.003										
2,4,5,TP					.003								

9 1 2 9 1 0 2 7 3

Distribution:

R. C. Brunke	WHC	H6-23
R. M. Carosino	RL	A4-52
C. E. Clark	RL	A5-15
W. G. Cox	WHC	H6-23
D. L. Duncan	EPA	HW-106
G. D. Forehand	WHC	B2-35
R. L. Jackson	WHC	H6-06
R. N. Krekel	RL	A5-15
A. G. Lassila	RL	A5-10
S. J. Lijek	GSSC	A4-35
P. J. Mackey	WHC	B3-15
R. G. McLeod	RL	A5-19
P. D. Mix	WHC	H6-29
S. M. Price	WHC	H6-23
F. A. Ruck III	WHC	H6-23
J. J. Wallace	Ecology - Kennewick	
M. A. Wasemiller	WHC	H6-03
E. A. Wiley	Ecology - Lacey	

ADMINISTRATIVE RECORD: 2101-M Pond Closure Plan, D-2-1 [Care of EDMC, WHC (H6-08)]

Washington State Department of Ecology Nuclear and Mixed Waste Library,
P.O. Box 47600, Olympia, Washington 98504-7600

Environmental Protection Agency Region 10, Seattle, Washington 98101, Mail
Stop HW-074

Please send comments on distribution list to Kym Tarter (H6-23), 376-4701.

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