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**DISTRIBUTION
UNIT MANAGERS' MEETING,
200 AREA GROUNDWATER SOURCE OPERABLE UNITS**

EPA

Craig Cameron

B5-01

Ecology

John Price

H0-57

Administrative Record (2)

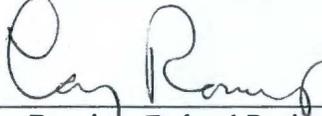
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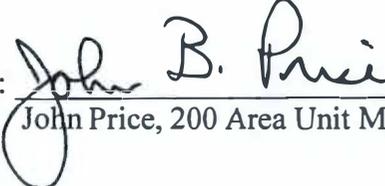
EDMC

**Meeting Minutes Transmittal/Approval
Unit Managers' Meeting
200 Area Groundwater and Source Operable Units
1200 Jadwin Avenue, Richland, Washington
April 15, 2004**

APPROVAL:  Date: 2/17/05
Arlene Tortoso, Groundwater Unit Manager, DOE/RL

APPROVAL:  Date: 2-17-05
Larry Romine, Federal Project Director, 200 Area D4 & Waste Site
Remediation, DOE/RL

APPROVAL:  Date: 2/17/05
Craig Cameron, 200 Area Unit Manager, EPA

APPROVAL:  Date: 2/17/05
John Price, 200 Area Unit Manager, Ecology

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

Attachment 1	--	Agenda
Attachment 2	--	Attendance Record
Attachment 3	--	200 Area UMM Minutes – April 15, 2004
Attachment 4	--	200 Area Current Action Log
Attachment 5	--	Float Table
Attachment 6	--	200-UP-1, 200-ZP-1 and 200-PW-1 Status Report
Attachment 7	--	Comparison of Maximum Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 Soil Vapor Extraction Sites FY 1998- FY 2004
Attachment 8	--	S Ponds 200 West Map
Attachment 9	--	Status of Well Decommissioning
Attachment 10	--	200-UP-1 Groundwater Well List
Attachment 11	--	Groundwater Remediation RI/FS ROD's Master Schedule

Prepared by:


Linda DeLannoy, Project Systems & Support (H8-49)

Date 1-26-05

Concurrence by:


Mary Todd Robertson, FH Groundwater Protection Program (E6-35)

Date 2/9/05

UNIT MANAGERS' MEETING AGENDA

1200 Jadwin Avenue

April 15, 2004

9 a.m. – 12 p.m. 200 Area Room 1C1

General (15 minutes)

- Outstanding Action Items
- Open for Regulatory Topics or Action Items
- TPA Quarterly Review

U Plant Area Regional Closure (10 minutes)

- Schedule Review
 - FFS/PP Status
 - Change Request Status
 - Drive casing/Spectra Gamma
 - Path forward

BC Cribs Area Closure (10 minutes)

- Schedule Review
 - Confirmatory DQO and SAP
 - TPA change request to move four LW-1 sites to TW-1

200-TW-1, 200-TW-2, & 200-PW-5 (10 minutes)

- Schedule Review
 - Status of RI Report
 - Status of FS and PP Review
 - ROD Strategy

GROUNDWATER OPERABLE UNITS

General (5 minutes)

- Update on Well Decommissioning
 - 90 Wells Scheduled For Decommissioning in FY04

200-BP-5 & 200-PO-1 OUs (5 minutes)

- 200-BP-5 Updated Well List
- 200-PO-1 Schedule Status

200-UP-1 OU (5 minutes)

- Remediation Treatment Status
- RI/FS Work Plan Status – April 7 Delivery to Ecology
- Will begin drilling New Monitoring Wells “K”, “P”, and “R” Next Week.

200-ZP-1 OU (5 minutes)

- Remediation Treatment Status
- RI/FS Work Plan Status – Responding to EPA and RL Comments on Draft A
- Replacement Extraction Wells #1 and 4 are being hooked up

SOURCE OPERABLE UNITS

200-PW-1, 200-PW-3, & 200-PW-6 OUs (15 minutes)

- Schedule Review
 - Remediation Treatment Status
 - Monthly Monitoring
 - Status of Field Work Preparation and Planning
 - Status of RI/FS Work Plan
 - Status of Field Work at 216-Z-9

218-W-4C Burial Ground (5 minutes)

- Remediation Treatment Status

200-CW-1 & 200-CW-3 OUs (10 minutes)

- Schedule Review
 - Status of FS and PP
 - Spring Sampling Results
 - Discussion of GMP Test Area

200-PW-2 & 200-PW-4 OUs (10 minutes)

- Schedule Review
 - Status of Waste Management Activities
 - Status of Work Plan
 - Status of RI Report
 - Status of Field Planning for 216-S-7 Borehole
 - Status of WCP

200-CS-1 OU (2 minutes)

- Schedule Review
 - Status of RI Report

200-CW-5, CW-2, CW-4, & SC-1 OUs (10 minutes)

- Schedule Review
 - Status of Work Plan
 - Status of RI Report
 - Status of FS

200 Area Ecological Evaluation (10 minutes)

- Schedule Review
 - Status of Eco DQO
 - Status of Eco Evaluation Report
- Overview of Eco Activities
 - Planning for Spring Sampling

200-IS-1 & 200-ST-1 (5 minutes)

- Schedule Review
 - Status of Work Plan
 - Status of ORP/RL work on pipeline strategy
 - Scope Definition

200-LW-1/200-LW-2/200-MW-1 (10 minutes)

- Status of Field Planning
- Status of 200-MW-1 WCP

200-UR-1 (5 minutes)

- Schedule Review
 - Status of DQO and Work Plan
 - Status of BC Control Zone Planning

200-SW-1/2 (5 minutes)

- Schedule Review
 - Status of Work Plan

**Groundwater and Source Operable Units Unit Managers' Meeting
Official Attendance Record – 200 Area
April 15, 2004**

Please print clearly and use black ink

PRINTED NAME	ORGANIZATION	O.U. ROLE	TELEPHONE
John Price	Ecology	Proj. Mgr	736-3029
Jean Vanni	Eco		736-3046
Mark Byrnes	FH	Task Lead	373-3996
Beth Rochette	Ecology	200 area common, UR-1, UW-1	736-3020
Brenda Becker-Khaleel	Ecology	reg compliance	736-3003
Kevin Leary	DOE	Task Lead	373-7285
Ron Jackson	FH	Task Lead	373-3599
Zelma Jackson	Ecology	200 Grd H ₂ O UR-1	736-3024
Arlene Tortoso	DOE	200 Area GW	373-9631
Virginia Rohay	FH	Task Lead PW-1, SW-2	373-3803
Mark Benedek	FH	BC TW-1/2, PW-5	376-0202
John P. McDonald	PNNL	200-UR-1	373-0362
Bruce Ford	Fit	GRP	373-3809
Eileen J. Murphy-Fitch	FH TPAL	—	376-8868
John Winterhalter	FH/GRP	ECO	372-8144
Craig Cameron	EPA	Proj. Mgr.	376-8665
Bryan L. Foley	DOE-RL	Groundwater Remediation	376-7087
Stuart Luttrell	PNNL	GW Mon.	376-6023
JV Boshese	FH	GW	373-3804
MIKE Hickey	FA	CWI+3	373-3092

MEETING MINUTES
200 AREA UNIT MANAGERS' MEETING -- 200 AREA
April 15, 2004

Agenda: See Attachment #1

Attendees: See Attachment #2

Topics of Discussion:

1. General

- Outstanding Action Items – Maps depicting the central plateau definition were distributed to the agencies at the meeting. These maps provided a physical outline of the central plateau and the ecological boundaries. Ecology requested a verbal definition of "central plateau" be provided as well.
- Open Regulatory Topics or Action Items – DOE/RL stated that Waste Control Plans and Sampling and Analysis Plans will no longer be signed by DOE. FH, Ecology and EPA requested a copy of the letter that stated that change in procedure. A DOE representative will explain this change further at the IAMIT meeting.
- TPA Quarterly Review – Not discussed at the meeting.

2. U Plant Area Regional Closure

- Schedule Review
 - Status of FFS/PP – The Proposed Plan was updated based on recent comments received. Ecology stated that input will be provided on RCRA/CERCLA integration. FH is putting together a P3 schedule to show how the plan fits the CERCLA process. FH will get the Proposed Plan out for another Region 10 review.
 - Change Request Status – The TPA Change Request was submitted a month ago and FH is still waiting for signature.
 - Drive Casing/Spectral Gamma – Twenty-nine drive casings have been completed. Spectral/gamma logs were run in those casings. Ten more casing will be done to try to gain a better understanding of the spreading under the perimeter of the crib. It seems the footprint is actually 20% to 30% larger than anticipated. Preliminary work on design is being performed.
 - Path Forward – The goal was to have the ROD out in 2004. That goal is slipping. The hope is that the Proposed Plan will be out in June or July of 2004. The ROD may be out in September or October.

3. BC Cribs Area Closure

- Schedule Review
 - Confirmatory DQO and SAP – The DQO process continues. A strawman DQO will be ready by the end of this week. DOE requested more information on the novel

methods being considered to evaluate the presence of a predicted Tc-99 and nitrate plume near the 100-ft bgs level.

- TPA Change Request to Move Four LW-1 Sites to TW-1 – The change form has been transmitted from DOE to Ecology and EPA for signature.

4. 200-TW-1, 200-TW-2, & 200-PW-5

- Schedule Review
 - Status of RI Report – Modeling activity to address United States Geological Society concerns is underway.
 - Status of FS and PP Review – The review is underway. Meetings with Mike Goldstein (EPA Lead) are scheduled. The initial focus of these meetings will be on worker risk, intruder scenarios, and cost estimates.
 - ROD Strategy – DOE stated that a final ROD on TW-1/-2/PW-5 is desired.

GROUNDWATER OPERABLE UNITS

5. General

- Update on Well Decommissioning
 - 90 Wells Scheduled For Decommissioning in FY 2004 – A handout was distributed and reviewed (attached).
 - 76 Subsurface Work Complete
 - 64 All Surface and Subsurface Work Complete
 - It was requested that well 299-W26-3, identified as a substitute well for decommissioning, be added to the 200-UP-1 Interim Action Waste Management Plan decommissioning well list. The marked-up appendix list will be attached to these meeting minutes to document this change.

6. 200-BP-5 & 200-PO-1 OUs

- 200-BP-5 Updated Well List – Two wells (699-50-53A and 699-53-48B) are dry. They will be removed from the sampling schedule and from the SAP. EPA stated that they are not comfortable with work proceeding without DOE signature on the 200-BP-5 Waste Control Plan. Ecology stated that signatures can and should be obtained at the 200 Area UMM. EPA doesn't want any sampling going on until the signature issue is resolved. The issue effects sampling, decommissioning and well drilling. It was stated that FH cannot work to the previous revision of the Waste Plan.
- 200-PO-1 Schedule Status – Ecology requested a task level schedule in accordance with TPA from DOE. The schedule was provided during the meeting.

7. 200-UP-1 OU

- Remediation Treatment Status – The average pumping rate for CY04 through April 4 was 47.4 gpm. The system operated at between 49.5 and 55.8 gpm for the month of March through April 4. The system was shut down for approximately 8 hours on March 4, 2004, for an ERDF leachate transfer. The pump in extraction well 299-W-19-36 failed

March 22. The pump was replaced and this extraction well was restarted March 26. Extraction well 299-W19-39 had to be shutdown on March 26 for a few hours due to low water levels. The system run time for the month of March through April 4 was 99.0%, for FY 2004 year-to-date was 86.0%, for system inception to date was 92.6%. A handout was distributed (attached).

- RI/FS Work Plan Draft B Status – Ecology comments will be issued April 23.
- Will Begin Drilling of New Monitoring Wells “K”, “P”, and “R” Next Week – Drilling of new monitoring well "P" is scheduled to begin the middle of next week. New monitoring wells "K" and "R" will follow. Missing data to support the CERCLA RI/FS process will be collected from these wells.

8. 200-ZP-1 OU

- Remediation Treatment Status – The average pumping rate for FY 2004 through April 4 was 120 gpm. For the month of March through April 4, 2004, the system operated at between 88 and 125 gpm. The system was shut down for approximately two hours on March 18 for a GAC change out. Extraction well #2 went down March 18 due to a failed pump. Extraction Wells #1 (W15-33) and #4 (W15-32) were shutdown on March 30 to transfer components to the replacement wells. Testing of the new replacement extraction well will begin in approximately one week. The system run time for the month of March through April 4, 2004, was 99.6%, FY 2004 year-to-date was 93.8% and system inception to date was 92.2%. A handout was distributed (attached).
- RI/FS Work Plan Status – A review of FH's addressing of EPA comments is scheduled for April 19.
- Replacement Extraction Wells #1 and 4 Are Being Hooked Up – No discussion.

SOURCE OPERABLE UNITS

9. 200-PW-1, 200-PW-3, & 200-PW-6 OUs

- Schedule Review
 - Remediation Treatment Status – The active soil vapor extraction system was restarted April 1, 2004, at the 216-Z-1A Tile Field. Performance data will be available for reporting next month. The vapor extraction system will be moved to the 216-Z-9 site in July. The Unit Managers for the 200-PW-1 OU approved the soil vapor extraction system operating plan on March 29, 2004 (attached).
 - Monthly Monitoring – The anomalously low carbon tetrachloride concentrations measured at 7 locations during the March 16, 2004, monitoring (reported at the March 2004 UMM) were found to be caused by sample pump problems. These locations were resampled on March 24, and the results were reported at this UMM (attached). Most of the results are consistent with past monitoring. However, concentrations at two of the sites (CPT-17/10ft and CPT-21A/45ft) that were resampled are slightly higher than other recent monitoring results at these locations.
 - Status of Field Work Preparation and Planning – The 200-PW-1 and 200-PW-3 Waste Control Plans were combined and delivered to DOE and the EPA for review on April 13, 2004. Comments are requested by the end of the month if possible.

- Status of RI/FS Work Plan – The Work Plan is in the signature cycle at DOE-RL for transmittal to EPA.
- Status of Field Work at 216-Z-9 – Drilling at Z-9 has reached a depth of 115 ft and is into the silt of the Cold Creek Unit. High gamma activity was encountered during field screening at 112 ft depth; the only gamma emitter detected during the radiological screening at the laboratory was Am-241. A soil vapor sample collected in the silt layer (110-112 ft depth) had a relatively high concentration (9,700 ppmv) of carbon tetrachloride.

10. 218-W-4C Burial Ground

- Remediation Treatment Status – Vapor extraction continues. Carbon tetrachloride concentration is in the 1 – 5 ppmv range.

11. 200-CW-1 & 200-CW-3 OUs

- Schedule Review
 - Status of FS and PP – FH is working on migrating the text to a new format.
 - Spring Sampling Results – Sampling is currently being done. DOE requested that some of the individuals doing the sampling attend the next 200 Area UMM.
 - Discussion of GMP Test Area – No discussion regarding Gable Mountain Pond was held.

12. 200-PW-2 & 200-PW-4 OUs

- Schedule Review
 - Status of Waste Management Activities – Drums from the A-10 waste site went to ERDF on March 25, 2004. Soil from the 216-A-36B crib is scheduled to go out April 15, 2004. The drill casing is being profiled. FH hopes to have that to ERDF by May 31, 2004.
 - Status of Work Plan – Ecology stated the review of outstanding items from the February 23, 2004, comment review meeting will begin next week.
 - Status of RI Report – The DOE review is scheduled to begin May 3, 2004, and run through May 14, 2004.
 - Status of Field Planning for 216-S-7 Borehole – Preliminary hazards classification work has begun. Drilling may begin in August or September 2004.
 - Status of WCP –The Waste Control Plan has been updated to add the 216-S-7 borehole.

13. 200-CS-1 OU

- Schedule Review
 - Status of RI Report – DOE should have it out by the end of May 2004.

14. 200-CW-5, CW-2, CW-4, & SC-1 OUs

- Schedule Review
 - Status of Work Plan – The Work Plan is in clearance review.
 - Status of RI Report – DOE requested an over-view of the RI Report when the Rev. 0 version is ready for issuance.
 - Status of FS – A full draft copy has been received from the sub-contractor and FH is reviewing that draft. A draft Proposed Plan is being prepared as well.

15. 200 Area Ecological Evaluation

- Schedule Review
 - Status of Eco DQO – The DQO is being prepared for discussion with the DQO project participants on May 26th. The draft SAP will be transmitted to the Tri-Party decision-makers and public participants for their review on May 4, 2004, as planned.
 - Status of Eco Evaluation Report – A target date for completion of this report is May 28, 2004.
- Overview of Eco Activities
 - Spring Sampling – The planned reconnaissance surveys were performed in support of selection of candidate waste sites for ecological sampling. This was a visual observation of the condition of the waste sites. The results of the reconnaissance surveys were transmitted to FH on April 29, 2004, as planned. The information is being reviewed for use in the final version of the SAP.

16. 200-IS-1 & 200-ST-1

- Schedule Review
 - Status of Work Plan – DOE drafted a transmittal letter to Ecology. An extension request will need to be made to meet the October deadline.
 - Status of ORP/RL Work on Pipeline Strategy – Preliminary meetings between FH and CHG personnel have been held to discuss the logic developed to determine ownership of the sites. Data gathering to support mapping sites in this OU is continuing. A FH subcontractor will be tasked to continue mapping sites identified in other process-based operable units.
 - Scope Definition – Discussions are ongoing within FH to determine the final scope and content of the revised work plan. There is some concern over desired document scope vs. funding available to complete the work.

17. 200-LW-1, 200-LW-2, & 200 MW-1

- Status of Field Planning – Field work is anticipated to begin in mid May 2004.
- Status of 200-MW-1 WCP – Awaiting resolution of RL approval concerns.

18. 200-UR-1

- Schedule Review
 - Status of DQO and Work Plan – The DQO is complete and being finalized for issuance. The Decisional Draft of the Work Plan will be delivered to RL for their review on April 30, 2004.
 - Status of BC Control Zone Planning – The approach in the Work Plan shows four groupings of unplanned release sites: candidate sites for rejection through the TPA-MP-14 process, sites that are candidates for transfer to other remedial actions, remove-treat-and-dispose sites, and sites that will be evaluated through the full RI/FS process. The BC Control Area is the only site identified as a candidate for the full RI/FS process because of its unique size and potential for human health and ecological impacts. This site will also be considered for a treatability study to support the selection of the remediation alternatives that have the least ecological impact.

19. 200-SW-1/2

- Schedule Review
 - Status of Work Plan – The DQO process is proceeding. There is a meeting scheduled for May 6, 2004, to discuss the reclassification of the status in WIDS for selected waste sites. The global issue, whether 40 CFR 191 is relevant and appropriate as an ARAR, has not yet been resolved.

200 Area Unit Managers' Meeting
200 Area Remedial Action Float Table
April 2004

Task	Scheduled Date	Float	Comments
200-CS-1			
Deliver Draft A RI Report for Regulator Review	5/31/04	--	On schedule
Deliver Draft A FS/PP for Regulator Review	11/30/05	--	On schedule
200-CW-1			
Deliver Draft B FS for Regulator Review	7/3/2003 (original date based on receipt of regulator comments 45 calendar days after submittal (which would be 5/15/2003) with 45 days to revise and reissue)	-285-d	Regulator comments originally due on 5/15/2003; policy level comments received on that date; Ecology indicated additional comments would be coming; to date these comments have not been received; the new schedule date assumes no additional comments will be received from the regulators on Draft A
	9/30/2004 (new target date based on collecting spring samples and incorporating data into the revision)	--	On schedule
200-LW-1			
Deliver Draft A RI Report for Regulator Review	10/31/05	--	On schedule
200-PW-2			
Deliver Revised Waste Control Plan for regulator review	3/8/04	--	Delivered 02/23/04
Ecology approve Rev 1 RI/FS work plan	2/14/03	-430-d	After BCR approval, field work is scheduled for 8/04 and completion of work is forecast to not generate a variance for the FS.
Deliver Draft A RI Report for Regulator Review	6/30/04	--	Assumes RI can be delivered w/o add'l sampling, per Ecology agreement @ 12/03 UMM
Deliver Draft A FS/PP for Regulator Review	12/31/05	--	Assumes additional sampling necessary for Ecology request
200-SW-1/200-SW-2			
Regulator DQO Interview	4/27/04	--	Interview conducted on 03/17/04
Deliver Draft DQO to regulators	7/5/04	--	On schedule
Deliver draft A RI/FS work plan for regulator review	12/31/04	--	On schedule
Deliver Waste Control Plan for regulator review	4/15/05	--	On schedule
Start field sampling	7/27/05	--	On schedule
Deliver Draft A RI Report for Regulator Review	9/19/07	--	On schedule
200-TW-1 (includes 200-TW-2)			
EPA/Ecology approve RI Report	7/10/03	-247-d	Need to finalize path forward on modeling revisions; meeting scheduled for 3/17
Deliver Draft A FS/PP for Regulator Review	3/31/04	--	Delivered on 03/31/04

200 Area Unit Managers' Meeting
 200 Area Remedial Action Float Table
 April 2004

Task	Scheduled Date	Float	Comments
200-UR-1			
Deliver draft A RI/FS work plan for regulator review	6/30/04	--	On schedule
Deliver Waste Control Plan for regulator review	3/1/06	--	On schedule
Start field sampling	4/26/06	--	On schedule
Deliver Draft A RI Report for Regulator Review	5/14/07	--	On schedule
U Plant Waste Sites			
Ecology approve confirmatory sampling SAP	12/1/03	-110-d	Remedial decisions were not reached with Ecology and EPA as planned. General consensus has just been developed and the SAP is being finalized.
Start U Plant Confirmatory and Design Sampling	1/5/04	--	Deferred until FY05 due to budget constraints
Deliver Draft A RD/RA work plan for regulator review (surface barrier RD/RA)	1/18/05	--	On schedule
Deliver Draft A RD/RA work plan for regulator review (excavation RD/RA)	1/18/05	--	On schedule
200-IS-1/200-ST-1			
Deliver Rev. 1 RI/FS work plan	10/29/04		On schedule with current understanding of work scope. If scope of work expands, then schedule will require reevaluation.
Deliver Waste Control Plan for regulator review	1/24/05	--	On schedule
200-PW-1/200-PW-3/200-PW-6			
Deliver Rev. 0 RI/FS work plan	3/31/04	--	Delivered to RL on 3/8
Deliver PW-3 Waste Control Plan for regulator review	3/29/04	--	Draft passed out on 03/18/04. EPA requested the WCP for PW-3 and PW-1 be combined. New delivery date 04/14/04
Deliver revised PW-1 Waste Control Plan for regulator review	3/29/04	--	Draft passed out on 03/18/04. EPA requested the WCP for PW-3 and PW-1 be combined. New delivery date 04/14/04
200-MW-1			
Deliver Waste Control Plan for regulator review	3/26/03	--	Delivered 03/23/04
Deliver Draft A RI Report for Regulator Review	12/31/05	--	On schedule

200 Area Unit Managers' Meeting
 200 Area Remedial Action Float Table
 April 2004

Task	Scheduled Date	Float	Comments
200-CW-5/200-CW-2/200-CW-4/200-SC-1			
Deliver Rev. 1 RI/FS work plan	M-013-22 met on schedule; Rev. 0 work plan approved 9/28/2002. Consolidation TPA change package approved 6/5/2002. Rev. 1 originally scheduled to be delivered 5/6/2003	-347-d	Consolidation TPA change package approved 6/5/2002; currently planned for 3/31/2004. Revision was delayed pending receipt of Ecology input on ecological evaluation, which was received on 11/18/03. This was followed by a final review with EPA 12/3/03. There were several additional delays, including: EPA's request to reinstate the SAP as part of the Work Plan (previously issued separately to enable field characterization to proceed); Official Use Only (OUO) document driven revisions; and poor figure quality problems associated with the XP-Pro Operating System. Document currently being review by DOE. New delivery date 04/21/04
Deliver Rev. 0 RI Report	9/1/2003 (original date based on receipt of regulator comments on 7/15/2003 with 45 days for revision)	-229-d	Currently scheduled for 4/30/2004. Because the consolidation logic is provided in the work plan, it was agreed that work plan issuance would precede the RI report.
Deliver Draft A FS/PP for Regulator Review	10/31/04	--	On schedule

200 Area UMM – April 2004

200-UP-1:

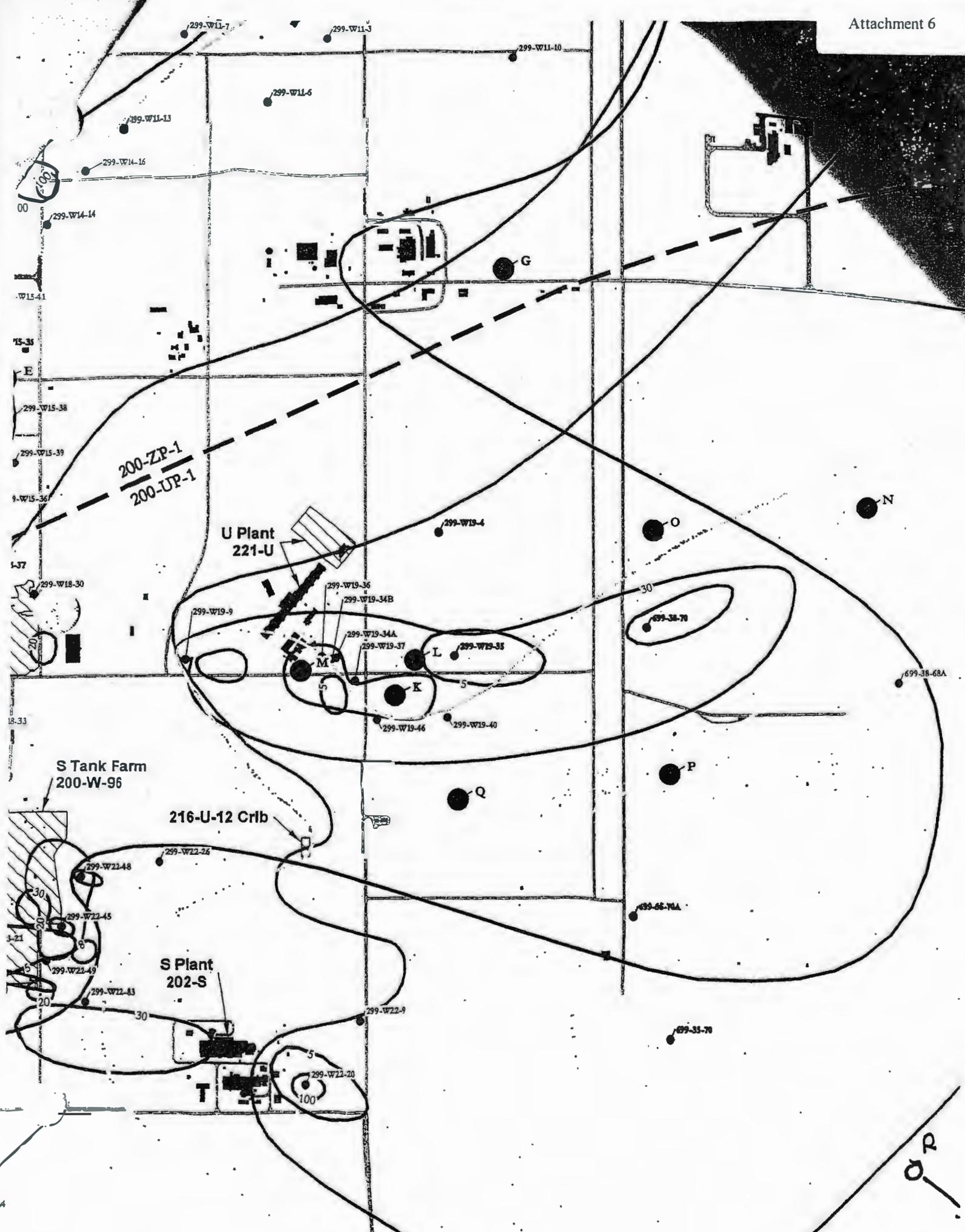
- Average Pumping Rate (counting all outage time as 0 gpm) for CY04 through April 4: 47.4 gpm.
- For the month of March through April 4, the system operated between 49.5 and 55.8 gpm.
- System was shutdown for approximately 8 hours on March 4 for an ERDF leachate transfer.
- The pump in extraction well 299-W19-36 failed March 22. The pump was replaced and this extraction well was restarted March 26.
- Extraction well 299-W19-39 had to be shutdown on March 26 for a few hours due to low water levels (pumping too hard).
- System Run Time
 - For Month of March through April 4 99.0%
 - FY2004 (Year to date) 86.0%
 - System Inception to date 92.6%
- RI/FS Work Plan Draft B – Ecology Comments will be issued April 23
- Important Milestones: *Deliverable* *SEP 2-17-05* *ACT 2/17/05*
 - July 12, 2005 – ~~02040105~~, DOE-RL submits Draft A RI Report to Regulators
 - April 5, 2007 – ~~02054100~~, Issue Draft A FS Report to Regulators
- Drilling of new monitoring well "P" is scheduled to begin the middle of next week. New monitoring wells "K" and "R" will follow. Missing data to support the CERCLA RI/FS process will be collected from these wells.

200-ZP-1:

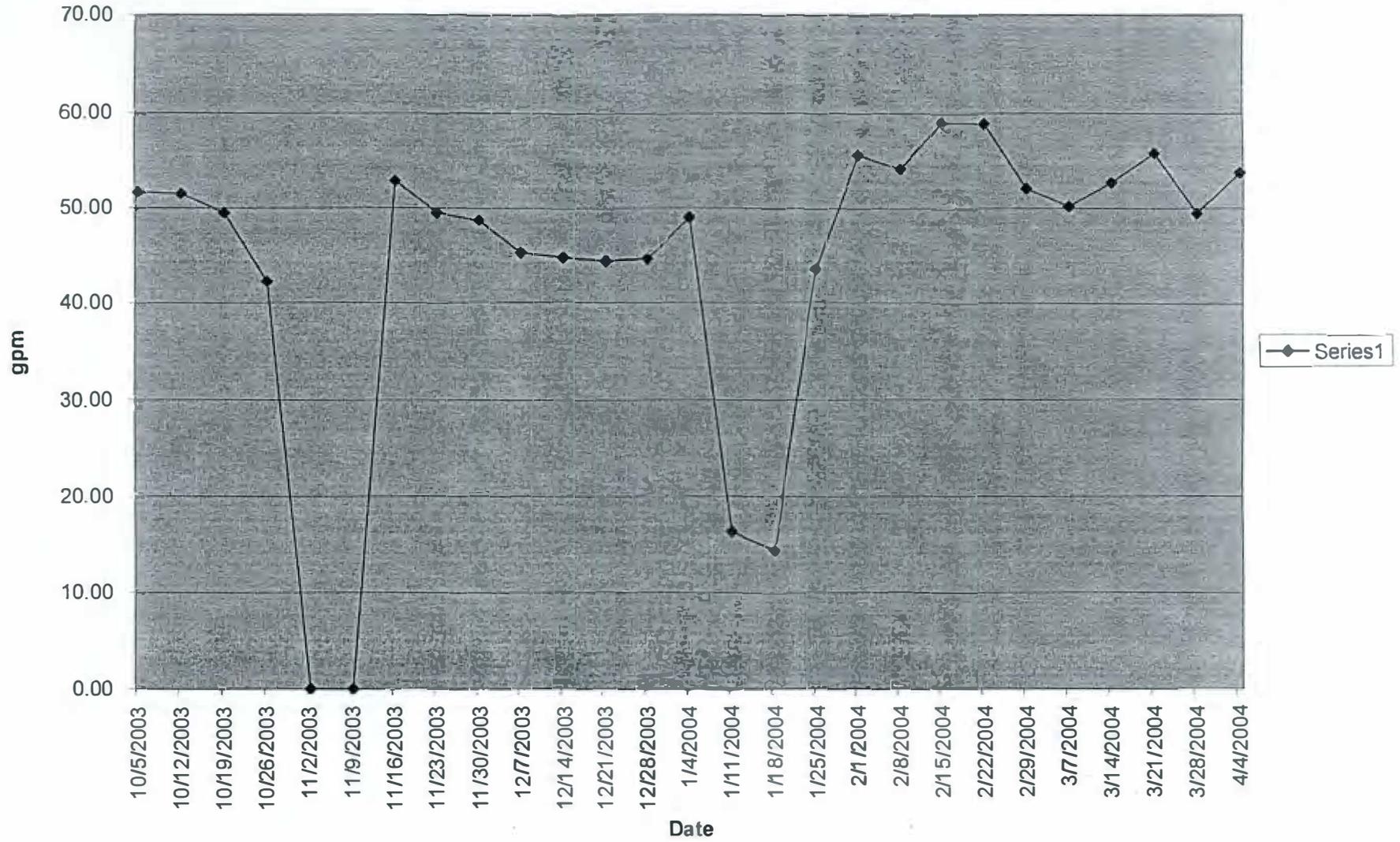
- Average Pumping Rate for FY04 through April 4: 120 gpm
- For the month of March through April 4, the system operated at between 88 and 125 gpm.
- System was shutdown for approximately 2 hours on March 18 for a GAC changeout.
- On March 18 Extraction Well #2 went down due to a failed pump.
- Extraction Wells #1 (W15-33) and #4 (W15-32) were shutdown on March 30 to transfer components to the replacement wells.
- We will begin testing the new replacement extraction well in approximately one week.
- System Run Time
 - For Month of March through April 4 99.8%
 - FY2004 (Year to date) 93.8%
 - System Inception to date 92.2%
- RI/FS Work Plan Status – Will be reviewing how we plan to address EPA comments with Dennis Faulk April 19.

200-PW-1 (200-ZP-2):

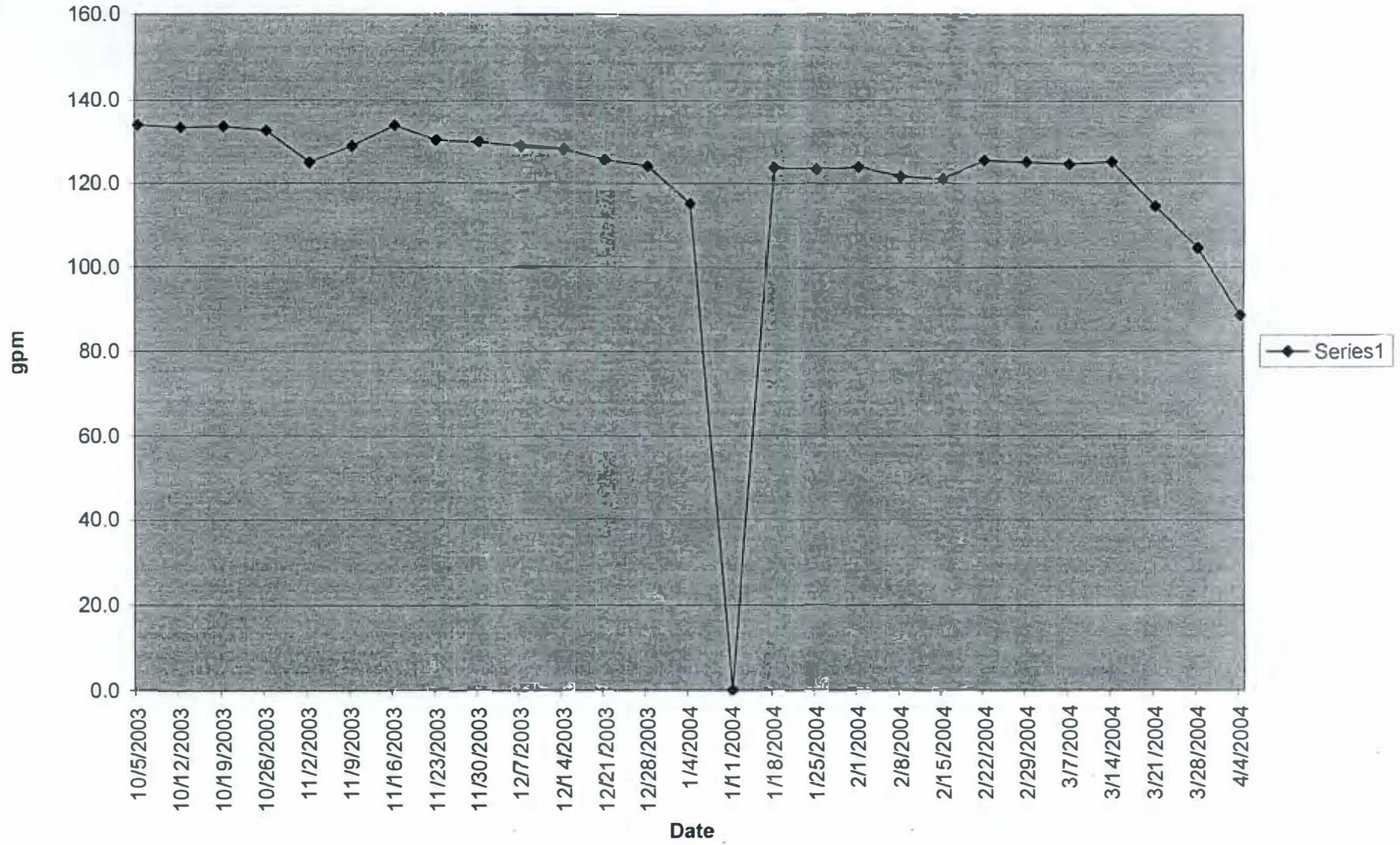
- Active system was restarted April 1, 2004. I will have performance data to report next month.
- The passive system remains operational.



200-UP-1 Average Pumping Rate for FY2004



200-ZP-1 Average Pumping Rate for FY2004



Comparison of Maximum Carbon Tetrachloride Rebound Concentrations
Monitored at 200-PW-1 Soil Vapor Extraction Sites
FY 1998 - FY 2004

200-PW-1 (200-ZP-2)		October 1997 - September 1998		July 1998 - September 1999		July 1999 - June 2001		July 2001 - June 2002		July 2002 - September 2003		July 2002 (Z-9) or October 2003 (Z-1A) - March 2004	
Location (Well or Probe)	Site	Maximum Rebound Carbon Tetrachloride (ppmv)	months* of rebound	Maximum Rebound Carbon Tetrachloride (ppmv)	months* of rebound								
79-03/ 5 ft	Z-1B	0	3	0	12								
79-06/ 5 ft	Z-1A	not measured		1.4	12								
79-11/ 5 ft	Z-1A	0	6	2.9	12								
86-05/ 5 ft	Z-9	not measured		0	3								
86-05-01/ 5 ft	Z-9	not measured		0	3								
86-06/ 5 ft	Z-9	0	9	1.9	6								
87-05/ 5 ft	Z-1A	0	3	1.0	12								
87-09/ 5 ft	Z-1A	1.5	3	2.6	12								
94-02/ 5 ft	Z-9	not measured		1.4	3								
95-11/ 5 ft	Z-9	2.1	9	2.5	6								
95-12/ 5 ft	Z-9	1.5	9	1.3	6								
95-14/ 5 ft	Z-9	not measured		0	3								
CPT-13A/ 9 ft	Z-1A	0	6	1.0	12								
CPT-16/ 10 ft	Z-9	0	9	1.5	6								
CPT-17/ 10 ft	Z-9	4.2	9	5.1	6	6.6	24	3.2	6	6.6	15	9.0	21
CPT-18/ 15 ft	Z-9	6.5	9	5.0	6	5.2	24	1.4	6	2.4	15	2.4	21
CPT-4A/ 25 ft	Z-1A	not measured		not measured		3.5	0	3.4	10				
CPT-4E/ 25 ft	Z-1A	not measured		not measured		not measured		2.6	12	1.3	0		
CPT-16/ 25 ft	Z-9	not measured		not measured		1.8	24	1.1	6	2	15	2.6	21
CPT-31/25 ft	Z-1A	0	6	0	12								
CPT-32/ 25 ft	Z-1A	9.1	6	10	12	16.5	18	13.0	12	8.3	6	6	6
CPT-30/ 28 ft	Z-18	not measured		3.2	12	1.4	18	0	12	0	6	0	6
CPT-13A/ 30 ft	Z-1A	not measured		not measured		3.6	18	2.6	12	1.6	6	2	6
CPT-7A/ 32 ft	Z-1A	2.3	6	5.4	12	6.2	18	5.6	12	3.9	6	9.5	6
CPT-27/ 33 ft	Z-9	not measured		not measured		2.6	24	1.5	6	1.7	15	2.7	21
CPT-1A/ 35 ft	Z-12	1.4	3	3.0	12	7.7	18	11.3	12	22.0	15	18.3	6
CPT-28/ 40 ft	Z-9							56.5	6				
CPT-33/ 40 ft	Z-1A	2.0	3	2.6	12			2.3	12				
CPT-34/ 40 ft	Z-18	not measured		1.7	12	1.9	0	2.2	12	1.6	0		
CPT-21A/ 45 ft	Z-9	52.7	9	57	3	127	24	133	6	90.0	15	150.0	21
W15-220ST/ 52 ft	Z-9	not measured		1.8	3	2.5	24			1.5	1		
CPT-28/ 60 ft	Z-9	1.5	0	3.7	3								
CPT-9A/ 60 ft	Z-9	41.1	0	44	3	68	24	45.3	6	35.9	15	35.9	21
CPT-16/ 65 ft	Z-9	not measured		not measured		not measured		not measured		4.2	15		
CPT-1A/ 68 ft	Z-12	not measured		not measured		not measured		5.5	12				
CPT-30/ 68 ft	Z-18	not measured		3.0	12								
CPT-32/ 70 ft	Z-1A							7.7	12				
CPT-13A/ 70 ft	Z-1A	not measured		5.6	12								
CPT-24/70 ft	Z-9	3.2	9	3.6	3					4.7	15		
W15-219SST/ 70 ft	Z-9	not measured		7.6	3	7.8	24			1.9	1		
CPT-18/ 75 ft	Z-9	not measured		not measured		18	24			4.5	15		
CPT-4A/ 75 ft	Z-1A	not measured		not measured		not measured		7.1	3				
CPT-31/ 76 ft	Z-1A	not measured		4.2	12								
CPT-33/ 80 ft	Z-1A	not measured		9.2	12								
W15-82/ 83 ft	Z-9	5.5	9	4.6	6	55	24	66.7	6	85.8	15	85.8	21
CPT-21A/ 86 ft	Z-9	206	9	148	6	195	24	186	6	206	15	244	21
CPT-34/ 86 ft	Z-18	5.9	3	0	12								
W15-95U/ 88 ft	Z-9	15.3	9	39	6	43	21						
W15-218SST/ 86 ft	Z-9	not measured		0	3					1.6	2		
CPT-28/ 87 ft	Z-9	230	9	203	6	224	24	229	6	235	15	258	21
CPT-4B/ 90 ft	Z-1A							3.2	10				
CPT-1A/ 91 ft	Z-18	not measured		4.2	12			10.7	10				
CPT-4A/ 91 ft	Z-1A	7.7	3	14	12			7.5	2				
CPT-9A/ 91 ft	Z-9	34.5	9	72	3			74.3	8				
W15-85/ 91 ft	Z-9	not measured		not measured		51	24						
W18-252SST/ 100	Z-1A	17.8	3	24	12								
W18-152/ 101 ft	Z-12	11.1	3	33	12	25	18	25.7	12	20.7	6	12.4	6
CPT-4E/ 103 ft	Z-1A	not measured		not measured		not measured		16.1	12				
W18-167/ 106 ft	Z-1A	79.7	3	228	12	248	18	297	12	243	6	266	6
W18-165/ 109 ft	Z-1A	not measured		not measured		not measured		278	12	328	6	205	6
W15-217/ 114 ft	Z-9	630	9	561	6	442	24	93.6	6	444	15	458	21
CPT-24/ 118 ft	Z-9	37.7	9	37	6	35	24			27.8	15		
W15-220SST/ 118	Z-9	not measured		36	3	34	24			27.5	3		
W18-158U/ 120 ft	Z-1A	143	3	492	12	284	18	163	3				
W15-219SST/ 130	Z-9	not measured		47	3	54	24			23.1	1		
W18-249/ 130 ft	Z-18	20.4	3	215	12	176	18	196	12	46.3	6	41.0	6
W18-248/ 131 ft	Z-1A	86.3	3	177	12	214	18	306	12	182	8	180	6
W15-95L/ 144 ft	Z-9	not measured		not measured		not measured		31.8	6	25.1	15	40.3	21
W15-219SST/ 155	Z-9	not measured		24	3	44	24			6.8	1		
W15-220L/ 163 ft	Z-9										15		
W15-219U/ 175 ft	Z-9										15		
W15-9U/ 176 ft	Z-9	15.0	9	15	6	20	21	16.9	6	13.1	15	13.1	21
W15-84L/ 180 ft	Z-9	not measured		not measured		not measured		not measured		25.9	15	25.9	21
W15-6U/ 182 ft	Z-9	17.8	9	1.3	6								
W15-220SST/ 185	Z-9	not measured		13	3	15	24				1		
W18-7/ 197 ft	Z-1A	17.3	3	29	12								
W18-12/ 198 ft	Z-18	3.81	3	19	12								
W18-6U/ 208 ft	Z-1A	31.3	6	15	12								

* - based on location (Z-1A/18); points may be beyond SVE zone of influence during particular operating configurations
 - Z-18 and Z-12 wells off-line
 - CPT-1A, CPT-9A, and possible zone of influence in Oct 96 based on differential pressure (BHI-01105, p. 6-1)
 - CPT-9A, CPT-21A, CPT-25/ 96 based on CCl4 concentrations and airflow modeling based on measured vacuums (BHI-01105, p. 6-1)

Carbon Tetrachloride Rebound Concentrations
 Monitored at 200-PW-1 Soil Vapor Extraction Sites
 July 2002 (Z-9) or October 2003 (Z-1A) - March 2004

200-PW-1 (@00-ZP-Z)		07/30/2002	08/26/2002	10/04/2002	10/30/2002	11/27/2002	12/31/2002	01/30/2003	02/21/2003	03/20/2003	05/01/2003	05/22/2003	07/01/2003	08/05/2003	08/26/2003	10/31/2003	12/04/2003	12/22/2003	01/20/2004	02/19/2004	03/16/2004	03/24/2004	
Location (Well or Probe) /feet bgs	Site	CCl4 (ppmv)	CCl4 (v)	CCl4 (v)	CCl4 (v)	CCl4 (v)	CCl4 (v)	CCl4 (v)	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (v)	CCl4 (ppmv)											
CPT-17/ 10 ft	Z-9	1.8	1.4	2.0	1.6	1.1	1.0	1.3	1.5	3.1	5.3	6.6	4.5	6.1	5.3	3.2	4.1	2.7	5.8	5.0	---	(c)	9.0
CPT-18/ 15 ft	Z-9	0	0	1.2	0	0	0	0	0	1.7	0	2.0	0	1.8	2.4	0	1.1	1.0	1.5	1.4	---	(c)	1.6
CPT-16/ 25 ft	Z-9	0	0	0	0	0	0	0	0	0	1.0	0	1.2	1.5	1.5	2.8	1.2	1.4	0	1.7	2.2	---	---
CPT-32/ 25 ft	Z-1A															0	0	0	2.4	5.1	5.9	---	---
CPT-30/ 28 ft	Z-1A															0	0	0	0	0	0	---	---
CPT-13A/ 30 ft	Z-1A															0	0	0	0	0	0	---	---
CPT-7A/ 32 ft	Z-1A															2.4	3.0	2.7	4.3	3.0	3.9	---	---
CPT-27/ 33 ft	Z-9	0	0	0	0	0	0	0	1.1	1.0	1.7	1.1	1.0	1.8	1.1	1.1	1.1	1.5	2.0	2.7	---	---	
CPT-1A/ 35 ft	Z-12															18.3	9.5	13.1	10.8	8.0	9.0	---	---
CPT-21A/ 45 ft	Z-9	80.2	31.6	68.0	81.9	35.7	40.8	45.2	30.4	73.7	72.8	90.0	75.1	85.5	83.0	52.3	89.1	68.5	59.2	71.8	---	(c)	150
CPT-9A/ 60 ft	Z-9	35.1	8.4	27.8	22.2	12.5	7.4	14.8	13.8	35.9	30.1	33.2	30.1	30.0	28.5	25.9	33.1	30.8	24.3	33.8	27.1	---	---
W15-82/ 83 ft	Z-9	85.8	5.6	58.8	35.6	14.7	12.1	6.5	15.4	36.0	50.0	58.2	49.2	44.3	54.4	24.0	34.4	43.1	47.5	45.9	50.5	---	---
CPT-21A/ 86 ft	Z-9	159	55	155	95.0	55.3	46.4	86.9	44.8	140	199	206	153	187	197	91.8	183	171	244	98.1	---	(c)	212
CPT-26/ 87 ft	Z-9	208	54.2	189	130	51.6	48.8	20.3	87.6	139	178	235	150	197	190	155	206	140	58.7	96.1	---	(c)	258
W18-152/ 101 ft	Z-12															5.7	10.5	11.3	10.5	12.4	12.1	---	---
W18-167/ 106 ft	Z-1A															201	223	201	266	201	---	(b)	---
W18-165/ 109 ft	Z-1A															94.2	205	193	188	188	94.8	---	---
W15-217/ 114 ft	Z-9	82.1	34.0	214	38.7	80.0	264	324	246	287	74.3	409	89.7	335	444	53.8	80.4	66.4	82.5	62.0	---	(c)	458
W18-249/ 130 ft	Z-18															8.0	31.1	21.4	19.6	22.1	41.0	---	---
W18-248/ 131 ft	Z-1A															78.6	80.4	85.6	90.9	166	180	---	---
W15-95L/ 144 ft	Z-9	13.3	0	16.1	18.5	9.7	9.8	12.6	11.9	21.7	17.2	18.8	25.1	13.7	10.9	19.2	20.3	---	(#)	---	(a)	40.3	23.0
W15-8L/ 176 ft	Z-9				5.1	2.9	5.2	5.8	5.1	10.5	8.2	11.6	10.3	13.1	12.5	8.1	5.8	---	(#)	---	(e)	9.1	9.6
W15-84L/ 180 ft	Z-9		5.8	13.1	2.8	7.2	10.6	13.0	10.9	18.8	8.3	25.9	17.9	21.0	23.8	4.7	4.9	4.9	10.7	18.5	---	(c)	19.5

(a) Unable to access because of drilling operations

(b) Unable to sample; tubing will be repaired.

(c) anomalously low due to pump problems; resampled on 3/24/04

S Ponds 200 West

U.S. DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE
HANFORD ENVIRONMENTAL RESTORATION PROGRAM

BECHTEL HANFORD, INC.
RICHLAND, WASHINGTON

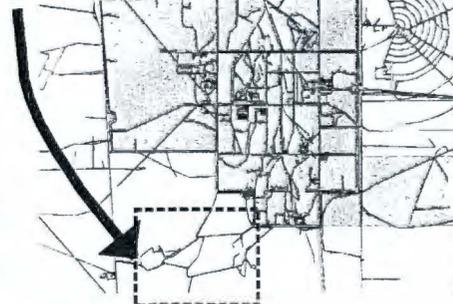
Bechtel Job No.: 22192 DOE Contract Number: DE-AC06-93RI.12367

AML: atlas_indiv Service File: sponds Date: 19-MAY-1998

Projection Lambert Conformal Conic
Coordinate System Washington State Plane, South Zone
Horizontal Datum North American Datum, 1983 (NAD83)
Vertical Datum North American Vertical Datum, 1988 (NAVD88)

Spatial and attribute data are maintained by the Environmental Data Management Group of the Environmental Restoration Contractor.

Area Shown on Map

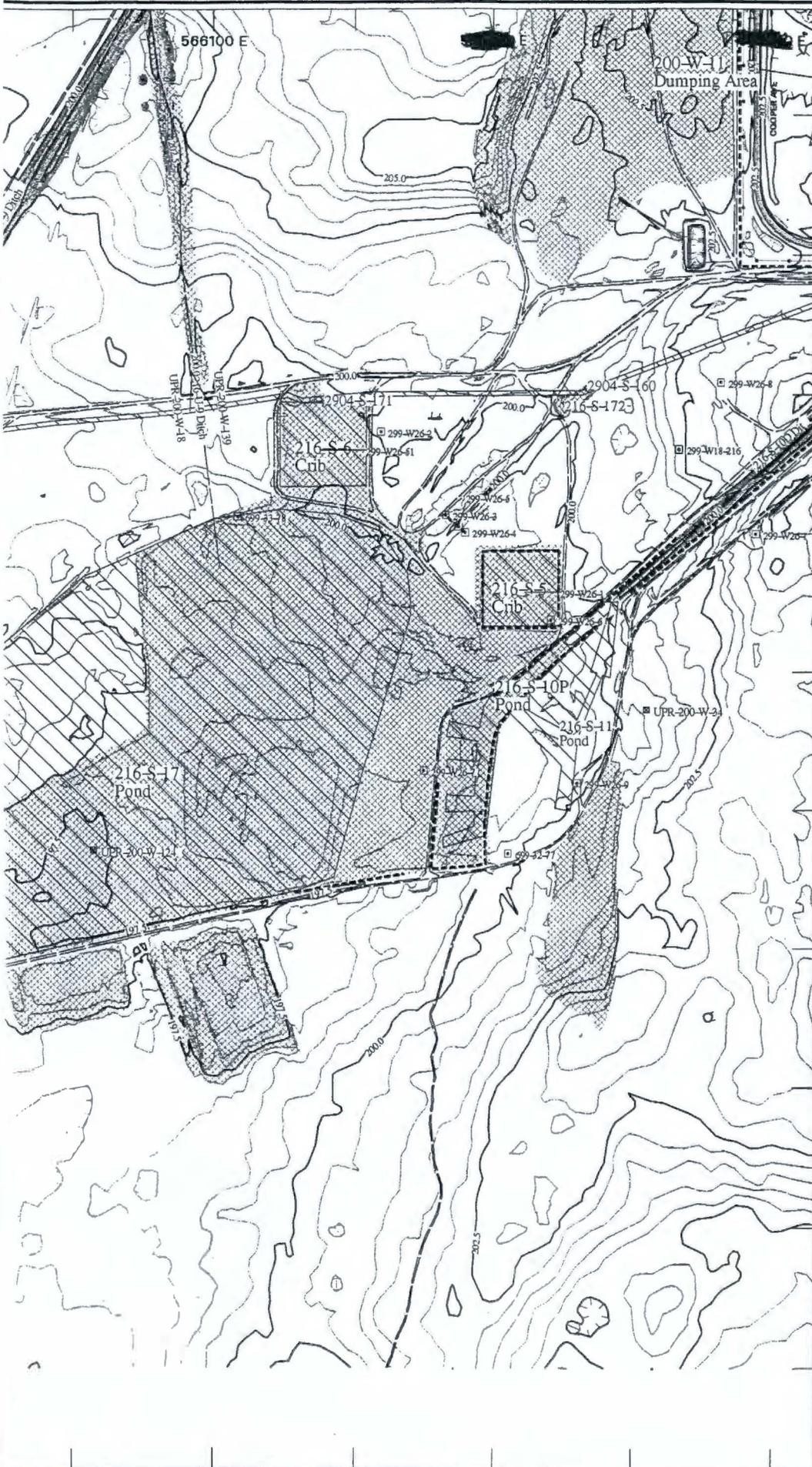


200 W Area

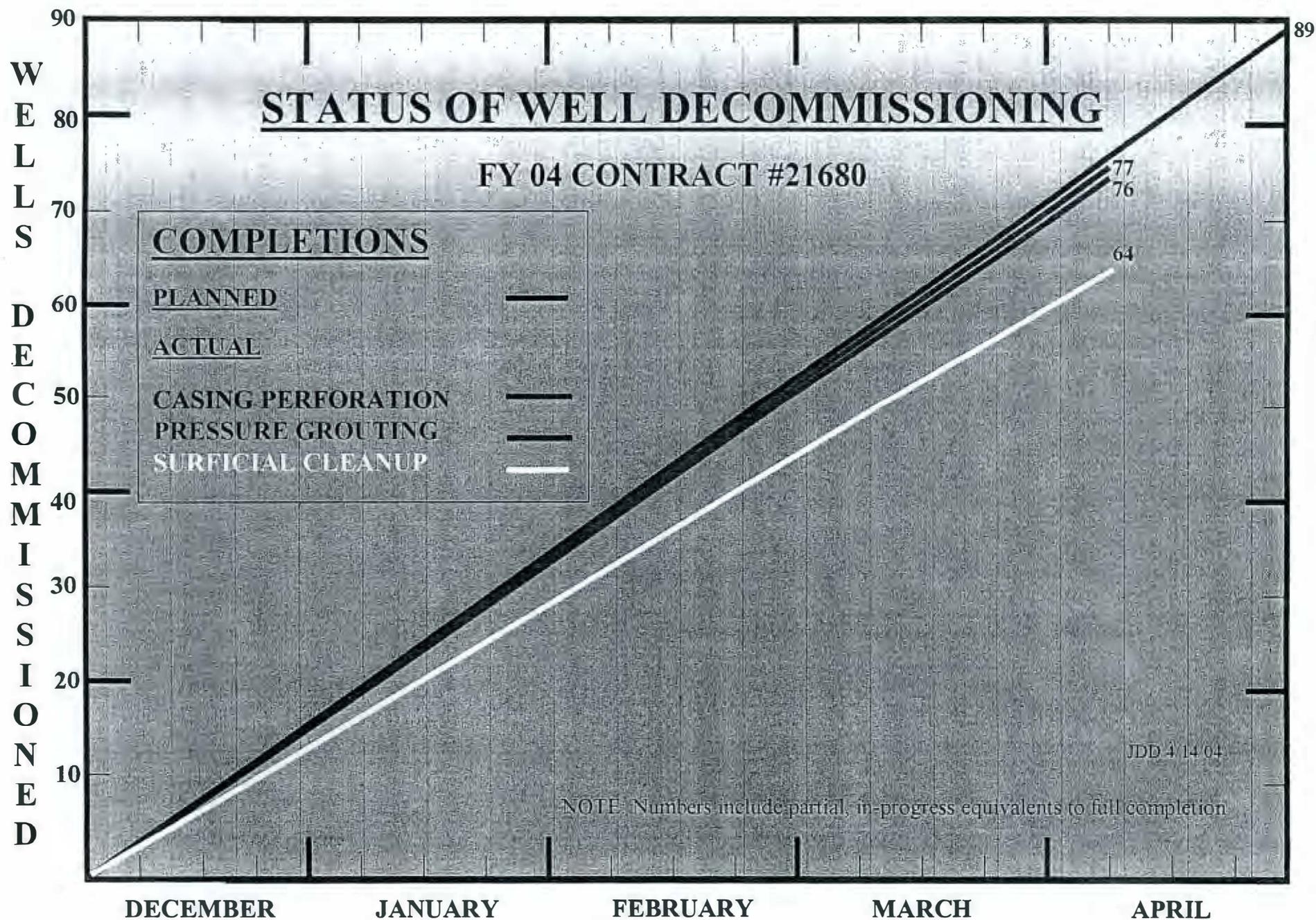
	200W Area		Utility Line
	Water		Fence
	Debris		Pipelines
	Disturbed		216-S-10D
	Shrub		216-U-9
	Waste Site		UPR-200-W-139
	Paved Road		UPR-200-W-18
	Unpaved Road		Utility pole
	2.5m Contour		Well
	2.5m Depression Contour		Well - Abandoned/Decomm.
	.5m Contour		Waste Site (dimensions unknown)
	.5m Depression Contour		



Hanford Geographic Information System
Environmental Technologies
Data Management
Bechtel Hanford, Inc.



ERC-19-0419-037 atlas_indiv_indiv.mxd R Pathbase-10.MAY.1008

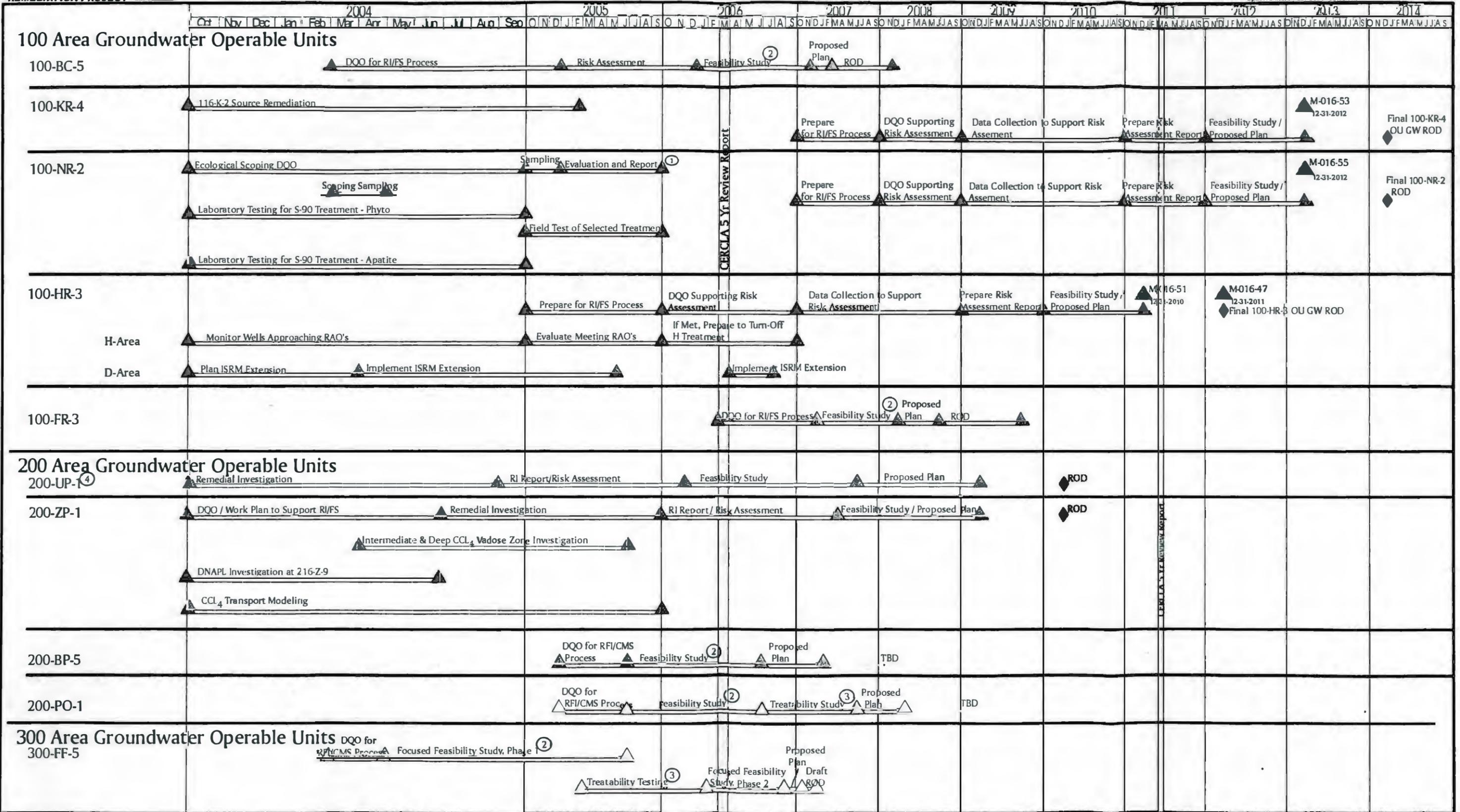


APPENDIX A

200-UP-1 GROUNDWATER WELL LIST

299-W14-56	299-W19-29	299-W22-37	699-36-70A
299-W14-57	299-W19-30	299-W22-38	699-38-65
299-W14-58	299-W19-31	299-W22-40	699-38-68A
299-W15-37	299-W19-32	299-W22-45	699-38-70
299-W18-15	299-W19-34A	299-W22-46	699-40-62
299-W18-19	299-W19-35	299-W22-48	New well K ^a
299-W18-20	299-W19-36	299-W22-49	New well L ^a
299-W18-21	299-W19-37	299-W22-60	New well M ^a
299-W18-29	299-W19-38	299-W22-74	New well N ^a
299-W18-30	299-W19-39	299-W23-4	New well O ^a
299-W18-33	299-W19-40	299-W23-8	New well P ^a
299-W18-250	299-W19-43	299-W23-9	New well Q ^a
299-W19-1	299-W19-46	299-W23-10	New well R ^a
299-W19-4	299-W19-90	299-W23-14	New well S ^a
299-W19-5	299-W19-91	299-W23-15	
299-W19-7	299-W19-92	299-W23-16	
299-W19-9	299-W19-93	299-W23-17	
299-W19-14	299-W21-1	299-W23-19	
299-W19-19	299-W22-4	299-W26-12	
299-W19-20	299-W22-8	299-W26-13	
299-W19-23	299-W22-9	699-32-62	← 299-W26-3 added at 4-15-04 URM
299-W19-24	299-W22-20	699-32-72A	
299-W19-25	299-W22-22	699-35-66A	
299-W19-26	299-W22-23	699-35-70	
299-W19-27	299-W22-26	699-35-78A	
299-W19-28	299-W22-28	699-36-61A	

^a New monitoring well specified in DOE/RL-2002-10, Rev. 0



Acronyms

DQO - Data Quality Objectives	PNNL - Pacific Northwest National Laboratory
GW - Groundwater	RI - Remedial Investigation
LFI - Limited Field Investigation	RI/FS - Remedial Investigation/Feasibility Study
O&M - Operations and Maintenance	ROD - Record Of Decision
OU - Operable Unit	SAP - Sample & Analysis Plan

Notes.

- ① Assumes renegotiated deadline for ROD ecological study
- ② Assumes Limited Field Investigation done previously, supplied adequate data.
- ③ If Required.
- ④ BCR in progress

TPA Milestones

M-016-47	Complete Interim Remedial Actions for 100D Area	12/31/2011
M-016-51	Complete Interim Remedial Actions for 100H Area	12/31/2010
M-016-53	Complete Interim Remedial Actions for 100K Area	12/31/2012
M-016-55	Complete Interim Remedial Actions for 100N Area	12/31/2012

Legend

Active

- ▲ Key Event(Start/Completion)
- ▬ Activity / Task
- ▲ Tri-Party Agreement Milestone