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0026953

November 19, 1991

Meeting Minutes Transmittal/Approval
200-BP-1 Operable Unit Managers Meeting
450 Hills Street, Richland, WA
October 16, 1991

From/
Appvl.: Allan Harris Date: 12-17-91
Allan Harris, 200-BP-1 Unit Manager, DOE-RL (A5-19)

Appvl.: Doug Sherwood Date: 12/17/91
Doug Sherwood, 200-BP-1 Unit Manager, EPA (B5-01)

Appvl.: Larry Goldstein Date 11/20/91
Larry Goldstein, 200-BP-1 Unit Manager, WA Department of Ecology

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

- Attachment #1 - Meeting Summary/Summary of Commitments and Agreements
 - Attachment #2 - Attendance List
 - Attachment #3 - Agenda for the Meeting
 - Attachment #4 - Status of Action Items
 - Attachment #5 - 200-BP-1 Well Remediation
 - Attachment #6 - 200-BP-1 Groundwater Well Sampling
 - Attachment #7 - 200-BP-1 Hydraulic Pump Tests
 - Attachment #8 - Source and Vadose Sampling Status
 - Attachment #9 - 377 Physical Property Lab Status
 - Attachment #10 - Schedule
 - Attachment #11 - Analytical Data
-

Prepared by: Edgar Everett Date: 11/19/91
SWEC Support Services

Concurrence by: Mark A. Brubaker Date: 11/20/91
WHC RI Coordinator



200-BP-1 Operable Unit Managers Meeting
October 16, 1991

Distribution

Donna Lacombe, PRC	Ronald D. Izatt (A6-95)
Ward Staubitz, USGS	Director, DOE-RL, ERD
Doug Fassett, SWEC (A4-35)	Donald E. Gerton (A6-80)
Linda Powers, WHC (B2-35)	Director, DOE-RL, WMD
Tom Wintczak, WHC (B2-15)	Roger D. Freeberg (A6-95)
Mel Adams, WHC (H4-55)	Chief, Rstr. Br., DOE-RL/ERD
Wayne Johnson, WHC (H4-55)	Steven H. Wisness (A6-95)
Rich Carlson, WHC (H4-55)	Tri-Party Agreement Proj. Mgr
Brian Sprouse, WHC (H4-22)	Richard D. Wojtasek (B2-15)
Bill Price, WHC (S0-03)	Prgm. Mgr. WHC
Ralph O. Patt, OR Water Resources Dept.	Mary Harmon, DOE-HQ (EM-442)
Doug Dunster, Golder Assoc.	
Mike Thompson, DOE (A6-95)	
Diane Clark, DOE (A5-55)	
Mark Buckmaster, WHC (H4-55)	
Don Praast, GAO (A1-80)	
David Pabst, WHC (B2-35)	

ADMINISTRATIVE RECORD: 200-BP-1; Care of Susan Wray, WHC (H4-51C)

Please inform Doug Fassett (SWEC) of deletions or additions to the distribution list.

Attachment #1

Meeting Summary and Summary of Commitments and Agreements

200-BP-1 Unit Managers Meeting
October 16, 1991

Action Item Update

1. The status of outstanding action items was given by Mark Buckmaster (WHC) (also see Attachment #4).

2BP1.49: There has been little or no action on this item. Rather than set a date for completion of this item, Ward Staubitz (USGS) and Doug Sherwood (EPA) agreed that WHC could proceed with the column leach test. Mr. Sherwood and Mr. Staubitz also agreed that the written comments should not affect the testing. Mark Buckmaster indicated the regulators would be contacted when the samples were received.

Remedial Investigation

2. Mark Buckmaster reported there were no work plan changes this month.
3. Well remediation in the 600 Area began last month, and three wells have been completed. Mr. Buckmaster stated that remediation on the remaining 600 Area wells was ready to be started. The sampling pumps have been removed and this may have some impact on groundwater sampling. Regarding the 200 Area wells, Mr. Buckmaster stated that the Hazardous Waste Operations Permit (HWOP) is ready for review, and work should begin in two or three weeks on 200 Area wells.
4. There was a great deal of discussion concerning the OSM Sample Tracking System handout (see Attachment #11). Mr. Buckmaster said he had just received the report, and that it did not provide an accurate assessment of the data that he actually has. Mr. Buckmaster said he would provide copies of a list of first quarter sample results generated to date to the regulators.
5. The test plan for well 53-55C is being finalized. Copies will be sent out to the regulators for review the week of October 21. After some discussion regarding completion of the work on well 55-55, Doug Sherwood (EPA) stated that the work should be completed. Mr. Sherwood said he required groundwater data packages for a period of at least one quarter year. Mr. Sherwood said that invalidated data describing the distribution of certain contaminants (i.e., nitrates, technetium, cyanide, cobalt 60) throughout the networks would be acceptable as it would provide valuable information in making decisions.
6. Drilling of well 49A is expected to be completed by the end of next week, contingent on the level of contamination found. Receipt of analytical data is still behind schedule. Mark Buckmaster said PNL had

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indicated Westinghouse should be receiving the first data package within the next two or three weeks.

7. Mark Buckmaster gave a status report on the 377 Physical Properties Laboratory (See Attachment #9). Ward Staubitz was concerned about waiting until April 1992 to do moisture content analyses on hot samples being collected from the vadose zone at this time. Mark Buckmaster said there hadn't been a problem with moisture content analyses because contaminant levels in the vadose zone had been low.
8. Mark Buckmaster provided an update on scheduled activities (See Attachment #10). He said one of the major problems with the installation of boreholes is the time needed for decontamination and for moving from one area to another. Task 4 is about two-thirds complete. Other activities including groundwater sampling and remediation are on schedule, with the exception of timely receipt of data for groundwater sampling. Pump tests will be nearing completion next month, and column leach tests should be initiated in November 1991. *Sorption* tests are being identified. Mr. Buckmaster has requested a statement of work for the *sorption* tests and he will provide the regulators with a copy when it is available. Phase IB wells will be discussed once the data is sent to the regulators. Risk assessment data is being entered into the system as soon as it is received. These activities are considered to be on schedule.
9. At the request of Mr. Sherwood, Mr. Buckmaster said he would set up a meeting at the end of next week with the regulators. The purpose of this meeting would be to provide an avenue to reconcile the data reporting issue in order to get a clear understanding of what has been reported.

Attachment #2

Attendance
200-BP-1 Operable Unit Managers Meeting
October 16, 1991

<u>Name</u>	<u>Org.</u>	<u>O.U. Role</u>	<u>Phone</u>
Robert Allender	BCC	Ecology Support	503-244-7005
Chuck Cline	Ecology	Hydrogeology	206-438-7556
Steve Cross	Ecology	CERCLA	206-459-6615
Billie Mauss	Ecology	CERCLA	509-546-2993
Darci Teel	Ecology	CERCLA	509-545-2312
Doug Sherwood	EPA	Unit Manager	509-376-9529
Donna LaCombe	PRC	EPA Contractor	206-624-2692
Diane Shigley	SWEC	GSSC, DOE-RL	509-376-5038
Bill Fryer	SWEC	GSSC, DOE-RL	509-376-9830
Kathy Knox	CNES	GSSC, DOE-RL	509-376-5011
Bill McClung	SWEC	GSSC, DOE-RL	509-376-1853
Ward Staubitz	USGS	EPA Support	206-593-6510
Mark Buckmaster	WHC	RI Coordinator	509-376-1792
David Pabst	WHC	TPA I/F	509-376-9048

9 3 1 2 8 9 3 1 0 2 4

Attachment #3

**Agenda
200-BP-1 Operable Unit Managers Meeting
October 16, 1991**

Introduction:

Status:

Action Items:

Work Plan:

Remedial Investigation:

- o Well Remediation
- o Groundwater Sampling
- o Hydraulic Pump Tests
- o Source and Vadose Sampling

Issues:

Other Topics:

- o Physical Property Lab
- o Schedule

Agreements and Commitments:

9 3 1 2 8 9 8 1 0 2 5

Attachment #4

Action Items
200-BP-1 Operable Unit Managers Meeting
October 16, 1991

<u>Item Number</u>	<u>Action</u>	<u>Status</u>
2BP1.49	Written comments are to be submitted on the column leach test procedure at 200-BP-1. Action: Sherwood (9/18/91)	Open:

9 3 1 2 3 9 8 1 0 2 6

Attachment #5

200-BP-1 Well Remediation
200-BP-1 Operable Unit Managers Meeting
October 16, 1991

WELL #	STATUS
699-47-50	12" CASING PREVENTED OVERDRILLING - EXCAVATE WITH BACKHOE TO REMOVE 12" AND GROUT ANNULUS
699-47-60	SURFACE SEAL COMPLETED TO 17', POSTS AND PADS INSTALLED - PROBLEMS ENCOUNTERED WITH SHIFTING SANDS PREVENTED COMPLETION AT 18 FT.
699-49-55A	SURFACE SEAL COMPLETED TO 18', POSTS AND PADS INSTALLED
699-49-55B	SURFACE SEAL COMPLETED TO 18', POSTS AND PADS INSTALLED
699-50-53	SURFACE SEAL COMPLETED TO 18', POSTS AND PADS INSTALLED
699-55-57	DRILLING - AUGER RIG IN THE SHOP FOR REPAIRS (OCTOBER 25)
699-49-57	SAMPLING PUMP REMOVED
699-53-55A	SAMPLING PUMP REMOVED
699-53-55B	SAMPLING PUMP REMOVED
699-53-55C	SAMPLING PUMP REMOVED
699-54-57	SAMPLING PUMP REMOVED
699-55-57	SAMPLING PUMP REMOVED

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Attachment #6

**200-BP-1 Groundwater Well Sampling
200-BP-1 Operable Unit Managers Meeting
October 16, 1991**

1. The fourth quarter of groundwater sampling is schedule to begin 10/21/91.
2. Analytical Data:
 - o OSM Sample Tracking System
 - o Transmittal of first quarter data

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Attachment #7

Hydraulic Pump Tests
200-BP-1 Operable Unit Managers Meeting
October 16, 1991

1. Aquifer testing on wells 699-49-57B and 699-52-54 have been delayed due to equipment shortages. Scheduled to be completed in November.
2. Test plan for well 699-53-55C is being finalized. Scheduled to begin in November.
3. Well 699-55-55.

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Attachment #8

Source and Vadose Sampling Status
200-BP-1 Operable Unit Managers Meeting
October 16, 1991

BOREHOLE	STATUS	REMARKS
216-B-61	COMPLETE TD-30.2 FT	FIELD INSTRUMENTS - NO CONTAMINATION
216-B-57A	ABANDONMENT TD-235.5 FT	60 FT. OF 12 INCH CASING
216-B-57B	COMPLETE TD-50.0 FT	GENERAL CONTAMINATION BETWEEN 30-40 FT.
216-B-57C	COMPLETE TD-50.0 FT	FIELD INSTRUMENTS - NO CONTAMINATION
216-B-49A	DRILLING DEPTH - 163 FT	CONTAMINATION IS LOW 300 cpm BETA/GAMMA POSSIBLE ALPHA
216-B-50B	COMPLETE TD-33.0 FT	HIGHEST LEVEL OF CONTAMINATION - 100mR/hr
216-B-50C	MOBILIZING	SCHEDULED TO BEGIN 10/18/91
216-B-43A	MOBILIZING	SCHEDULED TO BEGIN 10/25/91

Attachment #9

377 Physical Property Lab Status
200-BP-1 Operable Unit Managers Meeting
October 16, 1991

1. Safety Analysis Report
 - o Final comments are due 10/18/91.
 - o Tentatively scheduled to be completed by January 1992.
2. Operational Readiness Review
 - o Approximately 2-3 months to complete.
3. NEPA
 - o Documentation has been approved by DOE-RL and has been sent to DOE-HQ.
 - o DOE-HQ approval cycle is approximately 12 weeks. January 1992.

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200-BP-1 OPERABLE UNIT

PHASE I REMEDIAL INVESTIGATION

TASK-1 MANAGEMENT & STATUS REPORTS

TASK-2 SOURCE SAMPLING AND ANALYSIS

TASK-2a PREPARATION

TASK-2b DRILLING AND SOIL SAMPLING

TASK-2c SAMPLE HANDLING AND TRANSFER

TASK-2d LABORATORY AVAIL. & CHEMICAL ANALYSIS

TASK-2e BOREHOLE GEOPHYSICS

TASK-2f GEODETIC SURVEY

TASK-2g BOREHOLE SURVEY

TASK-3 SURFACE/NEAR SURFACE SOIL SAMPLE/ANALYSIS

TASK-3a PREPARATION

TASK-3b EVALUATE & TEST LEAK DETECTION TECHNIQUE

TASK-3c SCINTILLATION SURVEY OF LAND SURFACE

TASK-3d STAGE 1 SOIL PROBE SURVEY

TASK-3e STAGE 2 SOIL PROBE SURVEY

TASK-3f SOIL SAMPLING

TASK-3g GEODETIC CONTROL & SURVEY

TASK-3h LABORATORY AVAIL. & CHEMICAL ANALYSIS

TASK-4 VADOSE ZONE SOIL SAMPLING & ANALYSIS

TASK-4a REVIEW & PREPARATION

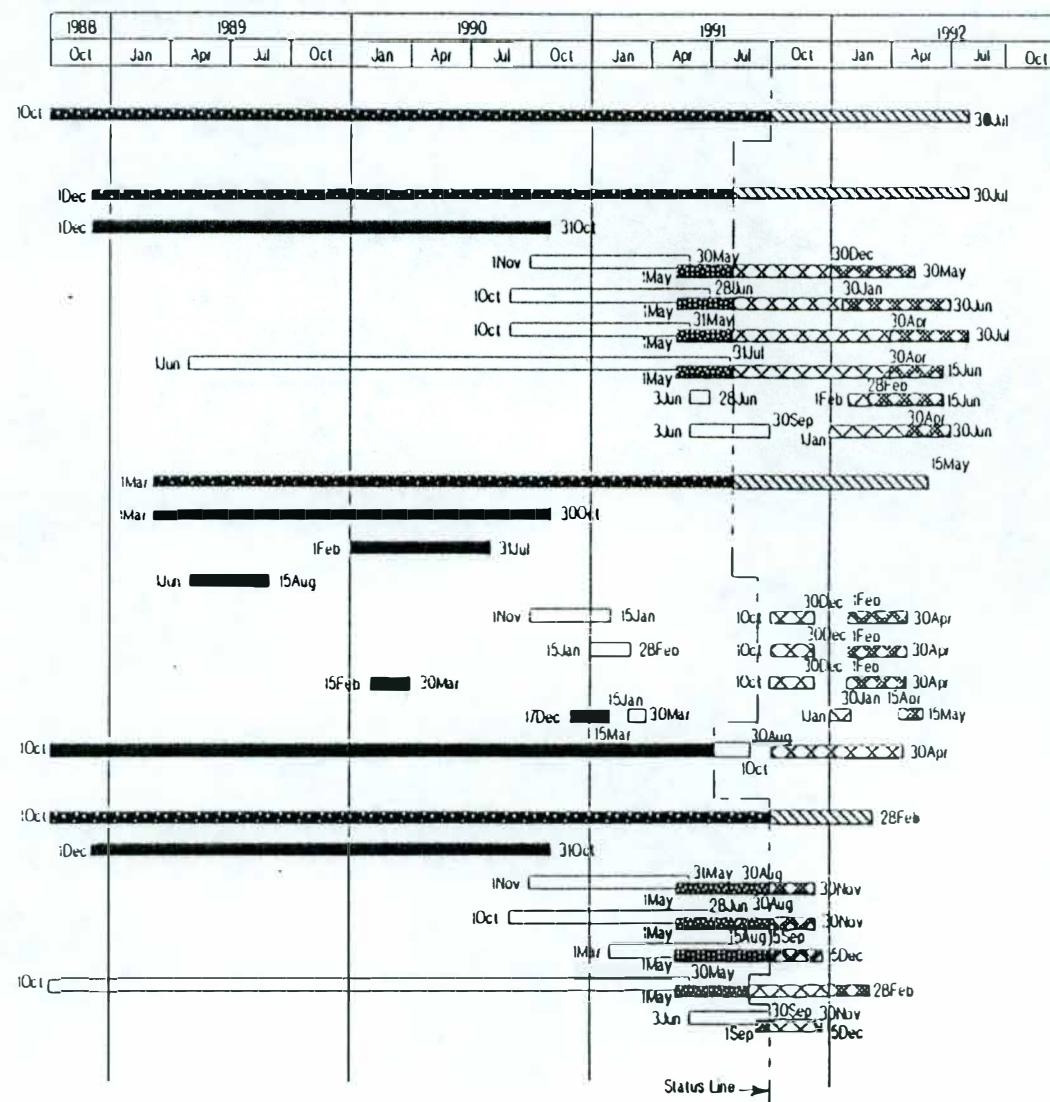
TASK-4b DRILLING & SAMPLING

TASK-4c SAMPLING, HANDLING & TRANSFER

TASK-4d BOREHOLE GEOPHYSICS

TASK-4e LABORATORY AVAIL. & CHEMICAL ANALYSIS

TASK-4f BOREHOLE ABANDONMENT



LEGEND:			
Original Schedule Activities	Summary Activities	Revised Activities	Actual Activities
■	▨	☒	▨
▨	▨	☒	▨
☒	☒	☒	☒

Project: PE13A	200BP1U	Date: 7 Oct 91 1245
200-BP-1 REMEDIAL INVESTIGATION (Pg. 1)		
Page: 1 of 3	Drawn by: Steve J. Sakey	6-3092

C/1

200-BP-1 OPERABLE UNIT

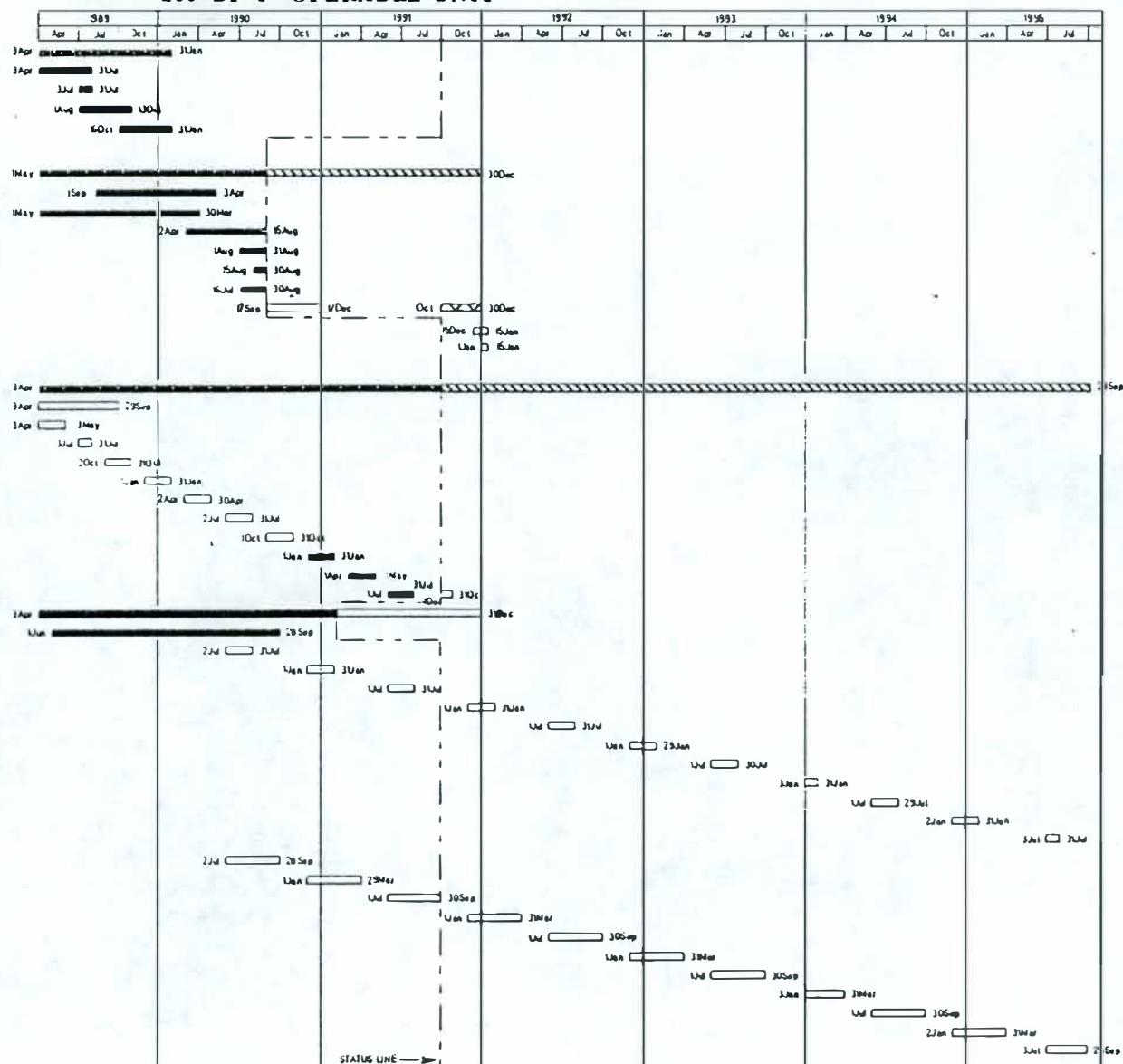
TASK-5 SEISMIC REFRACTION SURVEY
 TASK-5a REVIEW, TESTING & PREPARATION
 TASK-5b GEODETIC CONTROL
 TASK-5c FIELD RECONNAISSANCE
 TASK-5d DATA REDUCTION & INTERPRETATION

TASK-6 INSTALLATION OF MONITORING WELLS
 TASK-6a REVIEW & EVALUATE FROM TASK 5 & 7
 TASK-6b PREPARATION
 TASK-6c STAGE 1 DRILL, SAMPLE & WELL INSTALLATION
 TASK-6d BOREHOLE GEOPHYSICS
 TASK-6e GEODETIC SURVEY
 TASK-6f PRELIMINARY EVALUATION OF DATA
 TASK-6g STAGE 2 DRILL, SAMPLE & WELL INSTALLATION
 TASK-6h BOREHOLE GEOPHYSICS
 TASK-6i GEODETIC SURVEY

TASK-7 GROUNDWATER SAMPLING & ANALYSIS
 TASK-7a DEVELOP LEVEL V SAS ANALYSIS METHODS
 TASK-7b QUARTERLY SAMPLING ANALYSIS METHODS

TASK-7c QUARTERLY ANALYSIS
 TASK-7d REVIEW OF EXISTING WELLS
 TASK-7e SEMI-ANNUAL SAMPLING

TASK-7f SEMI-ANNUAL ANALYSIS



LEGEND
 ■ ORIGINAL SCHEDULE ACTIVITIES
 ▨ SCHEDULED ACTIVITIES
 ▨ REVISED ACTIVITIES
 ▨ ACTUAL ACTIVITIES

Project:	PE13A	200BP1RU	Date:	7 Oct 91	12:58
200-BP-1 OPERABLE UNIT Pg 2					
Page 2 of 3	Drawn by:	Steve J. Schrey	6-3092		

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200-BP-1 OPERABLE UNIT

TASK-8 SITE TOPOGRAPHIC MAP
 TASK-8a PREPARATION
 TASK-8b FIELD SURVEY
 TASK-8c DATA REDUCTION ON CAD

TASK-9 BIOTA SURVEY
 TASK-9a SITE RECONNAISSANCE
 TASK-9b BIOTA SAMPLING
 TASK-9c LABORATORY AVAIL & CHEMICAL ANALYSIS

TASK-10 COLUMN LEACH TEST
 TASK-10a PREPARATION
 TASK-10b TESTING PERIOD
 TASK-10c LABORATORY AVAIL & CHEMICAL ANALYSIS

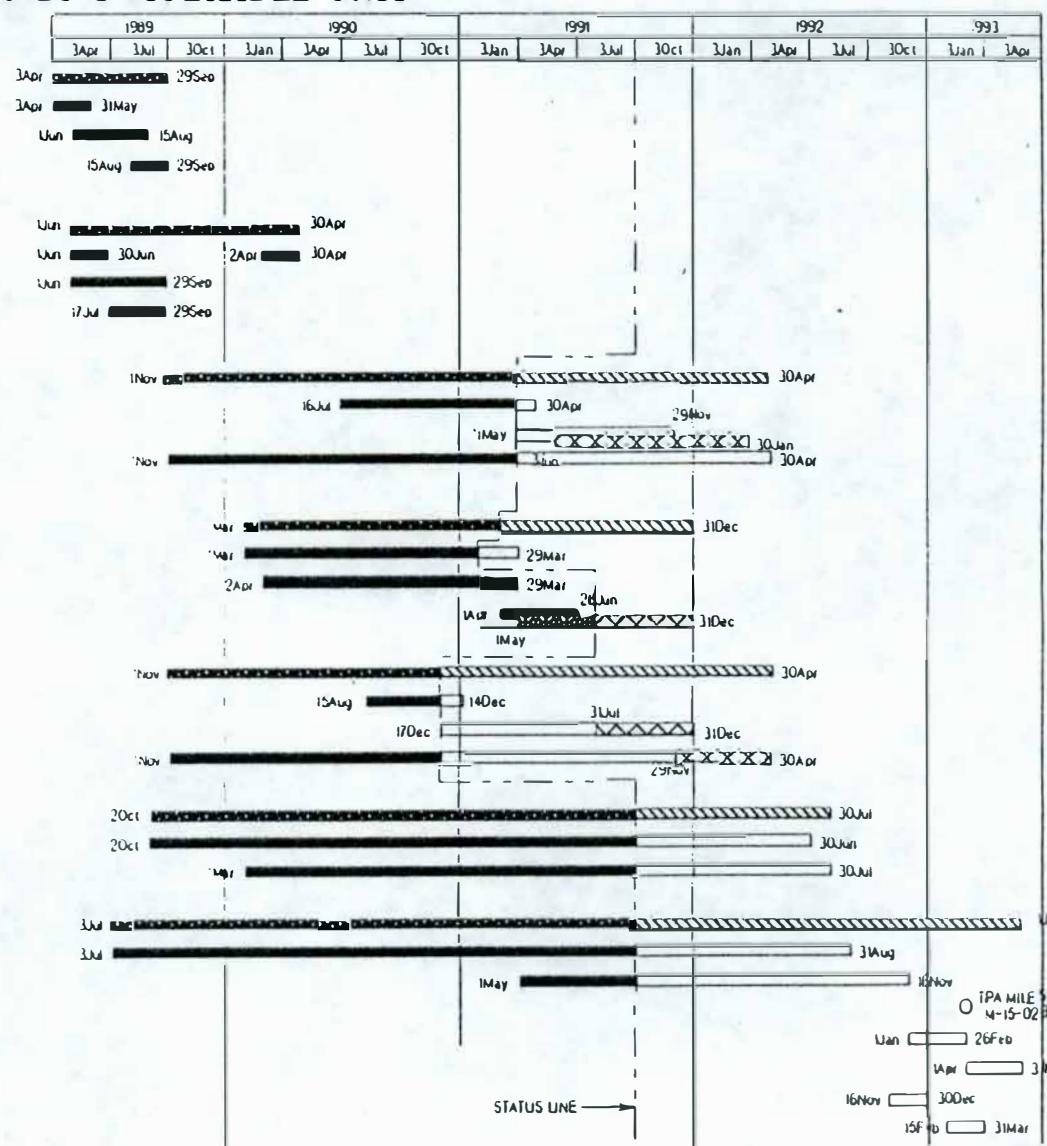
TASK-11 HYDRAULIC PUMP TESTS
 TASK-11a PREPARATION
 TASK-11b CONDUCT SLUG TEST
 TASK-11c CONDUCT DRAWDOWN/RECOVERY TESTS

TASK-12 SORPTION TEST
 TASK-12a PREPARATION
 TASK-12b TEST PERIOD
 TASK-12c LABORATORY AVAIL & CHEMICAL ANALYSIS

TASK-13 BASELINE RISK ASSESSMENT
 TASK-13a DATA COMPIILATION
 TASK-13d DATA ANALYSIS

TASK-14 EVALUATION AND REPORT
 TASK-14a EVALUATION AND REPORT
 TASK-14d DRAFT REPORTS

TASK-14c FINAL REPORT & REVIEW
 FINAL SECONDARY REPORT



Project: PE13A	200BP1OU	Date: 7 Oct 91 1105
200-BP-1 REMEDIAL INVESTIGATION (Pg.3)		
Page: 1 of 3	Drawn by: Steve J. Sakey	6-3092

WELL #	DATE SAMPLED	HEIS #	VOA	SEMI VOA	PEST	METALS	ANIONS	CYANIDE	RADCHEM	SAMPLE TYPE
699-55-57	12-Feb-91	BOODK6	06/01/91	05/31/91	06/01/91	NOT VAL	07/06/91	-----	NOT VAL	W
699-55-57	12-Feb-91	BOODK7	-----	-----	-----	NOT VAL	-----	-----	-----	W-F
699-55-57	12-Feb-91	BOODK8	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
699-54-57	12-Feb-91	BOODK9	06/01/91	05/31/91	06/01/91	NOT VAL	07/06/91	-----	NOT VAL	W
699-54-57	12-Feb-91	BOODLO	-----	-----	-----	NOT VAL	-----	-----	-----	W-F
699-54-57	12-Feb-91	BOODL1	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
699-55-55	25-Feb-91	BOODL2	?????????	?????????	?????????	?????????	?????????	-----	?????????	W
699-55-55	25-Feb-91	BOODL3	-----	-----	-----	10/05/91	-----	-----	-----	W-F
699-55-55	25-Feb-91	BOODL4	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
	25-Feb-91	BOODL5	?????????	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
699-53-55A	13-Feb-91	BOODL6	06/01/91	05/31/91	06/01/91	NOT VAL	07/06/91	-----	NOT VAL	W
699-53-55A	13-Feb-91	BOODL7	-----	-----	-----	NOT VAL	-----	-----	-----	W-F
699-53-55A	13-Feb-91	BOODL8	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
699-53-55B	13-Feb-91	BOODL9	06/01/91	05/31/91	06/01/91	NOT VAL	07/06/91	-----	NOT VAL	W
699-53-55B	13-Feb-91	BOODMO	-----	-----	-----	NOT VAL	-----	-----	-----	W-F
699-53-55B	13-Feb-91	BOODM1	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
699-53-55C	14-Feb-91	BOODM2	06/21/91	06/21/91	06/22/91	NOT VAL	NO DATA	-----	NOT VAL	W
699-53-55C	14-Feb-91	BOODM3	-----	-----	-----	NOT VAL	-----	-----	-----	W-F
699-53-55C	14-Feb-91	BOODM4	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
	12-Feb-91	BOODY5	06/01/91	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
699-52-57	25-Feb-91	BOODY6	10/04/91	10/04/91	10/04/91	10/05/91	07/07/91	-----	NOT VAL	W
699-52-57	25-Feb-91	BOODY7	-----	-----	-----	10/05/91	-----	-----	-----	W-F
699-52-57	25-Feb-91	BOODY8	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
699-52-54	25-Feb-91	BOODY9	10/04/91	10/04/91	10/04/91	10/05/91	07/07/91	-----	NOT VAL	W
699-52-54	25-Feb-91	BOODZO	-----	-----	-----	10/05/91	-----	-----	-----	W-F

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WELL #	DATE SAMPLED	HEIS #	VOA	SEMIVOA	PEST	METALS	ANIONS	CYANIDE	RADCHEM	SAMPLE TYPE
699-52-54	25-Feb-91	BOODZ1	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
699-47-60	19-Feb-91	BOODZ2	10/06/91	06/23/91	06/23/91	06/22/91	NO DATA	-----	NOT VAL	W
699-47-60	19-Feb-91	BOODZ3	-----	-----	-----	06/22/91	-----	-----	-----	W-F
699-47-60	19-Feb-91	BOODZ4	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
	14-Feb-91	BOODZ5	NO DATA	NO DATA	DAY TRIP					
699-50-53B	21-Feb-91	BOODZ6	09/18/91	09/18/91	09/18/91	10/05/91	NO DATA	-----	NOT VAL	W
699-50-53B	21-Feb-91	BOODZ7	-----	-----	-----	10/05/91	-----	-----	-----	W-F
699-50-53B	21-Feb-91	BOODZ8	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
699-50-53A	20-Feb-91	BOODZ9	08/05/91	08/05/91	08/05/91	08/06/91	07/08/91	-----	NO DATA	W
699-50-53A	20-Feb-91	BOOF00	-----	-----	-----	08/06/91	-----	-----	-----	W-F
699-50-53A	20-Feb-91	BOOF01	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
699-49-57A	20-Feb-91	BOOF02	10/05/91	10/05/91	10/05/91	08/06/91	07/08/91	-----	NOT VAL	W
699-49-57A	20-Feb-91	BOOF03	-----	-----	-----	08/06/91	-----	-----	-----	W-F
699-49-57A	20-Feb-91	BOOF04	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
	19-Feb-91	BOOF05	10/06/91	-----	-----	-----	-----	-----	-----	DAY TRIP
699-49-57B	26-Feb-91	BOOF06	NOT VAL	NOT VAL	NOT VAL	10/05/91	NO DATA	-----	NOT VAL	W
699-49-57B	26-Feb-91	BOOF07	-----	-----	-----	10/05/91	-----	-----	-----	W-F
699-49-57B	26-Feb-91	BOOF08	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
699-49-55A	27-Feb-91	BOOF09	10/06/91	10/06/91	10/06/91	10/09/91	07/06/91	-----	NOT VAL	W
699-49-55A	27-Feb-91	BOOF10	-----	-----	-----	10/09/91	-----	-----	-----	W-F
699-49-55A	27-Feb-91	BOOF11	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
699-49-55B	27-Feb-91	BOOF12	10/06/91	10/06/91	10/06/91	10/09/91	07/06/91	-----	NOT VAL	W
699-49-55B	27-Feb-91	BOOF13	-----	-----	-----	10/09/91	-----	-----	-----	W-F
699-49-55B	27-Feb-91	BOOF14	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
	20-Feb-91	BOOF15	10/05/91	-----	-----	-----	-----	-----	-----	DAY TRIP (W)

WELL #	DATE SAMPLED	HEIS #	VOA	SEMI VOA	PEST	METALS	ANIONS	CYANIDE	RADCHEM	SAMPLE TYPE
699-48-50	19-Feb-91	BOOF16	10/06/91	06/23/91	06/23/91	06/22/91	NO DATA	-----	NOT VAL	W
699-48-50	19-Feb-91	BOOF17	-----	-----	-----	06/22/91	-----	-----	-----	W-F
699-48-50	19-Feb-91	BOOF18	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
699-47-50	27-Feb-91	BOOF19	10/06/91	10/06/91	10/06/91	10/09/91	07/06/91	-----	NOT VAL	W
699-47-50	27-Feb-91	BOOF20	-----	-----	-----	10/09/91	-----	-----	-----	W-F
699-47-50	27-Feb-91	BOOF21	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
	21-Feb-91	BOOF22	NO DATA	-----	NOT VAL	TRIP BLANK (W)				
	21-Feb-91	BOOF23	-----	-----	-----	NO DATA	-----	-----	-----	TRIP BLANK (W-F)
	21-Feb-91	BOOF24	-----	-----	-----	-----	-----	07/16/91	-----	TRIP BLANK (PNL)
	21-Feb-91	BOOF25	NO DATA	-----	NO DATA	EQUIP BLANK (W)				
	21-Feb-91	BOOF26	-----	-----	-----	NO DATA	-----	-----	-----	EQUIP BLANK (W-F)
	21-Feb-91	BOOF27	-----	-----	-----	-----	-----	NO DATA	-----	EQUIP BLANK (PNL)
299-E34-01	28-Feb-91	BOOF28	10/06/91	10/06/91	10/06/91	10/09/91	07/06/91	-----	NOT VAL	W
299-E34-01	28-Feb-91	BOOF29	-----	-----	-----	10/09/91	-----	-----	-----	W-F
299-E34-01	28-Feb-91	BOOF30	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E34-02	28-Feb-91	BOOF31	10/06/91	10/06/90	10/06/91	10/09/91	07/06/91	-----	NOT VAL	W
299-E34-02	28-Feb-91	BOOF32	-----	-----	-----	10/09/91	-----	-----	-----	W-F
299-E34-02	28-Feb-91	BOOF33	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E34-05	28-Feb-91	BOOF34	10/06/91	10/06/91	10/06/91	10/09/91	07/06/91	-----	NOT VAL	W
299-E34-05	28-Feb-91	BOOF35	-----	-----	-----	10/09/91	-----	-----	-----	W-F
299-E34-05	28-Feb-91	BOOF36	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
	28-Feb-91	BOOF37	10/06/91	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
299-E33-05	27-Mar-91	BOOF38	10/09/91	-----	-----	-----	-----	-----	-----	METH BLANK (W)
299-E32-02	04-Mar-91	BOOF41	NO DATA	-----	NOT VAL	W				
299-E32-02	04-Mar-91	BOOF42	-----	-----	-----	NO DATA	-----	-----	-----	W-F

WELL #	DATE SAMPLED	HEIS #	VOA	SEMI VOA	PEST	METALS	ANIONS	CYANIDE	RADCHEM	SAMPLE TYPE
299-E32-02	04-Mar-91	BOOF43	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E33-30	04-Mar-91	BOOF44	NOT VAL	NOT VAL	NOT VAL	10/09/91	07/07/91	-----	NOT VAL	W
299-E33-30	04-Mar-91	BOOF45	-----	-----	-----	10/09/91	-----	-----	-----	W-F
299-E33-30	04-Mar-91	BOOF46	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E33-28	04-Mar-91	BOOF47	NOT VAL	NOT VAL	NOT VAL	10/09/91	07/07/91	-----	NOT VAL	W
299-E33-28	04-Mar-91	BOOF48	-----	-----	-----	10/09/91	-----	-----	-----	W-F
299-E33-28	04-Mar-91	BOOF49	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E33-29	05-Mar-91	BOOF50	NOT VAL	NOT VAL	NOT VAL	NO DATA	NO DATA	-----	NOT VAL	W
299-E33-29	05-Mar-91	BOOF51	-----	-----	-----	NO DATA	-----	-----	-----	W-F
299-E33-29	05-Mar-91	BOOF52	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E33-03	25-Mar-91	BOOF53	NOT VAL	NOT VAL	NOT VAL	10/09/91	NO DATA	-----	NOT VAL	SPIKE/DUP (W)
299-E33-03	25-Mar-91	BOOF54	-----	-----	-----	-----	-----	NOT VAL	-----	SPIKE/DUP (PNL)
	25-Feb-91	BOOF55	10/04/91	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
299-E33-34	05-Mar-91	BOOF56	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	-----	NOT VAL	W
299-E33-34	05-Mar-91	BOOF57	-----	-----	-----	NO DATA	-----	-----	-----	W-F
299-E33-34	05-Mar-91	BOOF58	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
	25-Feb-91	BOOF59	NOT VAL	-----	-----	-----	-----	-----	-----	DAY TRIP
299-E33-33	06-Mar-91	BOOF60	NOT VAL	NOT VAL	NOT VAL	NO DATA	NO DATA	-----	NOT VAL	W
299-E33-33	06-Mar-91	BOOF61	-----	-----	-----	NO DATA	-----	-----	-----	W-F
299-E33-33	06-Mar-91	BOOF62	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E33-14	06-Mar-91	BOOF63	NOT VAL	NOT VAL	NOT VAL	NO DATA	NO DATA	-----	NOT VAL	W
299-E33-14	06-Mar-91	BOOF64	-----	-----	-----	NO DATA	-----	-----	-----	W-F
299-E33-14	06-Mar-91	BOOF65	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E33-15	08-Apr-91	BOOF66	NOT VAL	NOT VAL	NOT VAL	NO DATA	NO DATA	-----	NOT VAL	W
299-E33-15	08-Apr-91	BOOF67	-----	-----	-----	NO DATA	-----	-----	-----	W-F

WELL #	DATE SAMPLED	HEIS #	VOA	SEMI VOA	PEST	METALS	ANIONS	CYANIDE	RADCHEM	SAMPLE TYPE
299-E33-15	08-Apr-91	BOOF68	-----	-----	-----	-----	-----	NOT VAL	-----	PNL - CN ONLY
299-E33-38	11-Mar-91	BOOF69	10/05/91	10/05/91	10/0591	10/05/91	NO DATA	-----	NOT VAL	DUPLICATE (W)
299-E33-38	11-Mar-91	BOOF70	-----	-----	-----	10/05/91	-----	-----	-----	DUPLICATE (W-F)
299-E33-38	11-Mar-91	BOOF71	-----	-----	-----	-----	-----	07/16/91	-----	DUPLICATE (PNL)
	27-Feb-91	BOOF72	10/06/91	-----	-----	-----	-----	-----	-----	DAY TRIP
299-E33-18	10-Apr-91	BOOF73	NO DATA	NOT VAL	NOT VAL	NO DATA	NO DATA	-----	NO DATA	W
299-E33-18	10-Apr-91	BOOF74	-----	-----	-----	NO DATA	-----	-----	-----	W-F
299-E33-18	10-Apr-91	BOOF75	-----	-----	-----	-----	-----	NOT VAL	-----	PNL - CN ONLY
299-E33-12	09-Apr-91	BOOF76	NOT VAL	NOT VAL	NOT VAL	NO DATA	NO DATA	-----	NO DATA	W
299-E33-12	09-Apr-91	BOOF77	-----	-----	-----	NO DATA	-----	-----	-----	W-F
299-E33-12	09-Apr-91	BOOF78	-----	-----	-----	-----	-----	NOT VAL	-----	PNL - CN ONLY
	11-Mar-91	BOOF79	10/05/91	10/05/91	10/05/91	10/05/91	NO DATA	-----	NOT VAL	TRIP BLANK (W)
	11-Mar-91	BOOF80	-----	-----	-----	10/05/91	-----	-----	-----	TRIP BLANK (W-F)
	11-Mar-91	BOOF81	-----	-----	-----	-----	-----	07/16/91	-----	TRIP BLANK (PNL)
	17-Apr-91	BOOF82	NOT VAL	NOT VAL	NOT VAL	NO DATA	NO DATA	-----	NO DATA	EQUIP BLANK (W)
	17-Apr-91	BOOF83	-----	-----	-----	NO DATA	-----	-----	-----	EQUIP BLANK (W-F)
	17-Apr-91	BOOF84	-----	-----	-----	-----	-----	NOT VAL	-----	EQUIP BLANK (PNL)
299-E33-32	13-Mar-91	BOOF85	07/31/91	07/31/91	07/31/91	10/05/91	NO DATA	-----	NOT VAL	W
299-E33-32	13-Mar-91	BOOF86	-----	-----	-----	10/05/91	-----	-----	-----	W-F
299-E33-32	13-Mar-91	BOOF87	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E33-04	01-Apr-91	BOOF88	NOT VAL	NOT VAL	NOT VAL	10/09/91	NO DATA	-----	NOT VAL	W
299-E33-04	01-Apr-91	BOOF89	-----	-----	-----	10/09/91	-----	-----	-----	W-F
299-E33-04	01-Apr-91	BOOF90	-----	-----	-----	-----	-----	NOT VAL	-----	PNL - CN ONLY
299-E33-03	25-Mar-91	BOOF91	NOT VAL	NOT VAL	NOT VAL	10/09/91	NO DATA	-----	NOT VAL	W
299-E33-03	25-Mar-91	BOOF92	-----	-----	-----	10/09/91	-----	-----	-----	W-F

WELL #	DATE SAMPLED	HEIS #	VOA	SEMIVOA	PEST	METALS	ANIONS	CYANIDE	RADCHEM	SAMPLE TYPE
299-E33-03	25-Mar-91	BOOF93	-----	-----	-----	-----	-----	NOT VAL	-----	PNL - CN ONLY
299-E33-07	03-Apr-91	BOOF94	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	-----	NO DATA	SPLIT (W)
299-E33-07	03-Apr-91	BOOF95	-----	-----	-----	NO DATA	-----	-----	-----	SPLIT (W-F)
	04-Mar-91	BOOF97	NOT VAL	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
299-E33-01	25-Mar-91	BOOF98	08/15/91	08/15/91	08/15/91	10/09/91	NO DATA	-----	NOT VAL	W
299-E33-01	25-Mar-91	BOOF99	-----	-----	-----	10/09/91	-----	-----	-----	W-F
299-E33-01	25-Mar-91	BOOFB0	-----	-----	-----	-----	-----	NOT VAL	-----	PNL - CN ONLY
299-E33-05	27-Mar-91	BOOFB1	10/09/91	10/09/91	10/09/91	08/23/91	NO DATA	-----	NOT VAL	W
299-E33-05	27-Mar-91	BOOFB2	-----	-----	-----	08/23/91	-----	-----	-----	W-F
299-E33-05	27-Mar-91	BOOFB3	-----	-----	-----	-----	-----	NOT VAL	-----	PNL - CN ONLY
299-E33-07	03-Apr-91	BOOFB4	NOT VAL	NOT VAL	NOT VAL	08/23/91	NO DATA	-----	NOT VAL	W
299-E33-07	03-Apr-91	BOOFB5	-----	-----	-----	08/23/91	-----	-----	-----	W-F
299-E33-07	03-Apr-91	BOOFB6	-----	-----	-----	-----	-----	NOT VAL	-----	PNL - CN ONLY
299-E33-04	01-Apr-91	BOOFB7	NOT VAL	NOT VAL	NOT VAL	08/23/91	NO DATA	-----	NOT VAL	SPIKE/DUP (W)
299-E33-04	01-Apr-91	BOOFB8	-----	-----	-----	-----	-----	NOT VAL	-----	SPIKE/DUP (PNL)
	05-Mar-91	BOOFC1	NO DATA	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
299-E33-24	04-Apr-91	BOOFC2	NOT VAL	NOT VAL	NOT VAL	NO DATA	NO DATA	-----	NOT VAL	W
299-E33-24	04-Apr-91	BOOFC3	-----	-----	-----	NO DATA	-----	-----	-----	W-F
299-E33-24	04-Apr-91	BOOFC4	-----	-----	-----	-----	-----	NOT VAL	-----	PNL - CN ONLY
299-E33-31	13-Mar-91	BOOFC5	08/02/91	08/02/91	08/02/91	10/05/91	NO DATA	-----	NOT VAL	W
299-E33-31	13-Mar-91	BOOFC6	-----	-----	-----	10/05/91	-----	-----	-----	W-F
299-E33-31	13-Mar-91	BOOFC7	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E33-13	27-Mar-91	BOOFC8	10/09/91	10/09/91	10/09/91	08/23/91	NO DATA	-----	NOT VAL	W
299-E33-13	27-Mar-91	BOOFC9	-----	-----	-----	08/23/91	-----	-----	-----	W-F
299-E33-13	27-Mar-91	BOOFC0	-----	-----	-----	-----	-----	NOT VAL	-----	PNL - CN ONLY

9 3 1 2 8 9 8 1 0 4 0

WELL #	DATE SAMPLED	HEIS #	VOA	SEMIVOA	PEST	METALS	ANIONS	CYANIDE	RADCHEM	SAMPLE TYPE
	06-Mar-91	BOOFD4	NOT VAL	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
	13-Mar-91	BOOFF1	08/02/91	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
299-E33-35	05-Mar-91	BOOFF2	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	-----	NOT VAL	W
299-E33-35	05-Mar-91	BOOFF3	-----	-----	-----	NO DATA	-----	-----	-----	W-F
299-E33-35	05-Mar-91	BOOFF4	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E33-26	06-Mar-91	BOOFF5	NOT VAL	NOT VAL	NOT VAL	NO DATA	NO DATA	-----	NOT VAL	W
299-E33-26	06-Mar-91	BOOFF6	-----	-----	-----	NO DATA	-----	-----	-----	W-F
299-E33-26	06-Mar-91	BOOFF7	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E33-38	11-Mar-91	BOOFF8	10/05/91	10/05/91	10/05/91	10/05/91	NO DATA	-----	NOT VAL	W
299-E33-38	11-Mar-91	BOOFF9	-----	-----	-----	10/05/91	-----	-----	-----	W-F
299-E33-38	11-Mar-91	BOOFG0	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E33-39	11-Mar-91	BOOFG1	10/05/91	10/05/91	10/05/91	10/05/91	NO DATA	-----	NOT VAL	W
299-E33-39	11-Mar-91	BOOFG2	-----	-----	-----	10/05/91	-----	-----	-----	W-F
299-E33-39	11-Mar-91	BOOFG3	-----	-----	-----	-----	-----	07/16/91	-----	PNL - CN ONLY
299-E33-24	04-Apr-91	BOOFG4	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	RU SAMPLE (PNL)
	04-Apr-91	BOOFG5	NOT VAL	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
	08-Apr-91	BOOFG6	NOT VAL	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
	09-Apr-91	BOOFG7	NOT VAL	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
	10-Apr-91	BOOFG8	NOT VAL	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
	11-Apr-91	BOOFG9	NOT VAL	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
299-E33-40	11-Apr-91	BOOFH0	NOT VAL	NOT VAL	NOT VAL	NO DATA	NO DATA	-----	NO DATA	W
299-E33-40	11-Apr-91	BOOFH1	-----	-----	-----	NO DATA	-----	-----	-----	W-F
299-E33-40	11-Apr-91	BOOFH2	-----	-----	-----	-----	-----	NOT VAL	-----	PNL - CN ONLY
299-E33-03	25-Mar-91	BOOFH3	-----	-----	-----	08/23/91	-----	-----	-----	SPIKE/DUP (W-F)
299-E33-04	01-Apr-91	BOOFH4	-----	-----	-----	08/23/91	-----	-----	-----	SPIKE/DUP (W-F)

WELL #	DATE SAMPLED	HEIS #	VUA	SEMI VOA	PEST	METALS	ANIONS	CYANIDE	RADCHEM	SAMPLE TYPE
299-E33-05	27-Mar-91	BOOFH5	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	-----	NO DATA	SPLIT (MM)
299-E33-05	27-Mar-91	BOOFH6	-----	-----	-----	NO DATA	-----	-----	-----	SPLIT (MM-F)
	25-Mar-91	BOOFH7	08/15/91	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
	27-Mar-91	BOOFH8	10/09/91	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
	01-Apr-91	BOOFH9	NOT VAL	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
	03-Apr-91	BOOFJ0	NOT VAL	-----	-----	-----	-----	-----	-----	DAY TRIP (W)
	03-Apr-91	BOOFJ1	NOT VAL	-----	-----	-----	-----	-----	-----	TRANSFER BLANK

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