

Final

**Meeting Minutes Transmittal/Approval**  
**Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units**  
**740 Stevens Center, Room 1200, Richland, Washington**  
**March 24, 1993**

FROM/APPROVAL: Eric D. Goller Date 4/28/93  
Eric D. Goller, 100 Area Unit Manager, RL (A5-19)

APPROVAL: Jack W. Donnelly for Jack Donnelly Date 4/28/93  
Jack W. Donnelly, 100 Aggregate Area Unit Manager, WA Department of Ecology

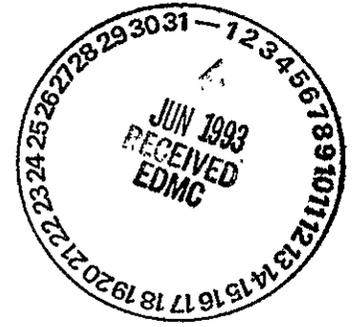
APPROVAL: Dennis Faulk Date 4-28-93  
Dennis Faulk, 100 Aggregate Area Unit Manager, EPA (B5-01)

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

- Attachment #1 - Meeting Summary
- Attachment #2 - Attendance Sheet
- Attachment #3 - Agenda
- Attachment #4 - Action Item Status List
- Attachment #5 - 100 Area Operable Units
- Attachment #6 - Agreement Activity Notification
- Attachment #7 - DSI, 100-HR-3 OU LFI Groundwater Investigation Validated Data
- Attachment #8 - DSI, 100-HR-1 OU LFI Source and Vadose Investigation Validated Data
- Attachment #9 - DSI, 100 Aggregate Area Ecological Investigation Validated Data
- Attachment #10 - TPA Milestone M-30-05
- Attachment #11 - 100 Area Treatability Tests Schedule and Summary
- Attachment #12 - 100-Area Excavation Treatability Test Schedule Options
- Attachment #13 - Test Objectives
- Attachment #14 - 100 NPL Agreement/Change Control Form # 35 (rev. 1)

Prepared by: Suzanne Clarke Date: 4/28/93  
Suzanne Clarke, Kay Kimmel, GSSC (A4-35)

Concurrence by: Bob Henckel Date: 4-28-93  
Bob Henckel, WHC Coordinator (H6-02)



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**Attachment #1  
Meeting and Summary of Commitments and Agreements**

**Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units  
March 24, 1993**

**1. SIGNING OF THE FEBRUARY 100 AREA UNIT MANAGER'S MEETING MINUTES -**  
Minutes were reviewed and approved with changes.

**2. ACTION ITEM UPDATE: (See Attachment 4 for complete status, items listed below indicate the update to Action Items made during the meeting):**

**1AAMS.9** No additional information.

**1AAMS.15** No additional information.

**1AAMS.16** No additional information.

**3. NEW ACTION ITEMS:** No new action items were initiated this month.

**4. 100 AREA ACTIVITIES:**

- Attachment #5 was provided for general information on the 100 Areas Operable Units.
- Milestone 30-05 - Robert E. Peterson presented an overview of activities being performed to fulfill the M-30-05 Milestone (see attachment #10). During the next month, the DQO process will be utilized to define the objectives of this effort in specific terms.
- Agreement Activity Notification on 100-NR-1 is attached (see attachment #6):
- Attachments #7, #8 and #9 are DSIs listing documents informally transmitted to the Regulators.

**5. FIELD ACTIVITIES:**

- Burial Grounds - Dennis Faulk distributed a suggested strategy relating to burial grounds, recognizing that many issues such as interim storage might pose insurmountable problems in the near term. It was agreed by all parties that the amount of information needed to prepare a Record of Decision (ROD) for burial grounds would be clarified through examining existing RODs for other sites and discussing the appropriate detail for a ROD.
- 100-HR-1 Excavation Treatability Study - Linda Bergmann led a discussion concerning the issues involved in the scoping and methodology for the excavation treatability test. It was agreed that "site cleanup" would be removed as a specific objective of the test (see attachment #13). Two alternatives were considered for the public review cycle (see attachment #12). Eric Goller will investigate the DOE/HQ review/approval requirements if the test plan must go out for public review. A meeting was tentatively scheduled for the week of April 5 for comment

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resolution and site location.

- **Soil Washing Treatability Study** - Jim Field presented the status of Soil Washing (see attachment #11).
- **100 HR-3 Groundwater Treatability Tests** - Jim Duncan provided the status of the groundwater treatability test plan (see attachment #11). The following agreements were reached with DOE-RL, Ecology and EPA:
  - 1) **Ex Situ Removal of Chromate, Nitrate and Uranium (VI):**
    - A) The treatability test procedures for ion exchange and precipitation were distributed to RL, Ecology and EPA for concurrent review and comment. Comments are to be provided by April 7, 1993.
    - B) RL directed WHC to initiate set up procedures and lab work for the ion exchange and precipitation tests.
  - 2) **Biodenitrification:**
    - A) As of March 24, 1993, Ecology and EPA had no comments on the biodenitrification test procedure.
    - B) It was agreed that if no comments to the contrary were received by Friday, March 26th, then inhibition testing could proceed on the well water samples that will be delivered on March 30th.
- **100 NPL Agreement/Change Control Form:** Change Form #35 (rev. 1) has been included as attachment #14.

**6. AGREEMENTS:**

- It was agreed that if no comments to the contrary were received by Friday, March 26th, then the biodenitrification inhibition laboratory testing of the March 30 well samples could proceed. Rich Hibbard from Ecology was not present to concur; it was agreed that RL should proceed with this effort in the absence of feedback from Ecology by March 29, 1993.

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100 Aggregate Area Unit Manager's Meeting  
Official Attendance Record  
March 24, 1993

Please print clearly and use black ink

PRINTED NAME

ORGANIZATION

O.U. ROLE

TELEPHONE

PRINTED NAME	ORGANIZATION	O.U. ROLE	TELEPHONE
KAY KIMMEL	DAMES & MOORE	ESSC TO RL	376-1985
Bob Schook	"	"	"
Jandra Stubecki	PRC	EPA Support	(206) 624-2692
Tom JONES	PNL	OHE	375-2710
Alvin Langstaff	WHC	100 BK	376-6056
Blair Drost	USGS	EPA Support	206-593-6518
6 STEVE VUKELICH	WHC	100 HR3	509-376-5158
7 Jim Roberts	WHC	100 BC-5	509-376-5164
1 Pamela Innis	EPA	O.U. MANAGER	509-376-4919
2 CHUCK CLINE	ECOLOGY	O.U. Manager & HYDROGEO. SUPPORT	(206) 438-7556
3 Ted Woolley	Ecology	OU M	509 736-3012
9 Eric Goller	RL	RL 100 Area Unit Manager	509 376-7326
2 Alan D. Krug	WHC	100 Area team lead	509 376 5634
1 Kevin R. Rowe	WHC	ER Program	509 376-7319
9 JEFF AYRES	WHC	AR-1,2 FR-1	509-376-3918
Tony Knapp	WHC	Geoscience	6-3398
KEVIN KYTOJA	WHC	100-BC-1/2	509-372-1662
BOB HENCKEL	WHC	100 Area	509-376-2091
Jim Patterson	WHC	ER Program	509-376-0902
William McMahon	WHC	Geoscience Technical	509-376-9744
Dennis Faulk	EPA	UM	376-8631
Diana Sickle	WHC	ER Program	372-3141
JOAN WOOLARD	WHC	100 Area reliability studies	376-2539
Paul Beaver	EPA	Unit Mgr	6-8665
Mark Donnelly	Ecology	100 Unit Mgr	509-736-3013



**Attachment #3  
Agenda**

**Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units  
March 24, 1993**

**100 Area General Discussions**

- **M-30-05 - Robert E. Peterson**
  
- **Treatability Studies**
  - **100-HR-1 Excavation Treatability Study - Linda Bergmann**
  
  - **Soil Washing Treatability Study - Jim Field**
  
  - **100-HR-3 Treatability Study - Jim Duncan**

**100-DR-1, 100-HR-1, 100-NR-1 OU's - Naiknimbalkar/Ayres/Krug**

**100-HR-3, 100-NR-2 - Steve Vukelich**

**100-BC-5, 100-KR-4, 100-FR-3 OU's - Jim Roberts**

**100-BC-1, 100-KR-1, 100-FR-1 OU's- Kytola/Naiknimbalkar/Ayres**

**Action Item Status**

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## Action Item Status List

Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units  
March 24, 1993

ITEM NO.	ACTION	STATUS
1AAMS.9	DOE shall send a letter to Ecology, suggested from S. H. Wisness to D. Jansen with a cc. to EPA, explaining what is included in the ER Program for the N Reactor Area and how the multiple programs will be handled organizationally. Action to J. D. Goodenough (2/27/92). Action: E. D. Goller (5/27/92).	Open. Related to the N Areas Issues Papers. No answer 7/29/92. No additional information (8/26/92). On General Topics Agenda for October (9/23/92). No new information (3/24/93).
1AAMS.15	Provide response to April 2 EPA letter concerning river seeps. Action: Eric Goller (RL) 7/29/92.	Open (7/29/92). In DOE for transmittal (8/26/92). No additional information (3/24/93).
1AAMS.16	DOE should transmit Revision 1 of M-30-01.	Open (7/29/92). In DOE for transmittal (8/26/92). No additional information (3/24/93).

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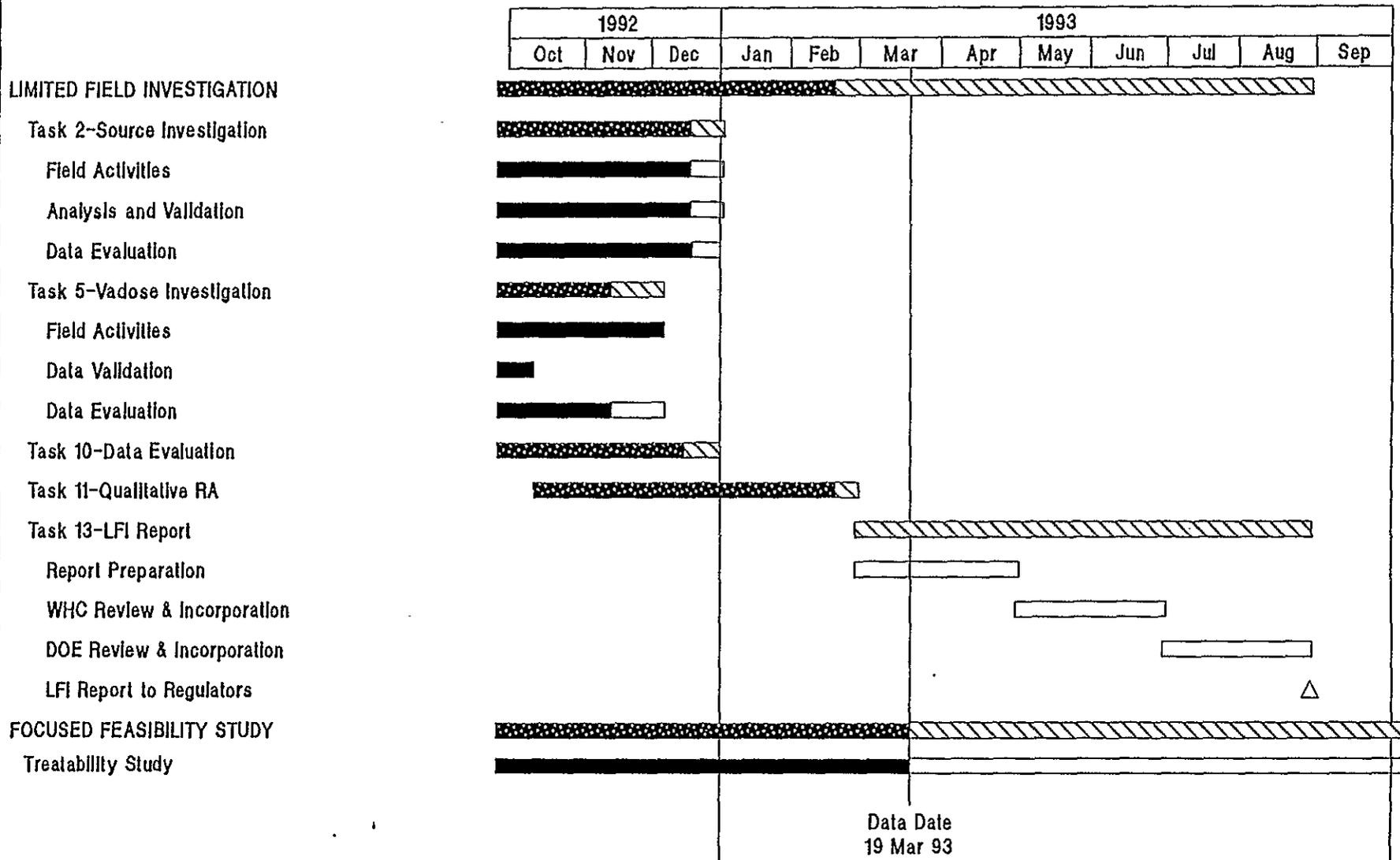
**UNIT MANAGER'S MEETING**

**100 AREA OPERABLE UNITS**

**MARCH 24, 1993**

93189331740

### 100-HR-1 OPERABLE UNIT



Data Date  
19 Mar 93

Summary 

Progress 

Project: 100-HR-1	DOE-RL 88-35, Rev 0	Date: 15Mar93 10:11
100-HR-1 Operable Unit Work Plan		
Page: 1	Drawn by ER Program Control-Scheduling	

## OU MANAGERS MEETING - MAR 93

### 100-FR-1

- Vadose drilling completed on 3/2/93. Site clean up and decontamination to continue several more weeks.
- Test Pits to commence on 4/5/93 (test pits are deferred until Kaiser removes the drilling equipment from the immediate areas).

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SAMPLES FROM 100-FR-1 OPERABLE UNIT  
 Jeff Ayres  
 March 11, 1993

VADOSE BOREHOLE SAMPLES

BOREHOLE SAMPLING SUMMARY  
 116-F-1A

Sample Number	Interval Sampled	Sample Type	ANALY	Sample Date	Ship Date	Lab	Offsite Number	Bill of Lading Number
B080N1	0-2'	SOIL	*	02-04-93	02-08-93	TMA	W93-0-0190#36	2536952880
B080N2	9.5-11'	SOIL	*	02-08-93	02-12-93	TMA	W93-0-0190#50	2536953243
B080N3	14.5-16'	SOIL	*	02-09-93	02-12-93	TMA	W93-0-0190#50	2536953243
B080N4	19-22.5'	SOIL	*	02-09-93	02-12-93	TMA	W93-0-0190#50	2536953243

116-F-1A TD at 22.5' on 02-09-93

\*ANALYSIS-G, 1000ml; Gross alpha/beta, Gamma Spec, U-235/238, Pu-239/240, Am-241, Sr-90, C-14  
 aG, 120ml; Anions (F, NO2, NO3, SO4)  
 aG, 500ml; SEMI-VOA, PCB/PEST  
 aG, 250ml; ICP/AA, Metals, Hg, Cn  
 aG, 120ml; VOA

BOREHOLE SAMPLING SUMMARY  
 116-F-6

Sample Number	Interval Sampled	Sample Type	ANALY	Sample Date	Ship Date	Lab	Offsite Number	Bill of Lading Number
B080L9	0-2'	SOIL	*	01-27-93	01-29-93	TMA	W93-0-0190#27	2536952682
B080M0	6.5-8.5'	SOIL	*	01-28-93	02-01-93	TMA	ORSR-15852	N/A
B080M1	9-11'	SOIL	*	01-28-93	02-01-93	TMA	W93-0-0190#28	2519007907
B080M2	15-17'	SOIL	*	01-28-93	02-01-93	TMA	W93-0-0190#28	2519007907
B080M3	19-21'	SOIL	*	01-29-93	02-02-93	TMA	W93-0-0190#29	2519007953
B080Q0A	N/A	HTWS	*	02-23-93	02-24-93	TMA	W93-0-0285#11	2536953584
B080Q0	N/A	HTWS	**	02-23-93	02-24-93	WESTON	W93-0-0285#12	2536953537
B080Q2	N/A	TRIP	VOA	02-23-93	02-24-93	TMA	W93-0-0285#11	2536953584

116-F-6 TD at 21' on 01-29-93

\*ANALYSIS-G, 1000ml; Gross alpha/beta, Gamma Spec, U-235/238, Pu-239/240, Am-241, Sr-90, C-14  
 aG, 120ml; Anions (F, NO2, NO3, SO4)  
 aG, 500ml; SEMI-VOA, PCB/PEST  
 aG, 250ml; ICP/AA, Metals, Hg, Cn  
 aG, 120ml; VOA

\*\*ANALYSIS-120ml; TOC

Note: Sample B080Q0 is a hard tool drilling water sample.  
 Sample B080Q0A is a split of above.

93129331713

**BOREHOLE SAMPLING SUMMARY  
116-F-2**

Sample Number	Interval Sampled	Sample Type	ANALY	Sample Date	Ship Date	Lab	Offsite Number	Bill of Lading Number
B080M4	0-2'	SOIL	*	02-02-93	02-05-93	TMA	W93-0-0190#35	2536952797
B080M6	10-12'	SOIL	*	02-02-93	02-05-93	TMA	ORSR-18335	N/A
B080M8	20-22'	SOIL	*	02-03-93	02-05-93	TMA	ORSR-18335	N/A
B080M5	N/A	TRIP	*	02-02-93	02-05-93	TMA	W93-0-0190#35	2536952797
B080M7	14.8-16.8'	SOIL	*	02-03-93	02-05-93	TMA	ORSR-18335	N/A
B080M9	24.5-26.5'	SOIL	*	02-03-93	02-05-93	TMA	W93-0-0190#35	2536952797
B080N0	30-32'	SOIL	*	02-04-93	02-08-93	TMA	W93-0-0190#36	2536952880

116-F-2 TD at 32'on 02-04-93

\*ANALYSIS-G,1000ml;Gross alpha/beta,Gamma Spec,U-235/238,Pu-239/240,Am-241,Sr-90,C-14  
aG,120ml;Anions (F,NO2,NO3,SO4)  
aG,500ml;SEMI-VOA,PCB/PEST  
aG,250ml;ICP/AA,Metals,Hg,Cn  
aG,120ml;VOA

**BOREHOLE SAMPLING SUMMARY  
116-F-14**

Sample Number	Interval Sampled	Sample Type	ANALY	Sample Date	Ship Date	Lab	Offsite Number	Bill of Lading Number
B080Q4	0-2'	SOIL	*	02-25-93	02-26-93	TMA	W93-0-0285#13	2536953617
B080Q5	3-5'	SOIL	*	02-25-93	03-01-93	TMA	ORSR-17582	N/A
B080Q6	5-7'	SOIL	*	02-26-93	03-01-93	TMA	ORSR-17582	N/A
B080Q7	10.5-13'	SOIL	*	03-01-93	03-02-93	TMA	W93-0-0285#15	2536953738
B080Q8	16.6-18.6'	SOIL	*	03-01-93	03-02-93	TMA	W93-0-0285#15	2536953738
B080Q9	23-24.5'	SOIL	*	03-02-93	03-04-93	TMA	W93-0-0285#16	2536953771

116-F-14 TD at 24.5'on 03-02-93

\*ANALYSIS-G,1000ml;Gross alpha/beta,Gamma Spec,U-235/238,Pu-239/240,Am-241,Sr-90,C-14  
aG,120ml;Anions (F,NO2,NO3,SO4)  
aG,500ml;SEMI-VOA,PCB/PEST  
aG,250ml;ICP/AA,Metals,Hg,Cn  
aG,120ml;VOA

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**BOREHOLE SAMPLING SUMMARY**  
**116-F-9C**

Sample Number	Interval Sampled	Sample Type	ANALY	Sample Date	Ship Date	Lab	Offsite Number	Bill of Lading Number
B080N5	0-4'	SOIL	*	02-11-93	02-16-93	TMA	W93-0-0285#4	2536953287
B080N6	9-11'	SOIL	*	02-12-93	02-16-93	TMA	W93-0-0285#4	2536953287
B080N7	14-18'	SOIL	*	02-12-93	02-16-93	TMA	W93-0-0285#4	2536953287
B080N8	14-18'	DUPL	*	02-12-93	02-16-93	TMA	W93-0-0285#4	2536953287
B080N9	14-18'	SPLT	*	02-12-93	02-16-93	WESTON	W93-0-0285#3	2536953287

116-F-9C TD at 18' on 02-12-93

\*ANALYSIS-G,1000ml;Gross alpha/beta,Gamma Spec,U-235/238,Pu-239/240,Am-241,Sr-90,C-14  
aG,120ml;Anions (F,NO2,NO3,SO4)  
aG,500ml;SEMI-VOA,PCB/PEST  
aG,250ml;ICP/AA,Metals,Hg,Cn  
aG,120ml;VOA

**BOREHOLE SAMPLING SUMMARY**  
**116-F-4**

Sample Number	Interval Sampled	Sample Type	ANALY	Sample Date	Ship Date	Lab	Offsite Number	Bill of Lading Number
B080P2	0-2'	SOIL	*	02-17-93	02-19-93	TMA	W93-0-0285#27	2536953463
B080P3	5-7'	SOIL	*	02-17-93	02-19-93	TMA	ORSR-18337	N/A
B080P4	9.4-11.4'	SOIL	*	02-18-93	02-22-93	TMA	ORSR-17580	N/A
B080P5	13.4-15.6'	SOIL	*	02-22-93	02-24-93	TMA	ORSR-17581	N/A
B080P9	19-20.8'	SOIL	*	02-24-93	02-02-93	TMA	W93-0-0285#13	2536953617

116-F-4 TD at 20.8' on 02-24-93

\*ANALYSIS-G,1000ml;Gross alpha/beta,Gamma Spec,U-235/238,Pu-239/240,Am-241,Sr-90,C-14  
aG,120ml;Anions (F,NO2,NO3,SO4)  
aG,500ml;SEMI-VOA,PCB/PEST  
aG,250ml;ICP/AA,Metals,Hg,Cn  
aG,120ml;VOA

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### 100-FR-1 OPERABLE UNIT

**LIMITED FIELD INVESTIGATION**

**Task 2-Source Investigation**

Data Compilation

Topographic Mapping

Field Activities

Source Sampling

132-F-1 Chronic Feeding Barn

Sample Analysis

Data Validation

Data Evaluation

**Task 5-Vadose Investigation**

Field Activities

Mobilization

Drilling/Excavation and Sampling

116-F-6 Liquid Waste Disposal Trench

116-F-3 Fuel Storage Test Pit

116-F-1A Lewis Canal

116-F-1B Lewis Canal Test Pit

116-F-1C Lewis Canal Test Pit

116-F-14 Retention Basin

116-F-2 Basin Overflow Trench

108-F French Drain Hand Sample

116-F-9C Animal Waste Trench-BH

116-F-9D Test Pit

116-F-4 Pluto Crib-BH

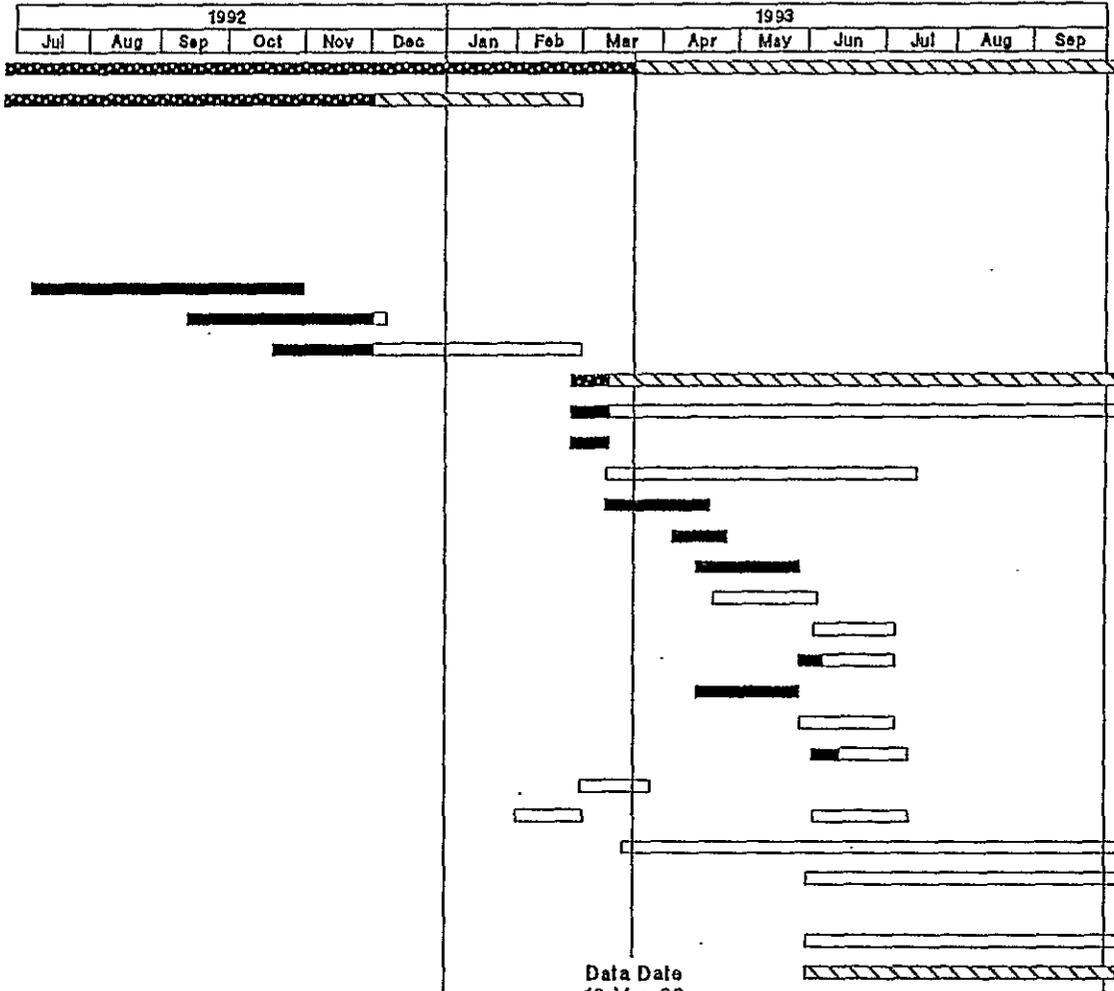
Sample Analysis

Data Validation

Validated Data to Regulators Nov 1993

Data Evaluation

**Task 10-Data Evaluation**



Data Date  
19 Mar 93

Summary   
Progress 

Project: 100-FR-1	DOE-RL 90-33, REV 0	Date: 15 Mar 93 11:29
100-FR-1 OPERABLE UNIT WORK PLAN		
Page: 1	Drawn by ER Program Control-Scheduling	

100-BC-1 SOURCE OPERABLE UNIT WORK SUMMARY  
March 12, 1993

Task 11 - Qualitative Risk Assessment:

The final draft has been reviewed by WHC and is anticipated to be to DOE for review on March 22, 1993.

Task 13 - Limited Field Investigation (LFI) Report:

Preparation of the LFI report is continuing and on schedule. A draft is due to WHC on March 15, 1993 with the DOE draft being submitted at the end of May.

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### 100-BC-1 OPERABLE UNIT

1992			1993								
Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep

**LIMITED FIELD INVESTIGATION**

Task 2-Source Investigation

Data Compilation

Topographic Mapping

Data Evaluation

Task 5-Vadose Investigation

Data Evaluation

Task 10-Data Evaluation

Task 11-Quallitative RA

Task 13-LFI Report

LFI Report preparation

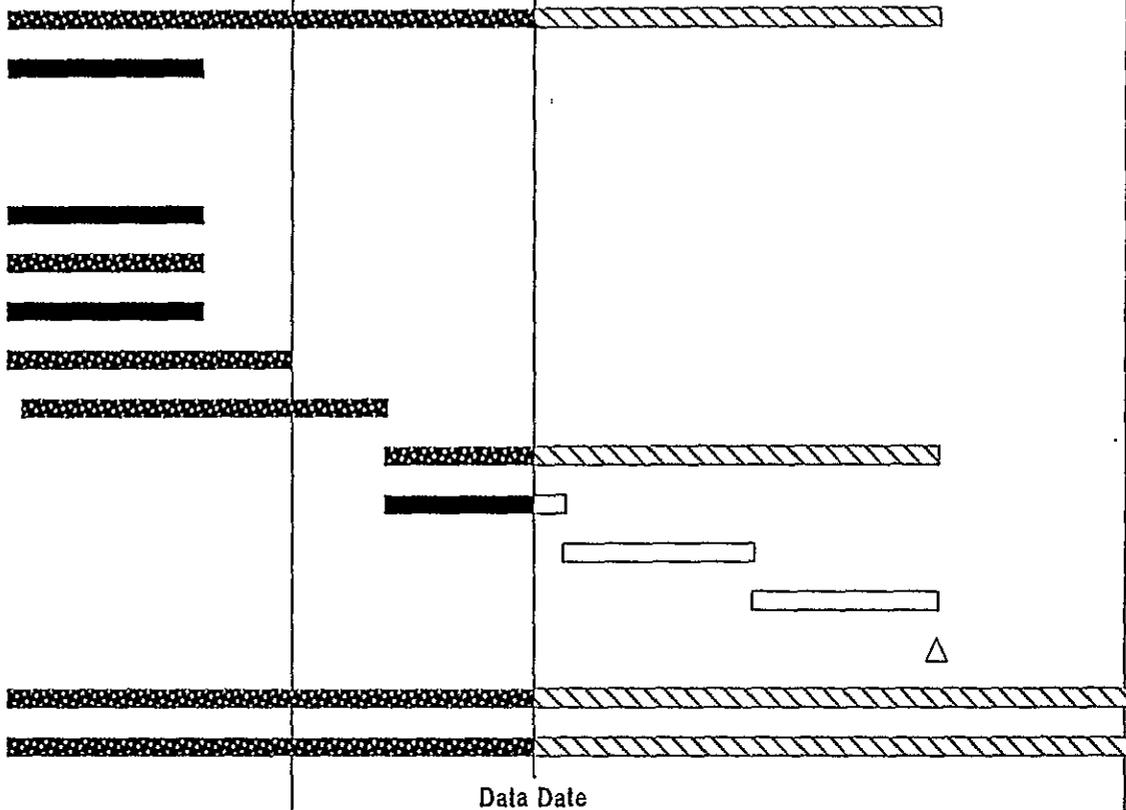
WHC Review and Incorporation

DOE Review and Incorporation

LFI Report to EPA

**FOCUSED FEASIBILITY STUDY**

Treatability Study



Data Date  
19 Mar 93

Project: 100-BC-1	DOE-RL 90-07, Rev 0	Date: 15Mar93 15:32
100-BC-1 Operable Unit Work Plan		
Page: 1	Drawn by ER Program Control-Scheduling	

Summary	
Progress	

FY 1993 Activities for 100-DR-1  
N.M. Naiknimbalkar

March 1993 Status Report

100-DR-1 DATA VALIDATION STATUS

Nonintrusive Data Validation:

The data validation report for nonintrusive site samples is expected to be completed by April 15, 1993.

100-DR-1 QUALITATIVE RISK ASSESSMENT STATUS

Qualitative Risk Assessment  
Document Preparation:

SAIC/Golder is preparing this document.

- o Qualitative Risk Assessment Report Due: 04-01-93.

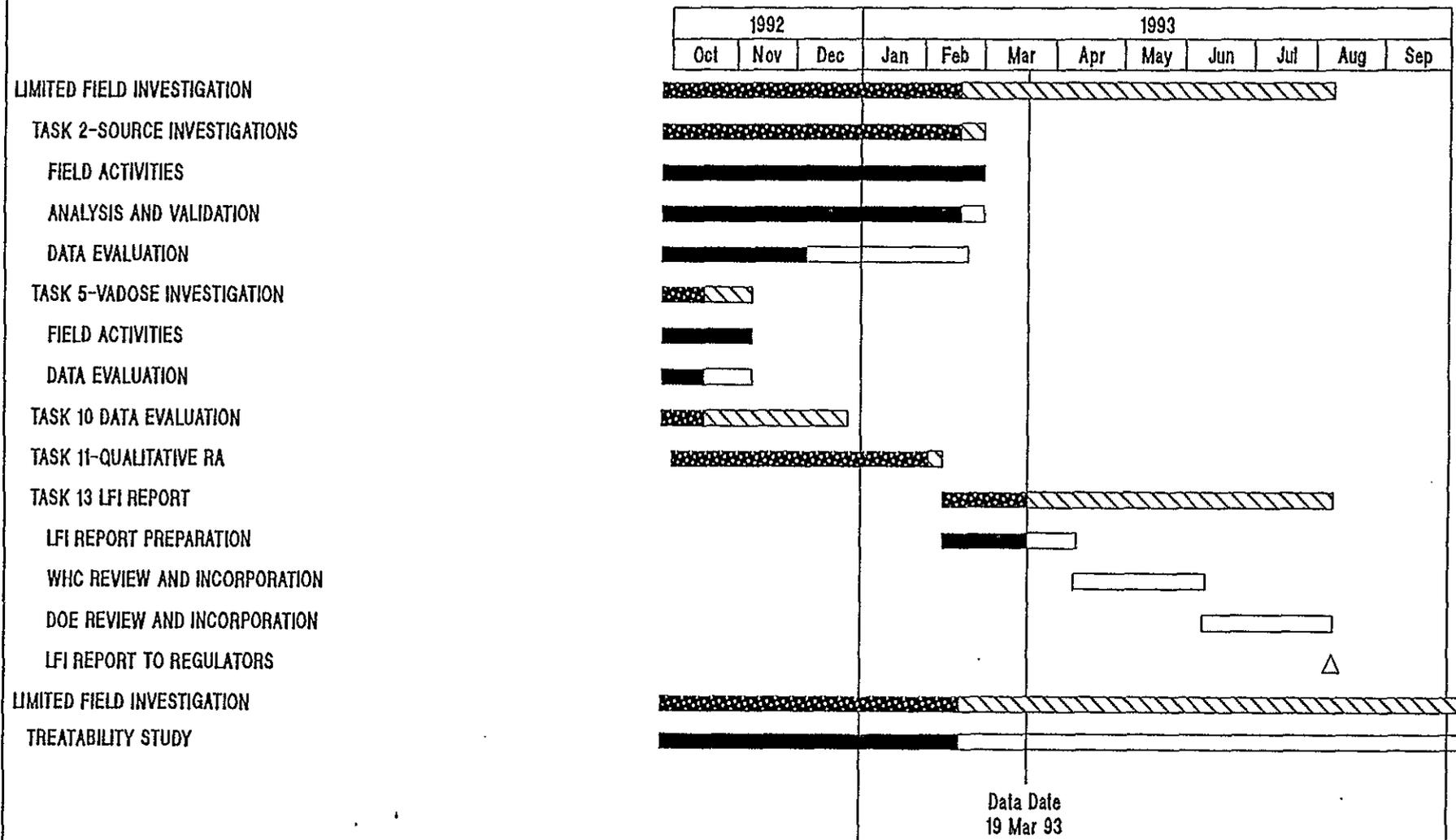
LFI Report

IT is preparing this document.

- o LFI Report Due: 08-09-93.

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### 100-DR-1 OPERABLE UNIT



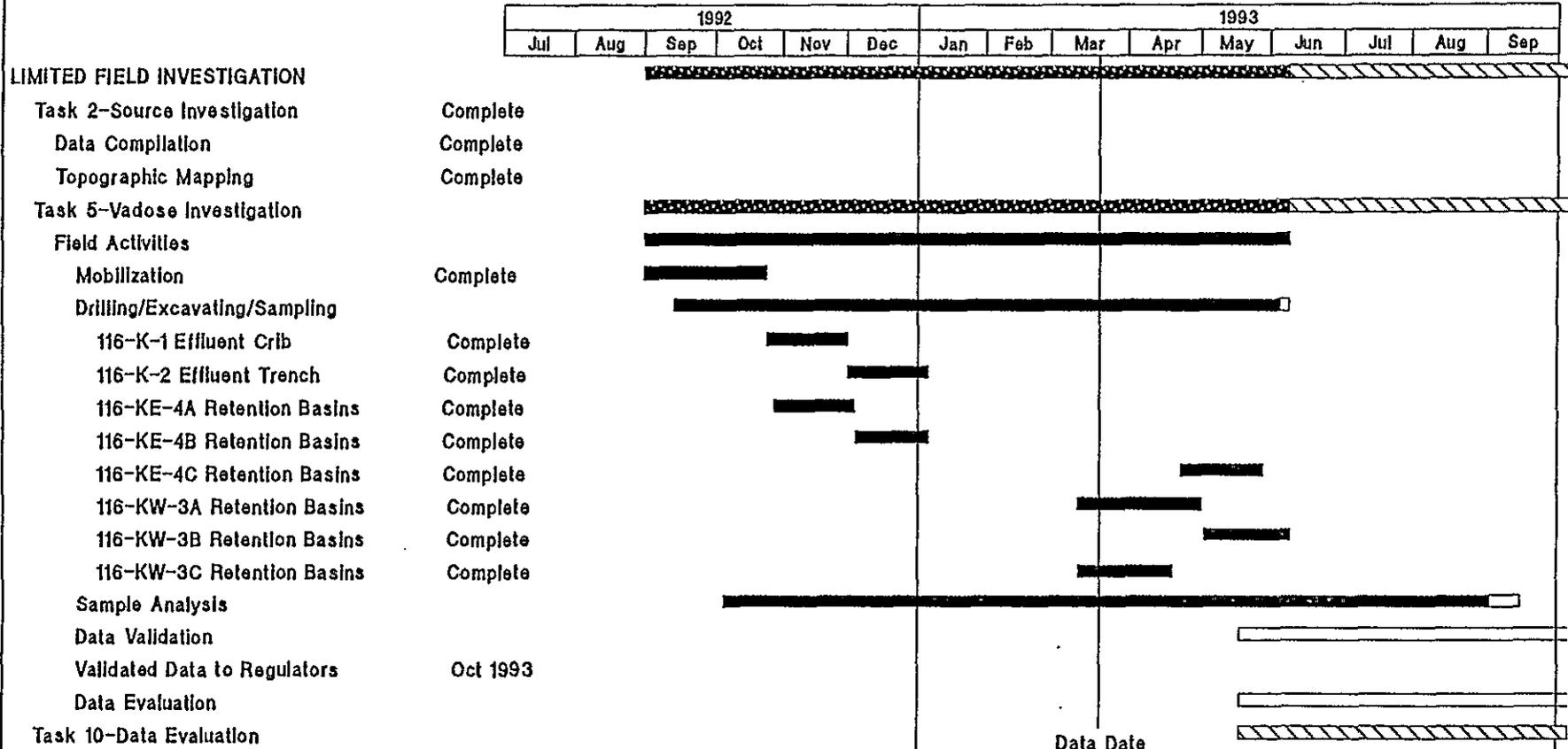
Data Date  
19 Mar 93

Project: 100-DR-1	DOE-RL 89-09, Rev 0	Date: 15Mar93 11:26
100-DR-1 Operable Unit Work Plan		
Page: 1	Drawn by ER Program Control-Scheduling	

Summary   
Progress 



### 100-KR-1 OPERABLE UNIT



Summary [diagonal lines]  
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Data Date  
19 Mar 93

Project: 100-KR-1	DOE-RL 90-20, REV 0	Date: 15Mar93 9:11
100-KR-1 OPERABLE UNIT WORK PLAN		
Page: 1	Drawn by ER Program Control-Scheduling	

100-NR-1 Operable Unit  
Activity Summary  
March 12, 1993

Task 2 - Vadose Investigation

Surface Samples - 1322-N/NA: 4 samples

116-N-1<sup>2</sup>3 Samples

DOW in review

Sampling scheduled for mid-March

116-N-2 ←

Begin April

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BOREHOLE SAMPLING SUMMARY  
1322-N

Sample Number	Interval Sampled	Sample Type	ANALY	Sample Date	Ship Date	Lab	Offsite Number	Bill of Lading Number
B07QB8	9-11'	SOIL	*	12-09-92	12-10-92	TMA	W93-0-0122#30	2519007623
B07QB9	15-17.5'	SOIL	*	12-09-92	12-10-92	TMA	W93-0-0122#30	2519007623
B07QC0	20-22.5'	SOIL	*	12-09-92	12-09-92	TMA	W93-0-0122#30	2519007623

1322-N TD at 22.5'on 12-09-92

\*ANALYSIS-G,1000ml;Gross alpha/beta,Gamma Spec,U-235/238,Pu-239/240,Am-241,Sr-90,C-14

Due to field screening none of the samples of this well were tested for radionuclides.

aG,950ml;SEMI-VOA,PCB/PEST,Anions (F,NO2,NO3,SO4,PH)

aG,250ml;ICP/AA,Metals,Hg,Cn

aG,120ml;VOA

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BOREHOLE SAMPLING SUMMARY  
116-N-2

Sample Number	Interval Sampled	Sample Type	ANALY	Sample Date	Ship Date	Lab	Offsite Number	Bill of Lading Number
B07QD7	0-2'	SOIL	*	12-16-92	12-16-92	TMA W93-0-0122#42	2519007898	
B07QD8	9-11.5'	SOIL	*	12-16-92	12-16-92	TMA W93-0-0122#42	2519007898	
B07QD9	13.5-16'	SOIL	*	12-17-92	12-18-92	TMA W93-0-0122#42	2519007898	
B07QF0	18.5-21'	SOIL	*	12-17-92	12-18-92	TMA W93-0-0122#42	2529007898	

116-N-2 TD at 21' on 12-17-92

\*ANALYSIS-G,1000ml;Gross alpha/beta,Gamma Spec,U-235/238,Pu-239/240,Am-241,Sr-90,C-14  
Due to field screening none of the samples of this well were tested for radionuclides.  
aG,950ml;SEMI-VOA,PCB/PEST,Anions (F,NO2,NO3,SO4,PH)  
aG,250ml;ICP/AA,Metals,Hg,Cn  
aG,120ml;VOA

9 1 2 9 3 3 1 7 5 5

BOREHOLE SAMPLING SUMMARY  
119-N

Sample Number	Interval Sampled	Sample Type	ANALY	Sample Date	Ship Date	Lab	Offsite Number	Bill of Lading Number
B07Q83	9.5-11.5'	SOIL	*	11-30-92	12-01-92	TMA	W93-0-0122#18	2519007249
B07Q84	17.5-20'	SOIL	*	11-30-92	12-01-92	TMA	W93-0-0122#18	2519007249
B07Q85	22.5-24'	SOIL	*	11-30-92	12-01-92	TMA	W93-0-0122#18	2519007249
B07Q86	22.5-24'	DUPL	*	11-30-92	12-01-92	TMA	W93-0-0122#18	2529007249

119-N TD at 24'on 11-30-92

\*ANALYSIS-G,1000ml;Gross alpha/beta,Gamma Spec,U-235/238,Pu-239/240,Am-241,Sr-90,C-14  
Due to field screening none of the samples of this well were tested for radionuclides.  
aG,950ml;SEMI-VOA,PCB/PEST,Anions (F,NO2,NO3,SO4,PH)  
aG,250ml;ICP/AA,Metals,Hg,Cn  
aG,120ml;VOA

9 0 1 2 9 3 1 7 5 6

**BOREHOLE SAMPLING SUMMARY**  
UN-100-N-17

Sample Number	Interval Sampled	Sample Type	ANALY	Sample Date	Ship Date	Lab	Offsite Number	Bill of Lading Number
B07QB7	15-17'	SOIL	*	01-05-93	01-07-93	TMA	W93-0-0122#42	2519007898
B07SX4	19-21.5'	SOIL	*	01-06-93	01-08-93	TMA	W93-0-0190#1	2536952363
B07WV1	24-26.5'	SOIL	*	01-06-93	01-08-93	TMA	W93-0-0190#1	2536952363
B07WV5	29-31'	SOIL	*	01-07-93	01-08-93	TMA	W93-0-0190#1	2536952363
B07WV7	49-51'	SOIL	*	01-08-93	01-12-93	TMA	W93-0-0190#5	2536952484
B07WX0	54-56'	SOIL	*	01-15-93	01-19-93	TMA	W93-0-0190#9	251901077T
B07WX1	59-61'	SOIL	*	01-18-93	01-19-93	TMA	W93-0-0190#9	251901077T
B07WX2	64-66'	SOIL	*	01-19-93	01-08-93	TMA	W93-0-0190#16	2536952550
B07WX3	69-71'	SOIL	*	01-20-93	01-08-93	TMA	W93-0-0190#16	2536952550
B07WX4	72.5-74'	SOIL	*	01-21-93	01-08-93	TMA	W93-0-0190#16	2536952550
B07WX5	N/A	BCKD	*	01-22-93	01-26-93	TMA	W93-0-0190#19	2536952649
B07WX6	N/A	BCKD	*	01-22-93	01-26-93	TMA	W93-0-0190#19	2536952649

120-N-2 TD at 76' on 01-12-93

\*ANALYSIS-G, 1000ml; Gross alpha/beta, Gamma Spec, U-235/238, Pu-239/240, Am-241, Sr-90, C-14  
aG, 950ml; SEMI-VOA, PCB/PEST, Anions (F, NO2, NO3, SO4, PH)  
aG, 250ml; ICP/AA, Metals, Hg, Cn  
aG, 120ml; VOA

9 9 1 1 7 5 7

BOREHOLE SAMPLING SUMMARY  
120-N-2

Sample Number	Interval Sampled	Sample Type	ANALY	Sample Date	Ship Date	Lab	Offsite Number	Bill of Lading Number
B07QB5	0-2'	SOIL	*	12-17-92	12-17-92	TMA	W93-0-0122#42	2519007898
B07QB6	4.-6.5'	SOIL	*	12-17-92	12-17-92	TMA	W93-0-0122#42	2519007898
B07SW7	10-11.5	SOIL	*	01-04-93	01-07-93	TMA	W93-0-0122#19	2536952374
B07SW8	14-16'	SOIL	*	01-04-93	01-07-93	TMA	W93-0-0122#19	2536952374
B07SW9	19-21'	SOIL	*	01-04-93	01-07-93	TMA	W93-0-0122#19	2536952374
B07SX0	24-26'	SOIL	*	01-05-93	01-07-93	TMA	W93-0-0122#19	2536952374
B07SX1	29-31'	SOIL	*	01-05-93	01-07-93	TMA	W93-0-0122#19	2536952374
B07QF1	N/A	TRIP	*	01-05-93	01-07-93	TMA	W93-0-0122#19	2536952374
B07SX2	34-36'	SOIL	*	01-05-93	01-07-93	TMA	W93-0-0122#19	2536952374
B07QF2	N/A	EQUIP	*	01-05-93	01-07-93	TMA	W93-0-0122#19	2536952374
B07SX3	39-41'	SOIL	*	01-05-93	01-08-93	TMA	W93-0-0190#1	2536952363
B07WV0	44-46'	SOIL	*	01-06-93	01-08-93	TMA	W93-0-0190#1	2536952363
B07WV2	51-53'	SOIL	*	01-06-93	01-08-93	TMA	W93-0-0190#1	2536952363
B07WV3	55-57'	SOIL	*	01-07-93	01-08-93	TMA	W93-0-0190#1	2536952363
B07WV4	58-60'	SOIL	*	01-07-93	01-08-93	TMA	W93-0-0190#1	2536952363
B07WV6	64-66'	SOIL	*	01-08-93	01-12-93	TMA	W93-0-0190#5	2536952484
B07WV8	69-71'	SOIL	*	01-11-93	01-13-93	TMA	W93-0-0190#5	2536952484
B07WV9	74-76'	SOIL	*	01-12-93	01-13-93	TMA	W93-0-0190#5	2536952484

120-N-2 TD at 76'on 01-12-93

\*ANALYSIS-G,1000ml;Gross alpha/beta,Gamma Spec,U-235/238,Pu-239/240,Am-241,Sr-90,C-14  
 Due to field screening none of the samples of this well were tested for radionuclides.  
 aG,950ml;SEMI-VOA,PCB/PEST,Anions (F,NO2,NO3,SO4,PH)  
 aG,250ml;ICP/AA,Metals,Hg,Cn  
 aG,120ml;VOA

9 1 1 2 9 3 1 7 5 8

**BOREHOLE SAMPLING SUMMARY  
SOUTH POND**

Sample Number	Interval Sampled	Sample Type	ANALY	Sample Date	Ship Date	Lab	Offsite Number	Bill of Lading Number
B07Q87	SURF	SOIL	*	12-03-92	12-04-92	TMA	W93-0-0122#25	2519007425
B07Q88	4-5'	SOIL	*	12-03-92	12-04-92	TMA	W93-0-0122#25	2519007425
B07Q89	9-11'	SOIL	*	12-03-92	12-04-92	TMA	W93-0-0122#25	2519007425
B07Q90	14-16'	SOIL	*	12-04-92	12-08-92	TMA	W93-0-0122#29	2519007491
B07Q91	19-21'	SOIL	*	12-04-92	12-08-92	TMA	W93-0-0122#29	2519007491
B07Q92	24-26'	SOIL	*	12-04-92	12-08-92	TMA	W93-0-0122#29	2519007491
B07Q93	29-31'	SOIL	*	12-07-92	12-10-92	TMA	W93-0-0122#30	2519007623
B07Q94	34-36'	SOIL	*	12-07-92	12-10-92	TMA	W93-0-0122#30	2519007623
B07Q95	39-41'	SOIL	*	12-08-92	12-10-92	TMA	W93-0-0122#30	2519007623
B07Q96	44-46'	SOIL	*	12-08-92	12-10-92	TMA	W93-0-0122#30	2519007623
B07Q97	44-46'	SPLT	*	12-08-92	12-10-92	WESTON	W93-0-0122#31	2519007634
B07Q98	49-51'	SOIL	*	12-08-92	12-10-92	TMA	W93-0-0122#30	2519007623
B07Q99	54-56'	SOIL	*	12-08-92	12-10-92	TMA	W93-0-0122#30	2519007623
B07QB0	59-61'	SOIL	*	12-09-92	12-10-92	TMA	W93-0-0122#30	2519007623
B07QB1	64-66'	SOIL	*	12-09-92	12-10-92	TMA	W93-0-0122#30	2519007623
B07QB2	69.5-70.5'	SOIL	*	12-10-92	12-11-92	TMA	W93-0-0122#35	2519007689
B07QB3	76-78'	SOIL	*	12-10-92	12-11-92	TMA	W93-0-0122#35	2519007689
B07QB4		HTW	**	12-14-92	12-15-92	TMA	W93-0-0122#38	2519007744

SOUTH POND TD at 78' on 12-10-92

\*ANALYSIS-G,1000ml;Gross alpha/beta,Gamma Spec,U-235/238,Pu-239/240,Am-241,Sr-90,C-14

Due to field screening none of the samples of this well were tested for radionuclides.

aG,950ml;SEMI-VOA,PCB/PEST,Anions (F,NO2,NO3,SO4,PH)

aG,250ml;ICP/AA,Metals,Hg,Cn

aG,120ml;VOA

\*\*ANALYSIS-P;3:1000ml;ICP/AA,Metals,Hg

P;3:1000ml;Cn

P;1:500ml;C-14

P;1:1000ml;Tc-99

aG;3:2360ml;Semi-VOA,PCB/PEST

aG;3:2360ml;Gross alpha/beta,Gamma Spec,U-235/238,Pu-239/240,Am-241,Sr-90

aG;1:500ml;Anions(F,PO4,Cl,SO4)

aG;1:500ml;9050;CONDUCTIVITY

aG;3:40ml;VOA

aG;1:250ml;TRITIUM

9631759

# 100-NR-1 OPERABLE UNIT

## LIMITED FIELD INVESTIGATION

### Task 2- Source Investigation

Data Compilation

Surface Radiation

Soil Gas Survey

### Data Evaluation

### Task 5-Vadose Investigation

#### Field Activities

#### Drilling/Sampling

120-N-2

119-N

1322-N

Settling Pond

166-N

116-N-2

Test Pit 120-N-1

Borehole Abandonment

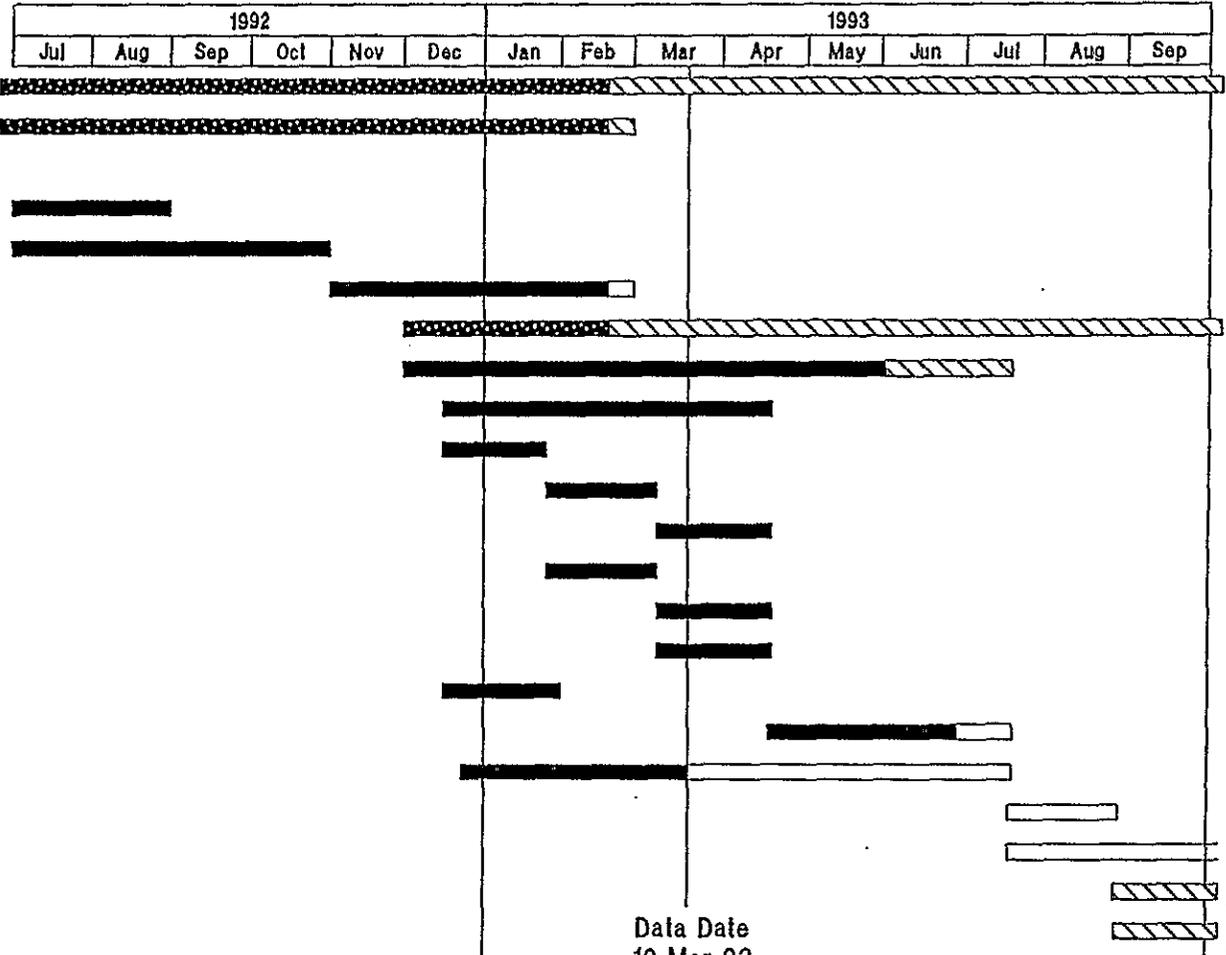
Sample Analysis

Data Validation

Data Evaluation

### Task 10-Data Evaluation

### Task 11-Qualltative RA



Data Date  
19 Mar 93

Project: 100-NR-1	DOE-RL	Date: 15Mar93 9:58
100-NR-1 OPERABLE UNIT WORK PLAN		
Page: 1	Drawn by ER Program Control-Scheduling	

Summary   
 Progress 

100 HR-3 GROUNDWATER OPERABLE UNIT  
WORK SUMMARY 3/15/93

TASK 3 - GEOLOGIC INVESTIGATION

*Data Compilation* - WHC released a report titled, "Geologic Information Summary for the Northern Portion of the Hanford Site". A Geologic Map was completed in June, 1992.

TASK 5 - VADOSE INVESTIGATION

*Data Complilation* - WHC released a report titled, "Hydrologic and Geologic Data Available for the Region North of Gable Mountain".

TASK 6 - GROUNDWATER INVESTIGATION

*Data Complilation* - WHC released a report titled, "Hydrologic Information Summary for the Region North of Gable Mountain" in September, 1992.

*Quarterly Monitoring* - Four rounds of groundwater samples have been taken.

*Data Validation* - 100% of the soil and first and second round groundwater data has been validated.

*LFI Report* - The LFI Report is in progress and is scheduled for release in August.

9 0 1 1 9 9 3 3 1 7 6 1

### 100-HR-3 OPERABLE UNIT

1992			1993								
Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep

**LIMITED FIELD INVESTIGATION**

Task 3-Geological Investigation Complete

Task 5-Vadose Investigation Complete

Task 6-Groundwater Investigation

Data Validation Complete

Data Evaluation Complete

Quarterly Monitoring

Sampling Complete

Analysis Complete

Validation

Task 10-Data Evaluation

Task 11-Qualitative RA

Task 13-LFI Report

LFI Report Preparation

WHC Review & Incorporation

DOE Review & Incorporation

LFI Report to Regulators

**FOCUSED FEASIBILITY STUDY**

Treatability Study



Data Date  
19 Mar 93

Project: 100-HR-3 | DOE-RL 88-36, Rev 0 | Date: 15Mar93 9:00

100-HR-3 Operable Unit Work Plan

Page: 1

Drawn by ER Program Control-Scheduling

Summary   
 Progress

100 NR-2 GROUNDWATER OPERABLE UNIT  
WORK SUMMARY 3/15/93

TASK 6 - GROUNDWATER INVESTIGATION

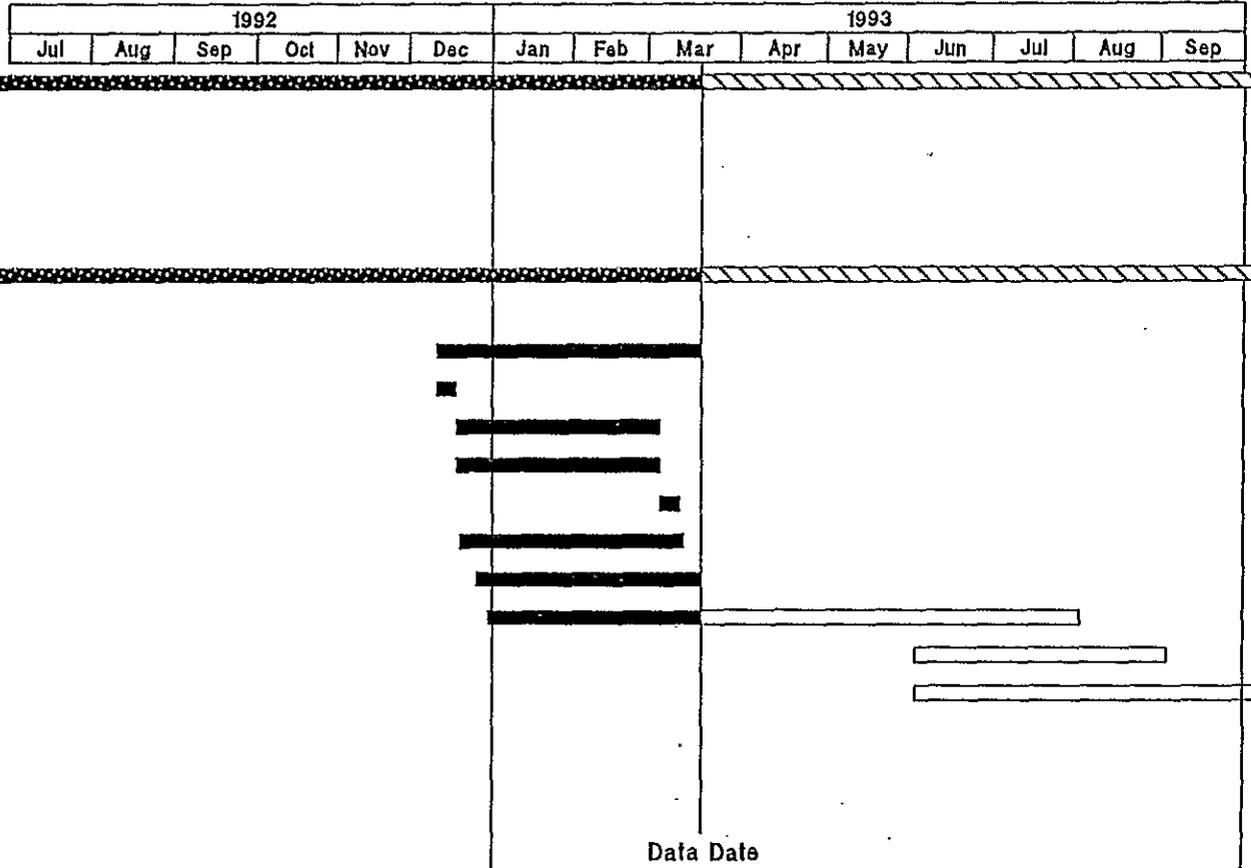
*Quarterly Monitoring* - Two rounds of groundwater samples have been taken.

*Data Validation* - 100% of the soil data has returned from the laboratories and is in the process of being validated.

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# 100-NR-2 OPERABLE UNIT

- LIMITED FIELD INVESTIGATION
- Task 3-Geological Investigation
  - Data Complation
- Task 5-Vadose Investigation
  - Data Complation
- Task 6-Groundwater Investgation
  - Data Complation
  - Field Activlites
    - Well Siting
    - Well Installation
    - Well N-1
    - Water Level Measurement
    - Air Monitoring
    - Groundwater/Soil Samples
  - Laboratory Analysis
  - Data Valdation
  - Data Evaluallon
- Task 11-Quallitative RA
- Task 13-LFI Report
- FOCUSED FEASIBILITY STUDY
- IRM PROPOSED PLAN



Data Date  
19 Mar 93

Project: 100-NR-2	DOE-RL	Date: 15 Mar 93 8:12
100-NR-2 OPERABLE UNIT WORK PLAN		
Page: 1	Drawn by ER Program Control-Scheduling	

Summary   
 Progress 

### 100-BC-5 STATUS

- 1ST QUARTER (JULY), 2ND QUARTER (OCTOBER), 3RD QUARTER (JANUARY) GROUNDWATER SAMPLING COMPLETE
- SAMPLE VALIDATION REPORTS FOR DRILLING SAMPLE DATA AND 1ST QUARTER GW SUBMITTED DECEMBER 31, 1992
- LFI REPORT ACTIVITIES IN PROGRESS

### 100-KR-4 STATUS

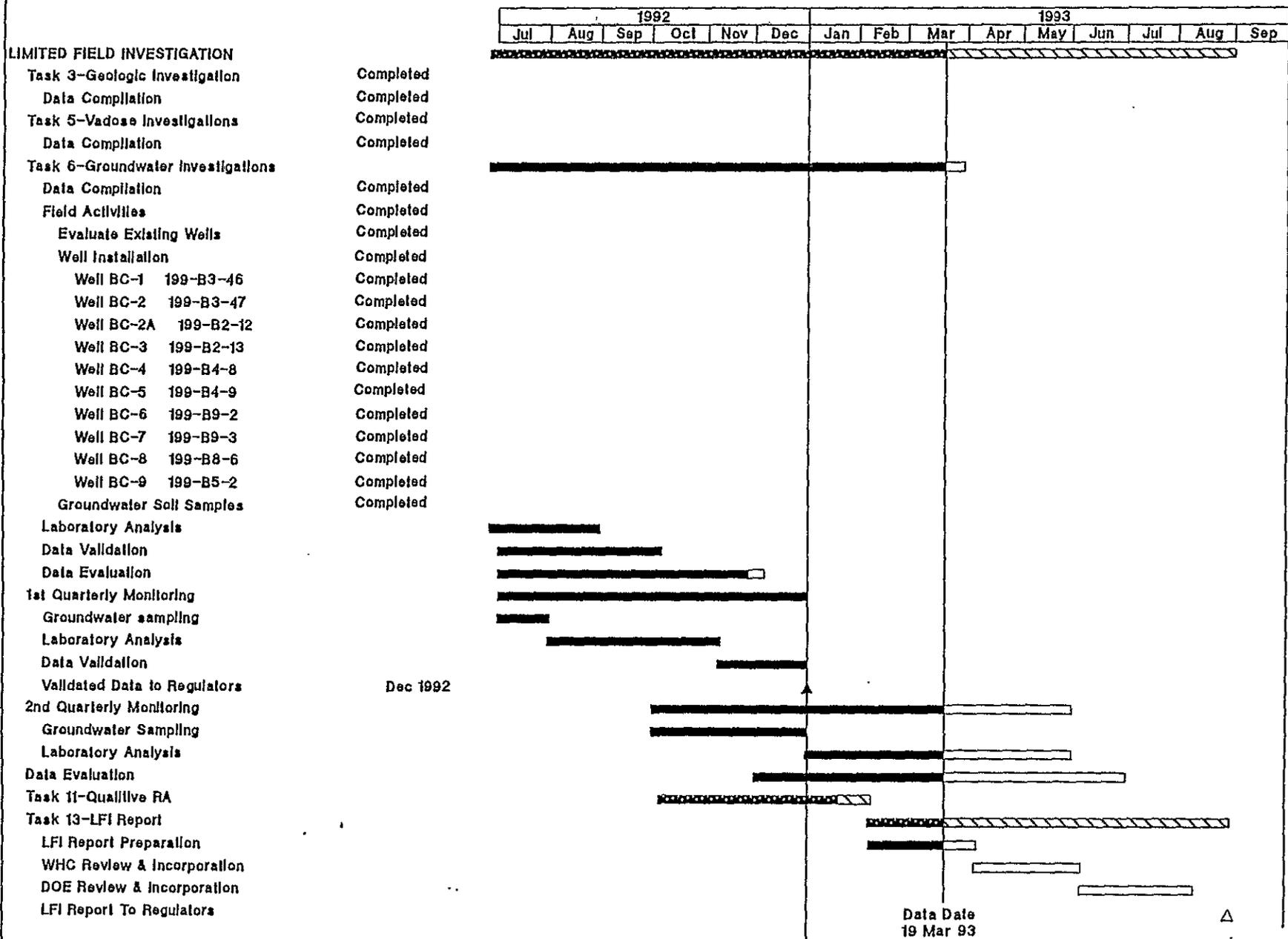
- 1ST QUARTER (SEPTEMBER), 2ND QUARTER (DECEMBER) GROUNDWATER SAMPLING COMPLETE; THIRD ROUND IN PROGRESS
- SAMPLE VALIDATION REPORTS FOR DRILLING SAMPLE DATA AND 1ST QUARTER GW SUBMITTED MARCH 12, 1993

### 100-FR-3 STATUS

- ALL FY92 DRILLING ACTIVITIES COMPLETE (DECEMBER)
- 1ST QUARTER (DECEMBER) GROUNDWATER SAMPLING COMPLETE; SECOND ROUND SCHEDULED FOR LATE MARCH
- SAMPLE VALIDATION REPORT FOR DRILLING SAMPLE DATA SUBMITTED MARCH 12, 1993

9 1 2 9 3 3 1 7 6 5

9 2 1 2 9 3 0 1 7 6 6  
**100-BC-5 OPERABLE UNIT**

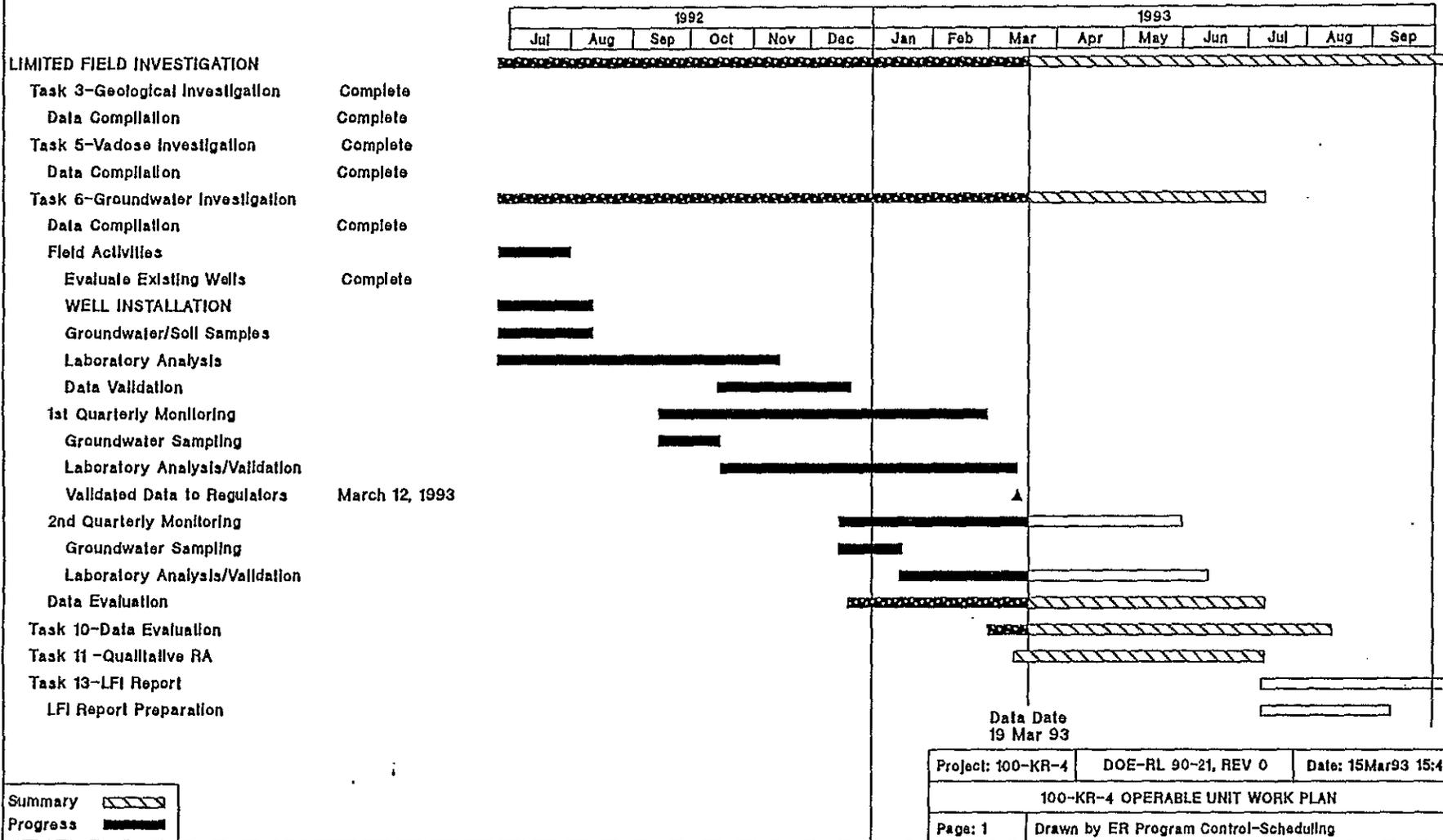


Data Date  
19 Mar 93 ▲

Summary Task [Hatched] Progress [Solid] [Triangle]  
 Detail Task [White] Milestone [Triangle]

Project: 100-BC-5    DOE-RL 90-08, REV 0    Date: 15 Mar 93 10:08  
 100-BC-5 Operable Unit Work Plan  
 Page: 1    Drawn by ER Program Control-Scheduling

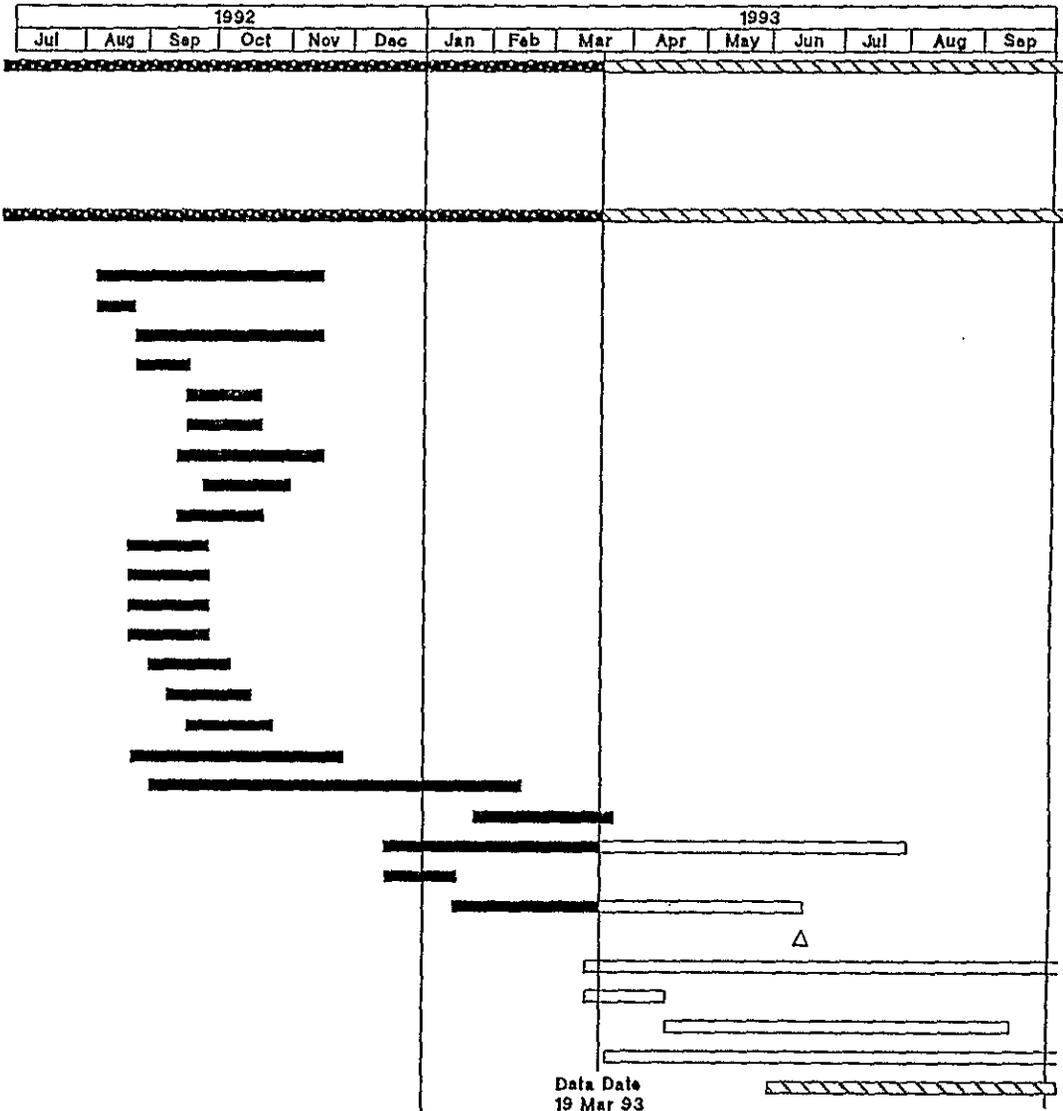
### 100-KR-4 OPERABLE UNIT



# 100-FR-3 OPERABLE UNIT

**LIMITED FIELD INVESTIGATION**

- Task 3-Geological Investigation Completed
- Data Compilation Completed
- Task 5-Vadose Investigation Completed
- Data Compilation Completed
- Task 6-Groundwater Investigation Completed
- Data Compilation Completed
- Field Activities
- Evaluate Existing Wells
- Well Installation
- Well F3-1 199-F6-1
- Well F3-2 199-F5-42
- Well F3-3 199-F5-43A
- Well F3-3A 199-F5-43B
- Well F3-4 199-F5-44
- Well F3-5 199-F1-2
- Well F3-6 199-F5-45
- Well F3-7 199-F5-48
- Well F3-8 199-F5-47
- Well F3-9 199-F8-3
- Well F3-11 199-F5-46
- Well F3-12 199-F7-3
- Well F3-13 199-F8-4
- Groundwater/Soil Samples
- Laboratory Analysis
- Data Validation
- 1st Quarterly Monitoring
- Groundwater Sampling
- Laboratory Analysis/Validation
- Validated Data to Regulators June 14, 1993
- 2nd Quarterly Monitoring
- Groundwater Sampling
- Laboratory Analysis/Validation
- Data Evaluation
- Task 10-Data Evaluation



Summary Task Progress   
 Detail Task Milestone

Data Date  
19 Mar 93

Project: 100-FR-3	DOE-RL 91-53, REV 0	Date: 15Mar93 14:09
100-FR-3 OPERABLE UNIT WORK PLAN		
Page: 1	Drawn by ER Program Control-Scheduling	

AGREEMENT ACTIVITY NOTIFICATION

OPERABLE UNIT 100-NR-1

DATE 3/24/93

TSD \_\_\_\_\_

OTHER \_\_\_\_\_

UNIT MANAGER

DOE-RL: E. D. Goller  
EPA: P. S. Innis  
WA DOE: J. Donnelly

ACTIVITY PERIOD 3/31/93 - 4/25/93

ACTIVITIES

SCHEDULED START

116-N-2 Surface Soil Sampling

3/31/93

1322-N/NA Surface Soil Sampling

3/31/93

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A. D. Krug A. D. Krug 3/24/93

EPA/Ecology/DOE representatives that may want to observe any of the listed activities should verify the start date with the Unit Manager. Depending on the activity, location, and the individual's needs relative to observation/participation, the individual may be required to meet the training requirements of Environmental Investigation Instruction 1.7

9 3 1 9 3 1 7 6 9

**DON'T SAY IT --- Write It!**

DATE: March 24, 1993

TO: Jack Donnelly, Ecology Kennewick FROM: Eric Goller, RL *EDG* A5-19  
 Paul Beaver, EPA B5-01  
 Telephone: 376-7326

cc: Jim Patterson, WHC H6-27 (w/o atts.)  
 Bob Henckel, WHC H6-02 (w/o atts.)  
 Alan Krug, WHC H6-02 (w/o atts.)  
 D Goswami, Ecology Kennewick (w/o atts.)  
 Bob Scheck, D&M G1-01  
 Kay Kimmel, D&M G1-01 (w/o atts.)

SUBJECT: 100-HR-3 OU LFI GROUNDWATER INVESTIGATION VALIDATED DATA

Attached please find three documents reporting validated data summaries from the 100-HR-1 OU LFI groundwater investigations. The three document titles and WHC identification numbers are:

1. WHC-SD-EN-TI-078 Data Validation Report for the 100-HR-3 Operable Unit 2nd Quarter Sampling, rev 0.
2. WHC-SD-EN-TI-083 Data Validation Report for the 100-HR-3 Operable Unit Groundwater Drilling, rev 0.
3. WHC-SD-EN-TI-127 Data Validation Report for the 100-HR-3 Operable Unit 3rd Quarter Sampling, rev 0.

Please feel free to contact me with any comments or questions regarding these documents. In addition, comments or questions regarding the technical elements of these documents can be directed to Bob Henckel (376-2091) or Alan Krug (376-5634).

9 2 1 0 3 3 1 7 7 0



**DON'T SAY IT --- Write It!**

DATE: March 25, 1993

TO: Jack Donnelly, Ecology Kennewick FROM: Eric Goller, RL **EDg** A5-19  
 Dennis Faulk, EPA

---

 Telephone: 376-7326
 

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cc: Jim Patterson, WHC H6-27 (w/o att.)  
 Bob Henckel, WHC H6-02 (w/o att.)  
 Alan Krug, WHC H6-02 (w/o att.)  
 Bob Scheck, D&M G1-01  
 Kay Kimmel, D&M G1-01 (w/o att.)

SUBJECT: 100 AGGREGATE AREA ECOLOGICAL INVESTIGATION VALIDATED DATA

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Please find attached a hard copy summary of 100 Area ecological investigation validated data.

This data transmittal is not a Hanford Federal Facility Agreement and Consent Order interim milestone, but is submitted as supplemental information. The data are validated by a review of laboratory performance and implementation of appropriate procedures.

This transmittal includes:

- Text describing the results of the validation.
- Analytical results for each sample.
- Sample location identification table.
- Table of all samples, with type of biota sampled, date of sample, and analytical laboratory.
- Listing of duplicate samples for Quality Assurance.

Please contact me with any questions or comments.

93129091772

**TPA MILESTONE M-30-05:**

**" Install all field instrumentation and initiate monitoring activities necessary to perform long-term evaluation of Columbia River and unconfined aquifer interaction, in accordance with the tasks defined in operable unit work plans . . . "**  
**(September 1993)**

9 3 1 2 9 3 3 1 7 7 3

## **OBJECTIVES FOR MILESTONE M-30-05**

- **Direction and rate-of-flow for groundwater within 100 Area groundwater operable units**
- **Water table variability in the 100 Areas where the aquifer is influenced by river stage**
- **Inland extent of river water influence on groundwater quality along the shoreline**

9 0 1 0 9 3 3 1 7 7 4

## **FIELD INSTRUMENTATION**

- **Water level recorders in wells**
- **River stage recorders**
- **Steel tape depth-to-water measurements**
- **Borehole velocity meters**
- **Electrical conductivity probes in wells**

9 5 1 2 9 3 5 1 7 5

## MONITORING ACTIVITIES

- **Multiple water level measurements obtained daily to describe short-term (e.g. days, weeks) water table variability**
- **Weekly or longer interval water level measurements to describe seasonal water table variability during a full annual cycle**
- **Plume-specific investigations to directly measure groundwater flow speed and direction, using borehole velocity meters**
- **Site-specific investigations to describe changes in groundwater quality due to river stage fluctuations**

9 3 1 5 9 3 8 1 7 7 6



## TASKS ASSOCIATED WITH M-30-05

- **Summarize existing information on groundwater direction and flow rate for each groundwater operable unit**
- **Deploy temporary water level recorders in wells presumed to be influenced by short-term river fluctuations**
- **Install water level recorder networks**
- **Establish steel tape water level measurement schedules**
- **Initiate field activities to describe groundwater quality changes induced by bank storage of river water**
- **Maintain field systems, manage field data, interpret data, and report results**

9 3 1 3 9 3 5 1 7 7 8

## SELECTED PRODUCTS

- **Profiles showing short-term and seasonal fluctuations in water table, in directions parallel and perpendicular to the shoreline**
- **Contour maps of data selected to show short-term and seasonal fluctuations in the water table, including inferred flow directions and velocity vectors from borehole measurements**
- **Descriptive statistics for variability observed in water table**
- **Interpretive reports**

93139531779

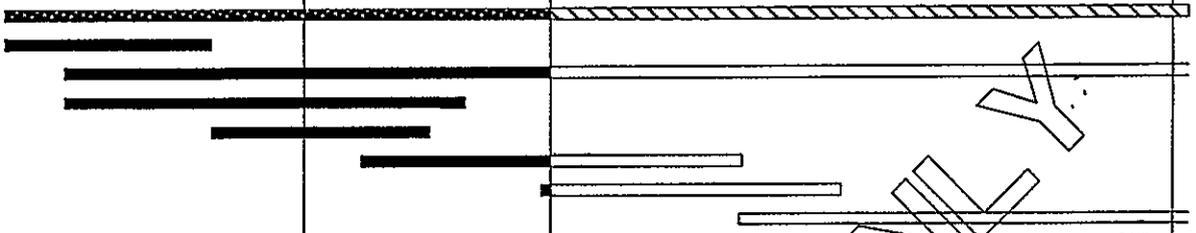
9 3 1 9 9 0 9 1 7 9 0

100-AREA TREATABILITY TESTS

1992			1993								
Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep

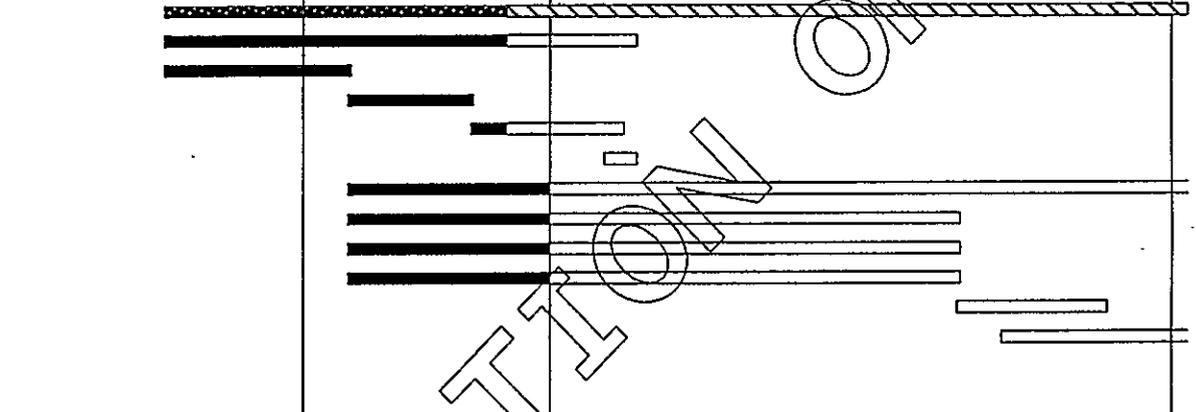
**SOIL WASHING**

- Test Plan
- Lab Scale Test
- Test Procedures
- Collect Samples
- Perform Test
- Data Evaluation
- Lab Test Report



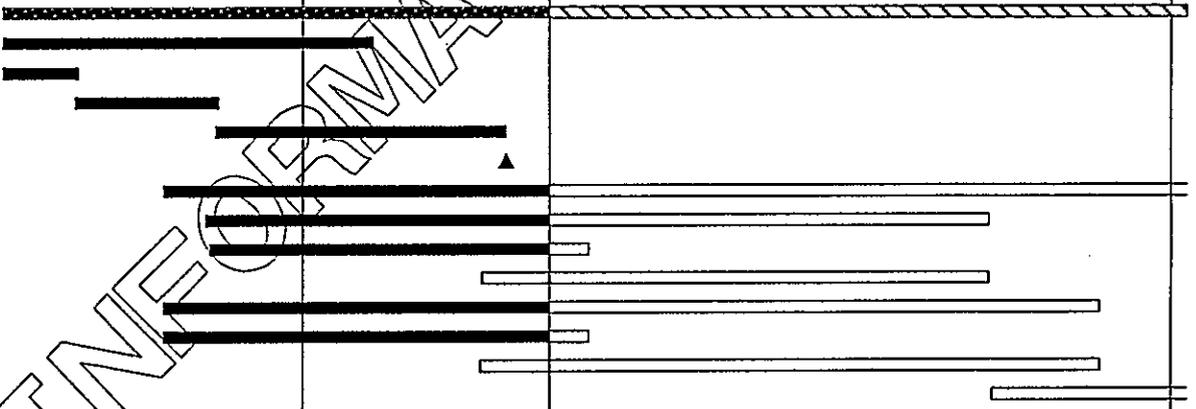
**EXCAVATION TEST**

- Excavation Test Plan
- Prepare Test Plan
- WHC Review
- RL/HQ/EPA/Ecology Review
- Issue Final Plan
- Test Activities
- Procure Equipment/Material
- Site Safety Assessment
- NEPA Documentation
- Perform Excavation
- Data Analysis
- Data Evaluation
- Excavation Test Report



**100-HR-3 GROUNDWATER**

- Groundwater Test Plan
- Prepare Test Plan
- WHC Review
- RL/HQ/EPA/Ecology Review
- Issue Document
- Lab Work
- Biodegradation Lab Test
- Test Procedures
- Perform Test
- Chromium Lab Test
- Test Procedures
- Perform Test
- Final Lab Report



Data Date  
19 Mar 93

Project: 100-Area RI/FS Activities		Date: 15Mar93 12:32
100-AREA DRAFT TREATABILITY TESTS		
Page: 1	Drawn by ER Program Control-Scheduling	

Summary   
 Progress

INFORMATION ONLY

TREATABILITY STATUS ITEMS FOR MARCH UNIT MANAGERS MEETING

100 Area Soil Washing Status  
J. G. Field

The 100 Area soil washing treatability test plan (DOE/RL-92-51, Rev. 0) was completed and copies will be distributed this week. A transmittal letter is being prepared. Test procedures were completed by PNL and will also be officially transmitted this week. Bench-scale soil washing tests are in progress. PNL is currently investigating physical soil characteristics (ie. moisture content, specific gravity, cation exchange capacity). They are scheduled to start wet sieve tests and analyses within the next week. Wet sieve tests will be performed using samples from three test pits; near the middle and inlet end of the 116-C-1 trench; and near the inlet end of the 116-D-1B trench. Preliminary observations for the three test pits were discussed with DOE/RL and the regulators on 3/12/93.

100 Area HR-3 Groundwater Treatability Test  
J. B. Duncan

The 100 Area Groundwater Treatability Test Plan, Rev 0 has been issued. The biodenitrification treatability test procedure is currently in review by Ecology and EPA. The chromium/ion exchange treatability test procedure is undergoing concurrent review with DOE/Ecology and EPA (procedures handed out at the UMM 3/24/93).

Excavation Treatability Study Status:  
L. M. Bergmann

The excavation test plan is currently being reviewed by RL, EPA, and Ecology. Comments are expected the end of this month. Test activities are proceeding on schedule. Several issues regarding the excavation test will be discussed at the March unit managers meeting. Resolution of these issues is critical to determine if the milestone date will be impacted.

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# 1. Test Objectives:

## Current (Ref. Agreement Form #35, 10/14/92)

"An excavation treatability study will count for the 100-HR-1 Work Plan treatability milestone. The milestone date will remain unchanged; complete test activities 11/93. The test will be conducted at the site with the most favorable site conditions, which may or may not be within the 100-HR-1 OU. The test site will be agreed to by all parties before initiating the test. The purpose of the test is to evaluate dust control methods and field screening systems to assist in the development of the observation approach. In addition, a site will be cleaned up as a result of this test".

## Propose:

Same as above but deleting the last sentence.

Control Number 35(rev. 1)	100 NPL Agreement/Change Control Form  Change <input type="checkbox"/> Agreement <input checked="" type="checkbox"/> Information Operable Unit: <u>Treatability 100-HR-1</u>	Date Submitted: 3/24/93 Date Approved:								
Document Number and Title: NA		Date Document Last Issued: NA								
Originator: R. P. Henckel		Phone: 6-2091								
<b>Summary Description:</b> <p>An excavation treatability study will count for the 100-HR-1 Work Plan treatability milestone. The milestone date will remain unchanged; complete test activities 11/93. The test will be conducted at the site with the most favorable site conditions, which may or may not be within the 100-HR-1 OU. The test site will be agreed to by all parties before initiating the test. The purpose of the the test is to evaluate dust control methods and field screening systems to assist in the development of the observation approach. This replaces the third paragraph (bullet) of the Summary Description of 100NPL Agreement Form #35.</p>										
<b>Justification and Impact of Change:</b> <p>NA</p>										
<table border="0"> <tr> <td data-bbox="131 1120 781 1181">R. P. Henckel <u>RP Henckel</u></td> <td data-bbox="938 1120 1268 1181"><u>3-24-93</u> Date</td> </tr> <tr> <td data-bbox="131 1201 781 1273">E. D. Goller <u>ED Goller</u> DOE Unit Manager</td> <td data-bbox="938 1201 1268 1273"><u>3/24/93</u> Date</td> </tr> <tr> <td data-bbox="131 1293 781 1365">B. B. Hibbard <u>B B Hibbard</u> Ecology Unit Manager</td> <td data-bbox="938 1293 1268 1365"><u>3/25/93</u> Date</td> </tr> <tr> <td data-bbox="131 1385 781 1457">P. R. Beaver <u>P R Beaver</u> Env. Protection Agency Unit Manager</td> <td data-bbox="938 1385 1268 1457"><u>3/24/93</u> Date</td> </tr> </table>			R. P. Henckel <u>RP Henckel</u>	<u>3-24-93</u> Date	E. D. Goller <u>ED Goller</u> DOE Unit Manager	<u>3/24/93</u> Date	B. B. Hibbard <u>B B Hibbard</u> Ecology Unit Manager	<u>3/25/93</u> Date	P. R. Beaver <u>P R Beaver</u> Env. Protection Agency Unit Manager	<u>3/24/93</u> Date
R. P. Henckel <u>RP Henckel</u>	<u>3-24-93</u> Date									
E. D. Goller <u>ED Goller</u> DOE Unit Manager	<u>3/24/93</u> Date									
B. B. Hibbard <u>B B Hibbard</u> Ecology Unit Manager	<u>3/25/93</u> Date									
P. R. Beaver <u>P R Beaver</u> Env. Protection Agency Unit Manager	<u>3/24/93</u> Date									
<p>Per Action Plan for Implementation of the Hanford Consent Order and Compliance Agreement Section 9.3</p>										

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**Distribution**  
**Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units**  
**March 24, 1993**

Roger D. Freeberg /Julie K. Erickson /Eric Goller ..... DOE-RL, ERD (A5-19)  
Mike Thompson ..... DOE-RL, EAP/RPB (A5-19)  
Diane Clark ..... DOE-RL, TSD/SSB (A5-55)  
Heather Trumble ..... DOE-RL, OTD/FTB (A6-55) A5-19  
Steve Balone ..... DOE-HQ (EM-442)

Dennis Faulk ..... 100 Aggregate Area Manager, EPA (B5-01)  
Ward Staubitz, USGS ..... Support to EPA  
Audree DeAngeles, PRC ..... Support to EPA

Jack Donnelly ..... 100 Aggregate Area Manager, WDOE (Kennewick)  
Larry Goldstein ..... WDOE (Lacey)

Lynn Albin ..... Washington Dept. of Health

Tom Wintczak, WHC ..... Program Manager (H6-27)  
Mel Adams, WHC /A.D. Krug, WHC (H6-02) ..... (H6-01)  
Bob Henckel, WHC ..... (H6-02)  
L.D. Arnold, WHC ..... (B2-35)  
Diana Sickle, WHC ..... (H6-27)  
Chris Widrig, PNL (Please route to:) ..... (K1-21)  
    Wayne Martin, PNL ..... (K1-19)  
    Mark Hanson, PNL ..... (K1-51)  
    Roy Gephart, PNL ..... (K1-22)  
    Steve Slate, PNL ..... (K1-19)  
    Joan Keller, PNL ..... (K1-21)  
    Ben Johnson, PNL ..... (K1-78)

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Original Sent to: ADMINISTRATIVE RECORD: 100 AAMS; Care of EDMC, WHC (H6-08)

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Please inform Suzanne Clarke (376-8189) or Kay Kimmel (376-1985) of Mactec/Dames & Moore of deletions or additions to the distribution list.

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