

3908 RFP 91

United States Government

Department of Energy

Rocky Flats Office

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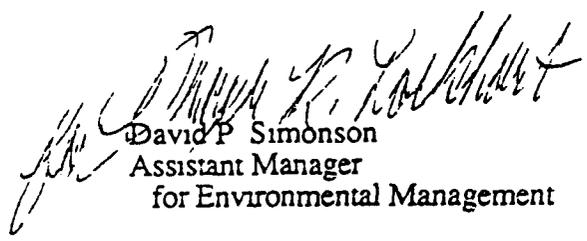
ERD PMP 8543

Section D Categorical Exclusion for Geologic and Ecologic Characterization Within Wetlands or Floodplains at Rocky Flats Plant (RFO/CX025 91)

Ralph Lightner Director Southwestern Area Programs Division EM 45

Enclosed is a draft categorical exclusion (CX) for proposed work to characterize the geology and ecology of the Rocky Flats Plant. This portion of the characterization work may occur within wetlands or floodplains on the plant site. The studies outlined in the CX will be conducted to provide data in support of cleanup activities to be performed under RCRA and CERCLA. The work is scheduled to begin immediately and continue through December 1993.

Please contact Tricia Powell (FTS 345 3260) to discuss the planned activity



David P. Simonson
Assistant Manager
for Environmental Management

Attachment

- cc w/attachment
- A Rampertaap EM-453
- L Lawson EM 431
- S Nesta EG&G/RF

ENJAMIN A	
BRETZKE, J.C.	
BUR INGAM, A.H.	
OP, B.D.	
ROUCHER, D.W.	
DAVIS, J.G.	
VERED, J.	<input checked="" type="checkbox"/>
ERRERA, D.W.	<input checked="" type="checkbox"/>
ERRIS, L.R.	
RAIKOR, J.	
RANFIS, G.E.	
RODWIN, R.	
HANNI, B.J.	
FEALY, T.J.	
DEKER, E.H.	
JENS, J.P.	
KERSH, J.M.	<input checked="" type="checkbox"/>
KIRBY, W.A.	<input checked="" type="checkbox"/>
RIFG, D.	
KUESTER, A.W.	
EE, E.M.	
MAJESTIC, J.R.	
MARX, G.E.	
MATH, W.S.T.A.	
MEURRENS, B.E.	
MORGAN, R.V.	
PIZZUTO, V.M.	
POTTER, G.L.	
SAFFELL, B.	
SANDLIN, N.B.	
SWANSON, E.R.	
WIEB, J.S.	
WILKINSON, P.B.	
WILSON, J.A.	
YOUNG, E.R.	
ZANE, J.O.	

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DATE BY

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**SECTION D DETERMINATION
CATEGORICAL EXCLUSION (CX) DETERMINATION RFO/CX025 91**

Proposed Action Field Activities for Geologic and Ecologic Characterization Within Floodplains or Wetlands

Location Rocky Flats Plant Golden CO

Proposed by U S Department of Energy Rocky Flats Office

Description of the Proposed Action

Rocky Flats Plant proposes to carry out field activities to gather data to characterize the geology and ecology of the plant site within wetlands and floodplains in support of the remediation of RCRA and CERCLA sites. This work may be performed both within and outside the boundaries of operable units 1, 2, 5 and 6. The characterization work would include 1) establishing new surface water and sediment sampling stations and collecting samples, 2) collecting soil and soil gas samples, and 3) drilling new water wells and collecting groundwater samples, and 4) drilling to obtain geologic cores.

To establish new surface water and sediment sampling stations, stakes would be driven into the ground at the edge of a stream or water body. The stakes would be used as reference points so that samples can be taken from the same locations periodically. Water and sediment samples would be taken by driving or walking to the sample site and collecting up to a few pounds of sediment or a few quarts of water.

Soil and soil gas samples may be collected within floodplains from grids 38, 51, 52, 57, 81, 96, 109 and 115 shown on Figure 2 using three different methods. The first soil sampling method uses a Colorado Department of Health sampler to remove two to three tablespoons of soil from the ground surface anywhere within the grid. The second soil sampling method that would be used is backhoe excavation of soil pits nine feet long, five feet wide and four feet deep to gather samples from the soil profile within each grid. The sample pits will be refilled with the excavated earth after sampling. Sampling soil gas (Figures 3 and 8) is to be accomplished by using a hand auger to drill a one inch diameter hole 18 to 24 inches deep. A probe is inserted into the hole to sample any gases that escape from the soil.

Drilling new water wells and core holes would involve driving a truck mounted drilling rig to the locations shown on Figures 1, 3, 6, 7, 8, 9, 10, 11, 13 and 14 to drill holes four to six inches in diameter. Drilling activities that may be within the 100 year floodplain or wetlands are highlighted by heavy arrows on the figures. As a general principle, drilling in wetlands would be avoided because of the added difficulties of setting up a drilling rig and drilling in saturated soils, but it may be necessary to locate one or more holes within a wetland. As holes are drilled, drill cuttings would be brought to the surface and shoveled into drums for analysis of contaminants and appropriate disposal. Drilling activity will result in the trampling of vegetation for up to 200 square feet around the drill hole.

All of these activities are scheduled to occur between May 1991 and December 1993. They will not introduce or cause the inadvertent or uncontrolled movement of hazardous substances or non native organisms, or adversely affect environmentally sensitive areas listed in the guidelines. Because of the nature of the proposed activities, no adverse impacts are expected to wetlands or floodplains.

Categorical Exclusion to be applied

3 Site characterization and environmental monitoring including siting construction or operation of ~~characterization and monitoring devices under CERCLA and RCRA if these activities would not~~ introduce or cause the inadvertent or uncontrolled movement of hazardous substances as defined in section 101(33) of CERCLA or non native organisms and would not adversely affect environmentally sensitive areas as defined in paragraph 4 (DOE NEPA Guidelines 55FR37178)

DOE NEPA REGULATIONS SECTION D DETERMINATION
CATEGORICAL EXCLUSION DETERMINATION RFO/CX 025 91
Geologic and Ecologic Characterization Within Floodplains and Wetlands at Rocky
Flats Plant

I have determined that the proposed action meets the requirements for a categorical exclusion as defined in the Section D of the DOE NEPA Guidelines Therefore I approve the categorical exclusion of the proposed action from further NEPA review and documentation

Date _____

Signature _____

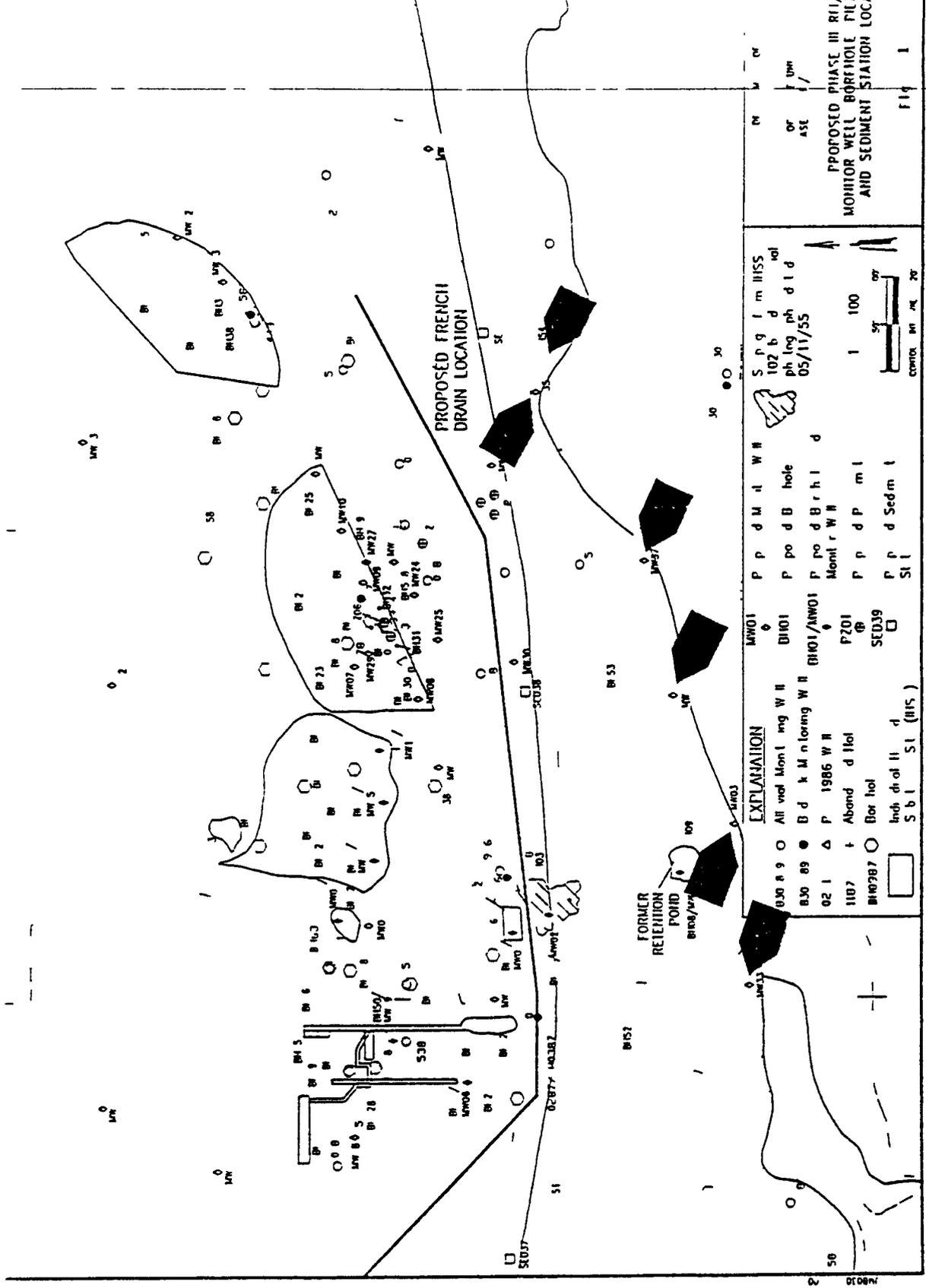
Title Leo Duffy
Director Environmental
Restoration & Waste Mgmt

EH 25 has reviewed this determination and has no objection

Date _____

Signature _____

Title Carol M Borgstrom
Director Office of NEPA
Oversight



EXPLANATION

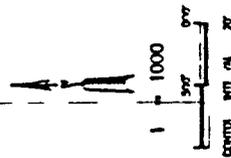
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PROPOSED PHASE III RII/RI
MONITOR WELL BOREHOLE LOCATION
AND SEDIMENT STATION LOCATIONS

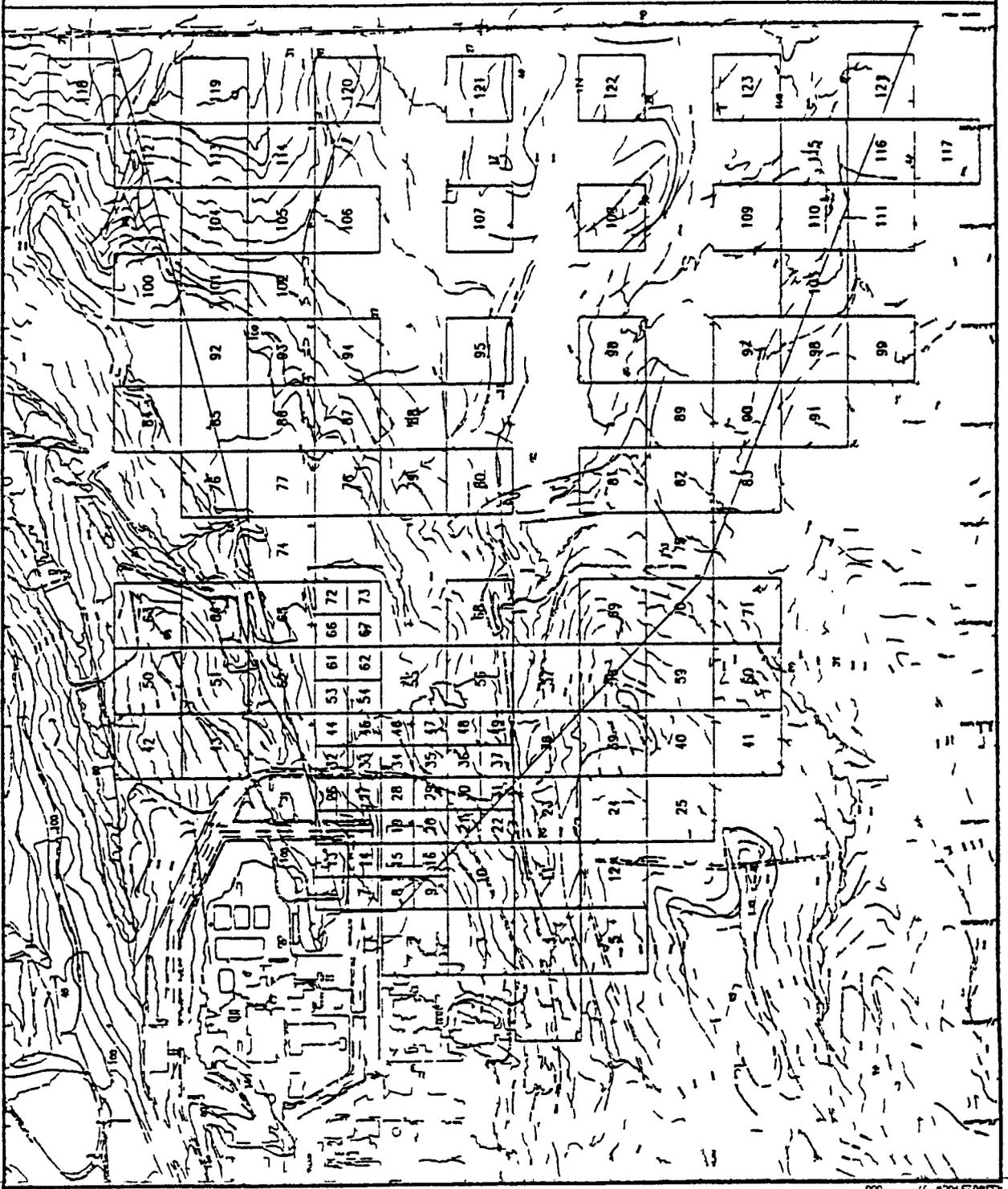
EXPLANATION

-  ESTIMATED NATURAL TIME INTERVAL FOR CONTAMINANT ACTIVITY
-  AREA SAMPLING IN 1978
-  AREA SAMPLING IN 1979
-  AREA SAMPLING IN 1980
-  SITE BOUNDARY

-  SOURCE
-  DEPARTMENT OF ARMY AIR WING
-  SOIL TYPE NUMBER
-  SERIES
-  PLOT NUMBER

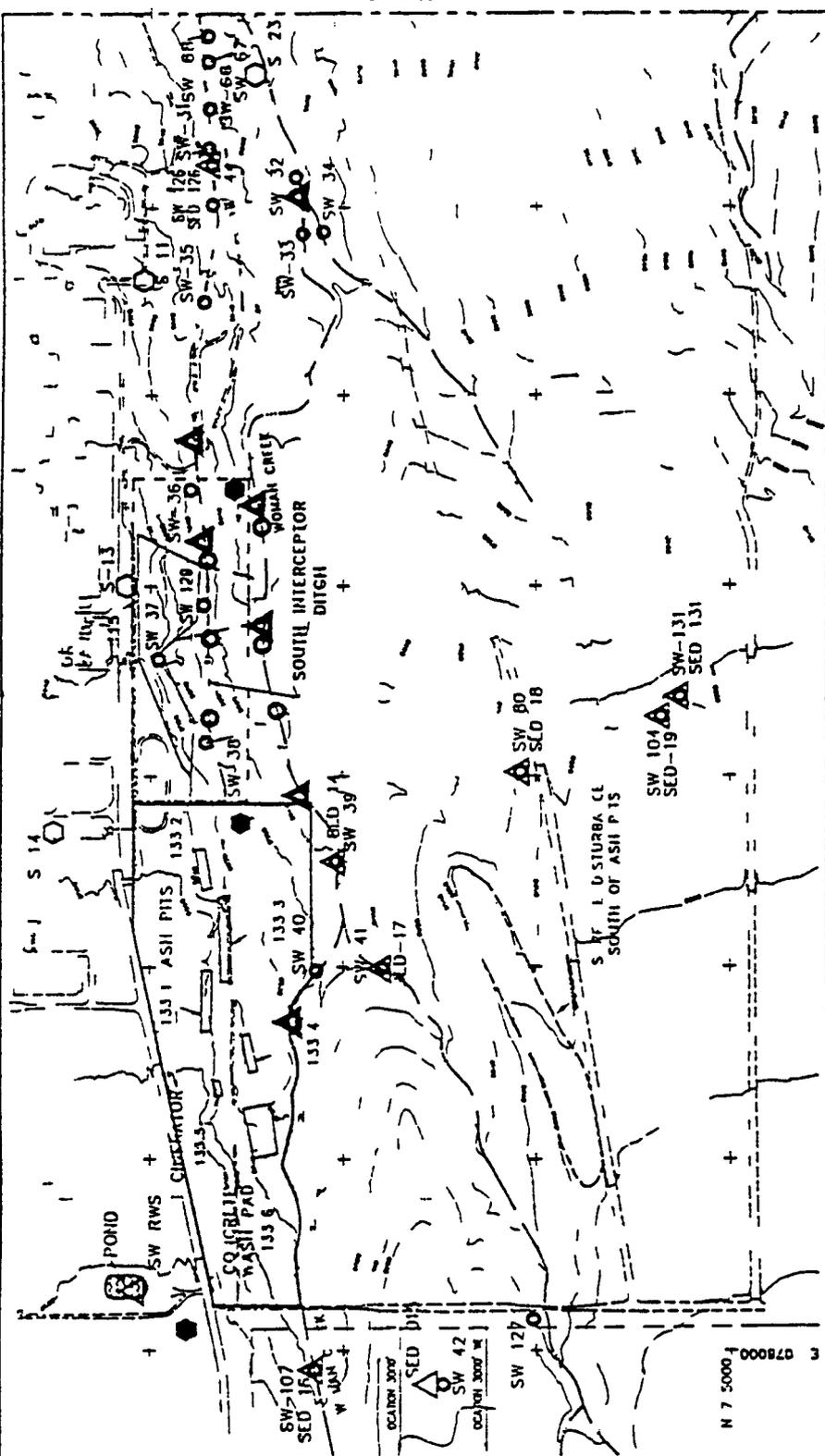


U.S. DEPARTMENT OF ARMY
 Corps of Engineers
 Hydrologic Engineering Center
 Sacramento, California



PROPOSED SURFICIAL SOIL SAMPLING
 PLOT IDENTIFICATION NUMBERS

50617

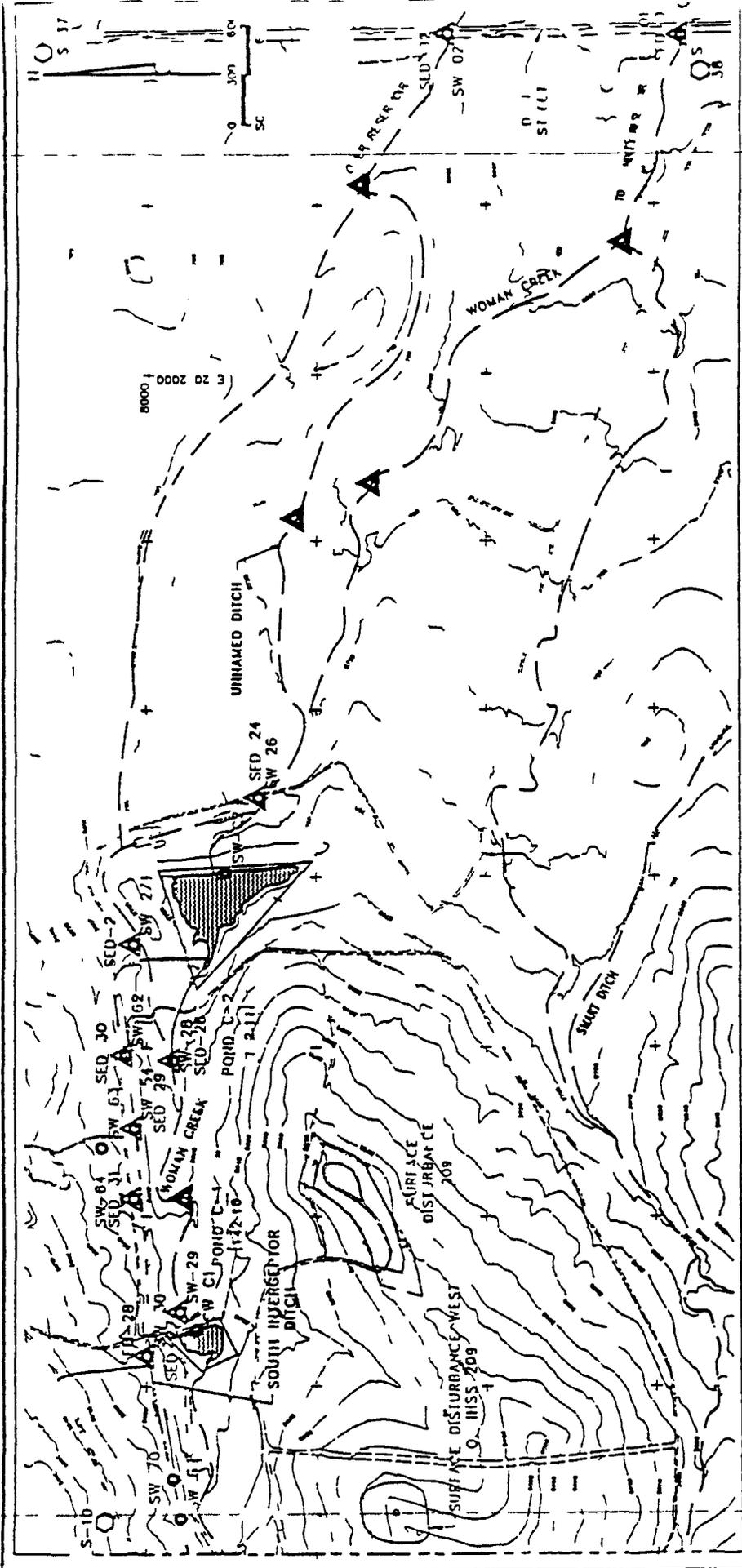


EXPLANATION

□	INDIVIDUAL ZIRCONIUM SUBSTITUTION SITE	△	PROPOSED SEDIMENT SAMPLE LOCATION
○	EXISTING SURFACE WATER LOCATION	●	PROPOSED ADDITIONAL AIR MONITORING PROGRAM LOCATION
△	EXISTING SEDIMENT SAMPLE LOCATION	○	PROPOSED SURFACE WATER LOCATION
---	INTERMITTENT STREAM	---	PROPOSED AIR MONITORING LOCATION FOR ASBESTOS AREA
---	DIRT ROAD	---	990 FEET PROPERTY BOUNDARY AROUND OLD LANDFILL
---	PERMANENT SURFACE WATER		
---	EXISTING PROPERTY BOUNDARY		
---	EXISTING MONITORING LOCATION		

U.S. DEPARTMENT OF ENERGY
 RAY FILLIPIG
 OPERABLE UNIT
 PHASE I REMEDIATION WORK PLAN
 SEDIMENT & SURFACE WATER
 SAMPLING SITES & AIR MONITORING
 STATIONS ALONG WOMAH CREEK AND
 THE SOUTH INTERCEPTOR DITCH

FIGURE 7.2
 (S) (5)
 TCHLNE OF



MATCHLINE
(SEE FIGURE 7 2 (1 OF 2))

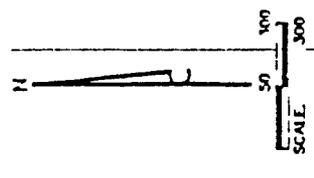
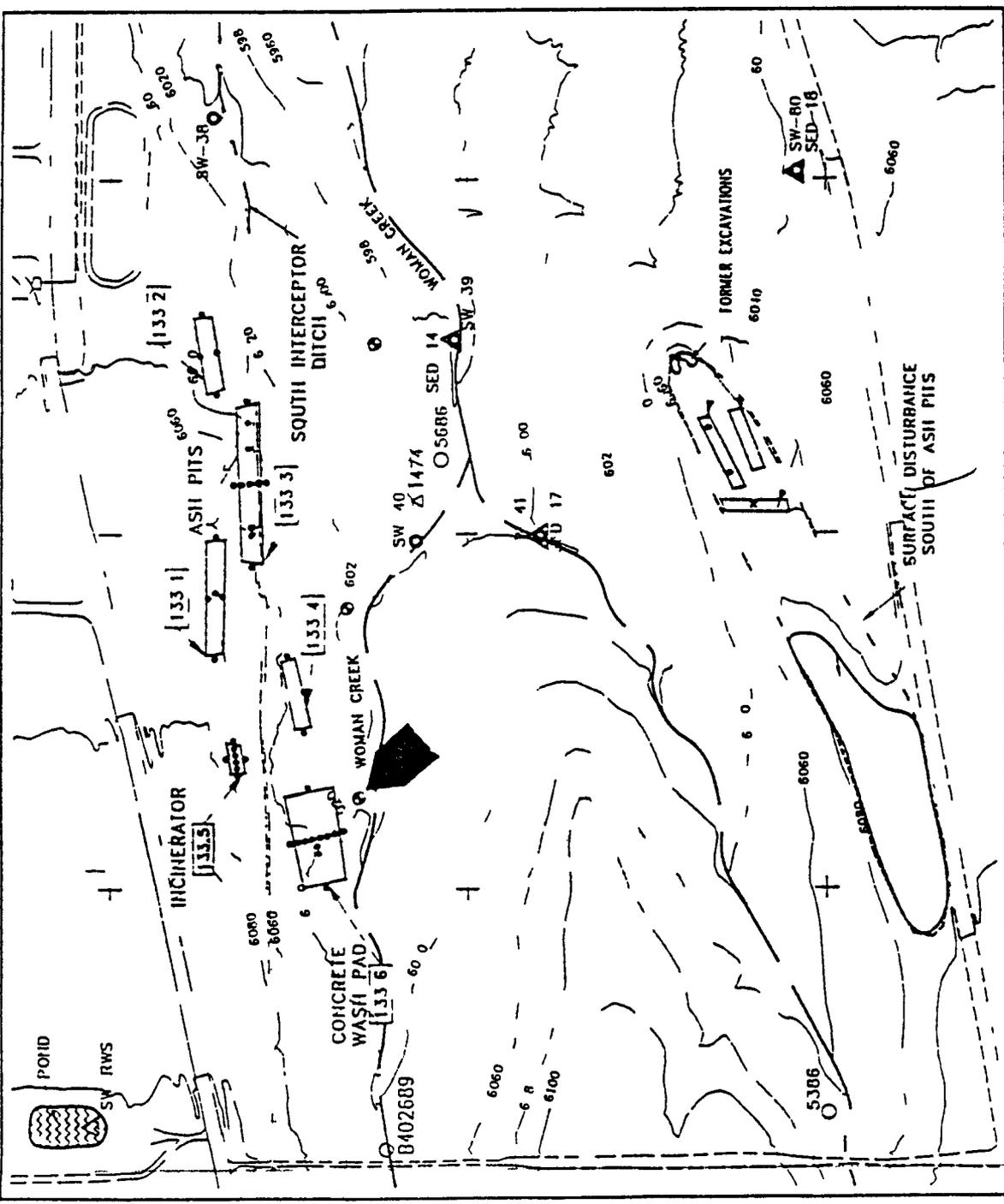
EXPLANATION

[]	INDIVIDUAL HAZARDOUS SUBSTANCE SITE	S-23
SW	EXISTING SURFACE WATER LOCATION	
SED	EXISTING SURFACE WATER LOCATION	
△	EXISTING SEDIMENT FLUX LOCATION	
---	INTERMITTENT STREAM	
---	DITCH ROAD	
---	ANY EXISTING SURFACE DISTURBANCE	
---	DISTURBANCE BETWEEN CHANNEL REAR	
---	CHANNEL REAR	

EXISTING RADIOACTIVE AIR MONITORING PROGRAM LOCATION
P OF SEDIMENT SAMPLE LOCATION

U.S. DEPARTMENT OF ENERGY
R. H. FILLIPPI, G. I. d.
OPERATION U. I. S.
PHASE I RIV/RI WORK PLAN
**SEDIMENT & SURFACE WATER
SAMPLING SITES & AIR MONITORING
STATIONS ALONG WOMAN CREEK AND
THE SOUTH INTERCEPTOR DITCH**

0617



EXPLANATION

- [115] HIDE HAZARDOUS MATERIAL
- SW 1 EXISTING SURFACE WATER SAMPLING LOCATION
- 5786 EXISTING ALLIUM GROUND WATER MONITORING POINT
- 47D EXISTING SEDIMENT SAMPLING LOCATION
- 7 4 PRE 1996 MONITORING WELL
- PROPOSED STEEL BRIDGE LOCATION
- PROPOSED WELL LOCATION
- PROPOSED SURFACE SAMPLING LOCATION
- INTERMITTENT STREAM
- DIRT ROAD
- ALL PROPOSED LOCATIONS ARE APPROXIMATE

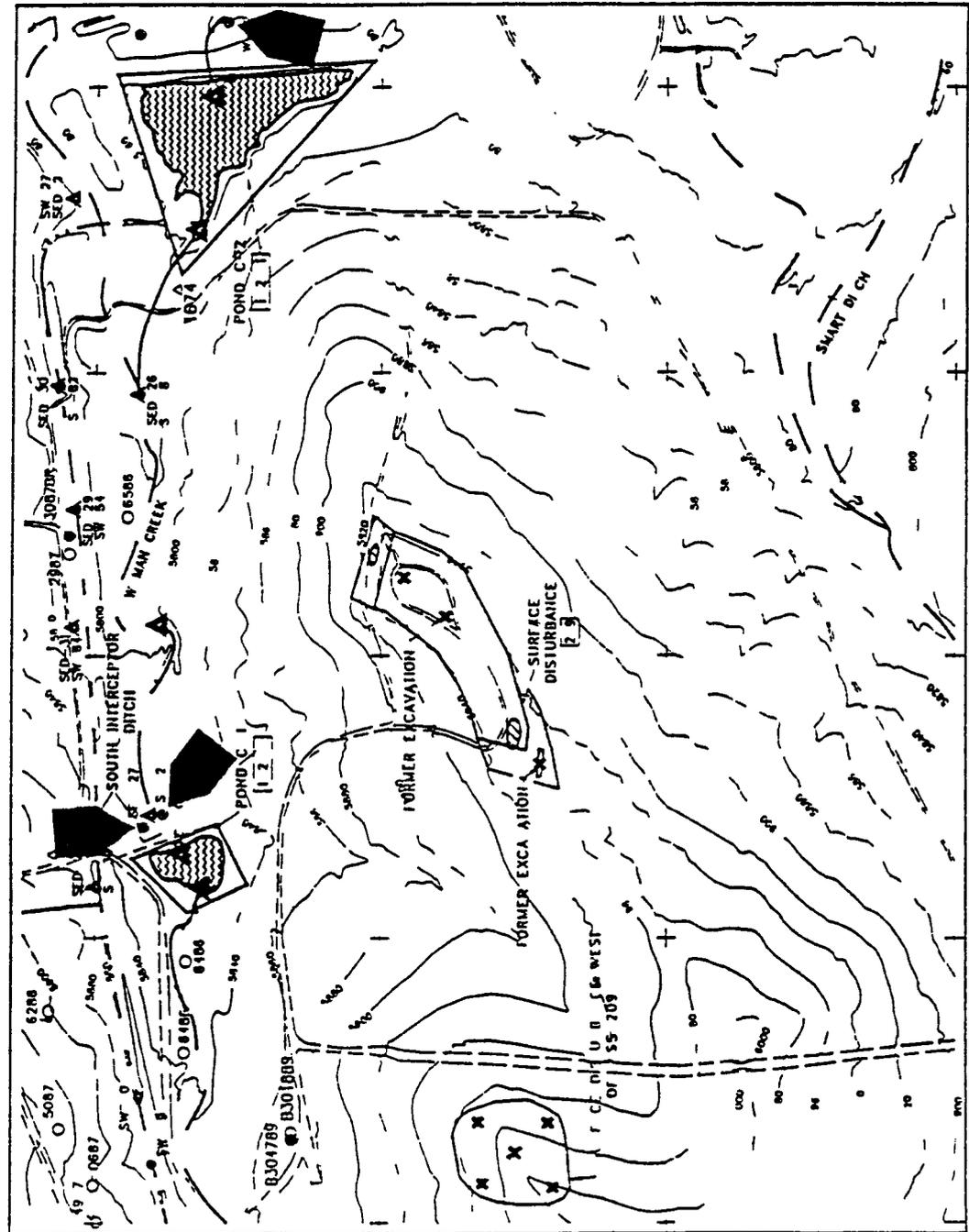
U.S. DEPARTMENT OF ENERGY
 Rocky Flats Plant
 OPERABLE UNIT 5
 PHASE I RI/R WORK PLAN
 PROPOSED SAMPLING & WELL LOCATIONS
 ASH PITS 1 & 4, INCINERATOR
 CONCRETE WASH PAD (MISS 133.1.6)
 AND ADDITIONAL SURFACE DISTURBANCE



EXPLANATION

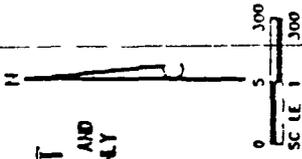
- INDIAL VARIOUS RPS ARE
- EXISTING SURFACE SAMPLING OF THEM
- EXISTING DUAL DRO V WORKING
- EXISTING STREAM SAMPLING LOCATION
- EXISTING INTERIOR DISTURBANCE MONITORING
- POULDER DEPRESSION
- TRUCK X TRAIL
- DRY ROAD
- PERMANENT TRENCH & E. IN IT
- DISTURBANCE BA ON OTHER SIDE
- ORIGINAL STREAM CHANNEL OF POOL
- PROPOSED SURFACE BUILT FACILITY
- PROPOSED FACILITY
- PROPOSED STREAM SURF 10' IN
- 3 PER LOC OF S AD PRO
- WILL BE SE E TO I ANCHOR
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- U S DEPARTMENT OF E I ERG
- R by FI I PI I C I d
- PFR LE U I S
- PHASE I RFI/R WORK PL I

PROPOSED SAMPLING & WELL LOCATION
 HISS 142 10 11 POUNDS C 1 & C 2
 HISS 209 SURFACE DISTURBANCE & THE
 SURFACE DISTURBANCE WEST OF
 HISS 209



1-6

DRAFT
FOR COMMENTS AND
DISCUSSION ONLY

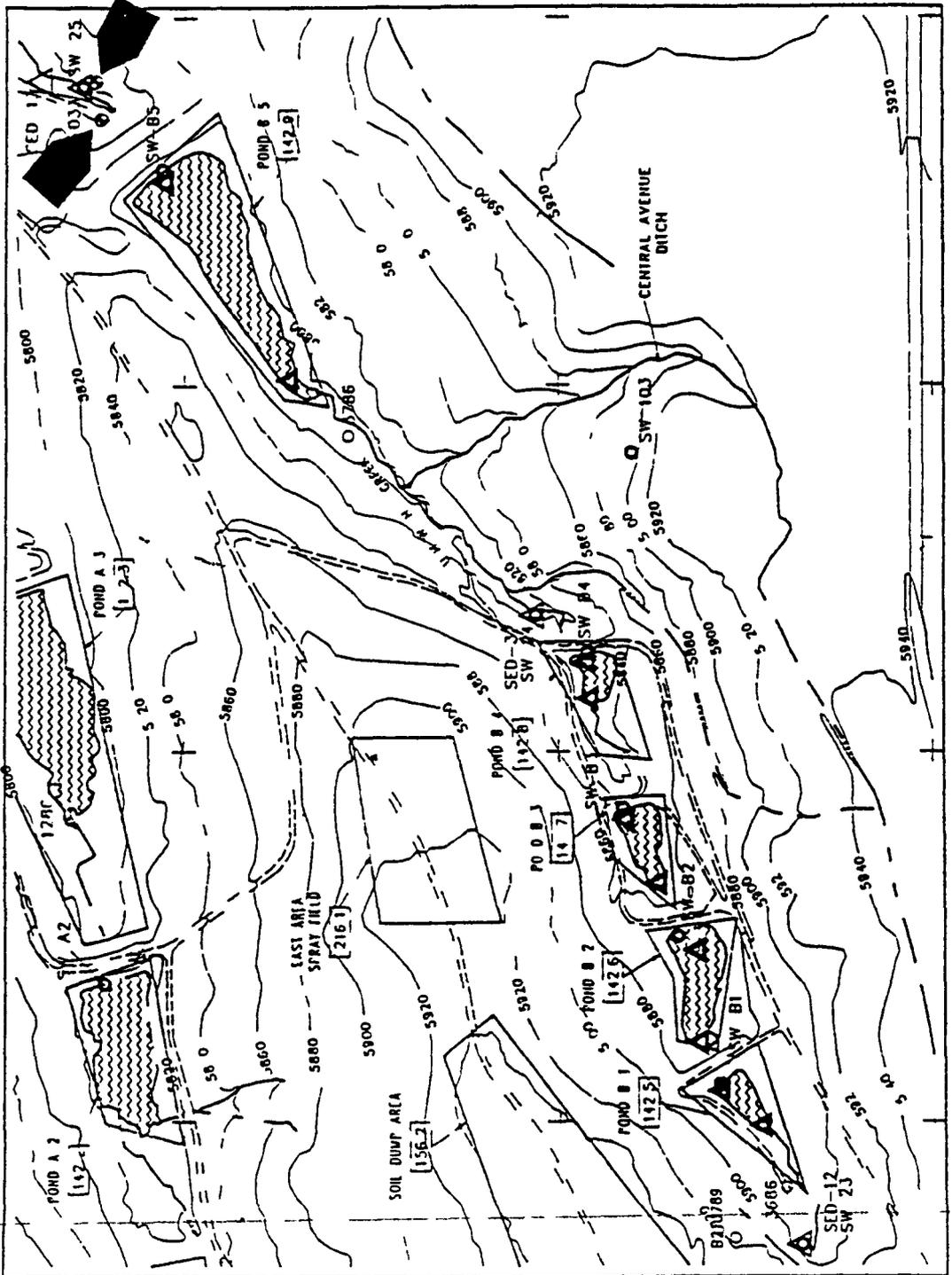


EXPLANATION

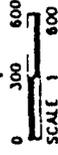
- [1] 1. PROPOSED HAZARDOUS SUBSTANCE SITE
 - SW 1. 2. EXISTING SURFACE WATER SOURCE LOCATIONS
 - 5786. 3. EXISTING ALLOWED CONTAMINANT CONCENTRATIONS
 - SED 17. 4. EXISTING GROUNDWATER SOURCE LOCATIONS
 - 5. WILDMARKET STREET
 - 6. DIRT ROAD
 - 7. ROCKY HILLS BRIDGE
 - 8. PROPOSED WELL LOCATION
 - 9. PROPOSED BORING AND SURFACE LOCATION
 - 10. PROPOSED SEDIMENT SAMPLE LOCATION
 - 11. PROPOSED REDROCK WELLS LOCATIONS FOR SITE WIDE GEOLOGICAL CHARACTERIZATION
1. ALL PROPOSED LOCATIONS ARE APPROXIMATE
2. THREE OTHER LOCATIONS IN EACH POND WILL BE SELECTED AT RANDOM

U.S. DEPARTMENT OF THE ARMY
OPERABLE UNIT 6
PHASE I REMEDIATION PLAN

PROPOSED SAMPLING & WELL LOCATION
HSSs 142 b 9
B-SERIES DETENTION PONDS
ALONG SOUTH WALNUT CREEK
HSS 216 1 EAST AREA SPRAY FIELD



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EXPLANATION



INDIVIDUAL HAZARDOUS SUBSTANCE SITE (HSS) IN OPERABLE UNIT 6



HSS REFERENCE NUMBER



EXISTING SURFACE WATER SAMPLING LOCATION



EXISTING SEDIMENT SAMPLE LOCATION



PERIMETER SECURITY ZONE



DIRT ROAD



PROPOSED LOCATIONS FOR SEDIMENT SAMPLES¹



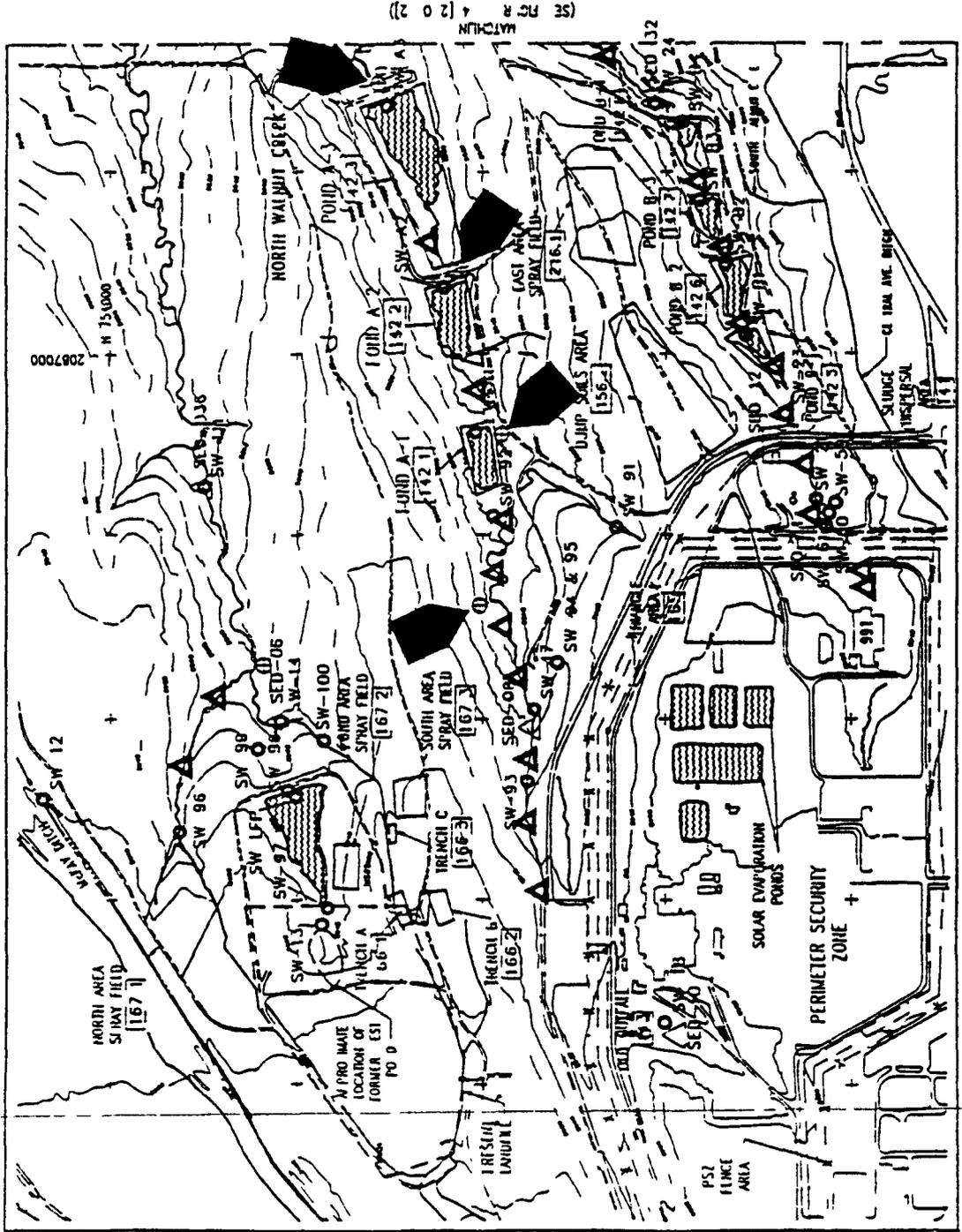
PROPOSED BEDROCK WELL LOCATIONS FOR SITE WIDE GEOLOGICAL CHARACTERIZATION PROGRAM

¹ ALL PROPOSED LOCATIONS ARE APPROXIMATE

U.S. DEPARTMENT OF ENERGY
RICHMOND FIELD OFFICE

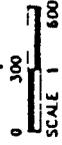
OPERABLE UNIT 6
PHASE I RI/RI WORK PLAN

SEDIMENT SAMPLING SITES AND
SITE-WIDE PROGRAM BEDROCK WELLS
ON NORTH AND SOUTH
WALNUT CREEKS



(SHEET NO. 11 OF 22)

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EXPLANATION



INDIVIDUAL HAZARDOUS SUBSTANCE SITE
(HSS) IN OPERABLE UNIT 6



115 HSS REFERENCE NUMBER



EXISTING SURFACE WATER SAMPLING LOCATION



EXISTING SEDIMENT SAMPLE LOCATION



DIRT ROAD



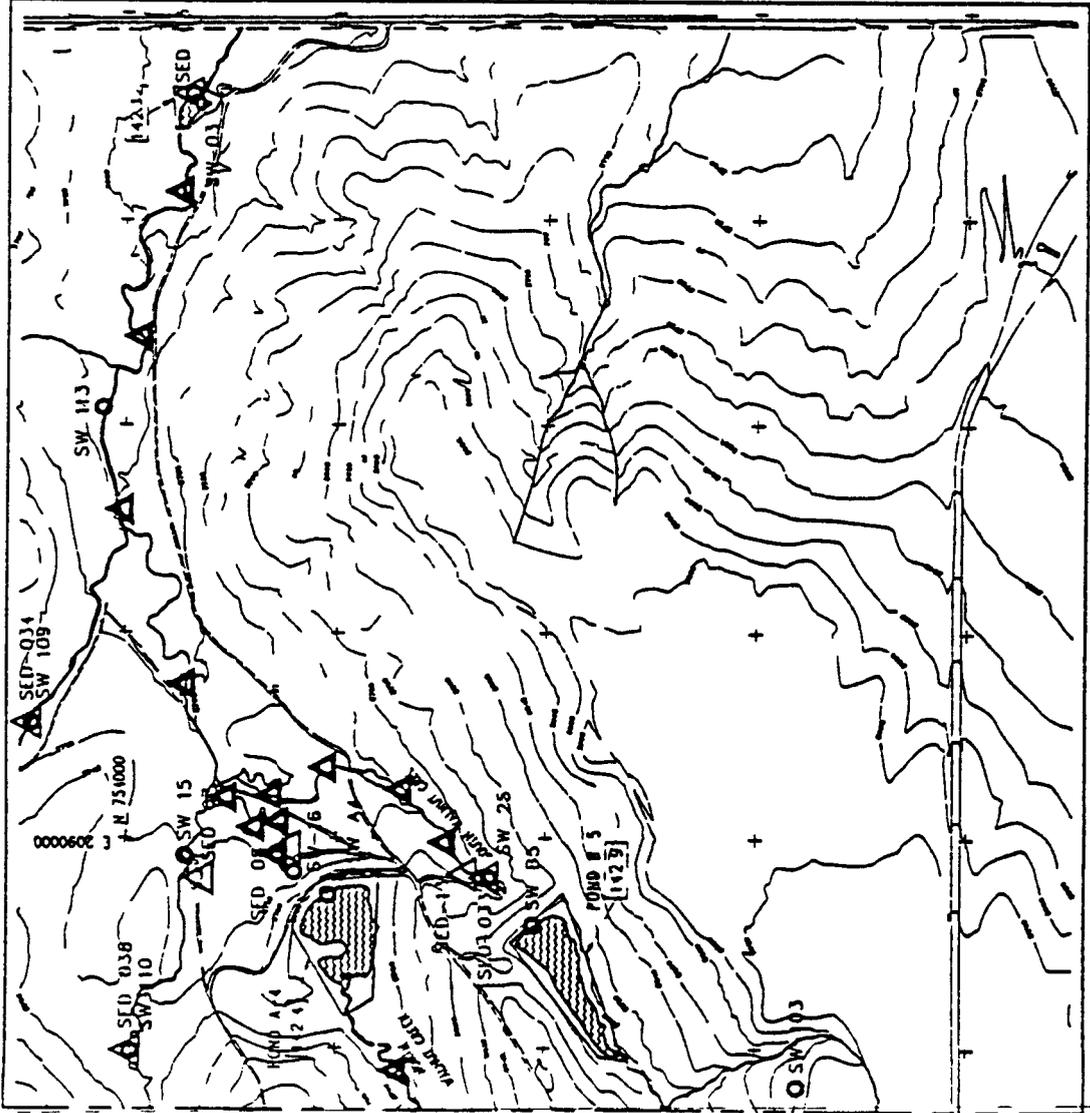
PROPOSED LOCATIONS FOR SEDIMENT SAMPLES

ALL PROPOSED LOCATIONS ARE APPROXIMATE

U.S. DEPARTMENT OF EMERGENCY
RESPONSE AND TREATMENT
OPERABLE UNIT 6

PHASE I REMEDIATION WORK PLAN

SEDIMENT SAMPLING SITES AND
SITE-WIDE PROGRAM BEDROCK WELLS
ON NORTH AND SOUTH
WALNUT CREEKS



(SEE FIGURE 7 [2 OF 2])

Figure 12

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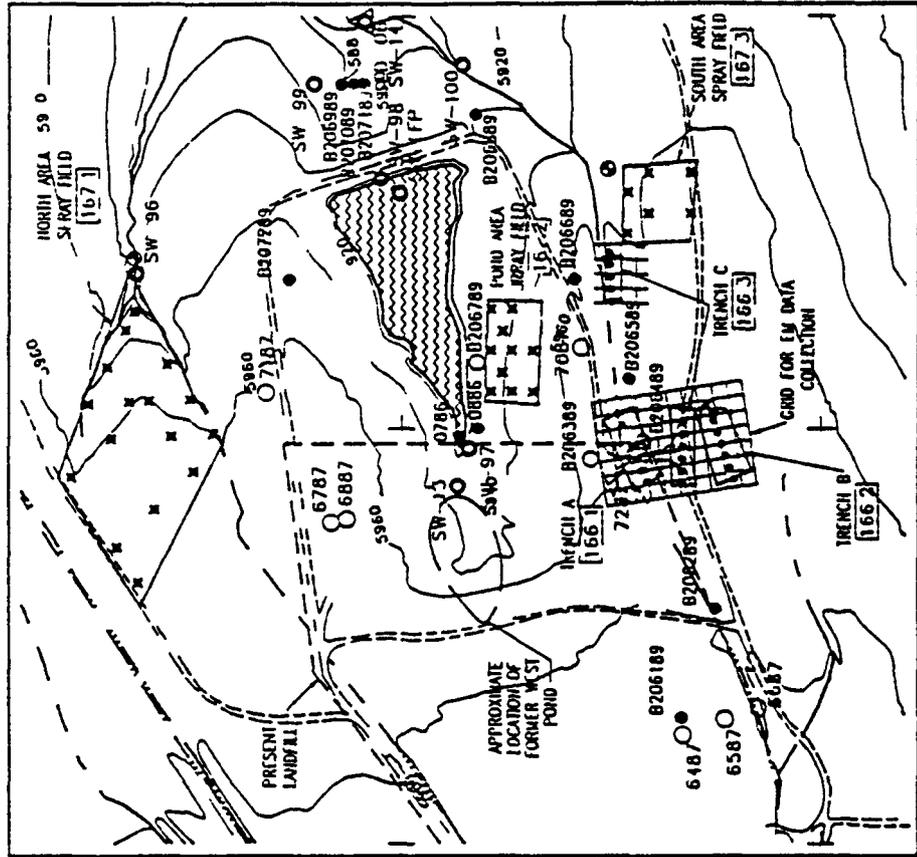
EXPLANATION

- [115] INDIVIDUAL HAZARDOUS SUBSTANCE SITE
- SW 1 ○ EXISTING SURFACE WATER SAMPLING LOCATION
- 5786 ○ EXISTING ALLUVIAL GROUND WATER LOCATION
- SE0 17 △ EXISTING SEDIMENT SAMPLING LOCATION
- 3087 ● EXISTING BEDROCK GROUNDWATER TAPPING WELL
- INTERMITTENT STREAM
- DIRT ROAD
- PROPOSED SURFACE WATER LOCATION
- PROPOSED WELL LOCATION
- ||||| PROPOSED BORING AND SURFACE SAMPLING LOCATION
- ||||| PROPOSED ELECTROMAGNETIC SURVEY LINE LOCATION

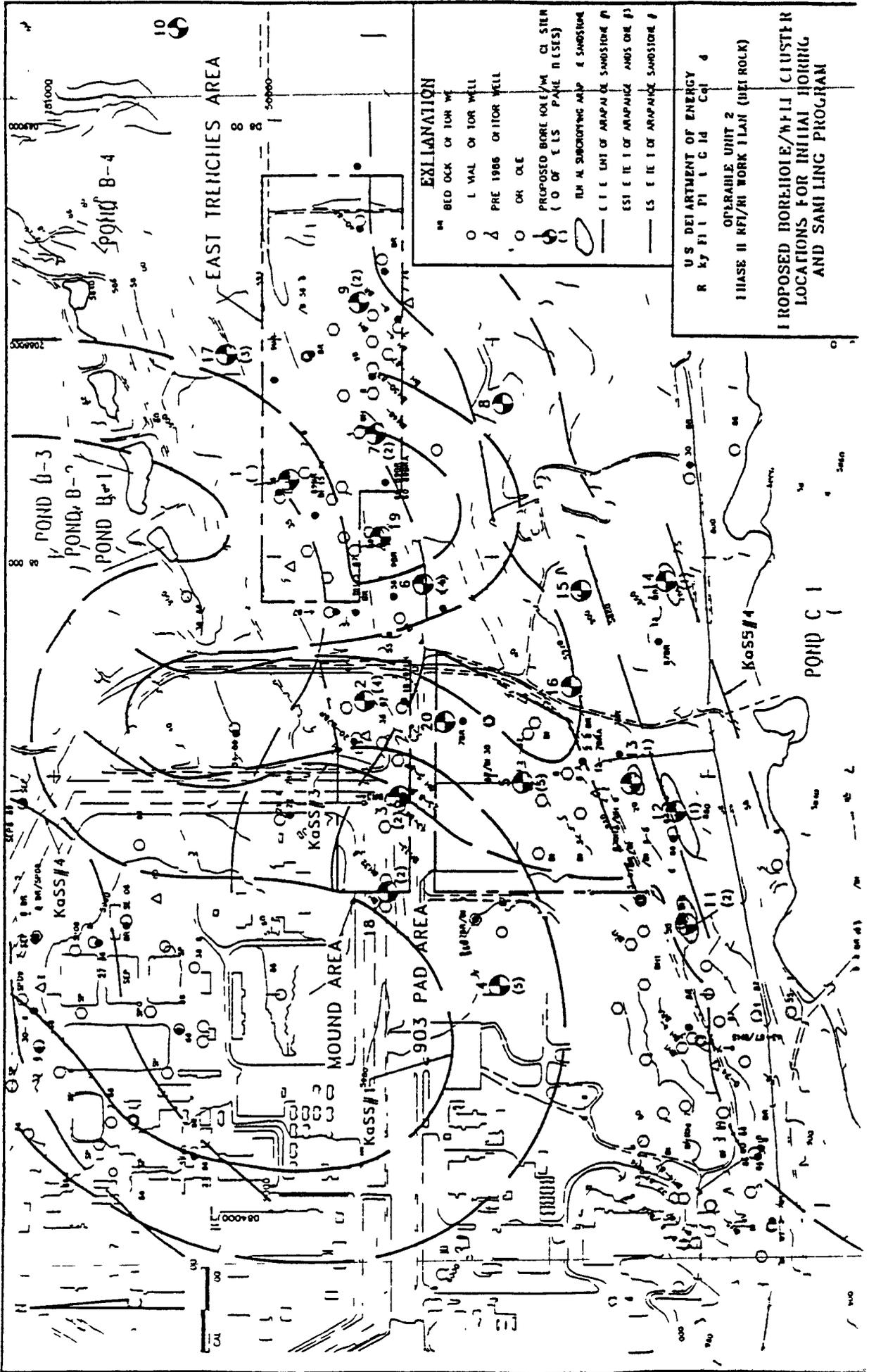
SCALE OF 1" = 1000'

U.S. DEPARTMENT OF ENERGY
OPERABLE UNIT &
PHASE I RI/RI WORK PLAN

PROPOSED SAMPLING & WELL LOCATIONS
HSSs 166 1-3 TRENCHES A, B & C
HSSs 167 1-3 NORTH AREA
POND AREA AND SOUTH AREA



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for the Department of Energy



EXPLANATION

- BED ROCK ON TOP WELL
- △ WAIL ON TOP WELL
- PRE 1986 ON TOP WELL
- OR OLE
- PROPOSED BOREHOLE/WHIRL CLUSTER (O OF E L S PAKE N LSES)
- NEW AL SURVEYING MAP E SANDSTONE
- E L E LIT OF ARAPAHOE SANDSTONE P
- EST E L E T OF ARAPAHOE SANDSTONE P
- ES E L E T OF ARAPAHOE SANDSTONE P

U.S. DEPARTMENT OF ENERGY
 OPERABLE UNIT 2
 PHASE II HFI/RI WORK PLAN (HEI ROCK)
 PROPOSED BOREHOLE/WHIRL CLUSTER
 LOCATIONS FOR INITIAL BORING
 AND SAMPLING PROGRAM

