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FAX COVER SHEET

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COMPANY: _____

ATTENTION: Steve Puller

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FROM:

GANDY CORPORATION:

LOVINGTON, N.M. 88260

SENDER'S NAME: Ally Gandy

MESSAGE: _____

IF THERE IS ANY TROUBLE IN RECEIVING THIS FAX, PLEASE CALL US AT
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DRAFT

WORK PLAN STRATIGRAPHIC AND GROUNDWATER CHARACTERIZATION PROGRAM

1.0 Introduction

The Hazardous and Radioactive Materials Bureau (HRMB) of the New Mexico Environment Department requested that additional data be acquired on the subsurface stratigraphy and groundwater potential of the Triassic Park Hazardous Waste Management Disposal Facility (Facility). This work plan will describe the procedures to be used in these two field programs and provide a means of achieving consensus between the HRMB and Gandy Marley, Inc. (GMI) on the conduct of these programs. Results of this field work will be incorporated into the existing Facility permit application.

2.0 Stratigraphic Characterization Program

2.1 Purpose - To date, all characterization drilling has been completed in the southern and central portions of the proposed site. The HRMB has requested that additional characterization drilling be completed in the northern portion of the site in order to assess the character of the subsurface relative to planned operational facilities in this area. The HRMB also requested that GMI use the same drilling and evaluation techniques on this additional drilling as was used on all subsequent drilling programs.

The primary purpose of this drilling will be to provide additional definition to the character of Upper Dockum sediments and their contact with the Lower Dockum mudstones. At the same time, this drilling will supply more information on the saturation conditions of the Upper Dockum sediments. All this data will help to site possible Vadose Zone Monitoring Wells, which may be used during the operation of the Facility.

2.2 Approach - GMI proposes the drilling of nine (9) additional stratigraphic holes in the northern portion of the proposed site (see Figure 1). The holes are to be located along a continuation of a survey grid used for all earlier drilling (see Figure 2). This grid was established by a licensed, professional land surveyor. As shown on Figure 1, these additional holes will have the same area of influence (drill hole density) as the earlier characterization holes.

All additional drill holes will be completed thirty (30) feet into the Lower Dockum mudstones. Estimated depths are also shown on Figure 1. The increase in drill hole depth from west to east is due to the eastward dip of the Triassic sediments and a gradual increase in surface elevation to the east.

2.3 Drilling equipment - Glenn's Well Service from Tatum, NM will be the drilling contractor. A rotary air rig will be used for these characterization holes. Drilling with air provides clean cutting samples and introduces no water into the subsurface. Therefore, should any water be observed, its source would have to be from saturated sediments in the subsurface. A 4½-inch hole will be drilled. It is expected to take 2-3 days to complete this drilling program.

2.4 Logging - This program will use the identical logging techniques as used in previous drilling programs.

2.4.1 Geophysical - Southwest Geophysical Services, Inc. from Farmington, NM will be the geophysical logging contractor. A suite of thermal neutron, gamma ray and caliper logs will be run. The thermal neutron log will provide lithologic characterization of the sediments, as well as detect the presence of any subsurface water. The gamma ray log will help to define lithology and indicate the presence of any naturally-occurring radioactive minerals. The caliper log will record the width of the drill hole.

2.4.2 Lithologic - The drilling crew will catch and lay-out samples of drill hole cuttings on five-foot intervals. This will provide a physical description of the subsurface sediments. A geologist will examine and record the color and lithology of these samples. It is important to remember that there is some "lag time" associated with these cuttings samples. This is due to the time it takes the drilling medium to transport the cuttings to the surface. For this reason, precise depths of lithologic contacts are best measured from geophysical logs.

2.5 Hole abandonment - After the hole has been logged, the driller will mix a bentonite slurry and inject it into the bottom of the hole through the drill pipe. The hole will be filled with bentonite from the bottom to the top. A surface plug of cement will be placed to keep surface waters from contaminating the hole.

3.0 Groundwater Characterization Program

3.1 Purpose - Both the HRMB and GMI consider the saturation in the Upper Dockum to be the "uppermost" aquifer for the purpose of the Facility permit application. However, drilling to date has encountered no saturated Upper Dockum sediments underlying the proposed site.

Saturated Upper Dockum sediments have been encountered ½ mile and one mile northeast of the proposed site and an inferred saturation interface is projected to be approximately fifteen hundred (1500) feet east of the site boundary. The HRMB has requested that GMI drill one exploratory hole east of the proposed site in order to determine the presence (or absence) of saturation within the Upper Dockum sediments.

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Should GMI encounter saturation, the HRMB has requested that an aquifer test be performed and that the groundwater be chemically characterized. The HRMB has further requested that, if groundwater is encountered, the drill hole be completed as a downgradient monitoring well. In this event, there would be no groundwater monitoring waiver as part of the Facility permit application.

In the event that no groundwater is encountered, the Facility permit application must be changed to designate the Lower Dockum (Santa Rosa Sandstone) as the "uppermost" aquifer. A groundwater monitoring waiver must also be incorporated into the Facility Permit Application. The HRMB has already determined that the monitoring of the Santa Rosa Sandstone would not be protective of human health and the environment (letter dated June 25, 1999).

3.2 Approach - At the present time, there is one drill hole located immediately east of the proposed site boundary. This hole, PB-38, is located approximately 800 feet east of the boundary and encountered no saturation within the Upper Dockum sediments. As shown in Figure 3, GMI proposes the drilling of one exploratory hole 1000 feet north of PB-38 and approximately 1800 feet east of PB-38. This hole should be on the "saturated" side of a projected saturation interface and located directly downgradient from the proposed Phase I landfill.

The eastern extend of this hole location will be dependent upon topography. There is a steep drainage in the area of the proposed hole location and it will be drilled on the western edge of this drainage - avoiding the added cost of road construction. The drill hole will be completed thirty (30) feet into the underlying Lower Dockum at a depth of 210 feet.

3.3 Drilling equipment -

3.4 Logging - This program will use the same logging techniques as used in characterization drilling program.

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3.5 Aquifer Testing -

3.6 Sampling -

3.6.1 Procedure -

3.6.2 Analyses -

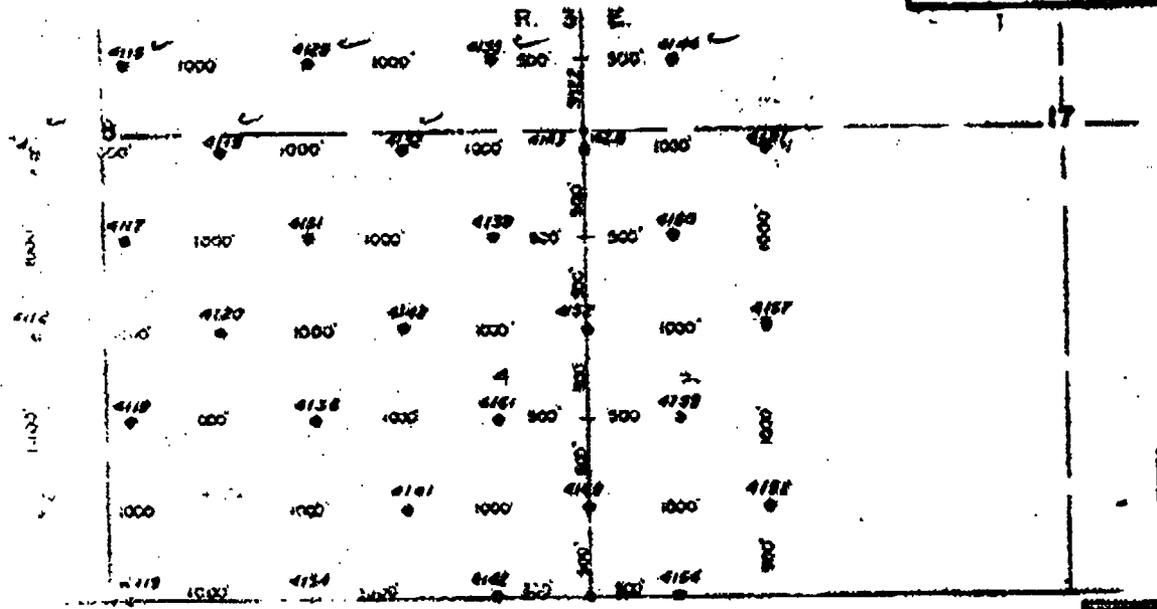
3.7 Well completion/Hole abandonment -

4.0 Approvals

The Hazardous and Radioactive Materials Bureau of the New Mexico Environment Department is in agreement with the Scope of Work and its proposed implementation, as described in this Work Plan.

James P. Bearzi
Chief, HRMB

JOB No.



OF THE PLAN AND THE PERFORMANCE OF THE SURVEY UPON WHICH IT IS BASED AND TO THE BEST OF MY KNOWLEDGE AND BELIEF THE SAME COMPLY WITH THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGULATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

Figure 2
Survey Grid for Drill Holes

Herschel L. Jones
HERSCHEL L. JONES
REGISTERED LAND SURVEYOR



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	SHEET OF 1

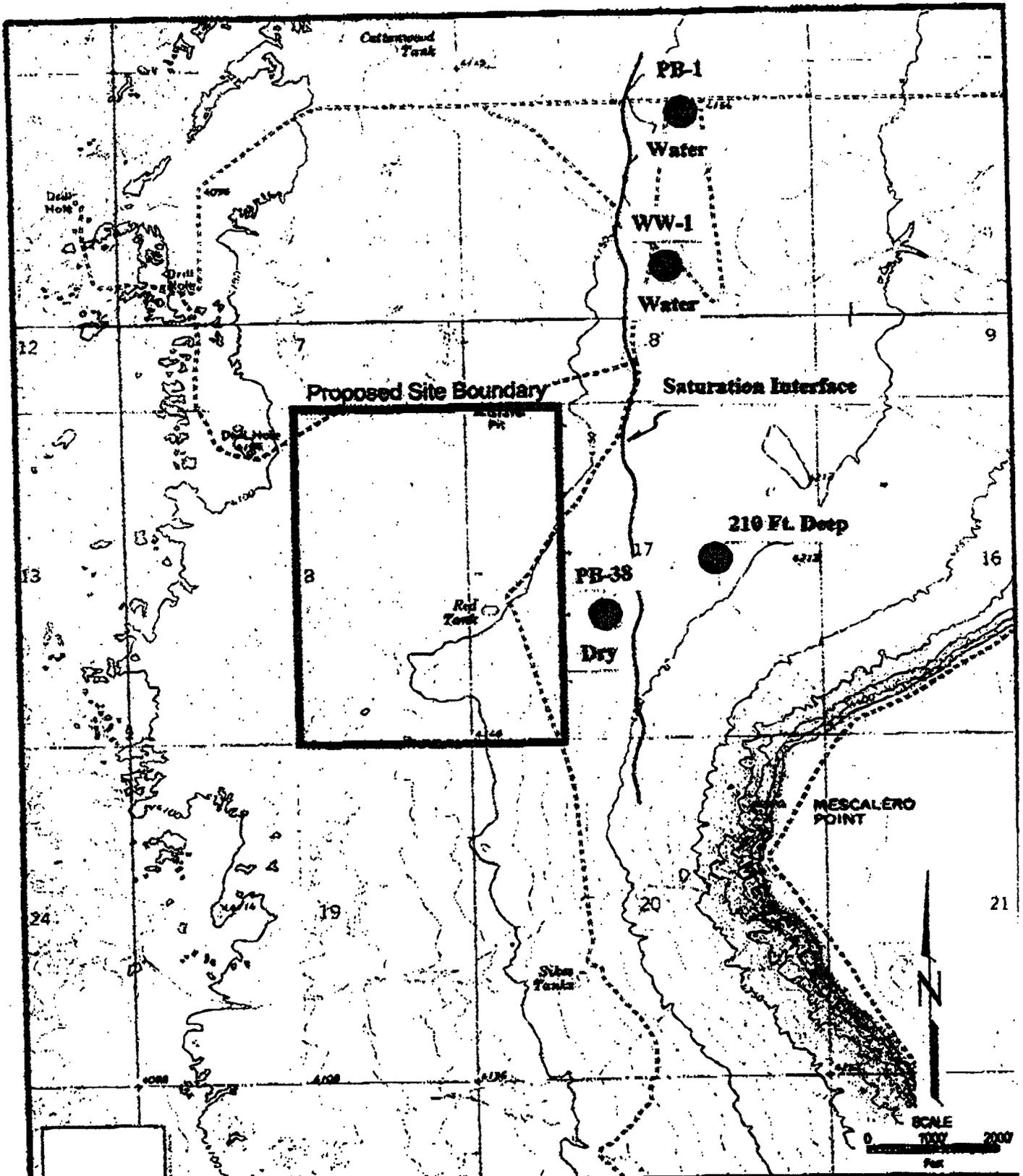


Figure 3

Proposed Exploratory Hole

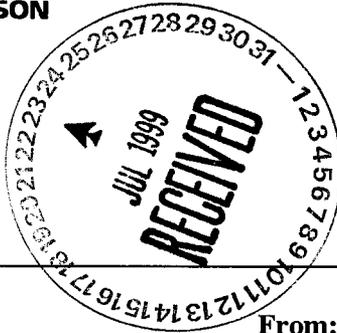
T R A N S M I T T A L



MONTGOMERY WATSON

Montgomery Watson
1340 Treat Boulevard, Suite 300
Walnut Creek, CA 94596

Date: July 22, 1999



Tel: 925 975 3400
Fax: 925 975 3412

To: Steve Poulin
NMED

From: Patrick Corser
Montgomery Watson

The following items are:

- Requested Enclosed Sent Separately via _____
- Report Specification Cost Estimate Shop Drawings
- Test Result Prints Test Sample Other

No. of Copies	Description
1	Work Plan

This data is submitted:

- At your request For your action
- For your approval For your files
- For your review For your information

cc. Dale Gandy, GMI
Larry Gandy, GMI
Jim Bonner, InfiMedia Inc.

WORK PLAN
STRATIGRAPHIC AND GROUNDWATER CHARACTERIZATION PROGRAM

1.0 Introduction

2.0 Stratigraphic Characterization Program

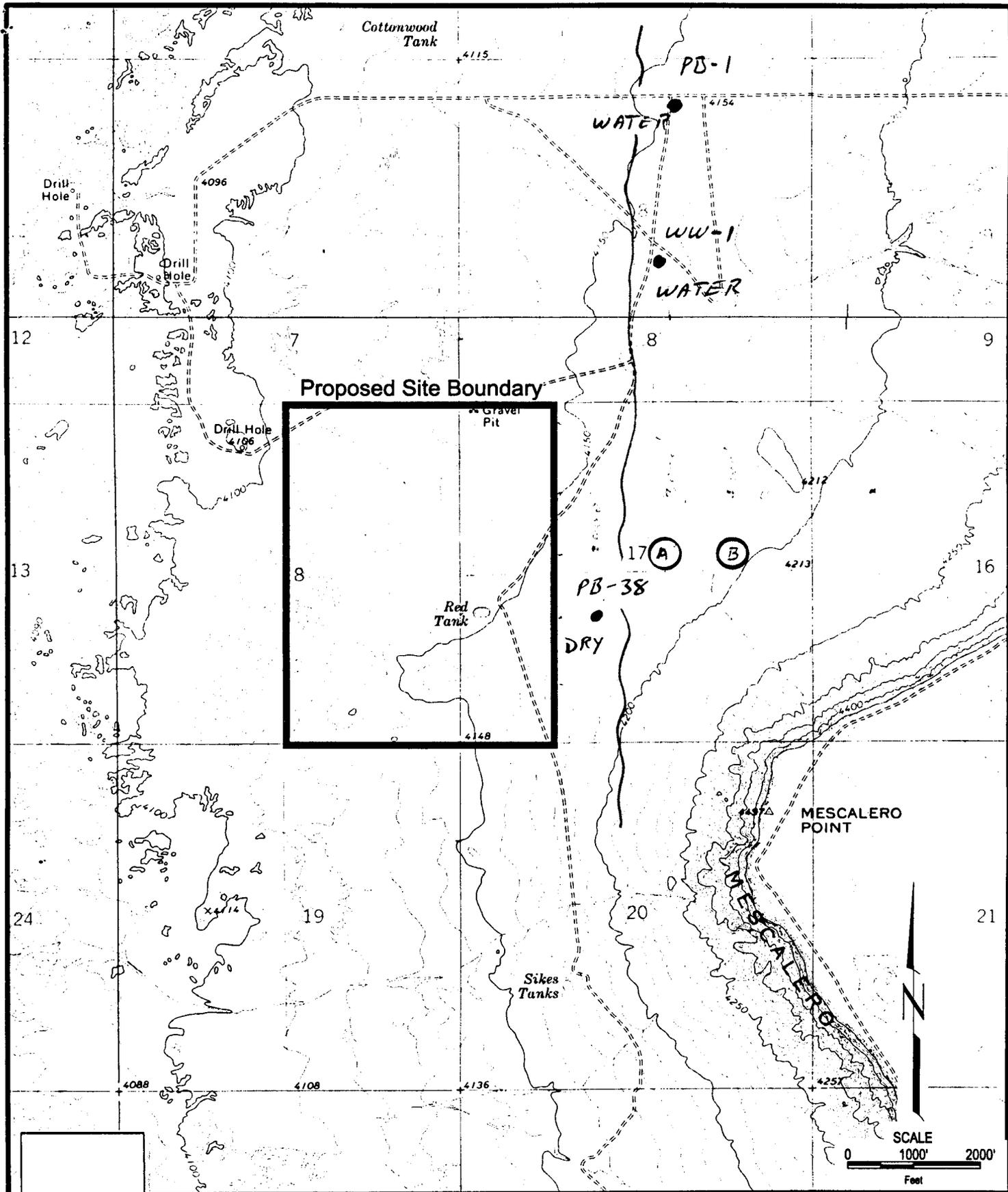
- 2.1 Purpose
- 2.2 Approach (rationale)
- 2.3 Drilling equipment
- 2.4 Logging
 - 2.4.1 Geophysical
 - 2.4.2 Lithologic
- 2.5 Hole abandonment

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 - 3.4.2 Lithologic
- 3.5 Aquifer Testing
- 3.6 Sampling
 - 3.6.1 Procedure
 - 3.6.2 Analyses
- 3.7 Well completion/Hole abandonment

4.0 - Approvals -

-
- Drawings location / BLOWDOWN.
- DDO.
- DECON
- Construction materials.
- Schedule.



TOPOGRAPHY OF SITE VICINITY

TRIASSIC PARK WASTE DISPOSAL FACILITY

Figure 3-2

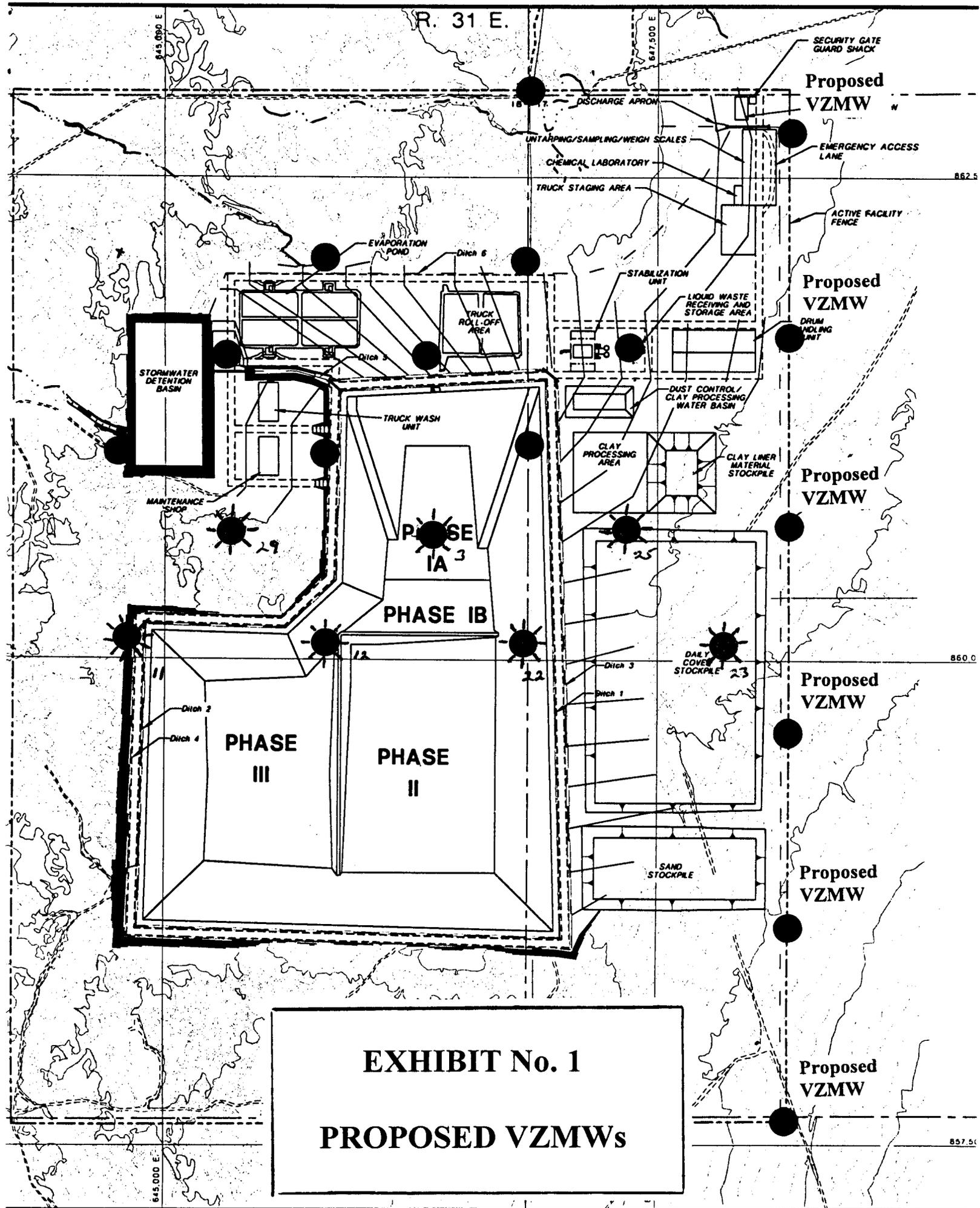


EXHIBIT No. 1
PROPOSED VZMWs

SECURITY GATE GUARD SHACK

Proposed VZMW

EMERGENCY ACCESS LANE

ACTIVE FACILITY FENCE

Proposed VZMW

Proposed VZMW

Proposed VZMW

Proposed VZMW

Proposed VZMW

R. 31 E.

645,000 E.

647,500 E.

862.5

860.0

857.5

STORMWATER DETENTION BASIN

EVAPORATION POND

Ditch 6

Ditch 5

MAINTENANCE SHOP

29

PHASE IA

3

PHASE IB

25

DAILY COVER STOCKPILE

23

PHASE III

PHASE II

22

SAND STOCKPILE

Ditch 3

Ditch 1

Ditch 2

Ditch 4

UNTAPPING/SAMPLING/WEIGH SCALES

CHEMICAL LABORATORY

TRUCK STAGING AREA

STABILIZATION UNIT

LIQUID WASTE RECEIVING AND STORAGE AREA

DUST CONTROL / CLAY PROCESSING WATER BASIN

CLAY PROCESSING AREA

CLAY LINER MATERIAL STOCKPILE

TRUCK WASH UNIT

TRUCK ROLL-OFF AREA

DRUM HANDLING UNIT

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