

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY30-045-22932  
5. LEASE DESIGNATION AND SERIAL NO.

SF 078510

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Jacquez

9. WELL NO.

1-A

10. FIELD AND POOL, OR WILDCAT

Blanco Mesaverde

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

Sec. 6-31N-8W

12. COUNTY OR PARISH 13. STATE

San Juan New Mexico

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Atlantic Richfield Company

## 3. ADDRESS OF OPERATOR

501 Lincoln Tower Bldg., 1860 Lincoln St., Denver, Colo. 80237

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

SE SE 850' f/East &amp; 850' f/South lines, Sec. 6-31N-8W

At proposed prod. zone

Approx. same

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

Approx. 7 miles from La Boca, Colorado

## 15. DISTANCE FROM PROPOSED\* 850' f/Lse. &amp; Unit

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

Line

## 16. NO. OF ACRES IN LEASE

2047.19

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320 Acres - E/2 Sec. 6

## 18. DISTANCE FROM PROPOSED LOCATION\* 3440' f/Jacquez

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT. W1.#1 (Mesaverde)

## 19. PROPOSED DEPTH

5950'

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6470' GR

## 22. APPROX. DATE WORK WILL START\*

Dirt Work when app'l. rec'd  
Est. March 16, 1978

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
1 1/4-3 1/4" - 15"	9-5/8"	32.3#	200'	200 sx (Cmt. to surface)
8-3/4"	7"	20.0#	3750'	300 sx
(Liner) 6-1/8"	4-1/2"	11.6#	3600' - T.D.	260 sx

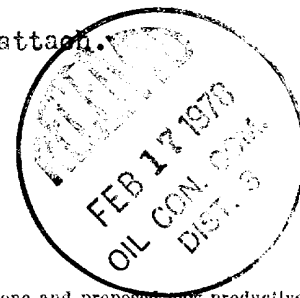
Propose to drill well to depth sufficient to test the Mesaverde, set liner, perforate, test, stimulate if necessary, and complete well in the Mesaverde.

Pursuant NTL-6, attached are:

Certified Location Plat

Drilling Plan w/attach.

Surface Use and Operations Plan w/attach.

*Gas is dedicated*

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

*W. A. Walther, Jr.*

TITLE Operations Manager

DATE 2/13/78.

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*Olaf*

\*See Instructions On Reverse Side

RECEIVED  
FEB 15 1978

U.S. GEOLOGICAL SURVEY

**NEW MEXICO OIL CONSERVATION COMMISSION**  
**WELL LOCATION AND ACERAGE DEDICATION PLAT**

All distances must be from the outer boundaries of the Section

Operator <b>THE ATLANTIC RICHFIELD COMPANY</b>				Lease <b>JACQUEZ</b>	Well No <b>1 A</b>
Unit Letter <b>P</b>	Section <b>6</b>	Township <b>31 NORTH</b>	Range <b>8 WEST</b>	County <b>SAN JUAN</b>	

Actual Footage Location of Well:  
 850 feet from the **SOUTH** line and 850 feet from the **EAST** line

Ground Level Elev. <b>6470</b>	Producing Formation <b>Mesaverde</b>	Pool <b>Blanco Mesaverde</b>	Dedicated Acreage: <b>320 (E/2) 2 1/32</b>
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1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
  2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
  3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communization, unitization, force-pooling, etc? **N/A - 100% Atlantic Richfield Company.**
- ( ) Yes ( ) No If answer is "yes," type of consolidation .....

If answer is "no," list the owners and tract descriptions which have actually consolidated. (Use reverse side of this form if necessary.) .....

No allowable will be assigned to the well until all interests have been consolidated (by communization, unitization, forced-pooling, or otherwise) or until a non standard unit, eliminating such interests, has been approved by the Commission.

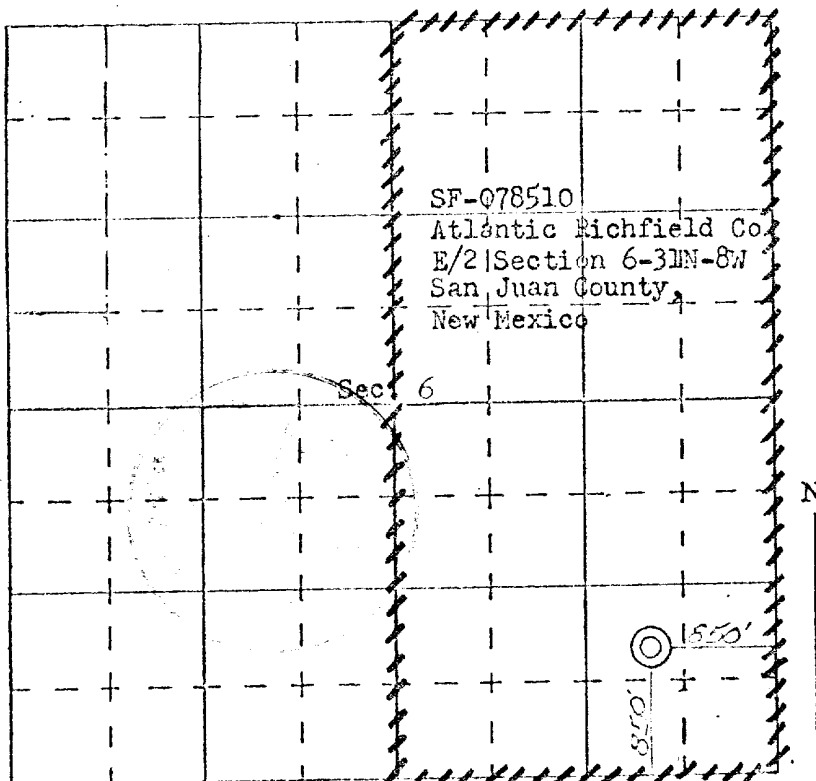
**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *W. A. Walther, Jr.*  
 Name **W. A. Walther, Jr.**  
 Position **Operations Manager**  
 Company **Atlantic Richfield Company**  
 Date **February 8, 1978**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed **23 January 1978**  
 Signature: *James P. Leone*  
 Registered Professional Engineer  
 and/or Land Surveyor **James P. Leone**



SCALE—1 INCHES EQUALS 1 MILE

## DRILLING PLAN

JACQUEZ, WELL NO. 1-A  
SE SE Section 6-31N-8W  
San Juan County, New Mexico

1. Surface Formation: Tertiary - Wasatch
2. Geologic Markers:

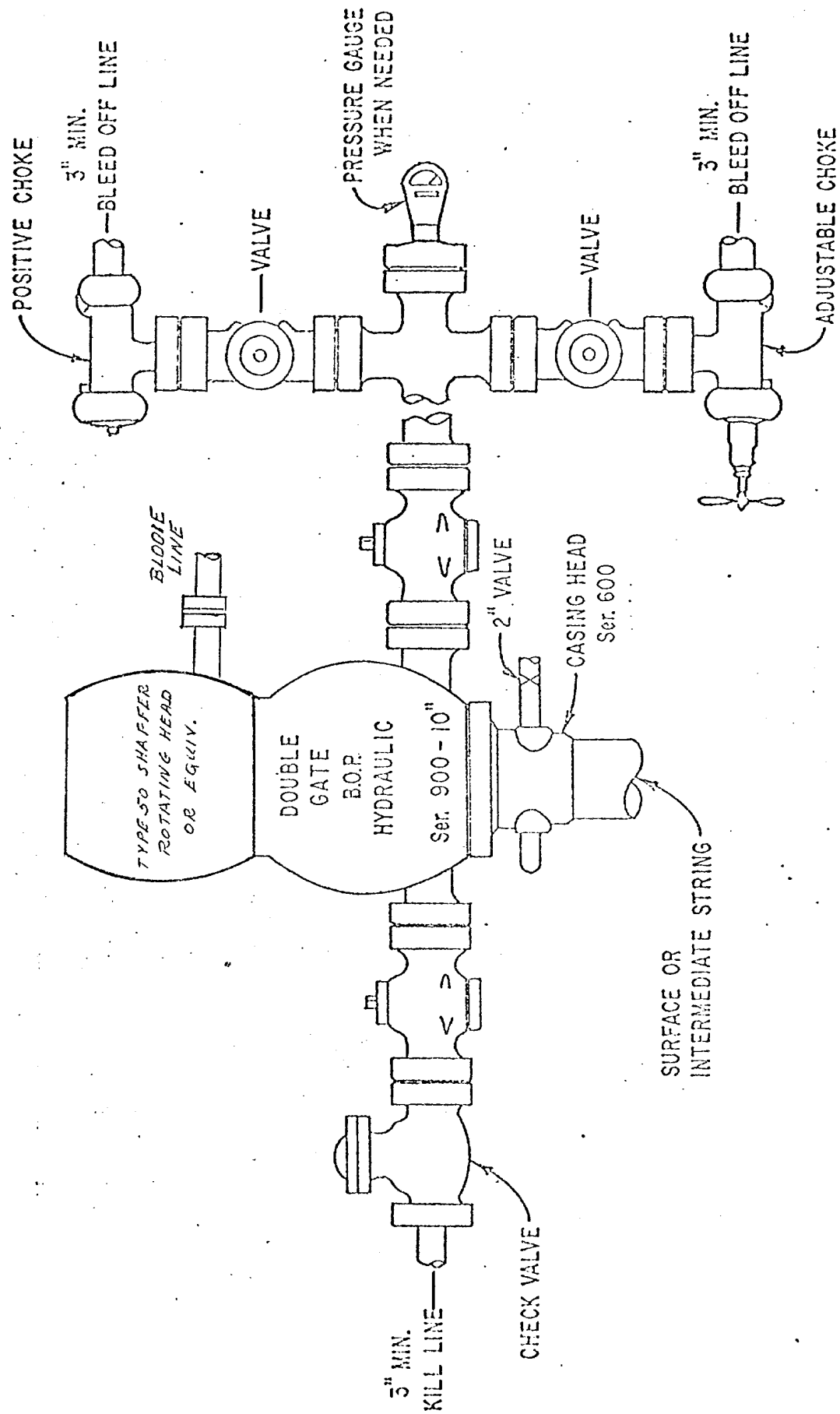
Ojo Alamo	- 1780'
Pictured Cliffs	- 3370'
Lewis Shale	- 3580'
Mesaverde	- 5000'
Point Lookout	- 5700'
Upper Mancos	- 5900'
3. Anticipated Mineral Bearing Formations:

Ojo Alamo	- 1780'	(Poss. Wtr.)
Pictured Cliffs	- 3370'	(Poss. Gas)
Mesaverde	- 5000'	(Poss. Gas)
Point Lookout	- 5700'	(Poss. Gas)
4. Casing Program:

Surface	- 200'±	9-5/8" OD 32.3# H-40 ST&C New
Intermediate	- 3750'±	7" OD 20# K-55 ST&C New
Liner	- 2350'±	4-1/2" OD 11.6# K-55 ST&C New
5. Control Equipment: Blowout Preventer - Ram Type, hydraulic operated  
Rams - Two: One blind ram & one pipe ram  
Series - 900 (3000# WP, 6000# TP)  
Manufacturer - Cameron or Shaffer  
Pressure test @ 1000 psi prior to drilling out of casing string. Operational checks to be made daily and on trips.  
Rotating Head - Type 50 Shaffer, or equivalent.  
Sketch attached.
6. Drilling Fluid:

0 - 200'	Gel and lime to drill surface hole and set casing.
200 - 3750'	Gel-Chem to maintain hole and set intermediate casing.
3750 - TD	Air drill
7. Auxiliary Equipment: Kelly Cock  
Sub on floor with full opening valve for use in drill pipe when kelly is not in the string.  
Drill pipe float while air drilling.
8. Testing, Logging, Coring: At this time no drill stem tests or cores are planned.  
Hole conditions, or information obtained while drilling may alter these plans.  
  
Logs: Open Hole - Bottom of Intermediate to Surface Casing:  
DIL w/SP 2" and 5" scales  
FDC-CNL-GR 5" scale  
  
TD to btm of Intermediate Casing:  
DIL-GR 2" and 5" scales  
FDC-SNP-GR 5" scale  
  
Cased Hole- Casing collar correlation log, CBL for Intermediate casing and liner.
9. Abnormal Pressures, Temperatures, Potential Hazards: There are no abnormal pressures, temperatures, or potential hazards in the area. The maximum anticipated pressure is 1000 psi. Weight material will be maintained on location and BOP will be pressure tested and kept in good working condition.
10. Starting Date - Completion: Building of the road and location will commence upon receipt of the District Engineers approval, requiring 7-10 days. Moving in and rigging up should require 4 days. Drilling to completion is estimated to require an additional 20 days, or a total time of 34 days. In the event of delays, the overall time could be considerably extended. Drilling operations possibly will not be commenced until sometime in May, 1978.

NTL-6 indicates a minimum of 30 days are required to obtain approval, in which case operations could not be commenced until about March 16, 1978.



## SURFACE USE AND OPERATIONS PLAN

JACQUEZ, WELL NO. 1-A  
SE SE Section 6-31N-8W  
San Juan County, New Mexico

1. Existing Roads: A portion of the Navajo Dam, N. Mex., Navajo Dam Quadrangle, map is attached with existing access roads colored "red". Main access would be from Blanco, N. M., approximately 15.5 miles east on State Hwy. 511 to Navajo Dam. From Navajo Dam proceed approximately 11.5 miles north and northwest on the "Ignacio Hwy." to a turn-off in the northern part of Section 33-32N-8W. Turn southwest approximately 1.8 miles as shown on the attached map. None of these existing roads as shown will require improvement. Insofar as is known, existing roads within a 1 mile radius are shown on this map.
2. Planned Access Road: The planned access road will leave the existing road in the NE NE of Section 6, extending south approximately 3/4 mile to the well site as shown in "blue" on the attached map. This planned road will have a width of approximately 18', sufficient to handle drilling equipment. No grades are anticipated in excess of 8%. Grading will be kept to a minimum and very little alteration of the natural drainage of the area is expected. There will be no major cuts, fills, culverts, turnouts, gates, cattleguards, or fence cuts. The area is a sandy type soil and no special surfacing material will be required.
3. Existing Wells: As shown on the attached map.
4. Existing/Proposed Facilities: Atlantic's Jacquez Well #1 is located 2/3 mile north of this proposed well site and production facilities have not yet been installed. This Well #1-A is a proposed single completion Mesaverde well. The maximum facilities anticipated would be a production unit and one tank, depending upon the amount of liquids produced, if any. All facilities would be located on the drill pad, and there would not be any additional surface disturbance. The tank pad would be approximately 18' X 18' X 10" high with 4" peagravel or sand on top. The production unit pad would be approximately 9' X 24', including small drain pit, and erected on concrete piers. The drain pit will be fenced for protection of livestock and wildlife. The gas gathering company will connect at the production unit. The area not required for facilities, or operation of the well, will be contoured as near as possible to original contours, and restored as directed by the Bureau of Land Management.
5. Water Supply: It is anticipated that it will be necessary to obtain water from the Pine River near LaBoca, Colorado. The water will be trucked and no new roads (other than 2. above) will be required.
6. Construction Materials: None anticipated to be required.
7. Waste Disposal: Cuttings and drilling fluids will be disposed of in the reserve pit. A trash, or burn, pit will be used to dispose of trash, garbage, etc. If the reserve pit is sufficiently dry when the well is completed, both the reserve pit and trash pit will be filled upon completion of the well. If not, the trash pit will be filled upon completion of the well, and the reserve pit will be fenced to be filled when sufficiently dry.  
  
Any produced fluids will be disposed of in the reserve pit. Any oil accumulations on the reserve pit during drilling and completion will be skimmed and disposed of immediately after the completion rig is moved off. Oil produced during completion will be held in temporary tank for later disposition. Trash and debris cleanup will commence as soon as completion rig moves out, and final cleanup and contouring will begin as soon as possible.
8. Ancillary Facilities: None are proposed.
9. Well Site Layout: Per the attached sketches. The reserve pit, which will be approximately 50' X 75', will be unlined.
10. Restoration of Surface: Upon completion of the well, the drill site will be cleaned, rat and mouse holes filled, and trash pit filled. If sufficiently dry, the reserve pit will be filled. If not, any oil accumulation will be removed and the pit fenced for protection of livestock and wildlife. Other than the area needed for operation and production facilities, the site will be contoured as near as possible to its original state. Gas line ditch will be backfilled and the access

road graded for proper drainage and minimum surface damage. Reseeding, or any other restoration, will be as specified by the Bureau of Land Management. Any topsoil will be stockpiled for distribution over the disturbed area upon final grading and for reseeded.

11. Other Information: The area of this location slopes slightly from north to south and will require an approximate cut of 2-1/2' to 3' on the north side with a corresponding fill on the south side. The surface is sandy with no apparent rock. The vegetation is pinon, cedar, oak, bitter brush, antelope brush and very little grass.

The nearest dwelling is a ranch house approximately 9 miles away on the San Juan River. The nearest town or village is LaBoca, Colorado and is approximately 7 miles away. Drainage is into Rattlesnake Canyon to the southwest and on into the San Juan River approximately 9 miles to the south.

The lands involved are Federal Lands in a gas field. There is sheep and cattle grazing in the area. To our knowledge there are no archeological, historical or cultural sites in the area. However, due to the present snow cover and since an archaeological inventory cannot be made at this time, if this permit is approved, we will provide an archaeologist on the site at the time snow is removed and construction begins. Sufficient time will be allowed during construction for a thorough inventory.

With the short period of operations and the restoration of the surface, any disturbance to vegetation and wildlife will be temporary and minimal. It is not anticipated that there will be any substantial impact on the environment.

12. Lessee's or Operator's Representatives:

W. A. Walther, Jr.  
Atlantic Richfield Company  
1860 Lincoln Street, Suite 501  
Denver, Colorado 80295  
Telephone: (303) 573-4049  
Res: (303) 798-5729

B. J. Sartain  
Atlantic Richfield Company  
1860 Lincoln Street, Suite 501  
Denver, Colorado 80295  
Telephone: (303) 573-4053  
Res: (303) 770-7849

Local Representative:

J. E. Taylor  
Atlantic Richfield Company  
P. O. Box 2197  
Farmington, New Mexico 87401  
Telephone: (505) 325-7527  
Res: (505) 325-7968

13. Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Atlantic Richfield Company and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

Feb 13 1978  
Date

W. A. Walther, Jr.  
W. A. Walther, Jr.  
Operations Manager

R 8 W

25

30

29

Koch Ind.  
Gardener  
MV

Koch Ind.  
Gardener  
O 4A

MESAVERDE PART AREA

O 2A  
Koch Ind.  
Gardener  
Fr, PC, Mv

MV

2

38  
Mv

36

31

32

Aztec

61  
MV

Koch Ind.  
Gardener  
MV

Koch Ind.  
Gardener  
O 3A

1  
Fr, Mv

Rattlesnake Canyon

S - NM - 5021

S - NM - 5022

S - NM - 5022

S - NM - 5022

S - NM - 5022

JACQUES UNIT  
ORR WN  
So. Union Oper.

Jacques  
MV

(W/2)  
PACIFIC NW UNIT ORR WN  
EPNG - Oper.

EPNG  
8  
MV

6  
MV

Nordhaus

S - NM - 5021

S - NM - 5022

S - NM - 5022

NORDHAUS ORR WN UNIT  
Gas Rts. (Secs. 1, 11, 12, W/2 13)  
o. Union Prod. - Oper.

12

S - NM - 5022

JAMES G. OXNARD ORR WN UNIT  
(Sec. 8, E/2 Sec. 7)  
So. Union Prod. - Oper.

3  
MV

8

3A  
MV

5  
MV

Nordhaus

S - NM - 5021

S - NM - 5023

S - NM - 5023

S - NM - 5023

So. Union  
1  
MV

QUINN 5 UNIT  
ORR WN

B  
MV

QUINN 3 UNIT (W/2)  
ORR WN

7  
MV

Teel

S - NM - 5021

UNIT

8

S - NM - 5023

TEEL UNIT ORR WN

1  
MV

5  
MV

So. Union  
3  
MV

Quinn

S - NM - 5021

S - NM - 5023

S - NM - 5023

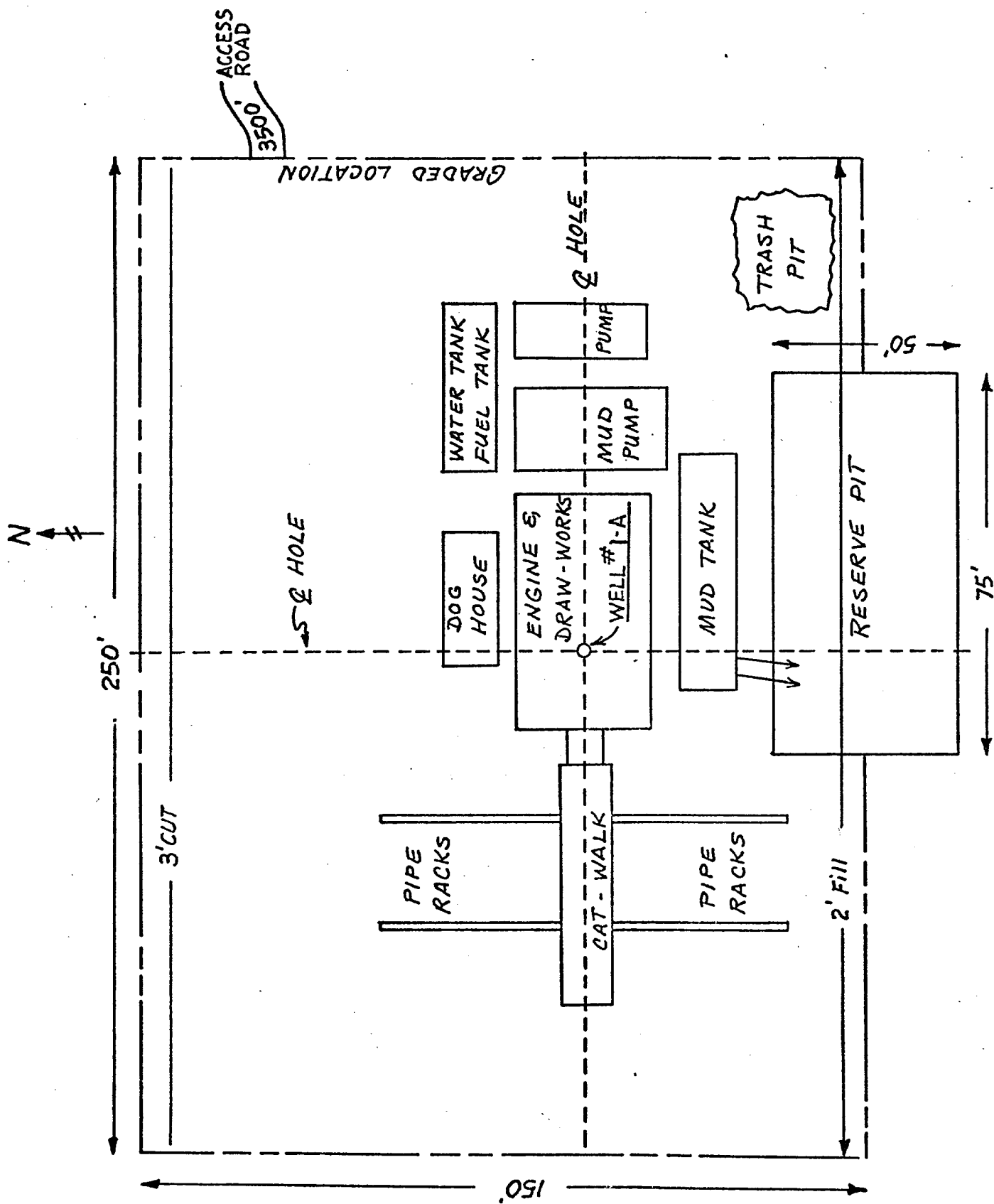
S - NM - 5023

O 2A

3  
MV

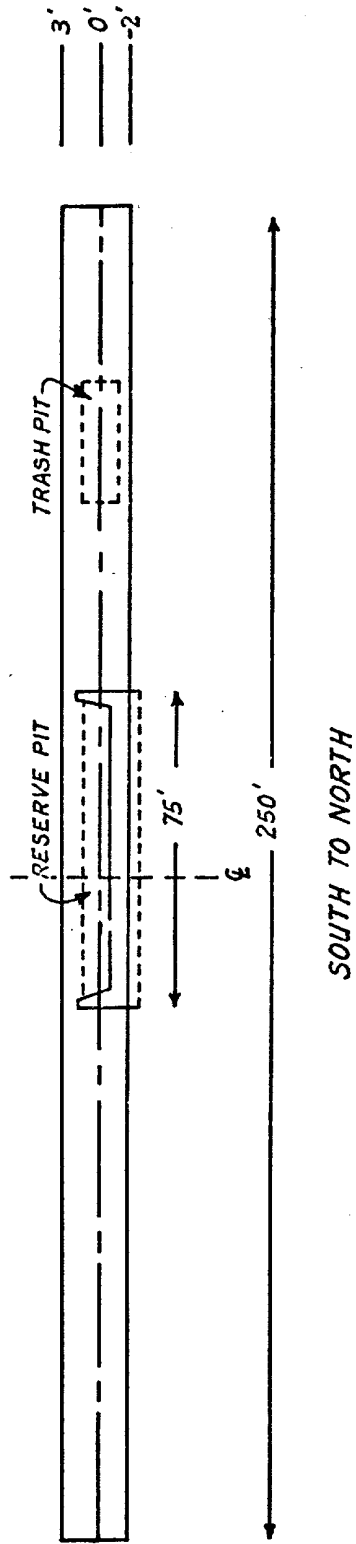
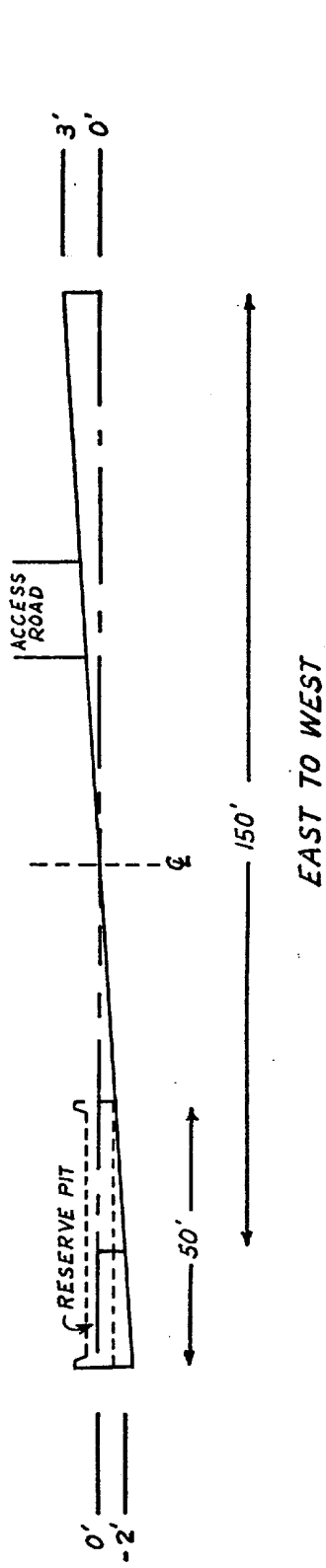
4  
MV

6  
MV



I-A, 31-8  
850' FEL - 850' FSL





JACQUEZ 1-A, 31-8