DRILLING PLAN

JACQUEZ, Well No. 1
NE NE Sec. 6-31N-8W
San Juan County, New Mexico

1. Surface Formation: Tertiary - Wasatch

2. Geologic Markers:

Ojo Alamo	2330'	Base @ 2630'
Pictured Cliffs	3430'	
Lewis Shale	3680'	
Mesaverde	5045'	
Point Lookout	5725'	
Upper Mancos	5900'	

3. Anticipated Mineral Bearing Formations:

Ojo Alamo (Poss. Water)	2330'
Pictured Cliffs (Poss. Gas)	3430'
Mesaverde (Poss. Gas)	5045'
Pt. Lookout (Poss. Gas)	5725'

4. Casing Program:
Surface - 200'± 9-5/8"OD 32.3# H-40 ST&C New
Intermediate - 3830'± 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#T)
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 - 3830' Gel-Chem to maintain hole and set intermediate casing.
3830 - T.D. 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" & 5" scales
FDC-CNL-GR	5" scale

TD to bottom of Intermediate Casing:

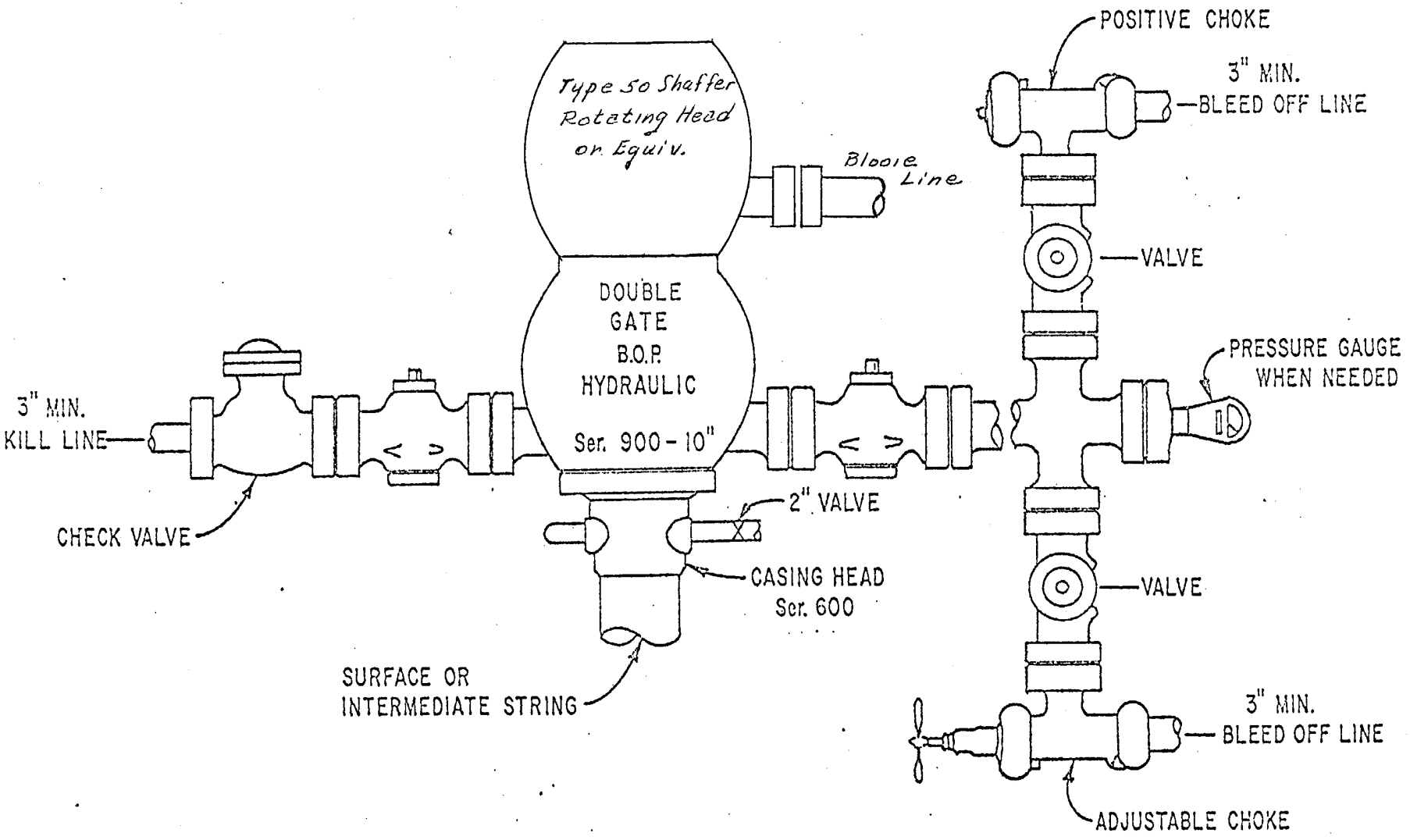
DIL-GR	2" & 5" scales
FDC-SNP-GR	5" scale

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 1000psi. 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.

NTL-6 indicates a minimum of 30 days are required to obtain approval, in which case operations could not be commenced until about July 23, 1977. Unless an additional rig can be located, this well will be drilled after five proposed wells in T27N-R8W, and drilling operations possibly will not be commenced until sometime in September, 1977.


POSITIVE CHOKE
3" MIN.
BLEED OFF LINE
Type 50 Shaffer
Rotating Head
or Equiv.
Blooie
Line
VALVE
DOUBLE
GATE
B.O.P.
HYDRAULIC
Ser. 900 - 10"
PRESSURE GAUGE
WHEN NEEDED
3" MIN.
KILL LINE
2" VALVE
CHECK VALVE
CASING HEAD
Ser. 600
VALVE
SURFACE OR
INTERMEDIATE STRING
3" MIN.
BLEED OFF LINE
ADJUSTABLE CHOKE

Jacquez. No.1

SURFACE USE AND OPERATIONS PLAN

Jacquez, Well #1
NE NE 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., approx 15.5 miles east on State Hwy. 511 to Navajo Dam. From Navajo Dam, proceed approx 11.5 miles North & Northwest on the "Ignacio Hwy" to a turn-off in the northern part of Sec. 33-32N-8W. Turn southwest approx 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 is shown on this map.

2. Planned Access Road: The planned access road will leave the existing road in the SE SE of Sec. 32, extending southwest and west approx. 1-1/4 miles to the well site as shown in "blue" on the attached map. This planned road will have a width of approx 18', sufficient to handle drilling equipment. No grades are anticipated in 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 has no facilities within a 1-mile radius of this proposal. This well 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 approx 18' x 18' x 10" high with 4" peagravel or sand on top. The production unit pad would be approx. 9' x 24', incl small drain pit, and erected on contrete piers. The drain pit will be fenced for protection of livestock and wildlife. 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: Due to drought conditions, water is in very short supply in the area. 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 approx. 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 reseeding.

Jacquez, Well #1 - Cont'd)

11. Other Information: The area of this location is relatively flat, sloping from east to west, and will require an approximate cut of 4' on the East side with a corresponding fill on the west side. The well site is on a very small east-west ridge with slight slope to the north and south. The surface is sandy with no apparent rock. The vegetation is pinon, cedar, sage brush, sparse bitter brush and native grasses. Some areas are more dense but none could be considered as heavy. There are no dwellings, or water wells, in the area.

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, of cultural sites which will be involved; however, an archeological report will be submitted.

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 Representative:

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

Mr. B. J. Sartain
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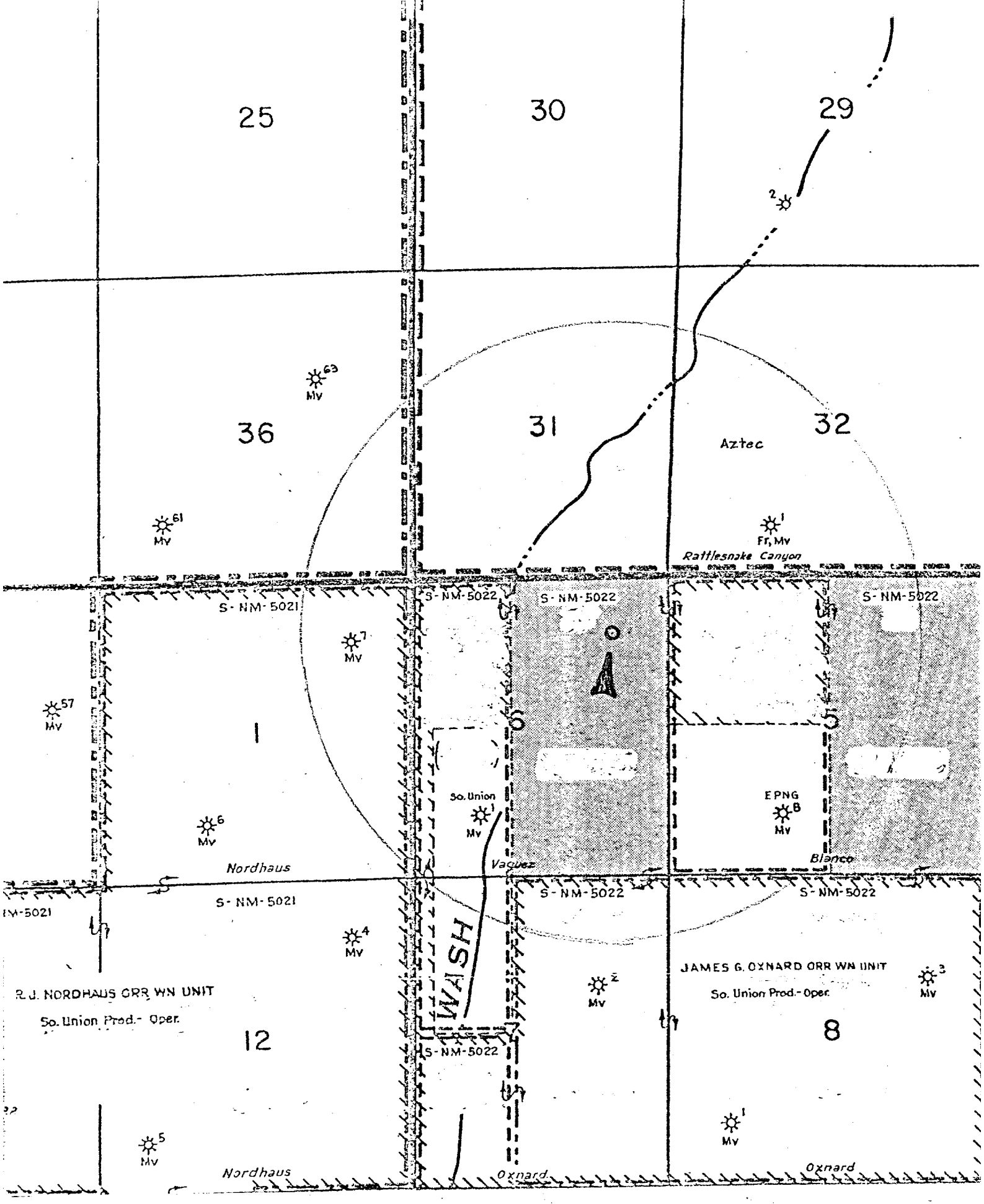
Local Representative: Mr. J. E. Taylor
Atlantic Richfield Company
P. O. Box 2197
Farmington, New Mexico 87401
Phone A/C 505 325-7527
Res. A/C 505 325-7968

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.

June 24th 1977
Date

W. A. Walther, Jr.
Operations Manager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Rattlesnake Canyon
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Vaquez
Blanco
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S-NM-5021
WALSH
R.J. NORDHAUS ORR WN UNIT
So. Union Prod.- Oper.
JAMES G. OXNARD ORR WN UNIT
So. Union Prod.- Oper.
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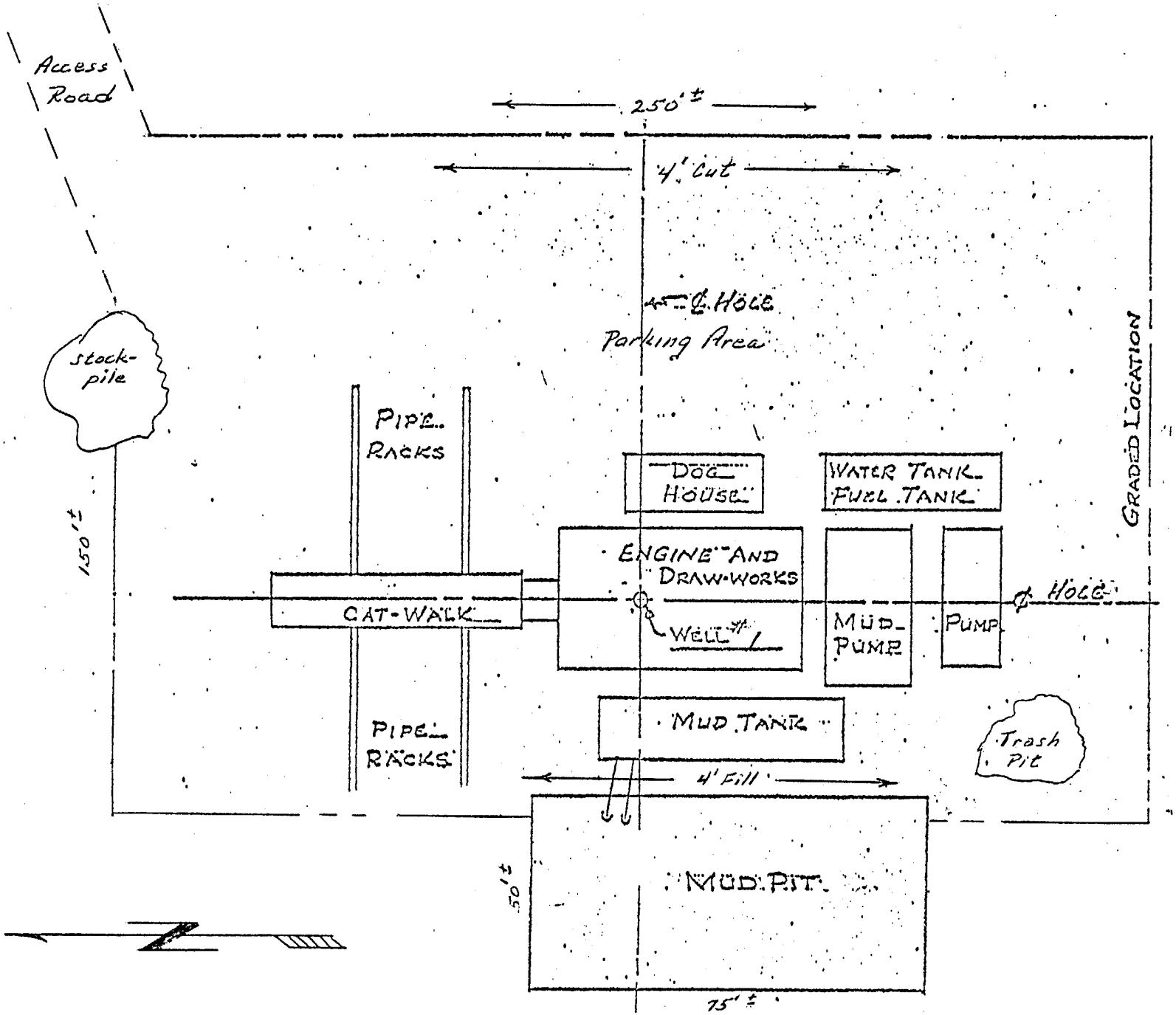
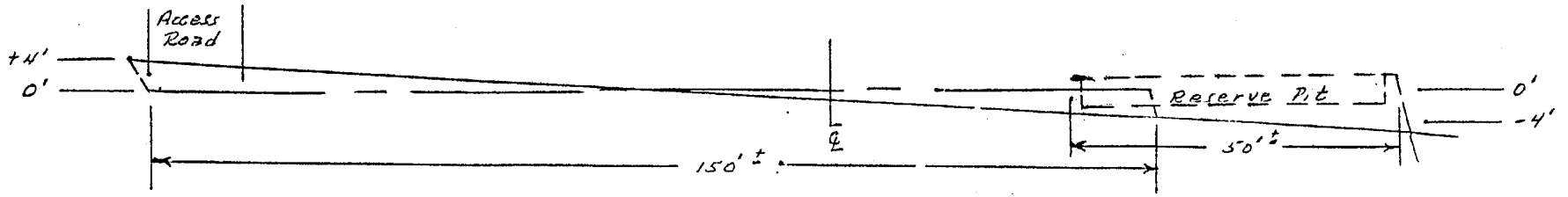
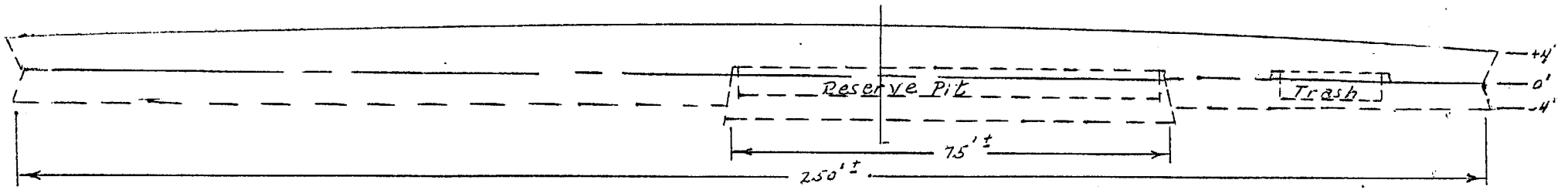
Nordhaus
Oxnard
Oxnard


Access Road
250' ±
4' Cut
℄ Hole
Parking Area
Stock-pile
Pipe Racks
Dog House
Water Tank
Fuel Tank
Graded Location
150' ±
Engine and Draw-works
Cat-walk
Well #1
Mud-Pump
Pump
℄ Hole
Mud Tank
Trash Pit
Pipe Racks
4' Fill
Mud Pit
50' ±
75' ±

Jacquez No 1

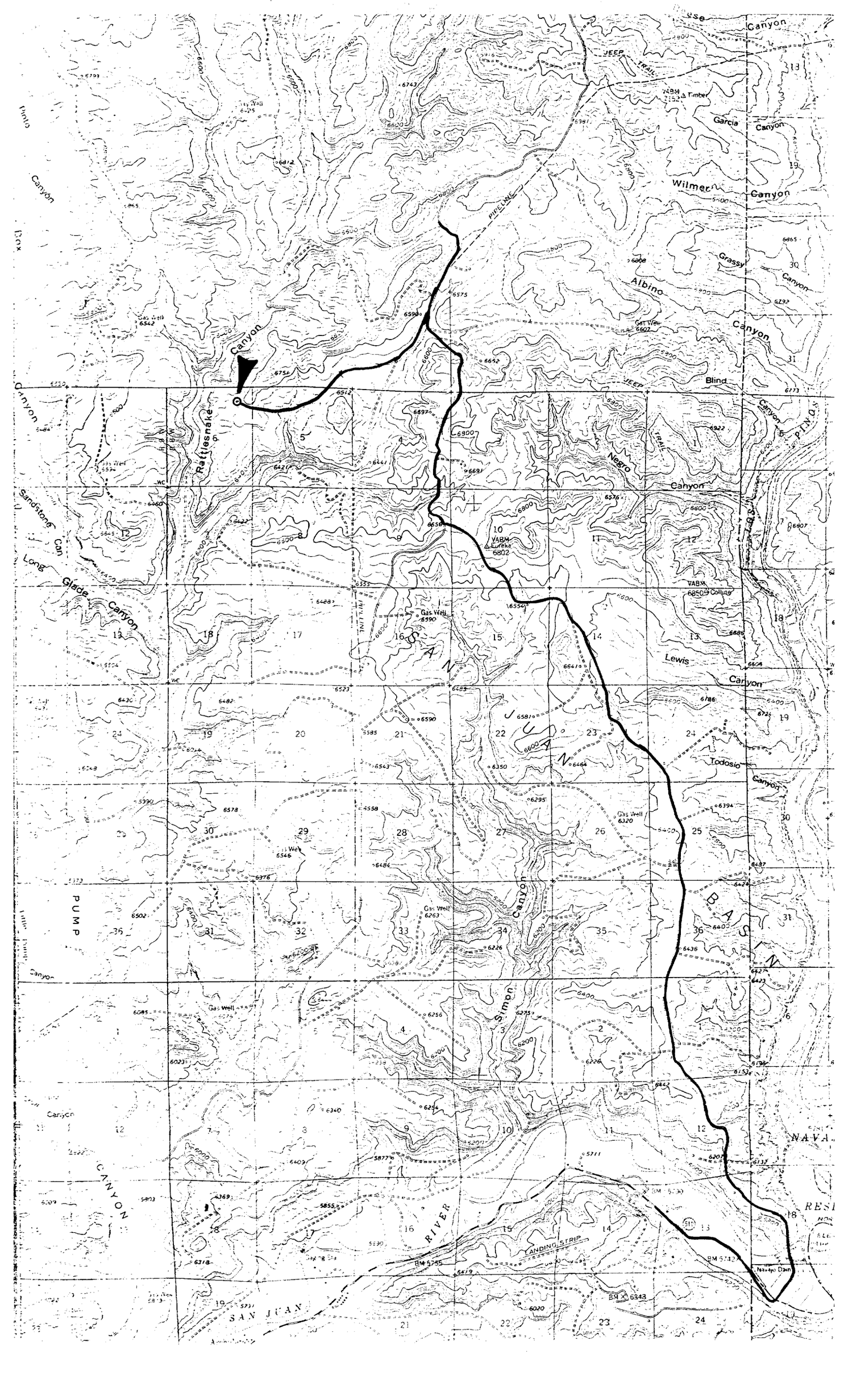


North - South



West - East

Jacquez. No. 1


Canyon
JEEP TRAIL
VABM Timber
Garcia Canyon
Wilmer Canyon
PIPELINE
Grassy Canyon
Albino Canyon
Gas Well 6602
Blind Canyon
Rattlesnake Canyon
Negro Canyon
TRAIL
Lewis Canyon
VABM Collins
Todosio Canyon
Gas Well 6320
Gas Well 6263
Simon Canyon
Gas Well 6546
Gas Well 6590
Gas Well 6542
VABM Eureka 6802
Sandstone Can
Long Glade Canyon
Box Canyon
SAN JUAN
BASIN
PUMP
CANYON
RIVER
LANDING STRIP
BM 5295
BM 5348
Navajo Dam