

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-045-22519

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. 80295

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface
SW NW (Unit E) - 1630' f/North & 1120' f/West lines Sec. 27
At proposed prod. zone
Approx Same

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

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.
1010' f/Lease line
1120' f/drlg unit
(Also to nearest drlg. unit line, if any)

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
856' SSE f/
#4

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6105' Gd, Ungr.

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	250'	200 sx (circ to surface)
7-7/8"	5-1/2"	15.5#	T.D.	750 sx (2 - stage)

Propose to drill well to depth sufficient to test the Mesaverde, set production casing, perforate, test, stimulate if necessary, and dual complete in the Chacra and Mesaverde formations.

Pursuant NTL-6, attached are: Certified Location Plat
Drilling Plan w/ att.
Surface Use and Operations Plan w/ att.



RECEIVED

APR 21 1977

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 4/18/77
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

Okaf

*See Instructions On Reverse Side

should require an additional 72 days or an estimated total of 33 days.

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

Am to be done
of this form
action by either
or may

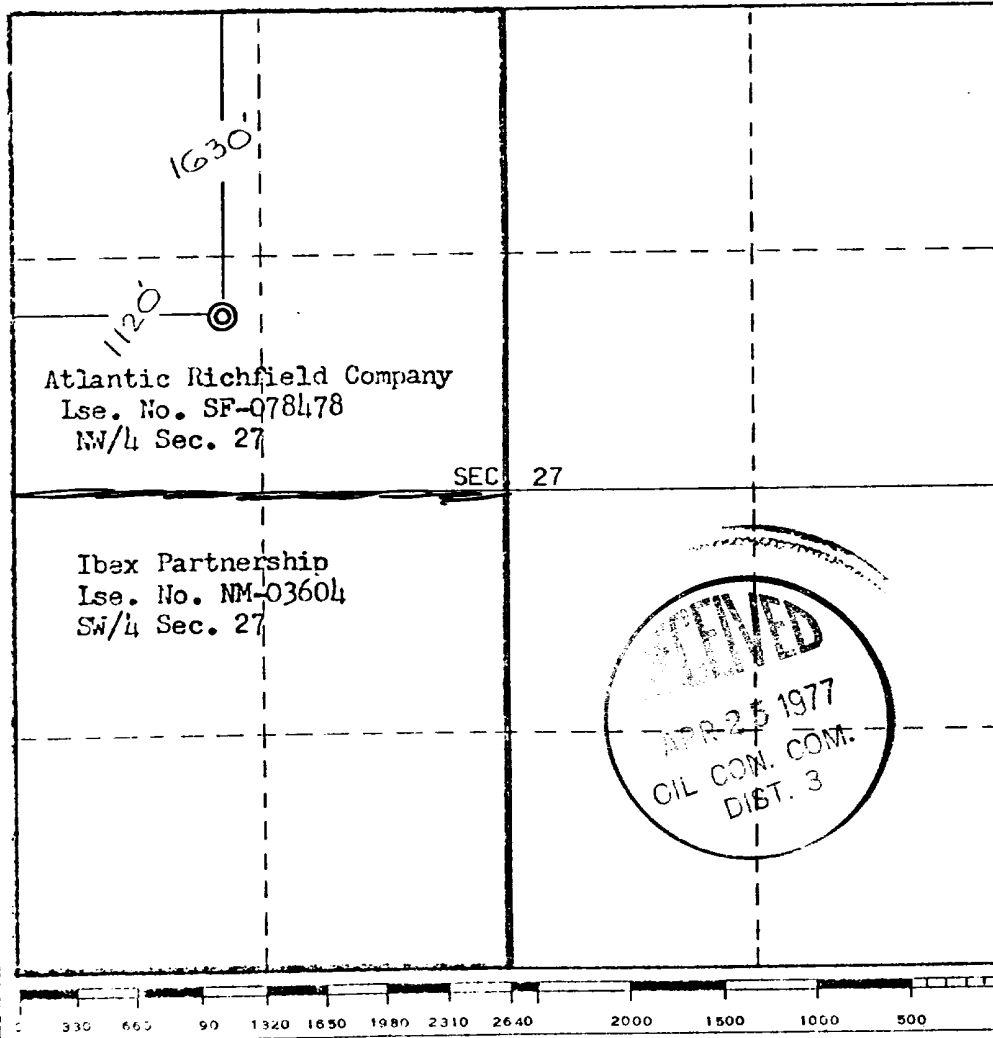
All distances must be from the outer boundaries of the Section.

Operator Atlantic Richfield Company			Lease Marron WN Federal Com.		Well No. 1-A
Unit Letter E	Section 27	Township 27 North	Range 8 West	County San Juan	
Actual Footage Location of Well: 1630 feet from the North line and 1120 feet from the West line					
Ground Level Elev. 6105	Producing Formation Mesaverde & Chacra		Pool Blanco Mesaverde & Largo Chacra	Dedicated Acreage: 320 & 160 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). **Both Federal Leases**
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? *** Operating Agreement has been executed. Communitization Agmt being prepared**
☐ Yes ☒ No * If answer is "yes," type of consolidation _____

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

No allowable will be assigned to the well until all interests have been consolidated (by communitization, 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.

W. A. Walther, Jr.
Name **W. A. Walther, Jr.**
Position **Operations Manager**

Atlantic Richfield Company
Company

April 18, 1977
Date

E. V. Echshaw
I hereby certify that the well location shown on this plat was plotted from field notes of actual survey made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.
REGISTERED LAND SURVEYOR
NEW MEXICO
3602
E. V. ECHSHAW

Date Surveyed
March 31, 1977
Registered Professional Engineer
and/or Land Surveyor

E. V. Echshaw
Certificate No. **3602**
E. V. Echshaw LS

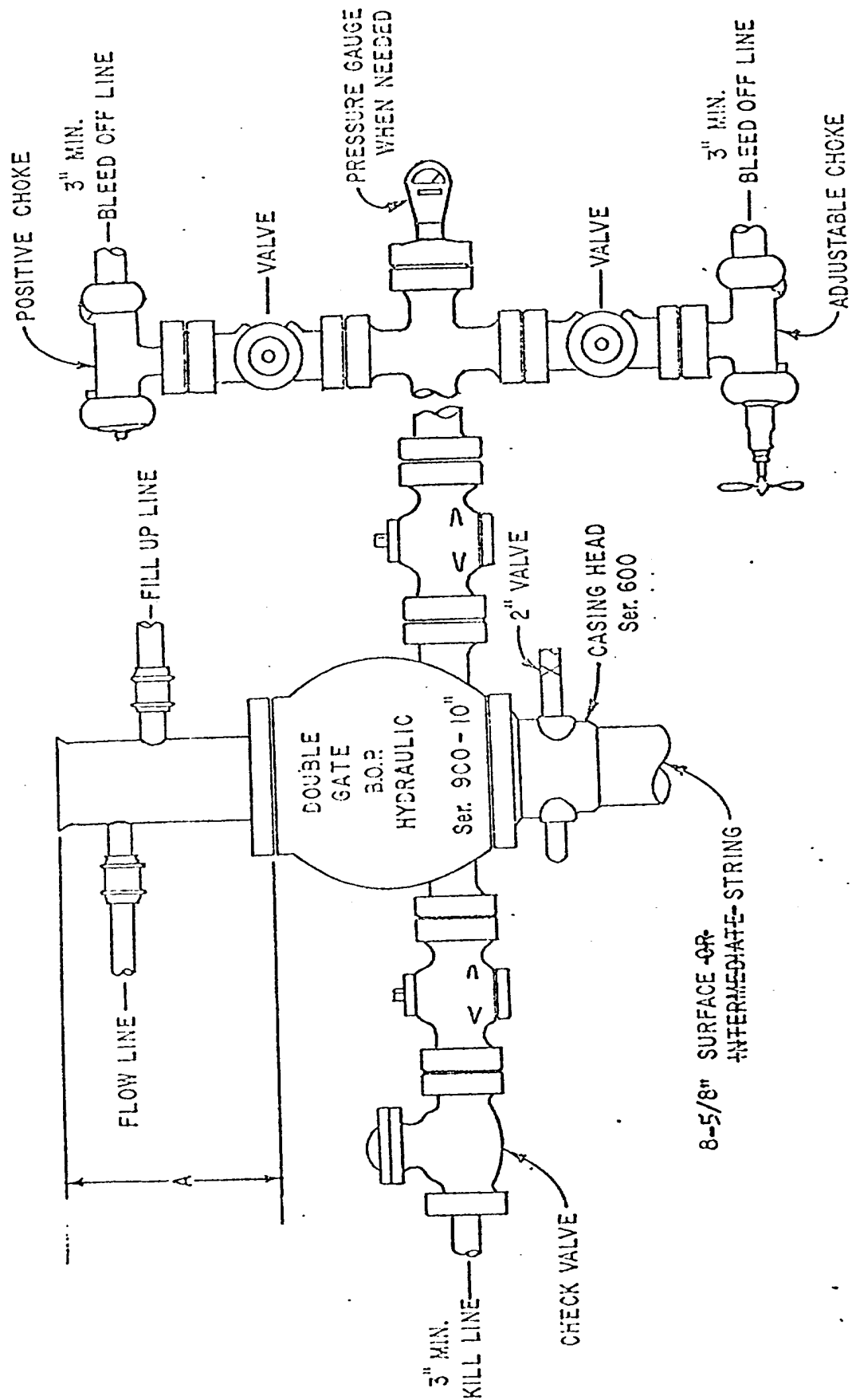
DRILLING PLAN

MARRON WN FEDERAL COM., WELL #1-A
NW/4 Section 27-27N-8W
San Juan County, New Mexico

1. Surface Formation: Tertiary - Wasatch
2. Geologic Markers: Ojo Alamo (base) - 1445'
Pictured Cliffs - 2195'
Chacra - 3125'
Mesaverde - 3825'
Mancos - 4665'
3. Anticipated Mineral Bearing Formations: Ojo Alamo (Poss. Water) - 1335'
Pictured Cliffs (Poss. Gas) - 2195'
Chacra (Poss. Gas) - 3125'
Mesaverde (Poss. Gas) - 3825'
4. Casing Program: Surface - 250'± 8-5/8" CD 24# J-55 New
Prod'n. - T.D. 5-1/2" OF 15.5# J-55 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.
Sketch attached.
6. Drilling Fluid: 0 - 250' Gel and lime to drill surface hole and set casing.
250' - 2950' Water w/gell chemical addition to maintain hole.
2950' T.D. Low solids non dispersed: 9-9.2#; vis 38-45;
water loss 8 cc or less. Maintain weight material
on location.
7. Auxiliary Equipment: Kelly cock
Sub on floor with full opening valve for use in drill pipe
when kelly is not in the string.
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 - Dual Induction Laterolog-8 TD - Surf. Casing
Simultaneous FDC-CNL TD - 2000' ±
Cased Hole - GR-Correl, and CBL w/Var. Dens.
9. Abnormal Pressures, Temperatures, Potential Hazards: There are no abnormal
pressures, temperatures, or potential hazards in the area. The maximum
anticipated pressure is 950 psi. Weight material will be maintained on
location and BOP will be pressure tested and kept in good working condition.
10. Starting Date- Completion: Upon receipt of the District Engineer's approval to
drill, building of the road and location will be commenced, requiring
approximately 4 days. Moving in and rigging up should require 4 days.
Drilling to T.D., logging, and setting casing is estimated to require
13 days. Perforating, testing, treating if required, and completion
should require an additional 12 days, or an estimated total of 33 days.
In the event of delays (rig, services, materials, etc.) 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 May 15, 1977.
Also, this is the 4th well of a five well drilling program, after completion
of the road and location, moving in and drilling operations are estimated
to commence about June 25th, 1977.



MARRON WN FEDERAL COM., WELL #1-A
 NW/4 Section 27-27N-8W
 San Juan County, New Mexico

The water will be trucked

SURFACE USE AND OPERATIONS PLAN

Marron VN Federal Com. Well #1-A
NW/4 Section 27-27N-8W
San Juan County, New Mexico

1. Existing Roads: As shown on the attached "Existing Road, Map 1" and "Existing Road - Planned Road, Map 2". The main access is East from Blanco, New Mexico on Hwy 17 approx. 1-3/8 miles, then turning right (southeasterly) along the east side of Canon Largo. From the turn-off, proceed approx. 4 miles southeasterly along the east side of Canon Largo to "Fivemile Crossing" and cross to the west side of Canon Largo. "Fivemile Crossing" is in the SW/4 Section 26-29N-9W. From "Fivemile Crossing", proceed approx. 11 miles southeasterly, turning southerly, along the west side of Canon Largo to a right-hand turnoff in the NW SE Section 22-27N-8W. Turn right in a southwesterly direction about 5/8 mile, then south 1/4 mile. From this point the new access road to location will need to be constructed. An alternate route is southeasterly from "Fivemile Crossing", up Carrizo Creek, crossing Carrizo Creek, back northwesterly along the west side of Carrizo Creek, then southeasterly along the east side of Canon Largo, crossing to the west side in the NW/4 Section 3-27N-8W. This route is not set forth, or color coded on the attached map.

None of the existing roads will require improvement.

Existing roads as set forth above, and roads within a 1-mile radius are colored "red" on the attached map. The access road to be constructed is colored "blue".

2. Planned Access Road: The planned access road to be constructed will leave the existing road in NW NW Section 27-27N-8W as shown on Map 2. The road will be approx. 900' southeasterly to the location. There will be no grades in excess of 8%. A minimum amount of grading will be done and the natural drainage will be altered very little, if any. There will be no major cuts or fills, culverts, turnouts, gates, cattleguards, or fence cuts. The width will be approx. 18', or sufficient to handle drilling equipment. The surface area is sandy and rocky, and no special surfacing material will be required.
3. Existing Wells: As shown on the attached map. All wells are gas wells.
4. Existing/Proposed Facilities: Atlantic's facilities within a 1-mile radius are as follows: Well #3, SE/4 Section 22 and Well #4, NW/4 Section 27, both are Pictured Cliffs gas wells with approx. 100' buried gas line to gas gathering company facilities.

This well is proposed as a dual Chacra and Mesaverde completion. The maximum facilities anticipated to be required would be two (2) tanks and two (2) production units. This will depend on the amount of liquids produced. All facilities would be located on the drill pad, and there would not be any additional surface disturbance. The tank(s) pad would be approx. 18' x 36' (two tanks) x 10" high with 4" peagravel or sand on top. The production unit(s) pad would be approx. 18' x 24' (incl small drain pit) and the unit(s) erected on concrete 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 the 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 and it is anticipated that Braden Head water from wells in Canon Largo will be used, primarily, Graham #8, NW/4 Section 3-27N-8W, and Marron #7, NE/4 Section 22-27N-8W. Both sources shown on Map 2. The water will be trucked and no new roads, or road improvements, will be required.
6. Construction Materials: Since the surface is sandy and rocky, no construction materials will 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 a temporary tank for later disposition. Trash and debris cleanup will commence as soon as completion rig move out, and final cleanup and contouring will begin as soon as possible.
8. Ancillary Facilities: No ancillary facilities are proposed.
9. Well Site Layout: Per the attached sketches. The reserve pit, which will be approximately 25' 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.
11. Other Information: This location will slope from Southeast to northwest, requiring a 4' cut on the SE corner and corresponding fill on the northwest corner. The surface is primarily sandy with rocks. Vegetation is scattered pinon and juniper trees, sparse yucca, sage brush and scattered clumps of native grasses. There are no dwellings in the area and no water wells. The closest water is in Canon Largo, on occasions.

The lands involved are Federal lands in an established gas field. There is some sheep and cattle grazing in the area. To our knowledge there are no archeological, historical, or cultural sites which will be involved, or in the area.

With the short period of operations and 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:

Mr. 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

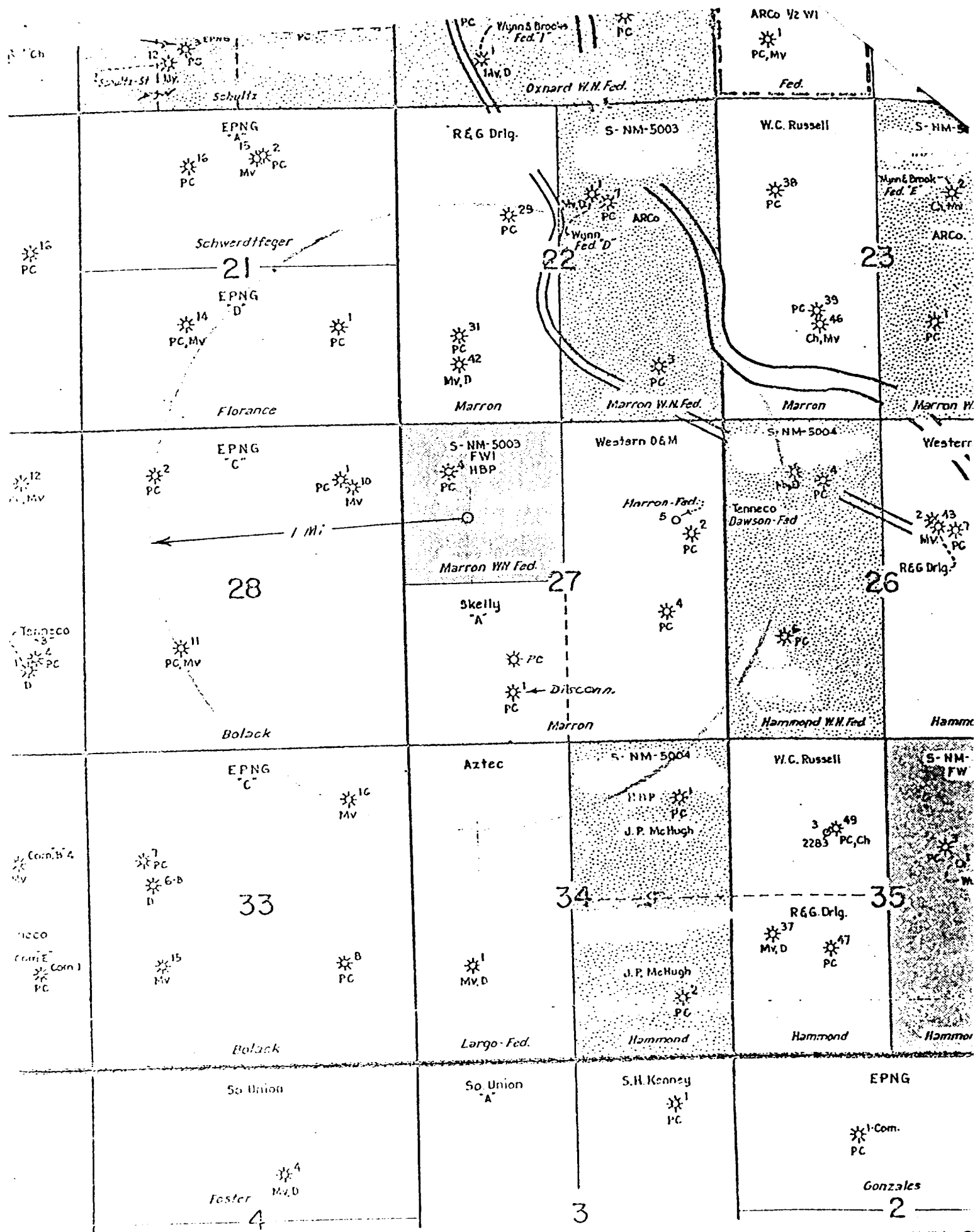
Mr. B. J. Sartain
Atlantic Richfield Company
1860 Lincoln Street, Suite 501
Denver, Colorado 80295
Phone: A/C 303 573-4053
Res: A/C 303 770-7849

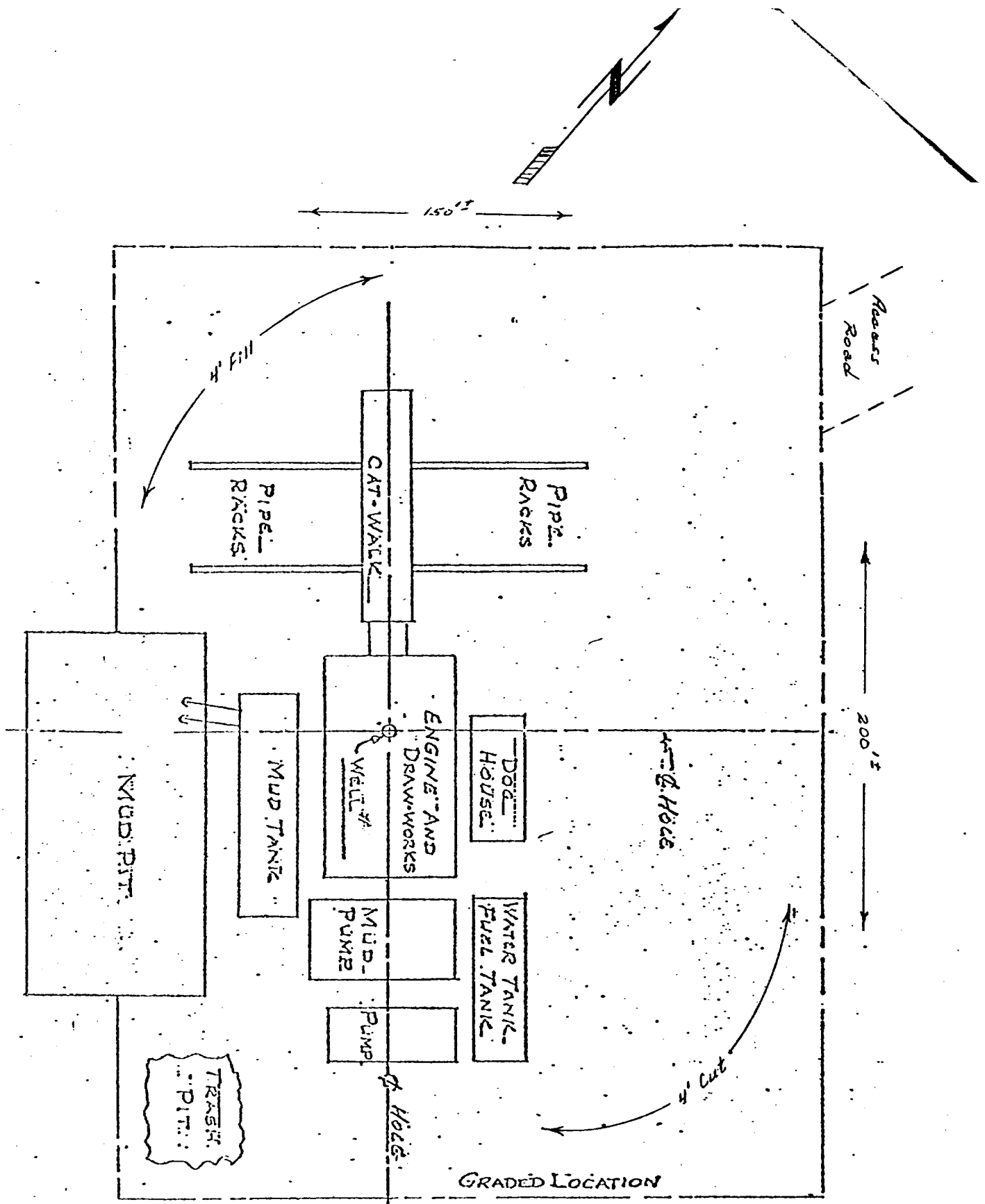
Local Representative: Mr. J. E. Taylor
Atlantic Richfield Company
P. O. Box 2197
Farmington, New Mexico 87401
Phone: A/C 505 325-7527
Res: A/C 505 325-7968

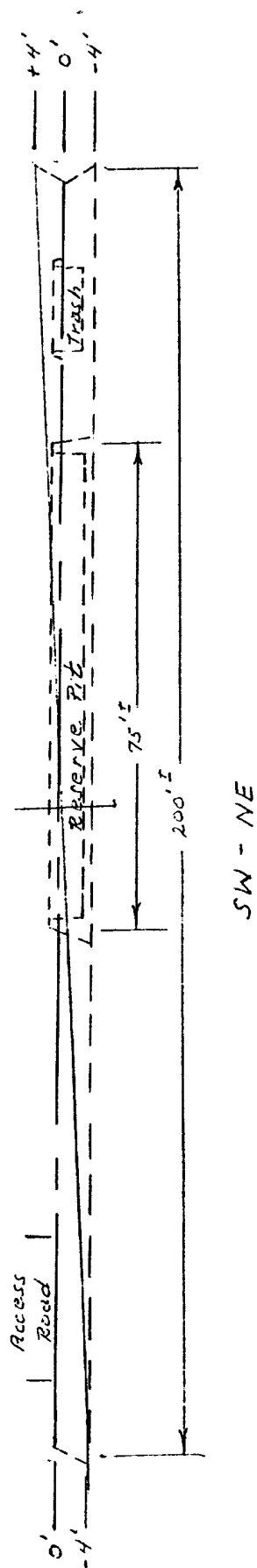
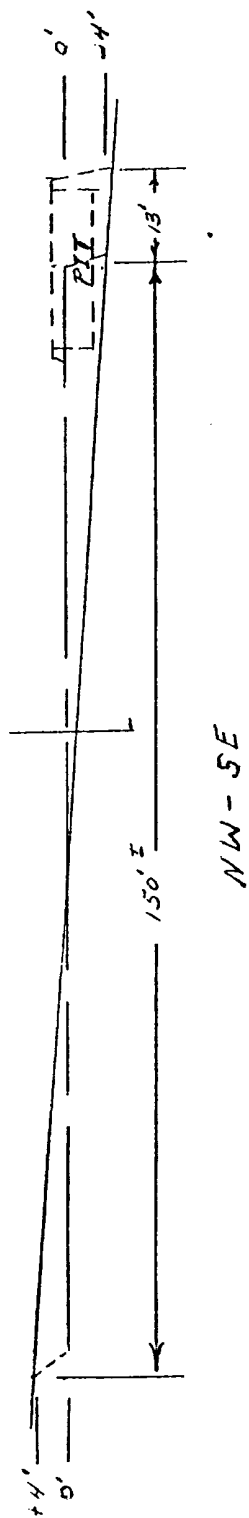
13. Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that 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.

Date

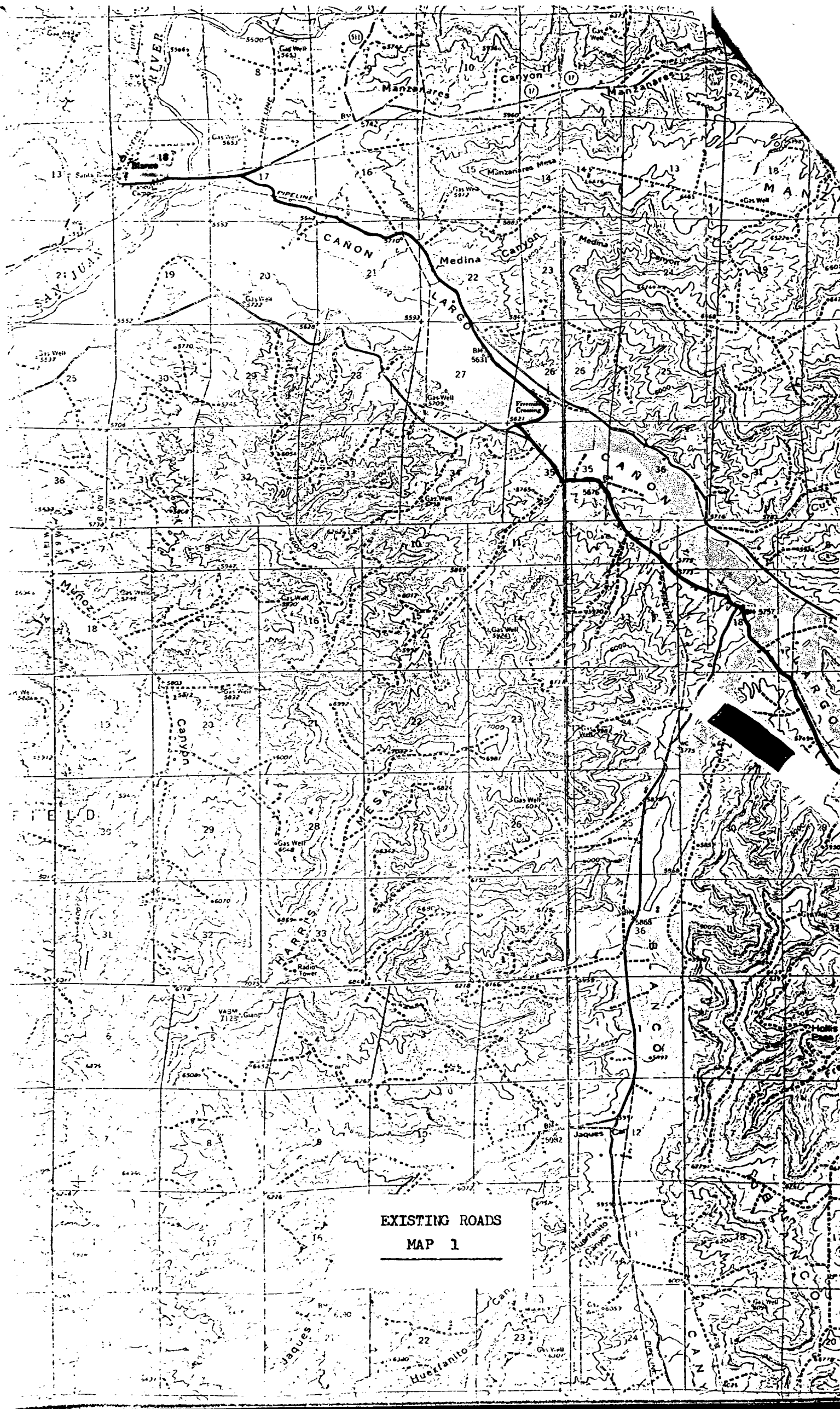
W. A. Walther, Jr.
W. A. Walther, Jr.
Operations Manager

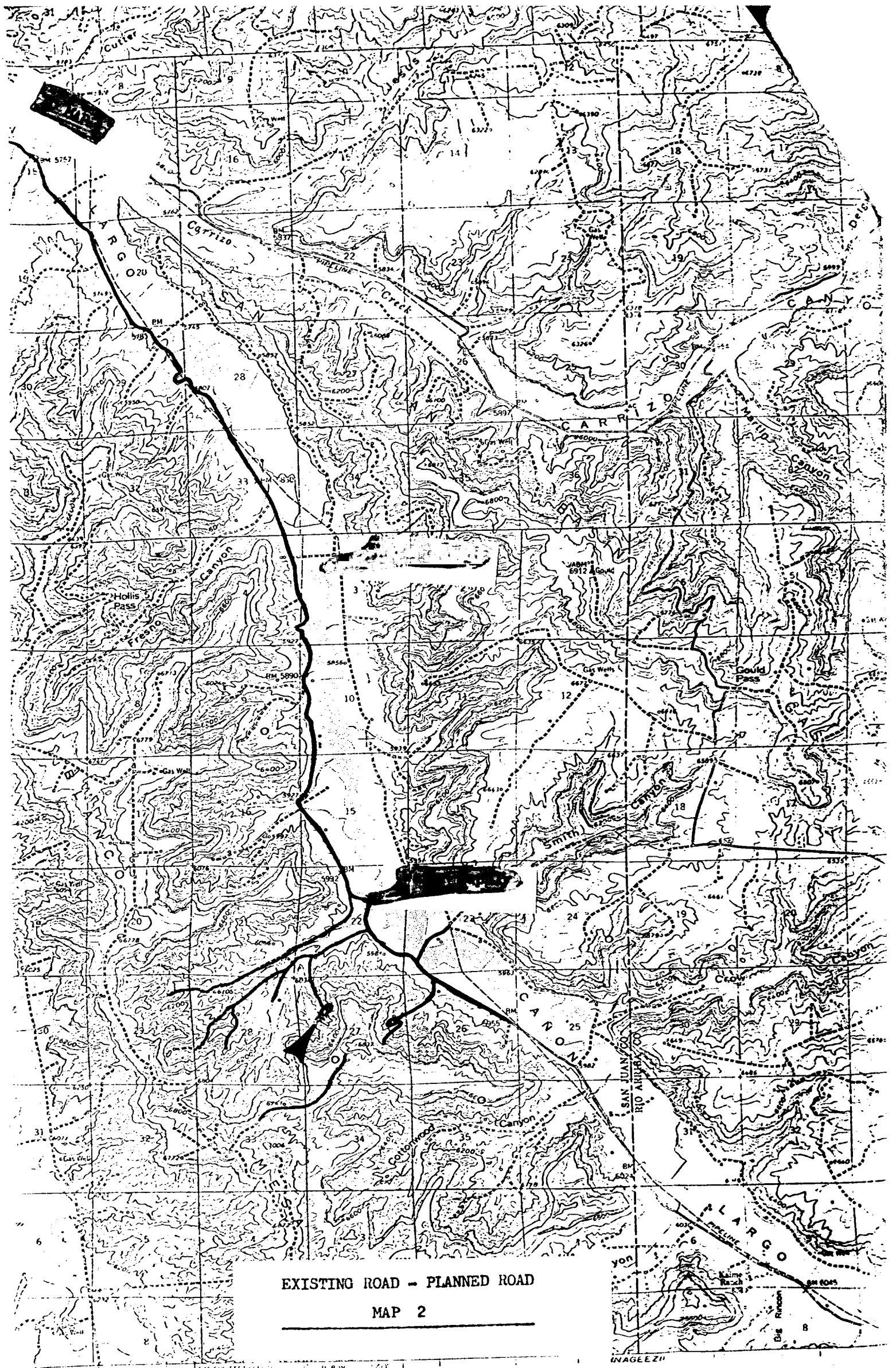






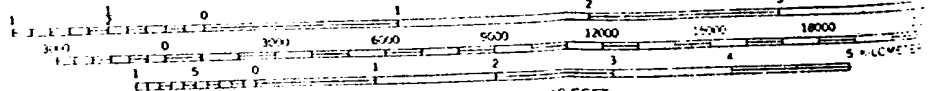
MARION VN FEDERAL COM., WELL #1-A
 NW/4 Section 27-27N-8W
 San Juan County, New Mexico





EXISTING ROAD - PLANNED ROAD
MAP 2

SCALE 1:62,500



CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL

by the Geological Survey

methods from aerial
photographs 1959
American datum
on coordinate system.