

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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
Unit B - N/4 NE - 790' f/North & 1450' f/East lines Sec. 35

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.

(Also to nearest dirg. unit line, if any)

790' - Both

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

1071' North

f/43

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

6695' GR, ungr.

23.

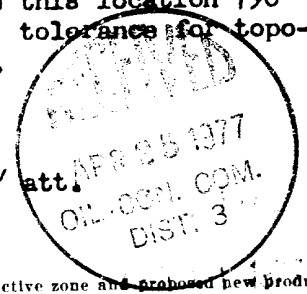
PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" OD	24#	250'	200 sx (Circ to surface)
7-7/8"	5-1/2" OD	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.

Due to the topography of the area, it has been necessary to stake this location 790' from the outer lease boundary. Spacing orders provide for a 200' tolerance for topographic reasons, and approval of the above location is requested.

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



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. M. Smith, Jr.
W. M. Smith, Jr.

(This space for Federal or State office use)

TITLE

Operations Manager

DATE

4/18/77

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

OK

*See Instructions On Reverse Side

RECEIVED
DIST. 3

should require an additional 12 days on an estimated total of 35 days

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C
Supersedes
Effective 1-1-

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

Operator Atlantic Richfield Company			Lease Hammond WN Federal		Well No. 7
Section B	Section 35	Township 27 North	Range 8 West	County San Juan	

Actual Footage Location of Well:

790	feet from the	North	line and	1450	feet from the	East	line
End of well flow.	Producing Formation Mesaverde & Chacra		Pool Blanco Mesaverde & Largo Chacra		Dedicated Acreage: 320 & 160		Acres
6695							

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

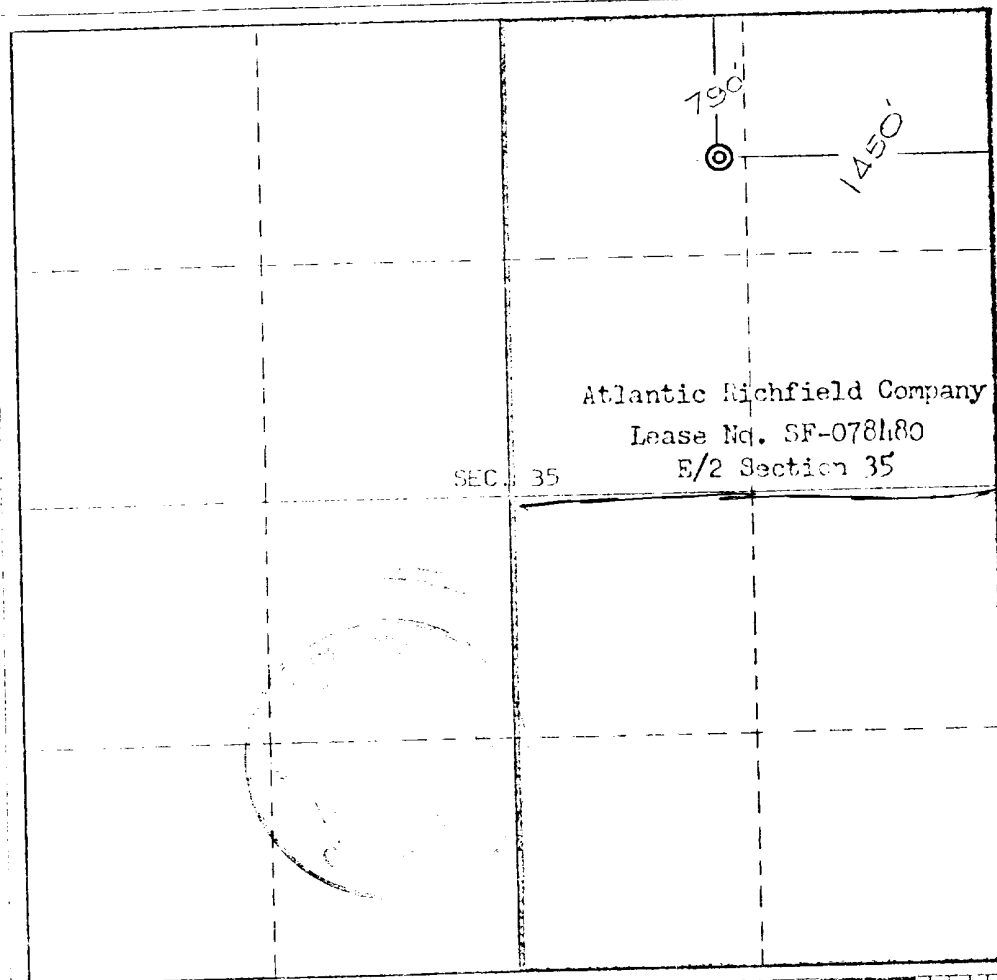
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, 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 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.**

Operations Manager
Position

Atlantic Richfield Company
Company

April 18, 1977
Date

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

3602

V. ECHOHAWK

Date Surveyed
April 1, 1977

Registered Professional Engineer
and/or Land Surveyor

E. V. Echohawk

Certificate No. **3602**

E. V. Echohawk LS

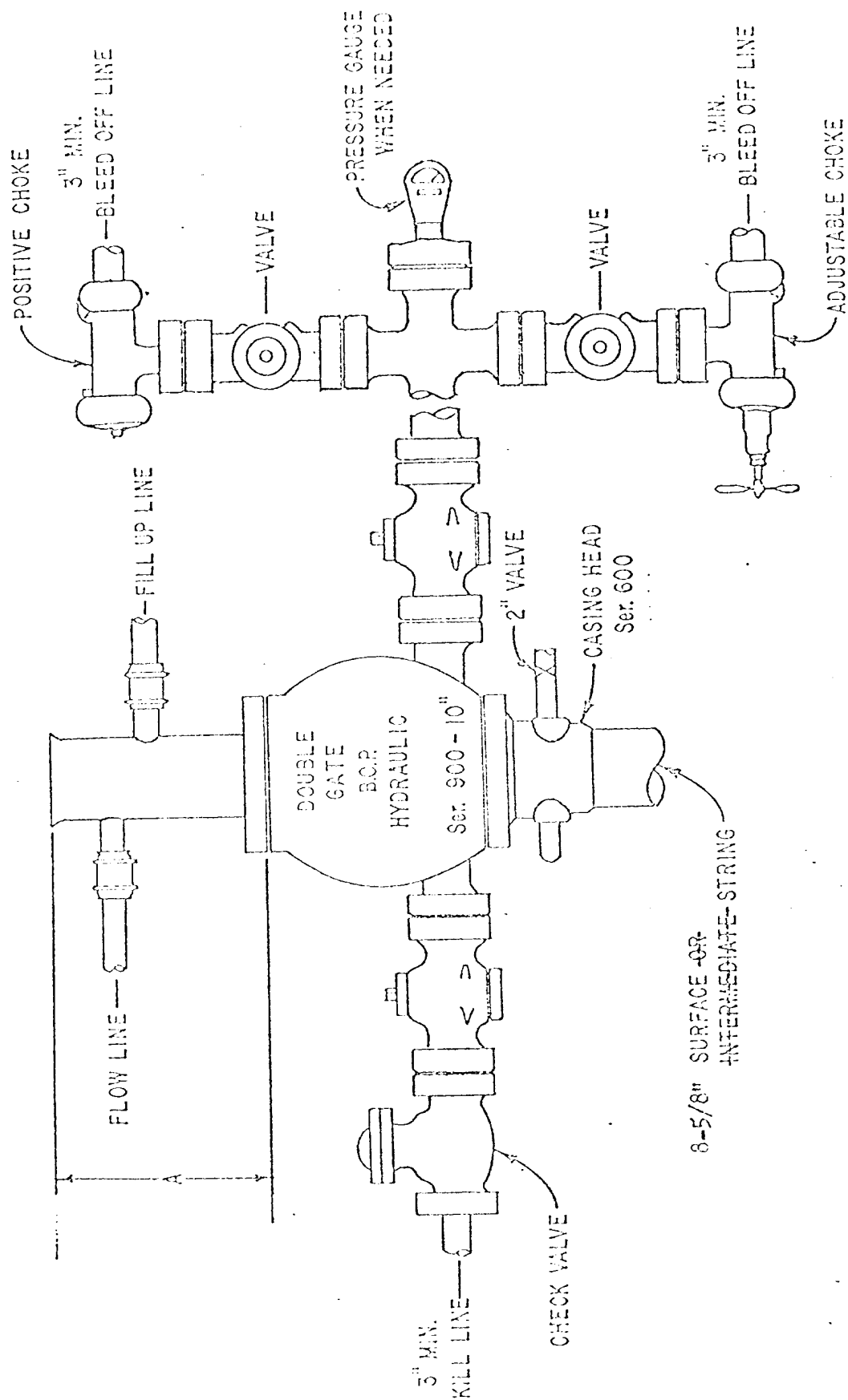
DRILLING PLAN

HAMMOND WN. FEDERAL, Well #7
N 1/2 NE Section 35-27N-8W
San Juan County, New Mexico

1. Surface Formation: Tertiary - Wasatch
2. Geologic Markers: Ojo Alamo (base) - 2050'
Pictured Cliffs - 2805'
Chacra - 3745'
Mesaverde - 4375'
Mancos - 5245'
3. Anticipated Mineral Bearing Formations: Ojo Alamo (Poss. Water) - 1940'
Pictured Cliffs (Poss. Gas) - 2805'
Chacra (Poss. Gas) - 3745'
Mesaverde (Poss. Gas) - 4375'
4. Casing Program: Surface - 250'± 8-5/8" OD 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' - 3395' Water w/gell chemical addition to maintain hole.
3395' - 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 7 days. Moving in and rigging up should require 3 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 35 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 3rd 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 10th, 1977.



KARACAND WEL FEDERAL, WELL #7
 NW NE Section 35-27N-8W
 San Juan County, New Mexico

SURFACE USE AND OPERATIONS PLAN

HAYMOND WN FEDERAL, WELL #7
NW NE Section 35-27N-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. 1-3/4 miles, then turning right (southeasterly) along the east side of Canon Largo. From the turn-off, proceed approx 1/4 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 Sec. 26 29N-8W. From "Fivemile Crossing", proceed approx 7 miles southeasterly, then turning right about the C SE/4 Sec. 33-28N-8W, up Fresno Canyon-Hollis Pass Road. Follow road to top of Blanco Mesa, then generally south to the SW/4 Sec. 33-27N-8W (approx 10 mi after leaving Canon Largo). Turn back northeasterly approx 1-1/2 mi to access road. 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 will leave the existing road near the disconnected well in SW/4 Sec. 27-27N-8W. A dim jeep trail extends southeasterly and will be improved approximately 1-1/2 miles to the location. A minimum amount of grading will be done and the natural drainage will be altered very little, if any. No grades will be in excess of 8%. There will be no major cuts, 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 with rock, and no special surfacing material will be required.

3. Existing Wells: As shown on the attached Map.

4. Existing/Proposed Facilities: Atlantic's facilities within a one mile radius are as follows: Well #1, SW/4 Sec. 25; Well #2, SE/4 Sec. 35; Well #3, NE/4 Sec. 35; and Well #6, SW/4 Sec. 26: are all Pictured Cliffs gas well, each having approx. 100' of buried gas line to gas gathering company's facilities.

This well is a proposed dual Chacra & Mesaverde completion. The maximum facilities anticipated to be required would be two tanks and two 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 1/4" peagravel or sand on top. The production unit(s) pad would be approx 18' x 24' (Incl small drain pit) and the units 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 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 Sec. 3-27N-8W, and Marron #7, NE/4 Sec. 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 with rock, 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, ect..(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 moves 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 approx. 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 slopes Northeast to southwest, and will require an approximate 2' cut on the North & East sides with 2' fill on the South and west sides. Surface is sandy with rock. Vegetation is pinon, and juniper trees, sage brush, mormon tea, prickly pears, yucca, and sparse clumps of native grasses. There are no dwellings in the area and no water wells.

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

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:

Mr. W. A. Walther, Jr
Atlantic Richfield Company
1860 Lincoln Street, Suite 50A
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

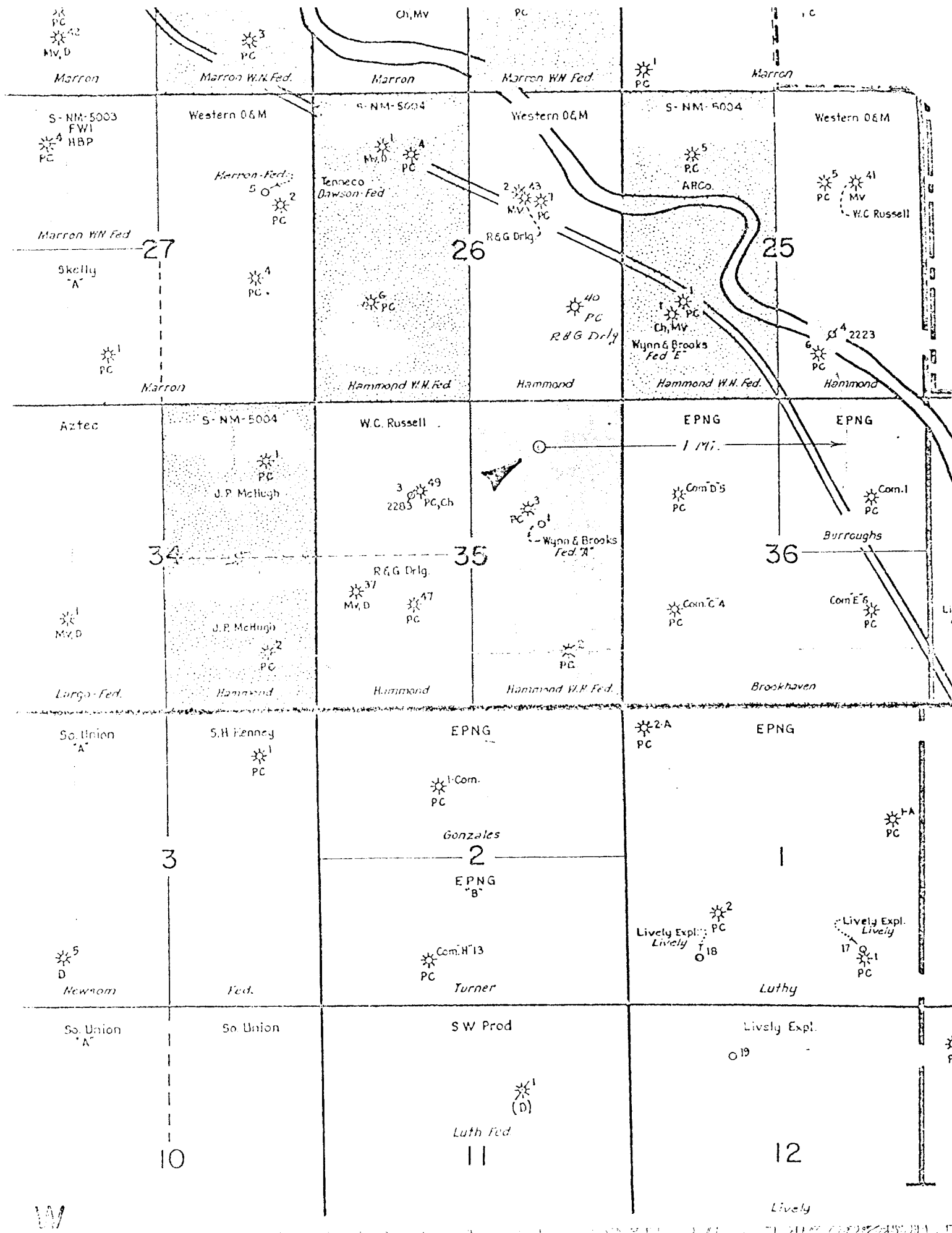
Local Representative:

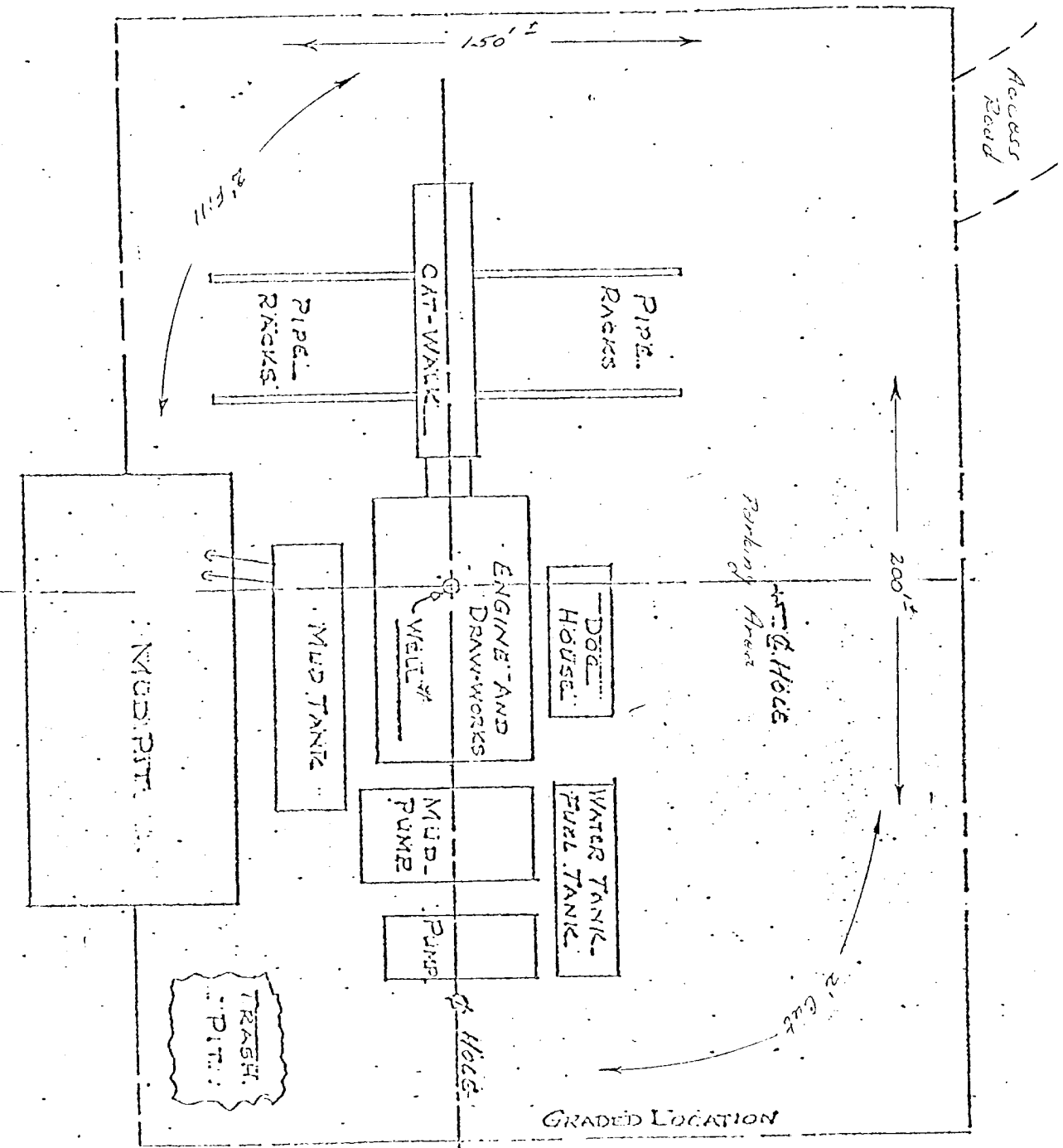
Mr. J. E. Taylor
Atlantic Richfield Company
P. O. Box 2197
Farmington, New Mexico 87401
Phone: A/C 505 325-7527
Res: A/C 505 325-7968

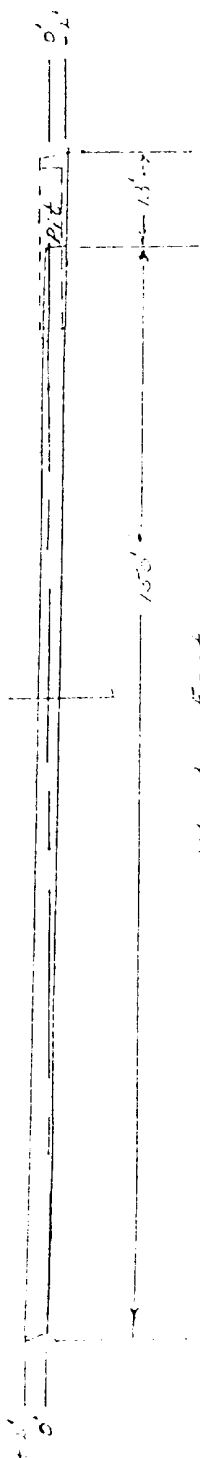
13. Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that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

4-18-72
Date

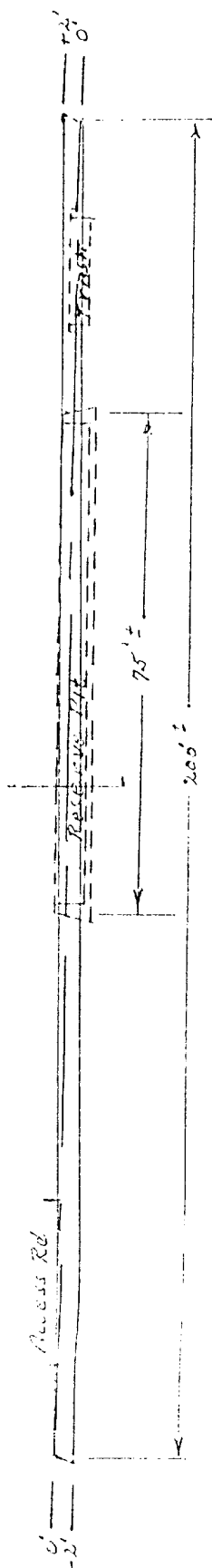
W. A. Walther, Jr.
W. A. Walther, Jr.
Operations Manager



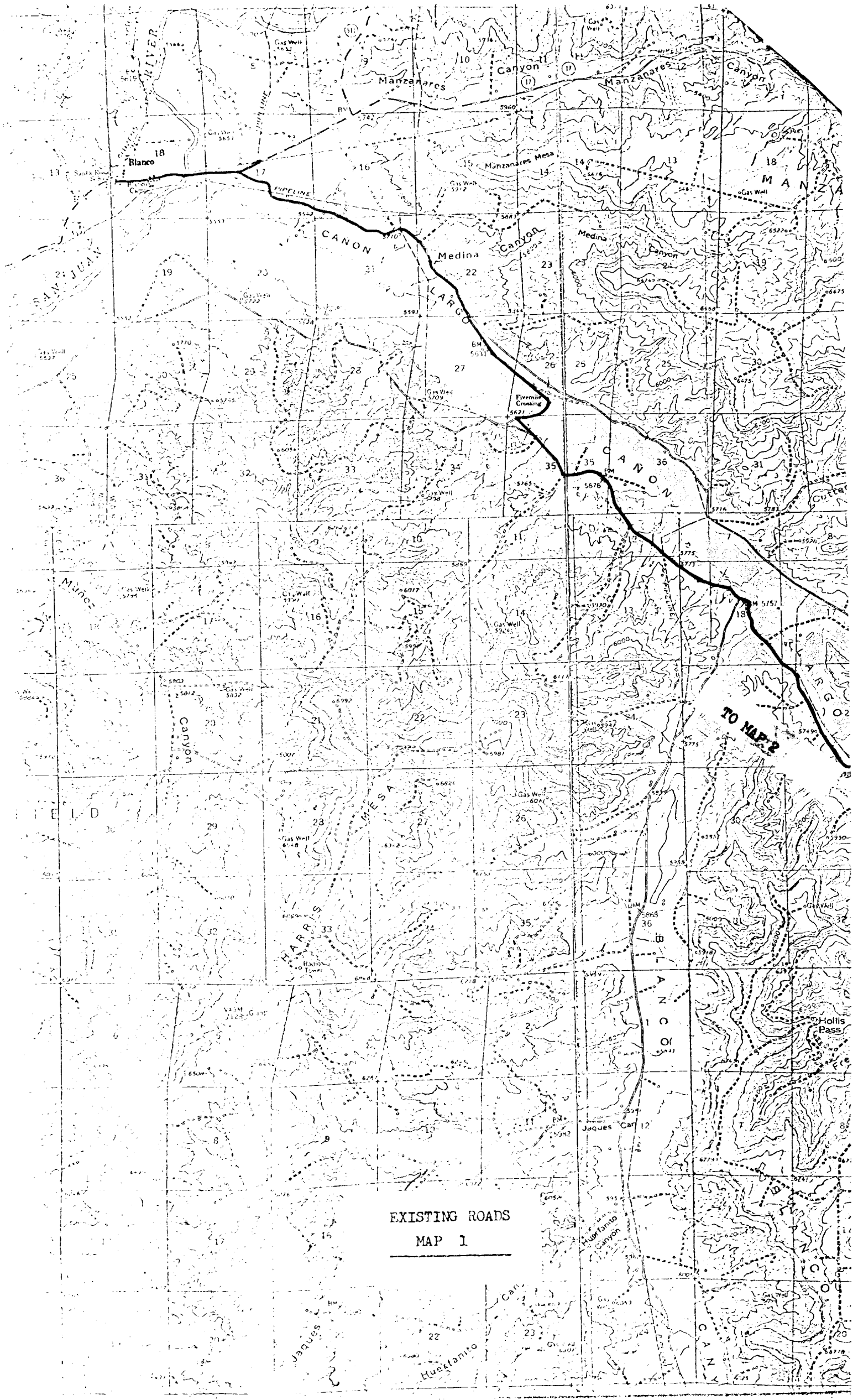




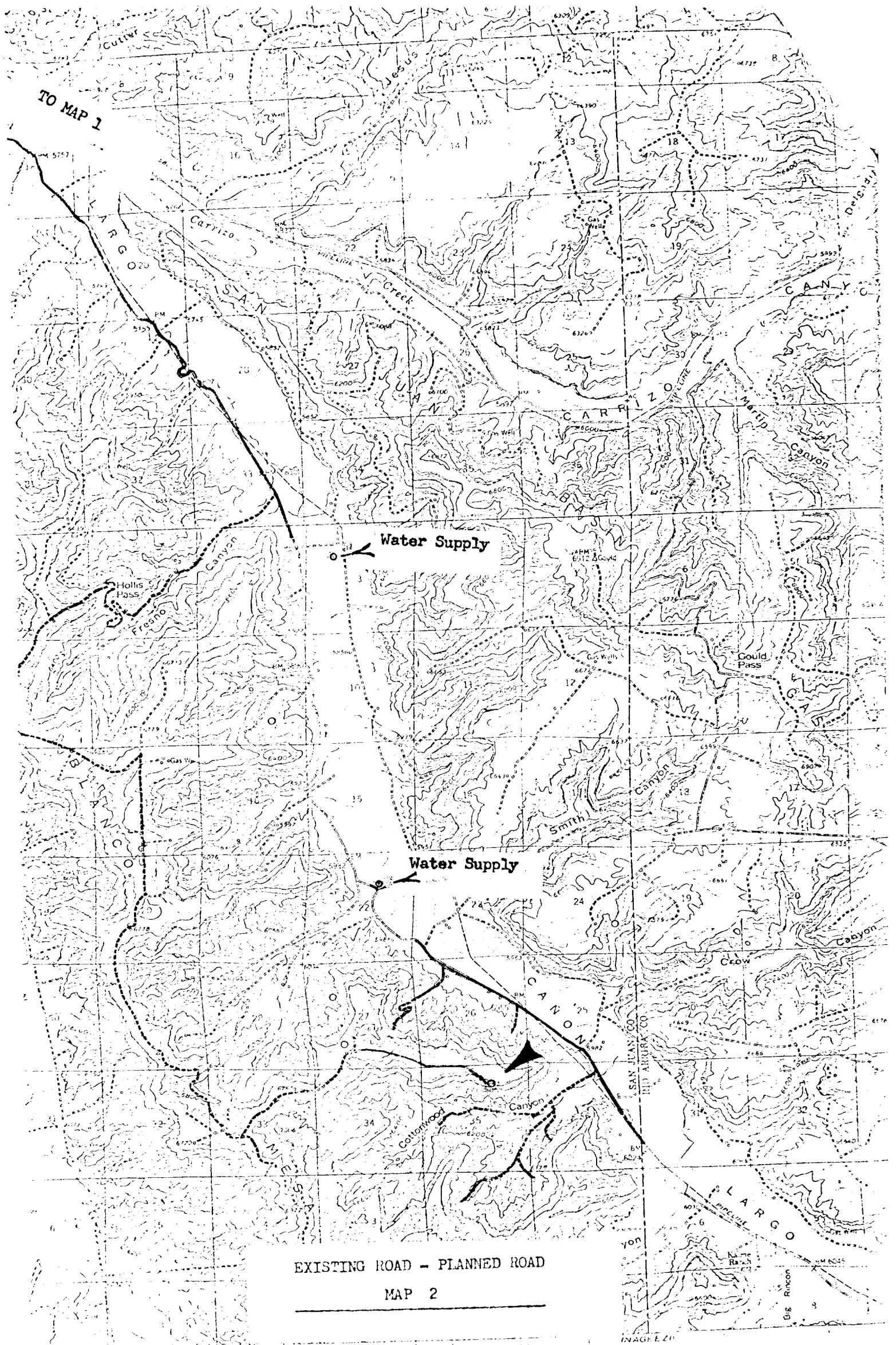
West - East



HAMMOND WN FEDERAL, Well #7
NW NE Section 35-27N-8W
San Juan County, Now Mexico



EXISTING ROADS
MAP 1



by the Geological Survey

paths from aerial
photos 1959
American Datum
T.M.C. coordinate system

