

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-22368

5. LEASE DESIGNATION AND SERIAL NO.

SF-078534

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Grace Federal 35

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Escrito Gallup

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

Sec. 35, T24N-R7W

12. COUNTY OR PARISH

Rio Arriba

13. STATE

New Mexico

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

Grace Petroleum Corporation

3. ADDRESS OF OPERATOR

1515 Arapahoe St., 3 Park Central, Ste. 200, Denver, CO 80202

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

At surface
890' FNL, 830' FWL

At proposed prod. zone

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

50 miles SE of Bloomfield, New Mexico

15. DISTANCE FROM PROPOSED*

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

890' FNL, 830' FWL

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

16. NO. OF ACRES IN LEASE

1202.88

19. PROPOSED DEPTH

5750'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

FW 80

20. ROTARY OR CABLE TOOLS

Rotary

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

7009' Ungraded Ground

22. APPROX. DATE WORK WILL START*

July, 1980

23.

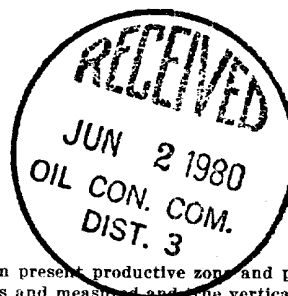
PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	300'	Cement to Surface
7-7/8"	4-1/2"	10.5#	TD	300 sx, Class "G"

It is proposed to drill and test the Gallup Formation at the above location. Total depth will be approximately 5750'.

A 4 1/2" production string will be run and cemented, or the well plugged and abandoned, as per regulations, whichever test indicates.

See attached for pertinent information.



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

TITLE

Southern District
Operations Manager

DATE

4-15-80

(This space for Federal or State office use)

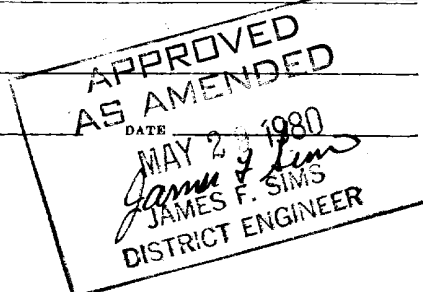
PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:



NMOCC

*See Instructions On Reverse Side

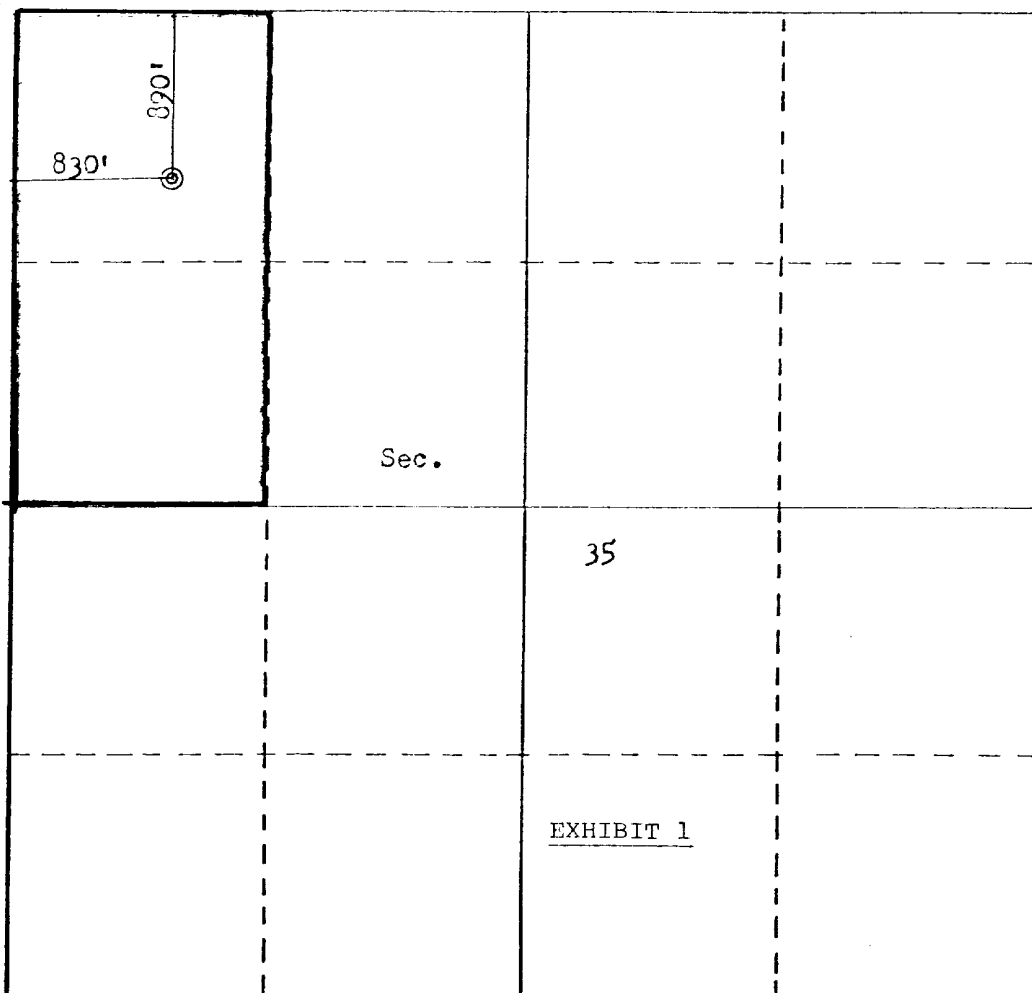
All distances must be from the outer boundaries of the Section

Operator GRACE PETROLEUM CORPORATION			Lease GRACE-FEDERAL 35		Well No. 1
Unit Letter D	Section 35	Township 24N	Range 7W	County Rio Arriba	
Actual Footage Location of Well: 890 feet from the North line and 830 feet from the West line					
Ground Level Elev. 7009	Producing Formation Gallup	Pool Escrito <i>Gallup ext</i>		Dedicated Acreage: W <i>80</i> Acres	

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). Single lease
 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
- ☐ 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.) N/A

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.

Scotty A. Smith
Name

Scotty A. Smith

Position Southern District
Operations Manager

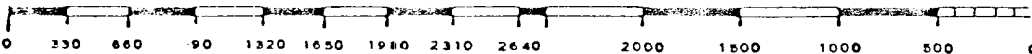
Company
Grace Petroleum Corporation

Date
March 26, 1980

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

Date Surveyed
March 25, 1980
Registered Professional Engineer
and/or Land Surveyor

Fred B. Kerr Jr.
Fred B. Kerr Jr.
Certificate No. 3950



SURFACE USE PLAN

OPERATOR: Grace Petroleum CorporationLEASE & WELL NAME: Grace Federal 35-1LOCATION: NWNW Sec. 35, T24N-R7W (890' FNL, 830' FWL)COUNTY & STATE: Rio Arriba, New Mexico

TO: The United States Geological Survey (USGS) and the Bureau of Land Management (BLM).

The following information, maps, plats, and descriptions of various surface characteristics should fulfill the requirements of the various agencies as to the environmental commitment of the operator at the above named well site.

1. Geologic Name of the Surface Formation

San Jose

2. Estimated Tops of Important Geologic Markers

Picture Cliffs	2110'
Lewis	2210'
Chacra Zone	2530'
Cliff House	3650'
Menefee	3750'
Point Lookout	4400'
Mancos	4630'
Gallup	5410'

3. Estimated Depths at which Anticipated Water, Oil, Gas, or Other Mineral-Bearing Formations are Expected to be Encountered

Possible oil and/or gas zones are Picture Cliffs (2110')
Point Lookout (4400') and Gallup (5410')

4. Proposed Casing Program (including the size, grade, and weight-per-foot of each string and whether new or used)

8-5/8", K-55, 24#/ft., new to approximately 300'.
4-1/2", K-55, 10.5#/ft., new to TD, approximately 5750'.

(continued)

5. Lessee's or Operator's Minimum Specifications for Pressure Control Equipment which is to be used, a Schematic Diagram thereof Showing Sizes, Pressure Ratings (or API series), and the Testing Procedures and Testing Frequency

B.O.P. will be as shown on Exhibit 3. The blind and pipe rams will be tested to 2000 psi and held for 20 minutes for each set of rams before the surface casing shoe is drilled out. During drilling, the pipe rams will be closed once a day and a check made for seating, fluid loss, and operations. On each trip, the blind rams will be closed and a check made for seating, fluid loss and operation.

6. Type and Characteristics of the Proposed Circulating Medium or Mediums to be Employed for Rotary Drilling and the Quantities and Type of Mud and Weighting Material to be Maintained

Circulating medium for 12 $\frac{1}{2}$ " surface hole will be gel and lime mud to set 8-5/8" surface casing. For 7-7/8" hole, we propose a CMC mud system weighing 3.8 to 9.1 ppg with a fluid loss of 10 cc or less.

7. Auxiliary Equipment to be Used (such as kelly cocks, floats at the bit, monitoring equipment on the mud system, a sub on the floor with a full opening valve to be stabbed into the drill pipe when the kelly is not in the string, etc.)

A kelly cock will be used on the kelly, and a bottom hole float will also be installed. A full opening safety valve subbed to drill pipe threads will be on the floor at all times. Monitoring of the mud system will be performed using floats and daily measurements by a mud engineer.

8. Testing, Logging, and Coring Programs to be Followed with Provision Made for Required Flexibility

2 DST's may be run in the assumed productive intervals (see No. 3), if samples, shows in the mud or drilling breaks indicate possible hydrocarbons. Logging will be DIL from TD to base of surface casing. Formation Density-Compensated Neutron Log will be run across zones of interest. No cores are anticipated. If the well is determined to be commercial, 4 $\frac{1}{2}$ " casing will be run and cemented. The cement program will include the following: 1) Cement from TD to approximately 4500' with a "G" class cement with salt and gel. 2) Cement the upper water sands from approximately 3200' to surface with a pozmix cement with gel. This will be sufficient to cover the Ojo Alamo zone. The stimulation procedure will consist of perforating all of the Gallup interval acidizing with a mud acid @ a volume of approximately 50 gal/ft and fracturing the Gallup with approximately 40,000 gals. gelled water with 60,000# sand.

(continued)

9. Any Anticipated Abnormal Pressures or Temperatures Expected to be Encountered or Potential Hazards such as Hydrogen Sulfide Gas, Along with Plans for Mitigating Such Hazards

No abnormal pressures or temperatures are anticipated. Also no potentially hazardous hydrogen sulfide gas is expected.

10. Anticipated Starting Date and Duration of the Operations

Anticipated spud date is July, 1980, with subsequent drilling and completion operations lasting 30-60 days.

(Continued)

1. A Lexible Map Showing Existing Roads (See Exhibit 2):

- A. Proposed well site location as staked (staking to include two (2) each 200-foot directional reference stakes):

Exhibit 1 shows proposed well site as staked by a registered surveyor.

- B. Planned Access Road (route and distance from nearest town or locatable referenced point to where well access route leaves the main road:

To reach the Grace Federal 35-1 location from Bloomfield, New Mexico, go Southeast on New Mexico Highway 44 for approximately 50 miles. Turn left immediately past Southern Union Gas Refining-Lybrook plant onto existing gravel/dirt road. Continue on dirt road for approximately 3.6 miles. Turn west at windmill. Continue on for approximately 3.0 miles. Turn north at second windmill. Go approximately .9 miles to top of mesa. Continue to flagged location site.

- C. Access road(s) to location color-coded or labeled:

Access road is color-coded red on Exhibit 2.

- D. If exploratory well, all existing roads within a 3-mile radius (type of surface, conditions, etc.):

N/A

- E. If development well, all existing roads within a 1-mile radius of wellsite:

Exhibit 2 shows existing roads within a 1-mile radius.

- F. Plans for improvement and/or maintenance of existing roads:

Improvement and/or maintenance will be according to BLM specifications.

(continued)

2. Map Showing All Necessary or Planned Access Roads to be Constructed or Reconstructed (See Exhibit 2):

- A. Width: 16-20'
- B. Maximum Grades: Approximately 4%
- C. Turnouts: None are necessary.
- D. Drainage Design: No drainage design will be incorporated for the drilling phase. Brush will be cleared and windrowed.
- E. Location and size of culverts and brief description of any major cuts and fills: No culverts are necessary. A 10-14' cut will be taken from the west side of the location and fill distributed to the east side, and as required to level the location..
- F. Surfacing Material: None is planned.
- G. Necessary gates, cattleguards, or fence cuts: None are necessary.
- H. New or reconstructed roads are to be center-line flagged at the time of location staking: Access road was center-line flagged at time of location staking.

3. Location of Existing Wells (See Exhibit 4):

A two-mile radius map, if exploratory, or a 1-mile radius map, if development well, showing and identifying existing (1) water wells, (2) abandoned wells, (3) temporarily abandoned wells, (4) disposal wells, (5) drilling wells, (6) producing wells, (7) shut-in wells, (8) injection wells, and (9) monitoring or observation wells for other resources is attached.

Exhibit 4 shows existing wells within a 1-mile radius.

(continued)

4. Location of Existing and/or Proposed Facilities:

- A. Within 1-mile radius of location showing the following existing facilities owned or controlled by lessee/operator: (1) tank batteries, (2) production facilities, (3) oil gathering lines, (4) gas gathering lines, (5) injection lines, (6) disposal lines.

There are no existing operator-owned facilities within a 1-mile radius.

- B. New facilities in the event of production.

In the event of production, a 2-phase separator and 1 - 400 bbl tank will be installed.

- (1) Dimensions of facilities: Actual facilities will require approximately 150' X 100'
- (2) Construction methods and materials: Any construction will utilize soil materials native to the site. Construction methods will be employed to assure no drainage flows are impounded unless surface Lessee requests embankment.
- (3) Protective measures to protect livestock & wildlife: Fences will be installed around equipment and pits to protect wildlife and livestock.

- C. Rehabilitation of Disturbed Areas Unnecessary for Production: Areas unnecessary for use will be graded to blend with the surrounding topography. Topsoil will be replaced on these areas and seeded according to BLM requirements.

(continued)

5. Location and Type of Water Supply

Water will be supplied from private rancher's stock located 4 miles east of proposed well site.

A. Water Transportation System:

Vaccum trucks will be utilized to haul water to the well site. Trucks will follow existing roads.

B. Water Wells:

No water wells will have to be drilled.

6. Source of Construction Materials

A. Materials:

Construction materials will consist of soil encountered within the boundaries of proposed well site.

B. Land Ownership: H. C. Berry

C. Materials Foreign to Site: N/A

D. Access Roads: Approximately 500' of access road will be constructed and will utilize soil within the road boundary.

7. Methods for Handling Waste Disposal

A. Cuttings: Cuttings will be contained in the reserve pit, Exhibit 5.

B. Drilling Fluids: Drilling fluids will be retained in the reserve pit, Exhibit 5.

(continued)

7. Methods for Handling Waste Disposal, (Cont'd)

C. Produced Fluids:

Produced fluids will be stored in tanks on the location and hauled off by truck.

D. Sewage:

Sewage disposal will be necessary during drilling operations only. A portable toilet will be provided for human waste.

E. Garbage:

A burn pit will be constructed and fenced with small mesh wire, overhead and around. Any refuse will be burned.

F. Cleanup of Well Site:

Clean-up of this location will proceed after the rig moves off, as outlined in Section 10 of this report.

8. Ancillary Facilities

None required.

9. Well Site Layout

A. Cross-Section of Drill Pad:

See Exhibit 5.

B. Location of Burn, Trash, and Reserve Pits, Soil Material Stockpiles, Access Roads, Mud Tanks, Pipe Racks, Living Facilities:

See Exhibit 5.

(continued)

9. Well Site Layout, (Cont'd)

C. Rig Orientation and Layout:

See Exhibit 6.

D. Lining of Pits:

No liners are planned.

10. Plans for Restoration of Surface Upon Completion of Operations:

A. Backfilling, Leveling, Contouring, and Waste Disposal; Segregation of Spoils Materials as Needed:

Prior to backfill operations, any hydrocarbon material on the pit surface will be removed. The fluids and solids contained in the pit will be backfilled when the pit dries. The entire area will be contoured, graded or leveled to its previous condition, such that no drainage will be impounded. The topsoil will be replaced and the area reseeded per BLM recommendations.

B. Revegetation and Rehabilitation - Including Access Roads:

The reseeding will be BLM specifications. Access road will be maintained for vehicular traffic if production results, or regarded to original condition if well is not productive. The area will be reseeded with seed mixture selected by BLM.

C. Prior to Rig Release, Pits Will be Fenced and so Maintained Until Cleanup:

This will be adhered to until pits are dry and backfilled, and the area is restored.

D. Oil on Pit:

Oil will be removed or overhead flagging will be installed.

(continued)

10. Plans for Restoration of Surface Upon Completion of Operations, (Cont'd):

E. Rehabilitation Timetable: 3 to 6 months upon completion of operations.

11. Other Information

A. Surface Description (Topography, Soil Characteristics, Geologic Features, Flora and Fauna): Refer to Report 80-SJC-097 of the Cultural Resource Management Program, San Juan Campus, New Mexico State University.

B. Surface Ownership and Use: H. C. Berry. Land used for livestock grazing.

C. Proximity of Water, Dwellings, Historical Sites:

(1) Water: Nearest source of water is located approximately 4 miles east of proposed well site.

(2) Occupied Dwellings: Nearest occupied dwelling is Southern Union employee's trailer court located approximately 2½ miles south of proposed location.

(3) Sites: None found.

(continued)

12. Operators Field Representative

Scotty A. Smith
3 Park Central - Ste 200
1515 Arapahoe Street
Denver, CO 80202

Work: 303/825-8193
Home: 303/234-0257

Benjamin C. Stromberg
Same as above

Work: 303/825-8193
Home: 303/733-9076

13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 Grace Petroleum Corp. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.



Scotty A. Smith, Southern District Operations Manager

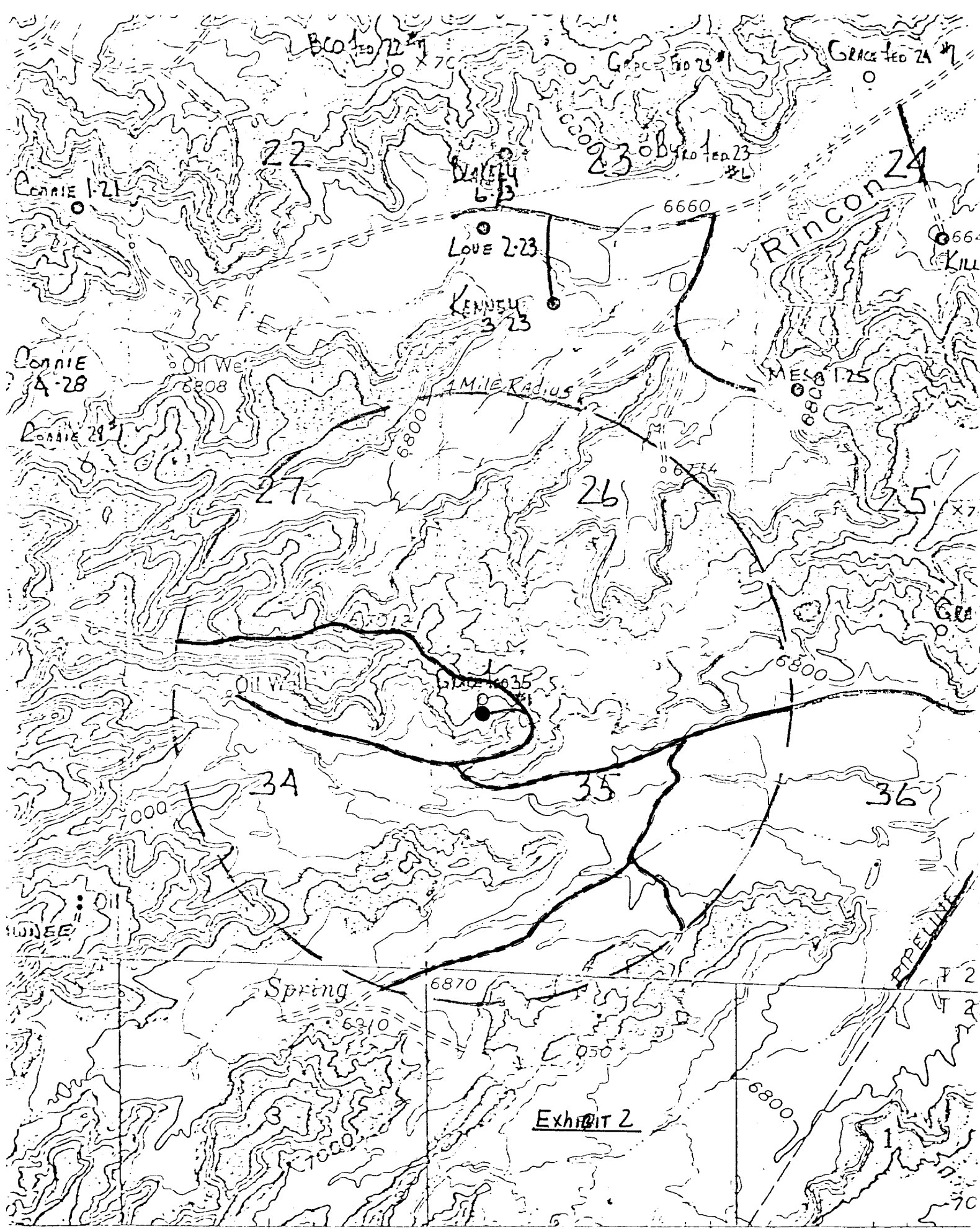
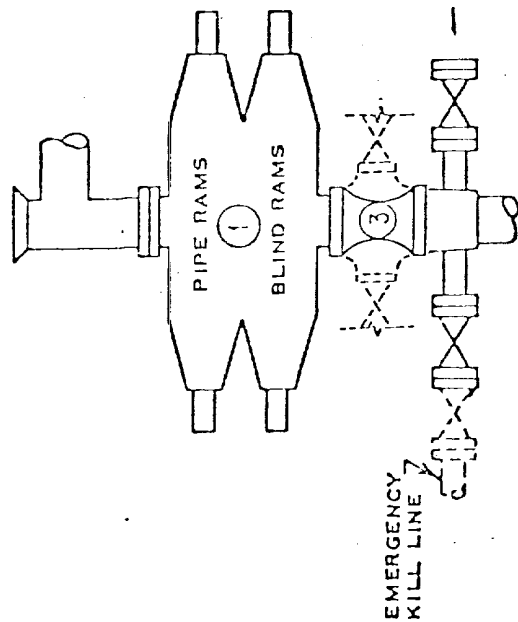


Exhibit 2

DOUBLE PREVENTER

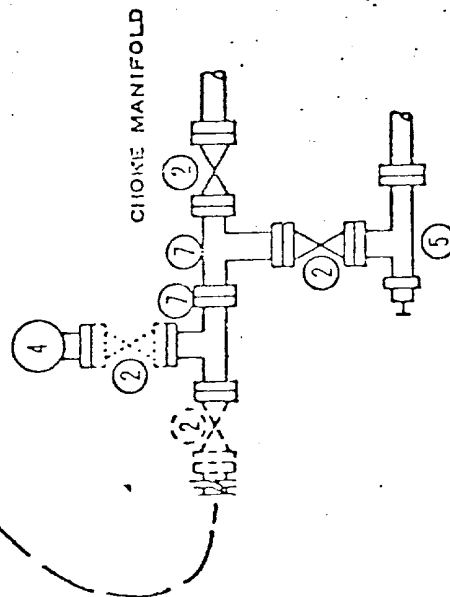


- ① SERIES 900 RAM-TYPE BOP
- ② 2" SERIES 900 VALVE
- ③ SERIES 900 DRILLING SPOOL
- ④ 2" MUD PRESSURE GAUGE
- ⑤ 2" SERIES 900 CHOKE
- ⑥ 2" SERIES 900 CHECK VALVE
- ⑦ 2" SERIES 900 STEEL TEE

NOTES:

1. 3000 PSI WP CLAMP
HUBS MAY BE SUBSTITUTED
FOR FLANGES

2. VALVES MAY BE EITHER HAND OR POWER
OPERATED BUT, IF POWER OPERATED,
THE VALVES FLANGED TO THE BOP RUN
MUST BE CAPABLE OF BEING OPENED AND
CLOSED MANUALLY OR CLOSE ON POWER
FAILURE AND BE CAPABLE OF BEING
OPENED MANUALLY



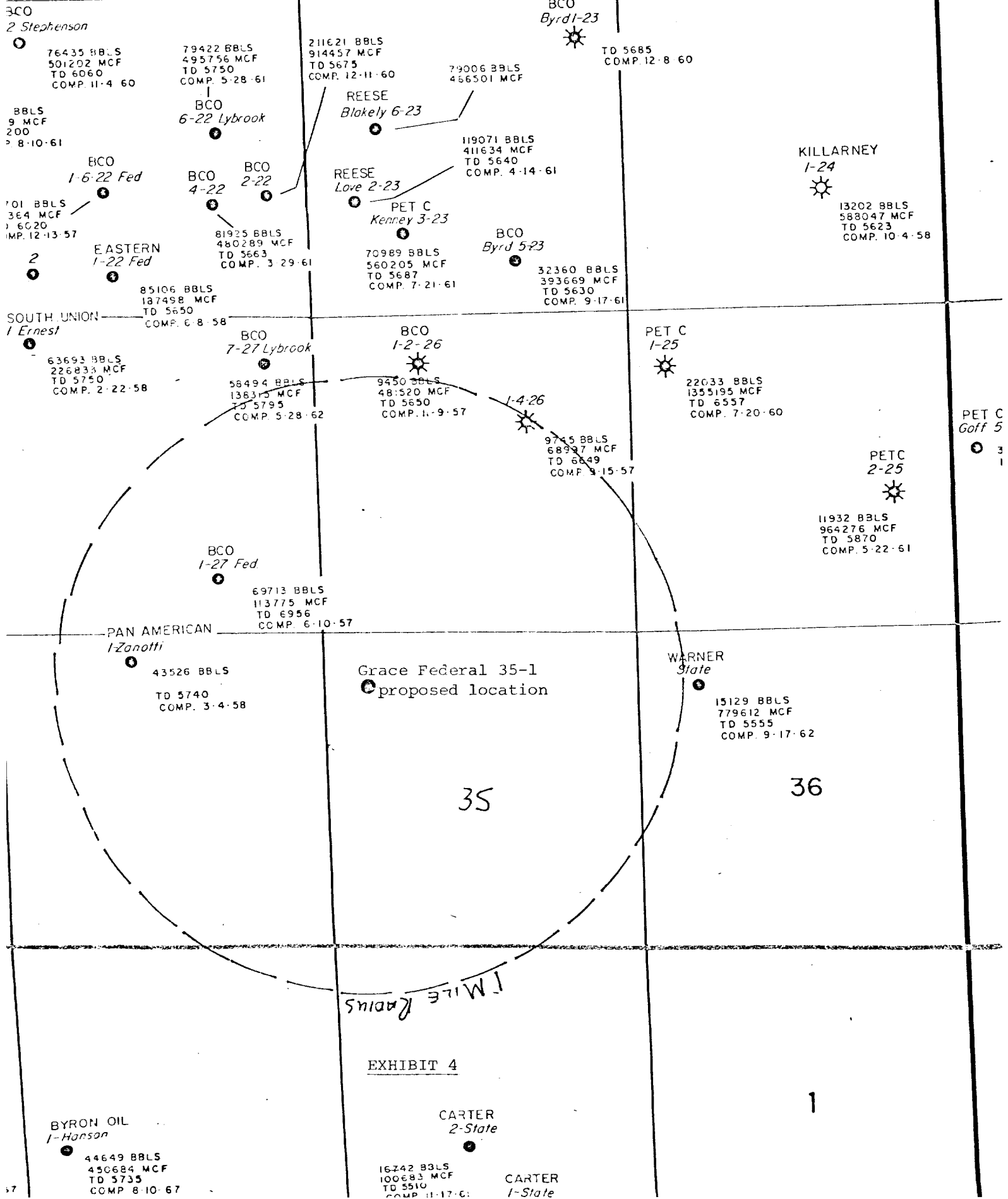
..... OPTIONAL EQUIPMENT

3000 PSI WORKING PRESSURE
BLOWOUT PREVENTER HOOK-UP

EXHIBIT NO. 3

in Amer.

COMP. 6-3-60



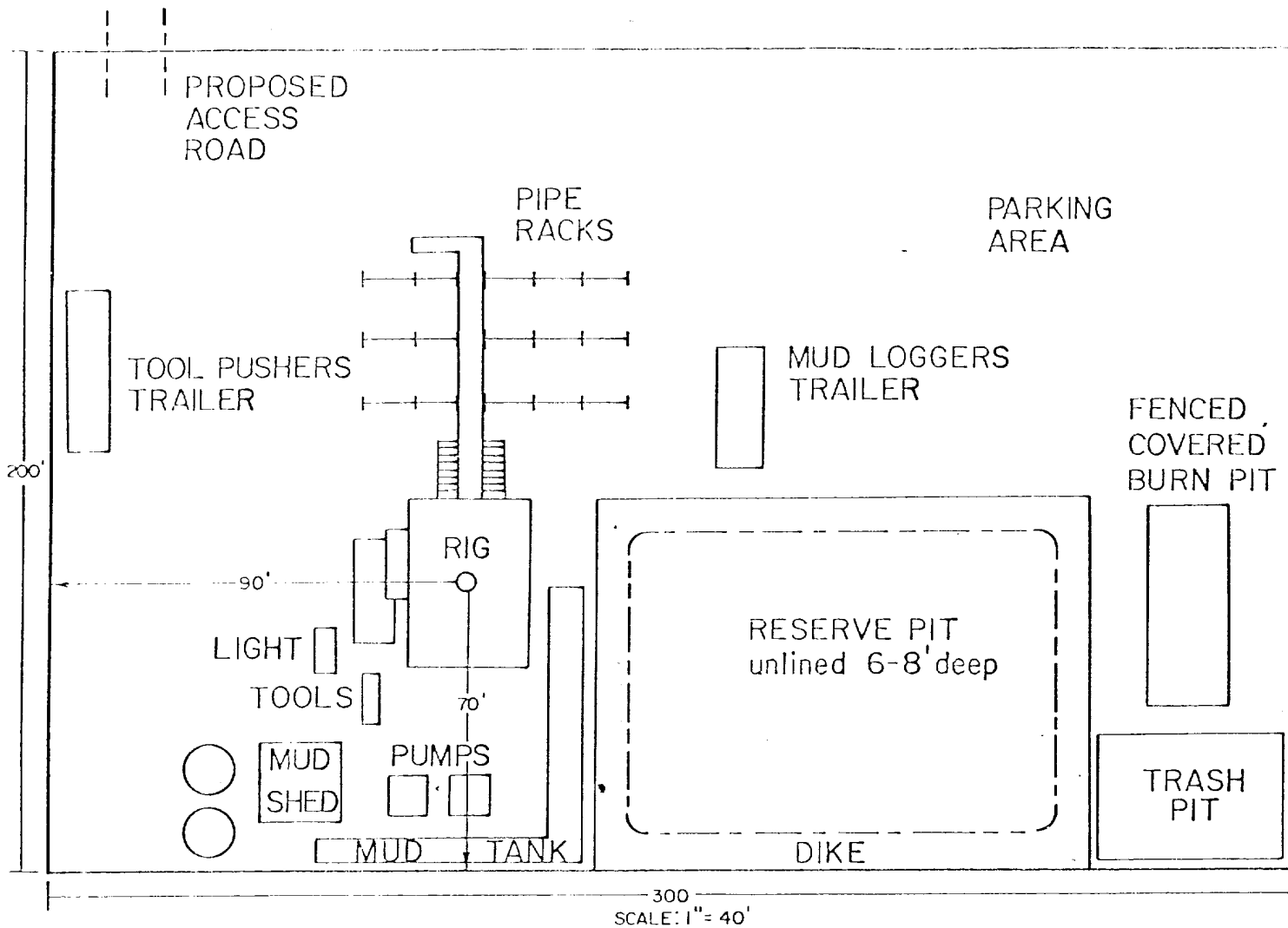
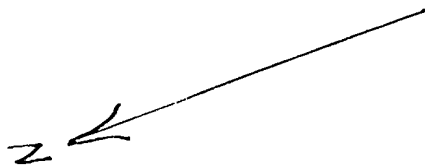


EXHIBIT 5

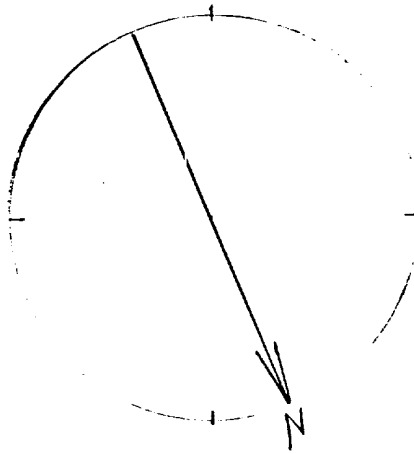
GRACE FEDERAL 35 #1
NW NW Sec. 35-T24N-R7W
Rio Arriba County, New Mexico



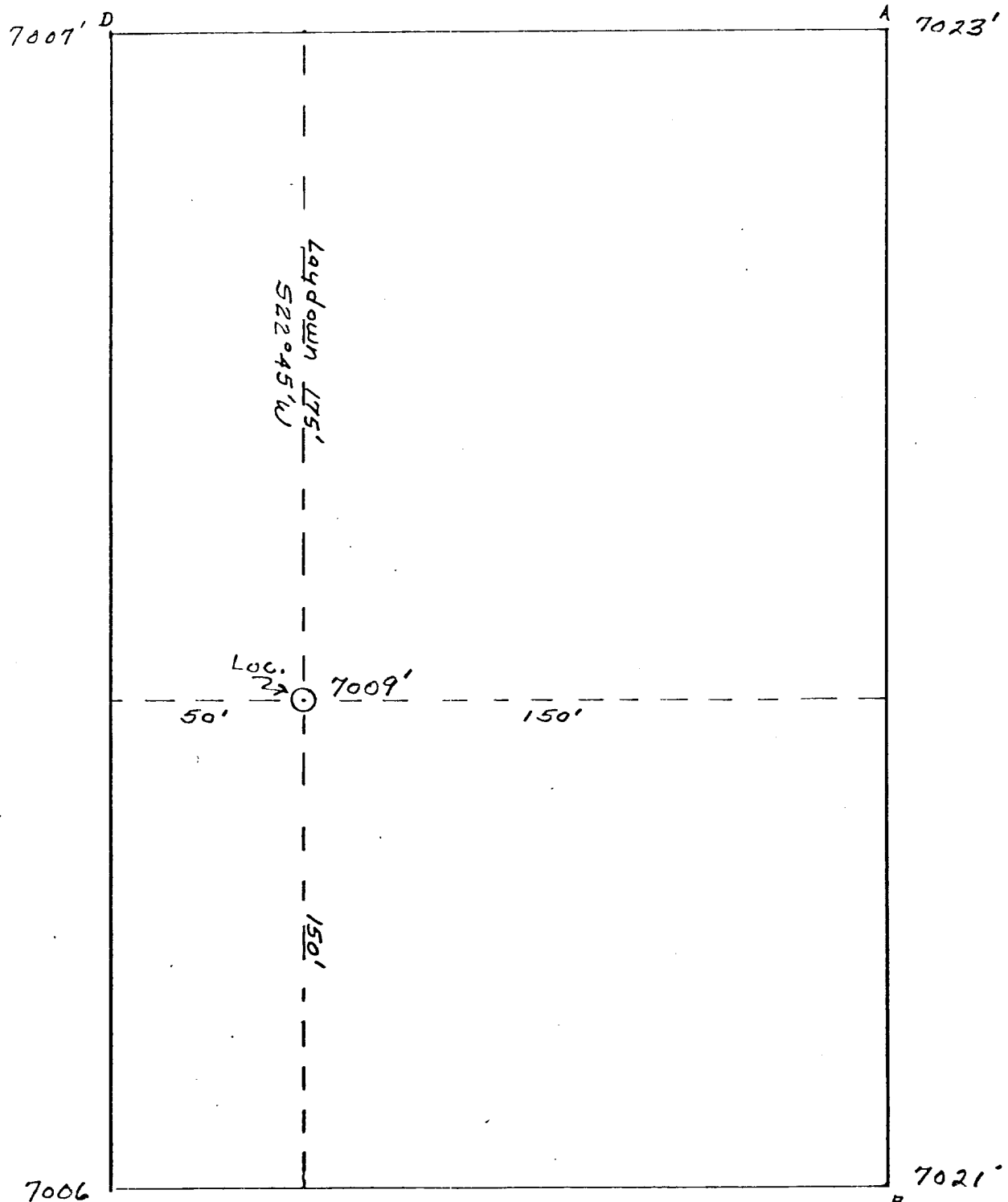
GRACE Petroleum Corp.
Rocky Mountain Region
1515 Arapahoe Suite 200 Three Park Central
Denver, Colorado 80202 (303) 825-8193

Profile 1010
 GRACE PETROLEUM CORP. #1 GRACE-FEDERAL 35
 890' FNL 830' FWL Sec. 35-T24N-R7W
 RIO ARriba COUNTY, NEW MEXICO

EXHIBIT 6



Scale: 1"=40'



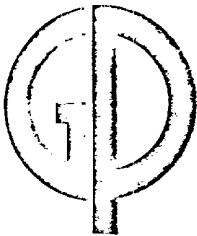


EXHIBIT 7

Grace Petroleum Corporation
Subsidiary of W.R. Grace & Co.

Three Park Central Suite 200
1515 Arapahoe Street
Denver, Colorado 80202
Phone (303) 825-8193

TO WHOM IT MAY CONCERN:

I, M.C. Berry representing Berry Land & Cattle acknowledge that I was contacted by a representative of Grace Petroleum Corporation, Three Park Central, Suite 200, 1515 Arapahoe Street, Denver, Colorado 80202. This contact was made for the purpose of approval to survey and stake the following oil and/or gas well drilling location. Approval of the surface land owner to survey and stake the location specified is signified by signature in the space provided below.

WELL LOCATION: NWNW
SECTION: 35 TOWNSHIP: 24N RANGE: 7W
COUNTY Rio Arriba, STATE New Mexico

It is also requested that the following questions be answered by the surface owner:

1. The length of time this tenant has been on the property?

1/2 yr

2. To your knowledge, are there any mining claims or active mines on this property? no

3. To your knowledge, are there any buried lines on the property, such as hydrocarbon, telephone or missile base lines? no

If this location is suitable for a drilling site, a Grace representative will contact you for the purpose of negotiating a reasonable surface damage fee and for the usage of any roads that we may use in drilling and completing this well.

APPROVAL: [Signature]

DATE: 2-25-80

Lease No.: _____; Well Name and No.: Grace Federal 35-1;
Location: Rio Arriba City, New Mexico, NWNW, Sec. 35, T. 24 N., R. 7 W.

Grace Petroleum Corporation intends to drill a well on surface owned by H.C. Berry, Berry Land & Cattle Co.. The lessee/operator agrees to complete the following rehabilitation work if the well is a producer:

☒ Yes ☐ No Maintain access road and provide adequate drainage to road.

☒ Yes ☐ No Reshape and reseed any area not needed for maintenance of the pump and support facilities.

Other requirements: _____

The following work will be completed when the well is abandoned:

☒ Yes ☐ No Pit will be fenced until dry, then filled to conform to surrounding topography.

☒ Yes ☐ No Water bars will be constructed as deemed necessary.

☒ Yes ☐ No Site will require reshaping to conform to surrounding topography.

☒ Yes ☐ No Entire disturbed area will be reseeded. If yes, the following seed mixture will be used:

☒ Yes ☐ No Access road will be closed, rehabilitated and reseeded using the same seed mixture as above.

☐ Yes ☒ No Access road will remain for surface owner's use.

☒ Yes ☐ No Water bars will be constructed on the access road as deemed necessary.

Other requirements: _____


Surface Owner:

Name: H. C. Berry
Address: P. O. Box 407
City: Dexter
State: New Mexico
Telephone: _____
Date: _____

Operator/Lessee

Name: Grace Petroleum Corporation
Address: 3 Park Central, 1515 Arapahoe
City: Denver
State: Colorado
Telephone: 303 825-8193
Date: _____

I CERTIFY rehabilitation has been discussed with me, the surface owner:


(Surface owner's signature)

This plan covers rehabilitation requirements only and does not affect any other agreements between the lessee/operator and surface owner.

GEOLOGIC PROGNOSIS

OPERATOR: Grace Petroleum Corporation
FIELD NAME: Escrito
WELL NAME: Grace Federal 35-1
LOCATION: NWNW 890 FNL 830 FW1
Sec. 35, T24N-R7W
Rio Arriba County, New Mexico

DEPTH AND LOCATION
OF NEAREST WELL:

R.W. Warner-State #1
NENW Sec. 36, T24N-R7W
TD 5555'

LOCATION OF NEAREST
WELL PENETRATING
OBJECTIVE
RESERVOIRS:

A/A

ELEVATION: Ungraded G.L. 7009' Est. KB 7021'

FORMATION TOPS:

<u>Formation</u>	<u>Depth</u>	<u>Datum</u>
OJO Alamo	1014'	+6007'
Kirtland	1652'	+5369'
Pictured Cliffs	2187'	+4834'
Lewis	2310'	+4711'
Chacra	2654'	+4367'
La Ventana	3005'	+4016'
Cliff House	3729'	+3292'
Menefee	3914'	+3107'
Point Lookout	4440'	+2581'
Mancos	4696'	+2325'
Upper Gallup	5456'	+1565'
Middle Gallup	5544'	+1477'
Lower Gallup	5630'	+1391'

TOTAL DEPTH 5730'

OBJECTIVE
RESERVOIRS:

Gallup Sands

RECEIVED

MAY 27 1990

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.