Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-039-22337

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: SF-078924

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME: Connie 29

2. NAME OF OPERATOR: Grace Petroleum Corporation

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: 3 Park Central Suite 200, 1515 Arapahoe Denver, Co. 80202

10. FIELD AND POOL, OR WILDCAT: Lybrook Gallup ext

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 970' FSL, 1650' FEL
At proposed prod. zone:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 29-T24N-R7W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 48 Miles SE of Bloomfield, New Mexico

12. COUNTY OR PARISH: Rio Arriba | 13. STATE: New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 970' FSL, 1650' FEL

16. NO. OF ACRES IN LEASE: 960

17. NO. OF ACRES ASSIGNED TO THIS WELL: ~~320~~ 40

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

19. PROPOSED DEPTH: 5970

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 7369' Ungraded Ground

22. APPROX. DATE WORK WILL START*: June, 1980

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12¼"	8-5/8"	24#	300'	CMT to Surface
7-7/8"	4½"	10.5#	TD	300sx, Class "G"

It is proposed to drill and test the Gallup formation at the above location. Total depth will be approximately 5970'.

A 4½" production string will be run and cemented, or the well plugged and abandoned, as per regulations, whichever test indicates.

See attached for pertinent data.

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APR 24 1980
OIL CON. COM.
DIST. 3

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 Sally A. Smith TITLE Operations Manager DATE March 17, 1980

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

APPROVED
AS AMENDED
APR 2 3 1980
JAMES F. SIMS
DISTRICT ENGINEER

Southern District

CONDITIONS OF APPROVAL, IF ANY:
DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

State

MAR 21 1980
U. S. GEOLOGICAL SURVEY
FARMINGTON, COLO.

*See Instructions On Reverse Side

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
GRACE PETROLEUM CORPORATION	CONNIE 29	1

Unit Letter	Section	Township	Range	County
O	29	24N	7W	Rio Arriba

Actual Footage Location of Well:
970 feet from the South line and 1650 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
7369	Gallup	Lybrook Gallup ~~Dakota~~	W ~~320~~ 160 Acres

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

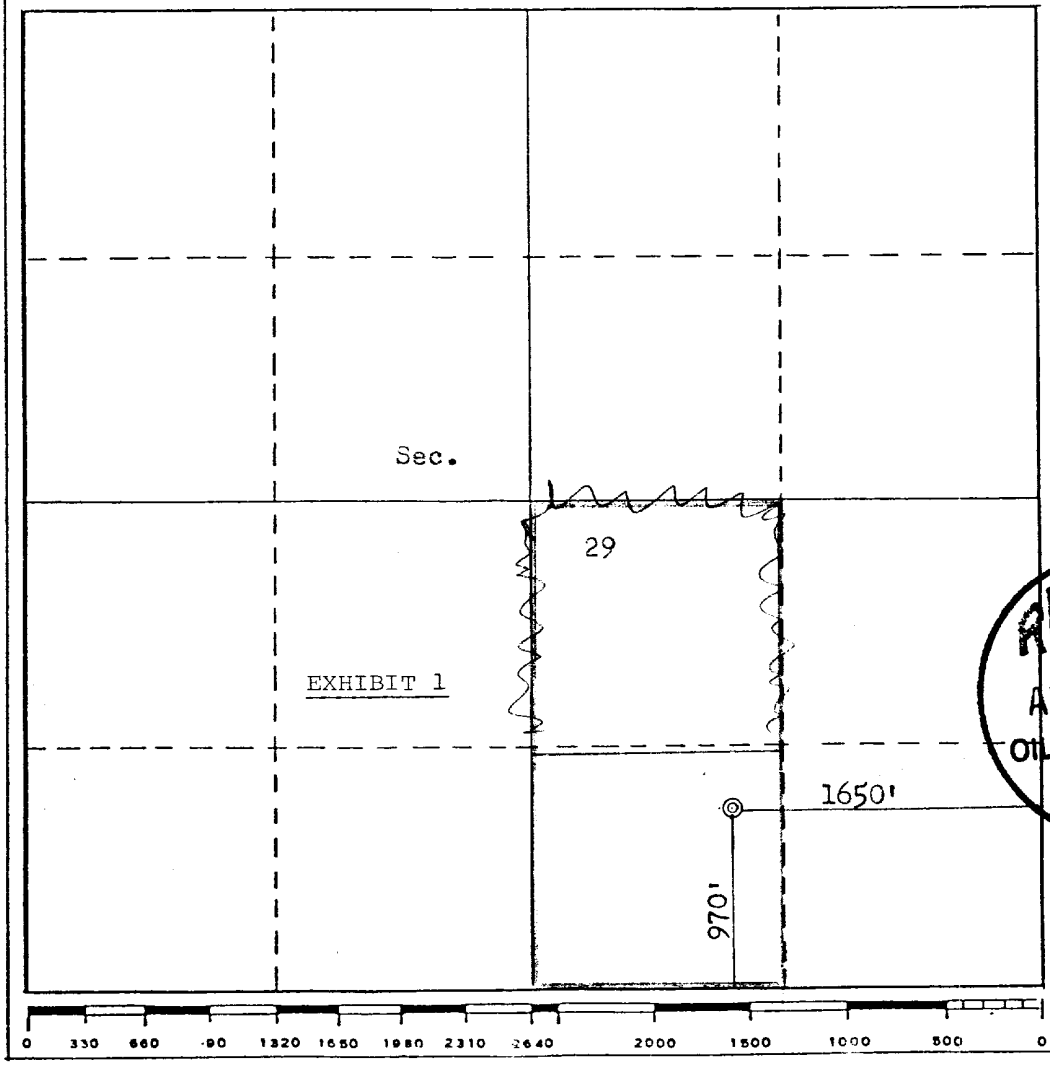
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). Single Lease

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.

Name: Scotty A. Smith

Position: Southern District Operations Manager

Company: Grace Petroleum Corporation

Date: March 17, 1980

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.

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APR 24 1980
OIL CON. COM.
DIST. 3

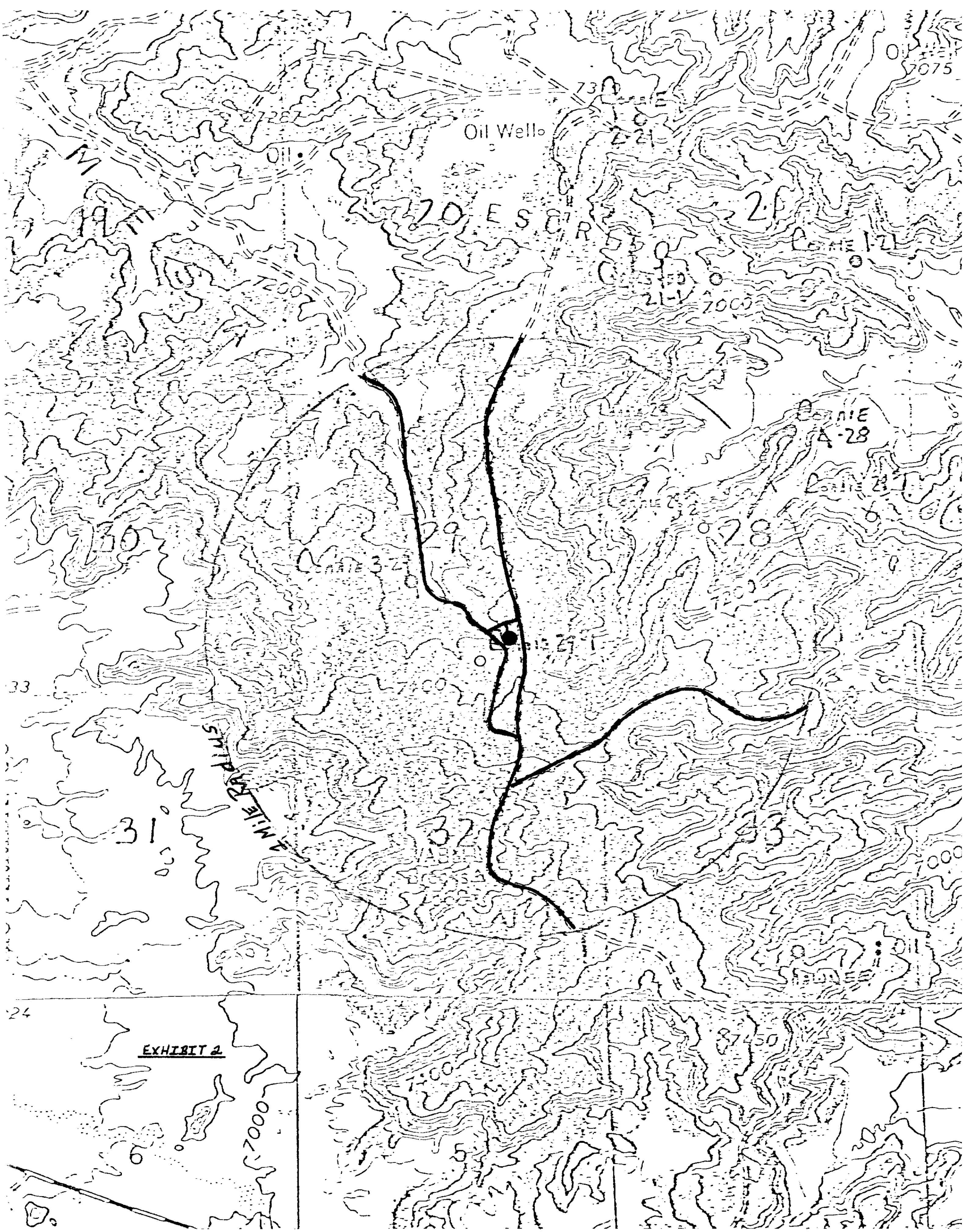
Date Surveyed: February 13, 1980

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.

Certificate No. 3950

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR STATE OF NEW MEXICO FRED B. KERR, JR.


Oil Well
Oil
Connie A-28
Connie 3-2
1 Mile Radius
EXHIBIT 2
7000
7200
7400
7075
8750
29
28
30
31
32
33
21
20
6
5

NTL-6 ENVIRONMENTAL STATEMENT

SURFACE USE PLAN

OPERATOR: Grace Petroleum Corporation
LEASE & WELL NAME: Connie 29 #1
LOCATION: SWSE Sec. 29-T24N-R7W (970' FSL, 1650' FEL)
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 oprerator at the above named well site.

Geologic Name of the Surface Formation

San Jose

Estimated Tops of Important Geologic Markers

Picture Cliffs	2453'
Lewis	2551'
Mesaverde	3251'
Point Lookout	4758'
Mancos	5024'
Gallup	5821'

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 (2453'), Point Lookout (4758') and Gallup (5821').

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'
4½" K-55, 10.5#/ft., new to TD, approximately 5970'.

(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 mintues 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 12-1/4" 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 8.8 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

Two Drill Stem Tests 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 a Dual Induction Lateral Log 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, 4-1/2" 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 3800' 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. Anv 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 June 1980, with subsequent drilling and completion operations lasting 30-60 days.

(Continued)

1. A Legible 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 land 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 Connie 29-1 location from Bloomfield, travel SE on New Mexico Highway 44 for approximately 48 miles. Turn North onto dirt road marked by BCO mailbox. Continue on dirt road for approximately 3½ miles. Turn left at "Y" in road. Proceed approximately 200' to flagged location.

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

Access road is color-coded in red on Exhibit 2.

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

N/A

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

Exhibit 4 shows wells within an 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: Approximately 16-20'

B. Maximum Grades: Approximately 1%

C. Turnouts: None are planned

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 cust and fills:

No culverts are necessary. A 2' cut will be taken from the southeast side of the location and fill distributed to the west 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:

Approximately 100' of access road was approved by USGS and BLM during site inspection and was center-line flagged at location staking.

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

A two-mile radius map, if exploratory, or a 1-mile radium 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.

Well is a development well. 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.

Exhibit 4A shows existing operator-owned facilities consisting of pumping unit,treater, oil storage tanks.

B. New facilities in the event of production.

We will utilize facilities at Connie 3-29 location, located approximately ½ mile Northwest of proposed well site.

(1) Dimensions of facilities:

30'x 30' for well head only

(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 water well located approximately 3 miles northwest of proposed well site.

A. Water Transportation System: Vacuum 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: Ownership is BLM

C. Materials Foreign to Site: N/A

D. Access Roads: 100' of access road will utilize soil within boundaries of proposed well site.

7. Methods for Handling Waste Disposal

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

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

(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 regraded 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):
Topagraphy is mesa top with northerly drainage alluvial surface deposits and sandstone bedrock. Soil is sandy, clayey loam. Principle vegetation consists of pinion, juniper, sagebrush, snakeweed, broadleaf yucca, indian ricegrass, grama and squirreltail.

B. Surface Ownership and Use: Ownership is BLM

C. Proximity of Water, Dwellings, Historical Sites:

(1) Water: Nearest source of water is located approximately 2½ miles north of proposed well site.

(2) Occupied Dwellings: Nearest dwelling is BCO camp located 2½ miles north of proposed location.

(3) Sites: [illegible] found
Refer to report [illegible]-SJC-047 of the Cultural Management Program, San Juan Campus, New Mexico State University, dated March 7, 1980.

(continued)

12. Operators Field Representative

Scotty A. Smith
Three Park Central
1515 Arapahoe Street
Suite 200
Denver, Colorado 80202

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

Benjamin C. Stromberg
Same as above.

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

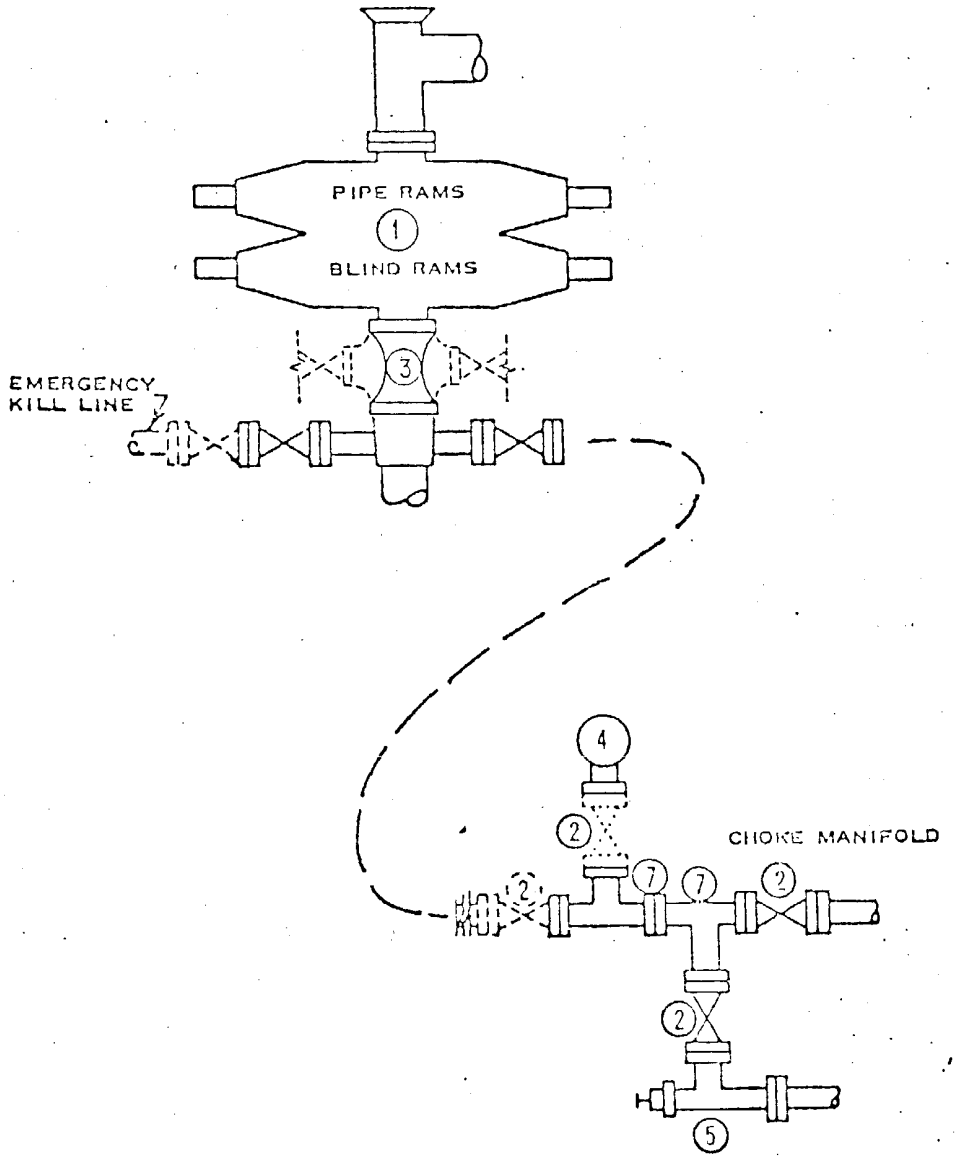
13. Certification

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

* * * * * * * *

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

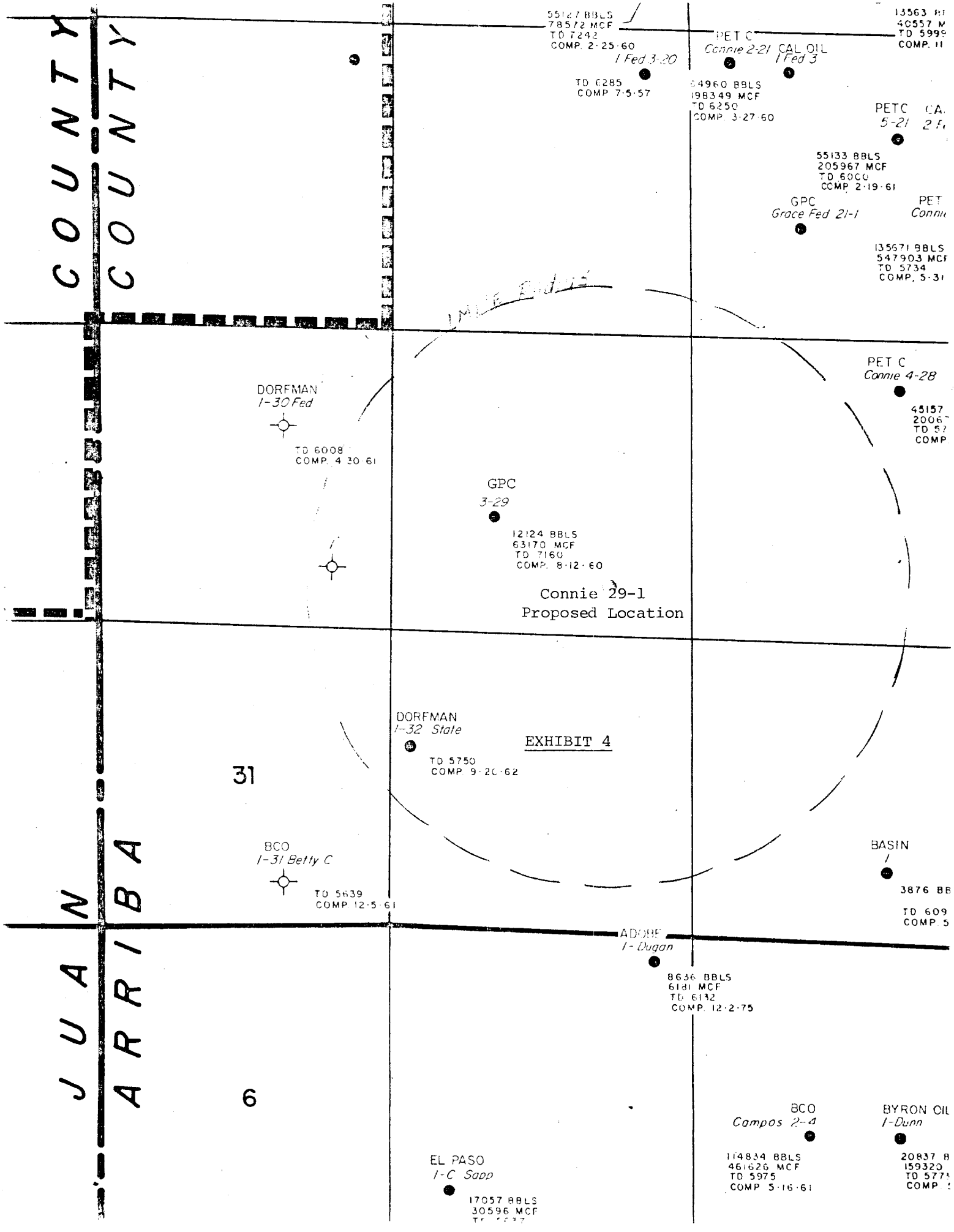
NOTES:

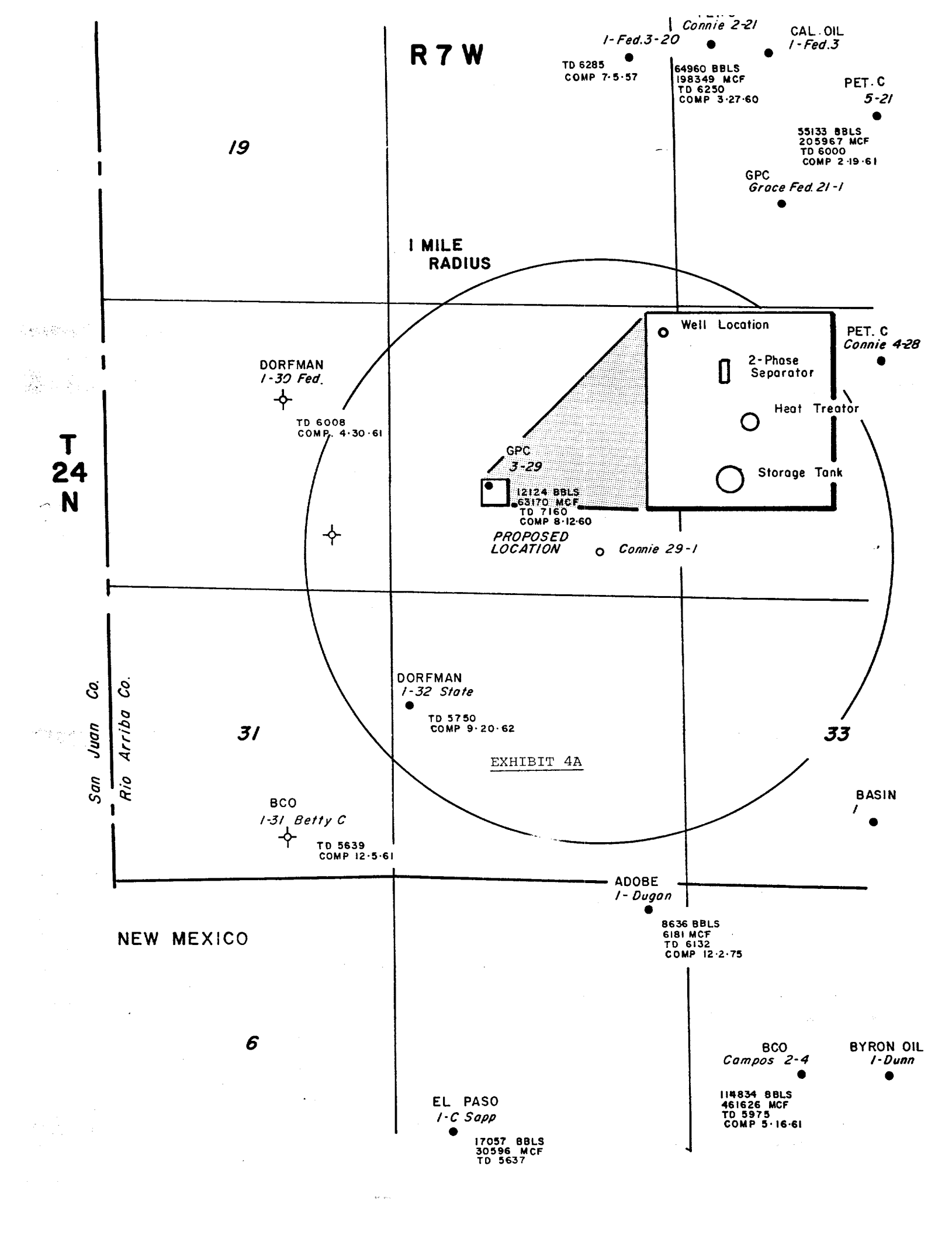
1. 3000 PSI WP CLAMP HUBS MAY BE SUBSTITUTED FOR FLANGES
2. VALVES MAY BE EITHER HAND OR POWER OPERATED BUT, IF POWER OPERATED, THE VALVES FLANGED TO THE BOP RUN MUST BE CAPABLE OF BEING OPENED AND CLOSED MANUALLY OR CLOSE ON POWER FAILURE AND BE CAPABLE OF BEING OPENED MANUALLY

..... OPTIONAL EQUIPMENT

3000 PSI WORKING PRESSURE
BLOWOUT PREVENTER HOOK-UP

EXHIBIT NO. 3


COUNTY
COUNTY
JUAN
ARRIBA
55127 BBLS
78572 MCF
TD 7242
COMP. 2-25-60
I Fed 3-20
TD 6285
COMP 7-5-57
PET C
Connie 2-21
CAL OIL
I Fed 3
84960 BBLS
198349 MCF
TD 6250
COMP. 3-27-60
PETC
5-21
55133 BBLS
205967 MCF
TD 6000
COMP 2-19-61
GPC
Grace Fed 21-1
135671 BBLS
547903 MCF
TD 5734
COMP. 5-31
PET C
Connie 4-28
DORFMAN
I-30 Fed
TD 6008
COMP. 4-30-61
GPC
3-29
12124 BBLS
63170 MCF
TD 7160
COMP. 8-12-60
Connie 29-1
Proposed Location
EXHIBIT 4
DORFMAN
I-32 State
TD 5750
COMP 9-20-62
31
BCO
I-31 Betty C
TD 5639
COMP 12-5-61
BASIN
3876 BB
TD 609
COMP. 5
ADOBE
I-Dugan
8636 BBLS
6181 MCF
TD 6132
COMP. 12-2-75
6
BCO
Compos 2-4
114834 BBLS
461626 MCF
TD 5975
COMP 5-16-61
BYRON OIL
I-Dunn
20837 B
159320
TD 577
COMP.
EL PASO
I-C Sapp
17057 BBLS
30596 MCF


R 7 W
T 24 N
19
31
33
6
Connie 2-21
1-Fed.3-20
TD 6285
COMP 7-5-57
CAL. OIL
1-Fed.3
64960 BBLS
198349 MCF
TD 6250
COMP 3-27-60
PET. C
5-21
55133 BBLS
205967 MCF
TD 6000
COMP 2-19-61
GPC
Grace Fed. 21-1
1 MILE
RADIUS
Well Location
2-Phase
Separator
Heat Treator
Storage Tank
PET. C
Connie 4-28
DORFMAN
1-30 Fed.
TD 6008
COMP. 4-30-61
GPC
3-29
12124 BBLS
63170 MCF
TD 7160
COMP 8-12-60
PROPOSED
LOCATION
Connie 29-1
DORFMAN
1-32 State
TD 5750
COMP 9-20-62
EXHIBIT 4A
BASIN
BCO
1-31 Betty C
TD 5639
COMP 12-5-61
San Juan Co.
Rio Arriba Co.
ADOBE
1-Dugan
8636 BBLS
6181 MCF
TD 6132
COMP 12-2-75
NEW MEXICO
BCO
Campos 2-4
BYRON OIL
1-Dunn
114834 BBLS
461626 MCF
TD 5975
COMP 5-16-61
EL PASO
1-C Sapp
17057 BBLS
30596 MCF
TD 5637

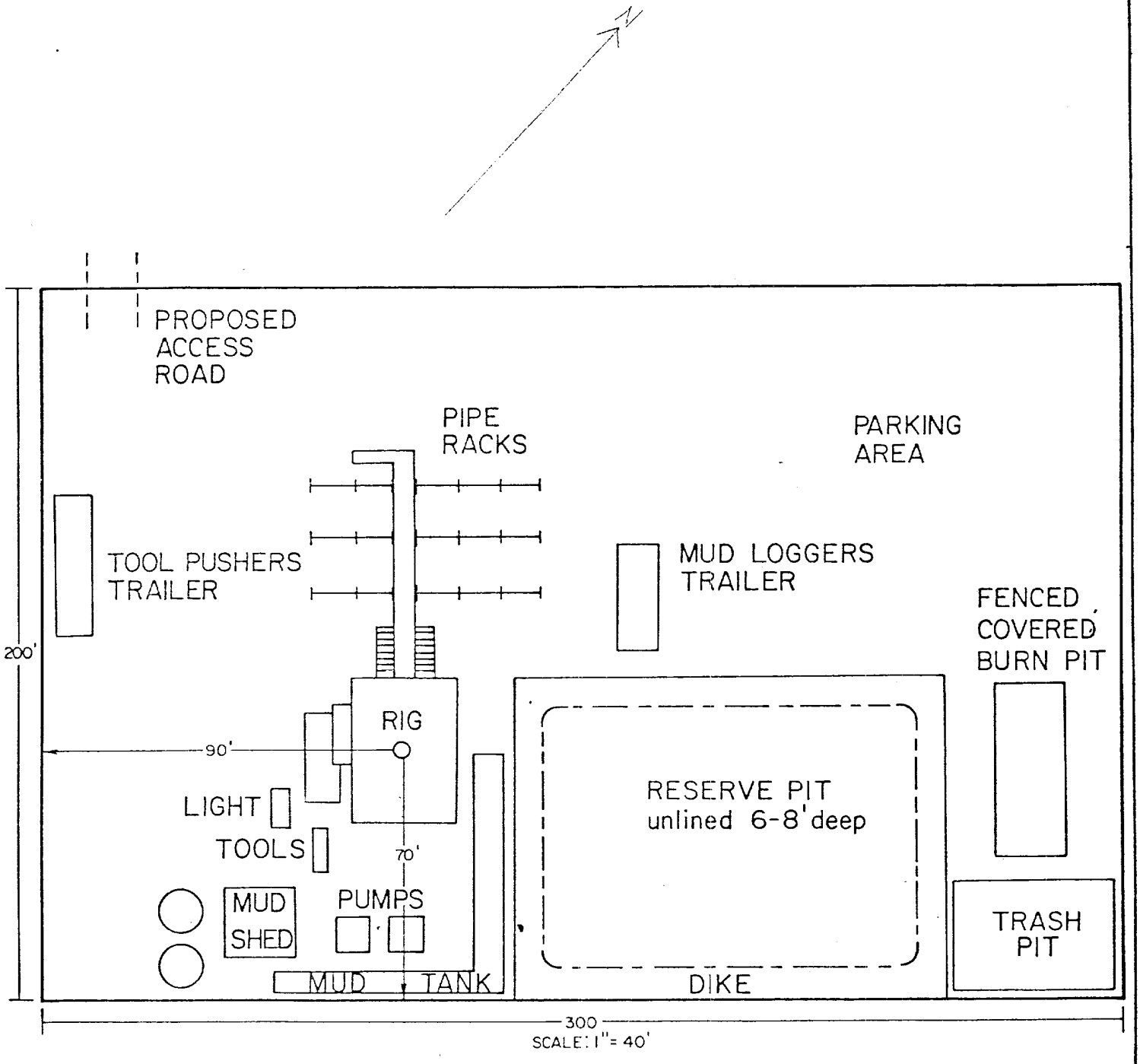


EXHIBIT 5

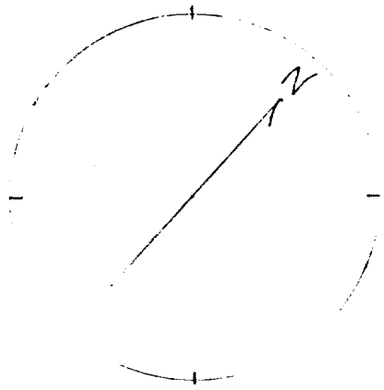
CONNIE #29-1
SW SE Sec. 29-T24N-R7W
Rio Arriba, Co. New Mexico

Subsidiary of W.R. Grace & Co.

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

Profile for
GRACE PETROLEUM CORP. #1 Connie 29
970'FSL 1650'FEL Sec 29-T24N-R7W
Rio Arriba County, New Mexico

EXHIBIT 6



Scale: 1"=40'