Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-039-22387

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:

8. FARM OR LEASE NAME: Connie 28

9. WELL NO.: 2

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

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 28-T24N-R7W

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

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

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

2. NAME OF OPERATOR: Grace Petroleum Corporation

3. ADDRESS OF OPERATOR: 3 Park Central, #200, 1515 Arapahoe, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1750' FNL, 1800' FWL
At proposed prod. zone:

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 50 miles SE of Bloomfield, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 1750'FNL, 1800' FWL

16. NO. OF ACRES IN LEASE: 960

17. NO. OF ACRES ASSIGNED TO THIS WELL: ~~40~~ 160

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

19. PROPOSED DEPTH: 5860

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6924' 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	300 Sx Class "G" use sufficient to cover zones above

It is proposed to drill and test the Gallup formation at the above location. Total depth will be approximately 5860'

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.

RECEIVED
JUN 10 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 Scotty G. Smith TITLE Southern District Operations Manager DATE March 20, 1980

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

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 28	1

Unit Letter	Section	Township	Range	County
F	28	24N	7W	Rio Arriba

Actual Footage Location of Well:
1750 feet from the North line and 1800 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6924	Gallup	~~Lybrook~~ Escrito Gallup ext	~~320~~ 80 Acres

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

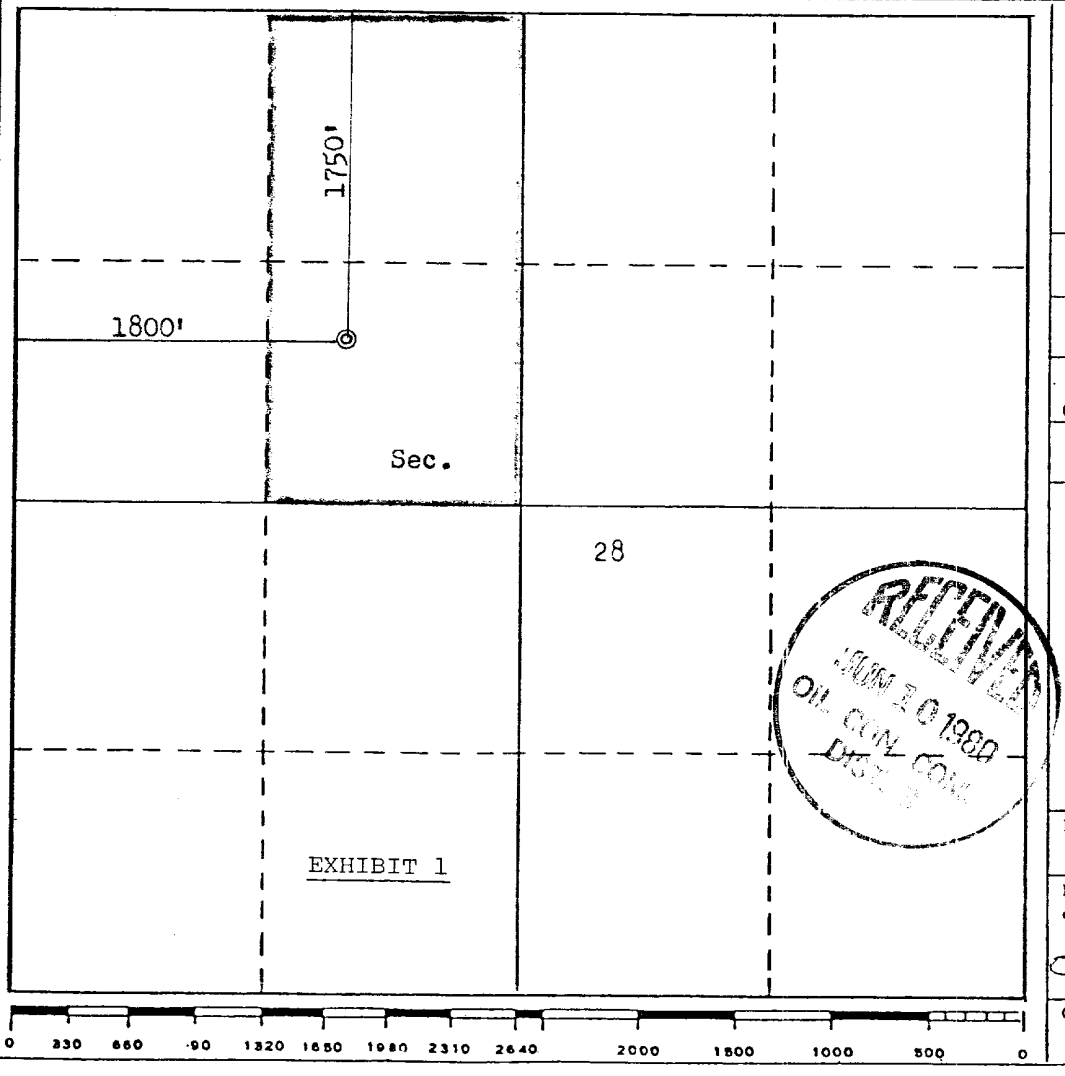
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). Single Lease

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.



RECEIVED
JUN 20 1980
OIL CON. COM.
DIST. 3

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 19,1980

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.

Date Surveyed: February 15, 1980

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.

Certificate No. 3950

REGISTERED LAND SURVEYOR
FRED B. KERR, JR.

NTL-6 ENVIRONMENTAL STATEMENT

SURFACE USE PLAN

OPERATOR: Grace Petroleum Corporation
LEASE & WELL NAME: Connie 28 #2
LOCATION: SE NW Sec. 28-T24N-R7W (1750' FNL, 1800' 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 oprerator at the above named well site.

1. Geologic Name of the Surface Formation

San Jose

2. Estimated Tops of Important Geologic Markers

Undivided	1665'
Picture Cliffs	2105'
Lewis	2195'
Chacra Zone	2910'
Cliff House	3635'
Menefee	3725'
Point Lookout	4385'
Mancos	4570'
Gallup	5430'

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 (2105') Chacra Zone (2910') Cliff House (3635') Menefee (3725') and Gallup (5430').

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'
4½", K-55, 10.5#/ft., new to TD, approximately 5860'

(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. 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 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 the Connie 28 #2 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 dirt road. Continue on dirt road for approximately 6.5 miles (Marker: windmill at 3.6 miles). Turn west onto existing road (El Paso Natural Gas P/L signs), continue on existing dirt road for approximately 5.4 miles, parallel to power line wires (Markers: railroad car and windmill @ 2.1 miles) to "Y" in road. Continue west on jeep trail for approximately 3/4 mile to flagged location.

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 radium (type of surface, conditions, etc.):

N/A

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

Exhibit 4A shows wells within 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 3%

C. Turnouts: None are planned.

D. Drainage Design: No drainage design will be incorporated for the drilling plase. Brush will be cleared and windrowed.

E. Location and size of culverts and brief description of any major cuts and fills: No culverts will be necessary. A 15-20' cut will be taken from the south side of the location and fill distributed to the north side, and as required to level the location.

F. Surfacing Material: None is planned.

G. Necessary gates, cattleguards, or fence cuts: None necessary.

H. New or reconstructed roads are to be center-line flagged at the time of location staking: Access road was centerline 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 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 within a 1-mile radius.

B. New facilities in the event of production. It is proposed to utilize existing facilities at Connie 1-21 location approximately 1 mile north of location. New facilities will consist of approximately 1 mile of 2" gas transmission surface line and will follow existing R-O-W.

(1) Dimensions of facilities:

Actual production facilities will utilize a beam pumping unit and will require approximately 50' x 50'.

(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.

(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 ranchers' water well located approximately 8 miles northeast 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: BLM

C. Materials Foreign to Site: N/A

D. Access Roads:
Approximately 600' of access road to be constructed will utilize soil encountered within the road boundaries.

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 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:

Three to six months upon completion of operations.

11. Other Information

A. Surface Description (Topography, Soil Characteristics, Geologic Features, Flora and Fauna):

Topography is pediment slope in canyon bottom with northeasterly drainage, alluvial surface deposits and sandstone bluffs. Soil is sandy, clayey loam. Principle vegetation consists of pinion, juniper, sagebrush, saltbush, scrub oak, prickly pear, narrowleaf yucca, grama, indian ricegrass, needle and thread.

B. Surface Ownership and Use: BLM

C. Proximity of Water, Dwellings, Historical Sites:

(1) Water:

Nearest source of water is approximately 1-1/2 miles north of proposed location.

(2) Occupied Dwellings:

Nearest occupied dwelling is located 1-1/2 miles north of proposed location.

(3) Sites: None found.

Refer to Report 80-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	Work 303/825-8103
3 Park Central, #200	Home 303/234-0257
1515 Arapahoe Street	
Denver, CO 80202	
Benjamin C. Stromberg	Work 303/825-8193
As above	Home 303/733-9076

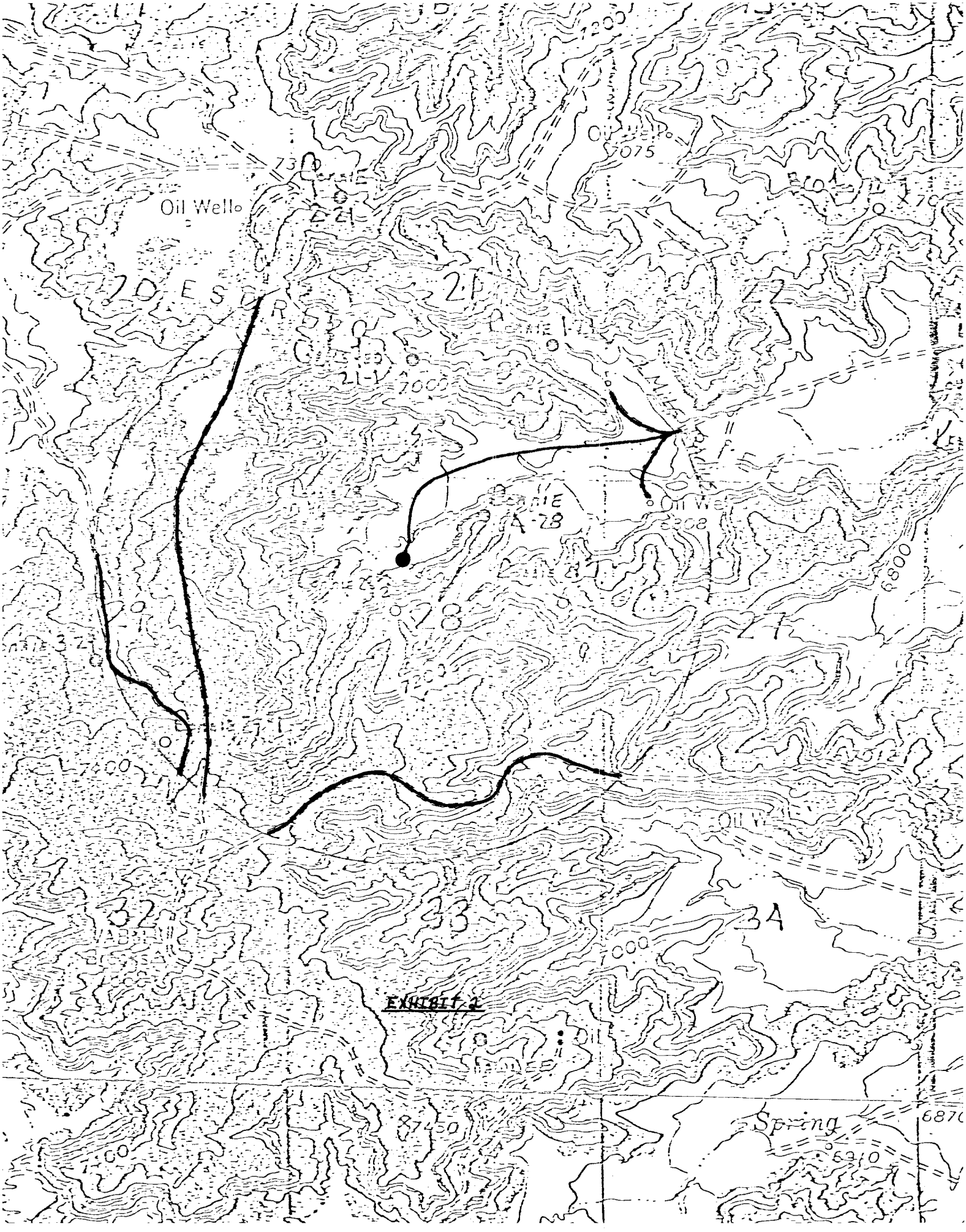
13. Certification

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.

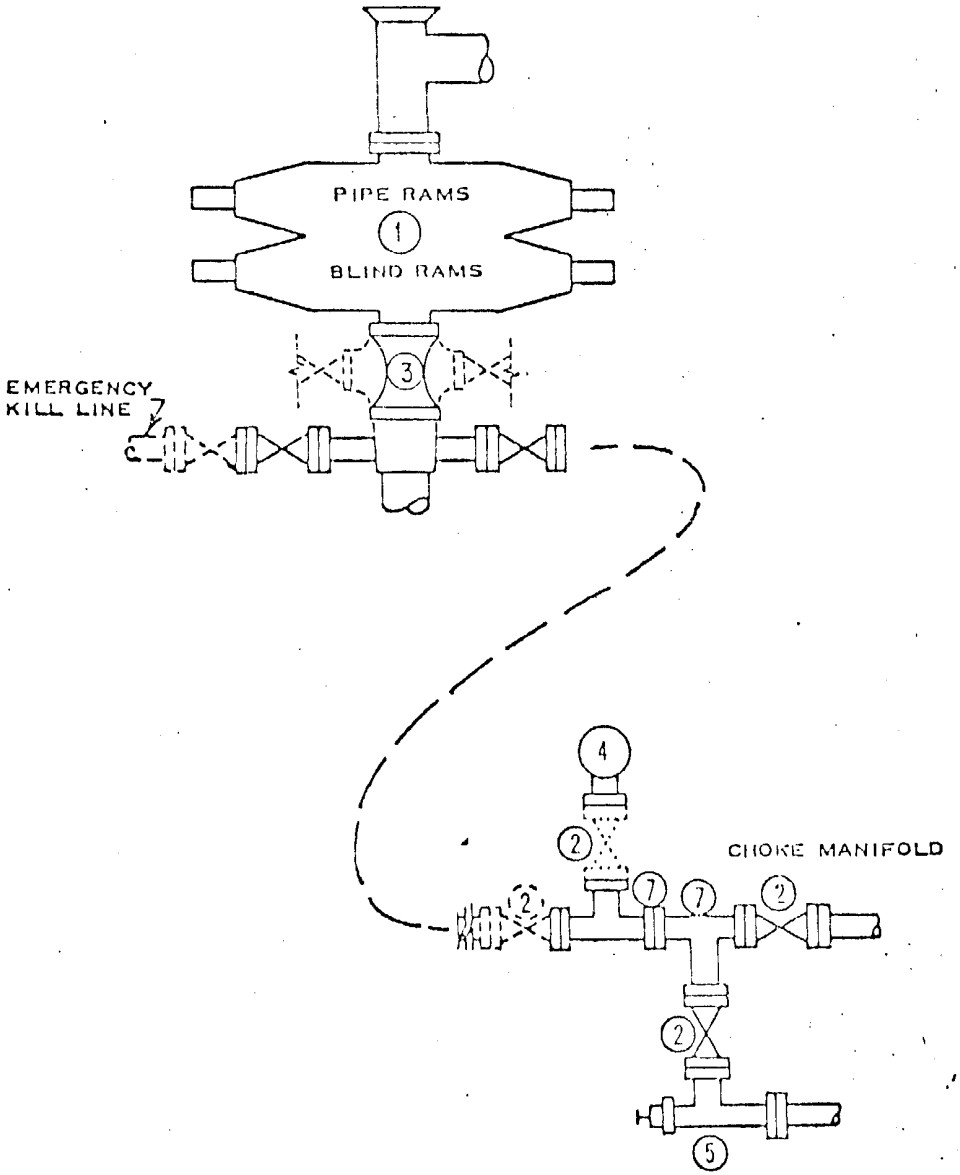
Scotty A. Smith

Scotty A. Smith, Southern District Operations Manager

* * * * * * * *


Oil Well
DESERT
EXHIBIT 2
Spring

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:

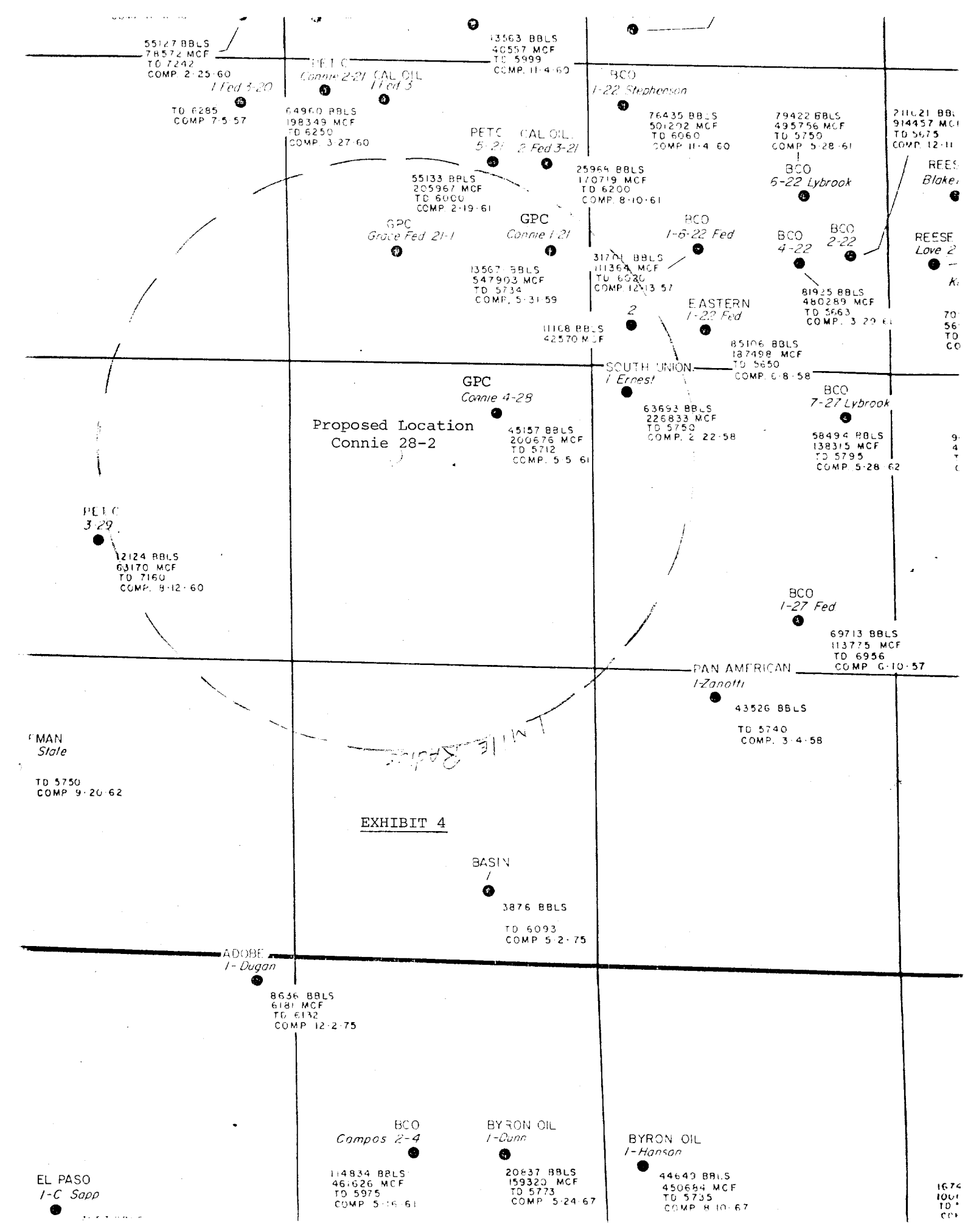
1. 3000 PSI WP CLAMP HUBS MAY BE SUBSTITUTED FOR FLANGES

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


55127 BBLS
78572 MCF
TD 7242
COMP. 2-25-60
1 Fed 3-20
TD 6285
COMP 7-5 57
PET C
Connie 2-21
CAL OIL
1 Fed 3
64960 BBLS
198349 MCF
TD 6250
COMP. 3-27-60
13563 BBLS
40557 MCF
TD 5999
COMP. 11-4-60
BCO
1-22 Stephenson
76435 BBLS
501202 MCF
TD 6060
COMP 11-4 60
79422 BBLS
495756 MCF
TD 5750
COMP 5-28-61
BCO
6-22 Lybrook
PETC
5-21
CAL OIL
2 Fed 3-21
55133 BBLS
205967 MCF
TD 6000
COMP 2-19-61
25965 BBLS
170719 MCF
TD 6200
COMP 8-10-61
GPC
Grace Fed 21-1
GPC
Connie 1 21
BCO
1-6-22 Fed
BCO
4-22
BCO
2-22
13567 BBLS
547903 MCF
TD 5734
COMP. 5-31-59
31701 BBLS
111364 MCF
TD 6030
COMP 12-13 57
81925 BBLS
480289 MCF
TD 5663
COMP. 3 29 61
EASTERN
1-22 Fed
2
11108 BBLS
42570 MCF
85106 BBLS
187498 MCF
TD 5650
COMP 6-8-58
SOUTH UNION
1 Ernest
GPC
Connie 4-28
Proposed Location
Connie 28-2
45157 BBLS
200676 MCF
TD 5712
COMP. 5 5 61
63693 BBLS
226833 MCF
TD 5750
COMP. 2 22-58
BCO
7-27 Lybrook
58494 BBLS
138315 MCF
TD 5795
COMP 5-28 62
PETC
3-29
12124 BBLS
63170 MCF
TD 7160
COMP. 8-12-60
BCO
1-27 Fed
69713 BBLS
113775 MCF
TD 6956
COMP 6-10-57
PAN AMERICAN
1-Zanotti
43526 BBLS
TD 5740
COMP. 3-4-58
MAN
State
TD 5750
COMP 9-20-62
EXHIBIT 4
BASIN
1
3876 BBLS
TD 6093
COMP 5-2-75
ADOBE
1-Dugan
8636 BBLS
6181 MCF
TD 6132
COMP 12-2-75
BCO
Compos 2-4
BYRON OIL
1-Dunn
BYRON OIL
1-Hanson
114834 BBLS
46626 MCF
TD 5975
COMP 5-16-61
20837 BBLS
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TD 5773
COMP 5-24-67
44649 BBLS
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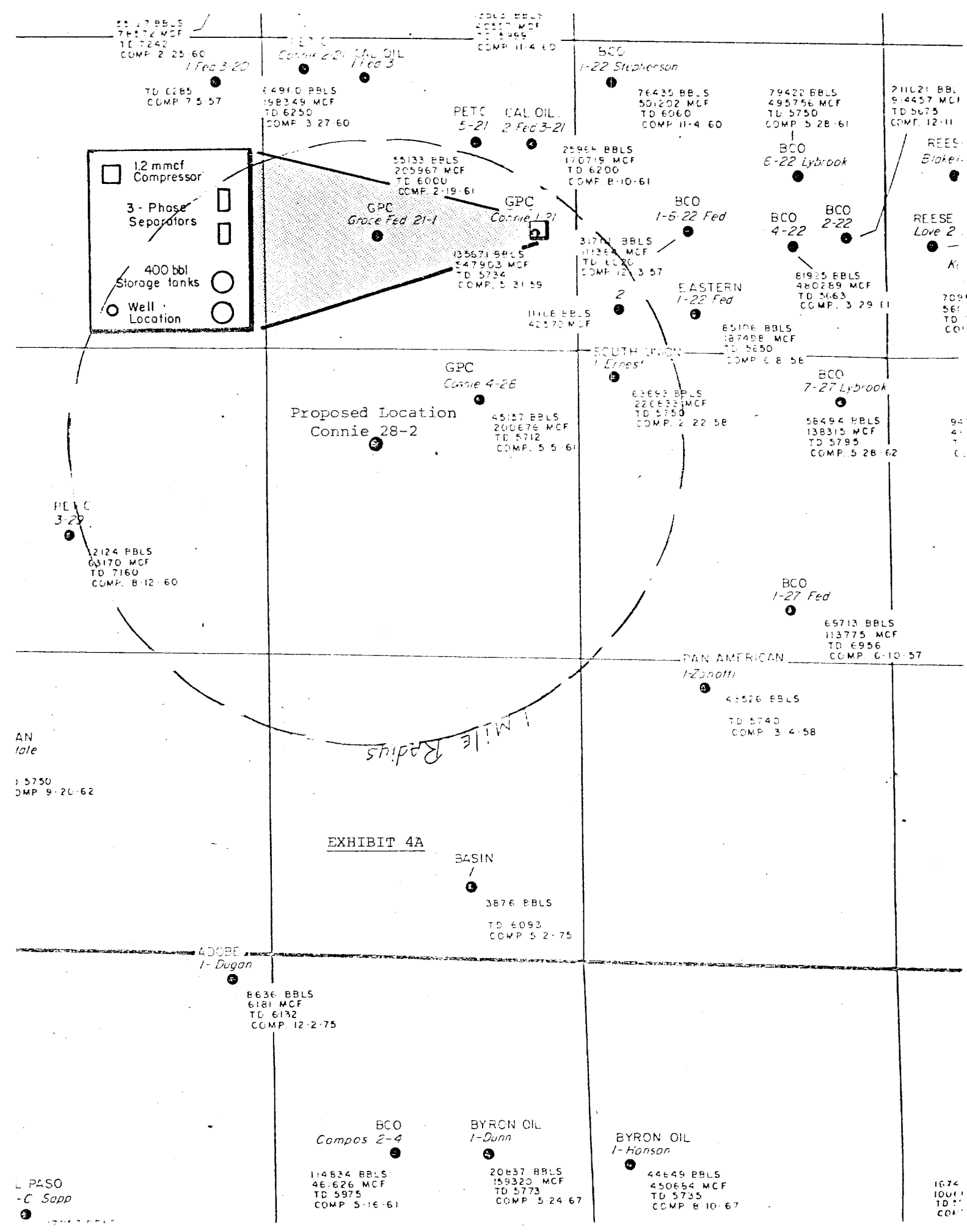
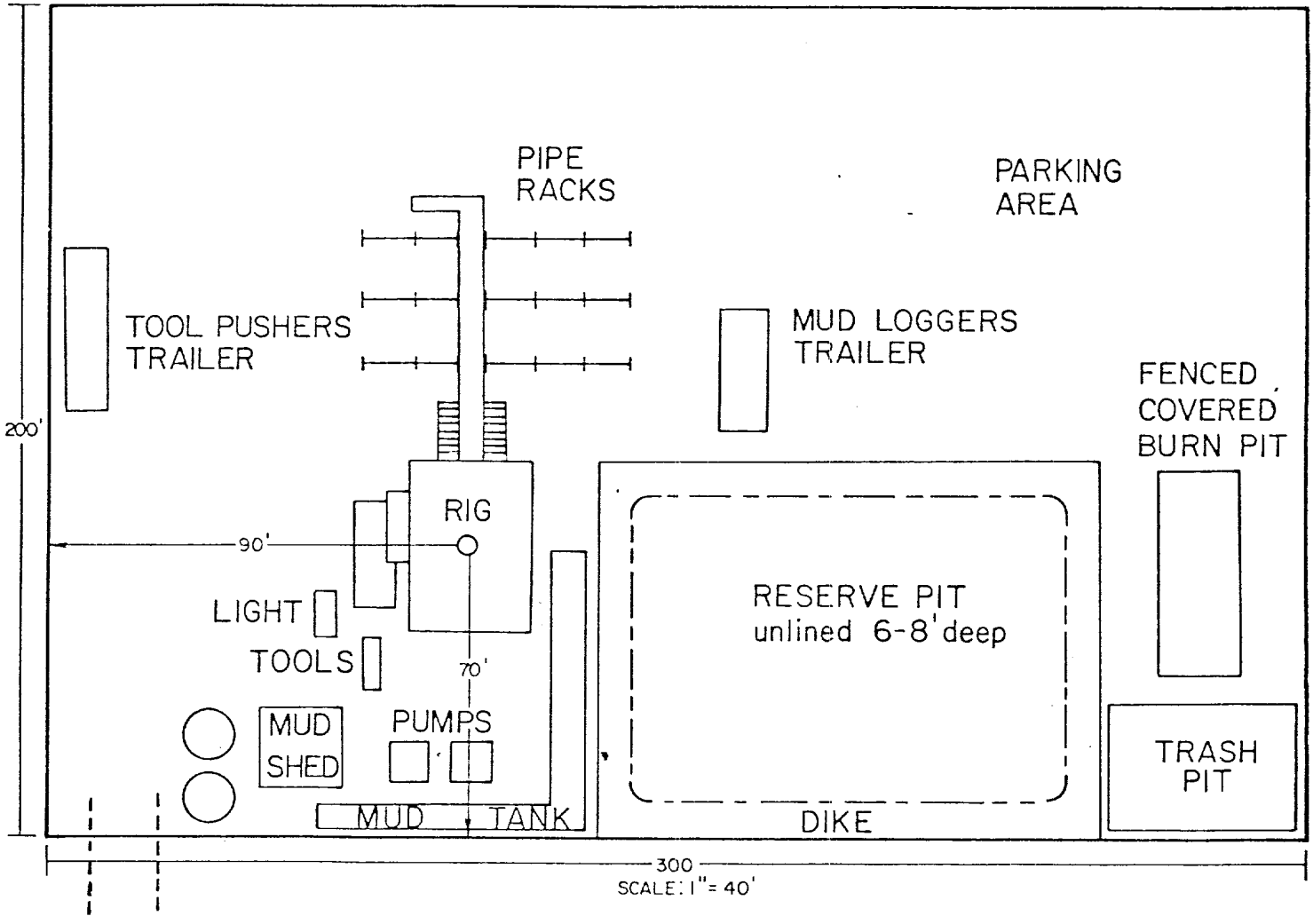
TD 5735
COMP 8-10-67
EL PASO
1-C Sapp


1.2 mmcf Compressor
3 - Phase Separators
400 bbl Storage tanks
Well Location
1 Mile Radius
Proposed Location
Connie 28-2
PETC
Connie 2-21 Fed
CAL OIL
1 Fed 3
PETC
5-21
CAL OIL
2 Fed 3-21
GPC
Grace Fed 21-1
GPC
Connie 1-21
GPC
Connie 4-28
PETC
3-29
BCO
1-22 Stephenson
BCO
6-22 Lybrook
BCO
1-6-22 Fed
BCO
4-22
BCO
2-22
BCO
7-27 Lybrook
BCO
1-27 Fed
EASTERN
1-22 Fed
SOUTH UNION
1 Ernest
PAN AMERICAN
1-Zonolli
ADOBE
1- Dugan
BCO
Compos 2-4
BYRON OIL
1-Dunn
BYRON OIL
1-Hanson
EXHIBIT 4A
BASIN



Proposed Access Road

EXHIBIT 5

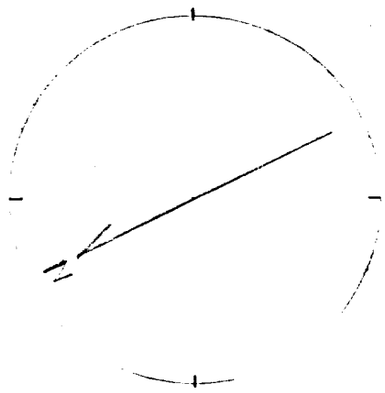
Connie 28 #2
SE NW Sec. 28-T24N-R7W
Rio Arriba County, New Mexico

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. #2 Connie 28
1750'FNL 1800'FWL Sec 28-T24N-R7W
Rio Arriba County, New Mexico

EXHIBIT 6



Scale: 1"=40'