Form 3160-3
(JULY 1989)
(formerly 9-331C)

CONTACT RECEIVING OFFICE FOR NUMBER OF COPIES REQUIRED (Other instructions on reverse side)

BLM Roswell District
Modified Form No.
NM060-3160-2

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.
LC-067715

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

1a. TYPE OF WORK
DRILL [ ] DEEPEN [X] Re-Entry PLUG BACK [ ]

7. UNIT AGREEMENT NAME
API #30-025-34109

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

8. FARM OR LEASE NAME
Bonanza Federal

2. NAME OF OPERATOR
STRATA PRODUCTION COMPANY

3a. Area Code & Phone No.
505-622-1127

9. WELL NO.
#2

3. ADDRESS OF OPERATOR
P. O. Box 1030
Roswell, New Mexico 88202-1030

10. FIELD AND POOL, OR WILDCAT
Bell Lake Bone Spring

4. LOCATION OF WELL (Report location clearly and in accordance with any State requ
At surface
330' FSL & 990' FEL
At proposed prod. zone
P

OGRID NO. 21712
PROPERTY NO. 20262
POOL CODE 5130
EFF. DATE 2-1-99
API NO. 30-025-34109

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 28-23S-34E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST
21 miles northwest of Jal, New Mexico

12. COUNTY OR PARISH
Lea

13. STATE
NM

15. DISTANCE FROM PROPOSED * LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
660'	640.00	40.00
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
660'	9000'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3474' GR

22. APPROX. DATE WORK WILL START*
February 1, 1999

23. PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48#	H-40	8 RD STC	WITNESS 5'	800 sacks
11'	8 5/8"	32#	HCK-55/J-55	8 RD LTC	4763'	1350 sacks
7 7/8"	5 1/2"	17#	J-55	8 RD LTC	9000'	Tie back to 300' into 8 5/8" casing

Strata Production Company proposes to Re-Enter and Deepen well to a depth sufficient to test the Bone Spring formation. If productive, 5 1/2" casing will be set. If non-productive, the well will be plugged and abandoned in a manner consistent with Federal Regulations. Specific programs as set out in Onshore Oil and Gas Order #1 are outlined in the following attachments:

NMOCD Form C-102 Well Location and Acreage Dedication Plat
Statement of Responsibility
Statement of Private Surface Owner's Agreement
Hole Prognosis
Surface Use and Operating Plan
Exhibit "A" Equipment Description
Exhibit "B" Planned Access Roads
Exhibit "C" One Mile Radius Map
Exhibit "D" Drilling Rig Layout Plan

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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 Carol J. Bercier TITLE PRODUCTION RECORDS MANAGER DATE 12/29/98

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY (ORIG. SGD.) ARMANDO A. LOPEZ TITLE Acting Assistant Field Office Manager, Lands and Minerals DATE JAN 28 1999

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-34109	5130	BELL LAKE BONE SPRING

Property Code	Property Name	Well Number
020262	BONANZA FEDERAL	2

OGRID No.	Operator Name	Elevation
021712	STRATA PRODUCTION COMPANY	3475.

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	28	23-S	34-E		330	SOUTH	990	EAST	LEA

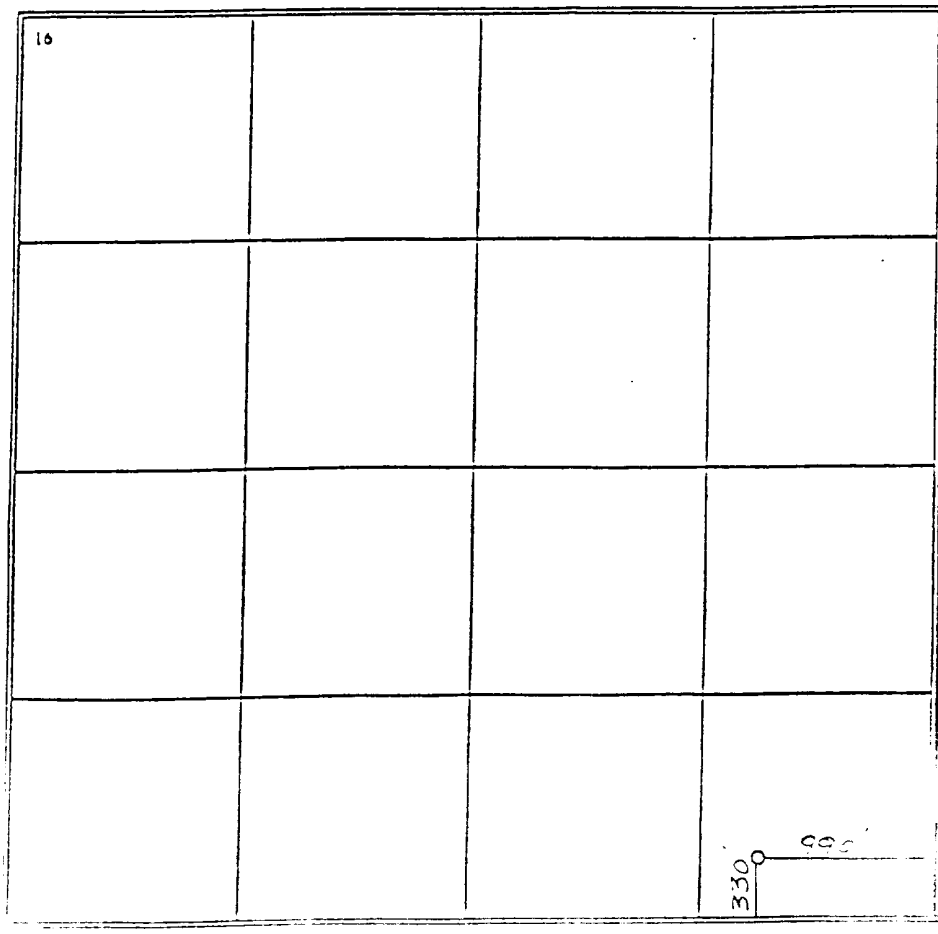
Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Carol J. Garcia
Signature
CAROL J. GARCIA
Printed Name
PRODUCTION RECORDS MANAGER
Title
DECEMBER 29, 1998
Date

18 SURVEYOR CERTIFICATION

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 belief.

JULY 20, 1997
Date of Survey
Signature and Seal of Professional Surveyor:

DAVID R. EDDY
NEW MEXICO

POST OFFICE DRAWER 1030
ROSWELL, NM 88202-1030

STRATA PRODUCTION COMPANY

TELEPHONE (505) 622-1127
FACSIMILE (505) 623-3533

200 WEST FIRST STREET, ROSWELL PETROLEUM BUILDING, SUITE 700
ROSWELL, NEW MEXICO 88201

STATEMENT OF RESPONSIBILITY

The undersigned, on behalf of Strata Production Company, accepts all applicable terms, conditions, stipulations and restrictions concerning the operations conducted on the leased lands or portions thereof as described below:

Federal Lease Number LC-067715
Township 23 South, Range 34 East
Section 28
Lea County, New Mexico
Formation: Bone Spring and Delaware
Bond: Statewide
Bond Number: OGB-233
Bonanza Federal

STRATA PRODUCTION COMPANY

December 29, 1998
Date

Carol J. Garcia
Carol J. Garcia
Production Records Manager

POST OFFICE DRAWER 1030
ROSWELL, NM 88202-1030

STRATA PRODUCTION COMPANY

TELEPHONE (505) 622-1127
FACSIMILE (505) 623-3533

200 WEST FIRST STREET, ROSWELL PETROLEUM BUILDING, SUITE 700
ROSWELL, NEW MEXICO 88201

STATEMENT OF PRIVATE SURFACE OWNER'S AGREEMENT

Strata Production Company hereby confirms that it has been unsuccessful in negotiating a mutually acceptable Private Surface Owner's Agreement with respect to the drilling and possible completion of the referenced well. Despite Strata's good faith efforts, the new Surface Owner refuses to accept consideration consistent with area prices, fair market value and amounts paid to the previous Surface Owner.

Federal Lease Number LC-067715
Township 23 South, Range 34 East
Section 28
Lea County, New Mexico
Formation: Bone Spring and Delaware
Bond: Statewide
Bond Number: OGB-233
Bonanza Federal

STRATA PRODUCTION COMPANY

December 29, 1998
Date

Carol J. Garcia
Carol J. Garcia
Production Records Manager

HOLE PROGNOSIS
FORM 3160-3 APPLICATION FOR PERMIT TO DRILL
STRATA PRODUCTION COMPANY
BONANZA FEDERAL #2 WELL
330' FSL & 990' FEL
SECTION 28-23S-34E
LEA COUNTY, NEW MEXICO

In conjunction with Form 3160-3, Application for Permit to Drill, Strata Production Company submits the following items in accordance with Onshore Oil and Gas Order Numbers 1 and 2, and all other applicable federal and state regulations.

1. Geologic Name of Surface Formation:

   Permian

2. Estimated Tops of Geologic Markers:

Rustler Anhydrite	920'	"B-1" Sand	7470'
B. Anhydrite	5040'	"K" Sand	8300'
Delaware	5110'	Bone Spring	8610'
"AAA" Sand	6850'	TD	9000'
"A" Sand	7190'		

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Surface	150'	Fresh Water
Delaware	5610' - 9000'	Oil or Gas

No other formations are expected to produce oil, gas or fresh water in measurable quantities. The surface fresh water sands will be protected by the 13 3/8" casing and cement set at 555'. Shallower zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across the zone by inserting a cementing stage tool into the 5 1/2" production casing which will be run at TD.

4. Casing Program:

Hole Size	Interval	OD Csg	Weight, Grade, Jt. Cond, Type
17 1/2"	0- 555'	13 3/8"	48#, H-40, ST&C, New
11"	0-4763'	8 5/8"	32#, J-55 & HCK-55, LT&C, New
7 7/8"	0- TD	5 1/2"	17#, J-55, LT&C, New

Cementing Program:

Surface Casing: 13 3/8" casing was set at 555' and cemented with 800 sacks of Class "C" cement with 2% CaCL and additives per sack.

Intermediate Casing: 8 5/8" casing was set at 4763' and cemented with 1150 sacks of 35/65 Poz "C" with 15# salt and additives per sack, and 200 sacks Class "C" with 2% CaCl.

Production Casing: If appropriate, 5 1/2" casing will be set at Total Depth. Strata utilizes cement in sufficient quantities to circulate cement into the 8 5/8" intermediate casing in two (2) stages. The first stage to be cemented with approximately 250 sacks 50/50 Poz "H" with 5# salt and additives per sack. The second stage to be cemented with approximately 350 sacks of 50/50 Poz "H" with 5# salt and additives per sack.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown on Exhibit "A" will consist of a double ram-type (3000 psi WP) preventer and a bag-type (hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram-type preventer will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. Both BOPs will be nippled up on the 13 3/8" surface casing and used continuously until TD is reached. All BOPs and accessory equipment will be tested to 1000 psi before drilling out of surface casing. Before drilling out of intermediate casing, the ram-type BOP and accessory equipment will be tested to 3000 psi and the hydril to 70% of rated working pressure (2100 psi).

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 3" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 3000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System:

0′ to 550′	Fresh water with lime and gel with paper and fiber for seepage will be used for drilling purposes. Anticipated mud properties are as follows: MW 8.4-8.6, Vis 29-36, Ph >8, WL N/C.
550′ to 4700′	Saturated brine water purchased from commercial sources with paper and fiber for seepage will be utilized. Anticipated mud properties are as follows: MW 8.6-10.5, Vis 32-34, Ph 10, WL N/C.
4700′ to 9000′	3% KCL water with 20-50 PPM Nitrates, CL 30,000 PPM, caustic for PH control, paper for seepage and starch for fluid loss control will be utilized. Anticipated mud properties are as follows: MW 8.5-8.9, Vis 29-34, Ph 9-10, WL NC-50.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary Well Control and Monitoring Equipment:

A. A kelly cock will be kept in the drill string at all times.

B. A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

8. Testing, Logging and Coring Program:

A two (2) man Mudlogging unit will be on location from the Delaware formation to TD. Mudlogging unit will be employed from approximately 7500' (Delaware) to 9000' (Total Depth).

If indicated, Dual Laterolog MSFL, Compensated Neutron Litho-Density Gamma Ray logs and Caliper logs will be run at TD. The Dual Laterolog will be run from TD back to the intermediate casing and the Compensated Neutron Litho-Density Log will be run from TD back to surface. In some cases, Strata may elect to run rotary sidewall cores from selected intervals from approximately 7500' to 9000' dependent upon logging results.

9. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. The anticipated bottomhole pressure is 3500# PSI.

Loss of circulation is possible in the Delaware section of the hole, however, no major loss circulation zones have been reported in offsetting wells.

Strata has drilled and completed seven (7) wells in the immediate area. To date, Hydrogen Sulfide has not been encountered. However, if Hydrogen Sulfide is encountered, a Hydrogen Sulfide alarm on the drilling rig would be activated. All personnel have had Hydrogen Sulfide training and appropriate breathing apparatus is located on site. If necessary, the well can be shut in utilizing the blow out preventer and other equipment to prevent the migration of Hydrogen Sulfide to the surface.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated re-entry date is February 1, 1999. Once commenced, the drilling operation should be completed in approximately 10 days. If the well is productive, an additional 15 days will be required for completion and testing before a decision is made to install permanent facilities.

SURFACE USE PLAN
FORM 3160-3 APPLICATION FOR PERMIT TO DRILL
STRATA PRODUCTION COMPANY
BONANZA FEDERAL #2 WELL
330' FSL & 990' FEL
SECTION 28-23S-34E
LEA COUNTY, NEW MEXICO

Submitted with Form 3160-3, Application For Permit to Drill covering the above captioned well. The purpose of the plan is to describe the location, the proposed construction activities, the operations, the surface disturbance involved, and the rehabilitation of the surface after completion of said well so that an appraisal can be made of the environment affected by this well.

1. Existing Roads:

A. The Well Location and Acreage Dedication Plat for the proposed well has been staked by Dan R. Reddy, Engineer, Carlsbad, New Mexico and is attached.

B. All roads to the location are shown in Exhibit "B". The existing roads are illustrated in red and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the on-site inspection.

C. Directions to location: From Jal, New Mexico, the well is located approximately 21 miles to the northwest on County Road #21.

D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as operations continue on the lease.

2. Proposed Access Road:

A new access road will not be required as shown on Exhibit "B". The road will be constructed from the existing East West road to the Bonanza Federal #1 location as follows:

A. The average grade will be less than 5%.

B. No turnouts will be necessary.

C. No culverts, cattleguards, gates, low-water crossings or fence cuts are necessary.

D. Surfacing material will consist of native caliche. If required, road across pad will be surfaced with a minimum of 6" of caliche. Caliche will be obtained from the nearest BLM approved caliche pit. Any additional materials that are required will be purchased from the dirt contractor.

3. Location of Existing Wells:

All existing wells within a one mile radius of proposed well are shown on Exhibit "C".

4. Location of Existing and/or Proposed Facilities:

In the event the proposed well proves to be productive, Strata Production Company will furnish maps or plats showing On Well pad facilities and Off Well pad facilities (if necessary) by Sundry Notice before beginning the construction of the facilities.

5. Location and Type of Water Supply:

The well will be drilled with a combination of brine and fresh water mud systems as outlined in the Hole Prognosis. The water will be purchased from commercial water stations in the area and trucked to the location by transport over the existing and proposed access roads as shown on Exhibit "B". If a commercial fresh water source is nearby, fasline may be laid along existing road ROWs and fresh water pumped to the well. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and the proposed new access road (approximately 2500 cubic yards) will be obtained from a BLM approved caliche pit. All roads and pads will be constructed of 6" rolled and compacted caliche.

7. Methods of Handling Water Disposal:

A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.

B. Drilling fluids will be contained in steel mud tanks. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit approximately 150' x 150' x 6' deep and fenced on three sides prior to drilling. It will be fenced on the fourth side immediately following rig removal. The reserve pit will be plastic lined (5-7 mil thickness) to minimize loss of drilling fluids and saturation of the ground with brine water. Drilling fluids will be allowed to evaporate in the reserve pits until dry.

C. Water produced from the well during completion may be disposed into the reserve pit or a steel tank (depending upon rates). After the well is permanently placed on production, produced water will be collected in tanks (fiberglass or steel) until hauled to an approved disposal system or a separate disposal application will be submitted to BLM for approval. Produced oil will be collected in steel tanks until sold.

D. A portable chemical toilet will be provided on the location for human waste during the drilling and completion operations. Compliance with current laws and regulations pertaining to the disposal of human waste will be observed.

E. Garbage and trash produced during drilling or completion operations will be disposed in a separate trash trailer on location. All waste material will be contained to prevent scattering by the wind. All water and fluids will be disposed into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by the operation.

F. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and kept closed until dried. When the reserve pit has dried sufficiently to breakout and fill, and as weather permits, the unused portion of the wellsite will be leveled and reseeded as per BLM specifications. Only that part of the pad required for production facilities will remain in use. In the event of a dry hole, only a dry hole marker will remain.

8. Ancillary Facilities:

No airstrip, campsite or other facility will be built as a result of the operations of the proposed well.

9. Well Site Layout:

A. The drill pad layout with elevations, as staked by Dan R. Reddy, Engineer, is shown on Exhibit "D". Dimensions of the pad, pits and location of major rig components are shown. Top soil, if available, will be stockpiled per BLM specifications as determined at the on-site inspection. Since the pad is fairly level, no major cuts will be required.

B. The planned orientation of the rig and associated drilling equipment, reserve pit, trash pit, pipe racks, turn-around and parking areas, and access road are shown on Exhibit "D". No permanent living facilities are planned, however, a temporary foreman/toolpusher's trailer will be on location during drilling operations.

C. The reserve pit will be lined with a high quality plastic sheeting (5-7 mil thickness).

10. Plan for Restoration of the Surface:

A. Upon completion of the proposed operations, should the well be abandoned, the pit area, after allowed to dry, will be broken out and leveled. The original top soil will be returned to the entire location, and leveled and contoured to the original topography as nearly as possible.

All trash, garbage and pit lining will be removed in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled within 120 days after abandonment.

B. The disturbed area will be revegetated by reseeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.

C. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time the rig is removed, the reserve pit will be fenced on the rig (fourth) side to prevent livestock or wildlife from being entrapped. The fencing will remain in place until the pit area is cleaned and leveled. No oil will be left on the surface of the fluid in the pit.

D. Upon completion of the proposed operations, should the well be productive, the reserve pit area will be treated as outlined above within the same prescribed time. The caliche from an area of the original drillsite not needed for production operations or facilities will be removed and used for construction of thicker pads or firewalls for the tank battery installation. Any additional caliche required for facilities will be obtained from a BLM approved caliche pit. Topsoil removed from the drillsite will be used to recontour the pit area and unused portions of the drill pad to the original natural level and reseeded as per BLM specifications.

11. Surface Ownership:

The wellsite and lease are located entirely on Fee surface.

12. Other Information:

A. The topography around the wellsite is rolling terrain with vegetation of sagebrush and native grass. The vegetation cover consists of prairie grasses and flowers. Wildlife in the area includes those typical of semi-arid desert land.

B. The soils are clayey sand over caliche base.

C. There are no permanent or live water in the immediate area.

D. There are no residences and other structures in the area.

E. The land in the area is used primarily for grazing purposes.

F. An archaeological study has been conducted for the location and new access road. The report has been submitted separately.

13. Lessee's and Operator's Representative:

FRANK MORGAN
P. O. BOX 1030
ROSWELL, NEW MEXICO 88202-1030
PHONE NUMBER: (505) 622-1127-OFFICE
365-7757-CELLULAR

14. Certification:

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site which currently exists; that the statements made in the plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Strata Production Company and its contractors and sub-contractors in conformity with the plan, and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 USC 1001 for the filing of a false statement.

STRATA PRODUCTION COMPANY

Carol J. Garcia

DATE: December 29, 1998

CAROL J. GARCIA
PRODUCTION RECORDS MANAGER

EXHIBIT "A"

EQUIPMENT DESCRIPTION

All equipment should be at least 3,000 psi WP or higher unless otherwise specified.

1. Bell nipple
2. Hydril bag type preventer
3. Ram type pressure operated blowout preventer with blind rams.
4. Flanged spool with one 3"and one 2"(minimum) outlet.
5. 2"(minimum) flanged plug or gate valve.
6. 2"x 2"x 2"(minimum) flanged.
7. 3"gate valve.
8. Ram type pressure operated blowout preventer with pipe rams.
9. Flanged type casing head with one side outlet.
10. 2" threaded (or flanged) plug or gate valve. Flanged on 5000# WP, threaded on 3000# WP or less.
11. 3" flanged spacer spool.
12. 3"x 2"x 2"x 2" flanged cross.
13. 2" flanged plug or gate valve.
14. 2" flanged adjustable choke.
15. 2" threaded flange.
16. 2" XXH nipple.
17. 2" forged steel 90`Ell.
18. Cameron (or equal) threaded pressure gauge.
19. Threaded flange.
20. 2" flanged tee.
21. 2" flanged plug or gate valve.
22. 2 1/2" pipe, 300' to pit, anchored.
23. 2 1/2" SE valve.
24. 2 1/2" line to steel pit or separator.

NOTES:

1). Items 3,4 and 8 may be replaced with double ram type preventer with side outlets between the rams.

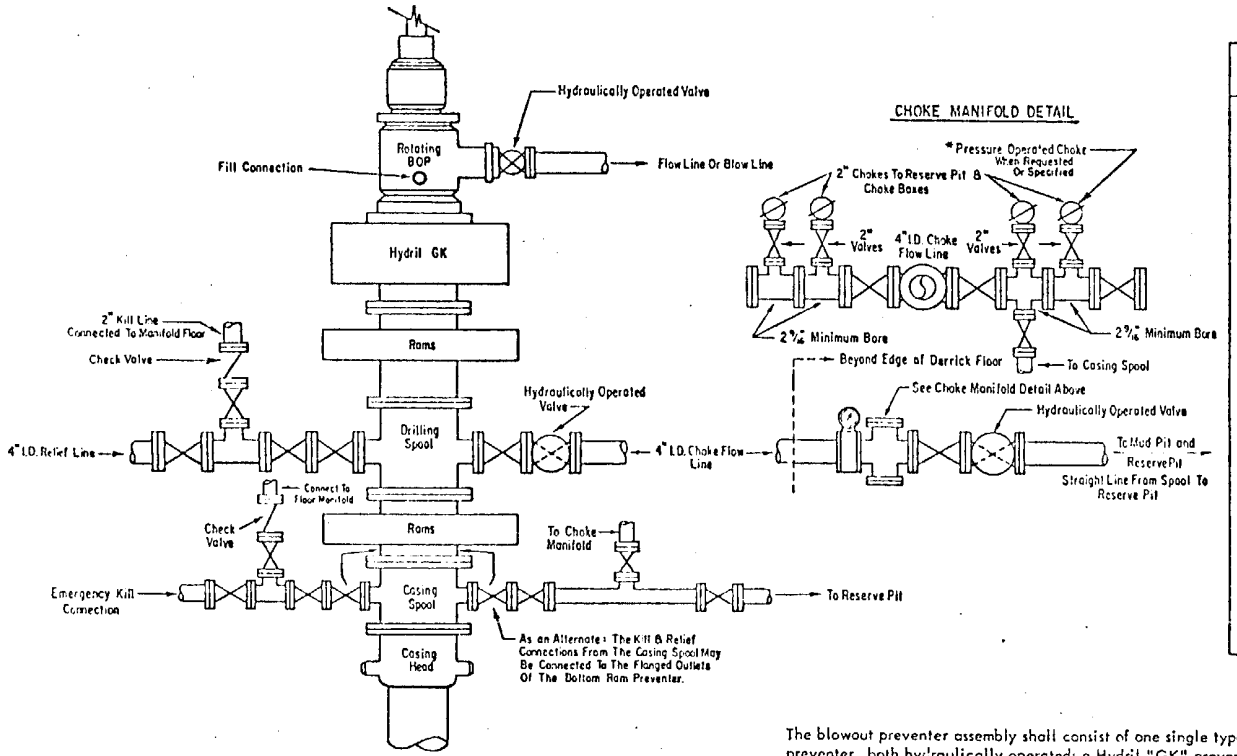
2). The two valves next tho the stack on the fill and kill line to be closed unless drill string is being pulled.

3). Kill line is for emergency use only. This connection shall not be used for filling.

4). Replacement pipe rams and blind rams shall be on location at all times.

5). Only type U, LSW and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.

6). Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.



3000# PSI WORKING PRESSURE
BLOWOUT PREVENTER HOOK-UP

The blowout preventer assembly shall consist of one single type blind ram preventer and one single type pipe ram preventer, both hydraulically operated; a Hydril "GK" preventer; a rotating blowout preventer; valves; chokes and connections, as illustrated. If a tapered drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing rams to fit the preventers are to be available as needed. If correct in size, the flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line and 4-inch I.D. relief line, except when air or gas drilling. All preventer connections are to be open-face flanged.

Minimum operating equipment for the preventers and hydraulically operated valves shall be as follows: (1) Multiple pumps, driven by a continuous source of power, capable of fluid charging the total accumulator volume from the nitrogen precharge pressure to its rated pressure within_____ minutes. Also, the pumps are to be connected to the hydraulic operating system which is to be a closed system. (2) Accumulators with a precharge of nitrogen of not less than 750 PSI and connected so as to receive the aforementioned fluid charge. With the charging pumps shut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultaneously within_____ seconds; after closure, the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least_____ percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pumps; or there shall be additional pumps operated by separate power and equal in performance capabilities.

The closing manifold and remote closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure reducer and regulator must be provided for operating the Hydril preventer. When requested, a second pressure reducer shall be available to limit operating fluid pressures to ram preventers. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, relief line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line, relief line, and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. If deemed necessary, walkways and stairways shall be erected in and around the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valves and relief line valves connected to the drilling spool and all ram type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

* To include derrick floor mounted controls.

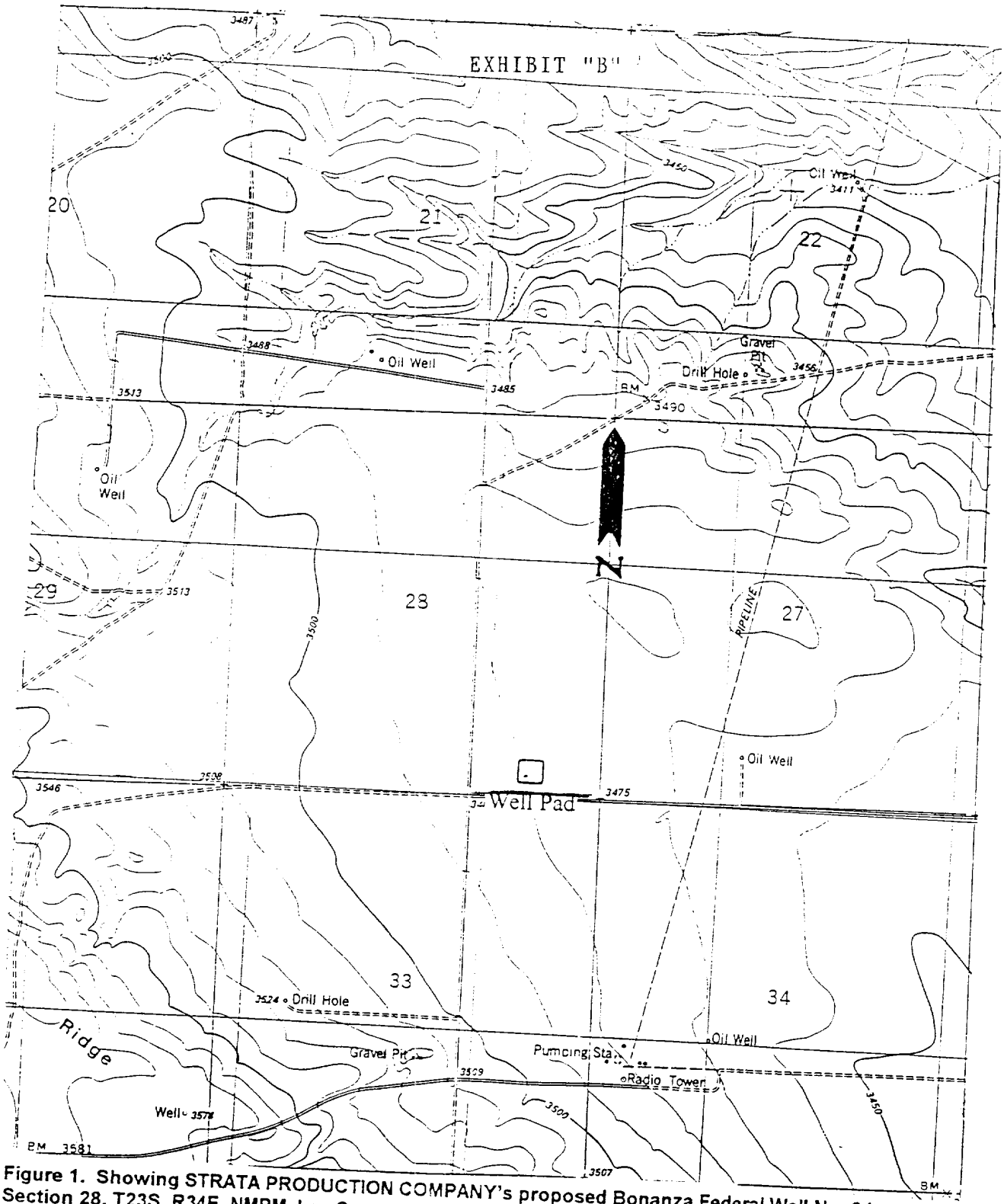


Figure 1. Showing STRATA PRODUCTION COMPANY's proposed Bonanza Federal Well No. 2 in Section 28, T23S, R34E, NMPM, Lea County, NM. Map Reference: USGS 7.5' series, San Simon Sink, NM (1984)

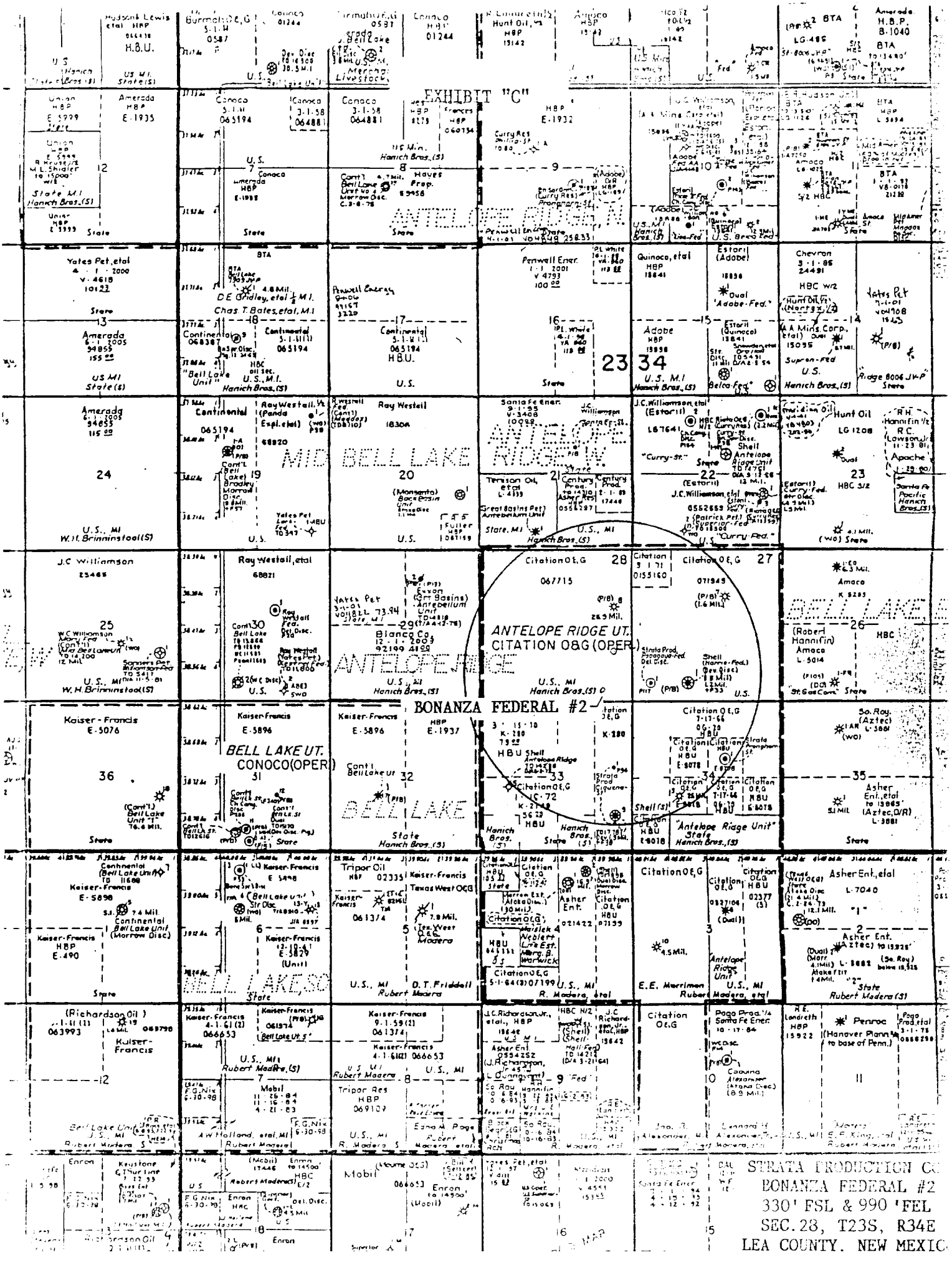
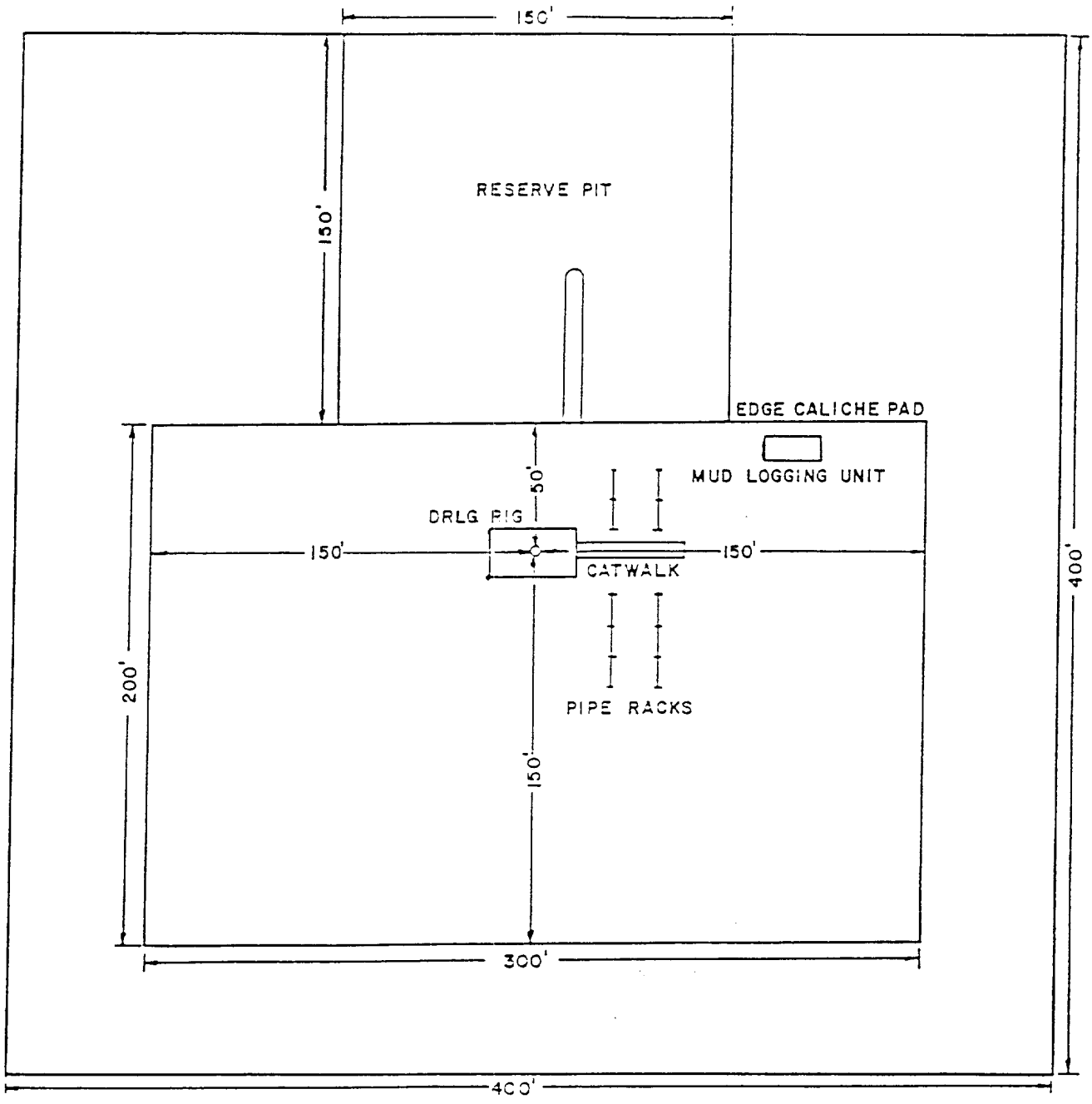


EXHIBIT "C"
ANTELOPE RIDGE
MID BELL LAKE
ANTELOPE RIDGE
ANTELOPE RIDGE UT.
CITATION O&G (OPER.)
BONANZA FEDERAL #2
BELL LAKE UT.
CONOCO (OPER.)
BELL LAKE
BELL LAKE SO.
STRATA PRODUCTION CO.
BONANZA FEDERAL #2
330' FSL & 990' FEL
SEC. 28, T23S, R34E
LEA COUNTY, NEW MEXICO



STRATA PRODUCTION COMPANY

DRILLING RIG LAYOUT PLAN
BONANZA FEDERAL #2
330' FSL & 990' FEL
SECTION 28-22S-34E
LEA COUNTY, NEW MEXICO

EXHIBIT "D"