# NE .EXICO OIL CONSERVATION COMMISSI' WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section					
			Lease	$\hat{\alpha}$	Well No.
erator Coron	ado Explor	ation Corp.	Carthel	Federal Can	2
	Section	Township	Range	County	1
G	5	23 South	29 East	Eddy	
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# United States Department of the Interior

RECEIVED

GEOLOGICAL SURVEY

South Central Region P. O. Box 26124 Albuquerque, New Mexico 87125 JUN 3 0 1980

O. C. D. ARTESIA, OFFICE

JUN 2 7 1980

Coronado Exploration Corporation 1007 Marquette, N.W. Albuquerque, New Mexico 87102 CORONADO EXPLORATION CORPORATION Carthel Fed Com. No. 2 2030 FNL 2080 FEL Sec. 5 T.23S R.29E Eddy County Lease No. NM-0556291

Gentlemen:

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well in the Secretary's Oil-Potash Area to a depth of 13,400 feet to test the Morrow is hereby approved subject to approval of the non-standard location by the N.M.O.C.D. and subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

- 1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
- 2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
- 3. All access roads will be limited to a 12 foot wide driving surface, excluding turnarounds. Surface disturbance associated with road construction will be limited to 20 feet in width.
- 4. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should not be less than 8" x 5" in size and each page should identify the well.
- 5. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
- 6. Before drilling below the 13-3/8" casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.

- 7. A kelly cock will be installed and maintained in operable condition.
- 8. After setting the 13-3/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.
- 9. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
  - (1) A recording pit level indicator to determine pit volume gains and losses.
  - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
  - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
- 10. Notify the Survey by telephone 24 hours prior to spudding well.
- 11. Notify the Survey in sufficient time to witness the cementing of the 13-3/8", 9-5/8", 7", and 4-1/2" casing.
- 12. Cement behind the 30", 20", 13-3/8", 9-5/8", 7", and 4-1/2" casing must be circulated.
- 13. It is required that a Gamma-Ray-Neutron Log be run in open hole from the base of Salado to the surface at a speed not to exceed 30 feet per minute.
- 14. Special Stipulations: No new surface disturbance authorized.

15. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

# (ORIG. SGD.) GENE F. DANIEL

Acting Deputy Conservation Manager, Oil and Gas

Enclosure

cc: Mining Branch (2) BLM, Roswell (w/cy Notice) NMOCD, Artesia (2) (w/2 cys Notice) Artesia Roswell (w/cy Notice) Area (potash) Area (chrono) District (potash) District (chrono)

#### SUPPLEMENTAL DRILLING DATA

#### CORONADO EXPLORATION CORPORATION

### CARTHEL FEDERAL COM. NO. 2

2030' FNL & 2080' FEL, SEC. 5., T-23-S, R-29-E

#### EDDY COUNTY, NEW MEXICO

#### LEASES: SEE FORM C-102 & ATTACHMENTS

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This supplemental plan is submitted with the Application to Drill the above-described well in compliance with NTL-6 of the United States Department of the Interior.

- 1. The surface is composed of a fine-grained sand, alluvium, quaternary in age.
- 2. Estimated top of primary geologic markers are:

Formation	<u>Est. Depth</u>	Subsea
Base Rustler	655'	+ 2,354'
Bell Canyon	2,895'	- 114'
Cherry Canyon	3,932'	- 923'
Brushy Canyon	4,977'	- 1,968'
Bone Spring	6,533'	- 3,524'
3rd Bone Spring	9,460'	- 6,451'
Wolfcamp	10,132'	- 7,122'
Penn	11,276'	- 8,267'
Strawn	11,444'	- 8,435'
Atoka	11,663'	- 8,654'
Morrow Lime	12,326'	- 9,317'
Morrow Sands	12,445'	- 9,436'
Total Depth	13,600'	-10,591'

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Elevations: GL - 3,003'. KB - 3,028' (estimated).

3.

The estimated depths at which anticipated water, oil or gas bearing formations are to be encountered are:

655'(-)	salt	Rustler Dolomite
3,932'	oil	Cherry Canyon Sand
10,132'	oil/gas	Wolfcamp Lime
11,444'	gas	Strawn
11,663'	gas	Atoka
12,445'	gas	Morrow Sands

- 4. Proposed casing program. See Form 9-331C and attachments.
- Pressure control equipment: See Form 9-331C, Exhibit 5. "B". Before drilling the Woldcamp formation, the BOP and related control equipment shall be pressure-tested to rated working pressures by an independent service The district office shall be notified in time company. to witness the tests. Pipe rams and the annular-type preventer shall be actuated at lease once each 24 hours and the blind rams each time the drill pipe is out of the hole. Accumulators shall maintain a pressure capacity reserve at all times to provide for repeated operation of hydraulic preventers. Blowout prevention drills shall be conducted as necessary to insure that each drilling crew is properly trained to carry out emergency duties.
- 6. Mud program: See Form 9-331C, Exhibit "A".
- 7. Auxiliary equipment to be used:
  - (a) Kelly cocks (upper and lower).
  - (b) Inside blowout preventer.
  - (c) Pit volume totalizer system before reaching Wolfcamp.
  - (d) Flow line flow sensor before reaching Wolfcamp.
  - (e) Mud gas separator before reaching Wolfcamp.
  - (f) Rotating head before reaching Wolfcamp.
  - (g) Full-opening drill string safety value on floor at all times before reaching Wolfcamp (value in "open" position).
- 8. Testing, coring and logging program:
  - (a) All significant shows of oil or gas will be drillstem tested if possible. Testing procedure will involve use of dual packers, jars and safety joint. Duration of test, shut-in times, etc. will be determined by company engineer in charge.
  - (b) No coring is anticipated.
  - (c) The following logs will be run:

#### SUPPLENEMTAL DRILLING DATA CORONADO EXPLORATION CORPORATION PAGE -3-

- (d) A mud logging unit will be placed on location
- at 2,500' KB and will remain to total depth. (e) Ten foot samples are to be caught from 2,000'
- KB to total depth.
  (f) Ten foot drilling time is to be kept from 2,000'
  KB to total depth.
- 9. Pressures in excess of a 10#/gallon mud hydrostatic pressure are anticipated between 10,800' KB and 12,300' KB. Zones having excessive pressures in nearby wells were the Strawn and Atoka. No abnormal temperatures or hydrogen sulfide are anticipated.

Pressure control shall be achieved by the use of muds having a density of 11.0 to 13.5#/gallon. Any gas kicks encountered should be recognized and controlled by the use of the mud logging unit and the following acessory equipment:

- (a) Pit level moniter.
- (b) Flow line moniter.
- (c) Dual 10,000 psi remote controlled chokes.
- (d) Mud gas separator.
- (e) Degasser.
- (f) Other equipment as needed.

Pressure below 12,300' KB (through Morrow zones) should not exceed a 10.0#/gallon hydrostatic pressure.

10. Anticipated spud date is July 20, 1980. Drilling operations will require approximately 95 days; completion operations will require an additional two or three weeks.

CORONADO EXPLORATION CORPORATION CARTHEL - FEDERAL NO : SECTION 5, T-23-S, R-29-E EDDY COUNTY, NEW MEXICO

#### CASING PROGRAM

#### CONDUCTOR PIPE

30" pipe set at 30' GL. Supplied by "Starting Hole Drilling" Company.

#### SURFACE PIPE

26" hole - 20" casing from surface to 500' KB.

500' - 94#/ft., H-40, ST & C casing. Top collar and bottom pin will be 8 RD., ST & C; others will be Buttress thread, supplied by Bearing Service & Supply.

94#, H-40, ST & C

Tension - 1,000 pounds	581
Internal yield - psig	1,530
Collapse - psig	520
Drift - inches	18.936
Coupling O.D inches	21.000
Make-up torque - ft./lbs.	* *

\*\* See Buttress thread tables.

Casing will be run in 9.0 ppg mud. Bouyancy factor - 0.862. String weight - 40,500 pounds.

Casing will be cemented through the drill pipe. Cementing equipment will consist of:

> Halliburton float shoe. Halliburton collar with latch in baffle plate.

Casing threads, both box and pin ends, are to be thoroughly cleaned with a 50 - 50 mixture of diesel and motor oil. Threads are to be doped as casing is run.

#### CASING PROGRAM CONTINUED

#### FIRST INTERMEDIATE

17 1/2" hole - 13 3/8" casing from surface to 2,850+' KB. Casing to be placed in hole as follows (top to bottom):

> 1,800' 54.5#/ft., ST & C, J-55 casing\* 1,100' 61.0#/ft., ST & C, J-55 casing\*\* 2,900'

\* Supplied by Bearing Service & Supply. \*\* Supplied by Union Supply Company.

	54.5#/ft.	61.0#/ft.
Tension - 1,000 pounds	545	798
Internal yield - psig	2,730	3,090
Collapse - psig	1,140	2,040
Drift - inches	12.459	12.359
Coupling O.D inches	14.375	14.375
Make-up torque - ft./lbs.	5,470	7,980

Casing will be run in 10.0 ppg brine water. Bouyancy factor - 0.847. String weight - 140,000 pounds.

Cementing equipment will consist of:

Halliburton float shoe. Halliburton float collar. Three Halliburton S-2 centralizers.

Casing threads, both box and pin ends, are to be thoroughly cleaned with a 50 - 50 mixture of diesel and motor oil. Threads are to be doped as casing is run.

#### SECOND INTERMEDIATE

12 1/4" hole - 9 5/8" casing set at 10,800' KB.

9,400 43.5#/ft., S-95, LT & C casing 1,400 47.0#/ft., S-95, LT & C casing

10,800

Supplied by Kirkpatrick Supply Company.

#### CASING PROGRAM CONTINUED

#### SECOND INTERMEDIATE (CONTINUED)

	43.5#/ft.	47.0#/ft.
Tension - 1,000 pounds	960	1,053
Internal yield - psig Collapse - psig	7,510 5,600	8,150 7,100
Drift - inches	8,599	8,525
Coupling O.D inches Make-up torque - ft./lbs.	9.625 9,600	9.625 10,500

Casing will be run in 10.0 ppg brine water. Bouyancy factor - 0.847. String weight - 395,300.

Casing equipment will consist of:

Halliburton float shoe. Halliburton float collar. Halliburton multiple stage cementer. One cement basket just below DV tool. Centralizers through any possible pay zones and above and below stage tool.

Casing is to be inspected by an Amalog IV (or equivalent) inspection, end area inspection and drifted for an 8.5" bit. This inspection should be accomplished at least 10 days prior to running in order to allow sufficient time for replacement of rejected casing.

Casing is to be sand blasted through and 150' above and below any possible productive zones.

Casing threads will be cleaned with a 50 - 50 mixture of diesel and motor oil. Threads are to be doped with Bakerseal as the casing is run. A pick-up machine will be used to run casing.

FIRST LINER

8 1/2" hole - 7" liner set at  $\pm$  12,300' KB. Casing to be placed in hole as follows:

1.800 29.0#/ft., NKT-95, LT & C casing

Supplied by Robert N. Enfield (Union Supply Company).

# CASING PROGRAM CONTINUED

#### FIRST LINER (CONTINUED)

29.0#, NKT-95, LT & C

- - -

Tension - 1,000 pounds	803
	9,690
Internal yield - psig	9,200
Collapse - psig	6,059
Drift - inches	
Coupling O.D inches	7.656
Make-up torque - ft./lbs.	6,920

Casing will be run on drill pipe with a TIW Type LP liner setting assembly with "Hydro-Hanger" liner hanger and accessory equipment. Casing will be hung approximately 250' above bottom of 9 5/8" casing.

Casing is to be inspected by an Amalog IV (or equivalent), end area inspection and drifted for a 6" bit.

Casing is to be sand blasted.

Casing threads will be cleaned with a 50 - 50 mixture of diesel and motor oil. Threads are to be doped with Bakerseal as casing is run. A pick-up machine will be used to run casing.

#### SECOND LINER

6" hole - 4 1/2" liner set at ± 13,600' KB. Casing to be placed in hole as follows:

1,600\* 13.5#/ft., S-95, LT & C casing

13.5#, S-95, LT & C

Tension - 1,000 pounds	248
Internal yield - psig	10,710
	10,380
Collapse - psig	3,795
Drift - inches	•••·
Coupling O.D inches	5.000
Make-up torque - ft./lbs.	3,100

Casing will be run on drill pipe with a TIW Type LP liner setting assembly with "Hydro-Hanger" liner hanger and accessory equipment. Casing will be hung approximately 250' above bottom of 7" casing.

#### CASING PROL AM CONTINUED

### SECOND LINER (CONTINUED)

Casing is to be inspected by an Amalog IV (or equivalent), end area inspection and drifted for a 3 3/4" bit.

Casing is to be sand blasted.

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Casing threads will be cleaned with a 50 - 50 mixture of diesel and motor oil. Threads are to be doped with Bakerseal as casing is run. A pick-up machine will be used to run casing.

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James F. O'Briant Registered Professional Engineer

#### MUD PROGRAM

### Surface Hole 0 - 500'

Spud with fresh water gel spud mud. Maintain viscosity to insure good hole cleaning in 26" hole. Use paper if required for seepage.

Weight	8.8 – 9.0 ppg
Viscosity	34 - 40  sec./1000 cc
Fluid Loss	No control
PH	· · · · · · · · · · · · · · · · · · ·

### Intermediate Hole 500 - 2,850'

Use existing mud to drill cement and shoe; then displace hole with 10# brine; drill hole. Use caustic soda for PH control. Circulate reserve pits and use Jet Jel for maximum solids control. Use paper to control seepage. Use salt water gel sweeps daily for hole cleaning.

Weight	9.8 - 10.1  ppg
Viscosity	28 sec./1000cc
	No control
PH	10 - 11

#### Intermediate Hole 2,850 - 10,800'

Drill out from 13 3/8" casing with existing brine water system. Use fresh water to cut fluid weight to  $\pm$  9.5 ppg. Allow hole conditions to dictate any further changes in fluid weight. Continue using caustic soda for PH control. Continue circulating reserve pit and using Jet Jel for solids control. Use salt water gel sweeps as necessary for hole cleaning.

Weight	9.4 - 10.0 ppg
Viscosity	28 sec./1000cc
Fluid Loss	No control
PH,	10 - 11

### Production Interval 10,800 - 12,300'

Test, drill cement and shoe with existing brine water fluid. Displace hole with pre-mixed 11.0 ppg fresh water lignosultonate mud. Use caustic soda to control PH.

Allow hole conditions to dictate any mud weight changes down to 11,400'. Begin weighting up fluid to 12.5 ppg at 11,400' and have weight up by 11,500'. After entering Strawn with 12.5 ppg mud, allow hole conditions to dictate any further mud weight changes.

Weight	11.0 - 13.5 ppg
Viscosity	38 - 45 sec./1000 cc
Fluid Loss	8 - 12
PH	10 - 11

# Production Interval 12,300 - 13,600'

Drill out from protective liner with 10#/gallon brine water/drispac mud system. Use caustic soda for PH control. Allow hole conditions to dictate any changes in mud weight.

 Weight
 9.8 - 10.4 ppg

 Viscosity
 32 - 34 sec./1000cc

 Fluid Loss
 5 - 8

 PH
 10

#### Accessory Equipment

The following equipment will be used while drilling the production interval of this hole.

1. Baroid double screen shaker.

2. Desilter.

3. Swaco degasser.

#### **LOWOUT PREVENTER EQUIPMEN**

#### Surface Casing - 20"

1. One 20", 2000 psi, Type MSP Hydrill preventer.

#### Intermediate Casing - 13 3/8"

- 1. One 13 5/8", 5000 psi, dual Hydrill preventer.
- 2. One 13 5/8", 5000 psi, Type GK Hydrill preventer.
- 3. One 5000 psi, choke manifold.
- 4. One rotating head. (if required)

#### Intermediate Casing - 9 5/8"

- 1. One 11", 10,000 psi, Cameron Type U double preventer.
- 2. One 11", 10,000 psi, Cameron Type U single preventer.
- 3. One 11", 10,000 psi, Type GK Hydrill preventer.
- 4. One rotating head.
- 5. One 4 1/16", 10,000 psi, choke manifold with two 10,000 psi Swaco chokes.
- 6. One 4 1/16", 10,000 psi, manual and one 4 1/16", 10,000 psi, hydraulic valve between choke spool and choke manifold.
- 7. One 2 1/16", 10,000 psi, manual and one 2 1/16", 10,000 psi hydraulic valve between casing head spool and choke manifold.

Blowout preventer equipment will be hydraulically actuated with a six station, 3000 psi Koomey accumulator with remote control station on the rig floor. Accumulator is to have sufficient capacity to close all pressure operated devices at one time and maintain a 25% reserve.

After each BOP stack is assembled a plug will be set in the casinghead and the stack tested to rated working pressure.

All BOP equipment shall be checked for proper working order on each trip. Choke manifold and lines should be flushed periodically with water. Swaco chokes are to be checked on each tour by driller.

Blowout preventer drills are to be held not less than twice weekly by each drilling crew. All crew members are to be familiar with BOP and choke manifold operation and their respective duties in the event of a kick.



# BOP STACK

### 5000 PSI WORKING PRESSURE

DEPTH INTERVAL

FROM 13-3/8" CASING SEAT TO 9-5/8" CASING POINT





### BOP STACK

10,000 PSI WORKING PRESSURE

## DEPTH INTERVAL

FROM 9-5/8" CASING SEAT TO TOTAL DEPTH

### CASING TESTING

Surface Casing - 20"

1. Before drilling out cement, pressure casing with rig pump to 1000 psig for thirty munutes - 50 psig pressure drop acceptable. Drill cement and shoe; displace fresh water mud with 10# brine.

Intermediate Casing - 13 3/8"

- 1. Before drilling shoe pressure casing to 2000 psig for thirty minutes with rig pump - 50 psig pressure drop acceptable.
- 2. After drilling shoe and five feet of new hole, pressure test to 10.5 ppg fluid equivalent at bottom of hole.

Intermediate casing - 9 5/8"

- Before and after drilling D. V. Tool pressure casing with Halliburton pump to 5000 psig for one hour - 50 psig pressure drop acceptable.
- 2. After drilling shoe and five feet of new hole, pressure test to 14 ppg fluid equivalent at bottom of hole.

Liner - 7" (or 7 5/8")

- 1. Displace mud with 10 ppg brine water.
- 2. Drill out cement from above and top of liner.
- 3. Pressure liner with Halliburton pump to 3000 psig for one hour 50 psig pressure drop acceptable.

Liner - 4 1/2''

- 1. Drill out cement from above and top of liner.
- 2. Pressure liner with Halliburton pump to 3000 psig for one hour 50 psig pressure drop acceptable.

### SURFACE USE AND OPERATIONS PLAN

# RECEIVED

### FOR

# JUN 5 1980

CORONADO EXPLORATION CORPORATION<br/>WELL NO. 2 CARTHEL FEDERALU.S. GEULUGICAL SURVEY<br/>ARTESIA, NEW MEXICO2030'FNL & 2080'FEL SEC.5, T.23 S., R.29 E.EDDY COUNTY, NEW MEXICO

LOCATED: 15 air miles southeast of Carlsbad, New Mexico.

FEDERAL LEASE NUMBER: New Mexico 0556291

LEASE ISSUED: March 1, 1965. Lease extended by drilling operations to November 11, 1981.

RECORD LESSEE: Hershel and Chester Carthel.

OPERATOR'S AUTHORITY: Designated operator.

ACRES IN LEASE: 360.80.

SURFACE OWNERSHIP: Federal.

<u>GRAZING PERMITTEE</u>: Henry Grandi P. O. Box 898 Carlsbad, New Mexico 88220

POOL: Wildcat.

POOL RULES: Statewide Rules.

EXHIBITS: A. General Road Map B. Plat Showing Existing Wells and Existing Roads C. Drilling Rig Layout

#### 1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. From the intersection of New Mexico highways 31 and 128, go southwest on highway 31 for 0.5 mile and turn southeast through a cattle guard onto a graded road. Follow this road to a point approximately 200 feet this side of railroad. The proposed well location is about 600 feet north of this point.
- B. Exhibit "B" is a plat showing existing roads within a onemile radius of the well site and the planned access road. Existing roads and the planned new road are color coded.
- C. Any repairs to existing roads do not appear necessary at the present time.

#### 2. PLANNED ACCESS ROAD:

- A. Length and Width: The new road will be 12 feet wide and approximately 500 feet long. The new road is labled and color coded red on Exhibit "B". The center line of the proposed new road, from the beginning to the well site, has been staked and flagged with the stakes being visible from any one to the next.
- B. <u>Surfacing Material</u>: Six inches of caliche, watered, compacted and graded.
- C. Maximum Grade: One percent.
- D. Turnouts: None required.
- E. <u>Drainage Design</u>: New road will have a drop of six inches from the center line on each side.
- F. Culverts: None required.
- G. <u>Cuts and Fills</u>: None necessary. Only minor levelling will be required.
- H. Gates and Cattle Guards: None required. No fences involved.

3. LOCATION OF EXISTING WELLS:

A. Existing wells in the immediate area are shown on Exhibit "B".

- 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:
  - A. This lease is undeveloped at present and there are no existing production facilities on the lease.
  - B. If the proposed well is productive, the tank battery and flow line will be located on the well pad and no additional surface disturbance will be necessary.
- 5. LOCATION AND TYPE OF WATER SUPPLY:
  - A. It is not contemplated that a water well will be drilled. Water necessary for drilling will be purchased and hauled to the site over existing and proposed roads shown on Exhibit "B".
- 6. SOURCE OF CONSTRUCTION MATERIALS:
  - A. There is an existing caliche pit approximately 0.5 mile south of the well site. Location of the pit is in the SW4SE4 sec. 5, T.23 S., R.29 E., Eddy County, New Mexico. Caliche for surfacing the access road and well pad will be taken from this pit and will be trucked to the well site over existing roads.

#### 7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.
- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- E. Trash, waste paper, garbage, and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit "C".

- F. All trash and debris will be buried or removed from the well site within 30 days after finishing drilling and/or completion operations.
- 8. ANCILLARY FACILITIES:
  - A. None required.
- 9. WELL SITE LAYOUT:
  - A. Exhibit "C" shows the relative location and dimensions of the well pad, mud pits, reserve pit, trash pit and the location of major rig components.
  - B. Only minor levelling of the well site will be required. No significant cut and fill will be necessary.
  - C. The pad and pit area has been staked and flagged.

#### 10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. After abandonment, all equipment, trash and junk will be removed and the location cleaned. Any special rehabilitation and/or special revegetation requirements of the surface management agency will be complied with and accomplished as expeditiously as possible.
- 11. OTHER INFORMATION:
  - A. <u>Topography</u>: The land surface is relatively level. There is a gentle slope southeastward.
  - B. <u>Soil:</u> Most of the top soil has previously been removed from the well site area. Apparently the Highway Department used this area for a road construction material plant site.
  - C. Flora and Fauna: Vegetative cover has been previously removed. Wildlife in the general area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.

- D. <u>Ponds and streams</u>: There are no fresh water rivers, streams, lakes or ponds in the area. There is a salt lake approximately a mile southeast.
- E. <u>Residences and Other Structures</u>: There are no occupied dwellings or windmills within a mile of the proposed well site.
- F. Archaeological, Historical and Other Cultural Sites: None observed in the area.
- G. Land Use: Grazing and hunting in season.
- H. Surface Ownership: Federal.
- 12. OPERATOR'S REPRESENTATIVE:

Representatives responsible for assuring compliance with the approved Surface Use Plan are:

James F. O'Briant	Harvey E. Yates, Jr.
316 Building of the Southwest	1005 Marquette NW
Midland, Texas 79701	Albuquerque, New Mexico 87102
Office Phone: 915-683-5511	Office Phone: 505-242-2050
Home Phone : 915-683-1094	Home Phone : 505-243-2052
Mobil Phone : 915-683-4044	Mobil Phone : 505-623-0989

### 13. CERTIFICATION:

I nereby 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 Coronado Exploration Ccrporation and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

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Bread lámes



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