

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

RECEIVED
JUL 10 1992
ARTESIADEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

CONCHO RESOURCES, INC. (ERICK NELSON) 915-683-7443

3. ADDRESS AND TELEPHONE NO.

110 WEST LOUISIANA SUITE 410 MIDLAND, TEXAS 79702 (915-683-7443)

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

At surface

1980' FNL & 2180' FWL SEC. 8 T16S-R28E EDDY CO. NM

At proposed prod. zone SAME

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

APPROXIMATELY 15 MILES NORTHEAST OF ARTESIA NEW MEXICO.

15. DISTANCE FROM PROPOSED*

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

1980

16. NO. OF ACRES IN LEASE

560

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

2100'

19. PROPOSED DEPTH

9600'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3687' GR.

22. APPROX. DATE WORK WILL START*

When Approved

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor	NA	40'	Cement to surface with Redi-mix
17 1/2"	H-40 13 3/8"	48	500'	500 Sx. circulate to surface.
12 1/4"	J-55 8 5/8"	32	1800'	1050 Sx. " " "
7 7/8"	N-80 4 1/2"	11.6	9600'	600 Sx. estimate top of cement 6000'

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17 1/2" hole to 500'. Run and set 500' of 13 3/8" 48# H-40 ST&C casing. Cement with 500 Sx. of Class "C" cement + 2% CaCl + 1/4# Flocele/Sx. circulate cement to surface.
3. Drill 12 1/4" hole to 1800'. Run and set 1800' of 8 5/8" 32# J-55 ST&C casing. Cement with 850 Sx. of 35/65 POZ + additives, tail in with 200 Sx. of Class "C" + 2% CaCl + 1/4# of Flocele/Sx. circulate cement to surface.
4. Drill 7 7/8" hole to 9600'. Run and set 9600' of 4 1/2" 11.6# N-80 LT&C casing. Cement with 600 Sx. of Class "H" 50/50 POZ + additives, estimate top of cement 6000' from surface.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 Joel Junice TITLE Agent

DATE 01/26/01

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

DATE

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED
JAN 25 2001
FBI
FEDERAL BUREAU OF INVESTIGATION
U.S. DEPARTMENT OF JUSTICE

YOU ARE INVITED TO MEET

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
		UNDES. DIAMOND MOUND-MORROW
Property Code	Property Name	Well Number
	BLACKBIRD 8 FEDERAL COM	3
GRID No.	Operator Name	Elevation
166111	CONCHO RESOURCES, INC.	3687'

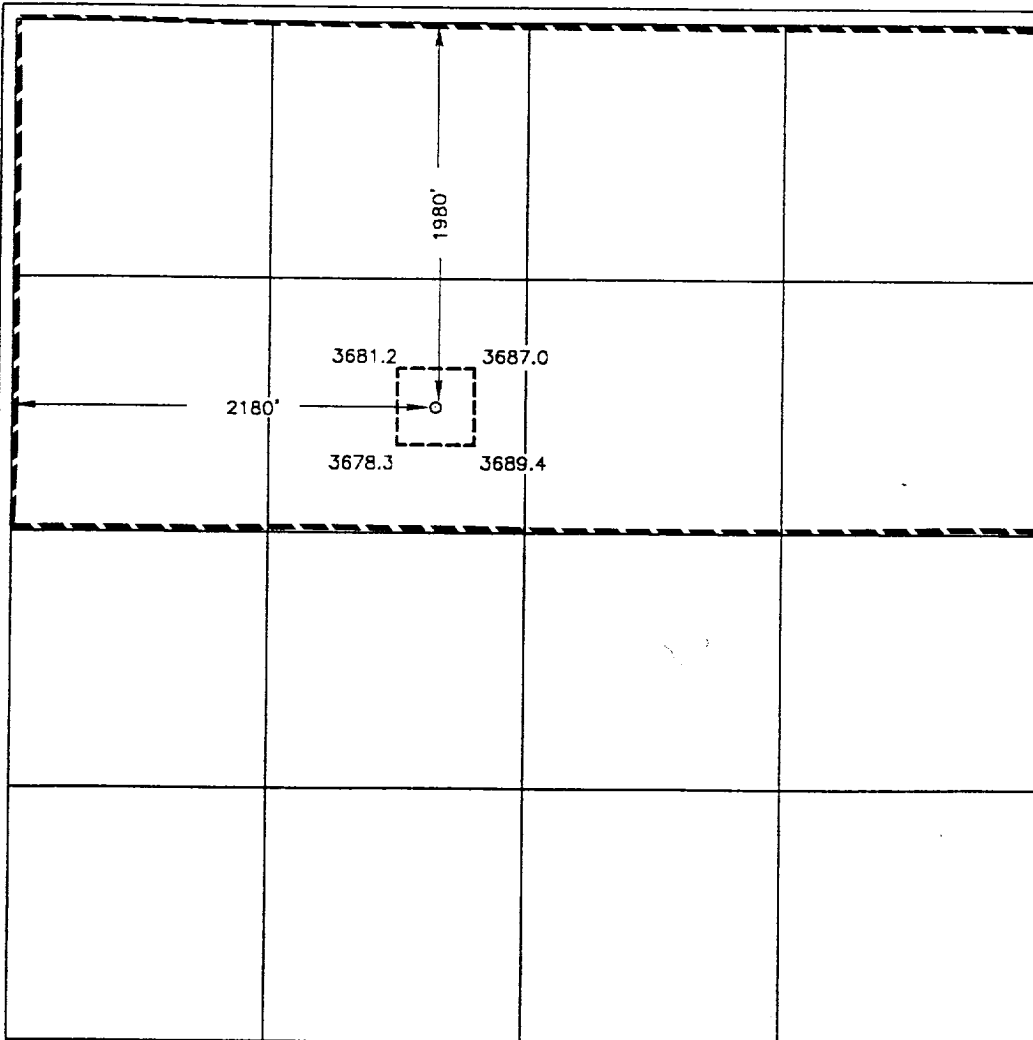
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	8	16-S	28-E		1980	NORTH	2180	WEST	EDDY

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.						
320									

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



OPERATOR CERTIFICATION

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

Signature

Joe T. Janica

Printed Name

Agent

Title

01/26/01

Date

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.

JANUARY 18, 2001

Date Surveyed

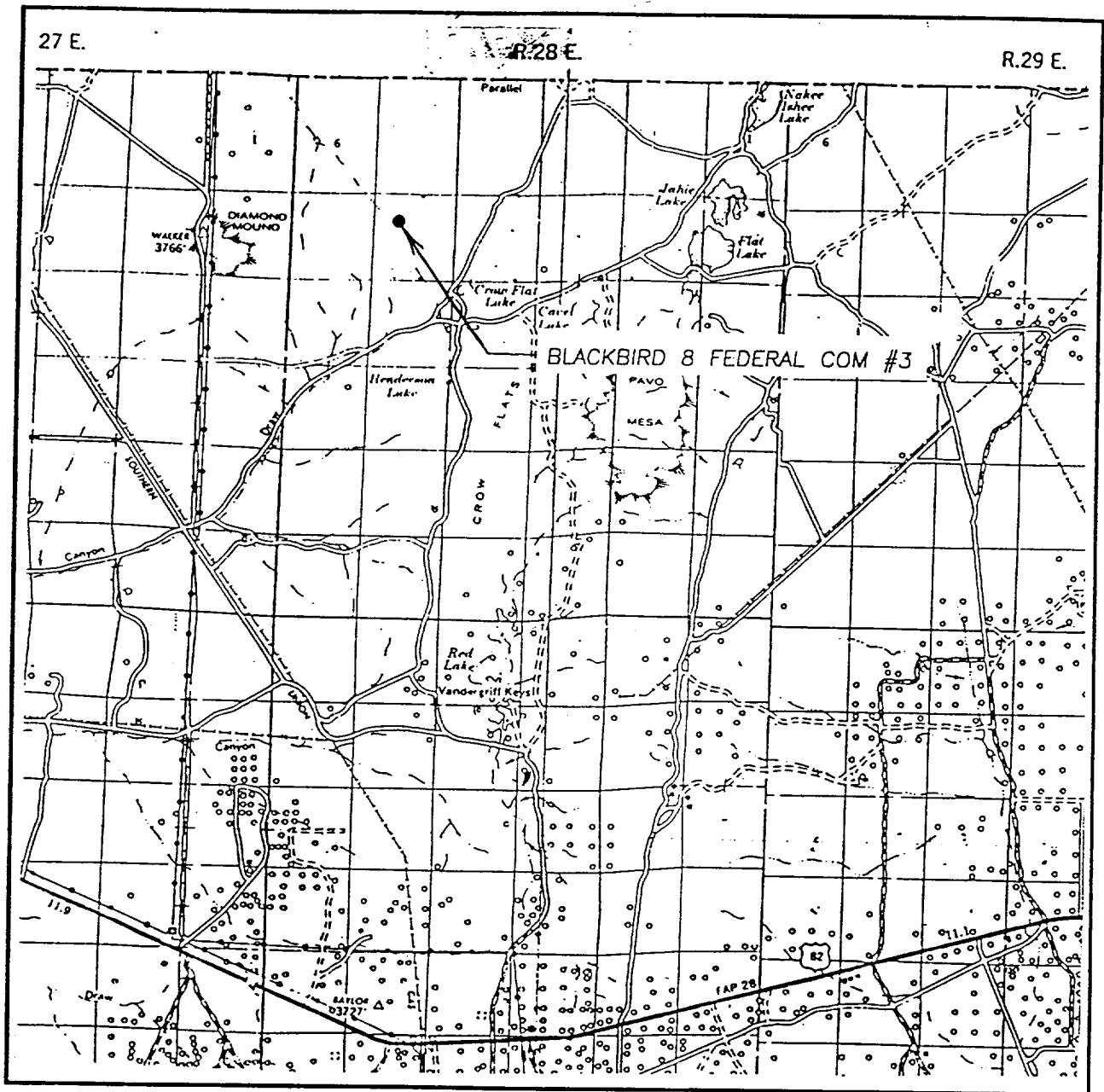
AWB

Signature & Seal of
Professional Surveyor

Ronald J. Eidson 01/22/01
00-11-1620

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 8 TWP. 16-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1980'FNL & 2180'FWL

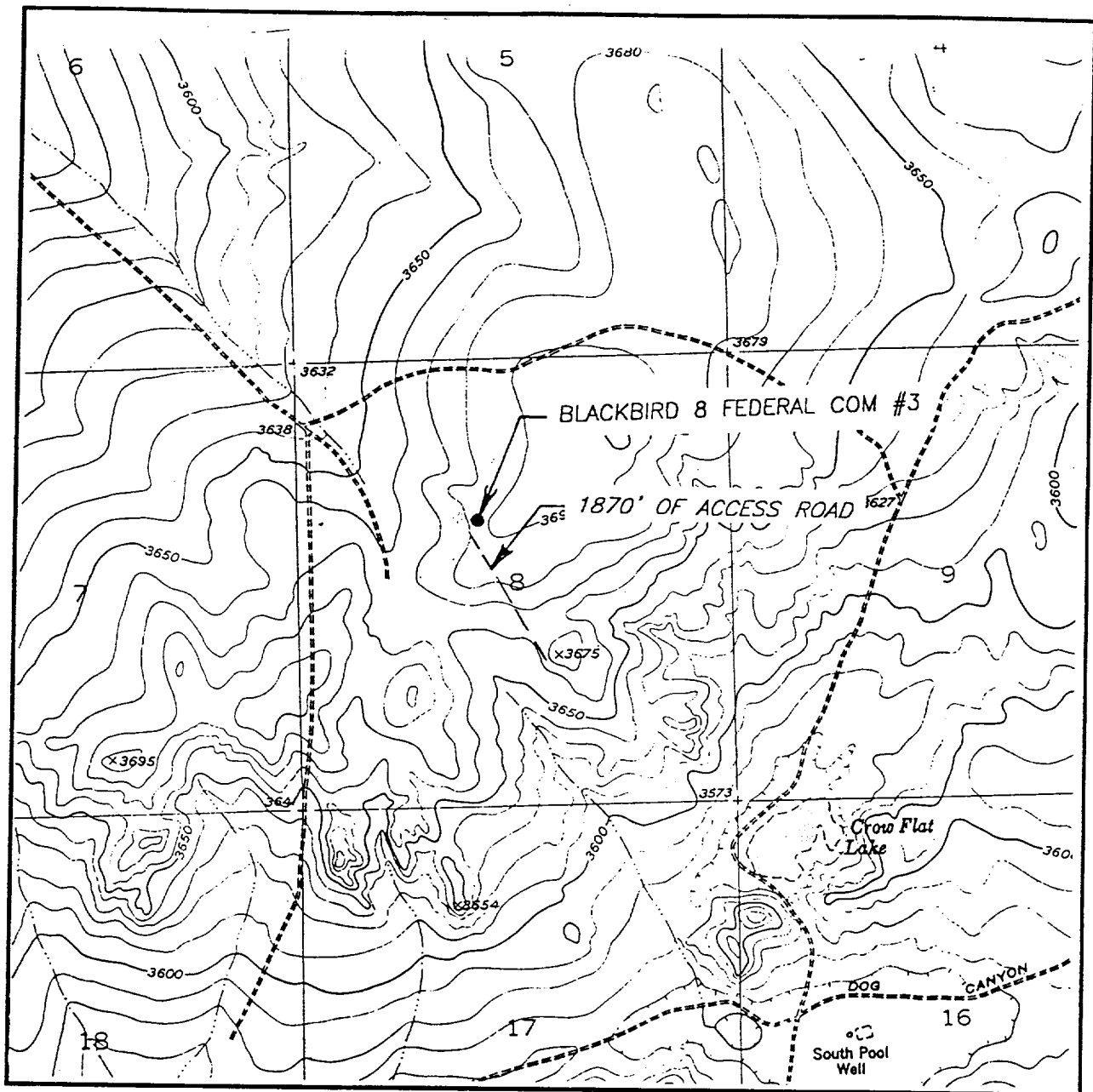
ELEVATION 3687'

OPERATOR CONCHO RESOURCES, INC.

LEASE BLACKBIRD 8 FEDERAL COM

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

DIAMOND MOUND

SEC. 8 TWP. 16-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1980'FNL & 2180'FWL

ELEVATION 3687'

OPERATOR CONCHO RESOURCES, INC.

LEASE BLACKBIRD 8 FEDERAL COM

U.S.G.S. TOPOGRAPHIC MAP

DIAMOND MOUND

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

APPLICATION TO DRILL

CONCHO RESOURCES, INC.
 BLACKBIRD "8" FEDERAL COM. # 3
 UNIT "F" SECTION 8
 T16S-R28E EDDY CO. NM

In response to questions asked under Section II of Bulletin NTL-6 the following information on the above well is provided for your consideration.

1. Location: 1980' FNL & 2180' FWL SEC. 8 T16S-R28E EDDY CO. NM
2. Elevation above Sea Level: 3687' GR.
3. Geologic name of surface formation: Quaternary Aeolian Deposits.
4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.
5. Proposed drilling depth: 9600'
6. Estimated tops of geological markers:

7 Rivers	280'	Wolfcamp	6500'
San Andres	1750'	Penn	7475'
Tubb	4410	Upper Morrow	8810'
Abo	5130'	Lower Morrow	9295'
7. Possible mineral bearing formations:

Wolfcamp	Oil	Morrow	Gas
Penn	Oil		
8. Casing program:

Hole size	Interval	OD of casing	Weight	Thread	Collar	Grade
25"	0-40	20"	NA	NA	NA	Conductor
17½"	0-400' 500'	13 3/8"	48	8-R	ST&C	H-40
12½"	0-1800'	8 5/8"	32	8-R	ST&C	J-55
7 7/8"	0-9600'	4½"	11.6	8-R	LT&C	N-80

APPLICATION TO DRILL

CONCHO RESOURCES, INC.
 BLACKBIRD "8" FEDERAL COM. # 3
 UNIT "F" SECTION 8
 T16S-R28E EDDY CO. NM

9. CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with redi-mix.
13 3/8"	Surface	Set 500' of 13 3/8" 48# H-40 ST&C casing and cement with 500 Sx. of class "C" cement + 2% CaCl circulate cement to surface.
8 5/8"	Intermediate	Set 1800' of 8 5/8" 24# J-55 ST&C casing. Cement with 1050 Sx. of Class "C" cement + 2% CaCl and other additives, circulate cement to surface.
4 1/2"	Production	Set 9600' of 4 1/2" 11.6# N-80 LT&C casing. Cement with 600 Sx. of 50/50 POZ + additives, estimate top of cement 6000' from surface.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E". A Series 900 3000 PSI working pressure B.O.P. consisting of a double ram type preventor with a bag type annular preventor. The B.O.P. unit will be hydraulically operated. Exhibit "E-1". Choke manifold and closing unit. The B.O.P. will be nipples up on 13 3/8" casing and will be operated at least once each 24 hour period while drilling and blind rams will be operated when out of hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. No abnormal pressure or temperature is expected while drilling.

11. PROPOSED MUD CIRCULATING SYSTEM:

Depth	Mud Wt.	Visc.	Fluid Loss	Type Mud System
^{500'} 40-400'	8.8-8.9	29-32	NC	Fresh water spud mud add paper to control seepage.
^{500'} 400-1800'	8.7-8.9	29-36	NC	Fresh water adding fresh water Gel for viscosity to clean hole add paper to control seepage.
1800-8500'	10.2-10.5	29-34	NC	Brine water add paper for seepage control and Lime for pH control.
8500-9600'	10.2-10.5	32-40	10 cc or less	Brine water add salt water Gel for viscosity, starch for water loss control & soda ash for pH.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing the viscosity and/or water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

CONCHO RESOURCES, INC.
BLACKBIRD "8" FEDERAL COM. # 3
UNIT "F" SECTION 8
T16S-R28E EDDY CO. NM

12. TESTING, LOGGING, & COREING PROGRAM:

- A. Open hole logs: Dual Laterolog, CNL, Density Gamma Ray, Caliper from TD to 1800'. Run gamma Ray Neutron from 1800' to surface.
- B. Mud logger will be placed on well when the geologist determines the zones of interest and remain on hole to TD.
- C. DST's and cores will be taken as shows dictate.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H₂S detectors will be in place to detect any presence of unsafe levels of H₂S. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operations of all equipment that will be used. Estimated BHP 4500 PSI & estimated BHT 150°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Roads and location construction will begin after the BLM approves the APD. Anticipated spud date will be as soon as pad & road construction has been completed. Drilling time for the well is estimated to take 30 days. If production casing is run an additional 30 days will be required to complete well and construct surface facilities.

15. OTHER FACETS OF OPERATION:

After running production casing, cased hole Gamma-Neutron & Collar logs will be run over all possible pay intervals. If commercial production from the MORROW pay is indicated it will be perforated and stimulated. Then if necessary the pay will be swab tested and completed as a gas well.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
2. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of bloopie line (mud pit) and on derrick floor or doghouse.
3. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - C. There should be a windsock at entrance to location.
4. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H₂S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well control equipment
 - A. See exhibit "E"
6. Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.
7. Drillstem Testing
 - A. Exhausts will be watered.
 - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
 - C. If location is near any dwelling a closed D.S.T. will be performed.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

8. Drilling contractor supervisor will be required to be familiar with the effects H_2S has on tubular goods and other mechanical equipment.
9. If H_2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H_2S scavengers if necessary.

SURFACE USE PLAN

CONCHO RESOURCES, INC.
BLACKBIRD "8" FEDERAL COM. # 3
UNIT "F" SECTION 8
T16S-R28E EDDY CO. NM

1. EXISTING ROADS & PROPOSED ROADS: Area maps; Exhibit "B" is a reproduction of a County General Hi-way Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
 - A. Exhibit "A" shows the proposed well site as staked.
 - B. From Loco Hills New Mexico go West on U.S. Hi-way 82 4.5 miles to CR.#214 Turn North (right) go 6.7 miles, bear Northwest (left) go 2.2 miles, bear right follow road 1.6 miles go off Caprock follow road Southwest 5.5 miles, turn Northeast (right) go .25 miles turn Northwest (left) follow road .6 miles to well # 1 turn Northeast (right) go .35 miles to well # 2 turn Northwest go 2000' to location.
 - C. Lay flow lines along road R-O-W to well # 1 to gathering lines for sales. See Exhibit "F"
2. PLANNED ACCESS ROADS: Approximately 2000' of new road will be constructed.
 - A. The access roads will be crowned and ditched to a 12' wide travel surface with a 40' Right-of-Way.
 - B. Gradient of all roads will be less than 5.00%.
 - C. If turn-outs are necessary they will be constructed.
 - D. If needed roads will be surfaced with a minimum of 4" of caliche. This material will be obtained from a local source.
 - E. Center-line for new roads will be flagged. Earth-work will be will be done as field conditions require.
 - F. Culverts will be placed in the access road if they are necessary. The roads will be constructed to utilize low water crossings for drainage as required by topography.
3. LOCATIONS OF EXISTING WELLS IN A ONE MILE RADIUS. EXHIBIT "A-1"
 - A. Water wells One approximately 6 miles Northeast of location.
 - B. Disposal wells None known
 - C. Drilling wells None known
 - D. Producing wells As shown on Exhibit "A-1"
 - E. Abandoned wells As shown on Exhibit "A-1"

SURFACE USE PLAN

CONCHO RESOURCES, INC.
BLACKBIRD "8" FEDERAL COM. # 3
UNIT "F" SECTION 8
T16S-R28E EDDY CO. NM

4. If on completion this well is a producer Concho Resources, Inc. will furnish maps and/or plats showing on site facilities. Flow lines that will be required are shown on Exhibit "F" attached with this APD.

5. LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the access roads or piped in flexible lines laid on top of the ground.

6. SOURCE OF CONSTRUCTION MATERIAL:

If possible construction will be obtained from the excavation of drill site, if additional material is needed it will be purchased from a local source and transported over the access route as shown on Exhibit "C".

7. METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the reserve pit.
- B. All trash, junk and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed all contents will be removed and disposed of in a approved sanitary land fill.
- C. Salts remaining after completion of well will be picked up by supplier including broken sacks.
- D. Sewage from living quarters will drain into holes with a minium depth of 10'. These holes will be covered during drilling and will be back filled upon completion. A Porta-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of the well.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for breaking out. In the event that drilling fluids do not evaporate in a reasonable time they will be hauled off by transports and be disposed of at a state approved disposal facility. Later pits will be broken out to speed drying. Water produced during testing will be put in reserve pits. Any oil or condensate produced will be stored in test tanks until sold and hauled from the site.

8. ANCILLARY FACILITIES:

- A. No camps or airstrips to be constructed.

SURFACE USE PLAN

CONCHO RESOURCES, INC.
BLACKBIRD "8" FEDERAL COM. # 3
UNIT "F" SECTION 8
T16S-R28E EDDY CO. NM

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the proposed well site layout.
- B. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- C. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with polyethelene. The pit liner will be 6 mils thick. Pit liner will extend a minimum of 2'00" over the reserve pits dikes where the liner will be anchored down.
- E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE:

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

SURFACE USE PLAN

CONCHO RESOURCES, INC.
BLACKBIRD "8" FEDERAL COM. # 3
UNIT "F" SECTION 8
T16S-R28E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography consists of Limestone and Caliche hills cut by drainage avenues that flow Westward to the Pecos River. Where there is soil it supports native grasses and mesquite.
- B. The surface is owned by The Bureau of Land Management, U.S. Department of Interior. The surface is used for grazing of livestock and is leased to ranchers for this purpose.
- C. An Archaeological survey will be conducted and copies will be filed with The Carlsbad Resource Area Office in Carlsbad New Mexico.
- D. There are no dwellings within 2.5 miles of this location.

12. OPERATORS REPRESENTATIVE:

Before construction:

TIERRA EXPLORATION INC.
P.O. BOX 2188
HOBBS, NEW MEXICO 88241
OFFICE PHONE 505-391-8503
JOE T. JANICA

During and after construction:

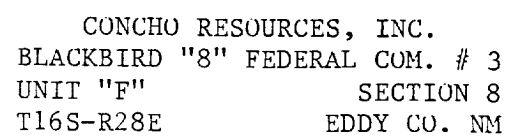
CONCHO RESOURCES INC.
110 WEST LOUISIANA
SUITE 410
MIDLAND, TEXAS 79701
ERICK NELSON 915-683-7443

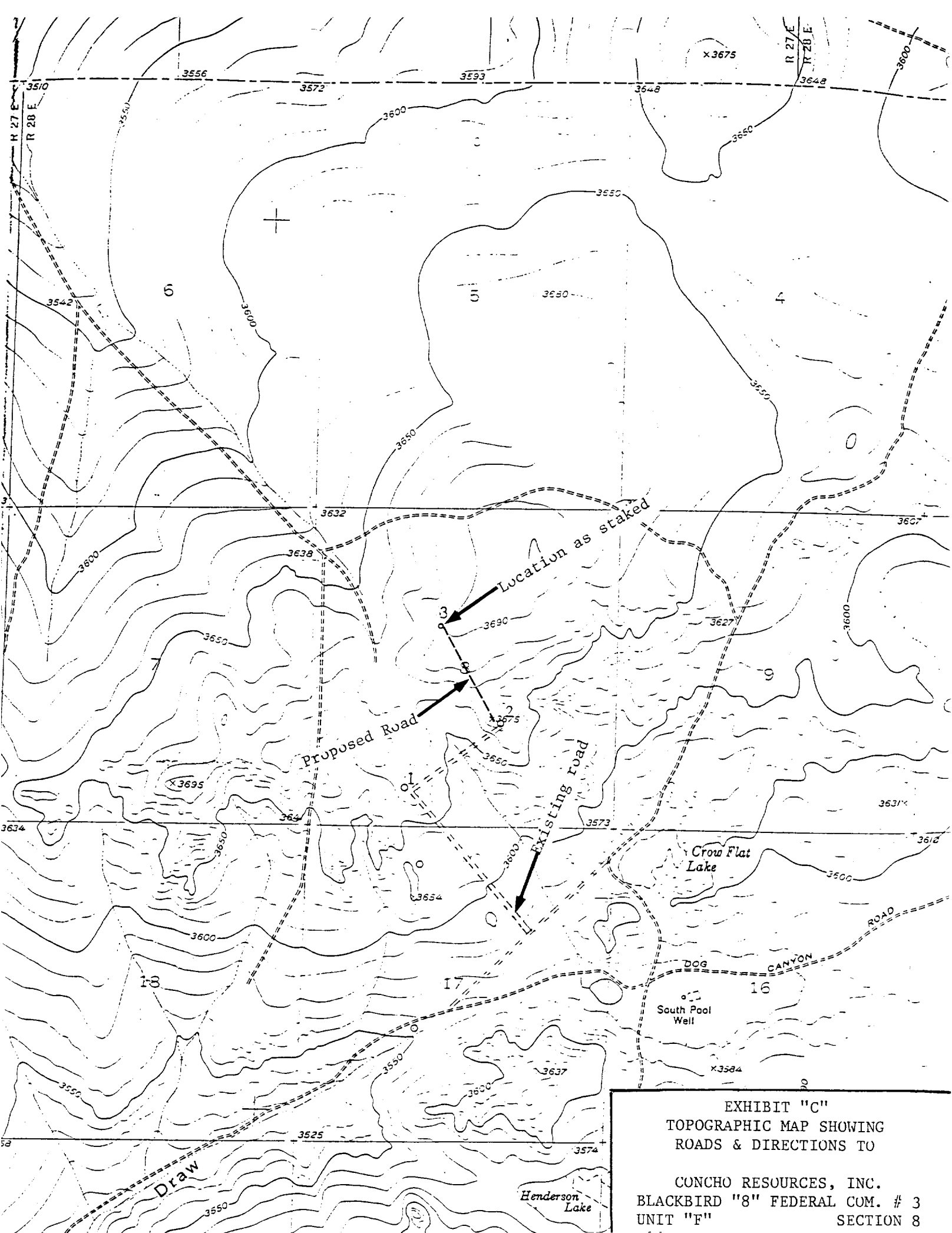
13. CERTIFICATION: - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Concho Resources Inc. or it's contractors/subcontractors is in the conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

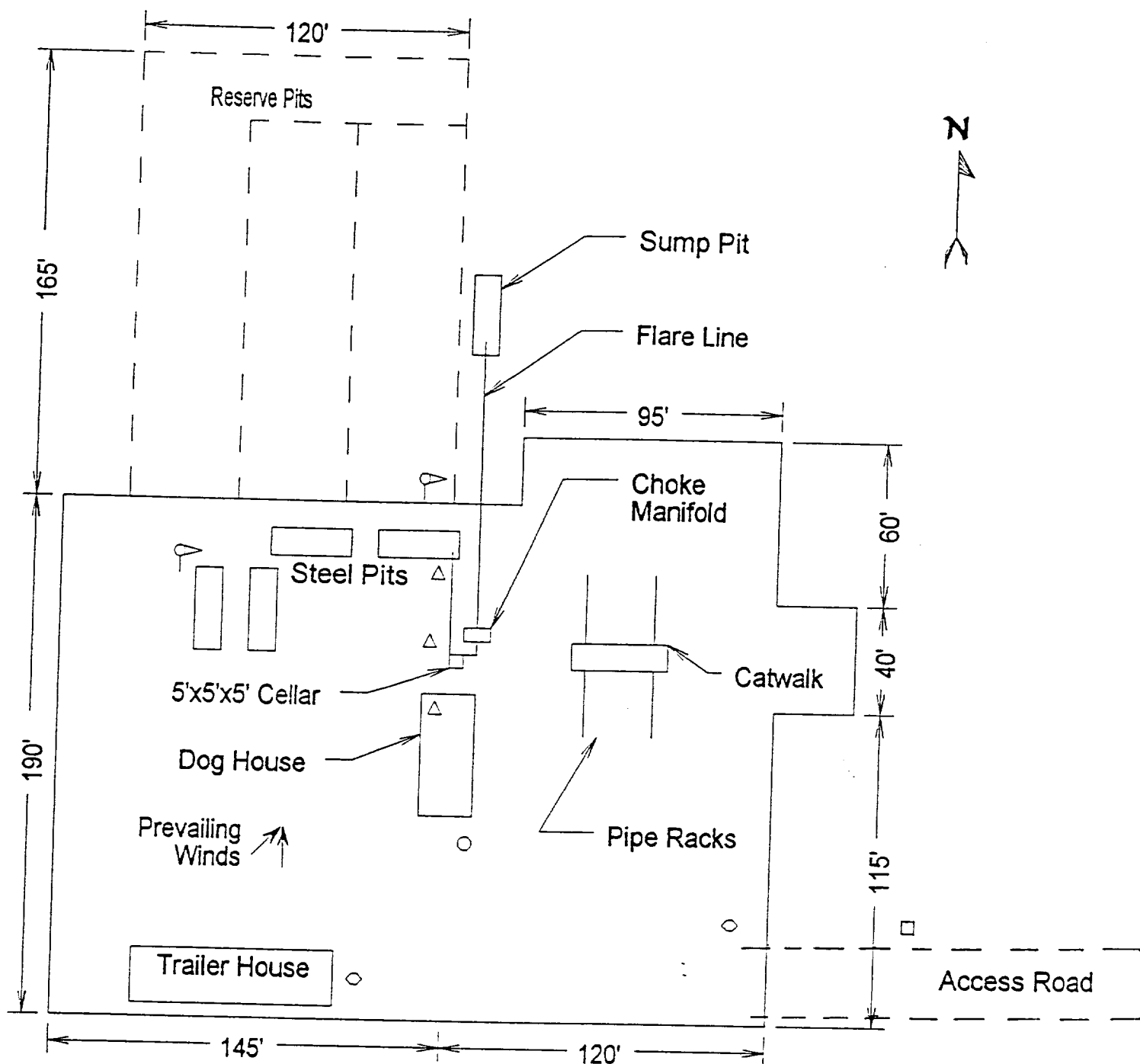
NAME : Joe T. Janica
DATE : 01/26/01
TITLE : Agent



R.29 E.



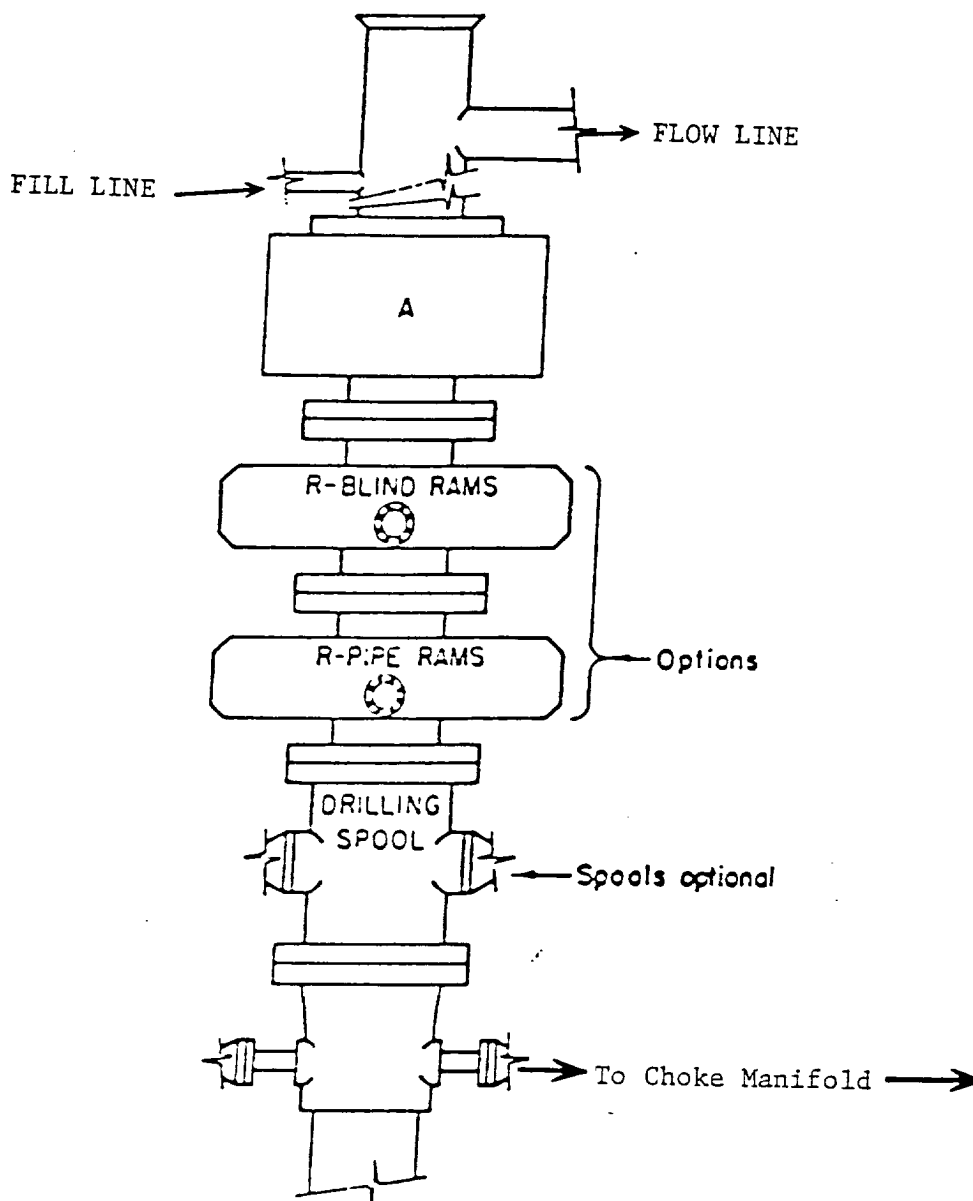




- Wind Direction Indicators
(wind sock or streamers)
- △ H2S Monitors
(alarms at bell nipple and shale shaker)
- ◇ Briefing Areas
- Remote BOP Closing Unit
- Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

CONCHO RESOURCES, INC.
BLACKBIRD "8" FEDERAL COM. # 3
UNIT "F" SECTION 8
T16S-R28E EDDY CO, NM

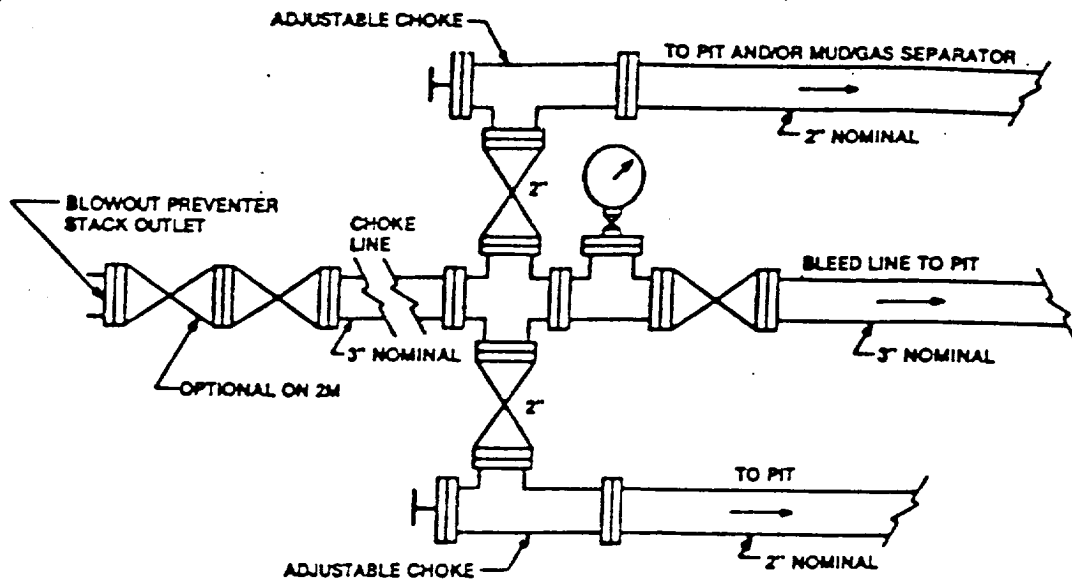


ARRANGEMENT SRRA

900 Series
3000 PSI WP

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

CONCHO RESOURCES, INC.
BLACKBIRD "8" FEDERAL COM # 3
UNIT "F" SECTION 8
T16S-R28E EDDY CO. NM



Typical choke manifold assembly for 3M WP system

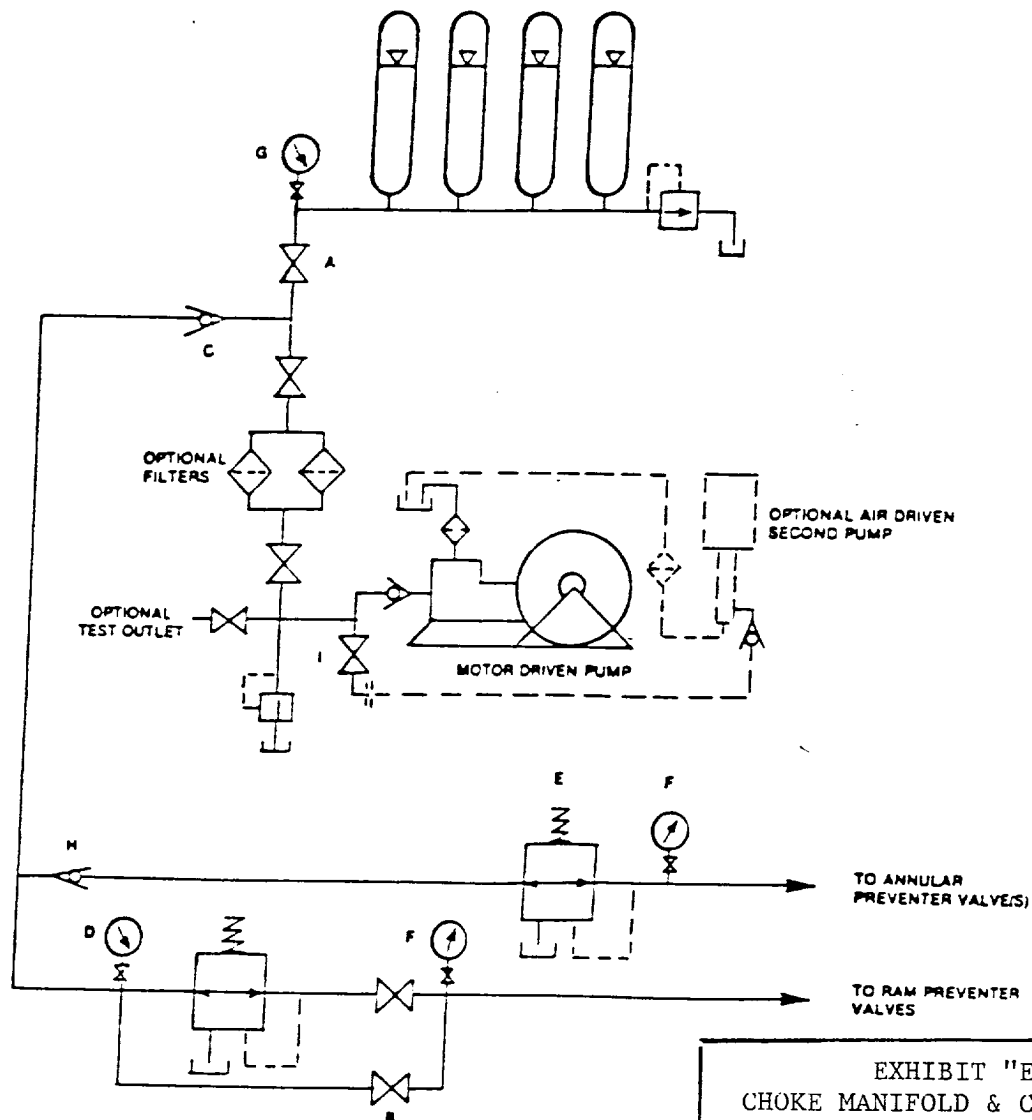


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

CONCHO RESOURCES, INC.
BLACKBIRD "8" FEDERAL COM. # 3
UNIT "F" SECTION 8
T16S-R28E EDDY CO. NM

