

UNITED
DEPARTMENT OF
BUREAU OF LAND

OPER. OGMIS NO. 166111

LOCATE*

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

PROPERTY NO. 24854

POOL CODE 53805

EFF. DATE 4/24/01

API NO. 30-025-35525

APPLICATION FOR PERMIT

1A. TYPE OF WORK

DRILL ☒

B. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐OTHER ☐SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

CONCHO RESOURCES, INC. (JIM BLOUNT) 915-683-7443

3. ADDRESS AND TELEPHONE NO.

110 WEST LOUISIANA SUITE 410 MIDLAND, TEXAS 79701

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

1980' FSL & 1980' FEL SEC. 20 T23S-R32E LEA CO. NM
At proposed prod. zone SAME

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

Approximately 32 miles West of Jal New Mexico

15. DISTANCE FROM PROPOSED*

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

1980'

16. NO. OF ACRES IN LEASE

640

18. DISTANCE FROM PROPOSED LOCATION*

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

990'

19. PROPOSED DEPTH

9100'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

ROTARY

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

3684' GR.

22. APPROX. DATE WORK WILL START*

When approved

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	20" conductor	NA	40'	Cement to surface with Redi-mix
17 1/2"	H-40 13 3/8"	48	650' 12 3/4"	550 Sx. cement to surface.
11"	J-55 8 5/8"	32	4900'	1400 Sx. Top of cement 450'
7 7/8"	J-55 5 1/2"	17 & 15.5	9100'	550 Sx. Estimate top of cement 7600'

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 650'. Run and set 650' of 13 3/8" 48# H-40 ST&C casing. Cement with 300 Sx. of Halco Light Class "C" + 25 CaCl + 1/4# Flocele/Sx. tail in with 250 Sx. of Premium Plus Class "C" + 2% CaCl + 1/4# Flocele/Sx. circulate cement to surface.
3. Drill 11" hole to 4900'. Run and set 4900' of 8 5/8" as follows: 700' of 32# S-80 LT&C, 4200' of 32# J-55 LT&C. Cement with 1200 Sx. of Class "C" + 1/2# Flocele/Sx. , tail in with 200 Sx. of Premium Plus cement + 2% CaCl, + 1/2# Flocele/Sx. estimate top of cement 200' into 13 3/8" casing. (450').
4. Drill 7 7/8" hole to 9100'. Run and set 9100' of 5 1/2" casing as follows: 1500' of 5 1/2" 17# K-55 LT&C, 7600' of 5 1/2" 15.5# K-55 LT&C casing. Cement with 350 Sx. of Premium Class "H" + additives, tail in with 200 Sx. of Super Class "H" + .4% CFR-3, + .5% Halad 322, + 5# of Gilsonite/Sx., +3# Salt/Sx. Estimate top of cement 7600' 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.

SIGNED Joe T. Lawrence TITLE Agent

DATE 02/16/01

(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 subsurface which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

DATE

GWW

*See Instructions On Reverse Side

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 States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

State of New Mexico
Energy, Minerals and Natural Resources Depar.

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

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

OIL CONSERVATION DIVISION

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

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

DISTRICT IV
P.O. BOX 2068, SANTA FE, N.M. 87504-2068

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-35525		Pool Code 53800 53805	South SAND DUNES - BONE SPRING	Pool Name
Property Code 24854	Property Name TOMCAT 20 FEDERAL			Well Number 6
OGRID No. 166111	Operator Name CONCHO RESOURCES, INC.			Elevation 3684'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	20	23-S	32-E		1980	SOUTH	1980	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 Access	Jointly Owned								

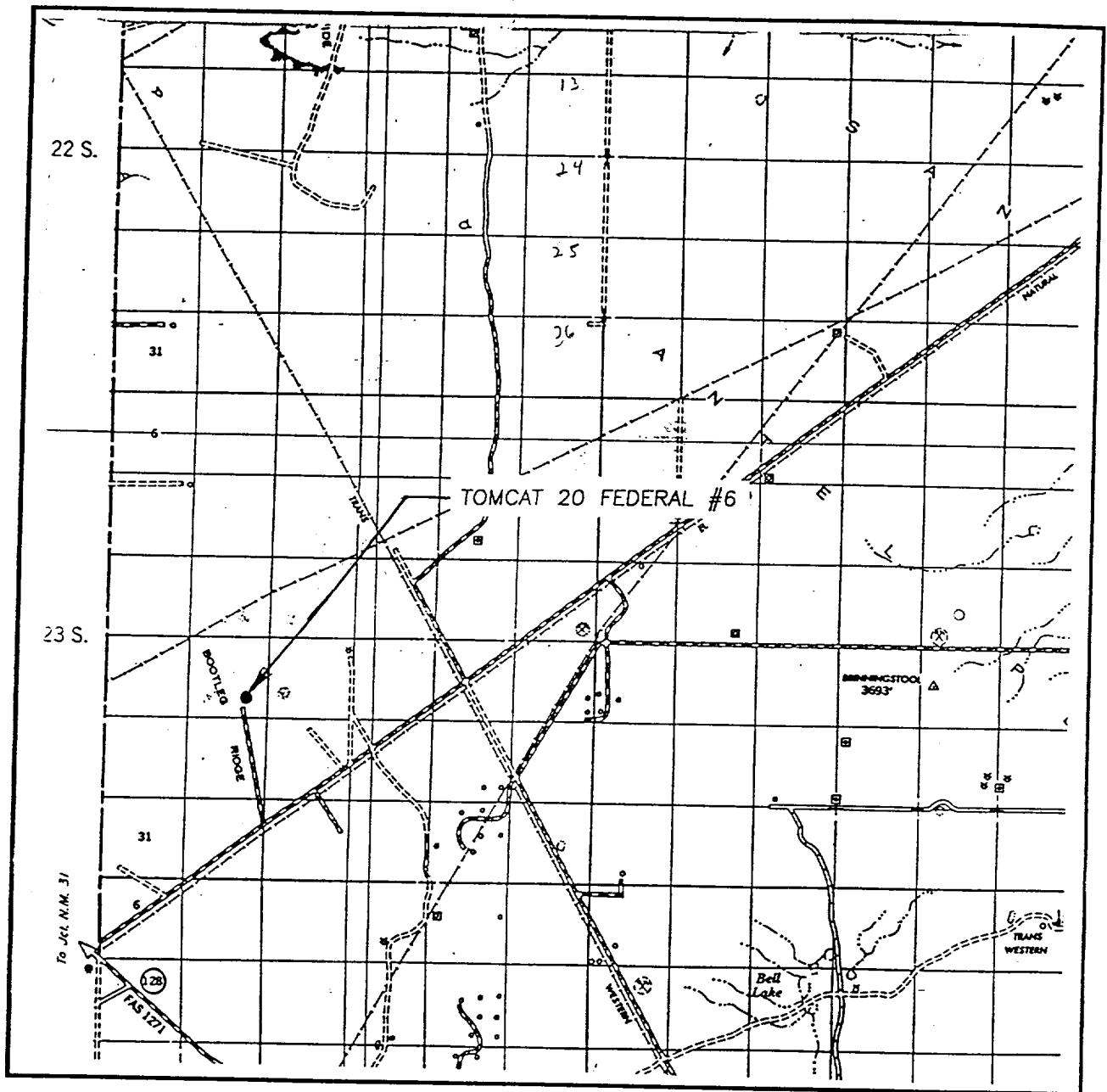
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

		OPERATOR CERTIFICATION	
		<i>I hereby certify the information contained herein is true and complete to the best of my knowledge and belief.</i>	
		 Signature	
		Joe T. Janica Printed Name Agent Title 02/16/01 Date	
		SURVEYOR CERTIFICATION	
		<i>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.</i>	
		FEBRUARY 06, 2001	
		Date Surveyed Signature & Seal of Professional Surveyor 01-11-0169	
Certificate No. RONALD L. EIDSON 3239 GARY EIDSON 12641			

EXHIBIT "A"

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 20 TWP. 23-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1980'FSL & 1980'FEL

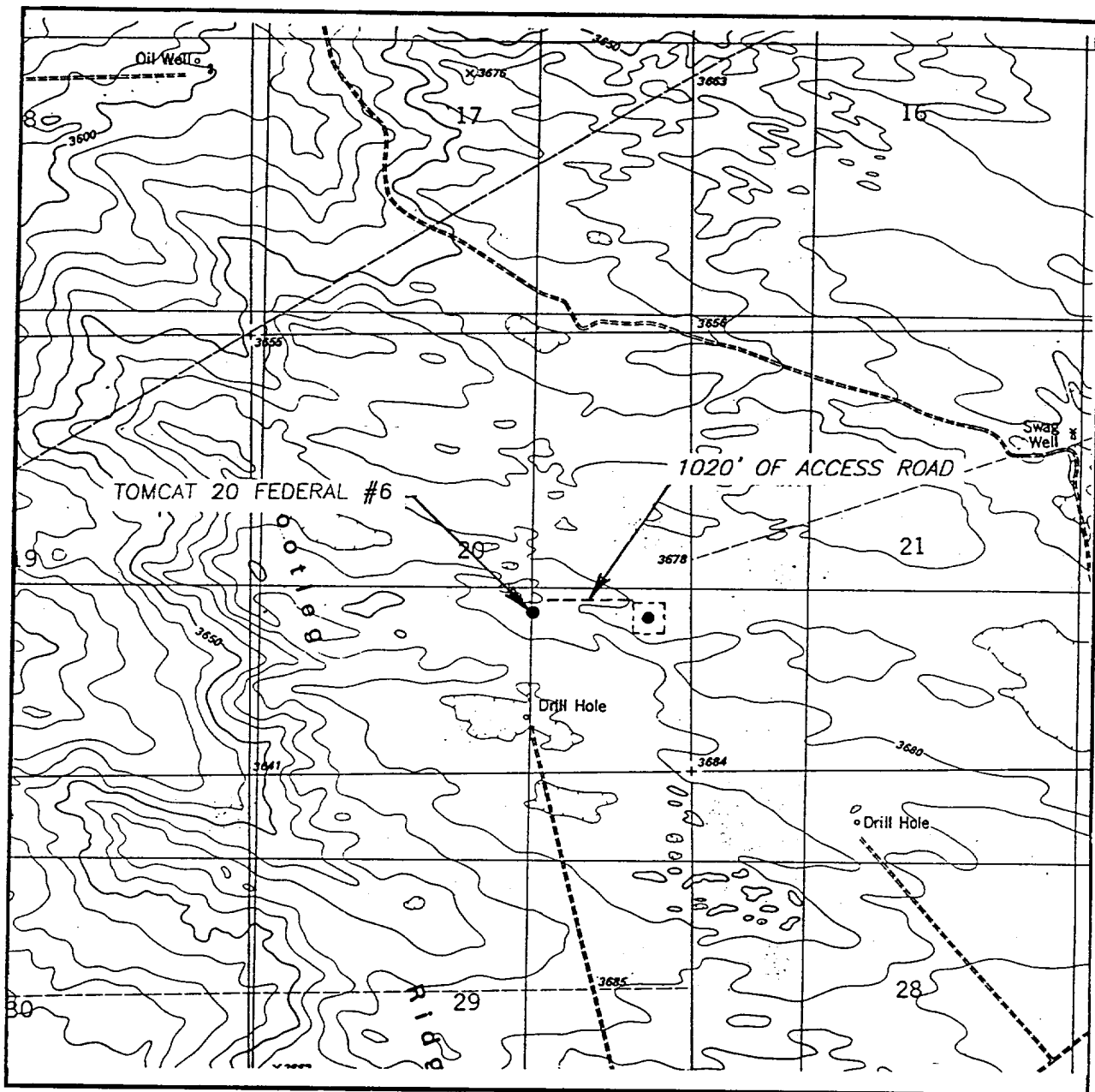
ELEVATION 3684'

OPERATOR CONCHO RESOURCES, INC.

LEASE TOMCAT 20 FEDERAL

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

BOOTLEG RIDGE, N.M.

SEC. 20 TWP. 23-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1980'FSL & 1980'FEL

ELEVATION 3684'

OPERATOR CONCHO RESOURCES, INC.

LEASE TOMCAT 20 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

BOOTLEG RIDGE, N.M.

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

APPLICATION TO DRILL

CONCHO RESOURCES, INC.
 TOMCAT "20" FEDERAL # 6
 UNIT "J" SECTION 20
 T23S-R32E LEA 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' FSL & 1980' FEL SEC. 20 T23S-R32E LEA CO. NM
2. Elevation above Sea Level: 3684' 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: 9100'
6. Estimated tops of geological markers:

Lamar	4820'	Brushy Canyon	7359'
Bell Canyon	4850'	Bone Spring	8650'
Manzanita	5900'		
7. Possible mineral bearing formations:

Delaware	Oil
Bone Spring	Oil
8. Casing program:

Hole size	Interval	OD of casing	Weight	Thread	Collar	Grade
25"	0-40	20"	NA	NA	NA	Conductor
17½"	0-650' 1235'	13 5/8"	48	8-R	ST&C	E-40
11"	0-4900'	8 5/8"	32#	8-R	LT&C	K-55 S-90
7 8/7"	0-9100'	5½"	15.5# 17#	8-R	LT&C	K-55

APPLICATION TO DRILL

ONCHO RESOURCES, INC.
TOMCAT "20" FEDERAL # 6
UNIT "J" SECTION 20
T23S-R32E LEA CO. NM

9. CEMENTING & SETTING DEPTH:

20" Conductor Drill 25" hole to 40'. Set 40' of 20" conductor Cement to surface with Redi-mix.

13 3/8" Surface Drill 17 1/2" hole to 650'. Run and set 650' of 13 3/8" 48# H-40 ST&C casing. Cement with 550 Sx of Class "C" Premium cement + additives circulate Cement to surface.

8 5/8" Intermediate Drill 11" hole to 4900'. Run and set 4900' of 8 5/8" K-55 & S-80 32# LT&C casing. Cement with 1400 Sx. of Premium Plus Class "C" cement + additives circulate cement or at least 200' above 13 3/8" C.

5 1/2" Production Drill 7 7/8" hole to 9100'. Run and set 9100' of 5 1/2" K-55 17 & 15.5# LT&C casing. Cement with 550 Sx. of Class "H" cement + additives estimated top of cement 7600'.

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 nipped 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
40-650' 17 3/8"	8.6-9	32-34	N/C	Fresh water system use paper to control seepage.
650-4900' 12 3/8"	10-10.1	29-34	N/C	Brine water use lime for pH control and paper to control seepage.
4900-8900'	8.4-8.5	28-34	N/C	Fresh water use Gel & paper to control seepage and clean hole.
8900-9100'	8.5-9.0	32-34	10-15 cc or less	Fresh water with Gel/Pac Clean hole with high viscosity sweeps.

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.
TOMCAT "20" FEDERAL # 6
UNIT "J" SECTION 20
T23S-R32E LEA CO. NM

12. Testing, Logging and Coring Program:
- A. Open hole logs will be run. Dual Induction , Density, compensat Neutron, Gamma Ray, Caliper. from TD to 4900'. Neutron Gamma Ra from 4900' to surface.
 - B. Two man mud logging unit will be on hole from 4700' to TD.
 - C. Side wall cores may be taken at the request of Geologist.
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. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 4500 PSI, estimated BHT 170° .
14. Anticipated Starting Date and Duration of Operation:
- Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 30 days. If production casing is run an additional 30 days will be required to complete and construct surface facilities.
15. Other Facets of Operations:
- After running casing, cased hole gamma ray neutron collar logs will be run from total depth over possible pay intervals. The Bone Spring pay will be perforated and stimulated. The well will be swab tested and potentialized as an Oil 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 blooie line (mud pit) and on derrick floor or doghouse.
3. Windsack and/or wind streamers
 - A. Windsack at mudpit area should be high enough to be visible.
 - B. Windsack at briefing area should be high enough to be visible.
 - C. There should be a windsack 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.
TOMCAT "20" FEDERAL # 6
UNIT "J" SECTION 20
T23S-R32 LEA CO. NM

1. EXISTING ROADS: Area maps, Exhibit "B" is a reproduction of Lea Co. General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads 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 Hobbs New Mexico take 62-180 West toward Carlsbad go 38 miles to CR-29 turn South go 21.5 miles to State Road 128 Turn Left go 1.3 miles to Elpaso Pipeline road turn Left go 3.8 miles turn Left go .7 miles bear Right go 1+ miles turn Left go .5 miles turn Left go .5 miles turn Right go 900' to location.
 - C. Lay flowlines and construct powerlines along road R-O-W's to connect to power and deliver product to tank battery.
2. PLANNED ACCESS ROADS: Approximately .5 miles of new road will be constructed.
 - A. the access road will be crowned and ditched to a 12'00" wide travel surface with a 40' right-of-way.
 - B. Gradient on all roads will be less tha 5.00%.
 - C. Turn outs will be constructed where necessary.
 - D. If needed, road will be surfaced with a minimum of 4" of caliche. This material will be obtained from a local source.
 - E. Centerline for the new access road has been flagged. Earthwork will be as required by field conditions.
 - F. Culverts in the access road will not be used. The road will be constructed to utilize low water crossings for drainage as required by the Lopography.
3. LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A-1"
 - A. Water wells - One approximately .8 miles Northeast.
 - 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.
TOMCAT "20" FEDERAL # 6
UNIT "J" SECTION 20
T23S-R32 LEA CO. NM

4. If this well is completed as a producer Concho Resources, Inc. will furnish maps and/or plats showing on site facilities and if necessary off site facilities. Exhibit "F" shows existing roads known pipelines & powerlines. Pipelines and powerlines necessary to produce this well will be laid and constructed along these roads and R-O-W's.

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 minimum 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 casing 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.
TOMCAT "20" FEDERAL # 6
UNIT "J" SECTION 20
T23S-R32 LEA 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 7.3 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.
TOMCAT "20" FEDERAL # 6
UNIT "J" SECTION 20
T23S-R32 LEA CO. NM

11. OTHER INFORMATION:

- A. Topography consists of sand dunes with a slight dip to the West. Deep sandy soil supports Mesquite, Shinnery Oak, Sage Brush, Thin Leaf Yucca, and other native grasses.
- B. The surface is owned by The U.S. Department of Interior, administered by ~~The Bureau of Reclamation~~ & The Bureau Of Land Management. Use of the land is limited livestock grazing & production of oil & gas.
- C. An archaeological survey will be conducted and filed with the Bureau of Land Management Carlsbad Field Office.
- D. There are no dwellings within one mile of location.

12. OPERATORS REPRESENTATIVE:

Before construction:

TIERRA EXPLORATION INC.
P.O. BOX 2188
HOBBS, NEW MEXICO 88241
OFFICE PHONE 505-392-2112
JOE T. JANICA

During and after construction:

CONCHO RESOURCES, INC..
110 WEST LOUISIANA SUITE 410
MIDLAND, TEXAS 79702
OFFICE PHONE 915-683-7443
JIM BLOUNT

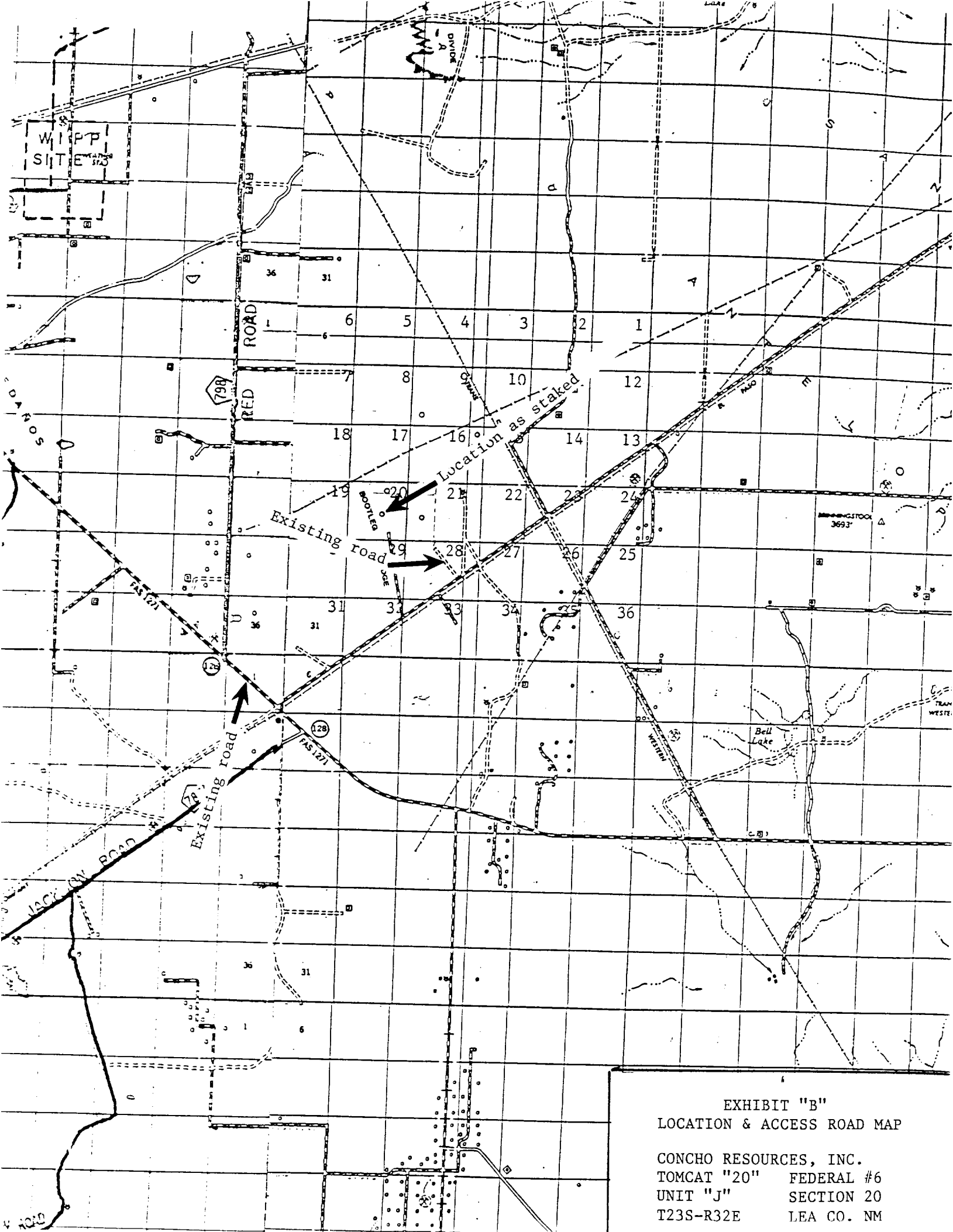
13. CERTIFICATION: - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Concho Resources, Inc., 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.

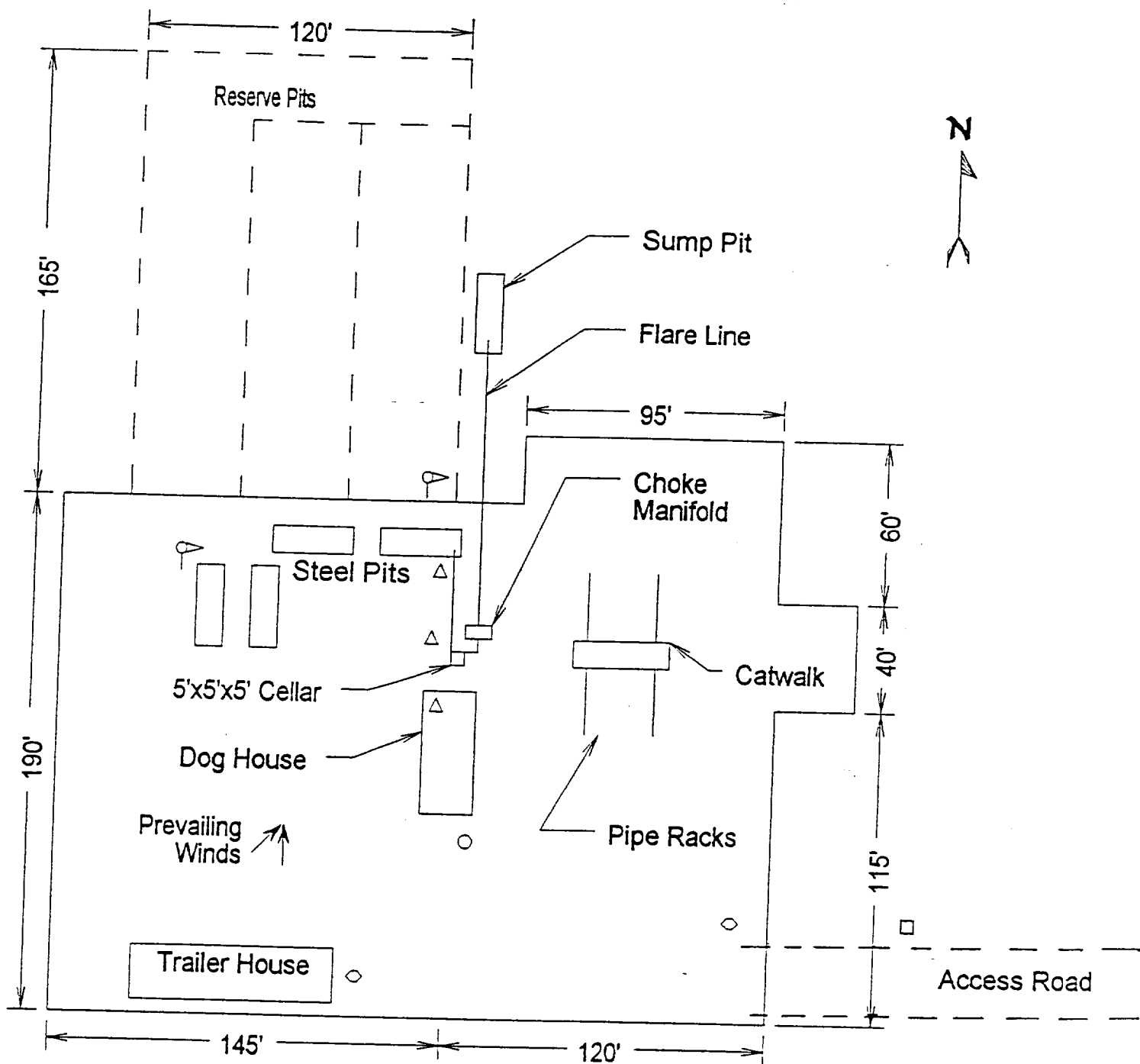
NAME

DATE

TITLE

Joe T Janica
: 02/16/01
Agent

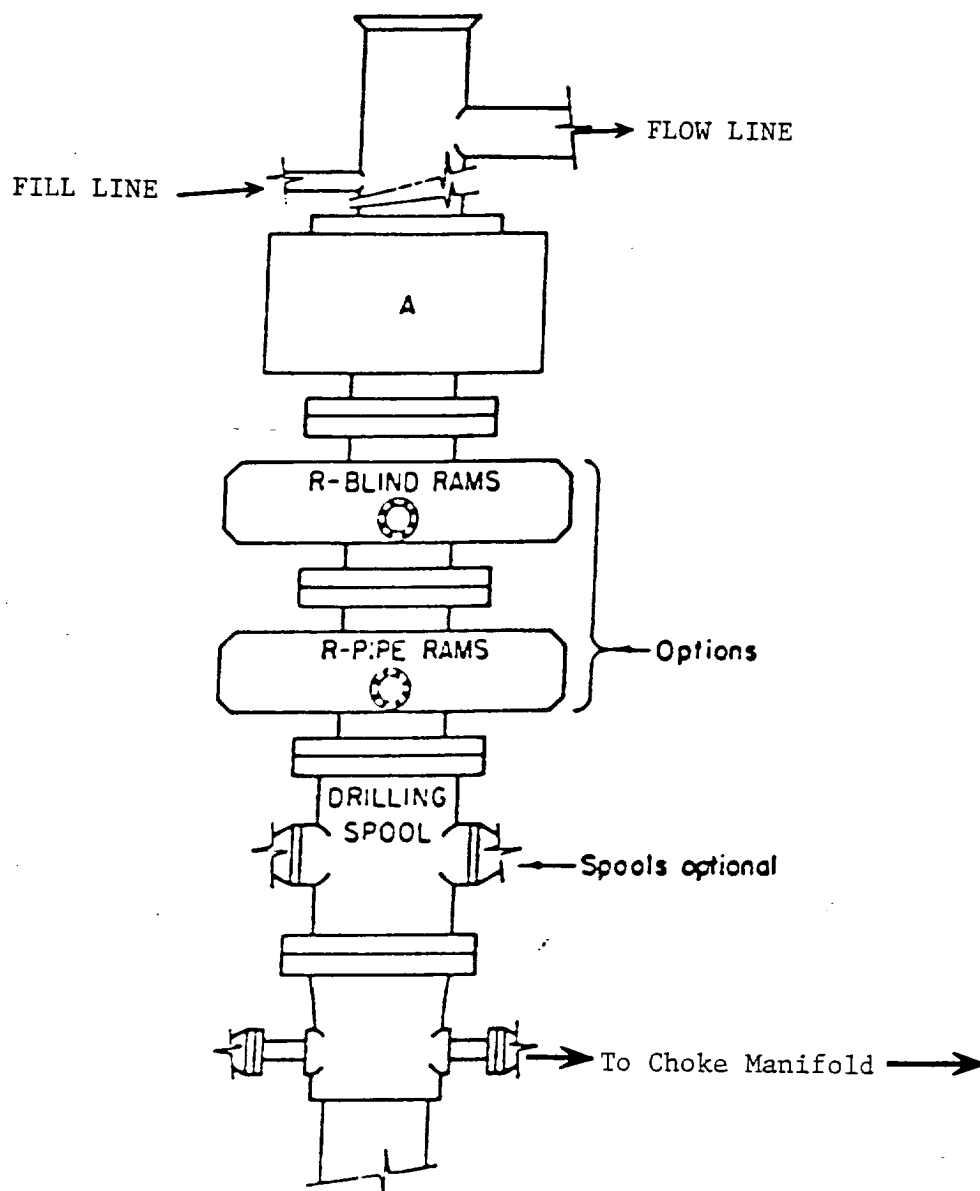




- Wind Direction Indicators
(wind sock or streamers)
- △ H2S Monitors
(alarms at bell nipple and shale shaker)
- Briefing Areas
- Remote BOP Closing Unit
- Sign and Condition Flags

EXHIBIT "D"
RIG LAYOUT PLAT

CONCHO RESOURCES, INC.
TOMCAT "20" FEDERAL #6
UNIT "J" SECTION 20
T23S-R32E LEA CO. NM



ARRANGEMENT SRRA

900 Series
3000 PSI WP

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

CONCHO RESOURCES, INC.
TOMCAT "20" FEDERAL #6
UNIT "J" SECTION 20
T23S-R32E LEA CO. NM

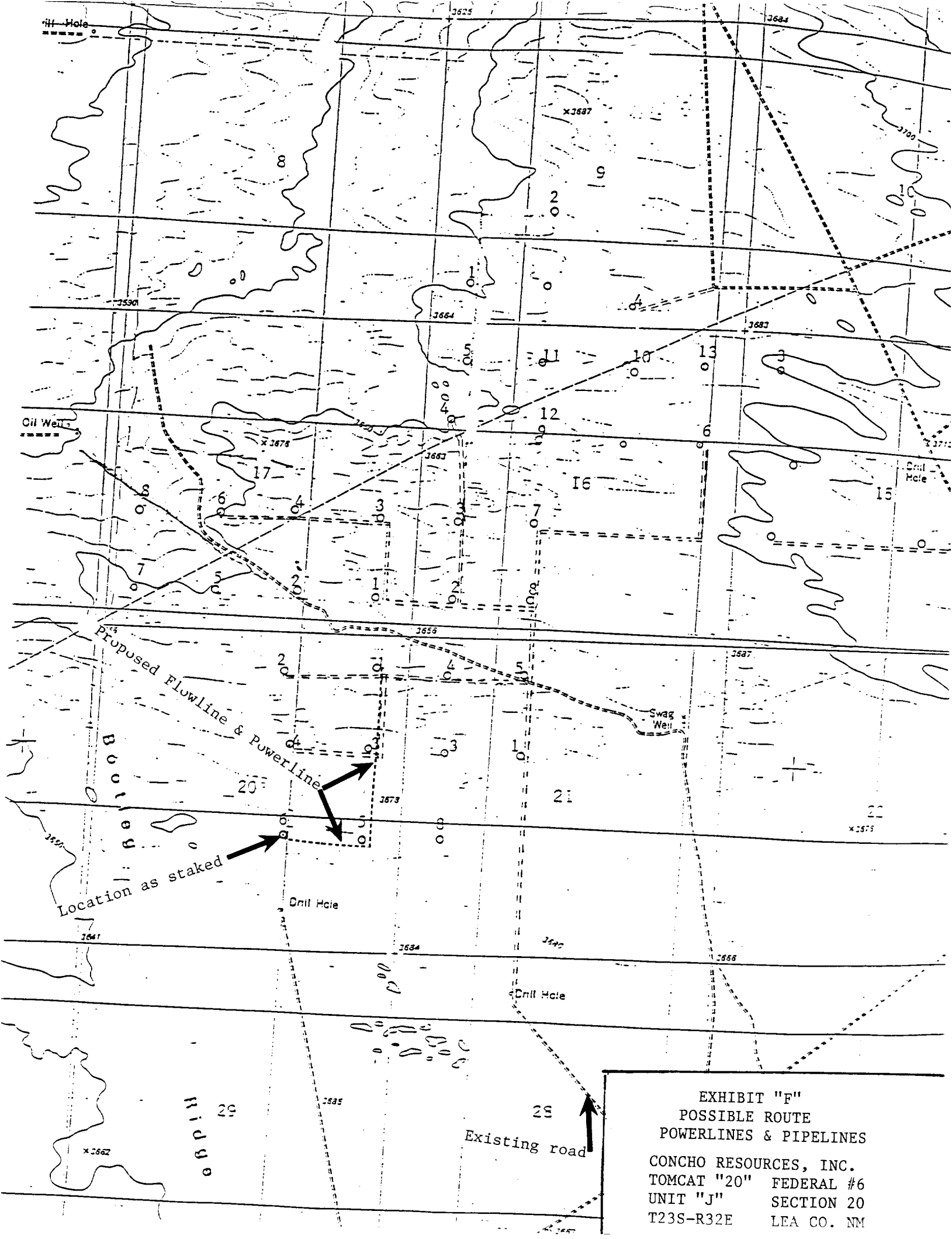


EXHIBIT "F"
POSSIBLE ROUTE
POWERLINES & PIPELINES
CONCHO RESOURCES, INC.
TOMCAT "20" FEDERAL #6
UNIT "J" SECTION 20
T23S-R32E LEA CO. NM

ELF 2/3/2
ABOVE DATE DOES NOT
INDICATE WHEN
CONFIDENTIAL LOGS
WILL BE RELEASED