

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNew Mexico
SUBMIT IN TRIPLICATEFORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM-19448	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME -----	
2. NAME OF OPERATOR CONCHO RESOURCES, INC. (JIM BLOUNT) 915-683-7443		7. UNIT AGREEMENT NAME -----	
3. ADDRESS AND TELEPHONE NO. 110 WEST LOUISIANA SUITE 410 MIDLAND, TEXAS 79702 (915-683-7443)		8. FARM OR LEASE NAME, WELL NO. DOROTHY FEDERAL # 2	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 990' FEL & 1980' FSL SEC. 25 T18S-R33E LEA CO. NM At proposed prod. zone SAME I		9. API WELL NO. 30-025-35717	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE Approximately 40 miles West Southwest of Hobbs New Mexico.		10. FIELD AND POOL OR WILDCAT EK-BONE SPRING	
13. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 660'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SEC. 25 T18S-R33E	
18. NO. OF ACRES IN LEASE 80		12. COUNTY OR PARISH LEA CO.	
19. PROPOSED DEPTH 10,200'		13. STATE NM	
20. ROTARY OR CABLE TOOLS ROTARY		22. APPROX. DATE WORK WILL START When Approved	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3871' GR.			

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
17½"	H-40 13 3/8"	48	400' 1 7/8"	550 Sx. circulate to surface
11"	K-55 8 5/8"	32	3700'	1300 Sx. " " "
7 7/8"	N-80 & K-55 5½"	17	10,200'	600 Sx. Est TOC 5500'

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 400'. Run and set 400' of 13 3/8" 48# H-40 ST&C casing. Cement with 300 Sx. of Class "C" Light, tail in with 250 Sx. of Class "C" + 2% CaCl + ½# Flocele/Sx. Circulate cement to surface.
3. Drill 12½" hole to 3700'. Run and set 3700' of 8 5/8" 32# K-55 ST&C casing. Cement with 1000 Sx. of Class "C" Light, tail in with 300 Sx. of Class "C" + 2% CaCl + ½# Flacele/Sx. Circulate cement to surface.
4. Drill 7 7/8" hole to 10,200'. Run and set 10,200' of 5½" casing as follows" 3700' of 5½" 17# N-80 LT&C, 6500' of 5½" J-55 17# LT&C casing. Cement 600 Sx. of Class "H" Premium Plus cement + additives. Estimate top of cement 6000'.

Capitan Controlled Water Basin

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

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. If applicable, give water program, if any.

24. SIGNED Joe T. Jones TITLE Agent DATE 03/30/01

(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.
CONDITIONS OF APPROVAL, IF ANY:APPROVED BY /S/ JOE G. LARA TITLE FIELD MANAGER DATE SEP 21 2001

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

RECEIVED

APR 02 2001

BLM
ROSWELL, NM

121 JOE G. LARA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OCD-HOBBS

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
CONCHO OIL & GAS CORP. (JIM BLOUNT) Terri 915-683-7443

3a. Address 110 WEST LOUISIANA SUITE 410
MIDLAND, TEXAS 79701

3b. Phone No. (include area code)
915-683-7443

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
810' FEL & 1980' FSL SEC. 25 T18S-R35E LEA CO. NM

5. Lease Serial No.
NM-19448

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
DOROTHY FEDERAL # 2

9. API Well No.
30-025-35717

10. Field and Pool, or Exploratory Area
EK-BONE SPRING

11. County or Parish, State
LEA CO. NEW MEXICO

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other <u>Move</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>location</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 day following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

1. Concho Oil & Gas Corp. requests the approval to move the location of their Dorothy Federal # 2.

From: 990' FEL & 1980' FSL SEC. 25 T18S-R33E LEA CO. NM

To: 810' FEL & 1980' FSL SEC. 25 T18S-R33E LEA CO. NM

2. The reason for this request is so Concho Oil & Gas Corp. would be in compliance with the Field Rules of The Oil Conservation Division of The New Mexico Energy, Minerals, and Natural Resources Dept.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Joe T. Janica

Title Agent

Signature

Joe T. Janica

Date 05/03/01

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/S/ JOE G. LARA

ACTING FIELD MANAGER

Date SEP 21 2001

Conditions of approval, if any, are attached. Approval of this notice 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.

Office CARLSBAD FIELD OFFICE

RECEIVED
MAY 3 2001
FEDERAL BUREAU OF INVESTIGATION
U.S. DEPARTMENT OF JUSTICE

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-35717	Pool Code 21650	Pool Name EK-Bone Springs
Property Code 27380	Property Name DOROTHY FEDERAL	Well Number 2
OGRID No. 143407	Operator Name CONCHO RESOURCES, INC. Gilbas Cap	Elevation 3873'

Surface Location

UL or lot No. 1	Section 25	Township 18-S	Range 33-E	Lot Idn	Feet from the 1980	North/South line SOUTH	Feet from the 810	East/West line EAST	County LEA
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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 80	Joint or Infill	Consolidation Code	Order No.						

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 Erick W Nelson Printed Name Engineer Title 9-24-01 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. APRIL 29, 2001 Date Surveyed AWB Signature & Seal of Professional Surveyor Certificate No. RONALD J. EDSON 3239 GARY EDSON 12641

APPLICATION TO DRILL

CONCHO OIL & GAS CORP.
DOROTHY FEDERAL # 2
UNIT "I" SECTION 25
T18S-R33E 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: 990' FEL & 1980' FSL SEC. 25 T18S-R33E LEA CO. NM
2. Elevation above Sea Level: 3871' 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: 10,200'
6. Estimated tops of geological markers:

Salt	1700'	San Andres	5220'
Yates	3200'	Delaware	5690'
Queen	4400'	Bone Spring	7620'
7. Possible mineral bearing formations:

Queen	Oil	Delaware	Oil
San Andres	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"	0-400'	13 3/8"	48#	8-R	ST&C	H-40
11"	0-3700'	8 5/8"	32#	8-R	ST&C	J-55
7 7/8"	0-10,200'	5½"	17#	8-R	LT&C	N-80

APPLICATION TO DRILL

CONCHO OIL & GAS CORP.
DOROTHY FEDERAL # 2
UNIT "I" SECTION 25
T18S-R33E LEA CO. NM

9. Cementing and Setting Depth:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 400' of 13 3/8" 48# H-40 ST&C casing. Cement with 300 Sx. of Class "C" Light cement + additives, tail in 250 Sx. of Class "C" + 2% CaCl + 1/2# Flocele/Sx. circulate cement to surface.
8 5/8"	Intermediate	Set 3700' of 8 5/8" 32# J-55 ST&C casing. Cement with 1000 Sx. of Class "C" Light + additives, tail in with 300 Sx. of Class "C" cement + 2% CaCl + 1/2# Flocele/Sx. circulate cement to surface.
5 1/2"	Production	Set 10,200' of 5 1/2" 17# N-80 LT&C casing. Cement with 600 Sx. of Class "H" 50/50 POZ + additives, estimate top of cement 6000'.

10. Pressure Control Equipment: Exhibit "E". A 900 Series 3000 PSI working pressure B.O.P. consisting of a double ram type preventor with a bag type annular preventor. BOP unit will be hydraulically operated. Exhibit "E-1". Choke manifold and closing unit. BOP will be nipped up on 13 3/8" casing and will be operated at least once each 24 Hr. period while drilling and blind rams will be operated when out of hole during trips. Flow sensor, PVT, 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
40-400'	8.4-8.7	29-34	NC	Fresh water spud mud add paper to control seepage.
400-3700'	10.1-10.3	29-38	NC	Brine water, add paper to control seepage and use high viscosity sweeps to clean hole.
3700-9000'	9.0-9.3	29-38	NC	Cut Brine
9000-10,200'	9.0-9.3	29-38	10 cc or Less	Cut Brine use a polymer to reduce water loss and high viscosity sweeps to clean hole.

Sufficient mud materials to maintain mud properties, meet lost circulation and weight increase requirements will be kept at well site at all times. In order to log well and run casing the viscosity may have to be raised and the water loss lowered in order to do so.

APPLICATION TO DRILL

CONCHO OIL & GAS CORP.
DOROTHY FEDERAL # 2
UNIT "I" SECTION 25
T18S-R33E LEA CO. NM

12. Testing, Logging and Coring Program:

1. Open hole logs: Run Dual Laterolog SNP, LDT, Gamma Ray, Caliper from TD to 3700'. Run Gamma Ray, Neutron from 3700' to surface.
2. No DST's are planned at this time.
3. No cores are planned at this time.
4. Mud logger may be rigged up on hole when Geologist sees the need.

13. Potential Hazards:

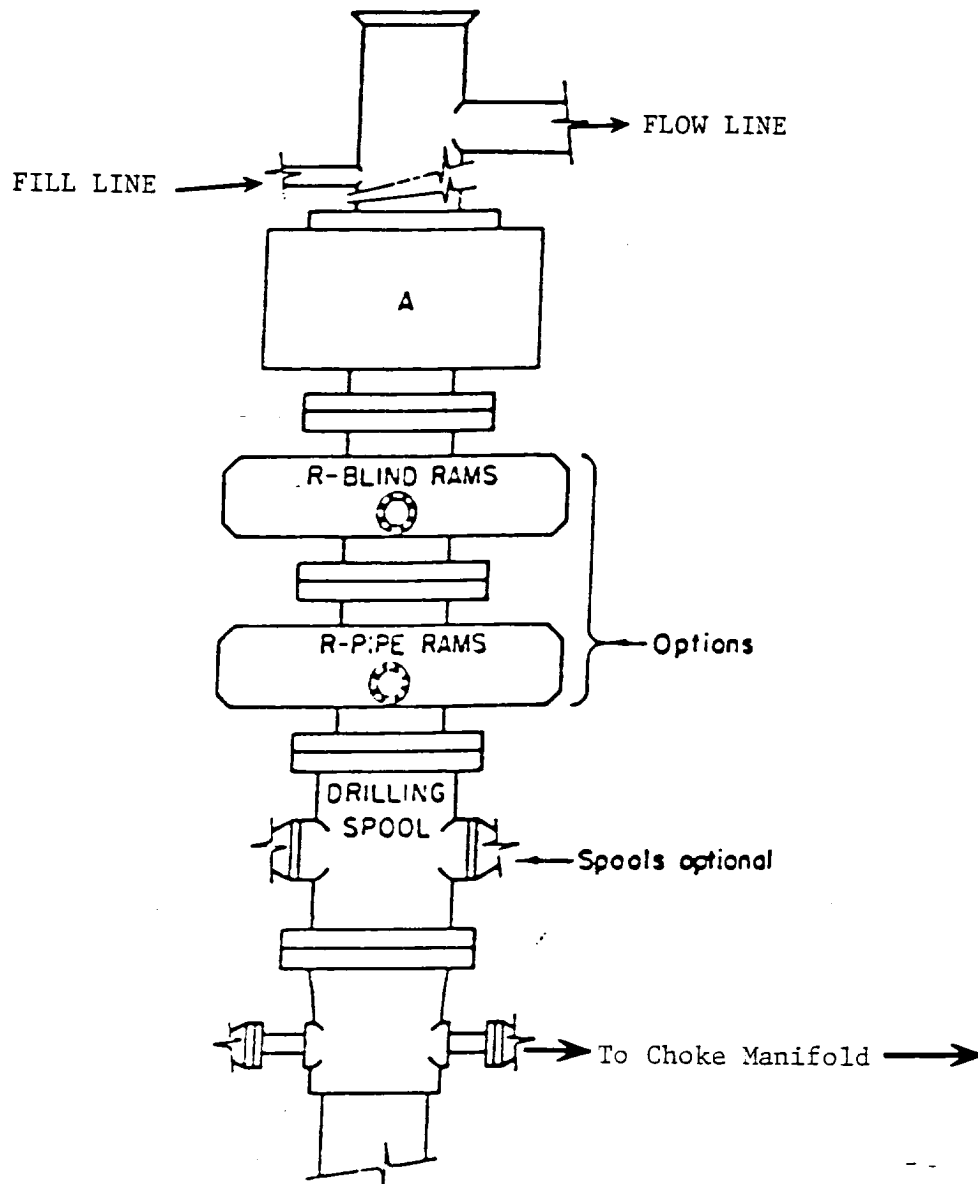
No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H₂S detectors will be in place to detect any presence. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 4000 PSI, estimated BHT 165°.

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 32 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.



ARRANGEMENT SRRA

900 Series
3000 PSI WP

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

CONCHO OIL & GAS CORP.
DOROTHY FEDERAL # 2
UNIT "I" SECTION 25
T18S-R33E LEA CO. NM

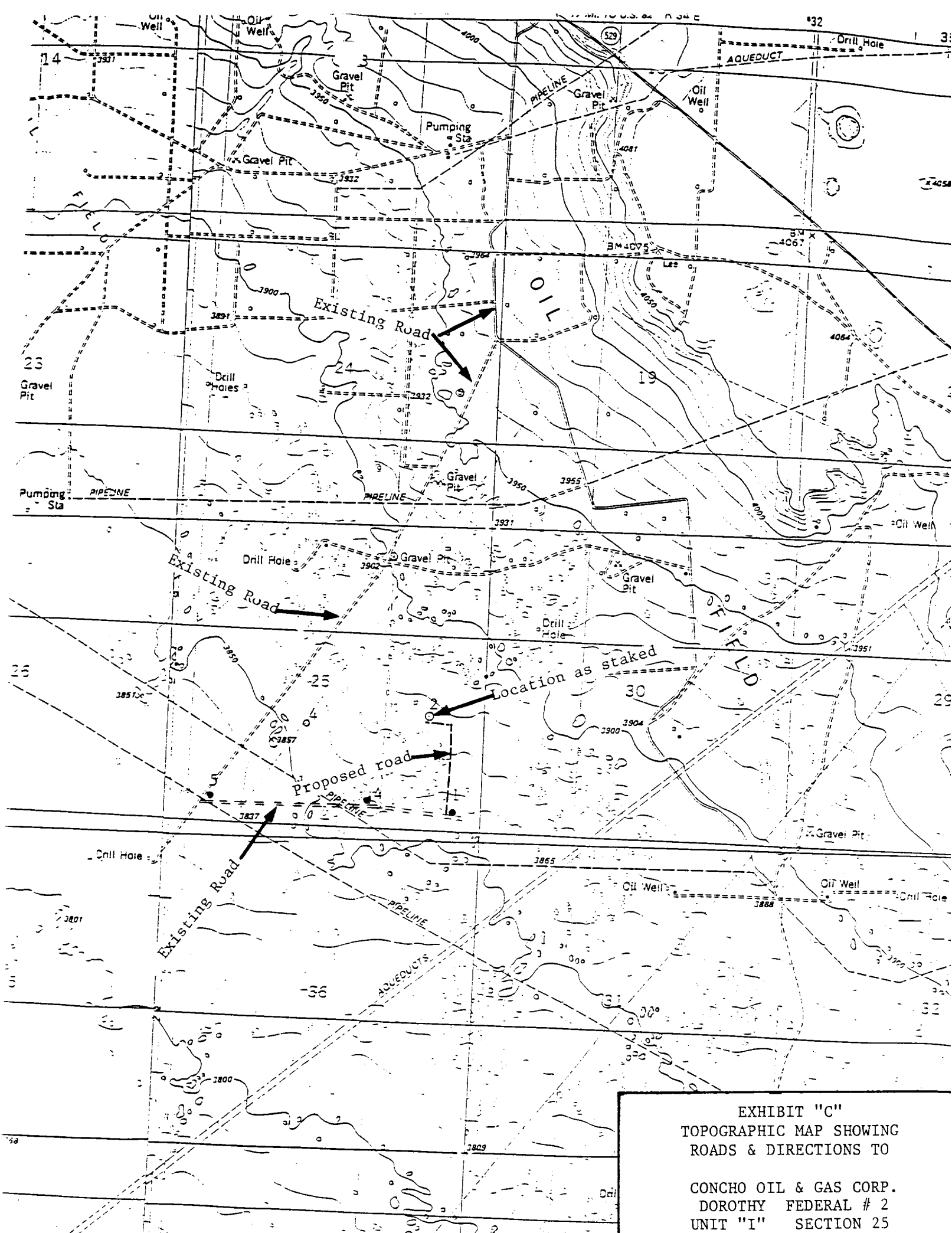
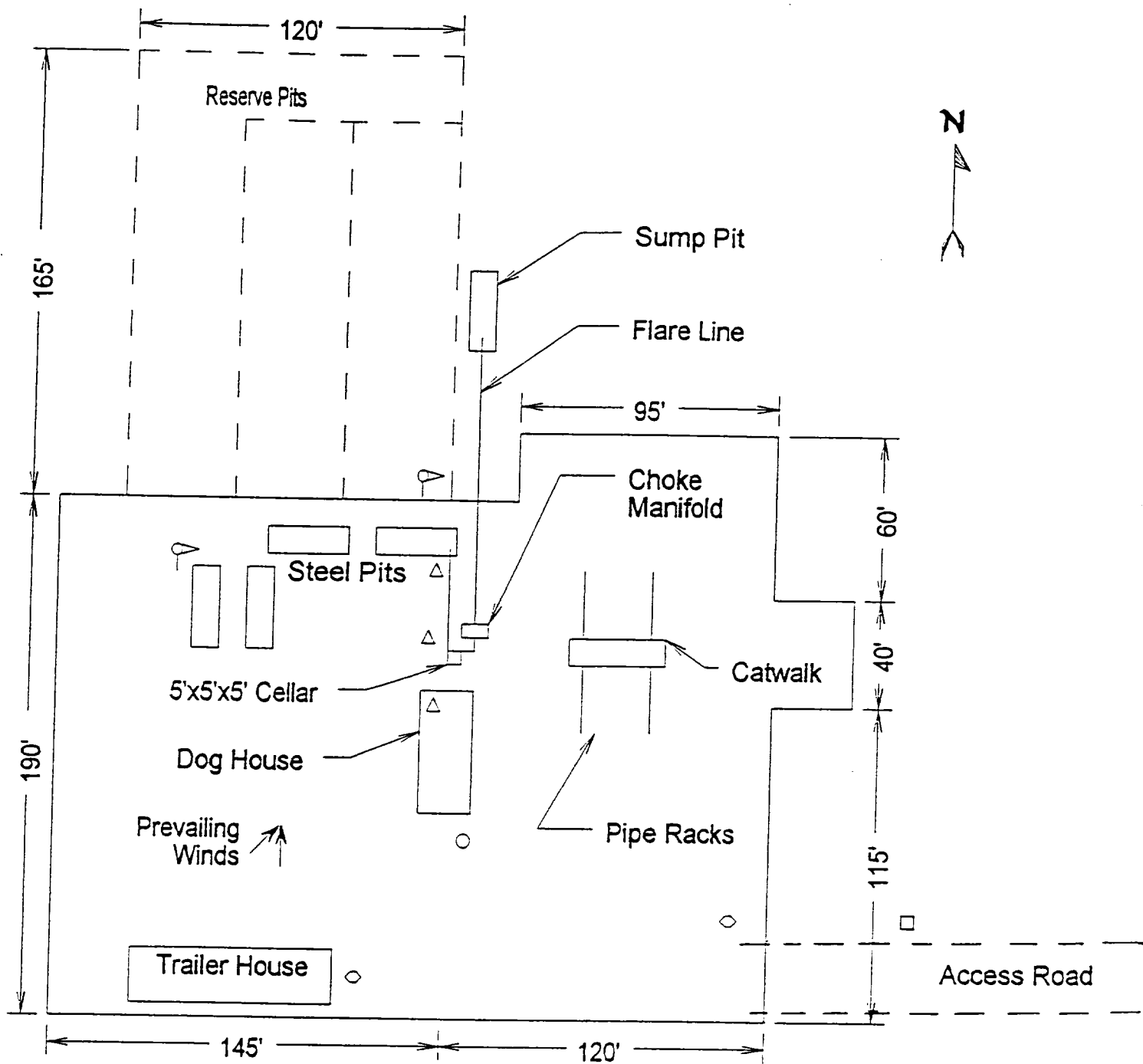


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO
CONCHO OIL & GAS CORP.
DOROTHY FEDERAL # 2
UNIT "I" SECTION 25



- 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 OIL & GAS CORP.
DOROTHY FEDERAL # 2
UNIT "I" SECTION 25
T18S-R33E LEA CO. NM