

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

1525 N. Front (Other locations on reverse side)

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☒GAS WELL ☐

OTHER

SINGLE ZONE ☒MULTIPLE ZONE ☐

2. NAME OF OPERATOR

CONCHO OIL & GAS CORP. (ERICK NELSON 915-683-7443)

3. ADDRESS AND TELEPHONE NO.

110 WEST LOUISIANA SUITE 410 MIDLAND, TEXAS 79701 915-683-7443

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

At surface

1975' FWL & 1980' FSL SECTION 25 T18S-R33E LEA CO. NM

At proposed prod. zone SAME

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

Approximately 40 miles Southwest of Hobbs, New Mexico

15. DISTANCE FROM PROPOSED*

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

1975'

16. NO. OF ACRES IN LEASE

400

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1320'

19. PROPOSED DEPTH

10,200'

20. ROTARY OR CABLE TOOLS
ROTARY

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

3853' GR.

Capitan Controlled Water Basin

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
17½"	H-40 13 3/8"	48	1750'	1250 Sx circulate cement
11"	K-55 8 5/8"	32	3700'	1200 Sx. circulate cement
7 7/8"	N80, K-55 5½"	17	10,200'	600 Sx. estimate top cem. 6000'

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 1750'. Run and set 1750' of 13 3/8" H-40 48# ST&C casing. Cement with 1000 Sx. of Halco-Light cement + additives, tail in with 250 Sx. of Class "C" cement + 2% CaCl₂, + ½# Flocele/Sx. circulate cement to surface.
3. Drill 11" hole to 3700'. Run and set 3700' of 8 5/8" 32# K-55 ST&C casing. Cement with 1000 Sx. of Class "C" Halco-Light cement + additives, tail in with 200 Sx. of Class "C" cement + 2% CaCl₂, + ½# Flocele/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 casing, 6500' of 17# K-55 LT&C casing. Cement with 600 Sx. of Class "H" Premium Plus cement + additives, top of cement to be at least 500' above the upper most productive pay.

Bureau of Land Management
Received

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

TITLE Agent

DATE 10/03/02

(This space for Federal approval)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHEDCarlsbad Field
Carlsbad, N.OPER. OGRID NO. 193407
PROPERTY NO. 27345
POOL CODE 21650
EFF. DATE 11-25-02
API NO. 30-025-36058

APPROVED BY

/S/ JOE G. LARA

TITLE

FIELD MANAGER

DATE

NOV 21 2002

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

DISTRICT I
P.O. Box 1880, Hobbs, NM 88241-1880

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

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 Brazos Rd., Artec, NM 87410

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number 30-025-36058	Pool Code 21650	Pool Name E-K Bone Spring
Property Code 27345	Property Name EDITH FEDERAL	Well Number 4
OGRID No. 193407	Operator Name CONCHO RESOURCES, INC.	Elevation 3853'

Surface Location

UL or lot No. K	Section 25	Township 18-S	Range 33-E	Lot Idn	Feet from the 1980	North/South line SOUTH	Feet from the 1975	East/West line WEST	County LEA
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Bottom Hole Location If Different From Surface

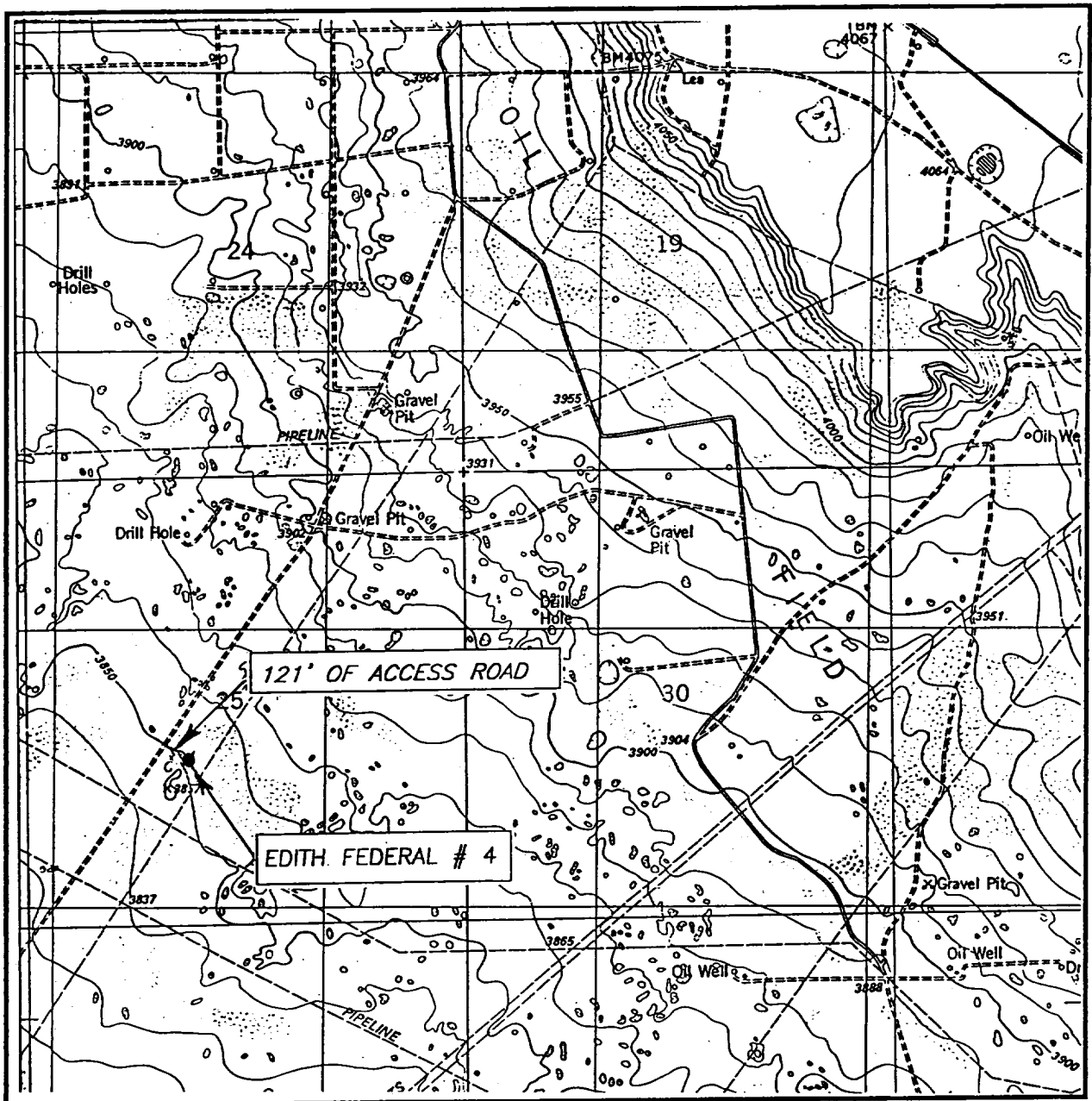
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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Dedicated Acres 80	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature Phyllis A. Edwards Printed Name Operations Secretary Title December 6, 2002 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 Signature & Seal of Professional Surveyor 01-11-0519 Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641	

LOCATION VERIFICATION ON MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

IRON HOUSE WELL, N.M.

SEC. 25 TWP. 18-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1980' FSL & 1975' FWL

ELEVATION 3853'

OPERATOR CONCHO RESOURCES, INC.

LEASE EDITH FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

IRON HOUSE WELL, N.M.

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

APPLICATION TO DRILL

CONCHO OIL & GAS CORP.

EDITH FEDERAL # 4

UNIT "K" 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: 1980' FSL & 1975' FWL SEC. 25 T18S-R33E LEA CO. NM
2. Elevation above Sea Level: 3853' 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- ^{1750'} 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

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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 ^{1750'} 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 + 1/4# 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 + 1/4# 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
^{1750'} 40- 400'	8.4-8.7	29-34	NC	Fresh water spud mud add paper to control seepage.
^{1750'} 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.

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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:

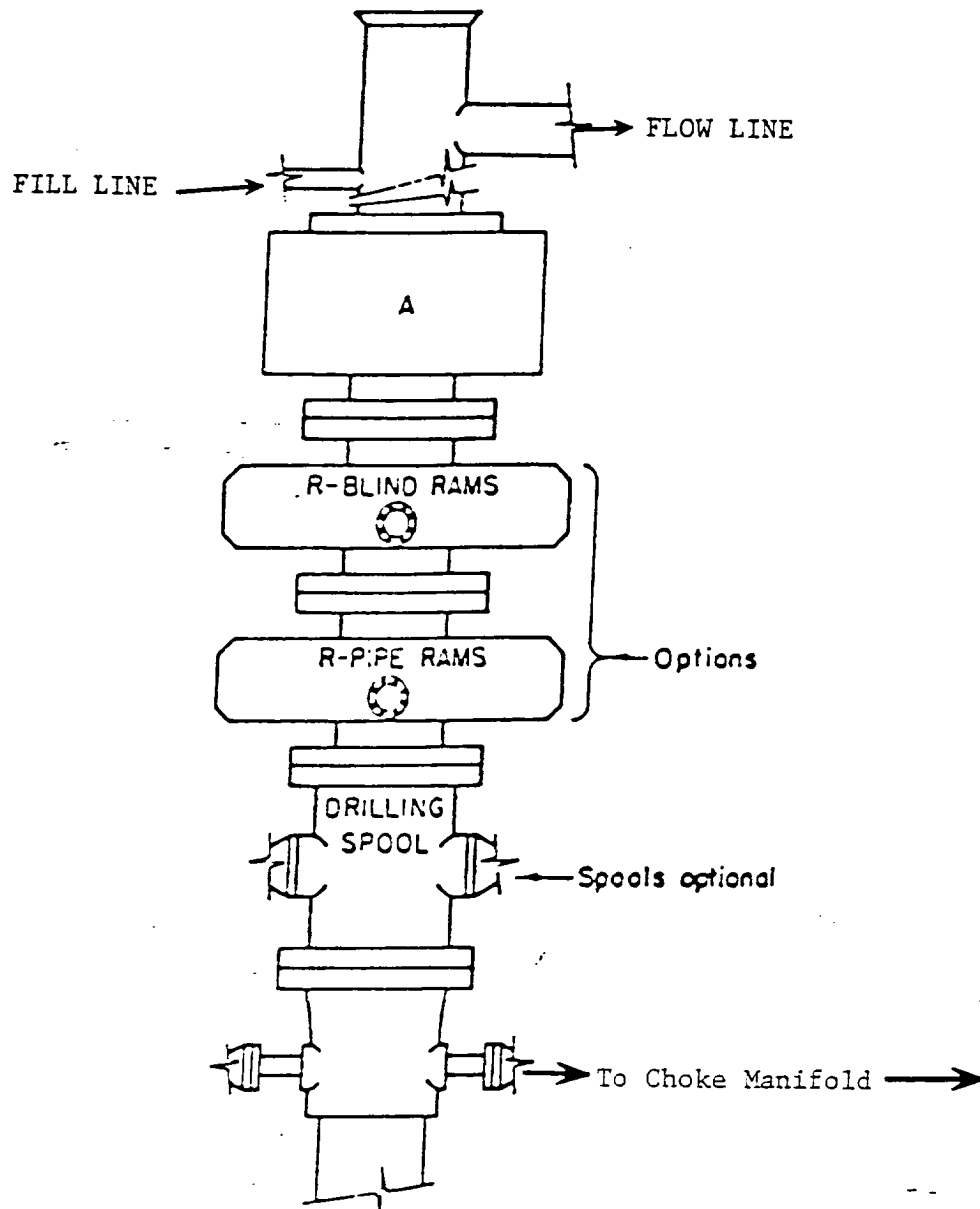
No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H₂S detectors will be in place to detect any presence. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 4000 PSI, 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"
KETCH OF B.O.P. TO BE USED ON

CONCHO OIL & GAS CORP.
EDITH FEDERAL # 4
UNIT "K" SECTION 25
T18S-R33E LEA CO. NM