For 3160-3 (July 1992)

OPER. OGRID NO.

APPROVED BY

UNITED STATES

FORM APPROVED OMB NO. 1004-0136

JAN 2 0 2004

Expires: February 28, 1995 DEPARTMENT OF THE INT 5. LEASE DESIGNATION AND SERIAL NO. BUREAU OF LAND MANAGEMEN POBOS, NM 88240 NM-97895 077004 6. IF INDIAN, ALLOTTEE OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL OR DEEPEN 1a. TYPE OF WORK 7. UNIT AGREEMENT NAME DRILL X DEEPEN b. TIPE OF WELL MULTIPLE ZONE WELL 8. FARM OR LEASE NAME, WELL NO. WELL X OTHER ZONE 2. NAME OF OPERATOR EXCALIBUR "17" FEDERAL #1 CONCHO RESOURCES, INC: FASKEN CENTER, TOWER II 9. API WELL NO. (MARK ELLERBE) 3. ADDRESS AND TELEPHONE NO. *30-025*-500 WEST TEXAS AVE. SUITE 1300 MIDLAND, TEXAS 79701 (432-683-7443 10. FIELD AND POOL, OR WILDCAT 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) BUFFALO-PENN. 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 860' FSL & 660' FEL SECTION 17 T19S-R33E LEA CO. NM At proposed prod. zone SAME SECTION 17 T19S-R33E 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE® 12. COUNTY OR PARISH | 13. STATE Approximately 35 miles Southwest of Hobbs, New Mexico CO. NEW MEXICO 15. DISTANCE FROM PROPUSED 17. NO. OF ACRES ASSIGNED TO THIS WELL 16. NO. OF ACRES IN LEASE LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT 660' 320 480 (Also to nearest drig, unit line, if any) 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS 18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. ROTARY 13,700' NA 22. APPROX. DATE WORK WILL START* 21. ELEVATIONS (Show whether DF, RT, GR, etc.) WHEN APPROVED 36431 GR. 23. PROPOSED CASING AND CEMENTING PROGRAM SETTING DEPTH SIZE OF HOLE GRADE, SIZE OF CASING WEIGHT PER FOOT QUANTITY OF CEMENT 25" 40' Cement to surface W/Redi-mix Conductor NA 430 17뇌" 485 Sx circulate to surface H-40 13 3/8" 48 12½" 5200**'** J-55,HCK-55 32 2390 Sx. Estimate TC 4700' 7/8" LSS-110 5½" 20 & 17 13,700' Mai Parinalla I Wales II 3 APPROVAL SUBJECT TO SEE ATTACHED SHEET eneral requirements and <u></u> special stip**ulations** PROPERTY NO. attached CONCHO RESOURCES, INC. ACCEPTS THE RESPONSIBILITY FOR THE OPERATION OF THIS LEASE. 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. 12/05/03 SIGNE (This space for Federal or State office use) 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 CONDITIONS OF APPROVAL, IF ANY:

APPROVAL *See Instructions On Reverse Side

FIELD MANAGER

/S/ JOE G. LARA

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240

DISTRICT 11

State of New Mexico

Form C-102 Revised March 17, 1999

Energy, Minerals and Natural Resources Department

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

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

811 South First, Artesia, NM 88210

DISTRICT IV 2040 South Pacheco, Santa Fe. NM 87505

OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe, New Mexico 87504-2088

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Na	me		
30-025-365	73000	73000 BUFFALO-PENN			
Property Code		Property Name			
33342	EXCAL	EXCALIBUR "17" FEDERAL			
OGRID No.		Operator Name			
193407	CONC	CONCHO RESOURCES INC.			

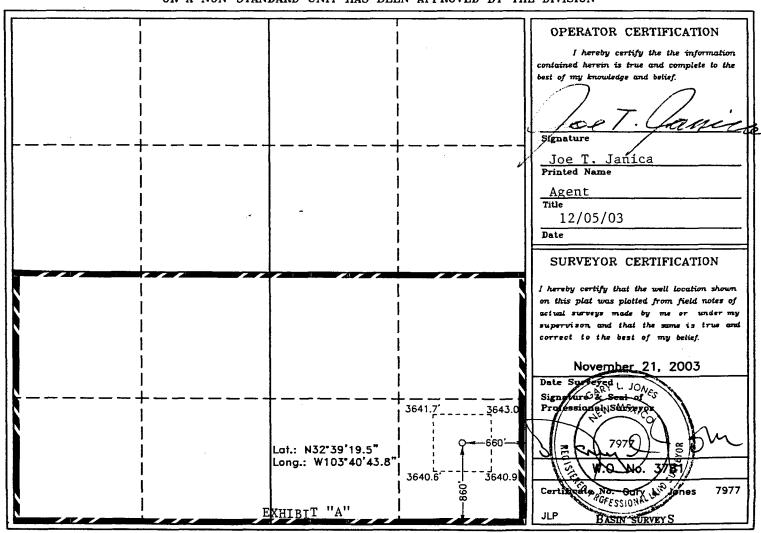
Surface Location

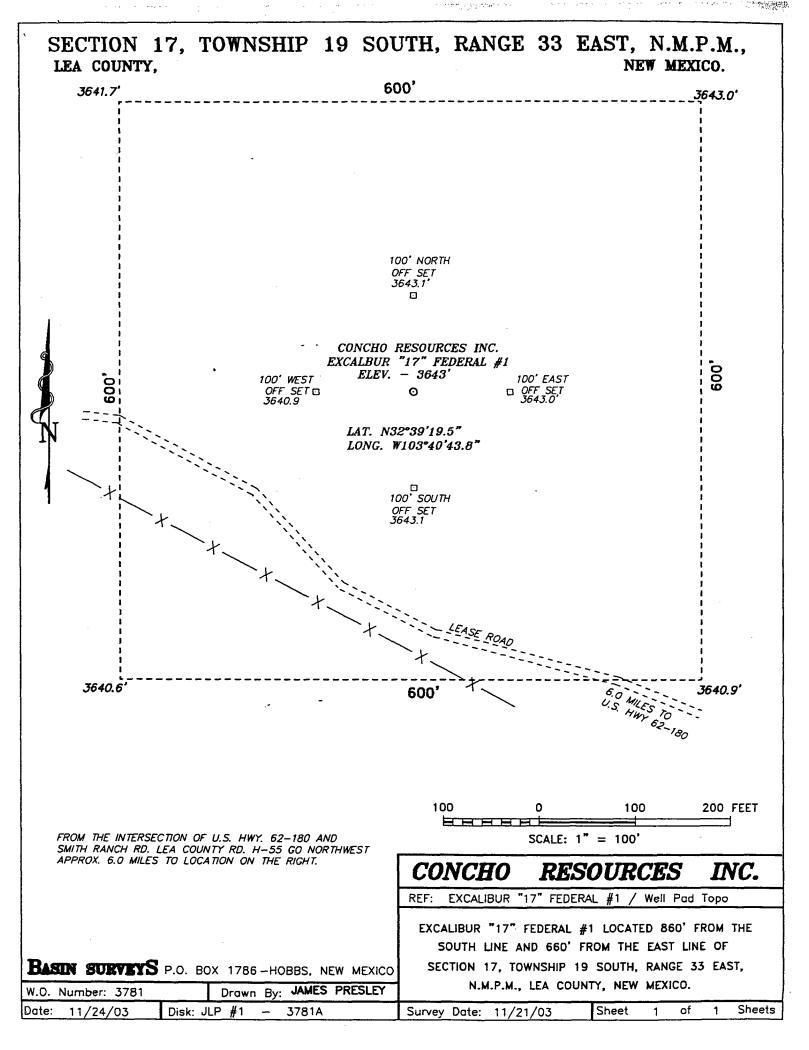
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	17	19 S	33 E		860'	SOUTH	660'	EAST	LEA

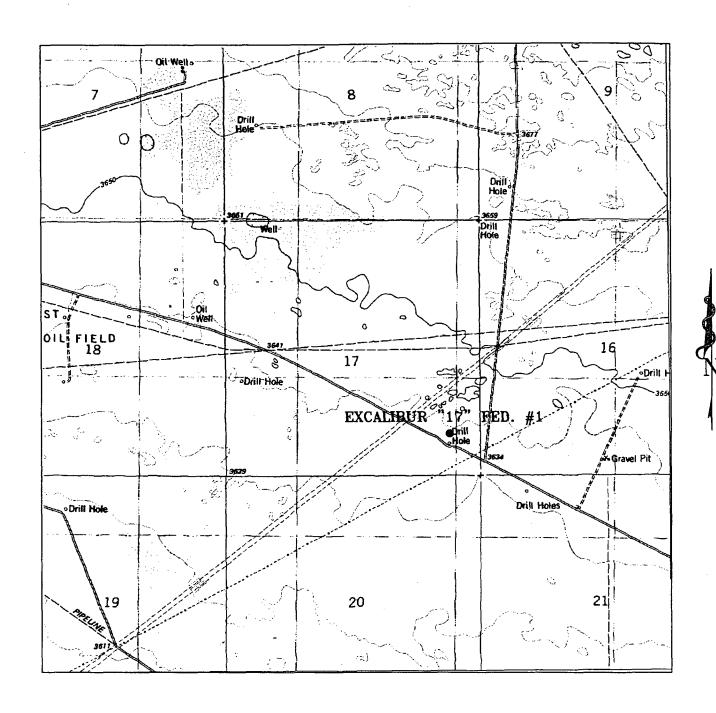
Bottom Hole Location If Different From Surface

UL or lot No. Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres Join	or Infill Co	nsolidation C	ode Ord	der 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







EXCALIBUR "17" FEDERAL #1
Located at 860' FSL and 660' FEL
Section 17, Township 19 South, Range 33 East,
N.M.P.M., Lea County, New Mexico.



in the oilfield

P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 - Office (505) 392-3074 - Fax basinsurveys.com

W.O. Number:	3781AA - JLP #1
Survey Date:	11/21/03
Scale: 1" = 2	000'
Date: 11/24/	03

CONCHO RESOURCES INC.

CONCHO RESOURCES, INC.

EXCALIBUR "17" FEDERAL # 1
UNIT "P" SECTION 17
T19S-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 of well: 860' FSL & 660' FEL SECTION 17 T19S-R33E LEA CO. NM
- 2. Ground Elevation above Sea Level: 3643' GR.
- 3. Geological age of surface formation: Quaternary Deposits:
- 4. <u>Drilling tools and associated equipment:</u> Conventional rotary drilling rig using drilling mud as a circulating medium to remove solids from hole.

5. Proposed drilling depth:

6. Estimated tops of geological markers:

Rustler Ar	hydrite	1400'	Bone Spring	7790'
Yates		3230'	Wolfcamp	10,960'
Oueen		4200 '	Strawn	12,080
San Andres Delaware 7. Possible		5050' 5960' ing formations:	Atoka Morrow	12,480' 12,780'
Yates	·	Oil	Bone Spring	Oil
7 Rivers		Oil	Morrow	Gas
Delaware		Oil		

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40'	20".	NA	NA	NA	Conductor
17½'	0-430'	13 3/8"	48	8-R	ST&C	H-40
124"	0-5200'	8 5/8"	32	8-R	ST&C	HCK & J-55
7 7/8"	0-13,700'	5½"	17 & 20	8-R	LT&C	P-110

CONCHO RESOURCES, INC.
EXCALIBUR "17" FEDERAL # 1
UNIT "P" SECTION 17
T19S-R33E LEA CO. NM

9. CASING SETTING DEPTH AND CEMENTING:

20" Conductor

Set 40' of 20" conductor and cement to surface with Redi-mix.

13 3/8" Surface

Set 430' of 13 3/8" 48# H-40 ST&C casing. Cement with 485 Sx. of Class "C" cement + 2% CaCl, + $\frac{1}{2}\#$ Flocele/Sx. circulate cement to surface.

8 5/8" Intermediate

-Set 5200' of 8 5/8" 32# casing as follows: 700' of 8 5/8" 32# HCK ST&C, 3400' of 32# J-55 ST&C, 1100' of 8 5/8" 32# HCK-55 ST&C. Cement in 2 stages with DV Tool at 3100' Cement 1st stage with 600 Sx. of 50/50/10 POZ: "C": Gel + 5% Salt + 5# Gilsonite/Sx. + 12# Flocels/Sx. tail in with 200 Sx. of Class "C" neat, cement 2nd stage with 840 Sx. of 50/50/10 POZ "C" Gel + 5% Salt, + 5# Gilsonite /Sx. + 12# Flocele/Sx., tail in with 200 Sx. of Class "C" +12% CaCl, circulate cement to surface.

5½" Production

Set 13.700' of $5\frac{1}{2}$ " casing as follows: 700' of $5\frac{1}{2}$ " 20# LSS-110 LT&C, 9600' of 17# LSS-110 LT&C, 3400' of $5\frac{1}{2}$ " 20# LSS-110 LT&C. Cement in 2 stages with DV Tool at 10,500'±. Cement 1st stage with 800 Sx. of 50/50/2 POZ "H" Gel + 5% salt, + 3# Gilsonite/Sx., .5%FL-52, + .5% FL-25,. Cement 2nd stage with 1140 Sx. of 50/50/10 POZ "H" Gel, + 5% Salt, + 5# Gilsonite/Sx, + $\frac{1}{2}$ # Flocele/Sx. tail in with 200 Sx. of Class "H" Neat. Estimate top of cement 4700'.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 1900 Series 3000 PSI working pressure .B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. This B.O.P. will be nippled up on the 13 3/8" casing and remain on hole till the 8 5/8" casing is cemented. A 1500 Series 5000 PSI B.O.P. consisting of an annular type bag preventor middle blind rams, and bottom pipe rams, this B.O.P will be nippled up on the 8 5/8" casing and will remain on hole till casing is run. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 5000 PSI choke manifold with dual adjustable chokes. B.O.P's and choke manifold will be tested to API specs. B.O.P.'s will be operated at least once each 24 hour period and blind rams will be operated when drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will be on the drilling rig at all times while drilling. No abnormal pressures or temperatures are expected in this well.

~~ (g) \$50.

CONCHO RESOURCES, INC.
EXCALIBUR "17" FEDERAL # 1
UNIT "P" SECTION 17
T19S-R33E LEA CO. NM

11 Proposed Mud Circulating System

<u>Interval</u>	Mud Wt.	Visc.	<u>FL</u>	Type Mud System
40' – 430'	8.4 – 8.9	32 – 34	NC	Fresh water spud mud. Add paper for seepage.
430' – 1500'	8.4 8.9	NC	NC	Fresh water w/ 4-6% oil for red bed stability. Pump sweeps of paper and starch while drilling red beds to meet BLM requirements for alternative surface casing setting depth.
1500' – 5200'	10.0 – 10.2	NC	NC	Fresh water to brine w/ 4-6% oil for red bed stability. Use paper and high viscosity sweeps for seepage and hole cleaning. Prior to TD add 30- 50 bbl oil and 30 sx of yellow starch to condition hole to run csg
5200' — 8800'	8.4 – 8.5	NC	NC	Drill section with fresh water circulating the reserve utilizing periodic sweeps of MF-55 and paper as needed for seepage control and solids removal.
8800' – 10800'	8.5 – 9.0	NC	NC	Increase weight with brine additions and utilize periodic sweeps of MF-55 and paper as needed for seepage control and solids removal.
10800' – 12500'	10.0 – 10.2	31-32	<20	Increase weight with brine additions and mud up with bentonite and polypac circulating through steel pits.
12500' — 13700'	10.0 - 10.2	⁻ 36-42	<8	Add 3% KCL and reduce FL w/ duovis and polypac. Maintain properties to TD. Spot a high vis pill on bottom for logs.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation and/or 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.

CONCHO RESOURCES, INC.

EXCALIBUR "17" FEDERAL # 1
UNIT "P" SECTION 17
T19S-R33E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Laterolog, SNP LDT, CNL, Gamma Ray- Caliper from 5200' to 13 3/8" casing shoe. (Run one) Run 2 same suite from TD back to 8 5/8" casing shoe at 5200'±.
- B. Mud logger may be placed on hole at the advice of Geologist after intermediate casing is run.
- C. Cores and DST's will be run as shows dictate.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of $\rm H^2S$ in this area. If $\rm H^2S$ is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 6250 PSI, and Estimated BHT 190°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 40 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The MORROW formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as a gas well.

- 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 hazzards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H_2S 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. 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" & "E-1"
- 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 the location is near to a dwelling a closed DST will be performed.

- 8. Drilling contractor supervisor will be required to be familiar with the effects H2S 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 seperator will be brought into service along with H_2S scavengers if necessary.

CONCHO RESOURCES, INC.
EXCALIBUR "17" FEDERAL # 1
UNIT "P" SECTION 17
T19S-R33E LEA 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 Hobbs New Mexico take U.S. Hi-way 62-180 West toward Carlsbad New Mexico go 30 miles to Smith Ranch road turn North go 2.2 miles bear Left follow caliche road Northwest approximately 4 miles to location on the North side of road.
 - C. Lay flowline and construct powerline along lease road as shown on Exibit "F".

- 2. PLANNED ACCESS ROADS: Aproximately 200' 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.
 - 3, 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 mimimum 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 utilaze 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

- None known

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"

CONCHO RESOURCES, INC.
EXCALIBUR "17" FEDERAL # 1
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4. If on completion this well is a producer the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's.

Possible routes of pipelines, flowlines and powerlines are shown on Exhibit "F".

5. LOCATION AND TYPE OF WATER SUPPLY:

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

6. SOURCE OF CONSTRUCTION MATERIAL:

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

7. METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. All trash, junk and other waste material will be contained in trash cages or trash 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 the supplier, including broken sacks.
- D. Waste water from living quaters will be drained into holes with a minium of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-John will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for furthed drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approve disposal site. Later pips will be broken out to speed drying. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in storage tanks and sold.

8. ANCILLARY FACILITIES:

A. No camps or air strips will be constructed on location.

CONCHO RESOURCES, INC.
EXCALIBUR "17" FEDERAL # 1
UNIT "P" SECTION 17
T19S-R33E 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 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 raclaimed 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.

CONCHO RESOURCES, INC.
EXCALIBUR "17" FEDERAL # 1
UNIT "P" SECTION 17
T19S-R33E LEA CO. NM

11. OTHER INFORMATION:

- A. Topography consists of sand dunes with a slight dip to the West. Deep sandy soil supports shinnery oak, native grasses, and an occasional mesquite tree.
 - B. Surface is owned by the U.S. Government and is administered by the Bureau of Land Management. The surface is used for grazing livestock and the production of oil and gas.
 - C. An archaeological survey will be conducted on the location and access roads. This report will be filed with The Bureau of Land Management in the Carlsbad field office.
 - D. There are no dwellings near this location.

12. OPERATORS REPRESENTIVES:

Before construction:

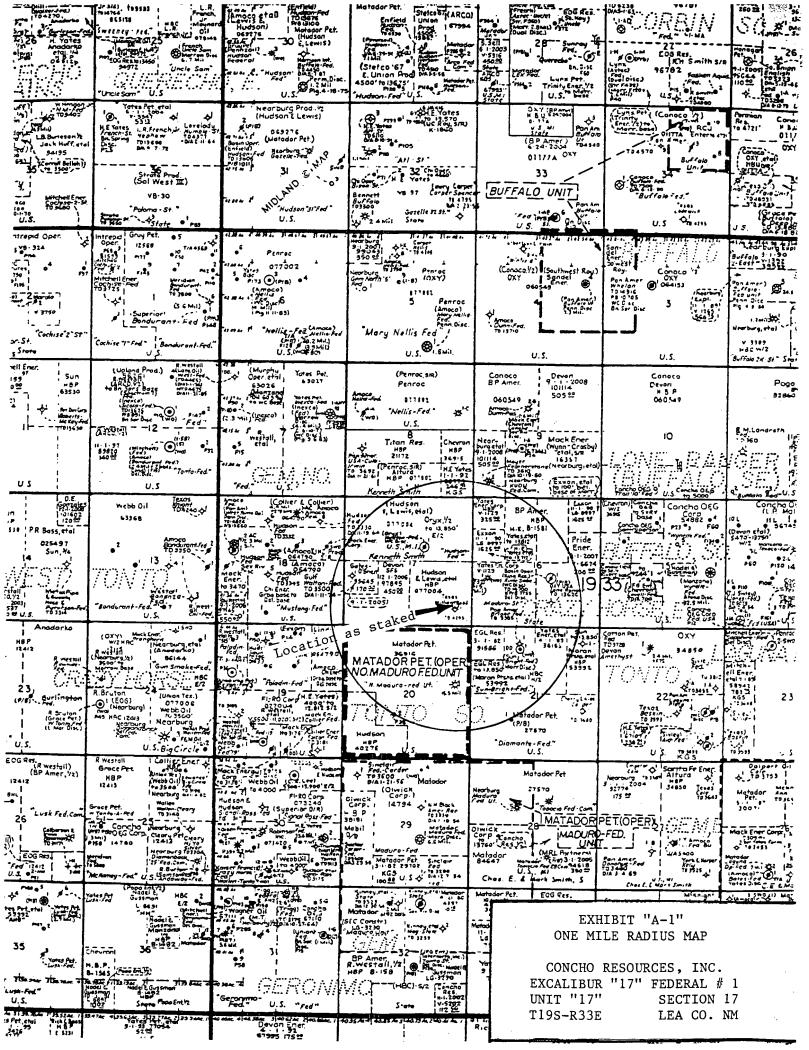
TIERRA EXPLORATION, INC P.O. BOX 2188
HOBBS, NEW MEXICO 88241
OFFICE Ph. 505-391-8503
JOE T. JANICA

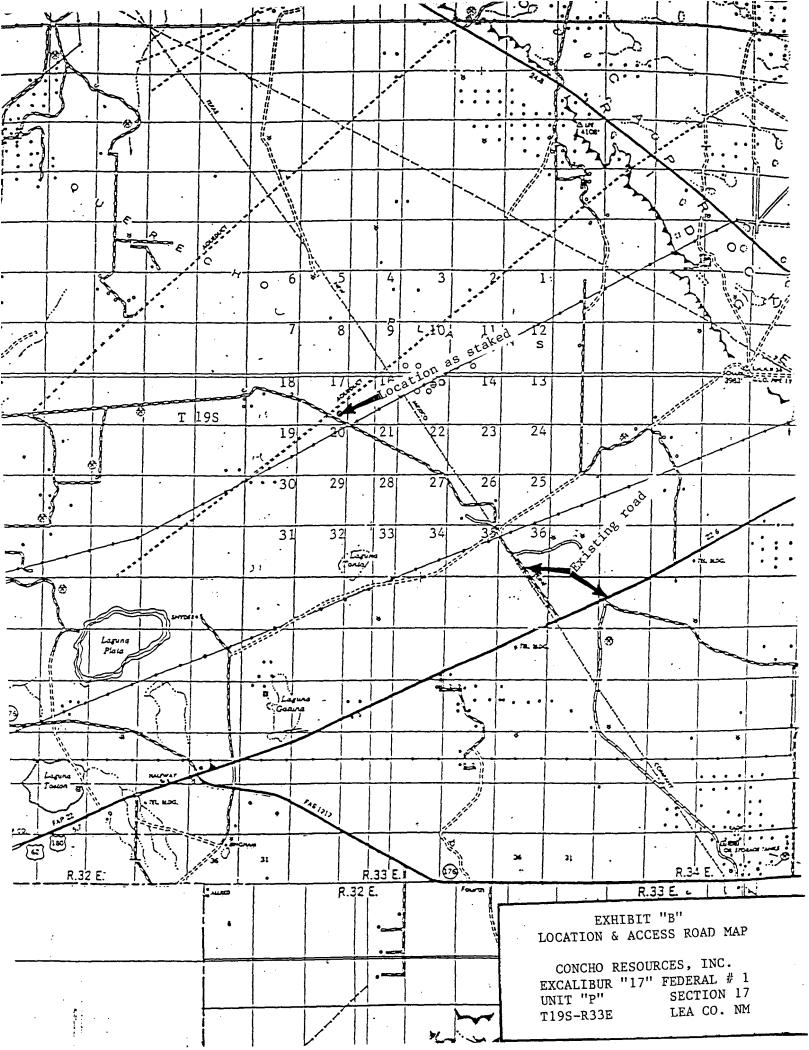
During and after construction:

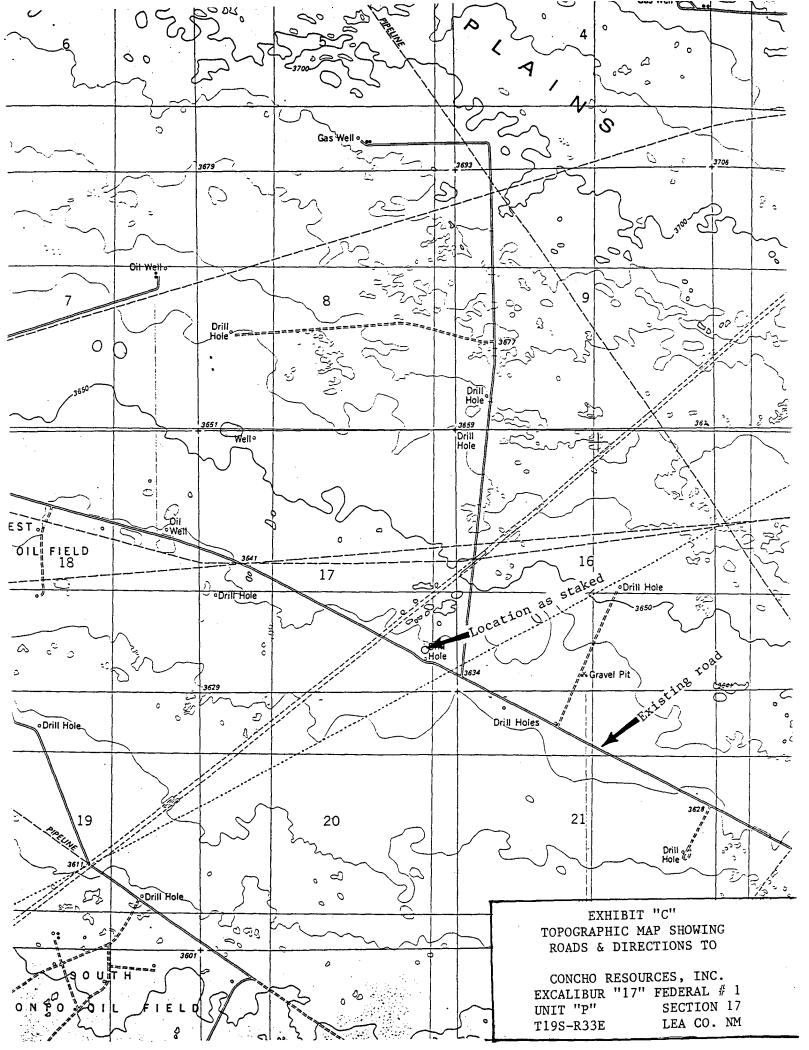
CONCHO RESOURCES, INC.
FASKEN CENTER TOWER II
550 WEST TEXAS ACE SUITE 1300
MIDLAND, TEXAS 79701
MARK ELLERBE OFFICE PH. 432-685-4343

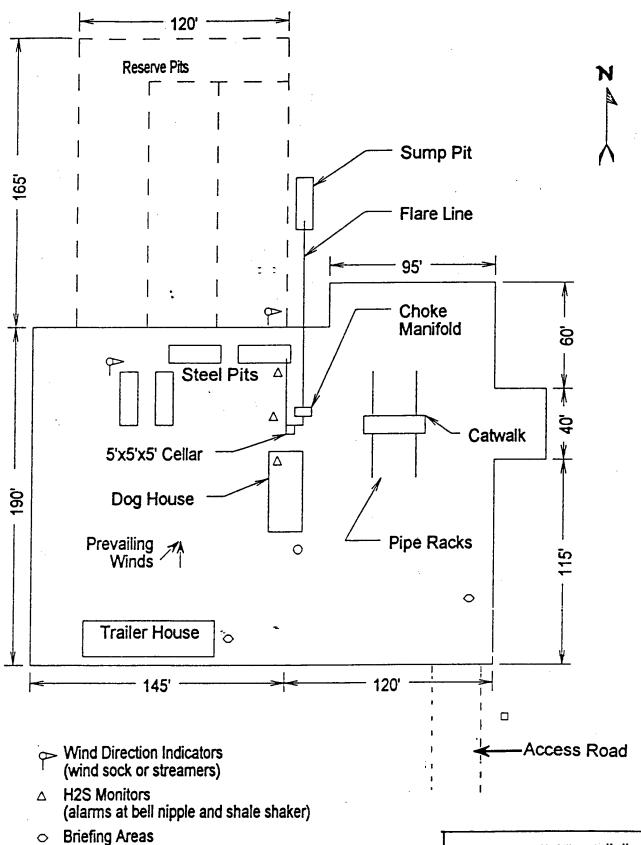
13. CERTIFICATION: I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access roads, and that I am fimiliar with the conditions which currently exist, that the statements made in this plan are to the best of my knowledge true and correct, and that the work associated with the operations proposed herein will be performed by CONCHO RESOURCES, INC. it's contractors/subcontractors is in compformity 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 report.

NAME : DATE : 12/05/03 / TITLE : Agent





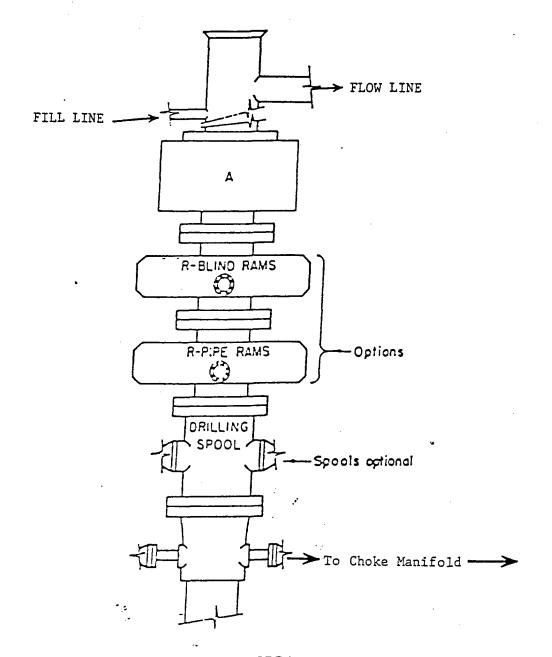




O Remote BOP Closing Unit

Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

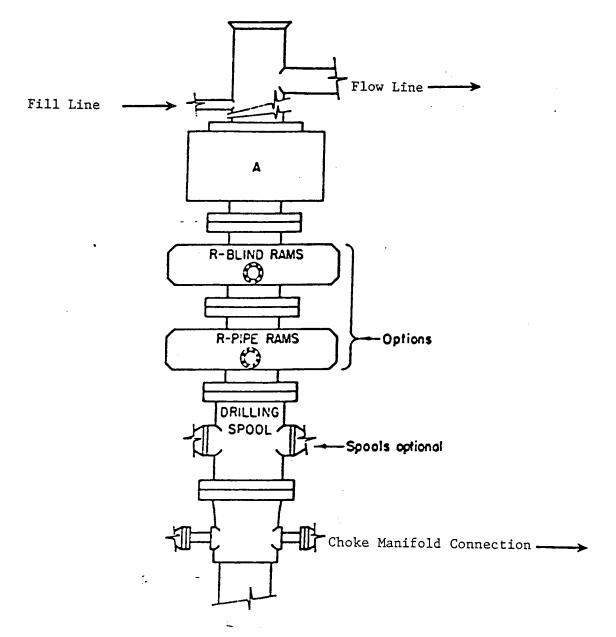


ARRANGEMENT SRRA

900 Series 3000 PSI WP

EXHIBIT "E"

SKETCH OF B.O.P. TO BE USED ON 3000 PSI



ARRANGEMENT SRRA

1500 Series 5000 PSI WP

EXHIBIT "E"

SKETCH OF B.O.P. TO BE USED ON 5000 PSI



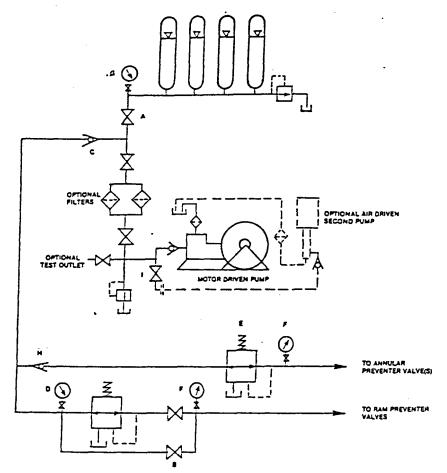


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

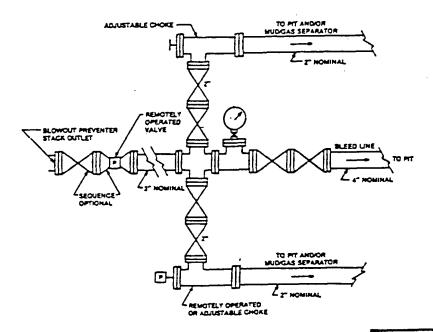


FIGURE K42. Typical choke manifold assembly for 5M rated working pressure service — surface installation.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

