

UNITED STATES  
DEPARTMENT OF THE INTERIOR

## BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse)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 RESOURCES, INC. (JIM BLOUNT) 915-683-7444

## 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.)

660' FNL &amp; 1650' FEL SEC. 23 T16S-R27E 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)

660'

## 16. NO. OF ACRES IN LEASE

960

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

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

1600'

## 19. PROPOSED DEPTH

9200'

## 20. ROTARY OR CABLE TOOLS

ROTARY

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

3610' 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"	20" conductor	NA	40'	Cement to surface with Redi-mix
12 1/2"	J-55 8 5/8"	32	1600'	950 Sx. circulate cement to surface
7 7/8"	J-55-N-80 4 1/2"	11.6	9200'	850 Sx.

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.

2. Drill 12 1/2" hole to 1600'. Run and set 1600' of 8 5/8" 32# J-55 ST&amp;C casing. Cement with 750 Sx. of 35/65 Class "C" POZ with 2% CaCl + 12% Salt, + 5% Gel, + 1/4# Celo Flakes/Sx. Tail in with 200 Sx. of Class "C" cement + 1/4# Celo Flakes/Sx., + 2% CaCl, circulate cement to surface.

3. Drill 7 7/8" hole to 9200'. Run and set 9200' of 4 1/2" casing as follows: 1000' of 4 1/2" 11.6# N-80 LT&amp;C, 7200' of 4 1/2" 11.6# J-55 LT&amp;C, 1000' of 4 1/2" 11.6# N-80 LT&amp;C. Cement with 350 Sx. of 50/50 POZ Class "H" + 10% Gel + 5% Salt + 1/4# Celo-Flakes/Sx. Tail in with 500 Sx. of 50/50 POZ Class "H" + 1% Fl-25 + 3% Salt + 1/4# Celo-Flakes/Sx.

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 08/08/00

(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:

Acting

(ORIG. SOD.) ARMANDO A. LOPEZ

Assistant Field Manager,  
Lands And Minerals

SEP 12 2000

APPROVED BY

TITLE

DATE

\*See Instructions On Reverse Side

APPROVED FOR 1 YEAR

RECEIVED  
AUG 09 2000  
BLM  
ROSWELL, NM

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

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

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

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 76079	Pool Name . DIAMOND MOUND-MORROW
Property Code	Property Name CARBON VALLEY 23 FEDERAL	Well Number 2
OGRID No. 166111	Operator Name CONCHO RESOURCES, INC.	Elevation 3610

Surface Location

UL or lot No. B	Section 23	Township 16 S	Range 27 E	Lot Idn	Feet from the 660	North/South line NORTH	Feet from the 1650	East/West line EAST	County EDDY
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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 320	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

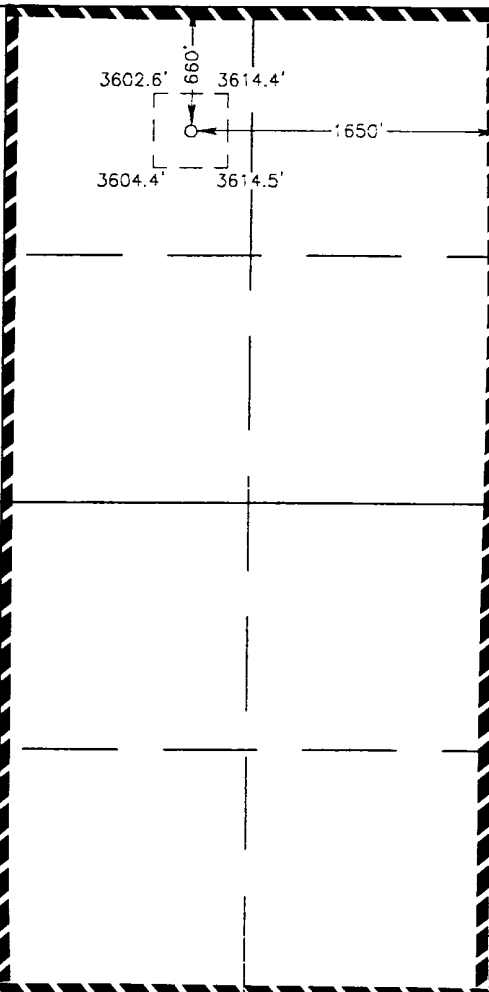
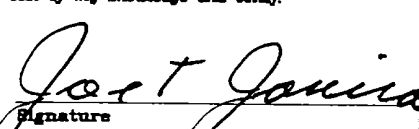
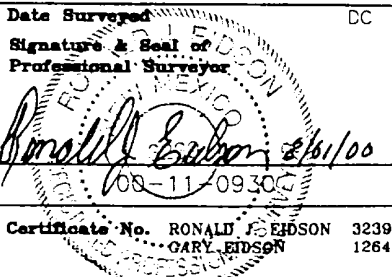
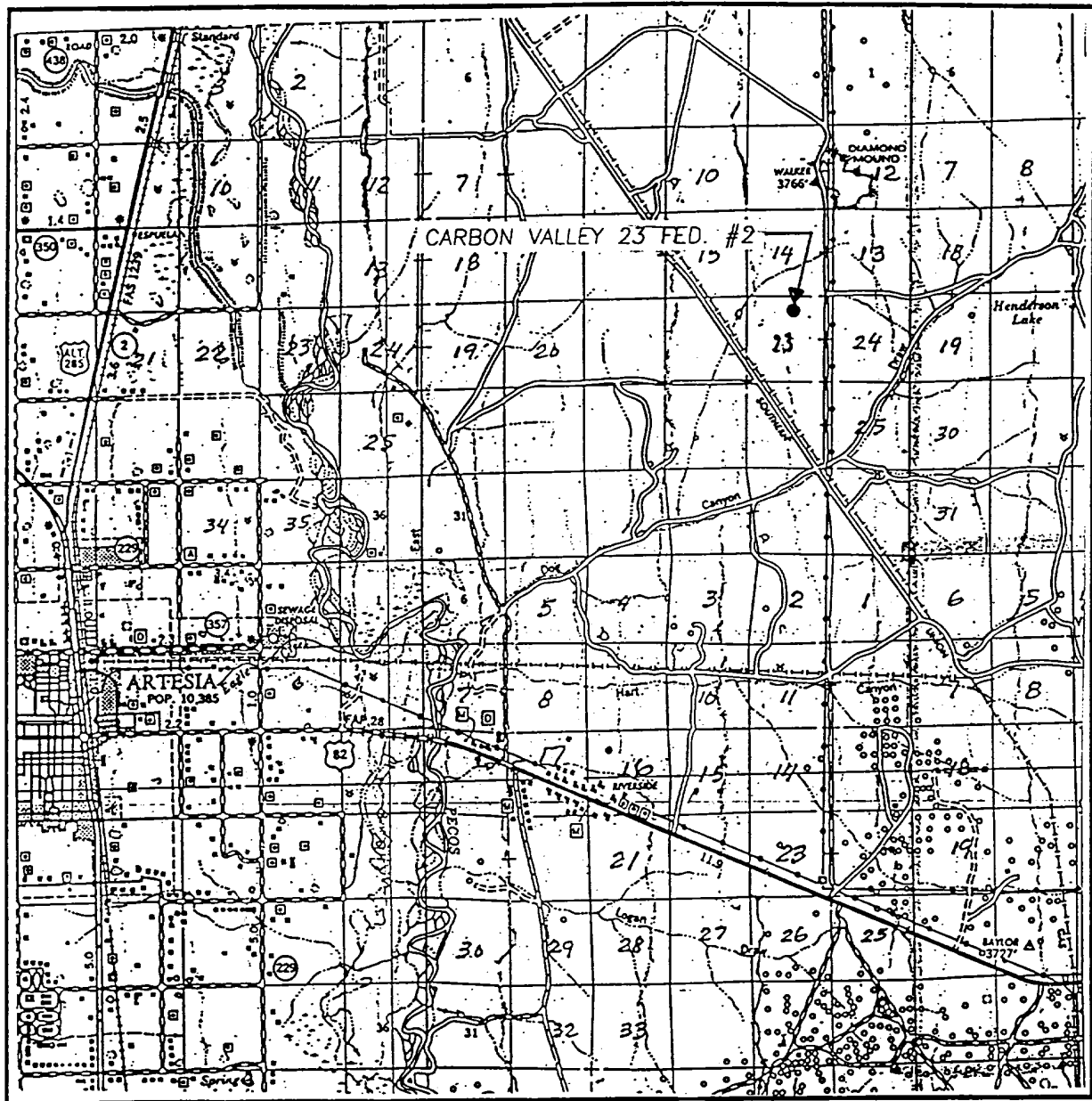
	<b>OPERATOR CERTIFICATION</b> <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>  Signature Joe T. Janica Printed Name Agent Title 08/08/00 Date
	<b>SURVEYOR CERTIFICATION</b> <i>I hereby certify that the well location shown on this 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> JULY 28, 2000 Date Surveyed Signature & Seal of Professional Surveyor  Certificate No. RONALD J. EDSON 3239 GARY EDSON 12641

EXHIBIT "A"

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 23 TWP. 16-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' F.N.L. & 1650' FEL

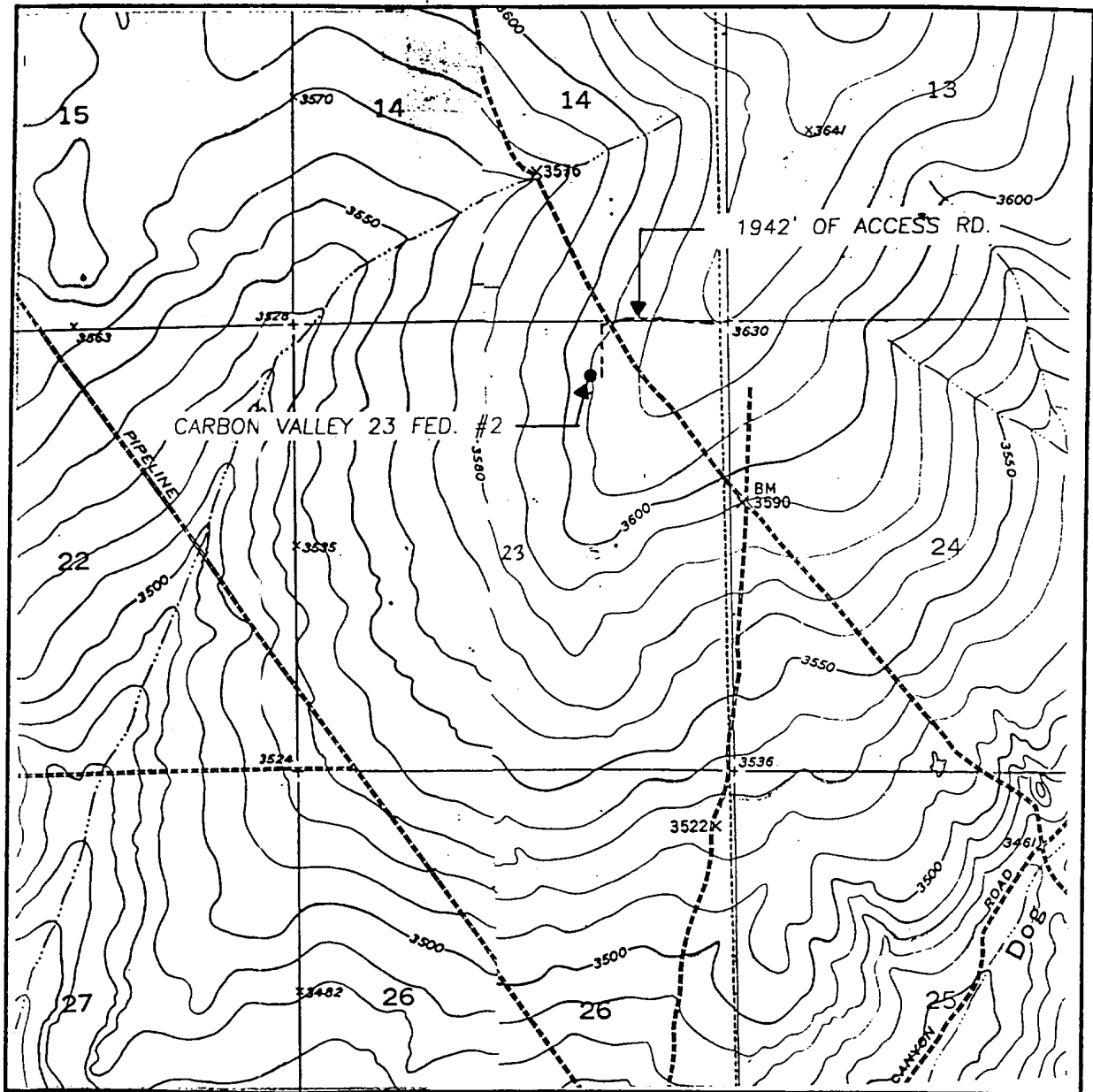
ELEVATION 3610

OPERATOR CONCHC RESOURCES, INC.

LEASE CARBON VALLEY 23 FED.

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

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
DIAMOND MOUND - 10'  
ARTESIA NE - 10'

SEC. 23 TWP. 16-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FNL & 1650' FEL

ELEVATION 3610

OPERATOR CONCHO RESOURCES, INC.

LEASE CARBON VALLEY 23 FED.

U.S.G.S. TOPOGRAPHIC MAP

DIAMOND MOUND, ARTESIA NE, N.M.

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

## APPLICATION TO DRILL

CONCHO RESOURCES, INC.  
 CARBON VALLEY "23" FEDERAL # 2  
 UNIT "B" SECTION 23  
 T16S-R27E 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: 660' FNL & 1650' FEL SEC. 23 T16S-R27E EDDY CO. NM
2. Elevation above Sea Level: 3610' 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: 9200'
6. Estimated tops of geological markers:

Seven Rivers	285	Wolfcamp	7290'
Grayburg	1145'	Strawn	8285'
San Andres	1440'	Morrow	9150'
7. Possible mineral bearing formations:

Wolfcamp	Oil		
Strawn	Oil	Morrow	Gas
8. Casing program:

Hole size	Interval	OD of casing	Weight	Thread	Collar	Grade
25"	0-40	20"	NA	NA	NA	Conductor
12½"	0-1600'	8 5/8"	32	8-R	ST&C	J-55
7 7/8"	0-9200'	4½"	11.6	8-R	LT&C	N-80 J-55

## APPLICATION TO DRILL

CONCHO RESOURCES, INC.  
 CARBON VALLEY "23" FEDERAL # 2  
 UNIT "B" SECTION 23  
 T16S-R27E EDDY CO. NM

9. Cementing and Setting Depth:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with redi-mix.
8 5/8"	Surface	Set 1600' of 8 5/8" 32# J-55 ST&C casing. Cement with 950 Sx. 750 Sx. of 35/65 Class "C" POZ + 2% CaCl + 12% Salt + 6% Gel + 1/4# Celo-flakes/Sx., tail in with 200 Sx. of Class "C" cement + 2% CaCl + 1/2# Celo-flakes/Sx. Circulate cement to surface.
4 1/2"	Production	Set 9200' of 4 1/2" casing as follows: 1000' of 4 1/2" 11.6# N-80 LT&C, 7200' of 4 1/2" 11.6# J-55 LT&C, 1000' of 4 1/2" 11.6# N-80 LT&C. Cement with 350 Sx. of 50/50 POZ Class "H" + 10% Gel + 5% Salt + 1/4# Celo-flakes/Sx., tail in with 500 Sx. of 50/50 POZ Class "H" + 1% Fl-25 + 3% Salt + 1/4# Celo-flakes/Sx. Estimate top of cement 4100'.

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 un-t will be hydraulically operated. Exhibit "E-1". Choke manifold and closing unit. BOP will be nipped up on 8 5/8" 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
40-1600'	8.8-8.9	29-38	NC	Fresh water use paper to control seepage and High viscosity sweeps to clean hole.
1600-8300'	10.2-10.6	29-38	NC	Brine water add paper to control seepage, clean hole with high sweeps and use Soda-ash for pH control.
8300-9200'	10.2-10.6	32-40	10 cc or less	Same as above & add starch for water loss control.

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 RESOURCES, INC.  
CARBON VALLEY "23" FEDERAL # 2  
UNIT "B" SECTION 23  
T16S-R27E EDDY CO. NM

12. Testing, Logging and Coring Program:

- A. Open hole logs: Dual-Laterolog, CNL Density, Gamma Ray, Caliper from TD to 1600'. Run Gamma Ray, Neutron from 1600' to surface.
- B. Mud logger will be rigged up on hole at the choice of Geologist.
- C. DST's will be run as shows dictate, no cores are planned at this time.

13. Potential Hazards:

No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H<sub>2</sub>S 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 4200 PSI, estimated BHT 150° .

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 25 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 MORROW pay will be perforated and stimulated. The well will be swab tested and potentialized as a gas well.

## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S
  - B. Physical effects and hazards
  - C. Proper use of safety equipment and life support systems.
  - D. Principle and operation of H<sub>2</sub>S detectors, warning system and briefing areas.
  - E. Evacuation procedure, routes and first aid.
  - F. Proper use of 30 minute pressure demand air pack.
2. H<sub>2</sub>S Detection and Alarm Systems
  - A. H<sub>2</sub>S 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, H<sub>2</sub>S 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.  
CARBON VALLEY "23" FEDERAL # 2  
UNIT "B" SECTION 23  
T16S-R27E EDDY CO. NM

1. EXISTING ROADS. Area map, Exhibit "B" is a reproduction of the New Mexico General Hi-way Co. Map. Exhibit "C" is a reproduction of a topographic map. Existing roads and proposed roads are shown on each exhibit. All roads will be maintained in a condition equal to or better than of construction.
  - A. From Artesia New Mexico go East on U.S. Hi-way 82 for 9 miles to booster station turn North on CR. 202 follow 202 for 2.7 miles. Turn right go 1.8 miles , turn Left go 2.7 miles turn Right go .7 miles turn Left go .9 miles turn West (Left) go 1600' to location.
  - B. Exhibit "A" shows the proposed well location as staked.
  - C. Exhibit "F" shows where pipelines and powerlines will be constructed if this well is and economical producer.
2. PLANNED ACCESS ROADS: Approximately 1600' of new road will be constructed.
  - A. The access road will be crowned and ditched to a 12'00" wide travel surface with 40' right-of-way.
  - B. Gradient on all roads will be less than 5.00%.
  - C. No turnouts will be 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 Topography.
3. LOCATION 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"

## SURFACE USE PLAN

CONCHO RESOURCES, INC.  
CARBON VALLEY "23" FEDERAL # 2  
UNIT "B" SECTION 23  
T16S-R27E EDDY 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 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.  
CARBON VALLEY "23" FEDERAL # 2  
UNIT "B" SECTION 23  
T16S-R27E EDDY CO. NM

### 9. WELL SITE LAYOUT

- A. Exhibit "D" shows location and rig layout.
- B. This exhibit indicates proposed location of reserve and trash pits; and living facilities.
- C. Mud pits in the active circulating system will be steel pits and 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 PVC or polyethylene line. 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 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 recountered 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.  
CARBON VALLEY "23" FEDERAL # 2  
UNIT "B" SECTION 23  
T16S-R27E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography consists of rolling plains with limestone and caliche hills, Drainage is toward Dog Canyon. Vegetation consists of mesquite, snakeweed javelina bush, cholla, acacia, tarbush and other native grasses.
- B. The surface is owned by the Bureau of Land Management The U.S. Department of Interior, and is used by ranchers for grazing of livestock.
- C. An archaeological survey will be conducted of the location and roads. This will be submitted to the Bureau of Land Management when it is completed.
- D. There are no dwellings within 2 miles of location.

12. OPERATORS REPRESENTATIVE:

Before construction:

TIERRA EXPLORATION INC.  
P.O. BOX 2183  
HOBBS, NEW MEXICO 88241  
OFFICE PHONE 505-392-2112  
JOE T. JANICA

During and after construction:

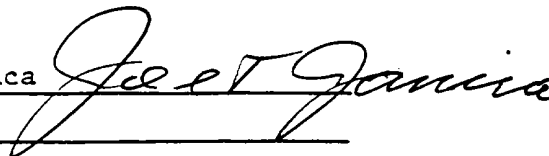
CONCHO RESOURCES, INC.  
110 WEST LOUISIANA SUITE 410  
MIDLAND, TEXAS 79702  
OFFICE PHONE 915-683-7443  
JIM BLOUNT

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 : Joe T. Janica

DATE : 08/08/00

TITLE : Agent



R-27-E

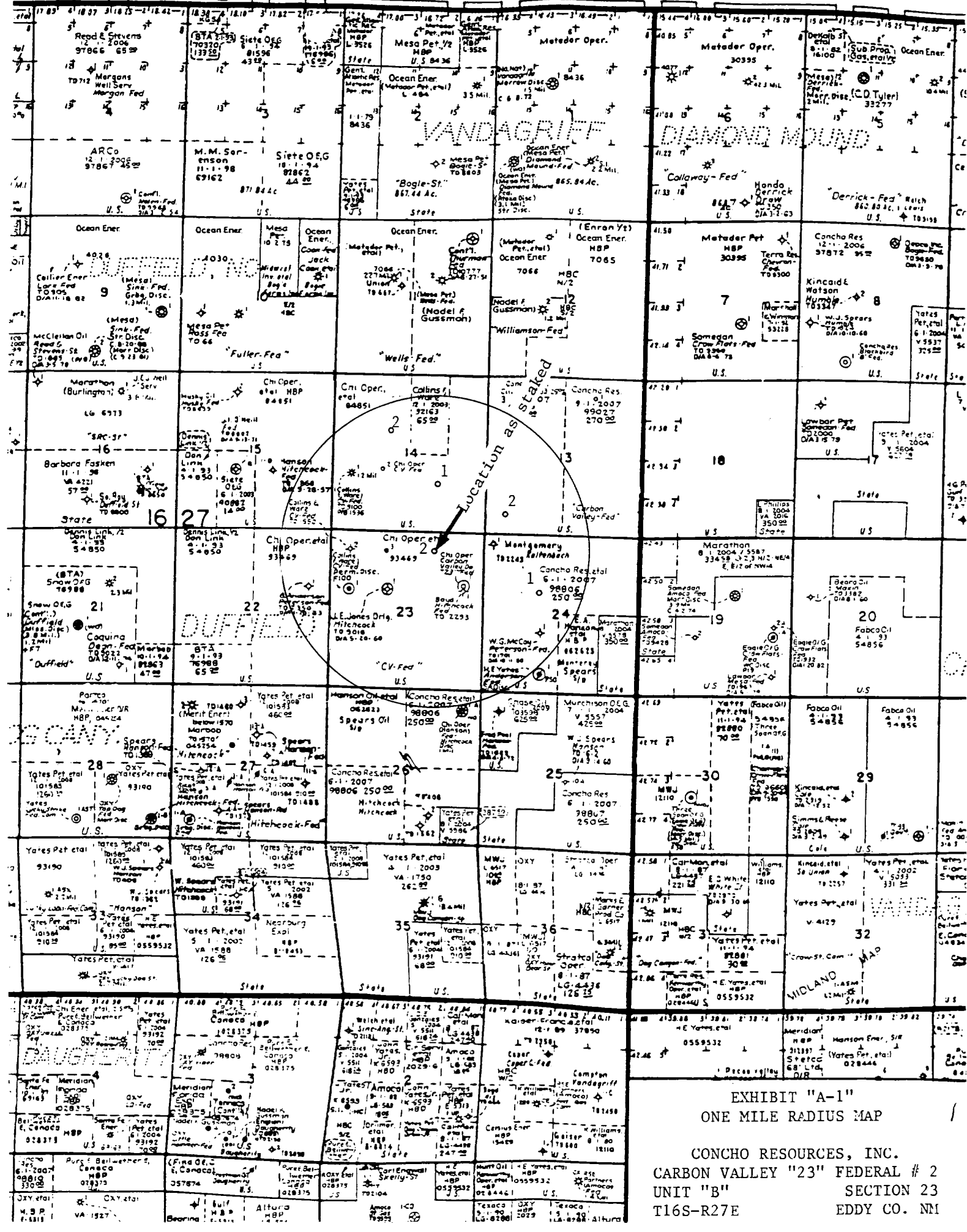


EXHIBIT "A-1"  
ONE MILE RADIUS MAP

CONCHO RESOURCES, INC.  
CARBON VALLEY "23" FEDERAL # 2  
UNIT "B" SECTION 23  
T16S-R27E EDDY CO. NM

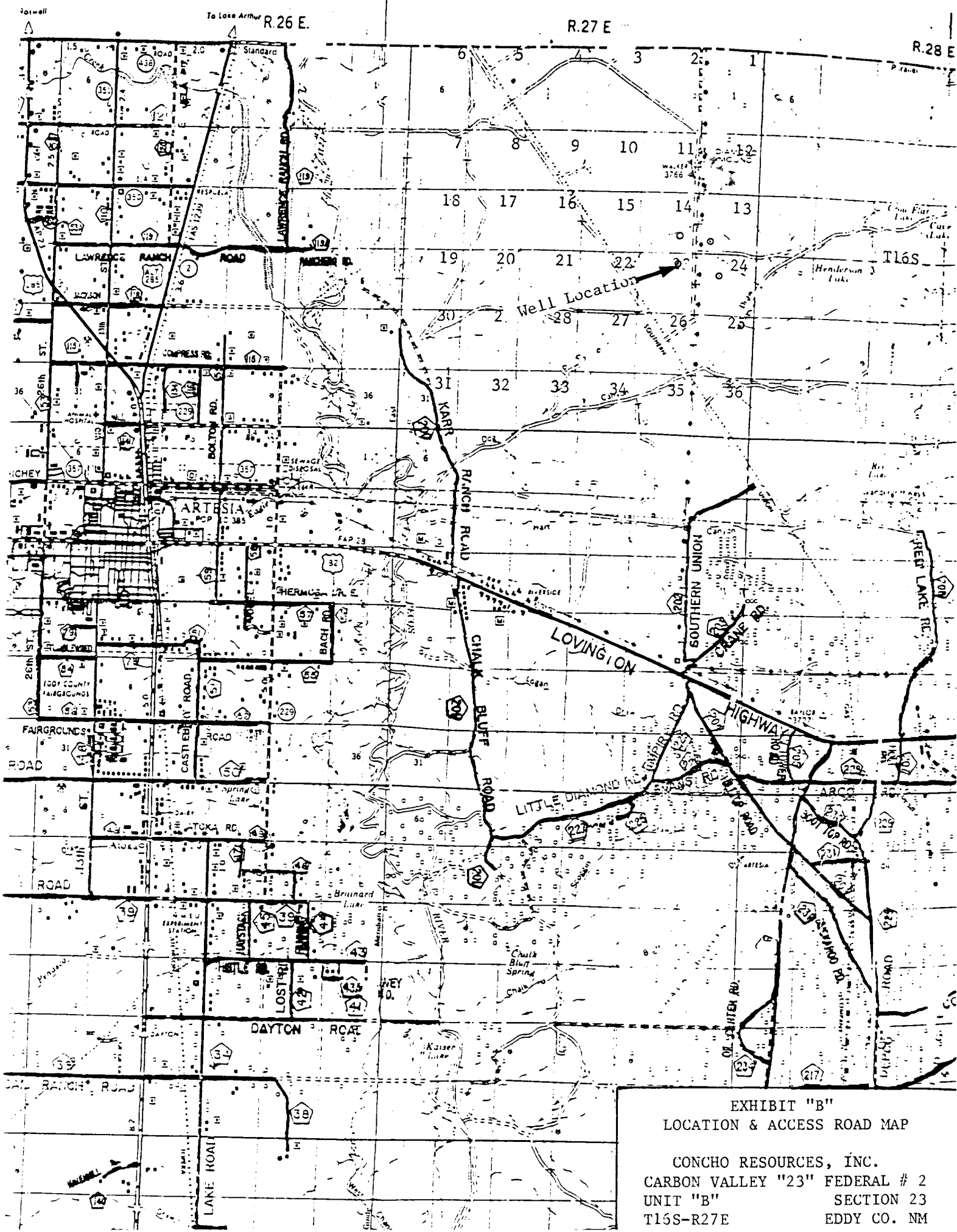


EXHIBIT "B"  
LOCATION & ACCESS ROAD MAP

CONCHO RESOURCES, INC.  
CARBON VALLEY "23" FEDERAL # 2  
UNIT "B" SECTION 23  
T16S-R27E EDDY CO. NM

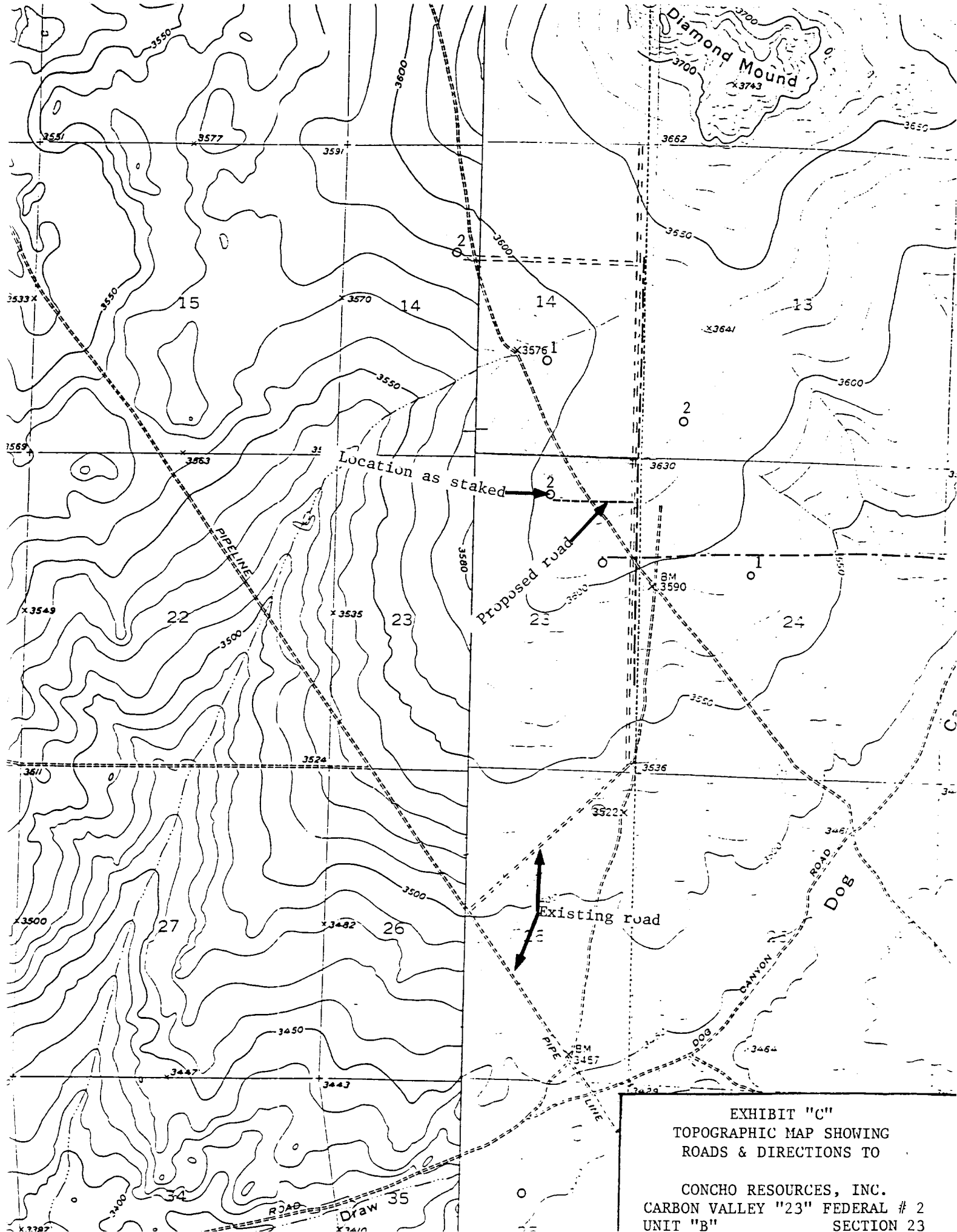
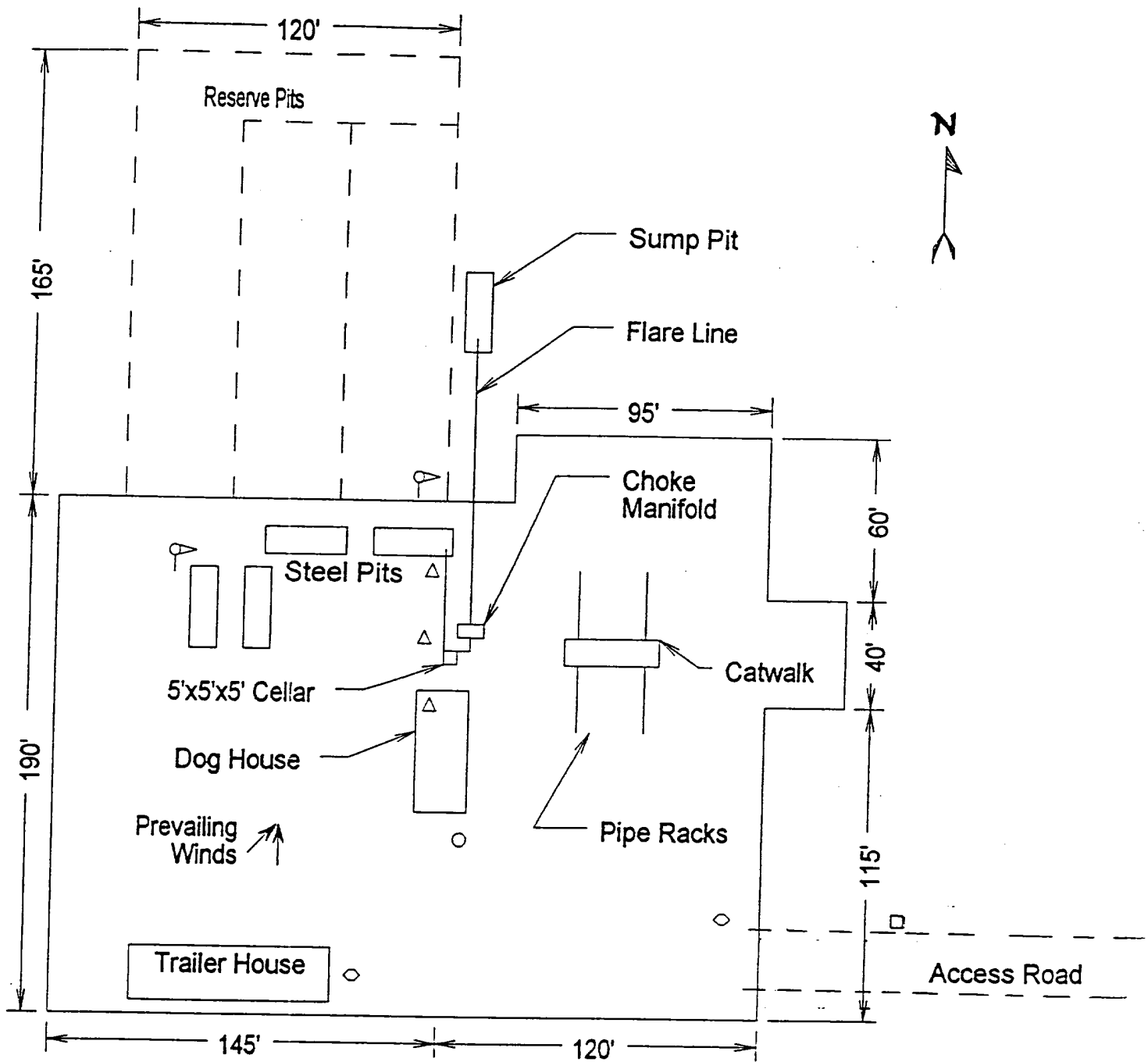


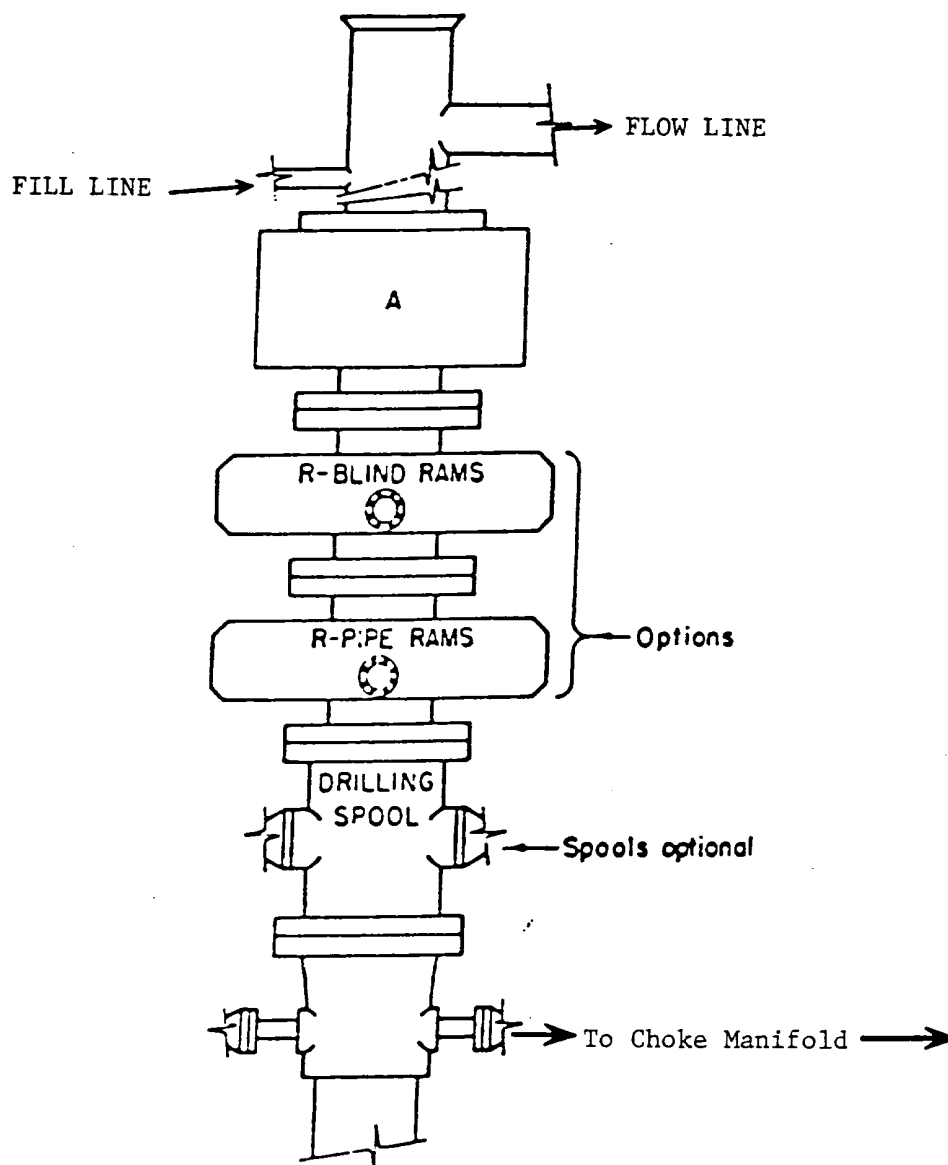
EXHIBIT "C"  
TOPOGRAPHIC MAP SHOWING  
ROADS & DIRECTIONS TO  
  
CONCHO RESOURCES, INC.  
CARBON VALLEY "23" FEDERAL # 2  
UNIT "B" SECTION 23



- 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.  
CARBON VALLEY "23" FEDERAL # 2  
UNIT "B" SECTION 23  
T16S-R27E EDDY CO. NM

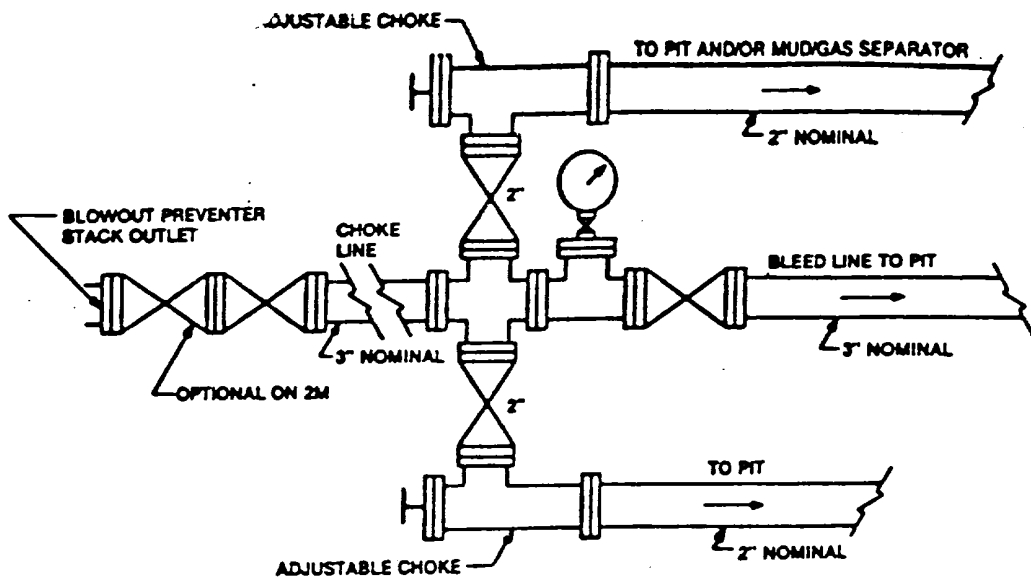


# **ARRANGEMENT SRRA**

900 Series  
3000 PSI WP

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

CONCHO RESOURCES, INC.  
CARBON VALLEY "23" FEDERAL # 3  
UNIT "B" SECTION 23  
T16S-R27E EDDY CO. NM



Typical choke manifold assembly for 3M WP system

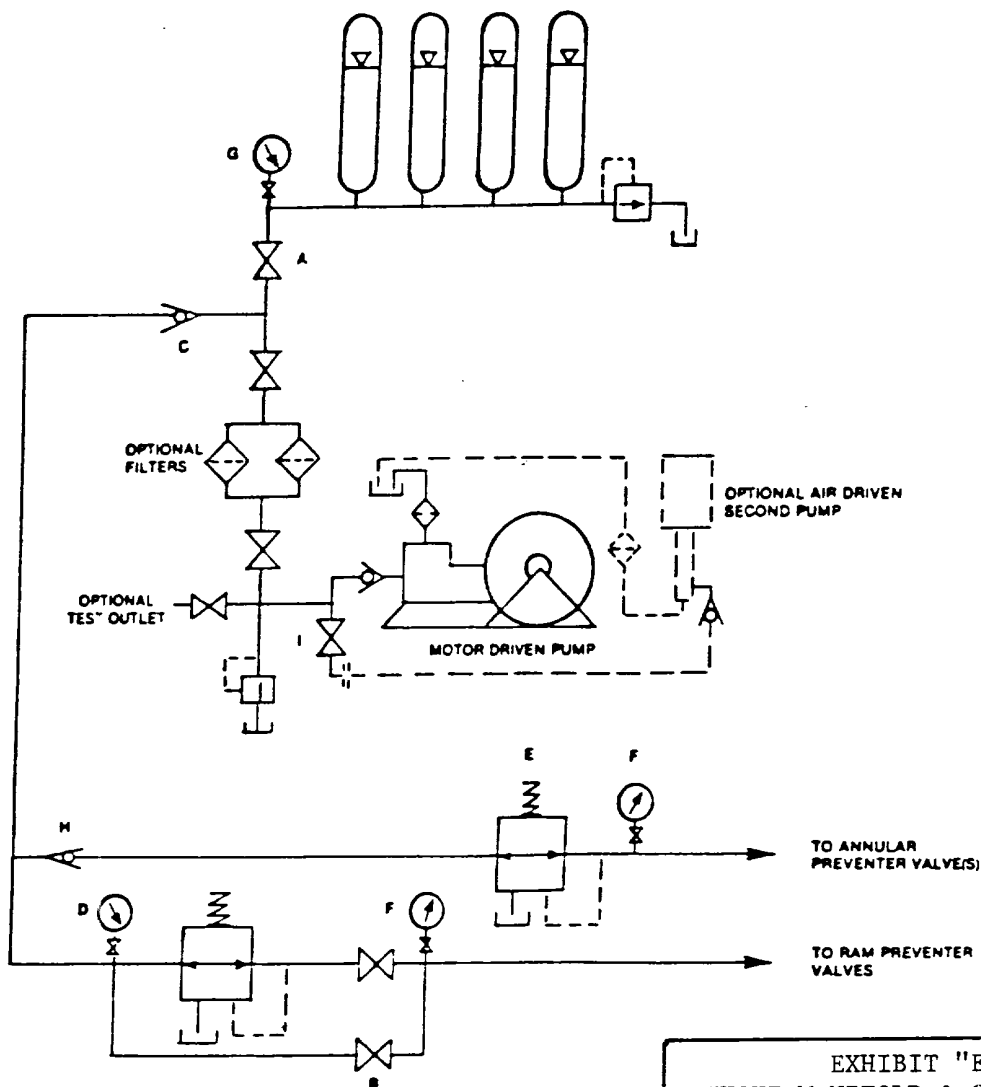


EXHIBIT "E-1"  
CHOKE MANIFOLD & CLOSING UNIT

CONCHO RESOURCES, INC.  
CARBON VALLEY "23" FEDERAL # 2  
UNIT "B" SECTION 23  
T16S-R27E EDDY CO. NM

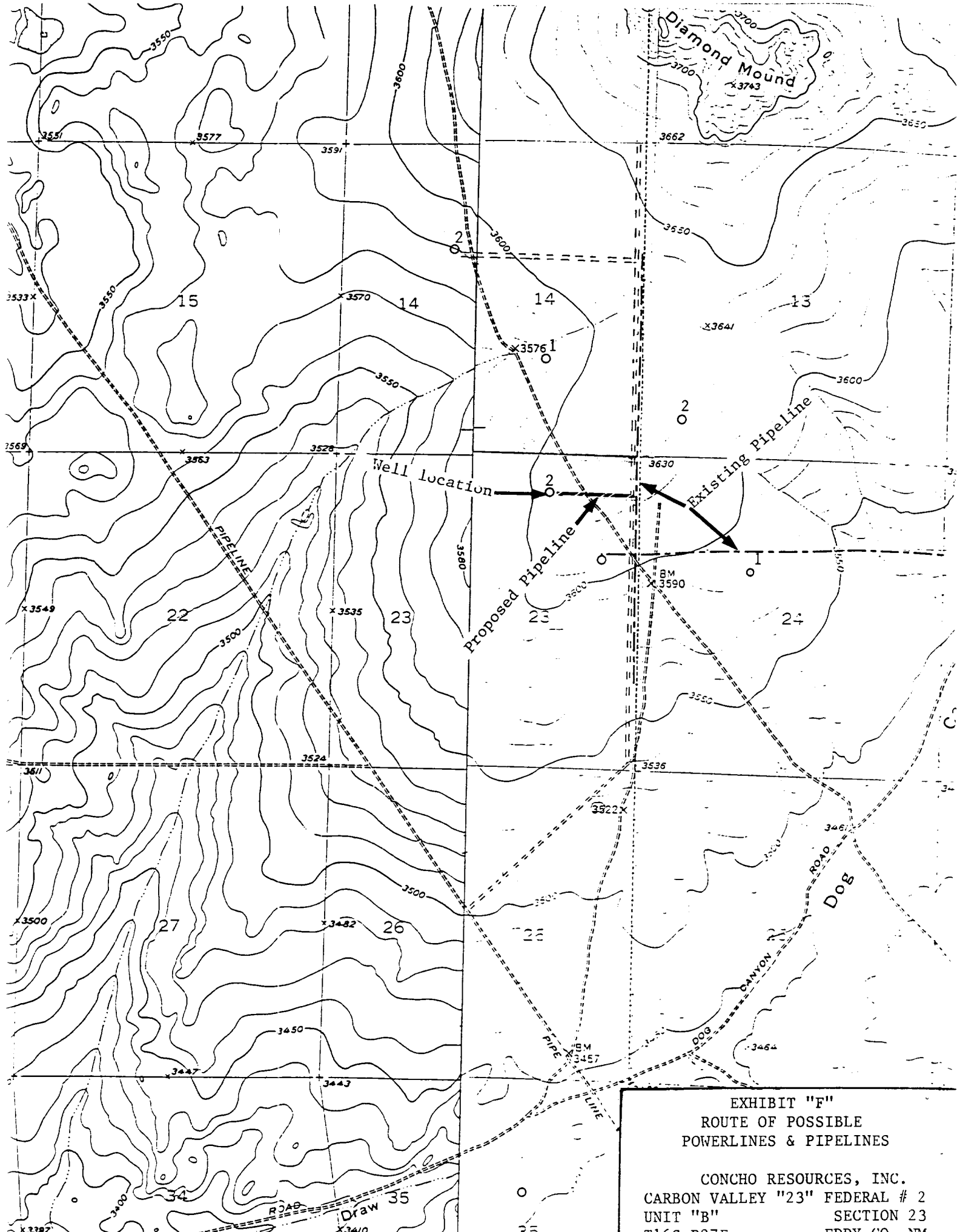


EXHIBIT "F"  
ROUTE OF POSSIBLE  
POWERLINES & PIPELINES

CONCHO RESOURCES, INC.  
CARBON VALLEY "23" FEDERAL # 2  
UNIT "B" SECTION 23  
B100 0075 EDDY CO. NM