

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

294

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

Fasken Oil and Ranch, Ltd.

151416

3. ADDRESS AND TELEPHONE NO.

303 W. Wall, Suite 1800, Midland, TX 79701 (915) 687-1777

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

At surface

990' FNL and 990' FEL
At proposed prod. zone

Unit A

Avalon

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

6 miles North of Carlsbad

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.

(Also to nearest drig. unit line, if any)

990'

16. NO. OF ACRES IN LEASE

1,464.64

17. NO. OF ACRES ASSIGNED TO THIS WELL

271.57

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

2333'

19. PROPOSED DEPTH

11250'

20. ROTARY OR CABLE TOOLS

Rotary

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

3201' GR

22. APPROX. DATE WORK WILL START*

April 1, 2001

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8" H-40	48.00	400'	400 sx, circulate to surface
12-1/4"	9-5/8" K-55	36.00	2275'	800 sx, circulate to surface
8-3/4"	5-1/2" N-80	17.00	11250'	1350 sx, estimate TOC @ 2000'

The operator proposes to drill to a depth sufficient to test the Morrow formation. If productive, 5-1/2" casing will be set at TD and cemented back to approximately 2,000'. If non-commercial, the well will be plugged and abandoned in accordance with Federal regulations.

Drilling Program:

Surface Use and Operating Plan

Exhibit No. 1 - Area Maps

Exhibit No. 2 - One-Mile Radius Map

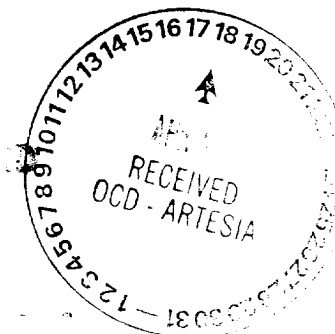
Exhibit No. 3 - Hydrogen Sulfide Drilling Operations Plan

Exhibit No. 4 - Well Site Layout

Exhibit No. 5 - Blowout Preventer Equipment

APPROVAL DATE
COVERED
SPECIAL
ATTACHED

NOTIFY OCD SPUD & TIME TO WITNESS
WATER PROTECTION STRING



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, deepen directionally, give pertinent data on subsurface locations and measured and

active zone. If proposal is to drill or

SIGNED Tammy C. Taylor

TITLE Drilling and Production Engineer

DATE 01/04/01

(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 lease which would entitle the applicant to conduct operations thereon.
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY 15/ Noe J Gonzalez

TITLE Asst.

DATE APR 16 2001

*See Instructions On Reverse Side

RECEIVED

JAN 10 1900

RECEIVED
JAN 10 1900

DISTRICT I
1025 E. French Dr., Hobbs, NM 88240

DISTRICT II
811 South First, Artesia, NM 88210

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 73280	Pool Name Burton Flat - Morrow
Property Code	Property Name EL PASO FEDERAL	Well Number 14
OGRID No. 151416	Operator Name FASKEN OIL & RANCH LTD.	Elevation 3201'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 24	3	21 S	26 E		990	NORTH	990	EAST	EDDY

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 271.57	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

LOT 20 - 28.56 AC.	LOT 19 - 28.51 AC.	LOT 18 - 28.47 AC.	LOT 17 - 29.45 AC.
LOT 21 - 39.39 AC.	LOT 22 - 39.19 AC.	LOT 23 - 39.10 AC.	LOT 24 - 38.90 AC.
LOT 28	LOT 27	LOT 26	LOT 25
LOT 32			LOT 31

1/4 COR

1/4 COR

EL Paso Fed. #4

3206.3'

3201.7'

990'

3201.3'

3199.4'

LAT - N32°31'11.6"

LONG - W104°16'30.5"

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Tommy E. Taylor
Signature

Tommy E. Taylor
Printed Name

Drilling and Production Engineer
Title

1/4/01
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.

December 20, 2000
Date Surveyed

Gary L. Jones
Signature of Professional Surveyor

NEW MEXICO
Professional Surveyor
No. 07148
7977

Certificate No. Gary L. Jones 7977

APPLICATION FOR PERMIT TO DRILL
FASKEN OIL AND RANCH, LTD.
El Paso Federal No.14
990' FNL & 990' FEL
SEC.3, T21S, R26E
EDDY COUNTY, NM

In conjunction with Form 3160-3, Application for Permit to Drill, Fasken Oil and Ranch, Ltd. submits the following items of pertinent information in accordance with Onshore Oil & Gas Order Nos. 1 & 2, and with all other applicable federal and state regulations.

1. The geologic surface formation is of Permian age.
2. Estimate tops of geologic markers are as follows:

Cherry Canyon	2300'
Bone Springs	4300'
3rd Bone Springs	8000'
Wolfcamp	8400'
Cisco	9300'
Strawn	9700'
Atoka	10,050'
Morrow Clastics	10,600'
Lower Morrow	10,850'
Barnett Shale	11,125'

3. The estimated depths at which water, oil or gas formation are expected to be encountered:

Delaware group	2300'	Oil/Gas
Strawn	9700'	Gas
Atoka	10,050'	Gas
Morrow	10,600'	Gas

* Groundwater to be protected by 13-3/8" surface casing with cement circulated to the surface.

** Potentially productive horizons to be protected by 5-1/2" production casing with cement tied back to 2000'.

4. Proposed Casing Program:

<u>String</u>	<u>Footage</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>
Surface	400'	13-3/8"	48.00#	H-40	ST&C
Intermediate	2,275'	9-5/8"	36.00#	J-55	ST&C
Production	11,250'	5-1/2"	17.00#	N-80	LT&C
Tubing	11,150'	2-3/8"	4.70#	N-80	EUE 8rd

Proposed Cementing Program:

Cement 13-3/8" casing with 440 sx Class "C" cement with 2% CaCl₂ (s.w. 14.8 ppg, yield 1.32 cuft/sx).

Cement 9-5/8" casing with 600 sx Class "C" with 4% gel and 2% CaCl₂ (s.w. 13.51 ppg, yield 1.74 ft³/sx) plus 200 sx Class "C" with 2% CaCl₂ (s.w. 14.8 ppg, yield 1.34 ft³/sx).

Cement 5-1/2" production casing (resin coated and centralized through pay zones) in two stages with DV tool approximately 8500' as follows;

First Stage: 10 bfw + 500 gallons Mud Clean II + 10 bfw and 750 sx Super "C" Modified with 1.4% FL-25, 1% salt, 0.2% CD-32 (s.w. 14.0 ppg, yield 1.34 ft³/sx). Open DV tool and circulate 6 hours.

Second stage: Pump 10 bfw, 500 sx BJ light with 6% gel, 1% salt, 0.4% FL-62, and 0.2% FL-52 (s.w. 12.6 ppg, yield 2.01 ft³/sx) and 100 sx Class "H" neat (s.w. 15.6 ppg, yield 1.18 ft³/sx). Calculate second stage cement volume for TOC at 2000'.

5. Pressure Control Equipment: BOP's to be hydrotested prior to drilling the Wolfcamp formation estimated to be at (8526') or first bit trip. See Exhibit #5 for BOP diagram.

6. Mud Program:

<u>Depth</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Waterloss</u>
0-400'	Fresh Water	8.5	40	N.C.
400'-2275'	Fresh Water	8.5	28	N.C.
2275'-9500'	Cut Brine	9.0	29	N.C.
9500'-11,250'	XCD/Pac	9.5-10.0	36	10 cc

7. Auxiliary Equipment: Upper Kelly Cock, Full Opening Stabbing Valve, PVT.
8. Testing Logging and Coring Programs:
 - DST's: DST any mudlog shows.
 - Logging: 2-man Mudlogging unit from 2275' to T.D.
 - Electric Logs: Platform Express with CNL-LDT, DLL-MSFL, GR and Caliper.
 - Coring: None anticipated
9. Abnormal Pressure, Temperatures or Other Hazards: Lost circulation is anticipated in the surface. Maximum bottomhole pressure is estimated to be 4875 psig.
10. Anticipated Starting Date: April 1, 2001.

SURFACE USE PLAN

Fasken Oil and Ranch, Ltd.
El Paso Federal No.14
990' FNL & 990' FEL
Sec. 3, T21S, R26E
Eddy County, New Mexico

1. EXISTING ROADS - Area map, Exhibit #1, is a reproduction of the U.S.G.S., Lake McMillian, South, N.M. Quadrangle 7.5 minute series. Existing and proposed roads are shown on the exhibit. All roads shall be maintained in a condition equal to that which existed prior to start of construction.

A. Exhibit #1 shows the proposed development well site as staked.

B. From Carlsbad, New Mexico, travel North on U.S. Highway 239 for 4.6 miles. Turn West on Black top and go 1 mile. Turn South on calchie road and go 0.6 mile. Cross railroad tracks, turn right and go 0.5 mile. Turn left and stay on main caliche road for 1.7 miles. Turn North and go 0.3 mile to location.

2. PLANNED ACCESS ROADS - 1200' of new access road will be constructed.

3. LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS.

A. Water wells - Water well at the Fasken Oil and Ranch, Ltd. El Paso "3" Federal No. 1 pad, Section 3, T-21-S, R-26-E, Eddy County, NM.

B. Disposal wells - None Known.

C. Drilling wells - None known.

D. Producing wells - As shown on Exhibit #2

Fasken Oil and Ranch, Ltd.:	El Paso "3" Federal No. 1
Fasken Oil and Ranch, Ltd.:	El Paso Federal No. 2
Fasken Oil and Ranch, Ltd.:	El Paso Federal No. 4
Fasken Oil and Ranch, Ltd.:	El Paso Federal No. 6
Fasken Oil and Ranch, Ltd.:	El Paso Federal No. 7
Maralo:	Hanson Federal No. 3
Devon:	G. Conley Federal No. 1

E. Abandoned wells - As shown on Exhibit #2.

Ralph Lowe:	Hanson Federal No.1
Ralph Lowe:	Hanson Federal No.1-A
E.A. Hanson:	McBride Federal No.1

4. If, upon completion, the well is a producer Fasken Oil and Ranch, Ltd. will furnish maps or plats showing "On Well Pad Facilities" and "Off Well Pad Facilities" (if needed) on a Sundry Notice before construction of these facilities starts.

5. LOCATION AND TYPE OF WATER SUPPLY

Fresh and Brine water will be purchased locally from a private source and trucked over the access roads. Fresh water will also be pumped through a 3" poly line from a water well located at the Fasken Oil and Ranch, Ltd. El Paso "3" Federal No. 1 located in Section 3, T-21-S, R-26-E, Eddy County, NM. This well is approximately 0.5 mile Southwest of the El Paso Federal No. 14 location.

6. SOURCE OF CONSTRUCTION MATERIALS

If needed, construction materials will be obtained from the drill sites excavations or from a local source. These materials will be transported over the access roads as shown on Exhibit #1.

7. METHOD FOR HANDLING WASTE DISPOSAL

- A. 1. Drill cuttings will be disposed of in the reserve pit.
2. Trash, waste paper, and garbage will be contained in a trash trailer and disposed of in an approved public landfill.
3. All mud materials including salts will be picked up by the mud supplier and transported back to their warehouse facilities.
4. Sewage from trailer houses will drain into hole with a minimum depth of 10'. A "Porta John" will be provided for the rig crews. This will be properly maintained and removed after drilling operations are completed.
5. Chemicals remaining after completion of the well will be stored in the manufacturer containers and picked up by the supplier.
- B. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for backfilling. In the event drilling fluids will not evaporate in a reasonable period of time, they will be transported by tank truck to a state approved disposal site.

Water produced during testing of the well will be disposed of in the reserve pit. Oil produced during the testing of the well will be stored in test tanks until sold and hauled from the site.

8. ANCILLARY FACILITIES

No camps or airstrips will be constructed.

9. WELL SITE LAYOUT

- A. Exhibit #3 is the H₂S Drilling Operations Plan.
- B. Exhibit #4 (Scale 1" = 50') shows the proposed well site layout.
- C. This exhibit indicates the proposed location of reserve pit, trash trailer and living facilities.
- D. Mud pits in the active circulation system will be steel pits.
- E. The reserve pit will be lined with a polyethylene liner. The pit liner will be a minimum of 2' over the reserve pit walls where the liner will be anchored down.
- F. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion operations. The fourth side will be fenced after drilling has been completed. 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 pad and surface facilities. After the area has been shaped and contoured, top soil from the spoil pile (if any) 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 recontoured 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.

11. OTHER INFORMATION

- A. The topography is of hilly terrain with vegetation of sagebrush and native grasses. The soils are silty and very shallow.
- B. The surface is used for livestock grazing. The surface is leased by Hart M. Greenwood, P.O. Box 104, Carlsbad, NM 88221

- B. The surface is used for livestock grazing. The surface is leased by Hart M. Greenwood, P.O. Box 104, Carlsbad, NM 88221
- C. An archeological study over this location and road will be forwarded to your office when completed.
- D. There are no buildings of any kind in the area.

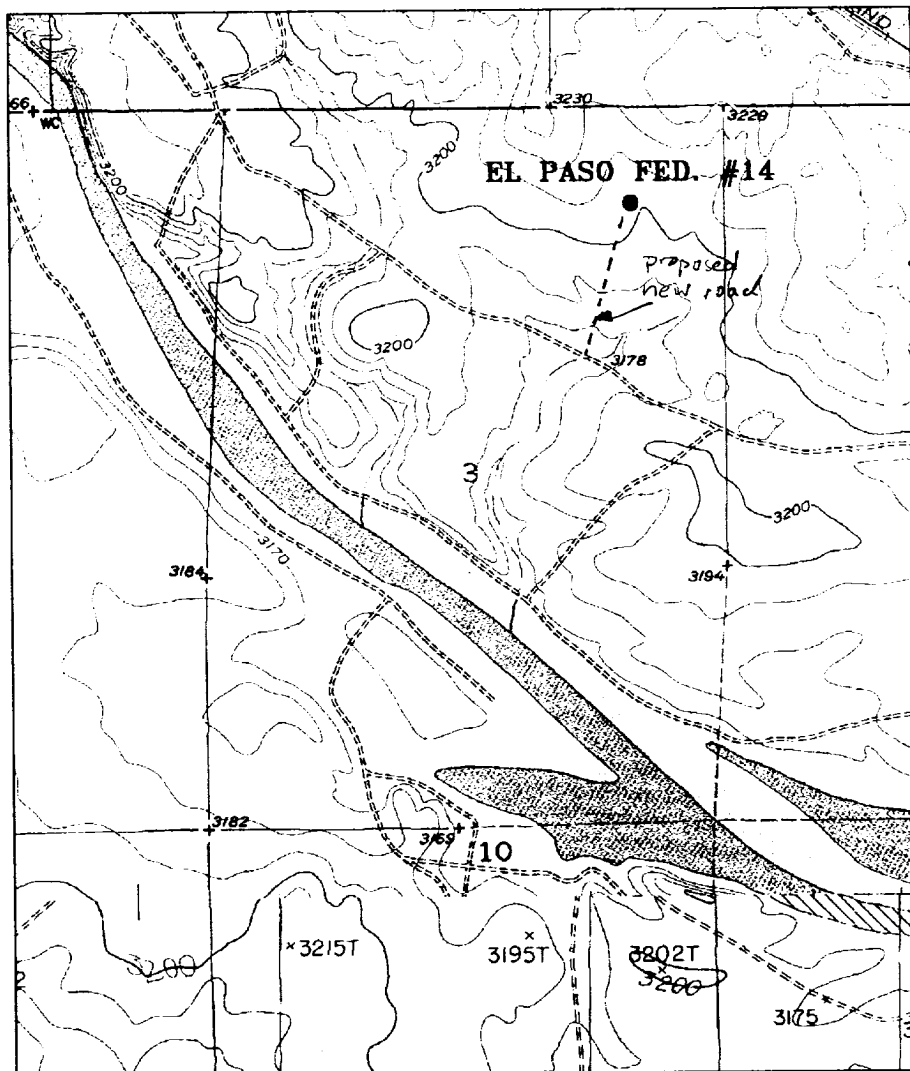
12. OPERATOR'S REPRESENTATIVE - Field representative for contact regarding compliance with the Surface Use Plan is:

Before, during & after Construction:

Tommy E. Taylor
303 W. Wall Ave., Suite 1900
Midland, Texas 79701-5116
(915) 687-1777

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 exists; 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 Fasken Oil and Ranch, Ltd. and its contractors/subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

NAME: Tommy E. Taylor
DATE: 1/9/2001
TITLE: Drilling and Production Engineer



EL PASO FEDERAL #14
 990' FNL & 990' FEL
 Section 3, Township 21 South, Range 26 East,
 N.M.P.M., Eddy County, New Mexico.

Exhibit #1

basin
surveys

focused on excellence
 in the oilfield

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

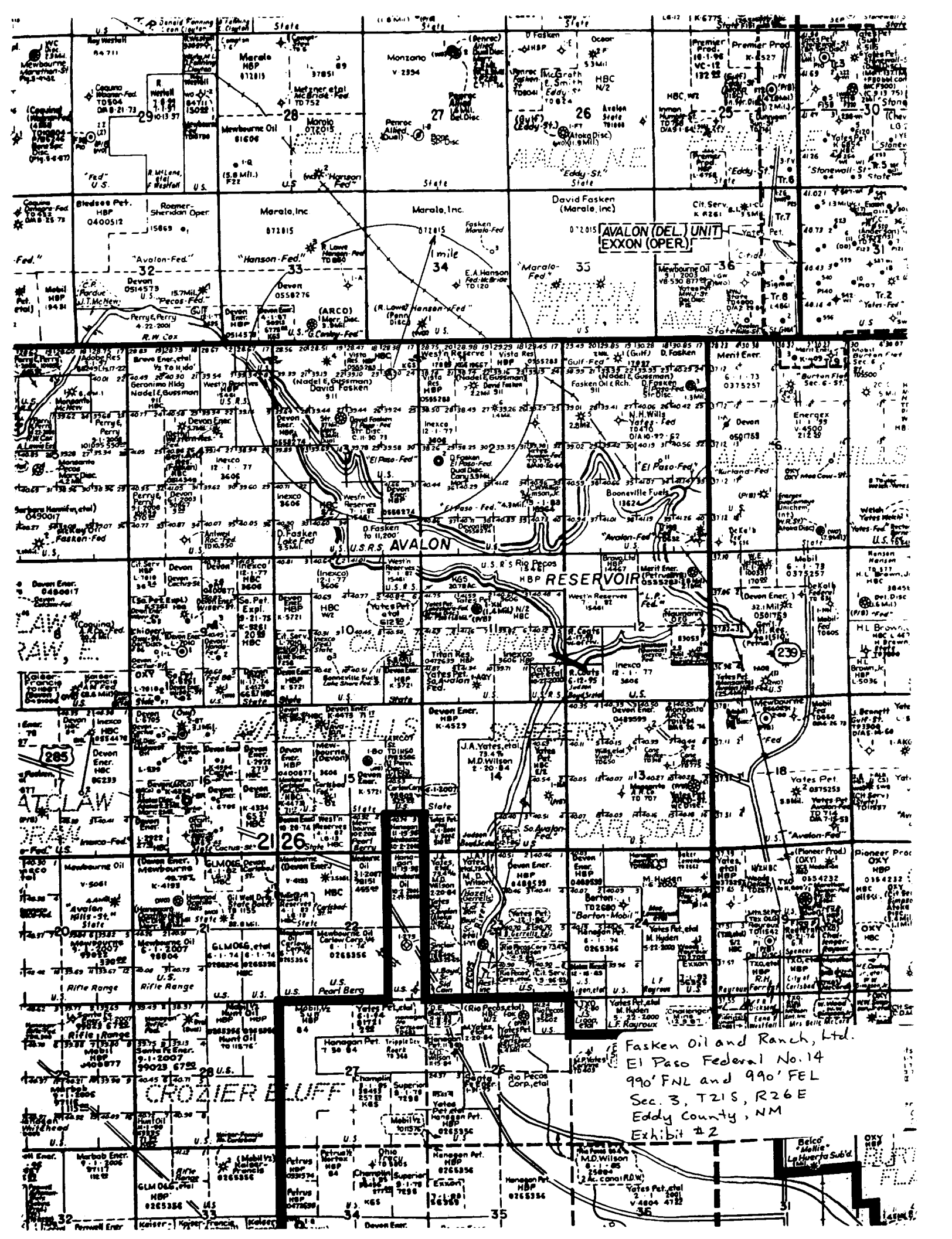
W.O. Number: 0714BB - KJG #122

Survey Date: 12-20-2000

Scale: 1" = 2000'

Date: 12-21-2000

FASKEN OIL & RANCH, LTD.



HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

EXHIBIT #3
FASKEN OIL AND RANCH, LTD.
El Paso Federal No.14
990' FNL & 990' FEL
SEC.3, T21S, R26E
EDDY COUNTY, NM

I. Hydrogen sulfide Training.

All personnel, whether regularly assigned, contracted or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques of first aid and rescue procedures.

In addition the supervisory personnel will be trained in the following areas:

1. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H2S Safety Equipment and Systems.

NOTE: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above or three days prior to penetration the first zone containing or reasonable expected to contain H2S.

1. Well Control Equipment:
 - A. Flare line.
 - B. Choke manifold.
 - C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - D. Auxiliary equipment to include: annular preventer, mud-gas separator (if necessary) and rotating head.
2. Protective equipment for essential personnel:
 - A. 5-minute escape units located in the dog house and 30-minute air units at briefing areas, as indicated on well site diagram.
3. H2S detection and monitoring equipment:
 - A. 3 - portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.
 - B. 1 - portable SO2 monitor positioned near flare line during H2S flaring operations.
4. Visual warning systems:
 - A. Wind direction indicators as shown on well site diagram.
 - B. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be a readable distance from the immediate location.
5. Mud program:
 - A. The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight safe drilling practices and the use of H2S scavengers when necessary will minimize hazards when penetrating H2S bearing zones.
 - B. A Mud-gas separator will be utilized.

6. Metallurgy:

A. All drill strings, casings, tubing, wellhead, blowout preventors, drilling spools kill lines, choke manifold and lines valves shall be suitable for H₂S service.

B. All elastomers used for packing and seals shall be H₂S trimmed.

7. Communications:

A. Radio communications will be available in company vehicles and rig dog house.

8. Well testing:

A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which are necessary to safely and adequately conduct the test. The drill stem testing of any known formation that contains H₂S will be conducted during daylight hours.

SECTION 3, TOWNSHIP 21 SOUTH, RANGE 26 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

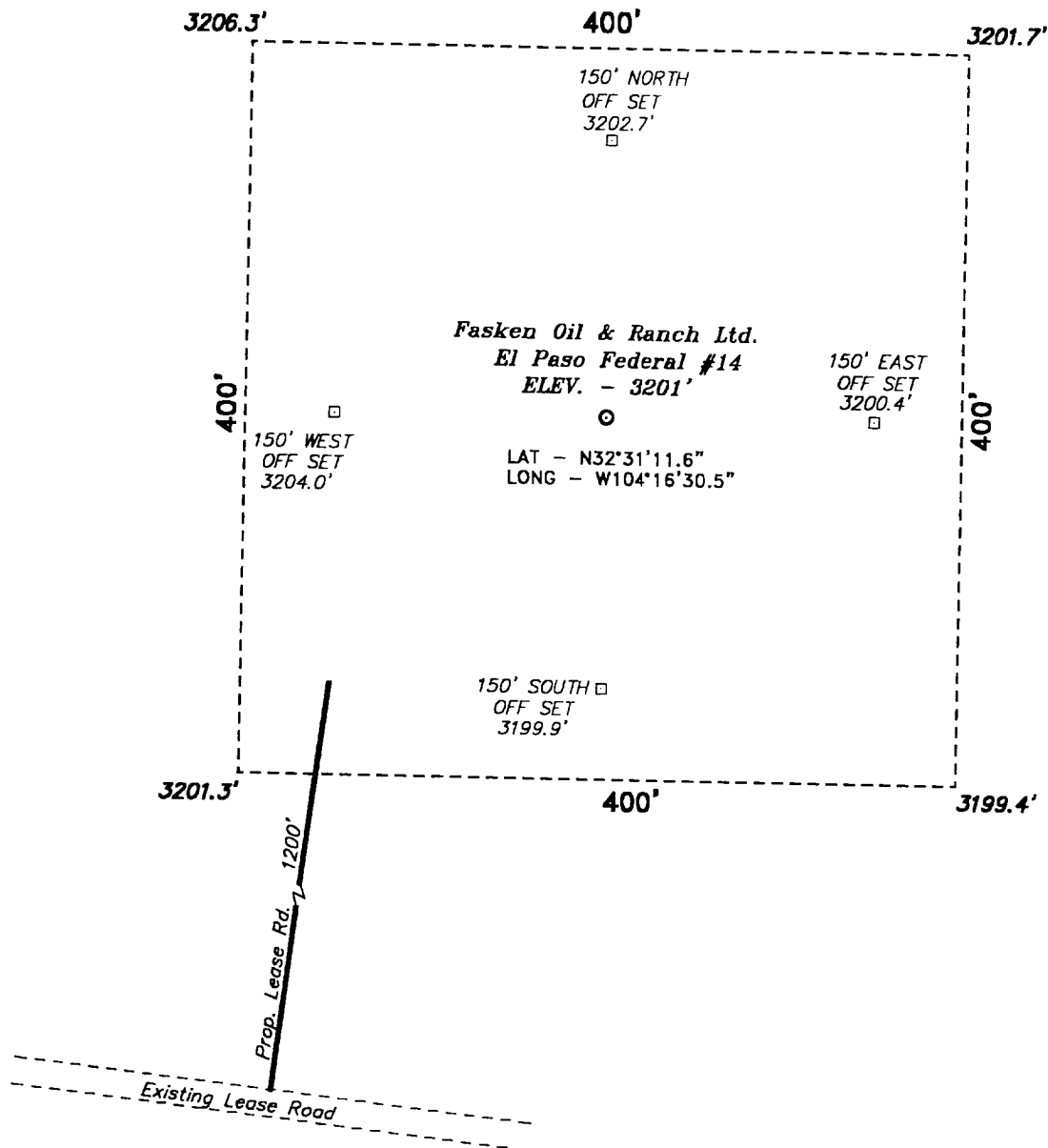
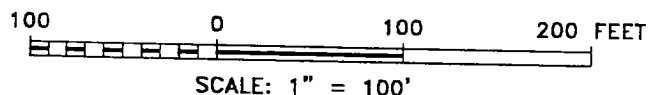


Exhibit # 4a



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF ILLINOIS CAMP ROAD & CO.
RD. 34, GO NORTHWEST ON CO. RD. 34 FOR 0.9 MILE
TO CO. RD. 601; THENCE WEST AND SOUTHWEST ON
601 FOR 0.6 MILE TO A RR CROSSING, THEN GO
NORTHWEST ON 601 FOR 0.4 MILE TO A LEASE ROAD
LEFT; THENCE GO WESTERLY STAYING ON MAIN LEASE
ROAD 1.6 MILE TO PROPOSED LEASE ROAD.

BASIN SURVEYS P.O. BOX 1786—HOBBS, NEW MEXICO

W.O. Number: 0714

Drawn By: K. GOAD

DATE: 12-21-2000

Disk: KJG #123 - 0714b.DWG

Fasken Oil & Ranch Ltd.

REF: EL PASO FEDERAL No. 14 / Well Pad Topo

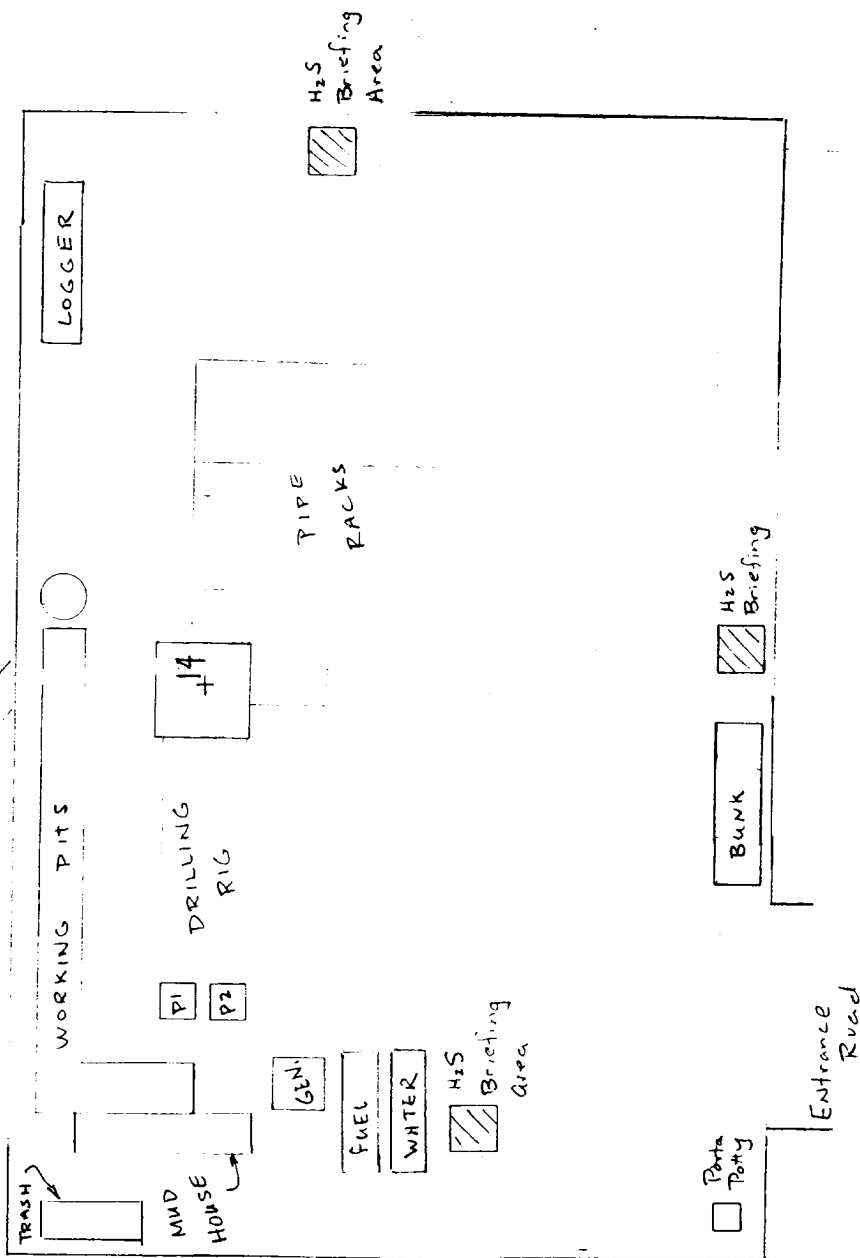
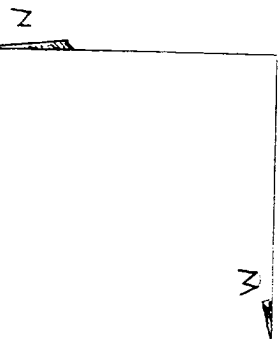
THE EL PASO FEDERAL No. 14 LOCATED 990' FROM THE
NORTH LINE AND 990' FROM THE EAST LINE OF
SECTION 3, TOWNSHIP 21 SOUTH, RANGE 26 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 12-20-2000

Sheet 1 of 1 Sheets

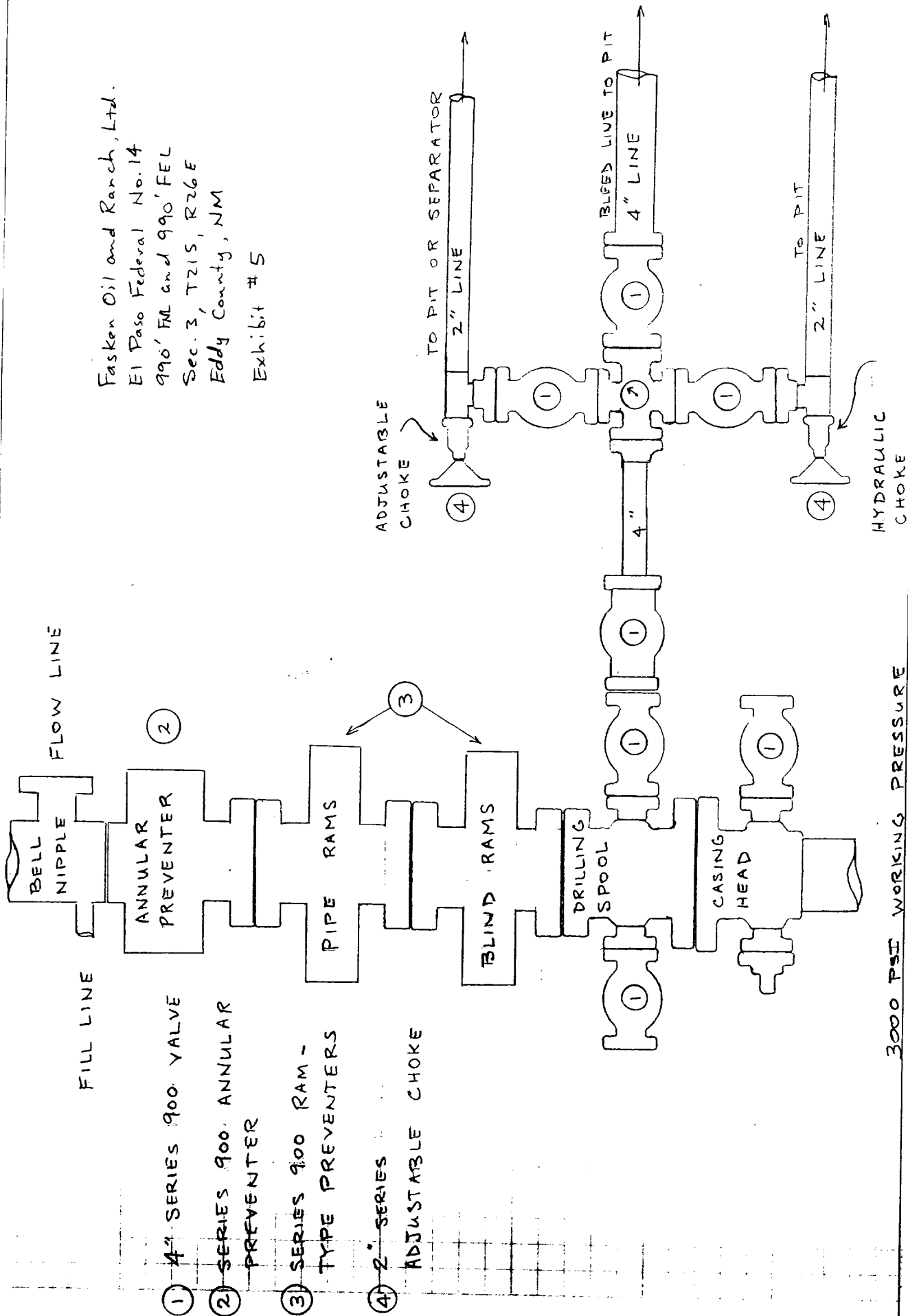
FLARE
PIT

RESERVE PIT



Fasken Oil and Ranch, Ltd.
El Paso Federal No. 14
990' FNL and 990' FEL
Sec. 3, T21S, R26E
Eddy County, NM

EXHIBIT #4b
SCALE 1" = 50'



Fasken Oil and Ranch, Ltd.
El Paso Federal No. 14
990' FM and 990' FEL
Sec. 3, T21S, R26E
Eddy County, NM
Exhibit # 5

3000 PSI WORKING PRESSURE