Form 3160-3
(December 1990)

NM OIL CONS. COMMISSION
DRAWER DD
ARTESIA, NM 88210

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: ~~0400877 C~~ NM-84

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

JAN 26 1994

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME, WELL NO.: Com. 1 Inexco Federal "17" No. 2

2. NAME OF OPERATOR: Barbara Fasken

9. API WELL NO.: 30-015-27804

3. ADDRESS AND TELEPHONE NO.: 303 W. Wall Ave., Suite 1900, Midland, TX 79701-5116 (915) 687-1777

10. FIELD AND POOL, OR WILDCAT: Catclaw Draw - Morrow

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 2300' FSL & 1800' FEL
At proposed prod. zone: 800' FNL & 1400' FEL Top of Morrow (10,600')

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 17, T21S, R26E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 5 miles Northwest of Carlsbad, NM

12. COUNTY OR PARISH: Eddy | 13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): SHL 1800' FEL, BHL 800' FNL

16. NO. OF ACRES IN LEASE: 640

17. NO. OF ACRES ASSIGNED TO THIS WELL: 640; Simultaneous Dedication

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: SHL 1755' BHL 3483'

19. PROPOSED DEPTH: 11,515' MD 11,000' TVD

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3280' GR

22. APPROX. DATE WORK WILL START*: December 15, 1993

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17½"	K-55, 13-3/8"	48.0	500'	500 sx est. CIRCULATE
12¼"	K-55, 8-5/8"	24.0	2500'	1100 sx est. CIRCULATE
7-7/8"	N-80, 4½"	11.60 & 13.50	11,515' MD 11,000' TVD	1st Stage: 950 sx est. tie back 2nd Stage: 950 sx est. into 8 5/8"

See attached recommended procedure.

RECEIVED
NOV 2 12 36 PM '93
CARLSBAD AREA

IA-1
1-28-94
NL&A

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 Tommy C. Taylor TITLE Drilling & Producton Engineer DATE 10/12/93

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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 /s/ Ron Dunston (for) TITLE AREA MANAGER DATE JAN 24 1994

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Submit to Appropriate
District Office
State Lease – 4 copies
Fee Lease – 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
BARBARA FASKEN	INEXCO FEDERAL 17	2

Unit Letter	Section	Township	Range	County
J	17	21 SOUTH	26 EAST NMPM	EDDY

Actual Footage Location of Well:
2300 feet from the SOUTH line and 1800 feet from the EAST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3280.0'	Morrow	CATCLAW DRAW	640 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

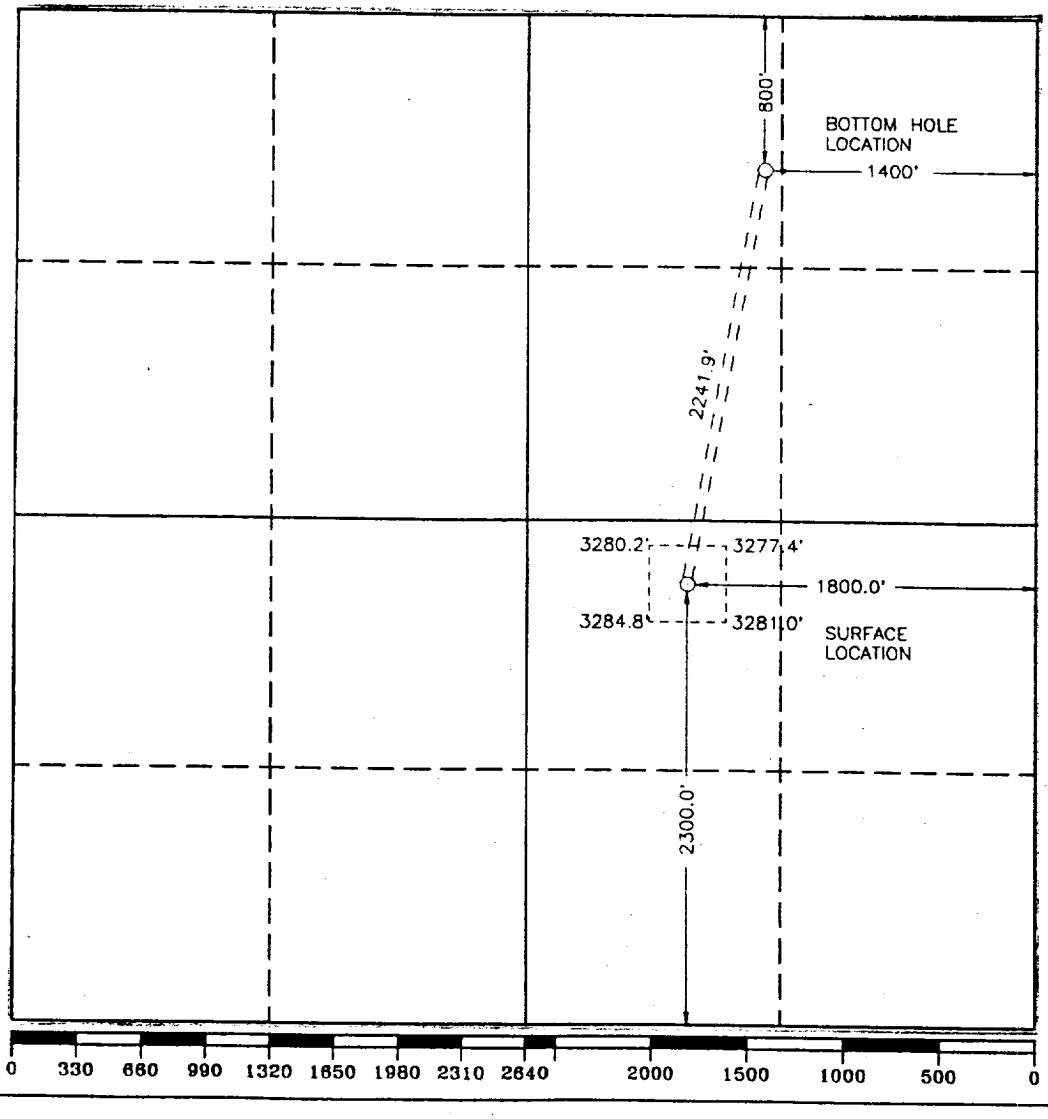
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☒ Yes ☐ No If answer is "yes" type of consolidation COMMUNITIZATION

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary. _____

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, 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: Tommy E. Taylor
Printed Name: Tommy E. Taylor
Position: Drilling & Production Engr.
Company: Barbara Fasken
Date: 10/29/93

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 supervison, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: AUGUST 9, 1993

Signature & Seal of Professional Surveyor

GARY L. JONES NEW MEXICO 7977 REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239
GARY L. JONES 7977

93-11-1490

APPLICATION FOR PERMIT TO DRILL
BARBARA FASKEN
INEXCO FEDERAL "17" NO. 2
SHL: 2300' FSL & 1800' FEL
BHL: 800' FNL & 1400' FEL
SEC. 17, T21S, R26E

In conjunction with Form 3160-3, Application for Permit to Drill, Barbara Fasken 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. Estimated tops of geologic markers are as follows:

Yates 302'	Strawn 9580'
Delaware 2100'	Atoka 9830'
Bone Springs 4165'	Morrow 10520'
Bone Springs Sand 8055'	
Pennsylvanian 9119'	

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

* - Water:
** - Oil or gas:

Delaware	2100'
Atoka	9830'
Morrow	10520'

* Groundwater to be protected by 13-3/8" surface casing with cement circulated to the surface.
** Potentially productive horizons to be protected by 4-1/2" production casing with cement tied back to approximately 2500'.

4. Proposed Casing Program: See Form 3160-3 and Exhibit F.

5. Pressure Control Equipment: See Exhibit E.

6. Mud Program: See Exhibit G.

7. Auxiliary Equipment: Upper Kelly Cock, Full Opening Stabbing Valve, Flow Sensor and PVT.

8. Testing, Logging and Coring Programs:

-DST's: DST any mudlog shows

-Logging: 2-man Mudlogging unit from 2500' to T.D.

-Electric Logs:
Compensated Neutron Litho-Density
Phasor Induction
Gamma Ray-caliper

-Coring: None anticipated

9. Abnormal Pressures, Temperatures or Other Hazards
-Lost circulation is anticipated in the surface.

10. Anticipated starting Date: December 15, 1993.

Drilling and Completion Procedure
Exhibit "F"

Barbara Fasken ----- Inexco Federal 17 No. 2 ----- Catclaw Draw Field
Eddy Co., New Mexico

1. Drill 17-1/2" hole to 500' with spud mud.

2. Set 13-3/8" casing at 500', cement to surface and install 12" 3000 psi W.P. casinghead and B.O.P. stack. (Estimate 400 sx HLW w/1/2# flocele/sk, 2% $CaCl_2$, slurry wt. 12.7 ppg, yield 1.84 cuft/sk + 100 sx Class "C" w/2% $CaCl_2$, slurry wt. 14.8 ppg, yield 1.32 cuft/sk).

3. Drill 12-1/4" hole to 2500' with fresh water, control seepage with paper. Dry drill if complete loss of returns is encountered.

4. Set and cement 8-5/8" casing at 2500' with sufficient cement to circulate. (Estimate 900 sx HLW w/1/2# flocele/sx, slurry wt. 12.7 ppg, yield 1.84 cuft/sk + 200 sx Class "C" w/2% $CaCl_2$, slurry wt. 14.8 ppg, yield 1.32 cuft/sx). WOC 18 hrs. before drilling new formation. If cement does not circulate, run temperature survey and stage cement outside 8-5/8" casing pumped through 1" tubing using Class "C" w/4% $CaCl_2$ and/or fill up with ready mix concrete - 6 sx mix with pea gravel aggregate. Install 12" 3000 psi W.P. x 10" 5000 psi W.P. spool with secondary seal, bit guide, B.O.P.'s, hydril and choke manifold (including hydraulic remote controlled choke).

5. Drill 7-7/8" hole to kop of 5000' with fresh water.

6. Run Gyro Survey on wireline through drill pipe and TOH.

7. Hydrostatically pressure test 200' of 8-5/8" casing to 2200 psig and test BOP's, choke manifold and all wellhead valves to 3000 psig. Test hydril to 1500 psig.

8. TIH with deflecting assembly as follows:
   1 - 7-7/8" bit
   1 - 6-1/2" F2000 Dyna Drill
   1 - 1-1/4 deg. Deflecting sub
   1 - 6-1/4" x 30' Non Magnetic Drill Collar
   Remaining drill collars and drill pipe

9. Orient assembly with a surface read out steering tool and drill 300' to deflect well bore with proper angle and direction. TOH.

10. TIH with angle building assembly as follows;
    1 - 7-7/8" bit
    1 - 7-7/8" Bottom hole IB stabilizer
    1 - 6-1/4" x 30' Non Magnetic drill collar
    1 - 30' drill collar
    1 - 7-7/8" String IB stabilizer
    1 - 30' drill collar
    1 - 7-7/8" string IB stabilizer
    17± - 6" to 6-1/8" drill collars
    1 - 7-7/8" String Roller Reamer
    1 - 6" Drilling Jars
    3 - 6" to 6-1/8" drill collars
    Remaining drill pipe.

11. Drill and build angle at 1-1/2 deg. per 100' to TVD of 6628' (6662' MD) and an average angle of 25.23 deg. or until a corrective motor run is required. TOH.

12. Install rotating head, flowline sensor & PVT equipment by 8000'.

13. Install Mud-Gas separator and 6" flare line by 8000'.

14. TIH with Semi-Packed assembly as follows;
    1 - 7-7/8" bit
    1 - 7-7/8" Bottom Hole RWP stabilizer
    1 - 6-1/4" x 30' Non Magnetic Drill Collar
    1 - 7-7/8" String IB stabilizer
    1 - 30' drill collar
    1 - 7-7/8" String IB stabilizer
    17± - 6" to 6-1/8" Drill Collars
    1 - 7-7/8" String Roller Reamer
    1 - 6" Drilling Jars
    3 - 6" to 6-1/8" Drill Collars
    Remaining Drill Pipe.

15. Drill and hold angle at 25.23 deg. to TVD 11,000' (11,515' MD) or until a corrective motor run is required. Increase KCl concentration to 4% by 8000'. Mud up with Polymer-Starch mud at 9500' with 35 sec. vis., 9.5 ppg weight (w/Barite), 15 cc water loss to <10 cc at 10,450' TVD.

16. Drill stem test all shows.

17. Increase viscosity to 38-40 sec at T.D.

18. Run open hole logs - CNL-LDT and Phasor Induction.

19. Set and cement 4-1/2" production casing (resin coated and centralized through pay zones) in two stages with D.V. tool at 7000'.
    First Stage: 450 sx HLW "H" w/0.5% Halad 22-A, 1/4# flocele/sx. Slurry wt. 12.4 ppg, yield 1.97 cuft/sx + 500 sx Class "H" w/3# KCL/sx, 0.8% Halad 22-A, 0.4% CFR-2, slurry wt. 15.6 ppg, yield 1.21 cuft/sk.

    Second Stage: 850 sx HLW "C" w/0.5% Halad 22-A, 1/4# flocele/sx. Slurry wt. 12.4 ppg, yield 1.97 cuft/sx + 100 sx Class "C", slurry wt. 14.8 ppg, yield 1.32 cuft/sx.

20. Install 10" - 5000 W.P. x 6" - 5000 psi W.P. tubinghead and Christmas tree.

21. Run temperature survey to locate cement top.

22. Rig down and move out rotary tools.

23. Level location and set mast anchors.

24. Rig up pulling unit. Hire night watchman.

25. Pressure test casing and Christmas tree to 4500 psi.

26. Install BOP and RIW with 3-3/4" bit, 4-1/2" casing scraper, 6 - 3" O.D. drill collars and 2-3/8" EUE 8rd N-80 tubing with AB modified couplings. Drill cement and D.V. tool.

27. Reciprocate casing scraper and bit through D.V. tool 10-12 times.

28. Pressure test casing to 1500 psi.

29. RIW and clean out to float collar.

30. Displace well with 3% KCL containing corrosion inhibitor, oxygen scavenger, and 1 gal./1000 Morflo II.

31. Test casing to 3000 psi for 30 mins.

32. POW with tubing and lay down tools.

33. RIW with 4-1/2" x 2-3/8" packer, T.O.S.S.D. with 1.81" "F" profile and tubing.

34. Remove BOP, set packer and install Christmas tree.

35. Swab fluid level to 9000' from surface.

36. Run gamma-ray collar log and perforate Morrow with 1-11/16" OD Enerjet gun.

37. Flow test well.

38. Stimulate as needed.

39. Clean up well after stimulation.

40. Run C.A.O.F.P. and pressure build up.

41. Install surface equipment.

42. Restore pit area to original contour.

Note: Do not leave location unattended at any time during completion operations due to nearby residential area.

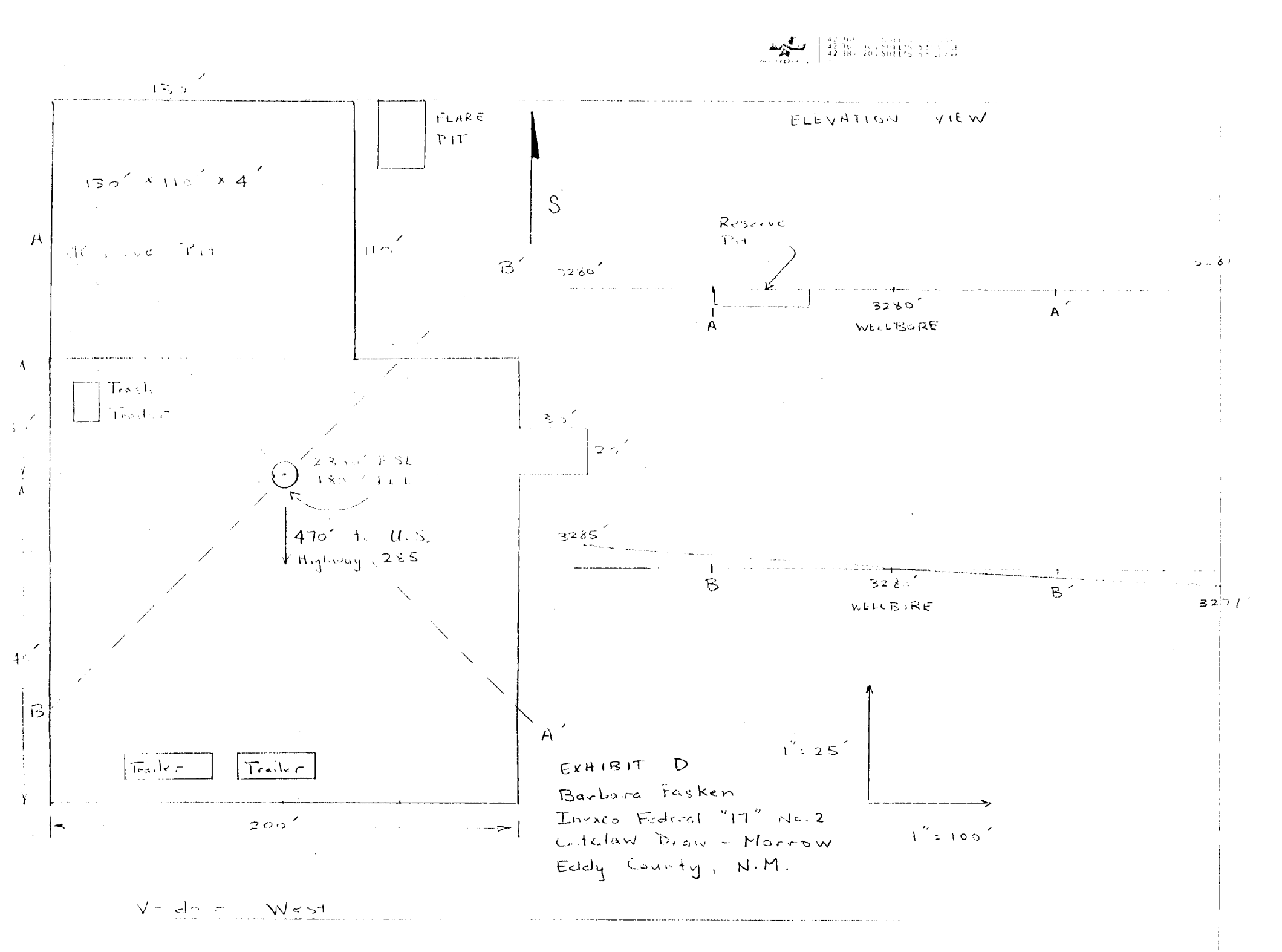
TET:sb
(inex.exhf)

Recommended Casing Program

Barbara Fasken ----- Inexco 17 Federal No. 2 ----- Catclaw Draw (Morrow) Field
Eddy County, New Mexico

	Footage	Size	Weight	Grade	Thread
Surface Casing	500'	13-3/8"	48#/ft.	K-55	ST&C
Intermediate Casing	2500'	8-5/8"	24#/ft.	K-55	ST&C
Production Casing	2100'	4-1/2"	11.60#/ft.	N-80	Buttress
	8150'	4-1/2"	11.60#/ft.	N-80	LT&C
	1265'	4-1/2"	13.50#/ft.	N-80	LT&C
	11515'				
Tubing	11515'	2-3/8"	4.70#/ft.	N-80	EUE 8rd AB Modified

TET:sb
(inex.csg)


ELEVATION VIEW
FLARE PIT
130' x 110' x 4'
Reserve Pit
S
A
B'
3280'
A'
3280'
WELLBORE
Trash Trailer
330'
330'
2310' FSL
180' FEL
470' to U.S. Highway 285
3285'
B
B'
328'
WELLBORE
3277'
A'
Trailer
Trailer
200'
1" = 25'
1" = 100'
EXHIBIT D
Barbara Fasken
Inexco Federal "17" No. 2
Catclaw Draw - Morrow
Eddy County, N.M.
West