

ARTESIAN, NM 88210-2834

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

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

Form 3160-3
(July 1992) Received

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carrizozo Field Office
Carrizozo, NM

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

18. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER

14838

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

BELLWETHER EXPLORATION COMPANY

3. ADDRESS AND TELEPHONE NO.

1331 Lamar, Suite 1455, Houston, Texas 77010-3039

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

1650' FNL & 1650' FWL of Section 18

At proposed prod. zone

Unit F

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

7.0 miles northwest of Village of Loco Hills, NM

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

1650'

16. NO. OF ACRES IN LEASE

communtized

17. NO. OF ACRES ASSIGNED
TO THIS WELL

312.73

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

1500'

19. PROPOSED DEPTH

10,975'

20. ROTARY OR CABLE TOOLS

Rotary

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

3756'

22. APPROX. DATE WORK WILL START*

12/00

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
20"	20"		40'	Driven
17-1/2"	13-3/8" H-40	48#	400'	550 cu. ft. (280 sx.)
11"	8-5/8" K-55	32#	3000'	1150 cu. ft. (650 sx.)
7-7/8"	5-1/2" N-80	17#	10975'	800 cu. ft. (550 sx.)

Bellwether Exploration Company proposes to drill the referenced well to a total depth of 10,975'.

If a dryhole Bellwether will plug and abandon the wellbore per Federal and State Regulations.

Drilling Plan attached
Surface Use Plan attached
Certification attached.
Exhibits attached.

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 Nancy K. Gatti
Nancy K. Gatti

TITLE Regulatory Coordinator

DATE 09/26/00

(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:

APPROVED BY _____

TITLE _____

DATE _____

*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 statement within its jurisdiction.

District I
1625 N. 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 & Natural Resources

Form C-102
Revised March 17, 1999

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code		³ Pool Name Wildcat; Morrow	
⁴ Property Code		⁴ Property Name Buckboard 18 Fed Com			⁴ Well Number 1
⁷ OGRID No. 148381		⁵ Operator Name Bellwether Exploration Company			⁶ Elevation 3756

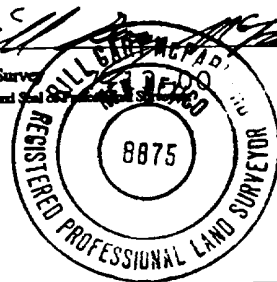
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	18	16S	30E		1650	North	1650	West	Eddy

¹¹ 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
¹² Dedicated Acres 312.73		¹³ Joint or Infill N		¹⁴ Consolidation Code C		¹⁵ 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

¹⁶ Lot 1 36.35 ac 1650' 1650' Lot 2 36.38 ac	40 ac	40 ac	40 ac	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature <i>Nancy K. Gatti</i> Printed Name Nancy K. Gatti Title Regulatory Coordinator Date 9-18-00
	40 ac	40 ac	40 ac	
	Lse# BLM NM 7724			¹⁸ 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. <i>[Signature]</i> Date of Survey Signature and Seal of Registered Professional Land Surveyor  Certificate Number 8675

LEASE INFORMATION

Buckboard 18 Fed Com #1

T16S-R30E, Section 18

312.73 Acres Dedicated

Lay-down N/2

Eddy County, New Mexico

Owner Name	BLM NM 7724 N/2 Sec 18
Bellwether Exploration Company	50.000000%
Pure Energy Group, Inc.	50.000000%
	100.000000%

APPLICATION FOR PERMIT TO DRILL WORKSHEET

(Based on the requirements contained in Onshore Oil and Gas Order Nos. 1 & 2)

All forms and information must be filed in triplicate

TORCH OPERATING COMPANY

BUCKBOARD 18 FEDERAL COM, WELL NO. 1

1650' FNL & 1650' FWL OF SECTION 18, T16S, R30E

EDDY COUNTY, NEW MEXICO

A. **FILE APPLICATION FOR PERMIT TO DRILL (FORM 3160-3)**

B. **LOCATION**

Attach plat showing well location in feet from nearest section line or for areas not surveyed according to the rectangular system, by such means as is normal for the area, prepared and sealed or certified by a registered surveyor.

C. **DRILLING PROGRAM**

1. **ESTIMATED GEOLOGICAL TOPS**

Give estimated tops of important geological marker horizons, including geologic name of the surface formation:

<u>FORMATION</u>	<u>DEPTH</u>
Queen	1,905'
San Anders	2,670'
Wolfcamp Lime	7,450'
U. Strawn	9,595'
L. Strawn	9,960'
Atoka	10,095'
Morrow	10,510'
L. Morrow	10,545'
Chester	10,875'
TD	10,975'

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2. DEPTH OF ANTICIPATED WATER, OIL, GAS, ETC.

All fresh water and prospectively valuable minerals (as described by Bureau of Land Management) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be evaluated to determine commercial potential.

The primary objective is the Morrow formation(s) estimated to be at 10,510' MD. The secondary objective is the Atoka formation(s) estimated to be at 10,095' MD.

3. PRESSURE CONTROL PROGRAM

A double gate hydraulic BOP, 13-5/8", 5000 psi WP with pipe rams and blind rams will be installed on the 8-5/8" casinghead. The BOP stack will be tested to 2000 psi prior to drilling below surface casing and as follows. Operational checks will be made daily or on trips.

<u>CASING STRING</u>	<u>REQUIREMENTS</u>	<u>TEST PRESSURE, psi</u>
SURFACE	1 ANNULAR	250/1000
	1 BLIND RAM	250/2000
	1 PIPE RAM	250/2000
INTERMEDIATE & PRODUCTION	1 ANNULAR	250/3500
	1 BLIND RAM	250/5000
	1 PIPE RAM	250/5000

BOP TESTING WILL BE DONE EVERY 14 DAYS.

SCHEMATIC ATTACHED AS EXHIBIT "A"

The BOP system will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventor controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

The following is a list of Auxiliary Equipment:

1. Upper Kelly Valve
2. Lower Kelly Valve
3. Drill Pipe Inside BOP

4. CASING PROGRAM

Conductor: 20" will be set approximately 40' below ground level (BGL).
Surface Casing: 13-3/8" casing will be set at approximately 400'.
Intermediate Casing: 8-5/8" casing will be set at approximately 3,000'.
Production Casing: 5-1/2" casing will be set if the well is productive by log measurements.

<u>DEPTH</u>	<u>SIZE</u>	<u>GRADE</u>	<u>WEIGHT</u>	<u>THREAD</u>	<u>CONDITION</u>
400'	13-3/8"	H-40	48#	ST&C	New
3,000'	8-5/8"	K-55	32#	ST&C	New
10,975'	5-1/2"	N-80	17#	LT&C	New

5. CEMENT PROGRAM

SURFACE CASING: 13-3/8" @ 400'

TOTAL: 550 CU FT / 280 SX (ASSUMING 100% EXCESS)

SLURRY: 35/65 POZ CLASS "C" + 2% CaCl + 6% BENTONITE GEL + .25%
#/SX CELLOFLAKES MIXED WITH 10.75 GPS FRESH WATER @
12.5 PPG AND YIELD 1.97 CU FT/SX.

CALCULATED TOP OF CEMENT: CIRCULATED TO SURFACE
CALCULATED CEMENT FILL: 400'

INTERMEDIATE CASING: 8-5/8" @ 3,000'

LEAD: 950 CU FT / 500 SX
TAIL: 200 CU FT / 150 SX
TOTAL: 1150 CU FT / 650 SX (ASSUMING 50% EXCESS)

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5. CEMENT PROGRAM, (continued)

LEAD: 35/65 POZ CLASS "C" + 1% CaCl + 6% BENTONITE GEL + 4 #/SX
GILSONITE MIXED WITH 9.65 GPS FRESH WATER @ 12.7 PPG
AND YIELD 1.87 CU FT/SX.

TAIL: CLASS "C" + 1% CaCl MIXED WITH 6.34 GPS FRESH WATER @
14.8 PPG AND YIELD 1.34 CU FT/SX

CALCULATED TOP OF CEMENT: CIRCULATED TO SURFACE
CALCULATED CEMENT FILL: 3,000' (2,500' LEAD AND 500' TAIL)

PRODUCTION CASING: 5-1/2" @ 10,975'

LEAD: 400 CU FT / 250 SX
TAIL: 400 CU FT / 300 SX
TOTAL: 800 CU FT / 550 SX (ASSUMING 25% EXCESS)

LEAD: 15/61/11 POZ CLASS "C" CSE + 8 #/SK GILSONITE + .5% FL25 +
.5% FL52 MIXED WITH 7.14 GPS FRESH WATER @ 13.2 PPG AND
YIELD 1.57 CU FT.SX

TAIL: CLASS "C" + .7% FL25 MIXED WITH 6.29 GPS FRESH WATER @
14.8 PPG AND YIELD 1.33 CU FT/SX

CALCULATED TOP OF CEMENT: 6,975'
CALCULATED CEMENT FILL: 4,000' (2,000' LEAD AND 2,000' TAIL)

Additional additives will be used to either/or retard cement, accelerate the cement, control loss circulation and control fluid loss. All cementing will be done in accordance with API cementing practices.

Anticipated cement tops will be reported as to depth, not the expected number of sacks of cement to be used. Torch Operating Company will notify the District Office, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.

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6. CIRCULATING MEDIA PROGRAM

A. Torch proposes to utilize the following mud system which will be visually monitored.

<u>DEPTH</u>	<u>MW(PPG)</u>	<u>VISC.</u>	<u>PV</u>	<u>YP</u>	<u>PH</u>	<u>FLUID LOSS</u>
0' - 400'	8.6 – 9.2	32-35	5-10	15-25	NC	NC
400' - 3,000'	9.9 – 10.1	28-29	5-10	15-25	9.0 – 10.0	NC
3,000' - 9,000'	8.3 - 9.5	28-29	4-8	5-10	9.0 – 10.0	20 - 25
9,000' – 10,975'	9.5 – 10.5	31-36	6-12	4-8	9.0 - 10.0	6-8

B. Air Drilling - Include the following information:

1. Length and location of blooie line, including automatic igniter or continuous pilot light.
2. Location of compressor equipment, including safety devices, and the distance from the wellbore.
3. Schematics showing deduster equipment and rotating head.
4. Amounts, types and characteristics of stand-by mud and circulating equipment.

**TORCH OPERATING COMPANY DOES NOT PROPOSE TO DRILL THE
BUCKBOARD 18 FEDERAL COM WELL NO. 1 BY THE AIR METHOD.**

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7. CORING, LOGGING AND TESTING PROGRAM

- A. DIL/Sonic/GR;
Azimuth Laterolog
Litho-Density-Neutron/Microlog/GR
CBL, if production casing is run.
Dipmeter - Stand-By
Drill Sidewall Cores - Stand-By
- B. Possible DSTs in the Atoka and/or Morrow formations as needed.

8. POTENTIAL HAZARDS (IF NONE, SO STATE)

- A. Expected bottom-hole pressures and any anticipated abnormal pressure zones.

NONE
- B. Expected temperature or bottom-hole temperature and any abnormal temperature zones.

NONE
- C. Expected potential hazards (i.e., H₂S, lost circulation zones).

Possible encounter with CO₂ .
- D. Discuss plans for mitigation of any of the potential hazards defined above.

9. ADDITIONAL INFORMATION

Any other facets of the proposed operation you wish to include for Bureau of Land Managements's consideration of the application.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

BELLWETHER EXPLORATION COMPANY

Buckboard 18 Fed. Com. #1

Section 18 , T-16S, R-30E

1650' FNL-1650'FWL

Eddy County, New Mexico

USA OGLse.#NM-7724

This plan is submitted with the application for permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS:

A. Exhibit "B" is a portion of a road map showing the location of the proposed well as staked. The well is approximately 7.0 miles Northwest of the Village of Loco Hills, N.M.

B. Directions: As reflected on map Exhibit "B", follow State Highway 82 East from Artesia, New Mexico for approximately 25 miles to Loco Hills, turn North on County Road 217, thence North 7.75 miles to Kayjay Southwest Henshaw Lease Sign, thence West 1.75 miles, thence South 1600 feet to location.

2. PLANNED ACCESS ROAD:

The planned access road is indicated on Exhibit "B" and Exhibit "C" with a yellow coloration.

A. Length and Width: New access is 1600 feet in length and is 14 feet wide with a 25 foot disturbance. Existing access back to county road 217 is 9500 feet.

B. Surfacing Materials: The road will be flat bladed and crowned with 6 " of compacted caliche if needed.

C. Turnouts: None

D. Maximum Grade: No more than 1% at any given point en route to location.

E. Drainage Design: Road will have drainage ditches on both sides and a crowned top, with culverts and/or low water crossings as necessary. The existing access road does not presently appear to have or need any low water crossings.

F. Culverts: None necessary.

G. Cut and Fill: A maximum of 3 feet will be necessary at any given point along access.

H. Gates, Cattleguards: None

I. Top Soil: Access road had predominately migrating sand as top soil.

3. LOCATION OF EXISTING WELLS WITHIN ONE MILE RADIUS:

A. A map indicating the location of adjacent wells within a one mile radius is attached as Exhibit "D".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. See Exhibit "D" for location of existing lease wells. If the well is commercial, production facilities and tank battery will be constructed.

B. Cuts and Fills: The well site will have less than 3 feet of cut and fill.

C. Top Soil: Any top soil which can sustain plant vegetation will be bladed and piled for future rehabilitation at location shown on Exhibit "E". The location is predominately covered with migrating sand.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. Location of water supply is yet to be determined. Once located will apply through Sundry Notice.

6. SOURCE OF CONSTRUCTION MATERIALS:

A. Location of caliche material is yet to be determined. Once located will apply through Sundry Notice.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. The reserve pit will be lined with a 12 mil plastic liner to prevent ground water contamination. Drill cuttings will be disposed of in the drilling pits.

B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.

C. Water produced during test will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.

D. Current laws and regulations pertaining to the disposal of human waste will be complied with.

E. Trash, waste paper, garbage, and junk will be contained within a trash or burn cage. After completion of the Well will be removed and disposed of in a approved sanitary landfill.

F. All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

G. The following is a list of Hazardous Materials that may be used during operations - Gasoline, New and Used Oil, Diesel, Hydrochloric acid, A-2(corrosion inhibitor), liquid citric(iron sequestrant), NE-17(non-emulsifier), CL-33(clay stabilizer), CL- 55C (liquid KCL), Breaker E (water gel breaker), Class C Cement, Flocele, Calcium Chloride. Gilsonite(Gel), Bentonite(Gel), Poz Mix "A", Salt, Halad-322. All of the above materials will be contained in a manner that is considered by the BLM as environmentally safe. Upon completion of the well all of these materials will be taken from the location and disposed of in accordance with applicable local, state & federal Laws.

8. ANCILLARY FACILITIES:

A. Exhibit "E" indicates the proposed pad dimensions. Camp trailers housing personal and monitoring equipment will be present during drilling operations.

9. WELL SITE LAYOUT:

A. Exhibit "E" indicates the relation location and dimensions of the well pad, mud pits, reserve pit and major rig equipment.

B. As reflected on Exhibit "C", the terrain slopes slightly West from location.

C. The reserve pit will be lined with a 12 mil plastic liner to prevent loss of water and ground water contamination.

10. PLANS FOR RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing condition as possible.

B. Any unguarded pits containing fluids will be fenced until they are filled.

C. If the well is non-productive or abandoned, the disturbed area will be rehabilitated using the preserved soil mentioned in 2. I. and 4. C.

11. OTHER INFORMATION:

A. Topography: The topography is a gradual slope to the West in the vicinity of the access road and West in the vicinity of the drill pad.

B. Soil: Predominantly sandy loam.

C. Flora and Fauna: The flora consists of typical desert vegetation, such as yucca, cactus and various grasses. Fauna consists of desert wildlife such as coyotes, rodents, snakes, deer and antelope.

D. Ponds or Streams: None in vicinity.

E. Residences and other Structures: No residence within 5 miles or more.

F. Archaeological, Historical and Other Cultural Sites: An Archaeological Survey was conducted by Archaeological Survey Consultants of Roswell, New Mexico. No significant archaeological resources were found in the survey area of the planned access road or of the proposed well site.

G. Land Use: Grazing
Grazing Lessee:
Bogle LTD Company
P.O. Drawer 460
Dexter, New Mexico 88230

H. Surface Ownership: Well site - Bureau of Land Management

12. OPERATOR'S REPRESENTATIVE:

Name: Rusty Ritz

Address: Torch Operating Company
1221 Lamar, Suite 1600
Houston, Texas 77010-3039

Phone Nos.: (713) 756-1624 (office phone)
(281) 728-9292 (cell phone)
(713) 613-7975 (pager number)

ALTERNATE REPRESENTATIVE

Name: Mike Albertson

Address: Torch Operating Company
1221 Lamar, Suite 1600
Houston, Texas 77010-3039

Phone Nos.: (713) 756-1755 (office phone)
(713) 201-3784 (cell phone)
(877) 391-7044 (pager number)

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 presently exists; that the statements made in this plan are, to the best of my knowledge true and correct; that the work associated with the operations proposed herein will be performed by Bellwether Exploration Company and its sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to provisions of 18 USC 1001 for the filing of a false statement.

Lynn Thompson for Mike Albertson
Signature

Drilling Manager
Title:

9/27/08
Date

STATEMENT ACCEPTING RESPONSIBILITIES FOR OPERATIONS

OPERATOR: BELLWETHER EXPLORATION COMPANY
ADDRESS: 1331 Lamar, Suite 1455
Houston, Texas 77010-3039

Please be advised that Bellwether Exploration Company is considered to be the operator of the Buckboard 18 Federal Com No. 1, located in SE/4NW/4 of Section 18, Township 16 South and Range 30 East, Eddy County, New Mexico, and is responsible under the terms and conditions of the lease (NM-7724) for the operations conducted upon the leased land. Bond coverage is provided by Reliance Insurance B2656947 (BLM# CA0296).

Lynn Thornhill for Mike Albertson
Signature

Drilling Manager
Title:

9/27/00
Date

ARTESIA QUADRANGLE - 106

EDDY & CHAVES COUNTIES
R. 29 E.

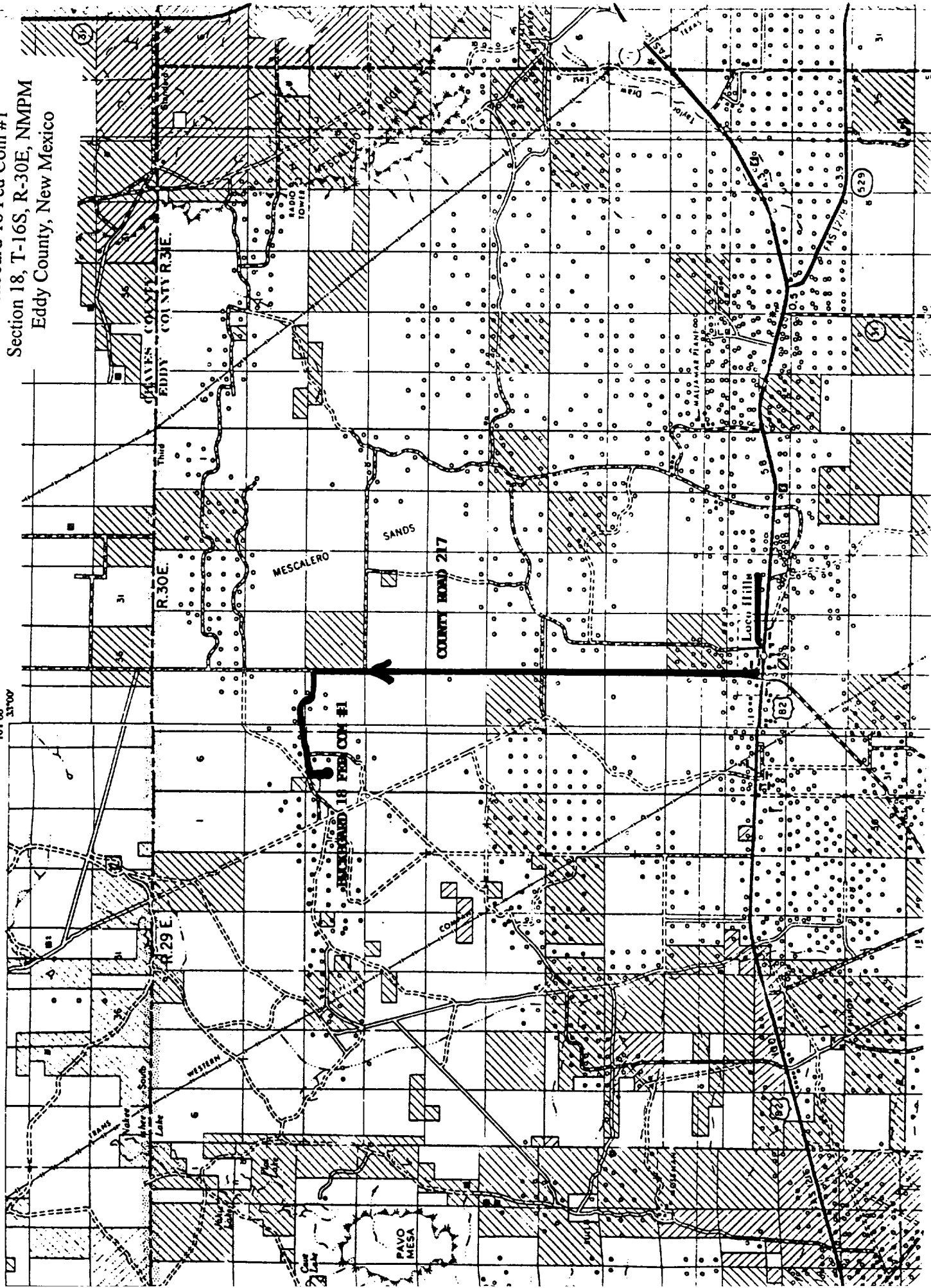
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EXHIBIT "B"

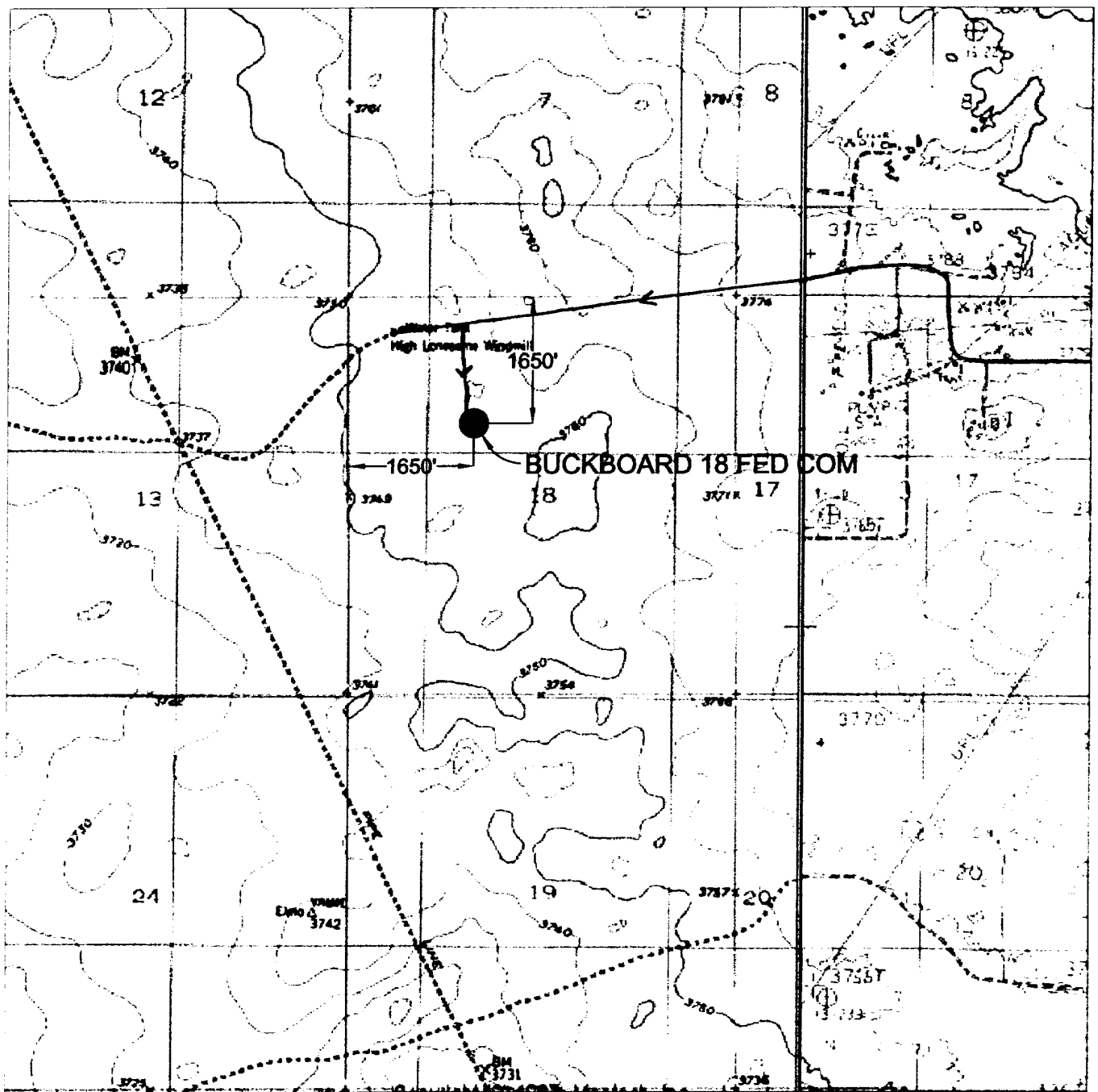
Buckboard 18 Fed Com #1

Section 18, T-16S, R-30E, NMPM

Eddy County, New Mexico



BUCKBOARD 18 FED COM



SEC 18, T16S, R30E

EXHIBIT "C"
Buckboard 18 Fed Com #1
Section 18, T-16S, R-30E, NMPPM
Eddy County, New Mexico

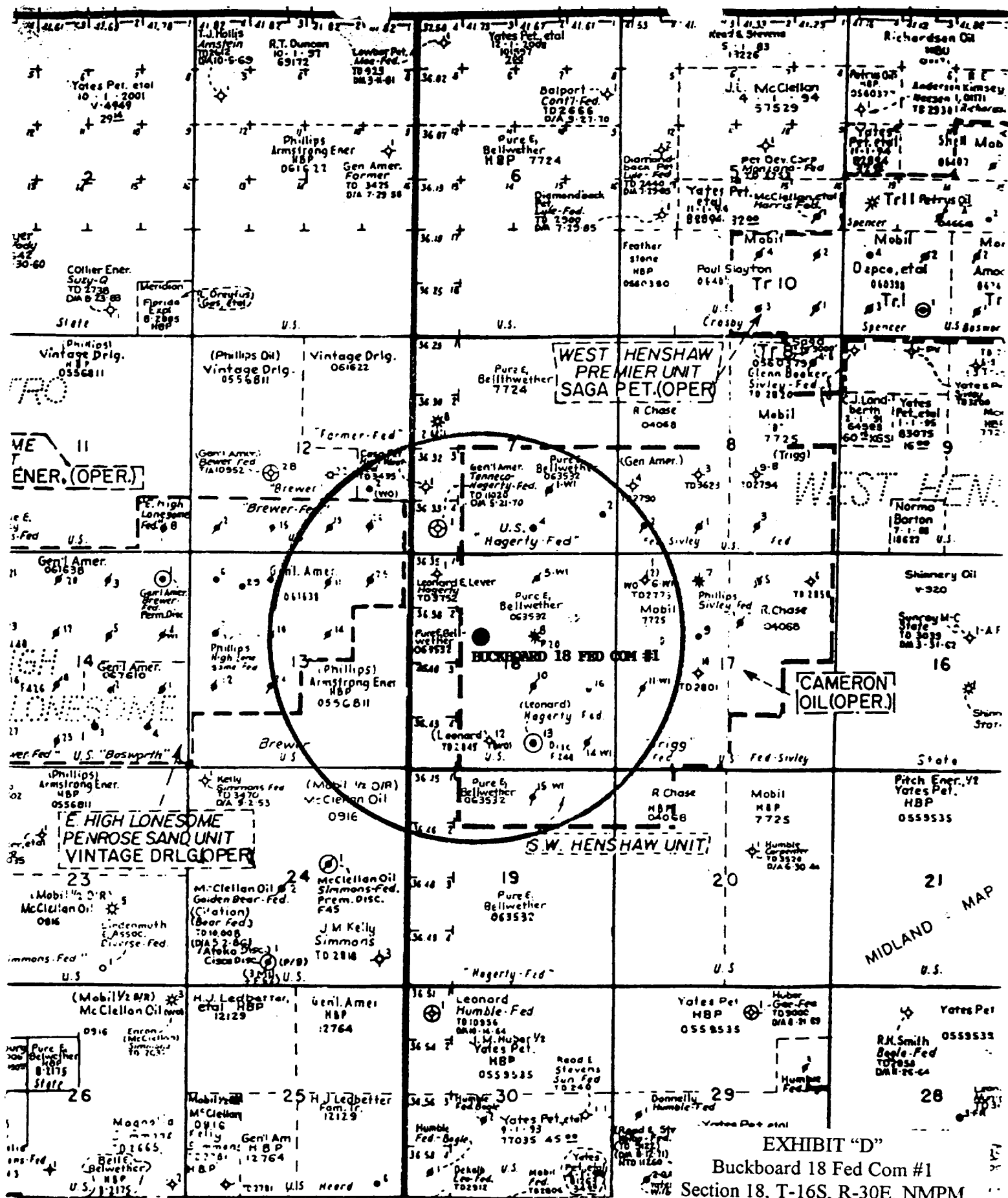


EXHIBIT "D"

Buckboard 18 Fed Com #1
Section 18, T-16S, R-30E, NMPM
Eddy County, New Mexico

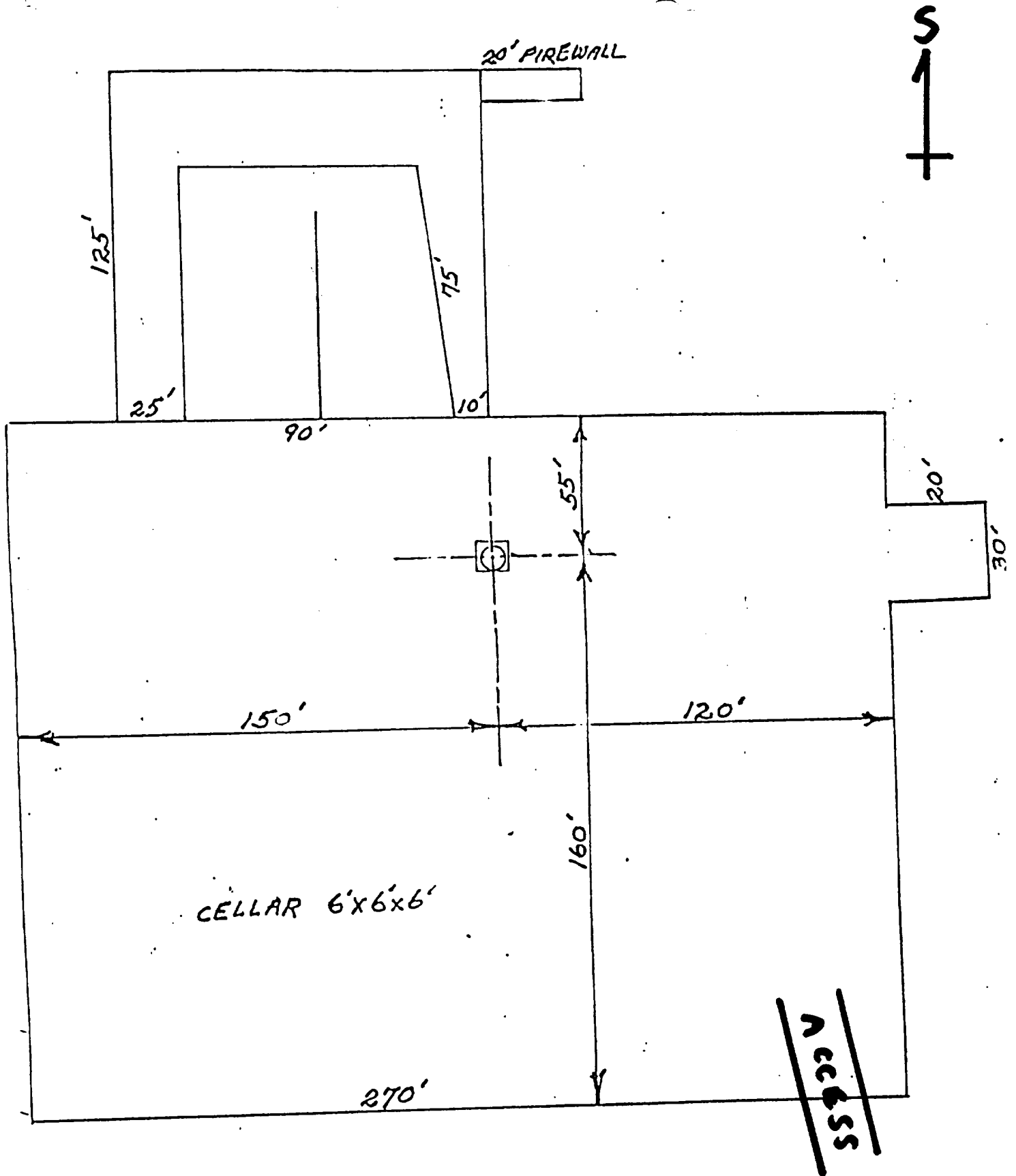


EXHIBIT "E"
 Buckboard 18 Fed Com #1
 Section 18, T-16S, R-30E, NMPM
 Eddy County, New Mexico