

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FOR OIL GASES. COMMISSION. LICATE  
SUBMIT IN (Other instructions on reverse side)  
60210

30-015-260880/64  
Form approved.  
Budget Bureau No. 1004-0136  
Expires August 31, 1985

RECEIVED  
6. LEASE IDENTIFICATION AND SERIAL NO.  
NM 44532

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1A. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

B. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

OTHER

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Exxon Corp. Attn: Permits Supervisor

3. ADDRESS OF OPERATOR

P. O. Box 1600, Midland, TX 79702

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

At surface

630' FSL and 900' FEL of Sec. 15, (SESE)

At proposed prod. zone

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

20 MI. SE from Malaga NM

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

Lease Line 900'  
Drlg Unit 420'

16. NO. OF ACRES IN LEASE

880

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

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

854' W to #1

19. PROPOSED DEPTH

5250'

20. ROTARY OR CABLE TOOLS

Rotary

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

GR. - 2933.5

22. APPROX. DATE WORK WILL START\*

4-1-89

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24	400'	165 ft. <sup>3</sup> CIRCULATE
7 7/8"	5 1/2"	14	5150'	390 ft. <sup>3</sup>

CASING DESIGN SAFETY FACTORS

SURFACE CASING, COLLAPSE 1, BURST 1.1, TENSION 1.5

PRODUCTION CASING, COLLAPSE 1.125, BURST 1, TENSION 1.5

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

POST IS-1  
NL & API  
3-31-89

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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. Charlotte Harper Permits Supervisor DATE 2-15-89

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*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

OIL CONSERVATION DIVISION

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

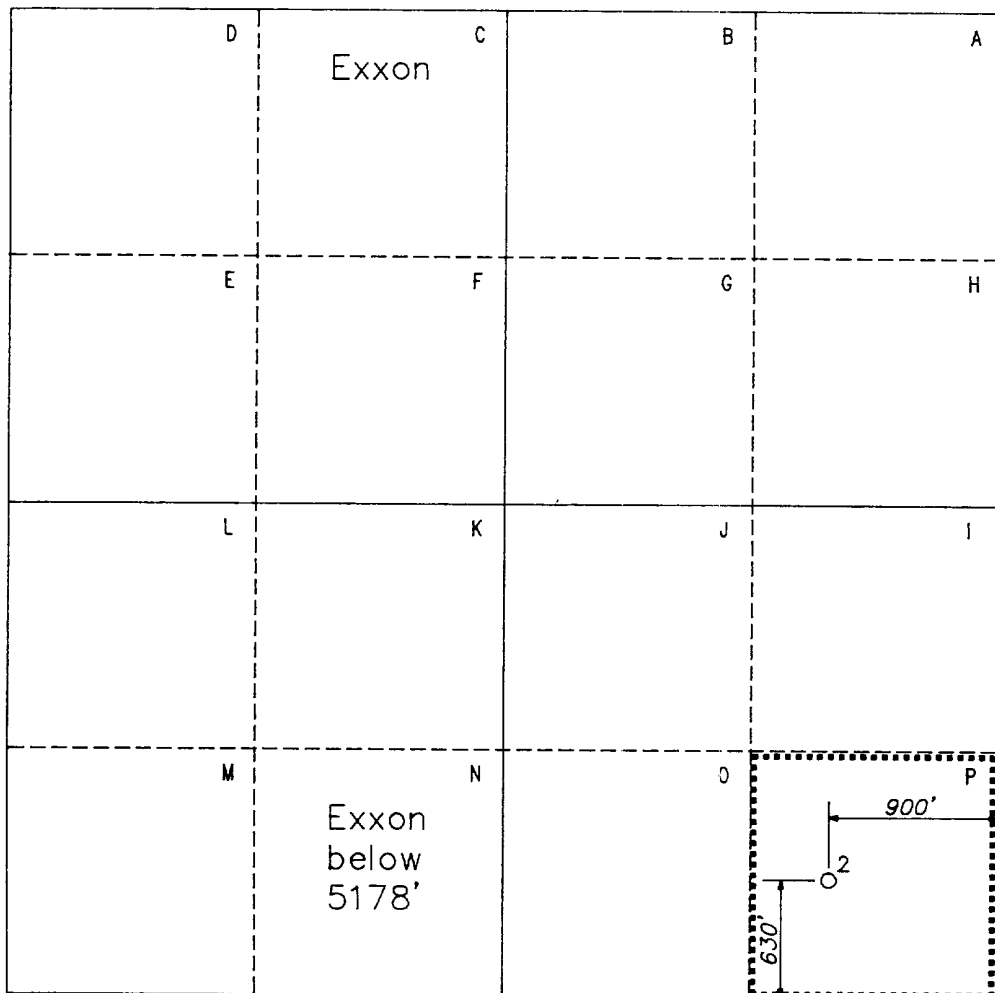
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator Exxon Corporation			Lease SOSA FEDERAL		Well No. 2
Unit Letter P	Section 15	Township 26-S	Range 29-E	County NMPM	EDDY
Actual Footage Location of Well: 630 feet from the SOUTH line and 900 feet from the EAST line.					
Ground level Elev. 2933.5	Producing Formation CHERRY CANYON		Pool BRUSHY DRAW-DELAWARE	Dedicated Acreage: 40 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 \_\_\_\_\_  
If answer is "no", list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature

Charlotte Harper

Printed Name

Charlotte Harper

Position

PERMITS SUPERVISOR

Company Exxon Corporation

P.O. Box 1600-Midland, Tx.-79702

Date

2-14-89

SURVEYOR CERTIFICATION

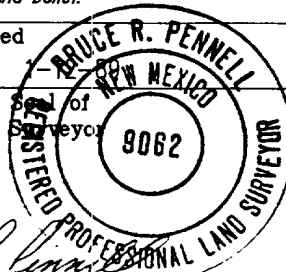
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Signature & Seal of Professional Surveyor

Certificate No.

9062

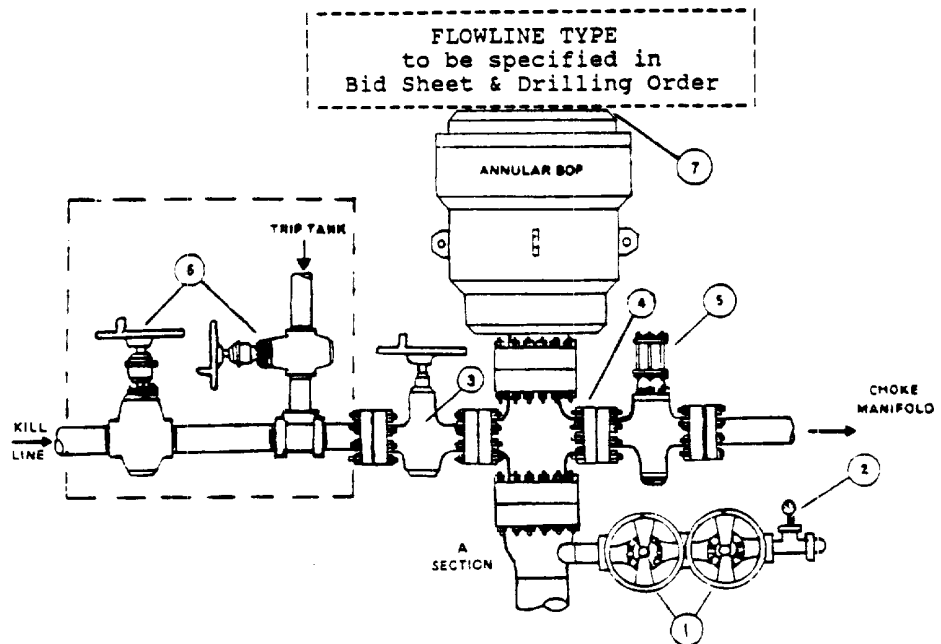


20 Miles SE of MALAGA, New Mexico.

C.E. File No. W-A-10236

# TYPE-SA BOP STACK

## ANNULAR



### COMPONENT SPECIFICATIONS

1. Screwed or flanged plug or gate valves -- 2" minimum nominal dia. -- same working pressure as "A" section.
2. Tee with tapped bullplug, needle valve, and pressure gauge.
3. Flanged plug or gate valve -- 2" minimum nominal dia. -- same working pressure as BOP stack.
4. Drilling spool. -- 3" choke and 2" kill line minimum nominal dia.
5. Flanged hydraulically controlled gate valve -- 3" minimum nominal dia. -- same working pressure as BOP stack.
6. Flanged or screwed gate or plug valve -- 2" minimum nominal dia. -- same working pressure as BOP stack. NOTE: Valves are optional if trip tank is tied into Flowline Type.
7. Top of annular preventer must be equipped with an API flange ring gasket. All flange studs must be in place or holes filled in with screw type plugs.

#### NOTE:

- A. Unless specified otherwise in the Bid Letter and/or Contract, the contractor will furnish and maintain all components shown above Exxon's wellhead.
- B. The choke line between the drilling spool and choke manifold should not contain any bend or turn in the pipe body. Any bend or turn required should be made with a running tee with a blind flange or welded bullplug. All connections should be flanged or welded. All fabrications requiring welding must be done by a certified welder. Welds should be stress relieved when required.
- C. Plug valves should be equivalent to the Howco Lo-Torc and gate valves equivalent to the Cameron Type 'F'.

EXXON CORPORATION - SOSA FEDERAL #1 AND #2

Section 15, T26S, R29E  
Eddy County, New Mexico  
BLM Eight-Point Plan  
January 1989

1. The Estimated Tops of Important Geologic Markers

<u>Formation</u>	<u>Tops</u>
Rustler	350'
Salado	850'
Castile	2650'
Bell Canyon	2950'
Cherry Canyon	3850'
Williamson Sand	5000'

2. The estimated depths at which the top and the bottom of anticipated water, oil, gas, and other mineral bearing formations are expected to be encountered.

	<u>Top</u>	<u>Bottom</u>	<u>How Protected</u>
Fresh Water	Surface	400'	Surface casing cemented to surface.
Williamson Sand (Hydrocarbons)	5000'	5150'	Production casing cemented to 2900'.

3. Minimum Specifications for Pressure Control Equipment

A. Wellhead and X-mas tree equipment:

"A" Section - 8 5/8" 8rd x 11" 3000 psi W.P. sweet  
Tubing Head - 5 1/2" 8rd x 2 7/8" 2000 psi W.P. sweet  
No X-mas tree required, well will be rod pumped

B. Blowout preventer equipment:

<u>Type</u>	<u>Pressure Rating</u>	<u>Installed on Casing</u>
Type - SA BOP	2000 psi	8 5/8"

Additional preventers may be added and/or preventers with higher pressure ratings may be substituted depending on equipment provided by drilling contractor. Diagram of the preventer stack type is attached.

C. Testing:

Operational testing - an operational test consisting of closing the annular preventer on the drill pipe will be performed weekly.

Pressure testing - Annular BOP will be tested to 200 psi (low pressure) and 1000 psi on the 8 5/8" casing upon installation.

Subsequent pressure tests of the BOP equipment will be conducted as follows:

1. Upon any change in any component of the BOP Stack and/or choke manifold.
2. At least every thirty (30) days.

Subsequent pressure tests will be at 200 psi (low pressure) and 500 psi for the annular preventer on the 8 5/8" casing.

Blow prevention drills - a drilling crew proficiency test to perform the well shut-in procedures will be performed at least once each week with each crew.

D. BOP control unit:

Unit will be hydraulically operated and have one control station located on the rig floor.

4. Auxiliary Equipment and Proposed Casing Program

A. Auxiliary equipment:

Kelly cocks - upper and lower installed on kelly.

Safety valve - full opening ball type valve to fit each type and size of drill pipe in use will be available on the rig floor in the open position at all times for use when the kelly is not connected to the drill string.

B. Casing:

<u>String</u>	<u>Size /Weight/Grade</u>			<u>Depth Interval</u>
Surface	8 5/8	24	J55	0-400'
Production	5 1/2	14	J55	0-5150'

Substitutions regarding weight and grade might be required due to availability.

C. Cement:

<u>Casing</u>	<u>Depth</u>	<u>Cement Type</u>	<u>Approximate Cement Volume</u>	<u>Top of Cement (Gauge Hole)</u>
Surface	400'	Class "C"	165 ft <sup>3</sup>	Surface
Production	5150'	Class "C" + gel and Class "C"	390 ft <sup>3</sup>	2900'

Calculated cement volume will be adequate to cover all hydrocarbon bearing formations.

D. Casing test procedures:

1. Surface casing (8 5/8") - 1000 psi test pressure.
2. Production casing (5 1/2") - 1500 psi test pressure.

5. Circulating Medium Characteristics

A. Type and anticipated characteristics of circulating medium:

<u>Depth Interval</u>	<u>Mud Type</u>	<u>Weight (ppg)</u>	<u>FV (Sec/Qrt)</u>	<u>PV (Cp)</u>	<u>YP (#/ 100 SF)</u>	<u>WL (cc/ 30 min)</u>	<u>pH</u>
0-400'	Spud	8.3-8.5	26-28	_____	No Control	_____	_____
400-5150'	SBW	10-10.2	28-30	_____	No Control	_____	9.5-10.5

B. Quantities of mud and weighting materials:

A sufficient inventory of mud materials and treating equipment will be maintained to control mud properties adequately for well control and drilling requirements.

C. Mud system monitoring equipment:

Trip tank - tank will be used to keep hole full of fluid on trips and to monitor hole behavior on trips.

6. Anticipated Type and Amount of Coring, Testing, and Logging

Coring program: non anticipated.

Drill stem tests: non anticipated.

Logging program:

<u>Logs</u>	<u>From</u>	<u>To</u>
GR-CNL-LDT	5150'	0'

7. Bottom Hole Pressure and Other Potential Hazards

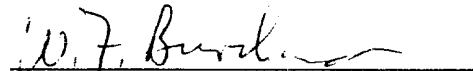
A. No H<sub>2</sub>S is anticipated.

B. No abnormal pressure is anticipated.

8. Other Facets of the Proposed Operation

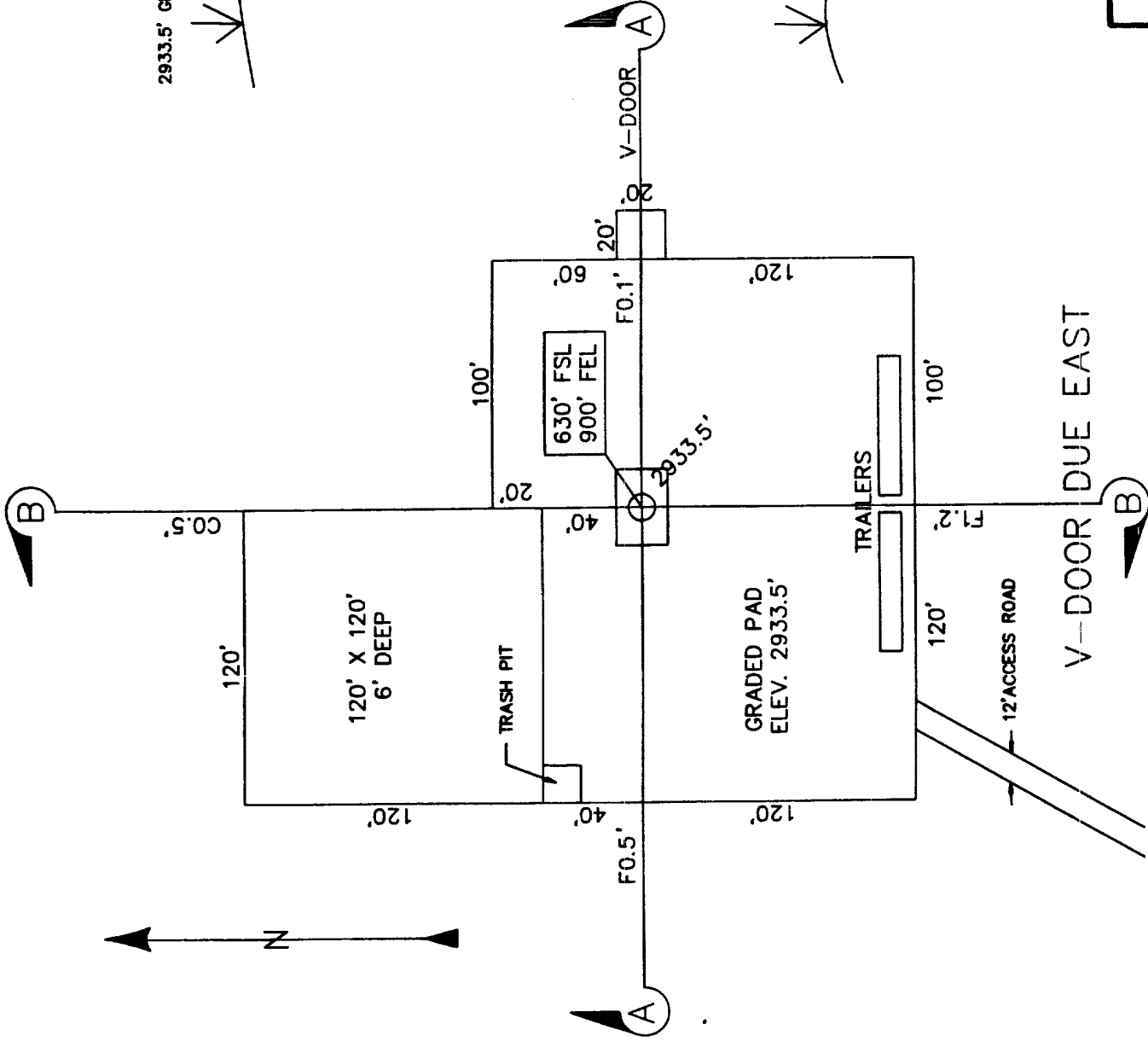
Completion operations: perforate, stimulate, and production test the Williamson Sand interval based on electric logs and shows.

Contact W. F. Burchard at 915/688-7892 or Bob Grady at 915/688-7887 with any questions concerning this eight-point plan.

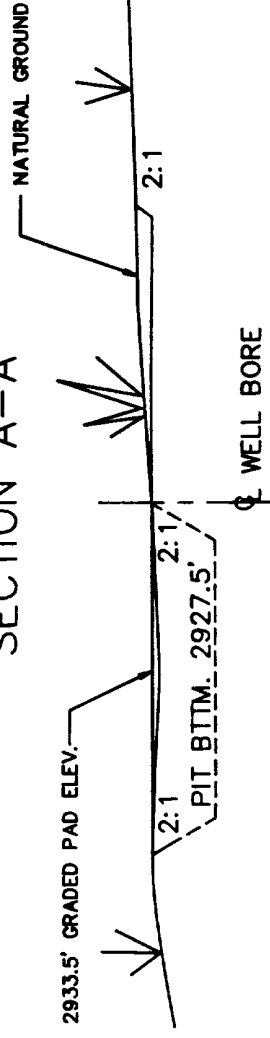
  
W. F. Burchard





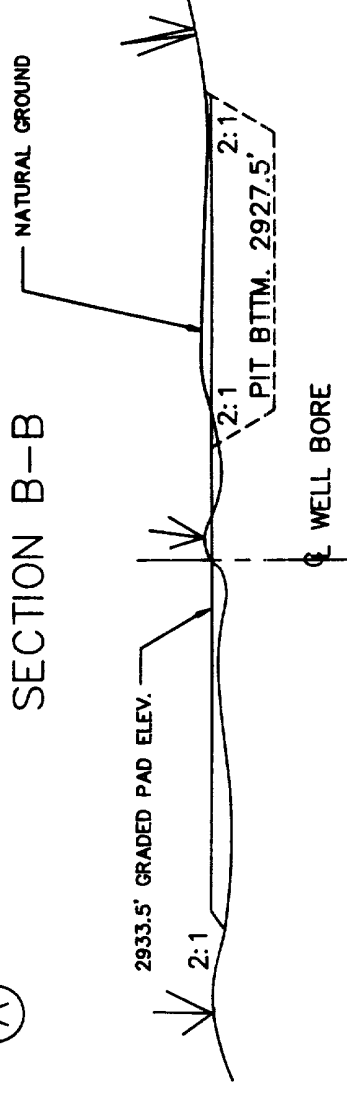


SECTION A-A



NTS  
SCALES  
1"=50'

SECTION B-B



V-DOOR DUE EAST

EXHIBIT "B"

V-DOOR DUE EAST

SOSA FEDERAL #2 SEC. 15, T26S, R29E		EDDY CO., N.M.		BRUSHY DRAW FLD.	
BRUSHY DRAW FLD.		EDDY CO., N.M.		BRUSHY DRAW FLD.	
DRAWN RSM	DESIGNED RSM	REVIEWED RSM	APPROVED RSM	DATE 2-7-89	FILE NO. W-B-2018
SOSA FEDERAL #2 SEC. 15, T26S, R29E		EDDY CO., N.M.		BRUSHY DRAW FLD.	
BRUSHY DRAW FLD.		EDDY CO., N.M.		BRUSHY DRAW FLD.	

PLAN VIEW  
SCALE: 1"=50'