

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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
 J.C. Williamson ✓

3. ADDRESS OF OPERATOR
 P.O. Box 16 Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface 660' FSL & ^{330'} 660' FEL
 At proposed prod. zone same
ut. p

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 13 miles NE of Carlsbad

10. 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
 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 2000'

19. PROPOSED DEPTH
 6200'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 3287.6 3285.9' GR

22. APPROX. DATE WORK WILL START*
 July 10, 1990

5. LEASE DESIGNATION AND SERIAL NO.
 NM-0556290

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 Canter Federal

9. WELL NO.
 5

10. FIELD AND POOL, OR WILDCAT
 Wildcat Delaware

11. SEC. T. R. M., OR BLK. AND SURVEY OR AREA
 Sec. 9-20S-29E

12. COUNTY OR PARISH
 Eddy

13. STATE
 New Mexico

PROPOSED CASING AND CEMENTING PROGRAM

Capitan Controlled Water Basin

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
20"	16"	65#	250'	250 sx circulate <i>WITNESS</i>
14-3/4"	11-3/4"	47#	1200'	600 sx circulate
11"	8-5/8"	15.5# 32.0#	2900' 3000'	1000 sx tie back
7-7/8"	5-1/2"	15.5# <i>Adm</i>	6200' <i>Adm</i>	600' above pay

Post ID-1
 8-10-90
 New Loc & API

RECEIVED
 JUN 14 10 42 AM '90
 OIL & GAS
 AREA

APPROVAL SUBJECT TO
 GENERAL REQUIREMENTS AND
 SPECIAL STIPULATIONS
 ATTACHED

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. SIGNED *Richard L. Adams* TITLE Production DATE May 29, 1990

(This space for Federal or State office use)

PERMIT NO. Orig. Signed by Richard L. Adams APPROVAL DATE _____

APPROVED BY _____ TITLE APPROVED BY DATE 7-27-90

CONDITIONS OF APPROVAL, IF ANY:

N.O.S.: 616190

Submit to Appropriate District Office
 State Leases - 4 copies
 Fee Leases - 3 copies

State of New Mexico
 Energy, Minerals and Natural Resources Department

Form C-102
 Revised 1-1-89

RECEIVED

OIL CONSERVATION DIVISION

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

JUN 14 10 42 AM '90

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

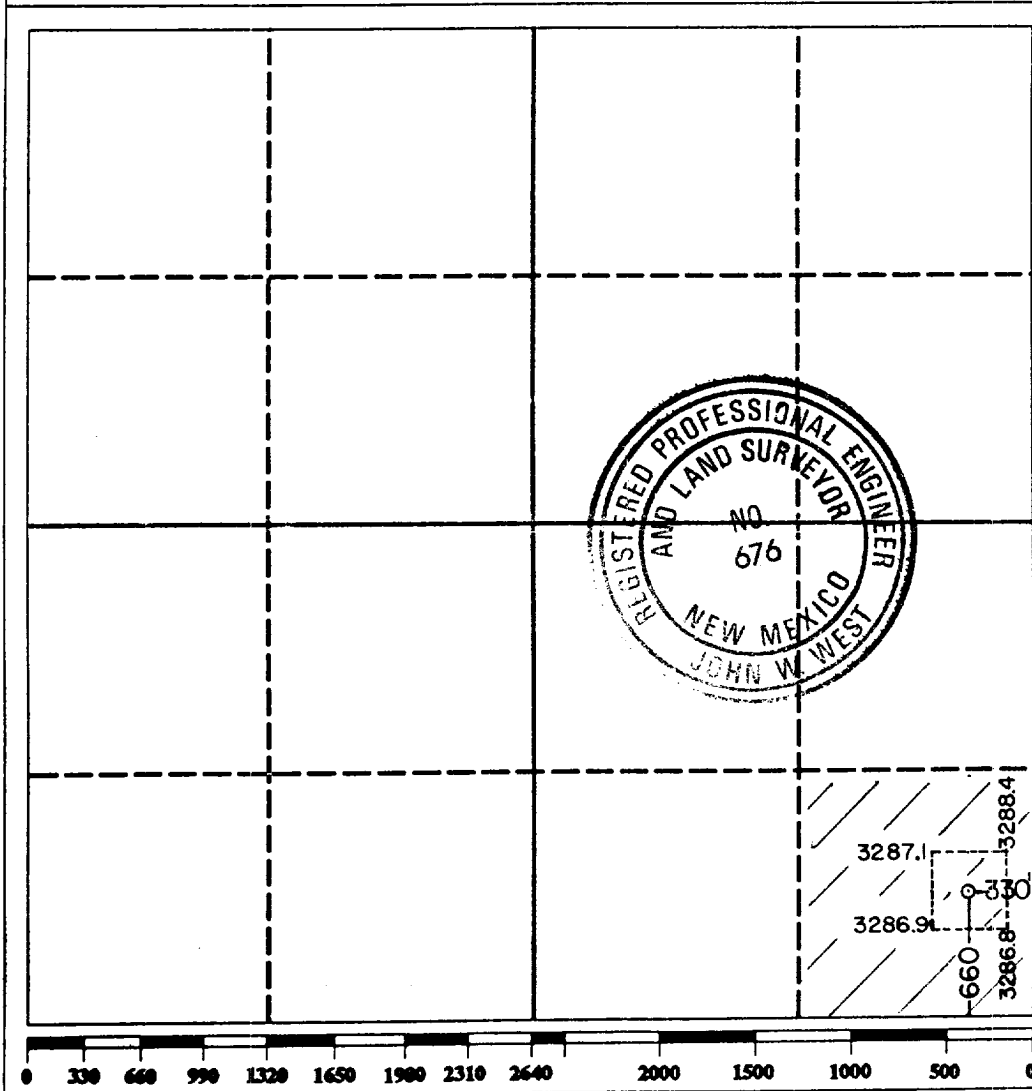
DISTRICT II
 P.O. Drawer DD, Artesia, NM 88210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT
 All Distances must be from the outer boundaries of the section

Operator J. C. WILLIAMSON			Lease Canter Federal			Well No. 5		
Unit Letter P	Section 9	Township 20 South	Range 29 East	County Eddy		NMPM		
Actual Footage Location of Well: 660 feet from the South line and 330 feet from the East line								
Ground level Elev. 3287.6	Producing Formation Delaware			Pool Wildcat		Dedicated Acreage: 40 Acres		

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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 N/A
 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: *Jan Pfister*
 Printed Name: Jan Pfister
 Position: Production
 Company: J.C. Williamson
 Date: 06/13/90

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: June 6, 1990
 Signature & Seal of Professional Surveyor: *John W. West*
 Certificate No. JOHN W. WEST, 676
 RONALD J. EIDSON, 3239

SUPPLEMENTAL DRILLING DAT

J. C. WILLIAMSON
CANTER FEDERAL # 5

1. SURFACE FORMATION: Quaternary Alluvium

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	250'
Tansill	1150'
Yates	1400'
Goat Seep Reef	1650'
T/Delaware Sand series	3350'
T/Lower Delaware	5600'
T/Bone Springs Lime	5950'
T/First Bone Springs sand	6250'

3. ANTICIPATED POSSIBLE WATER AND HYDROCARBON BEARING ZONES:

Fresh Water	above 200'
Delaware (oil)	3350' - 5950'
Bone Springs	5950' - 6500'

4. PROPOSED CASING AND CEMENTING PROGRAM:

Casing program is shown on Form 9-331 C.

A 20" hole for surface casing will be drilled to a depth below fresh water zones to a depth of 250'. 16" surface casing will be run to 250', below all fresh water zones and will be cemented to the surface with 250 sacks of Class "C" cement or sufficient cement to circulate this well to the surface.

A 14-3/4" hole will be drilled to 1200', through the salt section, with 11-3/4" casing to be set in this hole and cement circulated to the surface using 600 sx more or less.

8-5/8" casing will be run and cemented at 2900 feet, prior to entering delaware section and will be cemented with 500 sacks of Class "C" cement, or sufficient cement to bring cement back up to tie back to 11-3/4" casing.

5-1/2" casing will be run to total depth and will be cemented at a total depth if significant shows are encountered in the Bone Springs formation, or in the Delaware formation if significant shows are encountered in the Delaware sand series.

5. PRESSURE CONTROL EQUIPMENT:

Pressure control equipment will consist of a 3000# double ram hydraulically controled blow out preventer and a 3000# choke manifold.

6. CIRCULATING MEDIUM:

The circulating medium will be fresh water to 250' and produced salt water down to 1200 feet and fresh water down to 3100' if possible, and brine water and produced brine water will be used below 3100'.

7. AUXILARY EQUIPMENT:

Not Applicable.

8. TESTING, LOGGING AND CORING PROGRAM:

Formation testing will be made by conventional drill stem test; however none are anticipated.

It is planned that a Compensated Neutron-density gamma ray and gamma ray dual laterolog will be run when total depth is reached, with a backup computer analysis utilizing these logs.

No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE GAS:

None anticipated.

10. ANTICIPATED STARTING DATE:

It is planned that operations will commence on July 10, 1990 or as soon as the application is approved.

SURFACE USE AND OPERATIONS PLAN

FOR

J. C. WILLIAMSON
CANTER FEDERAL # 5
660' FSL & 660' FEL Sec. 9-20S-29E
EDDY COUNTY, NEW MEXICO

LOCATED: 13 air miles Northeast of Carlsbad, New Mexico

FEDERAL LEASE NUMBER: NM 0556290

LEASE ISSUED: March 1, 1965

RECORD LESSEE: J.C. Williamson, et al

ACRES IN LEASE: 960

SURFACE OWNERSHIP: Federal

POOL: Wildcat. Statewide Rules.

ATTACHMENTS:

- A. General Road Map
- B. Plat Showing existing well and existing roads
- C. Lease Plat
- D. Drilling Rig Layout
- E. BOP Diagram

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a road map showing the location of the proposed well. Close access to the location will be gained by using an existing road.
- B. Exhibit "B" is a plat showing existing roads in the vicinity of a well site. Existing roads are shown by a double black line.
- C. The road east of the location is a well-improved road and will not need to be graded or be improved in any manner.

2. PLANNED ACCESS ROAD:

400 feet of new road will be needed.

- A. SURFACING MATERIAL: Surfacing material should be needed for the prepared location. Existing access 4" caliche, watered and compacted will be used in those areas of the road where water might stand during a rain storm.
- B. MAXIMUM GRADE: One-half Percent.
- C. TURNOUTS: None required.
- D. DRAINAGE DESIGN: No new road will be needed.
- E. CULVERTS: None required.
- F. CUTS AND FILLS None necessary.
- G. GATES AND CATTLE GUARD: No fence will need to be cut in conjunction with drilling operations so no cattleguard will be needed.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells in the area are shown on Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. There are no existing facilities on this drill site that may be used for production facilities for this well, but usable facilities are located at the Canter Federal #1 location.
- B. If production is encountered, the production facilities at the Canter Federal #1 well will be used.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. Fresh water necessary for drilling will be purchased and hauled to the well site over existing and proposed roads, brine water will be hauled for make up water of the 11" and 7-7/8" hole. If a pumped fresh water source is available at the time of drilling it will come from the vicinity of the Conoco "Tuesday Fed. #1-A" located in the SW/4 NW/4 of Section 3-20S-29E Eddy Co., NM, with a 3" fasline style flowline to be laid down existing roadways leading to the location.

6. SOURCE OF CONSTRUCTION MATERIALS:

Material needed for the location improvement will be obtained from an approved caliche pit located 6/10 of one mile north of the location along the main northwest-southeast road in the area.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of the drilling pit.
- B. Drilling fluid will be allowed to evaporate in the drilling pit until the pit is dry.
- C. Water produced during testing of this well will be disposed of in the drilling pit. Oil produced during test 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 buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit "D"
- F. All trash and debris will be buried or removed from the well site within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None Required.

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, mud pit, trash pit, and the location of major rig components.
- B. Only minor leveling of the well site will be required, No significant cut and fill will be necessary.
- C. The pad and pit area has been staked and flagged.

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. Pit material and drill cuttings, when dried out will be pushed into a pit located beside the location and covered w/3" of top soil and the location cleaned of all trash, junk and all material buried so as to leave the well site in as an aesthetically pleasing condition as possible.

- B. Any unguarded pits containing fluids will be capped until they are filled.
- C. After abandonment, all equipment, trash and junk will be removed or buried and the location cleaned. Any special abandonment rehabilitation and/or special revegetation requirements of the surface management agency will be complied with and accomplished as expeditiously as possible. No location will be reclaimed and reseeded prior to well abandonment, except as discussed above.

11. OTHER INFORMATION:

- A. TOPOGRAPHY: The land surface is relatively level. Regional slope is to the southwest.
- B. SOIL: The top soil at the well site is a gravelly, loamy sand.
- C. FLORA AND FAUNA: The vegetative cover is sparse and consists of mesquite, grease wood, yucca, weeds and range grasses, wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.
- D. PONDS AND STREAMS: The Pecos River is approximately seven miles West of the proposed well site.
- E. RESIDENCE AND OTHER STRUCTURES: There are no occupied dwellings or operating windmills within one mile of proposed well site.
- F. ARCHAEOLOGICAL, HISTORICAL, AND OTHER CULTURAL SITES: None observed in the area.
- G. LAND USE: Grazing and hunting in season.
- H. SURFACE OWNERSHIP: Federal.

12. OPERATOR'S REPRESENTATIVE:

Representative responsible for assuring compliance with the approved Surface Use Plan is:

J. C. Williamson
890 One First City Center
Midland, Texas 79701
Attention: George Kingrea
Office Phone: 915-682-1797

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 exist; that the statements made in the 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 J. C. Williamson and its contractors and subcontractors in conformity with this plan and the term and conditions under which it is approved.

May 29, 1990

DATE


J. C. WILLIAMSON, OPERATOR

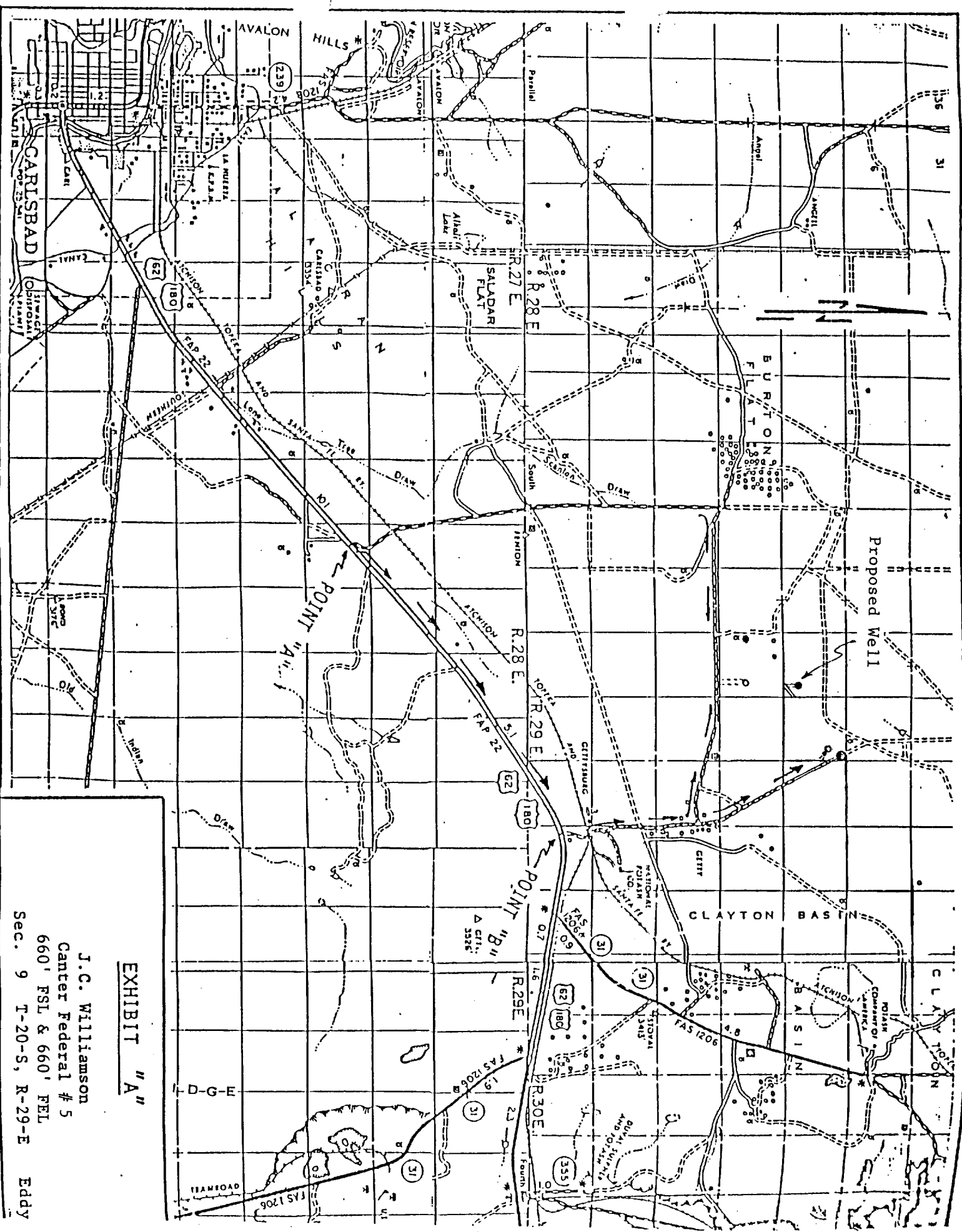
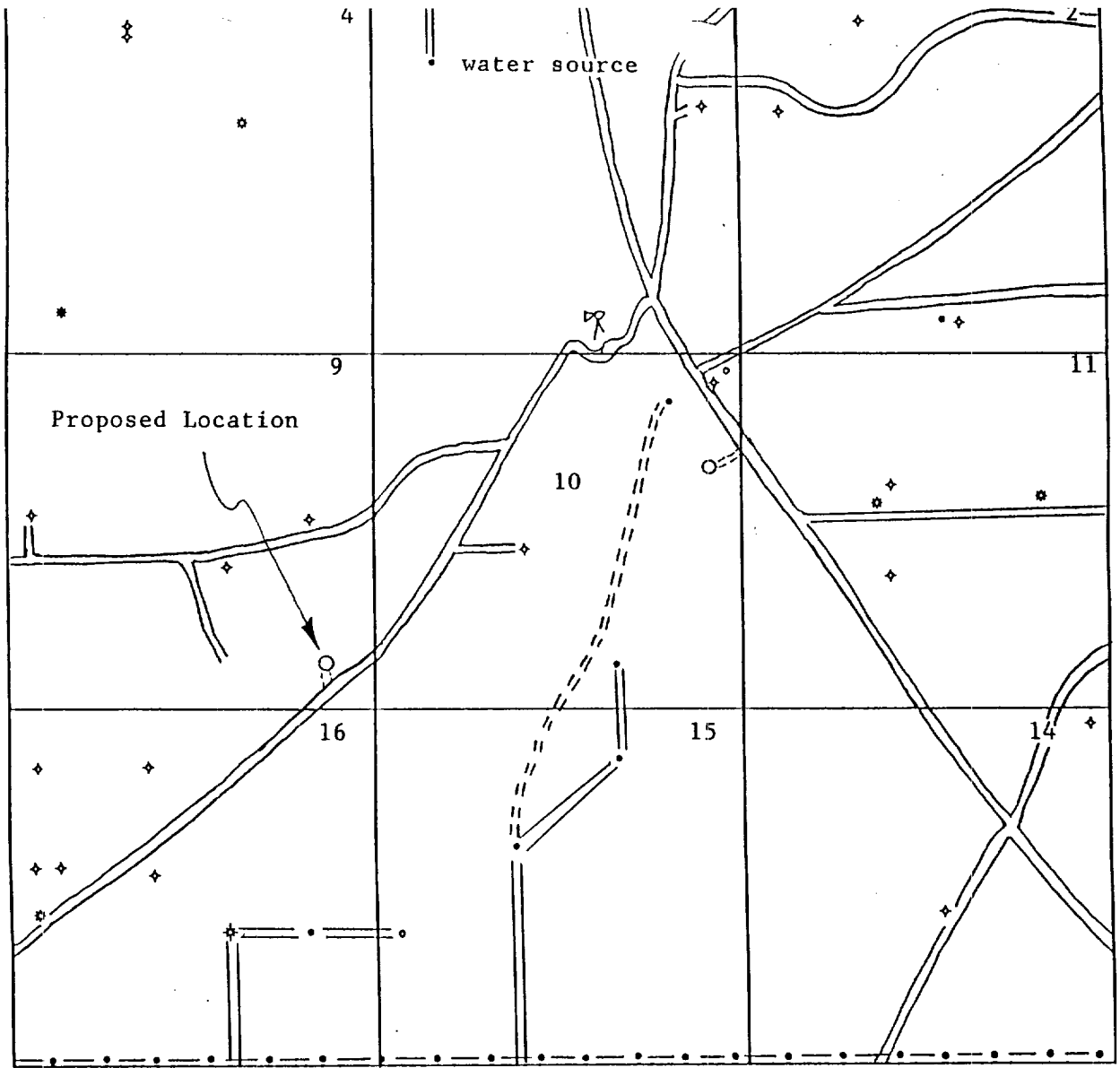


EXHIBIT "A"

J.C. Williamson
 Canter Federal # 5
 660' FSL & 660' FEL
 Sec. 9 T-20-S, R-29-E Eddy Co.



T-20-S R-29-E

LEGEND:

- Proposed Well Location
- Oil Well ☼ Gas Well
- ⊕ Plugged Well ○ Drilling Well
- ==== Existing Roads
- ===== Two track Ranch Road
- xxxxxxx- Barbed Wire Fence
- _____ Lease Lines
- Electric Line
- ⊕ Windmill

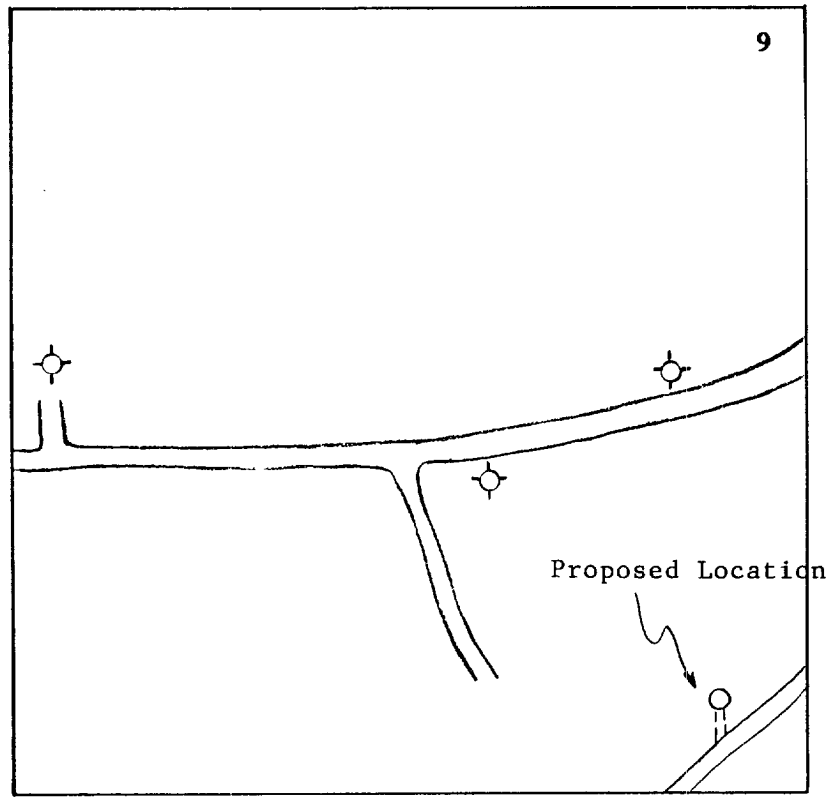
SCALE 2" = 1 MILE

EXHIBIT "B"

J.C. Williamson
Canter Federal # 5

Sec. 9 -20S-29E
Eddy Co., NM

SCALE 4" = 1 MILE



T-20-S R-29-E

EXHIBIT "C"

J.C. Williamson
Canter Federal #5
Sec.9-20S-29E Eddy Co.,NM

LEGEND

- Proposed Well Location
- Oil Well ⚙ Gas Well
- ⊕ Plugged Well ○ Drilling Well
- ==== Existing Roads
- Proposed Road
- x-x-x-x-x-x- Barbed Wire Fence
- _____ Lease Lines

-- 200' --

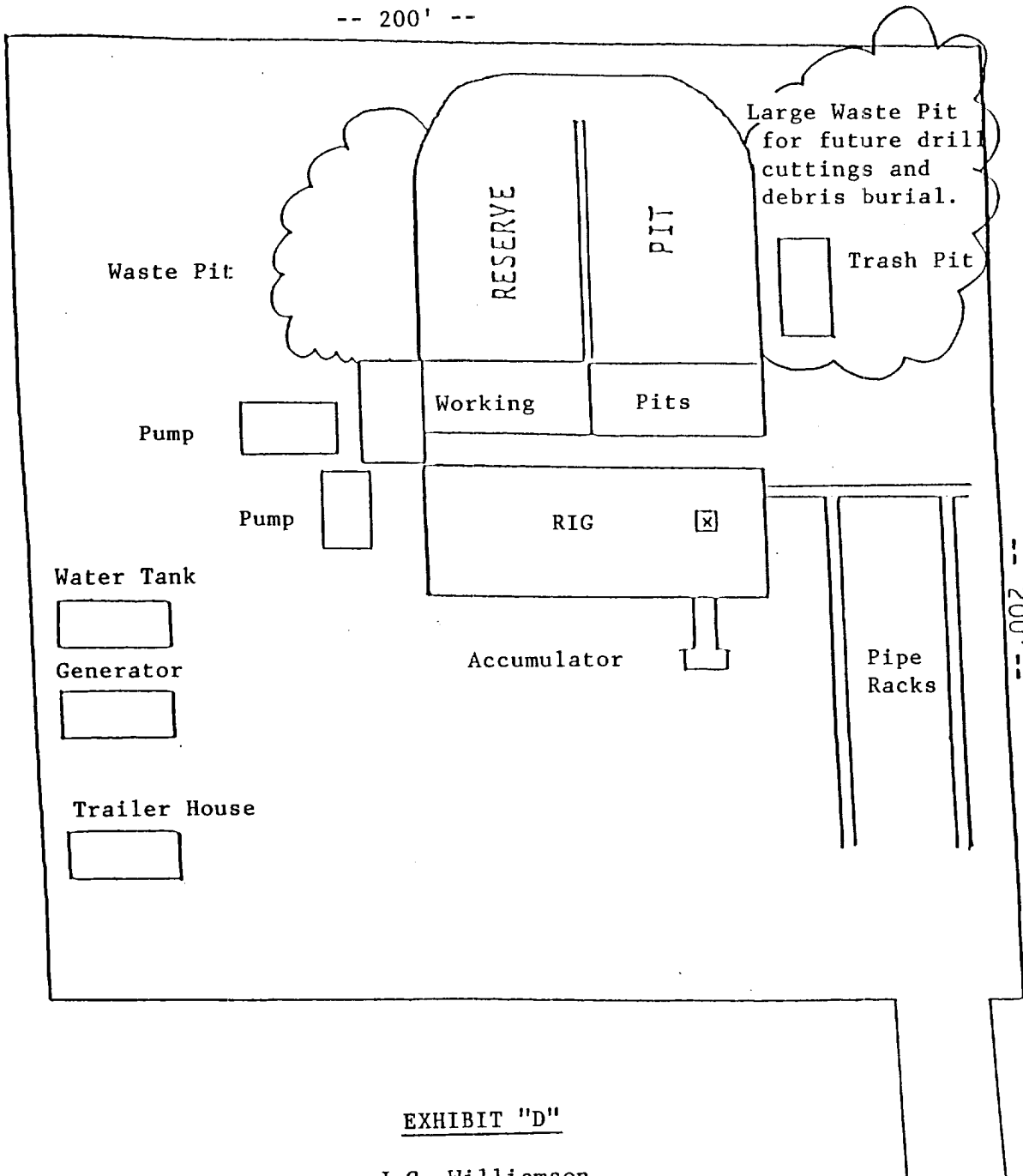


EXHIBIT "D"

J.C. Williamson
Canter Federal # 5
Sec. 9 -20S-29E
Eddy Co., NM

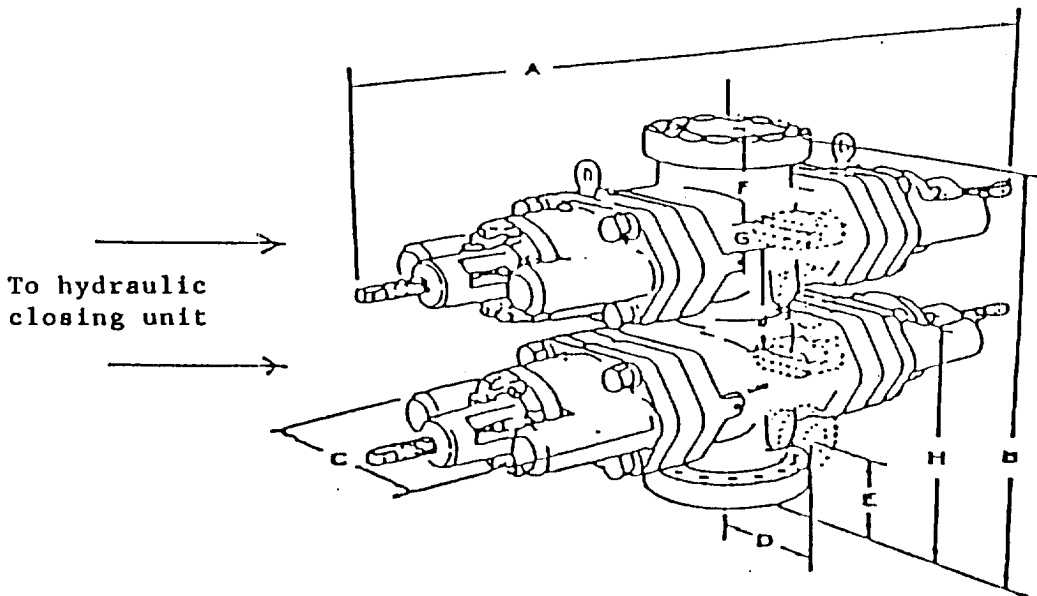
EXHIBIT "E"

BOP Diagram

A flanger type Bell lead will be used on this well. After the 11-3/4" casing has been set and cemented, an 11" double ram BOP will be put on and kept in service for the life of this well.

After 8-5/8" intermediate casing has been set and cement placed around this pipe, a bolted flange type well head will be put on this well.

And then an 11" double ram BOP, as shown below will be put on the hole. This blowout preventer will be connected to a hydraulically controlled closing unit. The pressure rating on this BOP is 3000#, and will have blank and 5-1/2" pipe.



J.C. Williamson
Canter Federal # 5

Sec. 9 , T-20-S, R-29-E
Eddy County, New Mexico