

Form 3100  
(August 1999)

N. M. Oil Cons. Division  
811 S. 1ST ST.  
ARTESIA, NM 88210-2834

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-11038
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator <u>Enwest</u> <u>LIMARK CORP 152527</u>		7. If Unit or CA Agreement, Name and No. <u>27071</u>
3a. Address P.O. Box 31 Pecos, TX 79772	3b. Phone No. (include area code) (915) 445-4927	8. Lease Name and Well No. Diverse Federal, Well No. 4
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1650' FNL & 660' FEL At proposed prod. zone Same <u>Unit H</u>		9. API Well No. <u>30-015-31393</u>
14. Distance in miles and direction from nearest town or post office* 37 miles SE of Carlsbad, NM		10. Field and Pool, or Exploratory Brushy Draw Delaware
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'		11. Sec., T., R., M., or Blk. and Survey or Area Sec. <u>23</u> T-26S-R29E
16. No. of Acres in lease 1240	17. Spacing Unit dedicated to this well 40	12. County or Parish Eddy
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 660' P/A 1206'	19. Proposed Depth 3200'	13. State NM
20. BLM/BIA Bond No. on file NM-2749	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 2946' GL	22. Approximate date work will start* 10/15/00
23. Estimated duration 3 weeks	24. Attachments <b>CARLSBAD CONTROLLED WATER BASIN</b>	

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <u>George R. Smith</u>	Name (Printed/Typed) George R. Smith	Date 08/22/00
Title Agent for: Enwest		
Approved by (Signature) <u>[Signature]</u>	Name (Printed/Typed) S/LARRY D. BRAY	Date [Date]
Title Assistant Field Manager, Lands And Minerals		
Office ROSWELL FIELD OFFICE		

APPROVED FOR 1 YEAR

Application approval does not warrant or certify 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, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

\*(Instructions on reverse)

Lease Responsibility Statement: ENWEST accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof.

George R. Smith

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

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-102  
Revised March 17, 1999

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code		Pool Name Brushy Draw Delaware	
Property Code		Property Name DIVERSE FEDERAL			Well Number 4
OGRID No.		Operator Name ENWEST			Elevation 2946.

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
H	23	26-S	29-E		1650	NORTH	660	EAST	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

Dedicated Acres 40	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

16					1650' 660' NM-11038	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  <i>George R. Smith</i> Signature George R. Smith, agent for: Printed Name Enwest Title Aug. 24, 2000 Date	
						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. AUGUST 19 2000 Date of Survey Signature and Seal of Professional Engineer 5412 REGISTERED LAND SURVEYOR NEW MEXICO NM PECS NO 5412	

**APPLICATION FOR DRILLING**  
**ENWEST**  
Diverse Federal, Well No. 4  
1650' FNL & 660' FEL, Sec. 23-T26S-R29E  
Eddy County, New Mexico  
Lease No.: NM-11038  
(Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, John R. Dorr dba Enwest, submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
2. The estimated tops of geologic markers are as follows:

Base of Rustler	400'
Top of Salt	2,400'
Base of Salt	2,900'
Delaware	3,110'
T. D. Max.	3,300'

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

Water: Surface water in the Triassic between 80' - 230'.

Oil: Possible in the Delaware below 3,110'

Gas: None expected.

4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8 "	24.0#	K-55	ST&C	850'	Circ. 400 sx "C" cement.
7 7/8"	5 1/2"	15.5#	K-55	ST&C	3200'	250 sx of C and additives

Drill out shoe and drill open hole: no casing, 50 - 100' +/- to the top of the Ramsey.

5. Proposed Control Equipment: See Exhibit "E":

BOP Program:.

A 10" 3000 psi wp Cameron Space Saver, double ram BOP, will be installed on the 8 5/8" casing. Casing and BOP will be tested before drilling out with 7 7/8". The BOP will be used as a 2000 psi system and will be tested daily.

6. Mud Program:.	MUD WEIGHT	VIS.	W/L CONTROL	
0' - 2300':	Fresh water mud	9.3 ppg	33	No W/L control
2300' - 3100':	Brine mud:	10.0 ppg	32	No W/L control
3100' - 3200':	No mud: Cable tool or air drill.			No W/L control

7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, pit level monitor, flow sensors and stabbing valve.

8. Testing, Logging, and Coring Program:

Drill Stem Tests: None unless warranted.

Logging: T.D. to 850': Sample logs.

Coring: None planned.

**ENWEST**

Diverse Federal, Well No. 4

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9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated BHP = 1280 psi (evac. hole) with temperature of 92<sup>o</sup>.
10. H<sub>2</sub>S: None expected. None in previously drilled wells.
11. Anticipated starting date: Oct 15, 2000.  
Anticipated completion of drilling operations: Approx. 3 weeks.

## **MULTI POINT SURFACE USE AND OPERATIONS PLAN**

### **ENWEST**

Diverse Federal, Well No. 4  
1650' FNL & 660' FEL, Sec. 23-T26S-R29E  
Eddy County, New Mexico  
Lease No.: NM-11038  
(Development Well)

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, to be followed in rehabilitating the surface environmental effects associated with the operations.

#### **1. EXISTING ROADS:**

- A. Exhibit "B" is a portion of a USGS/BLM Topo map showing the location of the proposed well as staked. The well site location is approximately 37 road miles southeast of Carlsbad, New Mexico. Traveling south from Carlsbad there will be approximately 30 miles of paved highway and 6.9 miles of gravel county road.
- B. Directions: Travel south from Carlsbad, NM on U.S. Highway 285 for approximately 27 miles; turn east, south of MM #4, onto County Rd. #725. Continue east for approximately 3.8 miles to a fork in the road. Turn southeast and continue on #725 for 4.9 miles to another fork in the road. Turn southeast on #725 for .8 mile to the start of the proposed access road staked on the south side of the county road on a P/A well site and will run south for approximately 800 feet to the southeast corner of the proposed well site.

#### **2. PLANNED ACCESS ROAD:**

- A. Length and Width: The proposed access road will be constructed to a width of 12 feet and will be approximately 800 feet in length. The proposed access road is color coded red on Exhibit "B".
- B. Construction: The existing access road will be constructed by grading and topping with compacted caliche and will be properly drained.
- C. Turnouts: None required.
- D. Culverts: None required.
- E. Cuts and Fills: None.
- F. Gates, Cattle guards: None required.
- G. Off Lease R/W: None required.

#### **3. LOCATION OF EXISTING WELLS:**

- A.. Existing wells within a two mile radius are shown on Exhibit "C".

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;**

- A. There are oil production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, gas production-process equipment will be installed on the drilling pad..A 2 3/8" 1,000 psi steel pipe flow line will be run north and east, parallel to access roads for 1300 feet to the Diverse Fed., No. 2 well site to an existing production flow line delivering to a tank battery in the NW4NW4 -Sec. 24-T26S-R29E.

**5. LOCATION AND TYPE OF WATER SUPPLY:**

- A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing access roads.

**6. SOURCE OF CONSTRUCTION MATERIALS:**

- A. Caliche for surfacing the proposed access road and well site pad will be obtained on location, if available, or from an approved Federal pit in the NW¼NW¼ of Section 24-T26S-R29E. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

**7. METHODS OF HANDLING WASTE DISPOSAL:**

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock and wildlife from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering and will be removed for deposit in an approved sanitary land fill 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, reserve pits, and major rig components. The pad and pit area have been staked and flagged 400' X 400'.
- B. Mat Size: 140' X 200', plus 80' X 80' reserve pits. The pits will be on the north.
- C. Cut & Fill: There will be a 2 foot cut on the north with fill to the south.
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

**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 a condition as possible
- B. Any unguarded pits containing fluids will be fenced until they are filled. .
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to work after abandonment.

**11. OTHER INFORMATION:**

- A. Topography: The proposed well site and access road is located on the edge a south sloping hill 650 feet south of County Rd. #725. The location and vicinity has a southwesterly slope of 1.5% toward Red Bluff Lake from an elevation of 2946'.
- B. Soil: The topsoil at the well site is a yellowish-red calcareous loamy fine sand of the Pajarito-Dune land complex. There is a surface scatter of caliche gravel.
- C. Flora and Fauna: The vegetation cover has a poor grass cover of three-awn, sand and spike dropseed, ring muhly and other miscellaneous native grasses along with plants of mesquite, yucca, creosote, broomweed, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: The Pecos River and Red Bluff Reservoir are 2.2 - 3 mile to the west and southwest of the location.
- E. Residences and Other Structures: None, but existing oil field facilities.
- F. Land Use: Cattle grazing.

11. OTHER INFORMATION; cont.....

- G.. Surface Ownership: The proposed well site and access road are on Federal surface.
- H. There is no evidence of archaeological, historical or cultural sites on the proposed 400' X 400' location or access road and pipeline R/W. An archaeological survey is being conducted by Archaeological Survey Consultants, P. O. Box D, Roswell, NM 88202, and their report will be submitted to the appropriate government agencies.

12. OPERATOR'S REPRESENTATIVE:

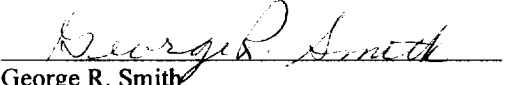
- A. The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

John R. Dorr  
Enwest  
P. O. Box 31  
Pecos, TX 79772  
Office Phone: (915) 445-4927

13. CERTIFICATION:

I hereby certify that I 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 John R. Dorr dba Enwest and his contractors and 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.

August 22, 2000

  
George R. Smith  
Agent for: Enwest



T  
E  
X  
A

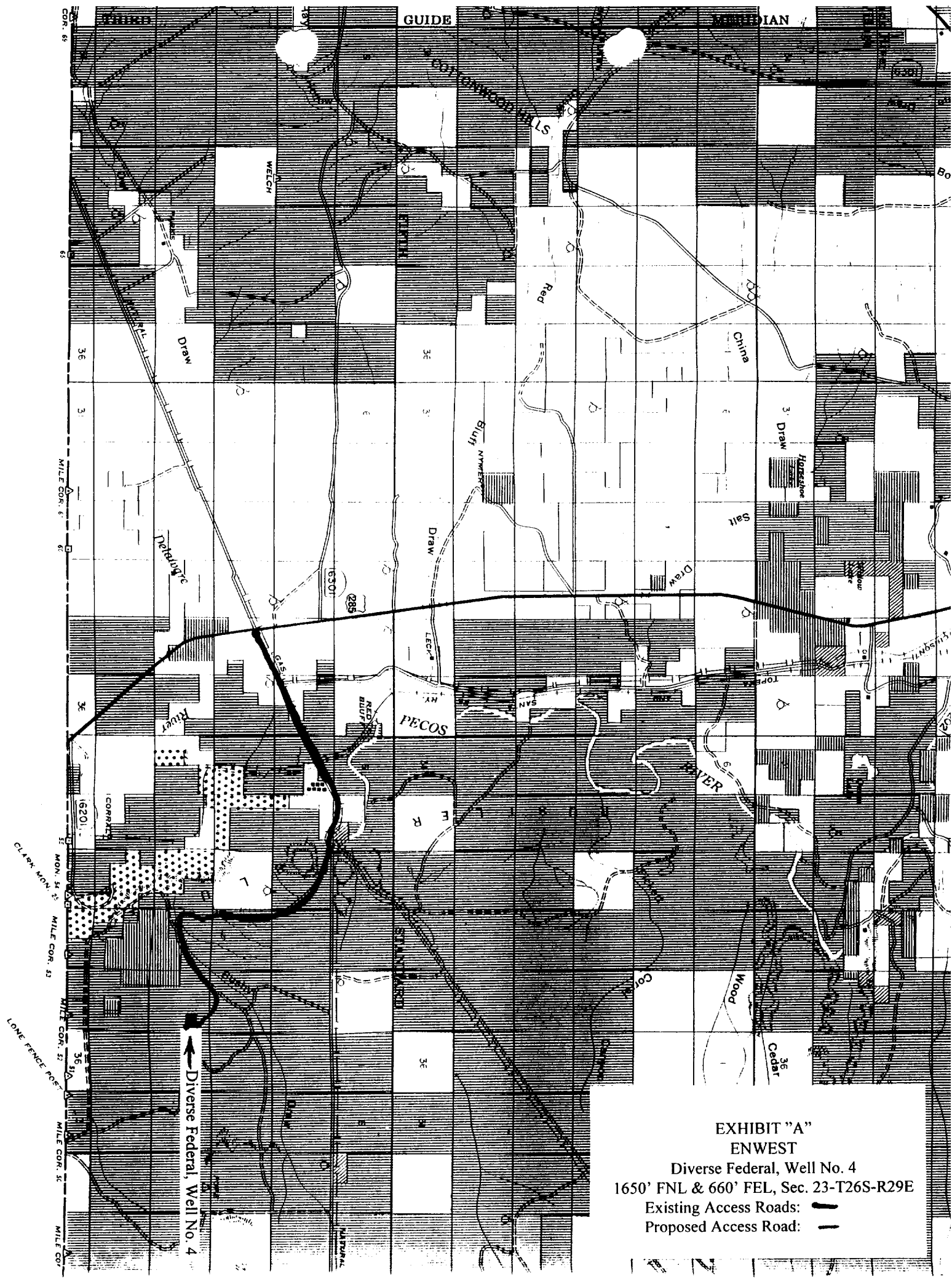
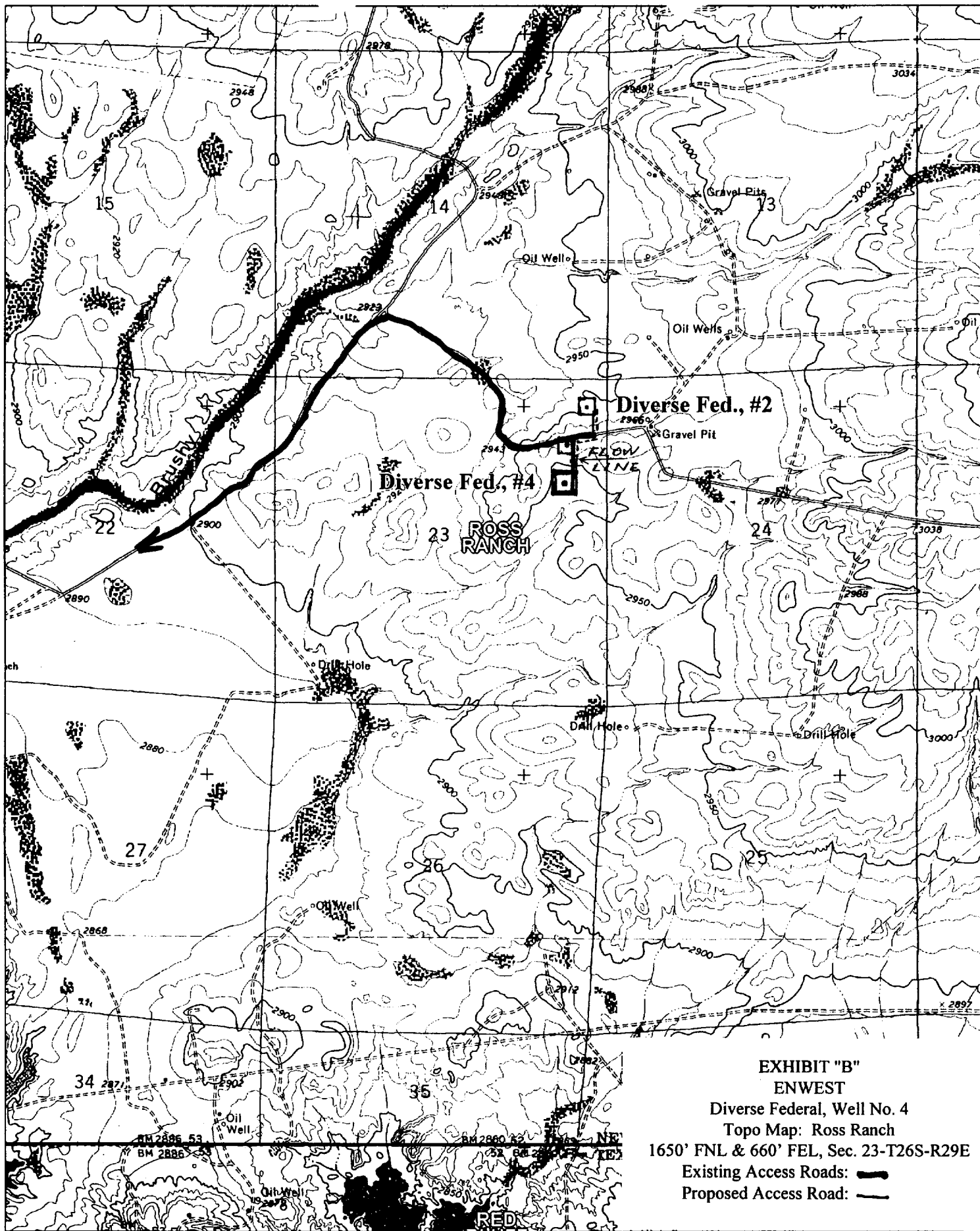


EXHIBIT "A"  
ENWEST  
Diverse Federal, Well No. 4  
1650' FNL & 660' FEL, Sec. 23-T26S-R29E  
Existing Access Roads: —  
Proposed Access Road: —



ULBERSON, East

REEVES, North

R-29-E LOVING COUNTY

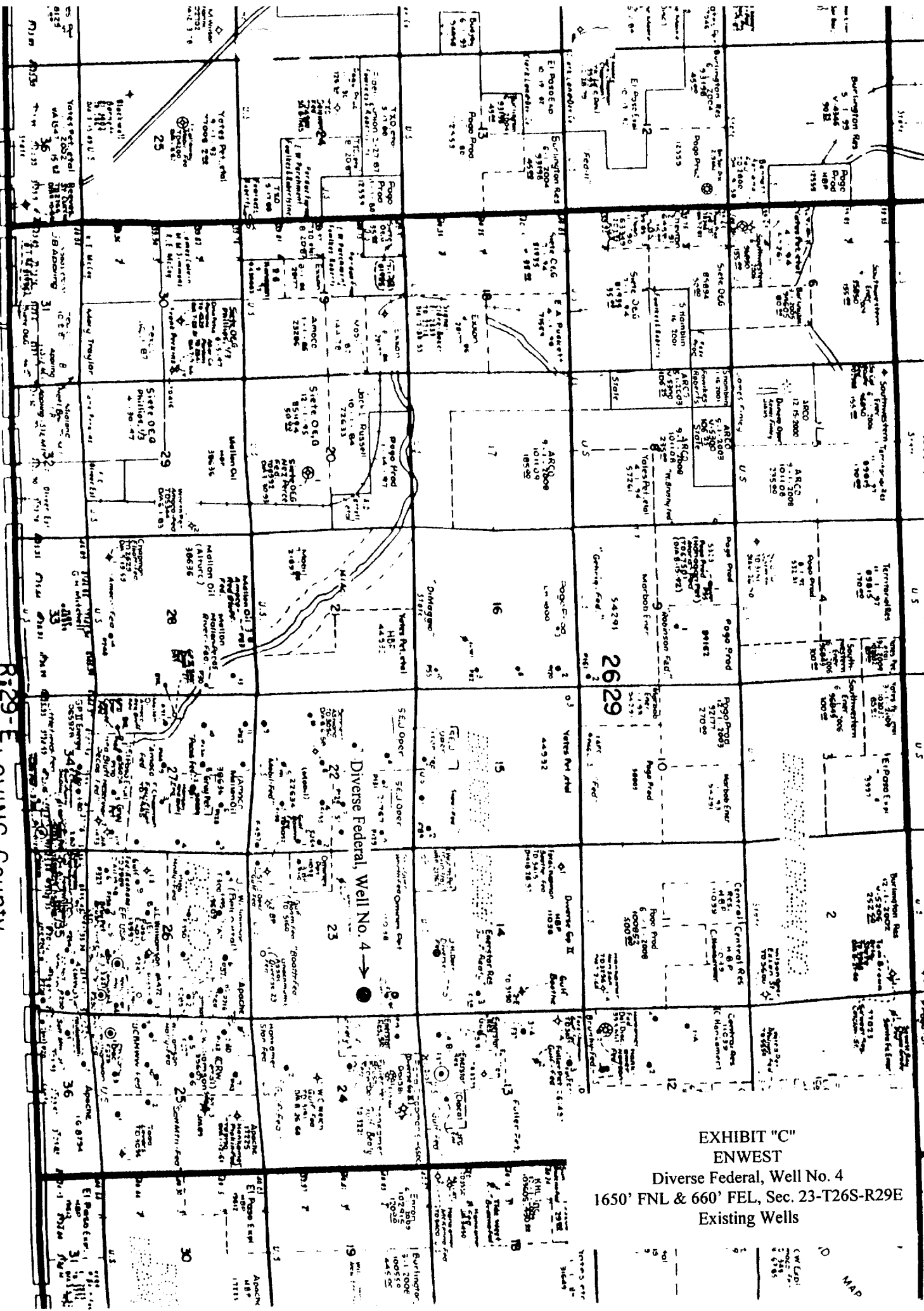
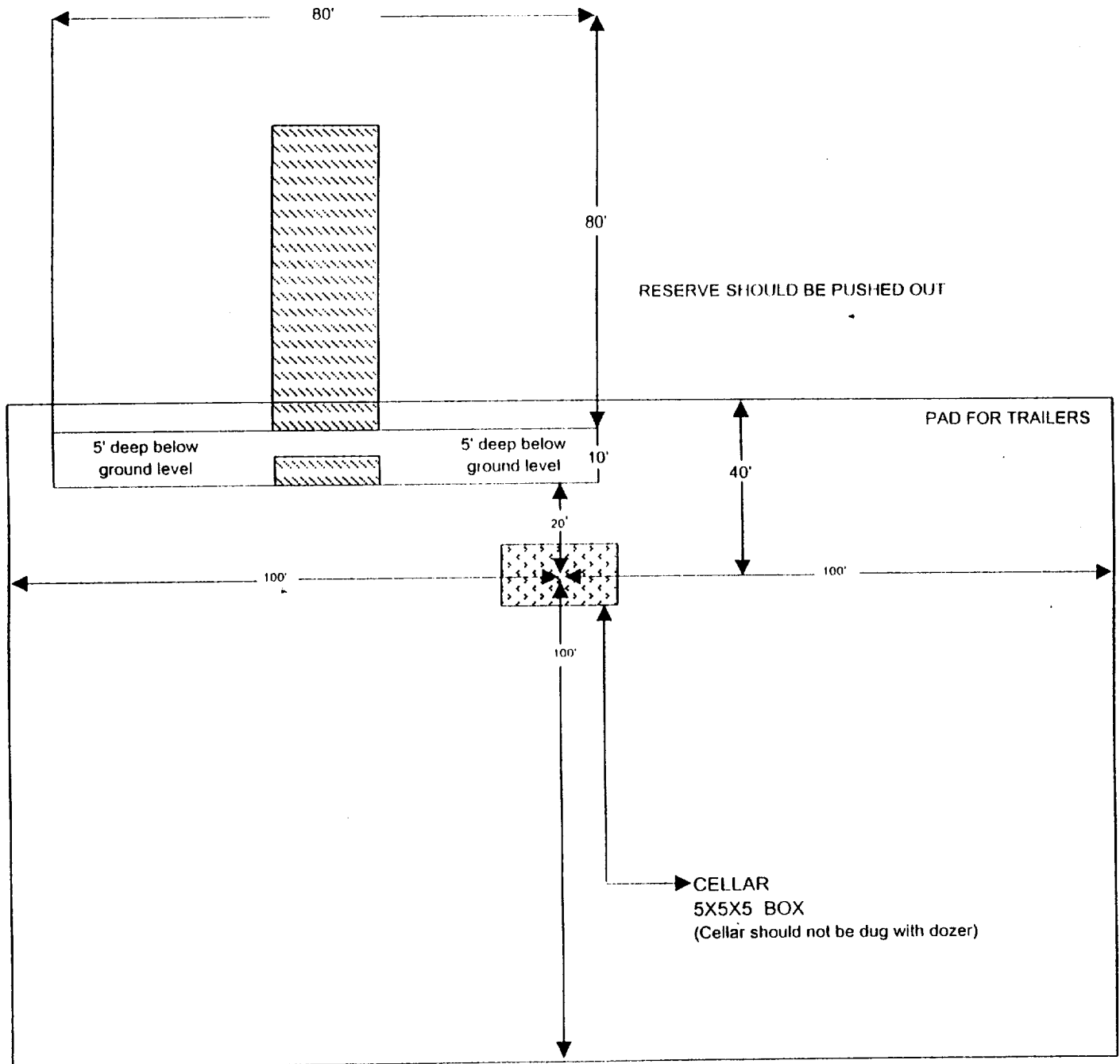


EXHIBIT "C"  
ENWEST

Diverse Federal, Well No. 4  
1650' FNL & 660' FEL, Sec. 23-T26S-R29E  
Existing Wells

CapStar Drilling, Inc.  
LOCATION SPECIFICATIONS



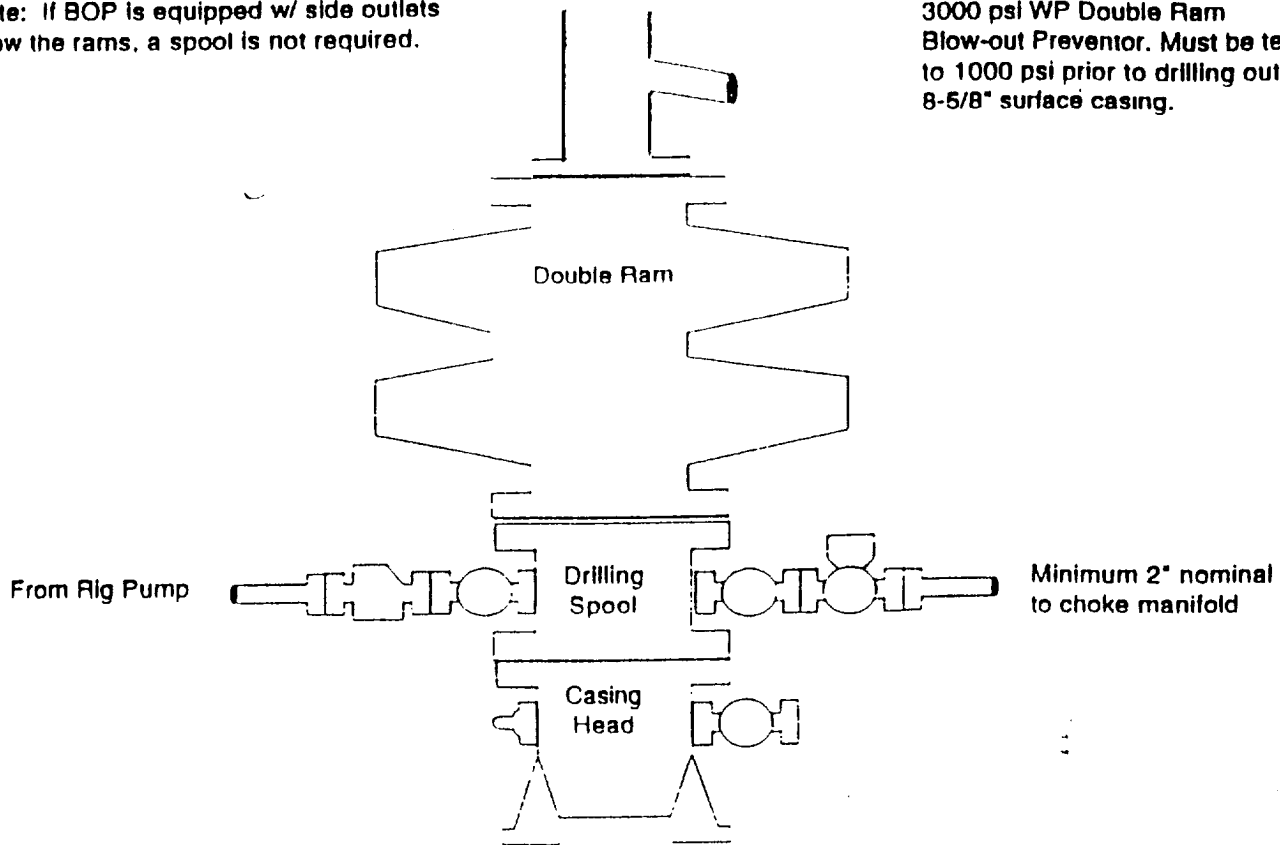
Location Specs

EXHIBIT "D"  
ENWEST  
Diverse Federal, Well No. 4  
Pad & Pit Layout

## BOP Schematic

\*Note: If BOP is equipped w/ side outlets below the rams, a spool is not required.

3000 psi WP Double Ram  
Blow-out Preventor. Must be tested  
to 1000 psi prior to drilling out  
8-5/8" surface casing.



## Choke Manifold Schematic

