

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK PLUG BACK	5. LEASE NUMBER NM-03017
1b. TYPE OF WELL GAS	6. IF INDIAN, ALL. OR TRIBE NAME
2. OPERATOR EL PASO NATURAL GAS CO. <i>Albuquerque, NM</i>	7. UNIT AGREEMENT NAME HUERFANO UNIT
3. ADDRESS & PHONE NO. OF OPERATOR P.O. BOX 4289 FARMINGTON, NM 87499 (505) 326-9700	8. FARM OR LEASE NAME
4. LOCATION OF WELL 1180' FSL; 1750' FEL	9. WELL NO. 234
14. DISTANCE IN MILES FROM NEAREST TOWN	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE.	11. SEC. T. R. M OR BLK. SEC. 07, T26N, R09W
16. ACRES IN LEASE	12. COUNTY SAN JUAN
17. ACRES ASSIGNED TO WELL 324.16	13. STATE NM
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. COMPL., OR APPLIED FOR ON THIS LEASE.	20. ROTARY OR CABLE TOOLS
21. ELEVATIONS (DF, FT, GR, ETC.) 6547' GL	22. APPROX. DATE WORK WILL START

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SEP 04 1990
OIL CON. DIV.
DIST. 3

23. PROPOSED CASING AND CEMENTING PROGRAM

*SEE OPERATIONS PLAN

24. AUTHORIZED BY: *Ken Townsend* (SHL)
REGULATORY AFFAIRS
DATE *8-3-90*

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

NOTE: THIS FORMAT IS ISSUED IN LIEU OF US BLM FORM 3160-3 (NO ADDITIONAL DIRT WORK WILL BE REQUIRED)

APPROVED AS AMENDED
AUG 24 1990
Ken Townsend
AREA MANAGER

Hold 5-10/1990

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

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

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

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

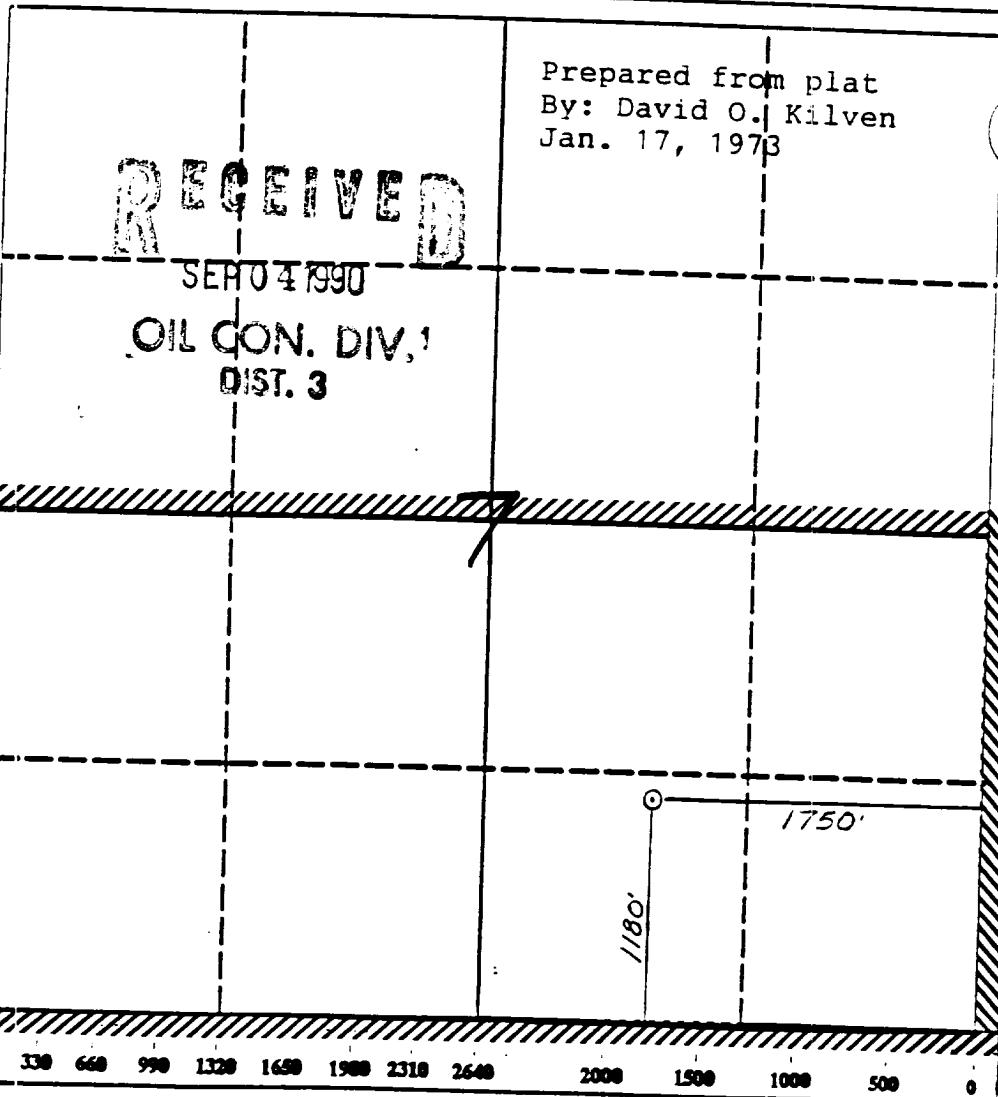
DISTRICT III
 1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <i>El Paso Natural Gas</i>		Lease (NM-03017)		Well No. 234
Unit Letter 0	Section 7	Township 26 North	Range 9 West	County San Juan
Actual Footage Location of Well: 1180 feet from the South line and 1750 feet from the East line				
Ground level Elev. 6547'	Producing Formation Fruitland Coal	Pool Basin	Dedicated Acreage: 324.16 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or highlighter 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 unitization
- 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, force-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



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 SEPT 4 1990
 OIL CON. DIV.
 DIST. 3

Prepared from plat
 By: David O. Kilven
 Jan. 17, 1973

OPERATOR CERTIFICATION

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

Signature
Peggy Bradfield

Printed Name
Peggy Bradfield

Position
Regulatory Affairs

Company
El Paso Natural Gas Co

Date
7-17-90

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
7-16-90

Signature of State Professional Surveyor
Neale C. Edwards

NEW MEXICO
 REGISTERED LAND SURVEYOR
 6857

Neale C. Edwards

HUERFANO UNIT #234
RECOMPLETION PROCEDURE
GALLUP PLUG AND ABANDONMENT

NO WORK IS TO BE PERFORMED OR EQUIPMENT TO BE LOCATED OFF APPROVED WELL PAD ✓

1. MOL and RU. ND wellhead. NU BOP. Load hole with water.
2. TOOH with 194 joints of 2 3/8" 4.7# K-55 tubing set @ 6054'
3. PU 4 1/2" casing scraper on 2 3/8" 4.7# J-55 EUE tubing and TIH to 6097'.
TOOH.
4. TIH. Establish a rate into the Gallup perforations. Spot a cement plug from 6097'-5633' with 55 sx of Class B neat cement (65 cf, 50% excess to cover 50' above the top of the Gallup). Pull up to 5633' and circulate the casing with 90 bbls of 9.0 PPG mud with a minimum viscosity of 50 sec/qt. TOOH. Tag cement top with wireline after 4 hours.
5. Perforate 4 squeeze holes at 3848'. Establish a rate into the perforations with water. Set a 4 1/2" cement retainer at 3748'. TIH with 2 3/8" tubing and sting into test position in cement retainer. Pressure test tubing to 1000 psi. Establish rate into perforations with water. Squeeze cement with 50 sx of Class B neat cement (59 cf, 100% excess to cover 50' above the top of the Cliff House). Sting out of cement retainer and spot 6 sx Class B neat cement on top of cement retainer (7cf, 81' in 4 1/2" casing) / TOOH.

RECOMPLETION PROCEDURE
HUERFANO UNIT #234

NO WORK IS TO BE PERFORMED OR EQUIPMENT TO BE LOCATED OFF APPROVED WELL PAD

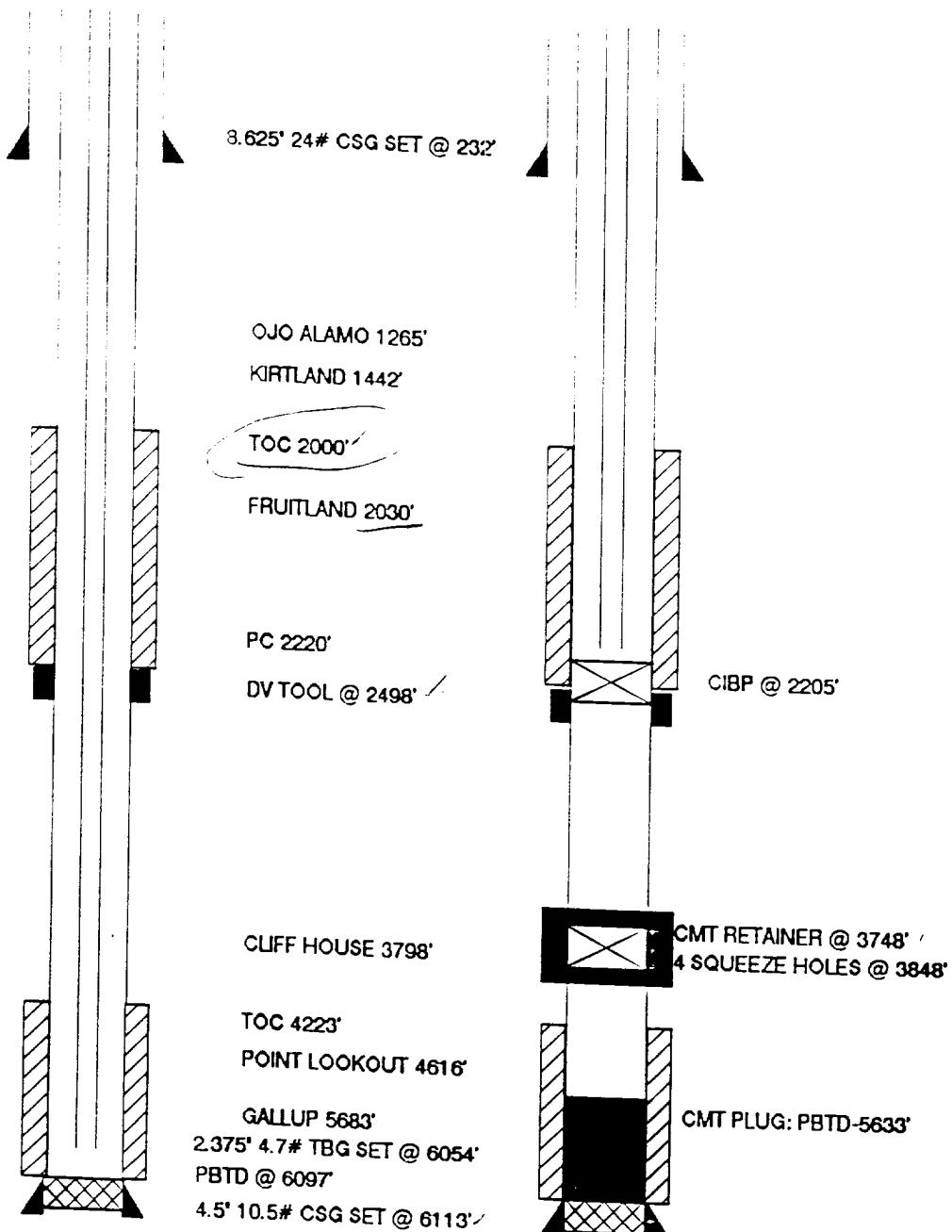
1. Load hole with water.
2. NU low pressure packoff.
3. Run logs. Pick perforations from log. TIH with 4-1/2" CIBP and set near 2205' to isolate the Pictured Cliffs. TOOH.
4. Pressure test casing to 1000 psi for 15 minutes.
4H Perforate at 21990' and attempt to circulate cement to the surface
5. Perforate across the coal.
6. TIH with tubing and swab wellbore dry. Check well for gas flow. Evaluate well overnight. Check well for buildup pressure and gas flow.
7. TIH with 1-1/2" tubing and clean out to CIBP.
8. Land 1 1/2" 2.9# EUE tubing with an expendable check on bottom, and a common pump seating nipple one joint off bottom. Land tubing. Swab well in. Record final 30, 45, and 60 minute gauges on morning report. ND BOP. NU tree. RD and release rig.
9. Evaluate well's performance for possible fracture stimulation. A fracture stimulation procedure will be provided if necessary.

HUERFANO UNIT #234

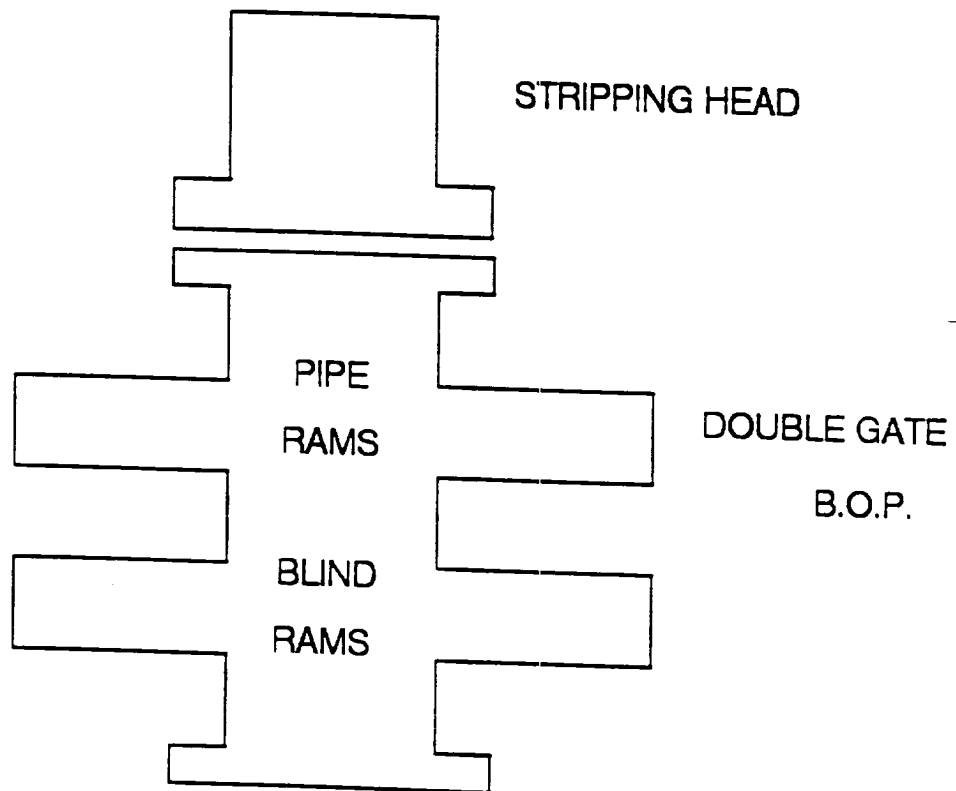
WELLBORE DIAGRAMS

BEFORE R/C

AFTER R/C



WORKOVER / RECOMPLETION B.O.P. SCHEMATIC



MINIMUM: 6" 2000 PSI DOUBLE GATE B.O.P.
MAXIMUM ANTICIPATED SHUT-IN WELLHEAD
PRESSURE IS LESS THAN 2000 PSI