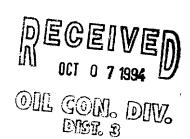
November 1983) (formerly 9-331C)

# UNITED STATES DEPARTMENT OF THE INTERIOR

(Other instructions on reverse side)

Budget Bureau No. 1004-0136 Expires August 31, 1985

•	DFPARTMENT	OF THE I	NTFR	IOR						
DEPARTMENT OF THE INTERIOR						5. LEASE DES	ignation	AND SERIAL NO.		
BUREAU OF LAND MANAGEMENT							7(	1 - 9	4-0012	
APPLICATIO	N FOR PERMIT 1	O DRILL, D	<b>EEPE</b>	N, OR P	LUG, B	ACK	6. IF INDIAN,			
1a. TIPE OF WORK							Jica	rilla_	Apache	
		DEEPEN [	_	PL	JG BAC	:K ∐	(. UNIT AGE	R TRIUMBI	AMB"	
b. TYPE OF WELL	AS		<b>a</b> i	NOLE (4	MULTIPI		S. PARM OR I	N	<u>/</u> A	
WELL WELL OTHER ZONE ZONE									15820 F	
2. NAME OF OPERATOR /33/82 EnRe Corporation (210) 826-0681						Cedar Canyon 22 G				
3. ADDRESS OF OPERATOR			700	~~				#	1	
P.O. Box 6027, San Antonio, Tx. 78209						-	10. PIBLO AMI			
	eport location clearly and	in accordance wit	h any 8	tate requiremen	nts.• )		7140 Bould	dor-M	lancos Di	
At surface	1950' FNL & 1800' FEL							11. Boulder-Mancos Oi		
At proposed prod. sone 2299'5 544							~ 22-28	2n_1 u	NMPM	
14 promision in with	AND DIRECTION FROM NEAR	1L & 4/30	PEI	-/w-			12. COUNTY O			
			OFFICE	,	- 1 - <i>1</i>	-	Rio Ar		NM	
15. DISTANCE FROM PROP	s S of Dulce,	IAIAI	18 NO	OF ACRES IN	<u>7-254</u>		ACRES ASSIG		141-1	
LOCATION TO NEARES	T LINE, FT.	2 mi.		,000	DAAGE		IS WELL		640	
(Also to mealest dilg. dutt fibe, it any)						20. ROTAR	Y OR CABLE TO	OOLS		
TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. >2000' 9,562' MD								Ro	tary	
21. ELEVATIONS (Show wh		:					1		RK WILL START	
		7,222' ung	rade	d ground			Sept.	<u>15,</u>	1994	
23.		PROPOSED CASI	NG ANI	CEMENTING	PROGRAM	А				
SIZE OF HOLE	BIZE OF CABING	WEIGHT PER FO	00 <b>T</b>	SETTING D	EPTH		QUANTITY	OF CEME!	(T	
14"	10-3/4"	40.5 (K-55	)	2	50'	≈24	42 cu ft and to surface			
· · · · · · · · · · · · · · · · · · ·				≈13	00 cu ft ar	nd to su	ırface			
6-1/4"	4-1/2"	11.6#(N-80	0)	9,5	62'	≈lin	er			



cc: BLM(3 +2 for OCD), EnRe

SIGNED	Print lovel	TITLE _	Consultant	DATE	9-6-94
(This space	for Federal or State office use)				
ERMIT NO			APPROVAL DATE		

R-10194

\*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.

District I PO Box 1980, Hobbs, NM 88241-1980 District II

PO Drawer DD, Artesia, NM 88211-0719

DIFF. &

2557.50'

District III

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

Form C-102 Revised February 21, 1994 Instructions on back

Submit to Appropriate District Office

September 6, 1994

7-20 Date of S Signatur

Certificate Number

18SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me

eros har belief it

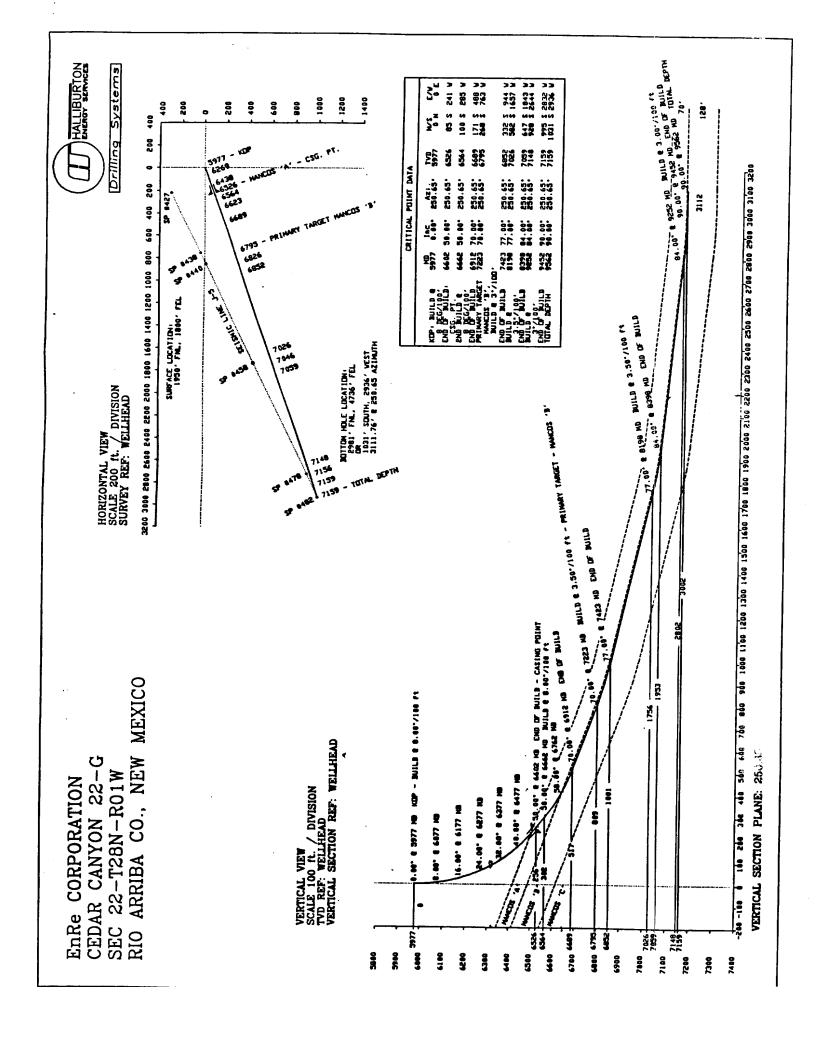
tion, and that the same is true and

☐ AMENDED REPORT

#### State Lease - 4 Copies 1000 Rio Brazos Rd., Aztec, NM 87410 Fee Lease - 3 Copies District IV PO Box 2088, Santa Fe, NM 87504-2088 WELL LOCATION AND ACREAGE DEDICATION PLAT API Number Boulder-Mancos Oil ExT 30-039-15/12 7140 <sup>4</sup> Property Code <sup>5</sup> Property Name Well Number Cedar Canyon 22 Ġ 15820 #1 OGRID No. Operator Name \* Elevation ENRE CORPORATION 133182 7222' <sup>10</sup> Surface Location UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County G 28 N 22 1 W 1950 North 1800 East R.A. 11 Bottom Hole Location If Different From Surface UL or lot no. Section Township Lot Idn Feet from the 2981 Range North/South line Feet from the East/West line County $\mathbf{L}$ North <del>4736</del> -Easi 22 28 N 1 W R.A. SOUTH 12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 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 5280.00 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief 1950 Signature Brian Wood Printed Name CON. DIV. Consultant

1800'

2647.92'



Surface: 1950' FNL & 1800' FEL

BHL: 2981' FNL & 4736' FEL Sec. 22, T. 28 N., R. 1 W. Rio Arriba County, NM

#### **Drilling Program**

#### 1. FORMATION TOPS

The estimated tops of important geologic markers are:

Formation Name	<u>TVD</u>	KB Depth	Subsea Elevation
San Jose	000'	12'	+7,222'
Lewis Shale	2,648'	2,660'	+4,574'
Pt. Lookout Ss	5,136'	5,148'	+2,086'
Mancos Shale	5,320'	5,332'	+1,902'
Niobrara	6,321'	6,333'	+901'
Mancos "A" Shale	6,526'	6,538'	+696'
Mancos "B" Shale	6,632'	6,644'	+590'
Total Depth (TD)*	7,159'	7,171'	+63'
		•	·

<sup>\*</sup> all elevations reflect the ungraded ground level of 7,222'

### 2. NOTABLE ZONES

The Point Lookout and Mancos zones are most likely to have oil and/or gas. The Mancos zones are the primary goal. Lost circulation may occur in the Mancos. Only likely water zone is the San Jose, but if any are found, then all will be recorded and protected with casing, cement, and weighted mud. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

#### 3. PRESSURE CONTROL

BOP systems will follow Onshore Order #2 and API RP 53. The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A typical model is on PAGE 3.



Surface: 1950' FNL & 1800' FEL

BHL: 2981' FNL & 4736' FEL

Sec. 22, T. 28 N., R. 1 W. Rio Arriba County, NM

BOP controls will be installed before drilling the surface casing plug and remain in use until the well is completed or abandoned. Once out from under the surface casing, a 10" minimum 3,000 psi BOP and choke manifold system will be used. System will include upper and lower kelly cock with handle, drill pipe float, mud logging unit with gas detector to detect any influx of formation fluids, and a sub on the floor with a full opening valve to be stabbed into the drill pipe when a kelly is not in the string.

Ram type preventers and associated equipment (e.g., choke manifold and kelly cock) will be pressure tested to 100% of their rated working pressure for a minimum of 10 minutes. A test plug will isolate the BOP stack from the casing. Annular preventers will be tested to 50% of their rated working pressure for at least 10 minutes. Tests will be run after installation, before drilling out the surface casing shoe, and after any use under pressure, or a minimum of once every 14 days. Pipe rams will be operationally checked each 24 hour period, as will blind rams and annular preventer each time pipe is pulled out of the hole. Annular preventers will be functionally operated at least weekly. BOP checks will be noted on the daily drilling report.

#### 4. CASING & CEMENT

The proposed casing program is:

Hole Size	<u>O.D.</u>	Weight (lb/ft)	<u>Grade</u>	<u>Type</u>	<u>Age</u>	GL Setting Depth		
14"	10-3/4"	40.5	K-55	ST&C	New	250'		
8-3/4"	7"	23	N-80	ST&C	New	6,500'		
6-1/4"	4-1/2"	11.6	N-80*	LT&C	New	**9,562'		
			*Liner			**Measured Depth		



Surface: 1950' FNL & 1800' FEL

BHL: 2981' FNL & 4736' FEL Sec. 22, T. 28 N., R. 1 W. Rio Arriba County, NM

Surface casing will be cemented to the surface with  $\approx$ 242 cubic feet Class B with 3% salt + 1/4#/sk celloflake + 2% CaCl<sub>2</sub>. Volume calculated at 100% excess. Centralizers will be used.

Production casing will be cemented to the surface. Actual volumes will be calculated at 30% excess as measured by caliper log. First stage will be cemented from 6,500' to  $\approx 3200$ ' with  $\approx 650$  cubic feet Halco Lite+ 1/4#/sk celloflake. Second stage lead will be cemented from  $\approx 3300$ ' to the surface with  $\approx 585$  cubic feet Halco Lite + 1/4#/sk celloflake and tail with  $\approx 65$  cubic feet Class B + 1/4#/sk celloflake. Centralizers will be used.

#### 5. MUD PROGRAM

<u>Depth</u>	<u>Type</u>	рH	ppg	Viscosity	Fluid Loss
0' - 250'	Fresh water gel	8	9.0-10.0	40-50	NC
400' - 6,500'	Gel polymer	7	8.8-9.2	28-40	8-15
6,500' - 9,562'	Gel polymer	7	8.8-8.9	30-35	6-8

Sufficient mud material to maintain mud properties, control lost circulation, and contain a blowout will be available at the wellsite while drilling. Mud will be checked frequently by rig personnel. Mud logging unit, gas detector, and flow sensor will be used.

### 6. CORING, TESTING, & LOGGING

No cores or DSTs are planned. Triple combination logs may be run from  $\approx 6,500$ ' to TD. Mud logger will be on site from base of surface casing to TD. Stimulation procedures will be determined after log evaluation. If stimulation is warranted, then a Sundry Notice will be submitted for approval.



EnRe Corporation's Cedar Canyon 22 G #1 PAGE 5 Surface: 1950' FNL & 1800' FEL

BHL: 2981' FNL & 4736' FEL

Sec. 22, T. 28 N., R. 1 W. Rio Arriba County, NM

#### 7. **DOWNHOLE CONDITIONS**

No abnormal temperatures pressures, nor hydrogen sulfide are expected. Maximum pressure will be  $\approx 1,100$  psi.

#### 8. OTHER INFORMATION

The anticipated spud date is September 15, 1994. It is expected it will take  $\approx\!25$  days to drill and  $\approx\!10$  days to complete the well.



Surface: 1950' FNL & 1800' FEL

BHL: 2981' FNL & 4736' FEL

Sec. 22, T. 28 N., R. 1 W.

Rio Arriba County, NM

#### Surface Use Plan

# 1. <u>DIRECTIONS & EXISTING ROADS</u> (See Pages 11 & 12)

From the junction of US 64 and NM 537, go south 9.1 miles on NM 537. Then turn left onto J-16 and go SE 7.3 mi. on J-16 to a stone culvert. Then turn left onto a jeep trail and go north 806' to the proposed well.

Of the existing roads, only the final  $\approx 806$ ' will need upgrading. That jeep trail will be upgraded and have a  $\approx 15$ ' wide running surface and a maximum disturbed width of 25'. Maximum grade will be 3%. Maximum cut or fill will be 1'. No culverts or cattleguards are needed.

The road will be initially flat bladed. If production results, then the road will be crowned and ditched. A 30' x 18" culvert would be needed to drain the road's west borrow ditch near its junction with J-16. Roads will be maintained to a standard at least equal to their present condition.

#### 2. ROAD TO BE BUILT

No new road will be built.

## 3. EXISTING WELLS (See PAGE 12)

According to NM Oil Conservation Div. records, there are no water or gas wells within a mile. There are ten oil wells, most of which have been or are scheduled to be plugged and abandoned, within a mile. Closest of the the wells is over 2,000' east. There are no water, gas, or injection wells.



Surface: 1950' FNL & 1800' FEL

BHL: 2981' FNL & 4736' FEL Sec. 22, T. 28 N., R. 1 W.

Rio Arriba County, NM

natural appearance, water barred, stockpiled topsoil spread evenly over disturbed areas, and disturbed areas ripped or harrowed. A seed mix will be drilled at a depth and time to be determined by the Tribe.

If seed is broadcast, the rate will be increased as determined by the Tribe. A harrow or cable will be dragged over the area to assure seed cover. After seeding is done, the stockpiled brush will be scattered evenly over disturbed areas. The  $\approx\!806$ ' of upgraded road will be reclaimed in the same way as the wellsite and water bars installed.

If the well is a producer, then the reserve pit and any other areas not needed for workovers will be reclaimed as previously described.

#### 11. SURFACE OWNER

The well and upgraded road are on Jicarilla Apache Tribal trust land.

### 12. OTHER INFORMATION

The nearest hospital is a  $\approx 2$  hour drive away in southwest Farmington. Hospital phone number is (505) 325-5011.

### 13. REPRESENTATION

Anyone having questions concerning the APD should call:
Brian Wood, Consultant
Permits West, Inc.
37 Verano Loop
Santa Fe, NM 87505
(505) 466-8120

FAX: (505) 466-9682



Surface: 1950' FNL & 1800' FEL BHL: 2981' FNL & 4736' FEL

Sec. 22, T. 28 N., R. 1 W. Rio Arriba County, NM

The field representative while drilling will be: Harvey Ashford (505) 326-2617, Unit 99. or cellular phone (505) 320-7626 then (210) 415-4235

EnRe Corporation has the necessary consents from the proper lease owners to conduct lease operations in conjunction with this well. Bond coverage pursuant to 43 CFR 3104 for lease activities and operations is being provided by EnRe Corporation.

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 currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by EnRe Corporation and its 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.

Brian Wood, Consultant

September 6, 1994

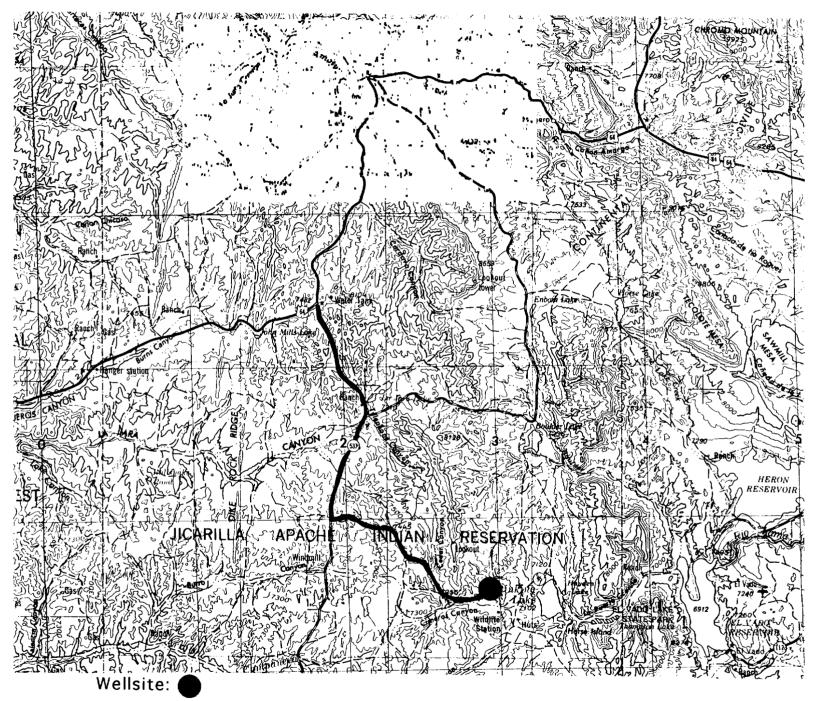
PAGE 10

Date



Surface: 1950' FNL & 1800' FEL

BHL: 2981' FNL & 4736' FEL Sec. 22, T. 28 N., R. 1 W. Rio Arriba County, NM



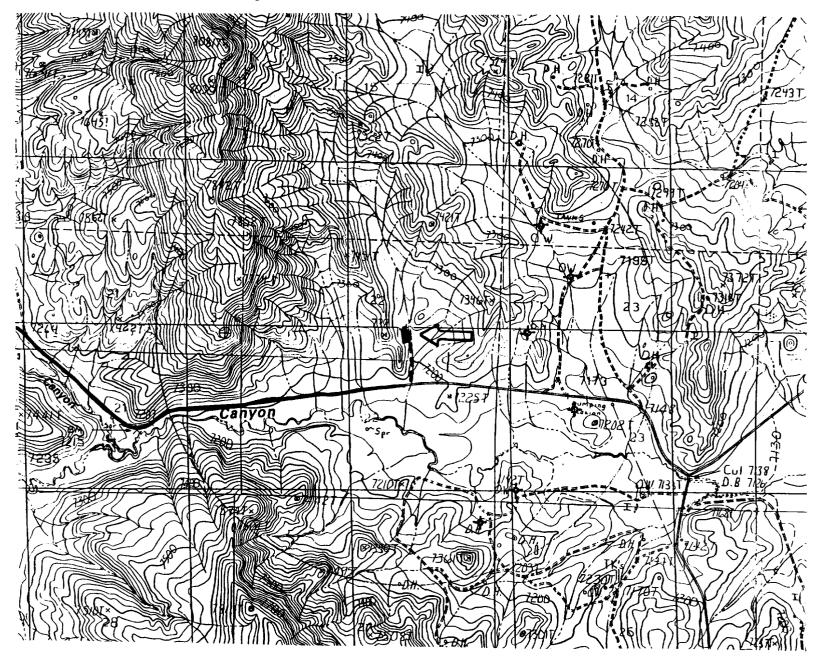
Access Route: ~



PAGE 12

Surface: 1950' FNL & 1800' FEL BHL: 2981' FNL & 4736' FEL

Sec. 22, T. 28 N., R. 1 W. Rio Arriba County, NM



Proposed Well:

Existing Road: ——

Upgrade Road: - - -

Existing Well: 💠

