		INTERIOR (Other Instructions of	5. LEASE DESIGNATION AND SERIAL NO
SUNDRY	BUREAU OF LAND MANA  NOTICES AND REP  for proposals to drill or to deepe  APPLICATION FOR PERMIT—	ORTS ON WELLS	SF-078329 6. IF INDIAN, ALLOTTEE OR TRIBE NAM
Use "	APPLICATION FOR PERMIT—	RECEIVE	7. UNIT AGREEMENT NAME
NAME OF OPERATOR	OTHER	OFC 0 5 1985 /	8. FARM OR LEASE NAME
Tenneco Oil Com	pany		Daum 1 S 9. Walt No.
D 0 Roy 32/10	Enlaewood, CO 80	BUREAU OF LAND MANAGEM 155 FARMINGTON RESOURCE AF	REA 6F
LOCATION OF WELL (Report   See also space 17 below.) At surface	location clearly and in accordance	with any State requirements.*	10. FIELD AND POOL, OR WILDCAT  Rasin Dakota  11. EBC., T., B., M., OR ELE. AND BURYET OR ARMA
700' FNL, 600'			Sec. 32 T28N ROW 12. COUNTY OF PARISE 18. STATE
. PERMIT NO.	6315 GL	whether DF, RT, GR, etc.)	San Juan NM
. C		ndicate Nature of Notice, Report,	
	OF INTENTION TO:		UBBRQUENT REPORT OF:
TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE	PULL OR ALTER CABING MULTIPLE COMPLETE ABANDON*	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZIN	REPAIRING WELL ALTERING CASING ABANDONMENT®
REPAIR WELL	CHANGE PLANS	(Other)	
(Other)		(Nors: Report i	results of multiple completion on Well ecompletion Report and Log form.)  dates, including estimated date of starting vertical depths for all markers and sones per
(Other)  DESCRIBE PROPOSED OR COMP. proposed work. If well nent to this work.)	LETED OPERATIONS (Clearly state is directionally drilled, give subs	(Nors: Report i	ecompletion Report and Log form.) dates, including estimated date of starting vertical depths for all markers and sones pe

(This space for Federal or State office use) TITLE . \*See Instructions on Reverse Side

# TENNECO OIL COMPANY WESTERN ROCKY MOUNTAIN DIVISION 6162 SOUTH WILLOW DRIVE ENGLEWOOD, COLORADO 80155

DATE:

November 13, 1985

LEASE:

Daum LS

WELL NO: 6E

LOCATION:

700' FNL, 1600' FEL

FIELD: Basin Dakota

Section 32, T28N, R9W

San Juan County, New Mexico

**ELEVATION** 

6315'(GL)

TOTAL DEPTH:

7010'

PROJECTED HORIZON: Chacra/Dakota Dual

CC: Administration CRJ Well File

Field File

# ESTIMATED FORMATION TOPS

Ojo .	1462'	Fresh Water Acquifer
Kirtland	1562'	
Fruitland	2152'	Coal Gas Potential
Pictured Cliffs	2417'	Gas
Lewis	2492'	
Chacra Top	3377'	Gas
Charca Base	3537'	
Cliff House	3997'	Wet
Menefee	4083'	Gas, Water
Point Lookout	4707'	Gas
Mancos	4957'	
Gallup	5882'	Potential Oil Flows
Greenhorn	6652'	
Graneros	6712'	
Dakota	6752'	Gas
TD	7010'	

## DRILLING, CASING AND CEMENT PROGRAM

- 1. MIRURT. Notify MMS of spud.
- 2. Drill a 12-1/4" hole to  $\pm 280$  ft. with a gel water mud.
- 3. Rig up and run 9-5/8" 36# K-55 ST&C casing to bottom. Cement with Class B + 2% CaCl<sub>2</sub> in sufficient quantity (200-250sx) to circulate cement to surface. If conditions warrant the use of loss circulation agents, 1/4 #/sx celloflake may be added. Wait on cement a minimum of 12 hours prior to drilling out.
- 4. While waiting on cement, screw on a 9-5/8" -8rd X 11"-3M casinghead. NU BOP's. Pressure test casing, blinds, manifold and lines to 1000 psi for 30 minutes. GIH with drill pipe and test the pipe rams in the same manner. Record all tests on the IADC report sheet.
- 5. Drill out with an 8-3/4" bit, clear water with rapid mud. Drill to  $\pm 3750$ ' or  $\pm 200$ ' below base of Chacra. Mud up prior to reaching intermediate T.D. Circulate at casing point a sufficient time to clean the hole to run casing. <u>GE Department will run logs in intermediate hole</u>.
- 6. Install casing rams, run 7" 23# K-55 casing equipped with a guide shoe on bottom, float collar one joint up and a stage collar 200' below the Ojo Alamo. Bakerlock from the shoe to the top of the float collar and run casing to bottom. Centralize casing with one centralizer in the middle of shoe joint and then on every other collar for total of 6 centralizers. Place one centralizer above and below the stage tool. Cementing baskets may be used if lost circulation has been encountered.

### INTERMEDIATE CEMENTING PROGRAM

LEAD	TAIL
65/35/6 + 1/4 #/sx flocele	Cl B + 1/4 #/sx flocele +
+ 2% CaCl <sub>2</sub>	2% CaCl <sub>2</sub> .
Theoretical Volume	100 sx _
1.84 cu. ft./sx	1.18 cuft/sx
12.7 ppg	15.6 ppg
9.9 gal/sx	5.20 gal/sx
	65/35/6 + 1/4 #/sx flocele + 2% CaCl <sub>2</sub> Theoretical Volume 1.84 cu. ft./sx 12.7 ppg

Type	65/35/6 + 1/4 #/sx flocele	Cl B + 2% CaCl <sub>2</sub> +
	+ 2% CaCl <sub>2</sub>	1/4 #/sx Flocele
Sacks ·	75% excess	50 sx
Slurry yield	1.84 cuft/sx	1.18 cuft/sx
Mix weight	12.7 ppg	15.6 ppg
Water req's.	9.9 gal/sx	5.2 gal/sx

Precede the first stage and second stage with 20 bbls chemical wash. Circulate four hours after opening the stage tool. If cement is not circulated to surface run a temperature survey after 8 hours to determine actual TOC as MMS requires. Wait on cement a total of 18 hours (from first plug down) before drilling out beneath casing.

- Set slips with casing in full tension and cut—off. NU BOE and test as in procedure 4 above. Record tests on IADC report.
- 8. Drill out, dry up hole and drill a 6-1/4" hole to T.D. surveying as required. If hole becomes wet, switch to foam mist.
- 9. Log open hole as directed by GE department.
- 10. If productive, run 4-1/2" 11.6# and 10.5# K-55 casing as a liner. Equip the casing with a float shoe on bottom, a float collar and latch down collar (piggy backed) on the top of the first joint. No threadlock or centralizers are to be used on this arrangement. Hang liner with a 150' lap in the intermediate casing and at least 3' off bottom..
- 11. Precede cement with 20 barrels of chemical flush. Cement with a lead slurry of 65/35 Poz + 6% gel + .6% fluid loss additive. Tail with 100 sx of Class B + .6% fluid loss additive. Use sufficient quantity (± 75% excess) to circulate cement to the liner top.
- 12. Circulate out the excess cement, LDDP and MORT.
- In non-productive, P & A as required by USGS.
- 14. Install tree and fence remainder of reserve pit.

#### CASING PROGRAM

INTERVAL	LENGTH	SIZE	WEIGHT	GRADE	OPTIMUM MAKE-UP TORQUE
0-280	280	9-5/8	36. #	K55	STC 4230
0-3750	3750	7	23. #	K-55	STC 3090 LTC 3410
3600-7010	3410	4-1/2	10.5#	K-55	STC 1460
		4-1/2	11.6#	K-55	STC 1700 LTC 1800

#### MUD PROGRAM

0-280'	Spud mud.
280'-3750'	Low solid, fresh water mud. (Water and Rapid Mud.) Mud up prior to logging and running casing.
3750'-T D	Air - If hole becomes wet switch to foam mist with shale treat, corrosion inhibitor & soap.

## **EVALUATION**

### Cores and DST's:

NONE.

#### **Deviation Surveys**

- 1. Survey surface hole at 100' intervals. Maximum allowable deviation at 500' is  $1-1/2^{\circ}$
- 2. From surface to the Mancos formation, deviation surveys must be taken every 500'. In the Mancos/Gallup zones surveys are to be taken every 250'. Record all surveys in IADC Report book. Maximum allowable change in deviation is 1° per 100'. Maximum deviation allowable is 8°.

#### Samples:

As requested by Wellsite Geological Engineer

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Logs: Run # 1: GR-SP-DLL: ICP-Surface Casing:

GR-CDL-CNL-Caliper: ICP - (2000' minimum)

Run # 2: GR-DIL: TD-ICP: GR-CDL-Caliper: TD-(2000'

minimum)

### **BLOWOUT EQUIPMENT**

11" — 3000 BOP with rotating head to comply with TOC requirements as shown in BOE arrangement, Figure C. Preventers must be checked for operation every 24 hours with each check recorded on the IADC Drilling Report Sheet.

## REPORTS

Drilling Reports for the past 24 hours will include depth, footage, time distribution, activity breakdown, mud properties, bit record, bottom hole assembly, types of logs and depths ran, daily and cumulative mud cost, deviation surveys, and other pertinent information to be called into Division Office by 7:30 AM Monday thru Friday.

TENNECO OIL COMPANY
P.O. Box 3249
ENGLEWOOD, COLORADO 80155
PHONE: 303-740-4800

# OFFICE DIRECTORY

Charles R. Jenkins	740-2575
Ted McAdam	740-2576
Tom Dunning	740-4813
Mark Kangas	740-4810

In case of emergency or after hours call the following in the preferred order.

(1)	Mark Kangas	740-4810	Office
	Project Drilling Engineer	973-8846	Home
(2)	Ted McAdam	740-2576	Office
	Drilling Engineering Supervisor	978-0724	Home
(3)	Charles R. Jenkins	740-2575	Office
	Division Drilling Engineer	987-2290	Home
(4)	Harry Hufft	771–5257	Home
	Division Production Manager		