

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Attention:

Amoco Production Company

Julie L. Acevedo

3. ADDRESS AND TELEPHONE NO.

P.O. Box 800, Denver, Colorado 80201

(303) 830-6003

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface 465FSL 1660FEL

At proposed prod. zone BHL 1350FNL 1850FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

19 miles from Aztec, N.M.

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE

469.91

17. NO. OF ACRES ASSIGNED TO THIS WELL

327.11 E/2

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

19. PROPOSED DEPTH

MD 8367'

20. ROTARY OR CABLE TOOLS

Rotary

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

5932' GR

22. APPROX. DATE WORK WILL START*

12/5/94

This action is subject to technical and procedural review pursuant to 43 CFR 3100.5 and appeal pursuant to 43 CFR 3100.4.

23.

PROPOSED CASING AND CEMENTING PROGRAM

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8" J-55	36#	400'	320 cu.ft. Cl B Surface
8 3/4"	7" J-55	23#	3055'	750 cu.ft. Cl B Surface
6 1/8"	4 1/2" K-55	11.6#	5350'	350 cu.ft. Cl B TOC 2850'
6 1/8"	4 1/2" K-55	11.6#	8367'	

Notice of Staking submitted as the Florance 37R on 8/3/94. The subject well located in Sec. 6, T30N-R8W has been restaked from the old location of 2450FSL and 1640FEL to the new location of 465FSL and 1660FEL.

Lease Description: T30N-R8W

Sec. 6: Lots 8, 9, 10, 11, SE/4

Sec. 7: Lots 1, 2, 3, 4, E/2NW/4

Amoco Production Company intends to drill this well within the legal drilling window. Application for High Angle/Horizontal Directional Drilling approved NMOC Case 11054.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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

Julie L. Acevedo

TITLE Sr. Staff Assistant

DATE 11/18/94

(This space for Federal or State official use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to produce from the well.

CONDITIONS OF APPROVAL, IF ANY:

DEC 12 1994

APPROVED BY

OIL CON. DIV.
DIST. 3

TITLE NMOC

*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.

5. LEASE DESIGNATION AND SERIAL NO.

NM-09717

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

Florance H #37R 541

9. API WELL NO.

10. FIELD AND POOL, OR WILDCAT

72319 Blanco Mesaverde

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Section 6
Township 30N Range 8W

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
P.O. Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

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
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-2925		Pool Code 72319	Pool Name Blanco Mesaverde
Property Code 541	Property Name FLORANCE		Well Number # 37 R
GRID No. 000778	Operator Name AMOCO PRODUCTION COMPANY		Elevation 5932

10 Surface Location

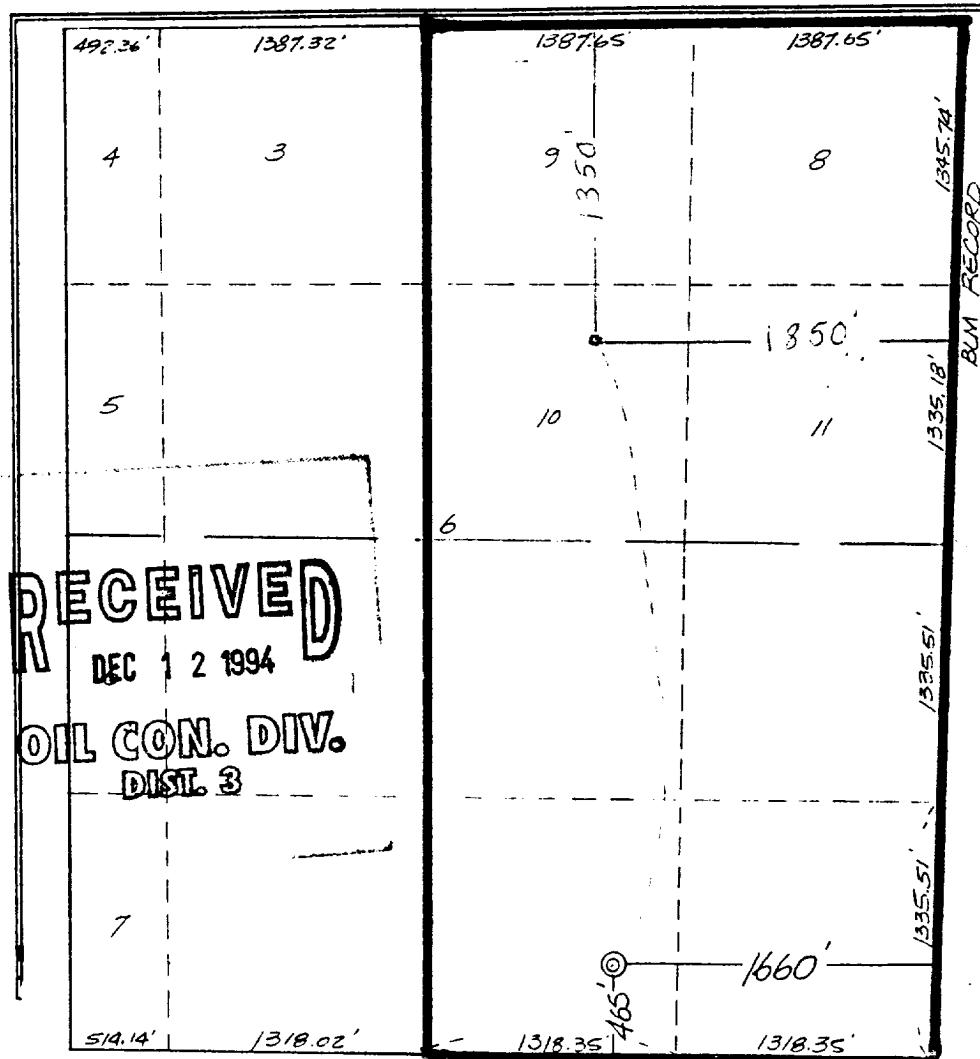
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	6	30 N	8 W		465	SOUTH	1660	EAST	SAN JUAN

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
	6	30N	8W		1350	North	1850	East	San Juan

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
327.1			

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



17 OPERATOR CERTIFICATION

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

Julie L. Acevedo
Signature
Julie L. Acevedo
Printed Name
Sr. Staff Assistant
Title
11/17/94
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.

November 9, 1994
Date of Survey
Signature and Seal of Professional Surveyor:

GARY D. VANDER
NEW MEXICO
REGISTERED PROFESSIONAL LAND SURVEYOR
7016
Certificate Number

F/urance #37-R

Units are FEET

PI

T I	Meas. Depth	Survey		Depth (TVD)	North -South	East -West	Vert. Section	Closure		Dog Leg
		Incl	Dir					Dist	Dir	
	.00	.00	13.00	.00	.00	.00	.00	0	0	.0
	100.00	.00	13.00	100.00	.00	.00	.00	0	0	.0
	200.00	.00	13.00	200.00	.00	.00	.00	0	0	.0
	300.00	.00	13.00	300.00	.00	.00	.00	0	0	.0
	400.00	.00	13.00	400.00	.00	.00	.00	0	0	.0
	500.00	.00	13.00	500.00	.00	.00	.00	0	0	.0
	600.00	.00	13.00	600.00	.00	.00	.00	0	0	.0
	700.00	.00	13.00	700.00	.00	.00	.00	0	0	.0
	800.00	.00	13.00	800.00	.00	.00	.00	0	0	.0
	900.00	.00	13.00	900.00	.00	.00	.00	0	0	.0
	1000.00	.00	13.00	1000.00	.00	.00	.00	0	0	.0
	1100.00	.00	13.00	1100.00	.00	.00	.00	0	0	.0
	1200.00	.00	13.00	1200.00	.00	.00	.00	0	0	.0
	1300.00	.00	13.00	1300.00	.00	.00	.00	0	0	.0
	1400.00	.00	13.00	1400.00	.00	.00	.00	0	0	.0
	1500.00	.00	13.00	1500.00	.00	.00	.00	0	0	.0
	1600.00	.00	13.00	1600.00	.00	.00	.00	0	0	.0
	1700.00	.00	13.00	1700.00	.00	.00	.00	0	0	.0
	1800.00	.00	13.00	1800.00	.00	.00	.00	0	0	.0
	1900.00	.00	13.00	1900.00	.00	.00	.00	0	0	.0
	2000.00	.00	13.00	2000.00	.00	.00	.00	0	0	.0
	2100.00	.00	13.00	2100.00	.00	.00	.00	0	0	.0
	2200.00	.00	13.00	2200.00	.00	.00	.00	0	0	.0
	2300.00	.00	13.00	2300.00	.00	.00	.00	0	0	.0
	2400.00	.00	13.00	2400.00	.00	.00	.00	0	0	.0
	2500.00	.00	13.00	2500.00	.00	.00	.00	0	0	.0
	2600.00	.00	13.00	2600.00	.00	.00	.00	0	0	.0
	2700.00	.00	13.00	2700.00	.00	.00	.00	0	0	.0
	2800.00	.00	13.00	2800.00	.00	.00	.00	0	0	.0
	2900.00	.00	13.00	2900.00	.00	.00	.00	0	0	.0
	3000.00	.00	13.00	3000.00	.00	.00	.00	0	0	.0
	3100.00	.00	13.00	3100.00	.00	.00	.00	0	0	.0
	3200.00	.00	13.00	3200.00	.00	.00	.00	0	0	.0
	3300.00	.00	13.00	3300.00	.00	.00	.00	0	0	.0
	3400.00	.00	13.00	3400.00	.00	.00	.00	0	0	.0
	3500.00	.00	13.00	3500.00	.00	.00	.00	0	0	.0
	3600.00	.00	13.00	3600.00	.00	.00	.00	0	0	.0
	3700.00	.00	13.00	3700.00	.00	.00	.00	0	0	.0
	3800.00	.00	13.00	3800.00	.00	.00	.00	0	0	.0
	3900.00	.00	13.00	3900.00	.00	.00	.00	0	0	.0

Florence #37-R

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Units are FEET

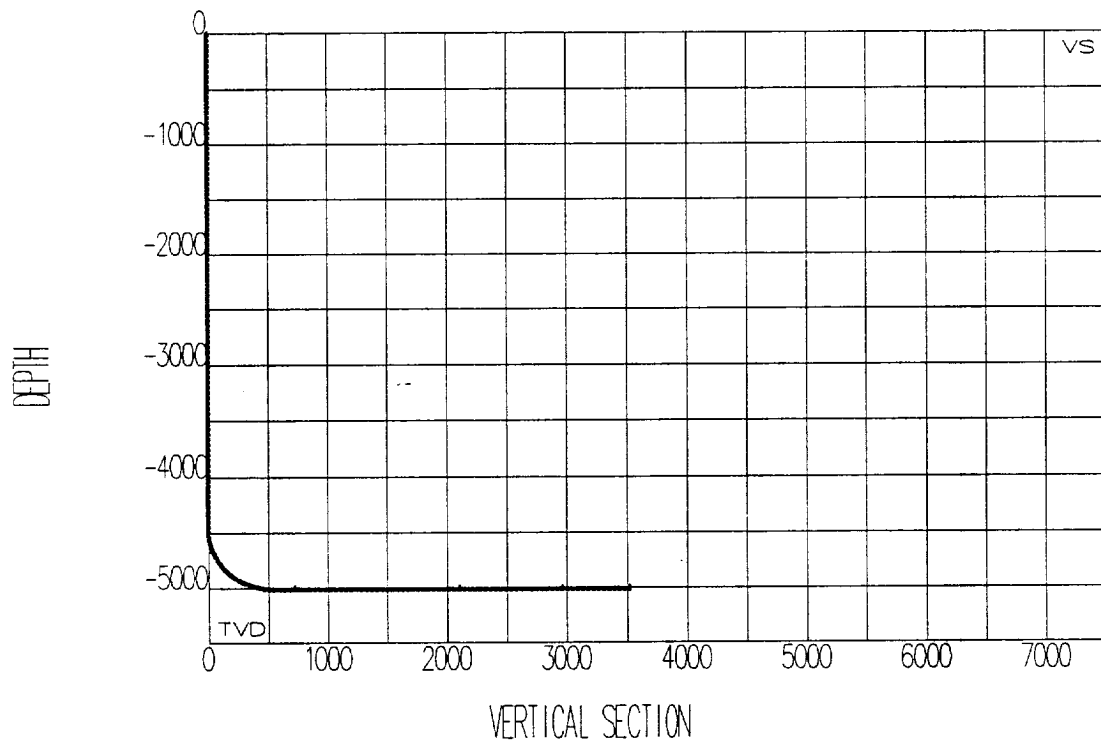
T I	Meas. Depth	Survey		Depth (TVD)	North -South	East -West	Vert. Section	Closure		Dog Leg
		Incl	Dir					Dist	Dir	
	4000.00	.00	13.00	4000.00	.00	.00	.00	0	0	.0
	4100.00	.00	13.00	4100.00	.00	.00	.00	0	0	.0
	4200.00	.00	13.00	4200.00	.00	.00	.00	0	0	.0
	4300.00	.00	13.00	4300.00	.00	.00	.00	0	0	.0
	4400.00	.00	13.00	4400.00	.00	.00	.00	0	0	.0
	4500.00	.00	13.00	4500.00	.00	.00	.00	0	0	.0
	4567.00	10.50	13.00	4566.63	5.97	1.38	5.91	6	13	15.7
	4667.00	21.00	13.00	4662.74	32.38	7.47	32.10	33	13	10.5
	4767.00	31.50	13.00	4752.30	75.41	17.41	74.77	77	13	10.5
	4867.00	42.00	13.00	4832.31	133.63	30.85	132.49	137	13	10.5
	4967.00	52.50	13.00	4900.10	205.08	47.35	203.33	210	13	10.5
	5067.00	63.00	13.00	4953.38	287.37	66.34	284.92	295	13	10.5
	5167.00	73.50	13.00	4990.39	377.74	87.21	374.52	388	13	10.5
	5267.00	84.00	13.00	5009.87	473.17	109.24	469.13	486	13	10.5
	5367.00	90.00	13.00	5015.10	570.43	131.69	565.56	585	13	6.0
	5465.00	90.00	13.00	5015.10	665.92	153.74	660.24	683	13	.0
	5507.14	90.00	13.00	5015.10	706.98	163.22	700.94	726	13	.0
	5574.17	90.00	13.00	5015.10	772.29	178.30	765.70	793	13	.0
	5674.17	90.00	10.91	5015.10	870.12	199.01	862.75	893	13	2.1
	5774.17	90.00	8.83	5015.10	968.63	216.15	960.62	992	13	2.1
	5874.17	90.00	6.74	5015.10	1067.71	229.70	1059.17	1092	12	2.1
	5974.17	90.00	4.66	5015.10	1167.21	239.63	1158.27	1192	12	2.1
	6074.17	90.00	2.57	5015.10	1267.00	245.93	1257.79	1291	11	2.1
	6174.17	90.00	.48	5015.10	1366.96	248.59	1357.59	1389	10	2.1
	6274.17	90.00	358.40	5015.10	1466.95	247.62	1457.56	1488	10	2.1
	6374.17	90.00	356.31	5015.10	1566.84	243.00	1557.55	1586	9	2.1
	6474.17	90.00	354.23	5015.10	1666.49	234.76	1657.43	1683	8	2.1
	6574.17	90.00	352.14	5015.10	1765.78	222.89	1757.06	1780	7	2.1
	6674.17	90.00	350.05	5015.10	1864.57	207.41	1856.33	1876	6	2.1
	6700.00	90.00	349.52	5015.10	1889.99	202.83	1881.89	1901	6	2.1
	6800.00	90.00	349.52	5015.10	1988.32	184.64	1980.79	1997	5	.0
	6900.00	90.00	349.52	5015.10	2086.65	166.45	2079.69	2093	5	.0
	6905.06	90.00	349.52	5015.10	2091.63	165.53	2084.69	2098	5	.0
	7005.06	90.00	350.28	5015.10	2190.08	148.00	2183.69	2195	4	.8
	7105.06	90.00	351.04	5015.10	2288.75	131.77	2282.86	2293	3	.8
	7205.06	90.00	351.80	5015.10	2387.63	116.85	2382.20	2390	3	.8
	7305.06	90.00	352.56	5015.10	2486.70	103.24	2481.68	2489	2	.8
	7405.06	90.00	353.32	5015.10	2585.94	90.95	2581.28	2588	2	.8
	7505.06	90.00	354.07	5015.10	2685.34	79.97	2680.99	2687	2	.8
	7600.00	90.00	354.79	5015.10	2779.83	70.75	2775.75	2781	1	.8

Florence #37-R
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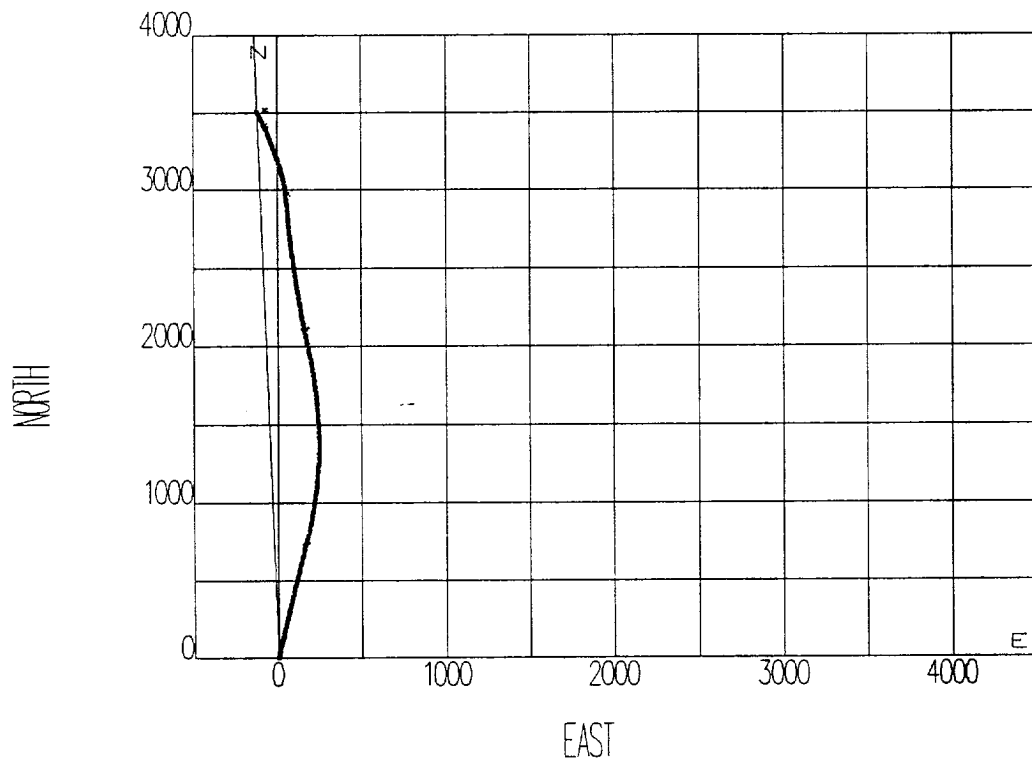
Units are FEET

T I	Meas. Depth	Survey Incl Dir		Depth (TVD)	North -South	East -West	Vert. Section	Closure Dist Dir		Dog Leg
	7700.00	90.00	354.79	5015.10	2879.42	61.67	2875.59	2880	1	.0
	7767.83	90.00	354.79	5015.10	2946.97	55.51	2943.31	2947	1	.0
	7867.83	90.00	349.72	5015.10	3046.02	42.04	3042.77	3046	1	5.1
	7967.83	90.00	344.65	5015.10	3143.50	19.87	3140.95	3144	0	5.1
	8067.83	90.00	340.00	5015.10	3238.75	-10.48	3237.19	3239	360	4.7
	8100.00	90.00	340.00	5015.10	3268.98	-21.49	3267.78	3269	360	.0
	8200.00	90.00	340.00	5015.10	3362.95	-55.69	3362.87	3363	359	.0
	8238.56	90.00	340.00	5015.10	3399.18	-68.88	3399.54	3400	359	.0
	8300.00	90.00	335.00	5015.10	3455.93	-92.38	3457.06	3457	358	8.1
	8340.28	90.00	330.00	5015.10	3491.65	-110.98	3493.40	3493	358	12.4
	8360.00	90.00	330.00	5015.10	3508.73	-120.84	3510.81	3511	358	.0

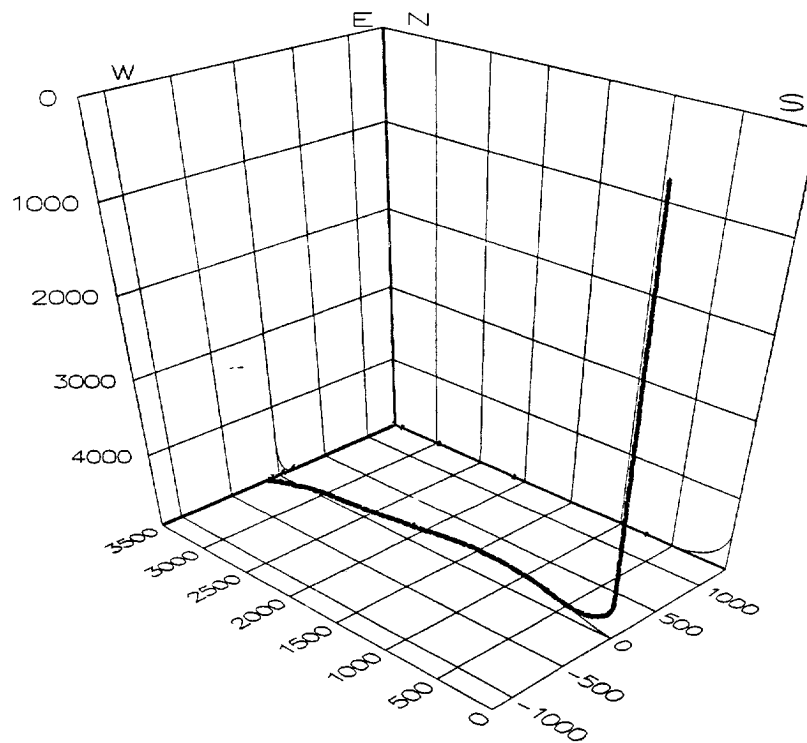
Florence #37-R



Florange #37-R



Florence #37-R



FINAL COPY (revised)

AMOCO PRODUCTION COMPANY
DRILLING AND COMPLETION PROGRAM

File No.: Hch37r.xlw

Date: 11/15/94

Lease: Florance "H" Well No. #37-R
 County: San Juan, New Mexico Location: 465' FSL X 1660' FEL Sect 6, 30N, 8W
 Former name: Florance "H" #37 Field: Basin Mesa Verde

11/18/94 15:18

30

8

OBJECTIVE: Horizontally drill Point Lookout member of Mesa Verde.

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER	
TYPE OF TOOLS	DEPTH OF DRILLING	Actual GL.....Estimated KB	5932 5947
Rotary	0 - TD	Marker	Depth (ft.) SS Elev. (ft.)
SPECIAL SURVEYS		Ojo Alamo	1,475 4,472
		Kirtland	1,650 4,297
		Fruitland*	2,280 3,667
		Pictured Cliffs*	2,740 3,207
		Lewis Shale	2,905 3,042
		Cliff House	4,499 1,448
		Menefee	4,605 1,342
		Point Lookout	4,978 969
		KOP	4,450
		Point Lookout Target	TVD 5,015 932
		TOTAL DEPTH	Measured 8,367
		* Possible pay	
		#Probable completion	
		OJO ALAMO IS POSSIBLE USEABLE WATER	
SPECIAL TESTS		DRILL CUTTING SAMPLES	
TYPE	DEPTH INTERVAL, ETC	FREQUENCY DEPTH	FREQUENCY DEPTH
None		None	Geolograph 0 - TD
Remarks:		Remarks:	
		Mud Logging Program: Two men fully equipped f/air from KOP. (BENCHMARK)	
		Coring Program: None	

MUD PROGRAM:

Approx. Intervals	Type Mud	Weight, #/gal	Vis, sec/qt.	W/L, cc's/30 min.
0.....SCP	SPUD	8.5-9.0	Sufficient to clean hole.	NC
SCP....ICP	LSND	8.8-9.5*	Sufficient to clean hole/ maintain integrity f/ logs.	10-15 cc
ICP.....TD	AIR/GAS	///	Probable gas/nitrogen mist drillin	

REMARKS:

* Use minimum mud weight to control formation pressures.

CASING PROGRAM:

Casing String	Estimated Depth	Casing Size	Hole Size	Landing Point, Cement, Etc
Liner Top				
Conductor				
Surface	400	9 5/8"	12 1/4"	1,2
Intermediate	3,055	7"	8 3/4"	1,2,3
Liner	5,350	4 1/2"	6 1/8"	2,4
Production	8,367	2,850"	6 1/8"	5
				Measured Depth
				Measured Depth

Remarks:

1. Circulate cement to surface.
2. Southern Rockies Drilling Team to design cement programs.
3. Intermediate casing will be set 150' into the Lewis Shale.
4. Liner will be run to protect the curve during the production phase. This liner would be run at completion of drilling operations. Top of liner would be at 2,850'.
5. Possible pre-perforated 4 1/2" liner set through the productive section of the Point Lookout if considered necessary to protect reservoir.

GENERAL REMARKS:

Southern Rockies Engineering staff to design completion program.

Form 46 Reviewed by:

Logging program reviewed by:

PREPARED BY:

APPROVED:

APPROVED:

Form 46 7-84bw

For Production Dept

For Exploration Dept.

CEMENTING PROGRAM

bip

Florance 'H' # 37-R

Well Name: Florance 'H' # 37-R
Location: sec 06-T30N-R08W, 465' FSL * 1660' FEL
County: San Juan
State: New Mexico

Field: Basin Mesa Verde
API No.
Well Flac
KB Elev. (est.) 5947 ft.
GL Elev. (est.) 5932 ft.

Casing Program:

Casing String	Est. Depth MD = (ft.)	Hole Size (in.)	Casing Size (in.)	Casing Weight (lb/ft.)	Casing Grade	Thread	TOC (ft.)	Stage Tool/TOL (ft.)
Surface	400	12.25	9.625	36	J-55	8R,ST&C	Surface	NA
Intermediate	3055	8.75	7.000	23	J-55	8R, LT&C	Surface	2080
KOP	4567							
Drilling Liner	5350	6.25	4.500	11.6	K-55	8R, LT&C	TOL	2850
Prod. Liner	8367	6.25	4.500	11.6	K-55	ydril 521/56	NA	

Casing Properties:

Casing String	Casing Weight (lb/ft.)	Burst (psi.)	Collapse (psi.)	Joint St. (1000 lbs.)	Capacity (bbl/ft.)	Torque(ft. lbs.) Opt/Min/Max	Drift (in.)
Surface	36	3520	2020	394	0.0773	3940/2960/4930	8.765
Intermediate	23	4360	3270	313	0.0393	3130/2350/3910	6.241
Drilling Liner	11.6	5350	4960	180	0.0155	1800/1350/2250	3.875
Prod. Liner	11.6						

Mud Program:

Apx. Interval (ft.)	Mud Type	Mud Weight (lb/gal)	Recommended Mud Properties Prior Cementing:	
Surface	Spud	8.5-9.0	PV	< 20
Intermediate	LSND	8.8-9.5	YP	< 10
			Fluid Loss	< 15
Drilling Liner	Air+N2/Gas	NA		
Prod. Liner	Air+N2/Gas	NA		

Cementing Program:

	Surface	Intermediate	Prod. Liner
Excess %, Bit	75	120	50
Excess %, Caliper	NA	1st = 70 , 2nd = 50	1st = 30
BHST, deg. F (est.)	60	120	160
Pipe Movement	Rotate 10-20 rpm	Rotate 10-20 rpm	Rotate 10-20 rpm
Rate, Max. (bpm)	1 truck	8	6 (air)
Rate, Recommended (bpm)	10	1st = 4 , 2nd = 6	4 (air)
Pressure, Max. (psi)	200	2000	2000
Shoe Joint	40'	80'	80'
Batch Mix	NA	NA	NA
Circulating prior cmtng (hr.)	1	1.5	1
Time Between Stages,(hr.)	NA	3	NA
Special Instructions	1,5,7	1,3,5,6,9	1,3,5,6,8

- 1 Do not wash pumps and lines
- 2 Do not reverse out
- 3 Run Blend Test on Cement
- 4 Record Rate , Pressure, and Density on 3.5" disk
- 5 Confirm densometer with pressurized mud scales
- 6 Run a temperature survey 12 hr. after bumping the plug if cement is not circulated to surface.
- 7 If cement is not circulated to surface , then 1" cement to surface.
- 8 Drop the plug on the fly.
- 9 If cement is not circulated to surface and temp. survey shows TOC below surface casing, then perforate and circulate cement to surface.

Notes:

- 1 The area is known for natural fractures in the Mesa Verde group.

CEMENTING PROGRAM

Florance 'H' # 37-R

Surface:

Preflush	30 bbl.	Fresh Water	
Slurry 1 TOC@Surface	270 sk	Standard Cement + 2% CaCl ₂ + 1/4 lb/sk floccle	320 cu. ft.
Slurry Properties:	density (lb/gal)	yield (ft ³ /sk)	water (gal/sk)
slurry1	15.60	1.18	5.20
Casing Equipment:	(Halliburton)	9 5/8" , 8R, ST&C	
	1 Type M Guide Shoe 1 Insert Float w Auto Fill 1 Weld A 3 S-4 Centralizer 1 Top Wooden Plug		

Notes: If boulders or loss of circulation is encountered, then pump the following:

Preflush	40 bbl.	Fresh Water
Slurry 1 TOC@Surface	370 sk	Standard Cement + 2% CaCl ₂ + 1/4 lb/sk floccle

CEMENTING PROGRAM

Florance 'H' # 37-R

Intermediate :

Preflush, 1st stage	20 bbl. 10 bbl.	Mud Flush + dye marker Fresh Water	
Tail, 1st stage slurry 1 TOC@Stage Tool		Standard Cement + 0.4% Halad-344 + 0.4% CFR-3 + 2.0% Microbond + 5 lb/sk gilsonite + 1/4 lb/sk flocele *** (use slurry 5 if significant losses are encountered during drilling, slurry 5 is slurry 1 with 10 lb./sk total gilsonite)	250 cu. ft.
Preflush, 2nd stage	20 bbl. 10 bbl.	Mud Flush + dye marker Fresh Water	
Lead, 2nd stage slurry 2 TOC@Surface		Halliburton Light Cement (std cmt) + 7 lb/sk salt + 5% Calseal + 0.5% VersaSet + 3/8 lb/sk flocele *** (use slurry 4 if significant losses are encountered during drilling, slurry 4 is slurry 2 + 10 lb./sk gilsonite)	371 cu. ft.
Tail, 2nd stage slurry 3	100 sk	Standard Cement + 0.4% Halad-344 + 0.4% CFR-3 + 2.0% Microbond + 5 lb/sk gilsonite + 1/4 lb/sk flocele	129 cu. ft.

Slurry Properties:

	density (lb/gal)	yield (ft ³ /sk)	water (gal/sk)
slurry 1	15.11	1.29	5.40
slurry 2	13.10	1.80	9.19
slurry 3	15.11	1.29	5.40
slurry 4	12.60	2.04	9.83
slurry 5	14.61	1.40	5.60

Casing Equipment: Halliburton 7", 8R, LT&C

1 Super Seal II Float Shoe		
1 Super Seal II Float Collar		
1 Multiple Stage Cementer	100 ft. above the Fruitland Coal top or apx.	2080 ft.
15 S-4 Fluidmaster Centralizer	1 on first 3 joints, then every 5th collar, also 1 on each collar above and below stage tool	
1 Cement Baskets	1 on each joint below the stage tool	
1 2 Stage Plug Set		
3 Lock Clamp		
2 Weld A		

CEMENTING PROGRAM

Florance 'H' # 37-R

Drilling Liner: (air drilled)

Preflush, 1st stage	20 bbl.	Chemical Wash	
	5 bbl.	Fresh Water + 2% KCl	
Lead, 1st stage		50/50 Std. Cmt/Poz A	350 cu. ft.
slurry 1		+ 2% gel (total)	
TOC =	2850 ft.	+ 5 lb/sk gilsonite	
		+ 0.8% Halad-344	
		+ 1/4 lb/sk flocele	

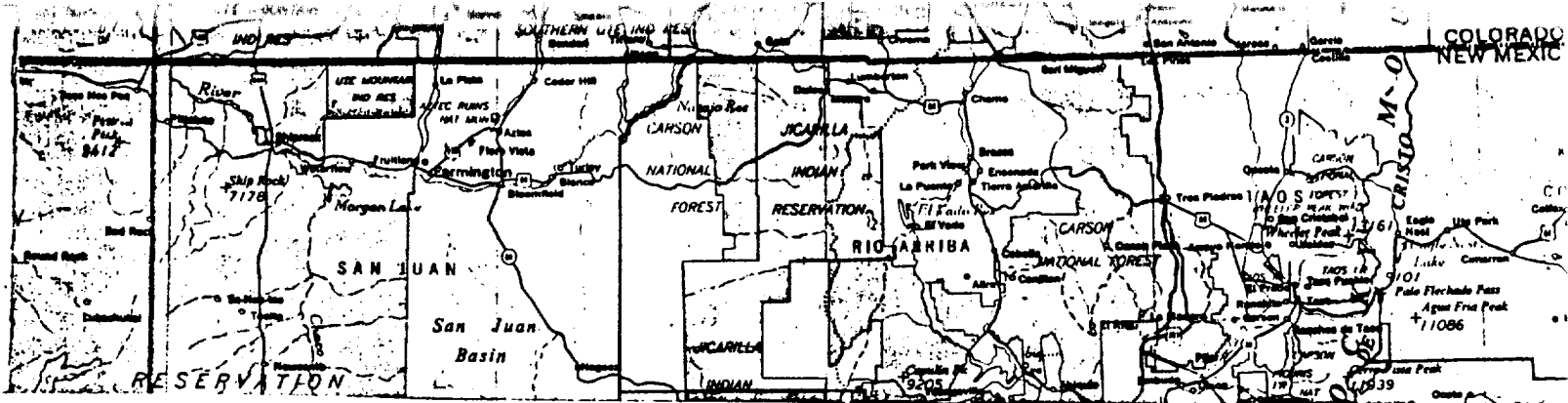
Slurry Properties:

	density (lb/gal)	yield (ft ³ /sk)	water (gal/sk)
slurry 1	13.50	1.32	5.48

Casing Equipment: ATI 4 1/2", 11.6 ppf

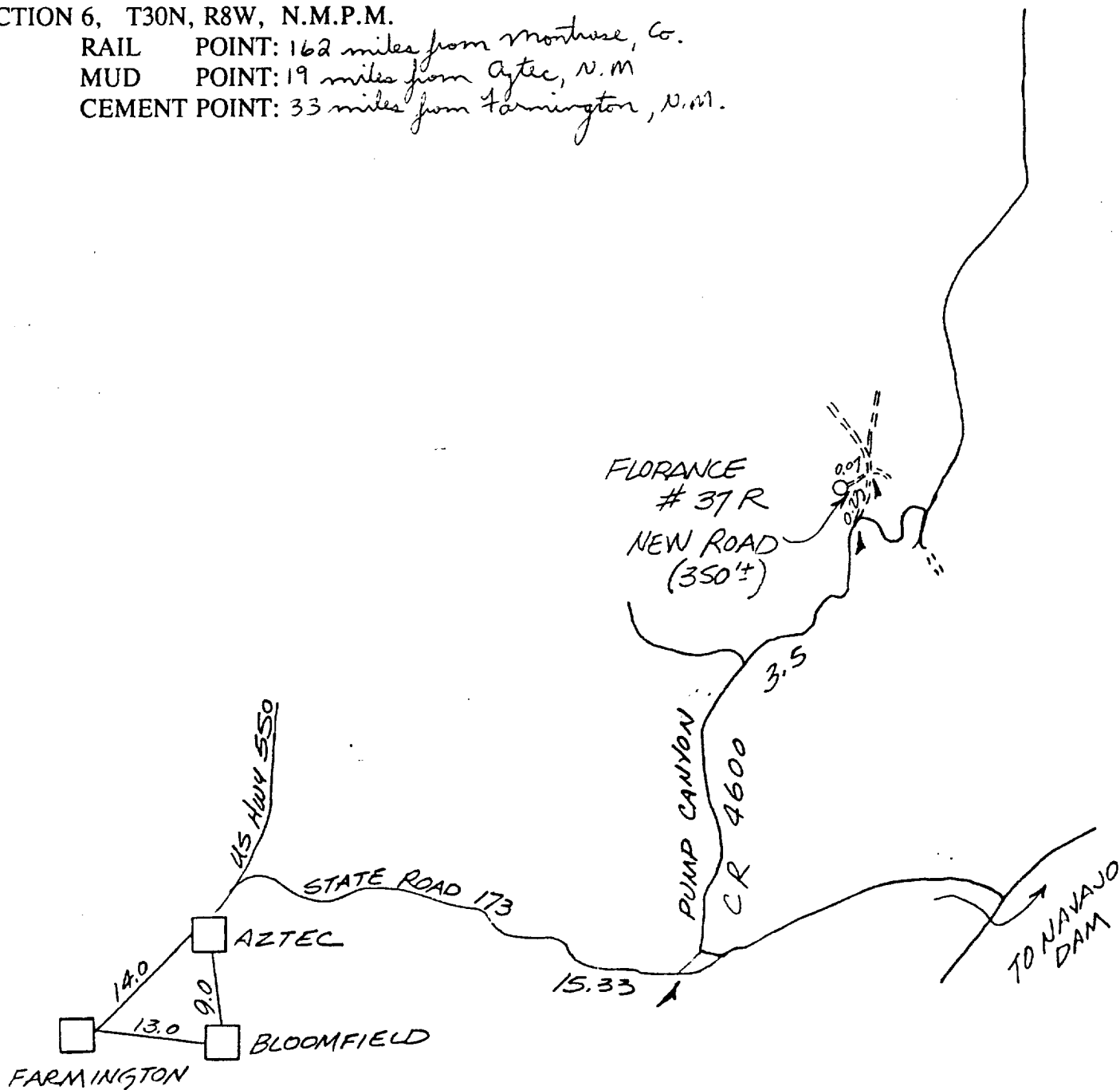
- 1 Float Shoe
- 1 Formation Packer Collar
- 20 Fluidmaster Centralizers 1 ea. on 1st two joints, then 1 every other collar
- 1 Top Rubber Plug
- 2 Lock Clamp
- 1 Weld A

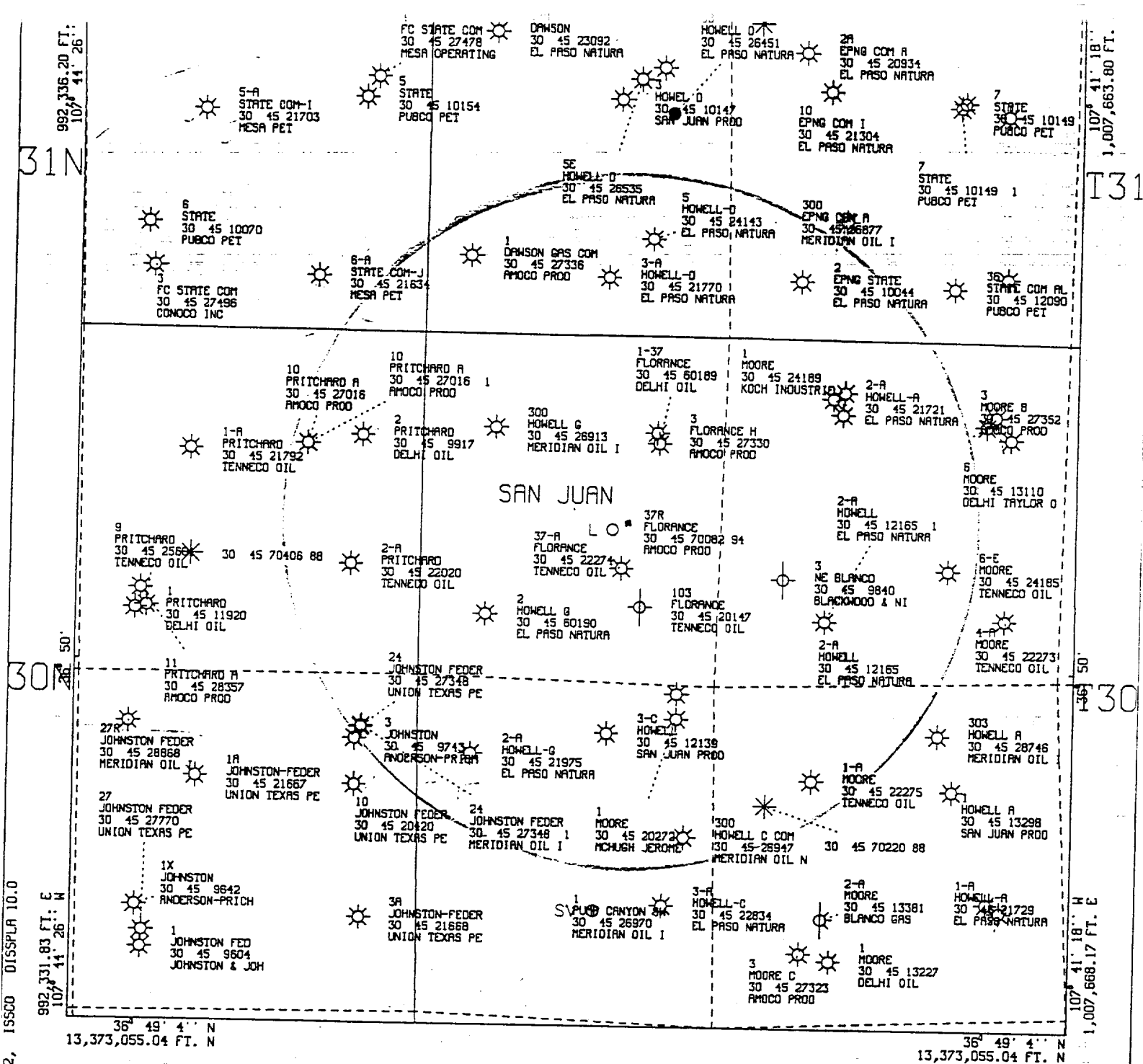




FLORANCE # 37 R
 465' F/SL 1660' F/EL
 SECTION 6, T30N, R8W, N.M.P.M.

RAIL POINT: 162 miles from Montrose, Co.
 MUD POINT: 19 miles from Aztec, N.M.
 CEMENT POINT: 33 miles from Farmington, N.M.





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AMOCO PRODUCTION COMPANY
FLORANCEH37R
SEC 21-T31N-R11W
SAN JUAN NM

SCALE 1 IN. = 2,000 FT. NOV 3, 1994

HORIZONTAL DATUM NAD27

JL.V307AB--RUN#94307164858