

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use  
"APPLICATION FOR PERMIT-" for such proposals

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OCT 18 PM 1:02

SUBMIT IN TRIPLICATE

070 FARMINGTON, NM

1. Type of Well  
☐ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
NORTHWEST PIPELINE CORP.

3. Address and Telephone No.  
PO BOX 58900 MS 2M3 SLC UTAH 84158-0900 (801)584-6981

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
830' FSL 830' FEL SEC. 11, T31N, R6W

5. Lease Designation and Serial No.  
SF-078771

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.  
ROSA UNIT #1E

9. API Well No.  
30-039-25411

10. Field and Pool, or Exploratory Area  
BLANCO MESAVERDE/BASIN DAKOTA

11. County or Parish, State  
RIO ARriba, NEW MEXICO

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other COMPLETION OPERATIONS

- ☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water  
(Note: Report results of multiple completion on  
Well Completion or Recompletion Report and  
Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

9-02-94

Drilled cement from 7914' to 8038'. Circulated hole clean and TOH. Blue Jet ran dual spaced neutron, GR/CCL, and CBL logs. Set CIBP at 8033'.

9-03-94

Tested tree saver to 6000# - OK. Blue Jet perforated total of 10 (0.36") holes at 7887', 7895', 7927', 7933', 7939', 7945', 7951', 7957', 7963', and 7981'. PU isolation tool and breakdown perfs individually. Breakdown pressures ranged from 3250# to 5200# and injection rates from 1.2 BPM to 2.4 BPM.

9-07-94

Faced Dakota with 102,300# of 20/40 sand in 55,586 gal of 30# cross-linked low pH zirconium 60 quality foam using 1,029,000 scf N<sub>2</sub> as follows: 10,710 gal pad, 5985 gal at 1 ppg, 9975 gal at 2 ppg, 10000 gal at 3 ppg, 6000 gal at 4 ppg, 8400 gal at 5 ppg, and 8925 gal at 5 ppg resin coated sand. Flushed with 3276 gal. Well screened out during flush. Job completed at 1100 hrs 9/6/94. ISIP = 5870#. ATP = 5200#, AIR = 30 BPM, MTP = 5950#, MIR = 30 BPM.

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14. I hereby certify that the foregoing is true and correct

Signed KATHY BARNEY Title SR. OFFICE ASSISTANT Date 10/12/94

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any:

OIL CON. DIV.  
OCT 18 1994

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.

\*See Instruction on Reverse Side

OCT 18 1994

FARMINGTON DISTRICT OFFICE

BY Sam

NM000

9-10-94

Set drillable BP at 6050'. Perforate 4 squeeze holes (0.50" dia.) at 5275'. Western squeezed with 150 sx (177 cu.ft.) of CL "B" neat cement. Displaced cement with 21.25 bbls. Final squeeze pressure = 1800#. Release packer and POH to 4750'. Reset packer and pressured squeeze to 1800#. SI well to WOC.

9-11-94

Tag cement at 5076'. Drill cement to 5135'. TIH to 5700' and circulate hole clean. TOH. Blue Jet ran CBL across squeeze interval. Bond OK. Pressure tested casing to 2500# - held OK.

9-13-94

RU Western pressure test to 3300# - held OK. RU Blue Jet and perforate MV at 5650', 5652', 5654', 5656', 5658', 5668', 5670', 5672', 5674', 5679', 5681', 5683', 5685', 5687', 5689', 5691', 5693', 5695', 5697', 5699', 5701', 5716', 5718', 5720', 5722', 5724', 5752', 5757', 5785', 5897', 5899', 5901', 5919', 5921', and 5973'. Total of 35 (0.32") holes.

9-14-94

TOH. Western fraced Point Lookout with 41,454 gal pad of slick water, followed by 82,300# of 20/40 sand in slick water at 1 - 2 ppg. Job completed at 1230 hrs 9/13/94. ISIP = 930#. AIR = 65 BPM, ATP = 2100#, MIR = 70 BPM, and MTP = 2800#. Total fluid = 88,242 gal of slick water. Blue Jet set RBP at 5630'. Pressure tested RBP to 3300# but did not hold. Injecting 3 BPM at 1300#.

9-15-94

Western established rate of 2 BPM at 1000#. Pumped 100 sx (118 cu.ft.) of Cl "B" cement at 2 BPM and from 900 to 600#. Displaced with 33.9 bbls. Final squeeze pressure was 1500#.

9-16-94

Tag cement at 5202'. Drill hard cement to 5284'. TIH to 5625' and circulate hole clean. Pressure test squeeze holes to 3300# - held OK. TOH. Blue Jet perforated 3rd stage as follows: 5356', 5397', 5402', 5435', 5457', 5478', 5488', 5490', 5492', 5527', 5529', 5531', 5533', 5535', 5537', 5539', 5541', 5543', 5545', 5547', 5549', 5551', 5553', 5555', 5571', 5586', 5588', 5590', 5592', 5594', 5596', 5598', 5600', 5602', and 5604'. Total of 35 (0.32") holes.

9-17-94

Western fraced with a 10,458 gal pad of slick water, followed by 89,000# of 20/40 sand in slick water at 1-2.5 ppg. Job completed at 1035 hrs 9/16/94. ISIP = 550#, 15 min. = 150#. ATP = 2800#, AIR = 70 BPM, MTP = 3200#, MIR = 72 BPM. Total fluid = 93,072 gals.

10-8-94

Blue Jet set Model "D" production packer at 6060'.

Dakota tubing: Ran 248 jts (7933.48') of 1-1/2", 2.9#, J-55, 10rd EUE as follows: 1/2 mule shoe collar on bottom, SN (1.375"ID @ 7914') on top of bottom joint, 58 jts. of tail pipe, a 5 unit seal assembly, 189 jts of tubing, 1 (5.95') 1-1/2" 2.9# J-55 pup jt. on top. Landed @ 7945' KB. Set 6000# on packer.

Mesa Verde tubing: Ran 170 jts. (5895.14') of 1-1/4", 2.33#, J-55, 10rd IJ as follows: orange peeled perforated nipple on bottom and a SN (1.062"ID @ 5868') on top of bottom joint. Landed @ 5907' KB. Wait on 1-1/4" X 1-1/2" swedge to land tubing. SDON.

10-9-94

Land MV tubing. Rig released at 1230 hrs 10/8/94.



**LTR**



**Job separation sheet**

**DISTRICT I**

P.O.Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals and Natural Resources DepartmentForm C-107  
Revised 4-1-91**DISTRICT II**

P.O.Drawer DD, Artesia, NM 88211-0719

**OIL CONSERVATION DIVISION**

P.O.Box 2088

**DISTRICT III**

1000 Rio Brazos Rd., Aztec, NM 87410

Santa Fe, New Mexico 87504-2088

Filing Instructions  
Bottom of Page**APPLICATION FOR MULTIPLE COMPLETION****NORTHWEST PIPELINE CORPORATION P.O. BOX 58900 SALT LAKE CITY, UTAH 84158-0900**

Operator

Address

**ROSA UNIT****#1E****P 11 31 06****RIO ARRIBA**

Lease

Well No.

Unit Ltr. — Sec — Twp — Rge

County

All applicants for multiple completion must complete Items 1 and 2 below.

1. The following facts are submitted:	Upper Zone	Immediate Zone	Lower Zone
a. Name of Pool and Formation	<b>BLANCO MESAVERDE</b>		<b>BASIN DAKOTA</b>
b. Top and Bottom of Pay Section (Perforations)	<b>5356' - 5973'</b>		<b>7887' - 7981'</b>
c. Type of Production (Oil or Gas)	<b>GAS</b>		<b>GAS</b>
d. Method of Production (Flowing or Artificial Lift)	<b>FLOWING</b>		<b>FLOWING</b>
e. Daily Production <input type="checkbox"/> Actual <input checked="" type="checkbox"/> Estimated Oil Bbls. Gas MCF Water Bbls.	<b>PITOT 1808 MCF/D</b>	<b>RECEIVED OCT 3 1 1994 OIL CON. DIV. DIST. 3</b>	<b>PITOT 5548 MCF/D</b>

**2. The following must be attached:**

- Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
- Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.)

**OPERATOR:**

I hereby certify above information is true and complete to best of my knowledge, and belief.

Signature Kathy BarneyPrinted Name & Title **KATHY BARNEY** **SRL OFFICE ASSISTANT**Date **10/17/94** Telephone **(801)584-6981****OIL CONSERVATION DIVISION**Approved by: [Signature]Title: **SUPERVISOR DISTRICT #3**Date: **OCT 3 1 1994**

# WELLBORE DIAGRAM

ROSA UNIT #1E MV/DK

LOCATION: 830' FSL, 830 FEL  
SE/4 SE/4 SEC. 11, T31N, R6W  
RIO ARRIBA CO., NM  
ELEVATION: 6345' GR  
KB: 12'

## TOPS:

OJO ALAMO	2447'
KIRTLAND	2547'
FRUITLAND	2947'
PICTURED CLIFFS	3205'
LEWIS	3510'
CLIFF HOUSE	5329'
MENEFEE	5442'
POINT LOOKOUT	5648'
MANCOS	6002'
GREENHORN	7516'
GRANEROS	7694'
DAKOTA	7872'

## STIMULATION

### DK

7887' to 7981'

102,300# 20/40 sand in 55,586 gals of  
30# zirconium X-Link in a 60 qual foam

### MV

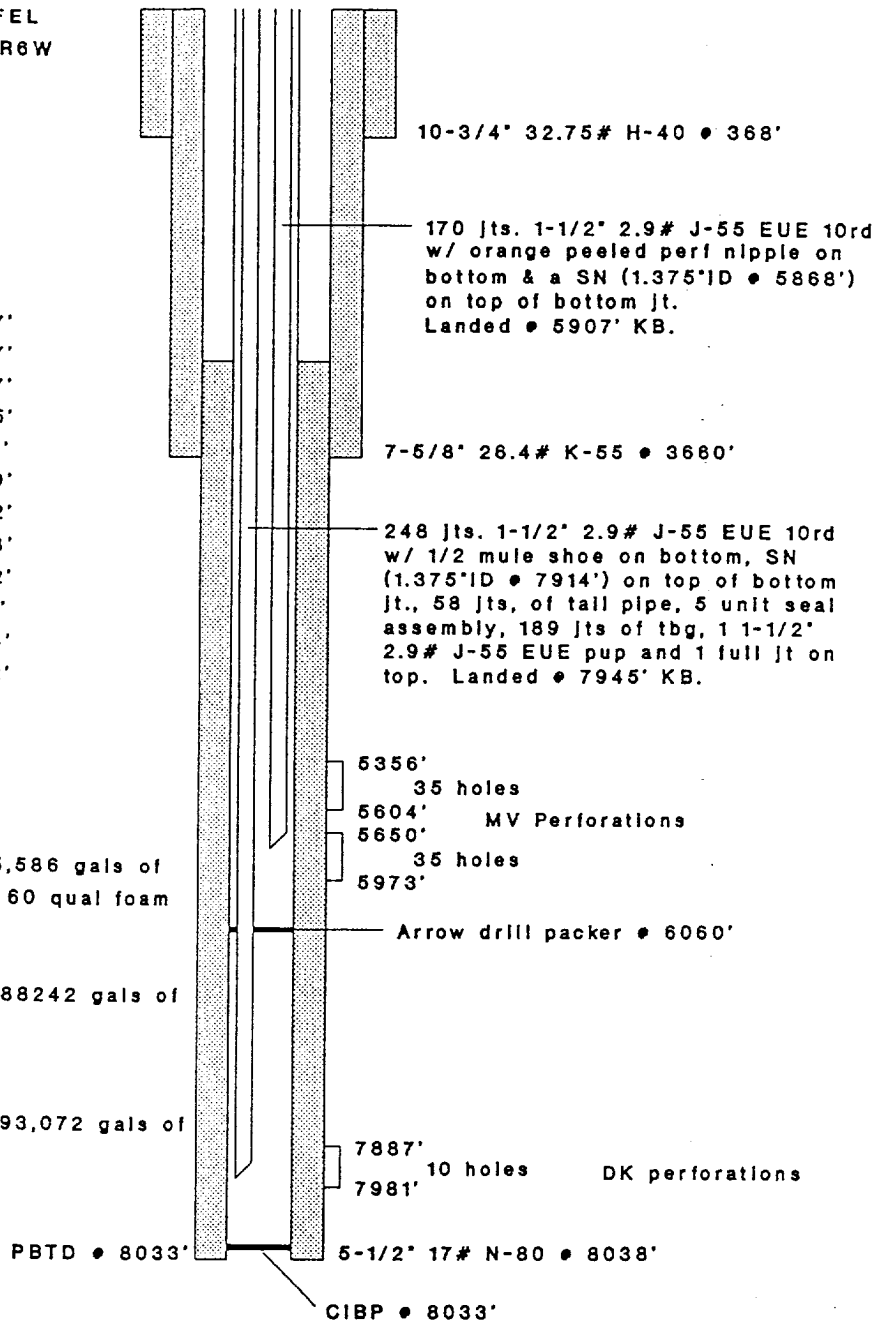
5650' to 5973'

82,300# of 20/40 sand in 88242 gals of  
slick water.

### MV

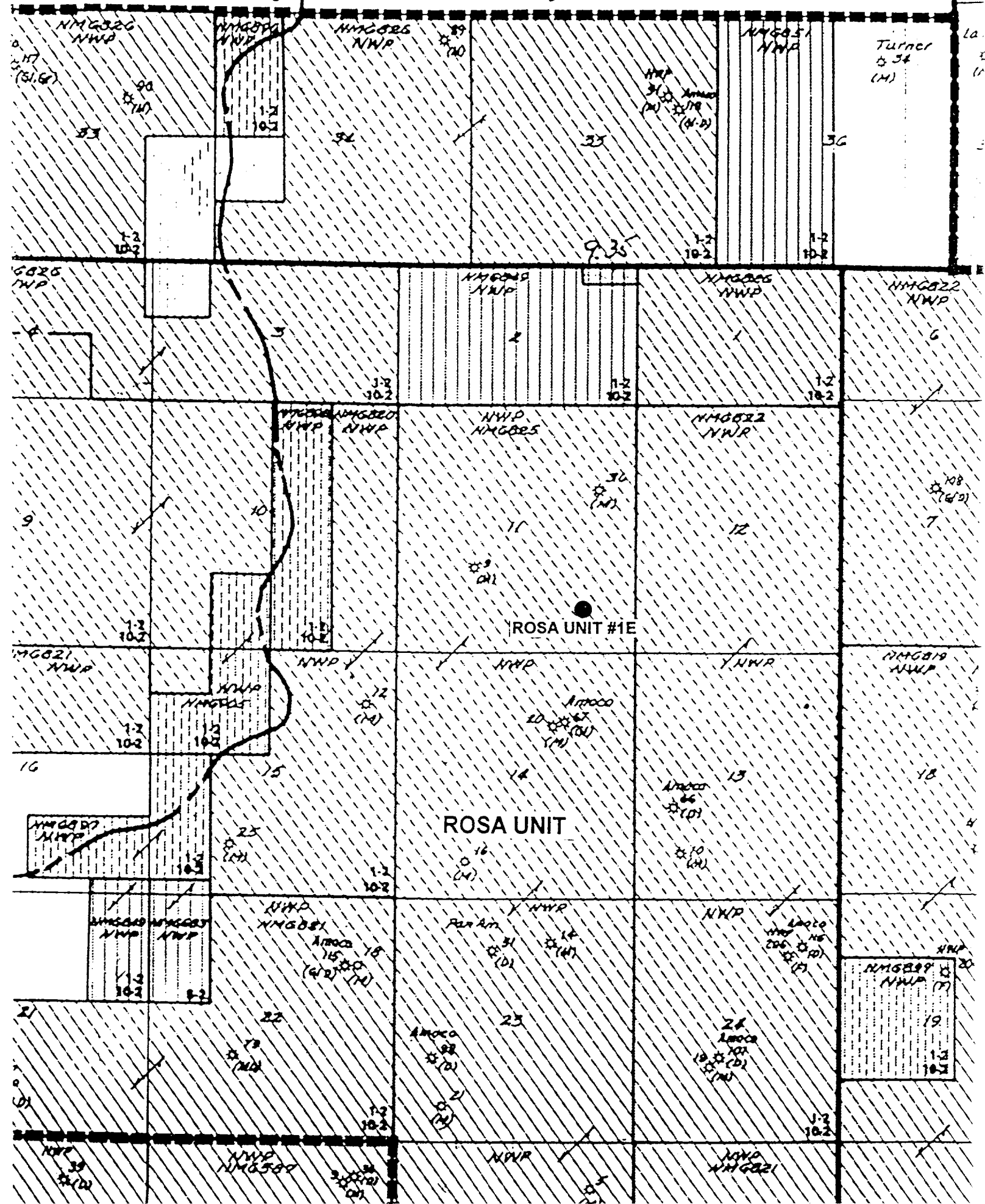
5356' to 5604'

89,000# of 20/40 sand in 93,072 gals of  
slick water.



HOLE SIZE	CASING	CEMENT	VOLUME	TOP OF CMT
13-3/4"	10-3/4" 32.75#	240 SX	286 CU.FT.	SURFACE
9-7/8"	7-5/8" 26.4#	865 SX	1607 CU.FT.	SURFACE
6-3/4"	5-1/2" 17#	415 SX	601 CU.FT.	3030' (SURV)

San Juan County | Rio Arriba County



**OFFSET OPERATORS  
ROSA UNIT #1E  
P-11-31N-6W**

1. LEASE: ROSA UNIT

Operator: Northwest Pipeline Corp, MS-2M3, P.O. Box 58900, Salt Lake City, UT, 84158-0900

**ORTHWEST PIPELINE CORP.**  
**OSA UNIT NO. 1E**  
**LANCO MV / BASIN DAKOTA**  
**CO ARRIIBA STATE: NEW MEXICO**

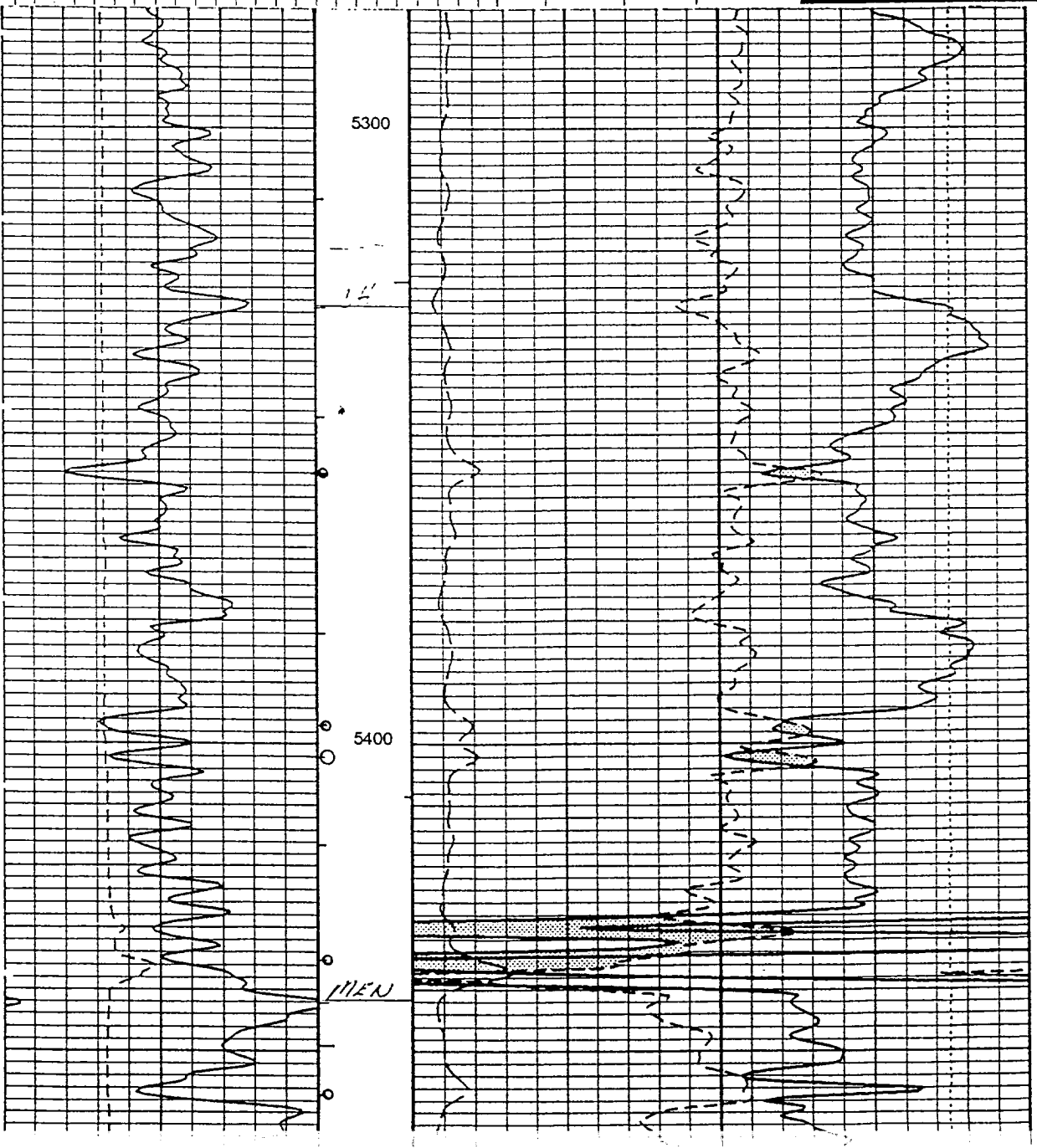
**chlumbergei**  
**EPITHERMAL NEUTRON**  
**LITHO-DENSITY**  
**WITH GAMMA RAY**

Y FSL & 830' FEL  
 Elev.: K.B. 6357 F  
 G.L. 6345 F  
 D.F. 6356 F

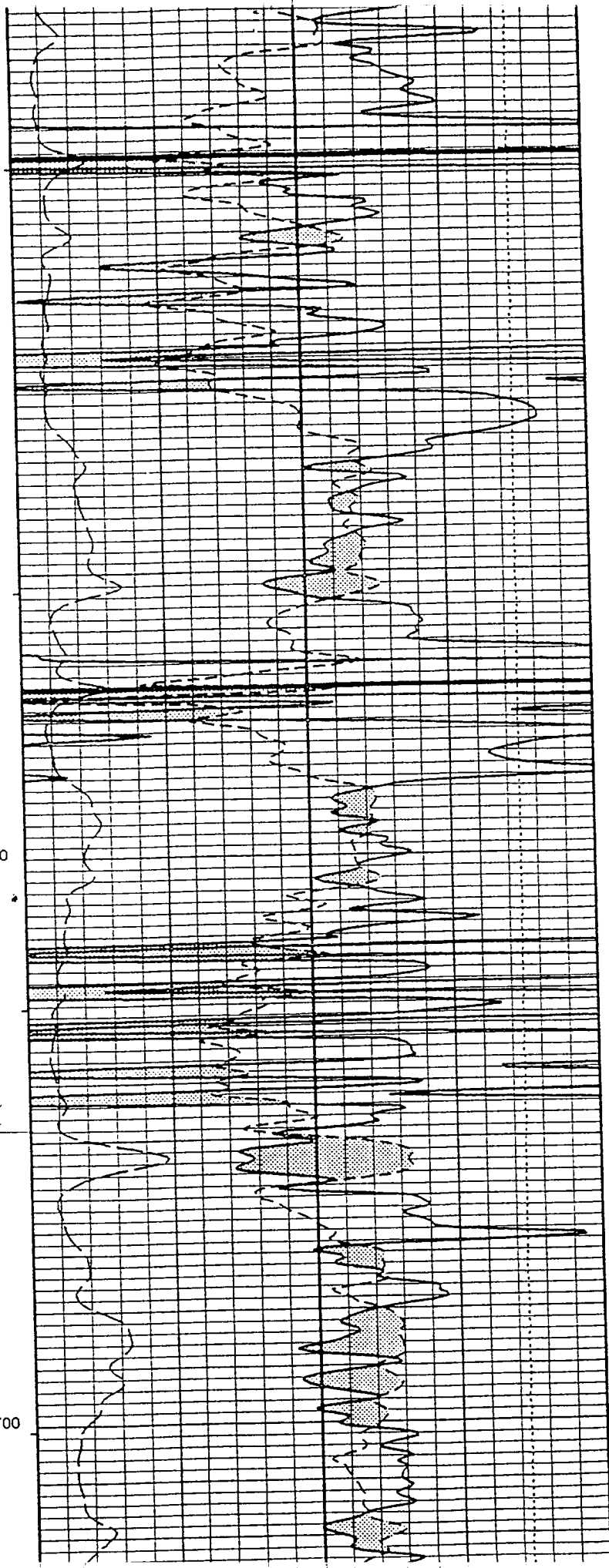
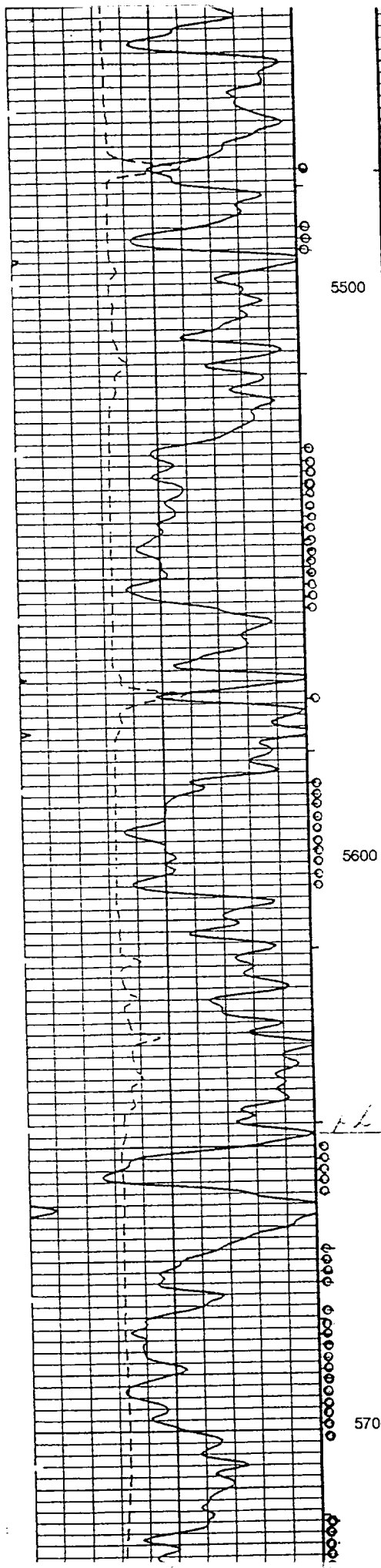
Ground Datum: GROUND LEVEL Elev.: 6345 F  
 Measured From: RKB 12.0 F above Perm. Datum  
 Logging Measured From: RKB

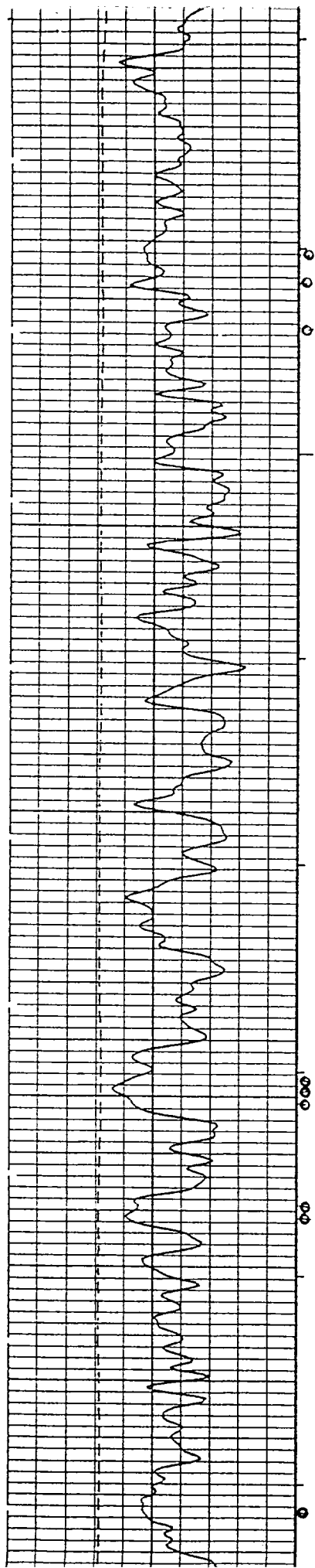
API Serial No.	SECTION	TOWNSHIP	RANGE
30 JUN-1994	11	31N	6W
1			
8025 F			
8036 F			
8034 F			
5050 F			
3659 F			
7.625 IN			
6.750 IN			
AIRGAS			
density			
temperature			
pressure			
depth			
MT			
109 DEGF			
30 JUN-1994			
21:00			
30 JUN-1994			
21:00			
8426			
PHILLIPS			
FARMINGTON			
BIRCHER			

FINAL PRINTS



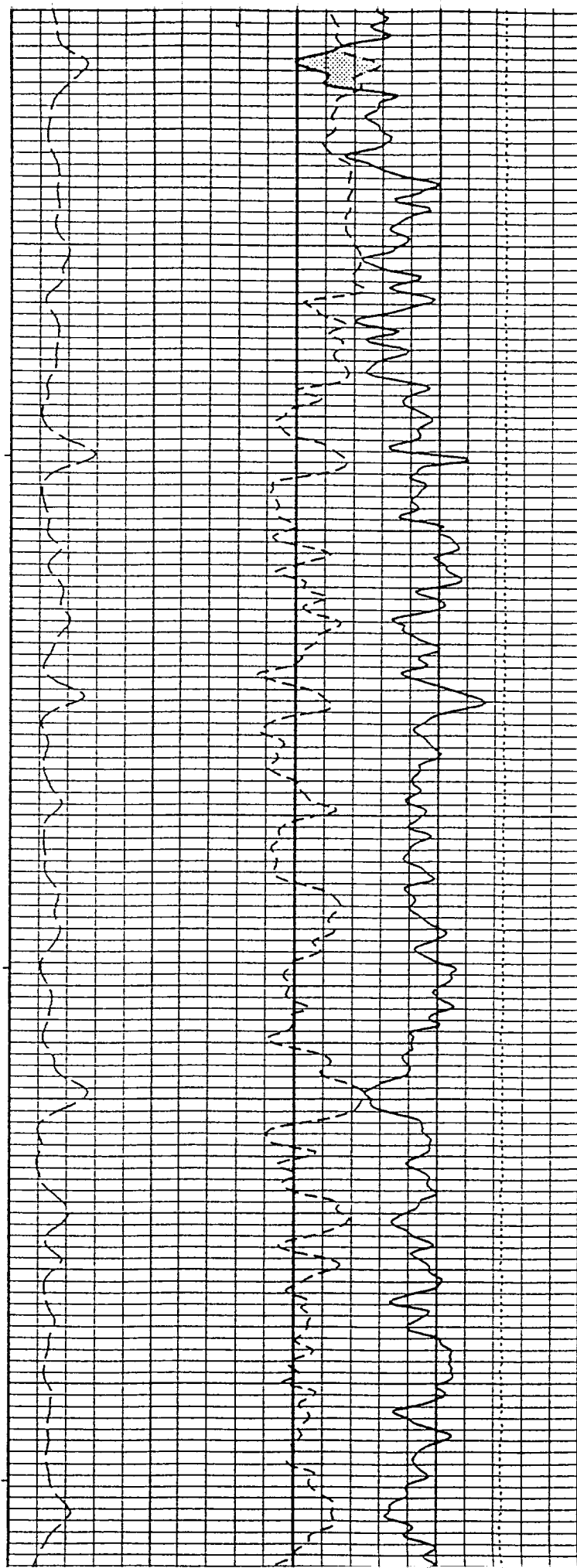






5800

5900



**RTHWEST PIPELINE CORP.**

**SA UNIT NO. 1E**

**ANCO MV / BASIN DAKOTA**

**ARRIBA STATE: NEW MEXICO**

**EPITHERMAL NEUTRON  
LITHO-DENSITY  
WITH GAMMA RAY**

SL & 830' FEL

Elev.: K.B. 6357 F  
G.L. 6345 F  
D.F. 6356 F

Parent Datum: GROUND LEVEL

Elev.: 6345 F  
12.0 F above Perm. Datum

Measured From: PKB

ig Measured From: PKB

API Serial No.	SECTION	TOWNSHIP	RANGE
30-JUN-1994	11	31N	04W
1			
8025 F			
8036 F			
8034 F			
5050 F			
7.625 IN	@		
3660 F			
6.750 IN			
3659 F			
AIR GAS			
Y			
N/A			
ure	@		
ature	@		
ature	@		
N/A			
MRT	N/A @ 109	N/A @ 109	
atures	109 DEGF		
Time	30-JUN-1994	21:00	
tion	30-JUN-1994	21:00	
PHILLIPS	8426	FARMINGTON	
BROCHER			

FINAL PRINTS

