ENERGY AND MINERALS DEPARTMENT

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

RECEIVED
MAR 14 1995
Oil Conservation Division

Revised 7-1-81

Case 11236

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☒ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☐ no

II. Operator: Yates Petroleum Corporation

Address: 105 South 4th Street Artesia, New Mexico 88210

Contact party: Pinson McWhorter Phone: (505) 748-1471

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ☐ yes ☒ no
If yes, give the Division order number authorizing the project _____.

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Pinson McWhorter Title Reservoir Engineering Supervisor

Signature: Pinson McWhorter Date: March 10, 1995

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal. _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division

C-108
Application for Authorization to Inject
Yates Petroleum Corporation
Chaves County, New Mexico

Quincy AMQ State #8
Unit F Sec 12-8S-27E

I. The purpose of these wells will be to reinject produced San Andres water into the San Andres formation as part of a pressure maintenance project in Acme San Andres Southeast.

II. Operator: Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Pinson McWhorter
(505) 748-1471

III. Well Data: See Attachment A

IV. This is not an expansion of an existing project.

V. See attached map, Attachment B.

VI. Area of Review Well Data: See Attachment C.

VII. 1. The proposed average daily injection volume will be approximately 400 BWPD.

The maximum daily injection volume is estimated to be 500 BWPD.

2. The system will be a closed system.

3. The proposed average injection pressure is estimated to be 900 psi.

The proposed maximum injection pressure is estimated to be 1100 psi.

4. The source of injection water will be produced San Andres water from Acme San Andres Southeast.

VIII. 1. The injection zone will be the P1 of the San Andres. The San Andres dolomite is a finely crystalline, tan to light grey reservoir rock, sandy textured with porosity development consisting of small vugs and fractures. The average depth of the top of the P1 zone of the San Andres is 2140' with a thickness of approximately 55'. Fresh water zones overlay the San Andres at depths of approximately 300'.

IX. The proposed injection interval may be treated with 8000 gallons of 20%HCL acid.

X. Well log data is attached.

XI. No fresh water wells were located within one mile of the proposed injection well.

XII. Yates Petroleum has examined available geologic and engineering data and has found no evidence of open faults or other hydrologic connection between the injection zone and any underground source of drinking water

XIII. Proof of Notice

Certified letters sent to the surface owners and offset operator are attached.

Attachment A

ACME SAN ANDRES SOUTHEAST PRESSURE MAINTENANCE PROJECT

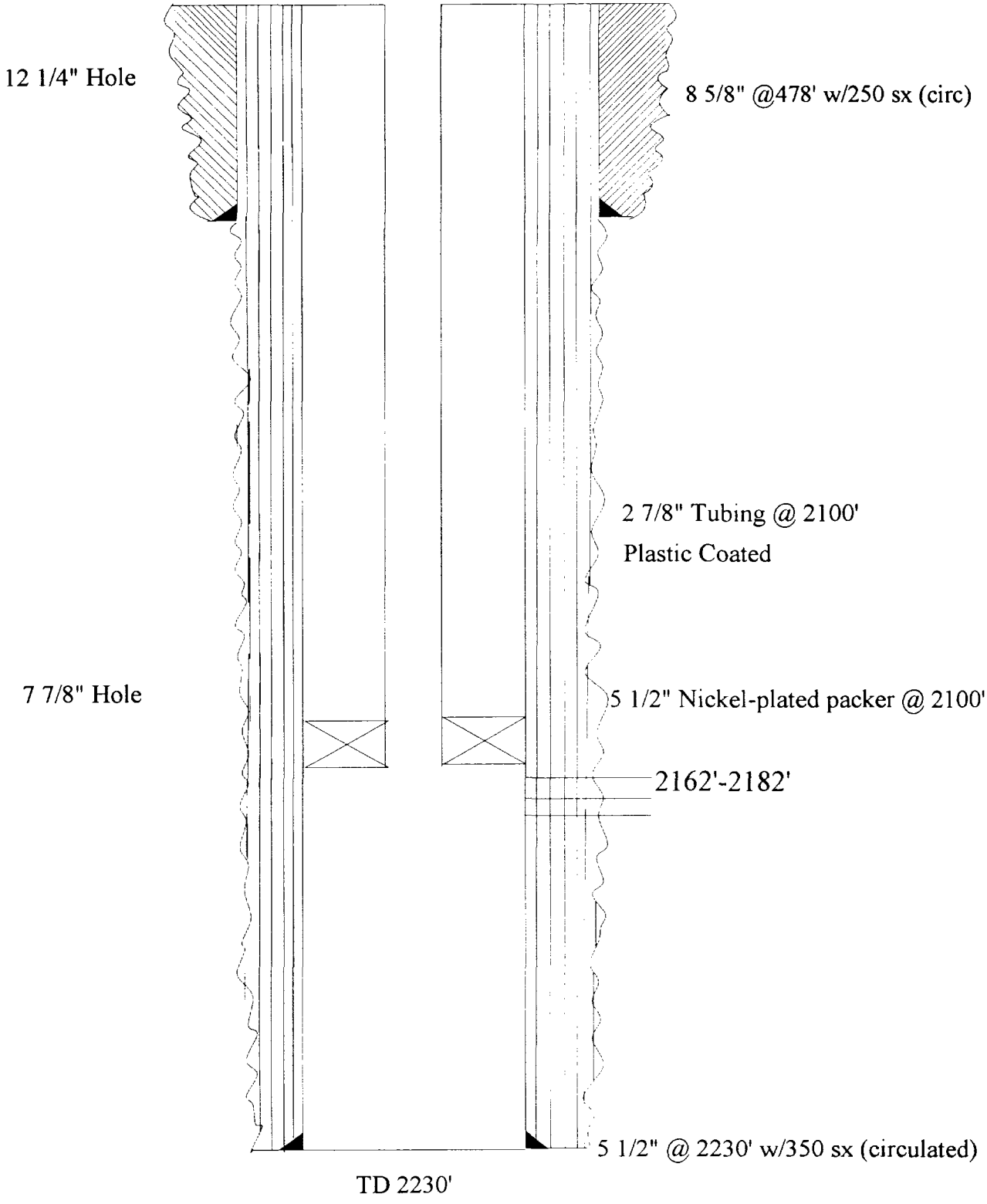
FORM C-108

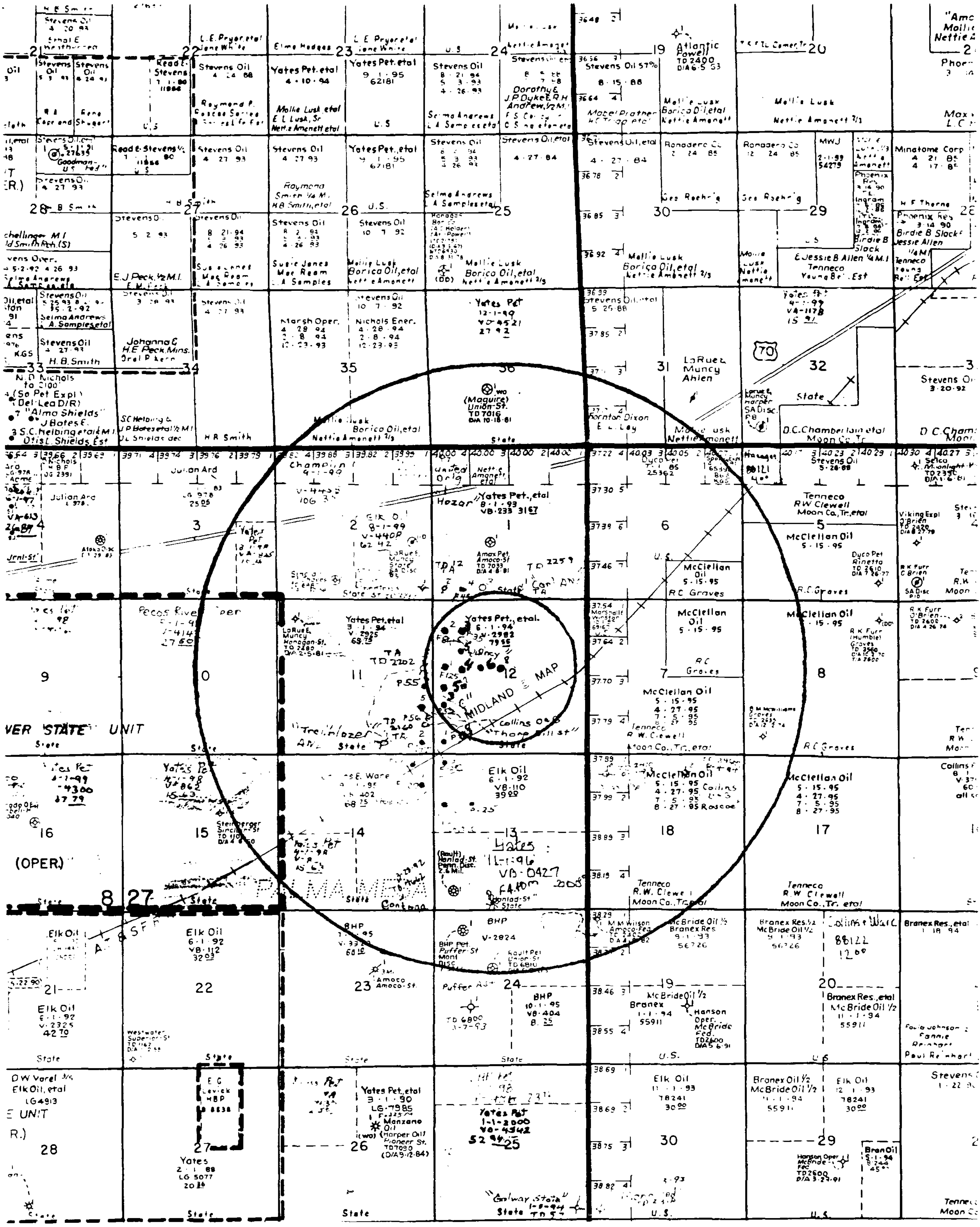
WELL DATA

Lease Name & Location	Casing Tubing & Packer Data	Injection Formation	Injection Interval Perforation	1 - Next Higher Oil/Gas Zone 2- Next Higher Oil/Gas Zone
Quincy AMQ State #8	8 5/8" @ 478' w/250 sx (circ)	San Andres	2162' - 2182'	1 - None
Unit F Sec 12-8S-27E	5 1/2" @ 2230' w/350 sx (circ)			2 - Ordovician
2310' FNL & 2310' FWL	2 7/8" tubing @ 2100' (plastic coated)			
(Originally Oil Test)	5 1/2" Nickel-plated packer @ 2100'			

Quincy AMQ State #8
F 12-8S-27E
2310' FNL & 2310' FWL

Proposed





7 miles
SW by W
at Elkins, NM

Yates Petroleum Corporation

Proposed Injection Well

Quincy AMQ State #8

F Sec. 12 T8S-R27E

2310' FNL & 2310' FWL

Chaves County, New Mexico

ATTACHMENT B

Page 1

ACME SAN ANDRES SOUTHEAST - PRESSURE MAINTENANCE PROJECT
Form C-108
Tabulation of Data on Wells Within Area of Review

WELL NAME	OPERATOR	TYPE	SPUD	COMPLETED	TOTAL DEPTH	PRODUCING ZONE	PERFORATIONS	CASING & CEMENTING INFORMATION
Quincy AMQ State #1 Unit E, Sec 12-8S-27E 2310' FNL & 330' FWL	Yates Petroleum Corporation	Oil	07/26/93	08/06/93	2195'	San Andres	2143' - 2186'	13-3/8" @ 10' w/cement to surface 8-5/8" @ 475' w/250 sx (circulated) 5-1/2" @ 2195' w/250 sx (TOC 1100' CBL)
Quincy AMQ State #2 Unit D, Sec 12-8S-27E 990' FNL & 330' FWL	Yates Petroleum Corporation	Oil	08/02/93	08/14/93	2203'	San Andres	2172' - 2189'	13-3/8" @ 10' w/cement to surface 8-5/8" @ 450' w/250 sx (circulated) 5-1/2" @ 2203' w/250 sx (TOC 800' CBL)
Quincy AMQ State #3 Unit D, Sec 12-8S-27E 990' FNL & 990' FWL	Yates Petroleum Corporation	Oil	08/25/93	09/04/93	2220'	San Andres	2180' - 2199'	13-3/8" @ 6' w/cement to surface 8-5/8" @ 460' w/250 sx (circulated) 5-1/2" @ 2220' w/250 sx (TOC 1200' CBL)
Quincy AMQ State #4 Unit E, Sec 12-8S-27E 2310' FNL & 990' FWL	Yates Petroleum Corporation	Oil	01/13/95	01/27/95	2214'	San Andres	2150' - 2192'	13-3/8" @ 5' w/cement to surface 8-5/8" @ 448' w/280 sx (circulated) 5-1/2" @ 2214' w/350 sx (TOC 846' CBL)
Quincy AMQ State #5 Unit E, Sec 12-8S-27E 1650' FNL & 990' FWL	Yates Petroleum Corporation	Oil	01/18/95	02/01/95	2218'	San Andres	2157' - 2202'	13-3/8" @ 5' w/cement to surface 8-5/8" @ 447' w/250 sx (circulated) 5-1/2" @ 2218' w/300 sx (TOC 461' calc)
Quincy AMQ State #6 Unit F, Sec 12-8S-27E 2310' FNL & 1650' FWL	Yates Petrolem Corporation	Oil	02/08/95	02/21/95	2220'	San Andres	2154' - 2194'	8-5/8" @ 464' w/250 sx (circulated) 5-1/2" @ 2220' w/300 sx (TOC 463' calc)

ACME SAN ANDRES SOUTHEAST - PRESSURE MAINTENANCE PROJECT
Form C-108
Tabulation of Data on Wells Within Area of Review

WELL NAME	OPERATOR	TYPE	SPUD	COMPLETED	TOTAL DEPTH	PRODUCING ZONE	PERFORATIONS	CASING & CEMENTING INFORMATION
Bill Thorp State #3 Unit L, Sec 12-8S-27E 1650' FSL & 330' FWL	Collins Oil & Gas	Oil	06/28/93	08/09/93	2185'	San Andres	2128' - 2160'	8-5/8" @ 470' w/245 sx (circulated) 4-1/2" @ 2185' w/200 sx (TOC 1295' calc)
Bill Thorp State #5 Unit L, Sec 12-8S-27E 2310' FSL & 330' FWL	Collins Oil & Gas	Oil	08/19/93	08/26/93	2195'	San Andres	2137' - 2181'	8-5/8" @ 450' w/245 sx (circulated) 4-1/2' @ 2195' w/200 sx (TOC 1305' calc)
Bill Thorp State #6 Unit I, Sec 11-8S-27E 2310' FSL & 330' FEL	Collins Oil & Gas	Oil	07/20/94	07/29/94	2197'	San Andres	2142' - 2184'	8-5/8" @ 458' w/260 sx 4 -1/2" @ 2197 w/200 sx (TOC 1307' calc)
Bill Thorp State #7 Unit L, Sec 12-8S-27E 2310' FSL & 990' FWL	Collins Oil & Gas	Oil	02/02/95	02/13/95	2200	San Andres	2138' - 2186	8-5/8" @ 450' w/200 sx 4 1/2" @ 2200' w/200 sx (TOC 1310' calc)
Trailblazer ANL State #2 Unit H, Sec 11-8S-27E 2310' FNL & 330' FEL	Yates Petroleum Corporation	Oil	08/20/93	Not Completed	2202'	San Andres	2159' - 2174'	8-5/8" @ 470' w/250 sx (circ) 5 1/2" @ 2202' w/250 sx (TOC 769' CBL)

Schlumberger

COMPENSATED NEUTRON LOG

COUNTY	CHAVES
FIELD	SOUTHEAST ACME (S.A.)
LOCATION	2310' FNL & 2310' FWL
WELL	QUINCY "AMQ" STATE #8
COMPANY	YATES PETROLEUM CORPORATION

COMPANY YATES PETROLEUM CORPORATION

WELL QUINCY "AMQ" STATE #8

FIELD SOUTHEAST ACME (S.A.)

COUNTY CHAVES STATE NEW MEXICO

LOCATION: 2310' FNL & 2310' FWL

API SERIAL NO.

SECT. 12 | TWP. 8S | RANGE 27E

Other Services: PERF

Elev.: K.B. 3946.0 F, D.F., G.L. 3941.0 F

Permanent Datum	G.L.	Elev. 3941.0 F	
Log Measured From	K.B.	7.0 F above Perm. Datum	
Drilling Measured From	K.B.		
Date	13-MAR-1995		
Run No.	1		
Depth Driller	2200.0 F		
Depth Logger (Schl.)	2222.0 F		
Btm. Log Interval	2218.0 F		
Top Log Interval	50.0 F		
Casing-Driller	5.5 @	@	@
Casing-Logger			
Bit Size	7.875		
Type Fluid in Hole	WATER		
Dens.			
Visc.			
pH			
Fld. Loss			
Source of Sample			
Rm @ Meas. Temp.	@	@	@
Rmf @ Meas. Temp.	@	@	@
Rmc @ Meas. Temp.	@	@	@
Source: Rmf	Rmc		
Rm @ BHT	@	@	@
TIME: Circulation Ended			
TIME: Logger on Bottom	SEE LOG		
Max. Rec. Temp.			
Equip. Location	8286 ROSWELL		
Recorded By	MARK LEBERENZ		
Witnessed By	MIKE ALLEN		

The well name, location and borehole reference data were furnished by the customer.

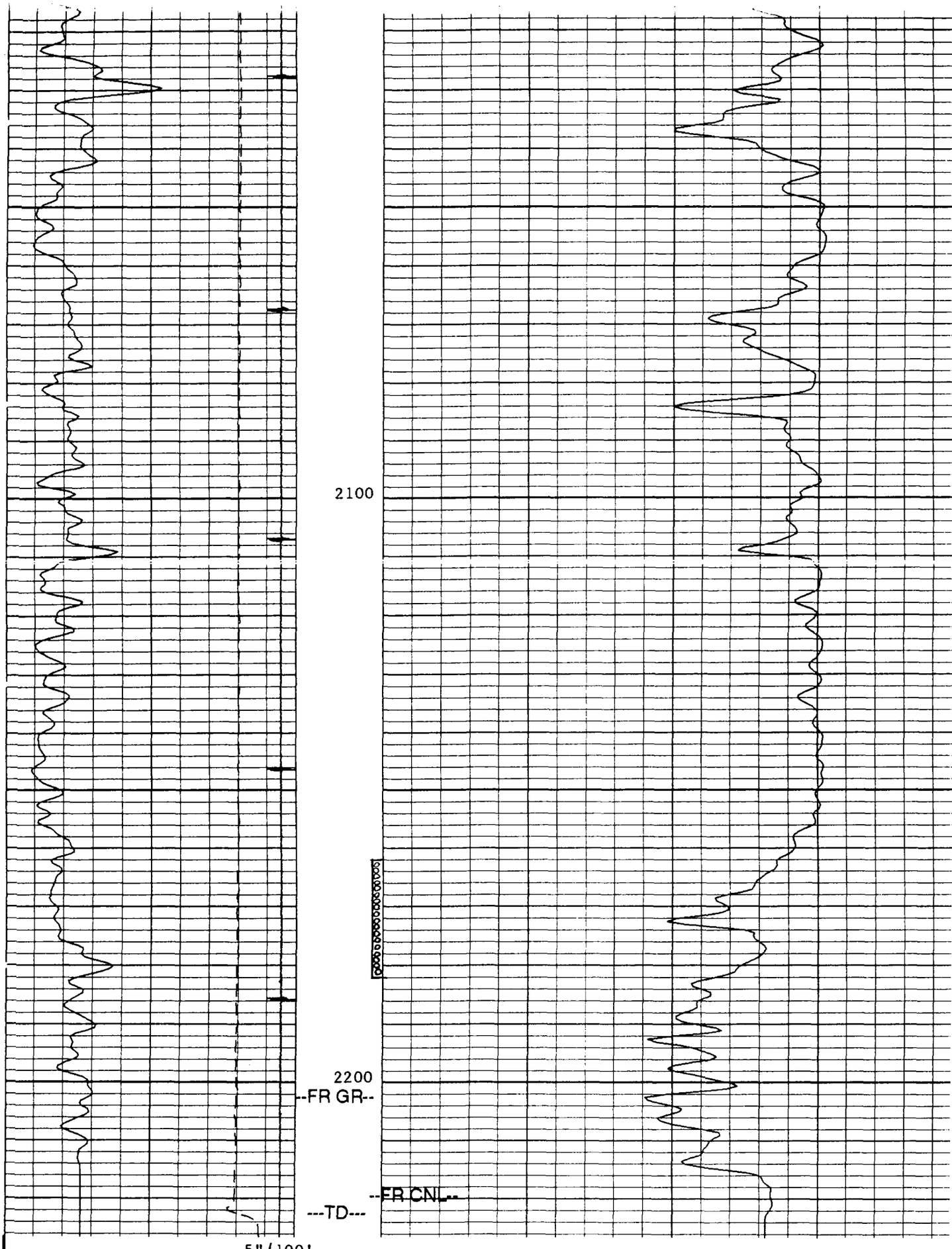
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Run No.	1	
Service Order No.	660335	
Drilling Fluid Level		
Salinity		
Rmf @ BHT	@	@
Rmc @ BHT	@	@
Logging Speed	3600.0 F/HR	
EQUIPMENT DATA		
Tool Number 1	TCCA 91	
Tool Number 2	CNC HA 489	
Tool Number 3		
Tool Number 4		
Tool Number 5		
Tool Number 6		
Tool Number 7		
Tool Number 8		
Tool Number 9		
Tool Number 10		
Tool Number 11		
Tool Number 12		

REMARKS:

NO BOWSPRING ON CNL.

OPERATORS: HERNANDEZ AND MCGONAGLE



CP 32.4 FILE 3 03- 1995 07:44 (UP)

TENS(LBF)	
5000.0	0.0
CCL	
-19.00	1.0000
GR(GAPI)	
0.0	100.00

NPHI(V/V)	
.30000	-.100

SENSOR MEASURE POINT TO TOOL ZERO

CFTC	2.8	FEET	GR	11.8	FEET
TENS	-.7	FEET	CNTC	2.3	FEET
TNRA	3.3	FEET	CCL	15.5	FEET