

SEE ATTACHED SUPPLEMENTAL DATA.

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☒ no
- II. Operator: Murphy Operating Corporation
Address: Post Office Box 2648, Roswell, New Mexico 88202-2648
Contact party: Ann Murphy Ezzell or Mark B. Murphy Phone: (505) 623-7210
- 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: Ann Murphy Ezzell Title Chairman and C.E.O.
- Signature: *Ann Murphy Ezzell* Date: 08/08/89
- * 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.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF MURPHY OPERATING CORPORATION FOR UNIT APPROVAL AND FOR AUTHORITY TO INSTITUTE A WATERFLOOD PROJECT, ROOSEVELT COUNTY, NEW MEXICO.

No. _____

SUPPLEMENTAL DATA REQUIRED
BY FORM C-108

I. The purpose of this Application is to request approval for a secondary recovery project. This application does not qualify for administrative approval. An examiner's hearing is required.

II. The operator is Murphy Operating Corporation of Post Office Box 2648, Roswell, New Mexico, 88202-2648, contact parties: Ms. Ann Murphy Ezzell, Mr. Mark B. Murphy, telephone (505) 623-7210.

III. The well data, in both tabular and schematic form ("typical data sheet"), for each well proposed for injection is attached as Exhibit III.

IV. This is not an expansion of an existing project. However, a preliminary record search indicates that certain OCD orders exist which relate to the approval of waterflood projects or authority to inject. These cases are identified below. We respectfully request that the order approving the Jennifer Chaveroo San Andres Unit specifically remand these prior orders and that the order approving our waterflood project supercede these orders and any other prior orders which are inconsistent with our application.

Oil Conservation Division

Order No./

<u>Date</u>	<u>Case No.</u>	<u>Legal Description</u>	<u>Authority Granted</u>
R-7809 02/06/85	8423	State "DB" Well No. 6 T-7-S, R-33-E, NMPM Section 25: SW $\frac{1}{4}$ SW $\frac{1}{4}$ Roosevelt County, N.M.	Waterflood project / Authority to inject water
R-3544 10/31/68	3904	Hobbs "W" Well No. 9 T-7-S, R-34-E, NMPM Section 29: SE $\frac{1}{4}$ NW $\frac{1}{4}$	Waterflood project / Authority to inject water

V. Attached hereto as Exhibit V. is a map identifying all wells and leases within two miles of each proposed injection well (two-mile boundary highlighted in yellow). A one-half mile radius circle (drawn in blue) around each proposed injection well identifies the wells' areas of review. Also attached is a chart, "Redesignation of Well Names" listing original well names within the proposed Unit Area together with corresponding redesignated well names.

VI. Attached hereto as Exhibit VI.A. is a tabulation of well data for all wells within the proposed Unit Area. Exhibit VI.B. contains a tabulation of well data for all wells outside the proposed Unit Area but within the "area of review". The proposed injection wells are encompassed within the boundary highlighted in blue on the aforementioned Exhibit V. and their locations are listed below. Also attached as Exhibit VI.C. are schematics (illustrating all plugging detail) of any plugged well within the area of review.

<u>Proposed Unit Well No.</u>	<u>Original Well Name</u>	<u>Location</u>
		Roosevelt County T-7-S, R-33-E, NMPM
25-02	State "J" No. 1	Section 25: NW $\frac{1}{4}$ NE $\frac{1}{4}$
25-04	State "DB" No. 1	Section 25: NW $\frac{1}{4}$ NW $\frac{1}{4}$
25-06	State "DB" No. 5	Section 25: SE $\frac{1}{4}$ NW $\frac{1}{4}$

(cont.)

<u>Proposed Unit Well No.</u>	<u>Original Well Name</u>	<u>Location</u>
Roosevelt County T-7-S, R-33-E, NMPM		
25-08	State Conine No. 1	Section 25: SE $\frac{1}{4}$ NE $\frac{1}{4}$
25-10	State "I" No. 1	Section 25: NW $\frac{1}{4}$ SE $\frac{1}{4}$
25-12	State "DB" No. 4	Section 25: NW $\frac{1}{4}$ SW $\frac{1}{4}$
25-14	State "DB" No. 8	Section 25: SE $\frac{1}{4}$ SW $\frac{1}{4}$
25-16	State "J" No. 4	Section 25: SE $\frac{1}{4}$ SE $\frac{1}{4}$
26-10	Federal "26" No. 5	Section 26: NW $\frac{1}{4}$ SE $\frac{1}{4}$
26-12	Federal "26" No. 2	Section 26: NW $\frac{1}{4}$ SW $\frac{1}{4}$
26-14	Federal "26" No. 4	Section 26: SE $\frac{1}{4}$ SW $\frac{1}{4}$
26-16	Federal "26" No. 8	Section 26: SE $\frac{1}{4}$ SE $\frac{1}{4}$
35-02	State "CV" No. 2	Section 35: NW $\frac{1}{4}$ NE $\frac{1}{4}$
35-04	Shackelford No. 1	Section 35: NW $\frac{1}{4}$ NW $\frac{1}{4}$
35-06	State Sec. 35 No. 3	Section 35: SE $\frac{1}{4}$ NW $\frac{1}{4}$
35-08	State Sec. 35 No. 5	Section 35: SE $\frac{1}{4}$ NE $\frac{1}{4}$
35-10	Hobbs "T" No. 14	Section 35: NW $\frac{1}{4}$ SE $\frac{1}{4}$
35-12	State Sec. 35 No. 1	Section 35: NW $\frac{1}{4}$ SW $\frac{1}{4}$
35-14	State "DE" No. 1	Section 35: SE $\frac{1}{4}$ SW $\frac{1}{4}$
35-16	Hobbs "T" No. 19	Section 35: SE $\frac{1}{4}$ SE $\frac{1}{4}$
36-02	State Sec. 36 No. 1	Section 36: NW $\frac{1}{4}$ NE $\frac{1}{4}$
36-04	State "K" No. 1	Section 36: NW $\frac{1}{4}$ NW $\frac{1}{4}$
36-06	State "K" No. 6	Section 36: SE $\frac{1}{4}$ NW $\frac{1}{4}$
36-07	State Sec. 36 No. 1	Section 36: SW $\frac{1}{4}$ NE $\frac{1}{4}$
36-12	State "K" No. 4	Section 36: NW $\frac{1}{4}$ SW $\frac{1}{4}$
Roosevelt County T-7-S, R-33-E, NMPM		
18-15	Wolf Federal No. 3	Section 18: SW $\frac{1}{4}$ SE $\frac{1}{4}$
19-01	Wolf Federal No. 4	Section 19: NE $\frac{1}{4}$ NE $\frac{1}{4}$
19-03	Federal "19" No. 2	Section 19: Lot 1
19-07	Wolf Federal No. 1	Section 19: SW $\frac{1}{4}$ NE $\frac{1}{4}$
19-09	State "G" No. 5	Section 19: NE $\frac{1}{4}$ SE $\frac{1}{4}$
19-11	State "G" No. 1	Section 19: Lot 3
19-15	State "G" No. 4	Section 19: SW $\frac{1}{4}$ SE $\frac{1}{4}$
20-03	Homme Federal No. 2	Section 20: NE $\frac{1}{4}$ NW $\frac{1}{4}$
20-05	Homme Federal No. 1	Section 20: SW $\frac{1}{4}$ NW $\frac{1}{4}$
20-11	State "20" No. 3	Section 20: NE $\frac{1}{4}$ SW $\frac{1}{4}$
20-13	State "20" No. 2	Section 20: SW $\frac{1}{4}$ SW $\frac{1}{4}$
29-03	Hobbs "W" No. 8	Section 29: NE $\frac{1}{4}$ NW $\frac{1}{4}$
29-05	Hobbs "W" No. 7	Section 29: SW $\frac{1}{4}$ NW $\frac{1}{4}$
29-06	Hobbs "W" No. 9	Section 29: SE $\frac{1}{4}$ NW $\frac{1}{4}$
30-01	Hobbs "W" No. 2	Section 30: NE $\frac{1}{4}$ NE $\frac{1}{4}$
30-03	State "V" No. 1	Section 30: Lot 1
30-07	Hobbs "W" No. 3	Section 30: SW $\frac{1}{4}$ NE $\frac{1}{4}$
30-09	State "V" No. 4	Section 30: NE $\frac{1}{4}$ SE $\frac{1}{4}$
30-11	State "V" No. 3	Section 30: Lot 3

VII. Data on the proposed operation:

1. It is projected that an average of 3,600 barrels of water per day (equivalent to 600 barrels of water per well per day) will be initially injected. If successful, a maximum of 29,400 barrels of water per day will be injected.

2. The proposed waterflood system shall be a closed system.

3. It is proposed that water will be injected at an average surface pressure of 800 psig and at a maximum surface pressure of 0.2 psi per foot of depth to top of injection zone, provided that surface pressure in excess of 0.2 psi per foot of depth to injection zone may be approved by administrative application pursuant to Oil Conservation Division rules and regulations.

4. The water to be used for injection for the waterflood project shall be acquired from the closest and most economical of several commercial sources in the immediate area of the proposed Unit (see Exhibit 1., "Field Map Indicating Proposed Unit Facilities" attached to the Plan of Operation, submitted for approval under separate cover, see File Folder No. 4);

Attached hereto as Exhibit VII.4. are chemical analyses and compatibility analyses of the proposed injection fluid (fresh water samples from possible sources as described hereinabove) with that of the receiving Chaveroo San Andres formation (samples from tank batteries located on the State Section 35 lease and the State "DB" lease located within the Unit Area).

5. Not applicable.

VIII. Attached hereto as Exhibit VIII. (see File No. 3) is geological data related to the injection zone including appropriate lithological detail, geological name, thickness and depth. This exhibit contains:

- Exhibit VIII. - Engineering and Geological Report - Proposed Jennifer Chaveroo San Andres Unit, prepared by Bert H. Murphy, Registered Professional Petroleum Engineer dated July 15, 1989;
- Exhibit VIII.A. - General Location Map;
- Exhibit VIII.B. - Report dated November, 1966 prepared by Roswell Geological Society Symposium with attached structural and isopachus maps and type log;
- Exhibit VIII.C. - Core Data - "Completion Coregraphs" for the Homme Federal Well No. 3 and for the Wolf Federal Well No. 1 located within the Unit Area; "Completion Coregraph" for the State "AZ" Well #2 located in near proximity of Unit in Section 33, T-7-S, R-33-E;
- Exhibit VIII.D. - Tabulated Summary of Geological Data;
- Exhibit VIII.E. - Structure Map with proposed Unit Area delineated;
- Exhibit VIII.F. - Iso-Cum Base Map, with proposed Unit Area delineated;
- Exhibit VIII.G.1. - Cross Section A-A' (Northwest-Southeast through Sections 30-29-32);
- Exhibit VIII.G.2. - Cross Section B-B' (West-East through Sections 20-21);
- Exhibit VIII.G.3. - Cross Section C-C' (North-South through Sections 8-18-19);
- Exhibit VIII.G.4. - Cross Section D-D' (West-East through Sections 35-36);
- Exhibit VIII.G.5. - Cross Section E-E' (North-South through Sections 25-36-2);
- Exhibit VIII.G.6. - Cross Section F-F' (West-East through Sections 30-29);
- Exhibit VIII.G.7. - Cross Section G-G' (North-South through Sections 19-30);
- Exhibit VIII.H. - Chart of Derivation of Tract Participation Factors.
- Exhibit VIII.I.1. - Decline Curves for Wells within Unit Area.
- Exhibit VIII.I.2. - Decline Curves for Wells outside Unit Area but within Area of Review.

IX. The proposed stimulation program, if any, is included with information contained in the aforementioned Plan of Operation, see File Folder No. 4.

X. Appropriate logging and test data for the proposed injection wells are attached as Exhibit X (see File No. 5).

XI. Based upon information supplied by the State Engineer's office and a field search performed by a Murphy Operating Corporation employee, it appears that there are four (4) sources of fresh water within one mile of any proposed injection well. Exhibit XI. contains a map showing the location of these 4 wells and copies of the results of chemical analysis of the fresh water.

XII. Not applicable.

XIII. Attached hereto as Exhibit XIII. is proof that copies of the application have been furnished by certified mail to: a) the owners of the surface of the lands on which the proposed injection wells are to be located; and b) to the leasehold operators within one-half mile of the proposed injection wells.

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: Ann Murphy Ezzell

Title: Chairman & C.E.O. of
Murphy Operating Corporation

Signature: _____

Date: August 8, 1989

JENNIFER CHAVEROO SAN ANDRES UNIT

SUPPLEMENTAL DATA REQUIRED BY FORM C-108

INDEX OF EXHIBITS

FILE 2.

- Exhibit III. - Well data, in both tabular and schematic form ("typical data sheet"), for each well proposed for injection.
- Exhibit V. - Map identifying all wells and leases within 2 miles of each proposed injection well (2-mile boundary highlighted in yellow). A one-half mile radius circle (drawn in blue) around each proposed injection well identifies the wells' areas of review.
- Chart, "Redesignation of Well Names" listing original well names of wells within the Unit Area together with corresponding redesignated well names.
- Exhibit VI.A. - Tabulation of data for all wells of public record within the proposed Unit Area.
- Exhibit VI.B. - Tabulation of data for all wells of public record outside the proposed Unit Area but within the "area of review".
- Exhibit VI.C. - Schematics (illustrating all plugging detail) of each plugged and abandoned well within the area of review.
- SEE FILE 4. - Plan of Operation submitted for approval under separate cover with attached exhibits:
Exhibit 1., "Field Map Indicating Proposed Unit Facilities"; and
Exhibit 2., "Comparison of Current and Proposed Well Statuses".
- Exhibit VII.4. - Chemical analyses and compatibility analyses of the proposed injection fluid (fresh water samples from possible sources as described hereinabove) with that of the receiving Chaveroo San Andres formation (samples from tank batteries located on the State Section 35 lease and the State "DB" lease located within the Unit Area).
- Exhibit VIII.A. through
Exhibit VIII.I.
SEE FILE 3 - Geological data related to the injection zone including appropriate lithological detail, geological name, thickness and depth.
- Exhibit X.
SEE FILE 5 - Appropriate logging and test data for the proposed injection wells.
- Exhibit XI. Map showing the location of 4 fresh water sources together with copies of the results of chemical analyses of the fresh water.
- Exhibit XIII. - Proof that copies of the application have been furnished by certified mail to: a) the owners of the surface of the lands on which the proposed injection wells are to be located; and b) to the leasehold operators within one-half mile of the proposed injection wells.

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drig. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
								Downhole Equipment	Packer	Proposed Inj. Average	Press (PSI) Maximum
MOC ✓ (Southern Petroleum Exploration, Inc.) State J Well #1 B-25-T7S-R33E 660' FNL & 1980' FWL Elevation 4320' GR	25-02	IP	378' 8 5/8" 24# in 11" hole. 200 sx cmt. Circ. to surf. 4394' 4 1/2" 10.5# in 7 7/8" hole. 350 sx cmt. TOC 3300' by Temp. Survey.	04-03-66/ 04-15-66	TD 4395' PBD 4356'	04-18-66 (1 SPI) 4168', 4203', 4212', 4228', 4234', 4248', 4255', 4262', 4275'	04-18-66 (4168'-4275') Acidize w/2000 gals.	2 3/8" 4.7# Ceramic Coated set @ 4065'	4 1/2" UNI-1 Tension Packer set @ 4068'	400/400#	600/800#
MOC ✓ (Pan American Petroleum Corp.) State DB Well #1 D-25-T7S-R33E 660' FNL & 660' FWL Elevation 4335' RDB	25-04	IP	437' 8 5/8" 24# in 11" hole. 225 sx cmt. Circ. to surf. 4388' 4 1/2" 11# in 7 7/8" hole. 800 sx cmt. TOC 1888' by Calc.	02-19-66/ 03-02-66	TD 4388' PBD 4357'	03-07-66 (2 JSPF) 4174'-4176', 4186'-4190', 4202'-4210', 4218'-4220', 4224'-4226', 4226'-4232', 4236'-4238', 4248'-4249', 4250'-4251', 4253'-4254', 4257'-4260', 4267'-4268', 4270'-4272', 4302'-4304', 4308'-4313', 4322'-4328', 4334'-4336'	03-07-66 (4174'-4336') Acidize w/2000 gals.	2 3/8" 4.7# Ceramic Coated set @ 4071'	4 1/2" UNI-1 Tension Packer set @ 4074'	400/400#	600/800#
MOC ✓ (Pan American Petroleum Corp.) State DB Well #5 F-25-T7S-R33E 1980' FNL & 1980' FWL Elevation 4330' RDB	25-06	IP	442' 8 5/8" 24# in 11" hole. 250 sx cmt. Circ. to surf. 4415' 4 1/2" 9.5# in 7 7/8" hole. 800 sx cmt. TOC 1915' by Calc.	04-21-66/ 05-02-66	TD 4415' PBD 4385'	05-02-66 (2 JSPF) 4337'-4350') 05-09-66 (2 JSPF) 4182'-4185', 4207'-4210', 4217'-4219', 4230'-4245', 4252'-4254', 4265'-4267', 4273'-4274', 4286'-4296', 4299'-4301', 4303'-4305'	05-09-66 (4337'-4350') Acidize w/1000 gals. 05-09-66 (4182'-4305') Acidize w/2000 gals. Frac w/30,000 gals. oil, 40,500# sand, & 3000# glass beads.	2 3/8" 4.7# Ceramic Coated set @ 4079'	4 1/2" UNI-1 Tension Packer set @ 4082'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drig. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection Downhole Equipment		Proposed Inj. Rate (BPD) Proposed Inj. Press (PSI)	
								Tubing	Packer	Average	Maximum
MOC (Kerrit Oil Company) State Well #1 H-25-T7S-R33E 1980' FNL & 660' FEL Elevation 4322' GR	25-08	IP	1826' 7" 20# in 8 3/4" hole. 350 sx cmt. Circ. to surf. 4417' 4 1/2" 9.5# in 6 1/4" hole. 325 sx cmt. TOC 3380' by Temp. Survey.	07-18-66/ 07-30-66	TD 4420' PBTD 4386'	08-01-66 (1 JSPF) 4196', 4197', 4251', 4259', 4262', 4275', 4281', 4287', 4296', 4303', 4308'	08-01-66 (4196'-4308') Acidize w/2000 gals.	2 3/8" 4.7# Ceramic Coated set @ 4093'	4 1/2" UNI-1 Tension Packer set @ 4096'	400/400#	600/800#
MOC (Kerr-McGee Corp.) State I Well #1 J-25-T7S-R33E 1980' FSL & 1980' FEL Elevation 4324.5 GR	25-10	IP	419' 8 5/8" 24# in 12 1/4" hole. 275 sx cmt. Circ. to surf. 4420' 5 1/2" 14# in 7 7/8" hole. 350 sx cmt. TOC 3326' by Calc.	06-12-66/ 07-15-66	TD 4420' PBTD 4393'	06-27-66 (1 SPI) 4203', 4209', 4215', 4217', 4221', 4268', 4281', 4283', 4286', 4289', 4291', 4299', 4311', 4340'	06-27-66 (4203'-4340') Acidize w/2000 gals. Frac w/30,000 gals. oil & 45,000# sand. 12-17-66 (4203'-4340') Acidize w/3000 gals.	2 3/8" 4.7# Ceramic Coated set @ 4100'	5 1/2" UNI-1 Tension Packer set @ 4103'	400/400#	600/800#
MOC (Pan American Petroleum Corp.) State DB Well #4 L-25-T7S-R33E 1980' FSL & 660' FWL Elevation 4338' RDB	25-12	IP	450' 8 5/8" 24# in 11" hole. 250 sx cmt. Circ. to surf. 4410' 4 1/2" 9.5# in 7 7/8" hole. 800 sx cmt. TOC 1910' by Calc.	04-12-66/ 04-23-66	TD 4410' PBTD 4375'	04-25-66 (2 JSPF) 4208'-4209', 4210'-4212', 4214'-4216', 4221'-4223', 4234'-4235', 4249'-4251', 4256'-4258', 4260'-4262', 4266'-4276', 4277'-4280', 4286'-4287', 4292'-4294', 4296'-4298', 4299'-4300', 4304'-4307', 4338'-4340', 4344'-4346', 4358'-4363'	04-25-66 (4208'-4363') Acidize w/2000 gals.	2 3/8" 4.7# Ceramic Coated set @ 4105'	4 1/2" UNI-1 Tension Packer set @ 4108'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drig. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection Downhole Equipment		Proposed Inj. Rate (BPD)	
								Tubing	Packer	Proposed Inj. Press (PSI) Average	Maximum
MOC (7) (Pan American Petroleum Corp.) State DB Well #8 N-25-T7S-R33E 660' FSL & 1980' FWL Elevation 4333' RDB	25-14	IP	455' 8 5/8" 24# in 12 1/4" hole. 250 sx cmt. Circ. to surf. 4465' 4 1/2" 9.5# in 7 7/8" hole. 800 sx cmt. TOC 1965' by Calc.	05-13-66/ 05-29-66	TD 4465' PBTD 4424'	05-31-66 (2 JSFP) 4205'-4209', 4211'-4213', 4218'-4220', 4243'-4247', 4251'-4253', 4255'-4257', 4267'-4270', 4274'-4275', 4277'-4279', 4287'-4289', 4295'-4297', 4300'-4304', 4307'-4316', 4323'-4325', 4327'-4332', 4339'-4341'	05-31-66 (4205'-4341') Acidize w/2000 gals.	2 3/8" 4.7# Ceramic Coated set @ 4102'	4 1/2" UNI-1 Tension Packer set @ 4105'	400/400#	600/800#
MOC (8) (Southern Petroleum Exploration, Inc.) State J Well #4 P-25-T7S-R33E 990' FSL & 990' FEL Elevation 4325' GRD	25-16	IP	343' 8 5/8" 24# in 12 1/4" hole. 200 sx cmt. Circ. to surf. 4470' 5 1/2" 20# in 7 7/8" hole. 325 sx cmt. TOC 3400' by Temp. Survey.	01-17-67/ 02-01-67	TD 4470' PBTD 4450'	02-06-67 (1 SPI) 4253', 4283', 4295', 4301', 4304', 4317', 4323', 4327', 4335', 4346', 4365'	02-06-67 (4253'-4365') Acidize w/2000 gals. Frac w/25,000 gals. 1se. oil & 25,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4150'	5 1/2" UNI-1 Tension Packer set @ 4153'	400/400#	600/800#
MOC (9) (Kern County Land Co.) Federal 26 Well #5 J-26-T7S-R33E 1980' FSL & 1980' FEL Elevation 4343' GR	26-10	IP	1818' 7" 24# in 8 3/4" hole. 375 sx cmt. Circ. to surf. 4394' 4 1/2" 9.5# in 6 1/4" hole. 350 sx cmt. TOC 3300' by Calc.	05-27-66/ 06-11-66	TD 4394' PBTD 4357'	06-13-66 (1 SPI) 4160', 4163', 4195', 4211', 4225', 4231', 4232', 4233', 4252', 4257', 4274'	06-13-66 (4160'-4274') Acidize w/2000 gals. Frac w/30,000 gals. 1se. oil & 45,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4057'	4 1/2" UNI-1 Tension Packer set @ 4060'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drig. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
								Downhole Equipment	Packer	Proposed Inj. Press (PSI)	Maximum
MOC (10) (Kern County Land Co.) Federal 26 Well #2 L-26-T7S-R33E 1980' FSL & 660' FWL Elevation 4373.3' GL	26-12	IP	1808' 7" 24# in 8 3/4" hole. 400 sx cmt. Circ. to surf.	05-08-66/ 05-23-66	TD 4405' PBTD 4356'	05-23-66 (1 SPI) 4142', 4158', 4168', 4175', 4206', 4222', 4236', 4244', 4250', 4262', 4270', 4281', 4288', 4292'	05-23-66 (4142'-4292') Acidize w/2000 gals. Frac w/30,000 gals. 1se. oil & 28,200# sand.	2 3/8" 4.7# Ceramic Coated set @ 4039'	4 1/2" UNI-1 Tension Packer set @ 4042'	400/400#	600/800#
			4402' 4 1/2" 9.5# in 6 1/4" hole. 300 sx cmt. TOC 3510' by Calc.								
MOC (11) (Kern County Land Co.) Federal 26 Well #4 N-26-T7S-R33E 660' FSL & 1980' FWL Elevation 4374' KB	26-14	IP	1825' 7" 24# in 8 3/4" hole. 375 sx cmt. Circ. to surf.	05-31-66/ 06-15-66	TD 4380' PBTD	06-13-66 (1 SPI) 4125', 4177', 4183', 4244', 4249', 4252', 4259', 4267', 4273', 4281', 4285', 4294' 07-28-80 (1 SPI) 4000'-4005', 4038'-4043', 4094'-4102'	06-13-66 (4125'-4294') Acidize w/2000 gals. Frac w/30,000 gals. 1se.	2 3/8" 4.7 Ceramic 3897'	4 1/2" UNI-1 Tension 3900'	400/400#	600/800#
			6 1/4" hole. 330 sx cmt. TOC 3398' by Calc.								
MOC (12) (Kern County Land Co.) Federal 26 Well #8 P-26-T7S-R33E 660' FSL & 660' FEL Elevation 4339.2' GL	26-16	IP	1820' 7" 24# in 8 3/4" hole. 350 sx cmt. Circ. to surf.	05-11-66/ 05-25-66	TD 4376' PBTD 4333'	05-31-66 (1 SPI) 4153', 4166', 4172', 4178', 4194', 4226', 4245', 4251', 4256', 4262', 4272', 4290'	05-31-66 (4153'-4290') Acidize w/2000 gals. Frac w/30,000 gals. 1se. oil & 30,300# sand.	2 3/8" 4.7# Ceramic Coated set @ 4050'	4 1/2" UNI-1 Tension Packer set @ 4053'	400/400#	600/800#
			4376' 4 1/2" 9.5# in 6 1/4" hole. 330 sx cmt. TOC 3394' by Calc.								

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drig. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
								Downhole Equipment	Packer	Proposed Inj. Press (PSI)	Maximum
MOC (13) (Shell Oil Company) State CV Well #2 B-35-T7S-R33E 660' FNL & 1980' FEL Elevation 4358' DF	35-02	IP	390' 8 5/8" 24# in 11" hole. 250 sx cmt. Circ. to surf. 4397' 4 1/2" 10.5# in 7 7/8" hole. 525 sx cmt. TOC 2836' by Calc.	03-01-66/ 03-14-66	TD 4397' PBTD 4359'	03-21-66 (1 SPI) 4161', 4183', 4185', 4194', 4219', 4229', 4233', 4247', 4250', 4253', 4259', 4275', 4281', 4303'	03-21-66 (4161'-4303') Acidize w/4200 gals.	2 3/8" 4.7# Ceramic Coated set @ 4058'	4 1/2" UNI-1 Tension Packer set @ 4061'	400/400#	600/800#
MOC (14) (Morris R. Antwell) Shackelford Well #1 D-35-T7S-R33E 660' FNL & 660' FWL Elevation 4391' KB	35-04	IP	404' 8 5/8" 32# in 12 1/4" hole. 300 sx cmt. Circ. to surf. 4499' 4 1/2" 9.5# in 7 7/8" hole. 325 sx cmt. TOC 3500' by Temp Survey.	05-07-66/ 05-25-66	TD 4500' PBTD 4472'	05-31-66 (1 SPI) 4167', 4173', 4209', 4231', 4241', 4259', 4263', 4269', 4271', 4277', 4281', 4289', 4301', 4307', 4318'	05-31-66 (4167'-4318') Acidize w/3500 gals.	2 3/8" 4.7# Ceramic Coated set @ 4064'	4 1/2" UNI-1 Tension Packer set @ 4067'	400/400#	600/800#
MOC (15) (Marathon Oil Co.) State Section 35 Well #3 F-35-T7S-R33E 1980' FNL & 1980' FWL Elevation 4368'	35-06	IP	358' 8 5/8" 24# in 12 1/4" hole. 250 sx cmt. Circ. to surf. 4439' 4 1/2" 9.5# in 7 7/8" hole. 350 sx cmt. TOC 3335' by Temp. Survey.	02-28-66/ 03-18-66	TD 4440' PBTD 4434'	03-14-66 (2 JSPF) , 4186'-4187', 4192'-4193', 4205'-4206', 4217'-4218', 4235'-4236', 4251'-4252', 4269'-4270', 4284'-4285', 4289'-4290', 4295'-4296', 4302'-4303', 4310'-4311', 4319'-4320', 4325'-4326'	03-14-66 (4186'-4326') Acidize w/3000 gals. Frac w/40,000 gals. lse. oil & 40,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4083'	4 1/2" UNI-1 Tension Packer set @ 4086'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drig. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
								Downhole Tubing	Equipment Packer	Proposed Inj. Average	Press (PSI) Maximum
MOC (Marathon Oil Co.) State Section 35 Well #5 H-35-T7S-R33E 1980' FNL & 660' FEL Elevation 4337' GR	35-08	IP	388' 8 5/8" 24# in 12 1/4" hole. 250 sx cmt. Circ. to surf. 4439' 4 1/2" 9.5# in 7 7/8" hole. 350 sx cmt. TOC 3630' by Temp. Survey.	04-24-66/ 05-08-66	TD 4440' PBTD 4406'	05-07-66 (2JSPF) 4256'-4257', 4271'-4272', 4278'-4279', 4291'-4292', 4301'-4302', 4306'-4307', 4317'-4318', 4326'-4327'	05-07-66 (4256'-4327') Acidize w/3000 gals.	2 3/8" 4.7# Ceramic Coated set @ 4153'	4 1/2" UNI-1 Tension Packer set @ 4156'	400/400#	600/800#
MOC (Skelly Oil Company) Hobbs "J" Well #14 J-35-T7S-R33E 1980' FSL & 1980' FEL Elevation 4357' DF	35-10	IP	376' 8 5/8" 24# in 11 hole. 250 sx cmt. Circ. to surf. 4500' 4 1/2" 10.5# in 7 7/8" hole. 350 sx cmt. TOC 3187' by Temp. Survey.	03-01-66/ 03-15-66	TD 4500' PBTD 4458'	03-21-66 (1 SPI) 4207', 4220', 4245', 4257', 4259', 4271', 4275', 4277', 4281', 4287', 4294', 4297', 4302', 4307', 4323', 4329'	03-21-66 (4207'-4329') Acidize w/2500 gals.	2 3/8" 4.7# Ceramic Coated set @ 4104'	4 1/2" UNI-1 Tension Packer set @ 4107'	400/400#	600/800#
MOC (Marathon Oil Co.) State Section 35 Well #1 L-35-T7S-R33E 1980' FSL & 660' FWL Elevation 4368'	35-12	IP	363' 8 5/8" 24# in 12 1/4" hole. 200 sx cmt. Circ. to surf. 4442' 5 1/2" 15.5# & 17# in 7 7/8" hole. 350 sx cmt. TOC 3295' by Temp. Survey.	12-14-65/ 01-13-66	TD 4450' PBTD 4405'	01-07-66 (1 SPI) 4244', 4256', 4277', 4281', 4288', 4292', 4303', 4309', 4321', 4327', 4331', 4334'	01-07-66 (4244'-4334') Acidize w/3500 gals. Frac w/40,000 gals. oil & 40,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4141'	5 1/2" UNI-1 Tension Packer set @ 4144'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Dr'g. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
								Downhole Equipment	Packer	Proposed Inj. Press (PSI)	Maximum
MOC (Pan American Petroleum Corp.) State DE Well #1 N-35-T7S-R33E 660' FSL & 1980' FWL Elevation 4371' RDB	35-14	IP	420' 8 5/8" 24# in 11" hole. 250 sx cmt. Circ. to surf. 4476' 4 1/2" 9.5# in 7 7/8" hole. 800 sx cmt. TOC 1976' by Calc.	04-06-66/ 04-17-66	TD 4476' PBTD 4442'	04-18-66 (2 JSPF) 4207'-4208', 4211'-4213', 4214'-4215', 4222'-4227', 4230'-4231', 4237'-4239', 4244'-4248', 4254'-4256', 4271'-4272', 4275'-4283', 4287'-4289', 4293'-4296', 4297'-4298', 4304'-4306', 4318'-4320', 4322'-4323', 4328'-4330', 4335'-4336'	04-18-66 (4207'-4336') Acidize w/2000 gals. Frac w/30,000 gals. oil, 45,000# sand, & 3,000# glass beads.	2 3/8" 4.7# Ceramic Coated set @ 4104'	4 1/2" UNI-1 Tension Packer set @ 4107'	400/400#	600/800#
MOC (Skelly Oil Company) Hobbs "T" Well #19 P-35-T7S-R33E 660' FSL & 660' FEL Elevation 4353' DF	35-16	IP	376' 8 5/8" 24# in 11" hole. 250 sx cmt. Circ. to surf. 4498' 4 1/2" 10.5# in 7 7/8" hole. 350 sx cmt. TOC 3276' by Temp. Survey.	05-02-66/ 05-15-66	TD 4500' PBTD 4460'	05-23-66 (1 SPI) 4187', 4211', 4223', 4240', 4250', 4255', 4278', 4292', 4306', 4310', 4314', 4319', 4332', 4336', 4340', 4351', 4358'	05-23-66 (4187'-4358') Acidize w/2500 gals.	2 3/8" 4.7# Ceramic Coated set @ 4084'	4 1/2" UNI-1 Tension Packer set @ 4087'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drig. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection Downhole Equipment		Proposed Inj. Rate (BPD) Proposed Inj. Press (PSI)	
								Tubing	Packer	Average	Maximum
MOC (21) (Marathon Oil Co.) State Section 36 Well #1 B-36-T7S-R33E 660' FNL & 2310' FEL Elevation 4333' DF	36-02	IP	348' 8 5/8" 24# in 12 1/4" hole. 275 sx cmt. Circ. to surf. 4488' 4 1/2" 9.5# in 7 7/8" hole. 350 sx cmt. TOC 3579' by Temp. Survey.	07-19-66/ 09-01-66	TD 4490' PBTD 4275'	08-02-66 (2 JSPF) 4229'-4230', 4235'-4236', 4246'-4247', 4252'-4253', 4257'-4258', 4302'-4303', 4315'-4316', 4320'-4321' 08-08-66 (4302'-4321') Squeezed perforations w/75 sx cmt. 08-29-66 (4229'-4258') Squeezed Perforations w/150 sx cmt. 08-31-66 (2 JSPF) 4229'-4230', 4235'-4236', 4241'-4242', 4246'-4247', 4252'-4253', 4257'-4258'	08-02-66 (4229'-4321') Acidize w/3000 gals. 08-09-66 Frac (4229'- 4258') w/2500 gal. lse. oil & 25,000# sand. 09-01-66 (4229'-4258') Acidize w/1500 gals.	2 3/8" 4.7# Ceramic Coated set @ 4126'	4 1/2" UNI-1 Tension Packer set @ 4129'	400/400#	600/800#
MOC (22) (Southern Petroleum Exploration Inc.) State "K" Well #1 D-36-T7S-R33E 660' FNL & 660' FWL Elevation 4330.5 GR	36-04	IP	354' 8 5/8" 24# in 11" hole. 200 sx cmt. Circ. to surf. 4460' 4 1/2" 10.5# in 7 7/8" hole. 350 sx cmt. TOC 3267' by Temp. Survey.	04-27-66/ 05-09-66	TD 4460' PBTD 4433'	05-09-66 (1 SPI) 4184', 4203', 4240', 4255', 4268', 4276', 4281', 4289', 4295', 4302', 4331'	05-09-66 (4184'-4331') Acidize w/2000 gals.	2 3/8" 4.7# Ceramic Coated set @ 4081'	4 1/2" UNI-1 Tension Packer set @ 4084'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drlg. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
								Downhole Equipment	Packer	Proposed Inj. Press (PSI)	Maximum
MOC (Southern Petroleum Exploration, Inc.) State "K" Well #6 F-36-T7S-R33E 1980' FNL & 1980' FWL Elevation 4324' GR	36-06	IP	294' 8 5/8" 24# 1in 12 1/4" hole. 200 sx cmt. Circ. to surf. 4462' 4 1/2" 10.5# in 7 7/8" hole. 350 sx cmt. TOC 3400' by Temp. Survey.	09-28-66/ 10-11-66	TD 4480' PBTD 4451'	10-17-66 (1 SPI) 4217', 4229', 4238', 4244', 4250', 4287', 4293', 4298', 4314', 4318', 4322', 4325'	10-17-66 (4217'-4325') Acidize w/2000 gals. Frac w/25,000 gal. lse. oil & 25,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4114'	4 1/2" UNI-1 Tension Packer set @ 4117'	400/400#	600/800#
MOC (Taylor Pruitt) State Section 36 Well #1 G-36-T7S-R33E 1980' FNL & 1980' FEL Elevation 4331' KB	36-07	IP	333' 8 5/8" 20# 1in 12 1/4" hole. 225 sx cmt. Circ. to surf. 4498' 4 1/2" 9.5# & 11.6# in 7 7/8" hole. 650 sx cmt. TOC 2565' by Calc.	04-22-68/ 05-04-68	TD 4500' PBTD 4471'	07-01-68 (Overall) 4163'-4413' 07-15-68 4426'-4460'	07-01-68 (4163'-4413') Acidize w/10,000 gals. 07-15-68 (4426'-4460') Acidize w/4,000 gals.	2 3/8" 4.7# Ceramic Coated set @ 4060'	4 1/2" UNI-1 Tension Packer set @ 4063'	400/400#	600/800#
MOC (Southern Petroleum Exploration, Inc.) State "K" Well #4 L-36-T7S-R33E 1980' FSL & 660' FWL Elevation 4336' GR	36-12	IP	373' 8 5/8" 24# 1in 12 1/4" hole. 225 sx cmt. Circ. to surf. 4481' 4 1/2" 10.5# in 7 7/8" hole. 350 sx cmt. TOC 3436' by Temp. Survey.	09-12-66/ 09-23-66	TD 4490' PBTD 4465'	09-26-66 (1 SPI) 4244', 4253', 4259', 4298', 4301', 4312', 4316', 4319', 4321', 4329', 4345'	09-26-66 (4244'-4345') Acidize w/2000 gals. Frac w/25,000 gals. lse. oil & 25,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4141'	4 1/2" UNI-1 Tension Packer set @ 4144'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drlg. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
								Downhole Equipment	Packer	Proposed Inj. Press (PSI)	Maximum
MOC ²⁶ (Pan American Petroleum Corp.) Wolf Federal Well #3 O-18-T7S-R34E 660' FSL & 2150.9' FEL Elevation 4333' RDB	18-15	IP	450' 8 5/8" 24# 1in 12 1/4" hole. 300 sx cmt. Circ. to surf.	09-21-66/ 10-07-66	TD 4340' PBD 4301'	10-10-66 (2 JSPF) 4064'-4066', 4078'-4079', 4080'-4083', 4085'-4086', 4089'-4090', 4092'-4093', 4094'-4095', 4120'-4122', 4126'-4129', 4146'-4149', 4155'-4157', 4162'-4163', 4168'-4170', 4170'-4172', 4177'-4179', 4182'-4184', 4186'-4188', 4192'-4193', 4195'-4197', 4238'-4242', 4245'-4249', 4252'-4254', 4255'-4257', 4261'-4263', 4265'-4267'	10-10-66 (4064'-4267') Acidize w/2000 gals. Frac w/30,000 gals. oil & 40,500# sand.	2 3/8" 4.7# Ceramic Coated set @ 3961'	4 1/2" UNI-1 Tension Packer set @ 3964'	400/400#	600/800#
MOC ²⁷ (Pan American Petroleum Corp.) Wolf Federal Well #4 A-19-T7S-R34E 660' FNL & 660' FEL Elevation 4325' RDB	19-01	IP	451' 8 5/8" 24# 1in 11" hole. 300 sx cmt. Circ. to surf. 4346' 4 1/2" 9.5# in 7 7/8" hole. 800 sx cmt. TOC 1846' by Calc.	10-14-66/ 10-26-66	TD 4346' PBD 4310'	10-31-66 (2 JSPF) 4093'-4097', 4141'-4144', 4159'-4164', 4174'-4176', 4184'-4194', 4201'-4214', 4256'-4280'	10-31-66 (4093'-4280') Acidize w/2000 gals. Frac w/30,000 gals. oil, 40,500# sand, & 3000# beads.	2 3/8" 4.7# Ceramic Coated set @ 3990'	4 1/2" UNI-1 Tension Packer set @ 3993'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drig. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
								Downhole Equipment	Packer	Proposed Inj. Press (PSI) Average	Maximum
MOC 2% (Dalport Oil Corp.) Federal 19 Well #2 C-19-T7S-R34E 990' FNL & 330' FWL Elevation 4320' GR	19-03	IP	379' 8 5/8" 24# in 11" hole. 200 sx cmt. Circ. to surf. 4328' 4 1/2" 9.5# in 7 7/8" hole. 300 sx cmt. TOC 3436' by Calc.	01-09-67/ 01-24-67	TD 4328' PBTD ? 4328'	01-31-67 (1 SPI) 4061', 4076.5', 4084.5', 4090', 4131.5', 4150', 4155', 4162', 4170', 4176', 4180.5' 4191', 4196', 4200', 4205'	01-31-67 (4161'-4205') Acidize w/2500 gals. Frac w/40,000 gals. oil, 40,000# sand, & 3000# beads.	2 3/8" 4.7# Ceramic Coated set @ 3958'	4 1/2" UNI-1 Tension Packer set @ 3961'	400/400#	600/800#
MOC (Pan American Petroleum Corp.) Wolf Federal Well #1 G-19-T7S-R34E 1980' FNL & 2310' FEL Elevation 4328' RDB	19-07	IP	443' 8 5/8" 24# in 12 1/4" hole. 250 sx cmt. Circ. to surf. 4355' 4 1/2" 9.5# in 7 7/8" hole. 800 sx cmt. TOC 1855' by Calc.	05-28-66/ 06-24-66	TD 4355' PBTD 4320'	06-13-66 (2 JSPP) 4268'-4298' 07-05-66 (2 JSPP) 4108'-4123', 4127'-4214'	06-13-66 (4268'-4298') Acidize w/2000 gals. Frac w/30,000 gals. oil, 40,500# sand & 3000# glass beads. 07-05-66 (4108'-4214') Acidize w/2000 gals. Frac w/30,000 gals. oil, 40,500# sand, & 3000# glass beads.	2 3/8" 4.7# Ceramic Coated set @ 4005'	4 1/2" UNI-1 Tension Packer set @ 4008'	400/400#	600/800#
MOC (Kerr-McGee Corp.) State G Well #5 I-19-T7S-R34E 1650' FSL & 990' FEL Elevation 4313.2' GR	19-09	IP	409' 8 5/8" 24# in 12 1/4" hole. 275 sx cmt. Circ. to surf. 4410' 5 1/2" 14# & 15.5# in 7 7/8" hole. 350 sx cmt. TOC 3369' by Calc.	07-28-66/ 08-26-66	TD 4410' PBTD 4387'	08-11-66 (1 SPI) 4115', 4120', 4127', 4133', 4142', 4146', 4151', 4177', 4183', 4192', 4193', 4195', 4222', 4229', 4236', 4242', 4250', 4255', 4259'	08-11-66 (4115'-4259') Acidize w/2500 gals. Frac w/30,000 gals. lse. oil & 45,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4012'	5 1/2" UNI-1 Tension Packer set @ 4015'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drlg. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
								Downhole Equipment	Packer	Proposed Inj. Press (PSI)	Maximum
MOC (Kerr-McGee Corp.) State G Well #1 K-19-T7S-R34E 1980' FSL & 660' FWL Elevation 4325.7' RKB	19-11	IP	393' 8 5/8" 24# in hole. 275 sx cmt. Circ. to surf.	05-13-66/ 06/03/66	TD 4340' PBTD 4308'	05-31-66 (2 JSPF) 4119', 4121', 4128', 4158', 4170', 4174', 4188', 4203', 4205', 4210', 4215'	05-31-66 (4119'-4303') Acidize w/2000 gals. Frac w/30,000 gals. oil, & 45,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4016'	5 1/2" UNI-1 Tension Packer set @ 4019'	400/400#	600/800#
			4340' 5 1/2" 14# in 7 7/8" hole. 300 sx cmt. TOC 3200' by Temp. Survey.								
MOC (Kerr-McGee Corp.) State G Well #4 O-19-T7S-R34E 660' FSL & 2310' FEL Elevation 4314.5' GR	19-15	IP	431' 8 5/8" 24# in 12 1/4" hole. 275 sx cmt. Circ. to surf.	06-23-66/ 07-14-66	TD 4400' PBTD 4371'	07-08-66 (1 SPI) 4138', 4145', 4151', 4156', 4161', 4170', 4190', 4193', 4195', 4208', 4231', 4237', 4243', 4250', 4256', 4261', 4267', 4272', 4275'	07-08-66 (4138'-4275') Acidize w/2500 gals. Frac w.30,000 gals. oil, & 45,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4035'	5 1/2" UNI-1 Tension Packer set @ 4038'	400/400#	600/800#
			4400' 5 1/2" 14# in 7 7/8" hole. 350 sx cmt. TOC 3359' by Calc.								
MOC (Pan American Petroleum Corp.) Homme Federal Well #2 C-20-T7S-R34E 660' FNL & 1980' FWL Elevation 4323' RDB	20-03	IP	458' 8 5/8" 24# in 12 1/4" hole. 300 sx cmt. Circ. to surf.	10-03-66/ 10-16-66	TD 4395' PBTD 4360'	10-17-66 (2JSPF) 4152'-4154', 4170'-4174', 4180'-4184', 4191'-4199', 4204'-4208', 4213'-4215', 4218'-4221', 4270'-4275', 4280'-4288', 4292'-4298'	10-17-66 (4152'-4298') Acidize w/2000 gals. Frac w/30,000 gals. oil, 40,500# sand, & 3000# glass beads.	2 3/8" 4.7# Ceramic Coated set @ 4049'	4 1/2" UNI-1 Tension Packer set @ 4052'	400/400#	600/800#
			4395' 4 1/2" 9.5# in 7 7/8" hole. 800 sx cmt. TOC 1895' by Calc.								

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drlg. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
								Downhole Equipment	Packer	Proposed Inj. Press (PSI)	Maximum
MOC (Pan American Petroleum Corp.) Homme Federal Well #1 E-20-T7S-R34E 1980' FNL & 660' FWL Elevation 4324' RDB	20-05	IP	452' 8 5/8" 24# in 12 1/4" hole. 300 sx cmt. Circ. to surf. 4448' 4 1/2" 9.5# in 7 7/8" hole. 800 sx cmt. TOC 1948' by Calc.	08-31-66/ 09-13-66	TD 4448' PBTD 4401'	09-13-66 (2 JSPF) 4093'-4094', 4108'-4112' 4116'-4120', 4147'-4149', 4153'-4159', 4173'-4175', 4180'-4181', 4185'-4186', 4090'-4092', 4094'-4099', 4204'-4206', 4214'-4216', 4218'-4221', 4267'-4269', 4286'-4294'	09-13-66 (4093'-4294') Acidize w/2000 gals. Frac w/30,000 gals. oil, 40,500# sand, & 3000# glass beads.	2 3/8" 4.7# Ceramic Coated set @ 3990'	4 1/2" UNI-1 Tension Packer set @ 3993'	400/400#	600/800#
MOC (American Trading & Production Corp.) State 20 Well #3 K-20-T7S-R34E 1980' FSL & 1980' FWL Elevation 4312' GL	20-11	IP	392' 8 5/8" 28# in 12 1/4" hole. 200 sx cmt. Circ. to surf. 4384' 4 1/2" 11.6# in 7 7/8" hole. 450 sx cmt. TOC 2000' by Calc.	10-20-66/ 11-13-66	TD 4400' PBTD 4352'	11-07-66 (1 SPI) 4164', 4181', 4198', 4210', 4220', 4228', 4232', 4251', 4262', 4270', 4279', 4290', 4297', 4305'	11-07-66 (4164'-4305') Acidize w/2500 gals. Frac w/30,000 gals. lse. oil & 30,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4061'	4 1/2" UNI-1 Tension Packer set @ 4064'	400/400#	600/800#
MOC (American Trading & Production Corp.) State 20 Well #2 M-20-T7S-R34E 660' FWL & 660' FSL Elevation 4325' KB	20-13	IP	424' 8 5/8" 28# in 12 1/4" hole. 200 sx cmt. Circ. to surf. 4377' 4 1/2" 11.6# in 7 7/8" hole. 450 sx cmt. TOC 2000' by Calc.	09-23-66/ 10-08-66	TD 4400' PBTD 4345'	10-10-66 (1 SPI) 4156', 4164', 4179', 4210', 4219', 4225', 4238', 4243', 4249', 4261', 4269', 4276', 4285', 4289'	10-10-66 (4156'-4289') Acidize w/2500 gals. Frac w/30,000 gals. lse. oil & 30,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4053'	4 1/2" UNI-1 Tension Packer set @ 4056'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drig. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection Downhole Equipment		Proposed Inj. Rate (BPD)	
								Tubing	Packer	Proposed Inj. Average	Prop. Press (PSI) Maximum
MOC (37) (Skelly Oil Company) Hobbs "W" Well #8 C-29-T7S-R34E 330' FNL & 1650' FWL Elevation 4318' DF	29-03	IP	373' 8 5/8" 24# in 11" hole. 250 sx cmt. Circ. to surf. 4478' 4 1/2" 10.5# in 7 7/8" hole. 400 sx cmt. TOC 3379' by Temp. Survey.	10-30-66/ 11-16-66	TD 4478' PBTD 4452'	11-16-66 (1 SPI) 4226', 4240', 4279', 4286', 4290', 4292', 4303', 4314', 4317', 4327', 4337', 4343', 4347', 4352', 4355'	11-16-66 (4226'-4355') Acidize w/2500 gals. Frac w/30,000 gals. oil & 30,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4123'	4 1/2" UNI-1 Tension Packer set @ 4126'	400/400#	600/800#
MOC (36) (Skelly Oil Company) Hobbs "W" Well #7 E-29-T7S-R34E 1650' FNL & 330' FWL Elevation 4319' DF	29-05	IP	366' 8 5/8" 24# in 11" hole. 250 sx cmt. Circ. to surf. 4439' 4 1/2" 10.5# in 7 7/8" hole. 400 sx cmt. TOC 3385' by Temp. Survey.	10-17-66/ 11-09-66	TD 4450' PBTD 4411'	11-03-66 (1 SPI) 4218', 4227', 4245', 4277', 4281', 4290', 4293', 4300', 4306', 4316', 4320', 4331', 4335', 4352', 4357'	11-03-66 (4218'-4357') Acidize w/2500 gals. 10-25-67 (4218'-4357') Frac w/30,000 gals. 1se. oil & 37,500# sand.	2 3/8" 4.7# Ceramic Coated set @ 4115'	4 1/2" UNI-1 Tension Packer set @ 4118'	400/400#	600/800#
MOC (39) (Skelly Oil Company) Hobbs "W" Well #9 F-29-T7S-R34E 1650' FNL & 1650' FWL Elevation 4320.4' KB	29-06	IP	360' 8 5/8" 24# in 12 1/4" hole. 250 sx cmt. Circ. to surf. 4500' 4 1/2" 10.5# in 7 7/8" hole. 500 sx cmt. TOC 3322' by Temp. Survey.	05-27-68/ 06-09-68	TD 4500' PBTD 4455'	06-17-68 (1 SPI) , 4369', 4399', 4403', 4413', 4419', 4425', 4432', 4433', 4443'	06-17-68 (4369'-4443') Acidize w/4000 gals.	2 3/8" 4.7# Ceramic Coated set @ 4266'	4 1/2" UNI-1 Tension Packer set @ 4269'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drig. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
								Downhole Equipment	Packer	Proposed Inj. Press (PSI)	Maximum
MOC (Skelly Oil Company) Hobbs "W" Well #2 A-30-T7S-R34E 330' FNL & 990' FEL Elevation 4322' DF	30-01	IP	390' 8 5/8" 24# in 11" hole. 250 sx cmt. Circ. to surf. 4430' 4 1/2" 10.5# in 7 7/8" hole. 350 sx cmt. TOC 3389' by Temp. Survey.	08-08-66/ 08-28-66	TD 4430' PBTD 4401'	08-27-66 (1 SPI) 4169', 4184', 4219', 4225', 4234', 4239', 4259', 4265', 4271', 4277', 4283', 4291', 4297', 4304', 4308' 04-15-68 (1 SPI) 4159', 4165', 4175', 4192'	08-27-66 (4169'-4308') Acidize w/2500 gals. Frac w/30,000 gals. lse. oil & 30,000# sand. 04-15-68 (4159'-4192') Acidize w/2000 gals. (4159'-4308') Frac w/50,000 gals. jelled brine & 50,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4056'	4 1/2" UNI-1 Tension Packer set @ 4059'	400/400#	600/800#
MOC (Tenneco Oil Co.) State "V" Well #1 C-30-T7S-R34E 660' FNL & 660' FWL Elevation 4320' GL	30-03	IP	362' 8 5/8" 24# in 11" hole. 140 sx cmt. Circ. to surf. 4348' 4 1/2" 10.5# in 7 7/8" hole. 520 sx cmt. TOC 2801' by Calc.	07-25-66/ 08-12-66	TD 4350' PBTD 4308'	08-16-66 (1 SPI) 4110', 4154', 4167', 4176', 4180', 4187', 4193', 4221', 4231', 4234', 4247', 4256', 4259', 4266', 4271', 4274', 4280', 4285', 4293', 4298'	08-16-66 (4110'-4298') Acidize w/2500 gals. Frac w/30,000 gals. lse. oil & 45,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4007'	4 1/2" UNI-1 Tension Packer set @ 4010'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

EXHIBIT III.

TABLE OF DRILLING AND COMPLETION INFORMATION FOR PROPOSED INJECTION WELLS
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT, ROOSEVELT COUNTY, NEW MEXICO

Operator (Original Operator) Well Name & Location	Unit Well#	Well Type*	Casing Record	Date Drig. & Comp.	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
								Downhole Equipment	Packer	Proposed Inj. Press (PSI)	Maximum
MOC (Skelly Oil Company) Hobbs "W" Well #3 G-30-T7S-R34E 1650' FNL & 1980' FEL Elevation 4322' DF	30-07	IP	368' 8 5/8" 24# in 11" hole. 250 sx cmt. Circ. to surf. 4475' 4 1/2" 10.5# in 7 7/8" hole. 350 sx cmt. TOC 3035' by Temp Survey.	08-19-66/ 09-05-66	TD 4475' PBTD 4439'	09-12-66 (1 SPI) 4197', 4205', 4223', 4253', 4256', 4264', 4269', 4281', 4292', 4296', 4308', 4314', 4324', 4332', 4337'	09-12-66 (4197'-4337') Acidize w/2500 gals. Frac w/30,000 gals. lse. oil & 30,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4094'	4 1/2" UNI-1 Tension Packer set @ 4097'	400/400#	600/800#
MOC (Tenneco Oil Co.) State "Y" Well #4 I-30-T7S-R34E 2310' FSL & 990' FEL Elevation 4319' GL	30-09	IP	374' 8 5/8" 24# in 11" hole. 270 sx cmt. Circ. to surf. 4426' 4 1/2" 10.5# in 7 7/8" hole. 520 sx cmt. TOC 2510' by Temp. Survey.	11-18-66/ 12-12-66	TD 4426' PBTD 4382'	12-12-66 (1 SPI) 4242', 4247', 4251', 4255', 4260', 4264', 4296', 4298', 4310', 4325', 4342', 4345', 4354'	12-12-66 (4242'-4354') Acidize w/5000 gals. Frac w/30,000 gals. lse. oil & 45,000# sand.	2 3/8" 4.7# Ceramic Coated set @ 4139'	4 1/2" UNI-1 Tension Packer set @ 4142'	400/400	600/800#
MOC (Tenneco Oil Co.) State "Y" Well #3 K-30-T7S-R34E 2314' FSL & 330' FWL Elevation 4320' GR	30-11	IP	387' 8 5/8" 24# in 11" hole. 140 sx cmt. Circ. to surf. 4400' 4 1/2" 10.5# in 7 7/8" hole. 550 sx cmt. TOC 2764' by Calc.	10-01-66/ 10-14-66	TD 4400' PBTD 4368'	10-17-66 (1 SPI) 4214', 4221', 4228', 4241', 4248', 4283', 4308', 4318', 4323', 4327', 4334', 4338', 4344'	10-17-66 (4214'-4344') Acidize w/5000 gals.	2 3/8" 4.7# Ceramic Coated set @ 4111'	4 1/2" UNI-1 Tension Packer set @ 4114'	400/400#	600/800#

WELL TYPE: IP = PROPOSED INJECTOR

MURPHY OPERATING CORPORATION

PROPOSED JENNIFER SAN ANDRES UNIT

OPERATOR

Well numbers & location(s)
listed on attached sheet.

LEASE

SEC. 25, 26, 35, 36

T7S-R33E Roosevelt Co., NM

SEC. 18, 19, 20, 21, 29, 30 T7S-R34E Roosevelt Co., NM

WELL NO.

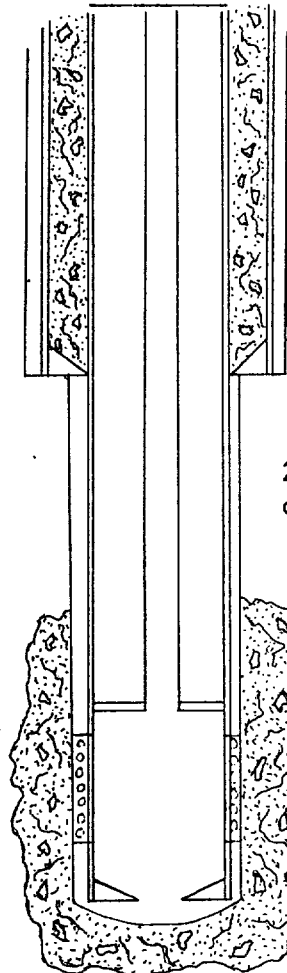
FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

Schematic



Annulus
filled with
inert
("packer")
fluid.
Pressure
tested to
300 psig and
held for
30 minutes.

2 3/8" ceramic
coated tubing.

4 1/2" or
5 1/2" Baker
UNI-1
Injection
Packer set
within 100'
of uppermost
perforation.

Tabular Data

Surface Casing

Size 7" to 8 5/8" Cemented with 140 - 400 sx.TOC Surface feet determined by circulationHole size 8 3/4" to 12 1/4"

Intermediate Casing

Size _____ Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 4 1/2" to 5 1/2" Cemented with 300 - 800 sx.TOC 1888'-3630' feet determined by Temp Survey or Calc.Hole size 6 1/4" to 7 7/8"Total depth 4328' to 4500'

Injection interval

4063' feet to 4460' feet
(perforated or open-hole, indicate which)

"Unitized Formation" is defined as the subsurface portion of the Unit Area known as the San Andres formation, and the vertical limits thereof are found in that stratigraphic interval between 4116 and 4424 feet as measured on the Compensated Formation Density Log run in the Murphy Operating Corporation Hobbs "W" Well No. 2 on August 18, 1966, said well located 330 feet from the North line and 990 feet from the East line of Section 30, Township 7 South, Range 34 East, Roosevelt County, New Mexico. The Unitized Formation shall further include all subsurface points throughout the Unit Area correlative to the aforementioned identified depths.

Tubing size 2 3/8" lined with ceramic epoxy coating set in a
(material)
Baker UNI-1 packer at 4100'-4150' feet
(brand and model) (Within 100' of uppermost perforation
(or describe any other casing-tubing seal).

Other Data

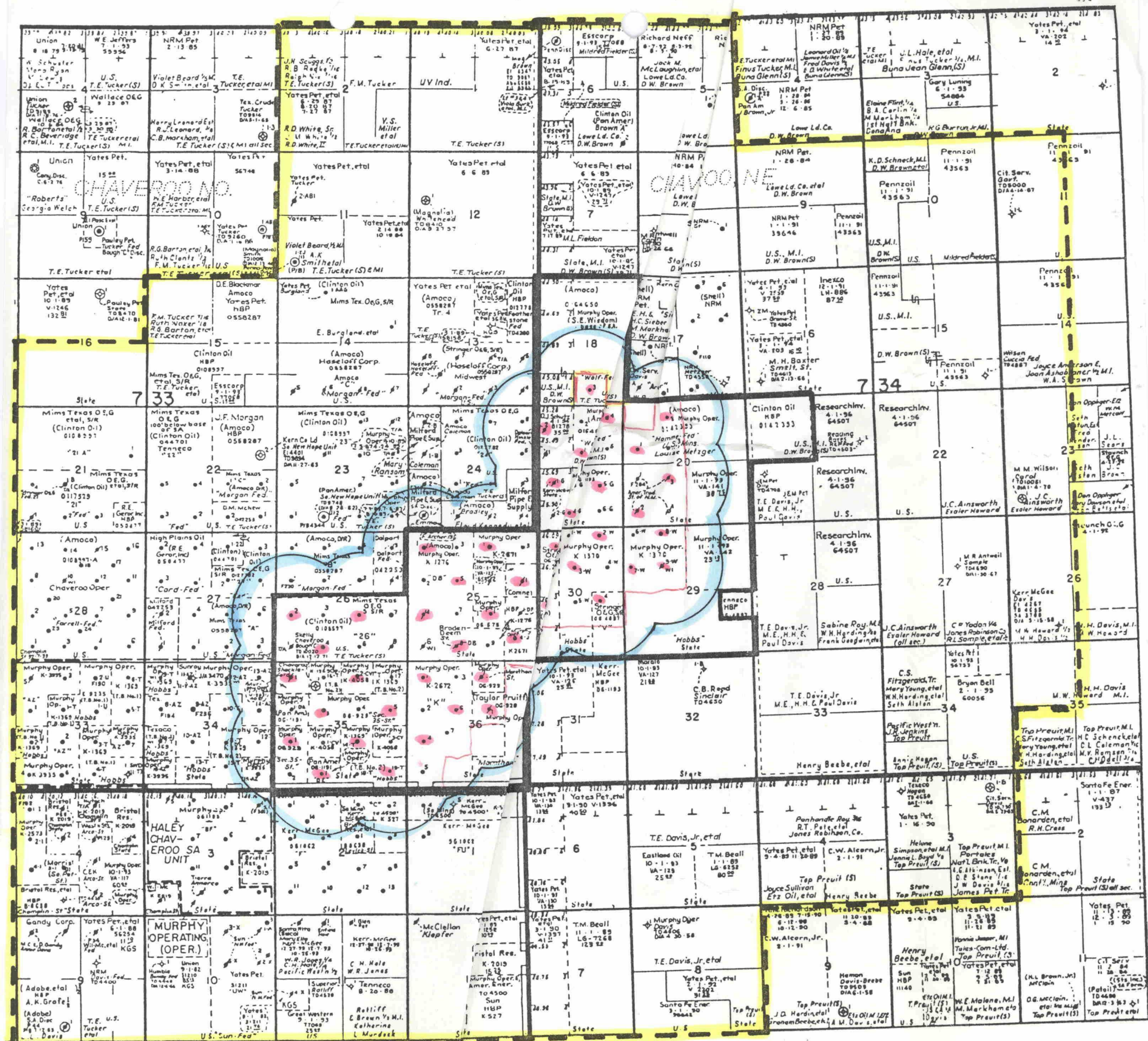
- Name of the injection formation San Andres
- Name of field or Pool (if applicable) Chaveroo San Andres
- Is this a new well drilled for injection? ☐ Yes ☒ No
If no, for what purpose was the well originally drilled? All wells were drilled as oil and gas producers.
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) See Exhibit III entitled Table of Drilling and Completion Information on Proposed Injection Wells.
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. There are no known overlying oil and gas zones. The Pennsylvanian Bough "C" is productive at an approximate depth of 9050' in the Tobac Field which is located approximately 3 to 4 miles south of the proposed Jennifer Chaveroo San Andres Unit.

EXHIBIT III.
WELL DATA FOR PROPOSED INJECTORS

Proposed Unit Well No.	Original Well No.	Location	TD	PBTD	Remarks
25-02	1B	25-T7S-R33E	4395'	4356'	
25-04	1D	25-T7S-R33E	4388'	4357'	
25-06	5F	25-T7S-R33E	4415'	4385'	
25-08	1H	25-T7S-R33E	4420'	4386'	
25-10	1J	25-T7S-R33E	4420'	4393'	
25-12	4L	25-T7S-R33E	4410'	4375'	RE/RD
25-14	8N	25-T7S-R33E	4465'	4424'	RE/RD
25-16	4P	25-T7S-R33E	4470'	4450'	
26-10	5J	26-T7S-R33E	4394'	4357'	
26-12	2L	26-T7S-R33E	4405'	4356'	
26-14	4N	26-T7S-R33E	4380'	N/A	
26-16	8P	26-T7S-R33E	4376'	4333'	
35-02	2B	35-T7S-R33E	4397'	4359'	
35-04	1D	35-T7S-R33E	4500'	4472'	
35-06	3F	35-T7S-R33E	4440'	4434'	
35-08	5H	35-T7S-R33E	4440'	4406'	
35-10	14J	35-T7S-R33E	4500'	4458'	
35-12	1L	35-T7S-R33E	4450'	4405'	
35-14	1N	35-T7S-R33E	4476'	4442'	
35-16	19P	35-T7S-R33E	4500'	4460'	
36-02	1B	36-T7S-R33E	4490'	4275'	RE/RD
36-04	1D	36-T7S-R33E	4460'	4433'	
36-06	6F	36-T7S-R33E	4480'	4451'	
36-07	1G	36-T7S-R33E	4500'	4471'	
36-12	4L	36-T7S-R33E	4490'	4465'	
18-15	30	18-T7S-R34E	4340'	4301'	
19-01	4A	19-T7S-R34E	4346'	4310'	
19-03	2C	19-T7S-R34E	4328'	N/A	RE/RD
19-07	1G	19-T7S-R34E	4355'	4320'	
19-09	5I	19-T7S-R34E	4410'	4387'	
19-11	1K	19-T7S-R34E	4340'	4308'	
19-15	40	19-T7S-R34E	4400'	4371'	
20-03	2C	20-T7S-R34E	4395'	4360'	
20-05	1E	20-T7S-R34E	4448'	4401'	
20-11	3K	20-T7S-R34E	4400'	4352'	RE/RD
20-13	2M	20-T7S-R34E	4400'	4345'	RE/RD
29-03	8C	29-T7S-R34E	4478'	4452'	
29-05	7E	29-T7S-R34E	4450'	4411'	
29-06	9F	29-T7S-R34E	4500'	4455'	
30-01	2A	30-T7S-R34E	4430'	4401'	
30-03	1C	30-T7S-R34E	4350'	4308'	
30-07	3G	30-T7S-R34E	4475'	4439'	
30-09	4I	30-T7S-R34E	4426'	4382'	
30-11	3K	30-T7S-R34E	4400'	4368'	

LEGEND:

Remarks: RE/RD = Well to be reentered or redrilled.



UNIT AREA MAP

WATER FLOOD STUDY

MURPHY OPERATING CORPORATION

CHAVEROO SAN ANDRES FIELD

PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT

ROOSEVELT COUNTY, NEW MEXICO

LEGEND

- PRODUCING WELL
- ⊕ PLUGGED & ABANDONED WELL
- ⊕ SWD WELL
- PROPOSED INJECTION WELL
- PROPOSED UNIT BOUNDARY
- 2 MILE PERIMETER AROUND UNIT BOUNDARY
- 1/2 MILE RADIUS AROUND PROPOSED INJECTORS

EXHIBIT V.

(P) = Producing
(S) = Shut-in
(A) = Plugged & Abandoned
(I) = Injection
(SWD)= Salt Water Disposal

EXHIBIT V.
REDESIGNATION OF WELL NAMES
JENNIFER CHAVEROO SAN ANDRES UNIT
ROOSEVELT COUNTY, NEW MEXICO

Original Well Name,				Serial No. & Lease Date	Redesignated Well Name	Basic Royalty & Percentage	W.I.	
Tract No.	Description of Land, No. of Acres & Status						San Andres Production W.I. Ownership	Percent Ownership Percent Unit Participation
1.	Federal "26" Well #1 (S) T-7-S, R-33-E Sec. 26: SW $\frac{1}{4}$ SW $\frac{1}{4}$ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #26-13	BHP Petroleum (Americas), Inc.	NM-0108997-B 09/01/60	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000	
1.	Federal "26" Well #2 (P) T-7-S, R-33-E Sec. 26: NW $\frac{1}{4}$ SW $\frac{1}{4}$ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #26-12	BHP Petroleum (Americas), Inc.	NM-0108997-B 09/01/60	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000	
1.	Federal "26" Well #3 (P) T-7-S, R-33-E Sec. 26: NE $\frac{1}{4}$ SW $\frac{1}{4}$ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #26-11	BHP Petroleum (Americas), Inc.	NM-0108997-B 09/01/60	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000	
1.	Federal "26" Well #4 (S) T-7-S, R-33-E Sec. 26: SE $\frac{1}{4}$ SW $\frac{1}{4}$ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #26-14	BHP Petroleum (Americas), Inc.	NM-0108997-B 09/01/60	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000	
1.	Federal "26" Well #5 (P) T-7-S, R-33-E Sec. 26: NW $\frac{1}{4}$ SE $\frac{1}{4}$ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #26-10	BHP Petroleum (Americas), Inc.	NM-0108997-B 09/01/60	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000	
1.	Federal "26" Well #6 (S) T-7-S, R-33-E Sec. 26: SW $\frac{1}{4}$ SE $\frac{1}{4}$ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #26-15	BHP Petroleum (Americas), Inc.	NM-0108997-B 09/01/60	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000	

Tract No.	Original Well Name, Description of Land, No. of Acres & Status	Redesignated Well Name	Serial No. & Lease Date	Lessee of Record	Basic Royalty & Percentage	San Andres Production W.I. Ownership	W.I.	
							Percent Ownership	Percent Unit Participation
1.	Federal "26" Well #7 (P) T-7-S, R-33-E Sec. 26: NE¼SE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #26-09	NM-0108997-B 09/01/60	BHP Petroleum (Americas), Inc.	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000	<u>TOTAL TRACT 1</u>
1.	Federal "26" Well #8 (P) T-7-S, R-33-E Sec. 26: SE¼SE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #26-16	NM-0108997-B 09/01/60	BHP Petroleum (Americas), Inc.	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000	1.309590 3.273973 5.893152 10.476715
2.	Homme Federal Well #1 (S) T-7-S, R-34-E Sec. 20: SW¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #20-05	NM-0142393 06/01/61	ENE Resources GP, Inc.	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000	
2.	Homme Federal Well #2 (S) T-7-S, R-34-E Sec. 20: NE¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #20-03	NM-0142393 06/01/61	ENE Resources GP, Inc.	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000	<u>TOTAL TRACT 2</u>
2.	Homme Federal Well #3 (S) T-7-S, R-34-E Sec. 20: SE¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #20-06	NM-0142393 06/01/61	ENE Resources GP, Inc.	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000	0.369763 0.924408 1.663934
3.	Wolf Federal Well #1 (P) T-7-S, R-34-E Sec. 19: SW¼NE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #19-07	NM-0164650 08/01/61	ENE Resources GP, Inc.	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000	
3.	Wolf Federal Well #2 (P) T-7-S, R-34-E Sec. 19: NW¼NE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #19-02	NM-0164650 08/01/61	ENE Resources GP, Inc.	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000	

Tract No.	Original Well Name, Description of Land, No. of Acres & Status	Redesignated Well Name	Serial No. & Lease Date	Lessee of Record	Basic Royalty & Percentage	W.I.	
						San Andres Production W.I. Ownership	Percent Unit Participation
3.	Wolf Federal Well #3 (S) T-7-S, R-34-E Sec. 18: SW ¹ / ₄ SE ¹ / ₄ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #18-15	NM-0164650 08/01/61	ENE Resources GP, Inc.	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
3.	Wolf Federal Well #4 (P) T-7-S, R-34-E Sec. 19: NE ¹ / ₄ NE ¹ / ₄ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #19-01	NM-0164650 08/01/61	ENE Resources GP, Inc.	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
3.	Wolf Federal Well #5 (S) T-7-S, R-34-E Sec. 19: SE ¹ / ₄ NE ¹ / ₄ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #19-08	NM-0164650 08/01/61	ENE Resources GP, Inc.	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
							<u>TOTAL TRACT 3</u>
							0.531294 1.328234 2.390821 4.250349
4.	Federal "19" Well #1 (A) T-7-S, R-34-E Sec. 19: Lot 2 45.49 acres Roosevelt County, N.M.	Jennifer Unit Well #19-06	NM-81278 04/01/89	Murphy Operating Corporation	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
							<u>TOTAL TRACT 4</u>
							0.058478 0.146195 0.263151 0.467824
4.	Federal "19" Well #2 (A) T-7-S, R-34-E Sec. 19: Lot 1 45.28 acres Roosevelt County, N.M.	Jennifer Unit Well #19-03	NM-81278 04/01/89	Murphy Operating Corporation	United States of America 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
5.	State DB Well No. 1 (S) T-7-S, R-33-E Sec. 25: NW ¹ / ₄ NW ¹ / ₄ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #25-04	K-1276 03/21/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
5.	State DB Well No. 2 (S) T-7-S, R-33-E Sec. 25: SW ¹ / ₄ NW ¹ / ₄ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #25-05	K-1276 03/21/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000

Tract No.	Original Well Name, Description of Land, No. of Acres & Status	Redesignated Well Name	Serial No. & Lease Date	Lessee of Record	Basic Royalty & Percentage	W.I.	
						San Andres Production W.I. Ownership	Percent Unit Participation
5.	State DB Well No. 3 (P) T-7-S, R-33-E Sec. 25: NE¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #25-03	K-1276 03/21/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
5.	State DB Well No. 4 (A) T-7-S, R-33-E Sec. 25: NW¼SW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #25-12	K-1276 03/21/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
5.	State DB Well No. 5 (P) T-7-S, R-33-E Sec. 25: SE¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #25-06	K-1276 03/21/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
5.	State DB Well No. 6 (I) T-7-S, R-33-E Sec. 25: SW¼SW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #25-13	K-1276 03/21/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
5.	State DB Well No. 7 (P) T-7-S, R-33-E Sec. 25: NE¼SW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #25-11	K-1276 03/21/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
5.	State DB Well No. 8 (A) T-7-S, R-33-E Sec. 25: SE¼SW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #25-14	K-1276 03/21/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
5.	State DB Well No. 9 (P) T-7-S, R-33-E Sec. 25: SW¼SE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #25-15	K-1276 03/21/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000

Tract No.	Original Well Name, Description of Land, No. of Acres & Status	Redesignated Well Name	Serial No. & Lease Date	Lessee of Record	Basic Royalty & Percentage	San Andres Production W.I. Ownership	W.I.	
							Percent Ownership	Percent Unit Participation
							<u>TOTAL TRACT 5</u>	
5.	State DF Well No. 1 (SWD)	Jennifer Unit Well #25-09	K-1276	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation	12.50000	1.751963
	<u>T-7-S, R-33-E</u>		03/21/61			American Energy Capital Corp.	31.25000	4.379908
	Sec. 25: NE <u>SE</u>					Snyder Oil Company	56.25000	7.883834
	40.00 acres						100.00000	14.015705
Roosevelt County, N.M.								
6.	State "J" Well No. 1 (P)	Jennifer Unit Well #25-02	K-2671	The Wiser Oil Co.	State of N.M. 12.5	Murphy Operating Corporation	12.50000	
	<u>T-7-S, R-33-E</u>		08/21/62			American Energy Capital Corp.	31.25000	
	Sec. 25: NW <u>NE</u>					Snyder Oil Company	56.25000	
	40.00 acres						100.00000	
Roosevelt County, N.M.								
6.	State "J" Well No. 2 (A)	Jennifer Unit Well #25-07	K-2671	The Wiser Oil Co.	State of N.M. 12.5	Murphy Operating Corporation	12.50000	
	<u>T-7-S, R-33-E</u>		08/21/62			American Energy Capital Corp.	31.25000	
	Sec. 25: SW <u>NE</u>					Snyder Oil Company	56.25000	
	40.00 acres						100.00000	
Roosevelt County, N.M.								
6.	State "J" Well No. 3 (P)	Jennifer Unit Well #25-01	K-2671	The Wiser Oil Co.	State of N.M. 12.5	Murphy Operating Corporation	12.50000	
	<u>T-7-S, R-33-E</u>		08/21/62			American Energy Capital Corp.	31.25000	
	Sec. 25: NE <u>NE</u>					Snyder Oil Company	56.25000	
	40.00 acres						100.00000	
Roosevelt County, N.M.								
6.	State "J" Well No. 4 (P)	Jennifer Unit Well #25-16	K-2671	The Wiser Oil Co.	State of N.M. 12.5	Murphy Operating Corporation	12.50000	0.496050
	<u>T-7-S, R-33-E</u>		08/21/62			American Energy Capital Corp.	31.25000	1.240127
	Sec. 25: SE <u>SE</u>					Snyder Oil Company	56.25000	2.232228
	40.00 acres						100.00000	3.968405
Roosevelt County, N.M.								
							<u>TOTAL TRACT 7</u>	
7.	State Conine Well #1 (A)	Jennifer Unit Well #25-08	VA-125	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation	12.50000	0.084971
	<u>T-7-S, R-33-E</u>		10/01/88			American Energy Capital Corp.	31.25000	0.212426
	Sec. 25: SE <u>NE</u>					Snyder Oil Company	56.25000	0.382367
	40.00 acres						100.00000	0.679764
Roosevelt County, N.M.								
8.	State "I" Well #1 (P)	Jennifer Unit Well #25-10	OG-575	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation	12.50000	0.138318
	<u>T-7-S, R-33-E</u>		02/11/57			Snyder Oil Company	56.25000	0.622432
	Sec. 25: NW <u>SE</u>					P.A.J.W. Corporation	31.25000	0.345793
	40.00 acres						100.00000	1.106543
Roosevelt County, N.M.								

Tract No.	Original Well Name, Description of Land, No. of Acres & Status	Redesignated Well Name	Serial No. & Lease Date	Lessee of Record	Basic Royalty & Percentage	San Andres Production W.I. Ownership	W.I.	
							Percent Ownership	Percent Unit Participation
9.	State "DA" Well #1 (S) T-7-S, R-33-E Sec. 35: SW¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-05	OG-1191 08/16/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000	TOTAL TRACT 9
9.	State "DE" Well #1 (S) T-7-S, R-33-E Sec. 35: SE¼SW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-14	OG-1191 08/16/57	Sun Operating Ltd. Partnership	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000	0.265938 1.196719 0.664844 2.127501
10.	Hobbs "T" Well #14 (P) T-7-S, R-33-E Sec. 35: NW¼SE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-10	K-1369 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000	
10.	Hobbs "T" Well #16 (P) T-7-S, R-33-E Sec. 35: NE¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-03	K-1369 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000	
10.	Hobbs "T" Well #17 (P) T-7-S, R-33-E Sec. 35: NE¼NE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-11	K-1369 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000	
10.	Hobbs "T" Well #18 (P) T-7-S, R-33-E Sec. 35: SW¼SE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-15	K-1369 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000	TOTAL TRACT 10
10.	Hobbs "T" Well #19 (P) T-7-S, R-33-E Sec. 35: SE¼SE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-16	K-1369 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000	1.277089 5.746902 3.192723 10.216714

Tract No.	Original Well Name, Description of Land, No. of Acres & Status	Redesignated Well Name	Serial No. & Lease Date	Lessee of Record	Basic Royalty & Percentage	W.I.	
						San Andres Production W.I. Ownership	Percent Unit Participation
11.	State "CV" Well #1 (P) I-7-S, R-33-E Sec. 35: NE½SW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-11	K-4058 04/21/64	Sun Operating Ltd. Partnership	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000
11.	State "CV" Well #2 (S) I-7-S, R-33-E Sec. 35: NW¼NE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-02	K-4058 04/21/64	Sun Operating Ltd. Partnership	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000
TOTAL TRACT 11							
11.	State "CV" Well #3 (P) I-7-S, R-33-E Sec. 35: NE½SE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-09	K-4058 04/21/64	Sun Operating Ltd. Partnership	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000
TOTAL TRACT 12							
12.	Shackelford Well #1 (S) I-7-S, R-33-E Sec. 35: NW¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-04	V-2821 01/01/89	Murphy Operating Corporation	State of N.M. 16.3334	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
13.	State "35" Well #1 (P) I-7-S, R-33-E Sec. 35: NW¼SW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-12	OG-929 06/18/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
13.	State "35" Well #2 (P) I-7-S, R-33-E Sec. 35: SW¼SW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-13	OG-929 06/18/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
13.	State "35" Well #3 (P) I-7-S, R-33-E Sec. 35: SE¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-06	OG-929 06/18/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
TOTAL TRACT 13							

Tract No.	Original Well Name, Description of Land, No. of Acres & Status	Redesignated Well Name	Serial No. & Lease Date	Lessee of Record	Basic Royalty & Percentage	W.I.	
						San Andres Production W.I. Ownership	Percent Unit Participation
13.	State "35" Well #4 (P) T-7-S, R-33-E Sec. 35: SW¼NE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-07	OG-929 06/18/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
13.	State "35" Well #5 (P) T-7-S, R-33-E Sec. 35: SE¼NE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #35-08	OG-929 06/18/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
13.	State "36" Well #1B (A) T-7-S, R-33-E Sec. 36: NW¼NE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #36-02	OG-929 06/18/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
TOTAL TRACT 13							
13.	State "36" Well #1G (SWD) T-7-S, R-33-E Sec. 36: SW¼NE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #36-07	OG-929 06/18/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
14.	State "K" Well #1 (P) T-7-S, R-33-E Sec. 36: NW¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #36-04	K-2672 08/21/62	The Wiser Oil Co.	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
14.	State "K" Well #2 (P) T-7-S, R-33-E Sec. 36: SW¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #36-05	K-2672 08/21/62	The Wiser Oil Co.	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
14.	State "K" Well #3 (P) T-7-S, R-33-E Sec. 36: NE¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #36-03	K-2672 08/21/62	The Wiser Oil Co.	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000

Tract No.	Original Well Name, Description of Land, No. of Acres & Status	Redesignated Well Name	Serial No. & Lease Date	Lessee of Record	Basic Royalty & Percentage	W.I.	
						San Andres Production W.I. Ownership	Percent Unit Participation
14.	State "K" Well #4 (P) T-7-S, R-33-E Sec. 36: NW¼SW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #36-12	K-2672 08/21/62	The Wiser Oil Co.	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
14.	State "K" Well #5 (P) T-7-S, R-33-E Sec. 36: SW¼SW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #36-13	K-2672 08/21/62	The Wiser Oil Co.	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
14.	State "K" Well #6 (P) T-7-S, R-33-E Sec. 36: SE¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #36-06	K-2672 08/21/62	The Wiser Oil Co.	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
TOTAL TRACT 14							
14.	State "K" Well #7 (P) T-7-S, R-33-E Sec. 36: NE¼SW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #36-11	K-2672 08/21/62	The Wiser Oil Co.	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
15.	State "G" Well #1 (S) T-7-S, R-34-E Sec. 19: Lot 3 45.69 acres Roosevelt County, N.M.	Jennifer Unit Well #19-11	OG-1193 08/20/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000
15.	State "G" Well #2 (S) T-7-S, R-34-E Sec. 19: Lot 4 45.90 acres Roosevelt County, N.M.	Jennifer Unit Well #19-14	OG-1193 08/20/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000
15.	State "G" Well #3 (S) T-7-S, R-34-E Sec. 19: NW¼SE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #19-10	OG-1193 08/20/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000

Tract No.	Original Well Name, Description of Land, No. of Acres & Status	Redesignated Well Name	Serial No. & Lease Date	Lessee of Record	Basic Royalty & Percentage	W.I.	
						San Andres Production W.I. Ownership	Percent Unit Participation
15.	State "G" Well #4 (P) T-7-S, R-34-E Sec. 19: SWSE X 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #19-15	OG-1193 08/20/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000
TOTAL TRACT 15							0.597946 2.690757 1.494865 4.783568
15.	State "G" Well #5 (S) T-7-S, R-34-E Sec. 19: NESE X 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #19-09	OG-1193 08/20/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000
15.	State "G" Well #6 (S) T-7-S, R-34-E Sec. 19: SESE X 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #19-16	OG-1193 08/20/57	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000
16.	State "20" Well #1 (A) T-7-S, R-34-E Sec. 20: NWSE X 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #20-12	VA-141 11/01/88	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
16.	State "20" Well #2 (A) T-7-S, R-34-E Sec. 20: SWSE X 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #20-13	VA-141 11/01/88	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
16.	State "20" Well #3 (A) T-7-S, R-34-E Sec. 20: NESE X 160.00 acres Roosevelt County, N.M.	Jennifer Unit Well #20-11	VA-141 11/01/88	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000
TOTAL TRACT 16							0.514392 1.285982 2.314767 4.115141
16.	State "20" Well #4 (A) T-7-S, R-34-E Sec. 20: SESE X 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #20-14	VA-141 11/01/88	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000

Tract No.	Original Well Name, Description of Land, No. of Acres & Status	Redesignated Well Name	Serial No. & Lease Date	Lessee of Record	Basic Royalty & Percentage	W.I.	
						San Andres Production W.I. Ownership	Percent Unit Participation
17.	State "20" T-7-S, R-34-E Sec. 29: NE¼ 40.00 acres Roosevelt County, N.M.	No Wells	VA-142 11/01/88	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 56.25000 100.00000 0.019429 0.048572 0.087429 0.155430
18.	Hobbs "W" Well #1 (P) T-7-S, R-34-E Section 30: NW¼NE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #30-02	K-1370 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000
18.	Hobbs "W" Well #2 (P) T-7-S, R-34-E Section 30: NE¼NE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #30-01	K-1370 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000
18.	Hobbs "W" Well #3 (P) T-7-S, R-34-E Section 30: SW¼NE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #30-07	K-1370 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000
18.	Hobbs "W" Well #4 (P) T-7-S, R-34-E Section 30: SE¼NE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #30-08	K-1370 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000
18.	Hobbs "W" Well #5 (S) T-7-S, R-34-E Section 30: NW¼SE¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #30-10	K-1370 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000
18.	Hobbs "W" Well #6 (P) T-7-S, R-34-E Section 29: NW¼NW¼ 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #29-04	K-1370 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 31.25000 100.00000

TOTAL TRACT 17

Tract No.	Original Well Name, Description of Land, No. of Acres & Status	Redesignated Well Name	Serial No. & Lease Date	Lessee of Record	Basic Royalty & Percentage	San Andres Production W.I. Ownership	W.I.	
							Percent Ownership	Percent Unit Participation
18.	Hobbs "W" Well #7 (S) <u>T-7-S, R-34-E</u> Section 29: <u>SW¼NW¼</u> 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #29-05	K-1370 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 <u>31.25000</u> 100.00000	
								<u>TOTAL TRACT 18</u>
18.	Hobbs "W" Well #8 (S) <u>T-7-S, R-34-E</u> Section 29: <u>NE¼NW¼</u> 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #29-03	K-1370 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 <u>31.25000</u> 100.00000	1.233654 5.551441 <u>3.084134</u> 9.869229
18.	Hobbs "W" Well #9 (I) <u>T-7-S, R-34-E</u> Section 29: <u>SE¼NW¼</u> 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #29-06	K-1370 04/18/61	Murphy Operating Corporation	State of N.M. 12.5	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	12.50000 56.25000 <u>31.25000</u> 100.00000	
19.	State "V" Well #1 (P) <u>T-7-S, R-34-E</u> Sec. 30: Lot 1 46.09 acres Roosevelt County, N.M.	Jennifer Unit Well #30-03	OG-4897 12/16/58	Fina Oil & Chemical Company	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 <u>56.25000</u> 100.00000	
19.	State "V" Well #2 (S) <u>T-7-S, R-34-E</u> Sec. 30: Lot 2 45.28 acres Roosevelt County, N.M.	Jennifer Unit Well #30-06	OG-4897 12/16/58	Fina Oil & Chemical Company	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 <u>56.25000</u> 100.00000	
19.	State "V" Well #3 (S) <u>T-7-S, R-34-E</u> Sec. 30: Lot 3 46.46 acres Roosevelt County, N.M.	Jennifer Unit Well #30-11	OG-4897 12/16/58	Fina Oil & Chemical Company	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 <u>56.25000</u> 100.00000	<u>TOTAL TRACT 19</u>
19.	State "V" Well #4 (P) <u>T-7-S, R-34-E</u> Sec. 30: <u>NE¼SE¼</u> 40.00 acres Roosevelt County, N.M.	Jennifer Unit Well #30-09	OG-4897 12/16/58	Fina Oil & Chemical Company	State of N.M. 12.5	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	12.50000 31.25000 <u>56.25000</u> 100.00000	0.412514 1.031285 <u>1.856312</u> 3.300111

Tract No.	Original Well Name, Description of Land, No. of Acres & Status	Redesignated Well Name	Serial No. & Lease Date	Lessee of Record	Basic Royalty & Percentage	San Andres Production		W.I. Ownership		W.I.	
						W.I. Ownership	Percent	Ownership	Percent	Participation	Participation
<u>TOTALS FOR TRACT NOS. 1 through 19</u>											
						American Energy Capital Corporation				19.979800	
						Murphy Operating Corporation				12.500000	
						P.A.J.W. Corporation				11.270200	
						Snyder Oil Company				<u>56.250000</u>	
						Total				<u>100.000000</u>	

EXHIBIT VI.A.

Tabulation of Well Data for Wells within Proposed Unit Area.
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
Roosevelt County, New Mexico

Tract #	Operator Lease	Well #/Unit	New Unit	Status	Compl. Date	Datum		TD or PBTD Feet	Casing Record		Completion Interval Feet	Initial Treatment		Initial Potential		Remarks	Cum Oil Prod. to Jan. 1, 1989	Useable Wells
						Elev. Feet			Size Inches	Depth Feet		Acid/ G	# Sand	BOPD	MCFGPD			
1	Sec. 25, T7S-R33E State DB	1D 25-04	25-04	S	03-02-66	4335'		4338'	4 1/2 W800	4388'	4174'-4336'	2000	-	F 220	118	2	70,715	1
			25-05	S	03-25-66	4336'		4411'	4 1/2 W800	4410'	4193'-4342'	2000	-	F 326	277	6	79,087	1
			25-03	P	04-14-66	4332'		4430'	4 1/2 W800	4430'	4218'-4333'	2000	-	F 291	56	0	147,639	1
			25-12	A	04-23-66	4338'		4410'	4 1/2 W500	4410'	4208'-4363'	2000	-	F 315	199	0	76,257	0
			25-06	P	05-02-66	4330'		4415'	4 1/2 W800	4415'	4182'-4385'	2000	40500#	F 186	176	0	73,421	1
			25-13	P	05-14-66	4355'		4430'	4 1/2 W800	4430'	4189'-4327'	2000	-	F 227	93	0	70,955	1
			25-11	P	05-12-66	4338'		4431'	4 1/2 W800	4431'	4188'-4324'	2000	40500#	F 178	49	0	76,711	1
			25-14	A	05-29-66	4333'		4465'	4 1/2 W800	4465'	4205'-4341'	2000	-	F 323	169	0	55,065	0
			25-15	P	06-24-66	4329'		4498'	4 1/2 W800	4498'	4223'-4373'	2000	40500#	P 67	21	8	64,017	1
			25-09	SWD	07-06-66	4325'		4498'	4 1/2 W800	4498'	4224'-4364'	2000	-	F 367	N/A	N/A	26,633	1
			25-02	P	04-15-66	4320'		4395'	4 1/2 W350	4394'	4168'-4275'	2000	-	F			73,707	1
			25-07	A	05-18-66	4320'		4422'	4 1/2 W350	4403'	4234'-4317'	2000	25000#	F 120	103	0	47,492	0
			25-01	P	06-04-66	4320'		4404'	4 1/2 W300	4396'	4169'-4290'	2000	25000#	F 360	313	0	52,490	1
			25-16	P	02-01-67	4325'		4470'	5 1/2 W325	4470'	4253'-4365'	2000	-	P 54	35	3	23,528	1
3	State Connine	1H	25-08	A	07-30-66	4327'		4420'	4 1/2 W325	4420'	4196'-4308'	2000	-	F 298	-	33	39,758	0
4	State I	1J	25-10	P	06-24-66	4332'		4420'	5 1/2 W350	4420'	4203'-4340'	2000	38250#	P 118	N/A	N/A	53,127	1
5	Sec. 26, T7S-R33E Federal 26	1M 26-13	26-13	S	06-22-66	4381'		4400'	4 1/2 W350	4400'	4108'-4284'	2000	45000#	F 516	121	0	62,819	1
			26-12	P	05-23-66	4373.3'		4405'	4 1/2 W350	4402'	4142'-4292'	2000	28200#	F 470	266	11	71,687	1
			26-11	P	06-05-66	4366.2'		4398'	4 1/2 W300	4398'	4153'-4283'	2000	40500#	F 439	250	4	64,475	1
			26-14	S	06-15-66	4374'		4380'	4 1/2 W300	4380'	4125'-4294'	2000	45000#	F 282	168	21	65,965	1
			26-10	P	06-11-66	4343'		4394'	4 1/2 W350	4394'	4160'-4274'	2000	45000#	F 203	278	2	62,823	1
			26-15	S	06-03-66	4346.7'		4380'	4 1/2 W400	4380'	4131'-4288'	2000	45000#	F 662	201	0	64,066	1
			26-09	P	06-18-66	4335.5'		4400'	4 1/2 W350	4400'	4140'-4260'	2000	49000#	F 574.8	264	0	63,263	1
			26-16	P	05-25-66	4339.3		4376'	4 1/2 W330	4376'	4153'-4290'	2000	30300#	F 528	348	12	70,685	1
6	Sec. 35, T7S-R33E Hobbs T	14J 35-10	35-10	P	03-15-66	4357'		4500'	4 1/2 W350	4500'	4207'-4329'	2500	-	F 496	293	0	140,139	1
			35-03	P	04-06-66	4376'		4500'	4 1/2 W350	4500'	4185'-4310'	2500	-	F 405	340	0	94,174	1
			35-01	P	04-21-66	4344'		4500'	4 1/2 W350	4500'	4188'-4299'	2500	-	F 523	265	5	114,624	1

EXHIBIT VI.A.

Tabulation of Well Data for Wells within Proposed Unit Area.
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
Roosevelt County, New Mexico

Tract #	Operator Lease	Well #/Unit	New Unit	Status	Compl. Date	Datum Elev. Feet	TD or PBTD Feet	Casing Record		Completion Interval Feet	Initial Treatment		Remarks	Cum Oil Prod. to Jan. 1, 1989	Useable Wells		
								Size Inches	Depth Feet		Acid/ G	Frac/ # Sand					
✓ 6	Sec. 35, T7S-R33E Hobbs T	180	35-15	P	05-04-66	4361'	4500'	4 1/2 W350	4500'	4216'-4345'	2500	-	F 302	110	6	103,771	1
		19P	35-16	P	05-15-66	4353'	4500'	4 1/2 W350	4498'	4187'-4358'	2500	-	P 120	50	0	103,495	1
7	State CV	1K	35-11	P	02-05-66	4367'	4437'	4 1/2 W400	4437'	4178'-4316'	4000	-	F 73	39	0	120,660	1
		2B	35-02	S	03-14-66	4358'	4397'	4 1/2 W375	4397'	4161'-4303'	4200	-	F 547	252	0	159,554	1
		3I	35-09	P	05-26-66	4354'	4452'	4 1/2 W450	4452'	4195'-4327'	4600	-	F 982	N/A	N/A	167,096	1
8	State DA and State DE	1E	35-05	S	02-20-66	4377'	4466'	4 1/2 W800	4466'	4205'-4332'	2000	30000#	P 47	-	3	42,792	1
		1N	35-14	S	04-17-66	4368'	4476'	4 1/2 W800	4476'	4207'-4336'	2000	-	F 136	-	-	58,153	1
9	Shackelford	1D	35-04	S	05-25-66	4390'	4500'	4 1/2 W350	4497'	4167'-4318'	3500	-	F 264	-	-	81,728	1
✓ 10	State Sec. 35 and State Sec. 36	1L	35-12	P	01-12-66	4377'	4450'	5 1/2 W350	4442'	4244'-4334'	2000	40000#	F 294	-	29	68,993	1
		2M	35-13	P	03-17-66	4373'	4374'	4 1/2 W350	4182'	4182'-4333'	2500	40000#	P 82	0	9	44,151	1
		3F	35-06	P	03-18-66	4378'	4440'	4 1/2 W350	4440'	4186'-4326'	3000	40000#	F 99	-	12	70,037	1
		4G	35-07	P	04-07-66	4370'	4431'	4 1/2 W350	4425'	4202'-4325'	4000	-	F 111	-	-	79,365	1
		5H	35-08	P	05-08-66	4347'	4440'	4 1/2 W350	4438'	4256'-4327'	3000	-	F 209	-	-	102,078	1
		1B	36-02	A	09-01-66	4333'	4490'	4 1/2 W350	4488'	4229'-4321'	3000	25000#	P 55	-	32	31,561	0
		1G	36-07	P	09-05-66	4327'	4500'	4 1/2 W600	4500'	4163'-4413'	1000	-	P 3	-	200	444	1
11	State K	1D	36-04	P	05-10-66	4339'	4455'	4 1/2 W350	4455'	4184'-4331'	2000	-	F 480	-	-	77,262	1
		2E	36-05	P	06-04-66	4338'	4460'	4 1/2 W350	4458'	4221'-4351'	2000	25000#	F 240	-	-	74,701	1
		3C	36-03	P	06-11-66	4333'	4458'	4 1/2 W200	4458'	4227'-4343'	2000	-	F 480	-	-	120,329	1
		4L	36-12	P	09-30-66	4345'	4490'	4 1/2 W350	4481'	4244'-4345'	2000	25000#	F 240	-	-	62,611	1
		5M	36-13	P	10-04-66	4349'	4480'	4 1/2 W350	4466'	4240'-4342'	2000	25000#	P 240	-	-	81,027	1
		6F	36-06	P	11-07-66	4334'	4480'	4 1/2 W350	4462'	4217'-4323'	2000	25000#	P 75	-	85	52,689	1
		7K	36-11	P	09-21-67	4341'	4480'	4 1/2 W350	4480'	4243'-4372'	2000	-	P 35	-	50	29,142	1
✓ 1	Sec. 18, T7S-R34E Wolf Federal	30	18-15	S	10-19-66	4329'	4340'	4 1/2 W800	4340'	4064'-4267'	2000	45000#	P 179	-	2	32,687	1

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EXHIBIT VI.A.

Tabulation of Well Data for Wells within Proposed Unit Area.
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
Roosevelt County, New Mexico

Tract #	Operator Lease	Well #/Unit	New Unit Well #	Status	Compl. Date	Datum Elev. Feet	TD or PBTD Feet	Casing Record		Completion Interval Feet	Initial Treatment		Initial Potential			Remarks	Cum Oil Prod. to Jan 1, 1989	Useable Wells
								Size Inches	Depth Feet		Acid/ G	# Sand	BOPD	MCFGPD	BWPD			
6	Sec. 30, T7S-R34E Hobbs W	1B 2A 3G 4H 5J	30-02	P	08-09-66	4323'	4430'	4 1/2	W350 4430'	4162'-4304'	2500	30000#	F 378	-	5		51,082	1
			30-01	P	08-22-66	4322'	4430'	4 1/2	W350 4430'	4159'-4308'	2500	30000#	F 239	-	-		65,313	1
			30-07	P	09-01-66	4322'	4475'	4 1/2	W350 4475'	4197'-4337'	2500	30000#	F 283	-	3		69,741	1
			30-08	P	09-28-66	4319'	4475'	4 1/2	W350 4466'	4202'-4343'	2500	30000#	F 269	-	3		51,798	1
			30-10	S	10-07-66	4321'	4500'	4 1/2	W350 4495'	4337'-4382'	2000	-	P 154	-	39		44,321	1
7	State V	1C 2F 3K 4I	30-03	P	08-30-66	4326'	4350'	4 1/2	W520 4338'	4110'-4298'	2000	45000#	P 128	-	-		46,952	1
			30-06	S	09-02-66	4321'	4385'	4 1/2	W520 4382'	4201'-4338'	2500	-	F 177	-	-		49,641	1
			30-11	S	10-15-66	4324'	4408'	4 1/2	W550 4400'	4214'-4344'	5000	-	F 132	-	24		19,839	1
			30-09	P	02-01-67	4319'	4426'	4 1/2	W520 4426'	4224'-4354'	5000	45000#	P 28	-	7		19,866	1

Exhibit VI.B
Tabulation of Well Data for Wells Outside Proposed Unit Area but within Area of Review.*
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
Roosevelt County, New Mexico

Operator Lease	Unit Well #	Status	Compl. Date	Datum		TD or PBTD Feet	Casing Record		Completion Interval Feet	Initial Treatment		Initial Potential		Remarks * One-half (½) mile of Unit Boundary.
				Elev. Feet	Feet		Size Inches	Depth Feet		Acid/ G	Frac/ # Sand	BOPD	MCFGPD	
Sec. 13, T7S-R33E														
Yates Petroleum Federal 13	1G	P&A	10-128-66	4327'	4276'	5½ W300	4280'	4133-4150'	2000	30000#	-	-	-	Plugged and Abandoned
Sec. 23, T7S-R33E														
Mims Texas Oil & Gas Federal 23	8I	S	07-19-66	4336'	4410'	4½ W350	4450'	4105-4227'	2000	-	F 616	326	-	Last Prod. Date 1/89
	7J	S	05-15-67	4343'	4269'	4½ W350	4298'	4168-4226'	2000	60000#	F 231	106	8	Last Prod. Date 1/89
	30	S	07-27-66	4340'	4367'	4½ W350	4400'	4117-4232'	2000	45000#	F 471	480	18	Last Prod. Date 1/89
	4P	P	07-18-66	4335'	4410'	4½ W350	4447'	4108-4236'	2000	45000#	F 144	-	-	Last Prod. Date 1/89
Sec. 24, T7S-R33E														
Mims Texas Oil & Gas Federal 24	8A	S	11-05-66	4334'	4303'	4½ W350	4340'	4116-4250'	2000	40000#	P 82	-	-	Last Prod. Date 2/86
	7B	P	08-28-66	4335'	4321'	4½ W350	4370'	4111-4247'	2000	45000#	F 444	-	4	Last Prod. Date 1/89
	5H	P	08-17-66	4321'	4345'	4½ W380	4380'	4102-4282'	2000	-	F 424	477	-	Last Prod. Date 1/89
	2J	P	10-15-66	4342'	4270'	4½ W350	4300'	4149-4235'	2000	45000#	F 353	259	-	Last Prod. Date 1/89
Milford Pipe & Supply														
Bradley	3I	P&A	04-28-66	4332'	4319'	4½ W800	4360'	4119-4309'	2000	40500#	F 187	48	-	Plugged and Abandoned
	1N	P&A	02-18-66	4333'	4338'	4½ W800	4372'	4165-4308'	3000	27000#	P 103	79	-	Plugged and Abandoned
	20	P&A	04-07-66	4332'	4340'	4½ W800	4378'	4141-4260'	2000	40500#	F 141	119	-	Plugged and Abandoned
	4P	P&A	05-09-66	4334'	4343'	4½ W800	4384'	4144-4278'	2000	40500#	P 121	25	10	Plugged and Abandoned
Coleman	2L	P&A	02-11-66	4334'	4318'	4½ W800	4362'	4141-4276'	2000	30000#	F 245	424	-	Plugged and Abandoned
	1M	P&A	01-14-66	4340'	4323'	4½ W800	4356'	4187-4196'	2000	-	F 102	51	-	Plugged and Abandoned
Sec. 26, T7S-R33E														
Dalport Oil Corp. Federal	3A	P&A	05-15-66	4346'	4367'	4½ W300	4397'	4119-4259'	2500	30000#	F 360	235	-	Plugged and Abandoned
	4H	P&A	05-22-66	4345'	4412'	4½ W300	4410'	4130-4269'	2500	30000#	F 384	207	-	Plugged and Abandoned

Exhibit VI.B

Tabulation of Well Data for Wells Outside Proposed Unit Area but within Area of Review.*

PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
Roosevelt County, New Mexico

Operator Lease	Unit Well #	Status	Compl. Date	Datum Elev. Feet	TD or PBD Feet	Casing Record		Completion Interval Feet	Initial Treatment		Initial Potential		Remarks * One-half (½) mile	
						Size Inches	Depth Feet		Acid/ G	# Sand	BOPD	MCFGPD		BWPD
Sec. 26, T7S-R33E														
Mims Texas Oil & Gas														
Morgan B Federal	6B	S	04-17-66	4352'	4425'	4½ W350	4424'	4111-4251'	2000	20000#	F 509	163	-	Last Prod. Date 9/88
	5C	S	04-09-66	4353'	4427'	4½ W300	4426'	4121-4257'	20Q0	20000#	F 312	245	-	Last Prod. Date 9/88
	4D	S	04-03-66	4368'	4747'	4½ W350	4747'	4134-4361'	4000	40000#	F 370	437	-	Last Prod. Date 9/88
	1E	S	03-04-66	4365'	4420'	4½ W250	4420'	4137-4278'	2000	20000#	F 230	108	5	Last Prod. Date 9/88
	2F	S	03-11-66	4363'	4424'	4½ W350	4424'	4137-4272'	2000	20000#	F 218	185	-	Last Prod. Date 9/88
	3G	S	04-03-66	4343'	4450'	4½ W350	4449'	4129-4261'	2000	20000#	F 343	63	-	Last Prod. Date 9/88
Sec. 27, T7S-R33E														
Mims Texas Oil & Gas														
Federal 27	3A	S	07-04-66	4382'	4354'	4½ W350	4395'	4145-4273'	2000	45000#	F 230	-	-	Last Prod. Date 1/89
	1-22B		10-07-66	4399'	4324'	4½ W375	4375'	4213-4290'	2000	40000#	F 288	-	-	
	2G	S	07-08-66	4390'	4365'	4½ W350	4403'	4149-4284'	2000	45000#	F 633	499	-	Last Prod. Date 1/89
	1H	P	07-13-66	4377'	4358'	4½ W350	4398'	4150-4280'	2000	45000#	F 55	12	-	Last Prod. Date 1/89
	6I	S	02-20-66	4387'	4387'	5½ W225	4426'	4211-4287'	1500	20000#	F 75	23	-	Last Prod. Date 12/88
	5J	S	02-13-66	4399'	4369'	4½ W260	4438'	4218-4287'	2000	20000#	F 165	144	-	Last Prod. Date 12/88
Morgan A Federal	20	S	12-21-65	4405'	4420'	4½ W350	4453'	4196-4296'	2300	-	F 72	128	-	Last Prod. Date 12/88
	3P	S	01-28-66	4404'	4387'	___	W550 4450'	4232-4302'	1500	20000#	F 180	209	3	Last Prod. Date 12/88
	of Unit Boundary.													
Sec. 34, T7S-R33E														
Murphy Operating Corp.														
Haley Chaveroo														
San Andres Unit	1A	T	12-12-65	4404'	4450'	4½ W200	4456'	4218-4351'	1500	-	F 456	260	-	
	2B	S	12-03-65	4403'	4405'	4½ W200	4444'	4246-4344'	1500	-	F 288	346	-	Last Prod. Date 11/84
	7G	P	10-21-65	4399'	4438'	4½ W350	4474'	4252-4327'	2000	-	F 275	-	3	
	8H	P	12-28-65	4388'	4470'	4½ W200	4478'	4161-4352'	1500	32500#	F 251	233	-	
	9I	S	12-10-65	4384'	4441'	4½ W350	4475'	4221-4353'	3000	40000#	F 432	-	8	Last Prod. Date 10/84
	10J	P	11-11-65	4397'	4446'	4½ W350	4474'	4229-4334.5'	2000	20000#	F 609	-	-	
	150	P	03-30-66	4397'	4450'	4½ W350	4500'	4217-4310'	2000	-	F 404	-	4	
	16P	T	12-31-65	4385'	4462'	4½ W200	4480'	4201-4347'	1000	24000#	S 182	138	-	

Exhibit VI.B
Tabulation of Well Data for Wells Outside Proposed Unit Area but within Area of Review.*
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
Roosevelt County, New Mexico

Operator Lease	Unit Well #	Status	Compl. Date	Datum Elev. Feet	TD or PBTD Feet	Casing Record		Completion Interval Feet	Initial Acid/ G	Initial Treatment		Initial Potential		Remarks * One-half (½) mile of Unit Boundary.
						Size Inches	Depth Feet			# Sand	Frac/ Sand	BOPD	MCFGPD	
Sec. 1, T8S-R33E														
Kerr-McGee Corp. State C	5C	SWD	10-10-66	4344'	4500'	4½ W350	4500'	4239-4416'	4000	-	-	-	-	-
	4D	P	08-01-66	4349'	4492'	4½ W375	4492'	4244-4338'	2100	40000#	P 75	-	32	-
	9E	P	02-10-68	4347'	4332'	5½ W350	4332'	4238-4330'	2500	45000#	-	-	-	-
Sec. 2, T8S-R33E														
Kerr-McGee Corp. State C	2A	P	06-28-66	4344'	4479'	4½ W375	4479'	4221-4358'	2500	40000#	F 280	99	-	-
	1B	S	06-18-66	4359'	4500'	4½ W375	4500'	4204-4347'	2500	40000#	F 308	171	-	-
	3H	P	07-12-66	4346'	4500'	4½ W375	4500'	4236-4380'	2250	39000#	F 280	115	-	-
	2C	P	06-13-66	4364'	4360'	5½ W350	4406'	4199-4347'	2500	45000#	F 261	150	-	-
	14C	P	10-16-80	4366'	4455'	4½ W730	4499'	4181-4353'	5500	111000#	P 14	9	81	-
	1D	S	06-03-66	4381'	4352'	5½ W300	4378'	4211-4341'	2000	44000#	F 376	104	-	-
	3E	P	07-06-66	4377'	4386'	5½ W350	4420'	4203-4339'	4500	-	P 129	100	16	-
	4F	P	07-12-66	4372'	4398'	5½ W350	4430'	4200-4328'	2500	42000#	F 200	175	-	-
Bristol Resources Corp. Levich State														
	1G	P	08-20-66	4360'	4441'	4½ W325	4450'	4216-4353'	2000	45000#	F 124	-	-	-
Sec. 3, T8S-R33E														
Murphy Operating Corp. Halley Chaveroo														
San Andres Unit														
	1A	S	04-13-66	4386'	4447'	4½ W250	4480'	4187-4344'	2000	22200#	F 381	313	12	Last Prod. Date 1/88
	2B	P	05-25-66	4392'	4453'	4½ W250	4491'	4200-4361'	2000	20000#	S 85	-	46	-
	7G	P	08-04-66	4397'	4417'	4½ W300	4455'	4208-4356'	2000	30000#	F 151	-	13	-
	8H	P	07-13-66	4387'	4452'	4½ W300	4489'	4198-4344'	2000	30000#	F 171	79	5	-

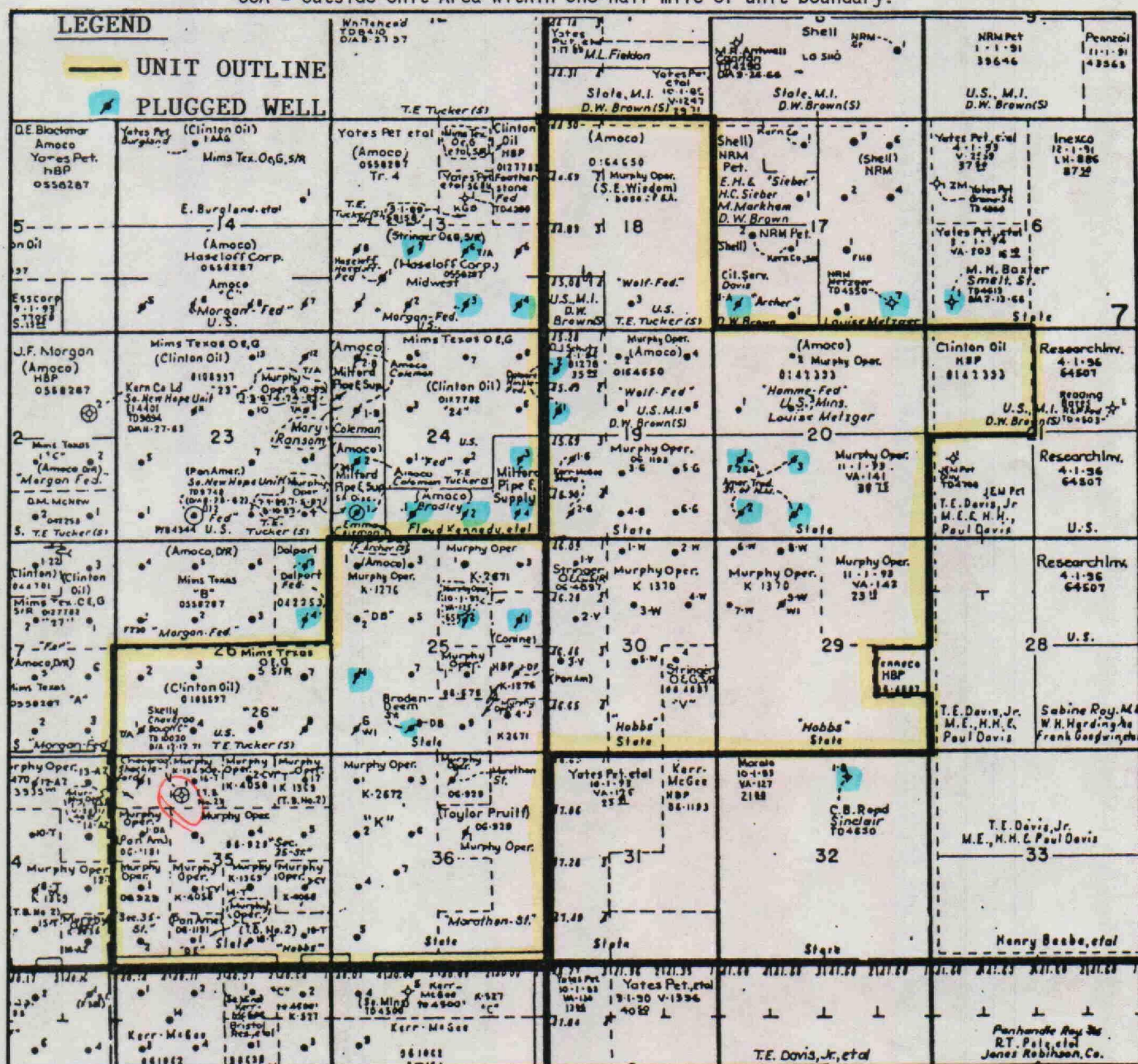
Last Prod. Date 1/86

Last Prod. Date 4/87

EXHIBIT VI.C.
SCHEMATICS OF PLUGGED & ABANDONED WELLS WITHIN ONE-HALF MILE OF UNIT AREA.
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
ROOSEVELT COUNTY, NEW MEXICO

WELL NAME	LOCATION	REMARKS
	T-7-S, R-33-E, N.M.P.M.	
Conine State No. 1	Section 25: SE/4NE/4	IUA JCSAU Well No. 25-08
State J No. 2	Section 25: SW/4NE/4	IUA JCSAU Well No. 25-07
State DB No. 8	Section 25: SE/4SW/4	IUA JCSAU Well No. 25-14
State DB No. 4	Section 25: NW/4SW/4	IUA JCSAU Well No. 25-12
Coleman No. 1	Section 24: SW/4SW/4	OUA
Federal No. 1	Section 13: SW/4NE/4	OUA
Federal No. 4	Section 26: SE/4NE/4	OUA
Federal No. 3	Section 26: NE/4NE/4	OUA
Coleman No. 2	Section 24: NW/4SW/4	OUA
Bradley No. 4	Section 24: SE/4SE/4	OUA
Bradley No. 2	Section 24: SW/4SE/4	OUA
Bradley No. 1	Section 24: SE/4SW/4	OUA
Bradley No. 3	Section 24: NE/4SE/4	OUA
Morgan D Fed. No. 6	Section 13: NW/4SE/4	OUA
Morgan D Fed. No. 3	Section 13: SW/4SE/4	OUA
Morgan D Fed. No. 4	Section 13: SE/4SE/4	OUA
	T-7-S, R-34-E, N.M.P.M.	
Metzger No. 7	Section 17: SE/4SE/4	OUA
Smelting State No. 1	Section 16: SW/4SW/4	OUA
Federal 19 No. 2	Section 19: NE/4NW/4	IUA JCSAU Well No. 19-03
Federal 19 No. 1	Section 19: SE/4NW/4	IUA JCSAU Well No. 19-06
State "20" No. 4	Section 20: SE/4SW/4	IUA JCSAU Well No. 20-14
State "20" No. 3	Section 20: NE/4SW/4	IUA JCSAU Well No. 20-11
State "20" No. 2	Section 20: SW/4SW/4	IUA JCSAU Well No. 20-13
State "20" No. 1	Section 20: NW/4SW/4	IUA JCSAU Well No. 20-12
Sinclair "B" No. 1	Section 32: NW/4NE/4	OUA
Davis A No. 1	Section 17: SW/4SW/4	OUA

LEGEND: IUA = Inside Unit Area.
OUA = Outside Unit Area within one-half mile of unit boundary.



PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Olen F. Featherstone II Trust

Lease Name: Federal 13

Well No.: 1

Location: 1980' FN & FE Lines, Section 13, T7S, R33E

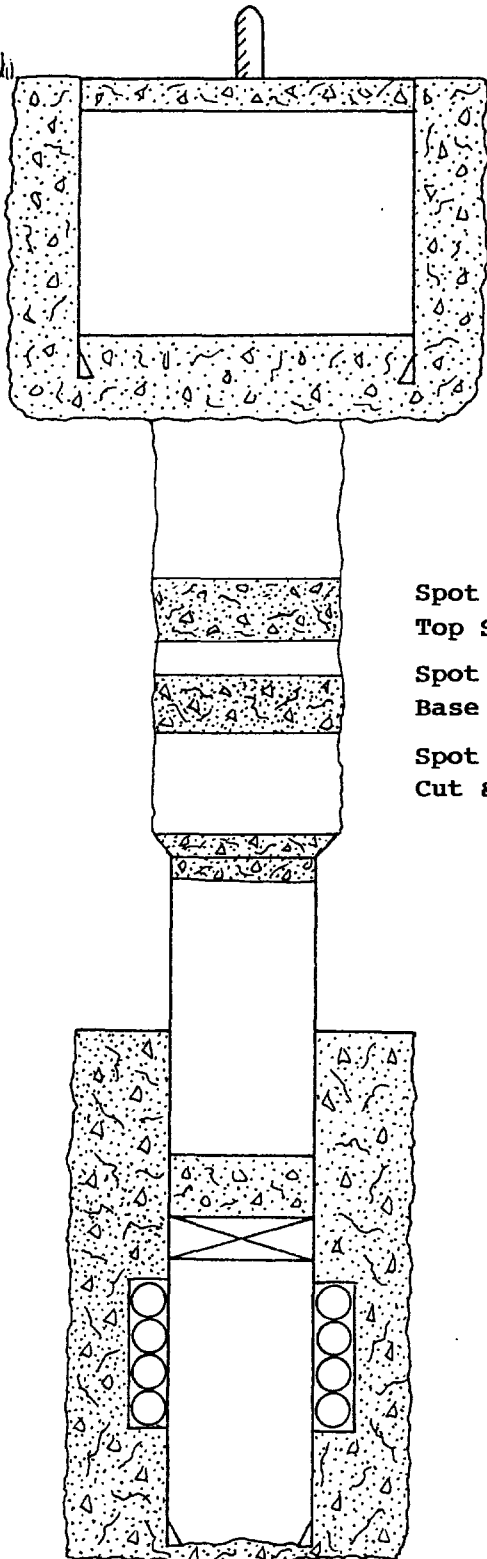
Drilling and Completion Data

360' 8-5/8", cmt w/ 300 sx.
Circulate to Surface.

4280' 5½", cmt. w/150 sx.

Perforations 4133'- 4150'
4205'- 4229'

4276' P.B.T.D.
4280' T.D.



Plugging and Abandonment Data

Surface: 7 sx. cmt. plug.

Spot 33 sx. cmt. 300' - 400'
TOC 360'

Spot 33 sx. cmt. plug 1840' - 1940'
Top Salt 1910'

Spot 33 sx. cmt. plug 2050' - 2150'
Base Salt 2085'

Spot 20 sx. cmt. plug 3140' - 3220'
Cut & Pull csg. at 3190'

20 sx. cmt. plug 4080' - 4230'

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions
reverse side)

Form approved.
Budget Bureau No. 42-R1424.
5. LEASE DESIGNATION AND SERIAL NO.

NM 050477

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

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

Section 13

T. 7S, R. 33E

12. COUNTY OR PARISH

Roosevelt

13. STATE

New Mex

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR
Olen F. Featherstone II Trust

3. ADDRESS OF OPERATOR
236 Petroleum Bldg., Roswell, New Mexico 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

1980' FN & FE lines, Section 13, T. 7S, R. 33E, NMPM

14. PERMIT NO.

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

4327' GR

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZING

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETION

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. 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.)*

10-12-66 Spudded 10-28-66 Completed Sept. 1967 Recovered load oil
9-22-67 Moved on location - Pulled rods, tubing and pump - Shot casing a
3190'

Pulled 3190' 5 1/2" casing. Cement plugs as follows:

160' cement plug - 4230' to 4080' - 20 sacks

72' cement plug - 3220' to 3140' - 20 sacks

100' cement plug - 2150' to 2050' - 33 sacks Base salt 2085'

100' cement plug - 1940' to 1840' - 33 sacks Top salt 1910'

100' cement plug - 400' to 300' - 33 sacks Bottom 8-5/8" 3

20' cement plug - 20' to 0' - 7 sacks Set regulation 4

marker pipe 4' above surface.

Dec. 1967 Removed surface equipment. Cut pit.

Jan. 1968 Cleaned location. Ready for inspection.

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

SIGNED Charles M. Lister

TITLE Co-trustee

DATE 2-2-68

(This space for Federal or State office use)

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

TITLE

APPROVED

DATE

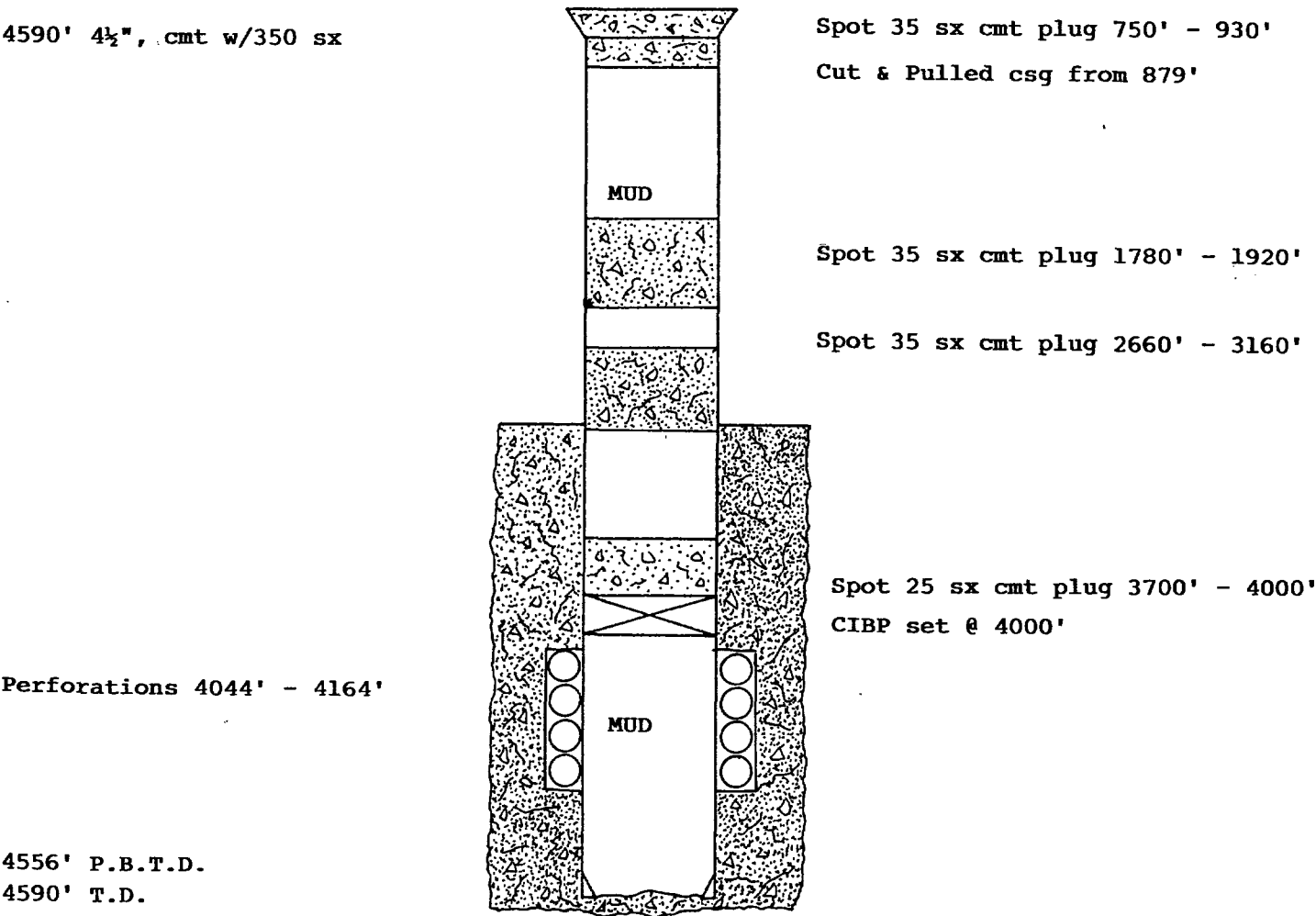
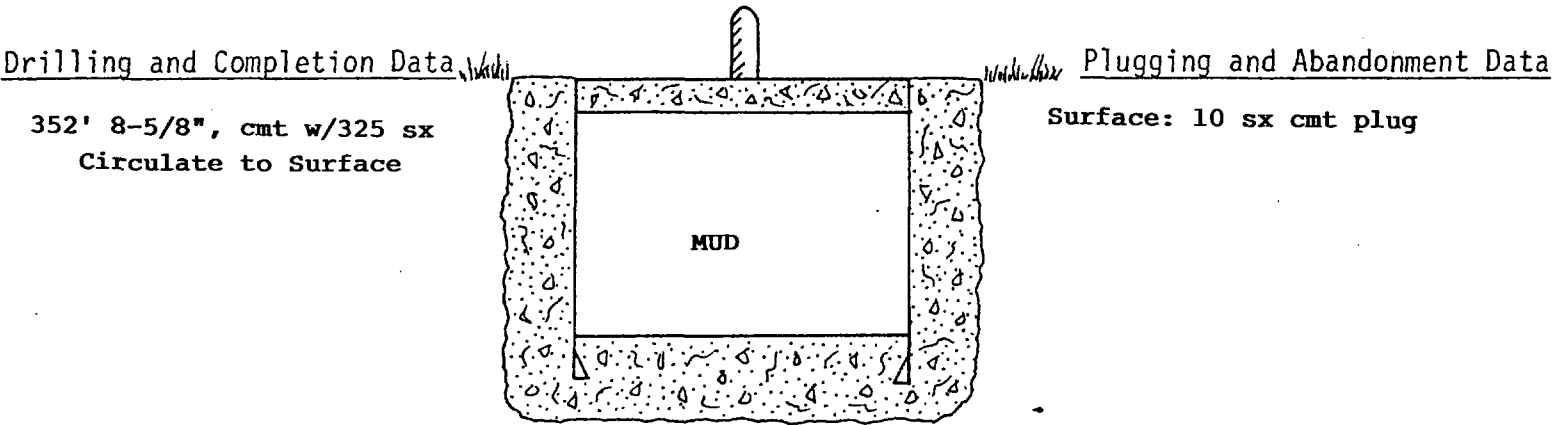
MAR

J L GORDON
ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

PLUGGING DIAGRAM
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: AMOCO Production Company
Lease Name: Morgan D Federal
Well No.: 6
Location: 1980' FSL & 1980' FEL, Section 13, T7S, R33E



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

6. LEASE DESIGNATION AND SERIAL NO.

NM-0558287

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR
AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR
BOX 367, ANDREWS, TEXAS 79714

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface

1980 FSLx 1980 FEL Sec. 13 (Unit J, NW 1/4 SE 1/4)

14. PERMIT NO.

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

4327' GL

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

MORGAN D Federal

9. WELL NO.

6

10. FIELD AND POOL, OR WILDCAT

CHAUEROO-SAN ANDRES

11. SEC., T., R., M., OR D.K. AND SURVEY OR AREA

13-7-33 NMPM

12. COUNTY OR PARISH

ROOSEVELT

13. STATE

NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. 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.)

Will P&A 3-16-76.

Set CIBP @ 4000' & Capped w/ 25Sx Cement 4000-3700';

35Sx 3160-2660'; 35Sx 1920-1780'; Cut & pull 4 1/2"

Casing from 879'; Spot 35 S4 in + out of stub from 930-750';

10 S4 @ surface and erect P&A marker.

All intervals filled w/ mud.

Final cleanup to be made in accordance w/

New Mexico Dept of Game and Fish's requirements

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

SIGNED *[Signature]*

TITLE ADMINISTRATIVE ASSISTANT

DATE 3-18-76

(This space for Federal or State office use)

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED

JAN 25 1977

ARTHUR R. BROWN
DISTRICT ENGINEER

*See Instructions on Reverse Side

044- USGS-H
1- DIR
1- SUSP
1- REY

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: AMOCO Production Company

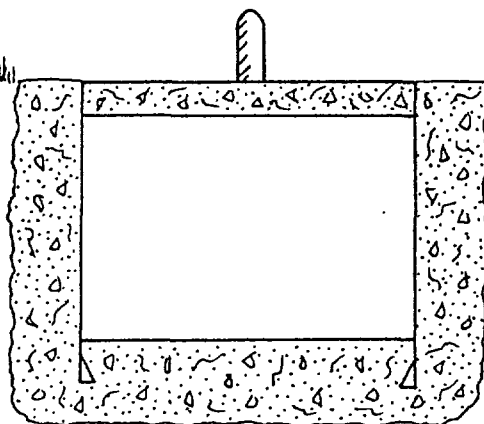
Lease Name: Morgan D Federal

Well No.: 3

Location: 660' FSL & 1980' FEL, Section 13, T7S, R33E

Drilling and Completion Data

352' 8-5/8", cmt w/325 sx
Circulate to Surface



Plugging and Abandonment Data

Surface: 10 sx cmt plug

Spot 35 sx cmt plug 300' - 435'

4360' 4 1/2", cmt w/260 sx

Spot 35 sx cmt plug 840' - 1200'
Cut & Pulled csg @ 1050'

Spot 35 sx cmt plug 1470' - 1970'

Spot 35 sx cmt plug 2905' - 3035'

Spot 35 sx cmt plug 3448' - 3954'
CIBP set @ 3954'

Perforations 4025' - 4275'

4343' P.B.T.D.
4360' T.D.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

NM-0558287

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR
AMOCO PRODUCTION COMPANY.

3. ADDRESS OF OPERATOR
BOX 367, ANDREWS, TEXAS 79714

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
See also space 17 below.
At surface

660' FSL - 1980' FEL Sec. 13 (Unit 0, SW 1/4 SE 1/4)

14. PERMIT NO.

15. ELEVATIONS (Show whether OF, RT, CR, etc.)

4325.5 G.L.

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

MORGAN D FEDERAL

9. WELL NO.

3

10. FIELD AND POOL, OR WILDCAT

CHAUERDO-SAN AND

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

13-7-33 NMPM

12. COUNTY OR PARISH

13. STATE

ROOSEVELT

N.M.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐
☐
☐
☐

PULL OR ALTER CASING

☐
☐
☐
☐

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐
☐
☐
☐

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

☐
☐
☒
☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. 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.)*

Will P+A 3-6-76.

Ran Cust Iron BP & Set @ 3954' Capped w/ 355x. 3954-3448'.

Spot 35 Sx element 3035-2905'; Cut 4 1/2" @ 1050 & pulled.

Spot 35 Sx 1970-1470'; 35 Sx in & out 4 1/2" Stub from 1200-840'

Spot 35 Sx 435-300'; 10 Sx @ surface w/ P+A markers.

Heavy mud between all plugs.

Final cleanup shall be made in accordance w/ New Mexico Dept of Game & Fish's requirements.

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

SIGNED *Art R. Brown*

TITLE ADMINISTRATIVE ASSISTANT

DATE 3-12-76

(This space for Federal or State office use)

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

TITLE

044-USGS-H
H-DIV
1-SURP
1-IRY

APPROVED

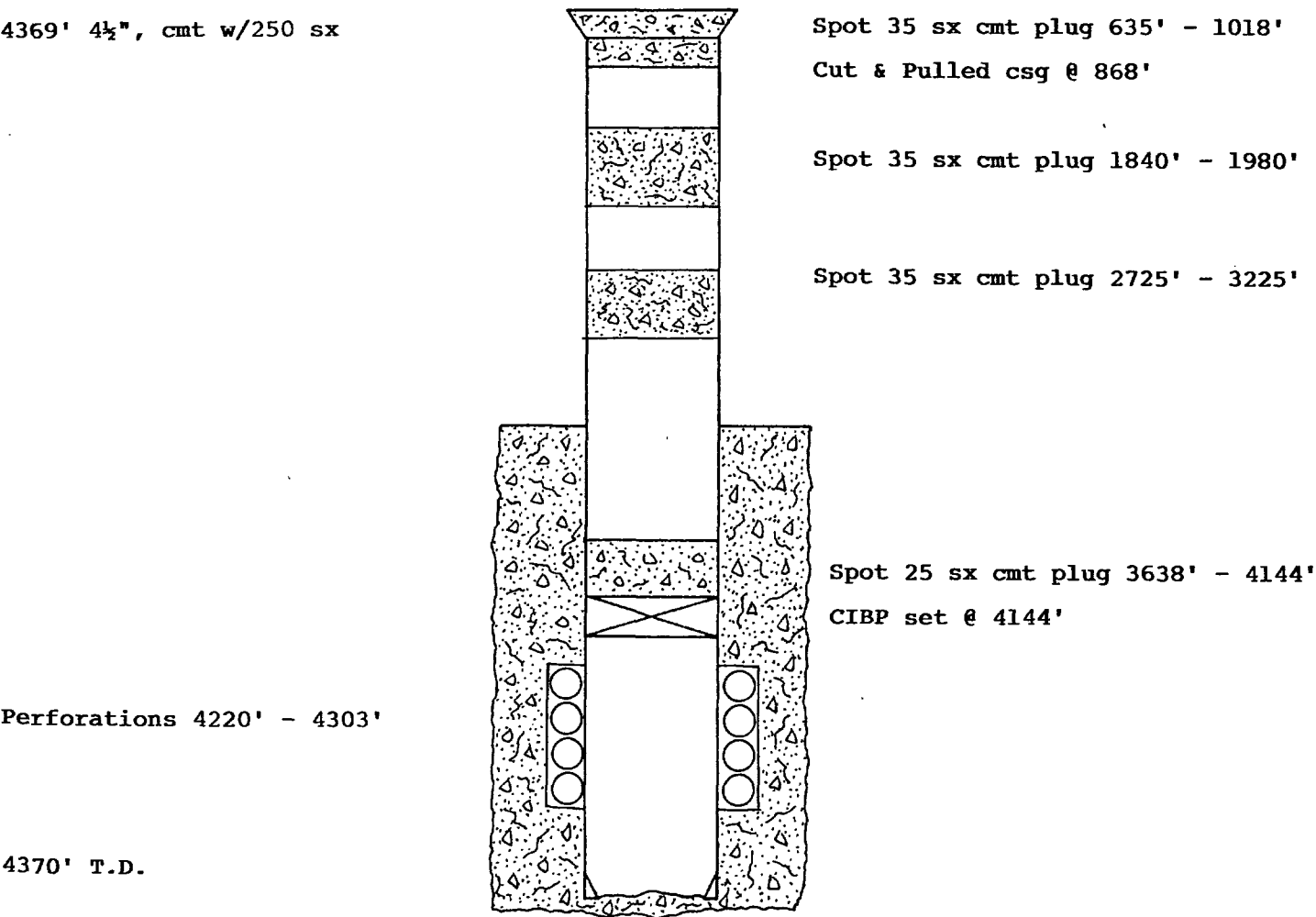
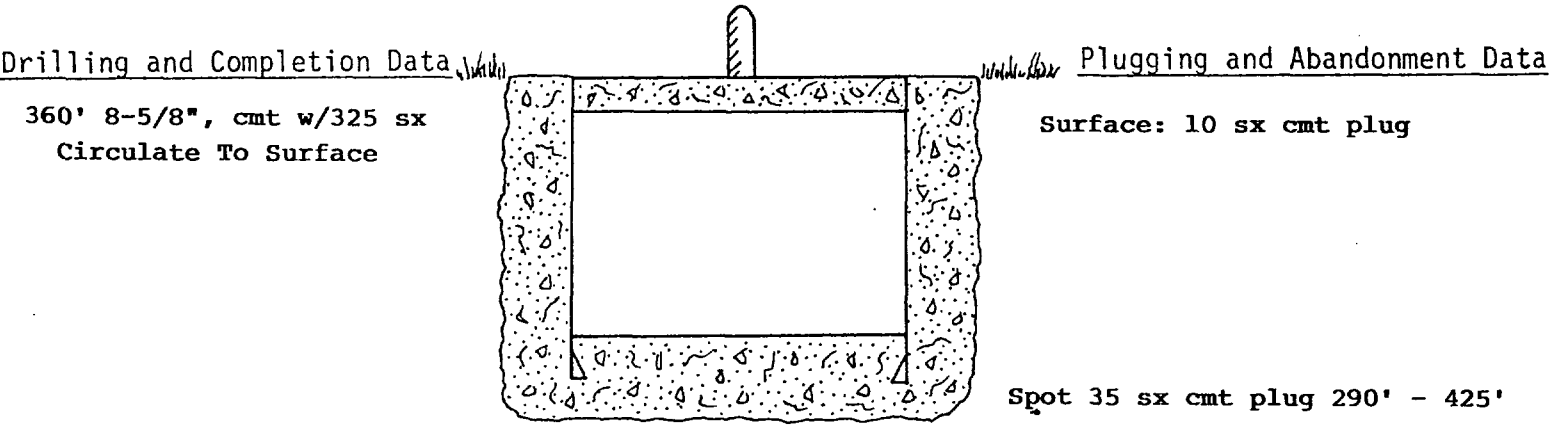
JAN 25 1977

ARTHUR R. BROWN
DISTRICT ENGINEER

*See Instructions on Reverse Side

PLUGGING DIAGRAM
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: AMOCO Production Company
Lease Name: Morgan D Federal
Well No.: 4
Location: 660' FSL & 660' FEL, Section 13, T7S, R33E



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE
(Other instructions on reverse side)Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

NM-0558287

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

MORGAN D Federal

9. WELL NO.

4

10. FIELD AND POOL, OR WILDCAT

CHAUEROO-SAN ANDRES

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

13-7-33 NMPM

12. COUNTY OR PARISH 13. STATE

ROOSEVELT NM

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)1. OIL WELL ☐ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR

BOX 367, ANDREWS, TEXAS 79714

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface

660' FSL * 660' FEL Sec. 13 (Unit P. SE 1/4 SE 1/4)

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, CR, etc.)

4322' GL

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. 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.)

Well P & A 3-9-76.

Set CIBP @ 4144' & Capped w/ 25 Sx Cmt. 4144-3638'

Spot 35 Sx Cmt. 3225-2725'. 35 Sx. 1980-1840'.

Cut & pulled 4 1/2" from 868'. Spot 35 Sx 1018-635'.

35 Sx 425-290'; 10 Sx @ surface w/ P & A marker.

Heavy mud between all plugs.

Final cleanup to be made in accordance w/ NM Dept of Game & Fish's requirements.

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

SIGNED *Arthur R. Brown*

TITLE ADMINISTRATIVE ASSISTANT

DATE

3-12-76

(This space for Federal or State office use)

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

TITLE

APPROVED

JAN 25 1977

ARTHUR R. BROWN
DISTRICT ENGINEER

*See Instructions on Reverse Side

044- USGS-H
1-DIV
1-SUS P
1-1224

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Gene Milford dba Milford Pipe & Supply Co.

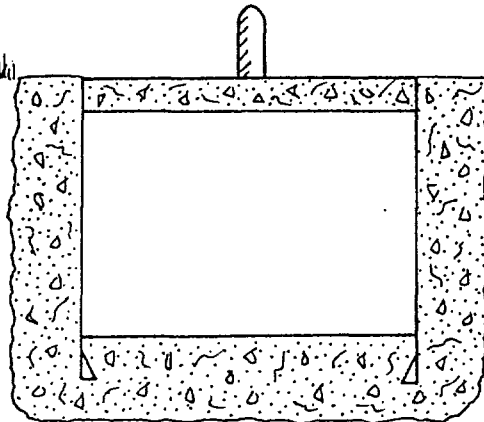
Lease Name: Bradley

Well No.: 3

Location: 1980' FSL & 660' FEL, Section 24, T7S, R33E

Drilling and Completion Data

450' 8-5/8", cmt w/250 sx
Circulate to Surface

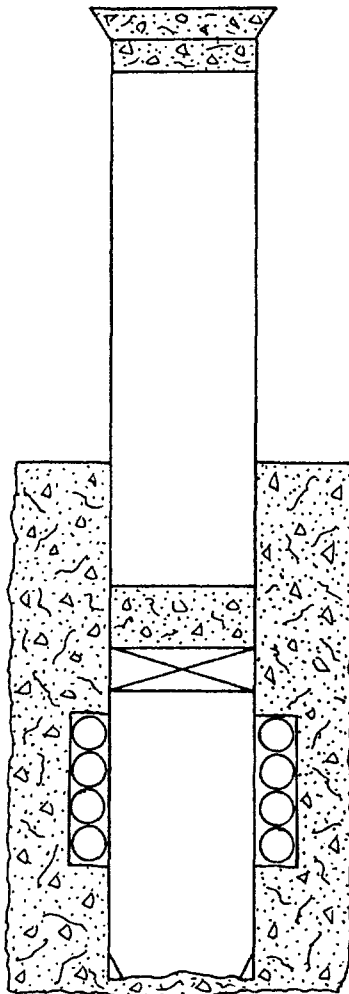


Plugging and Abandonment Data

Surface: 10 sx cmt plug

Spot 50 sx cmt plug 380' - 500'

4360' 4 1/2", cmt w/800 sx



Spot 40 sx cmt plug 1485' - 1625'

Shot & Recovered csg @ 1625'

Spot 35' cmt plug 3955' - 3990'

CIBP set @ 3990'

Perforations 4119' - 4309'

4319' P.B.T.D.

4360' T.D.

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LAND OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease	
State ☐	Fee ☒
5. State Oil & Gas Lease No.	

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☒ GAS WELL ☐ OTHER- ☐	7. Unit Agreement Name
2. Name of Operator Gene Milford dba Milford Pipe & Supply	8. Farm or Lease Name Bradley
3. Address of Operator Box 427 Tatum, NM 88267	9. Well No. 3
4. Location of Well UNIT LETTER T, 1980 FEET FROM THE South LINE AND 660 FEET FROM THE East LINE, SECTION 24 TOWNSHIP 7-S RANGE 33-E NMPM.	10. Field and Pool, or Wildcat Chaveroo San Andres
15. Elevation (Show whether DF, RT, GR, etc.)	12. County Roosevelt

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
-------------------------	-----------------------

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOB ☐	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Well Plugged & abandoned as follows:

3-14-74

Set CIBP @ 3990'
Dumped 35' cement from 3990' to 3955'
Shot 4 1/2" Csg. @ 1625' and recovered
Spotted 40 sk cmt plug from 1625' to 1435'
Spotted 50 sk cmt plug from 500' to 380'
Spotted 10'sk cmt plug from 10' to surface

Installed dry hole marker

Note: All plugs set with, and hole circulated w/ brine salt gelled mud.

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

SIGNED <u>Gene Milford</u>	TITLE <u>owner</u>	DATE <u>4-17-74</u>
APPROVED BY <u>John W. Runyan</u>	TITLE <u></u>	DATE <u>100 0 1974</u>
CONDITIONS OF APPROVAL, IF ANY:		

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Gene Milford dba Milford Pipe & Supply

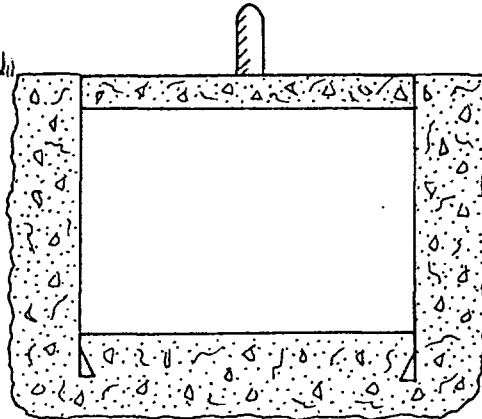
Lease Name: Coleman Federal

Well No.: 2

Location: 1980' FSL & 660' FWL, Section 24, T7S, R33E

Drilling and Completion Data

450' 8-5/8", cmt w/250 sx
Circulate to Surface

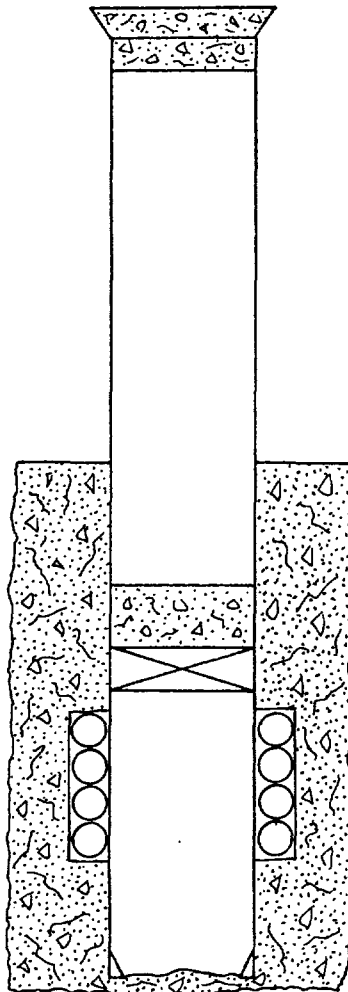


Plugging and Abandonment Data

Surface: 50 sx cmt plug.

• Spot 40 sx cmt plug 380'-500'

4362' 4 1/2", cmt w/800 sx



Spot 40 sx cmt plug 1017' - 1202'

Shot csg @ 1402', 1301', & 1202'
Recovered csg from 1202'

Spot 35' cmt plug TOC 3963'

CIBP @ 3998'

Perforations 4141' - 4276'

4318' P.B.T.D.

4362' T.D.

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OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease
State ☐ Fee ☒
5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)	
1. OIL WELL ☐ GAS WELL ☐ OTHER- ☐	7. Unit Agreement Name
2. Name of Operator Gene Milford dba Milford Pipe & Supply	8. Farm or Lease Name Coleman
3. Address of Operator Box 427 Tatum, NM 88267	9. Well No. 2
4. Location of Well UNIT LETTER <u>1</u> <u>1980</u> FEET FROM THE <u>South</u> LINE AND <u>600</u> FEET FROM THE <u>West</u> LINE, SECTION <u>24</u> TOWNSHIP <u>7-S</u> RANGE <u>33-E</u> NMPM.	10. Field and Pool, or Wildcat Chaveroo San Andres
15. Elevation (Show whether DF, RT, GR, etc.)	12. County Roosevelt

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☒
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOB ☐	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Well Plugged & Abandoned as follows:

3-16-74

Set CIBP @ 3998'
Dumped 35' Cement from 3998' to 3963'
Shot 4 1/2" Csg. @ 1402', 1301' and 1202'
Recovered Csg. from 1202'
Spotted 40 sks. cement plug @ 1202' to 1017'
Spotted 40 sk. cement plug @ 5' to 380'
Spotted 50 sd cement plug @ 10' to surface
Installed dry hole marker

Note; All plugs set with, and hole circulated w/ brine salt gelled mud

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

SIGNED <u>Gene Milford</u>	TITLE <u>owner</u>	DATE <u>4-17-74</u>
APPROVED BY <u>John W. Runyan</u>	TITLE <u></u>	DATE <u>JUL</u>
CONDITIONS OF APPROVAL, IF ANY:		

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Gene Milford dba Milford Pipe & Supply

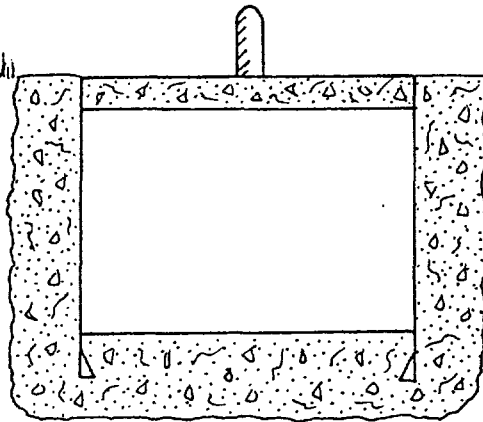
Lease Name: Coleman Federal

Well No.: 1

Location: 660' FSL & 660' FWL, Section 24, T7S, R33E

Drilling and Completion Data

468' 8-5/8", cmt w/250 sx
Circulate to Surface

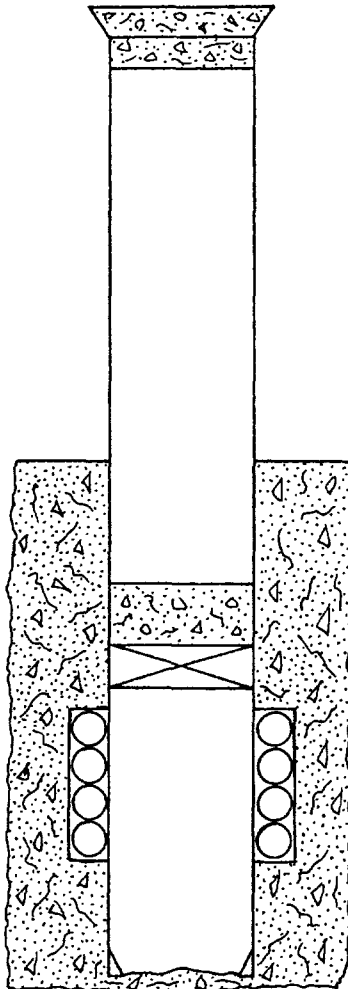


Plugging and Abandonment Data

Surface: 10 sx cmt plug.

Spot 50 sx cmt plug
390' - 500

4356' 4 1/2", cmt w/800 sx



Spot 40 sx cmt plug 1253' - 1393'

Shot csg @ 1503' & 1393'
Recovered csg 1393'

Spot 35' cmt plug TOC 3955'
CIBP set @ 3990'

Perforations 4187' - 4312'

4323' P.B.T.D.
4356' T.D.

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OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease
State ☐ Fee ☒
5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT - 1" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☐ GAS WELL ☐ OTHER- ☐	7. Unit Agreement Name
2. Name of Operator	8. Farm or Lease Name
3. Address of Operator Gene Wilford dba Wilford Pipe & Supply	9. Well No. 1
4. Location of Well Box 427 Tatum, NM 88267 UNIT LETTER N 660 FEET FROM THE South LINE AND 660 FEET FROM THE West LINE, SECTION 24 TOWNSHIP 7-S RANGE 33-10 NMPM.	10. Field and Pool, or Wildcat Chaveroo San Andres
15. Elevation (Show whether DF, RT, GR, etc.)	12. County Roosevelt

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐
PULL OR ALTER CASING ☐	OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐	ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOBS ☐	
OTHER ☐	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Well was plugged & abandoned as follows:

3-18-74

Set CIBP @ 3990

Dumped 35' cement plug from 3990' to 3955'

Shot 4 1/2" Csg @ 1503' & 1393'

Recovered csg. 1393'

Spotted 40 sk cmt plug from 1393 to 1253'

Spotted 50 sk cmt plug from 500' to 380'

Spotted 10 sk cmt plug from 10' to surface

Installed dry hole marker

Note: All plugs set witha and hole circulated w/ brine salt gelled mud.

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

SIGNED <u>Gene Wilford</u>	TITLE <u>owner</u>	DATE <u>4-17-74</u>
APPROVED BY <u>John W. Runyan</u>	TITLE <u>Geologist</u>	DATE <u>FEB 22 1974</u>
CONDITIONS OF APPROVAL, IF ANY:		

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Gene Milford dba Milford Pipe & Supply Co.

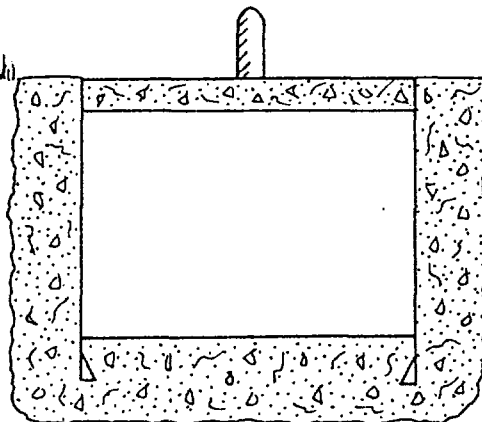
Lease Name: Bradley Federal

Well No.: 1

Location: 660' FSL & 1980' FWL, Section 24, T7S, R33E

Drilling and Completion Data

450' 8-5/8", cmt w/250 sx
Circulate to Surface

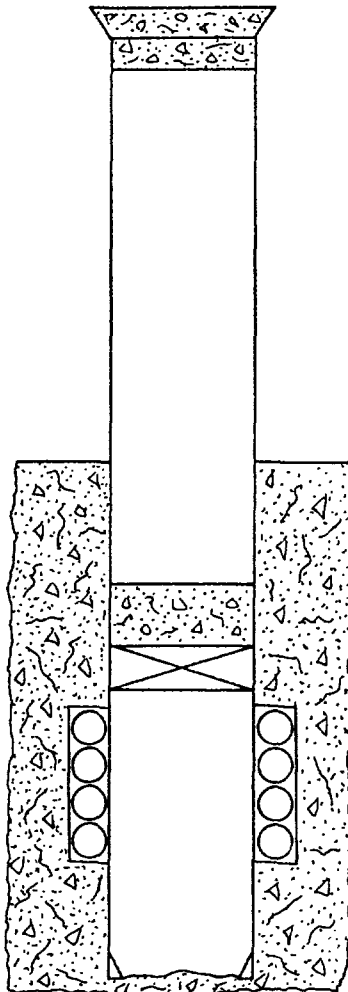


Plugging and Abandonment Data

Surface: 10 sx cmt plug

Spot 50 sx cmt plug 380' - 500'

4372' 4 1/2", cmt w/800 sx.



Spot 40 sx cmt plug 948' - 1068'

Shot csg @ 1275', 1179', & 1068'
Recovered csg from 1068'

Spot 35' cmt plug 3963' - 3998'

CIBP set @ 3998'

Perforations 4165' - 4308'

4338' P.B.T.D.

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C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease
State ☐ Fee ☒
5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐	7. Unit Agreement Name
2. Name of Operator ✓ Gene Milford dba Milford Pipe & Supply Co.	8. Farm or Lease Name Bradley
3. Address of Operator Box 427 Tatum, NM 86207	9. Well No. 1
4. Location of Well UNIT LETTER N, 660 FEET FROM THE South LINE AND 1980 FEET FROM THE West LINE, SECTION 24 TOWNSHIP 7-S RANGE 33-E NMPM.	10. Field and Pool, or Wildcat Chaveroo San Andres
15. Elevation (Show whether DF, RT, GR, etc.)	12. County Roosevelt

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐
OTHER ☐

PLUG AND ABANDON ☐
CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐
COMMENCE DRILLING OPS. ☐
CASING TEST AND CEMENT JOB ☐
OTHER ☐
ALTERING CASING ☐
PLUG AND ABANDONMENT ☒

16. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Well plugged & abandoned as follows:

3-13-74

Set CIRP @ 3998'
Dumped 35' cement from 3998' to 3963'
Shot 4½" Csg @ 1275', 1179' & 1068'
Recovered csg from 1068'
Spotted 40 sk cnt plug from 1068' to 948'
Spotted 50 sk cnt plug from 500' to 380'
Spotted 10 sk cnt plug from 10' to surface

Installed dry hole marker

Note: All plugs set with, and hole circulated w/ brine salt gelled mud.

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

SIGNED <u>Gene Milford</u>	TITLE <u>owner</u>	DATE <u>4-17-74</u>
APPROVED BY <u>John W. Runyan</u>	TITLE <u>Commissioner</u>	DATE <u>10/1/74</u>
CONDITIONS OF APPROVAL, IF ANY:		

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Gene Milford dba Milford Pipe & Supply

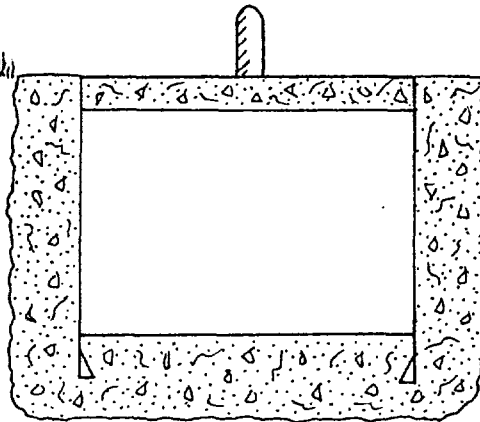
Lease Name: Bradley Federal

Well No.: 2

Location: 660' FSL & 1980' FEL, Section 24, T7S, R33E

Drilling and Completion Data

445' 8-5/8", cmt w/250 sx
Circulate to Surface

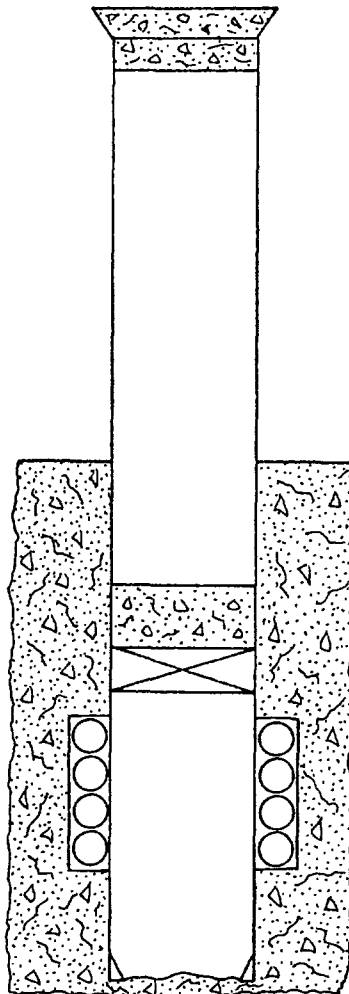


Plugging and Abandonment Data

Surface: 10 sx cmt plug

Spot 50 sx cmt plug 375' - 495'

4378' 4 1/2", cmt w/800 sx



Spot 40 sx cmt plug 861' - 981'

Shot 4 1/2" csg @ 1091' & 981'

Recovered csg from 981'

Spot 35' cmt TOC 3955'
CIBP set @ 3990'

Perforations 4141' - 4260'

4340' P.B.T.D.

4378' T.D.

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OPERATOR	

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C-102 and C-103
Effective 1-1-65

X

5a. Indicate Type of Lease	
State ☐	Fee ☐
5. State Oil & Gas Lease No.	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. ☒ OIL WELL ☐ GAS WELL Gene Wilford dba Wilford Pipe & Supply Co.	7. Unit Agreement Name Bradley
2. Name of Operator Box 427 Tatum, NM 88267	8. Farm or Lease Name 2
3. Address of Operator 0 660 South 1980	9. Well No. Chaveroo San Andres
4. Location of Well UNIT East 24 FEET FROM THE 2-3 LINE AND 33-1/2 FEET FROM THE LINE, SECTION TOWNSHIP RANGE NMPM.	10. Field and Pool, or Wildcat
15. Elevation (Show whether DF, RT, GR, etc.)	12. County

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK	☐
TEMPORARILY ABANDON	☐
PULL OR ALTER CASING	☐
OTHER	☐

PLUG AND ABANDON	☐
CHANGE PLANS	☐
OTHER	☐

REMEDIAL WORK	☐
COMMENCE DRILLING OPNS.	☐
CASING TEST AND CEMENT JOB	☐
OTHER	☐

ALTERING CASING	☐
PLUG AND ABANDONMENT	☐
OTHER	☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE Well Plugged & Abandoned as follows:
3-13-74

Set CIBP @ 3990'
Dumped 35' Cement from 3990 to 3955'
Shot 4 1/2" Csg. @ 1091 & 981'
Recovered csg. 981'
Spotted 40 sk cmt plug @ 981' to 361'
Spotted 50 sk cmt plug @ 495' to 375'
Spotted 10 sk cmt plug @ 10' to surface

Installed dry hole marker

Note: All plugs set with and hole circulated w/ brine salt gelled mud.

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

OWNER

4-17-74

SIGNED <u>Gene Wilford</u>	TITLE _____	DATE _____
APPROVED BY <u>John W. Runyan</u>	TITLE _____	DATE _____
CONDITIONS OF APPROVAL, IF ANY:		

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Gene Milford dba Milford Pipe & Supply

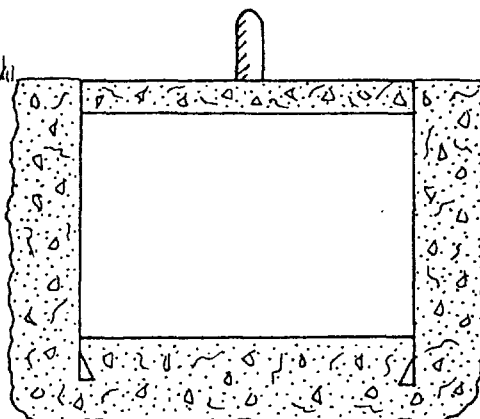
Lease Name: Bradley Federal

Well No.: 4

Location: 660' FSL & 660' FEL, Section 24, T7S, R33E

Drilling and Completion Data

445' 8-5/8", cmt w/250 sx
Circulate to Surface

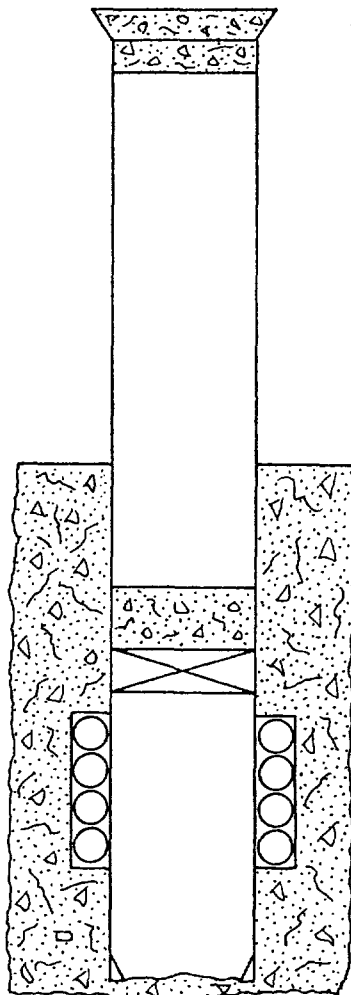


Plugging and Abandonment Data

Surface: 10 sx cmt plug

Spot 50 sx cmt plug 375' - 495'

4384' 4 1/2", cmt w/800 sx



Spot 60 sx cmt plug 1691' - 1900'

Shot & Recovered csg @ 1900'

Spot 35' cmt plug TOC 3960'

CIBP set @ 3995'

Perforations 4144' - 4278'

4343' P.B.T.D.

4384' T.D.

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OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease	
State ☐	Fee ☒
5. State Oil & Gas Lease No.	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. ☒ OIL WELL ☐ GAS WELL ☐ OTHER-	7. Unit Agreement Name
2. Name of Operator Gene Milford dba Milford Pipe & Supply	8. Farm or Lease Name Bradley
3. Address of Operator Box 427 Tatum, NM 88267	9. Well No. 4
4. Location of Well UNIT LETTER <u>P</u> <u>660</u> FEET FROM THE <u>South</u> LINE AND <u>660</u> FEET FROM THE <u>East</u> LINE, SECTION <u>24</u> TOWNSHIP <u>7-3</u> RANGE <u>33-E</u> NMPM.	10. Field and Pool, or Wildcat Chaveroo San Andres
15. Elevation (Show whether DF, RT, CR, etc.)	12. County Roosevelt

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐
PULL OR ALTER CASING ☐	OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐	ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☒
CASING TEST AND CEMENT JOB ☐	
OTHER ☐	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Well was plugged & abandoned as follows:

3-21-74
Set Cast Iron Bridge @ 3995'
Dumped 35' cement plug from 3995' to 3960'
Shot and recovered 4 1/2" Csg. from 1900'
Set 60 sk cement plug from 1900' to 1691'
Set 50 sk cement plug from 495' to 375'
Set 10 sk cement plug from 10' to surface
installed dry hole marker
Note: All plugs set with gelled brine

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

SIGNED <u>Gene Milford</u>	TITLE <u>OWNER</u>	DATE <u>4-16-74</u>
APPROVED BY <u>John W. Ramsey</u>	TITLE <u>Commissioner</u>	DATE <u>4-16-74</u>
CONDITIONS OF APPROVAL, IF ANY:		

PLUGGING DIAGRAM
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: The Wiser Oil Company
Lease Name: State J
Well No.: 2
Location: 1980' FNL & 1980' FEL, Section 25, T7S, R33E

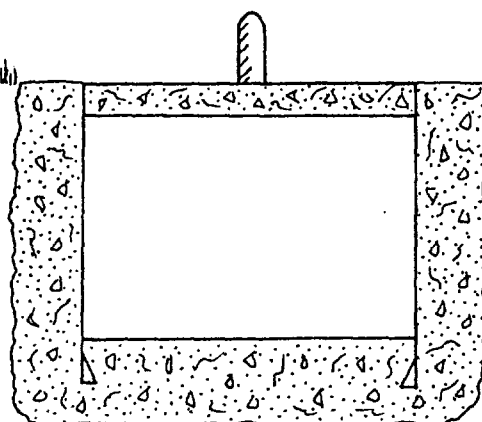
Drilling and Completion Data

366' 8-5/8", cmt w/200 sx
Circulate to Surface

Plugging and Abandonment Data

Surface: 10 sx cmt plug

Spot 55 sx cmt plug 316' - 416'



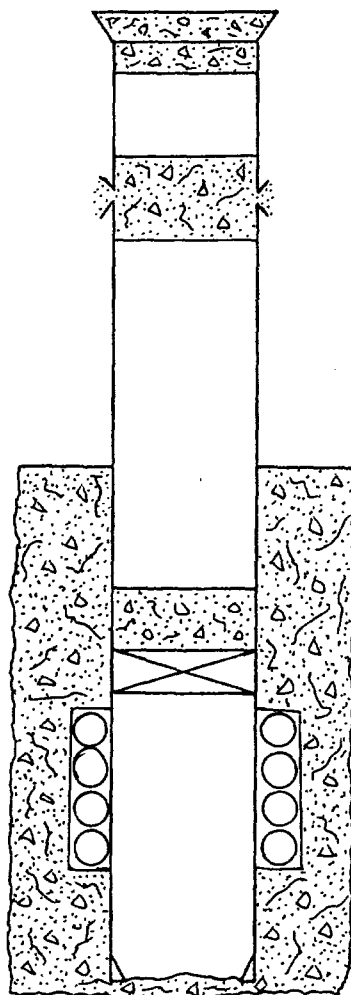
4403' 4½", cmt w/350 sx

Spot 25 sx cmt plug 1188' - 1288'

Shot csg @ 3260' & 1238'

Recovered csg from 1238'

Spot 12 sx cmt plug 3210' - 3310'



Spot 3 sx cmt plug on CIBP

CIBP set @ 4131'

Perforations 4234' - 4317'

4370' P.B.T.D.

4412' T.D.

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LAND OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease	State ☒ Fee ☐
5. State Oil & Gas Lease No.	K-2671

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)	
1. OIL WELL ☒ GAS WELL ☐ OTHER ☐	7. Unit Agreement Name
2. Name of Operator ✓ The Wiser Oil Company	8. Farm or Lease Name State J
3. Address of Operator P.O. Box 2467 Hobbs, New Mexico 88240	9. Well No. 2
4. Location of Well UNIT LETTER G 1980 FEET FROM THE North LINE AND 1980 FEET FROM THE East LINE, SECTION 25 TOWNSHIP 7S RANGE 33E NMPM.	10. Field and Pool, or Wildcat Chaveroo SA
15. Elevation (Show whether DF, RT, GR, etc.) 4320 GR	12. County Roosevelt

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	COMMENCE DRILLING OPNS. ☐
PULL OR ALTER CASING ☐	CASING TEST AND CEMENT JOBS ☐
OTHER ☐	OTHER ☐
PLUG AND ABANDON ☐	ALTERING CASING ☐
CHANGE PLANS ☐	PLUG AND ABANDONMENT ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

On April 4, 1977 went in 4½" casing with dump bailer and set 3 sx cement plug on top of CI bridge plug at 4131'. Went in with jet cutter and severed casing at 3260'. Worked casing with hydraulic jacks but couldn't pull it. Circulated 140 bbls of fresh water around casing but it still wouldn't come loose. Run a freepoint and found casing completely stuck at 1204'. Went in with jet cutter and severed casing at 1238'. Pulled 1238' of 4½" casing. Went back in with tubing string to TD of 3310'. Circulated hole with 25 sx mud per 100 bbl of fluid. Spotted 100' cement plug across severed 4½" casing at 3260' using 12 sx cement. Pulled up to 1288' and spotted 100' cement plug in and out of 4½" casing stub using 25 sx cement. Pulled up to 416' and spotted 100' cement plug in and out of 8-5/8" casing shoe using 55 sx cement. Set 10 sx cement plug in top of 8-5/8" casing and installed dry hole marker in accordance with New Mexico Oil Comm. rules.

On May 5, 1977 location was leveled and all material removed from location. Plugging is complete and location ready for final inspection.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.		
SIGNED <u>B. H. Langley</u>	TITLE <u>District Supt.</u>	DATE <u>6-10-77</u>
APPROVED BY <u>A. J. Palmer</u>	TITLE <u>1043</u>	DATE <u>10.10.77</u>
CONDITIONS OF APPROVAL, IF ANY:		

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Jim Conine, Inc.

Lease Name: State

Well No.: 1

Location: 1980' FNL & 660' FEL, Section 25, T7S, R33E

Drilling and Completion Data

1826' 7", cmt w/350 sx
Circulate to Surface

4417' 4½", cmt w/325 sx

Perforations 4196' - 4308'

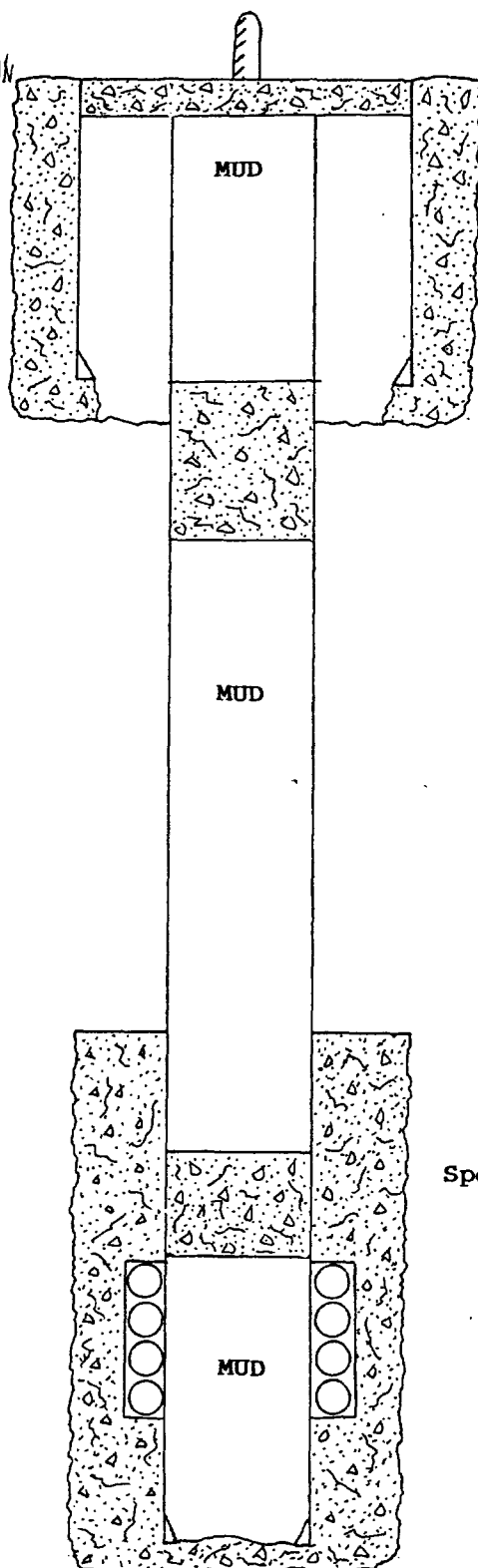
4386' P.B.T.D.
4420' T.D.

Plugging and Abandonment Data

Surface: 10 sx cmt plug

Spot 45 sx cmt plug 1750' - 2000'

Spot 15 sx cmt plug @ 4150'



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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

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5a. Indicate Type of Lease	
State ☒ Fee ☐	
5. State Oil & Gas Lease No.	
	111 25 7 33

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐	7. Unit Agreement Name
2. Name of Operator Jim Conine, Inc.	8. Farm or Lease Name State #1
3. Address of Operator 402 First National Bank Bldg.	9. Well No. State #1
4. Location of Well UNIT LETTER H, 1980 FEET FROM THE North LINE AND 660 FEET FROM THE East LINE, SECTION 25 TOWNSHIP 7S RANGE 33 E NMPM.	10. Field and Pool, or Wildcat Chaveroo
15. Elevation (Show whether DF, RT, GR, etc.)	12. County

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	COMMENCE DRILLING OPNS. ☐
PULL OR ALTER CASING ☐	CASING TEST AND CEMENT JOBS ☐
OTHER ☐	OTHER ☐
PLUG AND ABANDON ☐	ALTERING CASING ☐
CHANGE PLANS ☐	PLUG AND ABANDONMENT ☒

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

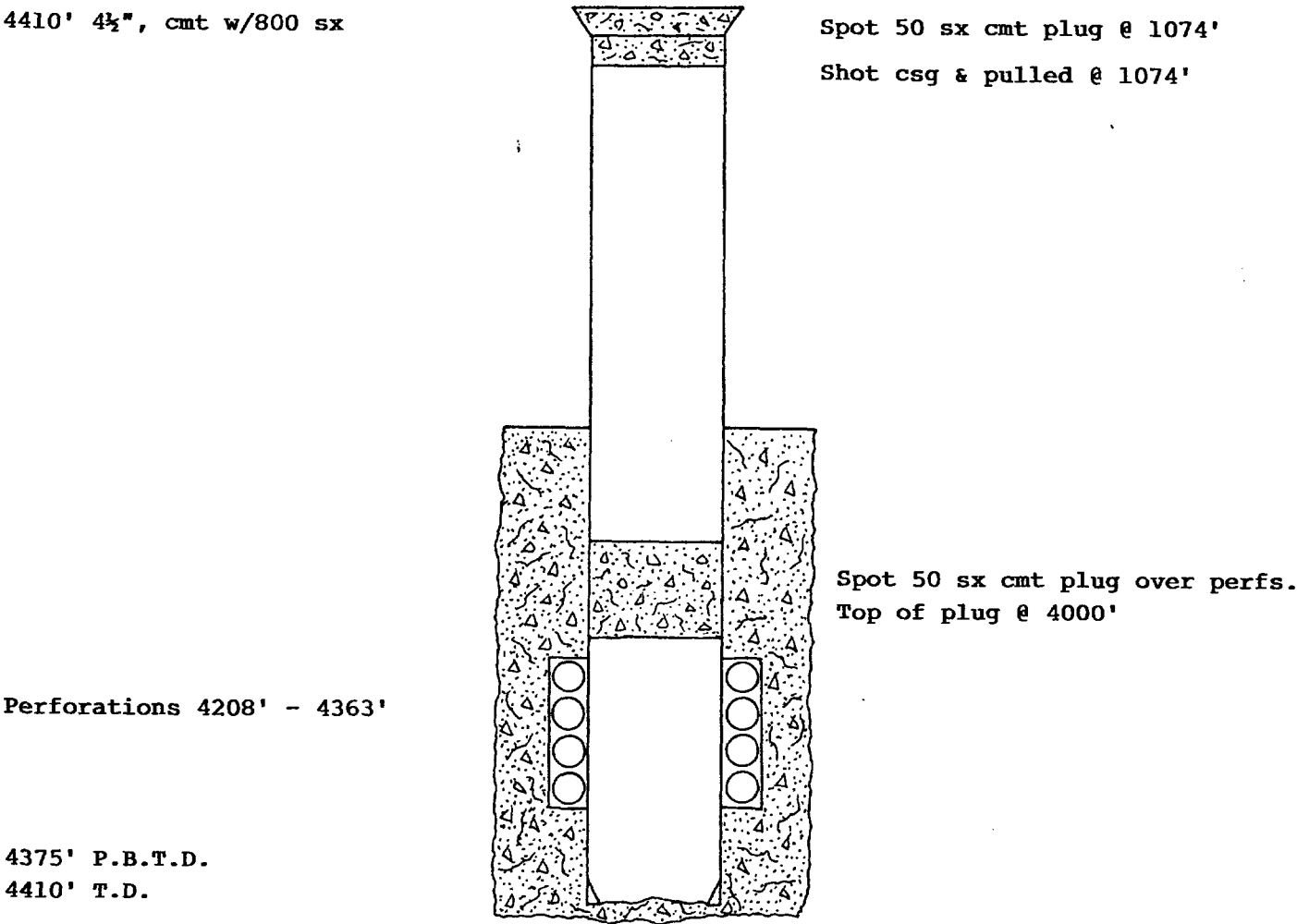
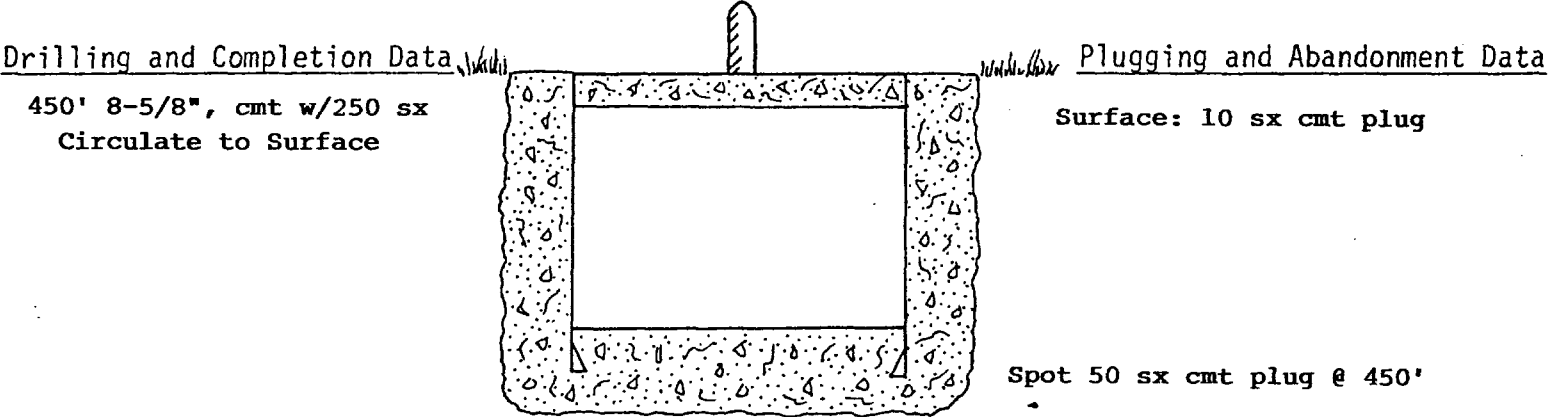
1/23/73 Plugged and Abandoned - Cactus Casing Pulling, Inc.
Plug #1 Set @ 4150' with 15 Sacks
Plug #2 Set @ 2000' to 1750' with 45 sacks
Plug #3 Set @ Top with 10 Sacks
Mud used between plugs and well plugged in accordance with rules set forth by Commission
Location being cleaned - weather has been a factor in the delay of cleaning pits.

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

SIGNED <u>Francis L. Corbett</u>	TITLE <u>Secretary</u>	DATE <u>3/31/73</u>
APPROVED BY <u>John W. Runyan</u>	TITLE <u>Geologist</u>	DATE <u>11</u>
CONDITIONS OF APPROVAL, IF ANY:		

PLUGGING DIAGRAM
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Braden-Deem, Incorporated
Lease Name: State DB
Well No.: 4
Location: 1980' FSL & 660' FWL, Section 25, T7S, R33E



Mac

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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
K-1276

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT --" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☒ GAS WELL ☐ OTHER- ☐	7. Unit Agreement Name
2. Name of Operator Braden-Deem, Inc.	8. Farm or Lease Name State DB
3. Address of Operator 200 E. First, Wichita, Kansas 67202	9. Well No. 4
4. Location of Well UNIT LETTER L, 1980 FEET FROM THE South LINE AND 660 FEET FROM THE West LINE, SECTION 25 TOWNSHIP 7S RANGE 33E NMPM.	10. Field and Pool, or Wildcat Chaveroo (San Andres)
15. Elevation (Show whether DF, RT, GR, etc.) 4338 RDB	12. County

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐
PULL OR ALTER CASING ☐	OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐	ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☒
CASING TEST AND CEMENT JOBS ☐	OTHER ☐

17. Describe ~~XXXXXX~~ or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

1. Spotted 50 sx cement plug over perfs. 4208-4263 11/30/74
Top of plug @ 4000'.
2. Loaded hole with brine water and pressured up on plug @ 4000' - plug OK 12-2-74.
3. Shot off pipe @ 1074' and worked loose. Loaded hole w/ brine water. Spotted 50 sx. cement plug @ 1074'. Pulled casing to 450' and spotted 50 sx cement plug. Finished pulling casing. Filled hole with brine water. Put 10 sx cement plug at surface and Installed dry hole marker. Plugging complete 12-3-74.

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

SIGNED <u>[Signature]</u>	TITLE <u>Vice-President</u>	DATE <u>12/13/74</u>
APPROVED BY <u>[Signature]</u>	TITLE <u>[Signature]</u>	DATE <u>12/13/74</u>
CONDITIONS OF APPROVAL, IF ANY:		

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Braden-Deem, Incorporated

Lease Name: State DB

Well No.: 8

Location: 660' FSL & 1980' FWL, Section 25, T7S, R33E

Drilling and Completion Data

455' 8-5/8", cmt w/250 sx
Circulate to Surface

4465' 4 1/2", cmt w/800 sx

Perforations 4205' - 4341'

4424' P.B.T.D.

4465' T.D.

Plugging and Abandonment Data

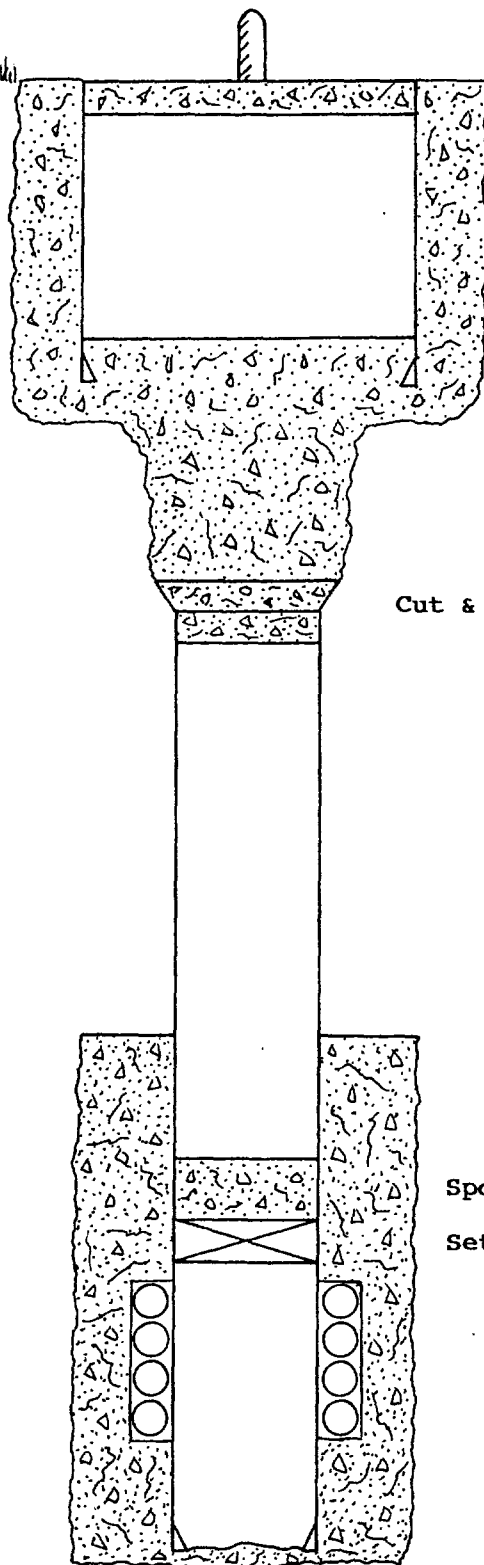
Surface: 10 sx cmt plug

Spot 75 sx cmt plug 290' - 540'

Cut & Recovered csg @ 538'

Spot 200 sx cmt plug 2038' - 3704'

Set SVEZ cement retainer @ 2088'



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LAND OFFICE	
OPERATOR	

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3a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
K-1276

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL ☒ GAS WELL ☐ OTHER ☐

Name of Operator	7. Unit Agreement Name
Braden-Deem, Inc.	8. Farm or Lease Name
Address of Operator	State DB
125 N. Market, Suite 1250, Wichita, Ks 67202	9. Well No.
Location of Well	8
UNIT LETTER N 660 FEET FROM THE South LINE AND 1980 FEET FROM	10. Field and Pool, or Wildcat
THE West LINE, SECTION 25 TOWNSHIP 7S RANGE 33E NMPM.	Chavero
15. Elevation (Show whether DF, RT, GR, etc.)	12. County
4333RDB	Roosevelt

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☒
REPAIR OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	OTHER ☐

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

- 4/11/85 - Set Halliburton SVEZ cement retainer @ 2088 in 4½" casing. Squeeze 200 sks cement thru 2" tubing at 1250 psi. Pull out of cement retainer and leave 50' of cement on top of retainer.
- Lay down 2" tubing.
- Rip 4½" casing collar @ 538'. Spot 75 sks of Class C cement from 540' to 290'. Pull and lay down 16 jts 4½" casing (538').
- 10 sks cement plug in top of 8 5/8" casing. Install dry hole marker and clean up location.

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

Doy C. Deem

SIGNED Doy C. Deem TITLE President DATE 4/22/85

APPROVED BY [Signature] TITLE OIL & GAS INSPECTOR DATE JAN 22 1986

CONDITIONS OF APPROVAL, IF ANY:

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Dalport Oil Corporation

Lease Name: Federal 26

Well No.: 3

Location: 660' FNL & 660' FEL, Section 26, T7S, R33E

Drilling and Completion Data

363' 8-5/8", cmt w/200 sx.
Circulate to Surface

4397' 4 1/2", cmt w/300 sx.

Perforations 4119' - 4259'

4367' P.B.T.D.
4400' T.D.

Plugging and Abandonment Data

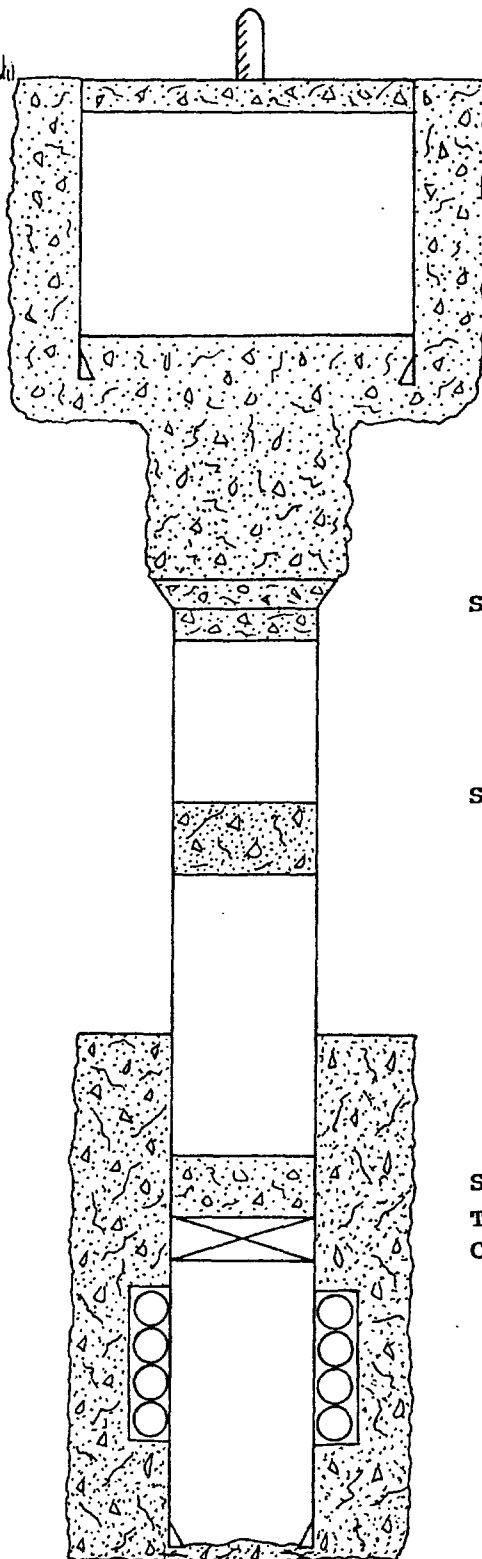
Surface: 10 sx cmt plug.

Spot 45 sx cmt plug 200' - 400
TOC 235'

Shot 4 1/2" csg @ 380'

Spot 15 sx cmt plug 3000' - 3150'

Spot 35' cmt plug
TOC 3957'
CIBP set @ 4000'



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

H. M. OIL CO. COMPANY

P. O. BOX 1070

SUBMIT IN TRIPPLICATE
HOBBS, NEW MEXICO 88240
(Reverse side)Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

NM-042253

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Fed. #

9. WELL NO.

3

10. FIELD AND POOL, OR WILDCAT

Chaveroo - San Andres

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

26-T7S-R33E

12. COUNTY OR PARISH 13. STATE

Roosevelt

NM

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. ☒ OIL WELL ☐ GAS WELL ☐ OTHER	14. PERMIT NO.
2. NAME OF OPERATOR Dalport Oil Corporation	15. ELEVATIONS (Show whether DP, RT, GR, etc.)
3. ADDRESS OF OPERATOR 3471 Inter First One, Dallas, TX 75202	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 660' FNL & 660FEL Letter "A"	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON*

SHOOTING OR ACIDIZING

ABANDONMENT*

REPAIR WELL

CHANGE PLANS

(Other)

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. 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.) *

DATA: T.D. 4400', PBTD 4367', Perfs. 4119' - 4259'

8 5/8" Casing set @ 363 Circulated. 4 1/2" Casing set @ 4397 w/300 SX

PROCEDURE:

12/7/87 Set CIBP @ 4000' w/35' Cement on plug, Ran tubing to 3900'

12/8/87 Circulate 4 1/2" Casing w/ salt gel mud, pulled tubing to 3150' spot
15 SX cement plug 3150' to 3000' in 4 1/2" casing, shot 4 1/2" casing @
380' spot, 45SX cement plug across 8 5/8" shoe & 4 1/2" casing stub,
Tagged cement plug @ 235' spot 10SX cement plug @ surface & install
dry hole marker

NOTE: Will notify USGS when location cleaned and ready for final inspection.

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

SIGNED

Gene McLeod

TITLE Agent

DATE 12/17/87

(This space for Federal or State office use)

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

Approved as to plugging of the well bore.
Liability under bond is retained until
surface restoration is completed.

*See Instructions on Reverse Side

DATE APPROVED

PETER W. CHESTER

JAN 21 1988

BUREAU OF LAND MANAGEMENT
ROOSEVELT RESOURCE AREA

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Dalport Oil Corporation

Lease Name: Federal 26

Well No.: 4

Location: 1980' FNL & 660' FEL, Section 26, T7S, R33E

Drilling and Completion Data

362' 8-5/8", cmt w/200sx.
Circulate To Surface.

4410' 4 1/2", cmt. w/300 sx.

Perforations 4130' - 4269'

4412' T.D.

Plugging and Abandonment Data

Surface: 10 sx. cmt. plug

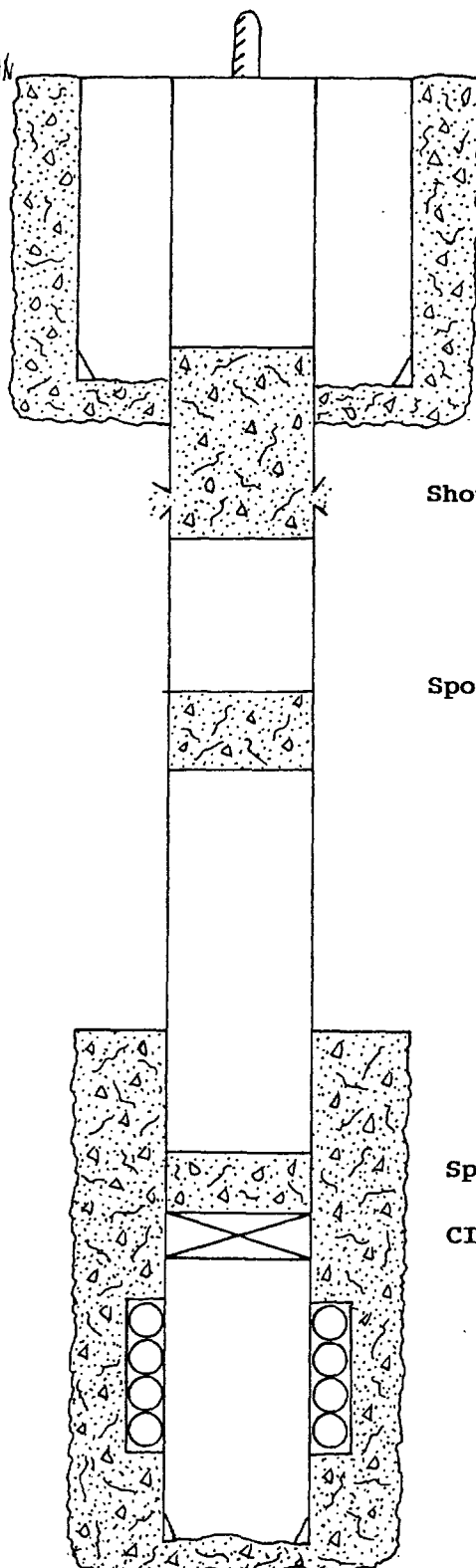
Spot 45 sx cmt. plug
TOC 270'

Shot 4 1/2" csg. @ 385'

Spot 15 sx. cmt. plug 3000' - 3150'

Spot 35' cmt. plug TOC @ 3957'

CIBP set @ 4000'



UNITED STATES N. M. OIL CONSERVATION
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
HOBBS, NEW MEXICO 88240

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

NM-042253

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Fed. #

9. WELL NO.

4

10. FIELD AND POOL, OR WILDCAT

Chaveroo - San Andres

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

26-T7S-R33E

12. COUNTY OR PARISH
Roosevelt

13. STATE
NM

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

Dalport Oil Corporation

3. ADDRESS OF OPERATOR

3471 Inter First One, Dallas, TX 75202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface

Letter "H" 1980' FNL & 660' FEL

14. PERMIT NO.

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

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐
☐
☐
☐
☐

PULL OR ALTER CASING

☐
☐
☐
☐
☐

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐
☐
☐
☐
☐

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

☐
☐
☐
☒
☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. 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.) *

DATA: T.D. 4412', Perfs. 4130' - 4269'

8 5/8" casing set @ 362' - circulated 4 1/2" casing set @ 4410' w/300' SX

PROCEDURE:

12/9/87 Set CIBP @ 4000' w/35' cement plug, ran tubing to 3900', circulate 4 1/2" casing w/salt gel mud, pulled tubing to 3150' spot 15 SX cement plug 3150' to 3000' in 4 1/2" casing

12/10/87 Shot 4 1/2" casing @ 385' spot, 45 SX cement plug across 8 5/8" shoe & 4 1/2" casing stub tagged cement plug @ 270' spot 10 SX cement plug @ surface and install Dry Hole Marker

Note: Will notify USGS when location cleaned and ready for inspection

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

SIGNED Gene Melford

TITLE Agent

DATE 12/17/87

(This space for Federal or State office use)

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

Approved as to planning of the well bore.
Liability under lease is not void until
surface restoration is completed.

*See Instructions on Reverse Side

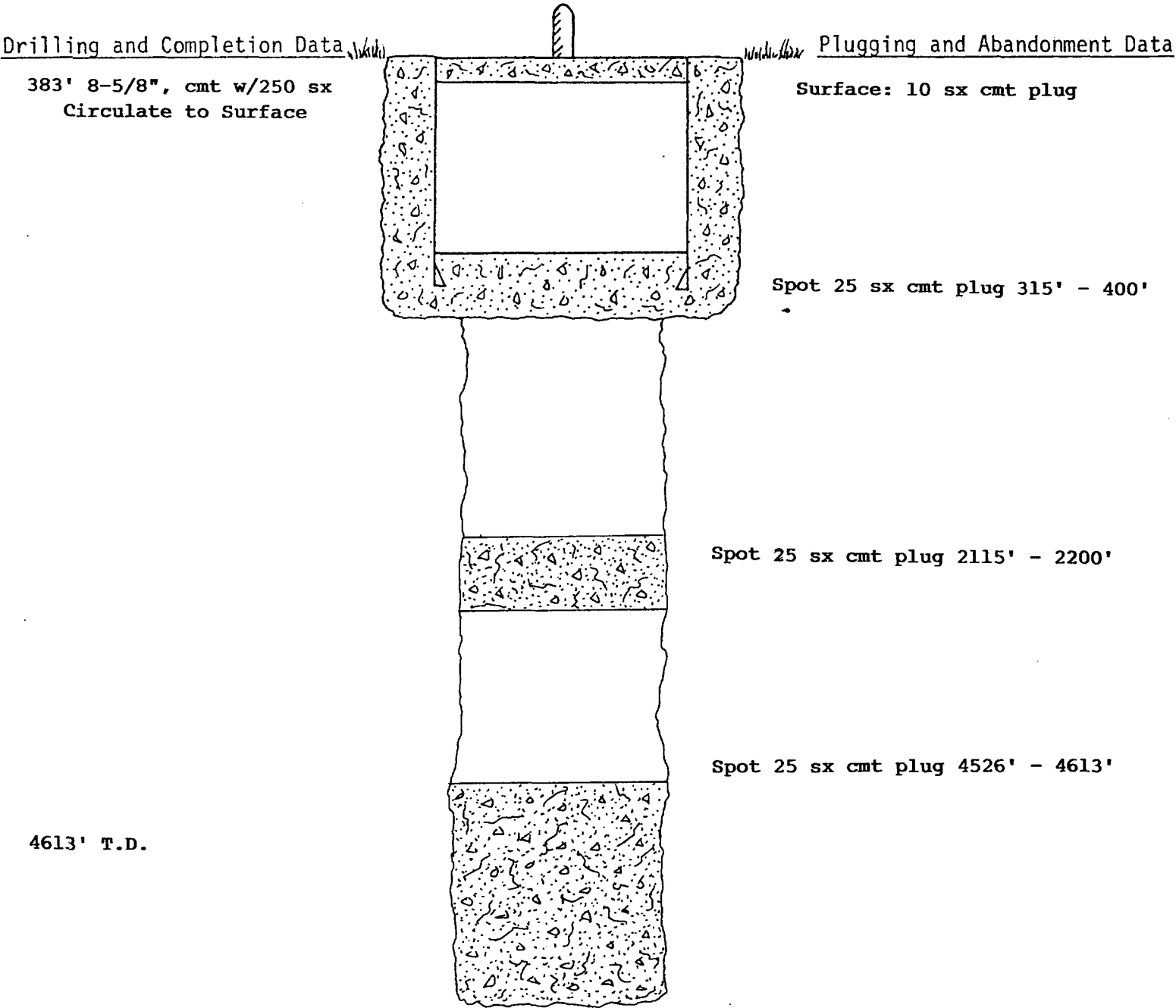
APPROVED
DATE

JAN 21 1988

DEPARTMENT OF LAND MANAGEMENT
BUREAU OF LAND MANAGEMENT

PLUGGING DIAGRAM
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Murphy H. Baxter
Lease Name: Smelting-State
Well No.: 1
Location: 660' FSL & 660' FWL, Section 16, T7S, R34E



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LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
E-9766

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. ☒ OIL WELL ☐ GAS WELL ☐ OTHER	7. Unit Agreement Name
2. Name of Operator MURPHY H. BAXTER	8. Farm or Lease Name Smelting-State
3. Address of Operator 1126 Vaughn Building, Midland, Texas 79701	9. Well No. 1
4. Location of Well UNIT LETTER M 660 FEET FROM THE South LINE AND 660 FEET FROM THE West LINE, SECTION 16 TOWNSHIP 7 RANGE 34 NMPM.	10. Field and Pool, or Wildcat Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 4308.8 GR	12. County Roosevelt

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☒
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

2/12/66 - A 25 sx. cement plug was set from 4613' (TD) to 4526'.
A 25 sx. cement plug was set from 2200' to 2115'.
A 25 sx. cement plug was set from 400' to 315'.
A 10 sx. cement plug was set in top of surface casing and a steel plate was welded on top of surface casing. A 10.2# mud was left between all cement plugs. Plugging was completed at 1:00 a.m. 2/13/66.

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

SIGNED W.H. Sumner TITLE PETROLEUM ENGINEER DATE February 14, 1966

APPROVED BY Lester A. Clements TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Cities Service Oil Company

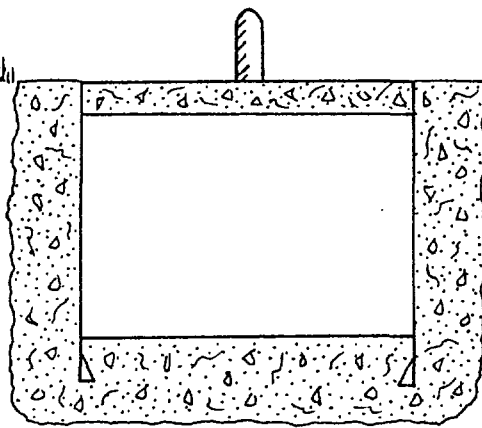
Lease Name: Davis A

Well No.: 1

Location: 660' FWL & 660' FSL, Section 17, T7S, R34E

Drilling and Completion Data

458' 8-5/8", cmt w/450 sx
Circulate to Surface

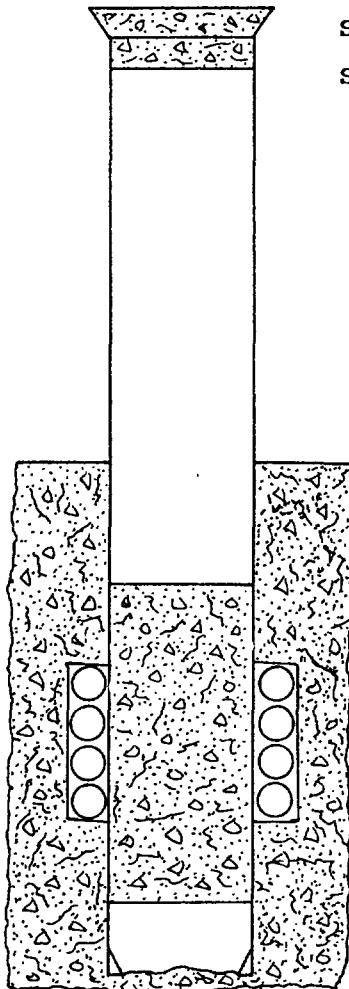


Plugging and Abandonment Data

Surface: 10 sx cmt plug

Spot 30 sx cmt plug 40' - 500'

4305' 4 1/2", cmt w/200 sx



Spot 30 sx cmt plug 1350' - 1450'

Shot & Pulled csg @ 1817'

Spot 60 sx cmt plug 3498' - 4218'

Perforations 4067' - 4196'

4270' P.B.T.D.

4305' T.D.

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OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease	
State ☒	Fee ☒
5. State Oil & Gas Lease No.	

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)		
1. ☐ OIL WELL ☐ GAS WELL ☐ OTHER- P & A		7. Unit Agreement Name
2. Name of Operator ✓ Cities Service Oil Company		8. Farm or Lease Name Davis A
3. Address of Operator P. O. Box 1919 - Midland, Texas 79701		9. Well No. 1
4. Location of Well UNIT LETTER M 660 FEET FROM THE West LINE AND 660 FEET FROM THE South LINE, SECTION 17 TOWNSHIP 7 S RANGE 34 E NMPM.		10. Field and Pool, or Wildcat Chaveroo San Andres
15. Elevation (Show whether DF, RT, GR, etc.) 4314' G.L.		12. County Lee

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data			
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☒
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	OTHER ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

This well was plugged and abandoned in the following manner in 9-30-70:

1. MIRU casing puller.
2. Loaded hole with mud laden fluid.
3. Displaced 60 sack cement plug through open ended tbg. 4 7218-3498'.
4. Pulled tbg.
5. Shot casing off @ 1817'.
6. Laid down 1817' of 4-1/2" OD csg.
7. Displaced 30 sack plug at top of salt 1450-1350'.
8. Displaced 30 sack plug 1/2 in & 1/2 out 8-5/8" csg. shoe 500-40.
9. Dumped 10 sack plug in top of 8-5/8" casing from G.L. to 30'.
10. Cut off head & installed 4" dry hole marker.
11. The location was cleared of all equipment & debris.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.		
SIGNED <u>George E. Dain</u>	TITLE <u>Region Petroleum Engineer</u>	DATE <u>11-5-74</u>
APPROVED BY <u>John W. Runyan</u>	TITLE <u></u>	DATE <u></u>
CONDITION OF APPROVAL, IF ANY:		

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Natural Resources Management Corporation

Lease Name: Metzger

Well No.: 7

Location: 660' FSL & 853' FEL, Section 17, T7S, R34E

Drilling and Completion Data

1649' 8-5/8", cmt w/750 sx
Circulate to Surface

4550' 4½", cmt w/1600 sx

Perforations 4472' - 4484'

4508' P.B.T.D.

4550' T.D.

Plugging and Abandonment Data

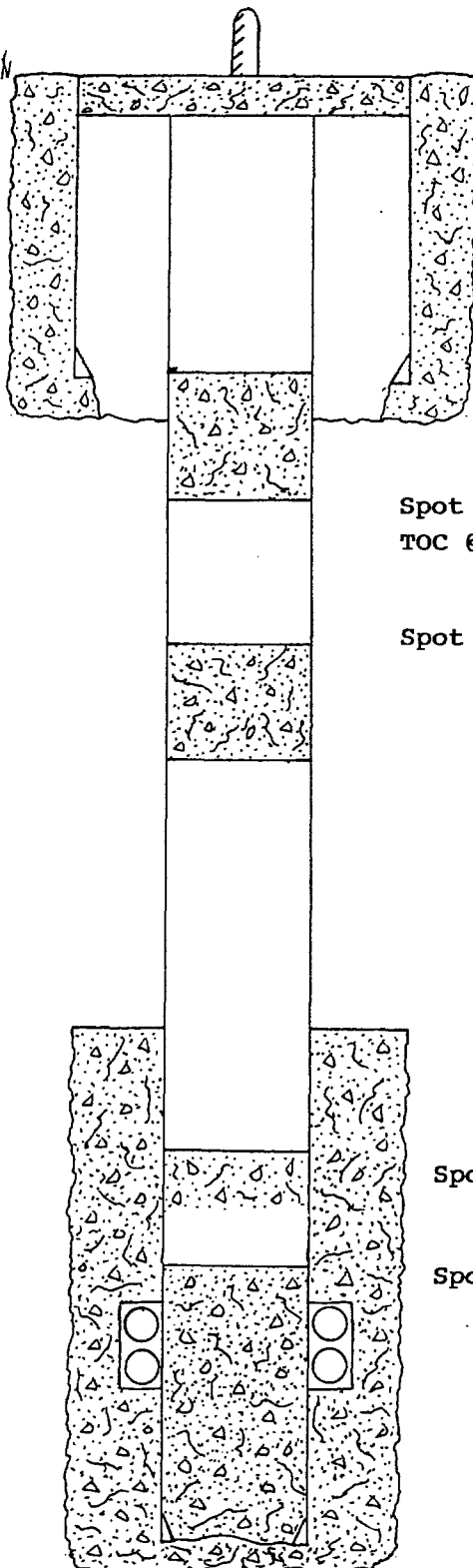
Surface: 10 sx cmt plug

Spot 10 sx cmt plug 1550' - 1700'
TOC @ 1625'

Spot 10 sx cmt plug 2850' - 3000'

Spot 10 sx cmt plug 4270' - 4420'

Spot 50 sx cmt plug 4420' - 4508'



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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease
State ☐ Fee ☒
5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL ☐ GAS WELL ☐ OTHER- DRY

Name of Operator Natural Resource Management
NRM Petroleum Corporation

Address of Operator
600 W. Illinois, Suite 800 - Midland, Texas 79701

Location of Well
UNIT LETTER P 660 FEET FROM THE South LINE AND 853 FEET FROM
THE East LINE, SECTION 17 TOWNSHIP 7S RANGE 34E NMPM.

7. Unit Agreement Name
8. Farm or Lease Name <u>Metzger</u>
9. Well No. <u>7</u>
10. Field and Pool, or Wildcat <u>Chaveroo (San Andre</u>
12. County <u>Roosevelt</u>

15. Elevation (Show whether DF, RT, GR, etc.) <u>4328.6 GR</u>

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	COMMENCE DRILLING OPNS. ☐
ULL OR ALTER CASING ☐	CASING TEST AND CEMENT JOBS ☐
OTHER ☐	OTHER ☐
PLUG AND ABANDON ☐	ALTERING CASING ☐
CHANGE PLANS ☐	PLUG AND ABANDONMENT ☐

1. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

8 5/8" csg set @ 1649' w/750 sx cement (circ.) Completed 8-23-84.
4 1/2" csg set @ 4550' w/1600 sx cement.
Perfs from 4472' - 4484' 4 SPF (48 holes)

TIH open-ended to 4420'. Circ hole clean. Spot 20 sx Class "C" plug @ 4420'. TOH to 3000'. WOC. Well on vacuum. Load hole w/30 bbls. Well on vacuum. TIH to 4420'. Spot 30 sx Class "C". Pull 10 stands. SI 1 hr. TIH w/wireline and tag plug @ 4470'. WOC 1 hr. TIH and spo 10 sx plug (150') from 4420' to 4270'. TOH to 3000'. Spot 10 sx plug (150') from 3000' to 2850'. TOH to 1700'. Spot 10 sx plug (150') from 1700' to 1550'. TOH. Spot 10 sx plug @ surface. TIH w/wireline between 4 1/2" and 8 5/8" csg. Tag cement @ 1625'. ND wellhead. Weld plate on 8 5/8" csg. Well Plugged and Abandoned on 9-18-84. Plugging operations commenced on 9-17-84.

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

SIGNED <u>Mary Carlton</u>	TITLE <u>Production Secretary</u>	DATE <u>9-24-84</u>
APPROVED BY <u>Jack Griffin</u>	TITLE <u>CH. & GAS DIST. CLERK</u>	DATE <u>AUG 16 '84</u>
CONDITIONS OF APPROVAL, IF ANY:		

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Dalport Oil Corporation

Lease Name: Hinkle-Federal

Well No.: 2

Location: 990' FNL & 330' FNL, Section 19, T7S, R34E

Drilling and Completion Data

379' 8-5/8", cmt w/200 sx
Circulate to Surface

4328' 4½", cmt w/300 sx

Perforations 4001' - 4205'

4328' T.D.

Plugging and Abandonment Data

Surface: 10 sx cmt plug

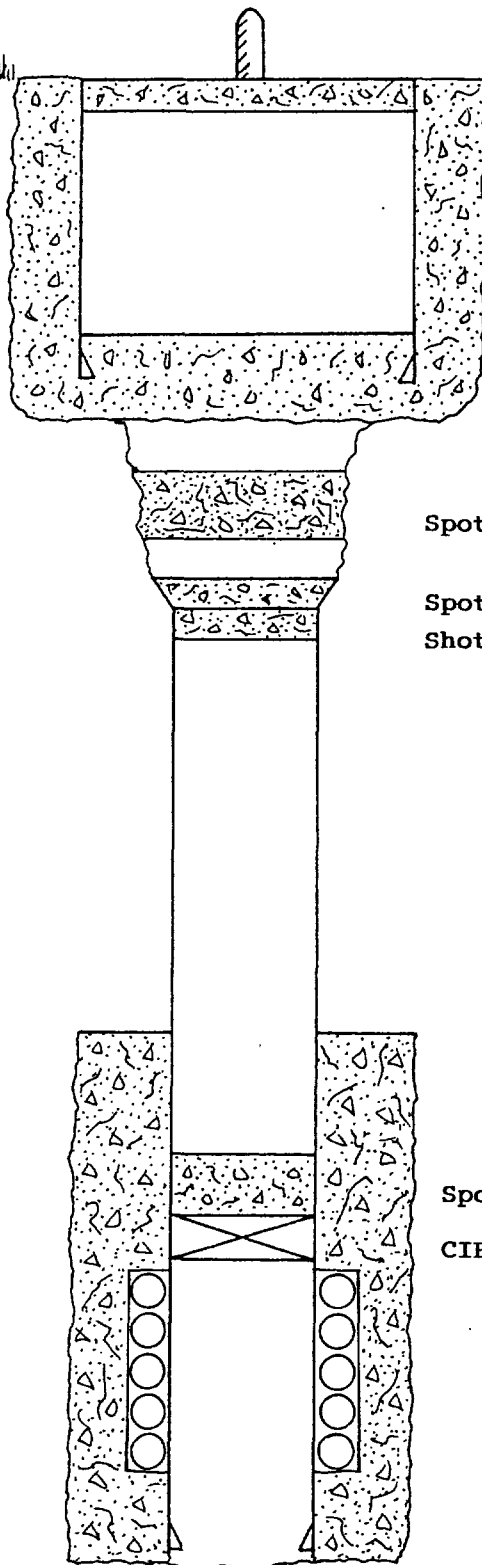
Spot 45 sx cmt plug 329' - 429'

Spot 45 sx cmt plug 1600' - 1700'

Spot 35 sx cmt plug 1929' - 2029'
Shot & pulled csg @ 2029'

Spot 35' cmt plug 3965' - 4000'

CIBP set @ 4000'



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE
(Other instructions on
reverse side)Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

M-067962

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Pinkle-Federal

9. WELL NO.

2

10. FIELD AND POOL, OR WILDCAT

City of San Andres
11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 19, 7-S, 34-E

12. COUNTY OR PARISH
Reconvey13. STATE
New Mexico

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1.

OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

3. ADDRESS OF OPERATOR
Baltimore Oil Corporation

3471 First National Bank Bldg., Dallas, Texas 75202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)

At surface

990'
1986' FNL & 330' FNL Section 19

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, CR, etc.)

4320 GR

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON* ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) ☐REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☒(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)17. 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 perti-
nent to this work.) *

On July 6, 1973 plugged and abandoned as follows:

- (1) Set cast iron bridge plug @ 4000'.
- (2) Dumped 35' cement on top of plug to 3965'.
- (3) Shot 4 1/2" casing @ 2029', set 35 sack cement plug from 2029' to 1929'.
- (4) Set 45 sack cement plug from 1600' to 1700' across salt section.
- (5) Set 45 sack cement plug from 429' to 329', 1/2 in. and 1/2 out on 8 5/8" surface casing.
- (6) Set 10 sack cement plug @ surface.
- (7) Installed dry hole market.

Note: All cement plugs were set with gelled mud.

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

SIGNED

TITLE President

DATE July 25, 1973

(This space for Federal or State office use)

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

PLUGGING DIAGRAM
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Dalport Oil Corporation

Lease Name: Hinkle-Federal

Well No.: 1

Location: 1980' FNL & 330' FWL, Section 19, T7S, R34E

Drilling and Completion Data

411' 8-5/8", cmt w/200 sx
Circulate to Surface

Plugging and Abandonment Data

Surface: 10 sx cmt plug

Spot 45 sx cmt plug 361' - 461'

4430' 4½", cmt w/300 sx

Spot 35 sx cmt plug 1440' - 1540'

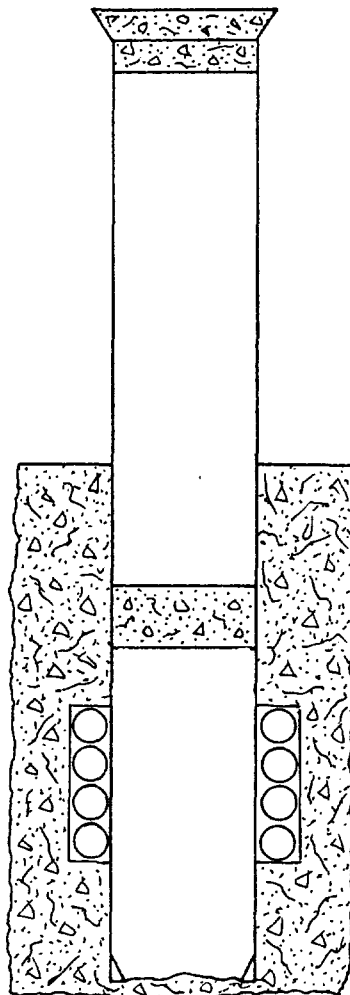
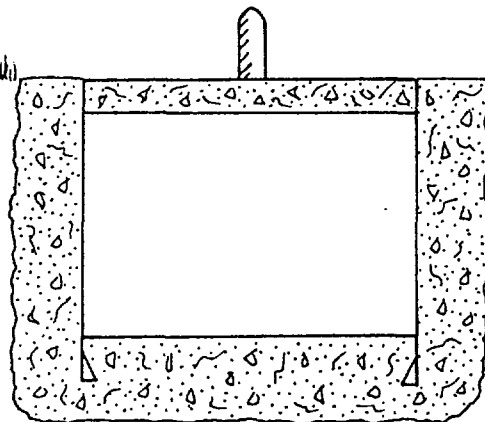
Shot & pull csg from 1540'

Set 25 sx cmt plug @ 4000'

Perforations 4107' - 4295'

4374' P.B.T.D.

4430' T.D.



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPlicate
(Other Instructions on
reverse side)Form approved.
Budget Bureau No. 42-R1421.

5. LEASE DESIGNATION AND SERIAL NO.

111-067962

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. ☒ OIL WELL ☐ GAS WELL ☐ OTHER	7. UNIT AGREEMENT NAME
2. NAME OF OPERATOR	8. FARM OR LEASE NAME
3. ADDRESS OF OPERATOR Dalport Oil Corporation 3471 First National Bank Bldg., Dallas, Texas 75202	9. WELL NO. Hinkle-Federal No. 1
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1980' FNL & 330' FWL Section 19, 7-S, 34-E	10. FIELD AND POOL, OR WILDCAT Cheveree-San Andres
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4321 GR
	12. COUNTY OR PARISH Roosevelt
	13. STATE New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT*

(Other)

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. 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.) *

On July 2, 1973, plugged and abandoned as follows:

- (1) Set 25 sack cement plug @ 4000'.
- (2) Shot 4 1/2" casing @ 1540'.
- (3) Set 35 sack cement plug @ 1540' to 1440'.
- (4) Set 45 sack cement plug 1/2 in and 1/2 out of 8 5/8" surface casing from 461' to 361'.
- (5) Set 10 sack cement plug @ surface.
- (6) Installed dry hole marker.

Note: All cement plugs set with gelled mud.

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

SIGNED

TITLE

President

DATE

July 25, 1973

(This space for Federal or State office use)

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

APPROVED

OCT 24 1973

ARTHUR R. BROWN
DISTRICT ENGINEER

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: American Trading and Production Corporation

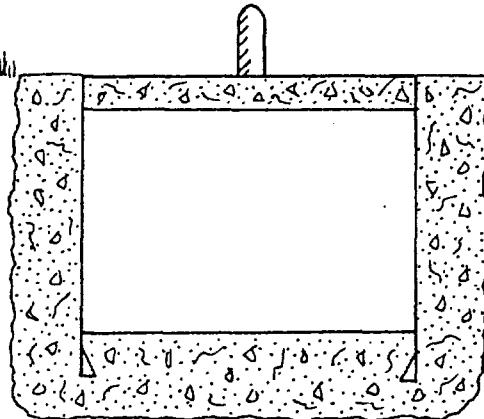
Lease Name: New Mexico State "20"

Well No.: 3

Location: 1980' FSL & 1980' FWL, Section 20, T7S, R34E

Drilling and Completion Data

392' 8-5/8", cmt w/200sx
Circulate to Surface

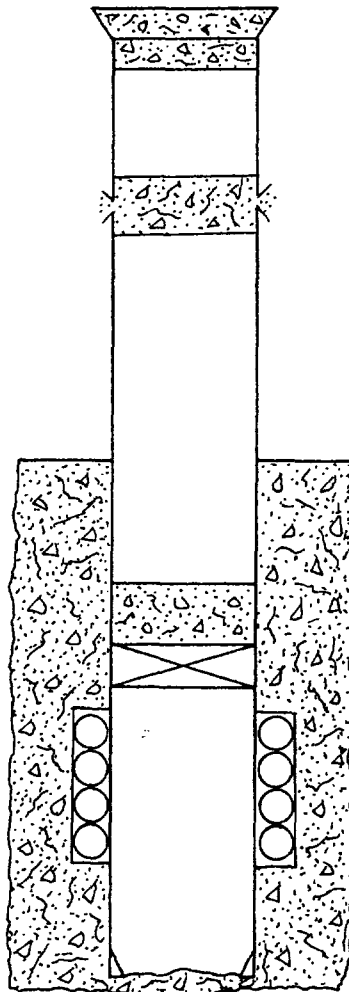


Plugging and Abandonment Data

Surface: 10 sx cmt plug

Spot 55 sx cmt plug 349'-450'
TQC @ 349'

4384' 4 1/2", cmt w/450 sx



Spot 15 sx cmt plug 899'-981'
Shot & pulled csg @ 958'

Shot csg @ 2000' Unable to pull
Spot 40 sx cmt plug 981'-1488'

Spot 35' cmt plug 4115'-4150'
CIBP set @ 4150'

Perforations 4164' - 4302'

4352' P.B.T.D.
4400' T.D.

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OPERATOR	

5a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
OG-930

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)	
1. OIL WELL ☒ GAS WELL ☐ OTHER ☐	7. Unit Agreement Name
2. Name of Operator American Trading and Production Corporation	8. Farm or Lease Name New Mexico State "20"
3. Address of Operator 110 W. Louisiana, Suite 300; Midland, Texas 79701	9. Well No. 3
4. Location of Well UNIT LETTER K 1980 FEET FROM THE South LINE AND 1980 FEET FROM THE West LINE, SECTION 20 TOWNSHIP 7S RANGE 34E NMPM.	10. Field and Pool, or WHdcat Chaveroo (San Andres)
15. Elevation (Show whether DF, RT, GR, etc.) 4312' GR	12. County Roosevelt

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data			
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPMS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	OTHER ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

11-19-87 Set CIBP @ 4150' w/35' cmt cap
11-22-87 Cir. hole w/+ 10#/gal mud. Shot csg @ 2000'. Unable to pull free. Spot 40 sx plug from 1488-981'.
11-23-87 Tag plug @ 981'. Shot & pulled 4 1/2" csg @ 958'. Spot 15 sx plug from 981-899'. W.O.C. 3 hrs. Tag plug @ 899'. Spot 55 sx plug from 450' to 349'.
11-24-87 Tag plug @ 349'. Spot 10 sx plug @ surface & erect dry-hole marker

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

SIGNED <u>[Signature]</u>	TITLE <u>Engineer</u>	DATE <u>12-8-87</u>
APPROVED BY <u>[Signature]</u>	TITLE <u>OIL & GAS INSPECTOR</u>	DATE <u>MAR 28 1988</u>
CONDITIONS OF APPROVAL, IF ANY:		

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: American Trading and Production Corporation

Lease Name: New Mexico State "20"

Well No.: 1

Location: 660' FWL & 1980' FSL, Section 20, T7S, R34E

Drilling and Completion Data

422' 8-5/8", cmt w/300 sx
Circulate to Surface

4496' 4 1/2", cmt w/450 sx

Perforations 4244' - 4123'

4461' P.B.T.D.
4500' T.D.

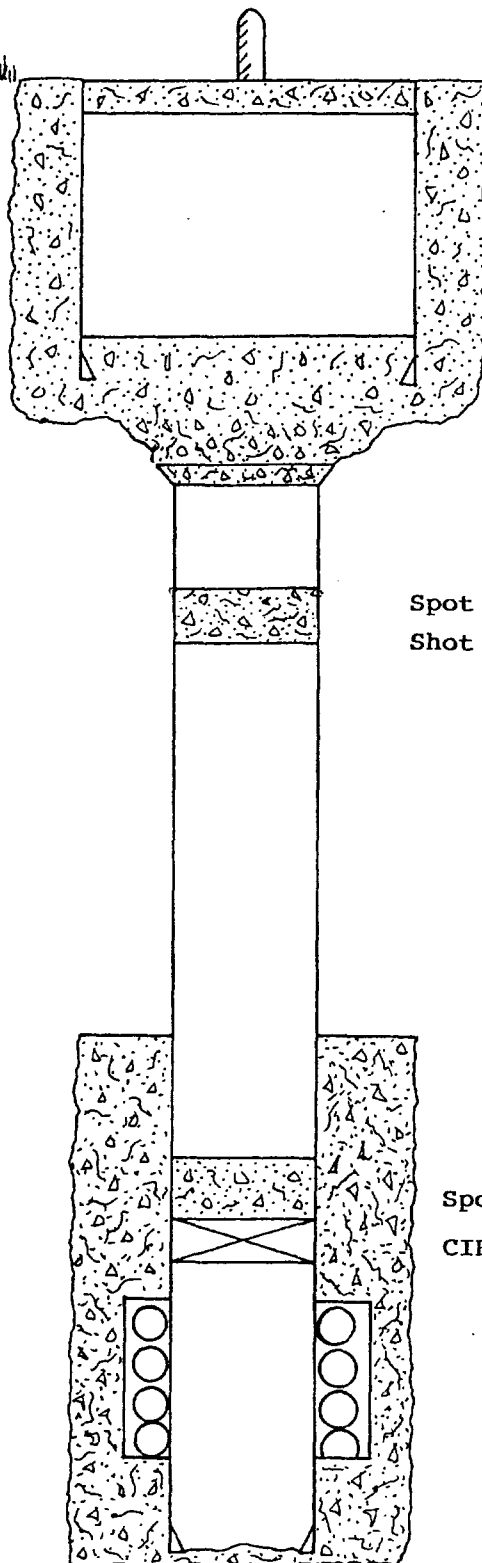
Plugging and Abandonment Data

Surface: 10 sx cmt plug

Spot 55 sx cmt plug 353' - 519'

Spot 10 sx cmt plug 1321' - 1464'
Shot & pulled csg @ 469'

Spot 35' cmt plug 4055' - 4090'
CIBP set @ 4090'



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-

5a. Indicate Type of Lease	State ☒ Fee ☐
5. State Oil & Gas Lease No.	OG-930

SUNDRY NOTICES AND REPORTS ON WELLS

DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐	7. Unit Agreement Name
2. Name of Operator ✓ American Trading and Production Corporation	8. Farm or Lease Name New Mexico State "20"
3. Address of Operator 110 W. Louisiana, Suite 300; Midland, Texas 79701	9. Well No. 1
4. Location of Well UNIT LETTER <u>L</u> , <u>660</u> FEET FROM THE <u>West</u> LINE AND <u>1980</u> FEET FROM THE <u>South</u> LINE, SECTION <u>20</u> TOWNSHIP <u>7S</u> RANGE <u>34E</u> NMPM.	10. Field and Pool, or Wildcat Chaveroo (San Andres)
15. Elevation (Show whether DF, RT, GR, etc.) 4326 KB	12. County Roosevelt

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

11-18-87 Set CIBP @ 4090' w/35' cmt cap.
11-19-87 Cir. hole w/+ 10#/gal mud.
11-21-87 Spot 10 sx cmt plug from 1464-1321'. Shot & pulled 4½" csg. @ 469'.
Spot 55 sx plug from 519-353'.
11-22-87 Tagged plug @ 353'. Spot 10 sx plug @ surface & erect dry-hole marker.

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

SIGNED [Signature] TITLE Engineer DATE 12-8-87
APPROVED BY [Signature] TITLE DIRECTOR DATE MAR 28 1988
CONDITIONS OF APPROVAL, IF ANY:

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: American Trading and Production Corporation

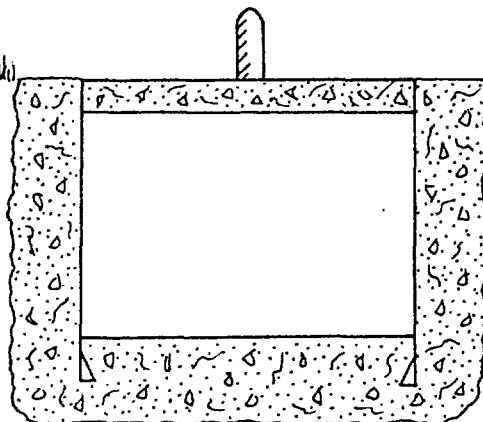
Lease Name: New Mexico State "20"

Well No.: 2

Location: 660' FWL & 660' FSL, Section 20, T7S, R34E

Drilling and Completion Data

424' 8-5/8", cmt w/200 sx
Circulate to Surface

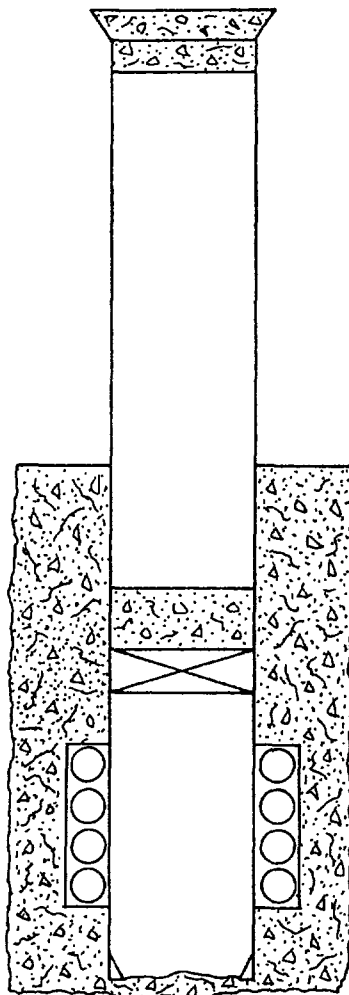


Plugging and Abandonment Data

Surface: 10 sx cmt plug

Spot 45 sx cmt plug 362' - 475'

4377' 4 1/2", cmt w/450 sx



Spot 25 sx cmt plug 868' - 1030'

Shot & pulled csg @ 979'

Spot 35' cmt plug 4105' - 4140'

CIBP set @ 4140'

Perforations 4156' - 4289'

4345' P.B.T.D.

4400' T.D.

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OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-

3a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
OG-930

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. ☒ OIL WELL ☐ GAS WELL ☐ OTHER-	7. Unit Agreement Name
2. Name of Operator American Trading and Production Corporation	8. Farm or Lease Name New Mexico State "20"
3. Address of Operator 110 W. Louisiana, Suite 300; Midland, Texas 79701	9. Well No. 2
4. Location of Well UNIT LETTER M 660 FEET FROM THE West LINE AND 660 FEET FROM THE South LINE, SECTION 20 TOWNSHIP 7S RANGE 34E N.M.P.M.	10. Field and Pool, or Wildcat Chaveroo (San Andres)
15. Elevation (Show whether DF, RT, CR, etc.) 4325' KB	12. County Roosevelt

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

11-19-87 Set CIBP @ 4140' w/35' cmt cap. Cir hole w/+ 10#/gal mud. :
11-20-87 Shot & pulled 4 1/2" csg @ 979'. Spot 25 sx plug from 1030-868'. W.O.C. 3 hrs.
Tag plug @ 868'. Spot 45 sx plug from 475-362'.
11-21-87 Tag plug @ 362'. Spot 10 sx plug @ surface & erect dry-hole marker

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

ISSUED <u>[Signature]</u>	TITLE <u>Engineer</u>	DATE <u>12-8-87</u>
APPROVED BY <u>[Signature]</u>	TITLE <u>OIL & GAS INSPECTOR</u>	DATE <u>MAR 28 1988</u>
CONDITIONS OF APPROVAL, IF ANY:		

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: American Trading and Production Corporation

Lease Name: New Mexico State "20"

Well No.: 4

Location: 1980' FWL & 600' FSL, Section 20, T7S, R34E

Drilling and Completion Data

410' 8-5/8", cmt w/200 sx
Circulate to Surface

4447' 4½", cmt w/450 sx

Perforations 4231' - 4349'

4409' P.B.T.D.

4450' T.D.

Plugging and Abandonment Data

Surface: 10 sx cmt plug

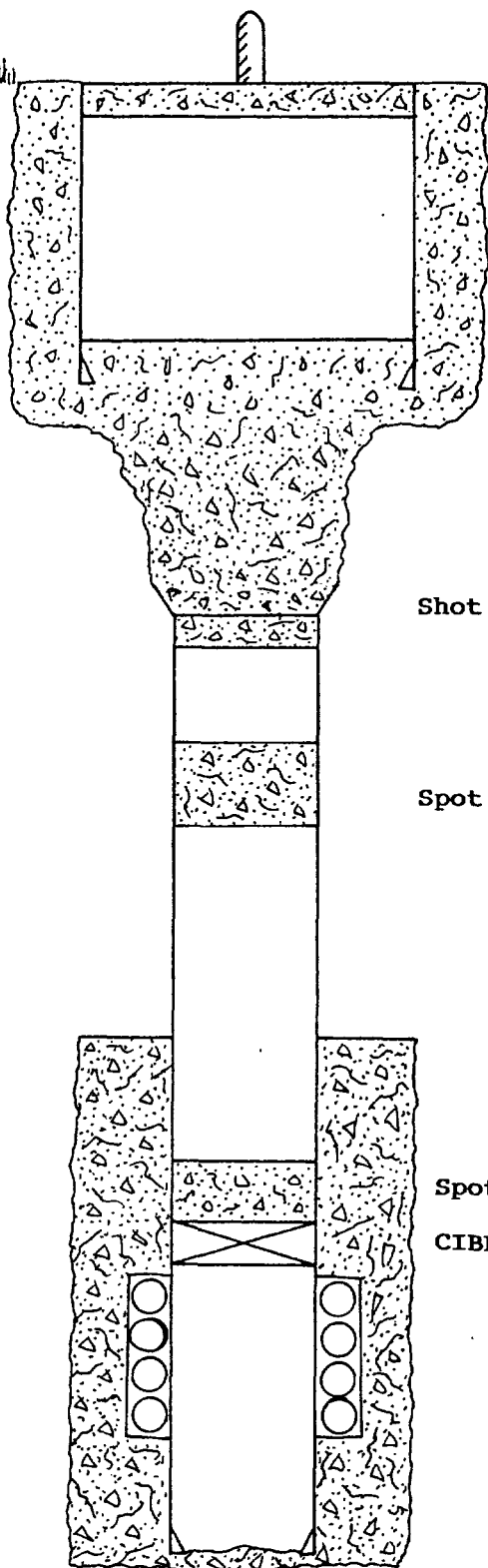
Spot 50 sx cmt plug 313' - 496'

Shot & pull csg @ 445'

Spot 10 sx cmt plug 1321' - 1464'

Spot 35' cmt plug 4165' - 4200'

CIBP set @ 4200'



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LAND OFFICE	
OPERATOR	

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-78

5a. Indicate Type of Lease	
State ☒	Fee ☐
5. State Oil & Gas Lease No.	
OG-930	

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT - 1" (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL ☒	GAS WELL ☐	OTHER ☐
--	-----------------------------------	--------------------------------

Name of Operator
American Trading and Production Corporation

Address of Operator
110 W. Louisiana, Suite 300; Midland, Texas 79701

Location of Well
UNIT LETTER N 1980 FEET FROM THE West LINE AND 600 FEET FROM

THE South LINE, SECTION 20 TOWNSHIP 7S RANGE 34E NMPM.

7. Unit Agreement Name

8. Farm or Lease Name
New Mexico State "20"

9. Well No.
4

10. Field and Pool, or Wildcat
Chaveroo (San Andres)

15. Elevation (Show whether DF, RT, GR, etc.)
4309 GR

12. County
Roosevelt

6. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	COMMENCE DRILLING OPNS. ☐
PULL OR ALTER CASING ☐	CASING TEST AND CEMENT JOBS ☐
OTHER ☐	OTHER ☐
PLUG AND ABANDON ☐	ALTERING CASING ☐
CHANGE PLANS ☐	PLUG AND ABANDONMENT ☒

7. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

11-18-87 Set CIBP @ 4200' w/35' cmt cap. Cir hole w/+ 10#/gal mud.
11-23-87 Spot 10 sx plug from 1464-1321'.
11-24-87 Shot & pulled 4½" csg @ 445'. Spot 50 sx plug from 496-313'. W.O.C. 3 hrs.
Tag plug @ 313;. Spot 10 sx plug @ surface & erect dry-hole marker.

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

SIGNED Robert L. Griffin TITLE Engineer DATE 12-8-87

APPROVED BY Jacob Griffin TITLE CONTROLLER OF THE DEPT. DATE MAR 28 1988

CONDITIONS OF APPROVAL, IF ANY:

PLUGGING DIAGRAM

Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Company Name: Charles B. Read

Lease Name: Sinclair "B"

Well No.: 1

Location: 660' FNL & 1980' FEL, Scetion 32, T7S, R34E

Drilling and Completion Data

401' 8-5/8", cmt w/225 sx
Circulate to Surface

Plugging and Abandonment Data

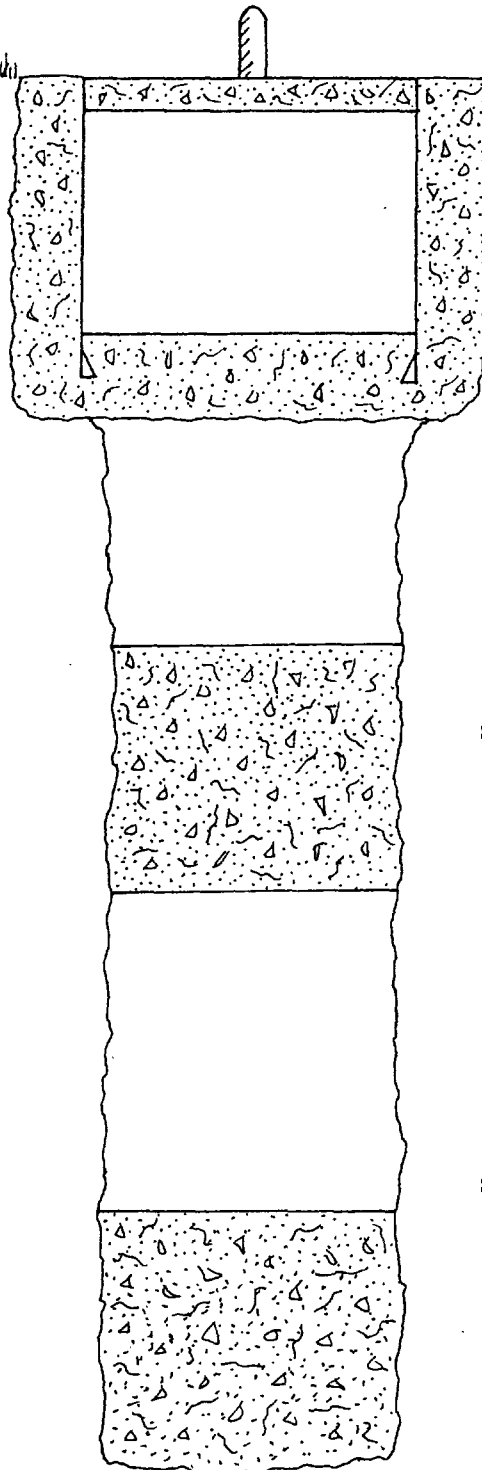
Surface: 10 sx cmt plug

Spot 25 sx cmt plug 375' - 425'

Spot 25 sx cmt plug 2260' - 2360'

Spot 25 sx cmt plug 4550' - 4650'

4650' T.D.



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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
OG-848

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)	
1. ☒ OIL WELL ☐ GAS WELL ☐ OTHER- Dry Hole	7. Unit Agreement Name
2. Name of Operator ✓ Charles B. Read	8. Farm or Lease Name Sinclair "B"
3. Address of Operator P. O. Box 2126, Roswell, New Mexico 88201	9. Well No. /
4. Location of Well UNIT LETTER B, 660 FEET FROM THE North LINE AND 1980 FEET FROM THE East LINE, SECTION 32 TOWNSHIP 7S RANGE 34E NMPM.	10. Field and Pool, or Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 4324' KB	12. County Roosevelt

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	COMMENCE DRILLING OPNS. ☐
PULL OR ALTER CASING ☐	CASING TEST AND CEMENT JOB ☐
OTHER ☐	OTHER ☐
PLUG AND ABANDON ☐	ALTERING CASING ☐
CHANGE PLANS ☐	PLUG AND ABANDONMENT ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1503.

Test was P & A on 5/30/67

Cement plug of 25sx was set at 4550 - 4650',
" " " " " " " " 2260 - 2360',
" " " " " " " " 375 - 425',
" " " 10 sx " " " Surface.

Installed Dry Hole Marker.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.		
SIGNED <i>Charles B. Read</i>	TITLE Agent	DATE 2-7-69
APPROVED BY <i>John W. Runyan</i>	TITLE	DATE
CONDITIONS OF APPROVAL, IF ANY:		

PERMIAN

Treating Chemicals, Inc.

P. O. BOX 815
TATUM, NM 88267
PHONE (505) 398-4111

May 18, 1989

Murphy Operating Corporation
P. O. Drawer 2648
Roswell, NM 88202-2648

Subject: Compatibility of fresh and produced comingled waters from
Tucker FW - Marathon Produced/Water.

Gentlemen:

We have run analysis on produced comingled waters from the above mentioned
leases (see attached copies).

We, at Permian Treating Chemicals, Inc. feel that these waters comingled,
are very compatible.

If we can be of any further assistance, please call myself or Mr. Gale
Blackwell at anytime.

Sincerely,



David Nailon
Permian Treating Chemicals, Inc.

DN/gb
Enclosures

PERMIAN

Treating Chemicals, Inc.

P. O. BOX 815
TATUM, NM 88267
PHONE (505) 398-4111

WATER ANALYSIS REPORT

Company Murphy Operating Corporation Date Samples 5-18-89
Field _____ County _____
Lease State Sec. 35 State New Mexico
Well Marathon & Tucker Formation _____
Type of Water Comingled Water, B/D _____
Sampling Point _____ Sampled By _____

DISSOLVED SOLIDS

CATIONS	mg/l		meq/l
Sodium, Na+(Calc)	<u>25990</u>	<u>÷ 23</u>	<u>1130</u>
Calcium, Ca++	<u>10600</u>	<u>÷ 20</u>	<u>530</u>
Magnesium, Mg++	<u>2916</u>	<u>÷ 12.2</u>	<u>239</u>
Barium, Ba++	_____	<u>÷ 68.7</u>	_____
Iron, Fe (Total	_____		_____
_____	_____		_____
_____	_____		_____

OTHER PROPERTIES

PH 6.04
Specific Gravity
1.075
H₂S Positive
Total Dissolved
Solids 107126
Total Hardness
38,500

ANIONS

Chloride, Cl-	<u>67000</u>	<u>÷ 35.5</u>	<u>1887</u>
Sulfate, So ₄ =	<u>425</u>	<u>÷ 48</u>	<u>9</u>
Carbonate, Co ₃ =	_____	<u>÷ 30</u>	_____
Bicarbonate, HCo ₃ -	<u>195</u>	<u>÷ 61</u>	<u>3</u>
_____	_____		_____

Remarks and Recommendations _____

PERMIAN

Treating Chemicals, Inc.

P. O. BOX 815
TATUM, NM 88267
PHONE (505) 398-4111

WATER ANALYSIS REPORT

Company Murphy Operating Corporation Date Samples 5-18-89
Field Chaveroo County _____
Lease Marathon State Sec. 35 State New Mexico
Well _____ Formation San Andres
Type of Water Produced Water, B/D _____
Sampling Point Heater Sampled By David Nailon

DISSOLVED SOLIDS

CATIONS	mg/l		meq/l
Sodium, Na+(Calc)	<u>34454</u>	<u>÷ 23</u>	<u>1498</u>
Calcium, Ca++	<u>24000</u>	<u>÷ 20</u>	<u>1200</u>
Magnesium, Mg++	<u>8213</u>	<u>÷ 12.2</u>	<u>673</u>
Barium, Ba++	<u>-0-</u>	<u>÷ 68.7</u>	<u>-0-</u>
Iron, Fe (Total	_____		_____
_____	_____		_____
_____	_____		_____

OTHER PROPERTIES

PH 5.43
Specific Gravity _____
1.150
H₂S Positive
Total Dissolved _____
Solids 186611
Total Hardness _____
93800

ANIONS

Chloride, Cl-	<u>119000</u>	<u>÷ 35.5</u>	<u>3352</u>
Sulfate, So ₄ =	<u>700</u>	<u>÷ 48</u>	<u>15</u>
Carbonate, Co ₃ =	_____	<u>÷ 30</u>	_____
Bicarbonate, HCo ₃ -	<u>244</u>	<u>÷ 61</u>	<u>4</u>
_____	_____		_____

Remarks and Recommendations Sulfate Scaling

PERMIAN

Treating Chemicals, Inc.

P. O. BOX 815
TATUM, NM 88267
PHONE (505) 398-4111

May 18, 1989

Murphy Operating Corporation
P. O. Drawer 2648
Roswell, NM 88202-2648

Subject: Compatibility of fresh and produced comingled waters from
Tucker FW-DB.

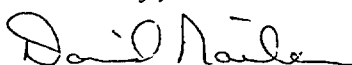
Gentlemen:

We have run analysis on produced comingled waters from the above mentioned
leases (see attached copies).

We, at Permian Treating Chemicals, Inc. feel that these waters comingled,
are very compatible.

If we can be of any further assistance, please call myself or Mr. Gale
Blackwell at anytime.

Sincerely,



David Nailon
Permian Treating Chemicals, Inc.

DN/gb
Enclosures

PERMIAN

Treating Chemicals, Inc.

P. O. BOX 815
TATUM, NM 88267
PHONE (505) 398-4111

WATER ANALYSIS REPORT

Company Murphy Operating Corporation Date Samples 5-18-89
Field Chaveroo County _____
Lease _____ State New Mexico
Well DB & Tucker Formation San Andres & FW
Type of Water Comingled Water, B/D _____
Sampling Point _____ Sampled By Gale Blackwell

DISSOLVED SOLIDS

CATIONS	mg/l		meq/l
Sodium, Na+(Calc)	<u>20608</u>	÷ 23	<u>896</u>
Calcium, Ca++	<u>9640</u>	÷ 20	<u>482</u>
Magnesium, Mg++	<u>3572</u>	÷ 12.2	<u>293</u>
Barium, Ba++	_____	÷ 68.7	_____
Iron, Fe (Total	_____		_____
_____	_____		_____
_____	_____		_____

OTHER PROPERTIES

PH 6.00
Specific Gravity
1.070
H₂S Positive
Total Dissolved
Solids 93304
Total Hardness
38800

ANIONS

Chloride, Cl-	<u>59000</u>	÷ 35.5	<u>1662</u>
Sulfate, So ₄ =	<u>350</u>	÷ 48	<u>7</u>
Carbonate, Co ₃ =	_____	÷ 30	_____
Bicarbonate, HCo ₃ -	<u>134</u>	÷ 61	<u>2</u>
_____	_____		_____

Remarks and Recommendations _____

PERMIAN

Treating Chemicals, Inc.

P. O. BOX 815
TATUM, NM 88267
PHONE (505) 398-4111

WATER ANALYSIS REPORT

Company Murphy Operating Corporation Date Samples 5-18-89
Field Chaveroo County _____
Lease DB State New Mexico
Well _____ Formation San Andres
Type of Water Produced Water, B/D _____
Sampling Point Heater Sampled By Gale Blackwell

DISSOLVED SOLIDS

CATIONS	mg/l		meq/l
Sodium, Na+(Calc)	<u>47587</u>	÷ 23	<u>2069</u>
Calcium, Ca++	<u>20440</u>	÷ 20	<u>1022</u>
Magnesium, Mg++	<u>7873</u>	÷ 12.2	<u>645</u>
Barium, Ba++	_____	÷ 68.7	_____
Iron, Fe (Total	_____		_____
_____	_____		_____
_____	_____		_____

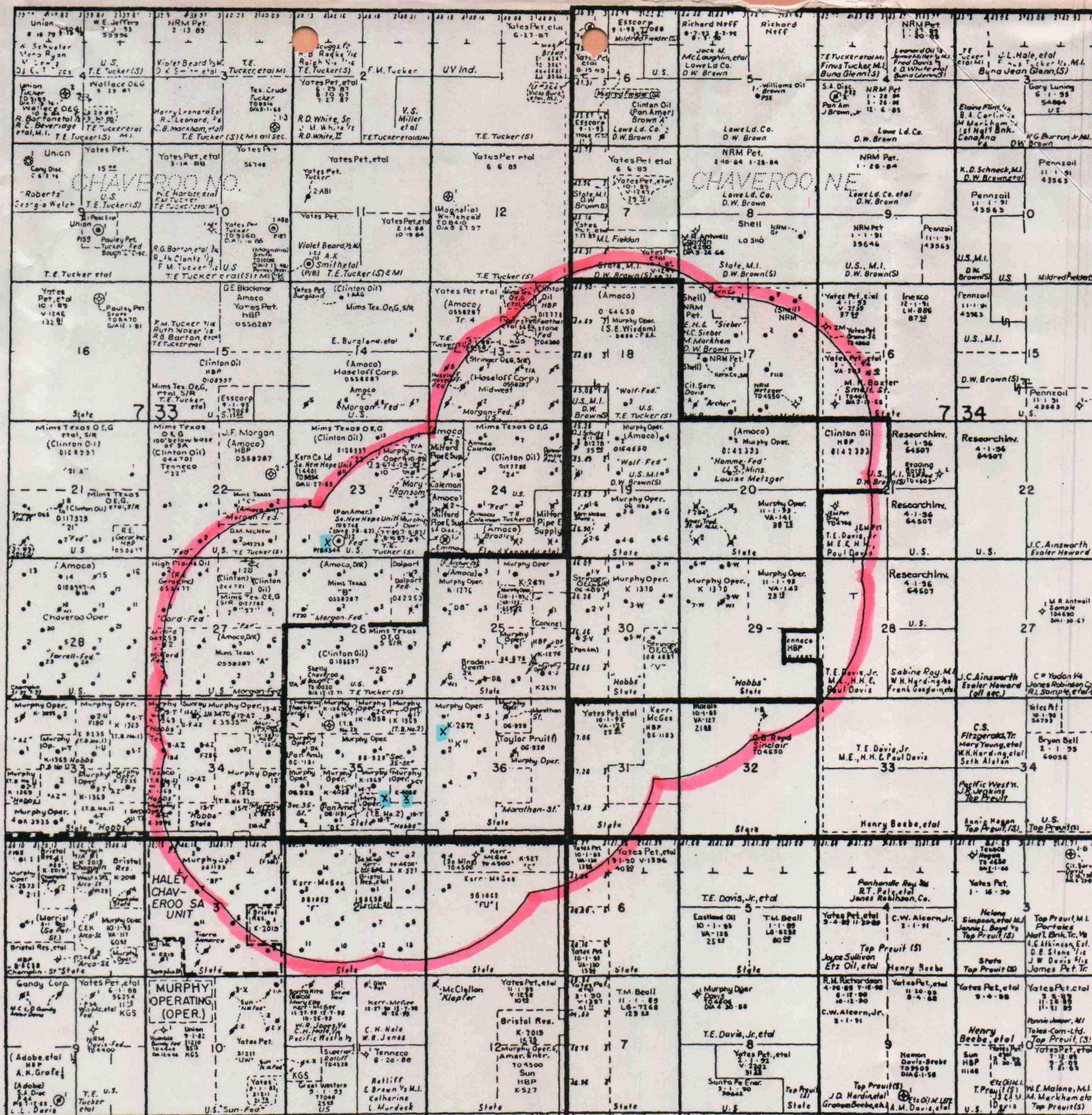
OTHER PROPERTIES

PH 5.42
Specific Gravity
1.150
H₂S Positive
Total Dissolved
Solids 208795
Total Hardness
83500

ANIONS

Chloride, Cl-	<u>132000</u>	÷ 35.5	<u>3718</u>
Sulfate, So ₄ =	<u>700</u>	÷ 48	<u>15</u>
Carbonate, Co ₃ =	_____	÷ 30	_____
Bicarbonate, HCo ₃ -	<u>195</u>	÷ 61	<u>3</u>
_____	_____		_____

Remarks and Recommendations _____



UNIT AREA MAP WATER FLOOD STUDY MURPHY OPERATING CORPORATION

SCALE: 1"=4000'

CHAVEROO SAN ANDRES FIELD
PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
ROOSEVELT COUNTY, NEW MEXICO

LEGEND

- PRODUCING WELL
- ✕ PLUGGED & ABANDONED WELL
- SWD WELL
- PROPOSED UNIT BOUNDARY
- X FRESH WATER SOURCES
- 1 MILE RADIUS AROUND PROPOSED INJECTORS

EXHIBIT XI.

PERMIAN

Treating Chemicals, Inc.

P. O. BOX 815
TATUM, NM 88267
PHONE (505) 398-4111

WATER ANALYSIS REPORT

Company Murphy Operating Corporation Date Samples 8/15/89
Field Chaveroo County Roosevelt
Lease Tucker Water Well State New Mexico
Well Southwest 1/4 mile Sec. 23-T7S-R33E Formation _____
Type of Water Fresh Water, B/D _____
Sampling Point Wellhead Sampled By Don Harmon

DISSOLVED SOLIDS

CATIONS	mg/l		meq/l
Sodium, Na+(Calc)	<u>161</u>	<u>÷ 23</u>	<u>7</u>
Calcium, Ca++	<u>250</u>	<u>÷ 20</u>	<u>20</u>
Magnesium, Mg++	<u>18</u>	<u>÷ 12.2</u>	<u>1</u>
Barium, Ba++	<u>-0-</u>	<u>÷ 68.7</u>	<u>-0-</u>
Iron, Fe (Total	_____		_____
_____	_____		_____
_____	_____		_____

OTHER PROPERTIES

PH 8.0
Specific Gravity
1.000
H₂S Negative
Total Dissolved
Solids 1597
Total Hardness
700

ANIONS

Chloride, Cl-	<u>600</u>	<u>÷ 35.5</u>	<u>17</u>
Sulfate, So ₄ =	<u>275</u>	<u>÷ 48</u>	<u>6</u>
Carbonate, Co ₃ =	<u>-0-</u>	<u>÷ 30</u>	<u>-0-</u>
Bicarbonate, HCo ₃ -	<u>293</u>	<u>÷ 61</u>	<u>5</u>
_____	_____		_____

Remarks and Recommendations _____

PERMIAN

Treating Chemicals, Inc.

P. O. BOX 815
TATUM, NM 88267
PHONE (505) 398-4111

WATER ANALYSIS REPORT

Company Murphy Operating Corporation Date Samples 8/10/88
Field _____ County _____
Lease 50 yds south of CV #3 State NM
Well Sample 3 - Sec 35 Formation Fresh Water
Type of Water Fresh Water Water, B/D FW
Sampling Point Well Sampled By Nailon

DISSOLVED SOLIDS

CATIONS	mg/l		meq/l
Sodium, Na+(Calc)	<u>1058</u>	<u>÷ 23</u>	<u>46</u>
Calcium, Ca++	<u>280</u>	<u>÷ 20</u>	<u>14</u>
Magnesium, Mg++	<u>49</u>	<u>÷ 12.2</u>	<u>4</u>
Barium, Ba++		<u>÷ 68.7</u>	
Iron, Fe (Total			

OTHER PROPERTIES

PH 7.4
Specific Gravity 1.0
H₂S Neg
Total Dissolved Solids 3821
Total Hardness 900

ANIONS

Chloride, Cl-	<u>2000</u>	<u>÷ 35.5</u>	<u>56</u>
Sulfate, So ₄ =	<u>300</u>	<u>÷ 48</u>	<u>6</u>
Carbonate, Co ₃ =	<u>-0-</u>	<u>÷ 30</u>	<u>-0-</u>
Bicarbonate, HCo ₃ -	<u>134</u>	<u>÷ 61</u>	<u>2</u>

Remarks and Recommendations _____

PERMIAN

Treating Chemicals, Inc.

P. O. BOX 815
TATUM, NM 88267
PHONE (505) 398-4111

WATER ANALYSIS REPORT

Company Murphy Operating Corporation Date Samples 8/10/88
Field _____ County _____
Lease Sec 35 Sample 8 State NM
Well East Well Formation F/W
Type of Water F/W Water, B/D _____
Sampling Point _____ Sampled By Nailon

DISSOLVED SOLIDS

CATIONS	mg/l		meq/l
Sodium, Na+(Calc)	<u>230</u>	<u>÷ 23</u>	<u>10</u>
Calcium, Ca++	<u>400</u>	<u>÷ 20</u>	<u>20</u>
Magnesium, Mg++	<u>170</u>	<u>÷ 12.2</u>	<u>14</u>
Barium, Ba++	_____	<u>÷ 68.7</u>	_____
Iron, Fe (Total	<u>-0-</u>		
_____	_____		_____
_____	_____		_____

OTHER PROPERTIES

PH 7.5
Specific Gravity _____
1.0
H₂S Neg
Total Dissolved _____
Solids 6133
Total Hardness _____
1700

ANIONS

Chloride, Cl-	<u>1000</u>	<u>÷ 35.5</u>	<u>28</u>
Sulfate, So ₄ =	<u>675</u>	<u>÷ 48</u>	<u>14</u>
Carbonate, Co ₃ =	<u>-0-</u>	<u>÷ 30</u>	<u>-0-</u>
Bicarbonate, HCo ₃ -	<u>146</u>	<u>÷ 61</u>	<u>2</u>
_____	_____		_____

Remarks and Recommendations _____

PERMIAN

Treating Chemicals, Inc.

P. O. BOX 815
TATUM, NM 88267
PHONE (505) 398-4111

WATER ANALYSIS REPORT

Company Murphy Operating Corporation Date Samples 8/10/88
Field _____ County _____
Lease Sec. 36 T7S-R33E State NM
Well 100 yds. north Myco K #2 Formation F/W
Type of Water F/W Water, B/D _____
Sampling Point Well Sampled By Nailon

DISSOLVED SOLIDS

CATIONS	mg/l		meq/l
Sodium, Na+(Calc)	<u>1219</u>	<u>÷ 23</u>	<u>53</u>
Calcium, Ca++	<u>240</u>	<u>÷ 20</u>	<u>12</u>
Magnesium, Mg++	<u>-0-</u>	<u>÷ 12.2</u>	<u>-0-</u>
Barium, Ba++		<u>÷ 68.7</u>	
Iron, Fe (Total			

OTHER PROPERTIES

PH 7.5
Specific Gravity 1.0
H2S Neg
Total Dissolved Solids 3966
Total Hardness 600

ANIONS

Chloride, Cl-	<u>2000</u>	<u>÷ 35.5</u>	<u>56</u>
Sulfate, So4=	<u>300</u>	<u>÷ 48</u>	<u>6</u>
Carbonate, Co3=	<u>-0-</u>	<u>÷ 30</u>	<u>-0-</u>
Bicarbonate, HCo3-	<u>207</u>	<u>÷ 61</u>	<u>3</u>

Remarks and Recommendations _____

EXHIBIT XIII.

PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
ROOSEVELT COUNTY, NEW MEXICO

SUPPLEMENTAL DATA REQUIRED BY FORM C-108

LEASEHOLD OPERATORS WITHIN ONE-HALF MILE OF PROPOSED UNIT AREA.

Mr. Clifford R. Hjelm, President
Mims Texas Oil & Gas Company
7060 South Yale Avenue, Suite 707
Tulsa, Oklahoma 74136

Ms. Gayla Grubeck
Milford Oil Company
Milford Pipe and Supply
Post Office Box 427
Tatum, New Mexico 88267

Mr. Terry L. Savage, Vice President-Land
Snyder Oil Company
1801 California Street, Suite 3500
Denver, Colorado 80202

Mr. David Christian, Senior Petroleum Landman
Kerr-McGee Corporation
Kerr-McGee Center
Oklahoma City, Oklahoma 73125

OWNER OF SURFACE OF THE LAND UPON WHICH PROPOSED INJECTORS ARE LOCATED.

Mr. Floyd O. Prando, Director
Oil and Gas Division
State of New Mexico
Commissioner of Public Lands
Post Office Box 1148
Santa Fe, New Mexico 87504-1148

Mr. Thomas Edd Tucker
South Star Route
Elida, New Mexico 88116

Mr. Thomas Edd Tucker
c/o Mr. David L. Stone
The Portales National Bank
Post Office Drawer 88
Portales, New Mexico 88130

Mr. Dale W. Brown
South Star Route
Elida, New Mexico 88116

Mr. Francis R. Cherry, Jr., District Manager
United States of America
Bureau of Land Management
Post Office Box 1397
Roswell, New Mexico 88202-1397

Ms. Louise R. Metzger
216 Smith Road
El Paso, Texas 79907

MURPHY OPERATING CORPORATION
UNITED BANK PLAZA, SUITE 300
400 NORTH PENNSYLVANIA AVENUE
POST OFFICE BOX 2648
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE
505 623-7210

August 9, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Clifford R. Hjelm, President
Mims Texas Oil & Gas Company
7060 South Yale Avenue, Suite 707
Tulsa, Oklahoma 74136

Re: NOTICE OF PROPOSED UNIT:
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Dear Cliff:

Our records indicate that your company is the operator of an oil and gas lease or leases within one-half mile of the proposed designated area of the captioned Unit. Pursuant to the rules of the New Mexico Oil Conservation Division requiring notice to offset operators, we have enclosed herewith for your information a copy of the "Application of Murphy Operating Corporation for Approval of a Unit and for Authority to Institute a Waterflood Project" for the proposed unit.

We have requested a hearing on Wednesday, September 6th, 1988 at 8:00 A.M. in the offices of the New Mexico Oil Conservation Division, Santa Fe, New Mexico. Your appearance at this hearing is not required. Please let me know if you have any questions.

Sincerely,

MURPHY OPERATING CORPORATION

Ann Murphy Ezzell

Ann Murphy Ezzell, Esq.
Chairman and Chief Executive Officer

AME:nrr

Enclosure: Application.

Is your RETURN ADDRESS
completed on the reverse side?

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested. 1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery (Extra charge)	
3. Article Addressed to: Mr. Clifford R. Hjelm, President Mims Texas Oil & Gas Company 7060 South Yale Avenue, Suite 707 Tulsa, Oklahoma 74136	4. Article Number P 140 462 652 Type of Service: ☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail ☐ Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X <i>Jana Aouenson</i>	
7. Date of Delivery <i>8-11-89</i>	

PS Form 3811, Mar. 1988

U.S.G.P.O. 1988-212-865
Jennifer Offset

DOMESTIC RETURN RECEIPT

Thank you for using
Return Receipt Service.

MURPHY OPERATING CORPORATION
UNITED BANK PLAZA, SUITE 300
400 NORTH PENNSYLVANIA AVENUE
POST OFFICE BOX 2648
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE
505 623-7210

August 9, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Gayla Grubeck
Milford Oil Company
Milford Pipe and Supply
Post Office Box 427
Tatum, New Mexico 88267

Re: NOTICE OF PROPOSED UNIT:
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Dear Ms. Grubeck:

Our records indicate that your company is the operator of an oil and gas lease or leases within one-half mile of the proposed designated area of the captioned Unit. Pursuant to the rules of the New Mexico Oil Conservation Division requiring notice to offset operators, we have enclosed herewith for your information a copy of the "Application of Murphy Operating Corporation for Approval of a Unit and for Authority to Institute a Waterflood Project" for the proposed unit.

We have requested a hearing on Wednesday, September 6th, 1988 at 8:00 A.M. in the offices of the New Mexico Oil Conservation Division, Santa Fe, New Mexico. Your appearance at this hearing is not required. Please let me know if you have any questions.

Sincerely,

MURPHY OPERATING CORPORATION

Ann Murphy Ezzell

Ann Murphy Ezzell, Esq.
Chairman and Chief Executive Officer

AME:nrr

Enclosure: Application.

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.	
1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge)	2. ☐ Restricted Delivery (Extra charge)
3. Article Addressed to: Ms Gayla Grubeck Milford Oil Company Milford Pipe and Supply Post Office Box 427 Tatum, New Mexico 88267	4. Article Number P 140 462 653 Type of Service: ☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail ☐ Return Receipt for Merchandise Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .
5. Signature - Address X <i>[Signature]</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery 8-10-89 <i>[Signature]</i>	

PS Form 3811, Mar. 1988

* U.S.G.P.O. 1988-212-865

DOMESTIC RETURN RECEIPT

Jennifer Offset

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using
Return Receipt Service

MURPHY OPERATING CORPORATION
UNITED BANK PLAZA, SUITE 300
400 NORTH PENNSYLVANIA AVENUE
POST OFFICE BOX 2648
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE
505 623-7210

August 9, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Terry L. Savage, Vice President-Land
Snyder Oil Company
1801 California Street, Suite 3500
Denver, Colorado 80202

Re: NOTICE OF PROPOSED UNIT:
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Dear Terry:

Our records indicate that your company is the operator of an oil and gas lease or leases within one-half mile of the proposed designated area of the captioned Unit. Pursuant to the rules of the New Mexico Oil Conservation Division requiring notice to offset operators, we have enclosed herewith for your information a copy of the "Application of Murphy Operating Corporation for Approval of a Unit and for Authority to Institute a Waterflood Project" for the proposed unit.

We have requested a hearing on Wednesday, September 6th, 1988 at 8:00 A.M. in the offices of the New Mexico Oil Conservation Division, Santa Fe, New Mexico. Your appearance at this hearing is not required. Please let me know if you have any questions.

Sincerely,

MURPHY OPERATING CORPORATION

Ann Murphy Ezzell

Ann Murphy Ezzell, Esq.
Chairman and Chief Executive Officer

AME:nrr

Enclosure: Application.

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested. 1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery (Extra charge)	
3. Article Addressed to: Mr. Terry L. Savage, Vice President-Land Snyder Oil Company 1801 California Street, Suite 3500 Denver, Colorado 80202	4. Article Number P140 462 651 Type of Service: ☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail ☐ Return Receipt for Merchandise Always obtain signature of addressee or Agent and DATE DELIVERED.
5. Signature - Address X	6. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X <i>Shirley H. Haddock</i>	
7. Date of Delivery AUG 14 1989	

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using
Return Receipt Service.

MURPHY OPERATING CORPORATION
UNITED BANK PLAZA, SUITE 300
400 NORTH PENNSYLVANIA AVENUE
POST OFFICE BOX 2648
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE
505 623-7210

August 9, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David Christian, Senior Petroleum Landman
Kerr-McGee Corporation
Kerr-McGee Center
Oklahoma City, Oklahoma 73125

Re: NOTICE OF PROPOSED UNIT:
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Dear Dave:

Our records indicate that your company is the operator of an oil and gas lease or leases within one-half mile of the proposed designated area of the captioned Unit. Pursuant to the rules of the New Mexico Oil Conservation Division requiring notice to offset operators, we have enclosed herewith for your information a copy of the "Application of Murphy Operating Corporation for Approval of a Unit and for Authority to Institute a Waterflood Project" for the proposed unit.

We have requested a hearing on Wednesday, September 6th, 1988 at 8:00 A.M. in the offices of the New Mexico Oil Conservation Division, Santa Fe, New Mexico. Your appearance at this hearing is not required. Please let me know if you have any questions.

Sincerely,

MURPHY OPERATING CORPORATION

Ann Murphy Ezzell

Ann Murphy Ezzell, Esq.
Chairman and Chief Executive Officer

AME:nrr

Enclosure: Application.

Is your RETURN ADDRESS
completed on the reverse side?

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3. Article Addressed to: Mr. David Christian, Senior Petroleum Landman Kerr-McGee Corporation Kerr-McGee Center Oklahoma City, Oklahoma 73125	4. Article Number P 140 462 650 Type of Service: ☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail ☐ Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED
5. Signature — Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X <i>L. Well...</i>	
7. Date of Delivery	

Thank you for using
Return Receipt Service.

MURPHY OPERATING CORPORATION
UNITED BANK PLAZA, SUITE 300
400 NORTH PENNSYLVANIA AVENUE
POST OFFICE BOX 2648
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE
505 623-7210

August 9, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Floyd O. Prando, Director
Oil and Gas Division
State of New Mexico
Commissioner of Public Lands
Post Office Box 1148
Santa Fe, New Mexico 87504-1148
Attention: Ms. Susan Howard

Re: NOTICE OF PROPOSED UNIT:
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Dear Ms. Howard:

Our records indicate that you are the owner of surface lands within the designated area of the proposed Jennifer Chaveroo San Andres Unit. Pursuant to the rules of the New Mexico Oil Conservation Division requiring notice to surface owners upon whose lands proposed injection wells are to be located, we have enclosed herewith for your information a copy of the "Application of Murphy Operating Corporation for Approval of a Unit and for Authority to Institute a Waterflood Project" for the proposed unit.

We have requested a hearing on Wednesday, September 6th, 1988 at 8:00 A.M. in the offices of the New Mexico Oil Conservation Division, Santa Fe, New Mexico. Your appearance at this hearing is not required. Please let me know if you have any questions.

Sincerely,

MURPHY OPERATING CORPORATION

Ann Murphy Ezzell

Ann Murphy Ezzell, Esq.
Chairman and Chief Executive Officer

AME:nrr

Enclosure: Application.

Is your RETURN ADDRESS completed on the reverse side?

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to:
Mr. Floyd O. Prando, Director
Oil and Gas Division
State of New Mexico
Commissioner of Public Lands
Post Office Box 1148
Santa Fe, New Mexico 87504-1148
ATTN: Ms. Susan Howard

4. Article Number
P 663 398 316

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

5. Signature - Addressee
X *Mike Howard*

6. Signature - Agent
X

7. Date of Delivery
AUG 10 1989

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Mar. 1988 U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

Thank you for using
Return Receipt Service.

MURPHY OPERATING CORPORATION
UNITED BANK PLAZA, SUITE 300
400 NORTH PENNSYLVANIA AVENUE
POST OFFICE BOX 2648
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE
505 623-7210

August 9, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Thomas Edd Tucker
South Star Route
Elida, New Mexico 88116

Re: NOTICE OF PROPOSED UNIT:
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Dear Tommy:

Our records indicate that you are the owner of surface lands within the designated area of the proposed Jennifer Chaveroo San Andres Unit. Pursuant to the rules of the New Mexico Oil Conservation Division requiring notice to surface owners upon whose lands proposed injection wells are to be located, we have enclosed herewith for your information a copy of the "Application of Murphy Operating Corporation for Approval of a Unit and for Authority to Institute a Waterflood Project" for the proposed unit.

We have requested a hearing on Wednesday, September 6th, 1988 at 8:00 A.M. in the offices of the New Mexico Oil Conservation Division, Santa Fe, New Mexico. Your appearance at this hearing is not required. Please let me know if you have any questions.

Sincerely,

MURPHY OPERATING CORPORATION

Ann Murphy Ezzell

Ann Murphy Ezzell, Esq.
Chairman and Chief Executive Officer

AME:nrr

Enclosure: Application.

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completed on the reverse side?

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3. Article Addressed to: Mr. Thomas Edd Tucker South Star Route Elida, New Mexico 88116	4. Article Number P 663 398 317 Type of Service: ☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail ☐ Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X	
7. Date of Delivery	

PS Form 3811, Mar. 1988

U.S.G.P.O. 1988-212-865

DOMESTIC RETURN RECEIPT

Thank you for using
Return Receipt Service

MURPHY OPERATING CORPORATION
UNITED BANK PLAZA, SUITE 300
400 NORTH PENNSYLVANIA AVENUE
POST OFFICE BOX 2648
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE
505 623-7210

August 9, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Thomas Edd Tucker
c/o Mr. David L. Stone
The Portales National Bank
Post Office Drawer 88
Portales, New Mexico 88130

Re: NOTICE OF PROPOSED UNIT:
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Dear Mr. Stone:

Our records indicate that you are the owner of surface lands within the designated area of the proposed Jennifer Chaveroo San Andres Unit. Pursuant to the rules of the New Mexico Oil Conservation Division requiring notice to surface owners upon whose lands proposed injection wells are to be located, we have enclosed herewith for your information a copy of the "Application of Murphy Operating Corporation for Approval of a Unit and for Authority to Institute a Waterflood Project" for the proposed unit.

We have requested a hearing on Wednesday, September 6th, 1988 at 8:00 A.M. in the offices of the New Mexico Oil Conservation Division, Santa Fe, New Mexico. Your appearance at this hearing is not required. Please let me know if you have any questions.

Sincerely,

MURPHY OPERATING CORPORATION

Ann Murphy Ezzell

Ann Murphy Ezzell, Esq.
Chairman and Chief Executive Officer

AME:nrr

Enclosure: Application.

Is your RETURN ADDRESS
completed on the reverse side?

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested. 1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery (Extra charge)	
3. Article Addressed to: Mr. Thomas Edd Tucker c/o Mr. David L. Stone The Portales National Bank Post Office Drawer 88 Portales, New Mexico 88130	4. Article Number P 663 398 318 Type of Service: ☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail ☐ Return Receipt for Merchandise Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .
5. Signature - Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature Agent X <i>La Venus Allison</i>	
7. Date of Delivery <i>8-10-89</i>	

PS Form 3811, Mar. 1988

* U.S.G.P.O. 1988-212-865

DOMESTIC RETURN RECEIPT

JENNIFER/SURFACE

Thank you for using
Return Receipt Service.

MURPHY OPERATING CORPORATION
UNITED BANK PLAZA, SUITE 300
400 NORTH PENNSYLVANIA AVENUE
POST OFFICE BOX 2648
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE
505 623-7210

August 9, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Dale W. Brown
South Star Route
Elida, New Mexico 88116

Re: NOTICE OF PROPOSED UNIT:
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Dear Mr. Brown:

Our records indicate that you are the owner of surface lands within the designated area of the proposed Jennifer Chaveroo San Andres Unit. Pursuant to the rules of the New Mexico Oil Conservation Division requiring notice to surface owners upon whose lands proposed injection wells are to be located, we have enclosed herewith for your information a copy of the "Application of Murphy Operating Corporation for Approval of a Unit and for Authority to Institute a Waterflood Project" for the proposed unit.

We have requested a hearing on Wednesday, September 6th, 1988 at 8:00 A.M. in the offices of the New Mexico Oil Conservation Division, Santa Fe, New Mexico. Your appearance at this hearing is not required. Please let me know if you have any questions.

Sincerely,

MURPHY OPERATING CORPORATION

Ann Murphy Ezzell

Ann Murphy Ezzell, Esq.
Chairman and Chief Executive Officer

AME:nrr

Enclosure: Application.

Is your RETURN ADDRESS
completed on the reverse side?

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.	
1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge)	2. ☐ Restricted Delivery (Extra charge)
3. Article Addressed to: Mr. Dale W. Brown South Star Route HC 60 Box 40 Elida, New Mexico 88116 *	4. Article Number P 663 398 319
Type of Service: ☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail ☐ Return Receipt for Merchandise	
Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .	
5. Signature - Address X <i>Dale W Brown</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery	

Thank you for using
Return Receipt Service.

MURPHY OPERATING CORPORATION
UNITED BANK PLAZA, SUITE 300
400 NORTH PENNSYLVANIA AVENUE
POST OFFICE BOX 2648
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE
505 623-7210

August 9, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Francis R. Cherry, Jr., District Manager
United States of America
Bureau of Land Management
Post Office Box 1397
Roswell, New Mexico 88202-1397
Attention: Mr. Armando Lopez

Re: NOTICE OF PROPOSED UNIT:
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Dear Mr. Cherry:

Our records indicate that you are the owner of surface lands within the designated area of the proposed Jennifer Chaveroo San Andres Unit. Pursuant to the rules of the New Mexico Oil Conservation Division requiring notice to surface owners upon whose lands proposed injection wells are to be located, we have enclosed herewith for your information a copy of the "Application of Murphy Operating Corporation for Approval of a Unit and for Authority to Institute a Waterflood Project" for the proposed unit.

We have requested a hearing on Wednesday, September 6th, 1988 at 8:00 A.M. in the offices of the New Mexico Oil Conservation Division, Santa Fe, New Mexico. Your appearance at this hearing is not required. Please let me know if you have any questions.

Sincerely,

MURPHY OPERATING CORPORATION

Ann Murphy Ezzell

Ann Murphy Ezzell, Esq.
Chairman and Chief Executive Officer

AME:nrr
Enclosure: Application.

Is your RETURN ADDRESS
completed on the reverse side?

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3. Article Addressed to: Mr. Francis R. Cherry Jr., District Manager United States of America Bureau of Land Management Post Office Box 1397 Roswell, New Mexico 88202-1397	4. Article Number P 663 398 320 Type of Service: ☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail ☐ Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Addressee X <i>Armando Lopez</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X <i>Ann Murphy Ezzell</i>	
7. Date of Delivery 8-11-89	

PS Form 3811, Mar. 1988

* U.S.G.P.O. 1988-212-865

DOMESTIC RETURN RECEIPT

JENNIFER/SURFACE

Thank you for using
Return Receipt Service.

MURPHY OPERATING CORPORATION
UNITED BANK PLAZA, SUITE 300
400 NORTH PENNSYLVANIA AVENUE
POST OFFICE BOX 2648
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE
505 623-7210

August 9, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Louise R. Metzger
216 Smith Road
El Paso, Texas 79907

Re: NOTICE OF PROPOSED UNIT:
Proposed Jennifer Chaveroo San Andres Unit
Roosevelt County, New Mexico

Dear Ms. Metzger:

Our records indicate that you are the owner of surface lands within the designated area of the proposed Jennifer Chaveroo San Andres Unit. Pursuant to the rules of the New Mexico Oil Conservation Division requiring notice to surface owners upon whose lands proposed injection wells are to be located, we have enclosed herewith for your information a copy of the "Application of Murphy Operating Corporation for Approval of a Unit and for Authority to Institute a Waterflood Project" for the proposed unit.

We have requested a hearing on Wednesday, September 6th, 1988 at 8:00 A.M. in the offices of the New Mexico Oil Conservation Division, Santa Fe, New Mexico. Your appearance at this hearing is not required. Please let me know if you have any questions.

Sincerely,

MURPHY OPERATING CORPORATION

Ann Murphy Ezzell

Ann Murphy Ezzell, Esq.
Chairman and Chief Executive Officer

AME:nrr

Enclosure: Application.

Is your RETURN ADDRESS
completed on the reverse side?

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested. 1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery (Extra charge)	
3. Article Addressed to: Ms. Louise R. Metzger 216 Smith Road El Paso, Texas 79907	4. Article Number P 663 398 321 Type of Service: ☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail ☐ Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Address X <i>Louise Metzger</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery <i>8-12-89 An</i>	

PS Form 3811, Mar. 1988

* U.S.G.P.O. 1988-212-865

DOMESTIC RETURN RECEIPT

JENNIFER/SURFACE

Thank you for using
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ENGINEERING AND GEOLOGIC REPORT
July 15, 1989

Proposed Jennifer Chaveroo San Andres Unit
Chaveroo San Andres Field
Roosevelt County, New Mexico

I. SAN ANDRES REGIONAL GEOLOGY. The San Andres Formation is one of the most prolific hydrocarbon-bearing horizons of the Permian Basin. It consists of a cyclic sequence of shallow-water carbonates and evaporites which progressed across the Northwest Shelf toward the Midland and Delaware Basins. San Andres production exists through the vertical stacking of porous dolomitic reservoirs. Stratigraphic trapping of hydrocarbons results from porosity pinch-outs defined by the degree of dolomitization and anhydrite plugging, both vertically near the top of depositional cycles, and on a regional scale. Stratigraphic trapping, combined with subtle structural nosing and changes in dip, define the limits of production. Reservoir zones are regionally correlatable and mappable. Major productive trends pinch out northward onto the Matador Arch causing this feature to be a major influence on San Andres deposition and production.

II. STRATIGRAPHY. At its type locality in the San Andres Mountains of New Mexico, the San Andres Formation consists of a 32 foot (10 meters) thick basal yellowish sandstone and 578 foot (176 meters) of overlying dark-gray to black petroliferous limestone (Lee and Girty, 1909; Kottlowski et al., 1956; Gratton and LeMay, 1969). This section apparently corresponds to the lower half of the uneroded subsurface San Andres of the Northwest Shelf (Kottlowski, et al., 1956; Kinney, 1969).

The San Andres consists of interbedded dolomites, anhydrites, and minor limestones, which directly overlie the sandy anhydritic dolomite of the Glorietta and Yeso formations (Leonardian). The San Andres is directly overlain by the evaporitic dolomites of the Grayburg Formation of the Artesia/White Horse Group (upper-middle Guadalupian).

The San Andres Formation over much of the Northwest Shelf can be divided into upper and lower parts based on the occurrence of a regionally correlatable marker bed, a silt-stone 5-10 foot (1.5-3 meters) thick, known as the "Pi" marker, which typically occurs 400-650 feet (122-198 meters) below the formation top. From bottom to top, the lower part of the San Andres, which may be up to 800 feet (244 meters) thick, is a large-scale shoaling depositional cycle. It is formed of open-marine shelf deposits, overlain by a thick package of restricted shelf and tidal-flat deposits, and capped by supratidal deposits. Depositional facies of the San Andres Formation have been previously described in detail (Gratton and LeMay, 1969; Silver and Todd, 1969; Chuber and Pusey, 1972; Meissner, 1972; Todd, 1976; Dutton et al., 1979; Hafner, 1979; Ramondetta, 1982). This regressive sequence of deposits represents progradation of facies to the south across the Northwest Shelf and toward the adjacent basins.

The cyclic nature of the restricted shelf and tidal-flat deposits of the lower San Andres has formed stratigraphic traps whose mechanism is the occurrence of impermeable anhydrite and tight dolomites between vertically stacked porosity zones commonly about 50 feet (15 meters) thick (Gratton and LeMay, 1969; Pitt and Scott, 1981; Ramondetta, 1982). The anhydrite layer is thicker to the north (updip), providing an impermeable regional porosity plug that parallels the deeper structural trend of the Matador Arch.

III. POROSITY ZONES. Eight porosity zones are defined at various depths below the Pi marker. Regionally, these zones represent, from bottom to top, cyclic deposition of carbonates and evaporites which become increasingly evaporitic upward through the section.

Zones 1 through 5 extend across the Northwest Shelf to their regional pinch-out against the Matador Arch. The reservoir zones correlate to anhydrite and anhydrite-plugged dolomites facies farther north (Gratton and LeMay, 1969; Pitt and Scott, 1981). Reservoir zones are stacked, with increasingly shallower production located farther southward. Zones 2 through 4 which comprise the productive interval are major hydrocarbon-producing zones and pinch out north and parallel to the Matador Arch. Dip cross-sections of the San Andres show that the deeper porous zones 7 and 8 are regionally extensive across the Northwest Shelf and Matador Arch. Although zones 7 and 8 are typically porous, the porosity occurs in a water-saturated dolomitic limestone which has not proven productive.

IV. STRUCTURAL INFLUENCES. Most San Andres fields on the Northwest Shelf are primarily stratigraphic traps, controlled by a combination of extensive dolomitization and anhydrite plugging. However, subtle structural elements on both a local and regional scale have some bearing on the localization of hydrocarbons in the San Andres Formation. Subtle structural nosing and changes in dip are important in localizing hydrocarbons in the porous reservoir zones (Gratton and LeMay, 1969). Gratton and LeMay showed that the Chaveroo field of Roosevelt County, New Mexico, results from a combination of stratigraphic, structural, and hydrodynamic interaction. The field produces from three vertically-stacked dolomite reservoirs on two subtle structural noses. Production is limited on the eastern edge of the field by porosity pinch-outs associated with steepening of dip.

The subtle structural influences evident on a local scale are also important on a regional scale. Two important structural features have a marked influence on San Andres production on the Northwest Shelf: a) the Matador Arch; and b) the shallow expression of the Wolfcamp-Pennsylvanian Shelf edge of the Midland Basin. The Matador Arch was a positive feature throughout much of the Mississippian and Pennsylvanian; undoubtedly, it remained a regional high even in the Late Permian. The southern-most wells in the Slaughter-Levelland Field produce from several porosity zones. These zones pinch out regionally updip onto the Matador Arch -- a pattern that is repeated and typifies the Northwest Shelf. All productive San Andres reservoirs that are major hydrocarbon producers pinch out onto this structural feature, restricting production in an east-west trend across the Northwest Shelf which parallels the Arch. Whereas, porous zones developed north of the Arch are stratigraphically deeper and typically produce water (Pitt and Scott, 1981). In addition, the percentage of halite increases north of the Matador Arch. Indeed, the Matador Arch probably marks the southern extent of major halite deposition and the northern extent of reservoir-facies deposition.

V. RESERVOIR CHARACTERISTICS. Core analysis porosities in the Chaveroo Field range up to 20 percent, but generally average between 6 and 8%. Available core analyses indicate that permeabilities in the Field are less than 1 millidarcy. However, core data is extremely limited and, therefore, existing core information may not be representative of reservoir characteristics throughout the Field. The high cumulative production from certain existing wells supported by volumetric engineering analysis suggests higher and more continuous permeabilities throughout portions of the Chaveroo Field. This is particularly applicable to the wells within the proposed Unit Area.

Water-oil contacts in San Andres fields are somewhat difficult to determine due to the existence of a broad oil-water transition zone and a possible "tilted" oil-water contact. Typically, oil and water cumulative production is about equal during primary recovery.

Certain Chaveroo Field wells exhibit high initial production and rapid decline to relatively low-rate, flatter decline. This suggests initial fracture production depleting by solution gas drive to matrix permeability production both directly to the well bore and through the fracture system. There is evidence of fracture orientation in a northwest/southeast direction. This can be expected in secondary structural north/south arching considering stress parallelogram analysis.

VI. CHAVEROO SAN ANDRES FIELD. As shown on Exhibit VIII.A., the Chaveroo San Andres Field is located on the county line separating Chaves and Roosevelt Counties, New Mexico. The field name itself is a contraction of Chaves and Roosevelt. The Field, located geologically on the south flank of the Matador Arch on the Northwestern Shelf, was discovered in March, 1965, with the completion of the Champlin Petroleum Company and Warren American Oil Company No. 1 Hondo State. This well was plugged back from a total depth of 9,100 feet to 4,400 feet. The field now has 419 wells. Production is a sour 24° to 28° A.P.I. gravity crude and the cumulative field production was 23,131,431 barrels of oil, 34,070,069 MCF of gas, and 28,100,918 barrels of water as of January 1, 1989. The original discovery was made using a combination of subsurface geology and reflection-seismograph data. Oil production is from a gray-to-brown fine crystalline to granular anhydritic dolomite with fine vuggy inter-crystalline and fracture-type porosity zones located approximately 650 feet below the top of the San Andres of Guadalupian (Permian) age. The Field contains a gross pay section of approximately 200 feet. The Field structure consists primarily of a southward plunging nose. Reservoir conditions are controlled by porosity zones which pinch out updip.

Exhibit VIII.B. contains a geologic report dated November, 1966 prepared by the Roswell Geological Society with attached structural and iso-pach maps. This report summarizes the technical information available fourteen months after the Field was discovered. It is important to note in this Roswell Geological Society report the reported parameters of average reservoir data as follows: 6% porosity, 0.7 md permeability, 26° A.P.I. black sour crude, initial bottom hole pressure of 1340 psi at +140 datum and an average reservoir temperature of 110°F. The current low well production and fluid levels indicate that solution drive primary recovery has depleted reservoir pressure to probably less than 100 psi. The exception to this depleted pressure is in areas of salt water disposal where pressures are often higher.

VII. PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT ("JCSAU"). The JCSAU area has geologic characteristics and reservoir conditions similar or superior to the rest of the Field. It is favored as an area of relatively high per well recovery as shown in Exhibit VIII.H., "Derivation of Tract Participation Factors", attached. Seventy-one (71) useable wells in JCSAU have recovered 4,962,726 barrels of oil to January 1, 1989 or an average of 69,898 barrels of oil per well. The Field average has been 55,206 barrels per well from 419 wells. As indicated in Exhibit VIII.I., "Decline Curves for Wells Within Area of Review", current production is marginal and near economic limit. The proposed Unit formula is based upon 80% total primary production to January 1, 1989 (essentially equates to ultimate primary recovery) plus 15% total useable wells plus 5% total surface acreage. This formula appears to be optimum given engineering and geological considerations.

The limited core data as shown in Exhibit VIII.C., "Core Data", indicates that porosity and permeability in the JCSAU area is generally consistent with that reported by the Roswell Geologic Society Symposium. Note, however, that these cores may not be representative of the overall reservoir characteristics of the JCSAU area because they come from relatively low recovery wells ($\pm$ 29,000 BBL/well) when compared to the cumulative production of $\pm$ 70,000 barrels per well for the average JCSAU well.

Exhibit VIII.D., "Tabulated Summary of Geologic Data," provides information concerning the gross producing section which is generally on the order of 200+ feet of gross thickness.

Exhibit VIII.E., "Structure Map", indicates a southeast plunging monoclinial structure with localized highs in the southwest and northwest portions of Section 35 and the center of Section 19. Higher recovery trends with the strike of the structure until reduced by lower permeability toward the updip pinch out and by higher water saturation in the downdip area.

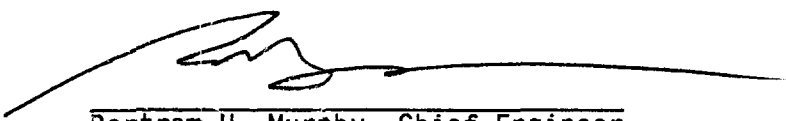
Exhibit VIII.F., "Iso-Cum Base Map", illustrates the cumulative oil production contours. This "iso-cum" mapping method is preferred to the iso-pach map as a tool for evaluating future secondary oil productivity.

Exhibits VIII.G.1 through VIII.G.7., various "Stratigraphic Cross Sections", suggest a general continuity of productive interval in the Unit area.

VIII. SUMMARY. A review of technical data and proposed operational plans indicate that the JCSAU area is similar or superior to the rest of the Chaveroo San Andres Field. The Unit area is typical or superior to numerous other San Andres fields in the Northwest San Andres trend area that have been waterflooded successfully. The proposed operational plans appear to be sound. The unitization and waterflooding of the Unit should: a) protect correlative rights; b) promote the conservation of petroleum; and c) prove beneficial to the interest owners, and county, state and federal treasuries.

IX. RECOMMENDATION. It is recommended that expeditious approval of the Unit be sought and that the proposed waterflood project be commenced as soon as possible.

MURPHY OPERATING CORPORATION



Bertram H. Murphy, Chief Engineer
Registered Professional Engineer,
New Mexico License #10243 and
Texas License #12951.

JENNIFER CHAVEROO SAN ANDRES UNIT

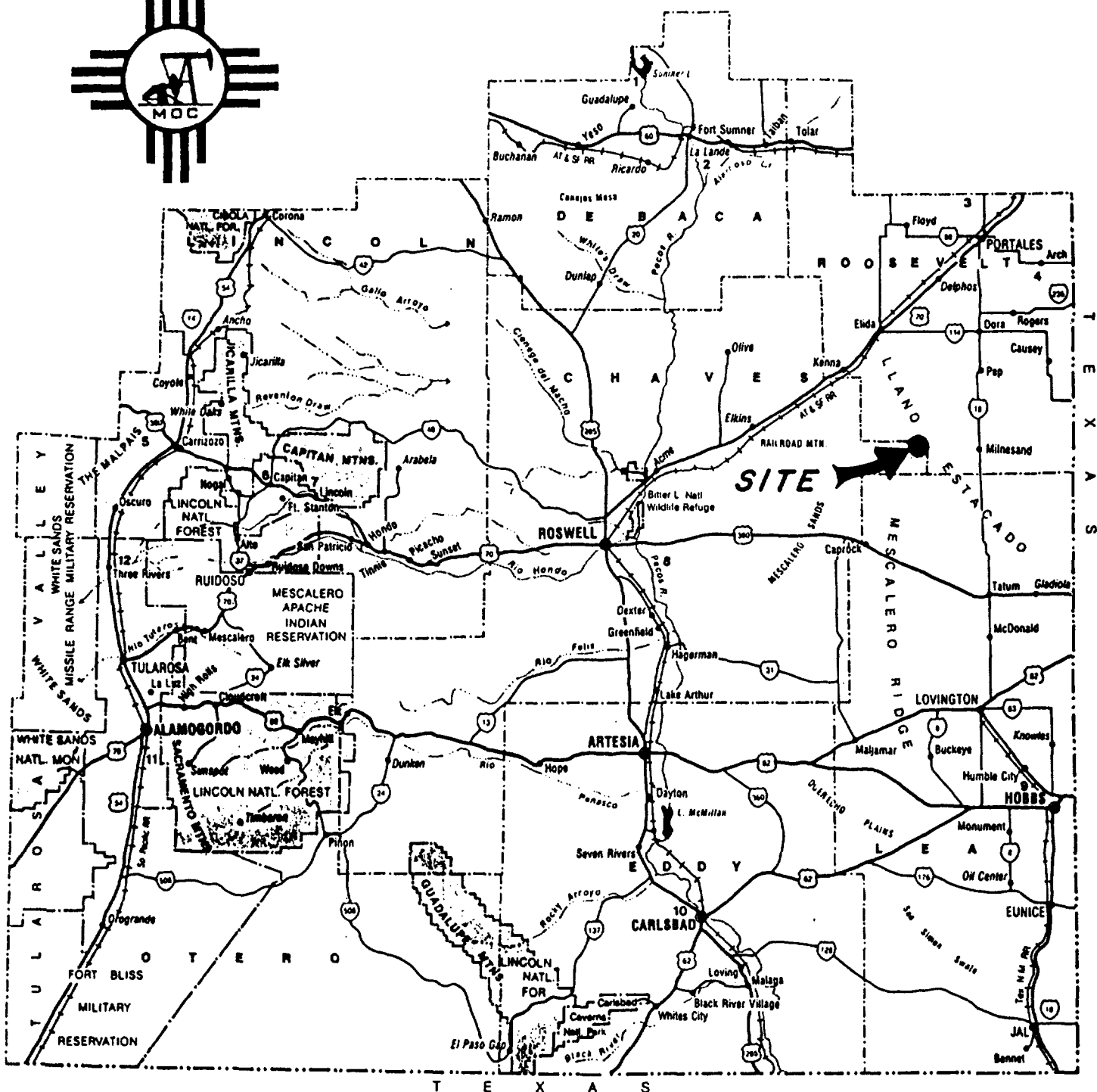
SUPPLEMENTAL DATA REQUIRED BY FORM C-108

INDEX OF EXHIBITS

FILE 3.

- Exhibit VIII. - Engineering and Geological Report - Proposed Jennifer Chaveroo San Andres Unit, prepared by Bert H. Murphy, Registered Professional Petroleum Engineer dated July 15, 1989;
- Exhibit VIII.A. - General Location Map;
- Exhibit VIII.B. - Report dated November, 1966 prepared by Roswell Geological Society Symposium with attached structural and isopachus maps and type log;
- Exhibit VIII.C. - Core Data - "Completion Coregraphs" for the Homme Federal Well No. 3 and for the Wolf Federal Well No. 1 located within the Unit Area; "Completion Coregraph" for the State "AZ" Well No. 2 located in near proximity of Unit in Section 33, T-7-S, R-33-E;
- Exhibit VIII.D. - Tabulated Summary of Geological Data;
- Exhibit VIII.E. - *Structure Map with proposed Unit Area delineated, San Andres Correlation Point.
- Exhibit VIII.F. - *Iso-Cum Base Map with proposed Unit Area delineated, Contour of Cumulative Oil Production to 01/01/89.
- Exhibit VIII.G.1. - *Cross Section A-A' (Northwest-Southeast through Sections 30-29-32);
- Exhibit VIII.G.2. - *Cross Section B-B' (West-East through Sections 20-21);
- Exhibit VIII.G.3. - *Cross Section C-C' (North-South through Sections 8-18-19);
- Exhibit VIII.G.4. - *Cross Section D-D' (West-East through Sections 35-36);
- Exhibit VIII.G.5. - *Cross Section E-E' (North-South through Sections 25-36-2);
- Exhibit VIII.G.6. - *Cross Section F-F' (West-East through Sections 30-29);
- Exhibit VIII.G.7. - *Cross Section G-G' (North-South through Sections 19-30);
- Exhibit VIII.H. - Chart of Derivation of Tract Participation Factors.
- Exhibit VIII.I.1. - Decline Curves for Wells within Unit Area.
- Exhibit VIII.I.2. - Decline Curves for Wells outside Unit Area but within Area of Review.

* See enclosures.



GENERAL LOCATION MAP WATER FLOOD STUDY

MURPHY OPERATING CORPORATION
CHAUEROO SAN ANDRES FIELD

PROPOSED JENNIFER CHAUEROO SAN ANDRES UNIT
ROOSEVELT COUNTY, NEW MEXICO

20 0 20 40 60 Miles

EXHIBIT VIII.A.

ROSWELL GEOLOGICAL SOCIETY SYMPOSIUM

Author: George L. Scott, Jr.
Affiliation: Consulting Geologist
Date: November 1966

Field Name: Chaveroo
Location: T-7,8-S, R-33, 34-E
County & State: Chaves & Roosevelt Counties,
New Mexico

Discovery Well: Champlin Pet. Co. & Warren American Oil Co. #1 Hondo State, SE/4 NE/4
Section 32, T-7-S, R-33-E. Completed 3/20/65
IPP 148 BOPD + 2 BWPD, GOR 810.

Exploration Method Leading to Discovery: 80% subsurface 20% seismic

Pay Zone: Top of field pay is at 4184 (+255)
Formation Name: San Andres Depth & Datum Discovery Well: Top perf in disc. well 4299.
Lithology Description: Tan to brown, fine to medium crystalline dolomite with scattered anhydrite inclusions, and vugular, inter-crystalline and fracture porosity. Most wells complete from 1st to 2nd porosities; scattered wells also perf 3rd porosity. The net porosity is based on a cut-off of 4% and covers only 1st and 2nd porosities. (Cont. under Type Trap)
Approximate average pay: 210 gross 40 net Productive Area 11,000 acres (on Nov. 1, 1966)

Type Trap: Stratigraphic. Porosity and permeability fails up dip along the north and west margin of the field to provide the trap.

Pay Zone (cont. from above). Net porosity map is not a strict net pay map as there are wells where extensive fracturing has lowered the porosity cut-off to 2 1/2%. It also includes porosity in the 2nd porosity interval at the south and southeast field margin that is

Reservoir Data: below the irregular oil-water contact.

6 % Porosity, 7 Md Permeability, 25 % Sw, 16 % So

Oil: 26° API, black, sour

Gas: GOR 400 to 1000

Water: 66,600 Na+K, 27,680 Ca, 4860 Mg, 165,600 Cl, 200 SO₄, 240 HCO₃, Fe

Specific Gravity 1.174 Resistivity .035 ohms @ 110 °F

Initial Field Pressure: 1340 psi @ +140 datum Reservoir Temp. 110°F

Type of Drive: Solution gas

Normal Completion Practices: Set casing through pay and selectively perforate with one shot per interval. Acidize with 2000 gallons of acid, and sand fracture with 30,000 gallons of oil and 30,000 pounds of sand.

Type completion: Both flowing and pumping Normal Well Spacing 40 Acres

Deepest Horizon Penetrated & Depth: Bough "C" at 9100' in the discovery well. At the south end of the field several abandoned Bough "C" wells have been plugged back to the San Andres

Other Producing Formations in Field: None within the area of San Andres production, however, Bough "C" production in the Tobac field adjoins the Chaveroo San Andres field on the south.

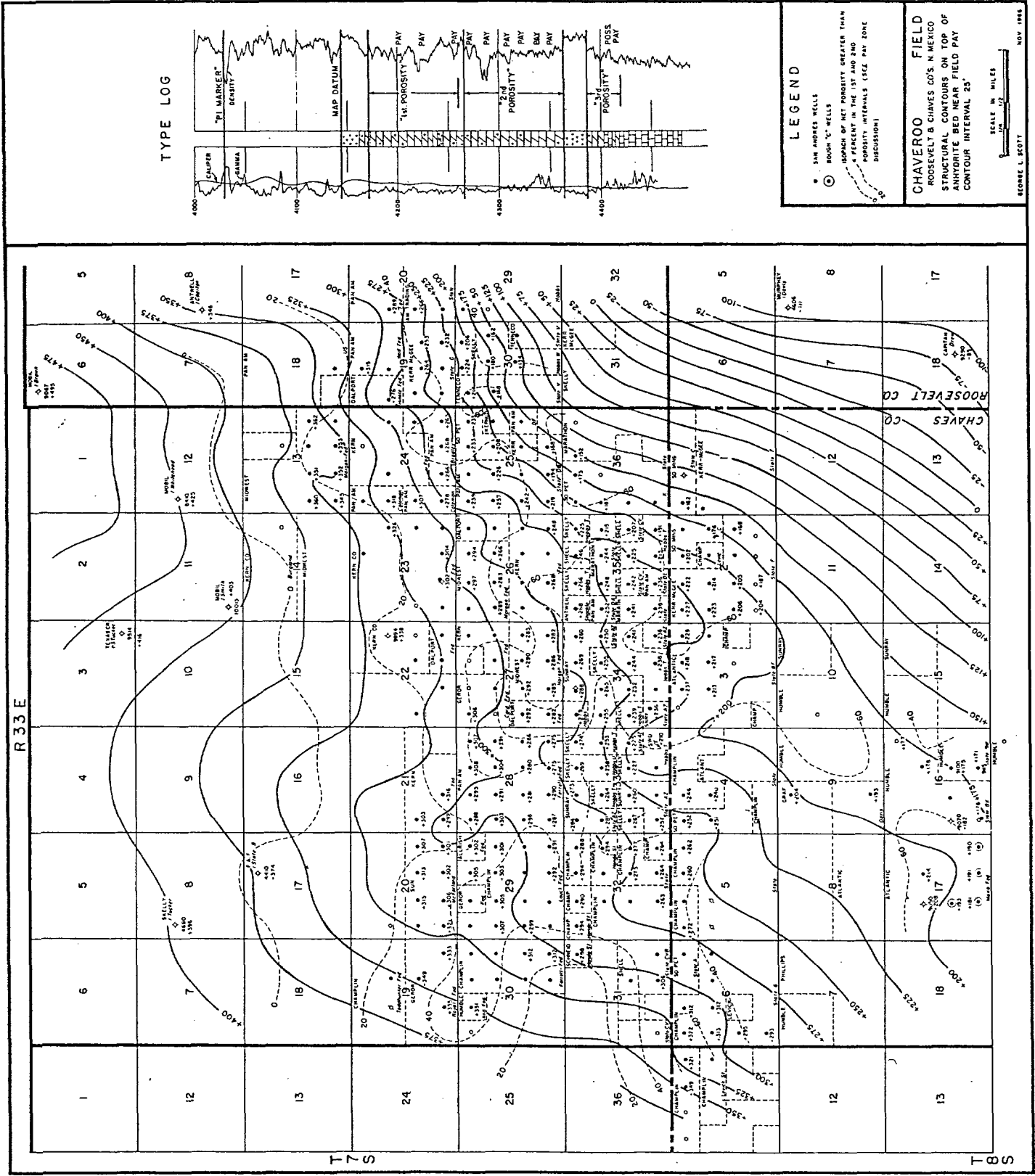
Production Data:

YEAR	TYPE	No. of wells @ yr. end		PRODUCTION OIL IN BARRELS GAS IN MMCF		YEAR	TYPE	No. of wells @ yr. end		PRODUCTION OIL IN BARRELS GAS IN MMCF	
		Prod.	S.I. or Abd.	ANNUAL	CUMULATIVE			Prod.	S.I. or Abd.	ANNUAL	CUMULATIVE
1965	OIL	45		166,896	166,896		OIL				
	GAS			179,400	179,400		GAS				
1966*	OIL	24		1,474,705	1,641,601		OIL				
	GAS			1,084,527	1,263,927		GAS				
	OIL						OIL				
	GAS						GAS				
	OIL						OIL				
	GAS						GAS				

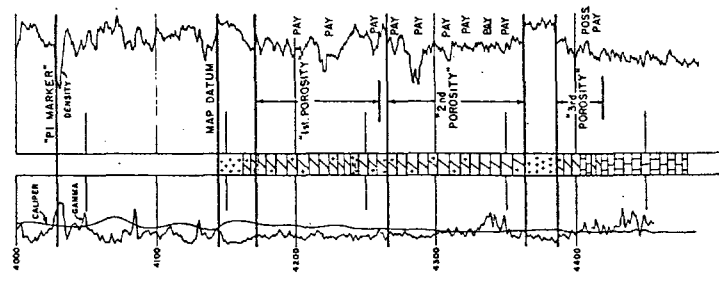
* 1966 production to September 30, 1966.

EXHIBIT VIII. B.

PAGE 1 OF 2



TYPE LOG



LEGEND

- SAN ANDRES WELLS
- BOON "C" WELLS
- BOUND OF NET POROSITY GREATER THAN 4 PERCENT IN THE 1ST AND 2ND POROSITY INTERVALS (SEE PAY ZONE DISCUSSION)

CHAVEROO FIELD
 ROOSEVELT & CHAVES CO'S, N. MEXICO
 STRUCTURAL CONTOURS ON TOP OF
 ANHYDRITE BED NEAR FIELD PAY
 CONTOUR INTERVAL 25'



NOV 1945
 GEORGE L. SCOTT



COMPANY PAN AMERICAN PETROLEUM CORPORATION FILE NO. WP-3-2702
WELL JOYCE WOLF NO. 1 DATE 6-5-66 ENGRS. ROONE
FIELD CHAVEROO FORMATION SAN ANDRES ELEV. _____
COUNTY ROOSEVELT STATE NEW MEXICO ORLG. FLD. WATER BASE MUD CORES DIAMOND 4 3/8"
LOCATION 19-75-34E REMARKS SAMPLED AS DIRECTED BY CLIENT

COMPLETION COREGRAPH

These graphs, reports or interpretations are based on observations and material supplied by the client to whom, and for whose business and confidential use the report is made. The interpretation or reports prepared hereafter are the best judgment of Core Laboratories, Inc. and its officers and employees, assuming no responsibility and making no warranty or representation as to the productivity, pressure, permeability, or porosity of any oil, gas or other material used or to be used in connection with which such report is made or relied upon.



Well #19-07

Completion Date: 07-12-66

Completion

Interval: 4108'-4298'

Perfs:

4268'-4298' (2 JSPF)

4108'-4123' (2 JSPF)

4127'-4214' (2 JSPF)

Initial Treatment:

Acid 2000 G

Frac 30000 #

Initial Potential:

P 97 BOPD

- MCFGPD

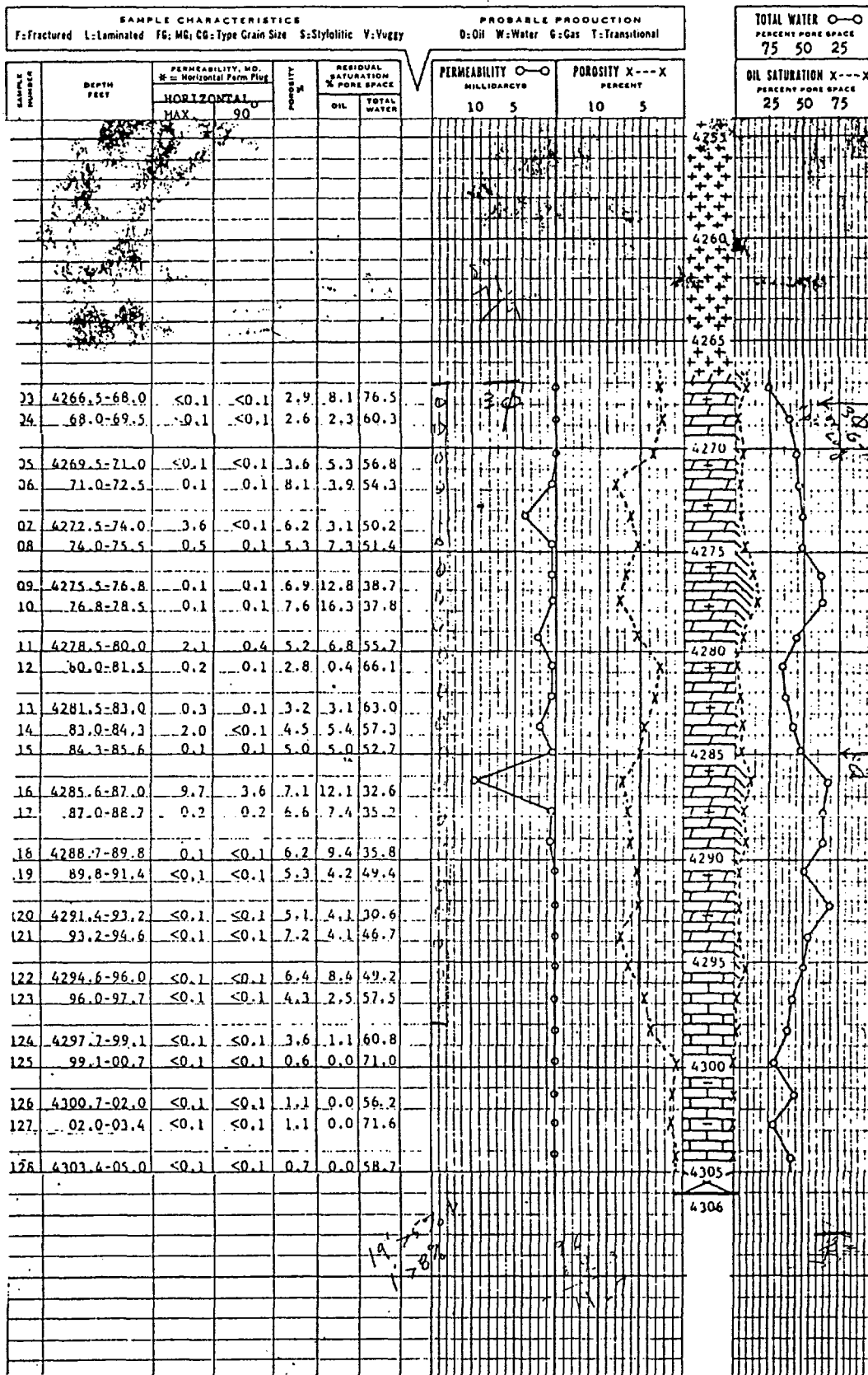
2 BWPD

Cumulative Recovery
to January 1, 1989:

Oil 32,254

Gas 25,626

Wat 17,215



Proposed Jennifer Chaveroo San Andres Unit
Form C-108 Exhibit VIII.C. - Core Data - "Completion Coregraph" for
Wolf Federal Well #1 (#19-07) located within Unit boundary.



CORE LABORATORIES, INC.

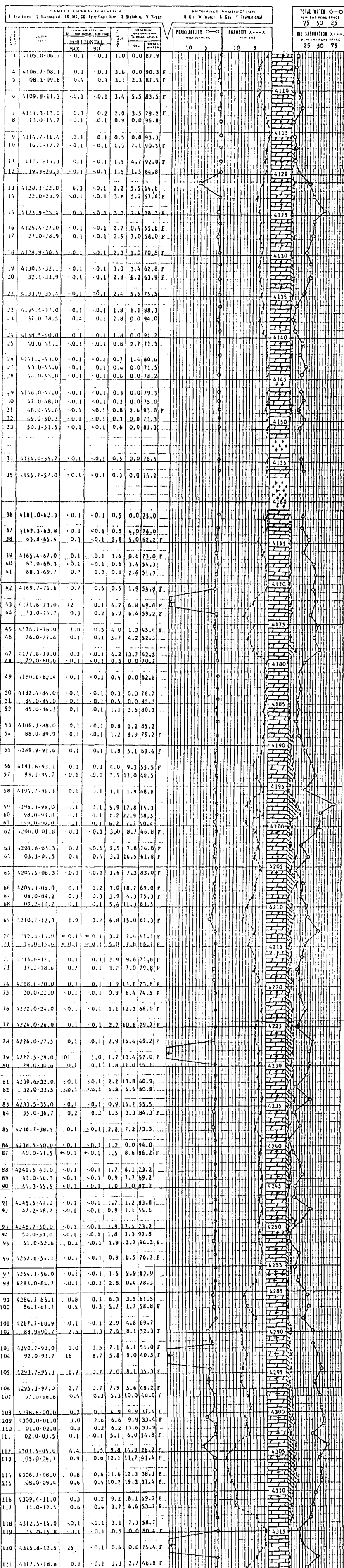
Petroleum Reservoir Engineering

COMPANY PAN AMERICAN PETROLEUM CORPORATION FILE NO. 42-3-2815
WELL HOMME FEDERAL NO. 3 DATE 12-25-66 ENGRS. BOONE
FIELD LEBERVILLE FORMATION SAN ANDRES ELEV. 1000
COUNTY CONCHO STATE TEXAS DILG. FLD. WATER BASE MUD CORES DIAMOND & 1/4"
LOCATION 1980 FN & EL. 890 20-175-R34E REMARKS SAMPLED AS DIRECTED BY CLIENT

COMPLETION COREGRAPH

This section of the Completion Coregraph is based on observations and data recorded by the operator in the well log and other data and information available to the operator at the time of completion. It is not intended to be a substitute for a core log or a core analysis report. The operator is responsible for the accuracy of the data and information recorded in this section of the Completion Coregraph.

GRAVEL SANDSTONE LIMESTONE CONGLOMERATE CHERT ARTHURITE
SANDSTONE DOLOMITE GOLITE



Well #20-06

Completion Date: 01-07-66

Completion Interval: 4114'-4317'

Perfs:

4114', 4128', 4138', 4178',
4179', 4180', 4182', 4205',
4216', 4220', 4222', 4223',
4237', 4294', 4295', 4300',
4301', 4305', 4311', 4312',
4312½', 4313', 4314',
4314½', 4315', 4316', 4317'
(1 JSPF)

Initial Treatment:

Acid 2000 G
Frac 50000 #

Initial Potential:

P 194 BOPD
- MCFGPD
55 BWP

Cumulative Recovery to January 1, 1989:

Oil 25,505
Gas 71,014
Wat 14,729

Proposed Jennifer Chaverro San Andros Unit
Form C-108 Exhibit VIII.C. - Core Data - "Completion Coregraph" for
Honne Federal Well #3 (#20-06) located within Unit boundary.

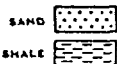
CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

COMPANY SUNRAY D-X OIL COMPANY FILE NO. WP-3-2535
WELL STATE "AZ" NO. 2 DATE 6-15-65 ENGRS. ROONE
FIELD CHAUVEROO FORMATION SAN ANDRES ELEV. 4426' KB
COUNTY ROOSEVELT STATE NEW MEXICO ORLG. FLD. WATER BASE M'D CORES DIAMOND 3 1/2"
LOCATION 1980' FS & 1940' FHL SEC 31-T7S-R33E REMARKS SAMPLED AS DIRECTED BY CLIENT

COMPLETION COREGRAPH

These patterns, symbols or interpretations are based on observations and material supplied by the client to whom they are for their reference and to be used only for the purpose of making the interpretation of the data reported. The interpretation of the data is the responsibility of the client. The patterns, symbols or interpretations are not to be used for any other purpose without the written consent of Core Laboratories, Inc. and its officers and employees. The patterns, symbols or interpretations are not to be used for any other purpose without the written consent of Core Laboratories, Inc. and its officers and employees.



Well #33-11

Completion Date: 06/27/65

Completion Interval: 4218' - 4419'

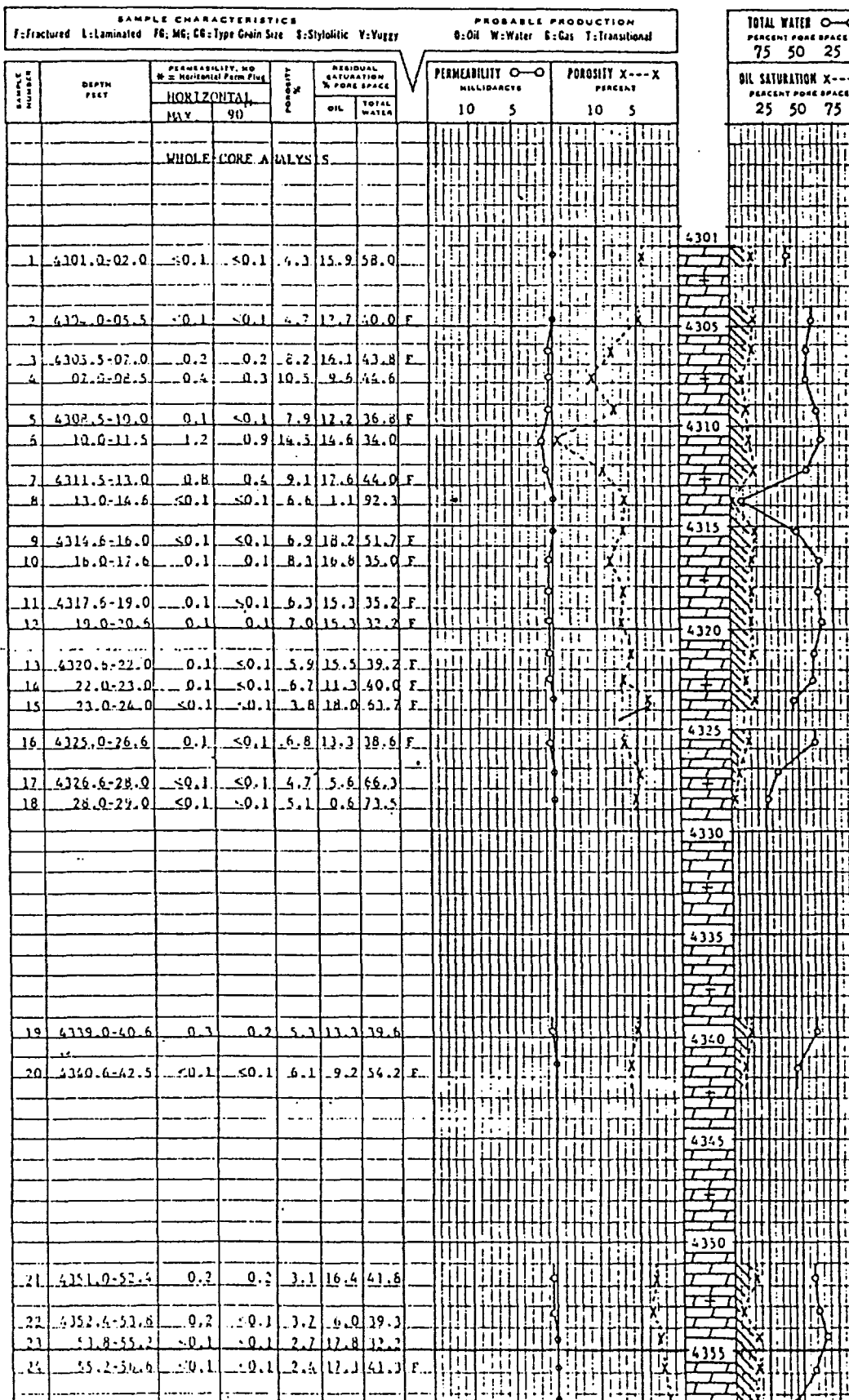
Perfs:
4408', 4413', 4419', 4218',
4246', 4251', 4276', 4295',
4307', 4314', 4223', 4330',
4338', 4369'

Initial Treatment:
Acid 2000 G
Frac 30000 #

Initial Potential:
F 288 BOPD
334 MCFGPD
N/A BWPD

Cumulative Recovery to January 1, 1989:

Oil 67,376 BBL
Gas 68,549 MCF
Wat 96,555 BBL



Proposed Jennifer Chaveroo San Andres Unit
Form C-108 Exhibit VIII.C. - Core Data - "Completion Coregraph" for
State "AZ" Well #2 (#33-11) located within close proximity of Unit boundary.

EXHIBIT VIII.D.
 Tabulated Summary of Geological Data for Wells within Proposed Unit Area
 PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
 Roosevelt County, New Mexico

CHL = Cased Hole Log

BHCS = Borehole Compensated Sonic Log

NDE = Not Deep Enough

GRN = Gamma Ray Neutron

<u>Operator</u> <u>Lease</u>	<u>Original</u> <u>Well#/Unit</u>	<u>New Unit</u> <u>Well #</u>	<u>Elevation</u> <u>GRL KB</u>		<u>Top P-1</u> <u>Meas.</u>	<u>Top P-2</u> <u>SubSea</u>	<u>Thickness</u> <u>P-1 to P-3</u>
<u>Sec. 25, T7S-R33E</u>							
Murphy Operating Corp.							
State "J"	3A	25-01	4320	4330	4097	+ 233	-
State "J"	1B	25-02	4320	4331	4100	+ 231	-
State "DB"	3C	25-03	4321	4333	4082	+ 251	CHL
State "DB"	1D	25-04	4324	4335	4072	+ 263	CHL
State "DB"	2E	25-05	4325	4336	4084	+ 252	CHL
State "DB"	5F	25-06	4319	4330	4102	+ 228	CHL
State "J"	2G	25-07	4320	4331	4124	+ 207	-
State Conine	1H	25-08	4322	4332	4143	+ 189	207
State "DF"	1I	25-09	4315	4325	4172	+ 153	CHL
State "I"	1J	25-10	4324	4337	4141	+ 196	CHL
State "DB"	7K	25-11	4316	4327	4112	+ 215	CHL
State "DB"	4L	25-12	4327	4338	4100	+ 238	CHL
State "DB"	6M	25-13	4325	4336	4116	+ 220	CHL
State "DB"	8N	25-14	4323	4333	4135	+ 198	CHL
State "DB"	9O	25-15	4310	4329	4160	+ 169	CHL
State "J"	4P	25-16	4324	4335	4180	+ 155	-
<u>Sec. 26, T7S-R33E</u>							
Murphy Operating Corp.							
Federal "26"	7I	26-09	4335	4347	4085	+ 262	CHL
Federal "26"	5J	26-10	4343	4355	4084	+ 271	210
Federal "26"	3K	26-11	4366	4378	4096	+ 282	208
Federal "26"	2L	26-12	4373	4385	4096	+ 289	214
Federal "26"	1M	26-13	4381	4388	4114	+ 274	216
Federal "26"	4N	26-14	4365	4374	4102	+ 272	216
Federal "26"	6O	26-15	4347	4354	4092	+ 262	216
Federal "26"	8P	26-16	4339	4346	4098	+ 248	217
<u>Sec. 35, T7S-R33E</u>							
Murphy Operating Corp.							
Hobbs "T"	17A	35-01	4333	4345	4118	+ 227	232
State "CV"	2B	35-02	4361	4370	4110	+ 260	Sonic Log
Hobbs "T"	16C	35-03	4366	4378	4108	+ 270	216
Shackelford	1D	35-04	4380	4391	4120	+ 270	220
State "DA"	1E	35-05	4368	4378	4126	+ 252	206
State Section 35	3F	35-06	4369	4379	4130	+ 249	210
State Section 35	4G	35-07	4361	4371	4126	+ 245	214
State Section 35	5H	35-08	4337	4348	4132	+ 216	210
State "CV"	3I	35-09	4345	4354	4146	+ 208	Latero Log
Hobbs "T"	14J	35-10	4347	4358	4135	+ 223	211
State "CV"	1K	35-11	4358	4367	4118	+ 249	212
State Section 35	1L	35-12	-	4378	4133	+ 245	211
State Section 35	2M	35-13	4363	4374	4131	+ 243	212
State "DE"	1N	35-14	4360	4370	4134	+ 236	216
Hobbs "T"	18O	35-15	4351	4363	4146	+ 217	214
Hobbs "T"	19P	35-16	4343	4355	4162	+ 193	216
<u>Sec. 36, T7S-R33E</u>							
Murphy Operating Corp.							
State Section 36	1B	36-02	4323	4334	4180	+ 154	212
State "K"	3C	36-03	4325	4335	4155	+ 180	-
State "K"	1D	36-04	4330	4340	4134	+ 206	219
State "K"	2E	36-05	4331	4341	4154	+ 187	BHCS
State "K"	6F	36-06	4324	4333	4178	+ 155	BHCS
State Section 36	1G	36-07	4321	4331	4208	+ 123	210 GRN
State "K"	7K	36-11	4331	4341	4188	+ 153	BHCS
State "K"	4L	36-12	4336	4345	4172	+ 173	BHCS
State "K"	5M	36-13	4337	4346	4188	+ 158	BHCS

EXHIBIT VIII.D.
 Tabulated Summary of Geological Data for Wells within Proposed Unit Area
 PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
 Roosevelt County, New Mexico

CHL = Cased Hole Log
 BHCS = Borehole Compensated Sonic Log
 NDE = Not Deep Enough
 GRN = Gamma Ray Neutron

<u>Operator</u> <u>Lease</u>	<u>Original</u> <u>Well#/Unit</u>	<u>New Unit</u> <u>Well #</u>	<u>Elevation</u>		<u>Top P-1</u> <u>Meas.</u>	<u>Top P-2</u> <u>SubSea</u>	<u>Thickness</u> <u>P-1 to P-3</u>
			<u>GRL</u>	<u>KB</u>			
<u>Sec. 18, T7S-R34E</u>							
Murphy Operating Corp. Wolf Federal	30	18-15					
<u>Sec. 19, T7S-R34E</u>							
Murphy Operating Corp. Wolf Federal	4A	19-01	4316	4325	4020	+ 305	CHL
Wolf Federal	2B	19-02	4318	4329	4020	+ 309	CHL
Federal "19"	2C	19-03	4320	4330	4016	+ 314	198
Federal "19"	1F	19-06	4321	4332	4046	+ 286	CHL
Wolf Federal	1G	19-07	4318	4328	4042	+ 286	CHL
Wolf Federal	5H	19-08	4316	4325	4040	+ 285	CHL
State "G"	5I	19-09	4314	4323	4072	+ 251	CHL
State "G"	3J	19-10	4320	4328	4065	+ 263	CHL
State "G"	1K	19-11	4318	4327	4048	+ 279	208
State "G"	2N	19-14	4319	4328	4080	+ 248	CHL
State "G"	4O	19-15	4315	4325	4080	+ 245	CHL
State "G"	6P	19-16	4312	4322	4091	+ 231	CHL
<u>Sec. 20, T7S-R34E</u>							
Murphy Operating Corp. Homme Federal	2C	20-03	4312	4323	4030	+ 293	208
Homme Federal	1E	20-05	4313	4324	4036	+ 288	CHL
Homme Federal	3F	20-06	4310	4320	4056	+ 264	Laterolog
State "20"	3K	20-11	4312	4323	4113	+ 210	-
State "20"	1L	20-12	4315	4326	4060	+ 266	195
State "20"	2M	20-13	4312	4324	4100	+ 224	CHL
State "20"	4N	20-14	4309	4320	4168	+ 152	-
<u>Sec. 29, T7S-R34E</u>							
Murphy Operating Corp. Hobbs "W"	8C	29-03	4309	4319	4170	+ 149	197
Hobbs "W"	6D	29-04	4311	4322	4118	+ 204	202
Hobbs "W"	7E	29-05	4308	4319	4172	+ 147	CHL
Hobbs "W"	9F	29-06	4309	4320	4252	+ 68	-
<u>Sec. 30, T7S-R34E</u>							
Murphy Operating Corp. Hobbs "W"	2A	30-01	4313	4323	4114	+ 209	202
Hobbs "W"	1B	30-02	4313	4324	4109	+ 215	205
State "Y"	1C	30-03	4317	4327	4113	+ 214	201
State "Y"	2F	30-06	4312	4322	4154	+ 168	-
Hobbs "W"	3G	30-07	-	4322	4144	+ 178	204
Hobbs "W"	4H	30-08	4309	4320	4155	+ 165	205
State "Y"	4I	30-09	4310	4320	4189	+ 131	CHL
Hobbs "W"	5J	30-10	4312	4323	4187	+ 136	157
State "Y"	3K	30-11	4315	4325	4176	+ 149	204

Exhibit VIII.D.
 Tabulated Summary of Geological Data for Wells Outside Proposed Unit Area
 but within Area of Review.*
 PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
 Roosevelt County, New Mexico

CHL = Cased Hole Log
 BHC-S = Borehole Compensated Sonic Log
 NDE = Note Deep Enough
 GR-N = Gamma Ray Neutron

<u>Operator</u> <u>Lease</u>	<u>Original</u> <u>Well#/Unit</u>	<u>Elevation</u> <u>GRL KB</u>		<u>Top P-1</u> <u>Meas.</u>	<u>Top P-2</u> <u>SubSea</u>	<u>Thickness</u> <u>P-1 to P-3</u>
<u>Sec. 13, T7S-R33E</u>						
Mims Texas Oil & Gas, Inc.						
Morgan Fed. Tract 4	5I	325	4336	3973	+ 363	197
Morgan Fed. Tract 4	6J	4328	4339	3982	+ 357	197
Morgan Fed. Tract 4	30	4328	4338	3982	+ 356	198
Morgan Fed. Tract 4	4P	4327	4338	3984	+ 354	196
<u>Sec. 23, T7S-R33E</u>						
Mims Texas Oil & Gas, Inc.						
Federal 23	8I	4336	4344	4034	+ 310	204
Federal 23	7J	4342	4353	4037	+ 316	CHL
Federal 23	30	4345	4352	4040	+ 312	206
Federal 23	4P	4335	4343	4040	+ 303	198
<u>Sec. 24, T7S-R33E</u>						
Mims Texas Oil & Gas, Inc.						
Federal	8A	4322	4334	4004	+ 330	CHL
Federal	7B	4323	4335	4001	+ 334	CHL
Federal	5H	4321	4333	4030	+ 303	CHL
Milford Pipe & Supply						
Bradley	3I	4321	4332	4046	+ 286	CHL
Mims Texas Oil & Gas, Inc.						
Federal	2J	-	4341	4052	+ 289	CHL
Federal	1K	4324	4336	4030	+ 306	CHL
Milford Pipe & Supply						
Coleman	2L	4326	4334	4027	+ 307	CHL
Coleman	1M	4328	4340	4058	+ 282	202
Bradley	1N	4323	4333	4053	+ 280	CHL
Bradley	20	4321	4332	4073	+ 259	205
Bradley	4P	4323	4334	4078	+ 256	202
<u>Sec. 26, T7S-R33E</u>						
Dalport Oil Corp.						
Federal	3A	4337	4346	4064	+ 282	210
Mims Texas Oil & Gas, Inc.						
Morgan Fed. Tract 2	6B	4343	4353	4057	+ 296	206
Morgan Fed. Tract 2	5C					
Morgan Fed. Tract 2	4D					
Morgan Fed. Tract 2	1E					
Morgan Fed. Tract 2	2F					
Morgan Fed. Tract 2	3G	4343	4353	4076	+ 277	210
Dalport Oil Corp.						
Federal	4H	4336	4345	4075	+ 270	CHL
<u>Sec. 27, T7S-R33E</u>						
Mims Texas Oil & Gas, Inc.						
Federal 27	3A					
Federal 27	1-22B					
Federal 27	2G					
Federal 27	1H					
Morgan Fed. Tract 1	6I	4378	4389	4100	+ 289	210
Morgan Fed. Tract 1	5J	4388	4399	4106	+ 293	214
Morgan Fed. Tract 1	20	4400	4412	4120	+ 292	212
Morgan Fed. Tract 1	3P	4420	4431	4121	+ 310	214

* Within one-half (½) mile of Unit Boundary.

Exhibit VIII.D.
 Tabulated Summary of Geological Data for Wells Outside Proposed Unit Area
 but within Area of Review.*
 PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
 Roosevelt County, New Mexico

CHL = Cased Hole Log
 BHC-S = Borehole Compensated Sonic Log
 NDE = Not Deep Enough
 GR-N = Gamma Ray Neutron

<u>Operator</u> <u>Lease</u>	<u>Original</u> <u>Well#/Unit</u>	<u>Elevation</u>		<u>Top P-1</u> <u>Meas.</u>	<u>Top P-2</u> <u>SubSea</u>	<u>Thickness</u> <u>P-1 to P-3</u>
		<u>GRL</u>	<u>KB</u>			
<u>Sec. 34, T7S-R33E</u>						
Murphy Operating Corp.						
State "AZ"	13A					
State "AZ"	12B					
Hobbs "T"	10G					
State "AZ"	14H					
Hobbs "T"	12I					
Hobbs "T"	8J					
Hobbs "T"	15O					
State "AZ"	15P					
<u>Sec. 16, T7S-R34E</u>						
Murphy H. Baxter Smelting State	1M	4306	4317	4326	+ 91	Sonic Log
<u>Sec. 17, T7S-R34E</u>						
Kern County Land Co. Sieber	1C					
NRM Petroleum Corp. Sieber	1F					
NRM Petroleum Corp. Metzger	1J	4314	4325	4094	+ 231	-
Kern County Land Co. Archer	1K					
NRM Petroleum Corp. Archer	2L					
Cities Service Oil Co. Davis "A"	1M	4314	4325	4010	+ 315	-
NRM Petroleum Corp. Archer	1N	4318	4329	4016	+ 313	-
NRM Petroleum Corp. Metzger	8O					
NRM Petroleum Corp. Metzger	7P					
<u>Sec. 21, T7S-R34E</u>						
JEM Petroleum Corp. Dilly	1L	4301	4312	4310	+ 002	196
<u>Sec. 32, T7S-R34E</u>						
Charles B. Read Sinclair "B"	1B	4314	4324	4372	- 48	204
<u>Sec. 1, T8S-R33E</u>						
Kerr-McGee Corp.						
State "C"	5C	4336	4347	4212	+ 135	213
State "C"	4D	4339	4351	4189	+ 162	203
State "FU"	9E	4338	4350	4186	+ 164	CHL

* Within one-half (½) mile of Unit Boundary.

Exhibit VIII.D.
 Tabulated Summary of Geological Data for Wells Outside Proposed Unit Area
 but within Area of Review.*
 PROPOSED JENNIFER CHAVEROO SAN ANDRES UNIT
 Roosevelt County, New Mexico

CHL = Cased Hole Log

BHCS = Borehole Compensated Sonic Log

NDE = Not Deep Enough

GR-N = Gamma Ray Neutron

<u>Operator</u> <u>Lease</u>	<u>Original</u> <u>Well#/Unit</u>	<u>Elevation</u> <u>GRL KB</u>		<u>Top P-1</u> <u>Meas.</u>	<u>Top P-2</u> <u>SubSea</u>	<u>Thickness</u> <u>P-1 to P-3</u>
<u>Sec. 2, T8S-R33E</u>						
Kerr-McGee Corp.						
State "C"	2A	4344	4356	4172	+ 184	214
State "C"	1B	4352	4363	4153	+ 210	-
State "F"	2C	4356	4366	4157	+ 209	NDE
State "F"	14C	4366	4377	4150	+ 227	204
State "F"	1D	4371	4381	4153	+ 228	NDE
State "F"	3E	4367	4377	4154	+ 223	205
State "F"	4F	4362	4371	4159	+ 212	204
Champlin Petroleum Co.						
Levick State 2	1G	4351	4363	4168	+ 195	CHL
Kerr-McGee Corp.						
State "C"	3H	4346	4358	4180	+ 178	-
<u>Sec. 3, T8S-R33E</u>						
Murphy Operating Corp.						
State "BF"	1A	4379	4389	4158	+ 231	210
State "BF"	2B	4385	4395	4174	+ 221	207
State "BF"	6G	4388	4399	4179	+ 220	215
State "BF"	4H	4376	4388	4170	+ 218	205

* Within one-half (½) mile of Unit Boundary.

EXHIBIT VIII. H.

EXHIBIT VIII.H.
PROPOSED JENNIFER SAN ANDRES UNIT
Derivation of Tract Participation Factors

(08/15/89)

*Based upon the 1988 Annual Report of the New Mexico Oil & Gas Engineering Committee.

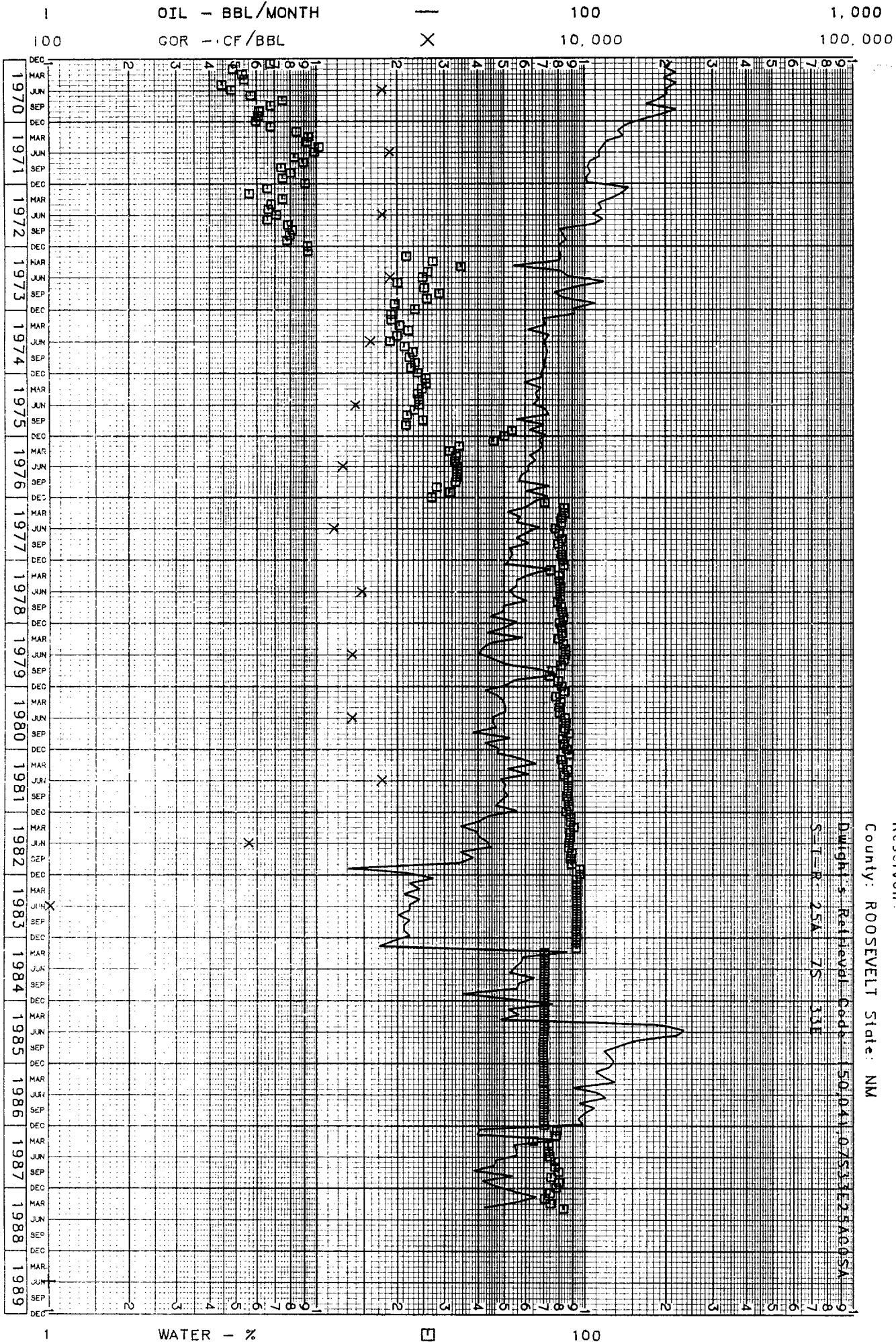
Tract Participation Formula
Tract Participation = 15% A + 80% B + 5% C
Where A = Percent of Total Useable Wells in Unit Area.
Where B = Percent of Total Primary Oil Recovery in Unit Area as of January 1, 1989.
Where C = Total Unit Acreage.

LEGEND
A Permanently Abandoned
F Flowing
I Injection
S Shut In
F Flowing

Tract Lease Name	Original Well		Well Location	Well Status	Unit Well Number	A			B			C			Tract Participation Factor	
	Number	Useable Wells				Number	%	x	15%	Total Primary Oil Recovery to January 1, 1989			Acreage			
										BBLs*	100%	x	80%	Number	%	x
1. Federal 26	1M	26 7S 33E	S	26-13	1				62,819							
	2L	26 7S 33E	P	26-12	1				71,687							
	3K	26 7S 33E	P	26-11	1				64,475							
	4N	26 7S 33E	S	26-14	1				65,965							
	5J	26 7S 33E	P	26-10	1				62,823							
	6O	26 7S 33E	S	26-15	1				64,066							
	7I	26 7S 33E	P	26-09	1				63,263							
	8P	26 7S 33E	P	26-16	1				70,685							
					8	11.267606	1.690141	525,783	10.594641	8.475713		320.00	6.217214	0.310861	10.476715	
2. Homme Federal	1E	20 7S 34E	S	20-05	1				62,290							
	2C	20 7S 34E	S	20-03	1				27,465							
	3F	20 7S 34E	S	20-06	1				25,505							
					3	4.225352	0.633803	115,260	2.322514	1.858011		480.00	9.325821	0.466291	2.958105	
3. Wolf Federal	1G	19 7S 34E	P	19-07	1				32,250							
	2B	19 7S 34E	P	19-02	1				27,113							
	3O	18 7S 34E	S	18-15	1				32,687							
	4A	19 7S 34E	P	19-01	1				28,695							
	5H	19 7S 34E	S	19-08	1				37,670							
					5	7.042254	1.056338	158,415	3.192096	2.553677		659.16	12.806684	0.640334	4.250349	
4. Federal 19	1F	19 7S 34E	A	19-06	0				15,554							
	2C	19 7S 34E	A	19-03	0				7,997							
					0	0.000000	0.000000	23,551	0.474558	0.379646		90.77	1.763552	0.088178	0.467824	
5. State DB	1D	25 7S 33E	S	25-04	1				70,715							
	2E	25 7S 33E	S	25-05	1				79,087							
	3C	25 7S 33E	P	25-03	1				147,639							
	4L	25 7S 33E	A	25-12	0				76,257							
	5F	25 7S 33E	I	25-06	1				73,421							
	6M	25 7S 33E	I	25-13	1				70,955							
	7K	25 7S 33E	P	25-11	1				76,711							
	8N	25 7S 33E	A	25-14	0				55,065							
	9O	25 7S 33E	P	25-15	1				64,017							
	1I	25 7S 33E	SWD	25-09	1				26,633							
State DF					8	11.267606	1.690141	740,500	14.921235	11.936988		400.00	7.771517	0.388576	14.015705	

*Based upon the 1988 Annual Report of the New Mexico Oil & Gas Engineering Committee.

[illegible]

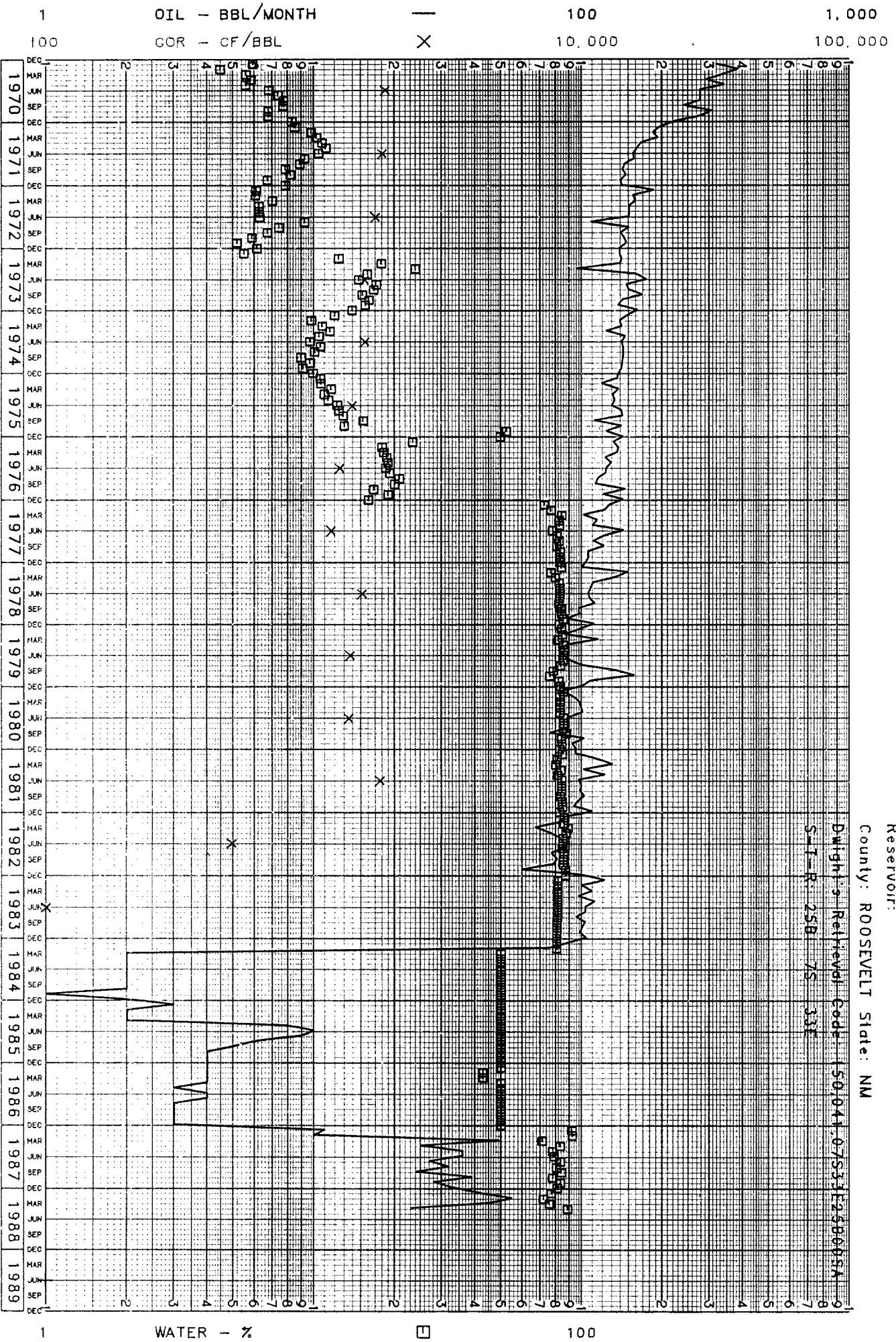


WELLS LOCATED WITHIN UNIT BOUNDARY

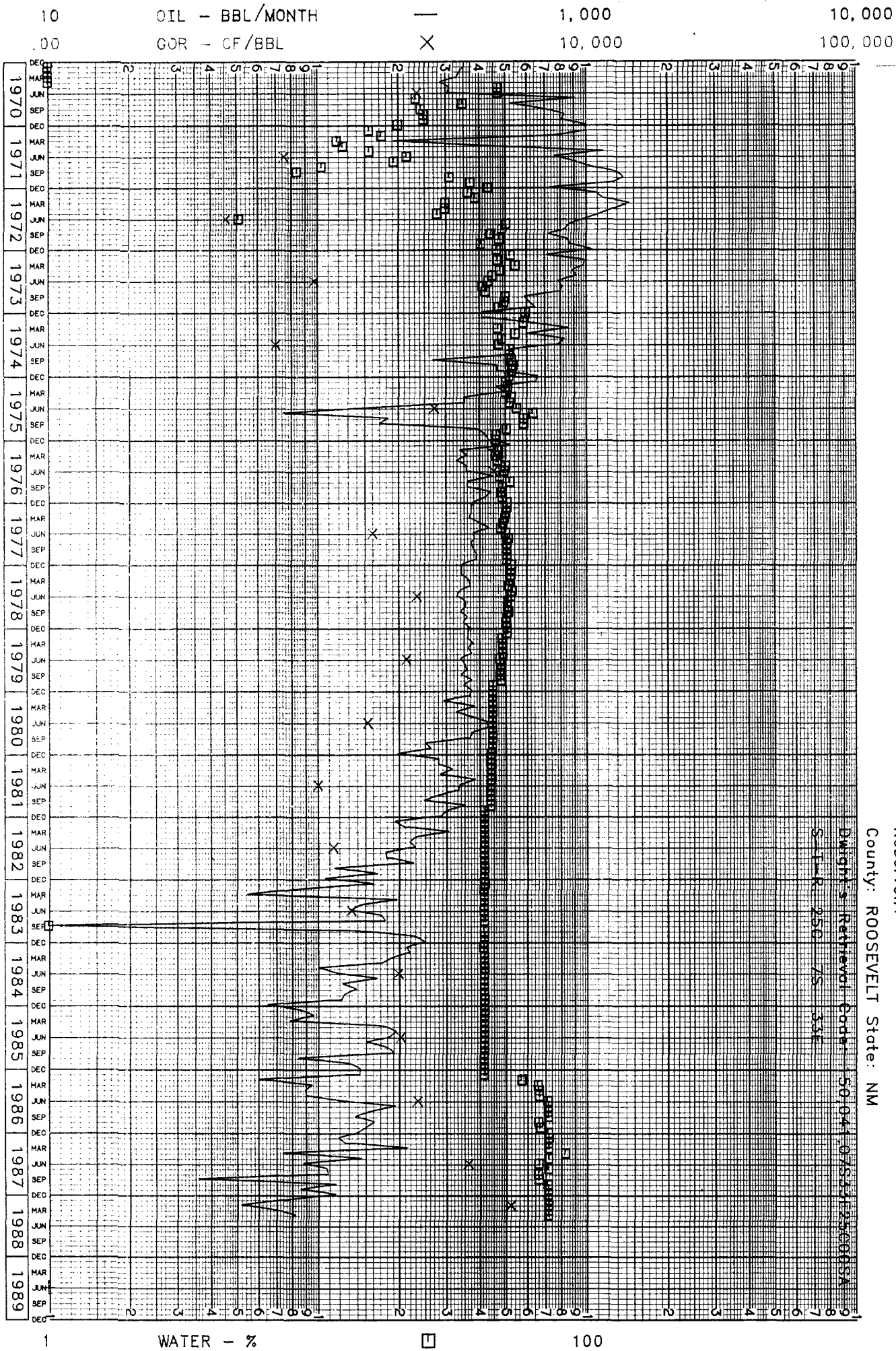
Operator: MYCO PETROLEUM
 Lease: STATE J Well No: 000001
 Field: CHAVEROO SAN ANDRES
 Reservoir:
 County: ROOSEVELT State: NM

SA

Dwight's Retrieval Code: 1501041-075331258005A
 S-I-R: 2581 75 331

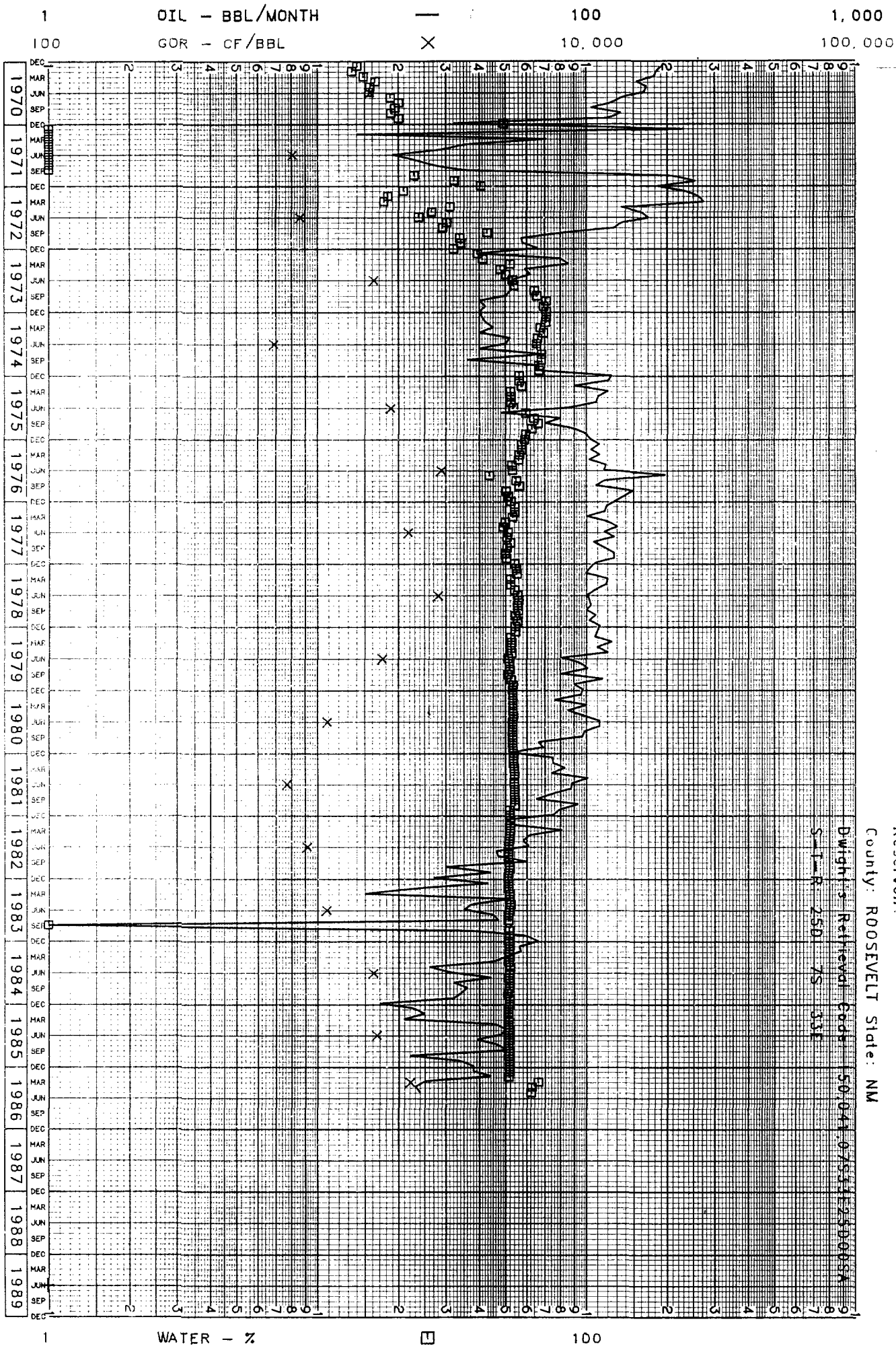


Operator: BRADEN DEEM INC
Lease: STATE DB Well No: 000003
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

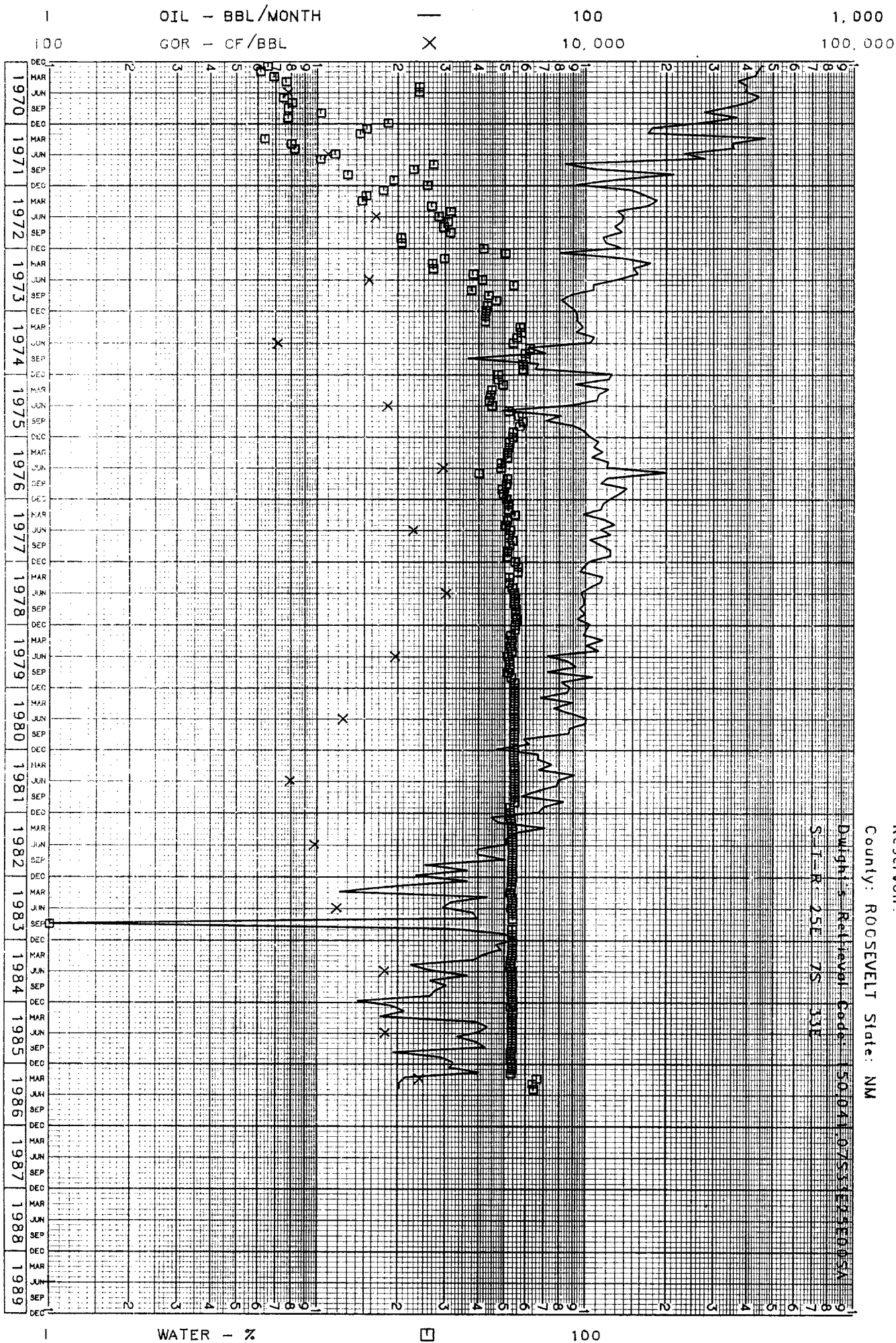


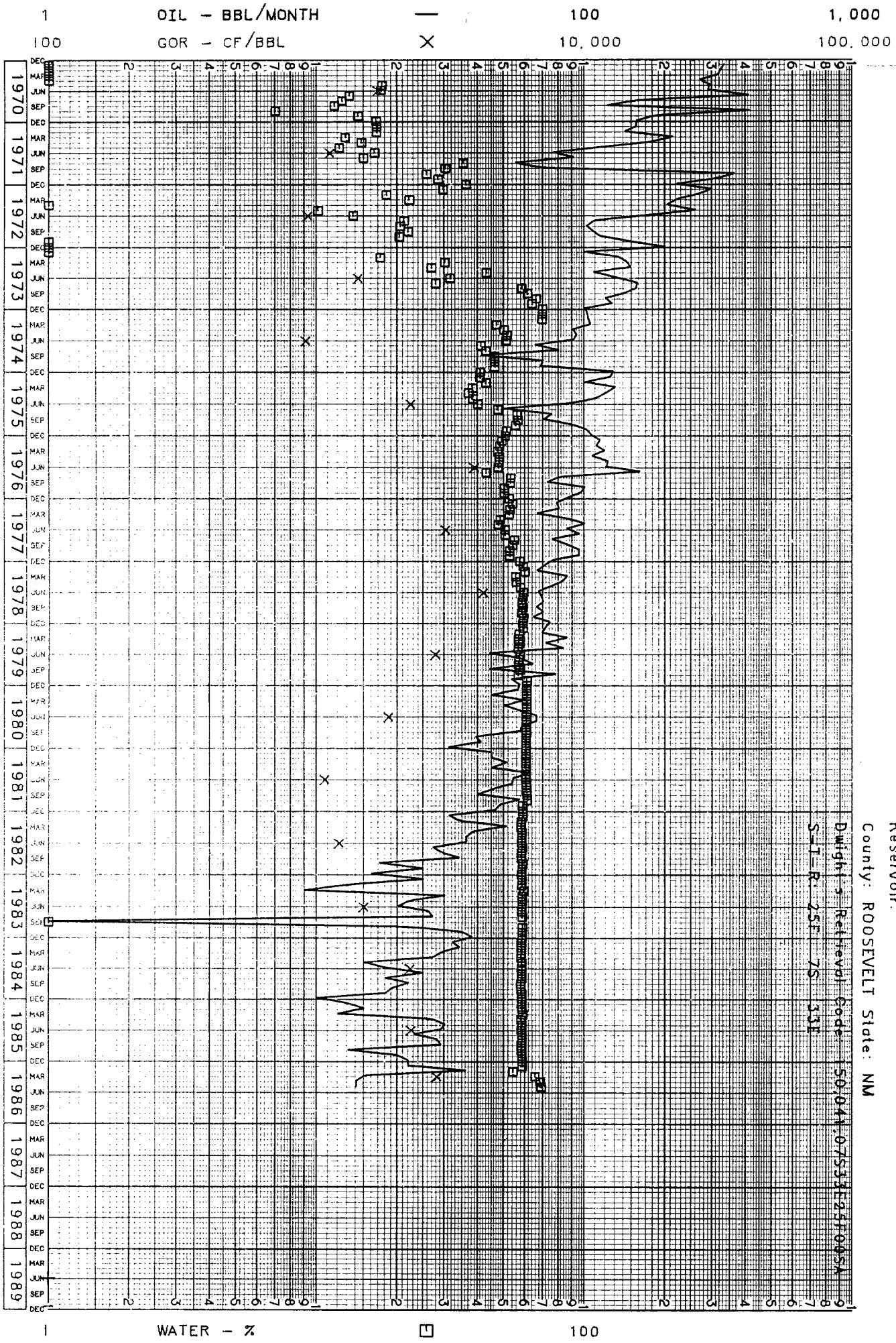
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 Lease: STATE DB Well No: 000001
 Field: CHAVEROO SAN ANDRES
 Reservoir:
 County: ROOSEVELT State: NM
 SA

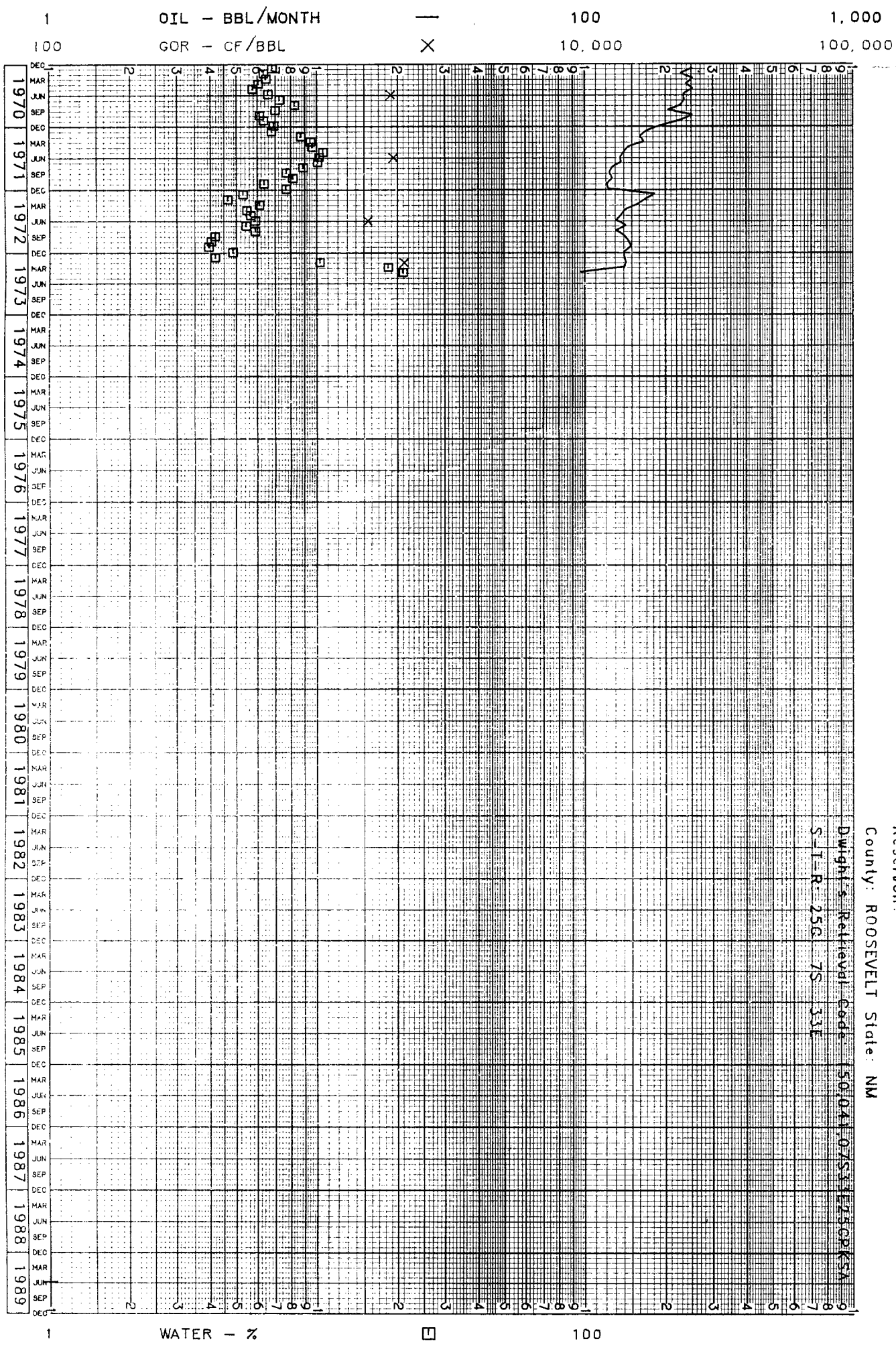
Dwight's Refractor Code: 50,041 0.7533250005A
 S-I-R 2501 75 335



Operator: BRADEN DEEM INC
 Lease STATE DB Well No: 000002
 Field: CHAVEROO SAN ANDRES
 Reservoir:
 County: ROOSEVELT State: NM





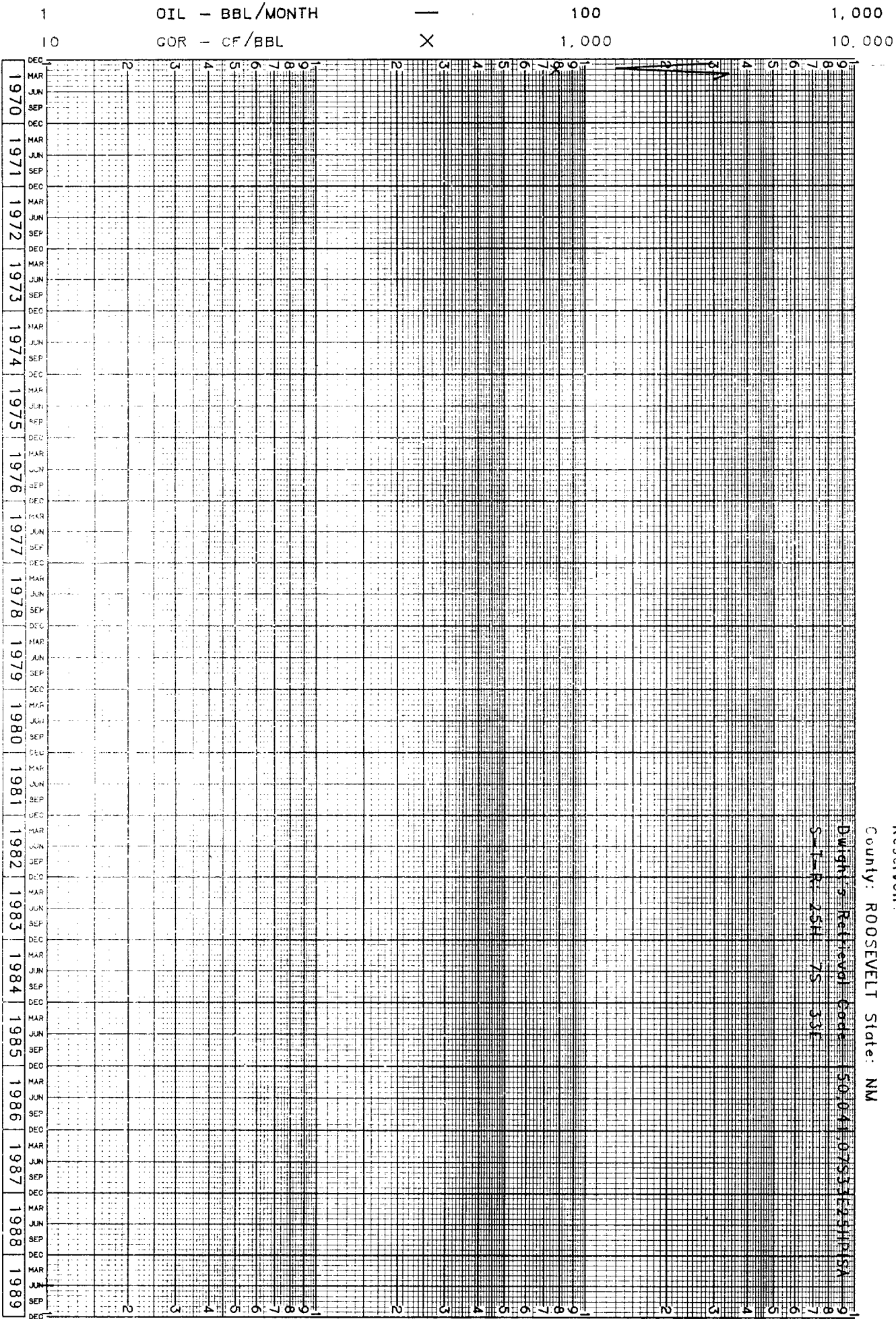


Operator: WISER OIL CO
Lease: STATE J Well No: 000002
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

Dwight's Retrieval Code: 1501041, 075344250P (SA
S-I-R-25G-7S-33E

SA

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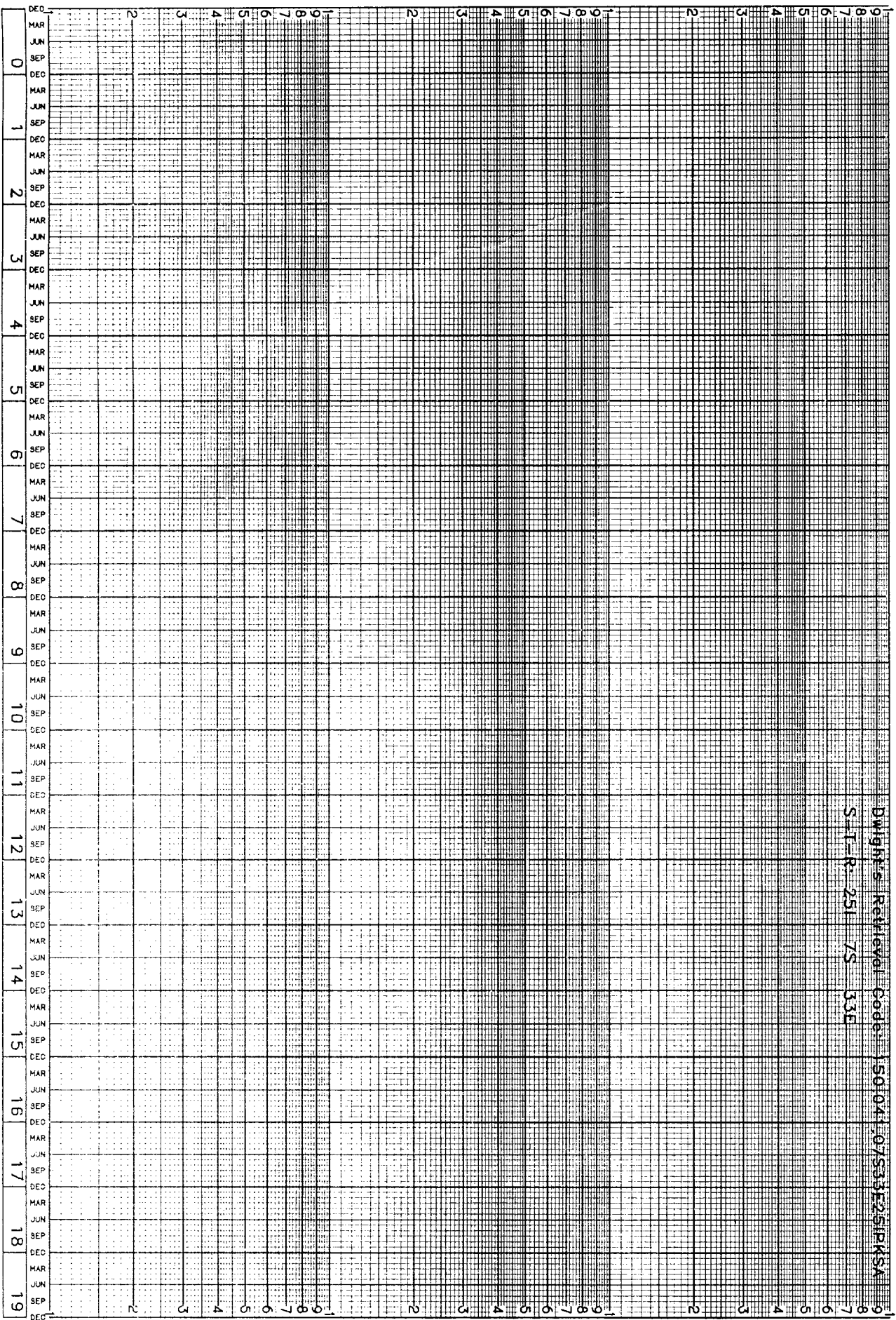


Operator: CONINE JIM INC
Lease: STATE Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

SA

36

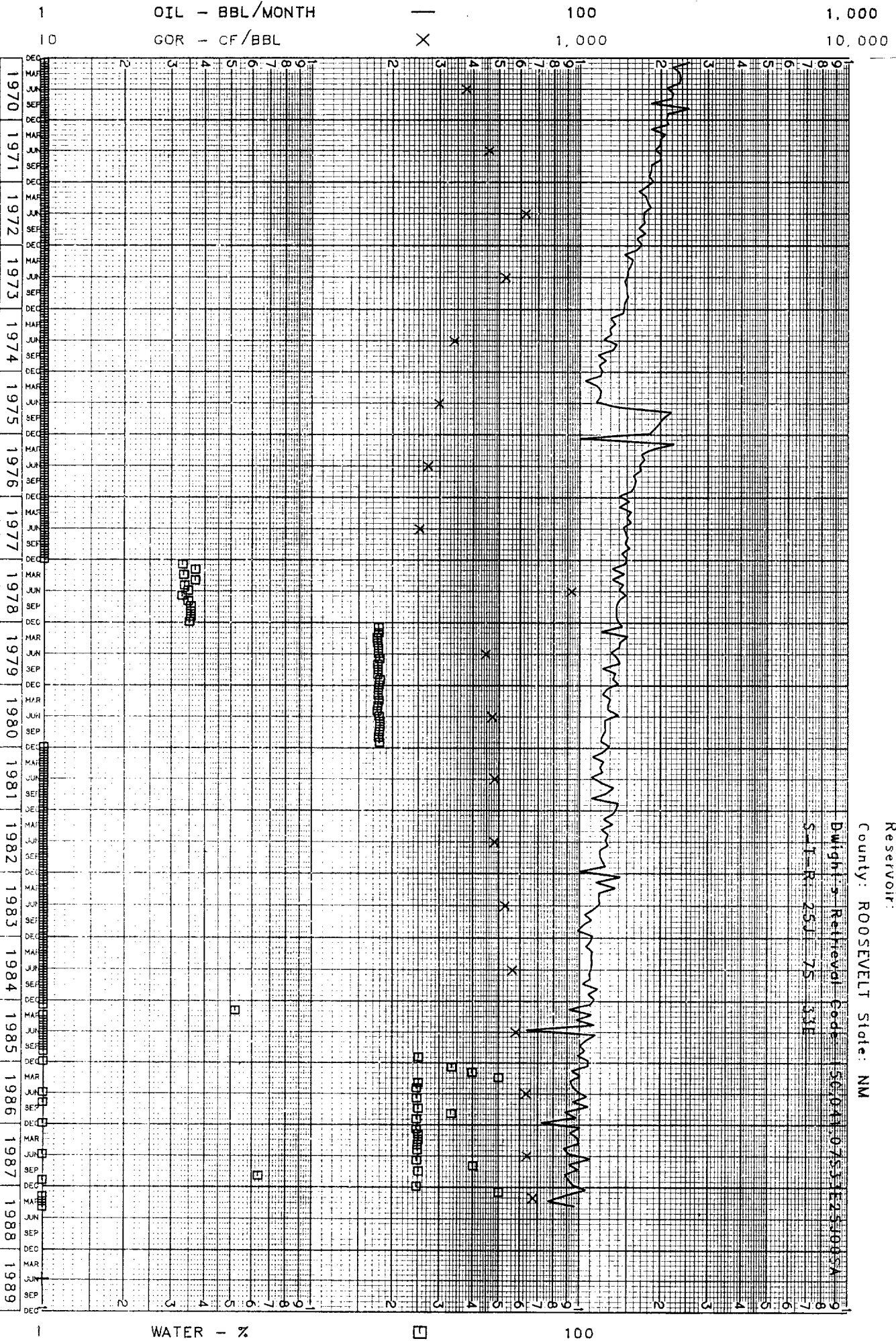
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Lease: STATE DF Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM



Operator: KERR MCGEE CORP
Lease: STATE 1 Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir: SA

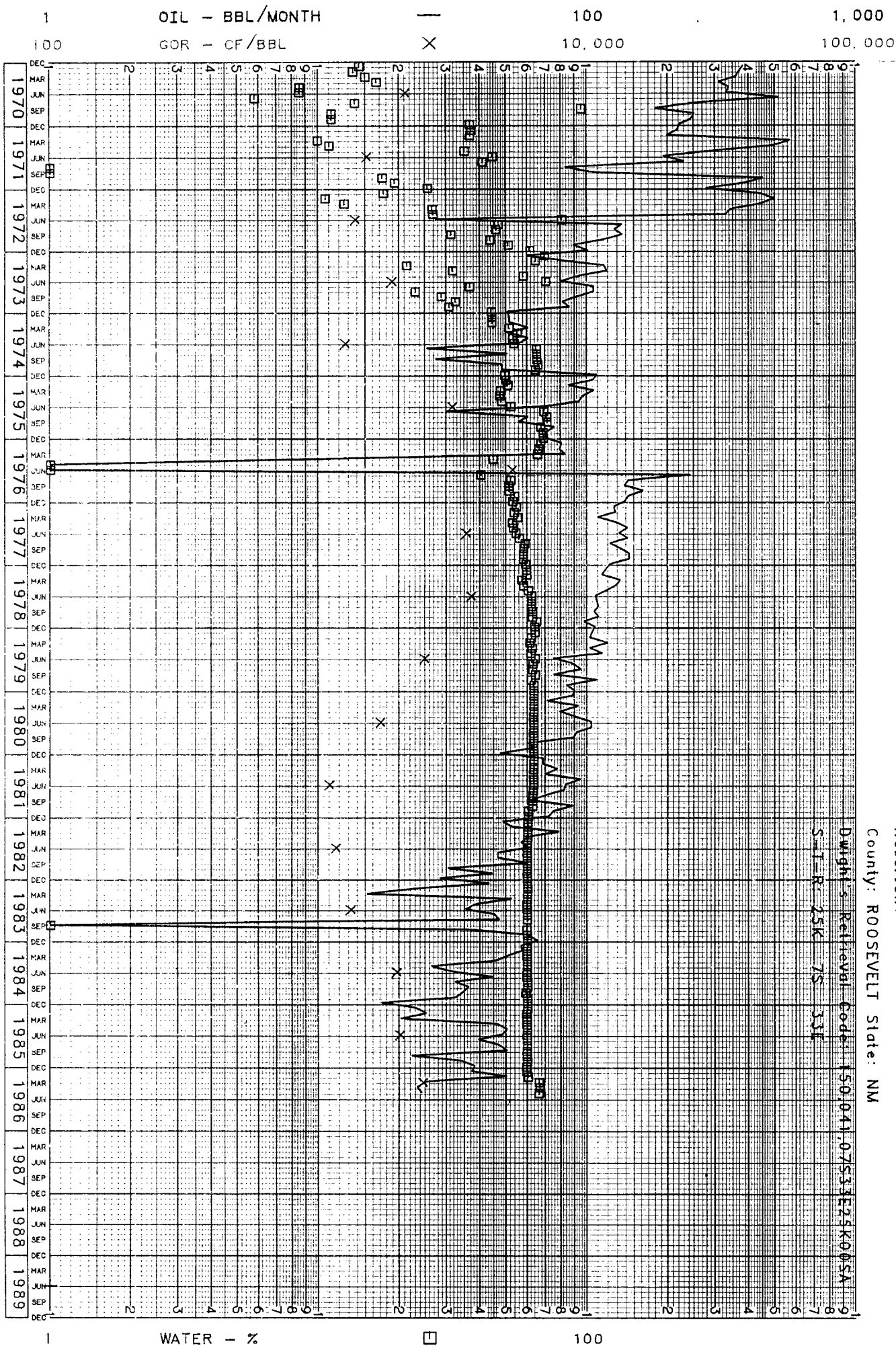
County: ROOSEVELT State: NM

Dwight - Retrieval Code: 156041-07531125005A
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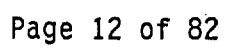


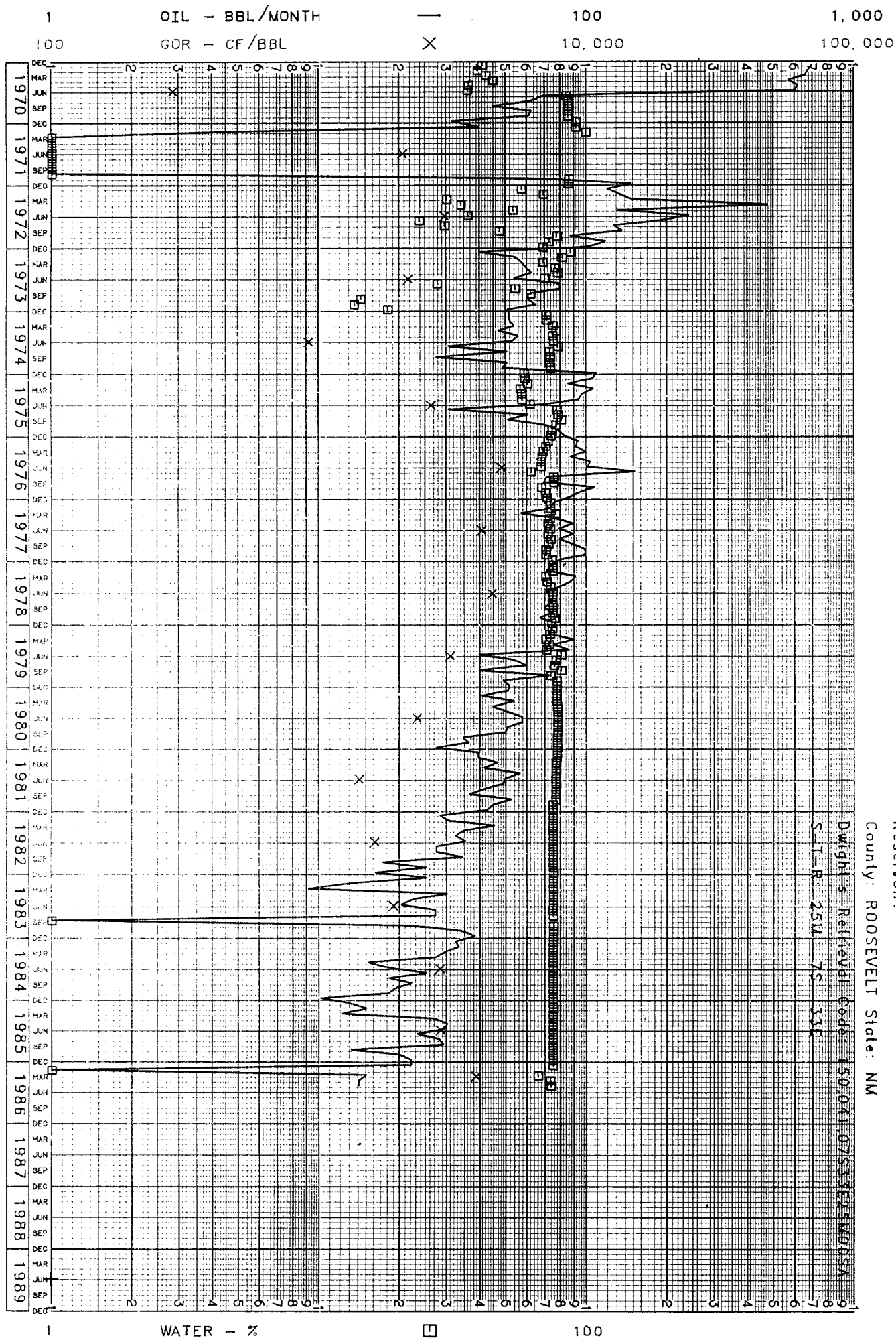
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 Lease STATE DB Well No: 000007
 Field: CHAVEROO SAN ANDRES
 Reservoir:
 County: ROOSEVELT State: NM

Dwight's Retrieval Code: 1501041.07533E25K00SA
 S-I-R-25K 75 33E



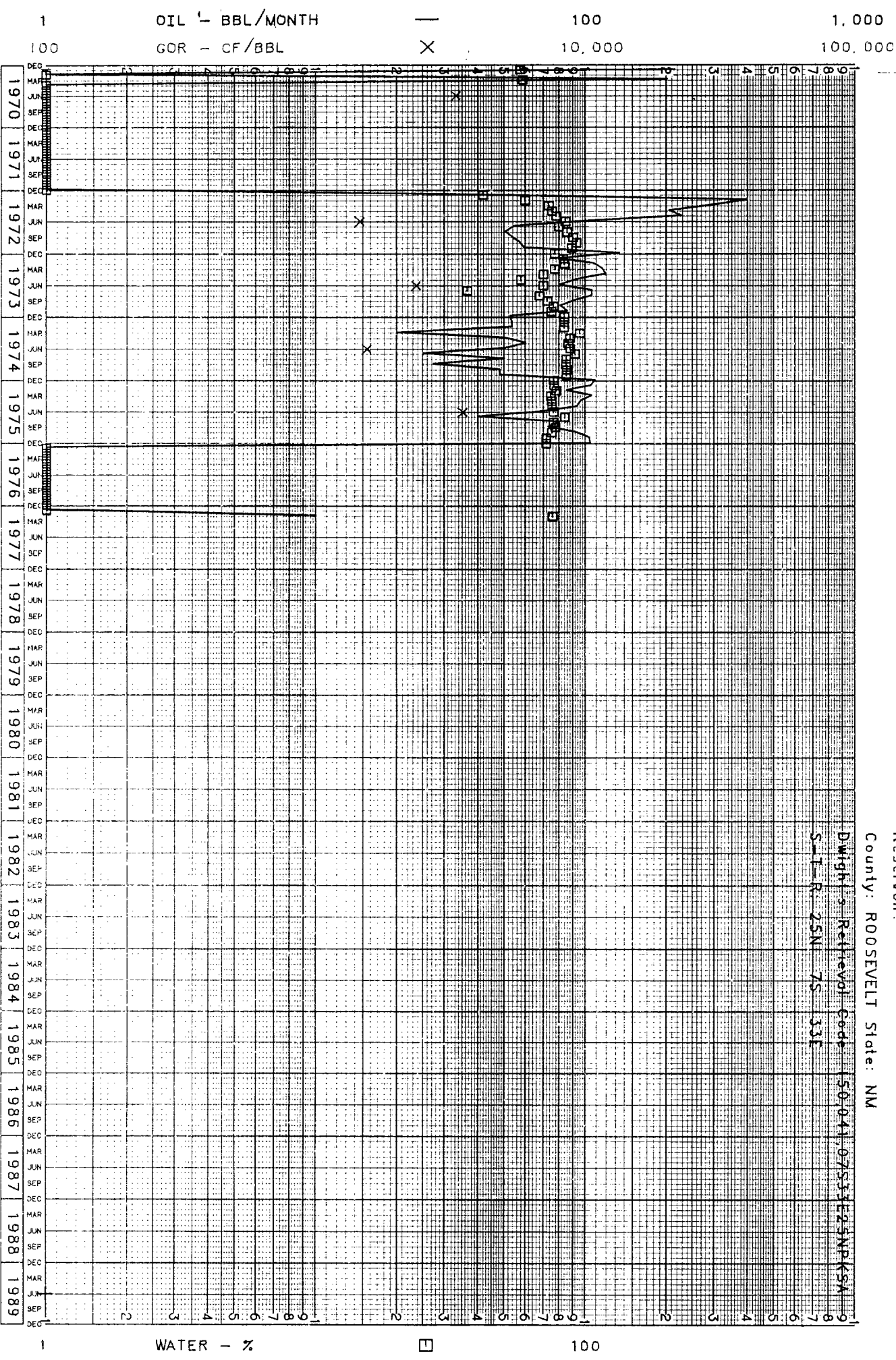
Operator: BRADEN DEEM INC
Lease: STATE DB Well No: 000004
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM





Operator: BRADEN DEEM INC
Lease: STATE DB Well No: 000006
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

SA



Operator: BRADEN DEEM INC
Lease: STATE DB Well No: 000008
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

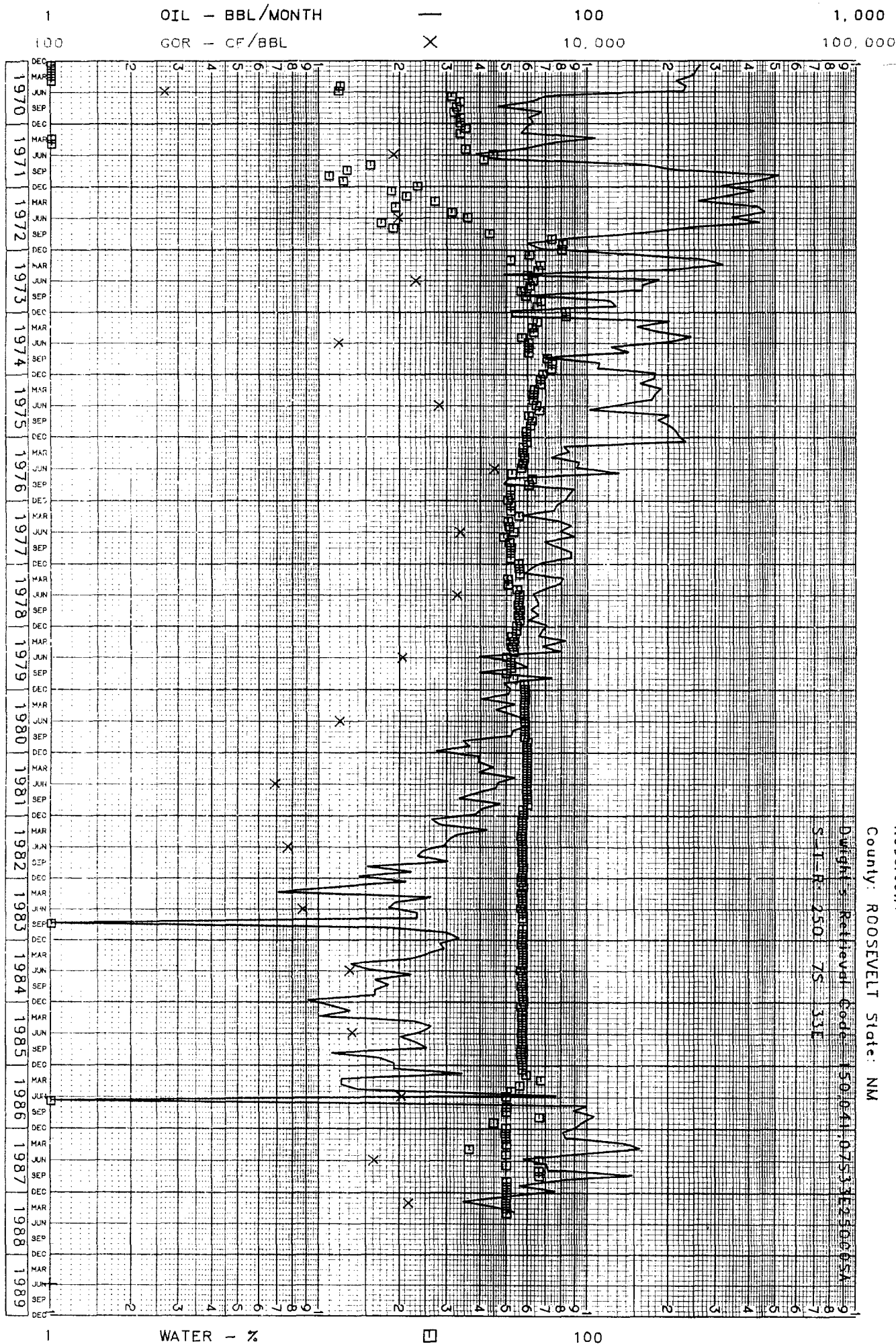
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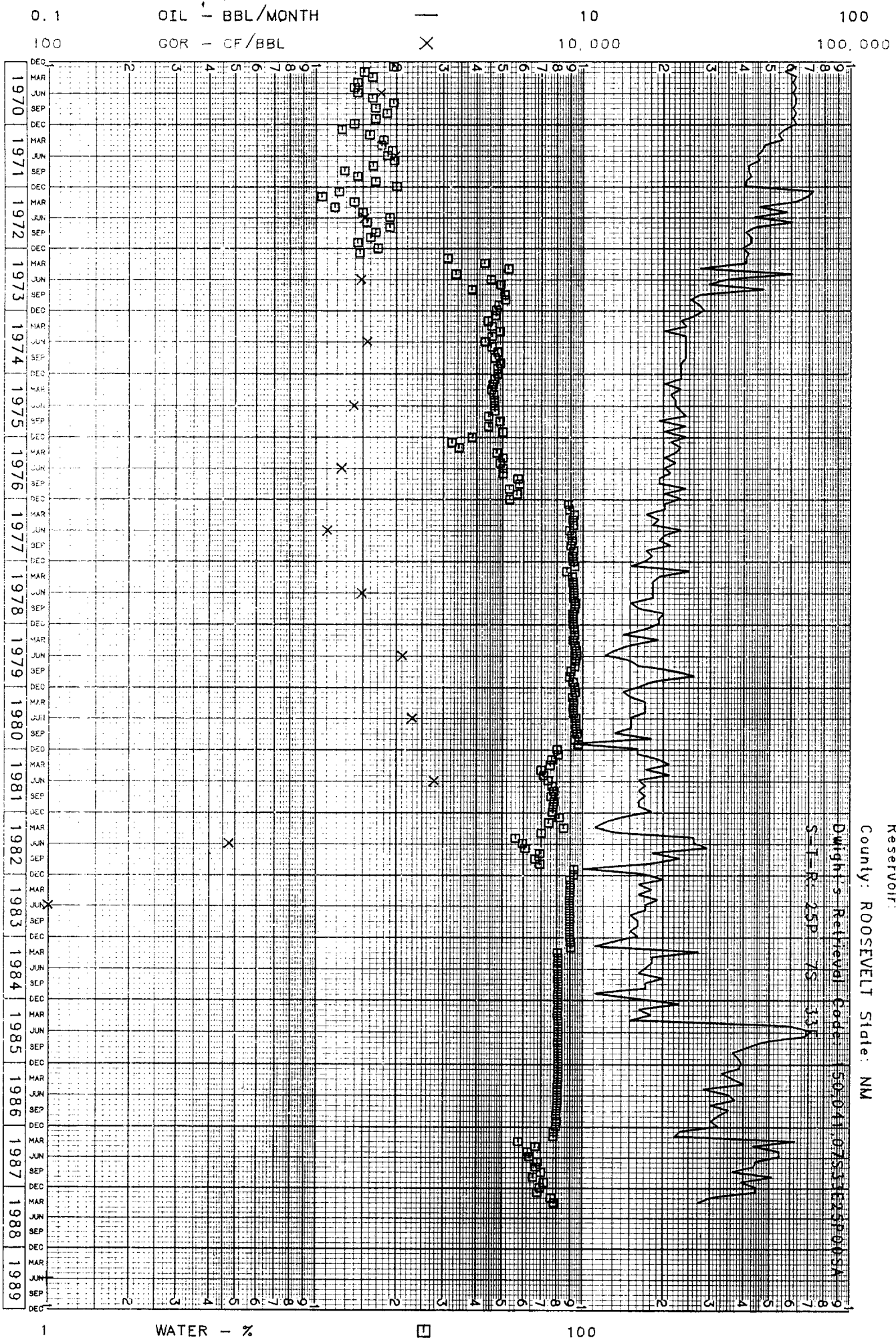
SA

Operator: BRADEN DEEM INC
Lease: STATE DB Well No: 000009
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

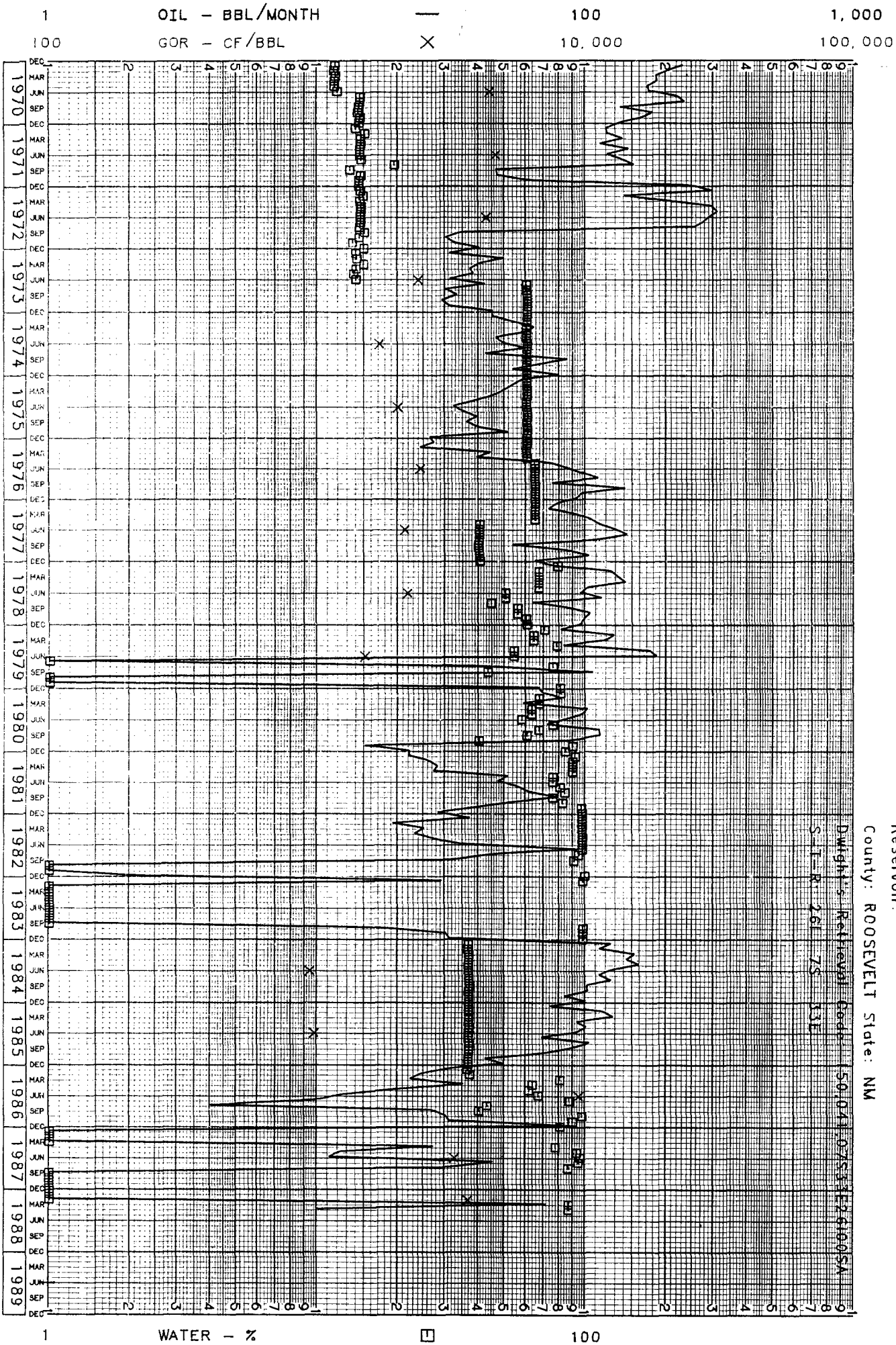
Dwight's Retrieval Code: 150.041.0753.11250605A
SIL-R-250 7S 33E

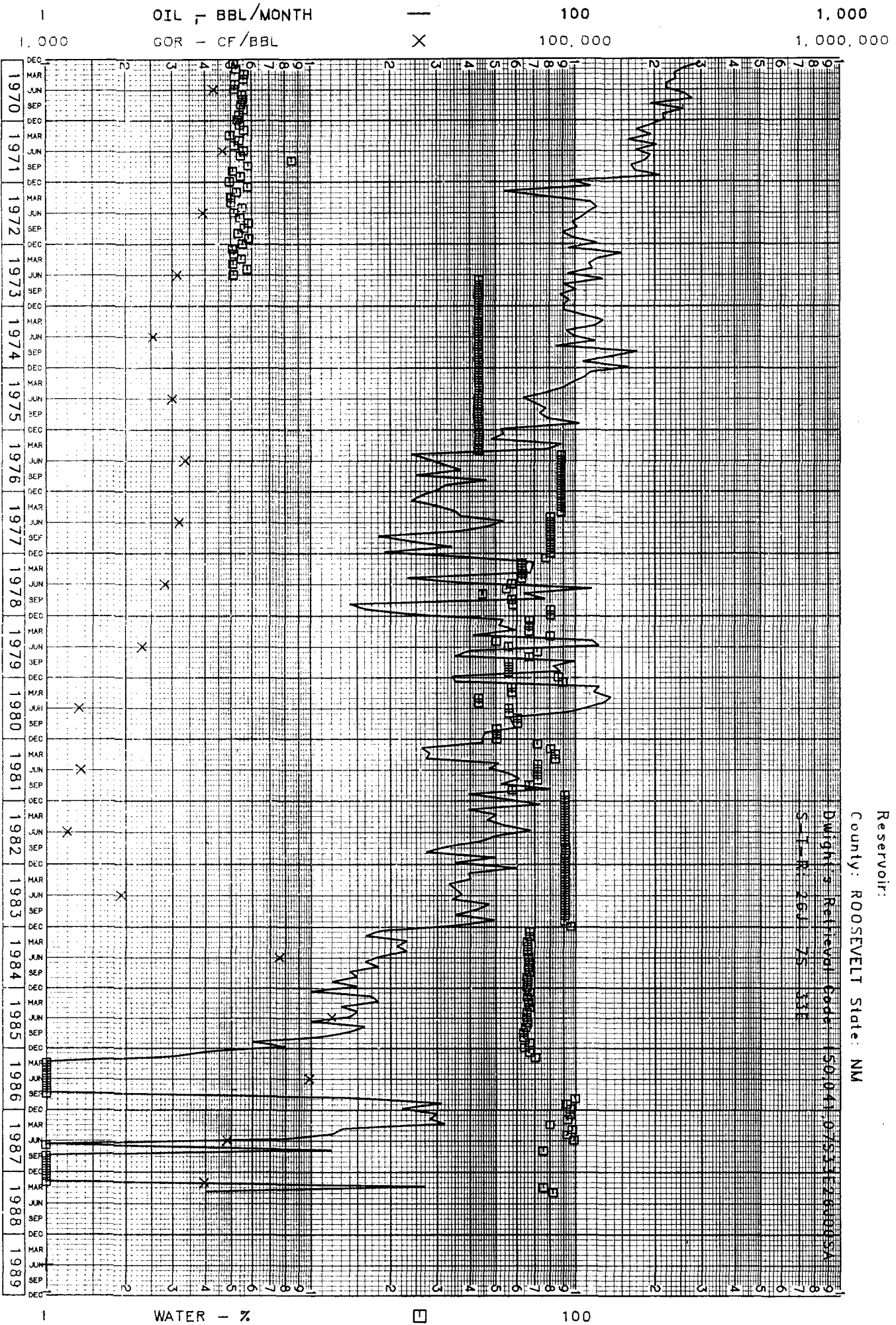
SA

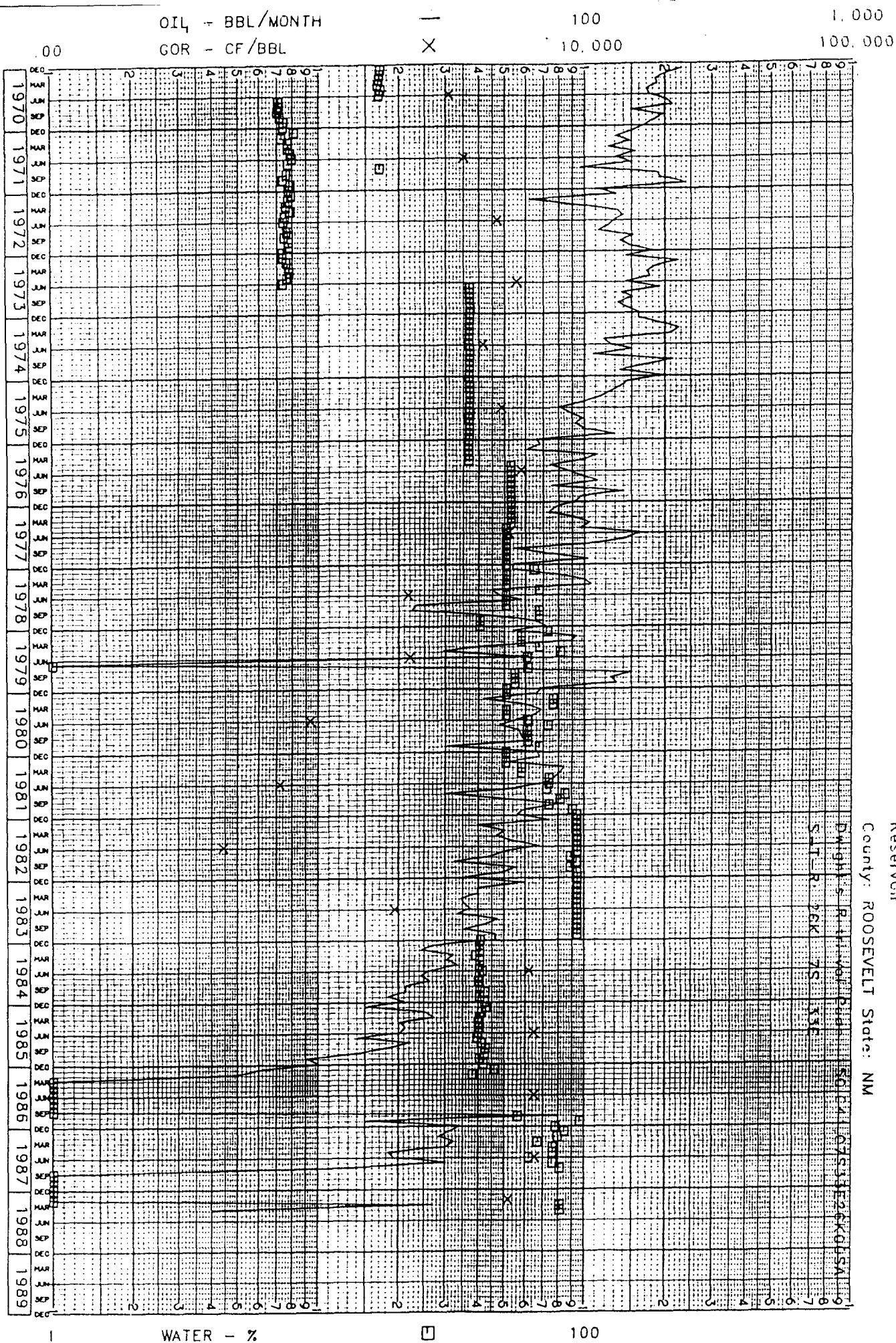




Operator: MYCO PETROLEUM
Lease: STATE J Well No: 000004
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM
SA

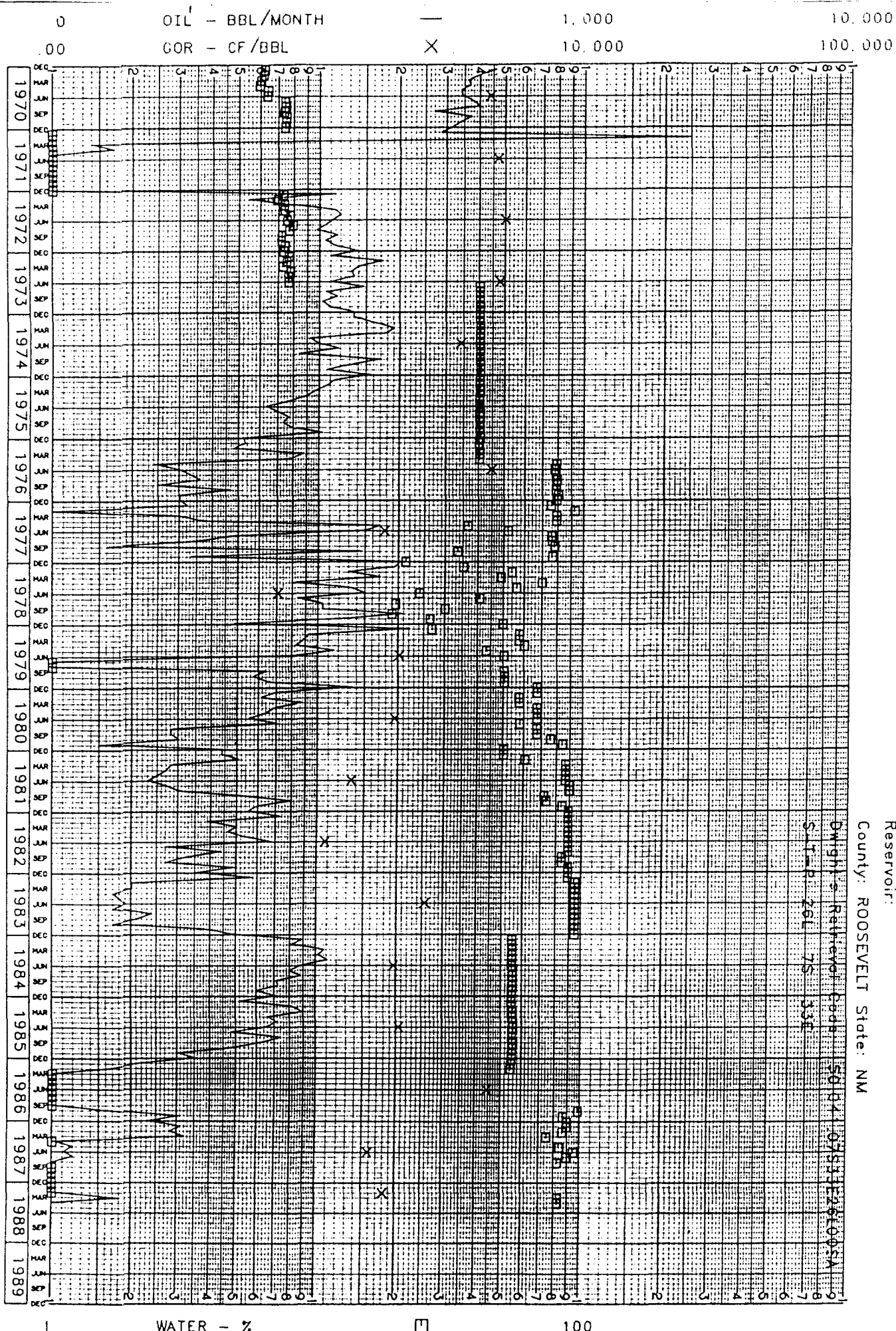


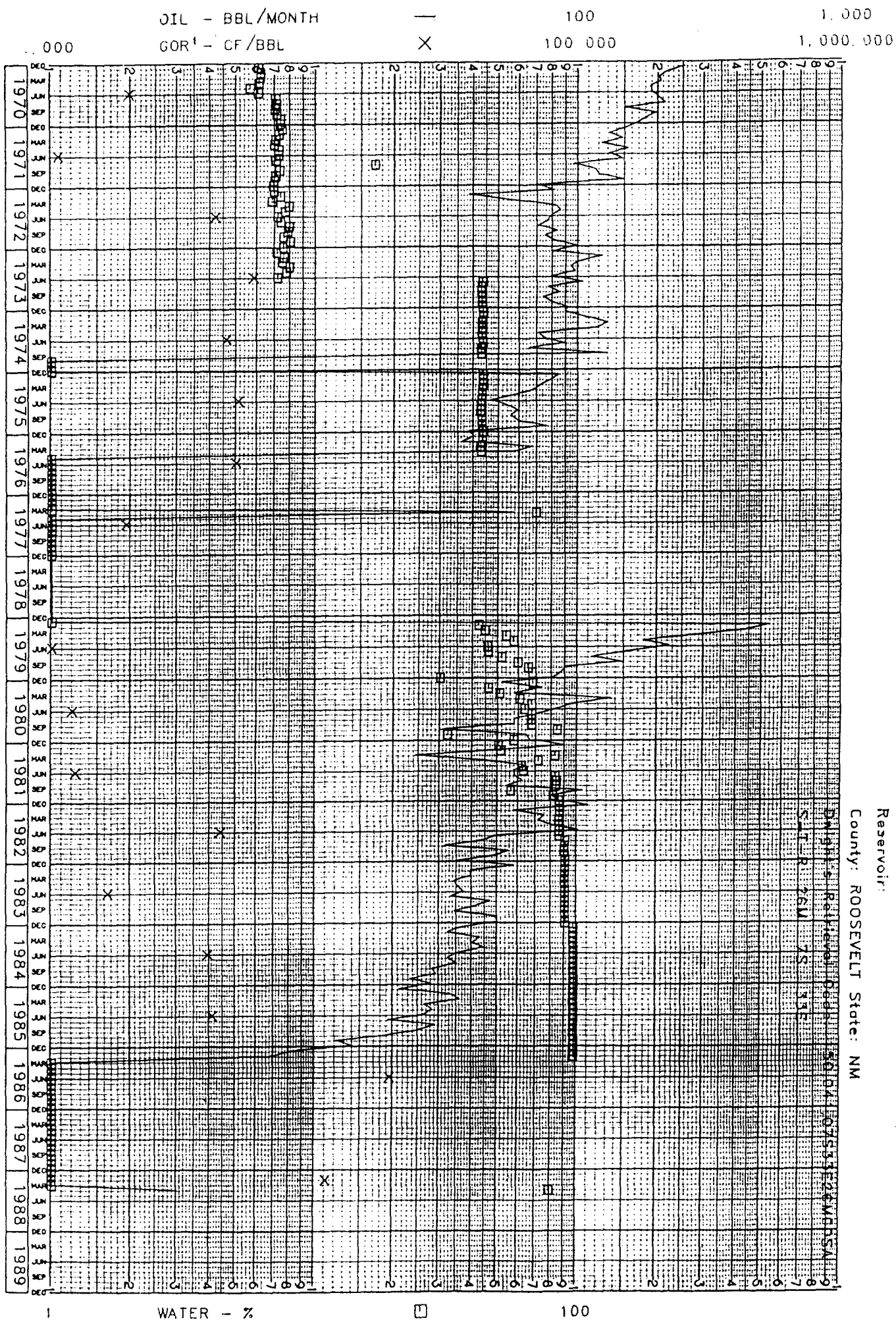




Operator: MIMS TEXAS O&G CO
Lease: FEDERAL 26 Well No: 000002
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

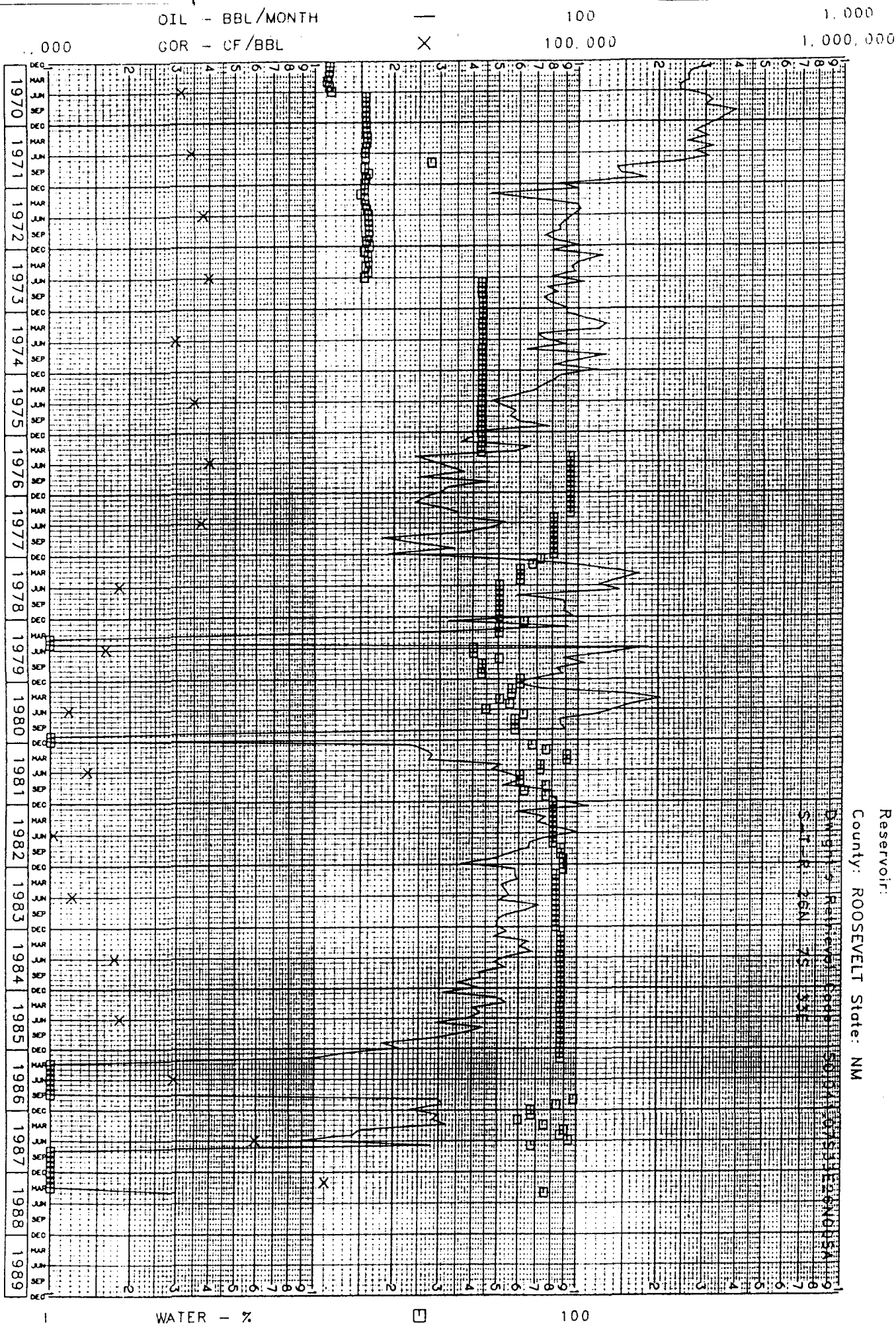
SA





Operator: MIMS TEXAS O&G CO
Lease: FEDERAL 26 Well No: 000004
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

SA

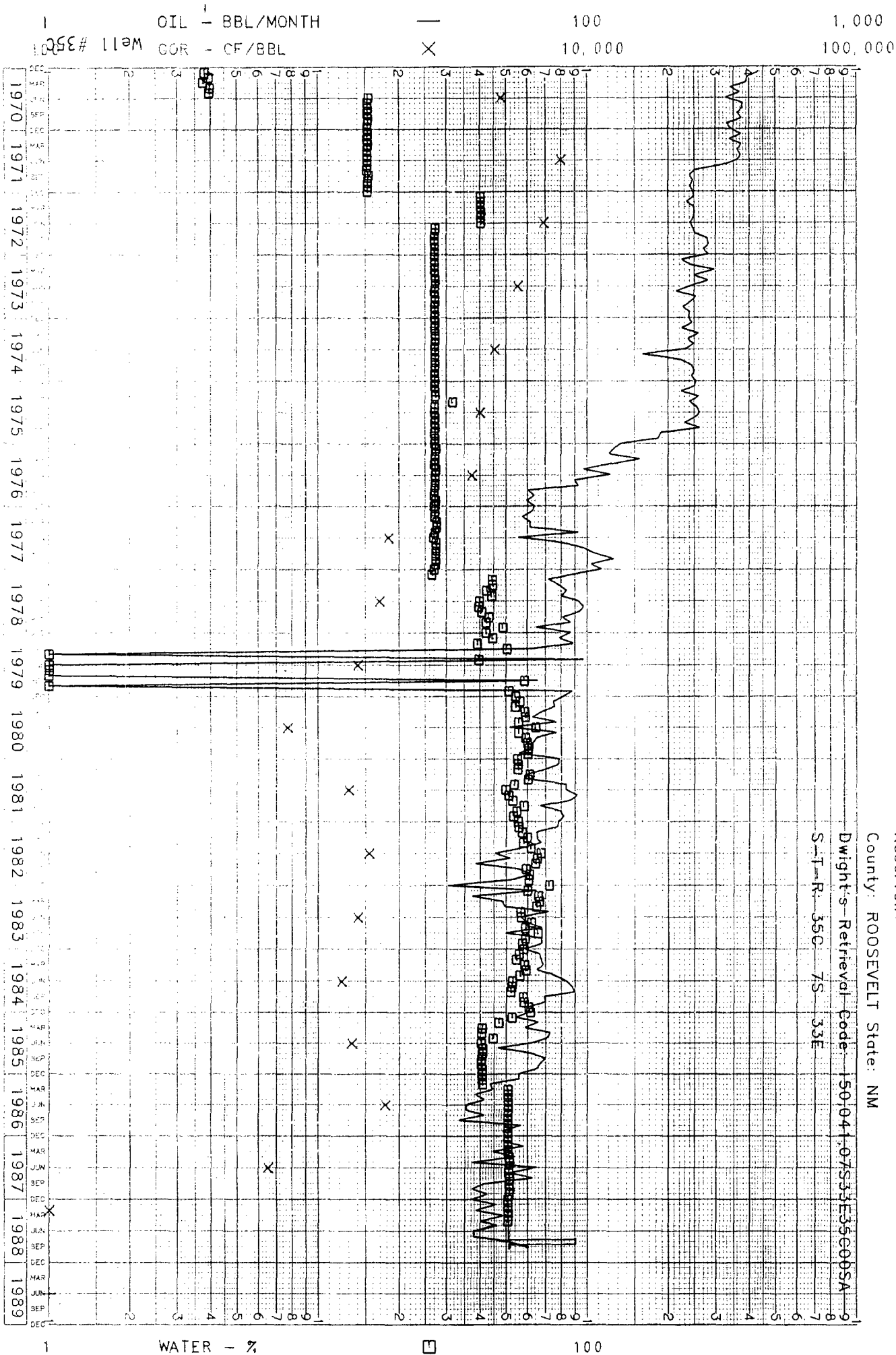


Operator: TEXACO PRODUCING INC
Lease: HOBBS T Well No: 000016
Field: CHAVEROO SAN ANDRES
Reservoir:

SA

County: ROOSEVELT State: NM

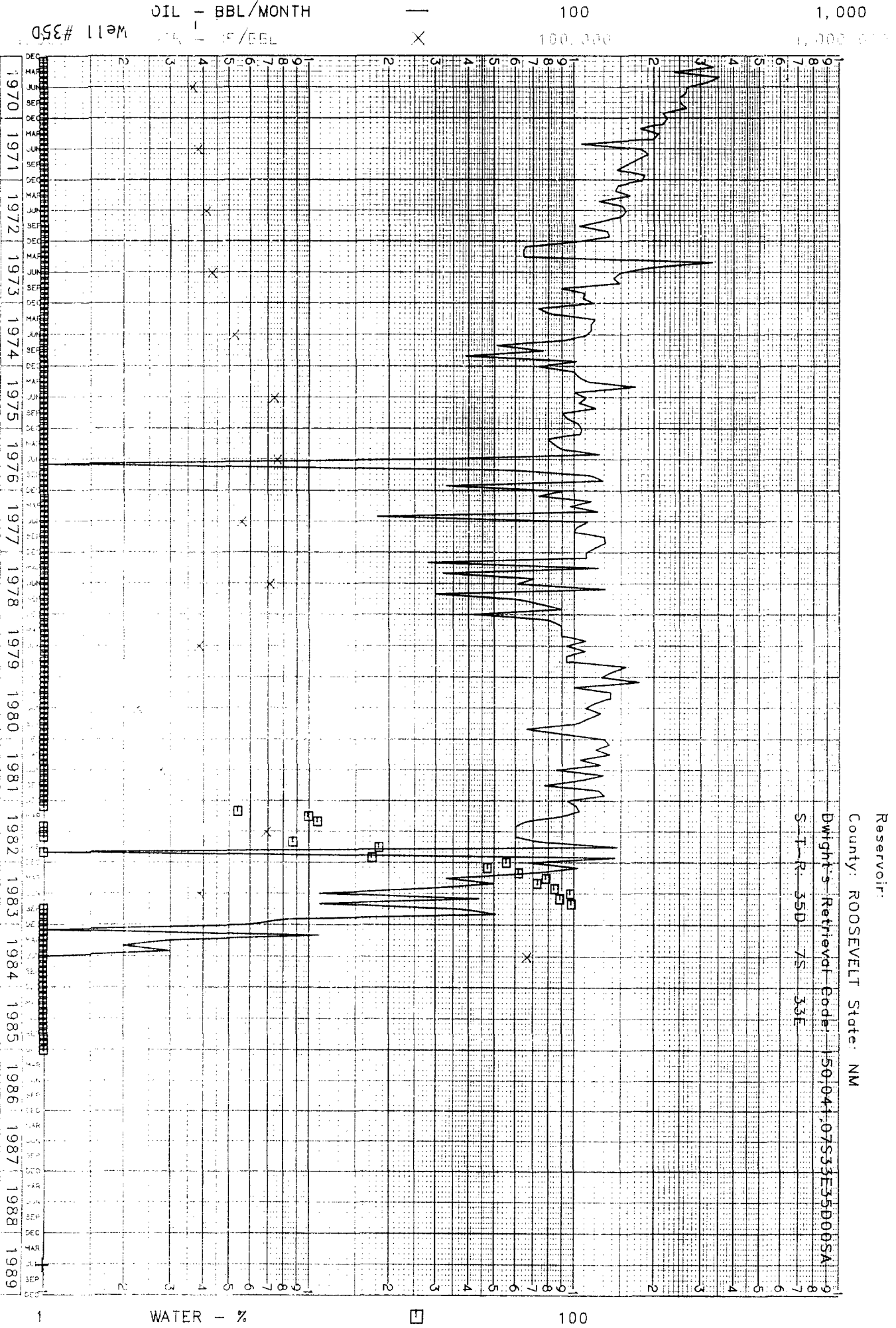
Dwight's Retrieval Code: 150/041-07533FE35C005A
S-I-R-35C-7S-33E



Operator: CHAVEROO OPERATING INC
Lease: SHACKELFORD Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir: SA

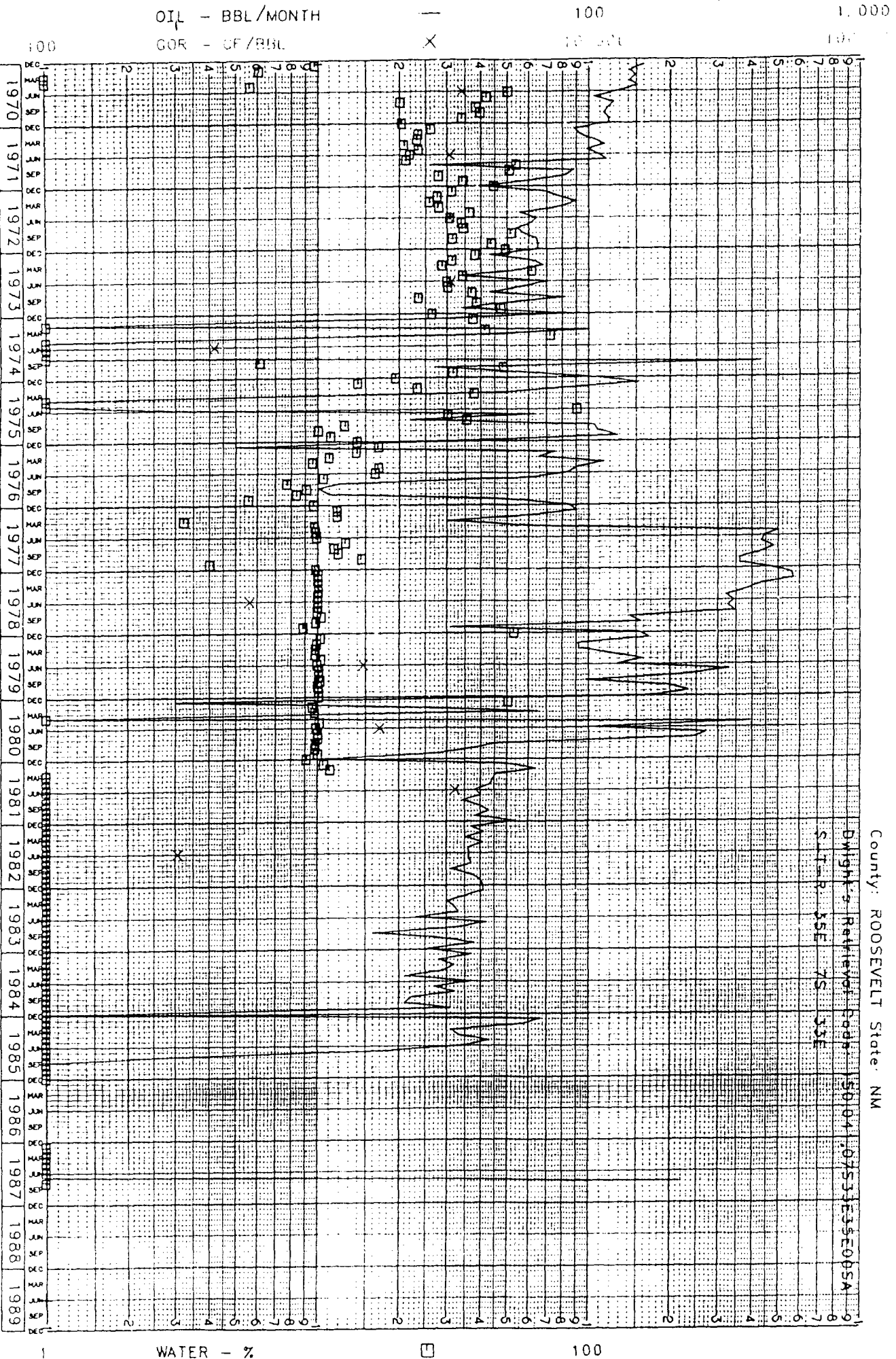
County: ROOSEVELT State: NM

Dwight's Retrieval Code: 150,041,07533E35D005A
S-I-R-35D 75 33E



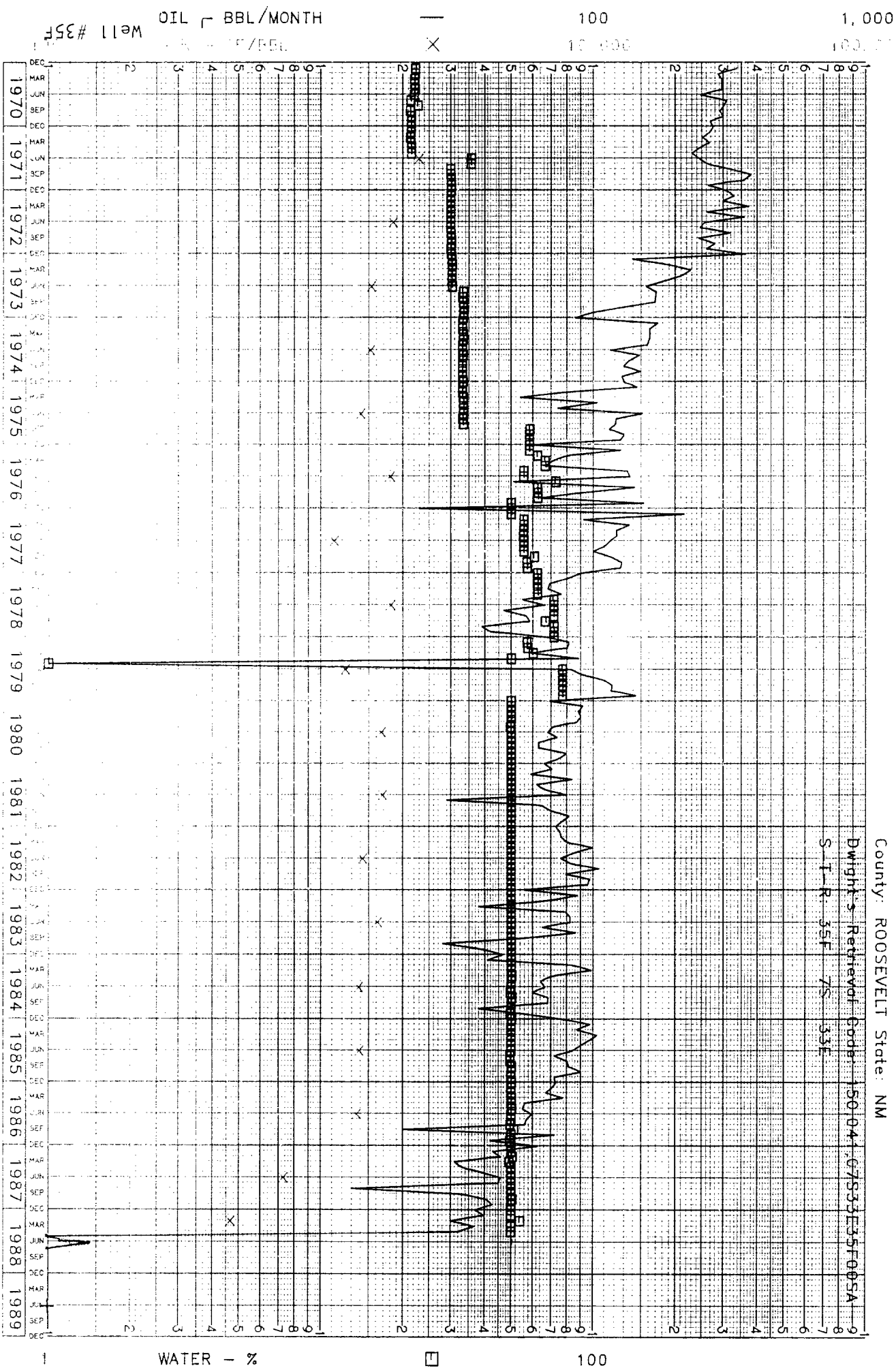
Operator: MERLIN EXPLORATION INC
Lease: STATE DA Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

SA

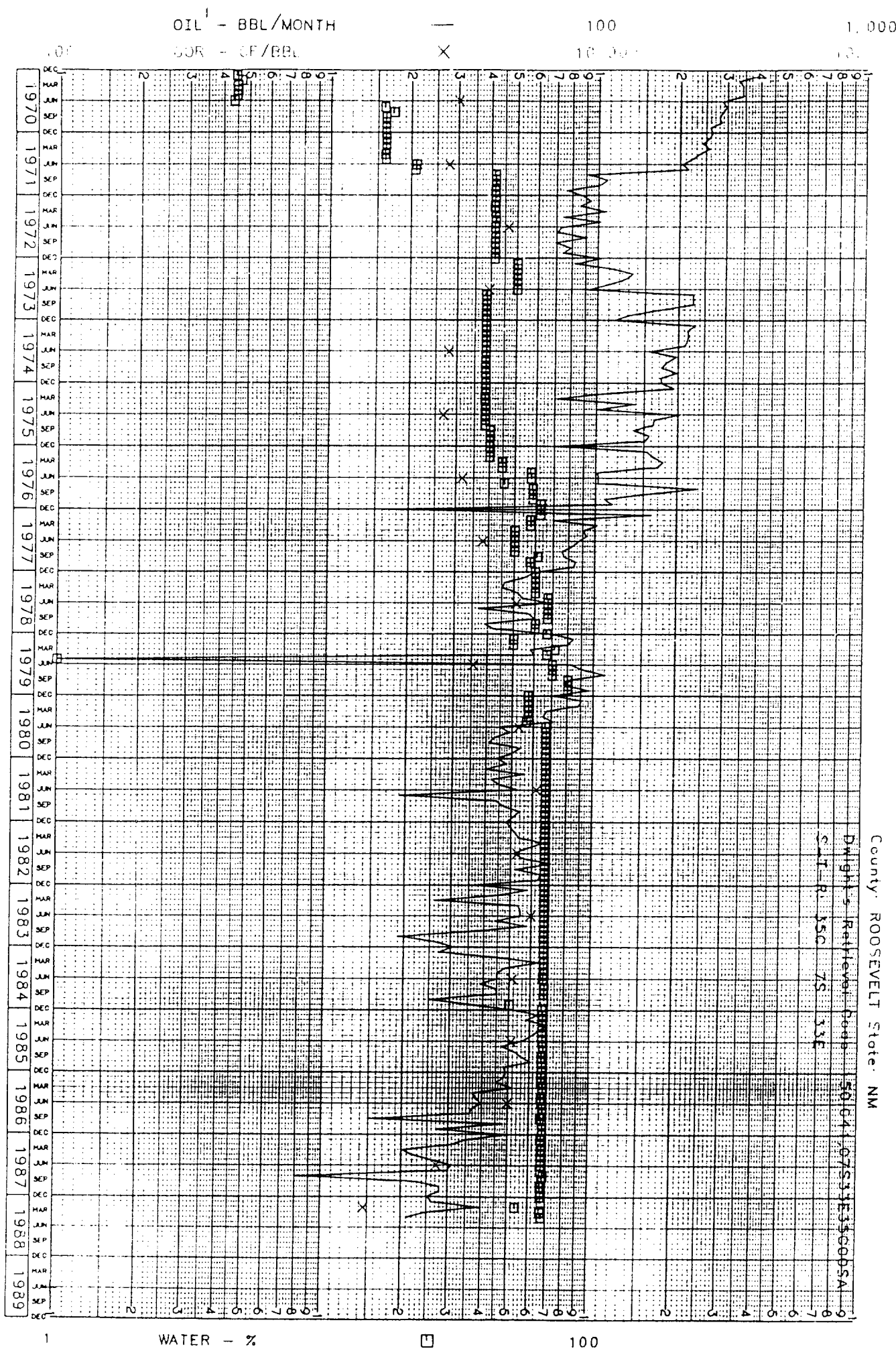


Operator: MARATHON OIL CO
Lease: STATE SECTION 35 Well No: 000003
Field: CHAVEROO SAN ANDRES
Reservoir: SA
County: ROOSEVELT State: NM

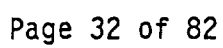
Dwight's Retrieval Code: 15004167933E35F005A
S-I-R-35F-7S-33E



Operator: MARATHON OIL CO
Lease: STATE SECTION 35 Well No: 000004
Field: CHAVEROO SAN ANDRES
Reservoir:
SA



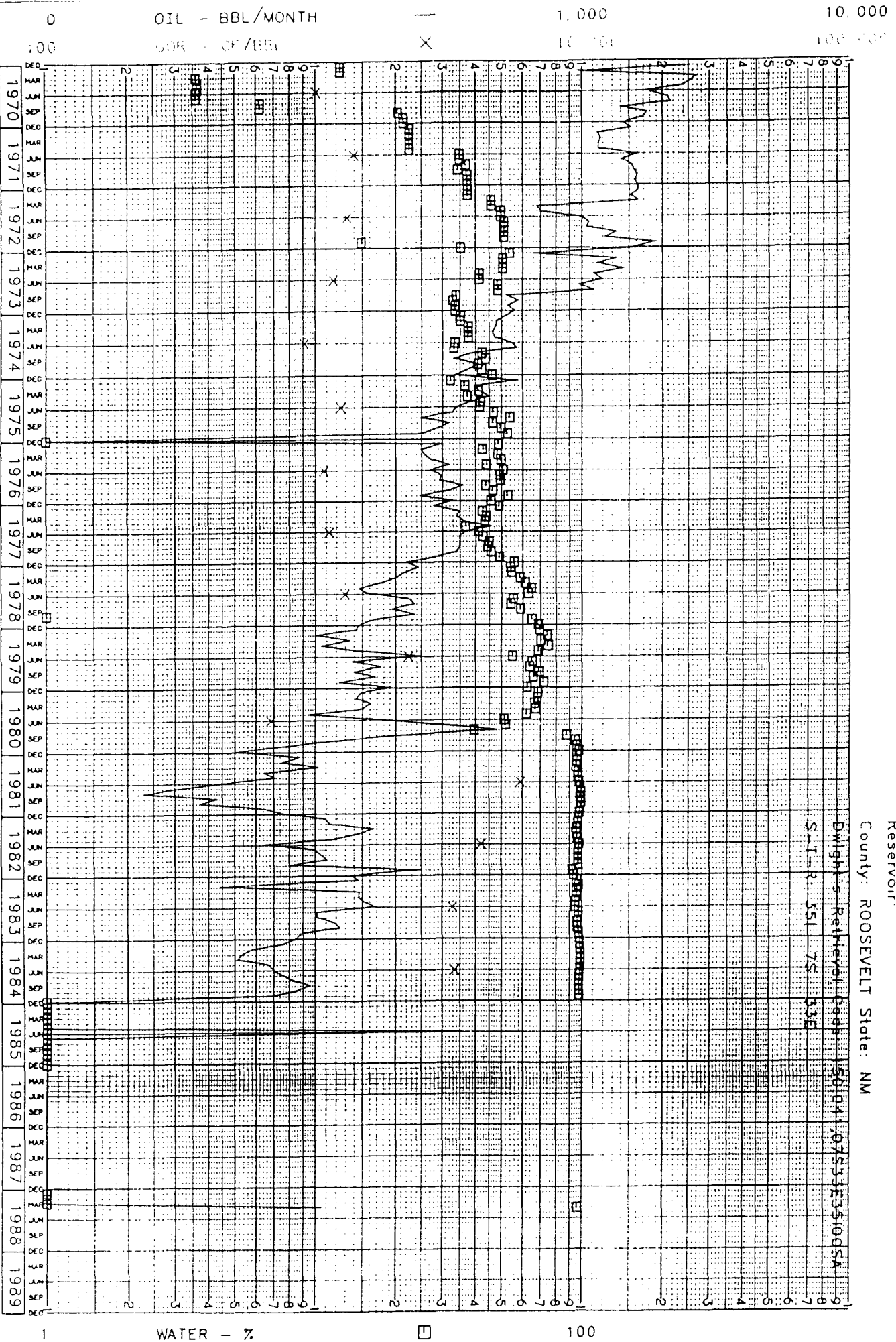
Operator: MARATHON OIL CO
Lease: STATE SECTION 35 Well No. 000005
Field: CHAVEROO SAN ANDRES
Reservoir: SA



Operator: MERLIN EXPLORATION INC
 Lease STATE CV Well No. 000003
 Field: CHAVEROO SAN ANDRES
 Reservoir:

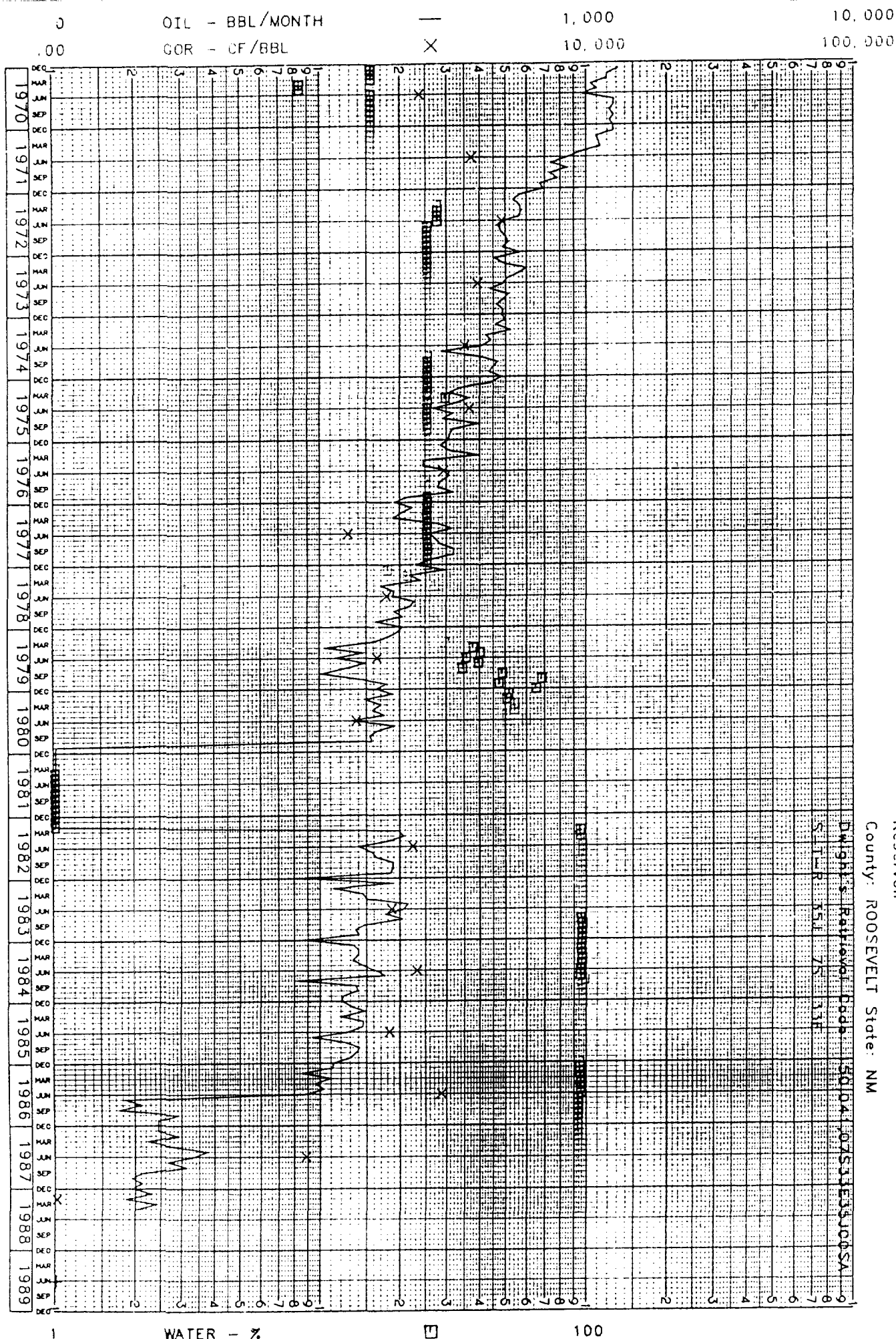
County: ROOSEVELT State: NM

Dwight's Retrieval Basin 150.041.07533251005A
 S-I-R-351 75 03E

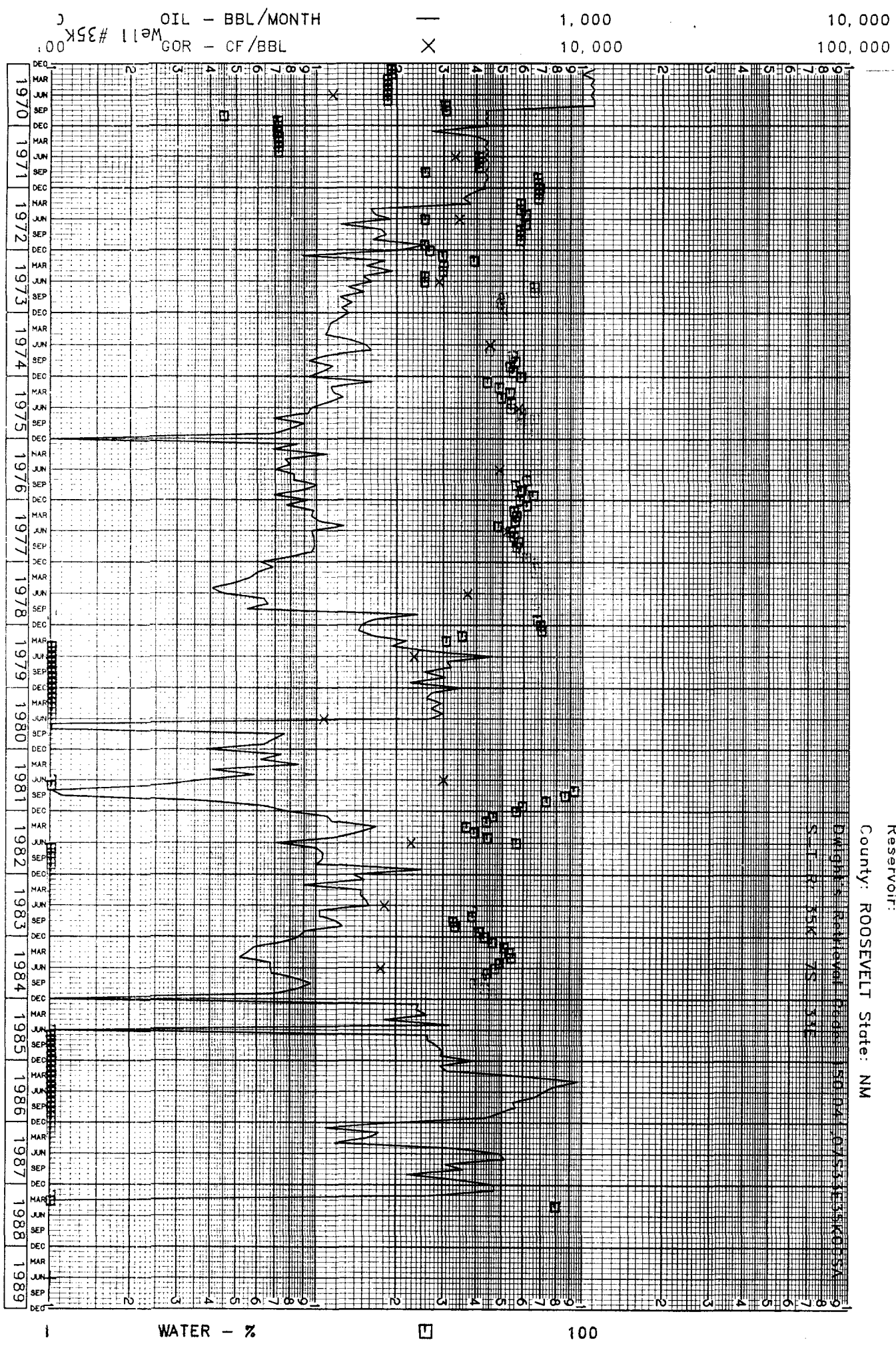


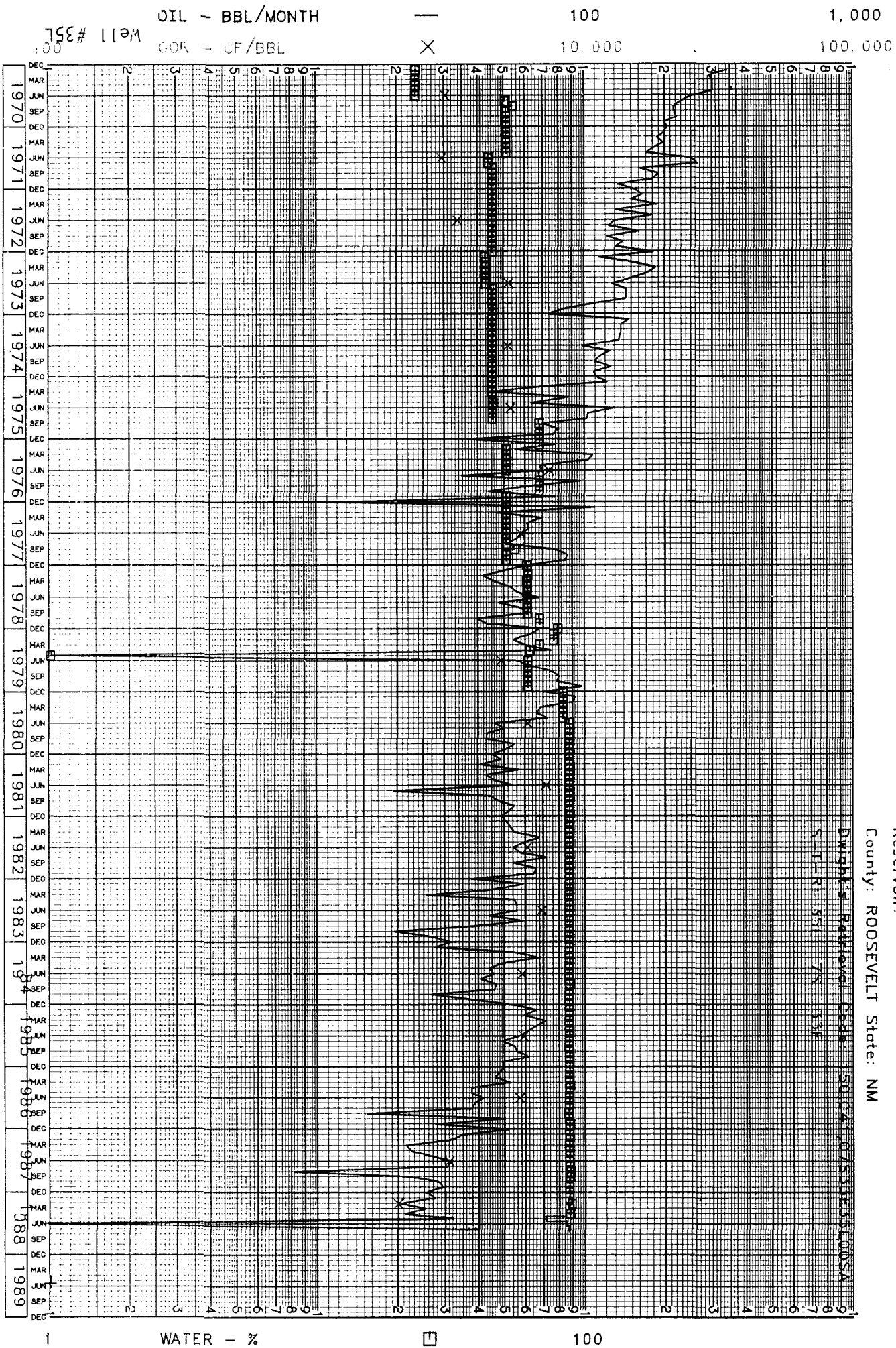
Operator: TEXACO PRODUCING INC
Lease: HOBBS T Well No. 000014
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

SA



Operator: MERLIN EXPLORATION INC
Lease: STATE CV Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM





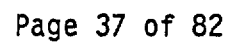
Operator: MARATHON OIL CO
Lease: STATE SECTION 35 Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

59

SA

Reservoir:

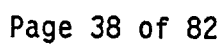
County: ROOSEVELT State: NM



Operator: MERLIN EXPLORATION INC
Lease: STATE DE Well No: 000001
Field: CHAVERCO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

Reservoir:

County: ROOSEVELT State: NM



OIL - BBL/MONTH

100

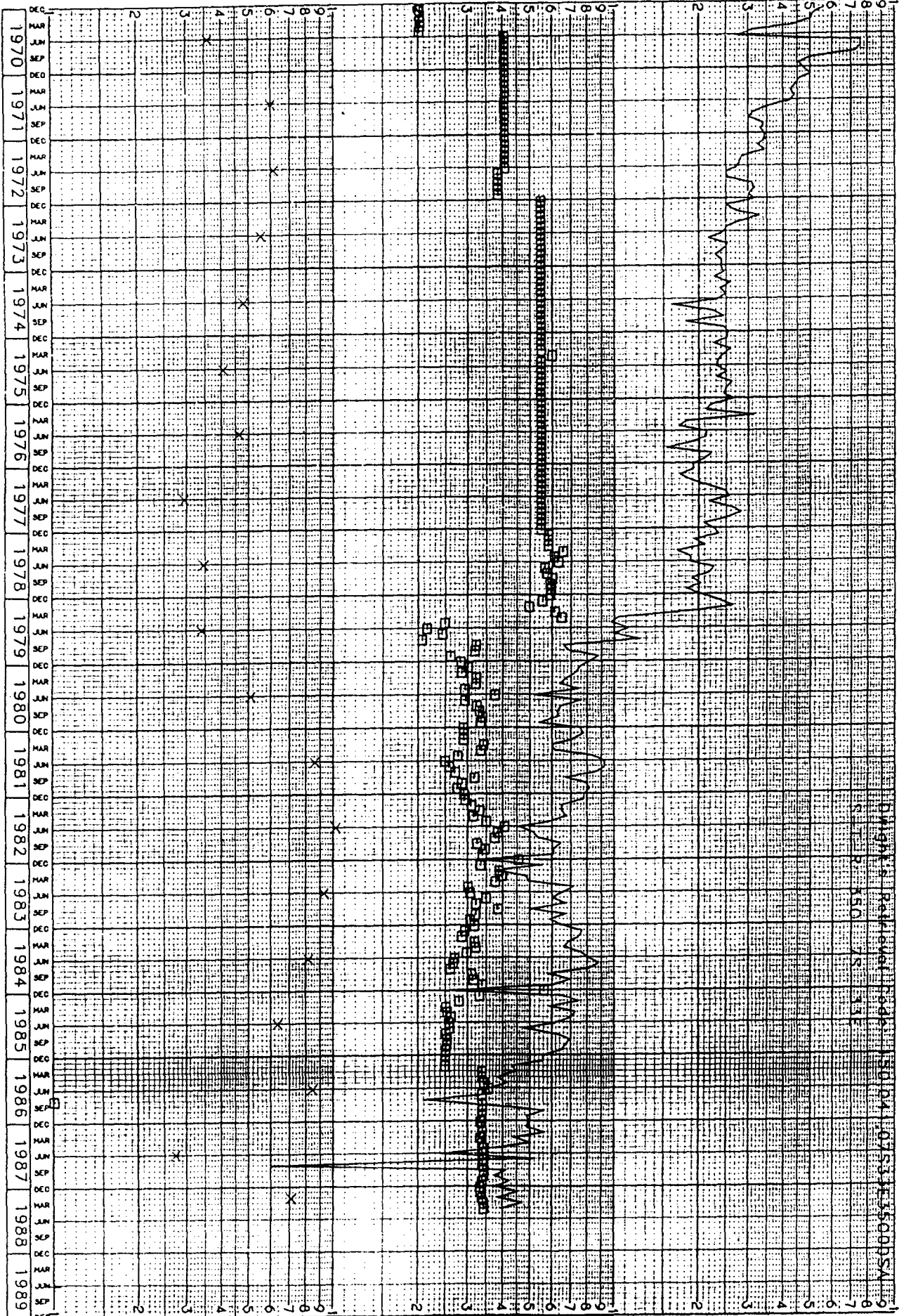
1,000

GOR - CF/BBT

X

100,000

1,000,000



Operator: TEXACO PRODUCING INC
Lease: HOBBS T Well No: 000018
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

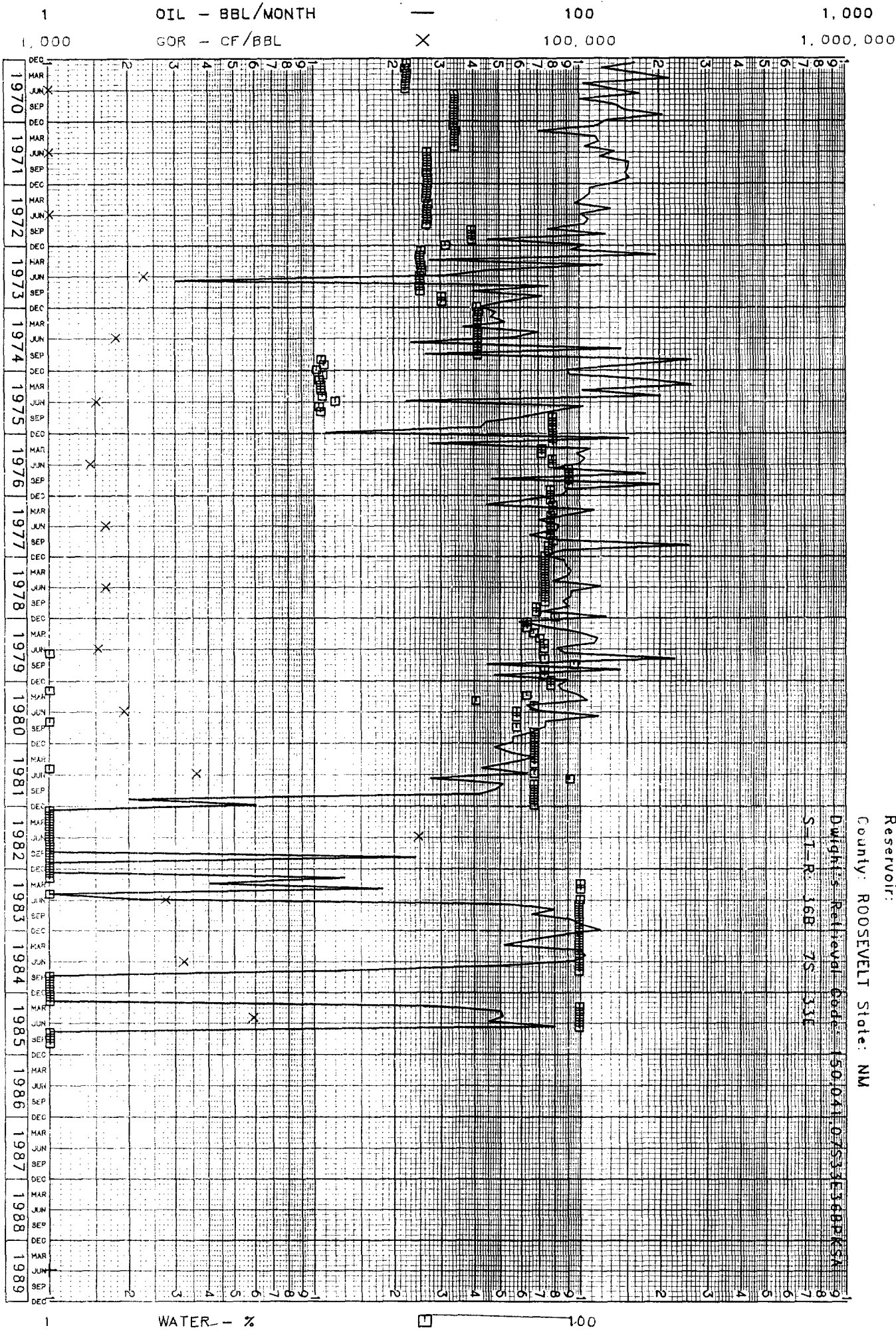
SA

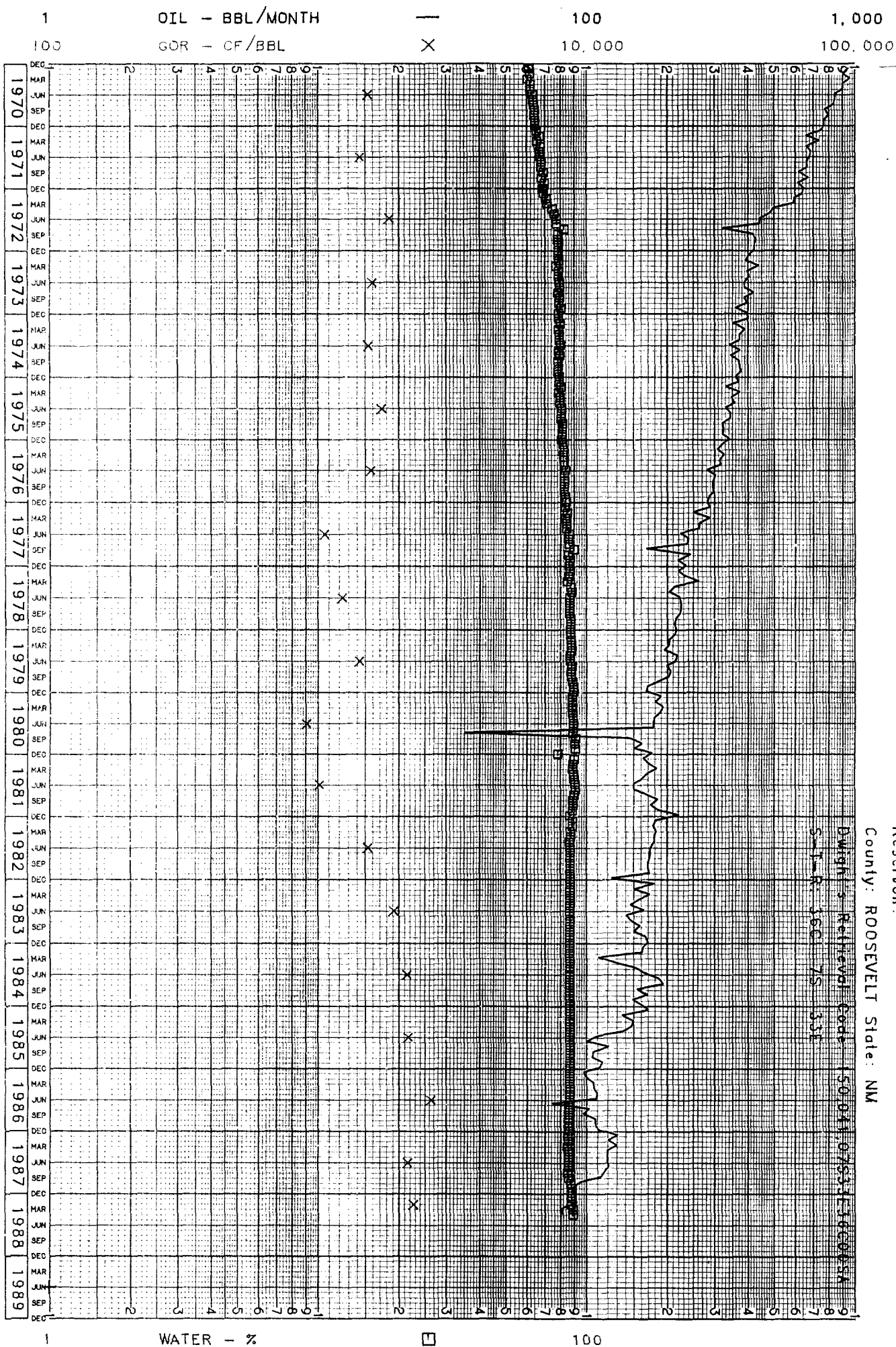
58

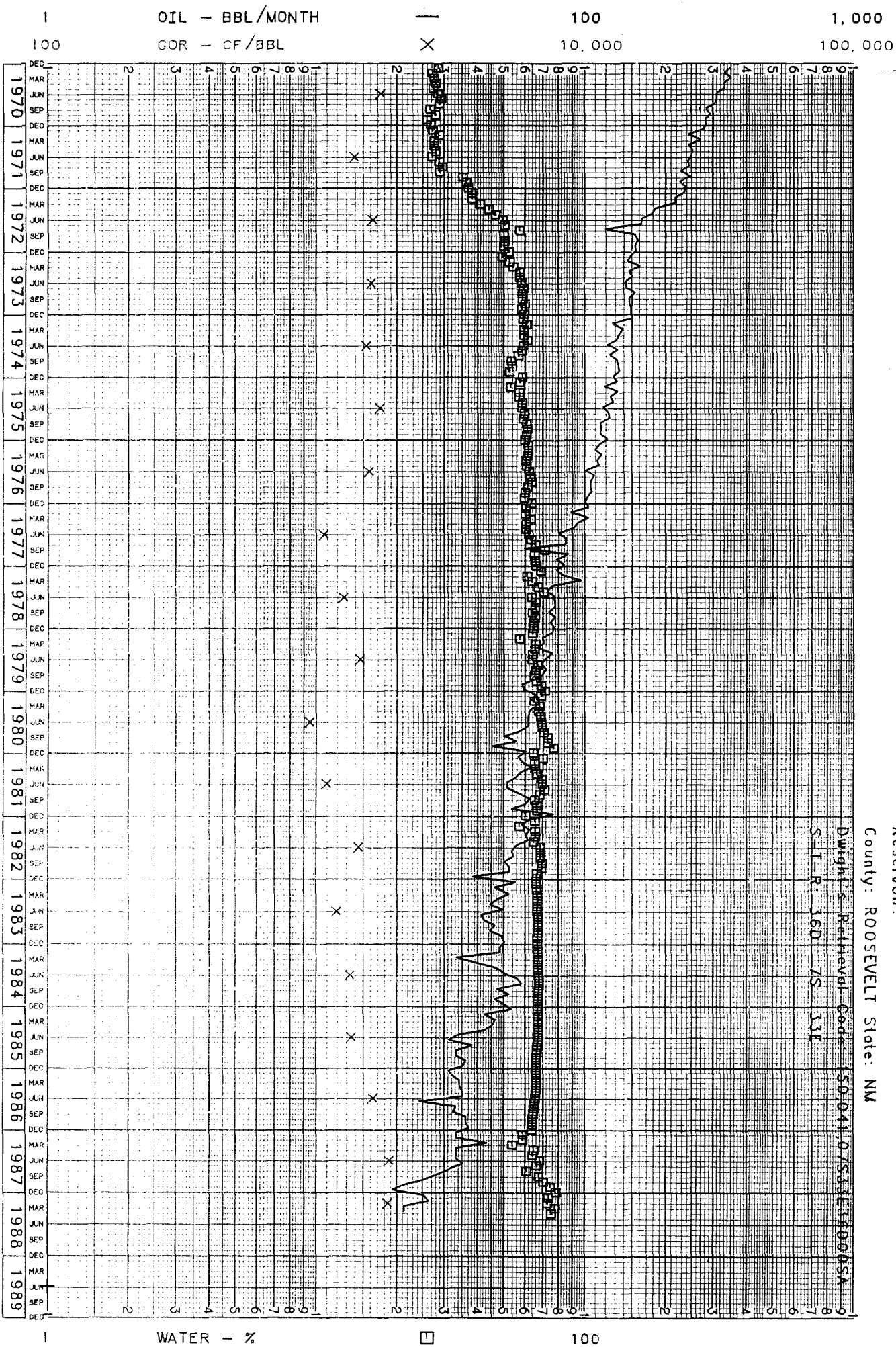
Operator: TEXACO PRODUCING INC
Lease: HOBBS T Well No: 000019
Field: CHAVEROO SAN ANDRES

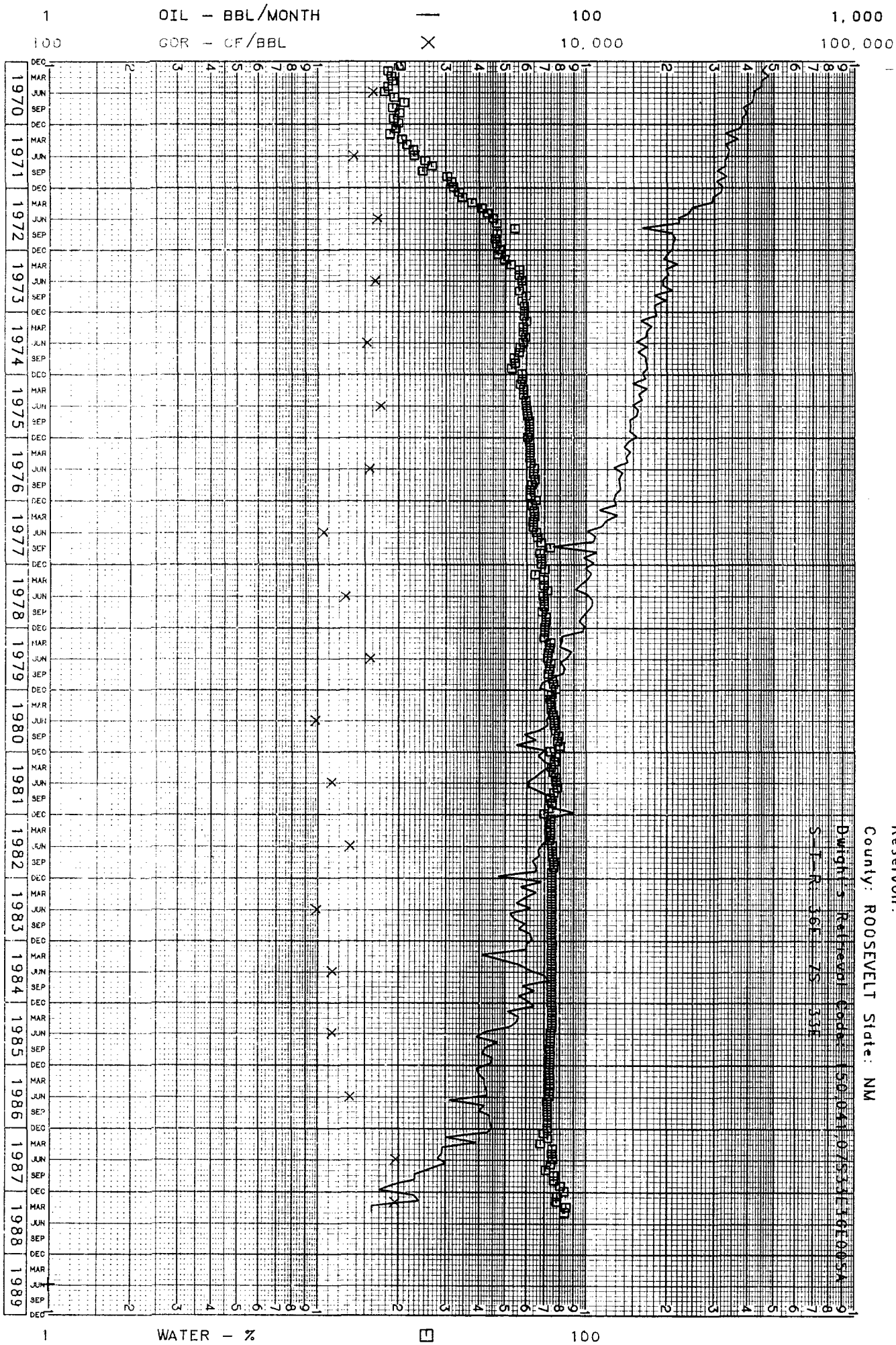
SA

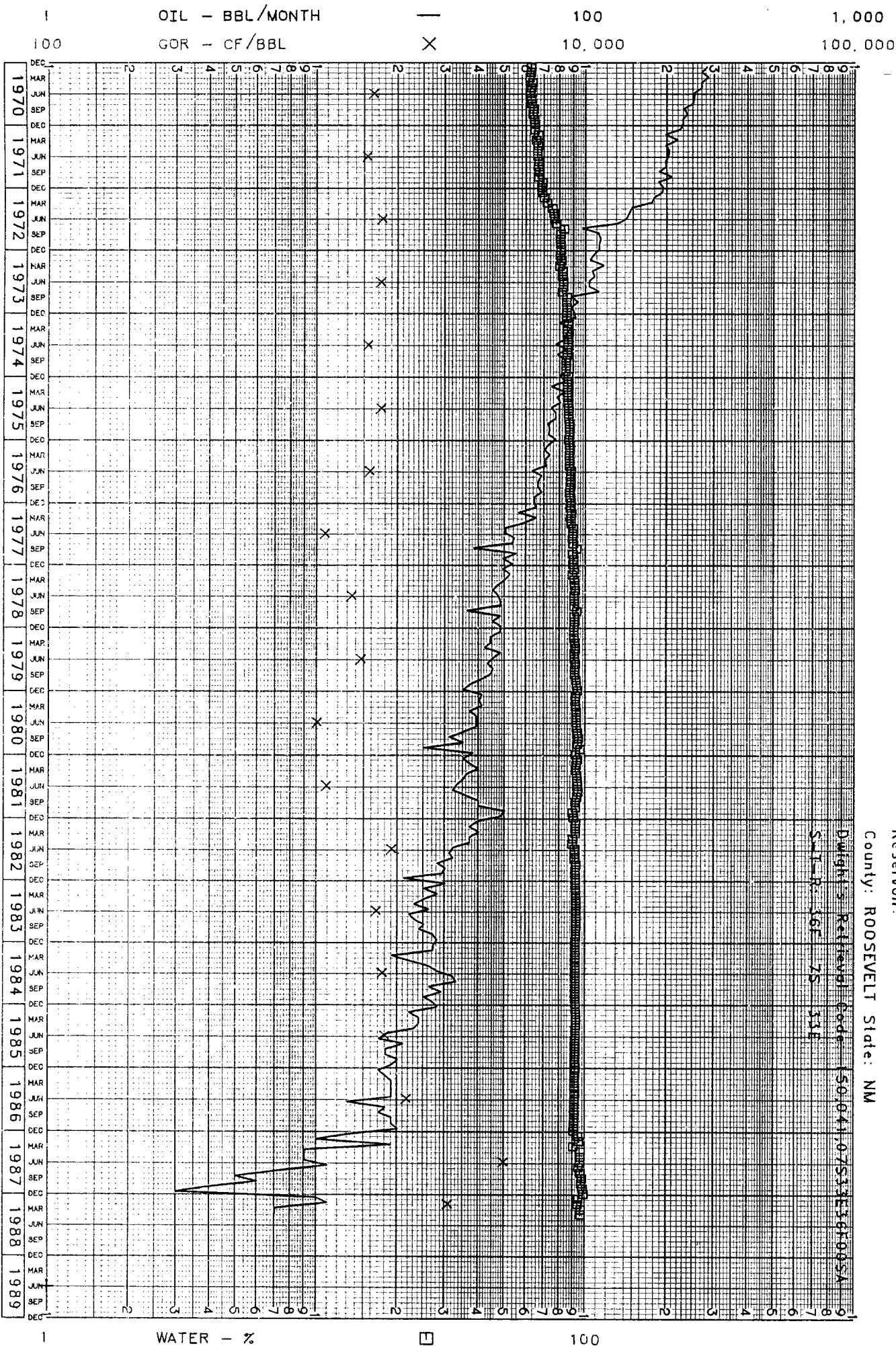




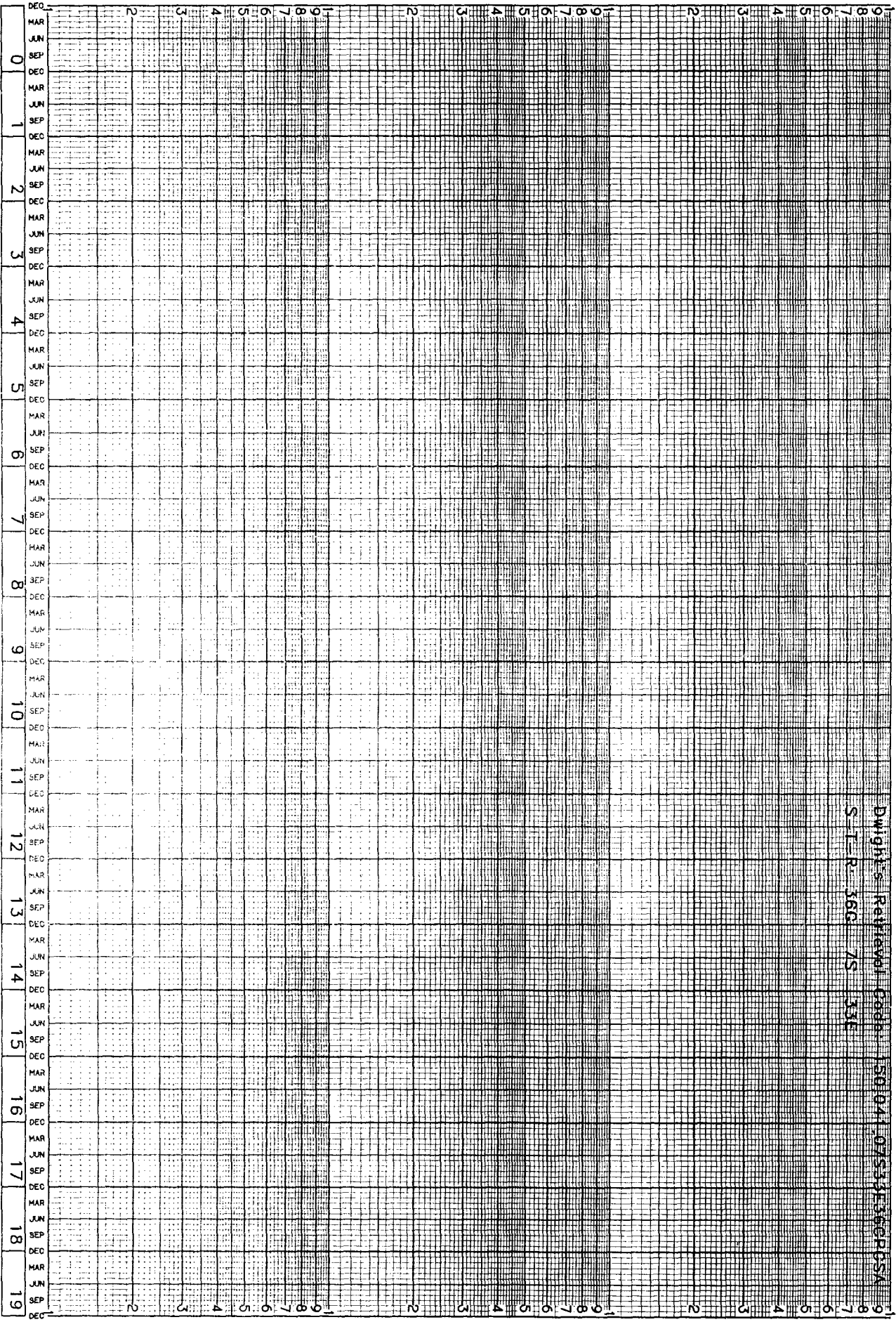








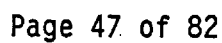
Operator: MARATHON OIL CO
Lease: MARATHON STATE Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

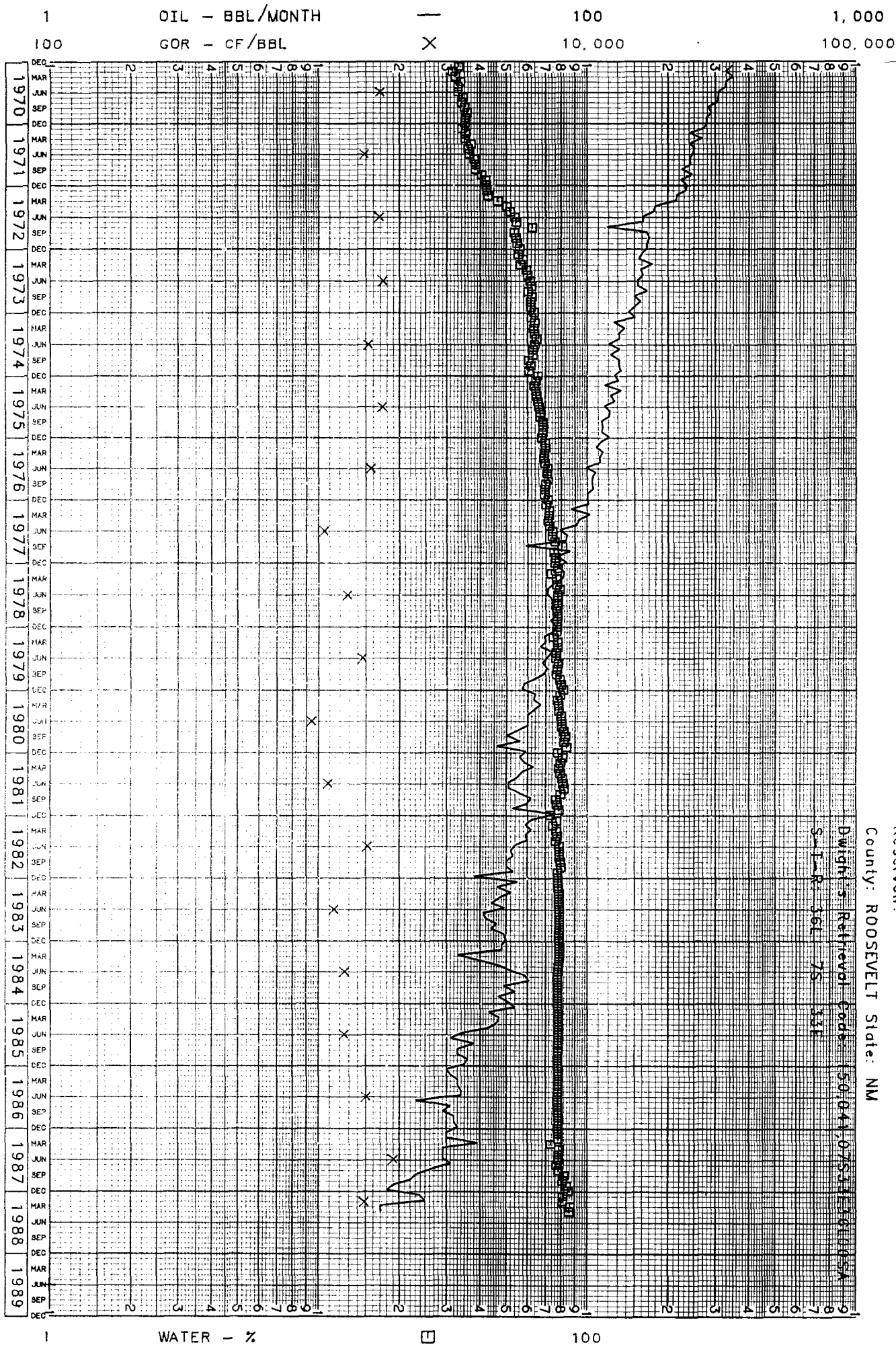


Operator: MYCO PETROLEUM
Lease: STATE K Well No. 00007
Field: CHAVEROO SAN ANDRES

County: ROOSEVELT State: NM

Dwight's Retrieval Code: 50 04 10 75 33 36 K00SA 9
S-I-R 36K 75 33 8 7

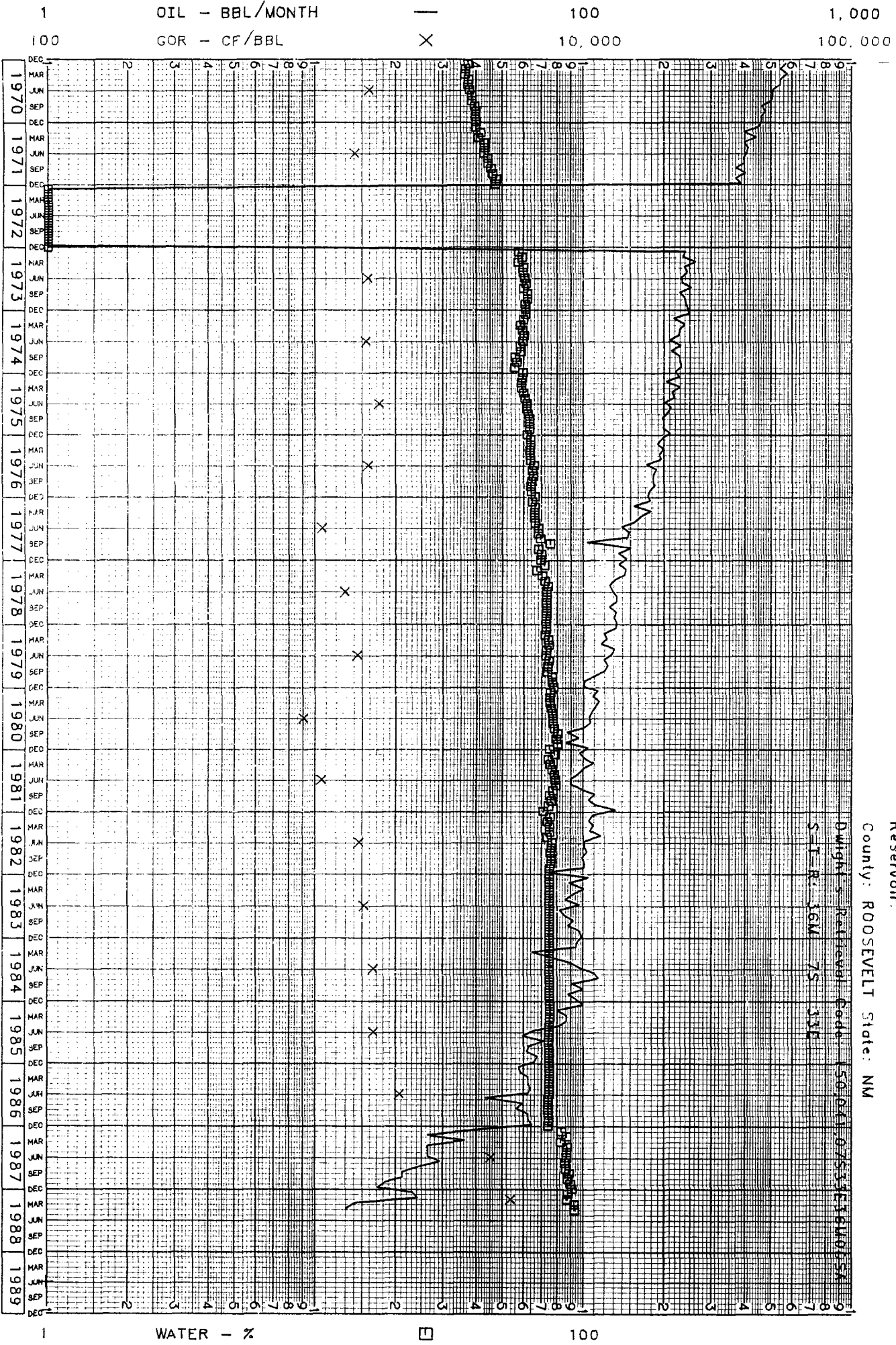


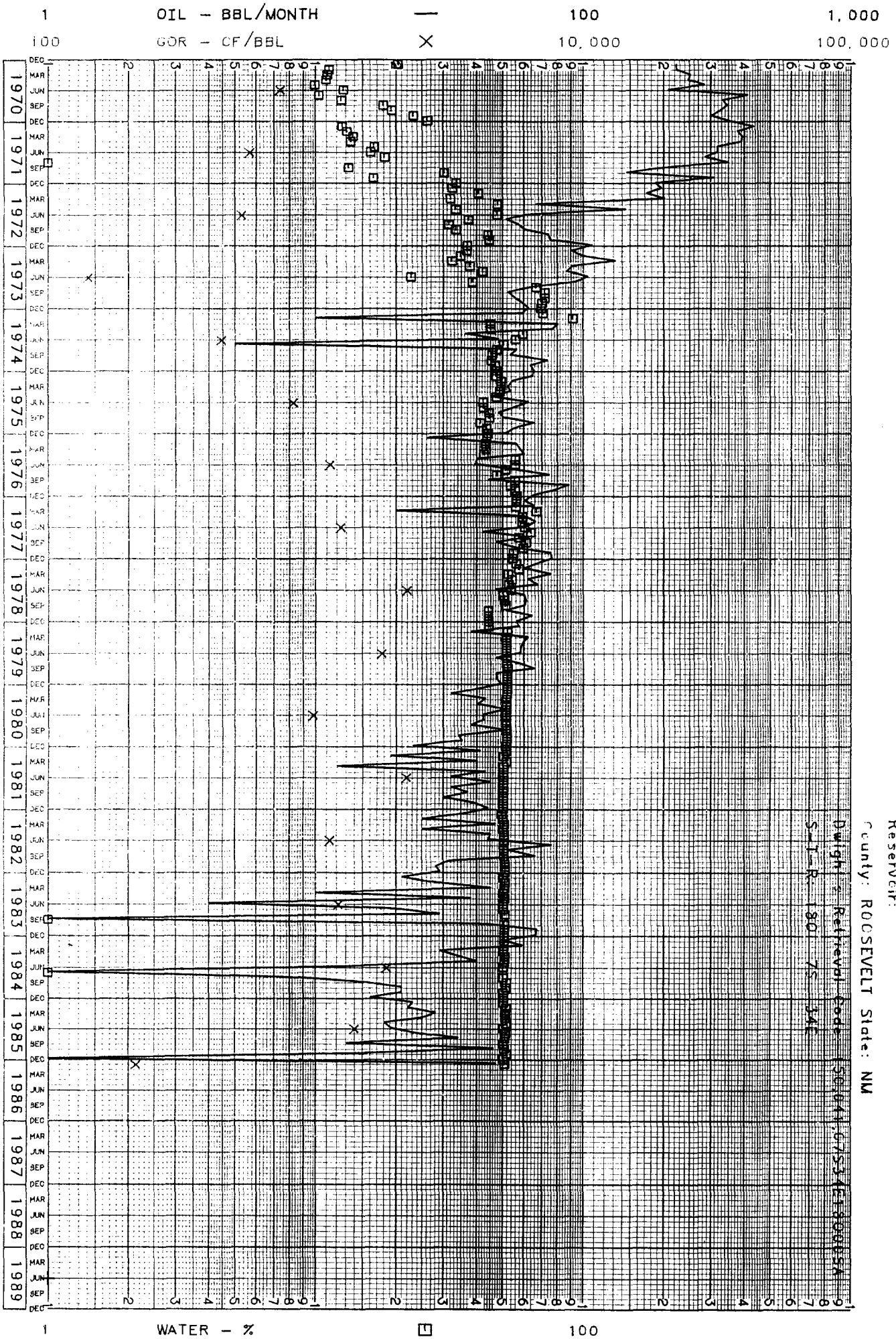


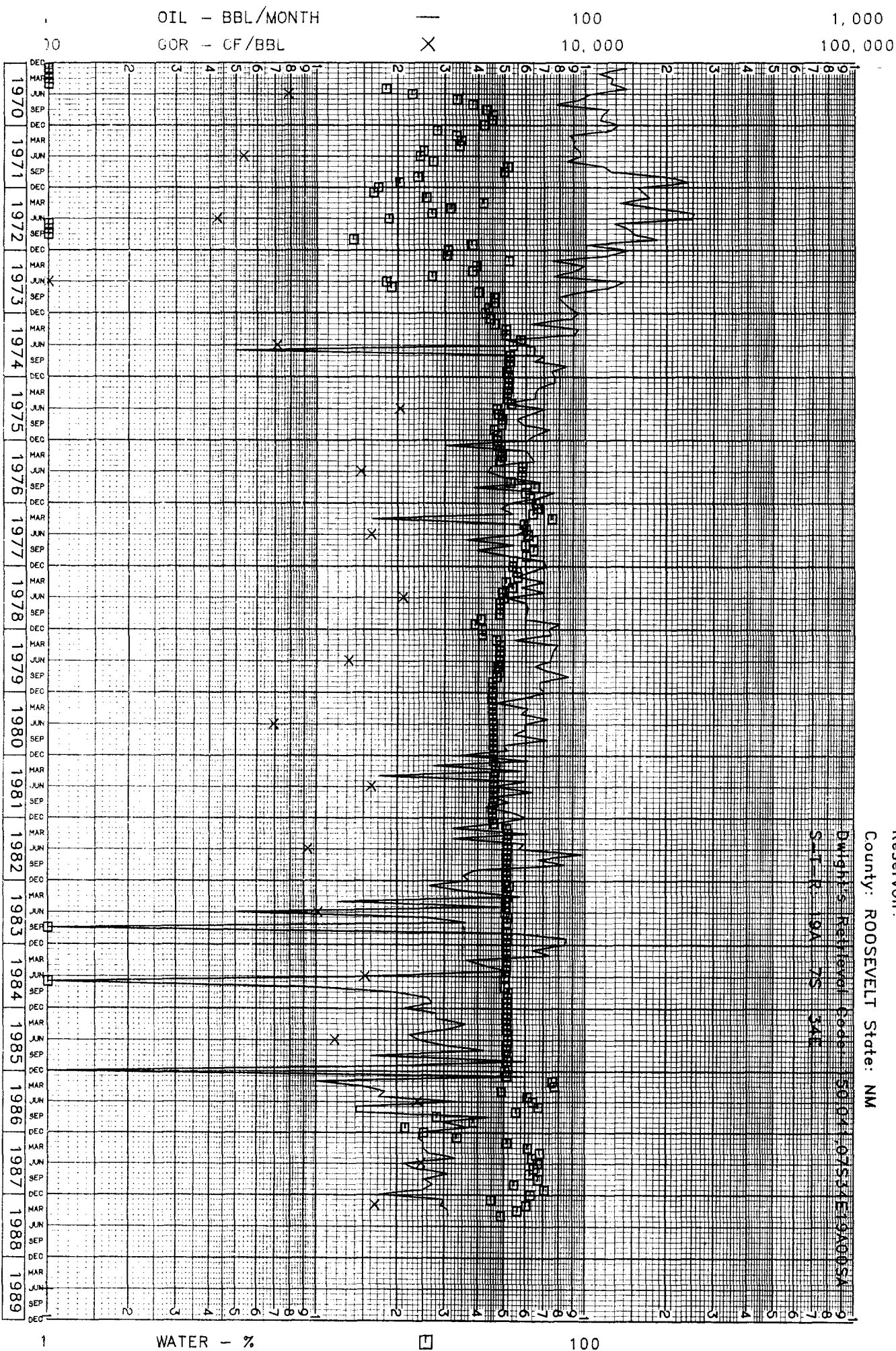
Operator: MYCO PETROLEUM
Lease: STATE K Well No: 000004
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

SA

60



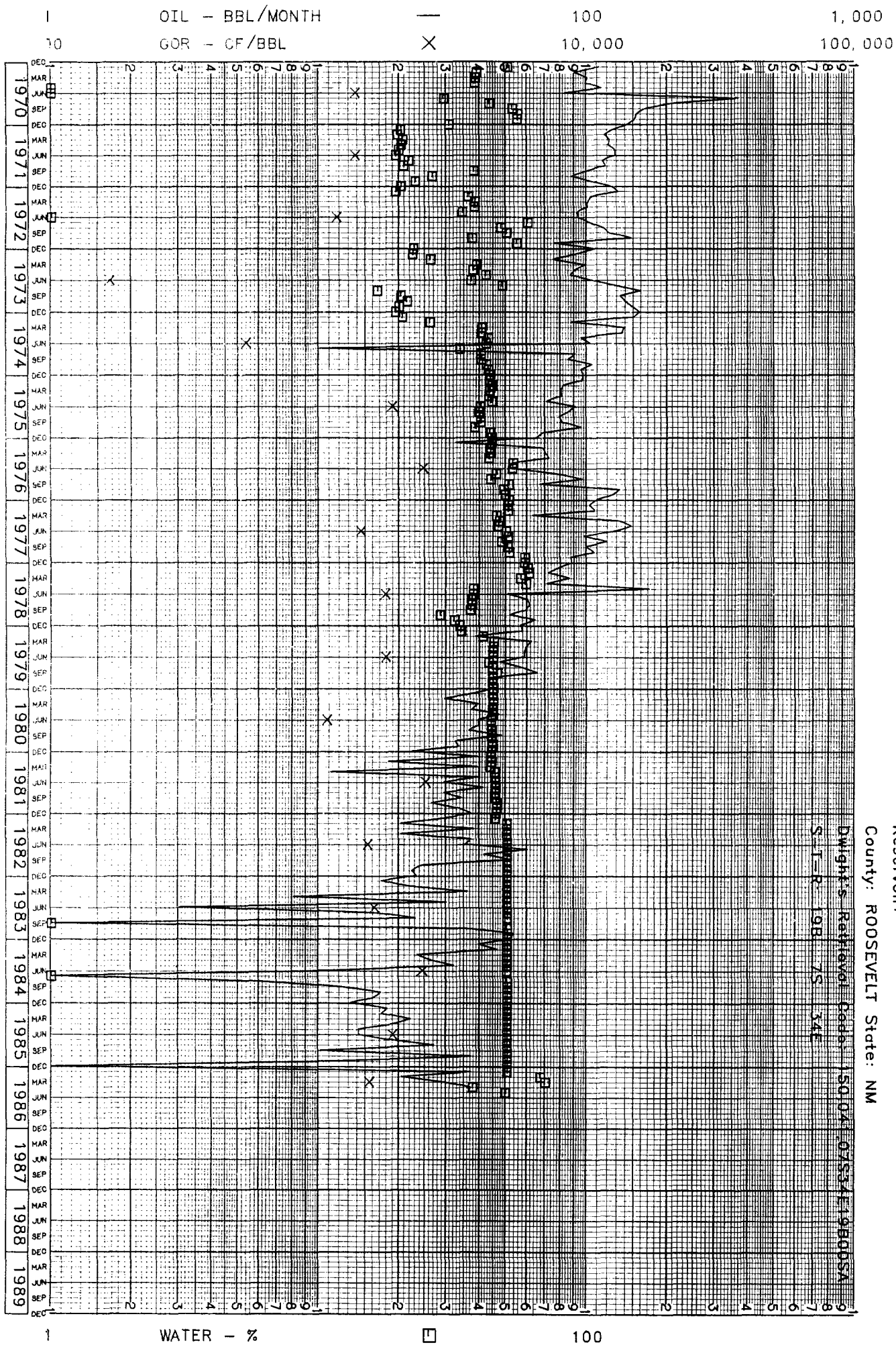


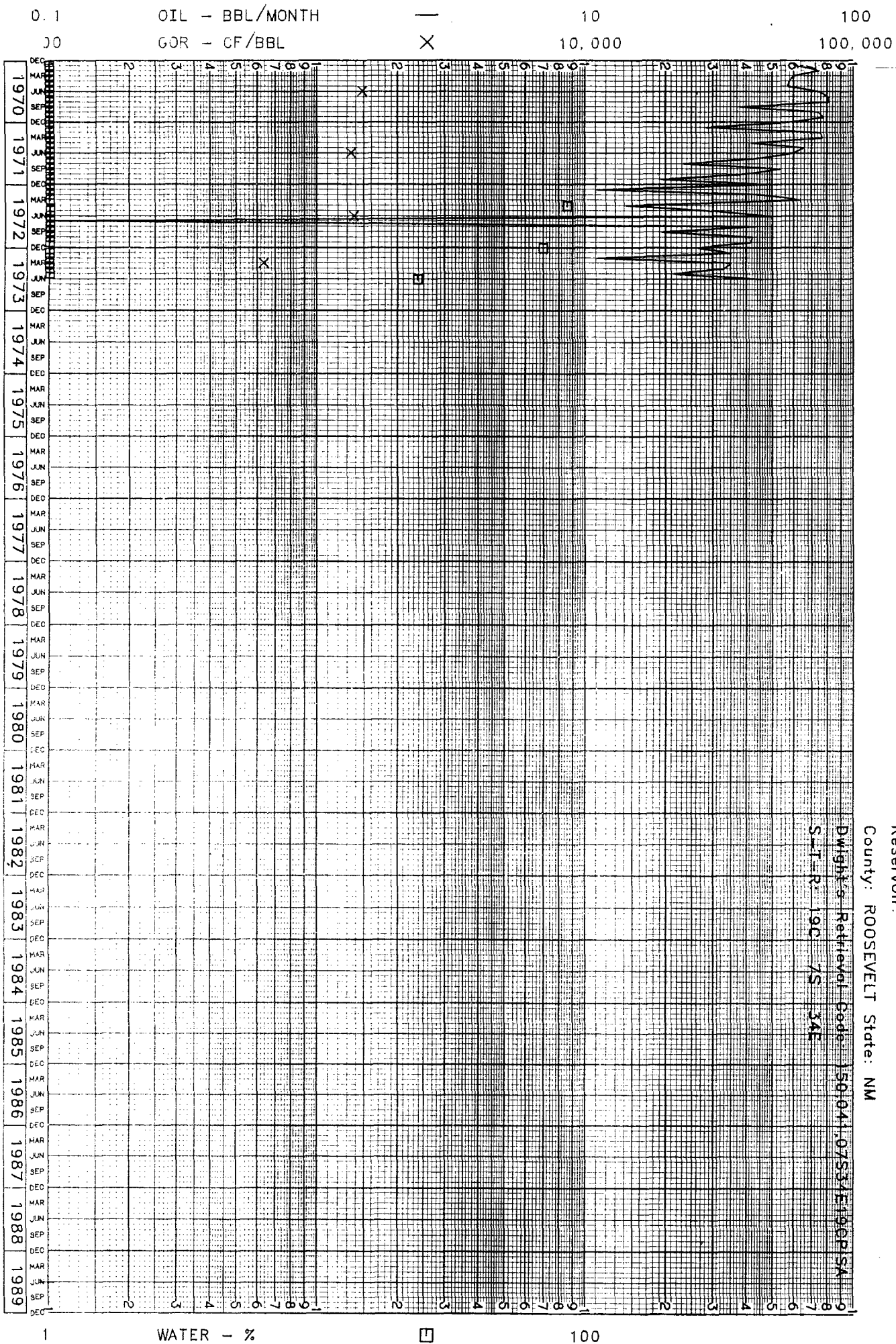


Operator: BRADEN DEEM INC
Lease: WOLF FEDERAL Well No: 000004
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM
SA

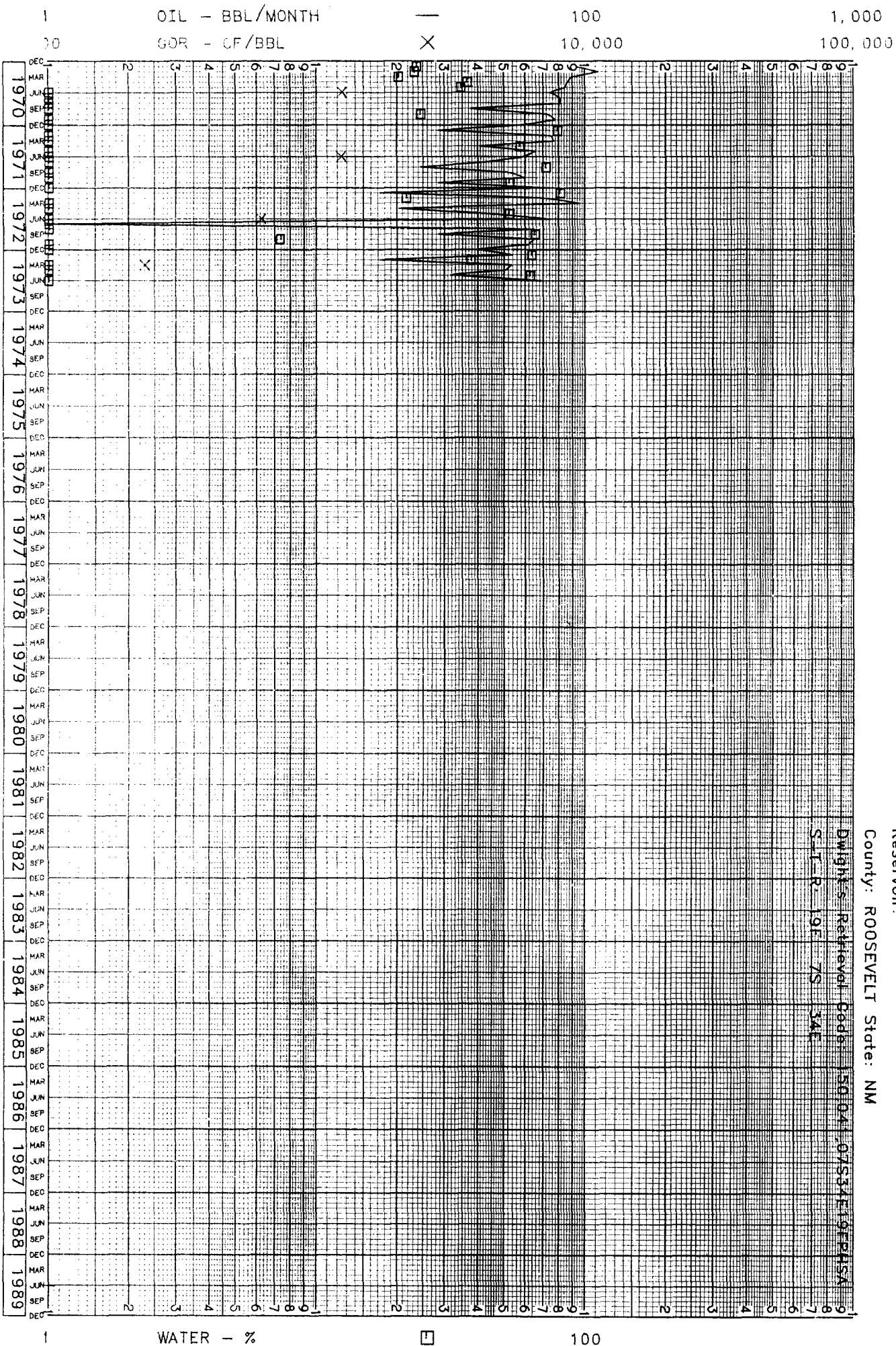
Operator: BRADEN DEEM INC
Lease: WOLF FEDERAL Well No: 000002
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

Dwight's Retrieval Data 150.04 07534198005A
S-T-R 19B 7S 34E

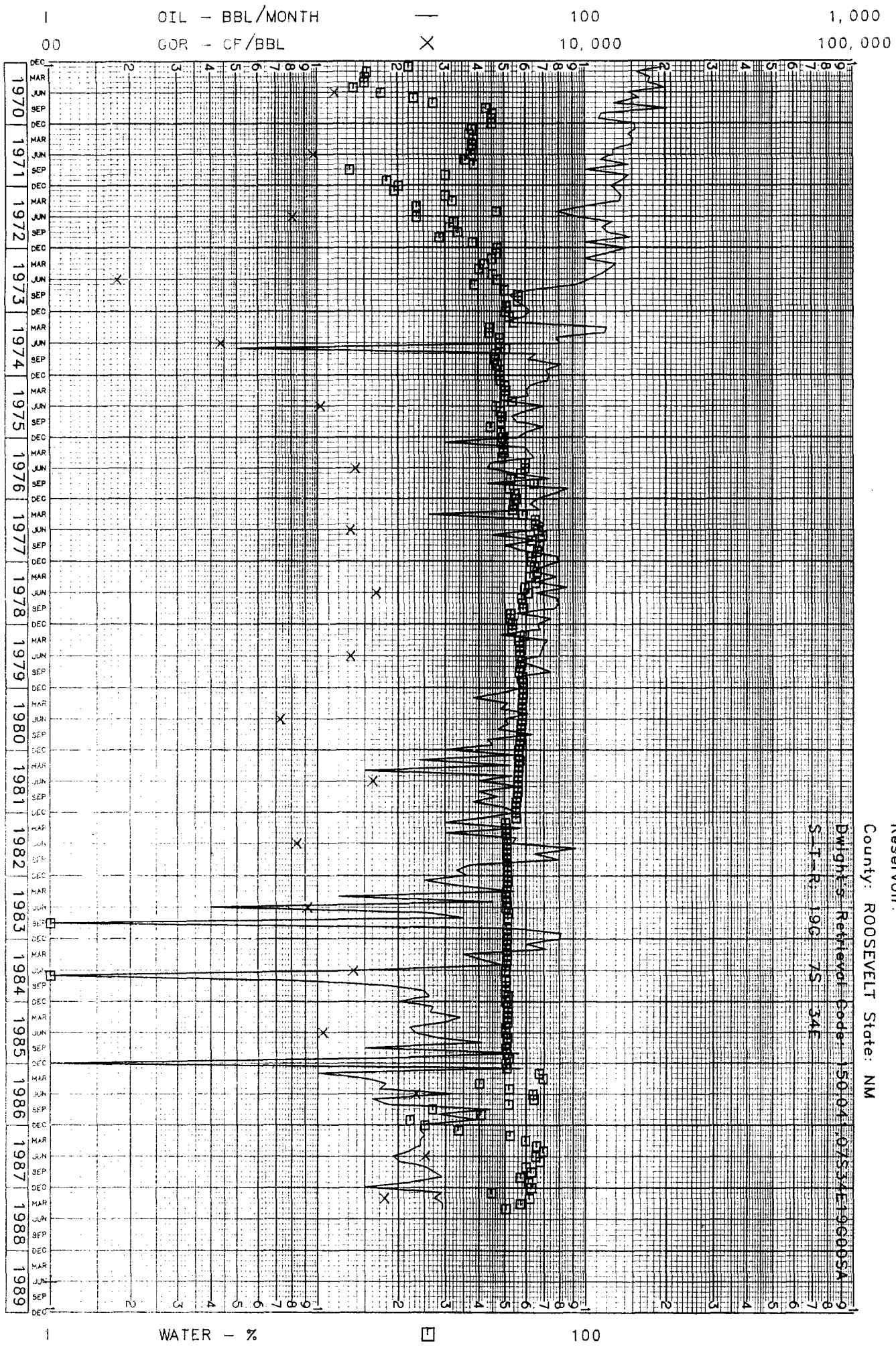




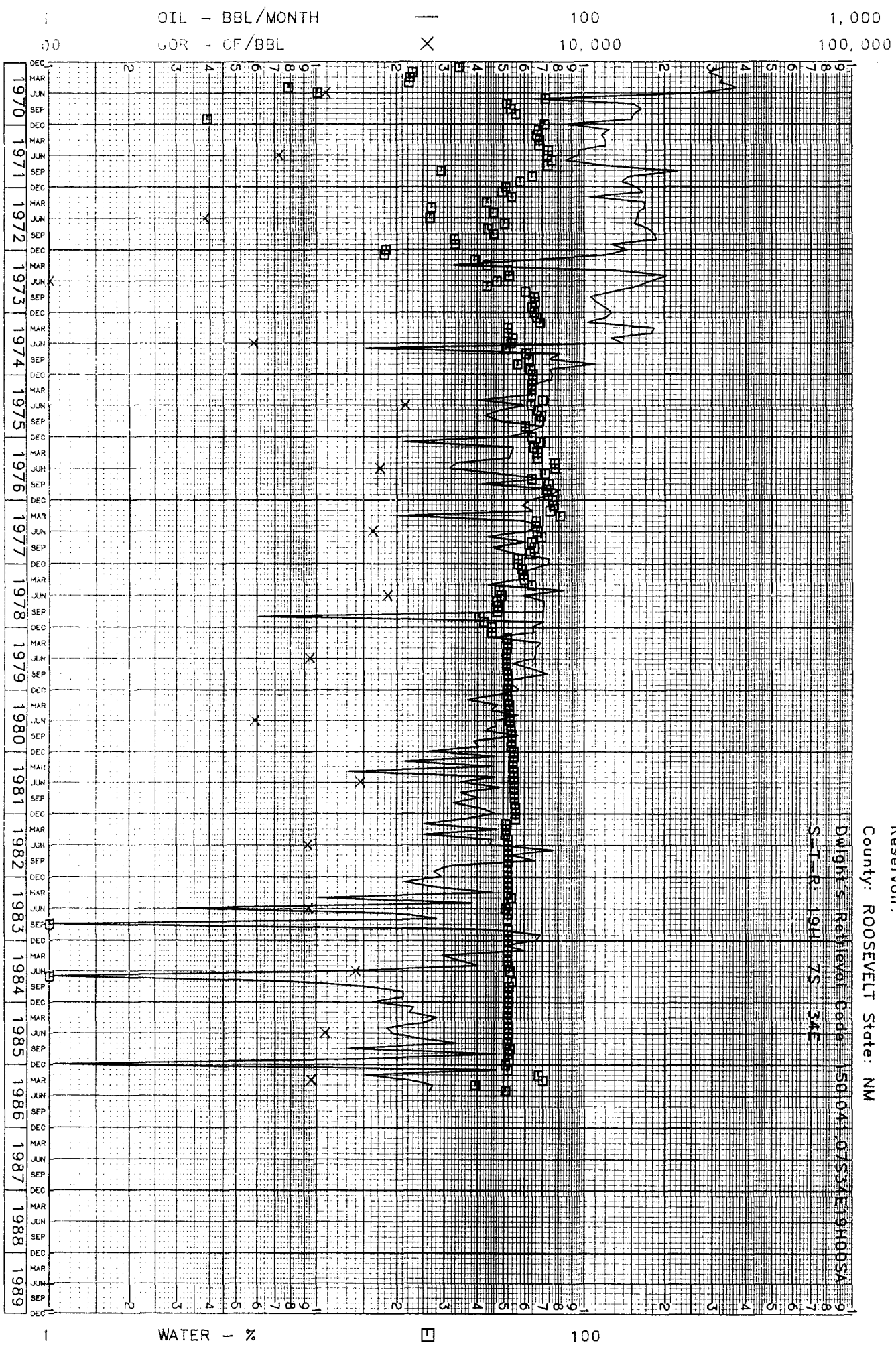
Operator: DALPORT OIL CORP
Lease: HINKLE FEDERAL Well No: 000002
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM
SA

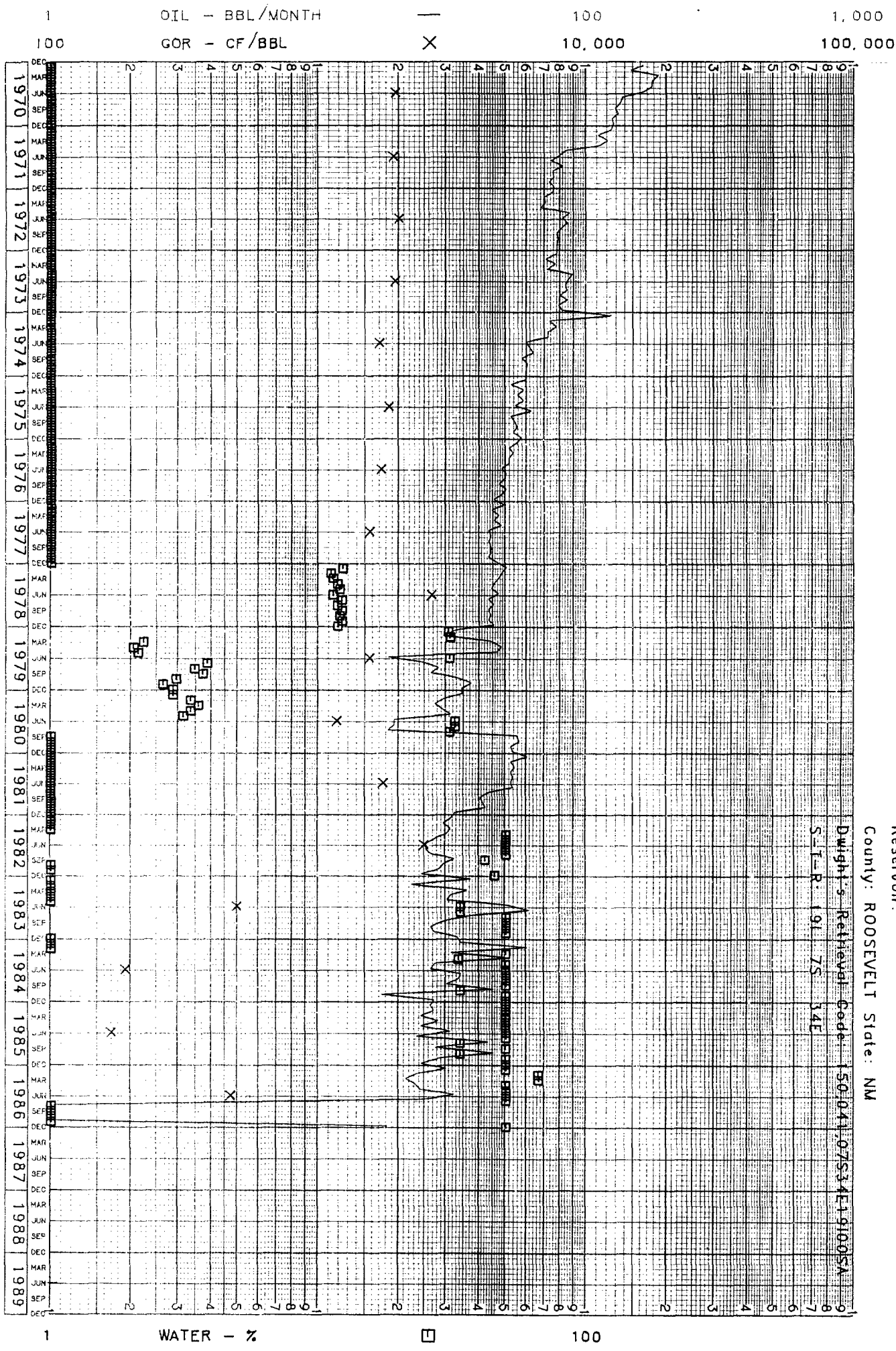


Operator: BRADEN DEEM INC
Lease: WOLF FEDERAL Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM
SA



Operator: BRADEN DEEM INC
Lease: WOLF FEDERAL Well No: 000005
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM
SA



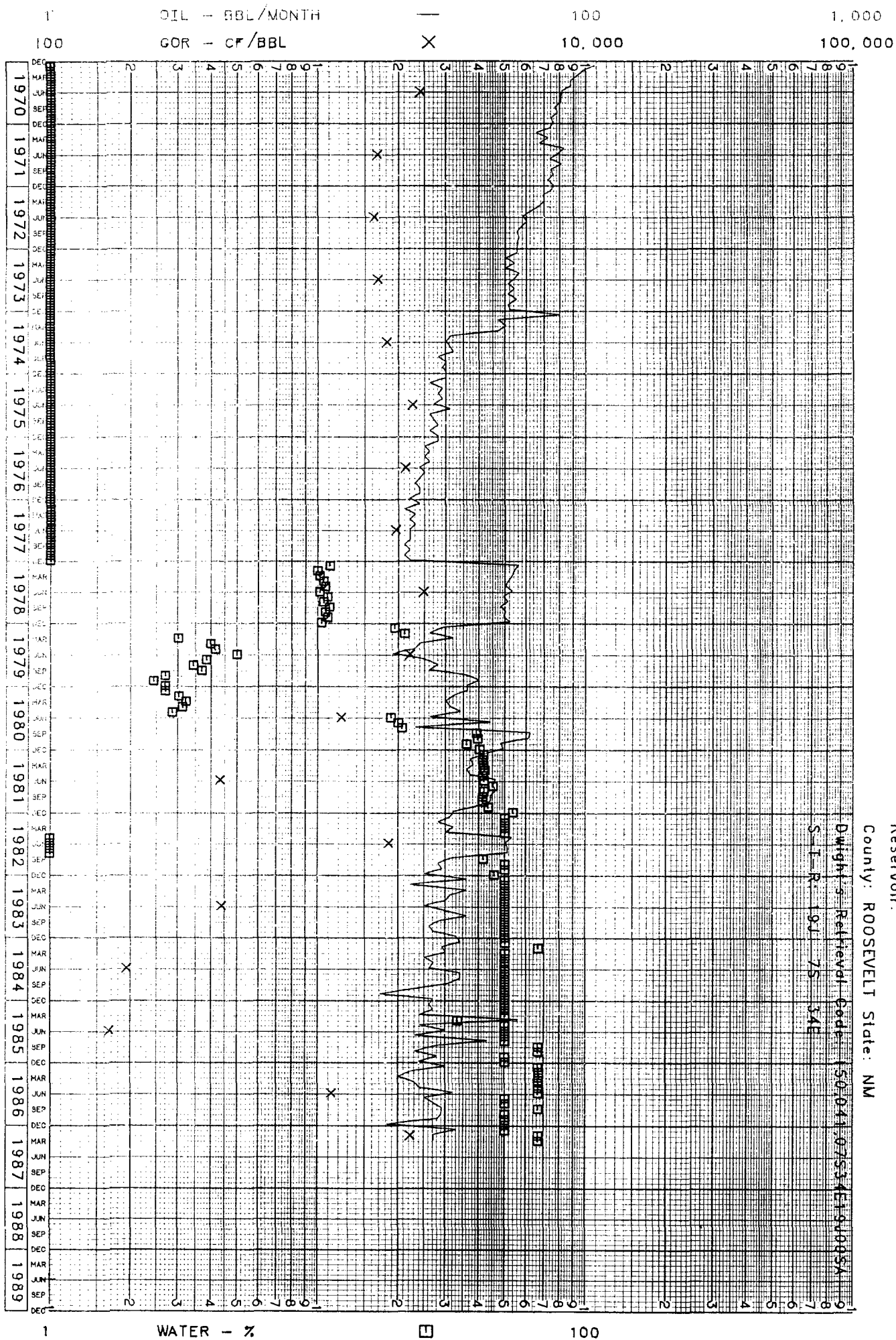


Operator: KERR MCGEE CORP
Lease: STATE G Well No: 000005
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

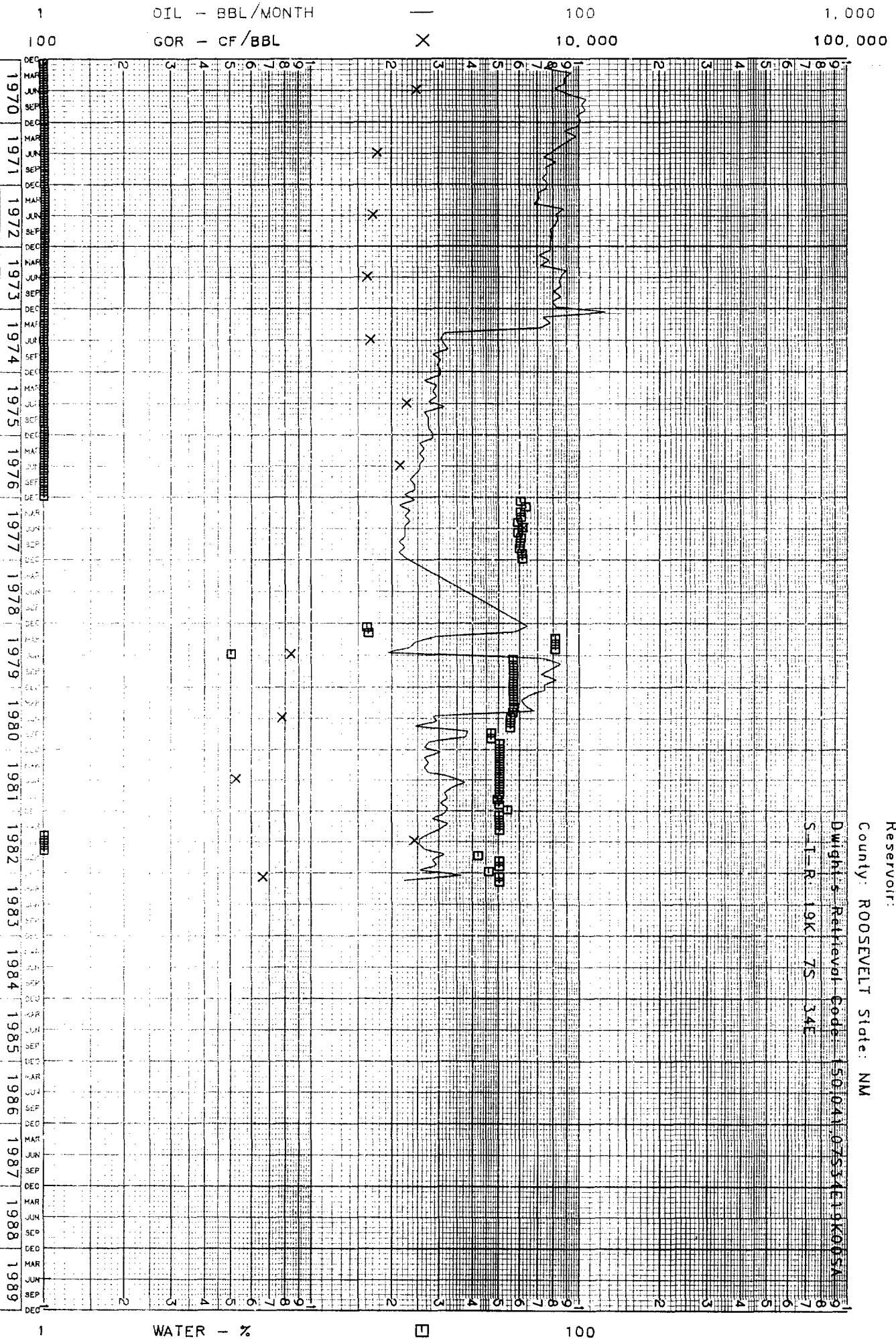
SA

Operator: KERR MCGEE CORP
Lease: STATE G Well No: 000003
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

SA



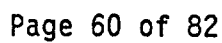
Operator: KERR MCGEE CORP
Lease: STATE G Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM



Operator: KERR MCGEE CORP
Lease: STATE G Well No: 000002
Field: CHAVEROO SAN ANDRES

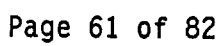
County: ROOSEVELT State: NM

$S = T = R = 19N$ 75 34E



Operator: KERR MCGEE CORP
Lease: STATE G Well No: 000004
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

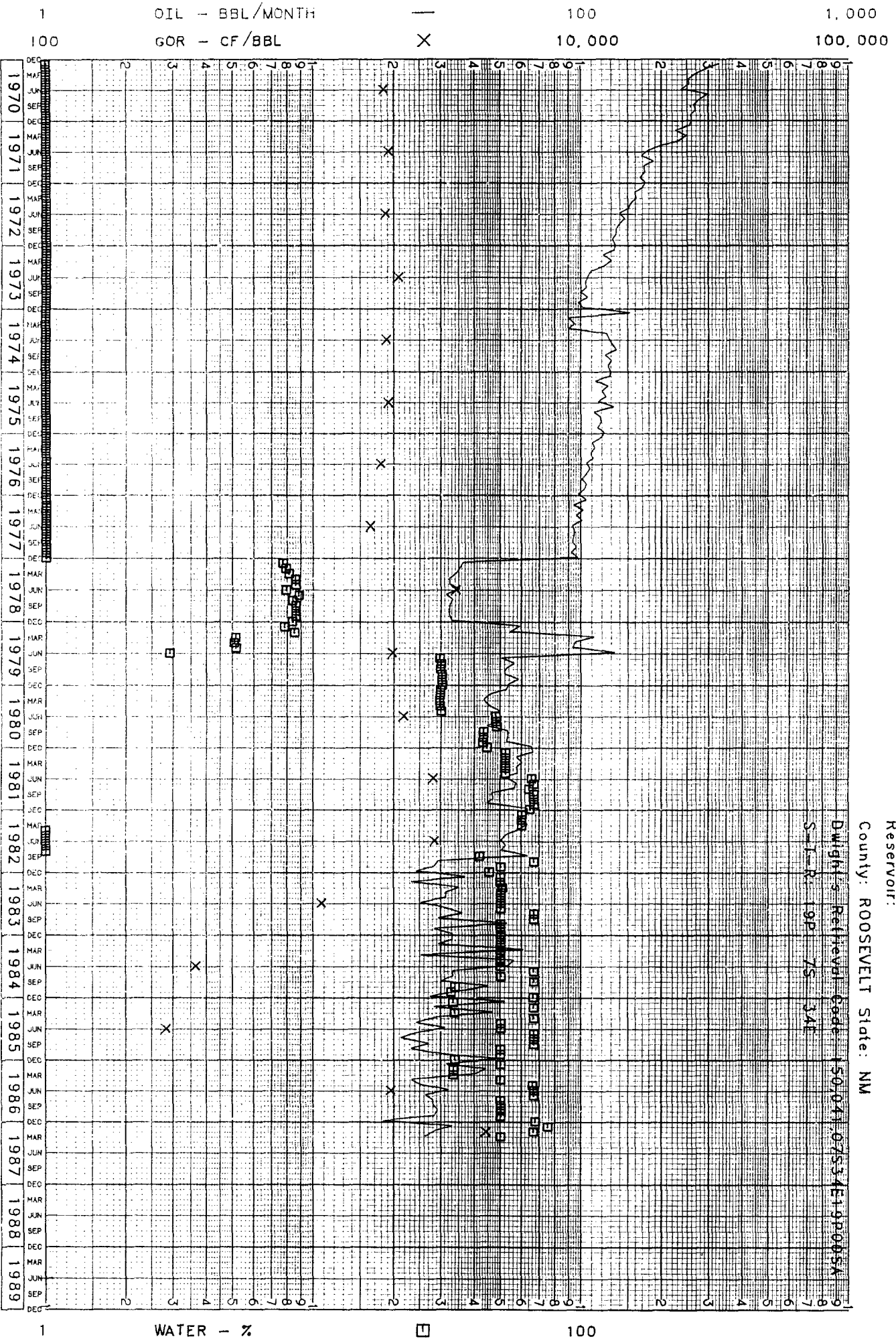
Reservoir:

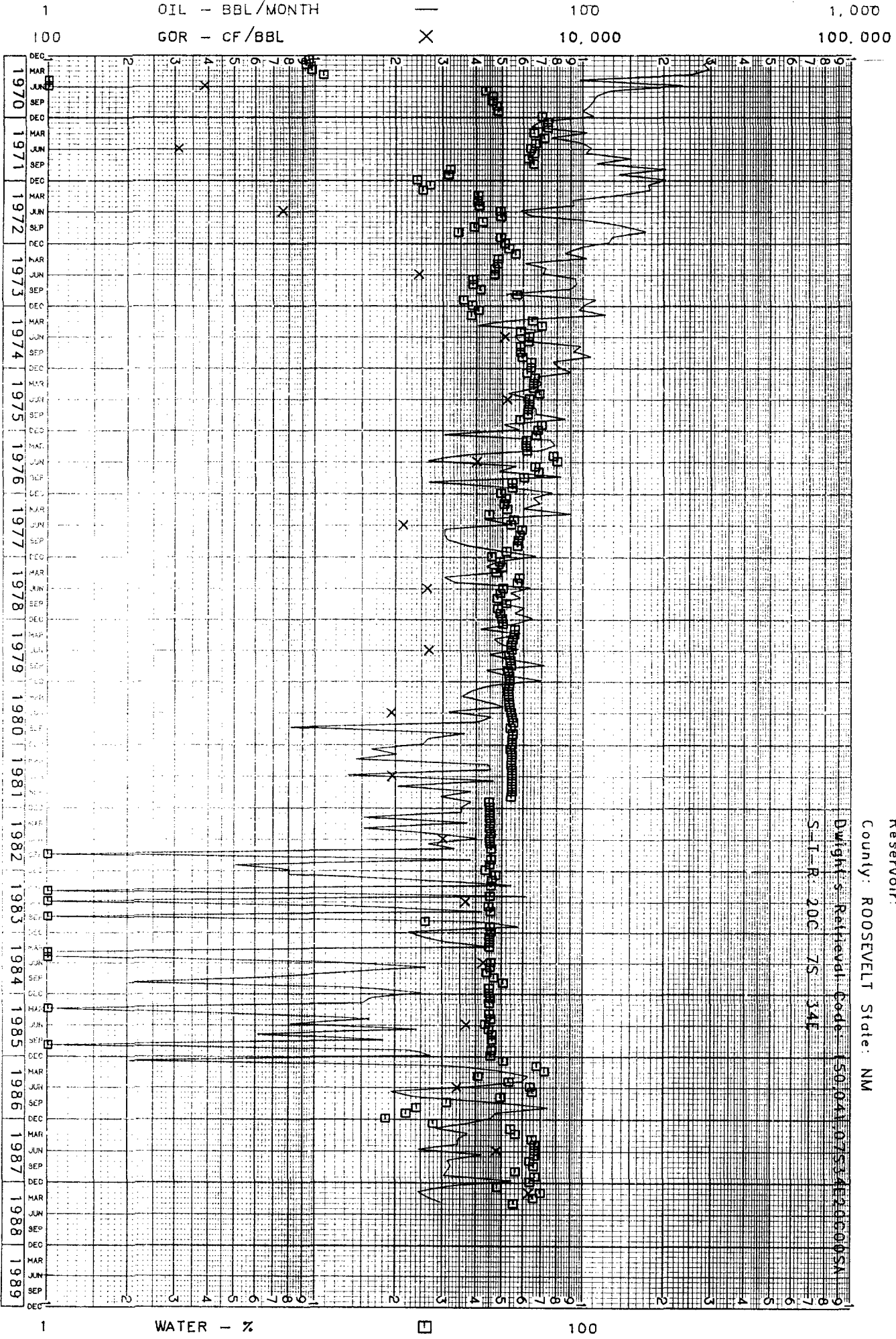


Operator: KERR MCGEE CORP
Lease: STATE G Well No: 000006
Field: CHAVEROO SAN ANDRES
Reservoir: SA

County: ROOSEVELT State: NM

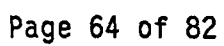
Dwight's Refinery Code: 150,041,07534E190005A
S-I-R-19P-7S-34E



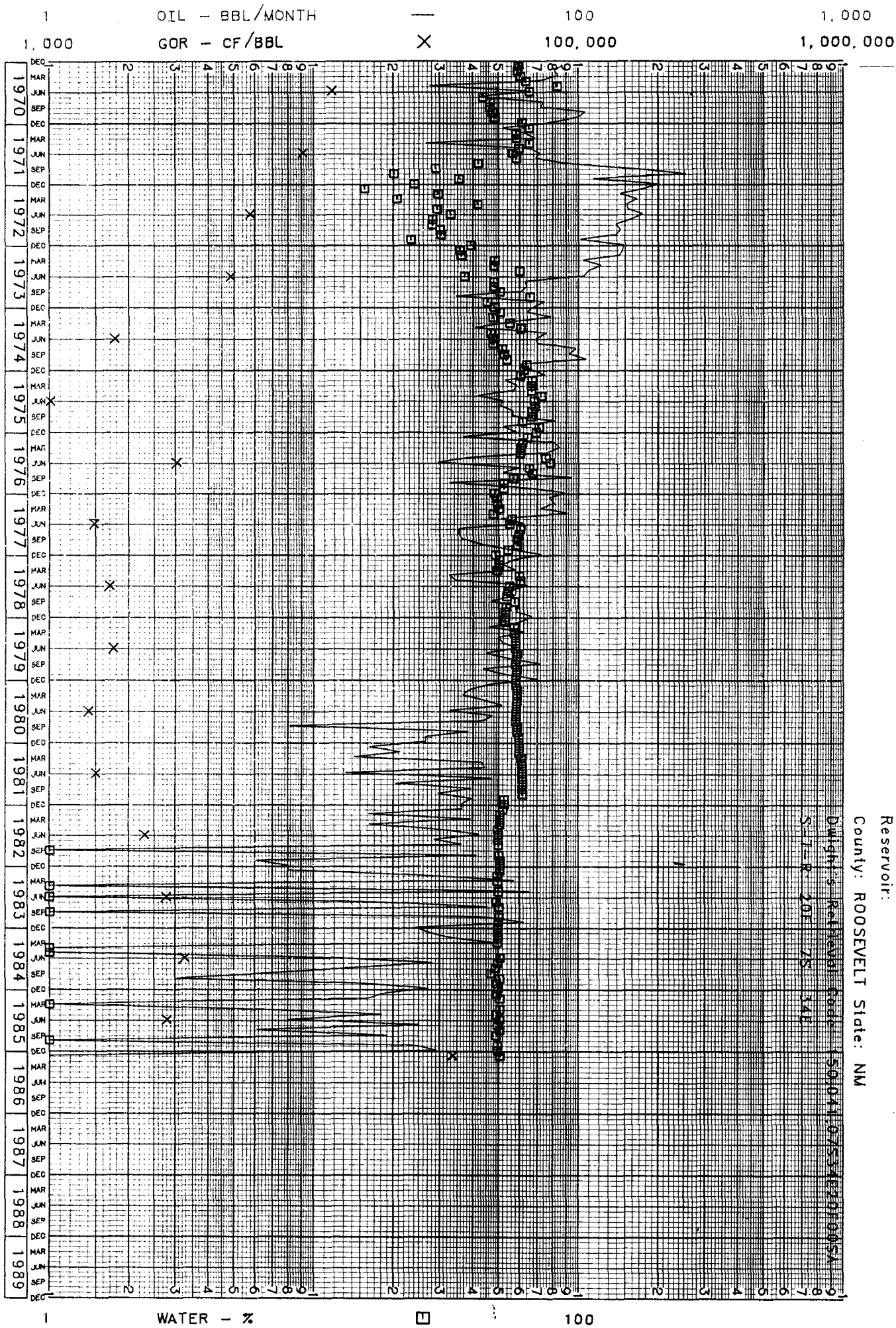


Operator: BRADEN DEEM INC
Lease: HOMME FEDERAL Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

Dwight - Ref:revd	Code	150,043	0.7534	20.1005A
S-I-R	20E	75	34E	



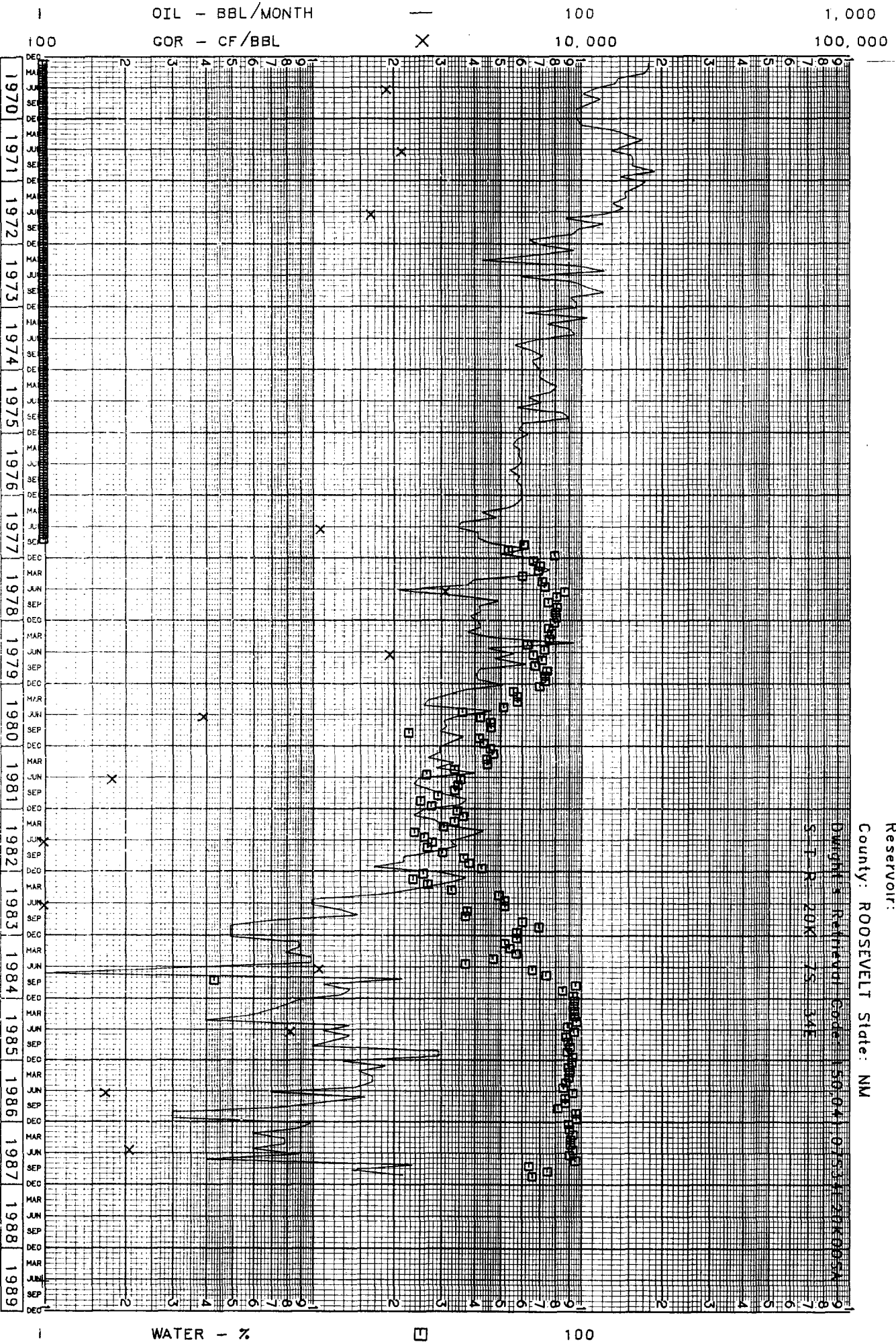
Operator: BRADEN DEEM INC
Lease: HOMME FEDERAL Well No: 000003
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM



Operator: AMERICAN TRADING & PROD
Lease: NEW MEXICO STATE 20 Well No: 000003
Field: CHAVEROO SAN ANDRES
Reservoir: SA

County: ROOSEVELT State: NM

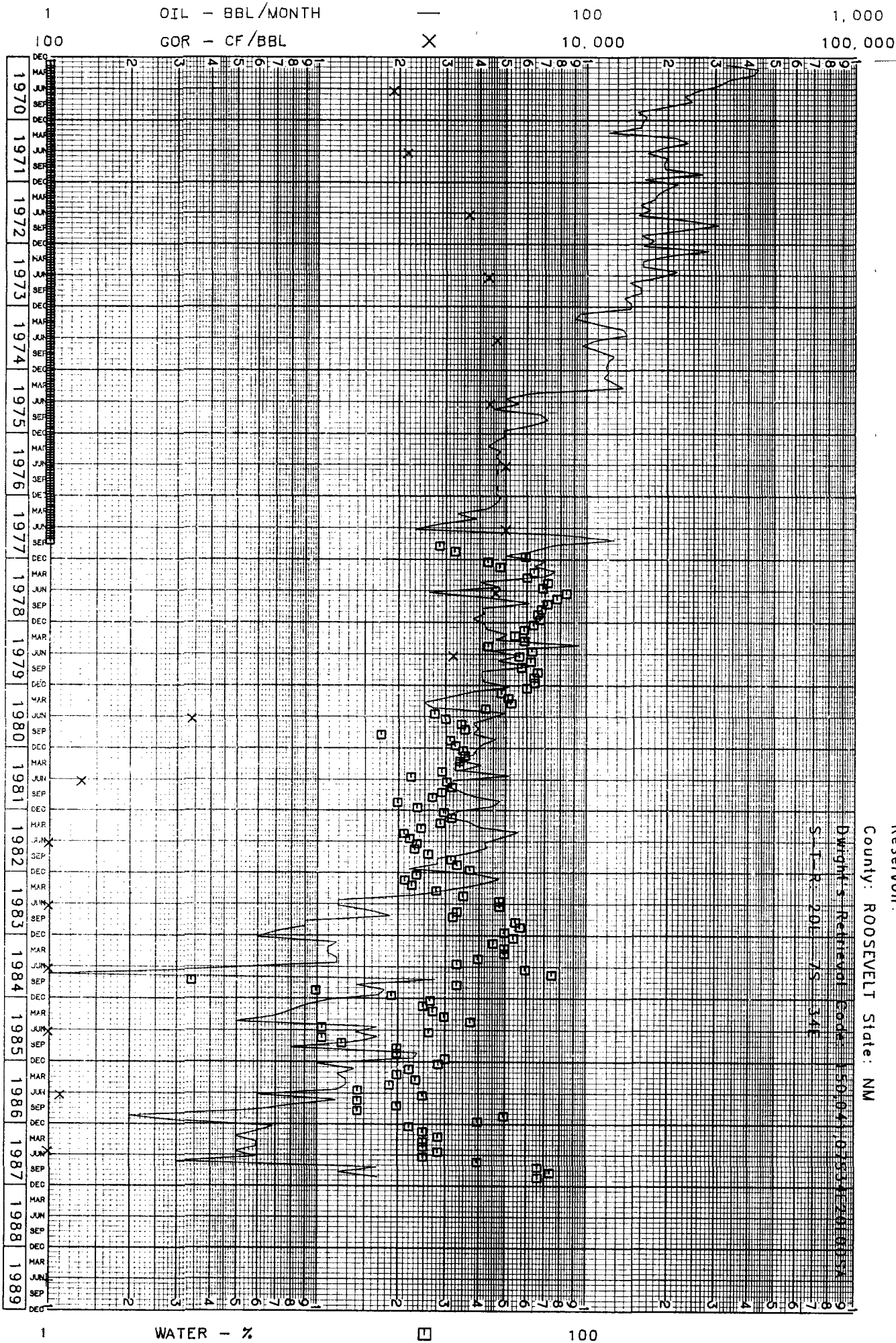
Dwight's Refinery Code: 150-041-07534-20K00-5A
S-T-R 20K 75 348



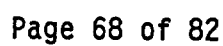
Operator: AMERICAN TRADING & PROD
Lease: NEW MEXICO STATE 20 Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir:
SA

County: ROOSEVELT State: NM

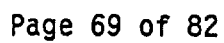
Dwight's Retrieval Code: 150,04 10,000 200,000
S-L-R 20L 7S 34E

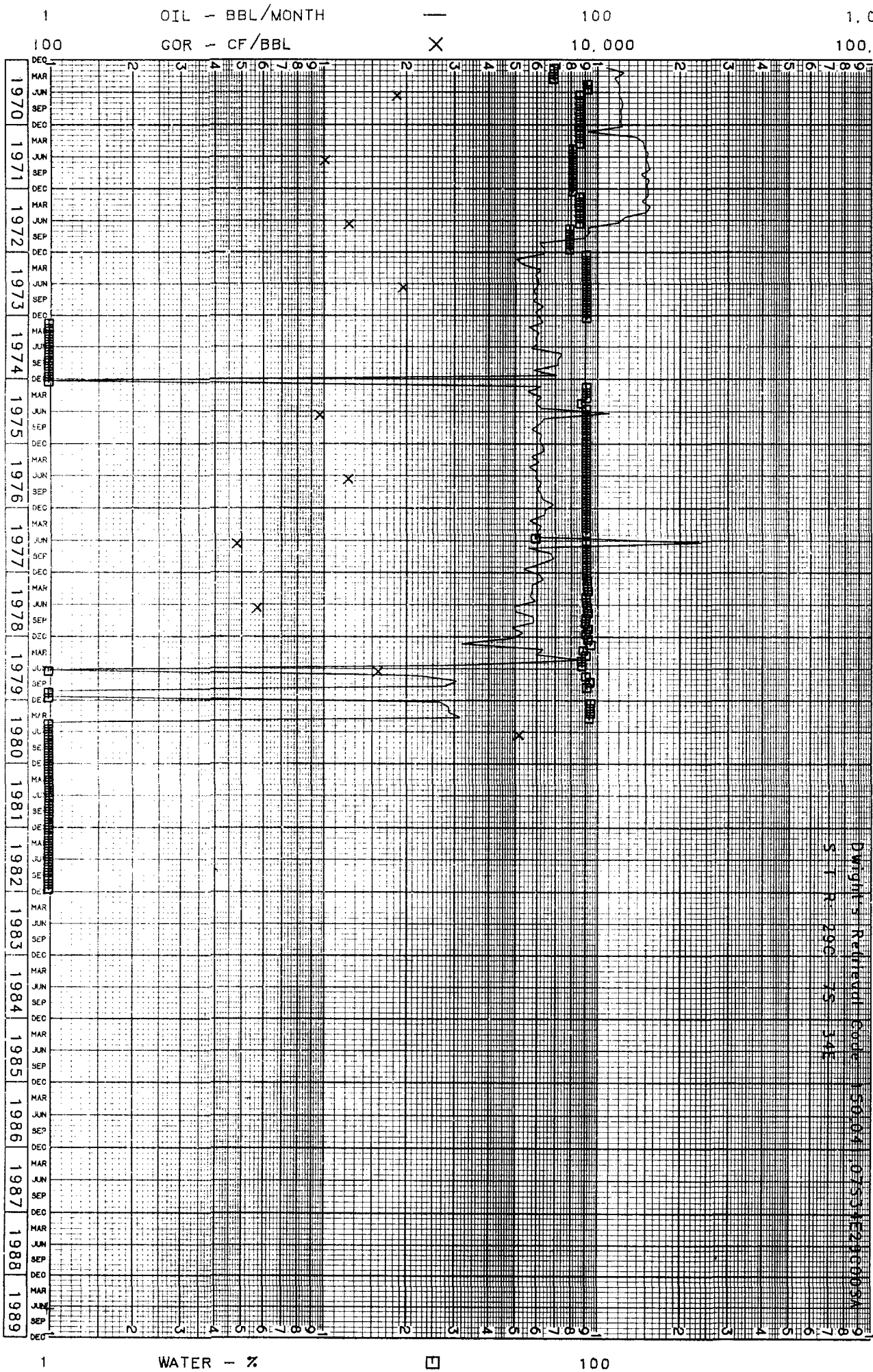


Operator: AMERICAN TRADING & PROD
Lease: NEW MEXICO STATE 20 Well No: 000002
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

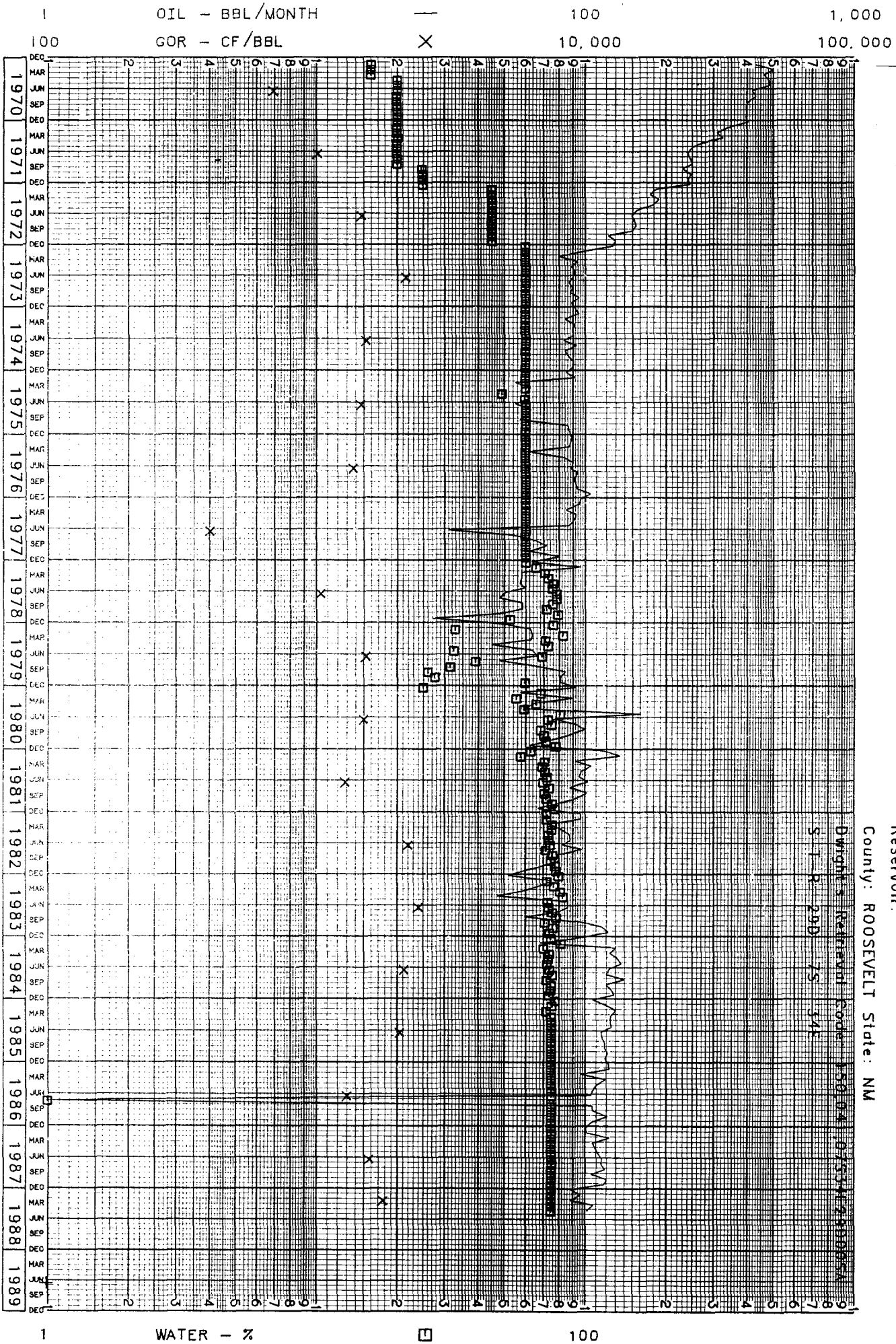


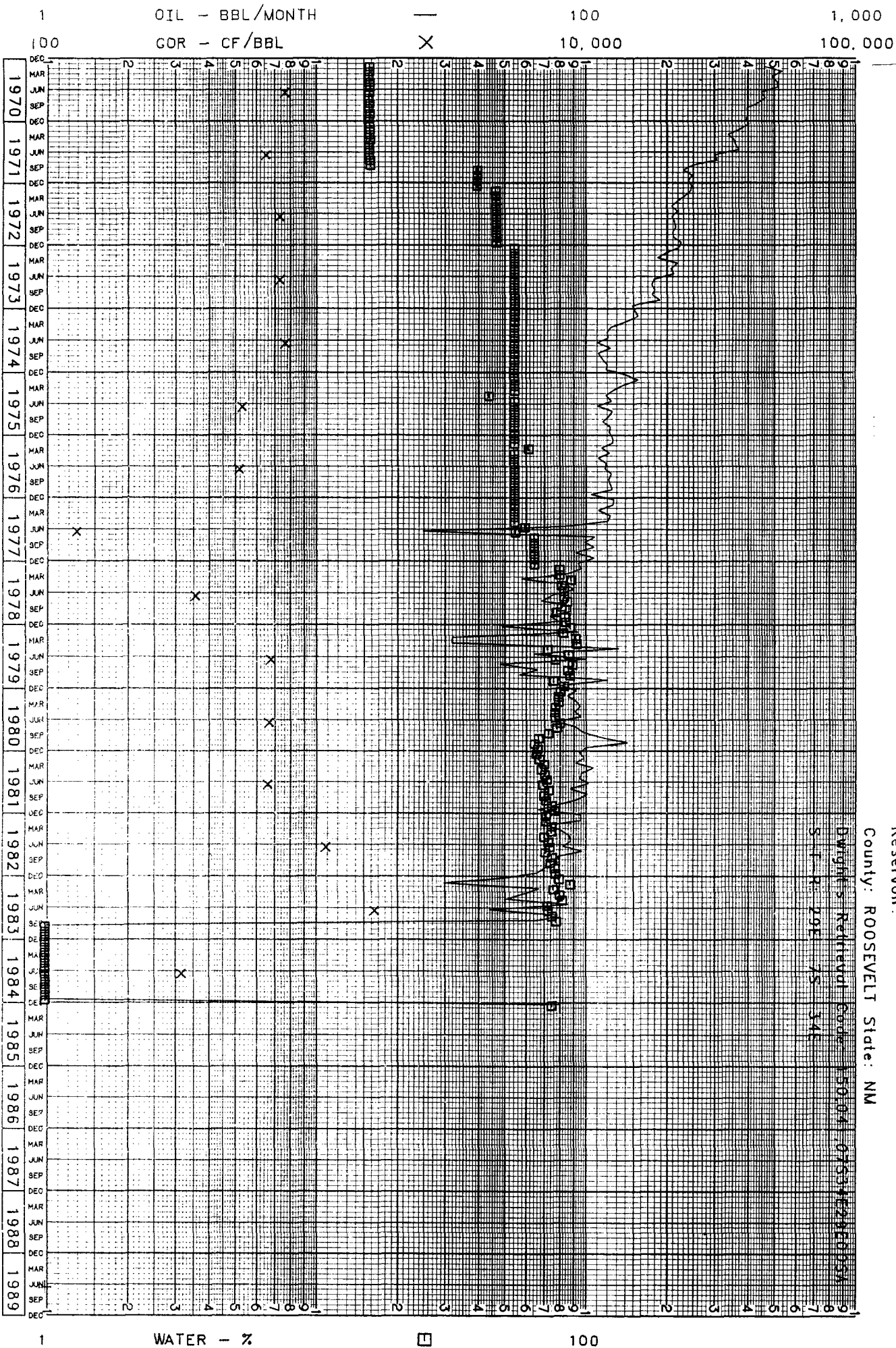
Operator: AMERICAN TRADING & PROD
Lease: NEW MEXICO STATE 20 Well No: 000004
Field: CHAVEROO SAN ANDRES
Reservoir: SA





Operator: TEXACO PRODUCING INC
Lease: HOBBS W Well No: 000008
Field: CHAVEROO SAN ANDRES
Reservoir: SA
County: ROOSEVELT State: NM
Dwight's Refractive Index Code: 150.04 075342210005A
SIT 290 75 345





Operator: TEXACO PRODUCING INC
Lease: HOBBS W Well No: 000007
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

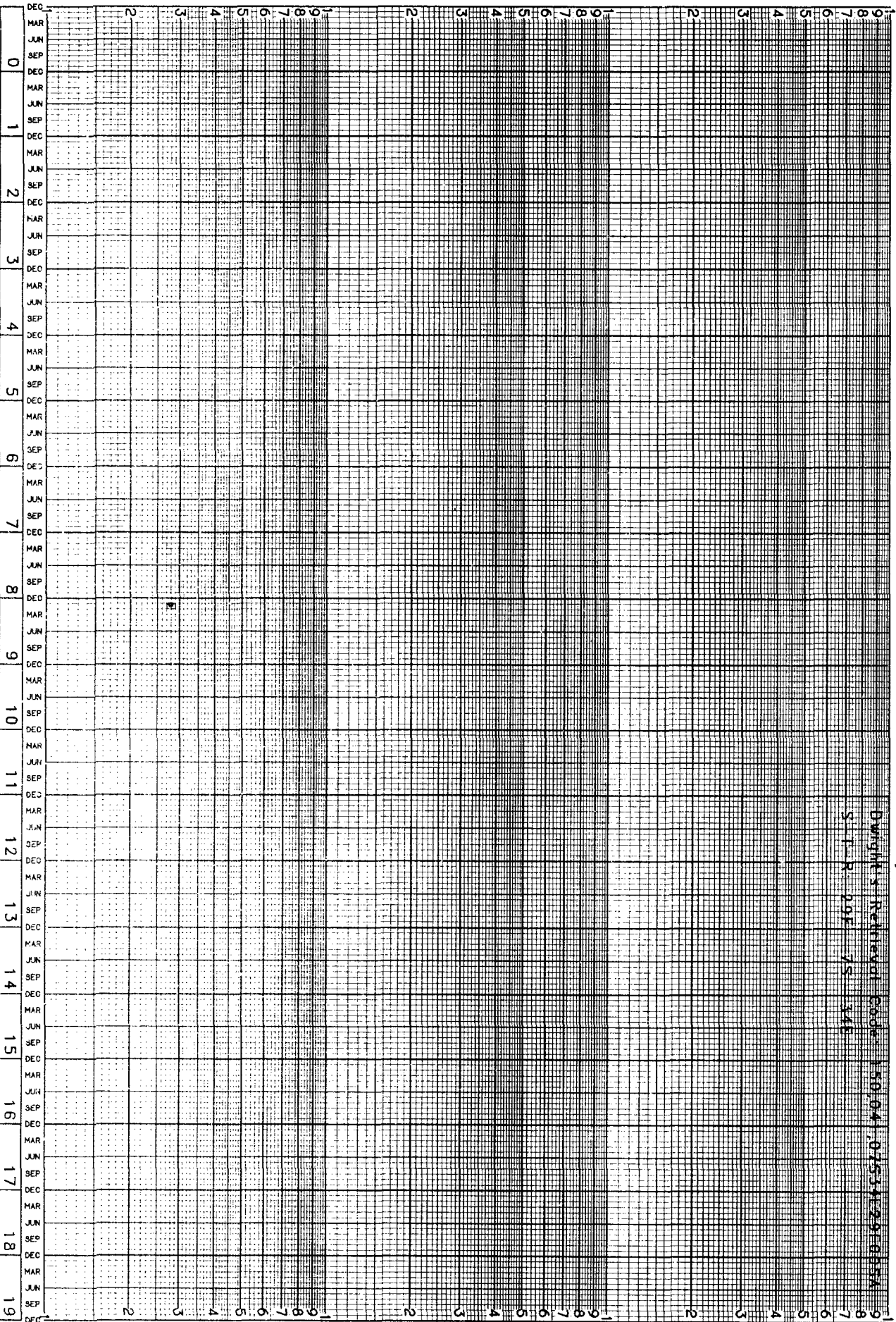
Dwight's Retrieval Code: 150104, 075346246095A
S-T-R: 295 JS 345

SA

Operator: TEXACO PRODUCING INC
Lease: HOBBS W Well No: 000009
Field: CHAVEROO SAN ANDRES
Reservoir:

SA

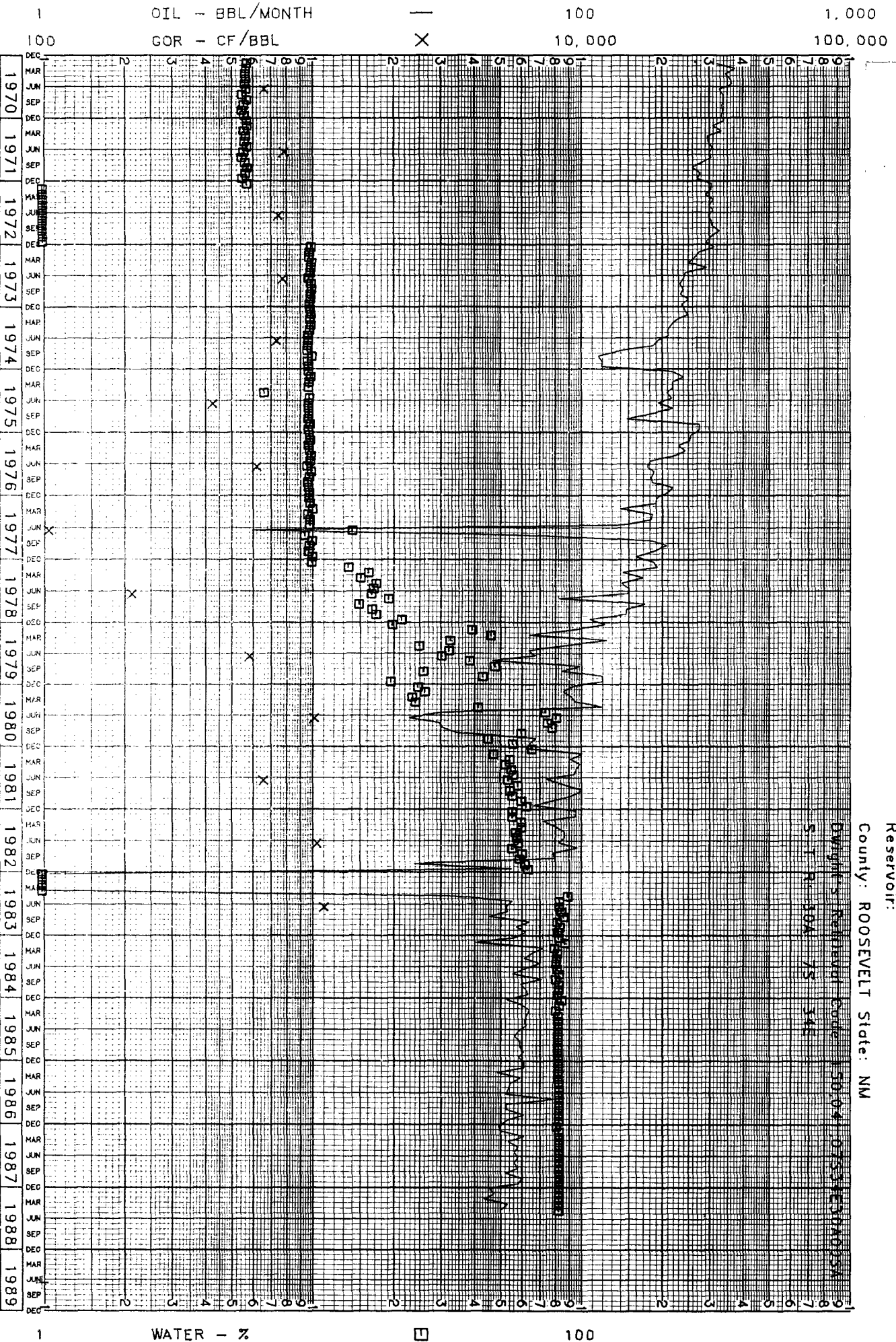
County: ROOSEVELT State: NM



Operator: TEXACO PRODUCING INC
Lease: HOBBS W Well No: 000002
Field: CHAVEROO SAN ANDRES
Reservoir: SA

County: ROOSEVELT State: NM

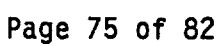
Original Wellhead Code: 150.04 0753163010054
SIT 100A 75 345



Operator: TEXACO PRODUCING INC
Lease: HOBBS W Well No: 000001
Field: CHAVEROO SAN ANDRES

County: ROOSEVELT State: NM

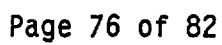
5-12-108-75-34



Operator: STRINGER OIL & GAS INC
Lease: STATE V Well No: 000001
Field: CHAVERO SAN ANDRES
Reservoir:

County: ROOSEVELT State: NM

Dwight's Retirement	Code	150.04	0753473000005A
S-I-R 500 75	347		

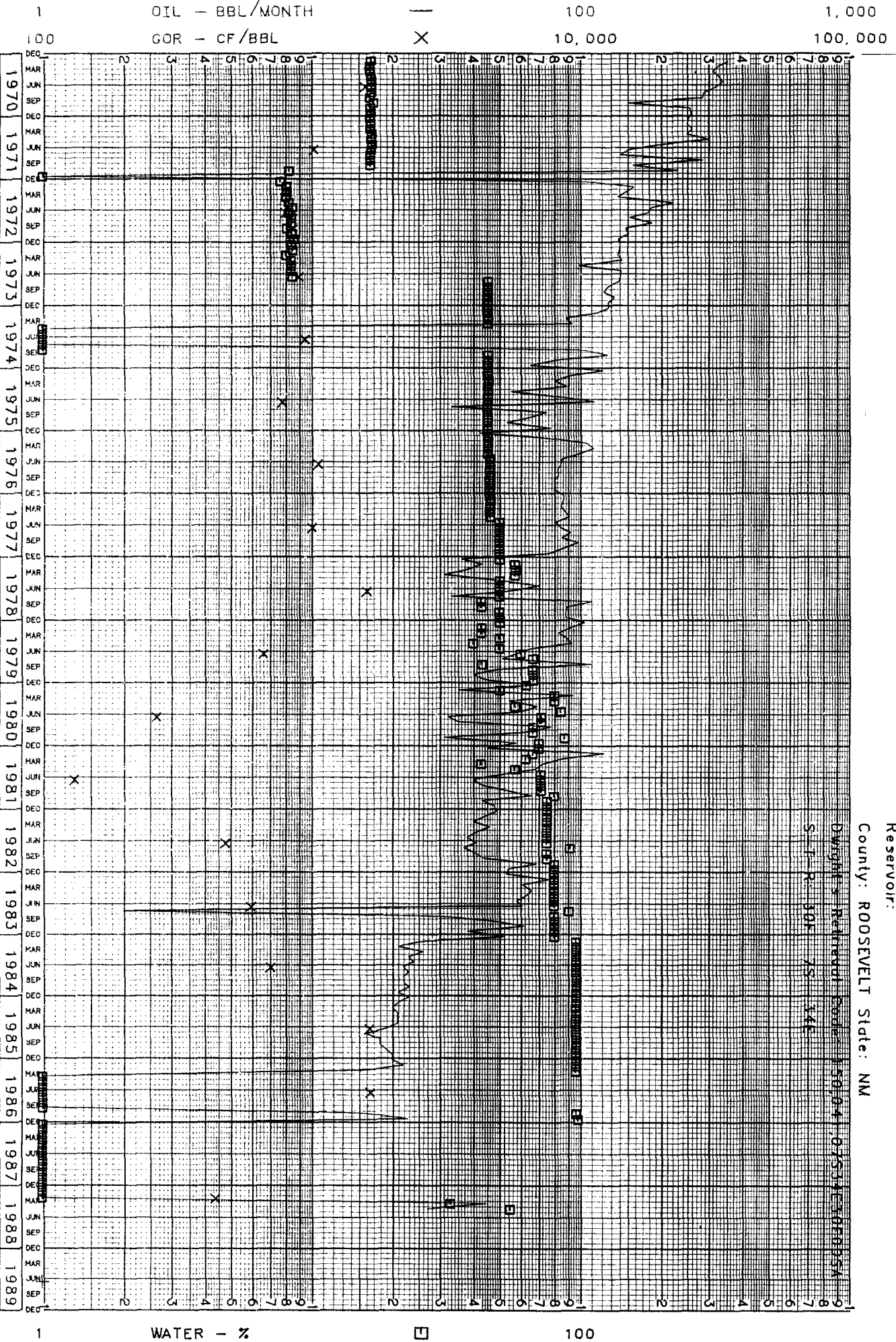


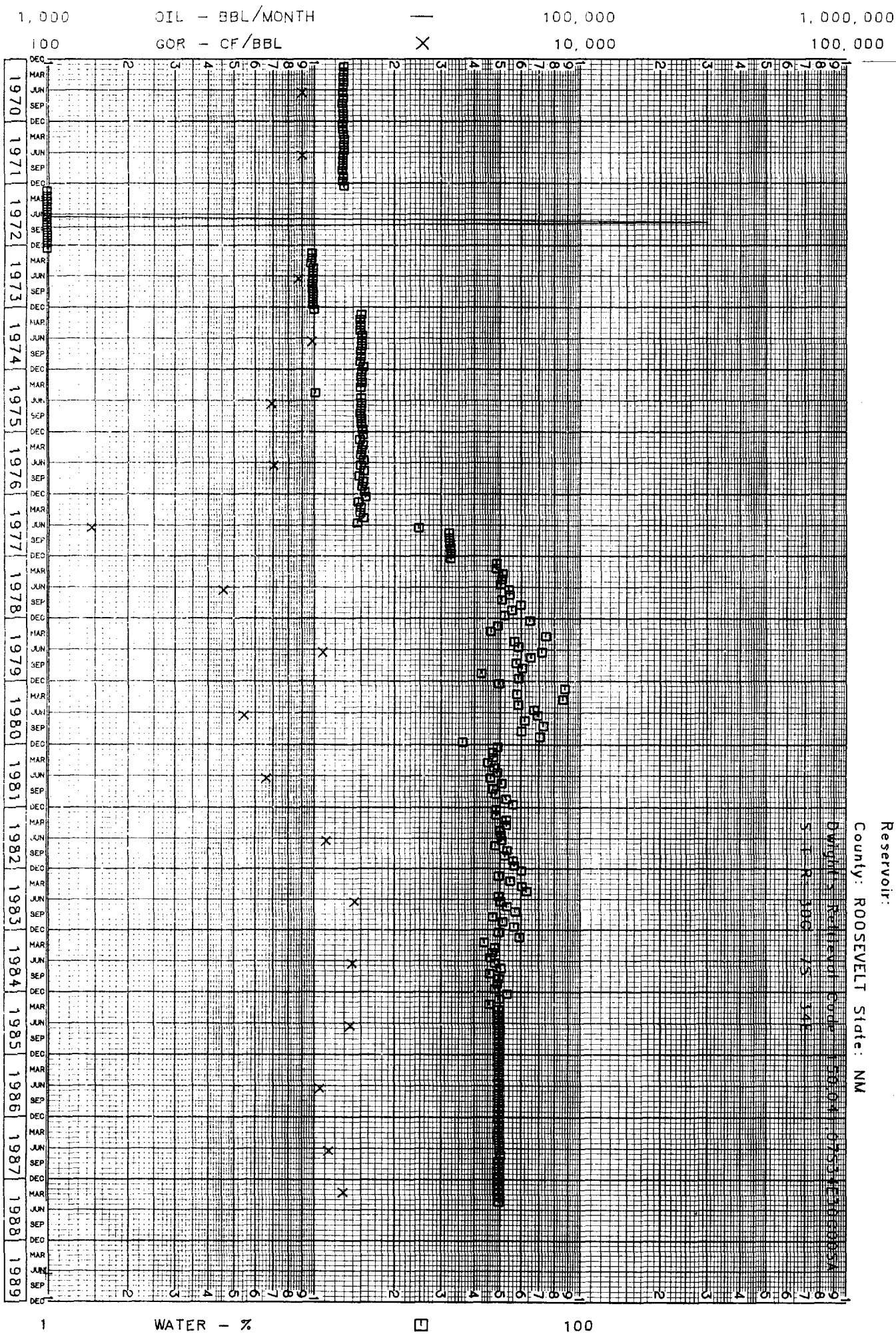
Operator: STRINGER OIL & GAS INC
Lease: STATE V Well No: 000002
Field: CHAVEROO SAN ANDRES
Reservoir:

SA

County: ROOSEVELT State: NM

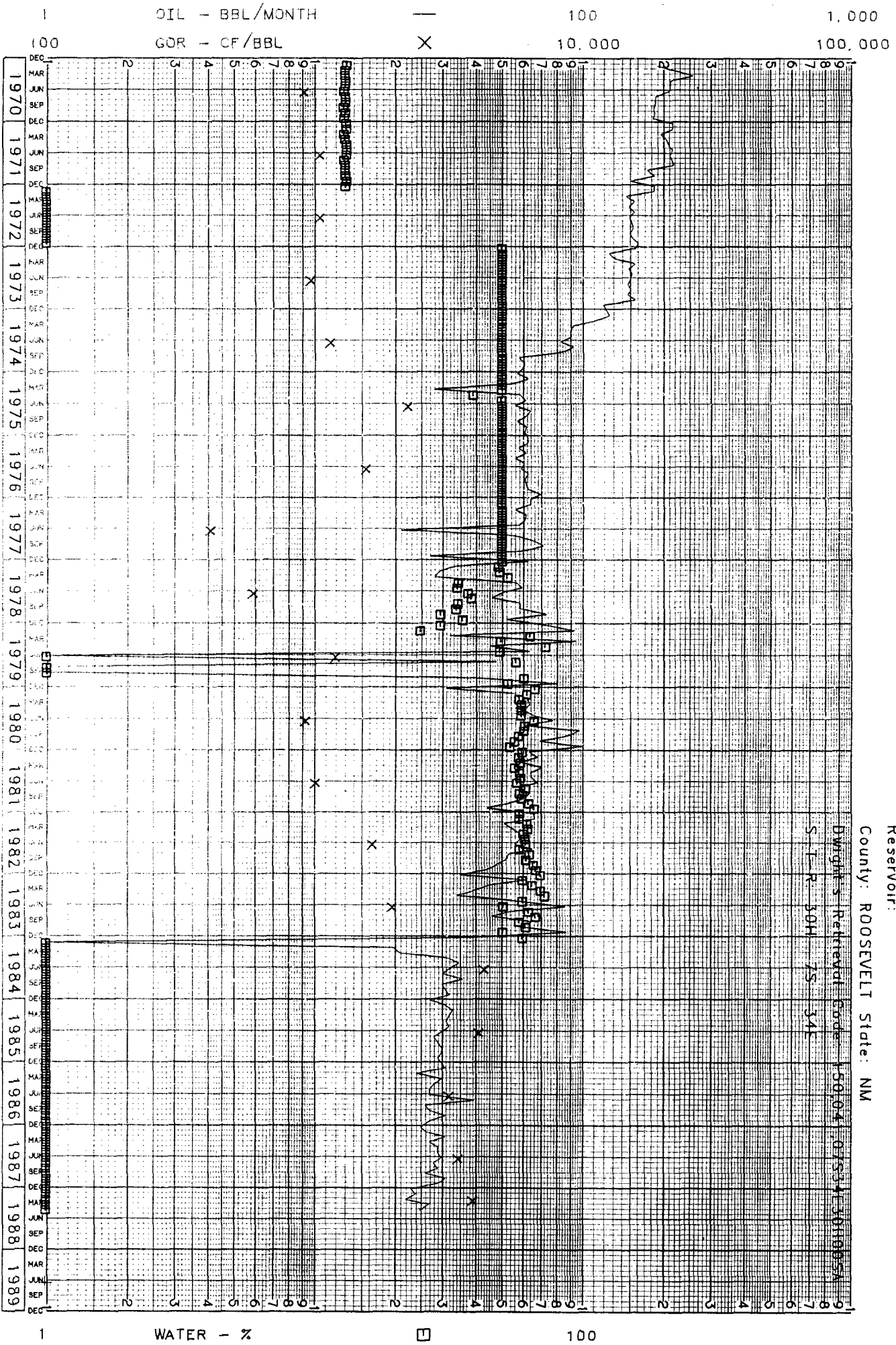
Dwight's Redwood Code: 150.04 0.4534 50.0054
S-F-R: 395 AS 145





Operator: TEXACO PRODUCING INC
Lease: HOBBS W Well No: 000003
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

SA



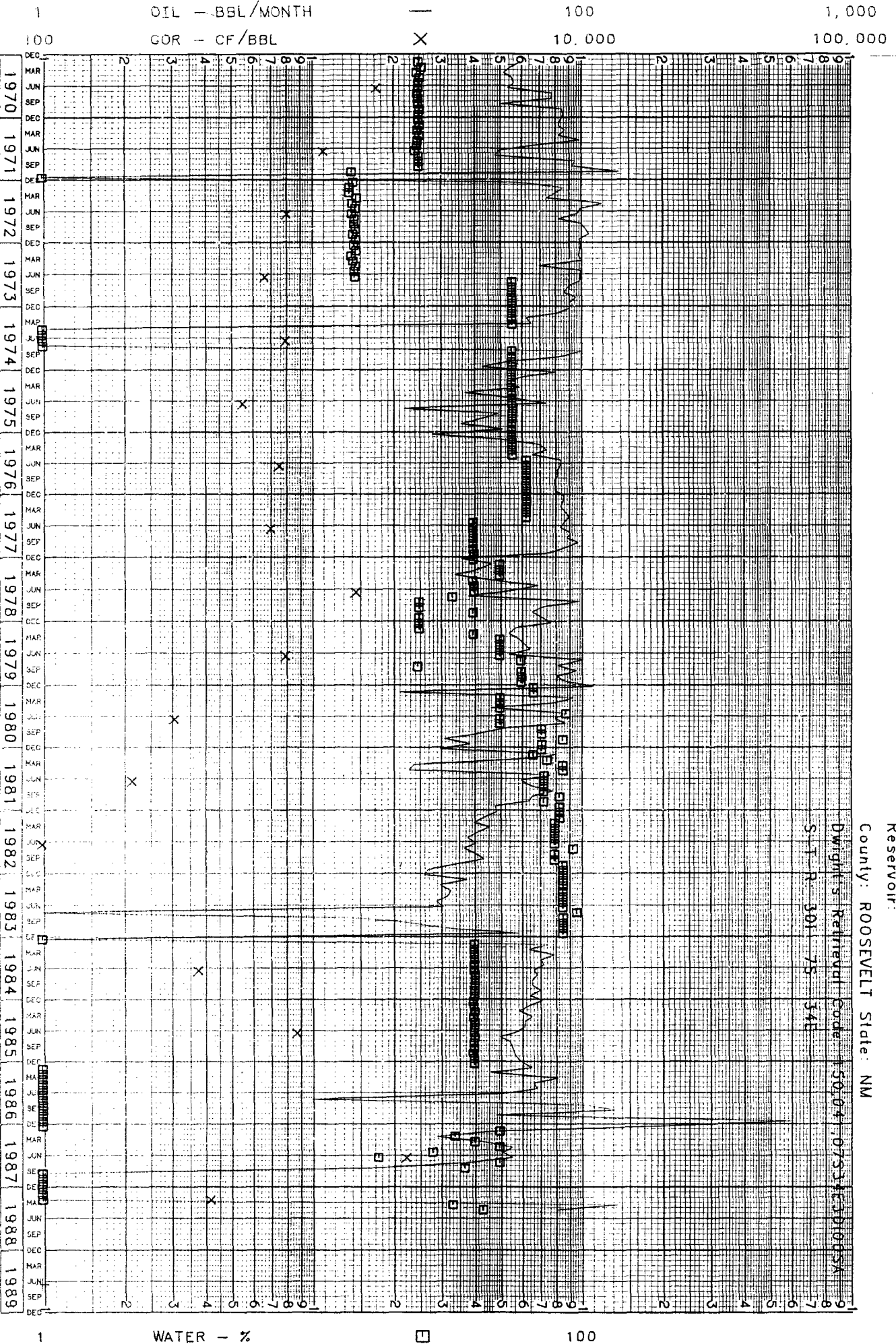
Operator: STRINGER OIL & GAS INC
Lease: STATE V Well No: 000004
Field: CHAVERO SAN ANDRES

SA

Reservoir:

County: ROOSEVELT State: NM

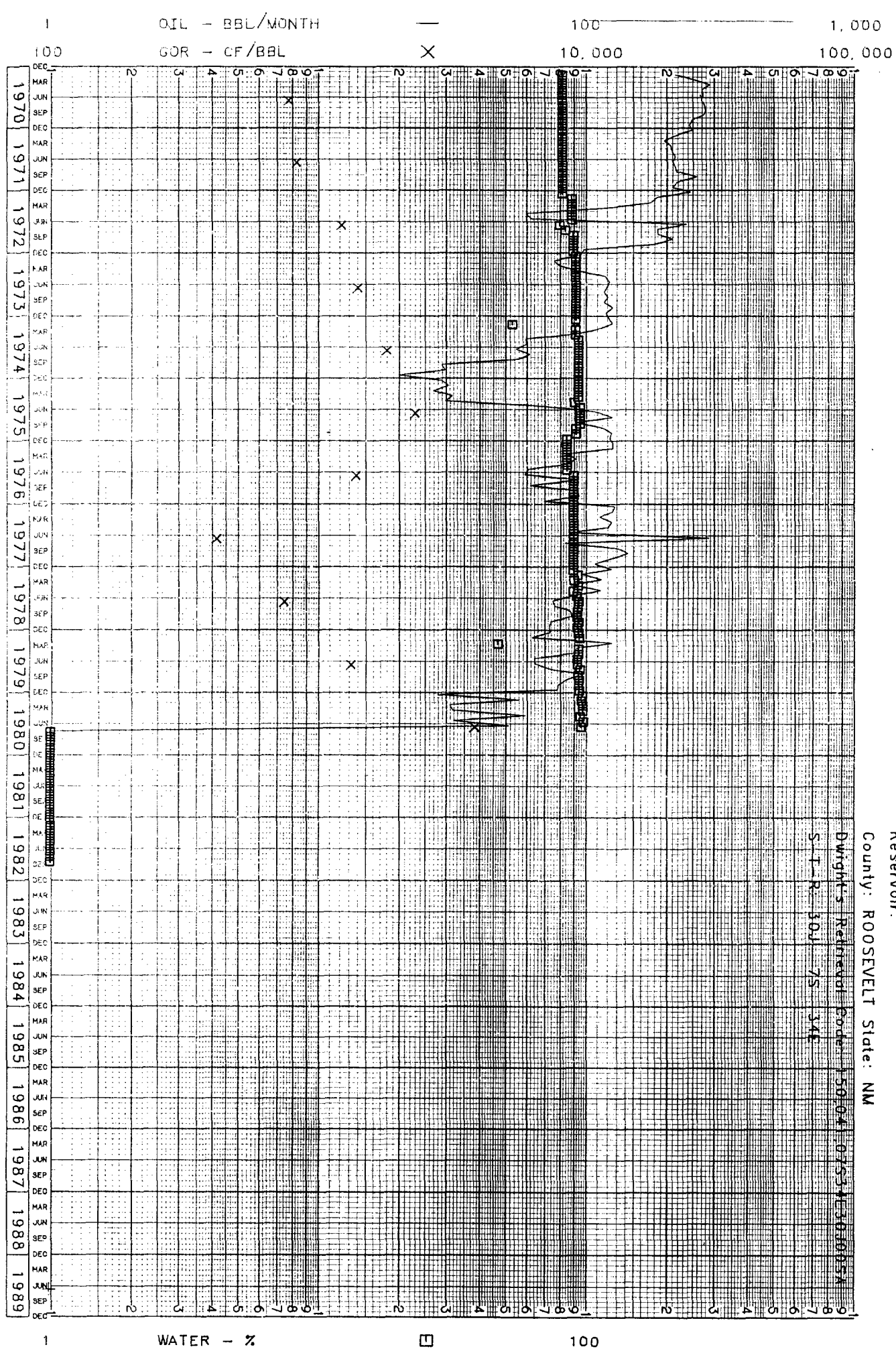
Dwight's Retrieval Code: 150.04 075346301005A
S.T.R. 301 75 346



Operator: TEXACO PRODUCING INC
Lease: HOBBS W Well No: 000005
Field: CHAVEROO SAN ANDRES
Reservoir:

County: ROOSEVELT State: NM

Dwight's Refractor Code: 15004 07534E30005A
S-T-R-304 75 348



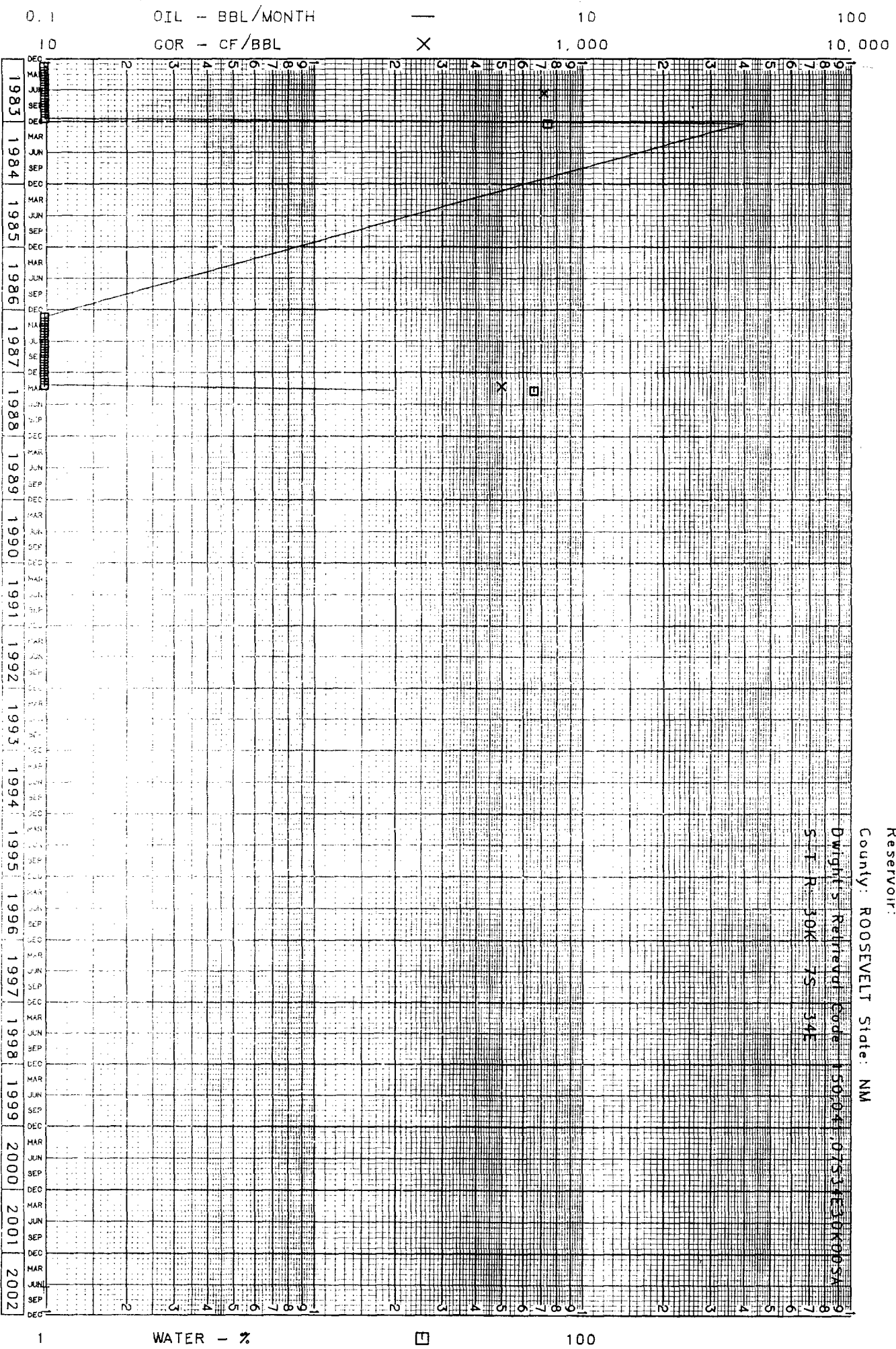
Operator: STRINGER OIL & GAS INC
Lease: STATE V Well No. 000003
Field: CHAVEROO SAN ANDRES

SA

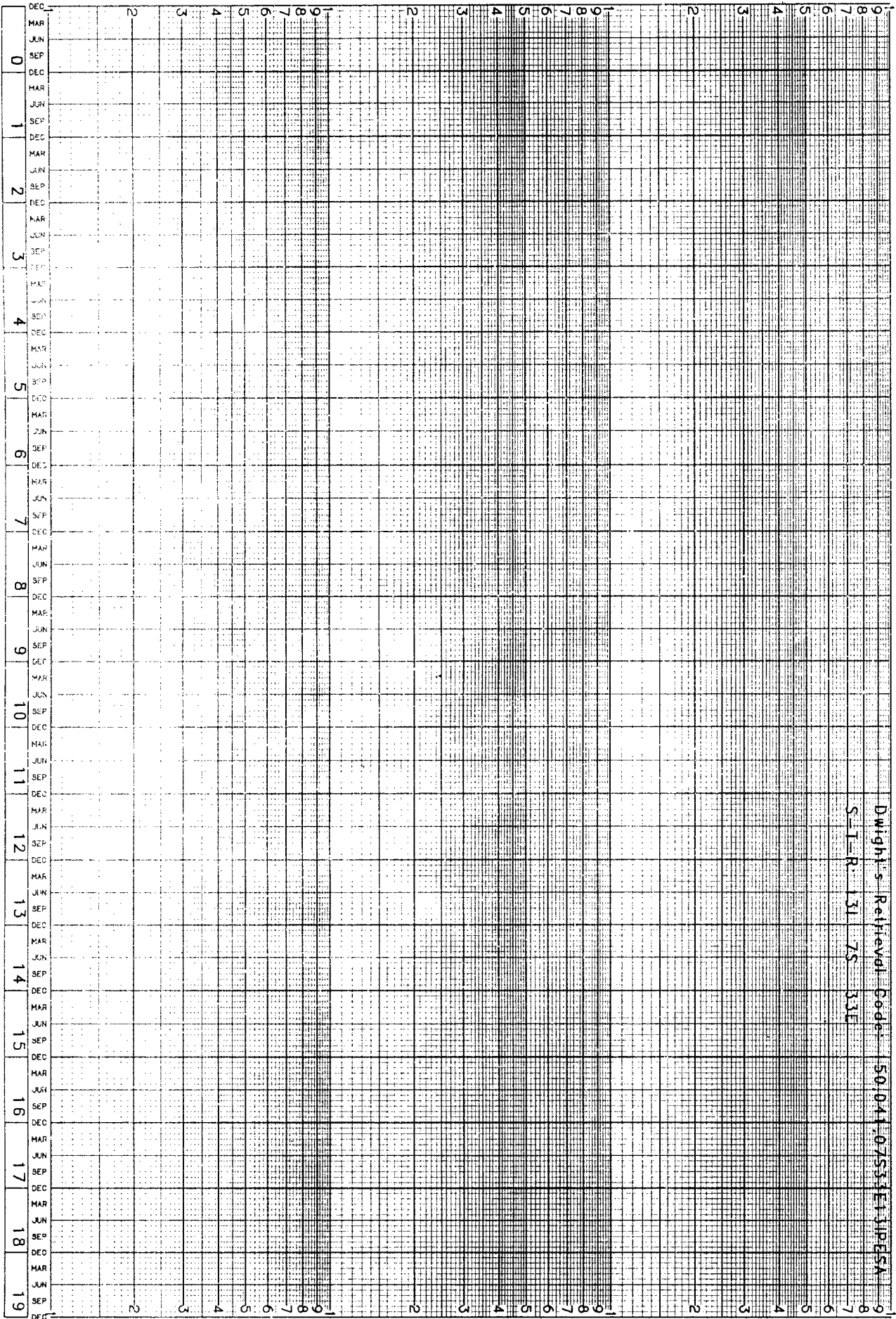
County: ROOSEVELT State: NM

Dwight's Retirement Code: 150-04-07534E30K005A 9

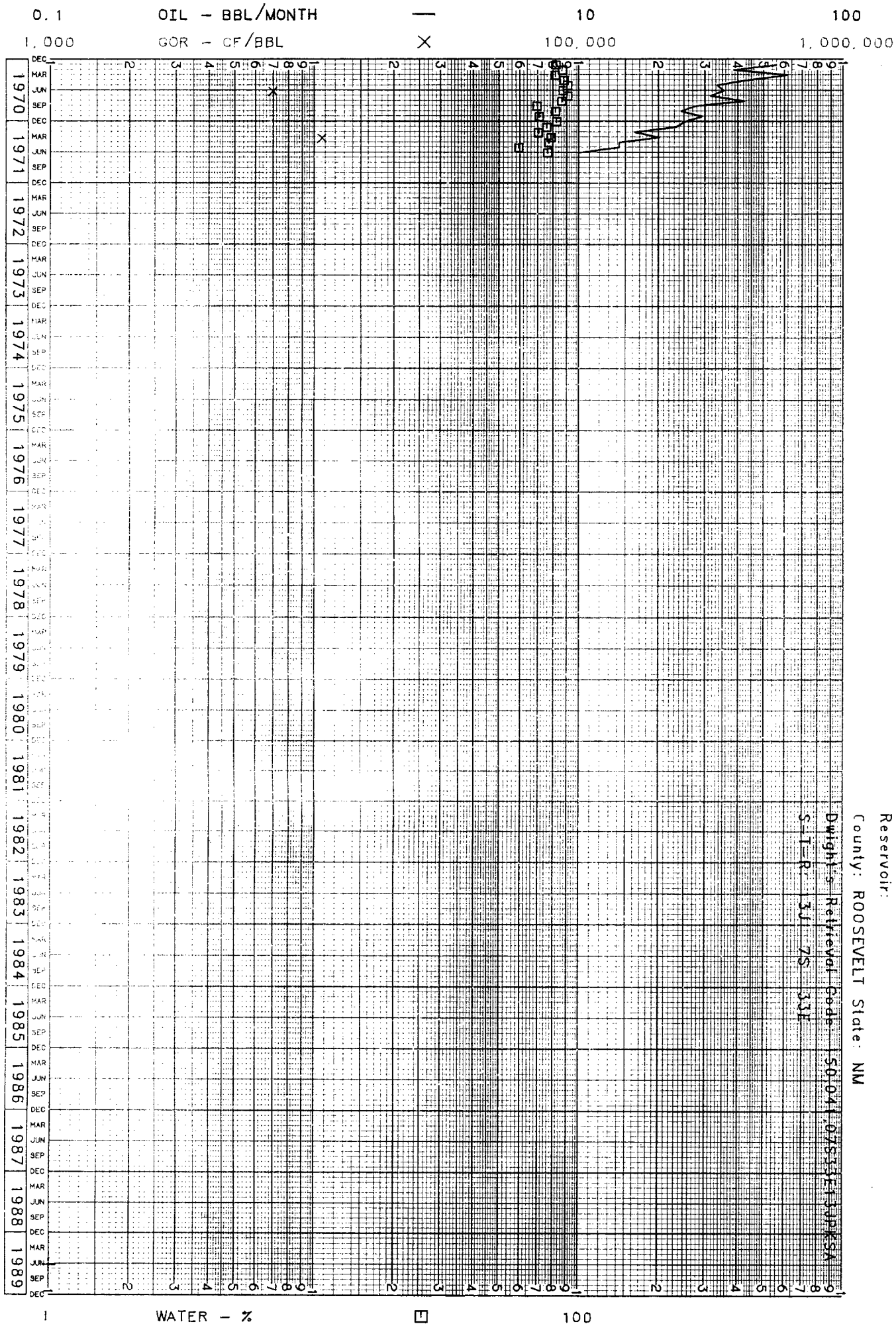
S-T R 30K 7S 34E



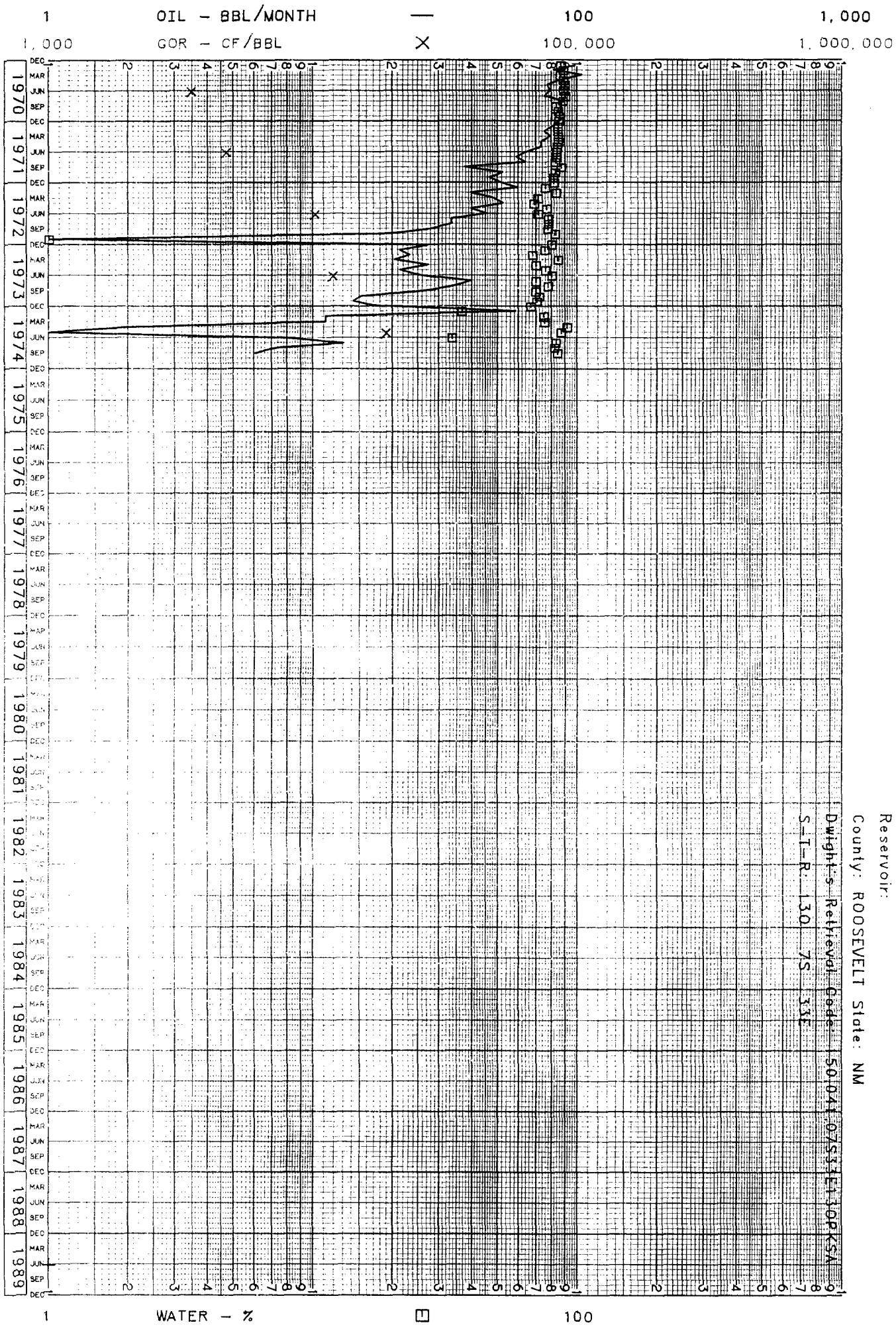
Operator: MIDWEST OIL CORP
Lease: MORGAN FEDERAL TRACT 4 Well No: 000005
Field: CHAVEROO SAN ANDRES SA
Reservoir:
County: ROOSEVELT State: NM



WELLS LOCATED OUTSIDE
OF UNIT BOUNDARY BUT
WITHIN AREA OF REVIEW

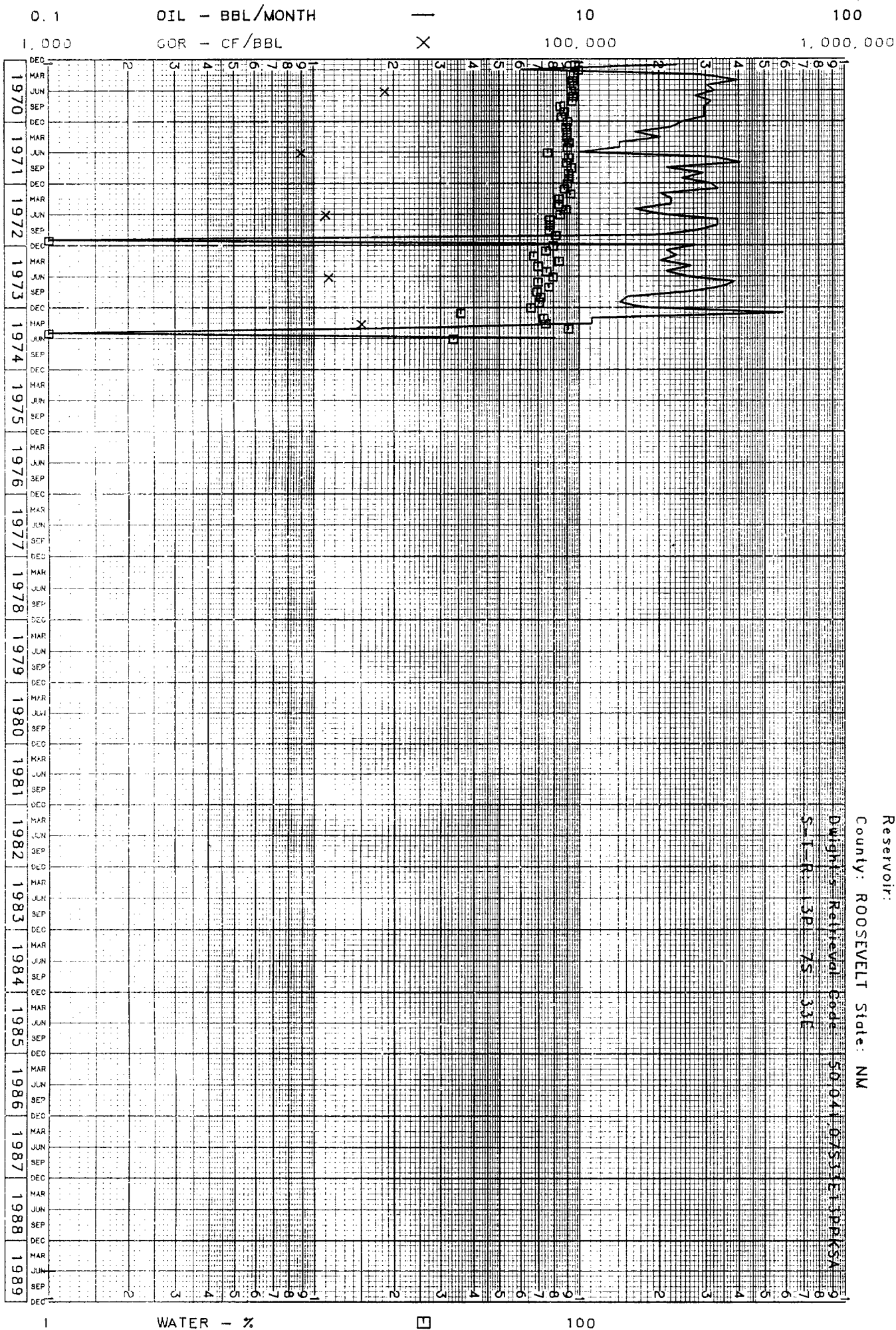


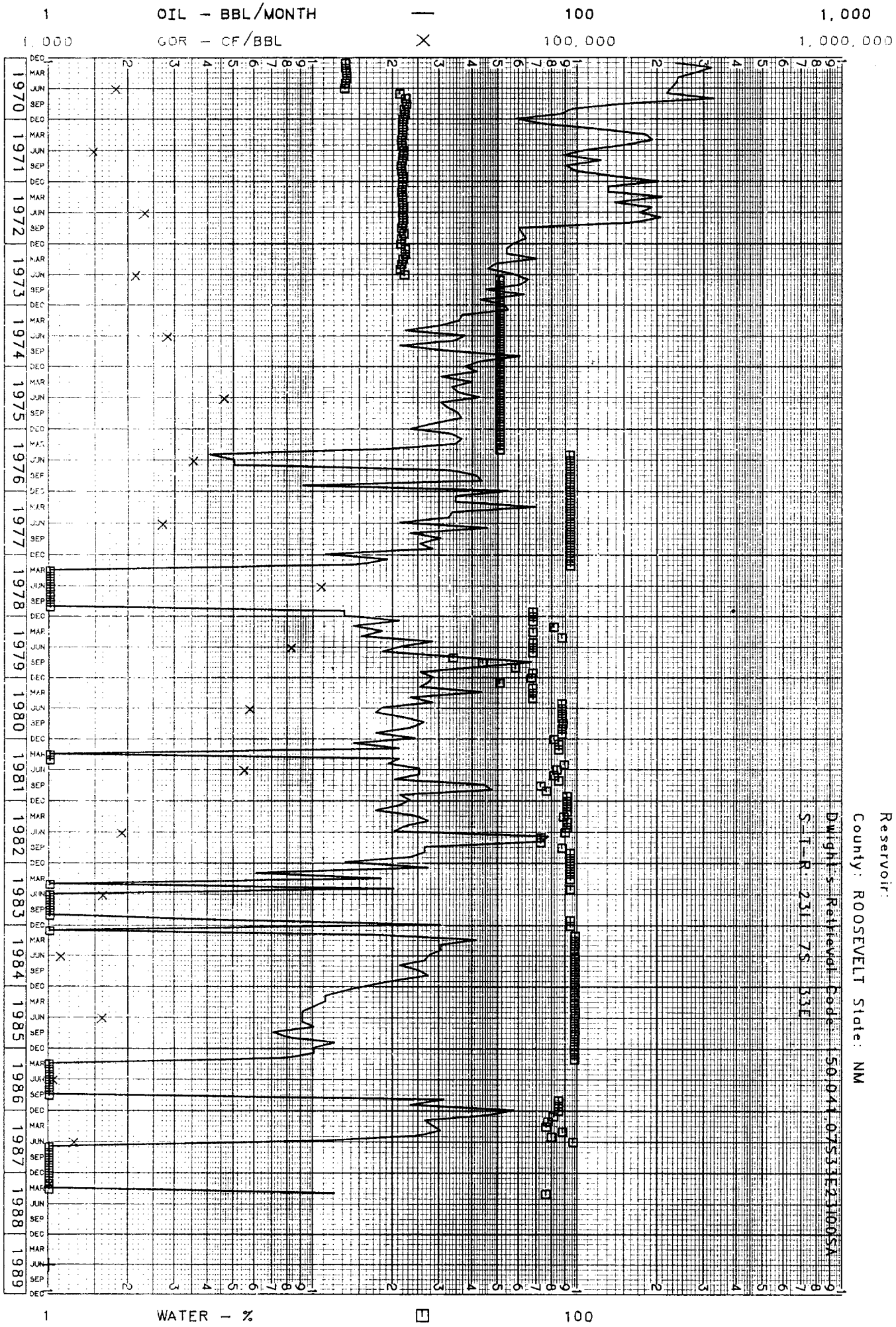
Operator: AMOCO PRODUCTION CO
Lease: MORGAN D FEDERAL Well No: 000006
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM
SA



Operator: AMOCO PRODUCTION CO
Lease: MORGAN D FEDERAL Well No: 000003
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

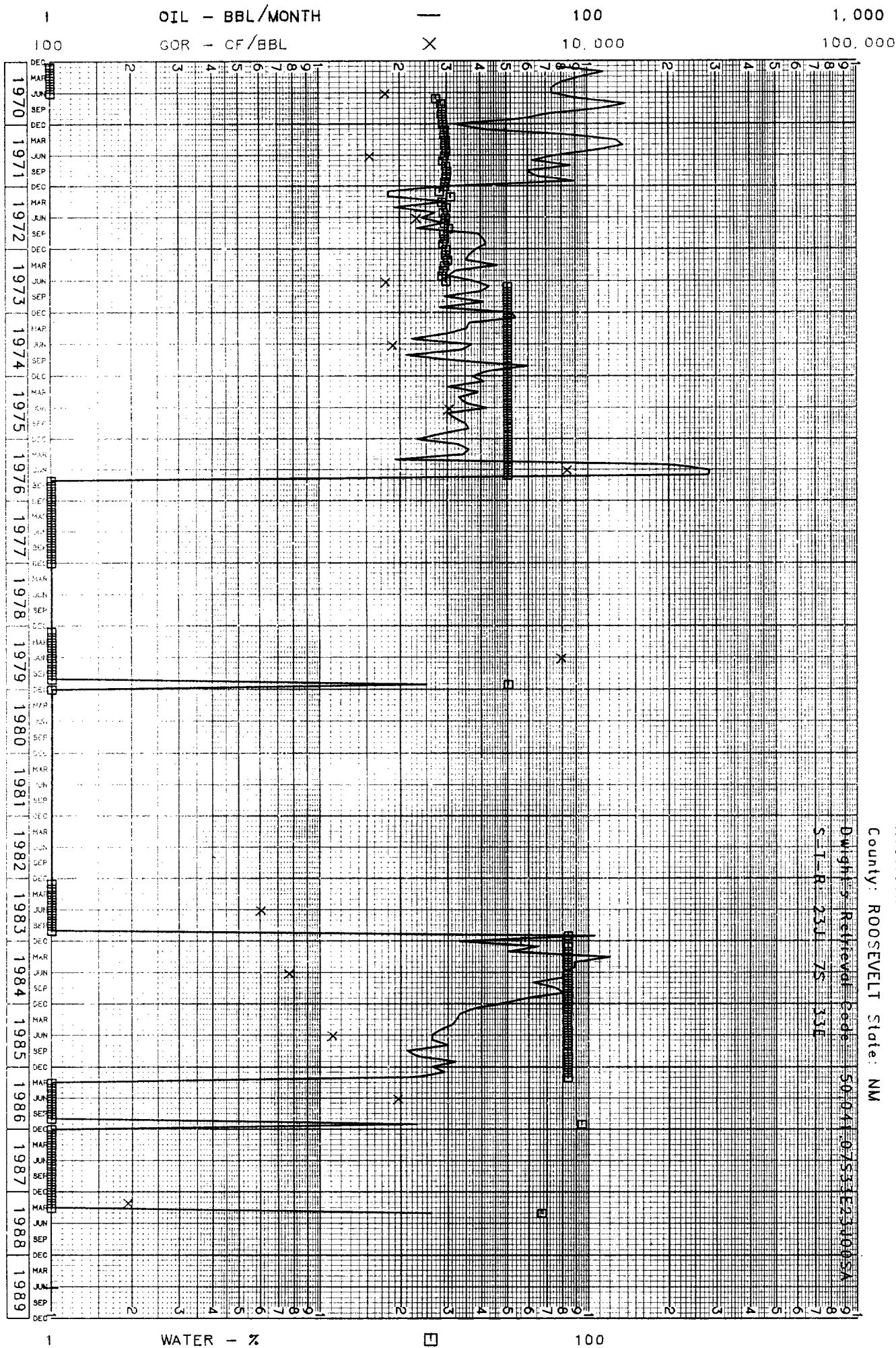
Dwight's Retrieval Code: 50.041.07533111.100KSA
S-T-R: 130 75 331

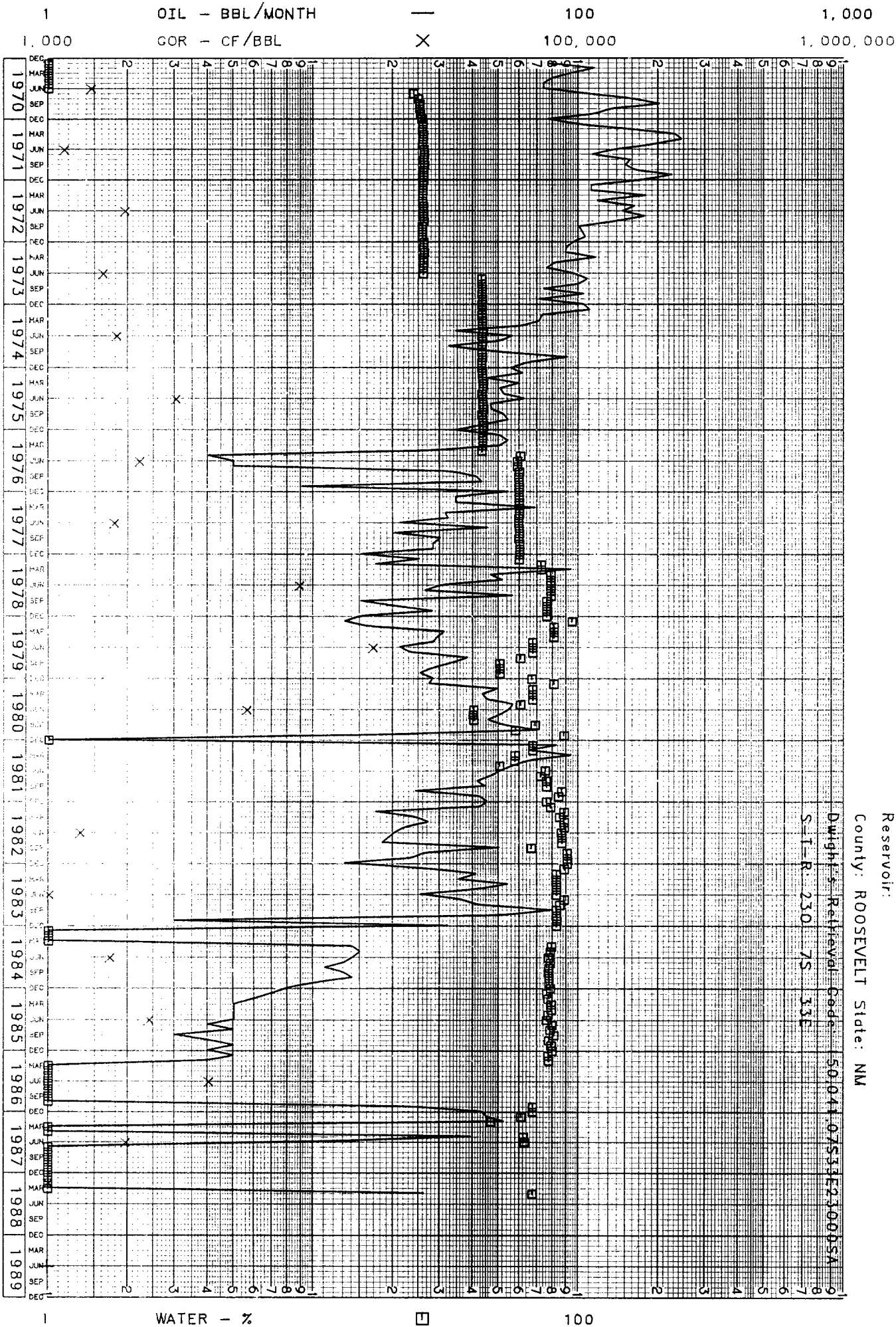


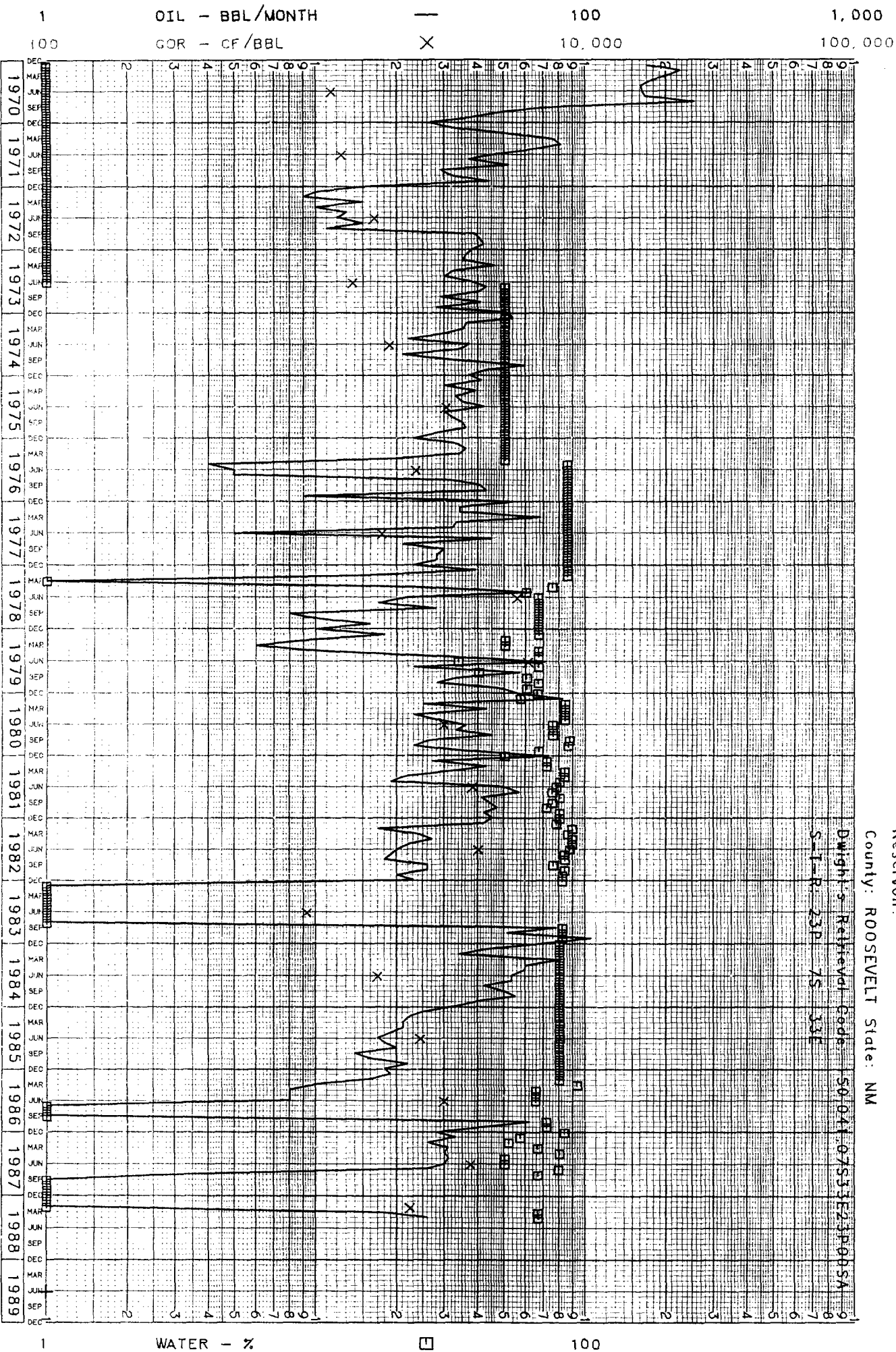


Operator: MIMS TEXAS O&G CO
 Lease: FEDERAL 23 Well No: 000007
 Field: CHAVEROO SAN ANDRES
 Reservoir:
 County: ROOSEVELT State: NM

Dwight's Retrieval Code: 50-041-07531E23400SA
 S-I-R: 2341 75 13E

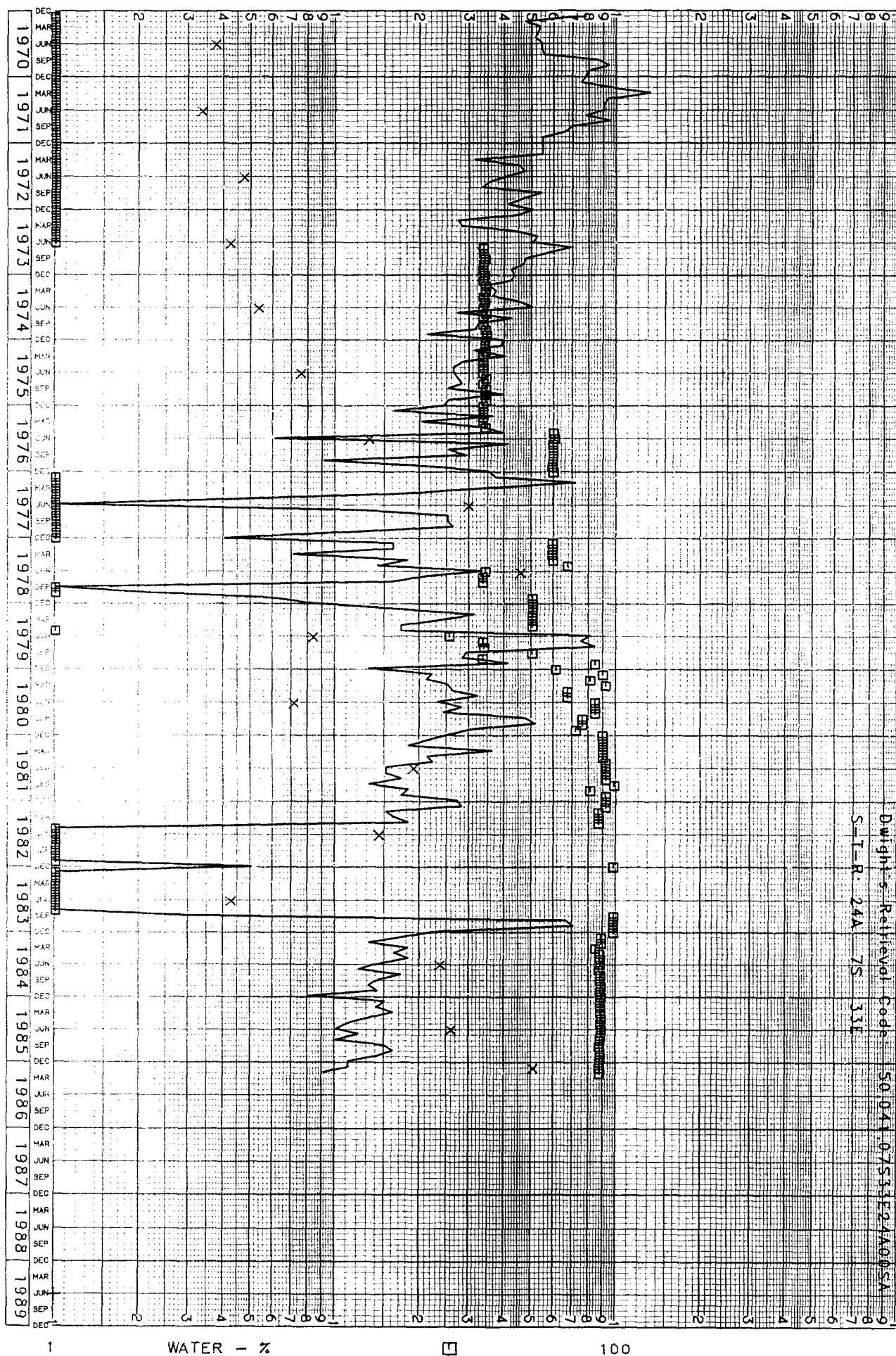






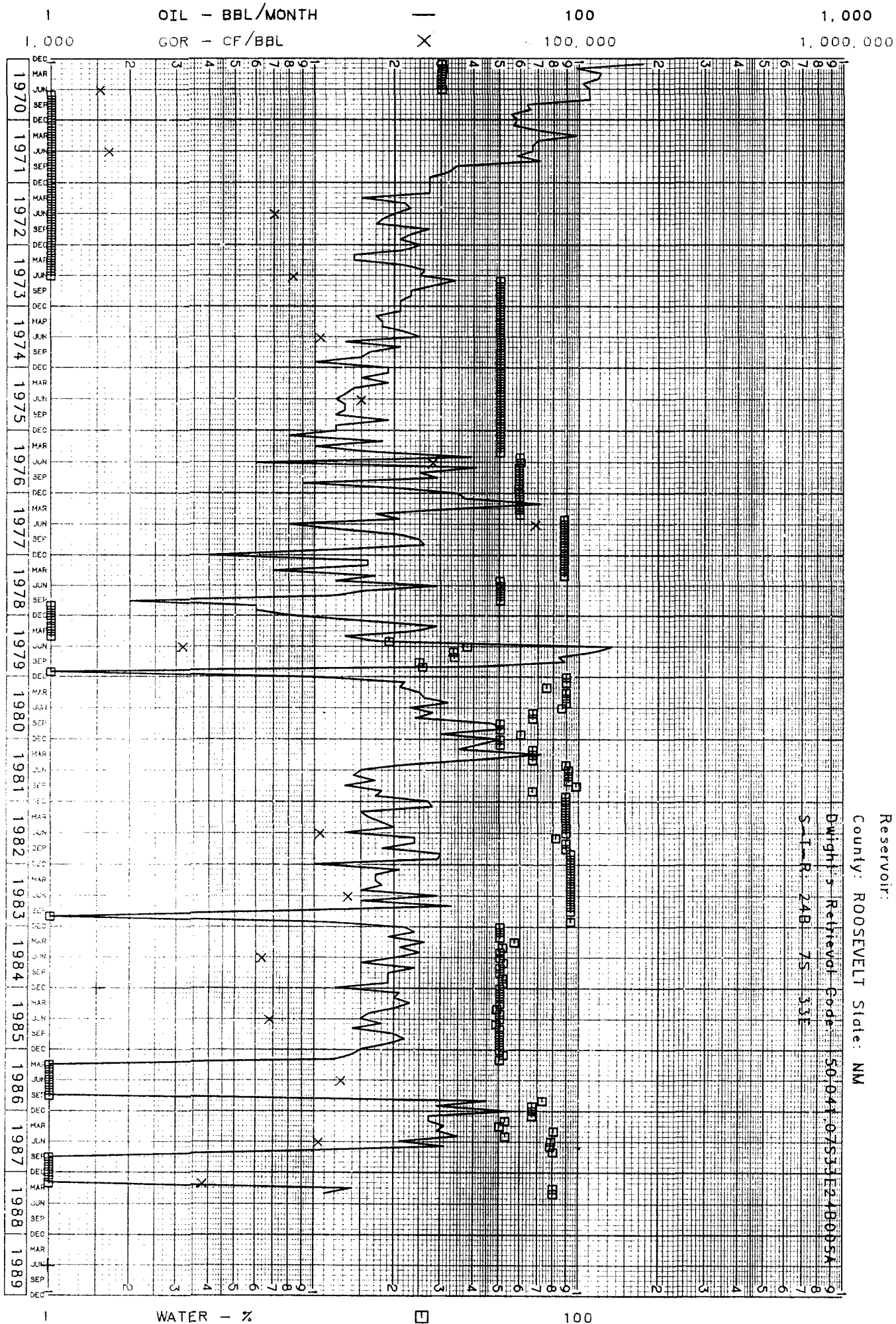
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1, 000, 000



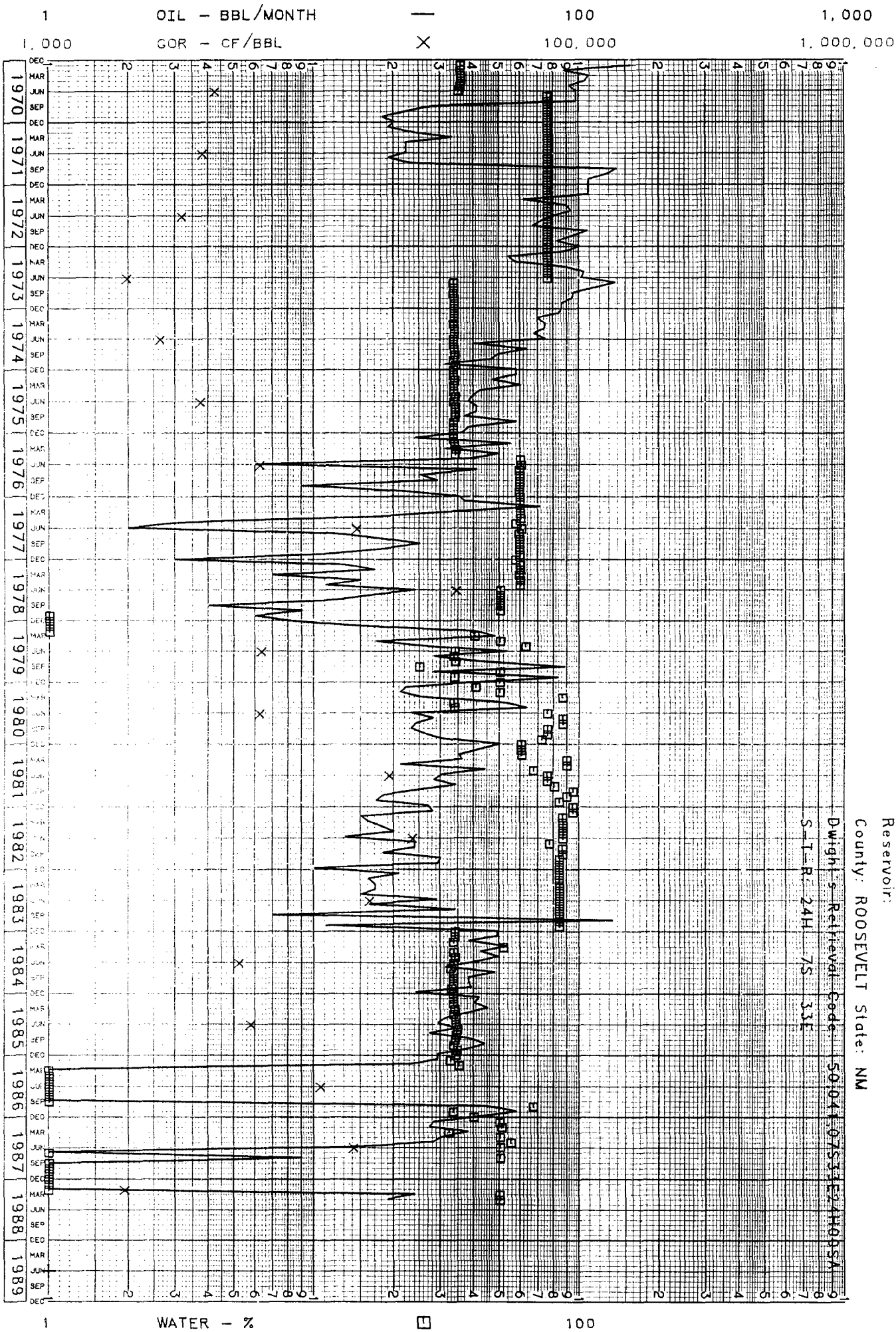
Operator: MIMS TEXAS O&G CO
Lease: FEDERAL 24 Well No: 000008
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

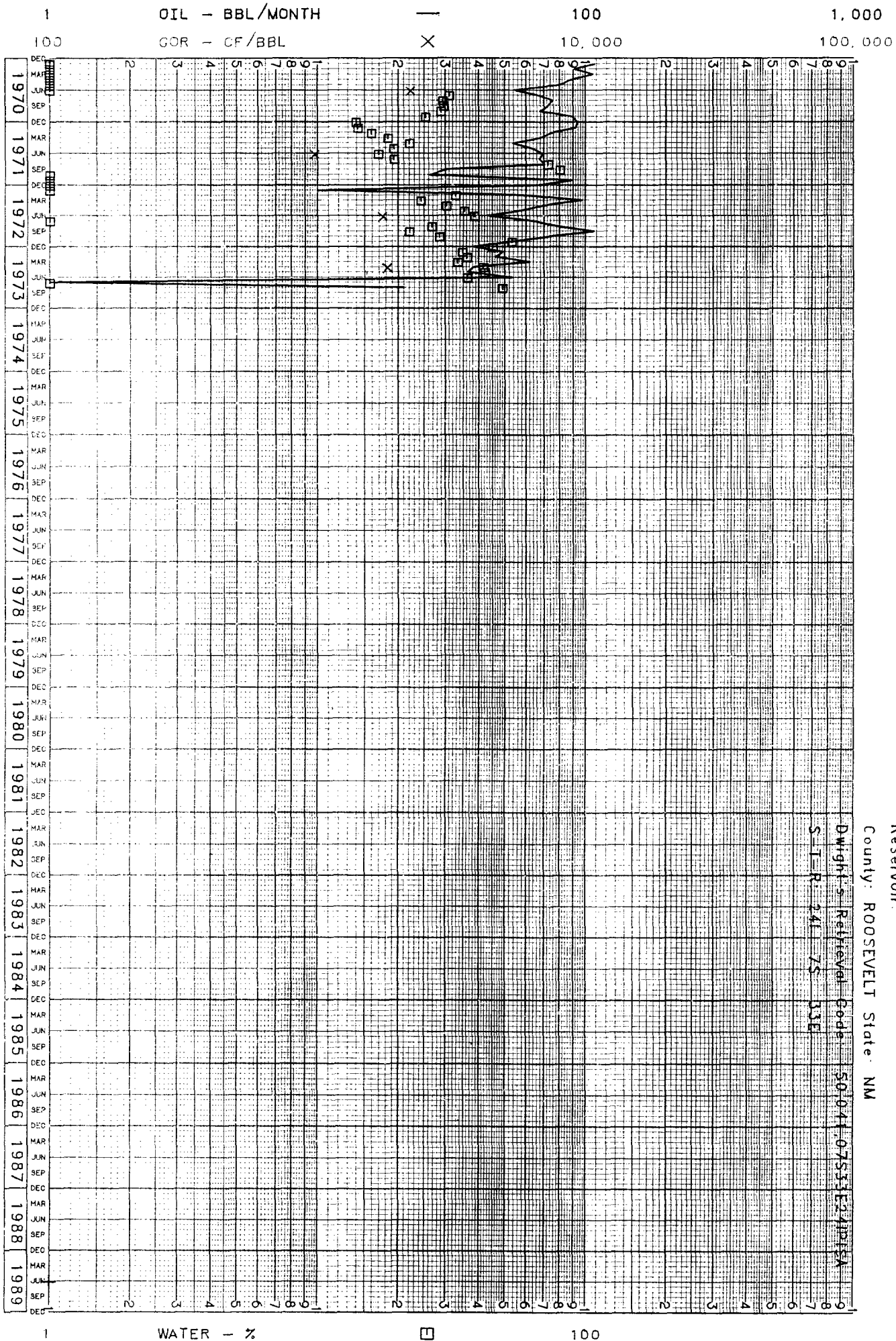
SA



Operator: MIMS TEXAS O&G CO
 Lease: FEDERAL 24 Well No. 000005
 Field: CHAVEROO SAN ANDRES
 Reservoir:
 County: ROOSEVELT State: NM

Dwight's Retrieval Code: 501041.07533E2.4H00SA
 S-I-R: 24H 7S 33E

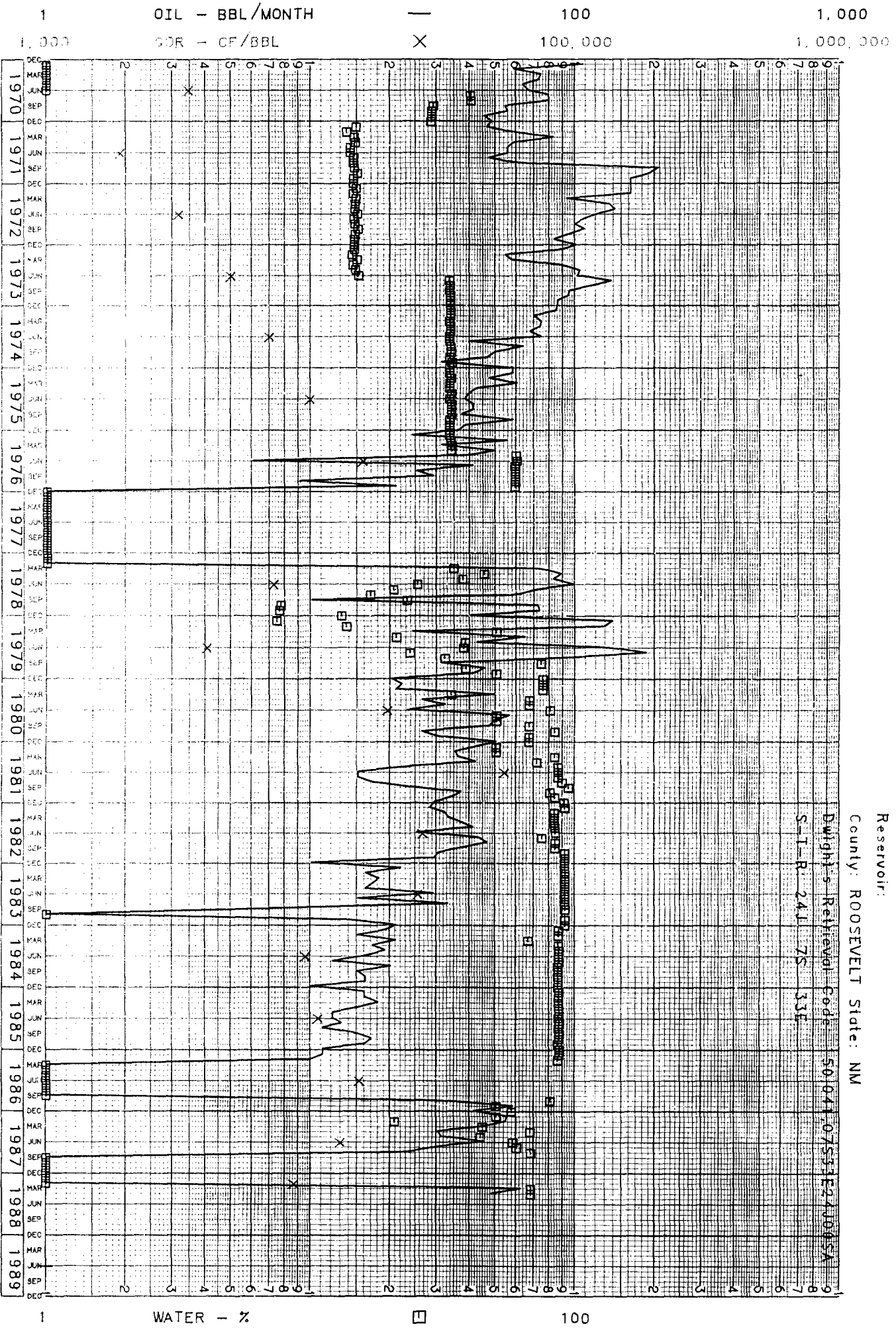




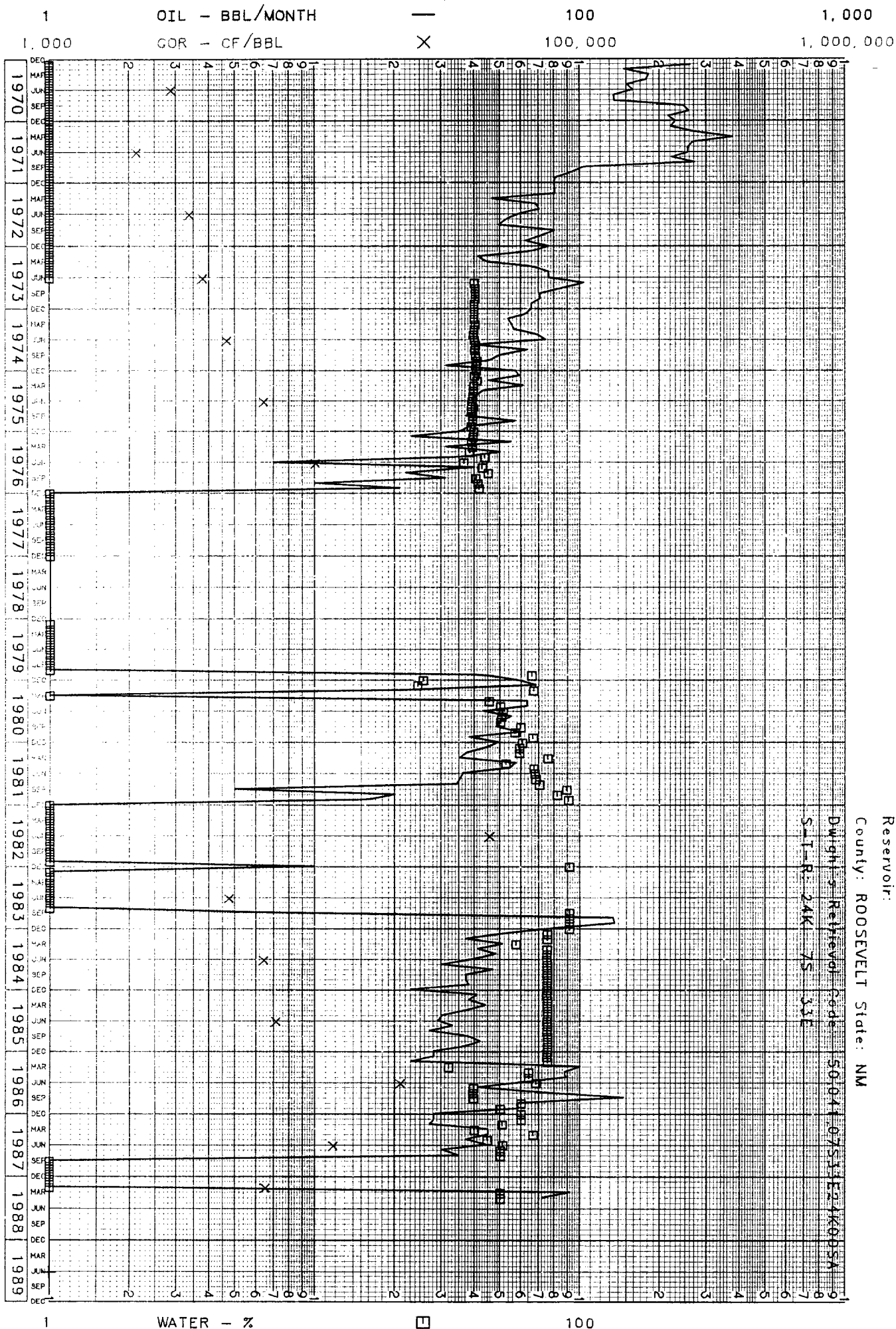
Operator: MILFORD PIPE & SUPPLY
Lease: BRADLEY Well No: 000003
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

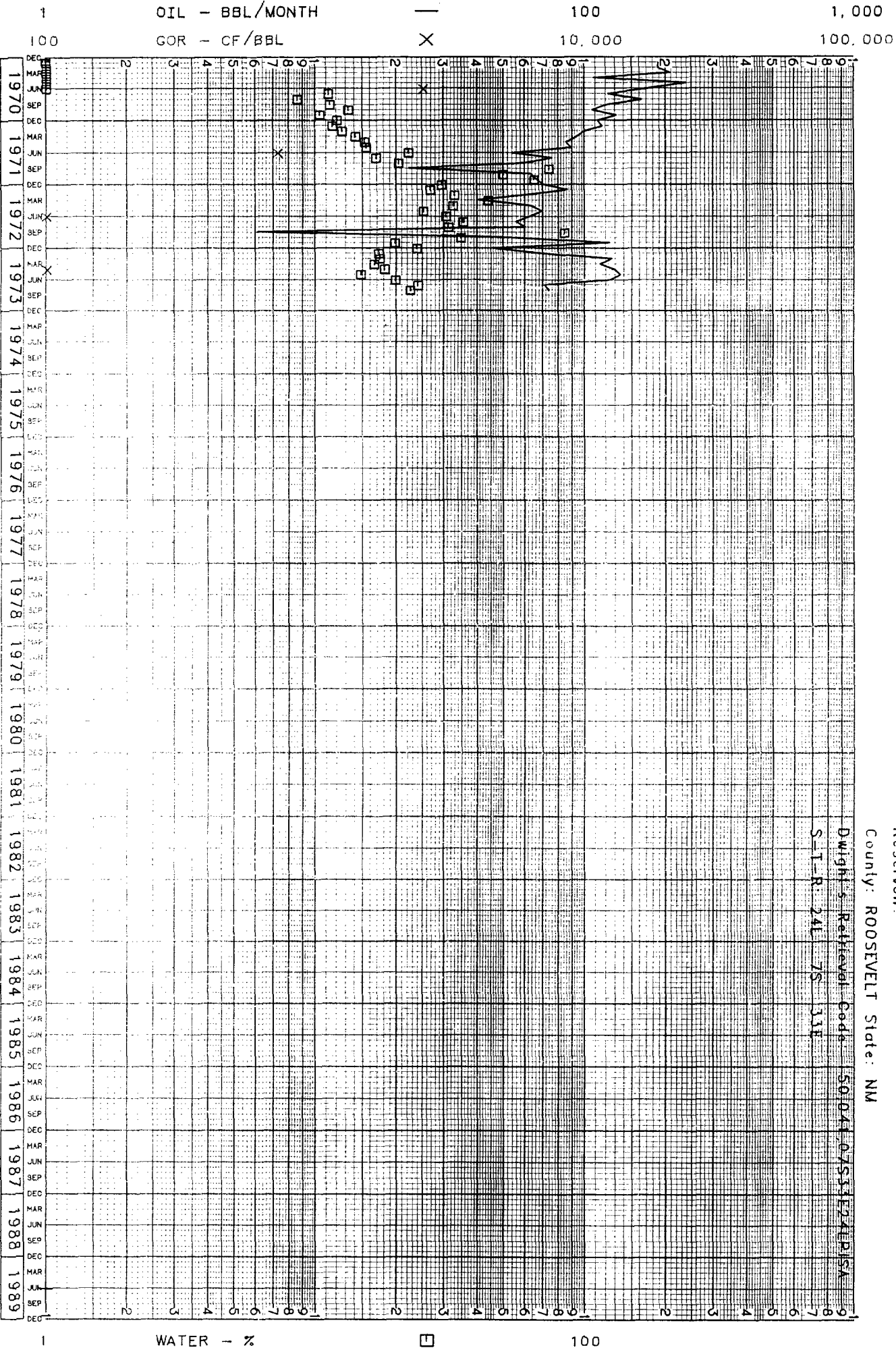
SA

21



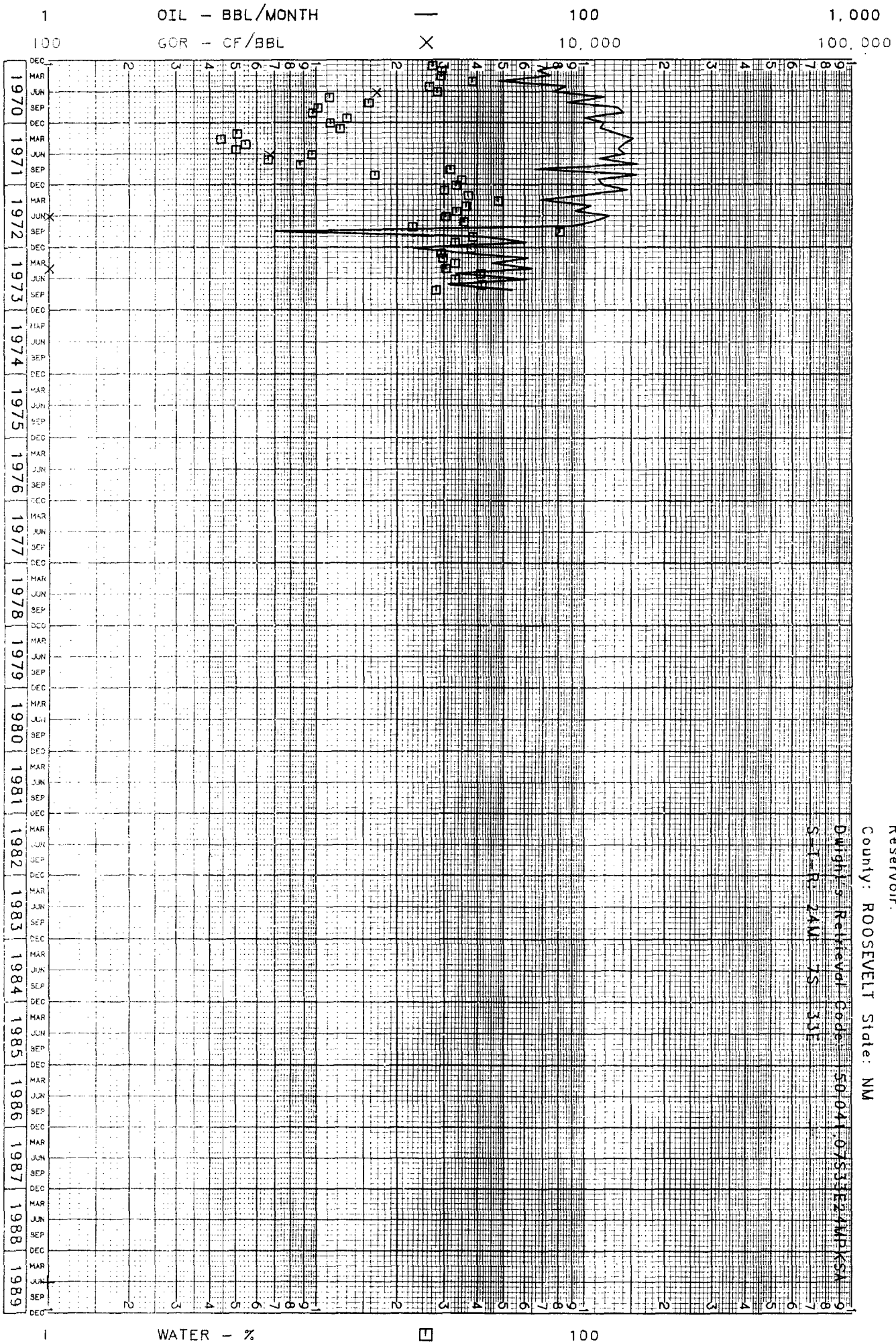
Operator: MIMS TEXAS O&G CO
Lease: FEDERAL 24 Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM





Operator: MILFORD PIPE & SUPPLY
Lease: COLEMAN Well No: 000002
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

SA



Operator: MILFORD PIPE & SUPPLY

Lease: BRADLEY Well No: 0000001

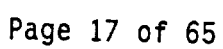
Field: CHAVEROO SAN ANDRES

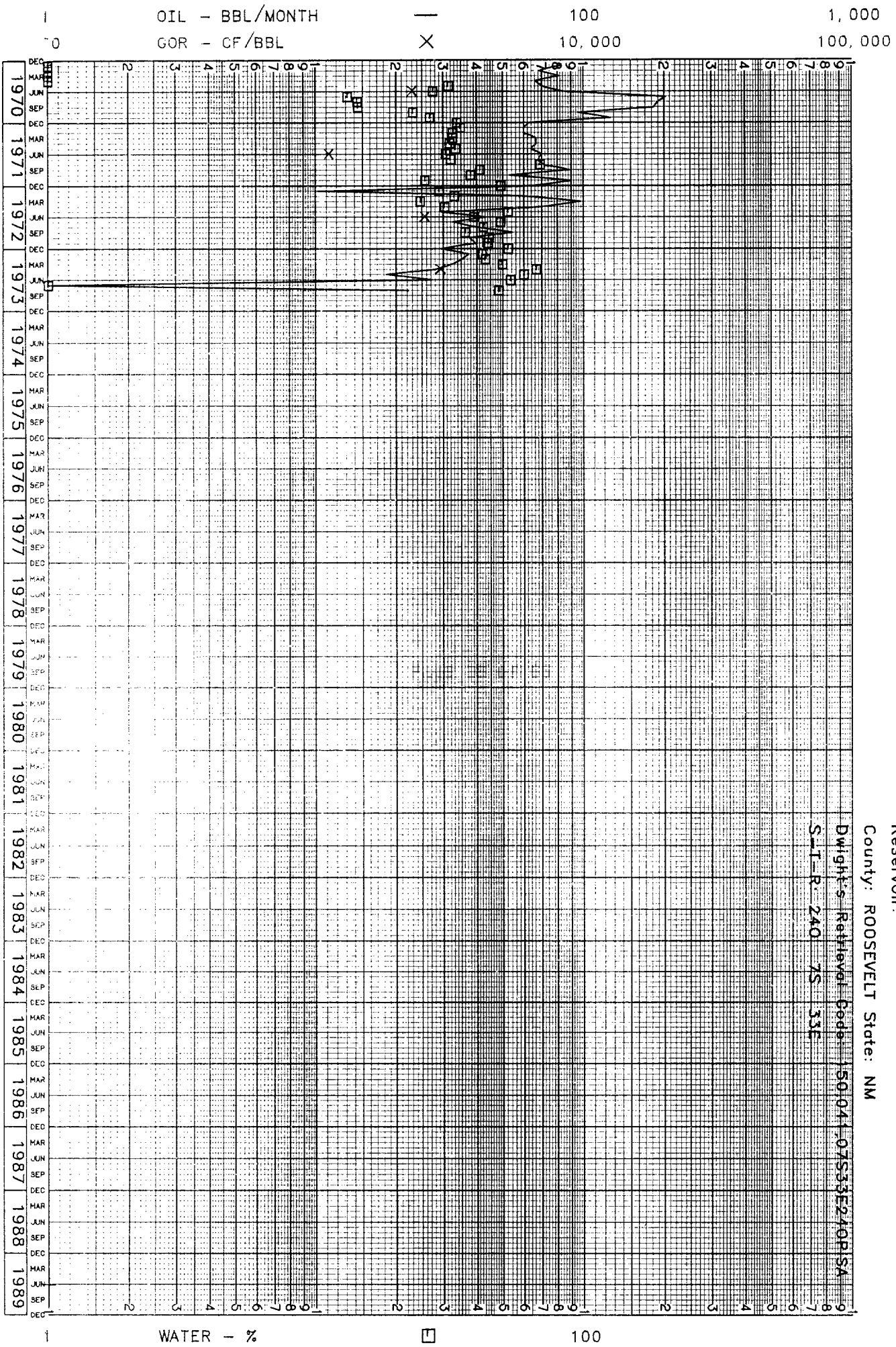
Reservoir:

County: ROOSEVELT State: NM

Dwight's Retrieval Code:	50 041 0753	E24NP	SA
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S-T-R-24N-7S-33E





Operator: MILFORD PIPE & SUPPLY
Lease: BRADLEY Well No: 000002
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

SA

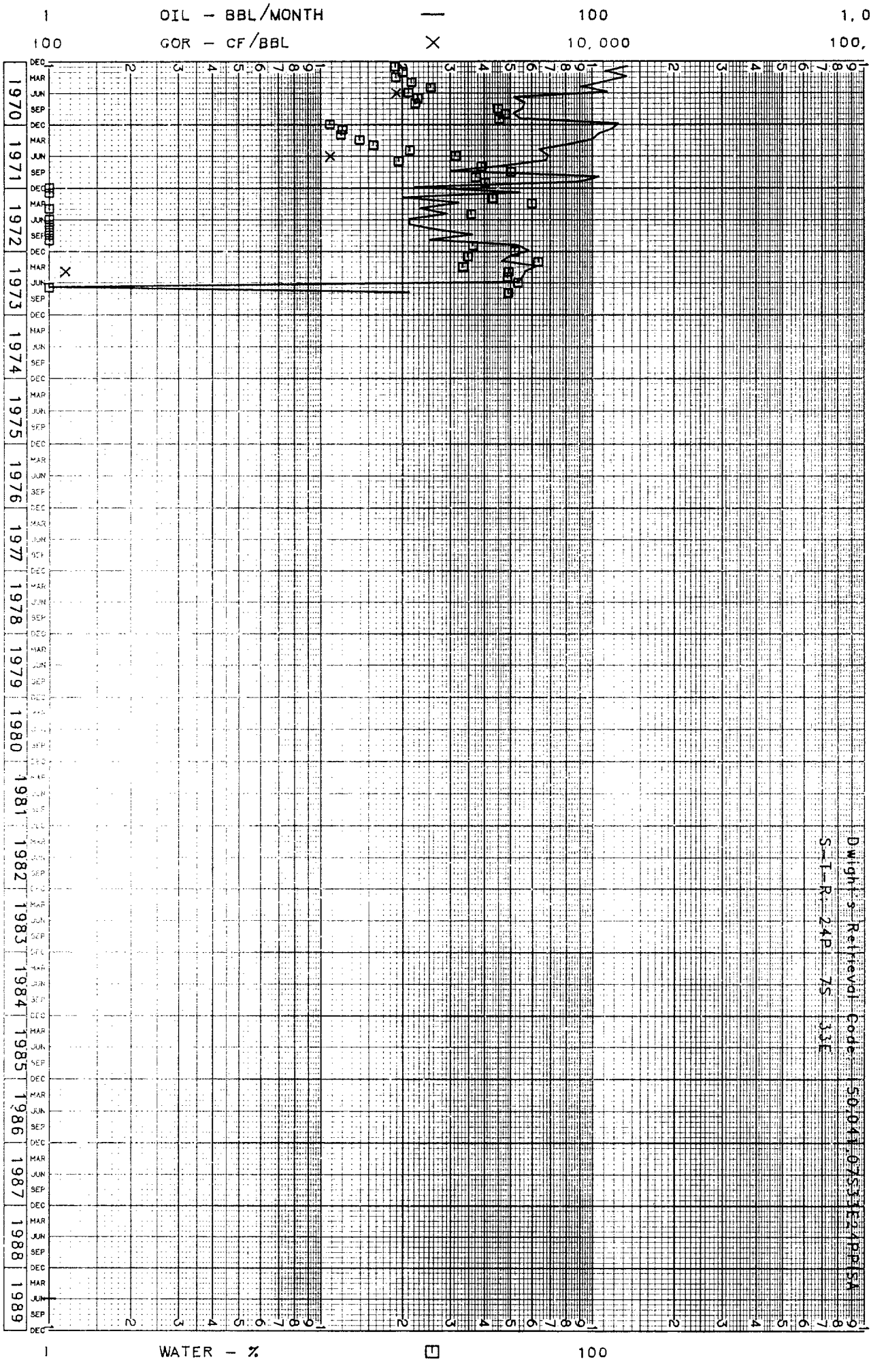
27

Operator: MILFORD PIPE & SUPPLY
Lease: BRADLEY Well No: 000004
Field: CHAVEROO SAN ANDRES
Reservoir:

SA

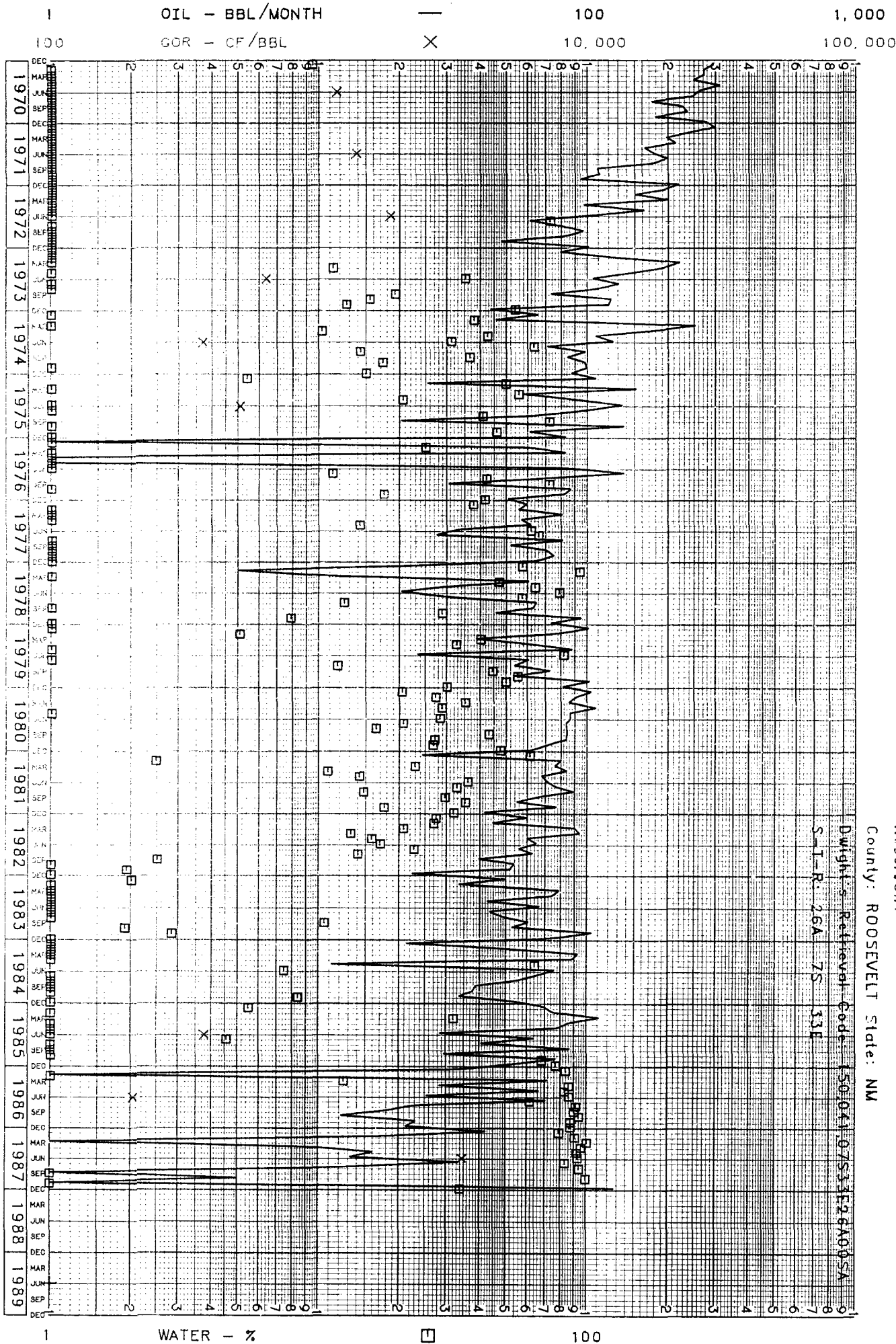
County: ROOSEVELT State: NM

Dwight's Retrieval Code: 50.041.0AS31E2APISA
S-I-R-24P 75 33E



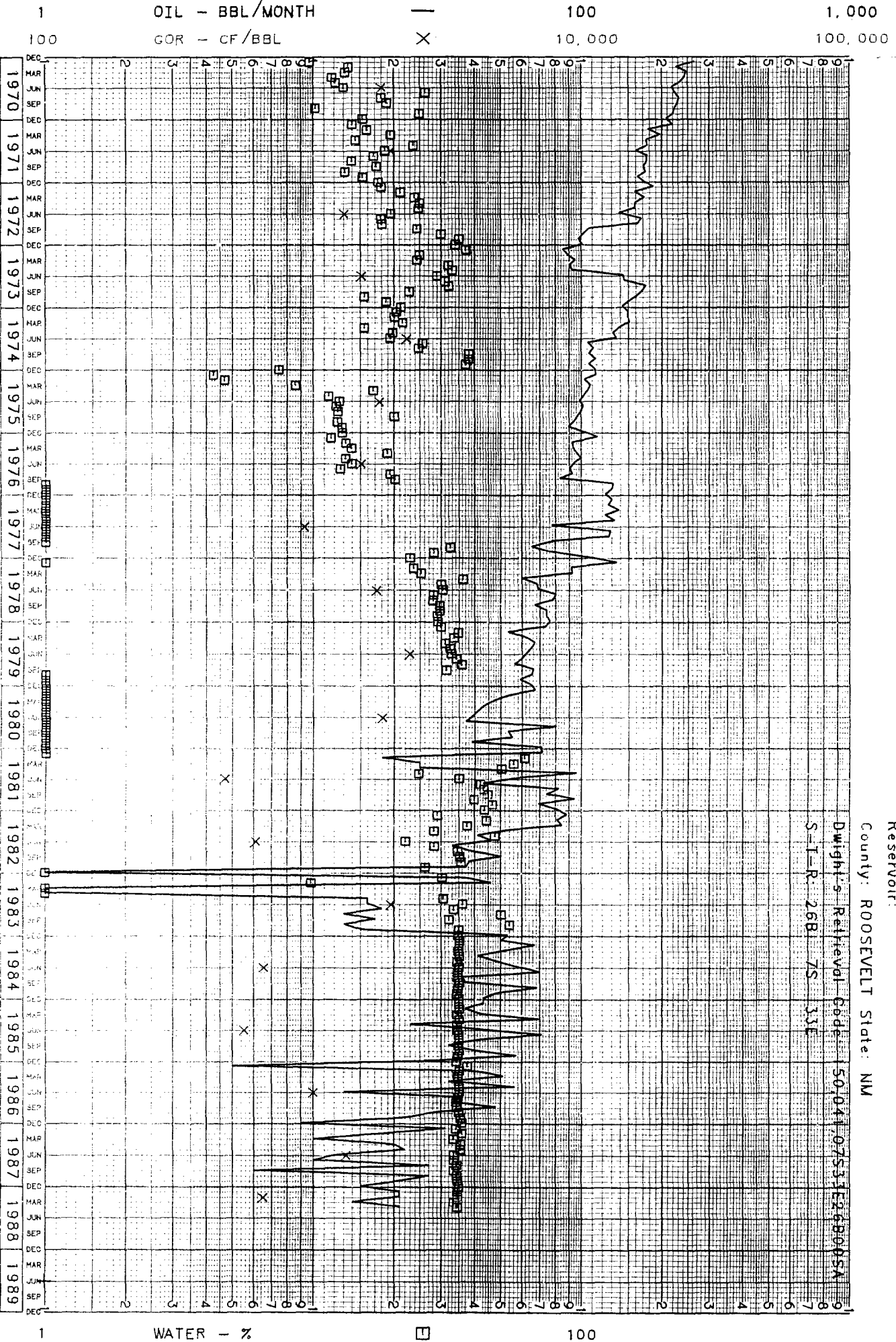
Operator: DALPORT OIL CORP
Lease: FEDERAL Well No: 000003
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

SA



Operator: LYNX PETROLEUM CONSLINTIS
Lease: MORGAN B FEDERAL Well No: 000006
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

Dwight's Retrieval Code: 150,041,075314268005A
S-I-R: 2681 75 33E



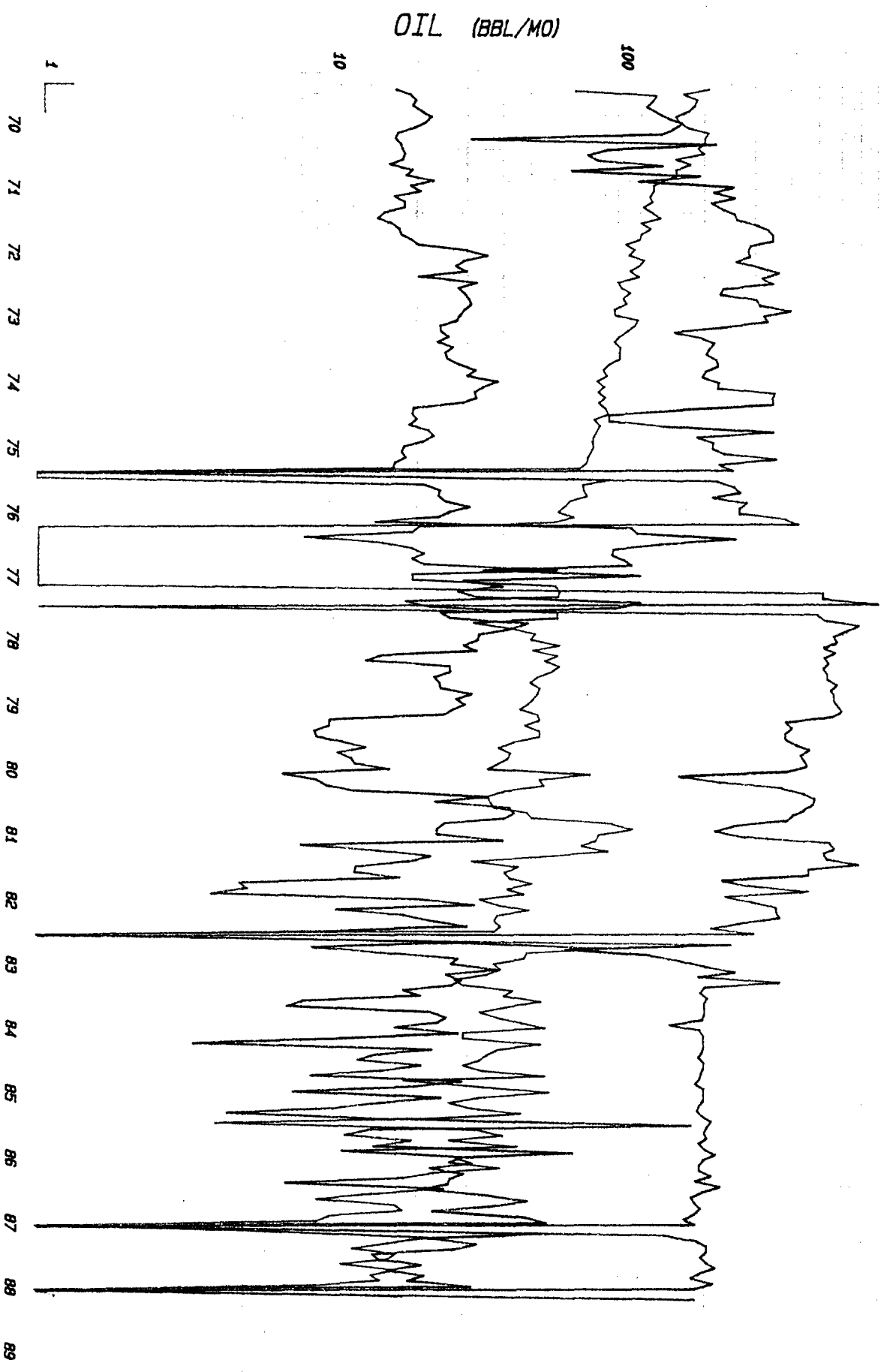
1000 Lease: MORGAN B FEDERAL

000005

Dwight's ENERGYDATA Inc.

Retrieval Code: 150, 041, 07333E26C00SA

100000
100.0

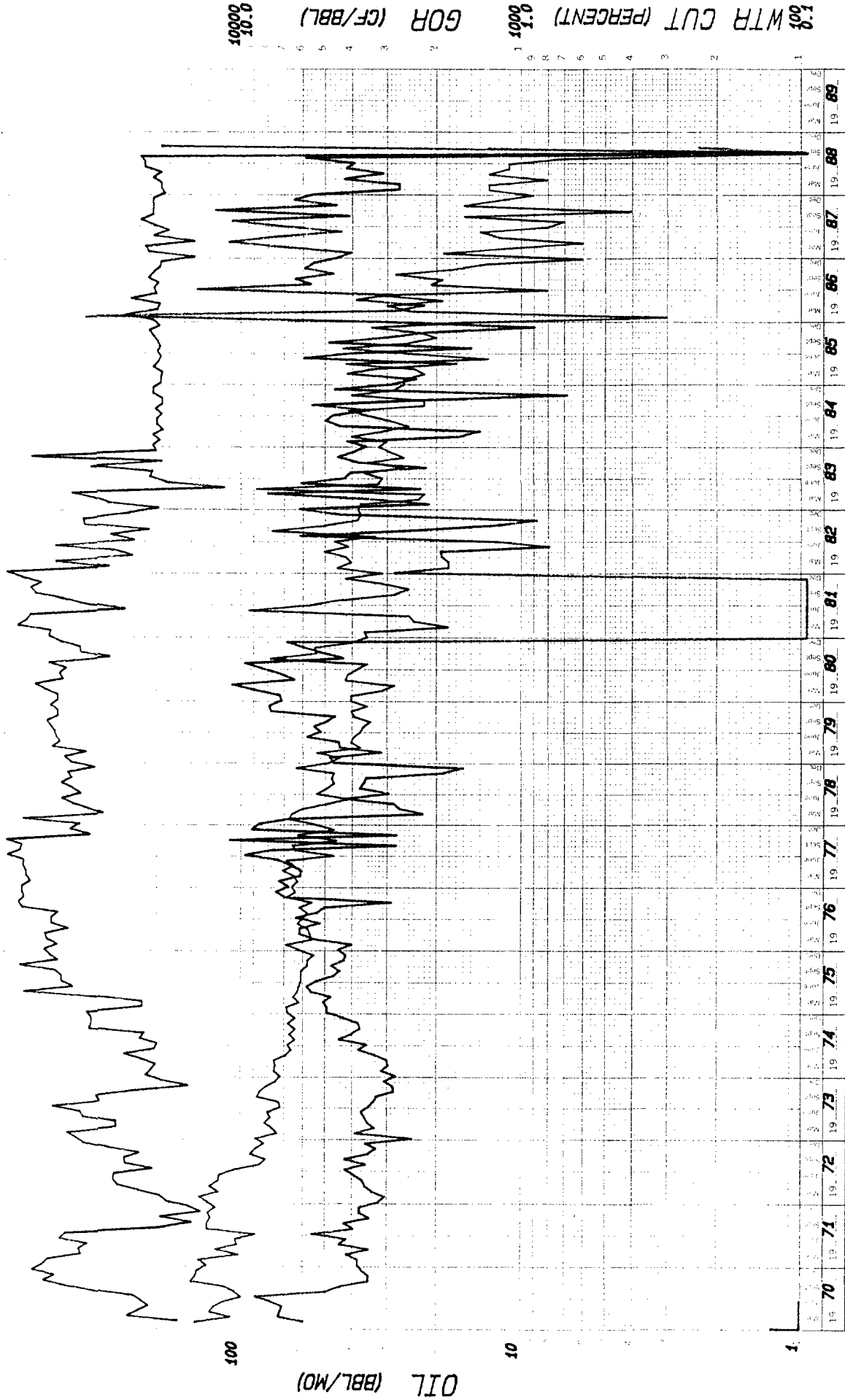


10000
100.0
1000
1.0
WTR CUT (PERCENT)
GOR (CF/BBL)

County: ROOSEVELT
Field: CHAVERO SAN ANDRES
Reservoir:
Operator: MIMS TEXAS OIL & GAS CO
Oil Cum: 53326 Gas Cum: 47311
Location: 26C 7S 39E

State: NM
SA

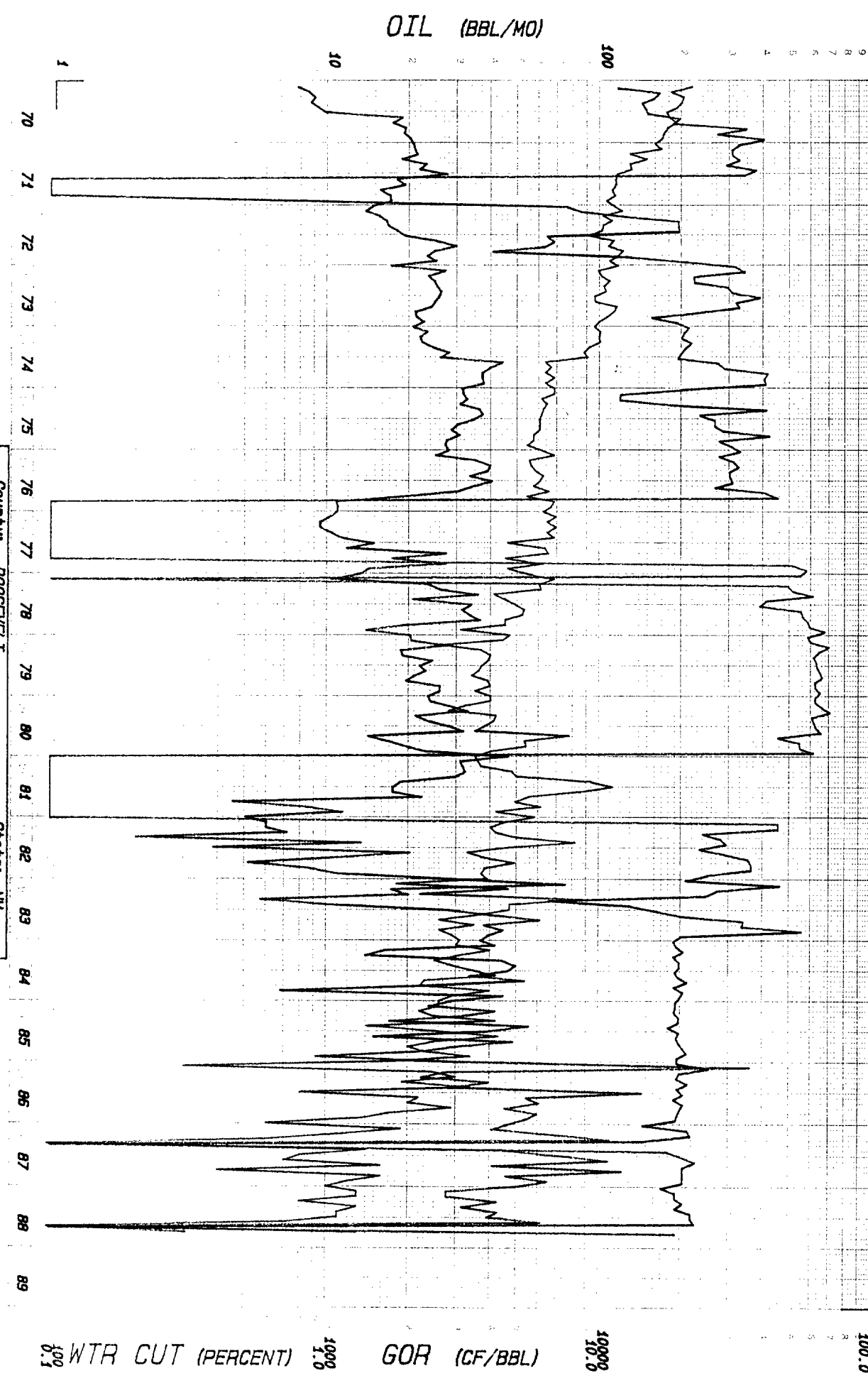
Date: 08-11-89



County: ROOSEVELT State: NM
Field: CHAVERO SAN ANDRES SA
Reservoir: MINS TEXAS OIL & GAS CO
Oil Cum: 46605 Gas Cum: 101881
Location: 260 75 39E

Date: 08-11-89

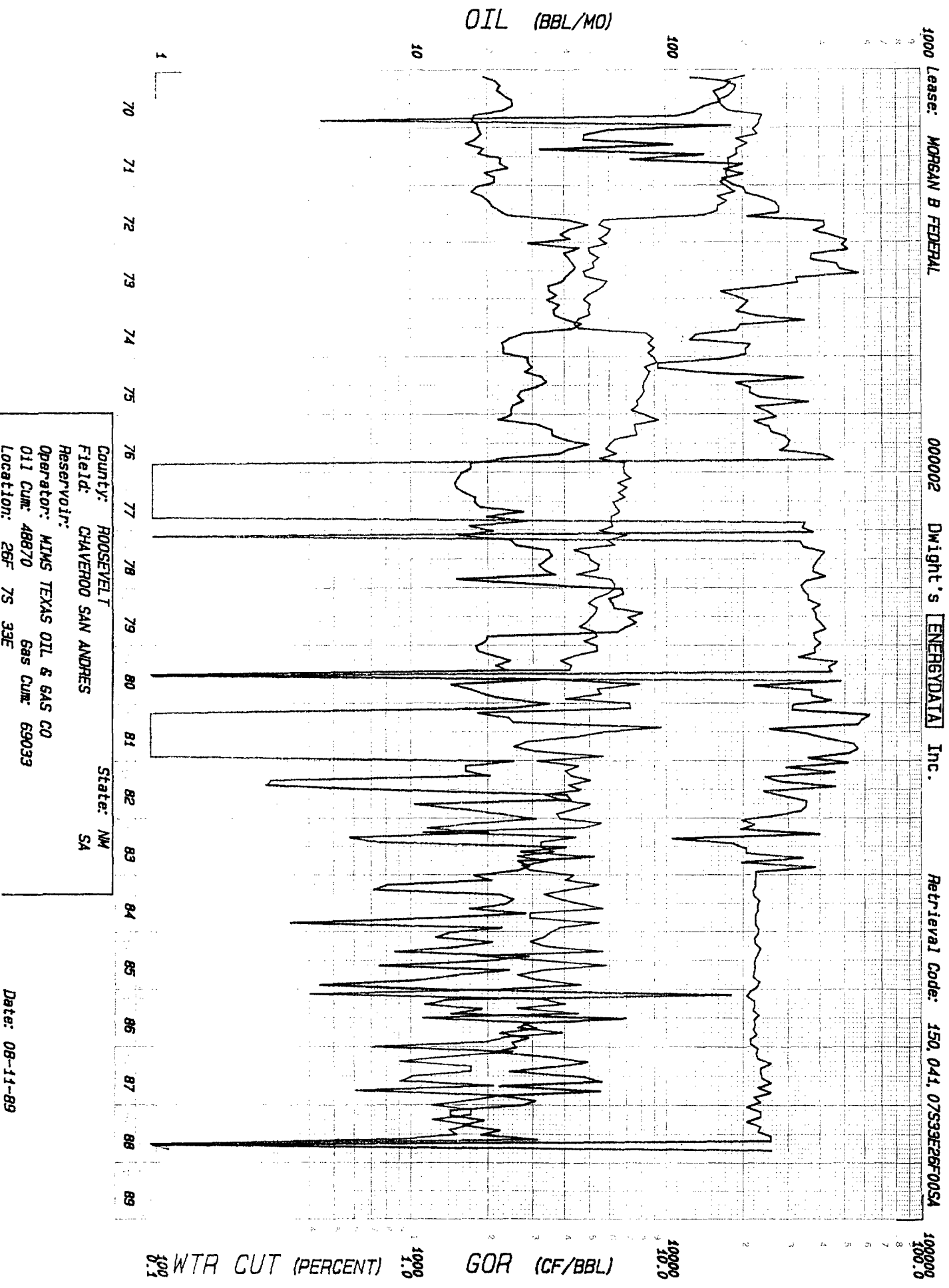
1000 Lease: MORGAN B FEDERAL 000001 Dwight's ENERGYDATA Inc. Retrieval Code: 150, 041, 07339E26E005A



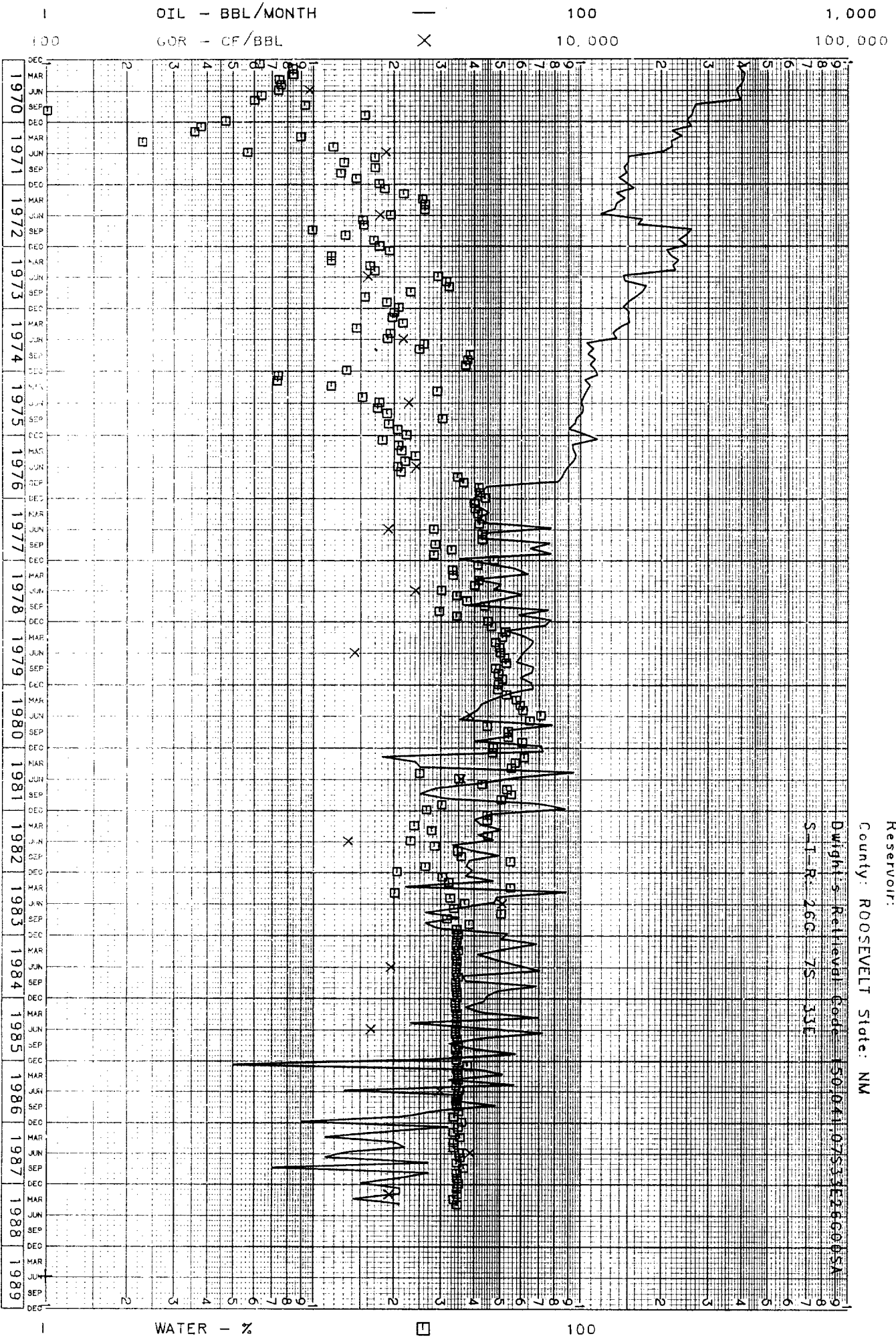
County: ROOSEVELT
Field: CHAVERO SAN ANDRES
Reservoir:
Operator: HIMS TEXAS OIL & GAS CO
Oil Cum: 47941 Gas Cum: 54282
Location: 26E 7S 33E

State: NM
SA

Date: 08-11-89

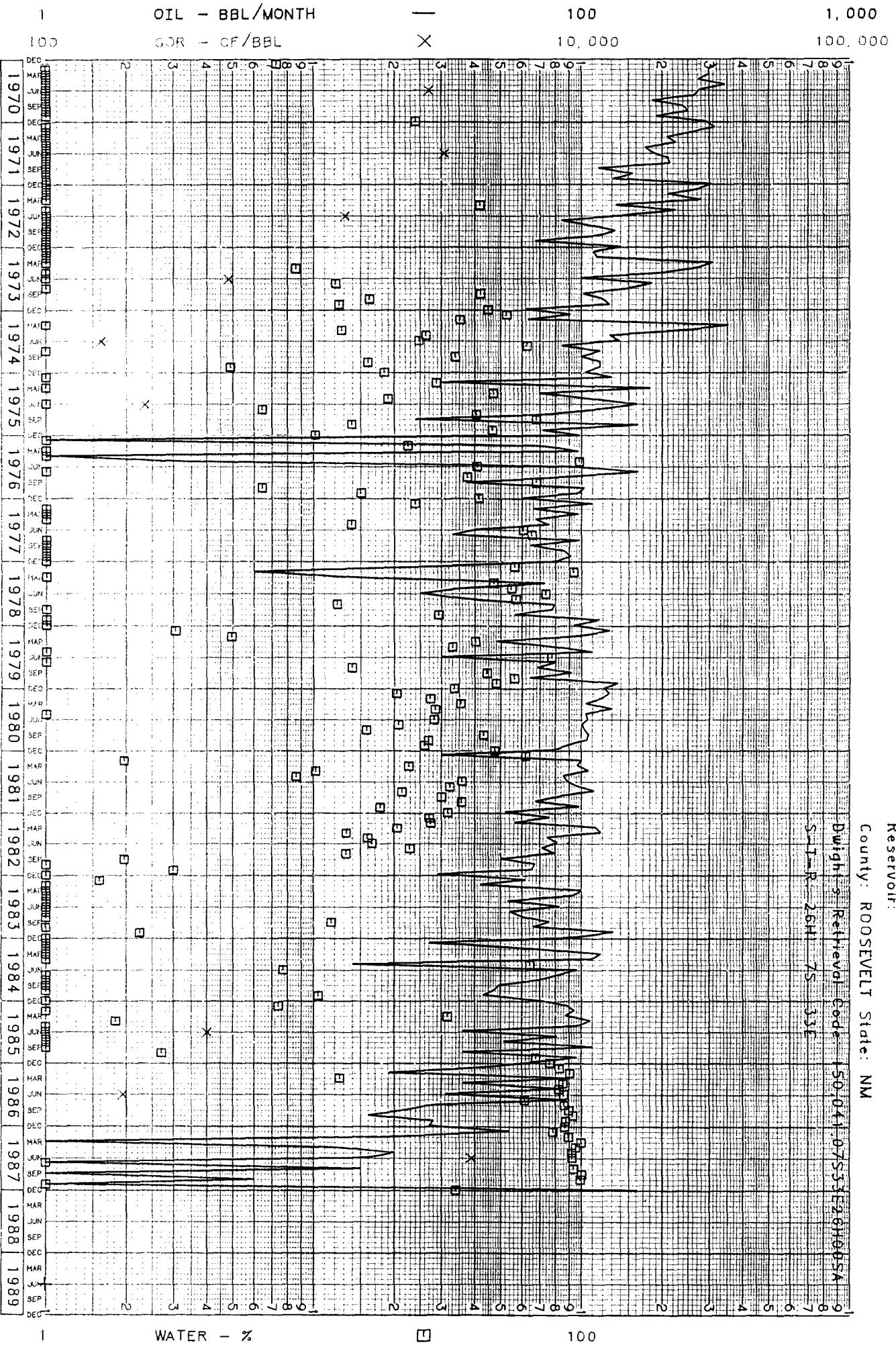


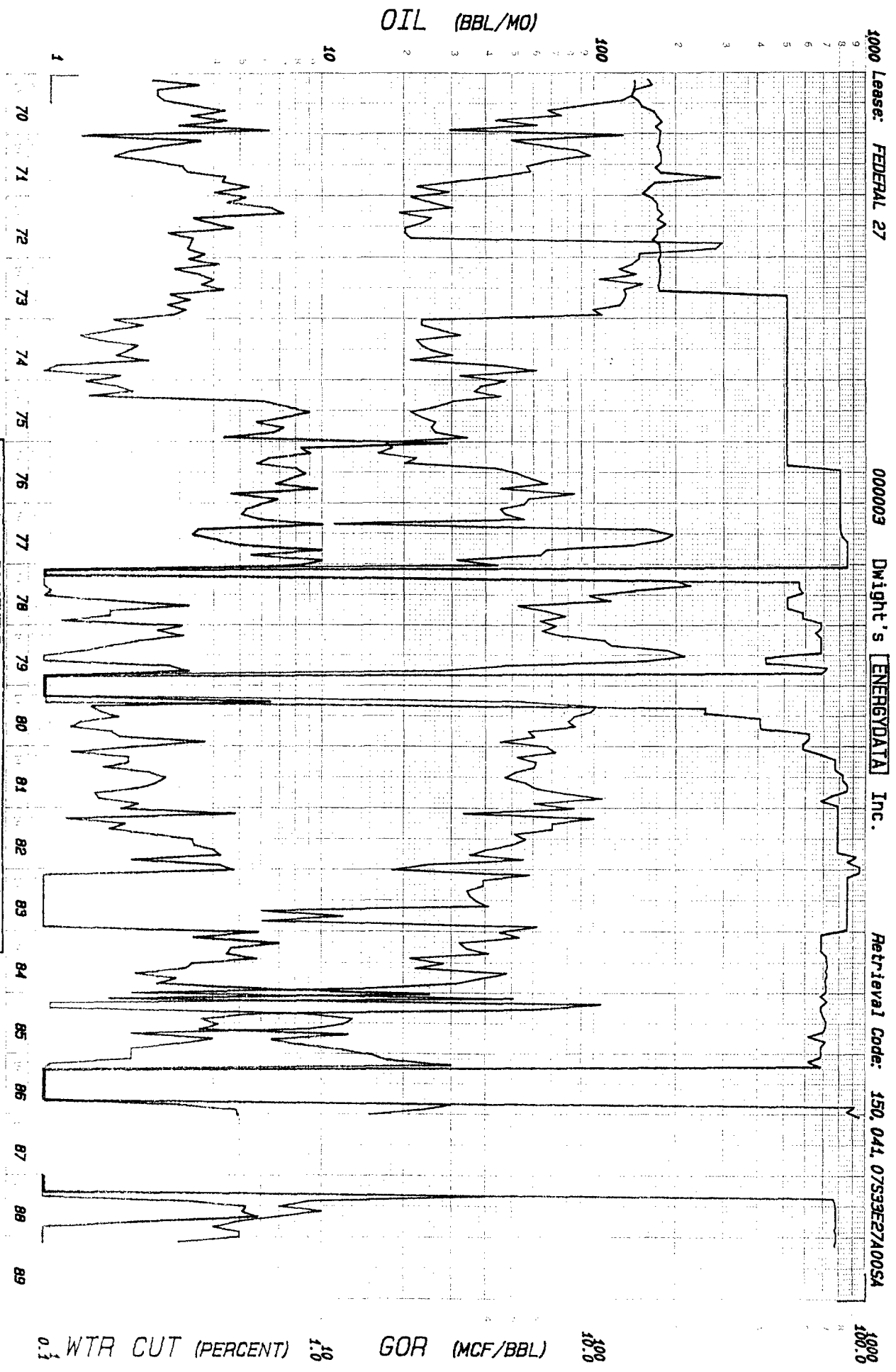
Operator: LYNX PETROLEUM CONSINTIS
 Lease: MORGAN B FEDERAL Well No: 000003
 Field: CHAVEROO SAN ANDRES
 Reservoir:
 County: ROOSEVELT State: NM
 SA



Operator: DALPORT OIL CORP
 Lease: FEDERAL Well No: 000004
 Field: CHAVEROO SAN ANDRES
 Reservoir:
 County: ROOSEVELT State: NM

SA

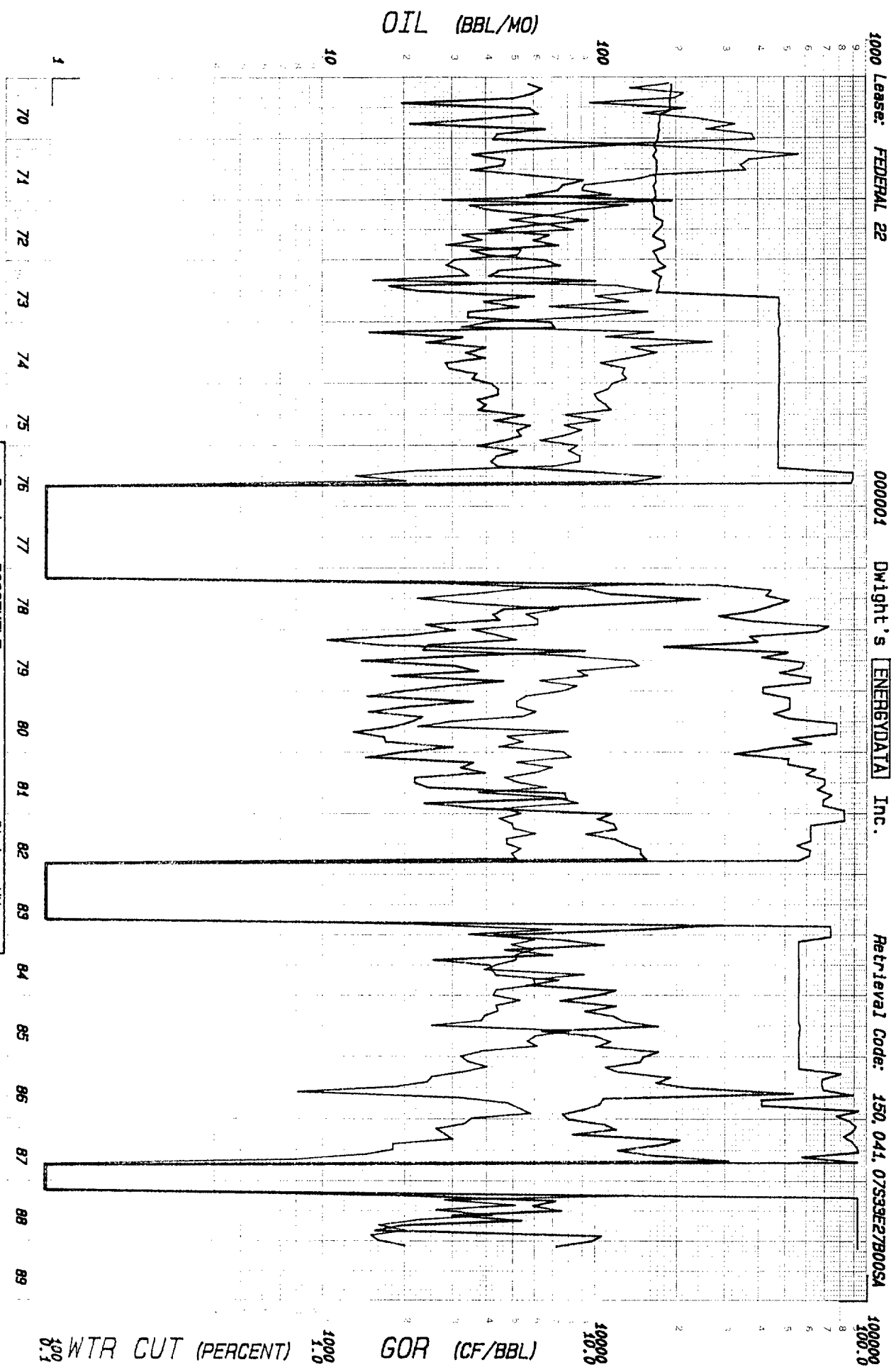




County: ROOSEVELT
Field: CHAVEZ SAN ANDRES
Reservoir:
Operator: MIMS TEXAS OIL & GAS CO
Oil Cum: 36649 Gas Cum: 60515
Location: 27A 7S 33E

State: NM
SA

Date: 08-11-89



County: ROOSEVELT
Field: CHAVERO SAN ANDRES
Reservoir:
Operator: MIMS TEXAS OIL & GAS CO
Oil Cum: 36964 Gas Cum: 114256
Location: 27B 7S 33E

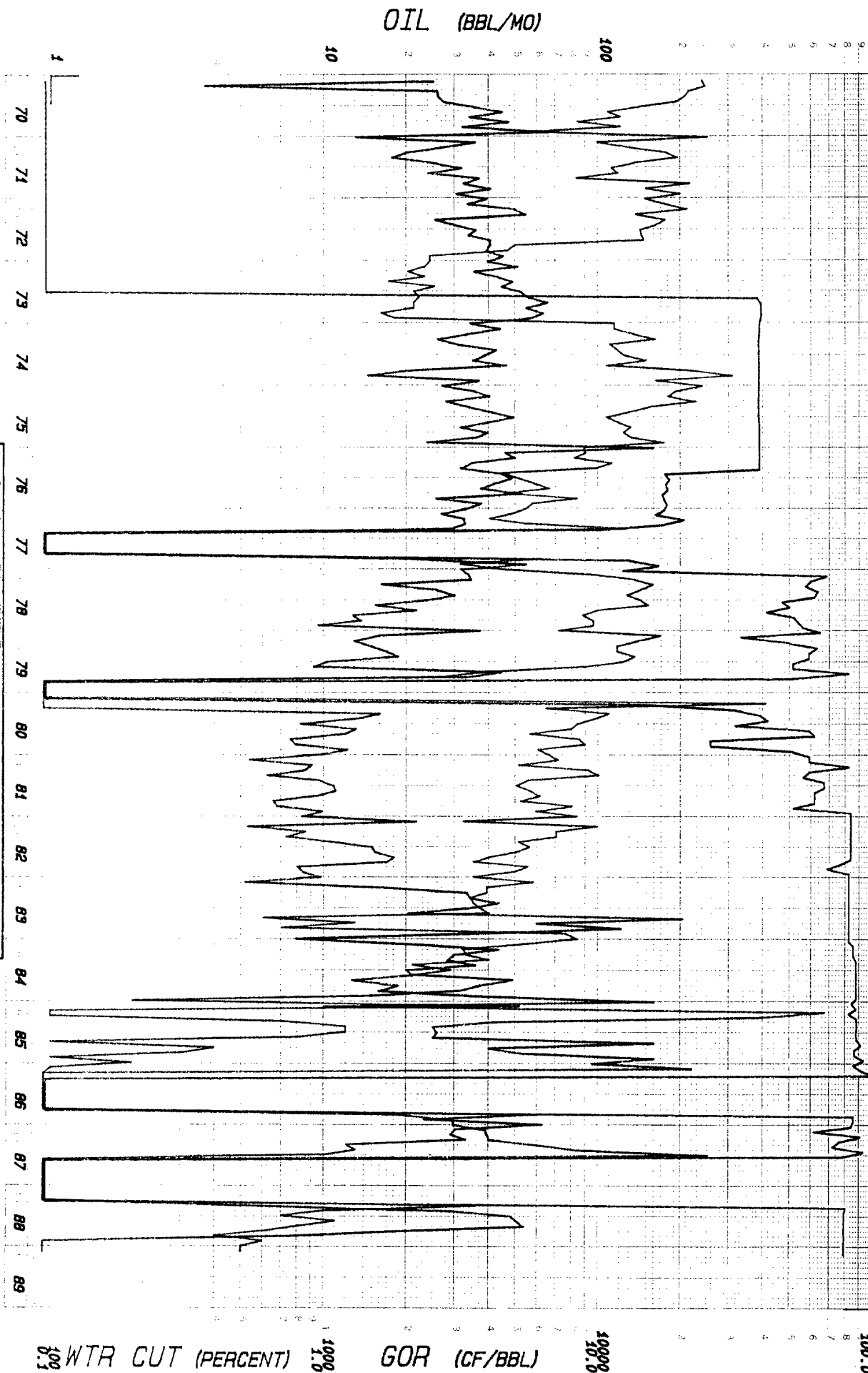
State: NM
SA

Date: 08-11-89

1000 Lease: FEDERAL 27

000002 Dwight's ENERGYDATA Inc.

Retrieval Code: 150, 041, 075339E276005A



County: ROOSEVELT
Field: CHAVEHOO SAN ANDRES
Reservoir:
Operator: MIMS TEXAS OIL & GAS CO
Oil Cum: 42491 Gas Cum: 89424
Location: 276 75 33E

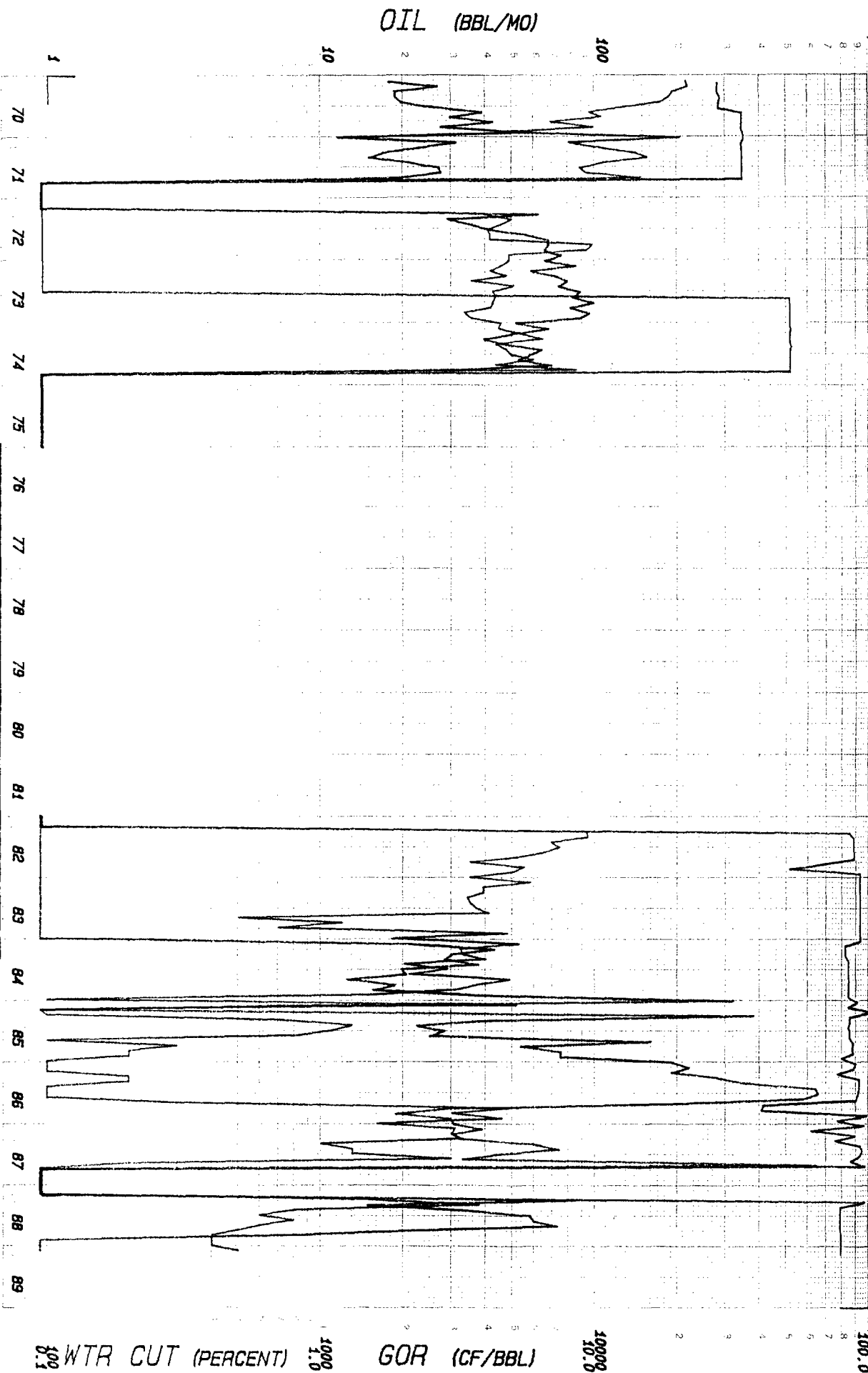
State: NM
SA

Date: 08-11-89

1000 Lease: FEDERAL 27

000004 Dwight's [ENERGYDATA] Inc.

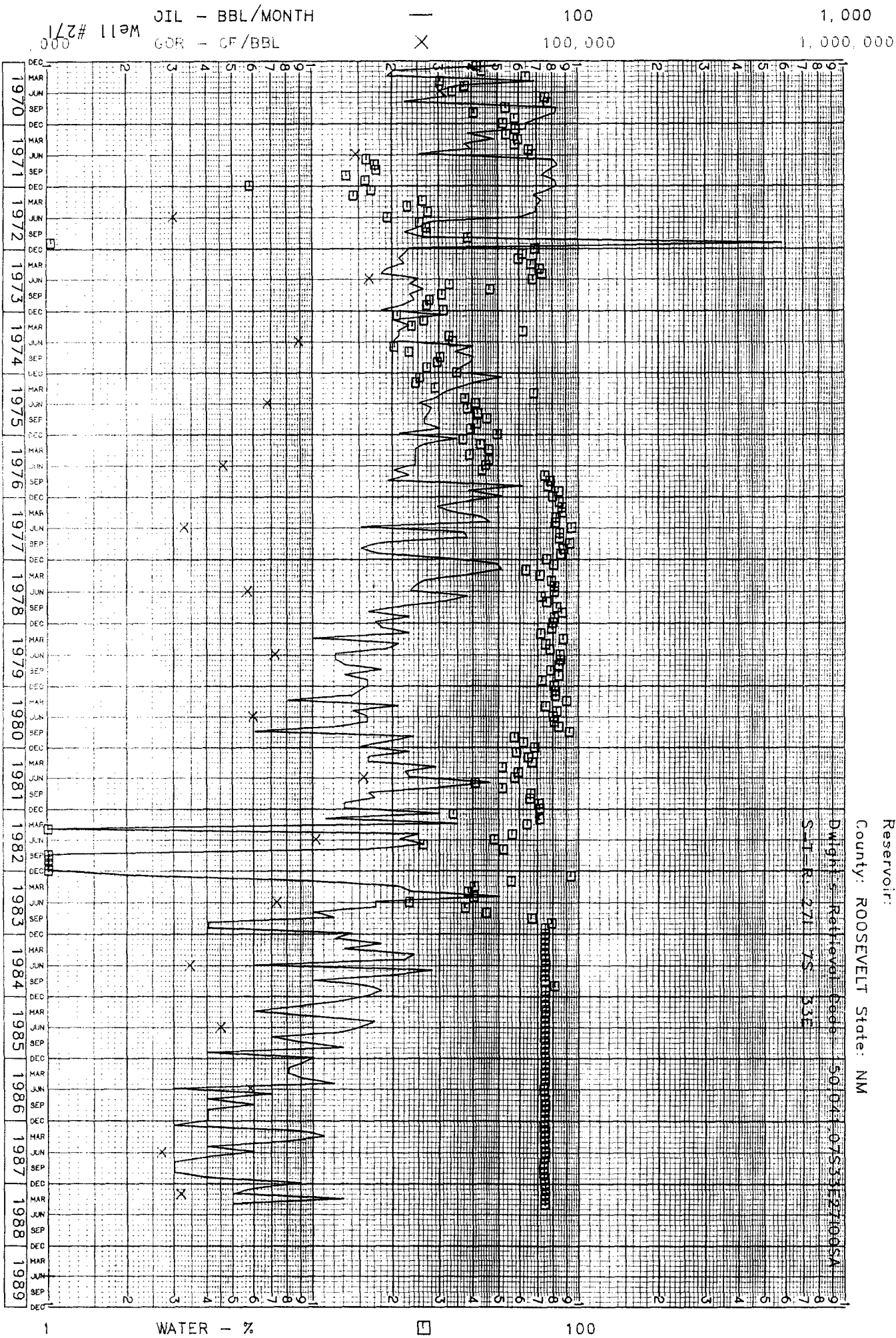
Retrieval Code: 150, 041, 07533E27H0054



100000 10000 1000 100 10 1 WTR CUT (PERCENT) 1.0 10000 1000 100 10 1 GOR (CF/BBL)

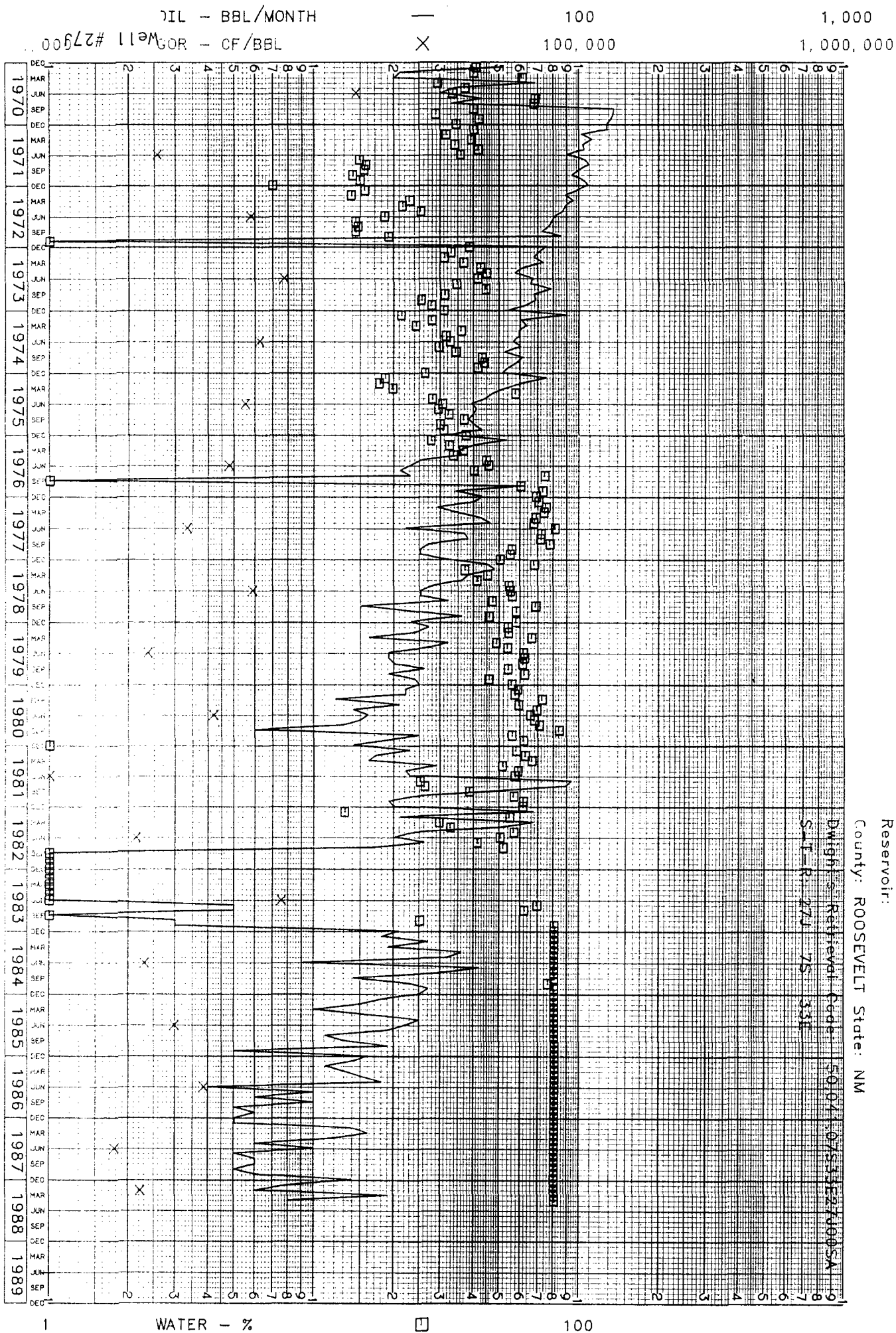
County: ROOSEVELT State: NM
Field: CHAVERO SAN ANDRES
Reservoir:
Operator: MIMS TEXAS OIL & GAS CO
Oil Cum: 31750 Gas Cum: 44661
Location: 274 75 33E

Revised: 08-11-00

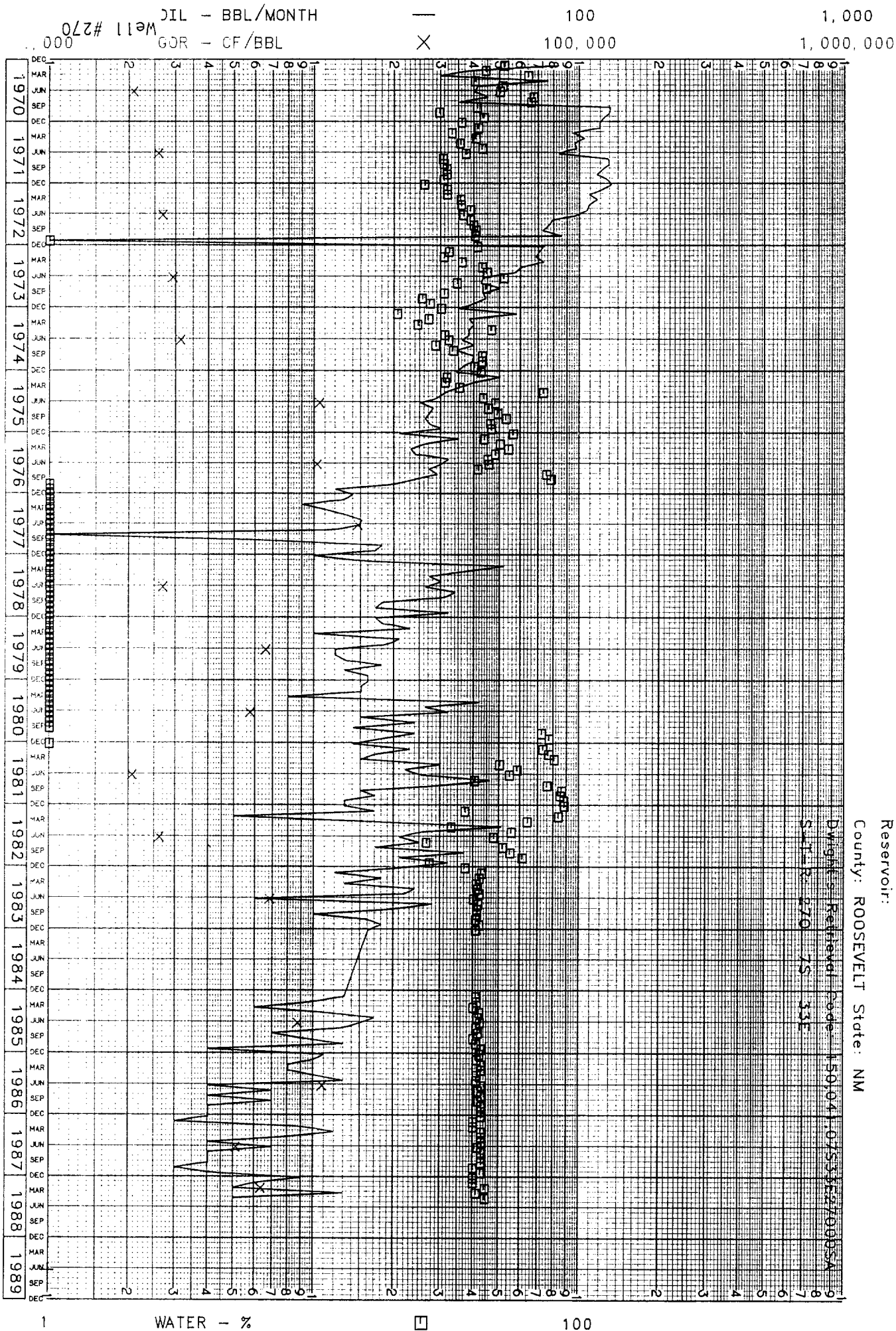


Operator: LYNX PETROLEUM CONSLTNTS
Lease: MORGAN A FEDERAL Well No: 000005
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

Dwight's Ref Level Code: 501041.07535270005A
S-I-R: 270 75 33E



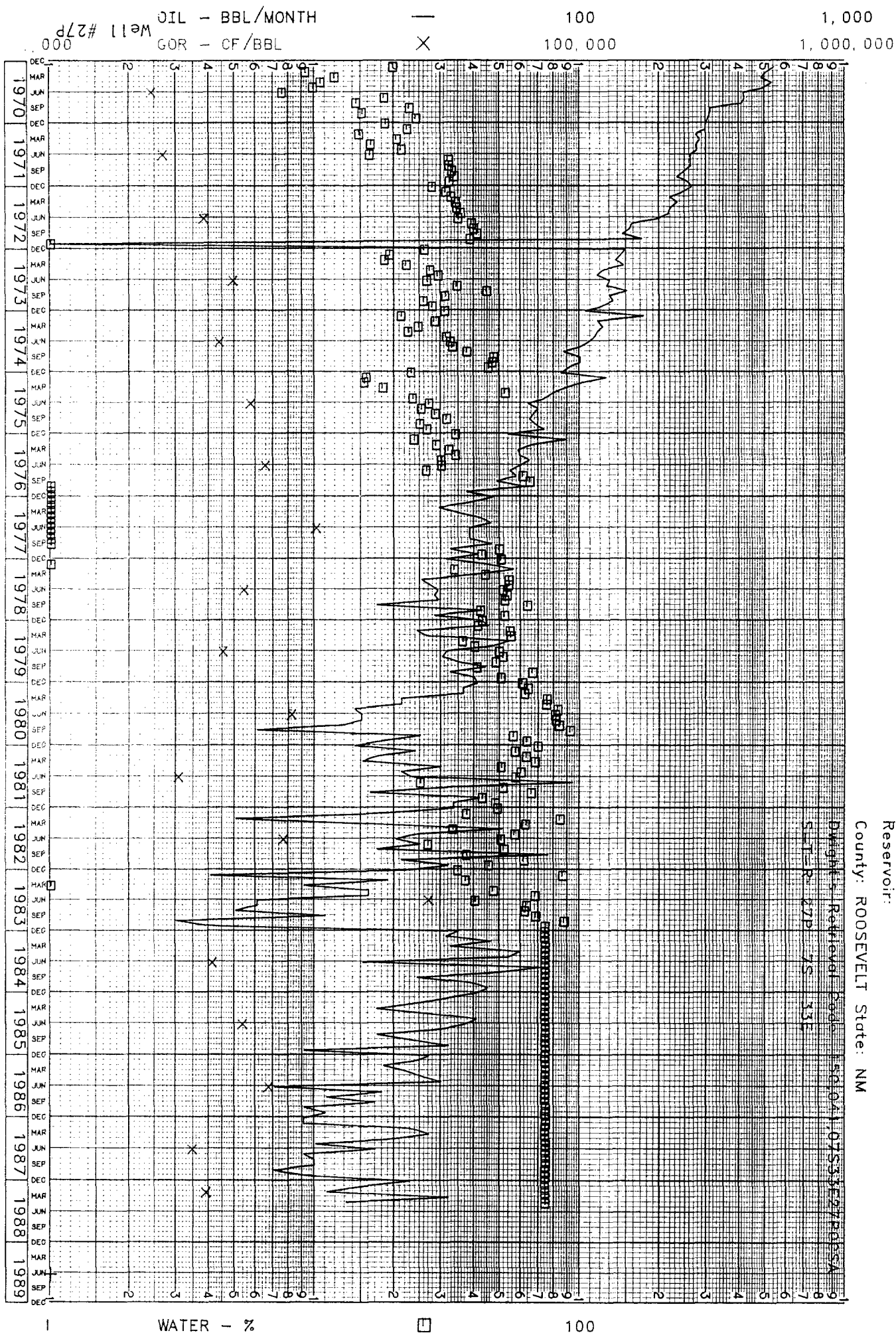
Operator: LYNX PETROLEUM CONSULTANTS
Lease: MORGAN A FEDERAL Well No: 000002
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM



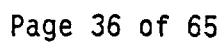
Operator: LYNX PETROLEUM CONSTANTS
Lease: MORGAN A FEDERAL Well No: 000003
Field: CHAVEROO SAN ANDRES
Reservoir: SA

County: ROOSEVELT State: NM

Drill: R. Redford Pad: 1501041.07533527P055A
SLT-R: 27P-7S 35E



Operator: MERLIN EXPLORATION INC
Lease: NEW MEXICO AZ STATE Well No. 000013
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM



OIL - BBL/MONTH

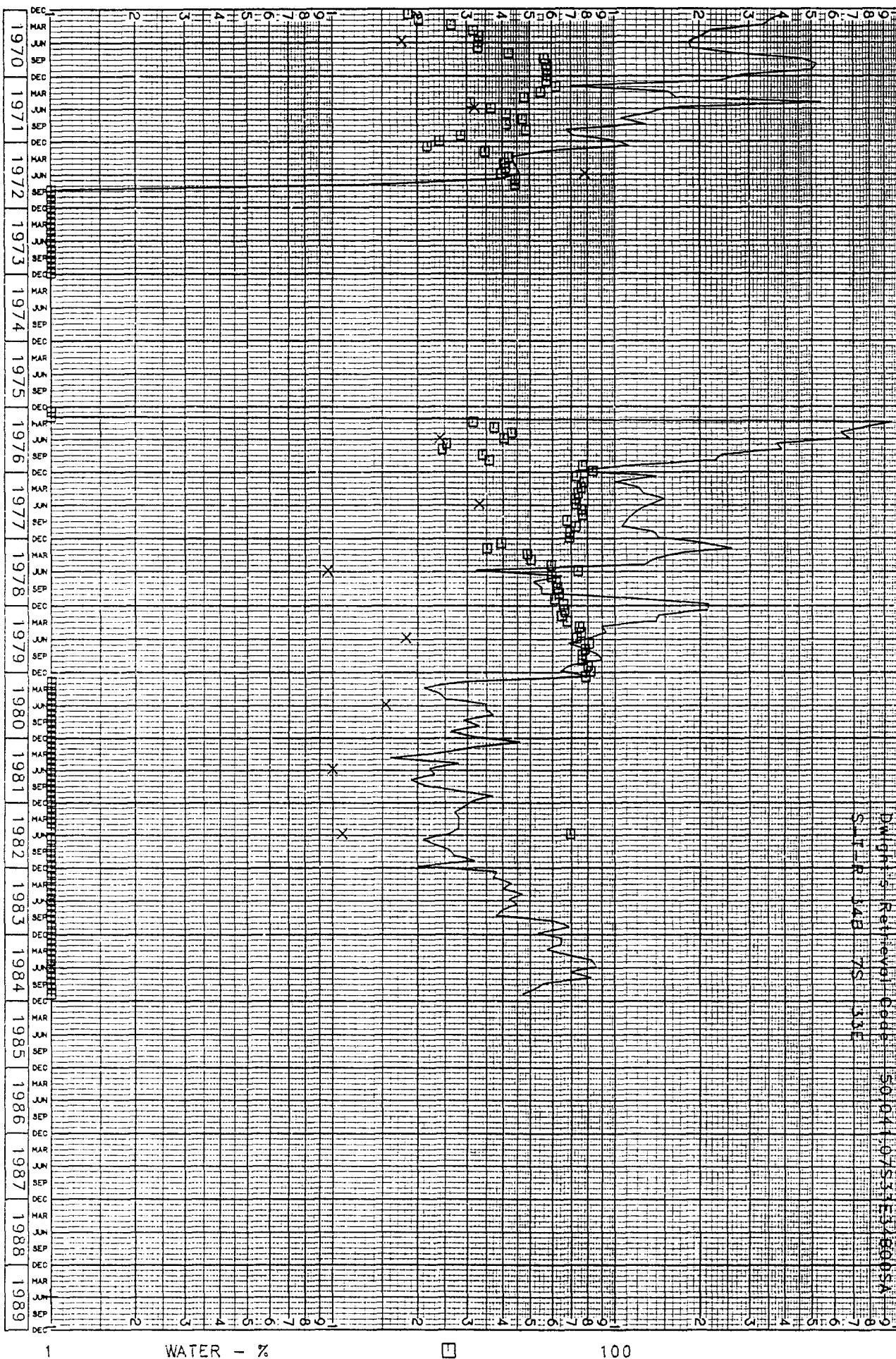
GOR - CF/BBL

100

1,000

10,000

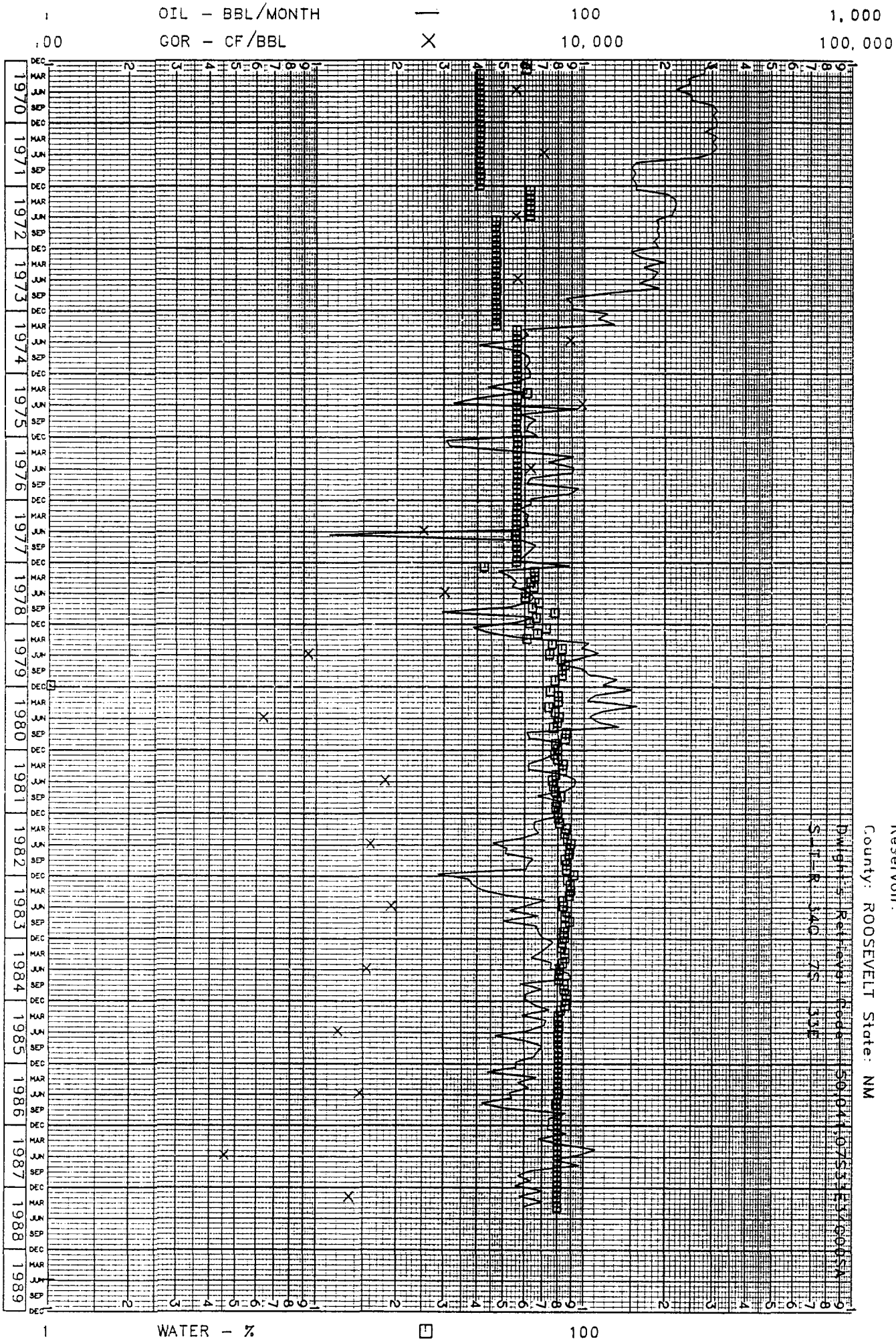
100,000



Operator: MERLIN EXPLORATION INC
Lease: NEW MEXICO AZ STATE Well No: 000012
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

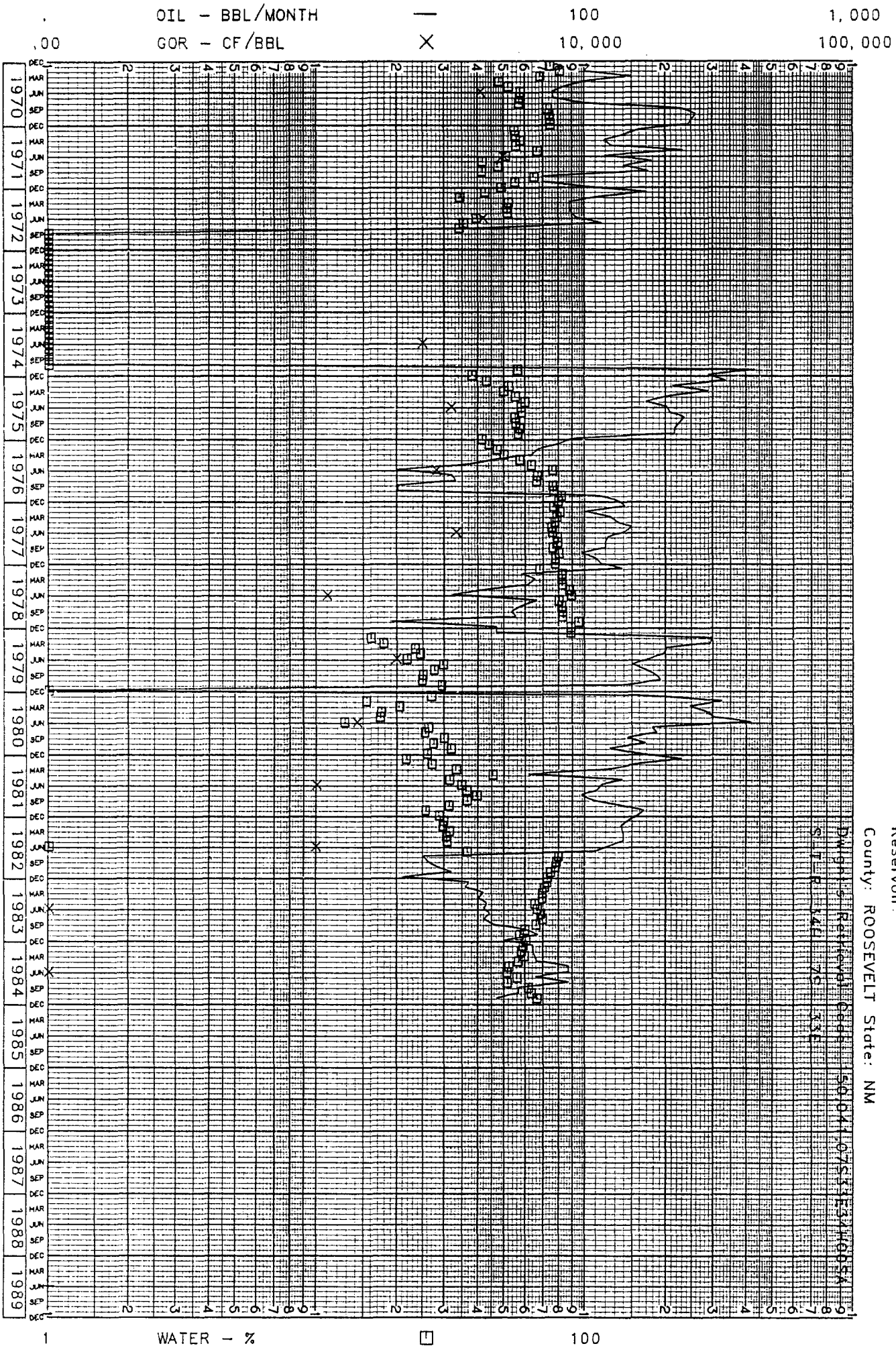
WATER - %

100



Operator: TEXACO PRODUCING INC
Lease: HOBBS T Well No: 000010
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

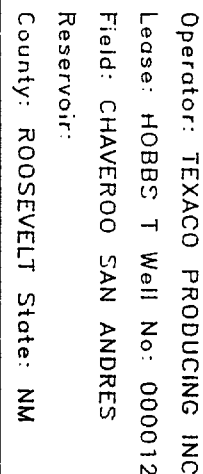
SA



Operator: MERLIN EXPLORATION INC
Lease: NEW MEXICO AZ STATE Well No: 000014
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

1,000

1, 000, 000



1



100

OIL - BBL/MONTH

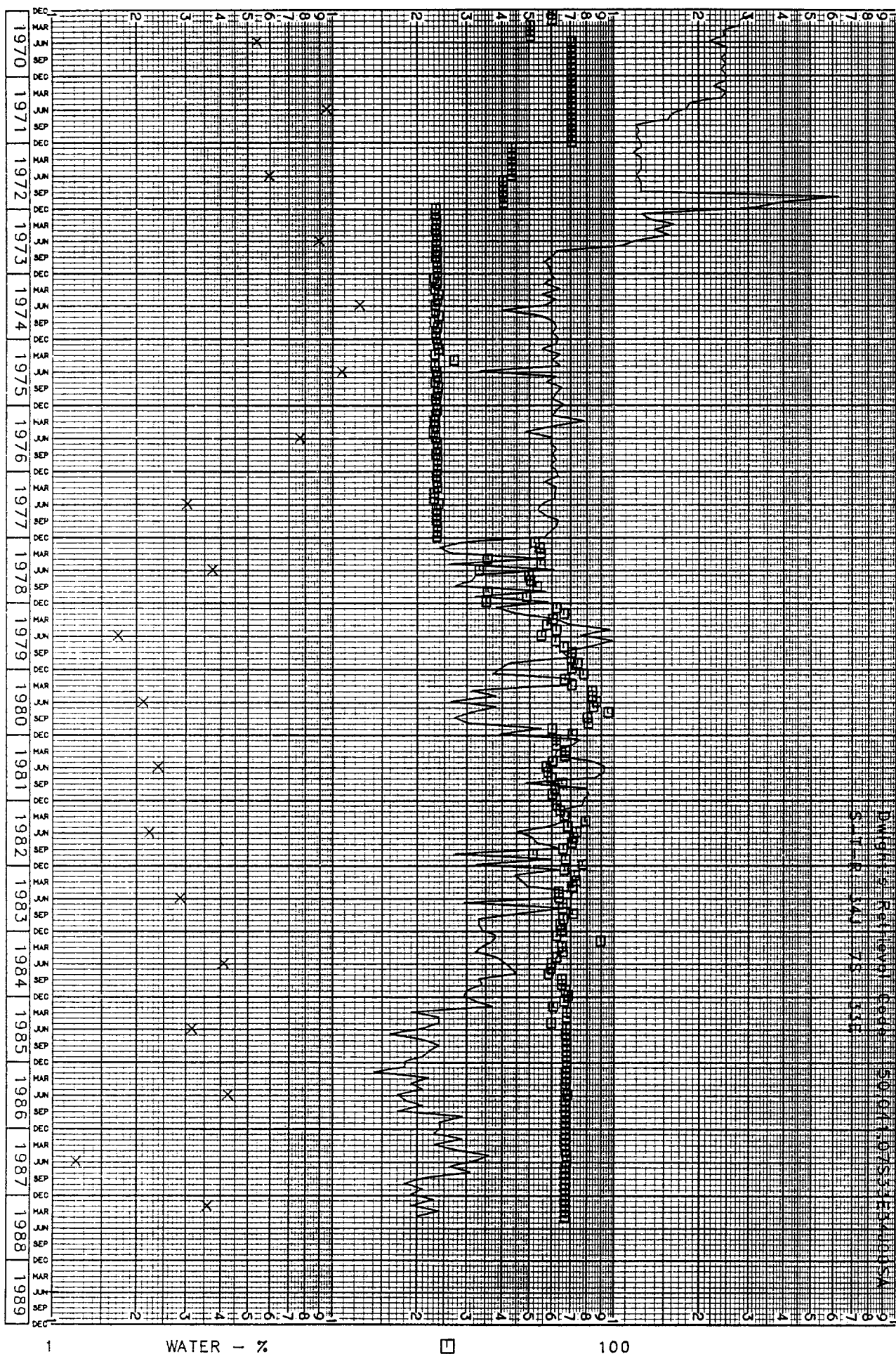
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1,000

GOR - CF/BBL

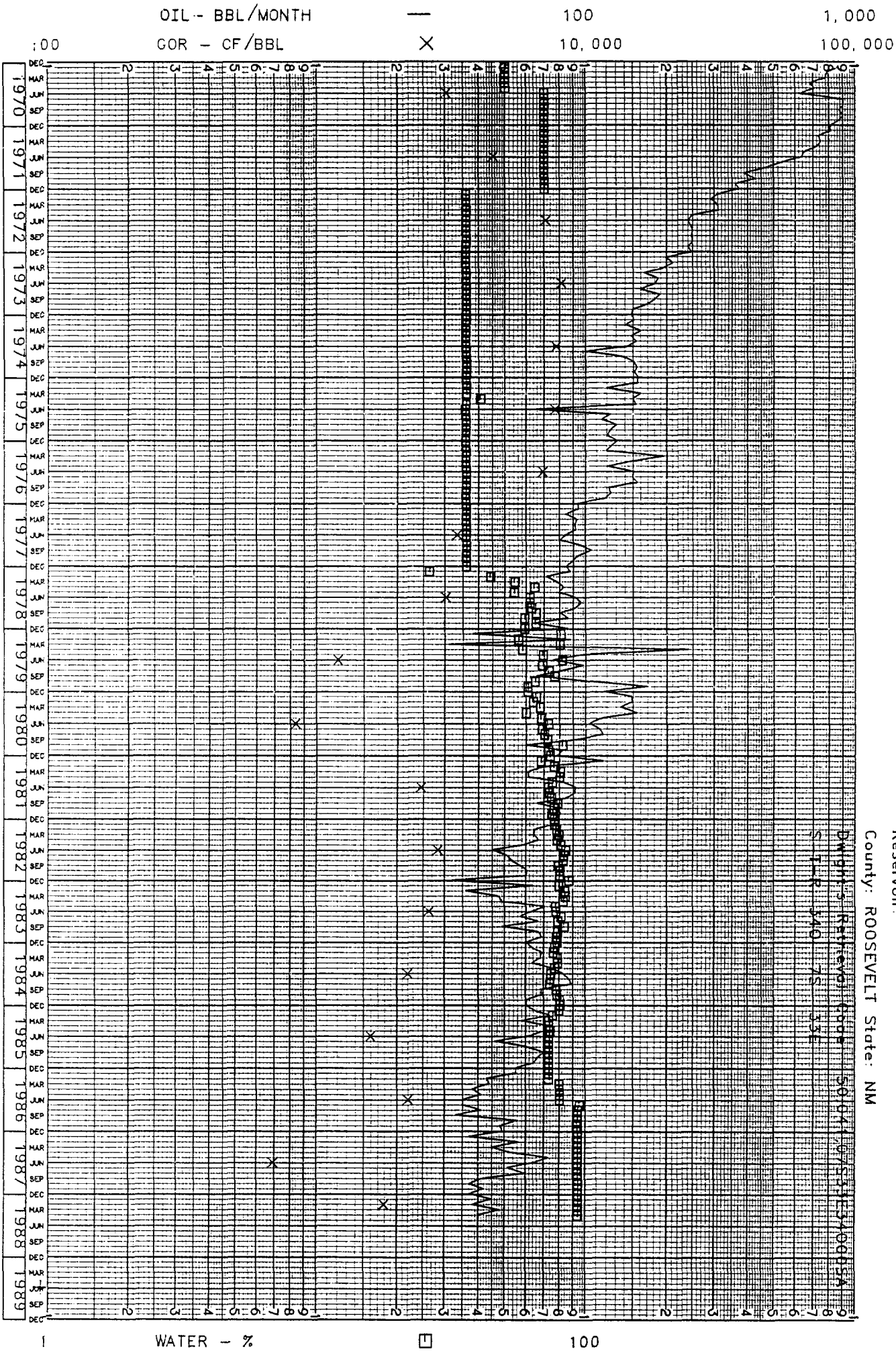
100,000

1,000,000



Operator: TEXACO PRODUCING INC
Lease: HOBBS T Well No: 000008
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

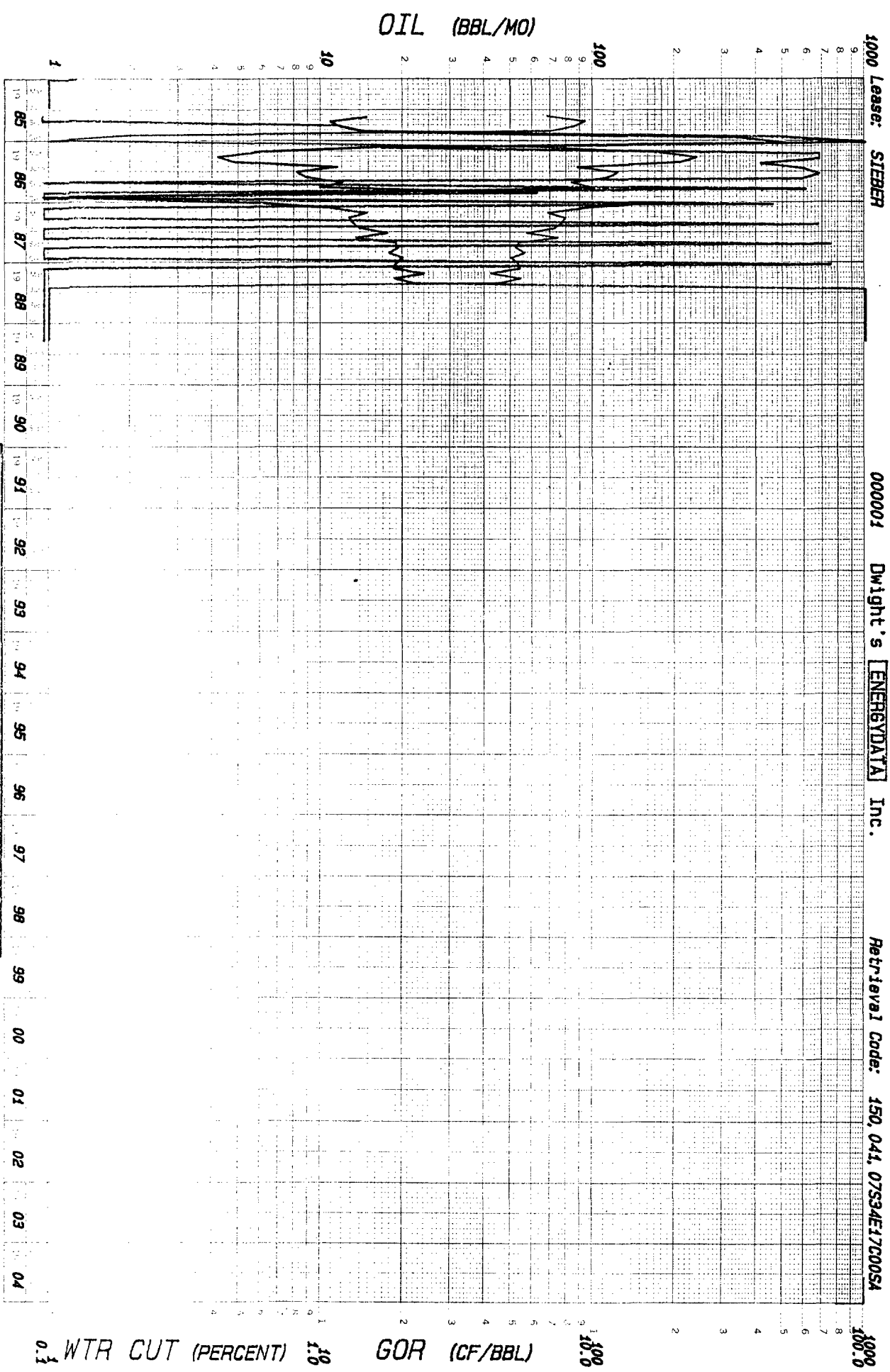
SA



Operator: TEXACO PRODUCING INC
Lease: HOBBS T Well No: 000015
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM

SA

7.2



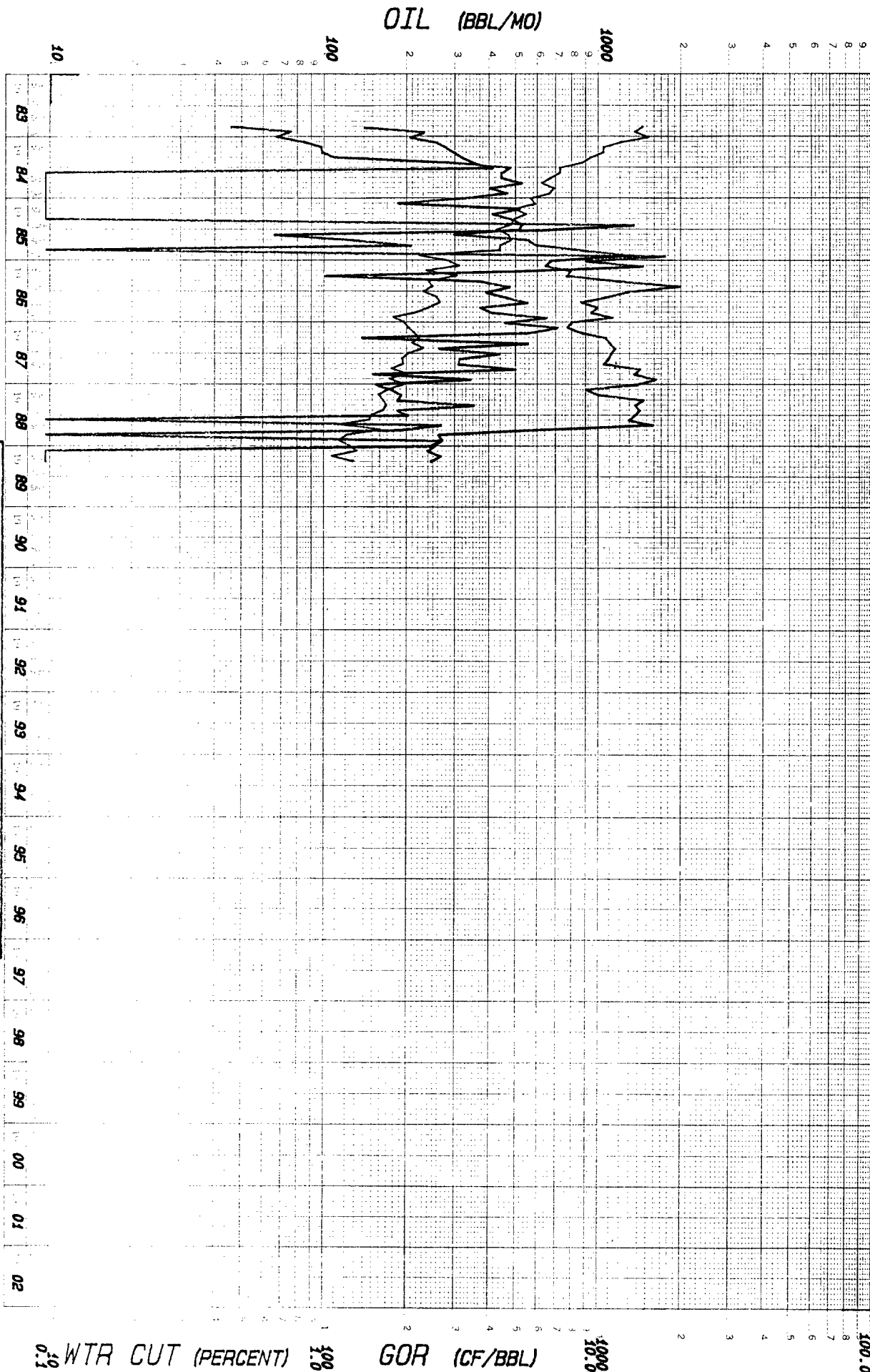
County: ROOSEVELT State: NM
Field: CHAVEZ SAN ANDRES
Reservoir:
Operator: KERN CO
Oil Cum: 2687 Gas Cum: 43
Location: 17C 7S 94E

Date: 08-11-89

10000 Lease: SIEBER

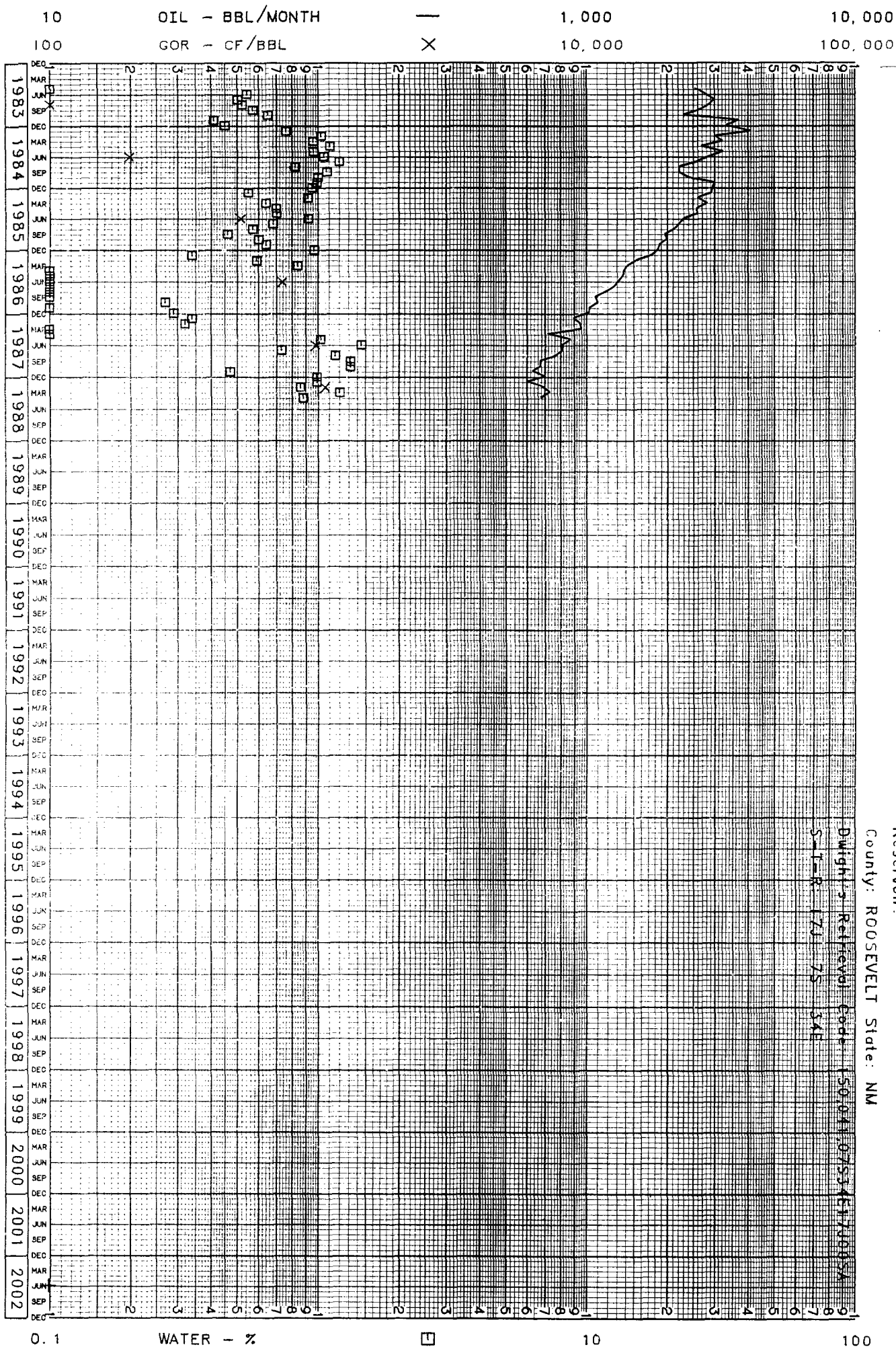
000001 Dwight's **ENERGYDATA** Inc.

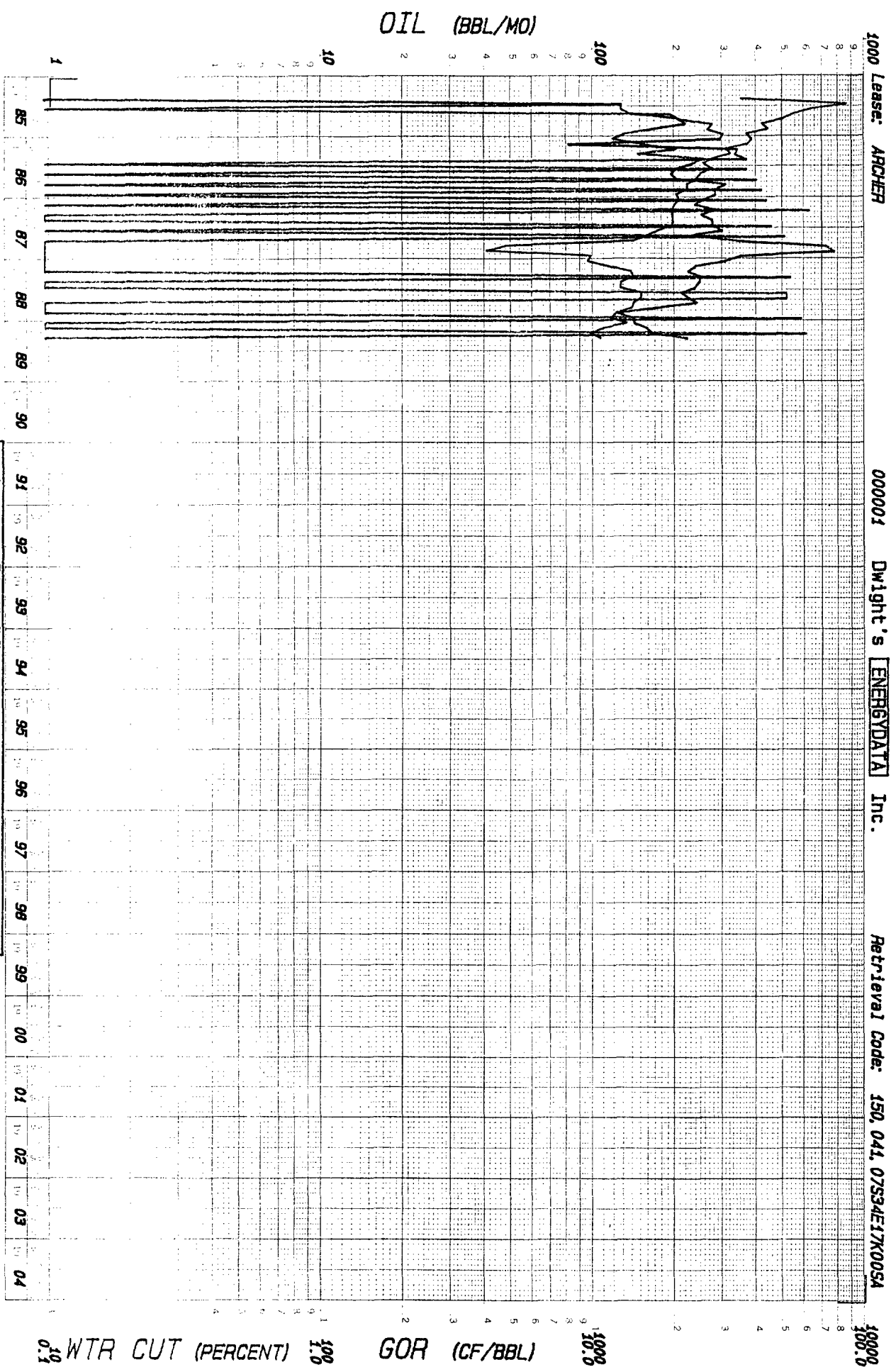
Retrieval Code: 150, 041, 07334E17F005A



County: ROOSEVELT
Field: CHAVEZ SAN ANDRES
Reservoir:
Operator: NATIONAL RESOURCES MGMT
Oil Cum: 26612 Gas Cum: 13182
Location: 17F 7S 34E

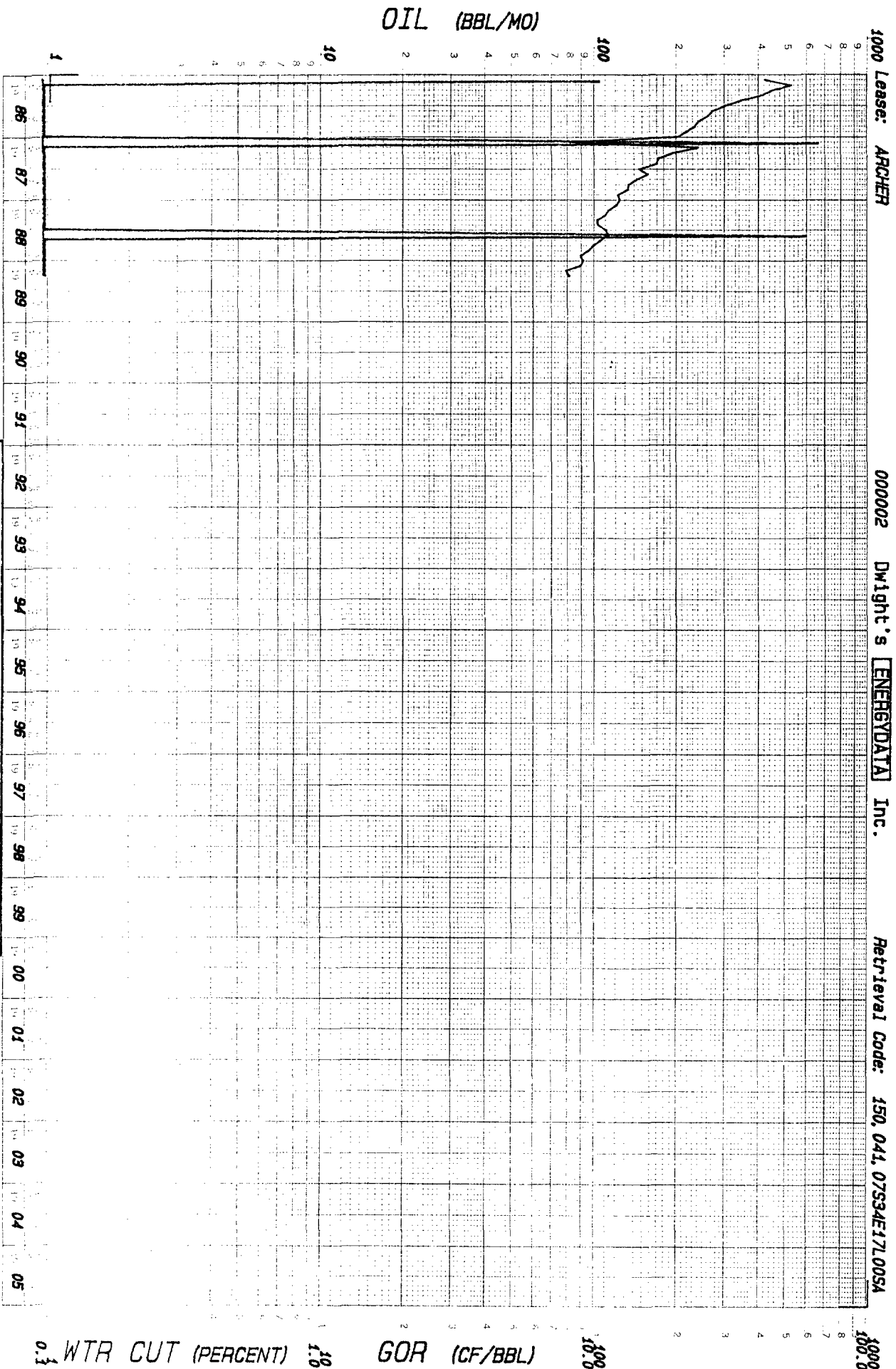
Date: 08-11-89





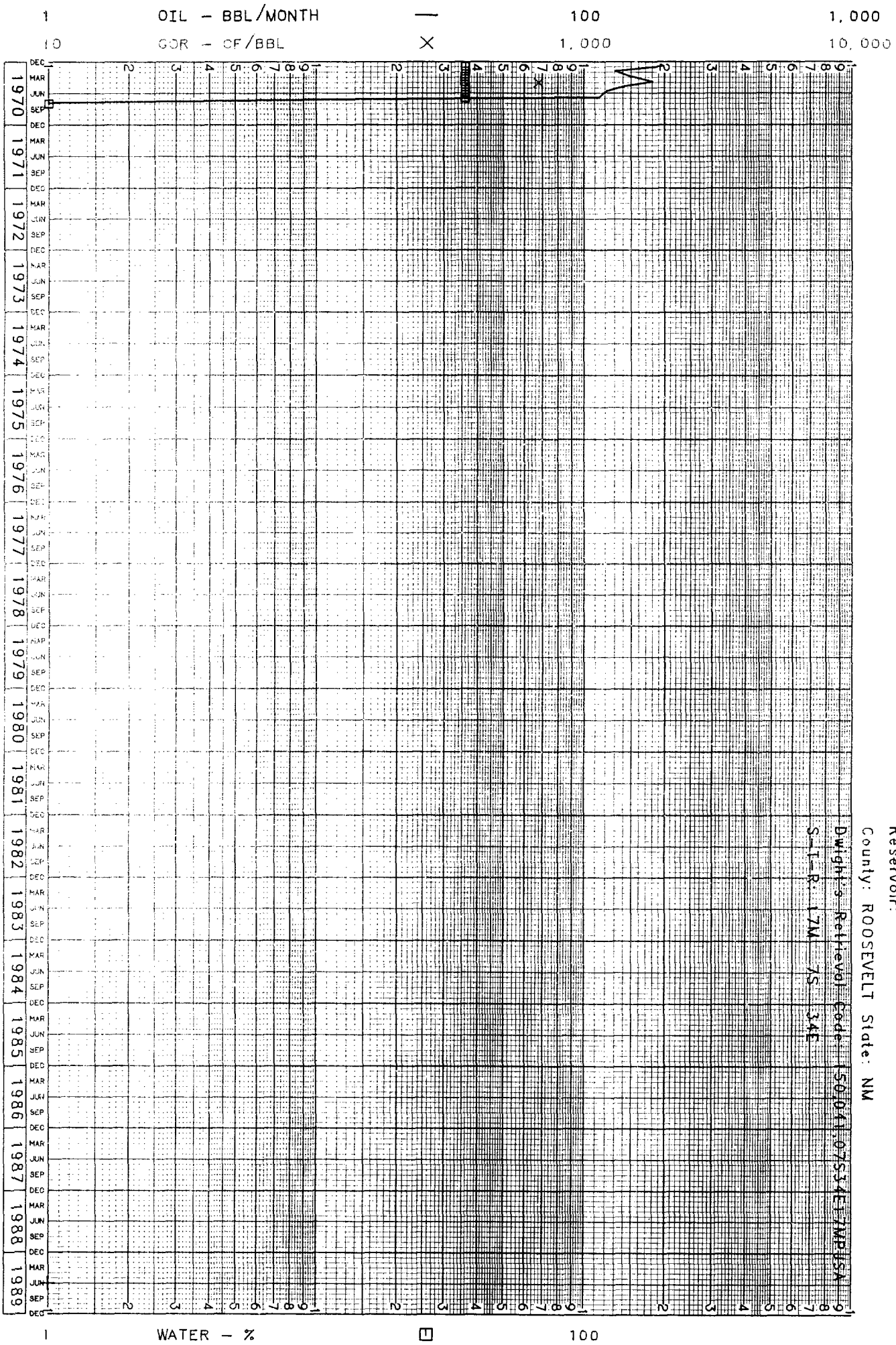
County: ROOSEVELT
Field: CHAVEHO SAN ANDRES
Reservoir:
Operator: KERN CO
Oil Cum: 11101 Gas Cum: 21477
Location: 17K 75 34E

Date: 08-11-89



County: ROOSEVELT State: NM
Field: CHAVEZ SAN ANDRES
Reservoir:
Operator: KERN CO
Oil Cum: 6994 Gas Cum: 0
Location: 17L 7S 34E

Date: 08-11-89



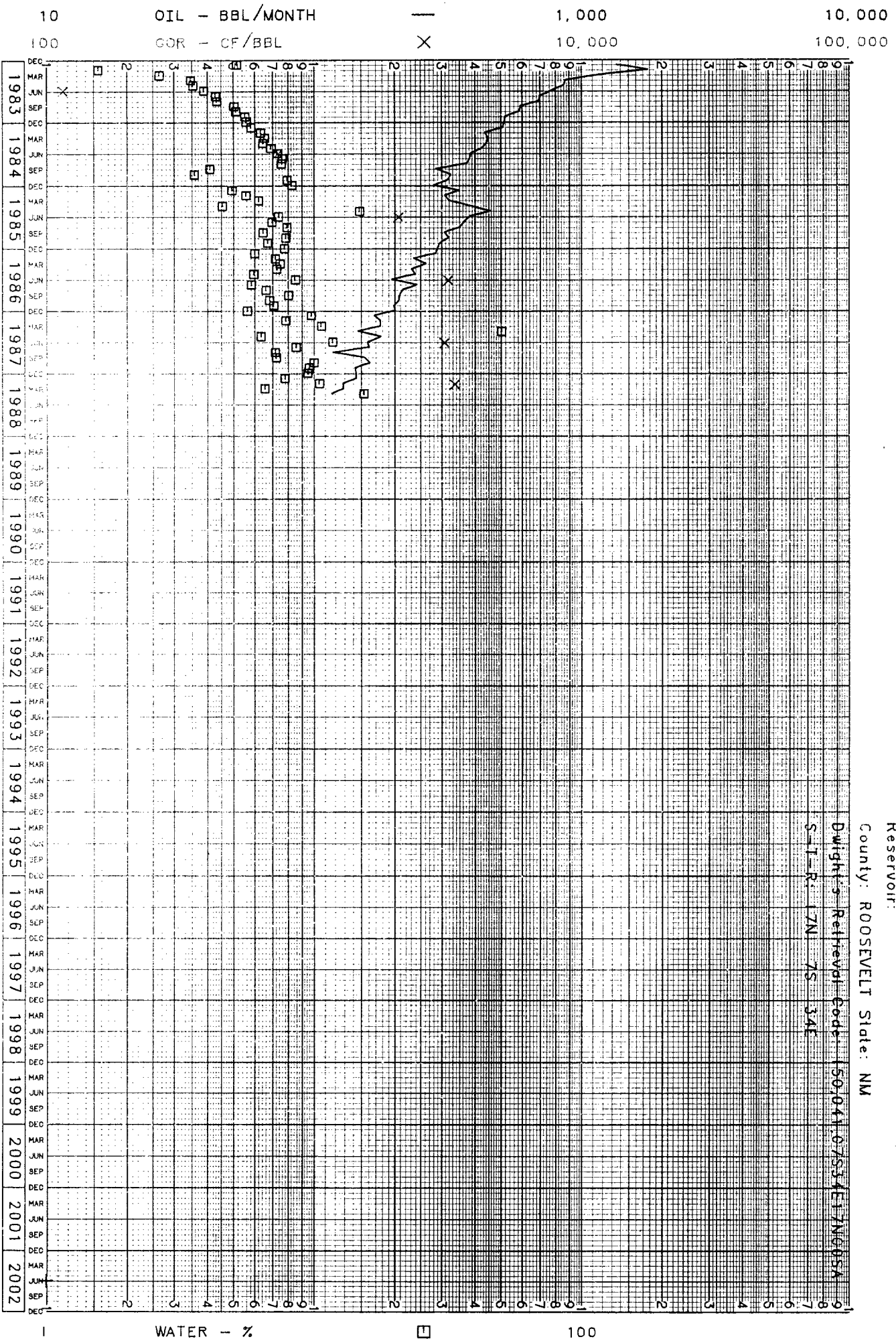
Operator: NATIONAL RESOURCES MGMT
Lease: ARCHER 17 Well No: 000001
Field: CHAVEROO SAN ANDRES

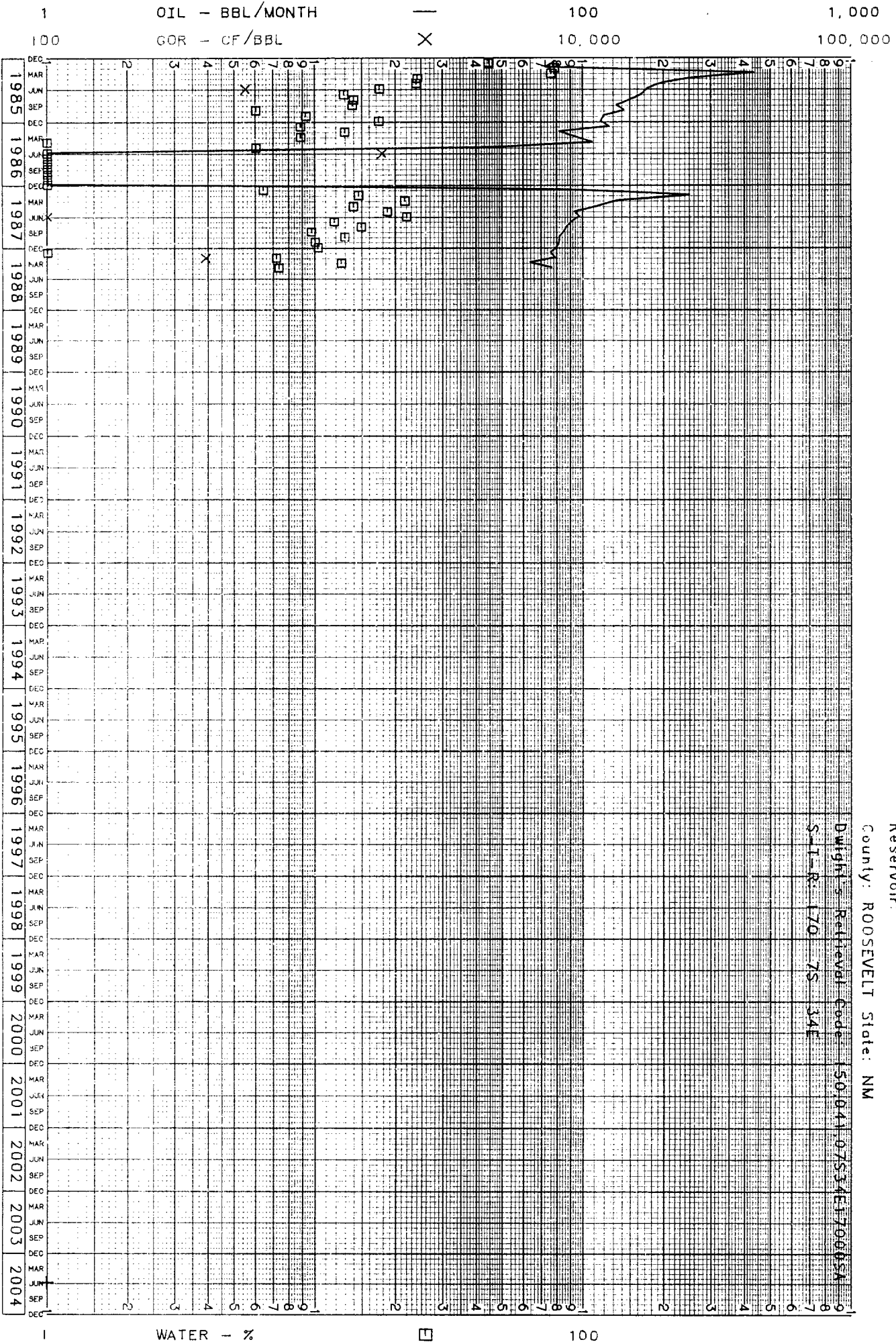
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5A

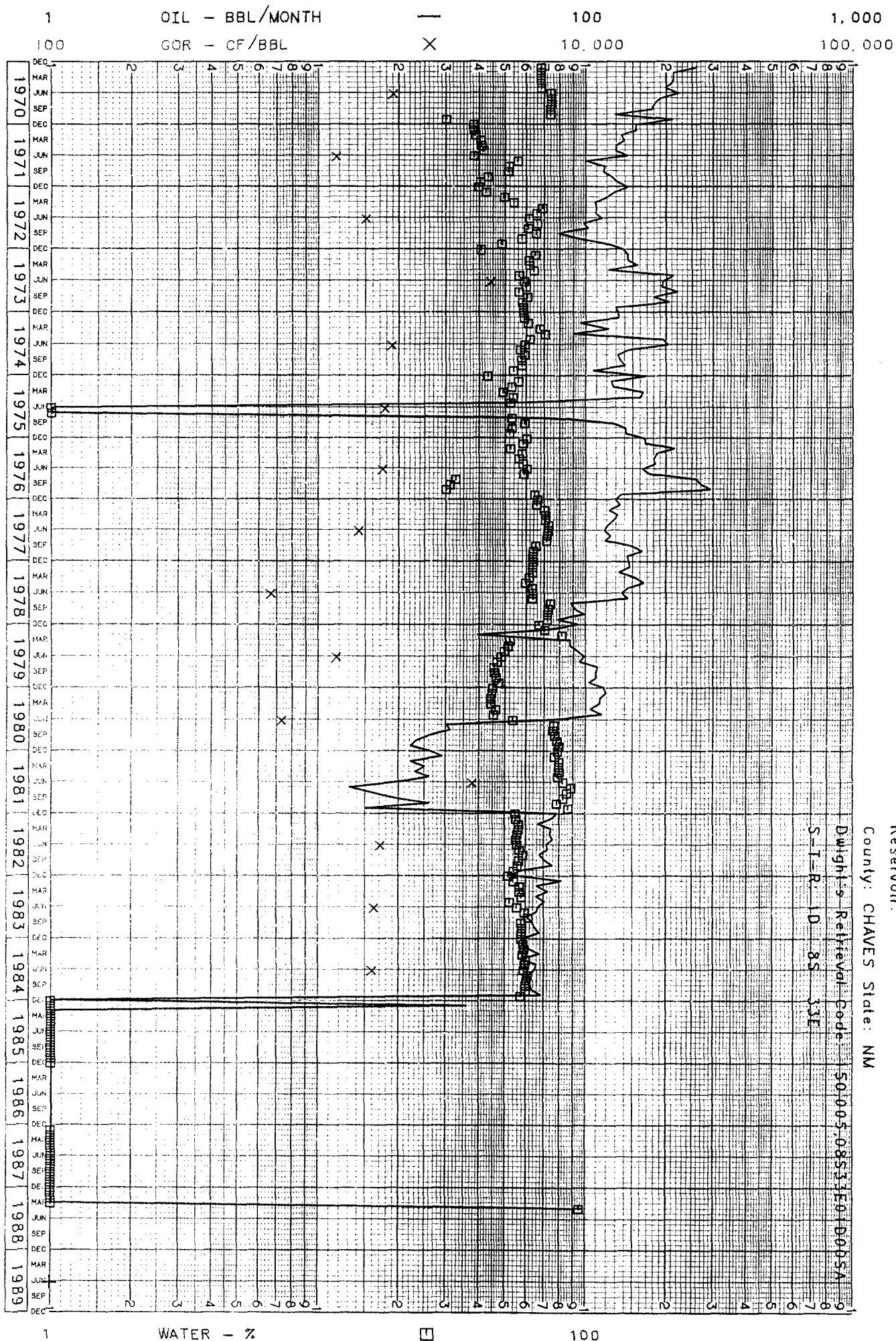
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5A



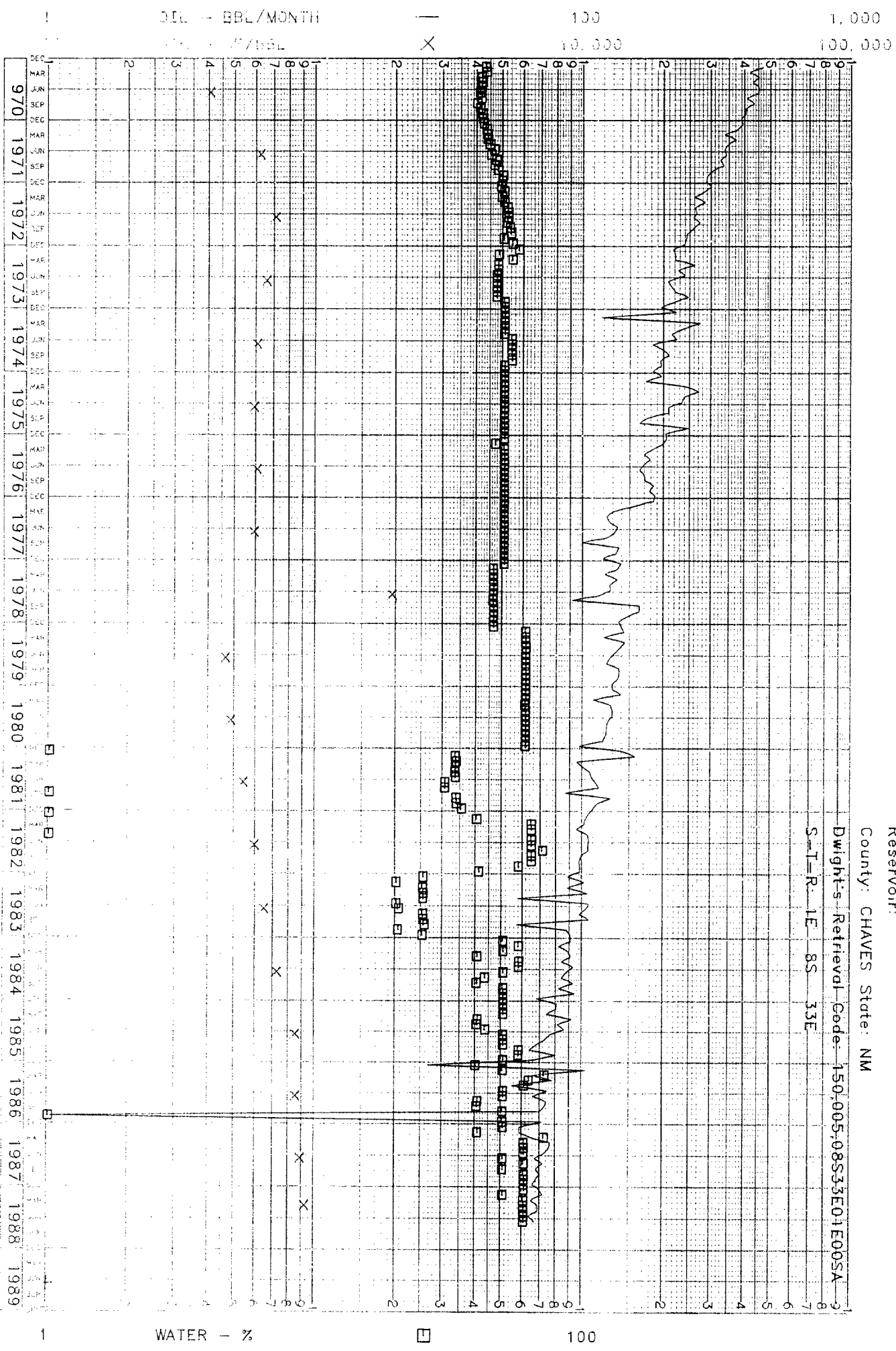


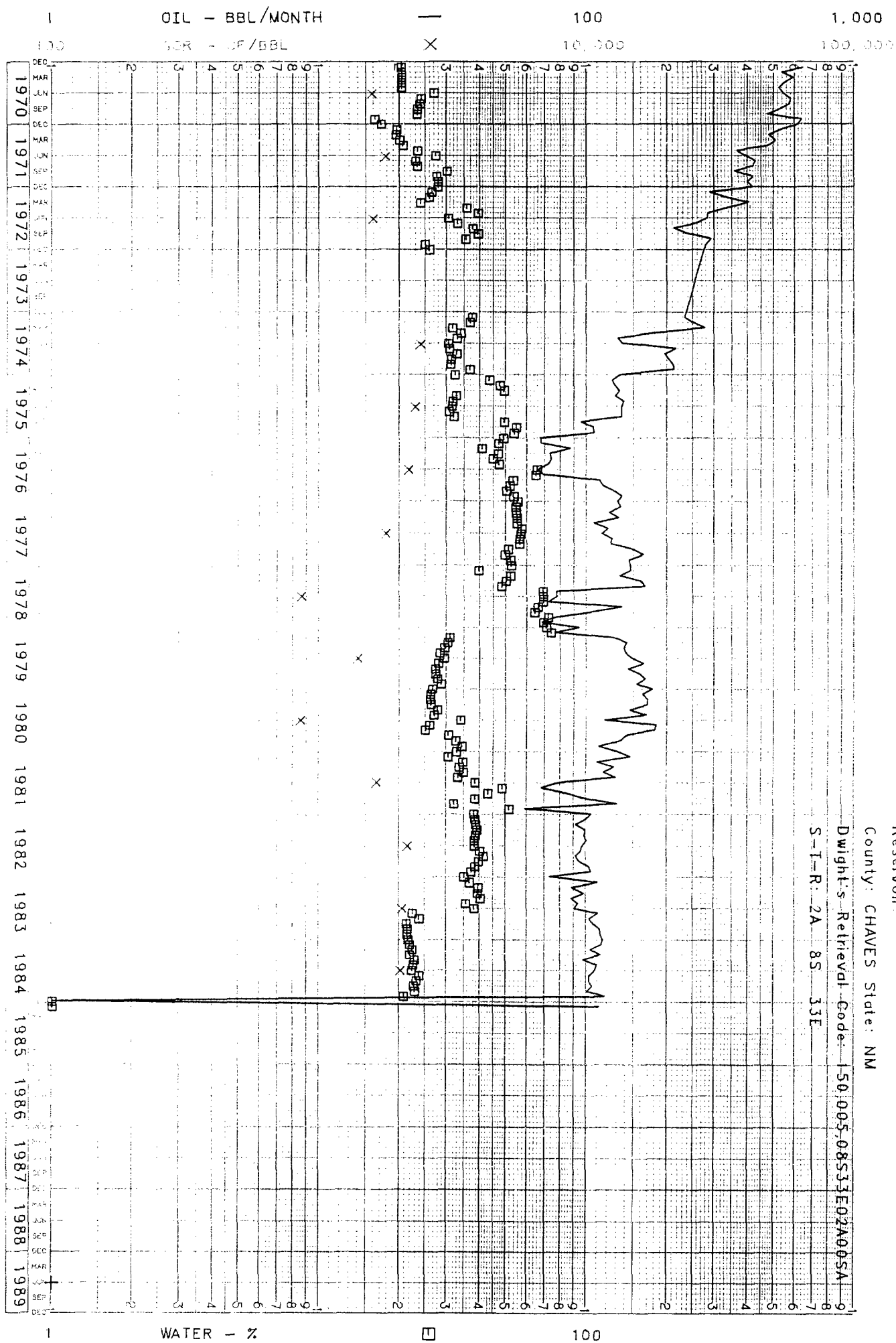
Operator: NATIONAL RESOURCES MGMT
Lease: METZGER Well No: 000008
Field: CHAVEROO SAN ANDRES
Reservoir:
County: ROOSEVELT State: NM
SA



Operator: KERR MCGEE CORP
Lease: STATE FU Well No: 000009
Field: CHAVEROO SAN ANDRES
Reservoir:
County: CHAVES State: NM

Dwight's Retrieval Code: 150.005.08S33E01E005A
S-T-R-1E-8S-33E

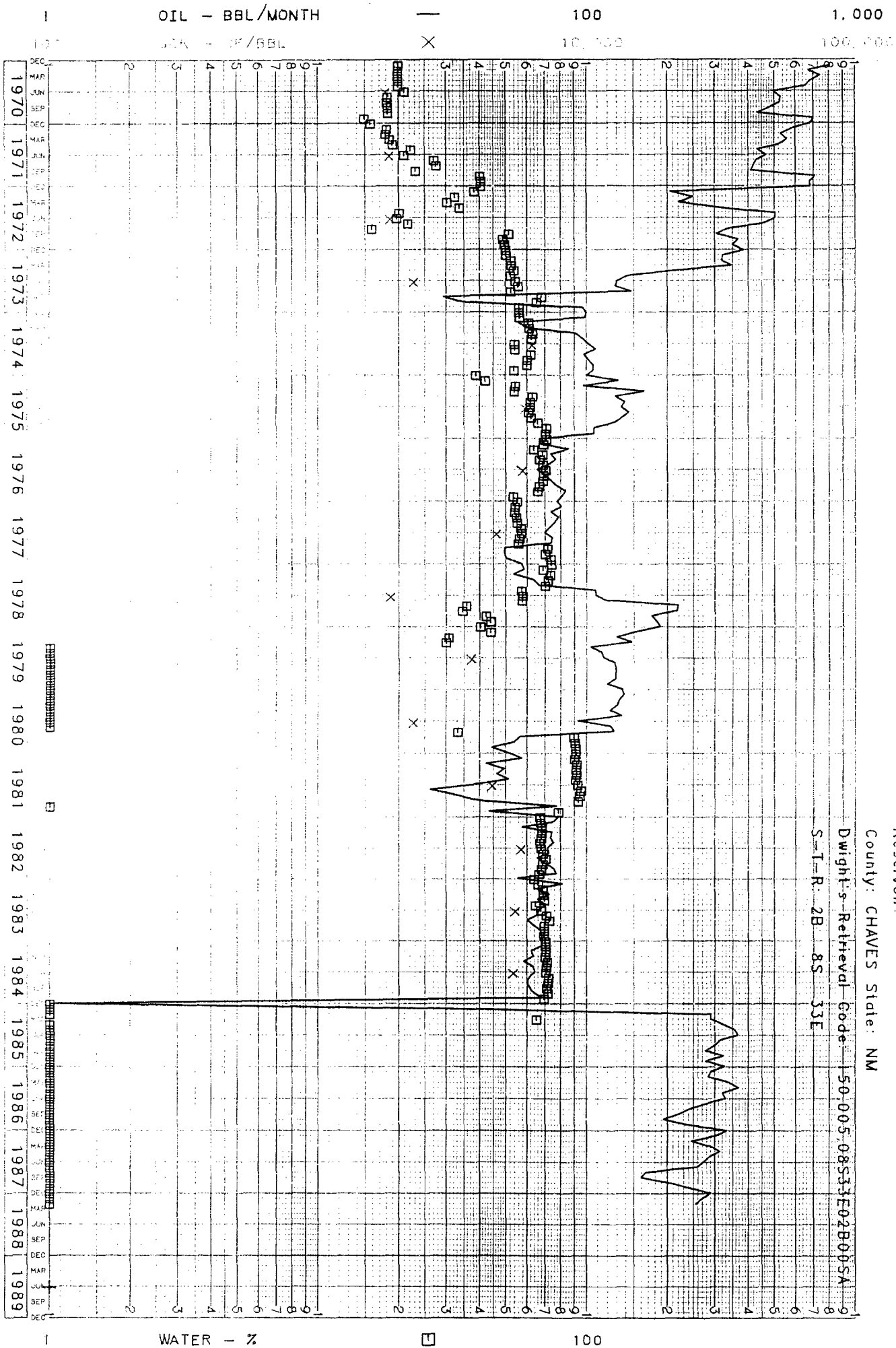




Operator: MERLIN EXPLORATION INC
Lease: STATE TRACT C Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir: SA

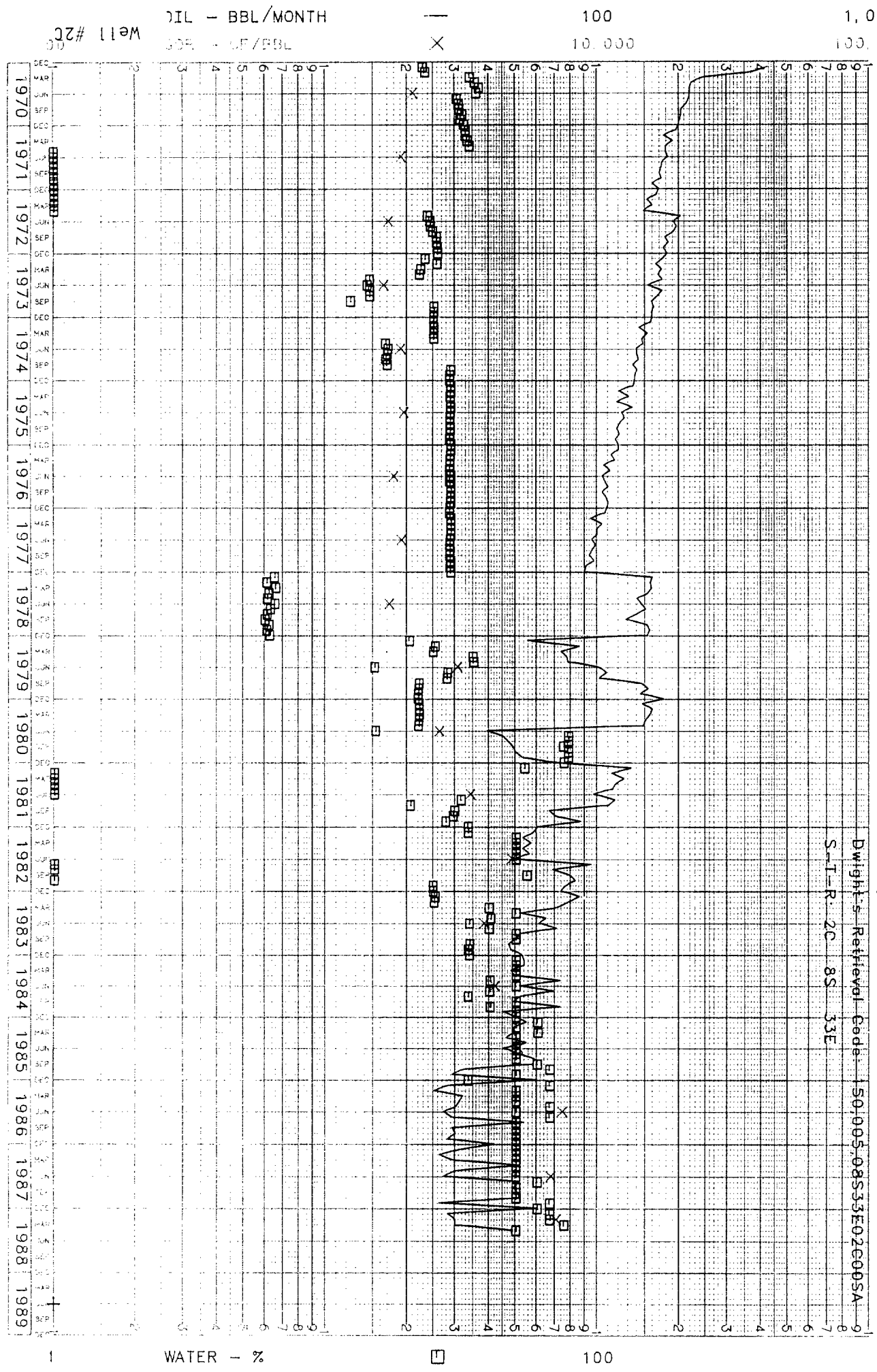
County: CHAVES State: NM

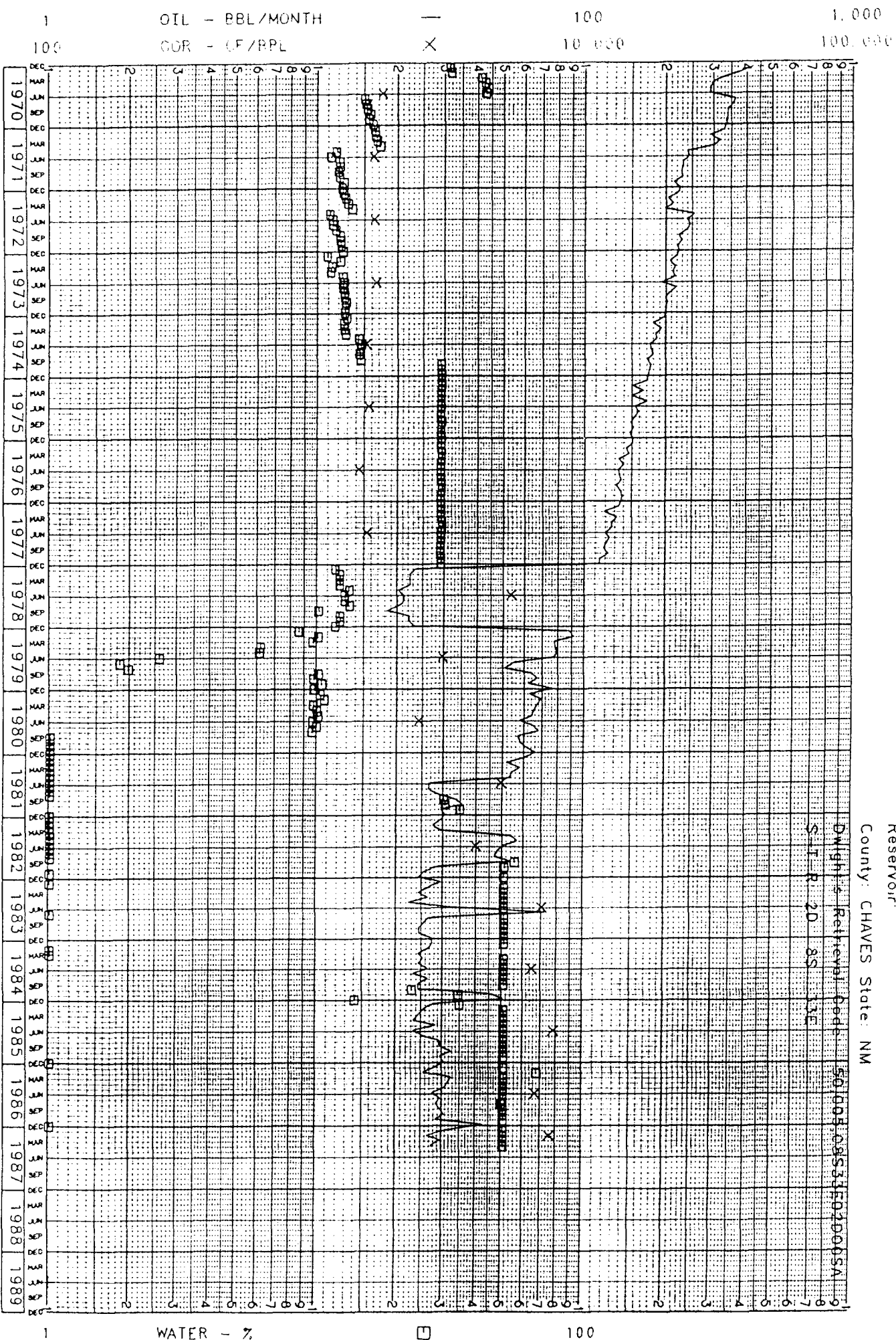
Dwight's Retrieval Code: 150-005,08533E02B005A
S-I-R: 2B 85 33E

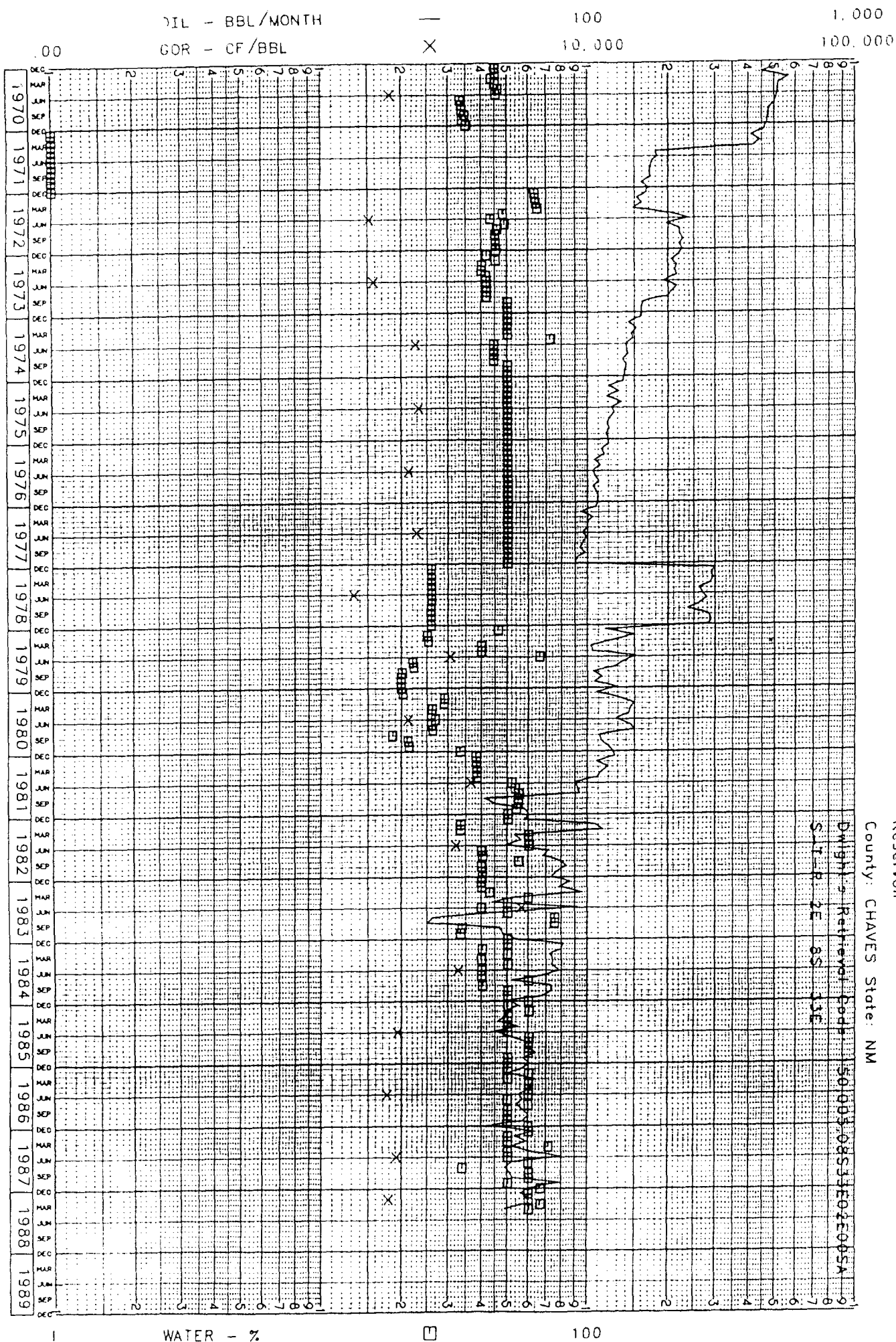


Operator: KERR MCGEE CORP
Lease: STATE F Well No: 000002
Field: CHAVEROO SAN ANDRES
Reservoir:
County: CHAVES State: NM

Dwight's Retrieval Code: 501005.08S33E02C005A
S-T-R-2C-8S-33E







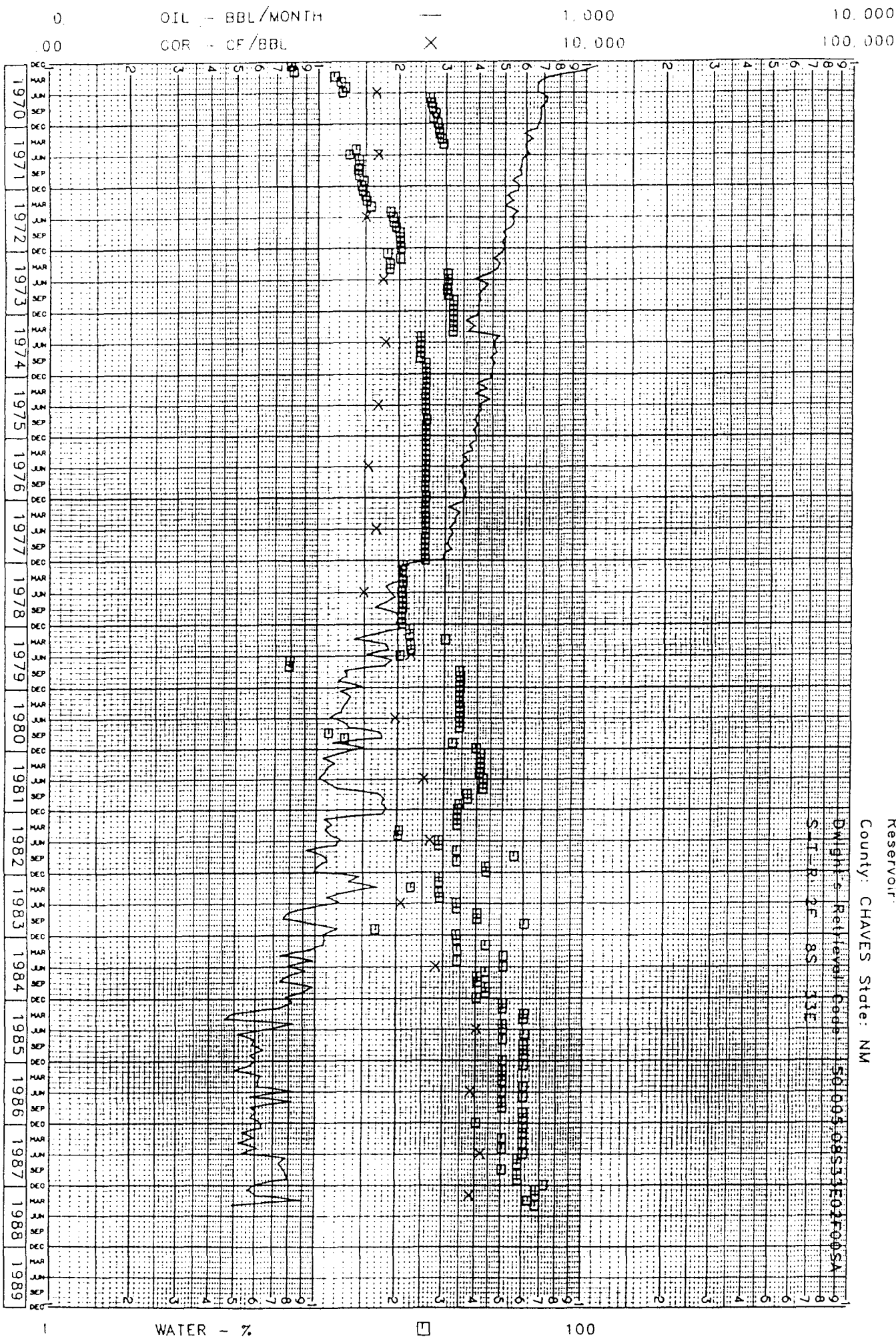
Operator: KERR MCGEE CORP
Lease: STATE F Well No: 000003
Field: CHAVEROO SAN ANDRES
Reservoir:
County: CHAVES State: NM

SA

5

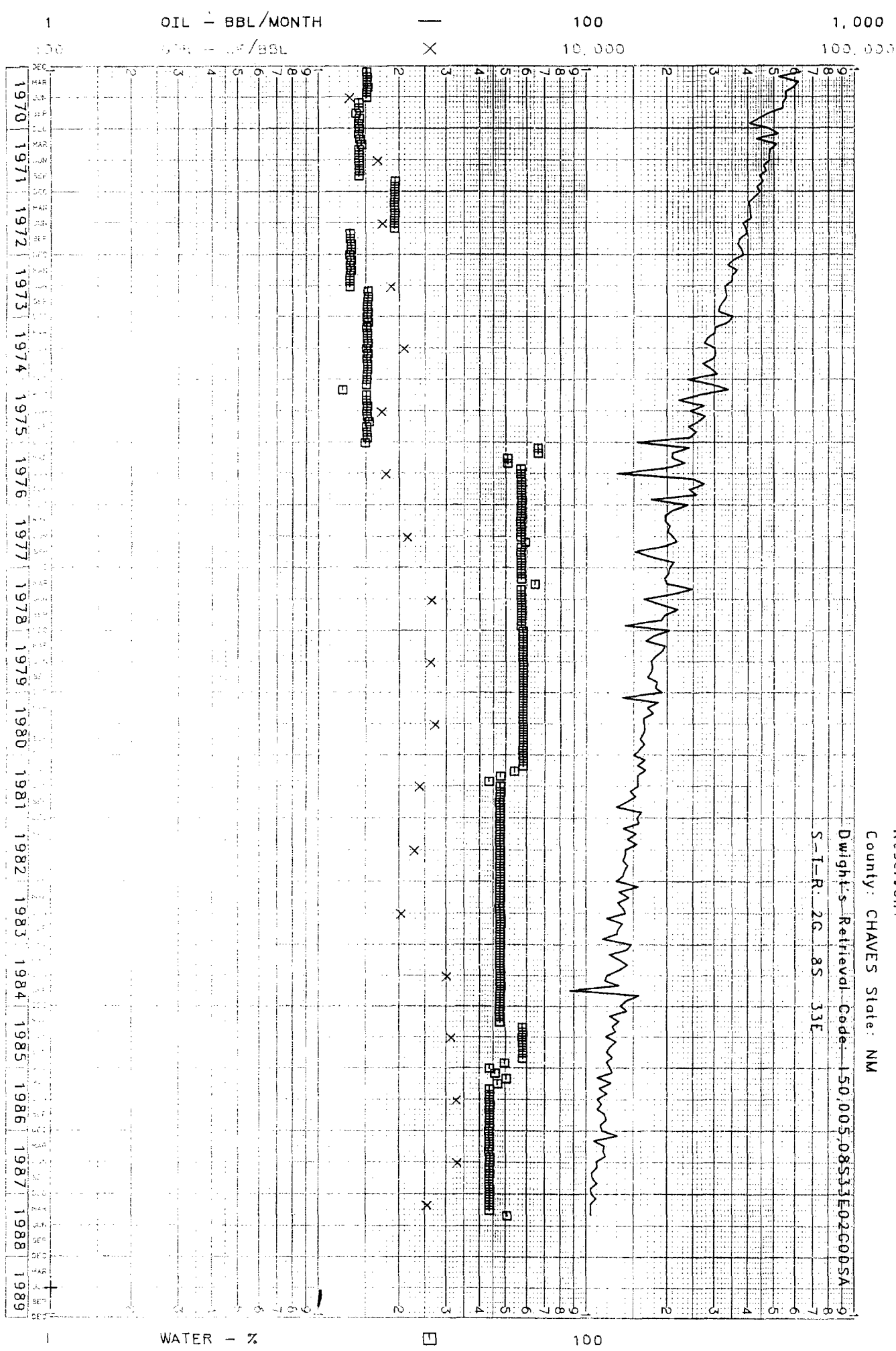
Operator: KERR MCGEE CORP
Lease: STATE F Well No: 000004
Field: CHAVEROO SAN ANDRES
Reservoir:
County: CHAVES State: NM

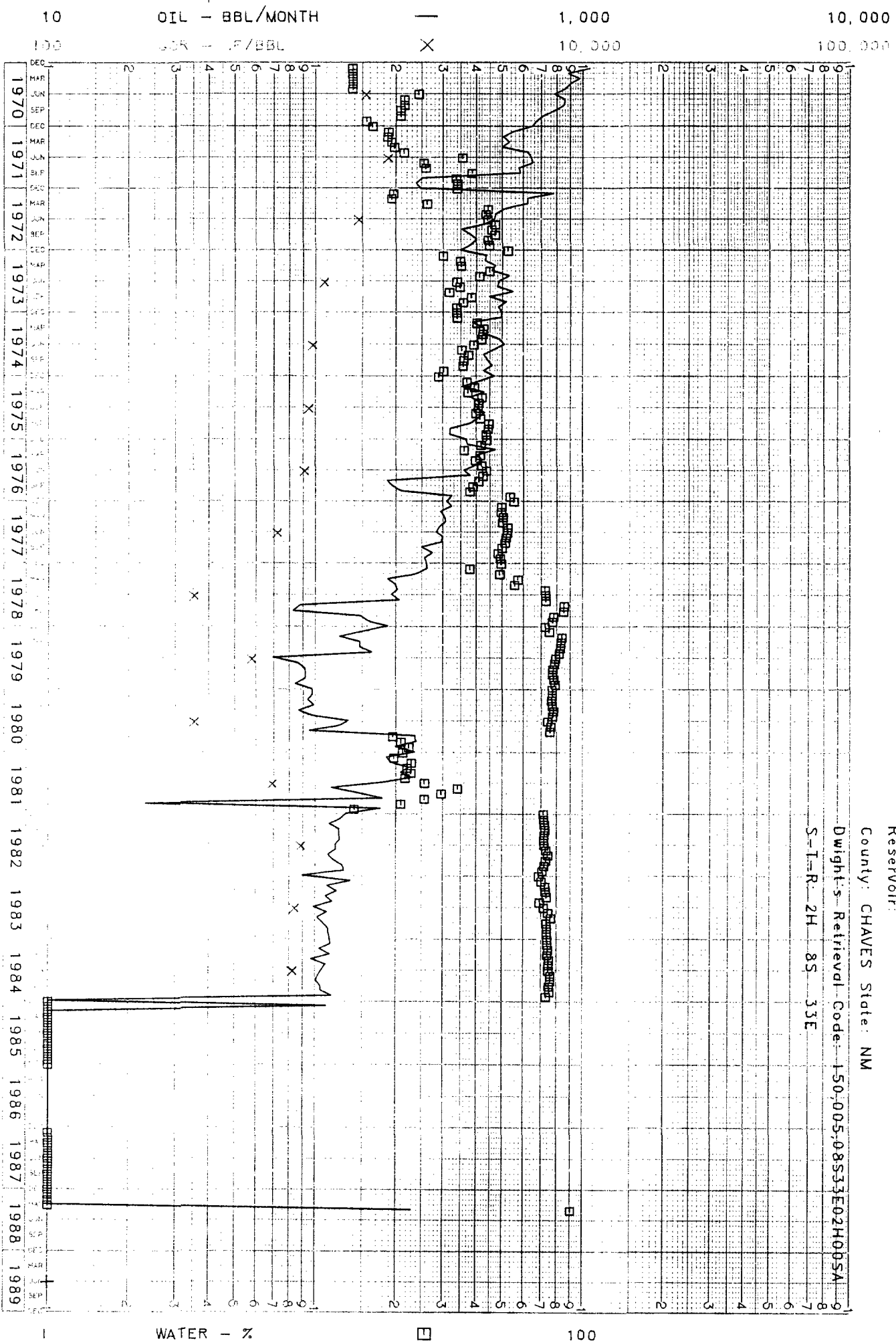
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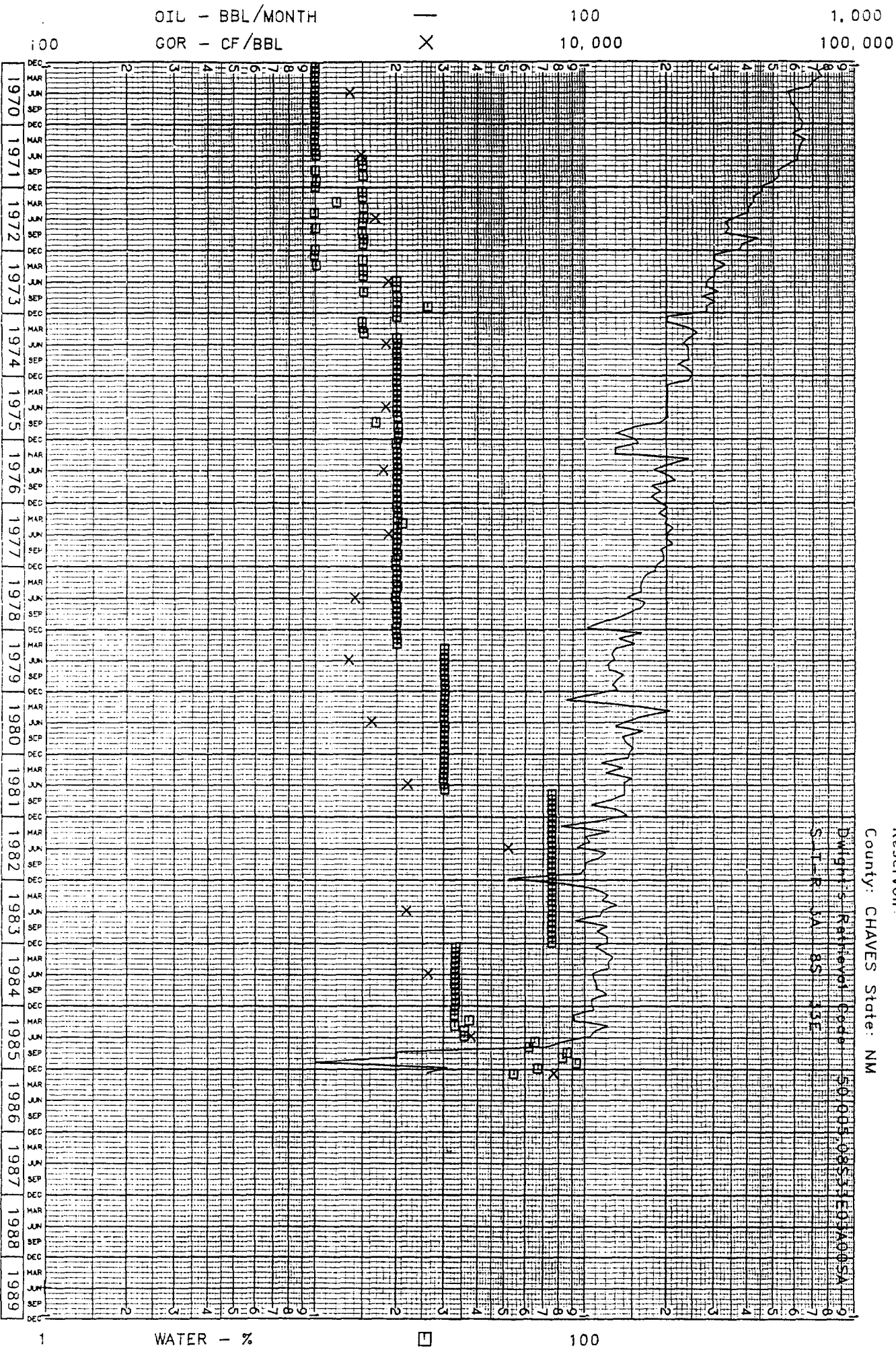


Operator: UNION PACIFIC RESOURCES
Lease: LEVICK STATE 2 Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir:
County: CHAVES State: NM

Dwight's Retrieval Code: 150,005,08533E02G005A
S-I-R: 2G 85 33E







Operator: HONDO O&G CO
Lease: STATE BF Well No: 000001
Field: CHAVEROO SAN ANDRES
Reservoir:
County: CHAVES State: NM
Dwight's Refractor Code: 50.005-0853-EO3A00SA
S-L-R: SA 85 45E

OIL - BBL/MONTH

—

100

1,000

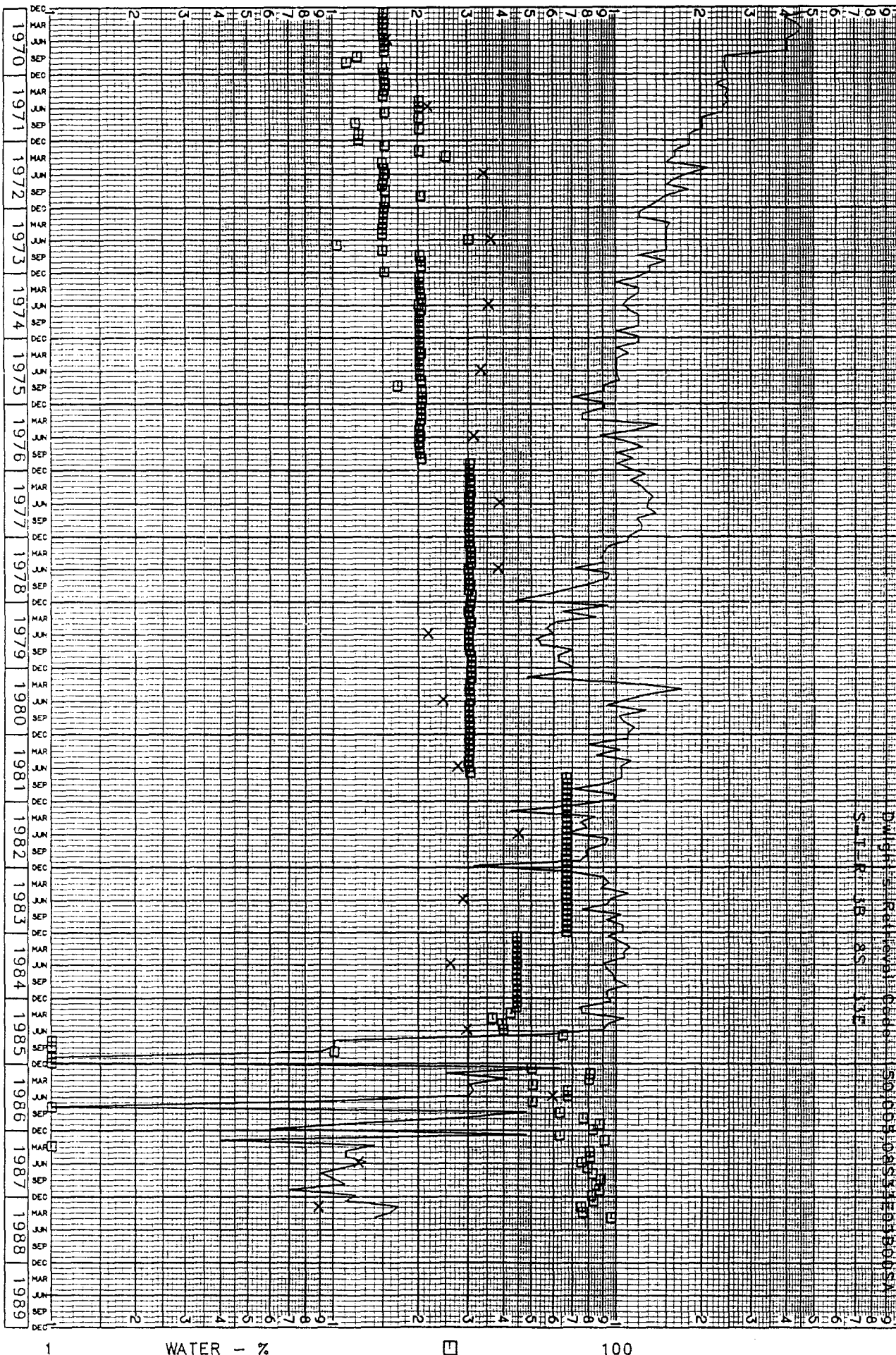
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GOR - CF/BBL

X

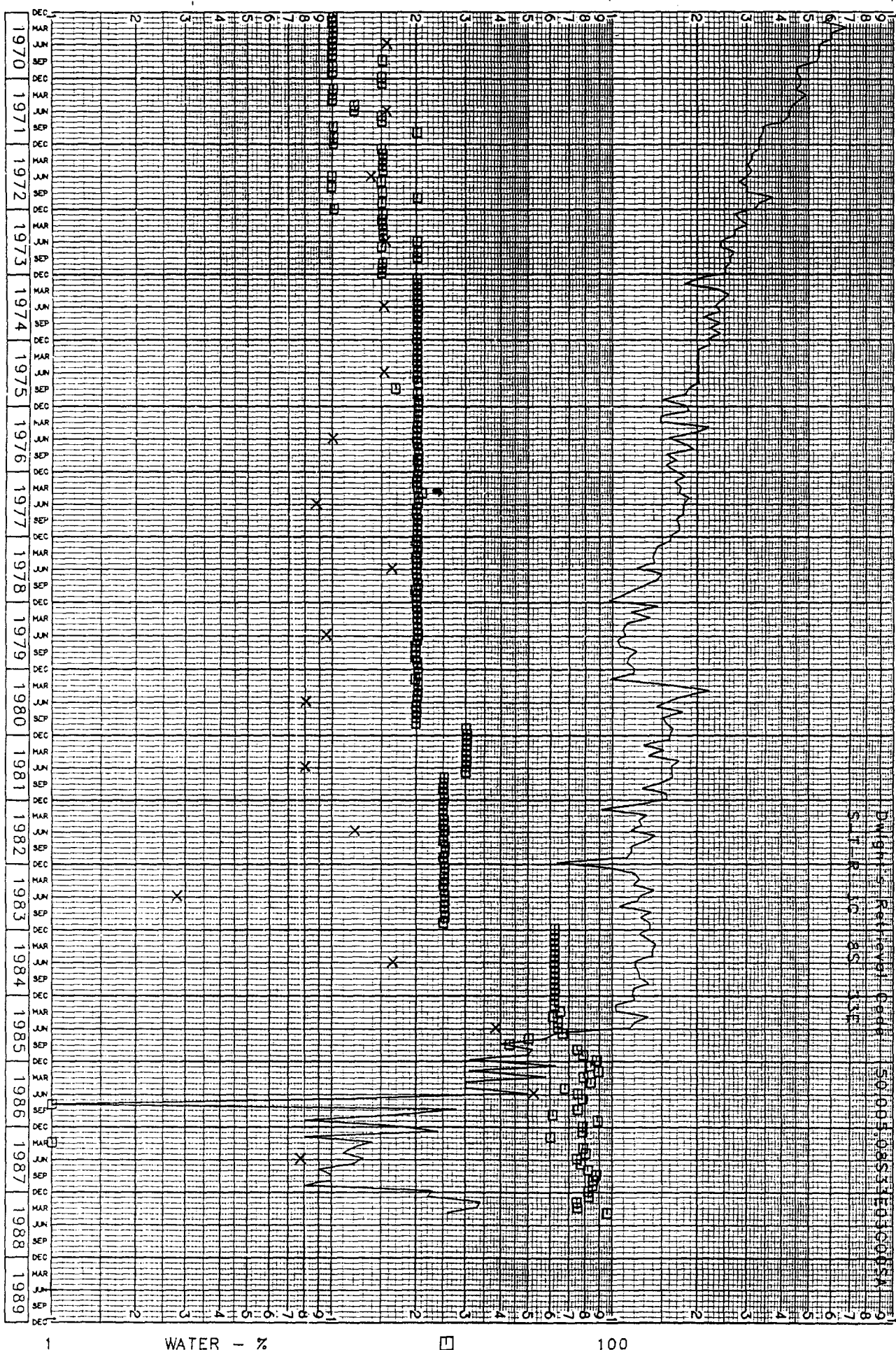
10,000

100,000



Operator: HONDO O&G CO
Lease: STATE BF Well No: 000002
Field: CHAVEROO SAN ANDRES
Reservoir:
County: CHAVES State: NM

1,000
100,000



Operator: HONDO O&G CO
Lease: STATE BF Well No: 000006
Field: CHAVEROO SAN ANDRES
Reservoir:
County: CHAVES State: NM

OIL - BBL/MONTH

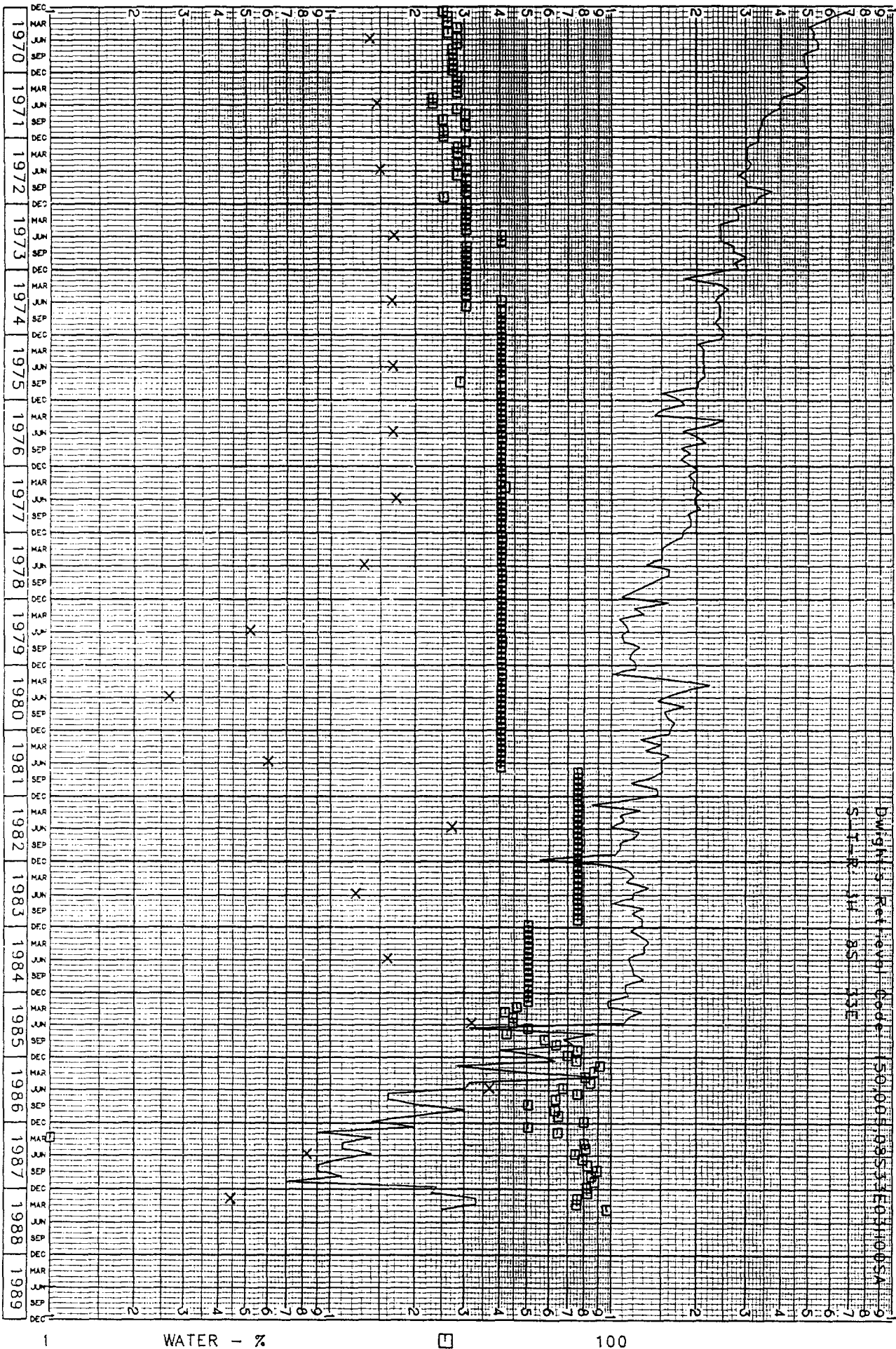
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1,000

GOR - CF/BBL

10,000

100,000



Operator: HONDO O&G CO
Lease: STATE BF Well No: 000004
Field: CHAVEROO SAN ANDRES
Reservoir:
County: CHAVES State: NM
Dwight's Retrieval Code: 150,005,1985,34E03100SA
ST-R 34 85 33E
SA



MURPHY OPERATING CORPORATION
UNITED BANK PLAZA, SUITE 300
400 NORTH PENNSYLVANIA AVENUE
POST OFFICE BOX 2648
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE
505 623-7210

August 17, 1989

Mr. Francis R. Cherry, Jr., District Manager
United States Department of the Interior
Bureau of Land Management
Roswell District Office
Post Office Box 1397
Roswell, New Mexico 88202-1397

Attention: Mr. Armando Lopez, Branch Chief
Branch of Fluids

Mr. William J. LeMay, Director
Oil Conservation Division
Energy and Minerals Department
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico 87504-2088

Attention: Mr. Michael E. Stogner, Examiner

Mr. Floyd O. Prando, Director
Oil and Gas Division
State of New Mexico
Commissioner of Public Lands
Post Office Box 1148
Santa Fe, New Mexico 87504-1148

Attention: Ms. Susan Howarth, Unitization Manager

Re: PLAN OF OPERATION FOR 1989-1990:
Proposed Jennifer Chaveroo San Andres Unit
Chaveroo San Andres Field
Roosevelt County, New Mexico

Gentlemen:

Pursuant to the provisions of Section 11. of the Unit Agreement, Murphy Operating Corporation ("MOC"), designated Unit Operator of the proposed Jennifer Chaveroo San Andres Unit, Roosevelt County, New Mexico, respectfully submits for your consideration and approval, this Plan of Operation for the secondary recovery of oil by waterflood on the subject unitized land.

- I. Proposed Plan of Operation 1988-1989: MOC hereby proposes that the Jennifer Chaveroo San Andres Unit ("the Unit"), consisting of 5,147.00 acres, as more particularly delineated on the map contained in Exhibit 1 attached hereto, be formed for the purpose of secondary recovery by the waterflood method. This proposed Unit currently consists of a total of eighty-two (82) wells (42 producing wells, 2 salt water disposal wells, 24 temporarily shut-in, 3 injectors and 11 plugged and abandoned wells). Ultimately, it is planned that the Unit will consist of eighty-two (82) wells (44 injection wells and 38 producing wells). The current and proposed status of each well is listed in the attached Exhibit 2.

The conversion to injection of certain wells will be undertaken in 3 phases as proposed below:

Phase I: Subsequent to Unit approval, MOC will initiate injection by gravity into proposed injection Wells #35-02, #35-04, #35-10 and #35-12. The conversion of these wells to injection will facilitate a 360-acre nine-spot pattern allowing MOC to monitor and observe any preferential fracture trends should they appear.

Phase II: Upon completion of the injection plant approximately 45 to 90 days after Unit approval, it is proposed that Wells #35-06 and #35-08 be converted to injection status. The conversion of these wells together with injection into the Haley Chaveroo San Andres Unit Well #34-08 will transform the nine-spot pattern (described in Phase I above) into two (2) 80-acre five-spot patterns. It is proposed that Phase II be monitored for 12 to 24 months. Subject to reservoir fill-up and response, additional development will be implemented as more particularly described in Phase III below.

Phase III: Assuming satisfactory waterflood performance, Phase III will consist of unit-wide development in five-spot injection patterns. The proposed five-spot patterns will utilize the existing salt water disposal wells, protect lease boundaries and provide for the maximum recovery of secondary oil. This will require the conversion of 36 producing wells to injection status, the conversion of 1 injection well (Unit Well #25-13) to producing status and 1 salt water disposal well (Unit Well #25-09) to producing status (see Exhibit 2).

As presented in Exhibit 1 attached, MOC plans to construct a water injection plant in the NE/4SW/4, Section 25, Township 7 South, Range 33 East, to service the Unit area. This plant will be constructed in such a manner to provide approximately 3,600 BBLS of water per day for ample injection capability in Phases I and II of the development program. The plant will provide an ultimate injection capability of approximately 26,400 BBLS of water per day in Phase III of the Unit development. The planned location was chosen because of its proximity to existing roads and electrical service and its central location to the proposed injection wells. A series of individual and trunk injection lines will radiate in a northeasterly, northwesterly and southeasterly direction to provide injection service to the individual injection wells.

Supplemental water will be purchased from the closest and most economical of several commercial sources which are available in this area. All sources are fresh water from the Ogallala formation which is present at an approximate depth of 200 feet below the surface. This water, combined with the San Andres produced water, has been deemed compatible by chemical analysis (see analyses submitted under separate cover). A water supply system will be constructed as shown on Exhibit 1.

- II. Operating Guidelines: MOC plans to monitor all injection wells through daily rate and pressure checks. After 90 to 120 days of initiation of injection into any given well, a tracer survey will be run in order to insure acceptable injection profiles and to determine if water channeling is occurring. If water channeling or unacceptable injection profiles are observed, appropriate remedial work will be performed. As wells are converted to injection status, the annuluses of each well will be filled with inert ("packer") fluid containing corrosion inhibiting chemicals. The downhole integrity of each injection well will be determined by "pressuring up" the annulus of each well and maintaining a positive pressure of 300 psig for at least thirty (30) minutes. The procedure for conversion to injection status and all remedial and drilling operations will be performed in strict adherence to the Rules and Regulations of the Oil Conservation Division and other regulatory agencies.
- III. Modification: Subject to your further approval, this Plan of Operation may be modified or supplemented during the year to meet changed conditions and to protect the interests of all parties to the Unit Agreement.

Should you have any questions or comments, please contact the undersigned.

Respectfully submitted,

MURPHY OPERATING CORPORATION



Mark B. Murphy
President and Chief Operating Officer

AME:MBM:nrr

Attachments: Exhibit 1, Proposed Jennifer Chaveroo San Andres Unit, "Field Map Indicating Proposed Unit Facilities".
Exhibit 2, Comparison of Current and Proposed Well Statuses.

cc: Mr. Jerry E. Sexton
State of New Mexico
Energy and Minerals Department
Oil Conservation Division
Post Office Box 1980
Hobbs, New Mexico 88240-1980

EXHIBIT 2.

COMPARISON OF CURRENT AND PROPOSED WELL STATUSES

Proposed Unit Well No.	Original Operator	Lease Name	Original Well No.	Well Status	Proposed Well Status	Remarks
26-13	Kern County Land Company	Federal 26	1M ✓	S	P	
26-12			2L ✓	P	I	
26-11			3K ✓	P	P	
26-14			4N ✓	S	I	
26-10			5J ✓	P	I	
26-15			6O ✓	S	P	
26-09			7I ✓	P	P	
26-16			8P ✓	P	I	
20-05	Pan American Petro. Corp.	Homme Federal	1E ✓	S	I	
20-03			2C ✓	S	I	
20-06			3F ✓	S	P	
19-07	Pan American Petro. Corp.	Wolf Federal	1G ✓	P	I	
19-02			2B ✓	P	P	
18-15			3O ✓	S	I	
19-01			4A ✓	P	I	
19-08			5H ✓	S	P	
19-06	Dalport Oil Corporation	Federal 19	1F ✓	A	P	RE/RD
19-03			2C ✓	A	I	RE/RD
25-04	Pam American Petroleum Corp.	State DB	1D ✓	S	I	
25-05			2E ✓	S	P	
25-03			3C ✓	P	P	
25-12			4L ✓	A	I	RE/RD
25-06			5F ✓	P	I	
25-13			6M ✓	P	P	
25-11			7K ✓	P	P	
25-14			8N ✓	A	I	RE/RD
25-15			9O ✓	P	P	
25-09			1I ✓	S	P	
25-02	Southern Petroleum Exploration, Inc.	State J	1B ✓	P	I	
25-07			2G ✓	A	P	RE/RD
25-01			3A ✓	P	P	
25-16			4P ✓	P	I	
25-08	Kermit Oil Co.	State Conine	1H ✓	A	I	RE/RD
25-10	Kerr-McGee	State I	1J ✓	P	I	
35-05	Pan American Petro. Corp.	State DA and State DE	1E ✓	S	P	
35-14			1N ✓	S	I	
35-10	Skelly Oil Company	Hobbs T	14J ✓	P	I	
35-03			16C ✓	P	P	
35-01			17A ✓	P	P	
35-15			18O ✓	P	P	
35-16			19P ✓	P	I	
35-11	Shell Oil Company	State CV	1K ✓	P	P	
35-02			2B ✓	S	I	
35-09			3I ✓	P	P	
35-04	M. Antweil	Shackelford	1D ✓	S	I	
35-12	Marathon Oil Company	State Sec. 35 and State Sec. 36	1L ✓	P	I	
35-13			2M ✓	P	P	
35-06			3F ✓	P	I	
35-07			4G ✓	P	P	
35-08			5H ✓	P	I	
36-02			1B ✓	A	I	RE/RD
36-07			1G ✓	A	I	

Proposed Unit Well No.	Original Operator	Lease Name	Original Well No.	Well Status	Proposed Well Status	Remarks
36-75-33E	Southern Petroleum Exploration, Inc.	State K	1D ✓	P	I	
			2E ✓	P	P	
			3C ✓	P	P	
			4L ✓	P	I	
			5M ✓	P	P	
			6F ✓	P	I	
			7K ✓	P	P	
19-75-34E	Kerr-McGee Corporation	State G	1K ✓	S	I	
			2N ✓	S	P	
			3J ✓	S	P	
			4O ✓	P	I	
			5I ✓	S	I	
			6P ✓	S	P	
20-75-34E	American Trading & Production Corp.	State 20	1L ✓	A	P	RE/RD
			2M ✓	A	I	RE/RD
			3K ✓	A	I	RE/RD
			4N ✓	A	P	RE/RD
30-75-34E 29-75-34E	Skelly Oil Company	Hobbs W	1B ✓	P	P	
			2A ✓	P	I	
			3G ✓	P	I	
			4H ✓	P	P	
			5J ✓	S	P	
			6D ✓	P	P	
			7E ✓	S	I	
			8C ✓	S	I	
			9F ✓ R-3544		I	
30-75-34E	Tenneco Oil Company	State V	1C ✓	P	I	
			2F ✓	S	P	
			3K ✓ R-3577	S	I	
			4I ✓	P	I	

LEGEND:

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A = Plugged and Abandoned

Remarks: RE/RD = Well to be reentered or redrilled.



MURPHY OPERATING CORPORATION
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TELEPHONE
505 623-7210

August 17, 1989

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United States Department of the Interior
Bureau of Land Management
Roswell District Office
Post Office Box 1397
Roswell, New Mexico 88202-1397

Attention: Mr. Armando Lopez, Branch Chief
Branch of Fluids

Mr. William J. LeMay, Director
Oil Conservation Division
Energy and Minerals Department
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico 87504-2088

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Mr. Floyd O. Prando, Director
Oil and Gas Division
State of New Mexico
Commissioner of Public Lands
Post Office Box 1148
Santa Fe, New Mexico 87504-1148

Attention: Ms. Susan Howarth, Unitization Manager

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Chaveroo San Andres Field
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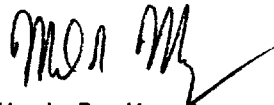
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Should you have any questions or comments, please contact the undersigned.

Respectfully submitted,

MURPHY OPERATING CORPORATION



Mark B. Murphy
President and Chief Operating Officer

AME:MBM:nrr

Attachments: Exhibit 1, Proposed Jennifer Chaveroo San Andres Unit, "Field Map Indicating Proposed Unit Facilities".
Exhibit 2, Comparison of Current and Proposed Well Statuses.

cc: Mr. Jerry E. Sexton
State of New Mexico
Energy and Minerals Department
Oil Conservation Division
Post Office Box 1980
Hobbs, New Mexico 88240-1980

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26-12			2L	P	I	
26-11			3K	P	P	
26-14			4N	S	I	
26-10			5J	P	I	
26-15			6O	S	P	
26-09			7I	P	P	
26-16			8P	P	I	
20-05	Pan American Petro. Corp.	Homme Federal	1E	S	I	
20-03			2C	S	I	
20-06			3F	S	P	
19-07	Pan American Petro. Corp.	Wolf Federal	1G	P	I	
19-02			2B	P	P	
18-15			3O	S	I	
19-01			4A	P	I	
19-08			5H	S	P	
19-06	Dalport Oil Corporation	Federal 19	1F	A	P	RE/RD
19-03			2C	A	I	RE/RD
25-04	Pam American Petroleum Corp.	State DB	1D	S	I	
25-05			2E	S	P	
25-03			3C	P	P	
25-12			4L	A	I	RE/RD
25-06			5F	I	I	
25-13			6M	I	P	
25-11			7K	P	P	
25-14			8N	A	I	RE/RD
25-15			9O	P	P	
25-09		State DF	1I	SWD	P	
25-02	Southern Petroleum Exploration, Inc.	State J	1B	P	I	
25-07			2G	A	P	RE/RD
25-01			3A	P	P	
25-16			4P	P	I	
25-08	Kermit Oil Co.	State Conine	1H	A	I	RE/RD
25-10	Kerr-McGee	State I	1J	P	I	
35-05	Pan American Petro. Corp.	State DA and State DE	1E	S	P	
35-14			1N	S	I	
35-10	Skelly Oil Company	Hobbs T	14J	P	I	
35-03			16C	P	P	
35-01			17A	P	P	
35-15			18O	P	P	
35-16			19P	P	I	
35-11	Shell Oil Company	State CV	1K	P	P	
35-02			2B	S	I	
35-09			3I	P	P	
35-04	M. Antweil	Shackelford	1D	S	I	
35-12	Marathon Oil Company	State Sec. 35 and	1L	P	I	
35-13			2M	P	P	
35-06		State Sec. 36	3F	P	I	
35-07			4G	P	P	
35-08			5H	P	I	
36-02			1B	A	I	RE/RD
36-07			1G	SWD	I	

Proposed Unit Well No.	Original Operator	Lease Name	Original Well No.	Well Status	Proposed Well Status	Remarks
36-04	Southern	State K	1D	P	I	
36-05	Petroleum		2E	P	P	
36-03	Exploration,		3C	P	P	
36-12	Inc.		4L	P	I	
36-13			5M	P	P	
36-06			6F	P	I	
36-11			7K	P	P	
19-11	Kerr-McGee	State G	1K	S	I	
19-14	Corporation		2N	S	P	
19-10			3J	S	P	
19-15			4O	P	I	
19-09			5I	S	I	
19-16			6P	S	P	
20-12	American	State 20	1L	A	P	RE/RD
20-13	Trading &		2M	A	I	RE/RD
20-11	Production		3K	A	I	RE/RD
20-14	Corp.		4N	A	P	RE/RD
30-02	Skelly Oil	Hobbs W	1B	P	P	
30-01	Company		2A	P	I	
30-07			3G	P	I	
30-08			4H	P	P	
30-10			5J	S	P	
29-04			6D	P	P	
29-05			7E	S	I	
29-03			8C	S	I	
29-06			9F	I	I	
30-03	Tenneco Oil	State V	1C	P	I	
30-06	Company		2F	S	P	
30-11			3K	S	I	
30-09			4I	P	I	

LEGEND:

Well Status: P = Producer
I = Injector
SWD = Salt Water Disposal
A = Plugged and Abandoned

Remarks: RE/RD = Well to be reentered or redrilled.

JENNIFER CHAVEROO SAN ANDRES UNIT

SUPPLEMENTAL DATA REQUIRED BY FORM C-108

INDEX OF EXHIBITS

FILE 5.

Exhibit X. - Appropriate logging and test date for the proposed injection wells.

<u>Proposed Unit Well No.</u>	<u>Original Well Name</u>	<u>Page</u>
25-02	STATE "J" NO. 1	1
25-04	STATE "DB" NO. 1	2
25-06	STATE "DB" NO. 5	3
25-08	STATE CONINE NO. 1	4
25-10	STATE "I" NO. 1	5
25-12	STATE "DB" NO. 4	6
25-14	STATE "DB" NO. 8	7
25-16	STATE "J" NO. 4	8
26-10	FEDERAL "26" NO. 5	9
26-12	FEDERAL "26" NO. 2	10
26-14	FEDERAL "26" NO. 4	11
26-16	FEDERAL "26" NO. 8	12
35-02	STATE "CV" NO. 2	13
35-04	SHACKELFORD NO. 1	14
35-06	STATE SEC. 35 NO. 3	15
35-08	STATE SEC. 35 NO. 5	16
35-10	HOBBS "T" NO. 14	17
35-12	STATE SEC. 35 NO. 1	18
35-14	STATE "DE" NO. 1	19
35-16	HOBBS "T" NO. 19	20
36-02	STATE SEC. 36 NO. 1	21
36-04	STATE "K" NO. 1	22
36-06	STATE "K" NO. 6	23
36-07	STATE SEC. 36 NO. 1	24
36-12	STATE "K" NO. 4	25
18-15	WOLF FEDERAL NO. 3	26
19-01	WOLF FEDERAL NO. 4	27
19-03	FEDERAL "19" NO. 2	28
19-07	WOLF FEDERAL NO. 1	29
19-09	STATE "G" NO. 5	30
19-11	STATE "G" NO. 1	31
19-15	STATE "G" NO. 4	32
20-03	HOMME FEDERAL NO. 2	33
20-05	HOMME FEDERAL NO. 1	34
20-11	STATE "20" NO. 3	35
20-13	STATE "20" NO. 2	36
29-03	HOBBS "W" NO. 8	37
29-05	HOBBS "W" NO. 7	38
29-06	HOBBS "W" NO. 9	39
30-01	HOBBS "W" NO. 2	40
30-03	STATE "V" NO. 1	41
30-07	HOBBS "W" NO. 3	42
30-09	STATE "V" NO. 4	43
30-11	STATE "V" NO. 3	44

[illegible]

THE WESTERN COMPANY
Gamma-Ray

COMPANY: PAN AMERICAN PETROLEUM CORPORATION

WELL: STATE DB #1
FIELD: CHAVERO
COUNTY: ROOSEVELL
STATE: NEW MEXICO

Location: 6601 FNL & WL SEC. 25 T-7S
R-33E

Other Services:

3663-H
Permanent Datum: GROUND LEVEL
Log measured from: K.B. 11
Drilling measured from: K.B. 11

Elev. 4324
Elev. K.B. 4335
D.F. 11
C.L. 4324

Date	3-1-66	3-1-66
Run No.	ONE	ONE
Type Log	GAMMA RAY	NEUTRON
Depth-Driller	4355	4355
Depth-Logger	4357	4357
Bottom logged interval	4358	4358
Top logged interval	SURFACE	SURFACE
Type fluid in hole	WATER	WATER
Salinity, PPY Cl.		
Density		
Level	FULL	FULL
Max. rec. temp. deg. F.		
Operating rig time		
Recorded by	V. IDEN	
Witnessed by	MR. WILLIAMS	

Run	Bit	From	To	Size	Wt.	From	To
				4 1/2		SURFACE	T.D.

EQUIPMENT DATA

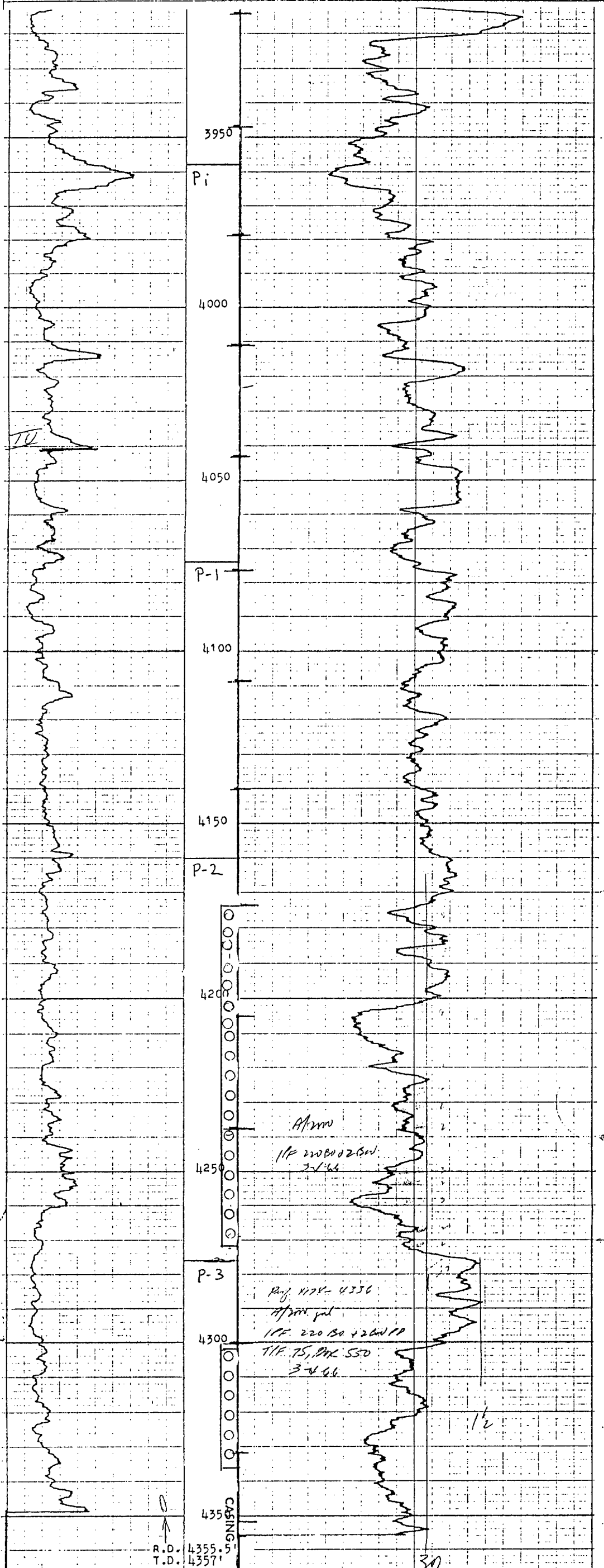
Run No.	ONE	Run No.	ONE
Tool Model No.	500	Log Type	N/N (THERM)
Diameter	3 1/2	Tool Model No.	500
Detector Model No.	5PA12	Diameter	3 1/2
Type	SCINT	Detector Model No.	5PA12
Length	3	Type	SCINT
Distance to N. Source	104"	Length	1
		Source Model No.	RB-300
		Serial No.	
		Spacing	13 1/2"
		Type	RA-BE
		Strength	4.5x10 ⁶

General

Hoist Truck No. 6205
Instrument Truck No. 6205
Tool Serial No. 14

LOGGING DATA											
Run No.	General		Speed Ft/Min	T.C. Sec	Gamma Ray			G.R. Units per Log Div.	T.C. Sec	Neutron	
	From	To			Sens. Settings	Zero Div. L or R	Sens. Settings			Zero Div. L or R	N. Units per Log Div.
ONE	3400	4355.5	30	4	425	0	8	3	150	4L	50
TWO	0	4355.5	50	3	425	0	8	2	150	4L	50

Reference Literature:



THE WESTERN PETROLEUM CORPORATION

Gallatin

COMPANY: DAN AMERICAN PETROLEUM CORPORATION

WEL STATE "08" # 8

PROD CHAMBERO

Locality: ROOSEVELT

STATE: NEW MEXICO

660, FS, & 1980, FAL

SEC. 25, T4P. 7S, R6E. 3SE

Other sections:

56682-M

Permitted Duration: MONTHS
Estimated Production: 1000000
Estimated Reserves: 1000000
Estimated Production: 1000000

GROUND LEASE

Per: 1953

From: K.B. 4333

To: 4335

Drill Date: 5-28-66

Drill Date: 5-28-66

Type Log: GRAVITY

Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

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Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

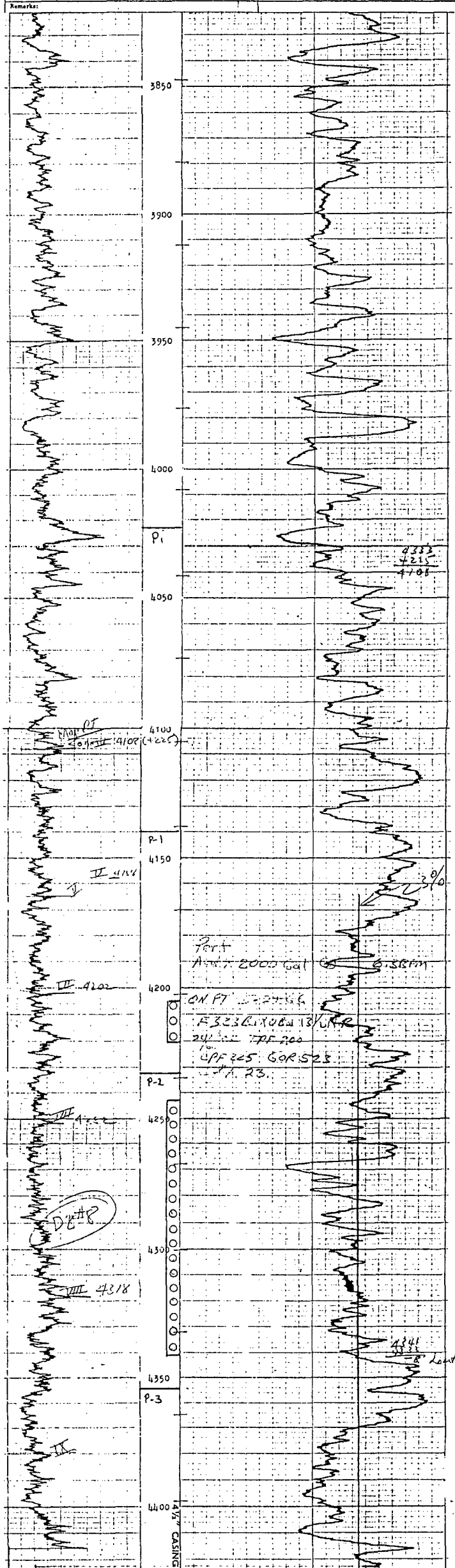
Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

Drill Date: 5-28-66

EQUIPMENT DATA									
Gamma Ray					Neutron				
Man No.	ONE				Man No.	ONE			
Tool Mark No.	506				Tool Mark No.	N-4 (THERM)			
Diameter	1 1/2"				Log Type	500			
Detector Model No.	5A12				Diameter	1 1/2"			
Type	SCINT				Detector Model No.	5A14			
Length	3"				Type	SCINT			
Distance to N. Source	104"				Length	18"			
					Source Model No.	RB-300			
General					Serial No.				
Heat Treat No.	6512				Sparing	13, 5"			
Instrument Treat No.	6412				Type	RA-10			
Tool Serial No.	15				Strength	11.5 x 10 ⁶			
LOGGING DATA									
Gamma Ray					Neutron				
Run No.	Depth		Speed Ft./Min	T.C. Sec	Sens. Settings	Zero Div. L or R	T.C. Sec	Sens. Settings	N. Units per Log Div.
	From	To							
1	102.5	350	30	3	1000	0	1	160	11
2	102.5	SURF	30-50	2	1000	0	2	160	30 A.P.
Reference Literature:									



COMPENSATED FORMATION DENSITY LOG

SCHUMBERGER

COMPANY: KERN COUNTY LAND COMPANY

WELL: FEDERAL 26 #5

FIELD: CHAYEROO

COUNTY: ROOSEVELT

STATE: NEW MEXICO

LOCATION: 1980' FROM S/L, 1980' FROM E/L

Sec. 26, Twp. 25, Rgn. 33E

Log Measured From: 0' Elev. 5333.4

Drilling Measured From: 0' Elev. 5333.4

Other Services: L. M.L. ADP

Run No. 1

Tool Model No. 4556

Diameter 4.125

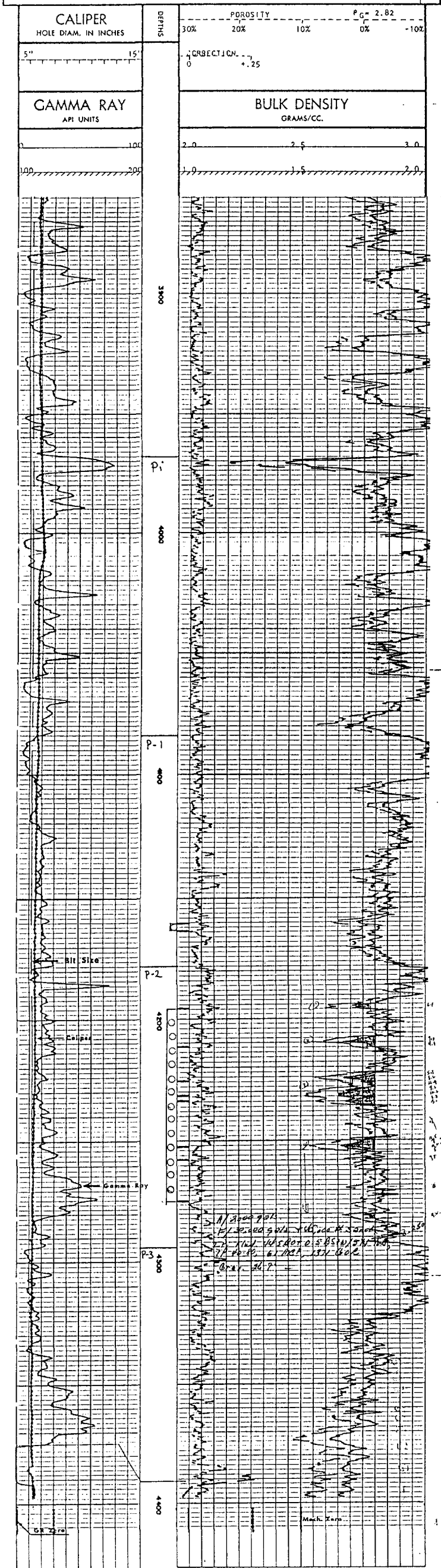
Depth 1397

Section 26, Twp. 25, Rgn. 33E

PERMANENT FILE COPY

DO NOT REMOVE

EQUIPMENT DATA			
Gamma-Gamma		General	
Run No.	ONE	Run No.	ONE
Tool Model No.	PGT-0	Inst. Truck No.	4556
Diameter	4.125	Inst. Truck No.	4556
Depth	1397	Inst. Truck No.	4556
Section	26, Twp. 25, Rgn. 33E	Inst. Truck No.	4556
LOGGING DATA			
General		Gamma Ray	
Run No.	ONE	Run No.	ONE
Tool Model No.	PGT-0	Inst. Truck No.	4556
Diameter	4.125	Inst. Truck No.	4556
Depth	1397	Inst. Truck No.	4556
Section	26, Twp. 25, Rgn. 33E	Inst. Truck No.	4556



GAMMA RAY API UNITS		INTERVAL TRANSIT TIME MICROSECONDS PER FOOT	
0	100	100	70
100	200	160	130

5" 15"

CALIPER
HOLE DIAM. IN INCHES

3000 3500 4000 4500 4600

P₁

P₂

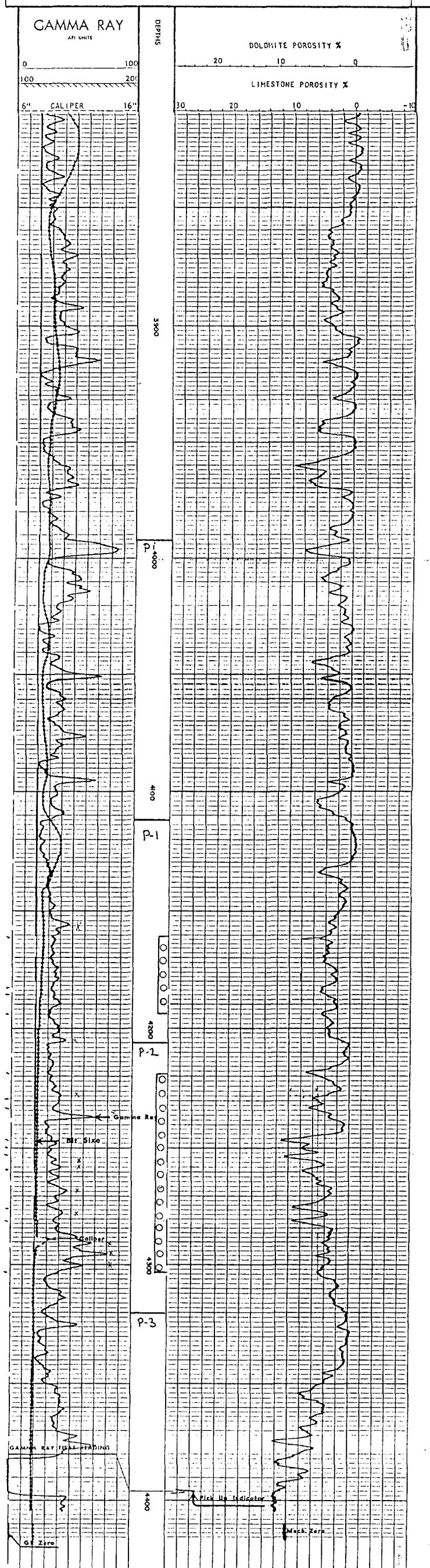
P₃

Gamma Ray
Caliper
Bit Size

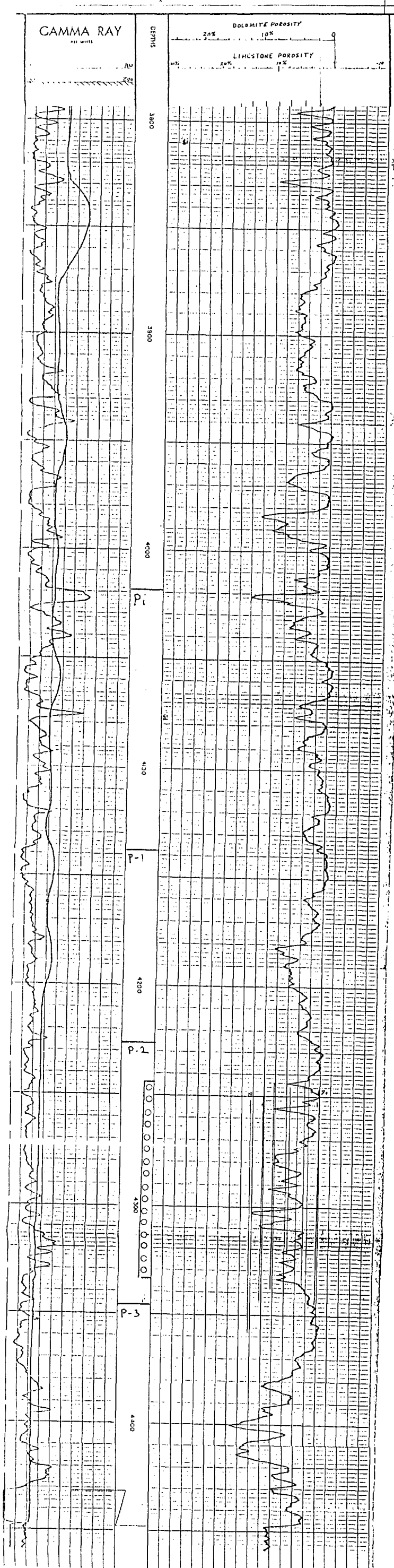
4600

4600

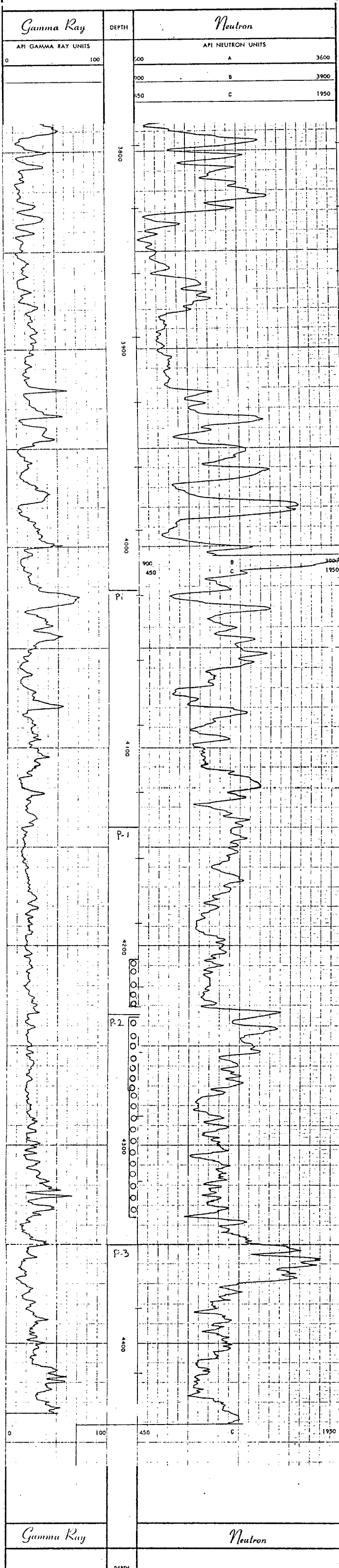
FEDERAL "26" NO. 4 /
UNIT WELL NO. 26-14
Page 11 of 44

[illegible]

GAMMA RAY API UNITS		INTERVAL TRANSIT TIME MICROSECONDS PER FOOT	
DEPTH			
3800			
3900			
4000			
4100			
4200			
4300			
4400			
4500			
4600			
4700			
4800			
4900			
5000			
5100			
5200			
5300			
5400			
5500			
5600			
5700			
5800			
5900			
6000			
6100			
6200			
6300			
6400			
6500			
6600			
6700			
6800			
6900			
7000			
7100			
7200			
7300			
7400			
7500			
7600			
7700			
7800			
7900			
8000			
8100			
8200			
8300			
8400			
8500			
8600			
8700			
8800			
8900			
9000			
9100			
9200			
9300			
9400			
9500			
9600			
9700			
9800			
9900			
10000			



E G A C PAN-GE-O AT LAS CORP. <i>Gammag Ray Neutron Log</i> (EPI-TERMAL NEUTRON)											
SITE NO.		COMPANY: PAK AMERICAN PETROLEUM CORPORATION									
WELL		STATE DE # 1									
FIELD		COUNTRY: CHAD									
COUNTY		ROD/CITY		STATE		NEC MEXICO			DRILL STREET		
LOCATION:		660 PSL		1980 PSL		NEC 33-E			NEC 33-E		
DATE		JUL 35		TIME: 7-5		TIME: 4:30		TIME: 4:30		TIME: 4:30	
LOGGING INTERVAL		5.8 ft.		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)	
DATE		JUL 35		TIME: 7-5		TIME: 4:30		TIME: 4:30		TIME: 4:30	
LOGGING INTERVAL		5.8 ft.		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)	
DATE		JUL 35		TIME: 7-5		TIME: 4:30		TIME: 4:30		TIME: 4:30	
LOGGING INTERVAL		5.8 ft.		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)	
DATE		JUL 35		TIME: 7-5		TIME: 4:30		TIME: 4:30		TIME: 4:30	
LOGGING INTERVAL		5.8 ft.		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)	
DATE		JUL 35		TIME: 7-5		TIME: 4:30		TIME: 4:30		TIME: 4:30	
LOGGING INTERVAL		5.8 ft.		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)	
DATE		JUL 35		TIME: 7-5		TIME: 4:30		TIME: 4:30		TIME: 4:30	
LOGGING INTERVAL		5.8 ft.		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)	
DATE		JUL 35		TIME: 7-5		TIME: 4:30		TIME: 4:30		TIME: 4:30	
LOGGING INTERVAL		5.8 ft.		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)	
DATE		JUL 35		TIME: 7-5		TIME: 4:30		TIME: 4:30		TIME: 4:30	
LOGGING INTERVAL		5.8 ft.		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)	
DATE		JUL 35		TIME: 7-5		TIME: 4:30		TIME: 4:30		TIME: 4:30	
LOGGING INTERVAL		5.8 ft.		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)	
DATE		JUL 35		TIME: 7-5		TIME: 4:30		TIME: 4:30		TIME: 4:30	
LOGGING INTERVAL		5.8 ft.		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)	
DATE		JUL 35		TIME: 7-5		TIME: 4:30		TIME: 4:30		TIME: 4:30	
LOGGING INTERVAL		5.8 ft.		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)		10.0 ft. (1st 100 ft. Penetration Depth)	
DATE											



CAMMA RAY
API UNIT

DOLOMITE POROSITY %

LIMESTONE POROSITY %

DEPTH

3500

4000

4500

4600

4700

4800

4900

5000

5100

5200

5300

5400

5500

5600

5700

5800

5900

6000

6100

6200

6300

6400

6500

6600

6700

6800

6900

7000

7100

7200

7300

7400

7500

7600

7700

7800

7900

8000

8100

8200

8300

8400

8500

8600

8700

8800

8900

9000

9100

9200

9300

9400

9500

9600

9700

9800

9900

10000

10100

10200

10300

10400

10500

10600

10700

10800

10900

11000

11100

11200

11300

11400

11500

11600

11700

11800

11900

12000

12100

12200

12300

12400

12500

12600

12700

12800

12900

13000

13100

13200

13300

13400

13500

13600

13700

13800

13900

14000

14100

14200

14300

14400

14500

14600

14700

14800

14900

15000

15100

15200

15300

15400

15500

15600

15700

15800

15900

16000

16100

16200

16300

16400

16500

16600

16700

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16900

17000

17100

17200

17300

17400

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17700

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17900

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40000

40100

40200

40300

40400

40500

40600

40700

40800

40900

41000

41100

41200

41300

41400

41500

41600

41700

41800

41900

42000

42100

42200

42300

42400

42500

42600

42700

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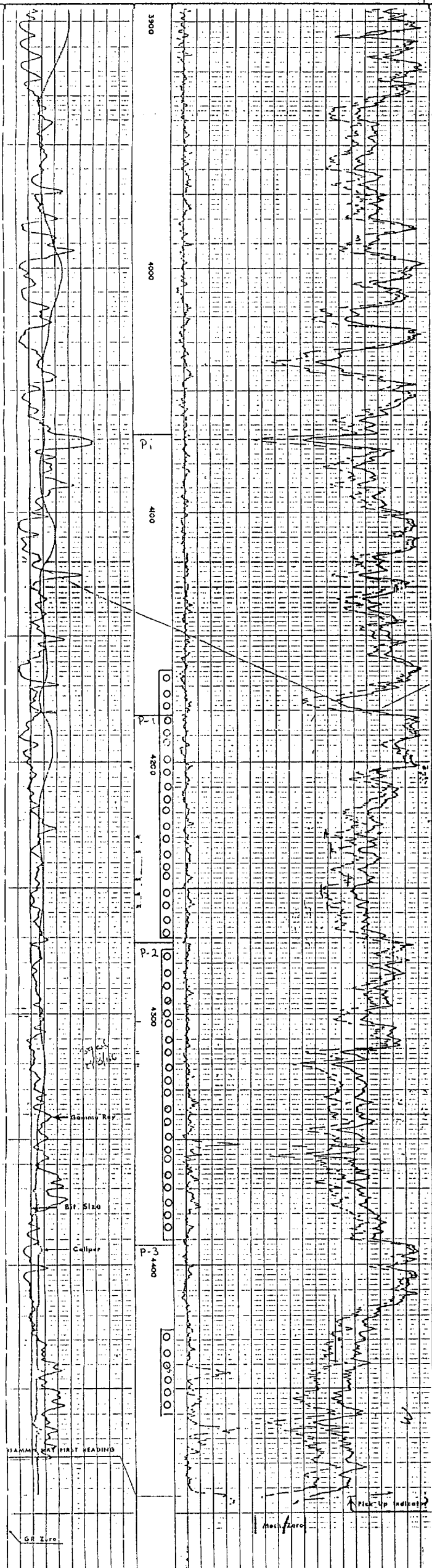
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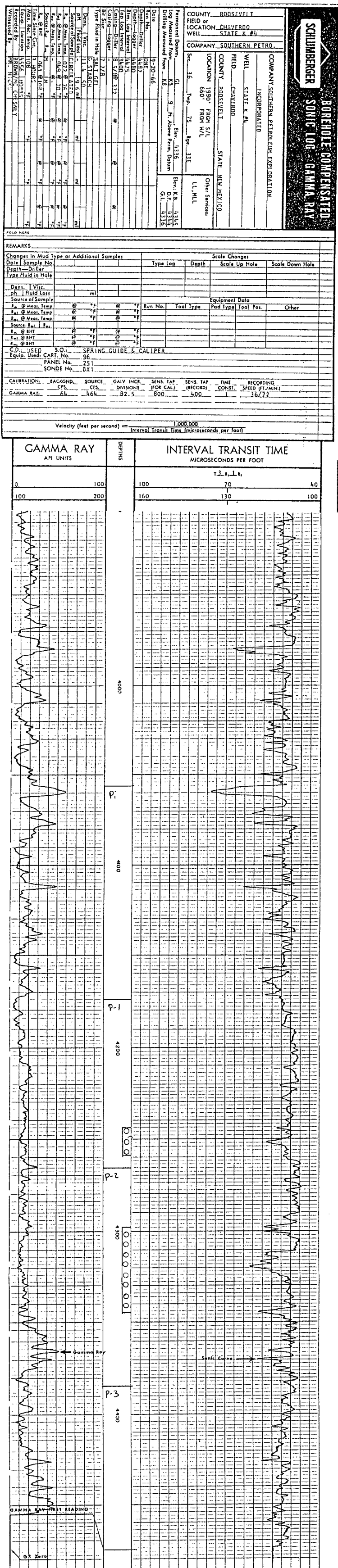
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GAMMA RAY API UNITS		DEPTH	INTERVAL TRANSIT TIME MICROSECONDS PER FOOT	
			T ₂ - T ₁	
0	100		100	80
100	200		160	100
		P ₁ 4000 P ₁ 4200 P-2 4375 P-3 4400 4471 SWS TD 4471		

FORMATION DENSITY LOG																																																																			
WELL NO. 36-07 DATE 11/11/77 LOG NO. 1 LOGGERS: J. P. O'NEILL, S. L. MILL OVERSEER: S. L. MILL WELL DEPTH: 4000 WELL TYPE: NORMALLY COMPRESSIBLE WELL STATUS: IN PROGRESS WELL LOCATION: STATE SEC. 36 NO. 1 / UNIT WELL NO. 36-07 LOGGERS: J. P. O'NEILL, S. L. MILL OVERSEER: S. L. MILL WELL DEPTH: 4000 WELL TYPE: NORMALLY COMPRESSIBLE WELL STATUS: IN PROGRESS WELL LOCATION: STATE SEC. 36 NO. 1 / UNIT WELL NO. 36-07																																																																			
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EQUIPMENT DATA					GENERAL																																																														
Run No.	1	Log No.	1	Log Date	11/11/77	Run No.	1	Log No.	1	Log Date	11/11/77																																																								
Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1																																																								
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Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1																																																								
<table border="1"> <thead> <tr> <th colspan="10">LOGGING DATA</th> </tr> </thead> <tbody> <tr> <td>Run No.</td> <td>1</td> <td>Log No.</td> <td>1</td> <td>Log Date</td> <td>11/11/77</td> <td>Run No.</td> <td>1</td> <td>Log No.</td> <td>1</td> <td>Log Date</td> <td>11/11/77</td> </tr> <tr> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> </tr> <tr> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> </tr> <tr> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> <td>Tool No.</td> <td>1</td> </tr> </tbody> </table>										LOGGING DATA										Run No.	1	Log No.	1	Log Date	11/11/77	Run No.	1	Log No.	1	Log Date	11/11/77	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1	Tool No.	1
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10665-H

19-75 34E

WOLF FEDERAL #4

CHAVEROO

ROOSEVELT

NEW MEXICO

6601 FNL & 6601 FEL

10-25-66

ONE-NW

ONE-NW

GAWA RAY

NEUTRON

4310

4310

4301

4308.5

WATER

WATER

187

187

3 HOURS

SAMS

MR. SMITH

1.0

EQUIPMENT DATA

Gamma Ray

Run No. ONE

Tool Model No. 500

Diameter 3 1/2"

Detector Model No. 5PA12

Type SCINT

Length 3"

Distance to N. Source 10 1/2"

Neutron

Run No. ONE

Log Type N/N (THERM)

Tool Model No. 500

Diameter 3 1/2"

Detector Model No. 5ALL

Type SCINT

Length 1"

Source Model No. S12B3

Serial No.

Spacing 13.5"

Type AC-BE

Strength 4.0X10⁶

LOGGING DATA

General

Run No. 1

From 4310

To 3200

Speed Ft/Min 25

T.C. Sec 2

Sens. Settings 256

Zero Div. L or R 0

G.R. Units per Log Div. 8

T.C. Sec 2

Sens. Settings 94

Zero Div. L or R 5L

N. Units per Log Div. 60

Run No. 2

From 4310

To SURFACE

Speed Ft/Min 50

T.C. Sec 1

Sens. Settings 256

Zero Div. L or R 0

G.R. Units per Log Div. 8

T.C. Sec 1

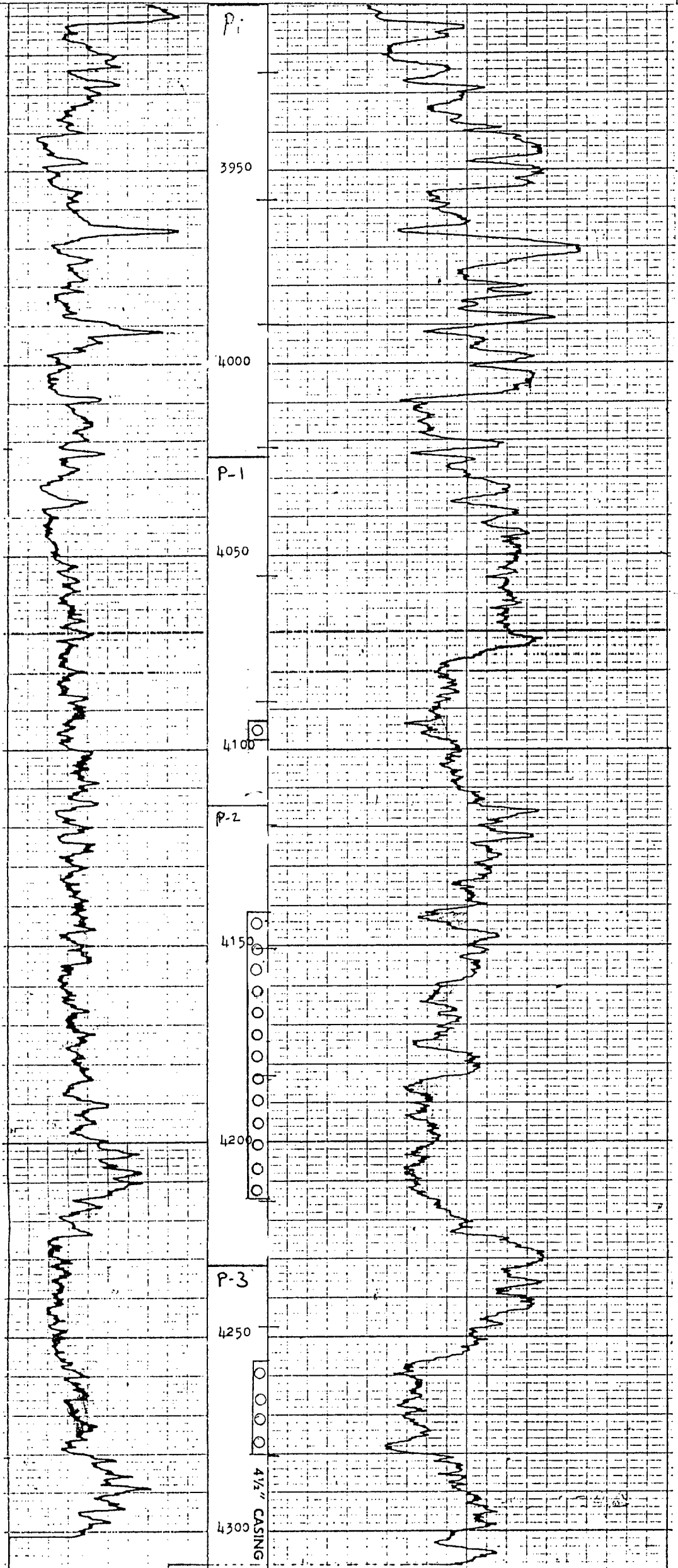
Sens. Settings 94

Zero Div. L or R 5L

N. Units per Log Div. 60

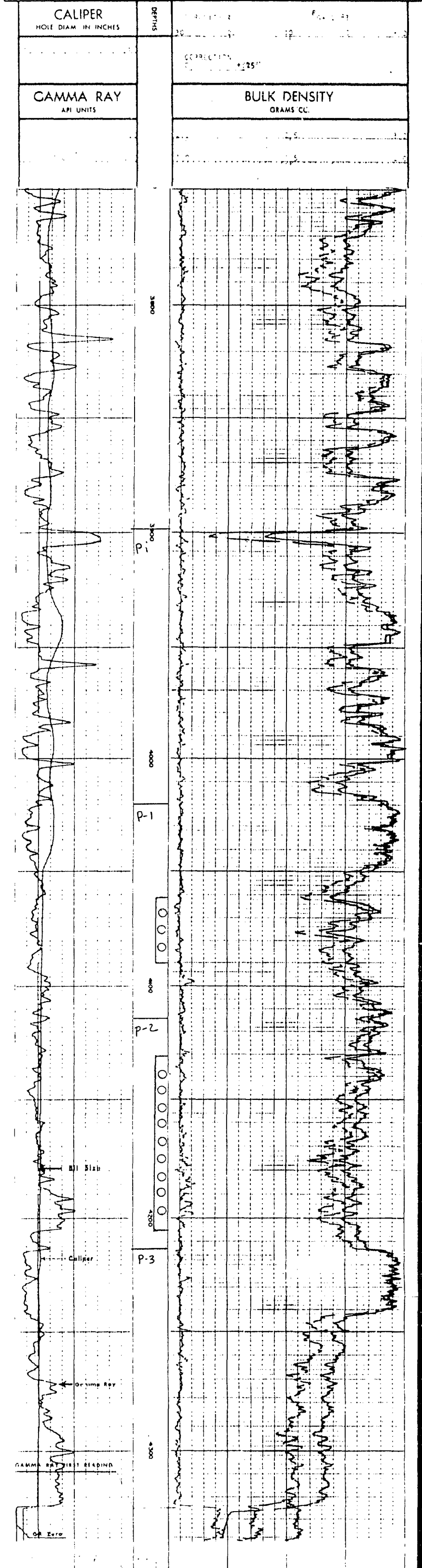
Reference Literature:

Remarks:



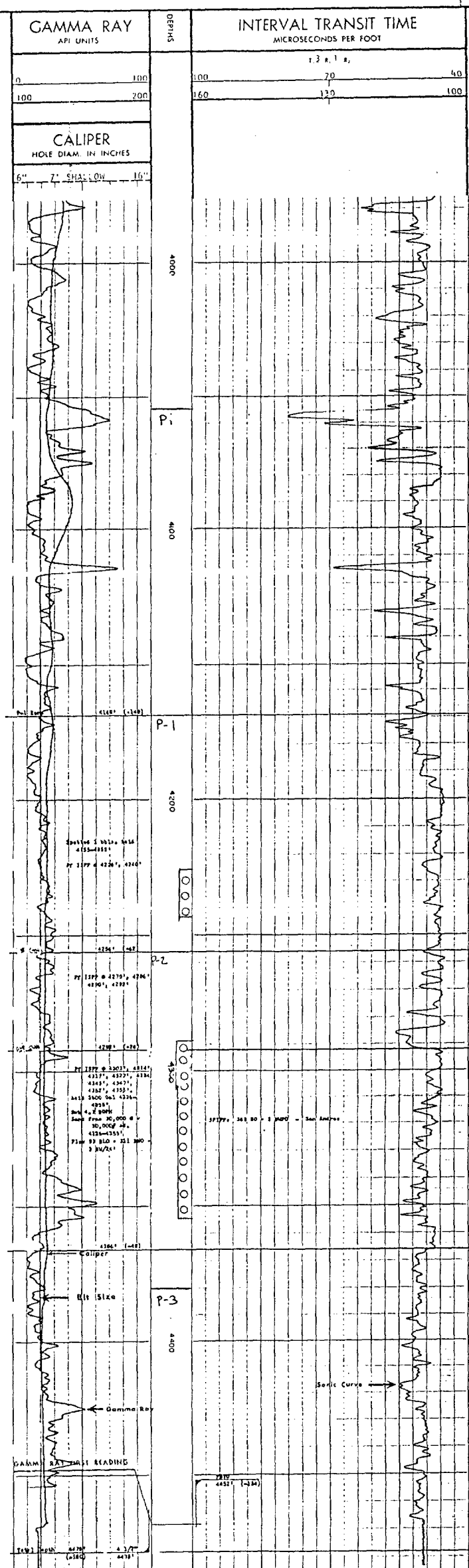
SCHUMBERGER FORMATION DENS 19-7-34		COMPENSATE 19-7-34	
COUNTY: DAUPHIN, OIL CORPORATION WELL: H1 M.L. FEDERAL E. 2 FIELD: G-21800 COUNTY: ROSS, WELLS STATE: N.S. M.L.L. Location: 330' 4th Ave Sec. 12, Twp. 2, Rge. 24 Other Sections: 4		COUNT: 1082221 FIELD or LOCATION: CHAVERCO WELL: 19-7-34 COMPANY:	
Permanent Down: 10.5m, Above Perm. Bottom Log Measured from: 10.5m, Above Perm. Bottom Drilling Measured from: 10.5m, Above Perm. Bottom		Date: 10-7-34 Run No.: 1082221 Tool Model No.: 1082221 Diameter: 1082221 Dev. Model No.: 1082221 Type: 1082221	

EQUIPMENT DATA Run No.: 1082221 Tool Model No.: 1082221 Diameter: 1082221 Dev. Model No.: 1082221 Type: 1082221		General Run No.: 1082221 Tool Model No.: 1082221 Diameter: 1082221 Dev. Model No.: 1082221 Type: 1082221	
LOGGING DATA Gamma Ray: 1082221 Zero: 1082221 Div. 1 or 2: 1082221 API Unit: 1082221 per log Div: 1082221		Gamma-Gamma CALIBRATE: 1082221 ACPS: 1082221	



GAMMA RAY & CALIPER		DEPTH	DENSITY
RADIATION INTENSITY INCREASES 10 API/CO 0 API 100 API			
HOLE SIZE - INCHES 7 9 11 13 15		2" = 100' LR 100'	DENSITY IN GM/CM ³ 2.32 2.35 2.39 2.45 2.50 2.56 2.63 2.69 2.77 2.85 2.96
		3500 P-1 4000 P-1 4500 P-2 5000 P-3 5500 6000 6500 7000 7500 8000 8500 9000 9500 10000	

20~03

[illegible]

SCHUMBERGER		BOREHOLE COMPENSATED	
SONIC LOG - GAMMA RAY			
COUNTY ROOSEVELT		COMPANY SKELLY OIL CO.	
FIELD CHAVERO		WELL HOBBS "W" NO. 9	
WELL HOBBS "W" NO. 9		FIELD CHAVERO	
COUNTY ROOSEVELT		STATE NEW MEXICO	
LOCATION 1650' FN & HL		Other Services	
Sec. 29 Twp. 7-S. Rge. 34-E.		F.O.C. S.M.P.	
Log Measured From K.B. 11.4 ft. Above Farm Down		L. N.L.L.	
Drilling Measured From K.B.		Bar. R.A. 3300 L.	
Date 5-14-58		C.I. 3300	
Run No. ONE			
Depth - Driller 4450			
Depth - Sonar 4450			
Top Log Interval 4445			
Bottom Log Interval 4455			
Casing - Driller 8 5/8 @ 360			
Casing - Sonar 7 7/8			
Bit Size 7 7/8			
Type Fluid in Hole SALT GEL			
Density - Visc. 10.0 LBU			
pH Fluid Loss 6.5 @ 15.6 ml			
Source of Sample 21			
Run No. 1			
Tool Type			
Pad Type			
Tool Pos.			
Other			
C.I. USED 501		SPRING GUIDE & CALIPER	
Equip. Used CART. No.		SLH-A-56	
PANEL No.		SLP-A-49	
SONDE No.		SLS-A-11	
CALIBRATION		BACKGROUND	
GALV. INCH		SENS. TAP	
DIVISIONS		IPOR CAL	
B2.5		800	
RECORDING		TIME	
SPEED (FT./MIN.)		CONST.	
50		1	
Velocity (feet per second) =		Interval Transit Time (microseconds per foot)	
1,000,000			
GAMMA RAY		INTERVAL TRANSIT TIME	
API UNITS		MICROSECONDS PER FOOT	
0 100 200		T.S.R. 2.R.	
100 200		100 200	
160 130 100			
CALIPER			
HOLE DIAM. IN INCHES			
6 16			
4000			
400			
P-1			
400			
P-2			
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LANE WELLS Logging

FILE NO. ... COMPANY: JENNICO OIL COMPANY

WELL: STATE "V" NO. 1

FIELD: CHAYERO

COUNTY: ROOSEVELT STATE: NEW MEXICO

LOCATION: 660' FWL 5 660' FWL

DATE: DEC 30 1964 TIME: 7:55

PERMANENT FILE COPY

DO NOT REMOVE

Gamma Ray

Run No. ONE

Tool Model No. 350

Diam. 5.0

Order Model No. 400

Type SCINT

Length 6'

Dist to 0 Source

General

Run No. 1

Depth 3900

Speed 30

Temp 100

Gamma Ray

Run No. 1

Depth 3900

Speed 30

Temp 100

Density

Run No. 1

Depth 3900

Speed 30

Temp 100

