

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no
- II. Operator: QUANICO OIL & GAS, INC.
Address: P.O. Box 1714 EL DORADO, AR 71730
Contact party: MR. DAVID ALEXANDER Phone: (505) 624-1702
- 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. No Additional Stimulation will be used
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.) All logs on file at Commission.
- * 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. NO WATER WELLS WITHIN 1 MILE.
- 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: Douglas K. Alexander Title: Vice-President
Signature: Douglas K. Alexander Date: 4/15/87
- * 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.

INJECTION WELL DATA SHEET

Quonico Oil & Gas, Inc. "Mac Federal"
OPERATOR LEASE
2 990' FSL E 330' FEL 6 9-South 30-East
WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE

Schematic

see attached schematic

Tabular Data

Surface Casing 318'
 Size 24# - 8 5/8" Cemented with 175 sx.
 TOC Surface feet determined by Cement circulated
 Hole size 12"

Intermediate Casing None
 Size _____ " Cemented with _____ sx.
 TOC _____ feet determined by _____
 Hole size _____

Long string 3335'
 Size 10.5# - 4 1/2" Cemented with 150 sx.
 TOC 2800' feet determined by volumetric formula
 Hole size 7 7/8"
 Total depth 3335' P.B.T.D. = 3284'

Injection interval
3247 feet to 3273 feet
(perforated or open-hole, indicate which)
(Perforated)

Change in ownership effective October 1, 1984

Tubing size 2 3/8" - 4.5# - J-55 lined with unlined set in a
(material)
Cherokee - 2 3/8" X 4 1/2" - Model 'R' packer at 3200' feet
(brand and model)
 (or describe any other casing-tubing seal).

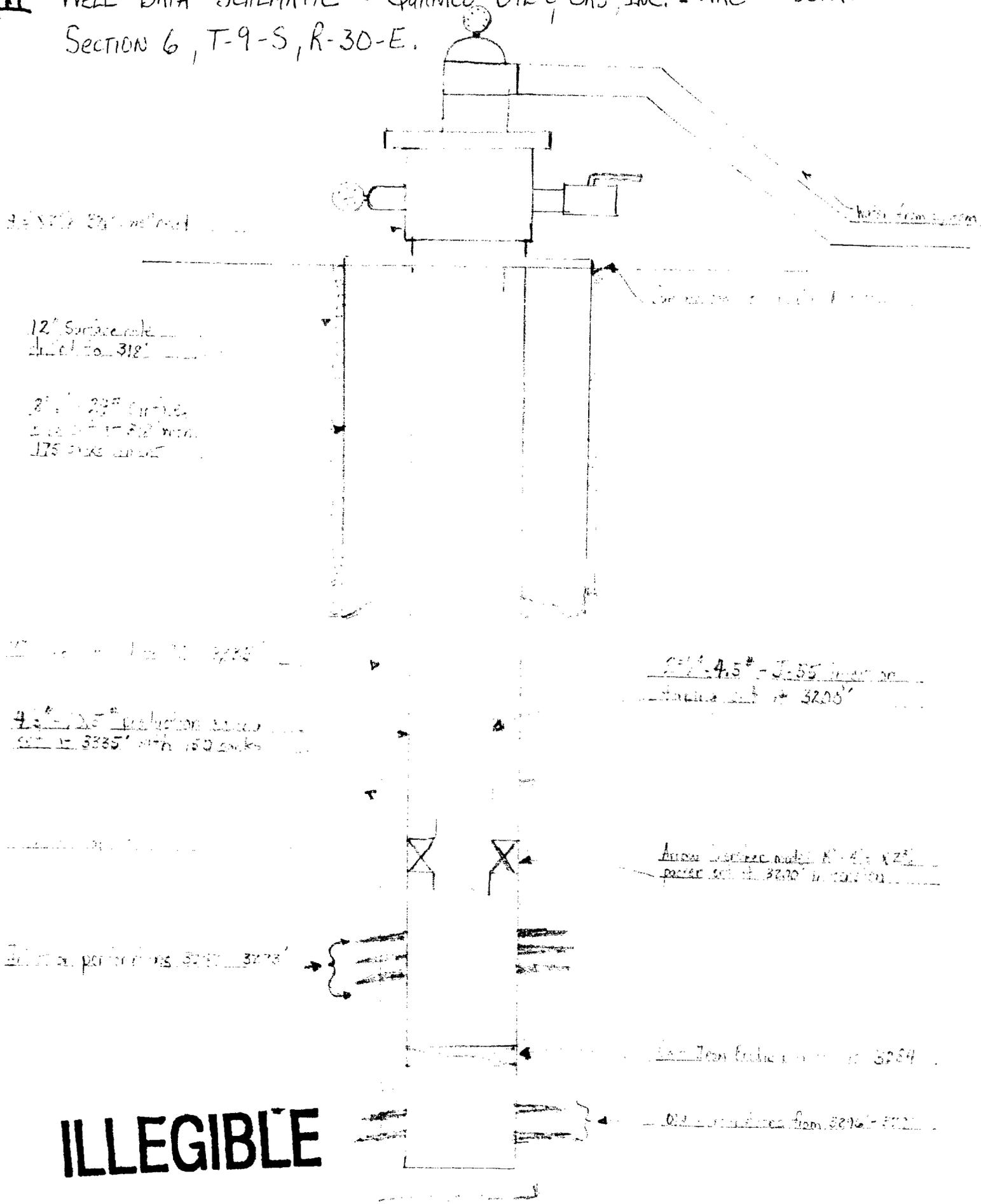
Other Data

- Name of the injection formation Cato - San Andres
- Name of Field or Pool (if applicable) Cato
- Is this a new well drilled for injection? Yes No
 If no, for what purpose was the well originally drilled? production

4. 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) _____
old perforations from 3296' to 3296', sealed with cast iron
bridge plug @ 3284'

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. There are no productive oil or gas zones, either overlying or underlying this zone, in this area

III WELL DATA SCHEMATIC = QUARNICO OIL & GAS, INC. = "MAC" FEDERAL #2
 SECTION 6, T-9-S, R-30-E.



ILLEGIBLE

III, WELL DATA

A. (1.) 'MAC' FEDERAL # 2 . SECTION 6 , T-9-S , R-30-E
330' FEL & 990 FSL. (Schematic attached)

(2.) CASING DATA:

SURFACE: $8\frac{5}{8}$ " - 24# SET AT 318' IN 12" HOLE, WITH 175 SACKS OF CEMENT. CEMENT TOP AT TOP OF GROUND. DETERMINED BECAUSE CEMENT WAS CIRCULATED (Schematic attached).

PRODUCTION: $4\frac{1}{2}$ " - 10.5# SET AT 3335' IN $7\frac{7}{8}$ " HOLE, WITH 150 SACKS OF CEMENT. CEMENT TOP AT 2800'. THIS WAS DETERMINED USING VOLUMETRIC FORMULA FOR ANNULUS BETWEEN OPEN HOLE AND CASING. (Schematic attached)

(3.) TUBING DATA: $2\frac{3}{8}$ " - 4.5# J-55 unlined tubing will be set at 3200'. (Schematic attached)

(4.) An Arrow Cherokee MODEL "R" - $4\frac{1}{2}$ " X $2\frac{3}{8}$ " PACKER WILL BE SET AT 3200', IN TENSION, WITH APPROX. 14,000# OVER STRING WEIGHT. (Schematic attached.)

B. (1.) THE NAME OF THE INJECTION FORMATION IS THE CATO-SAN ANDRES.

(2.) THE INJECTION INTERVAL IS PERFORATED FROM 3247' - 3273'.

(3.) THIS WELL WAS ORIGINALLY DRILLED FOR PRODUCTION.

(4.) THIS WELL HAD ADDITIONAL PERFORATIONS FROM 3296' - 3298', THESE PERFORATIONS WERE SHUT-OFF WITH A CAST-IRON BRIDGE PLUG SET AT 3284'.

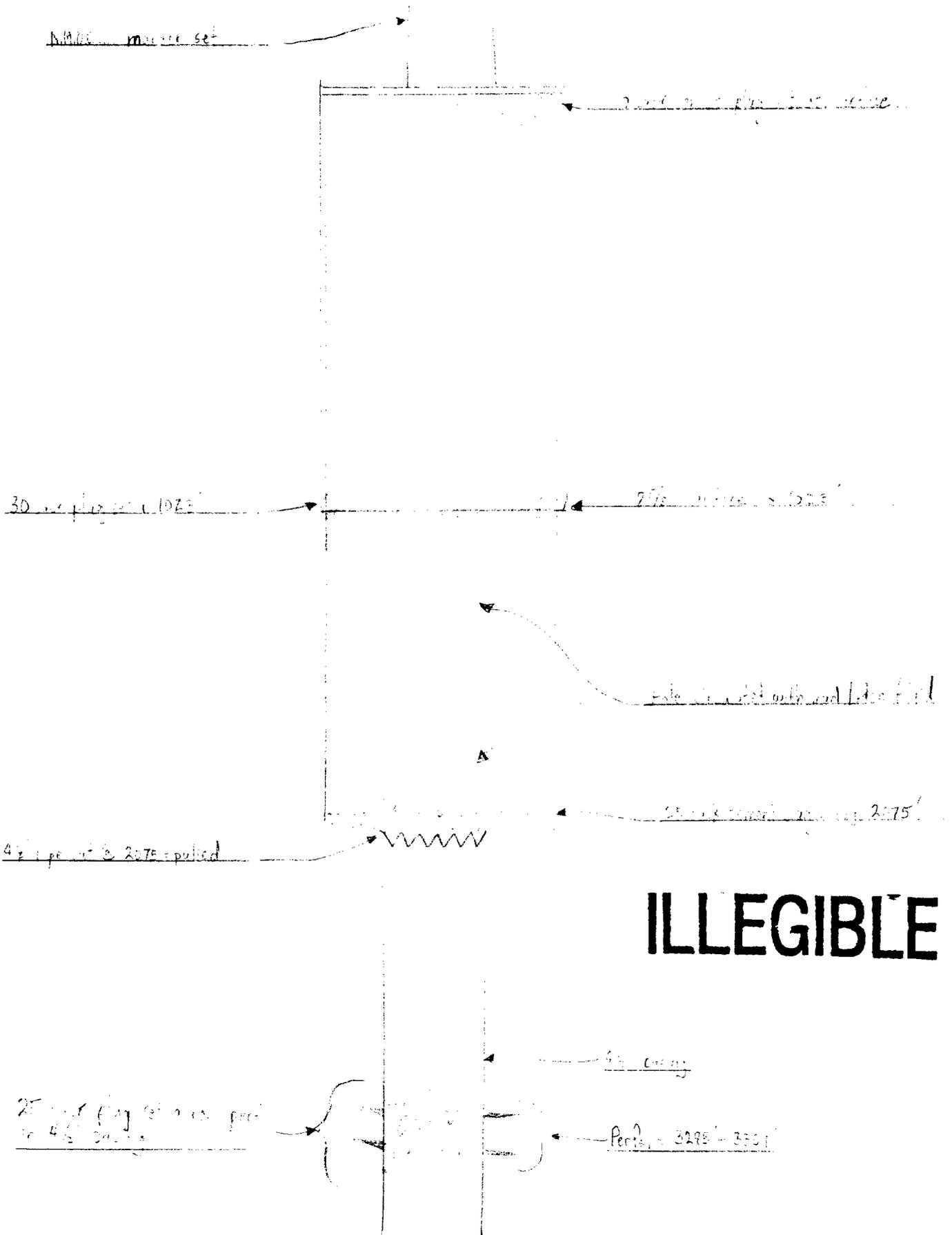
(5.) THERE ARE NO OTHER OIL OR GAS ZONES PRODUCING, EITHER HIGHER OR LOWER, IN THE AREA OF THIS WELL.

VI. Wells located within area of review

Operator	Lease	Location	Casing Data	Perforations	TD @ P/B/TD	Dates	Type
Warrick Oil & Gas, Inc.	NM-25479 Federal # 1	Chaves Co. NM Sec. 6, T-9-S, R-30-E	8 5/8" @ 315' w/ 1755x.	3 shots	TD = 3340'	Drilled = 7/18/75	Sam Andres
Warrick Oil & Gas, Inc.	Marshall # 1	Chaves Co. NM Sec. 6, T-9-S, R-30-E	8 5/8" @ 318' w/ 1755x.	3306' - 3314'	P/B/TD = 3314'	Comp. = 9/22/75	Sam Andres
Warrick Oil & Gas, Inc.	Marshall # 1	Chaves Co. NM Sec. 6, T-9-S, R-30-E	8 5/8" @ 318' w/ 1755x.	3274' - 3314'	TD = 3360'	Drilled = 2/13/76	Sam Andres
Warrick Oil & Gas, Inc.	Marshall # 2	Chaves Co. NM Sec. 6, T-9-S, R-30-E	4 1/2" @ 3390' w/ 1755x.	13 shots	P/B/TD = 3344'	Comp. = 3/22/76	Sam Andres
Warrick Oil & Gas, Inc.	Marshall # 2	Chaves Co. NM Sec. 6, T-9-S, R-30-E	4 1/2" @ 3390' w/ 1755x.	3285' - 3351'	TD = 3390'	Drilled = 6/12/76	Sam Andres
Brown JR.	Federal # 1	Chaves Co. NM Sec. 6, T-9-S, R-30-E	8 5/8" @ 223' w/ 1805x.	Casing notch @	P/B/TD = 3227'	Comp. = 7/12/76	Producer (P/A)
Brown JR.	Federal # 1	Chaves Co. NM Sec. 6, T-9-S, R-30-E	4 1/2" @ 3274' w/ 2005x.	3258'	TD = 3274'	Drilled = 12/21/76	Sam Andres
Brown JR.	Federal # 1	Chaves Co. NM Sec. 6, T-9-S, R-30-E	4 1/2" @ 3274' w/ 2005x.	3258'	P/B/TD = 3227'	Comp. = 7/27/76	Producer (P/A)
Brown JR.	Federal # 1	Chaves Co. NM Sec. 6, T-9-S, R-30-E	8 5/8" @ 275' w/ 2005x.	3302' - 3306'	TD = 3475'	Drilled = 7/27/76	Sam Andres
Brown JR.	Federal # 1	Chaves Co. NM Sec. 5, T-9-S, R-30-E	8 5/8" @ 275' w/ 2005x.	3302' - 3306'	P/B/TD = 3227'	Comp. = 8/12/76	Producer
Brown JR.	Federal # 1	Chaves Co. NM Sec. 5, T-9-S, R-30-E	8 5/8" @ 275' w/ 2005x.	3302' - 3306'	TD = 3329'	Drilled = 11/25/76	Sam Andres
Brown JR.	Federal # 1	Chaves Co. NM Sec. 5, T-9-S, R-30-E	8 5/8" @ 264' w/ 2205x.	3282' - 3316'	P/B/TD = 3329'	Comp. = 12/1/76	Producer
Brown JR.	Federal # 1	Chaves Co. NM Sec. 5, T-9-S, R-30-E	8 5/8" @ 264' w/ 2205x.	3282' - 3316'	TD = 3320'	Drilled = 8/12/76	Sam Andres
Brown JR.	Federal # 1	Chaves Co. NM Sec. 5, T-9-S, R-30-E	4 1/2" @ 3329' w/ 2205x.	3279' - 3308'	P/B/TD = 3345'	Comp. = 8/12/76	Producer
Brown JR.	Federal # 1	Chaves Co. NM Sec. 5, T-9-S, R-30-E	4 1/2" @ 3329' w/ 2205x.	3279' - 3308'	TD = 3450'	Drilled = 8/12/77	Sam Andres
Brown JR.	Federal # 1	Chaves Co. NM Sec. 5, T-9-S, R-30-E	8 5/8" @ 254' w/ 1505x.	3267' - 3292'	P/B/TD = 3416'	Comp. = 9/19/77	Producer
Brown JR.	Federal # 1	Chaves Co. NM Sec. 5, T-9-S, R-30-E	8 5/8" @ 254' w/ 1505x.	3267' - 3292'	TD = 3340'	Drilled = 10/6/77	Sam Andres
Brown JR.	Federal # 1	Chaves Co. NM Sec. 5, T-9-S, R-30-E	8 5/8" @ 254' w/ 1505x.	3282' - 3287'	P/B/TD = 3325'	Comp. = 12/21/77	Producer
Brown JR.	Federal # 1	Chaves Co. NM Sec. 5, T-9-S, R-30-E	4 1/2" @ 3340' w/ 1505x.	3282' - 3287'	TD = 3325'	Drilled = 11/25/77	Sam Andres
Brown JR.	Federal # 1	Chaves Co. NM Sec. 7, T-9-S, R-30-E	4 1/2" @ 3355' w/ 1505x.	3282' - 3317'	P/B/TD = 3317'	Comp. = 12/31/76	Producer
Brown JR.	Federal # 1	Chaves Co. NM Sec. 7, T-9-S, R-30-E	8 5/8" @ 325' w/ 2255x.	3282' - 3317'	TD = 3360'	Drilled = 12/9/75	Sam Andres
Brown JR.	Federal # 1	Chaves Co. NM Sec. 8, T-9-S, R-30-E	4 1/2" @ 3364' w/ 2505x.	3239' - 3283'	P/B/TD = 3216'	Comp. = 12/18/75	Producer
Brown JR.	Federal # 1	Chaves Co. NM Sec. 8, T-9-S, R-30-E	4 1/2" @ 3364' w/ 2505x.	3239' - 3283'	TD = 3350'	Drilled = 4/16/76	Sam Andres
Brown JR.	Federal # 1	Chaves Co. NM Sec. 8, T-9-S, R-30-E	4 1/2" @ 3350' w/ 2505x.	3265' - 3334'	P/B/TD = 3313'	Comp. = 5/1/76	Producer
Brown JR.	Federal # 1	Chaves Co. NM Sec. 8, T-9-S, R-30-E	4 1/2" @ 3350' w/ 2505x.	3265' - 3334'	TD = 3333'	Comp. = 5/1/76	Producer

VI. Plugging & venting = Wolfson Oil Co. Marginal L

2310' FNL & 1620' FHL 5' SE. 6 T 7-C.P. 30-E. Cluses Co. NH



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July 1967

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

OF OILS IN TERRITORIES AND
POSSESIONS (SEE INSTRUCTIONS
VERSE SIDE)

Budget Form No. 43-R1424

AMCOB - ARTHUR

NMOCS - WELLS

BLM - SANTA FE

LEASE DESIGNATION AND SERIAL NO.

New Mexico 03-03544-09

6. IF INDIAN, ALLOTTEE OR TRUST LAND

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal-6

9. WELL NO.

10. FIELD AND FOOT, OR WELLSIT

Winters

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

Sec. 6, T-9-S, R-30-E

12. COUNTY OR PARISH 13. STATE

Chaves New Mexico

1. TYPE OF WELL: OIL GAS OTHER

2. NAME OF OPERATOR: H. L. Brown, Jr.

3. ADDRESS OF OPERATOR: 704 Vantage Dr. Amarillo, Texas

4. DEPTH OF WELL (Report location clearly and in accordance with any state requirements. See "APPLICATION FOR PERMIT" form for such proposals.)
330' FSL & 2510' FSL of Sec. 6, T-9-S, R-30-E

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:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACURING 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 Report form.)

17. OPERATIONS 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 October 5, 1967, this well was plugged and abandoned as follows:

- 10 sacks cement at 3258';
- Out off 4-1/2" casing at 2500' (top of cement @ 2550')
- 25 sacks cement at 2500';
- 25 sacks cement at 1350';
- 25 sacks cement at 930';
- 25 sacks cement at 273';
- 10 sacks cement at the surface with 4' 4-1/2" steel marker in place.

Hole was filled with 8.9 mud.

Completed at 8:00 P.M. on October 5, 1967.

Notification will be given when well site has been cleared and conditioned for final inspections.

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

SIGNED

DATE

1967

DATE October 12, 1967

(This space for Federal or State name and title)

APPROVED BY: J. W. SUTHERLAND

DISTRICT ENGINEER

APPROVED BY: [Signature]

DATE OCT 16 1967

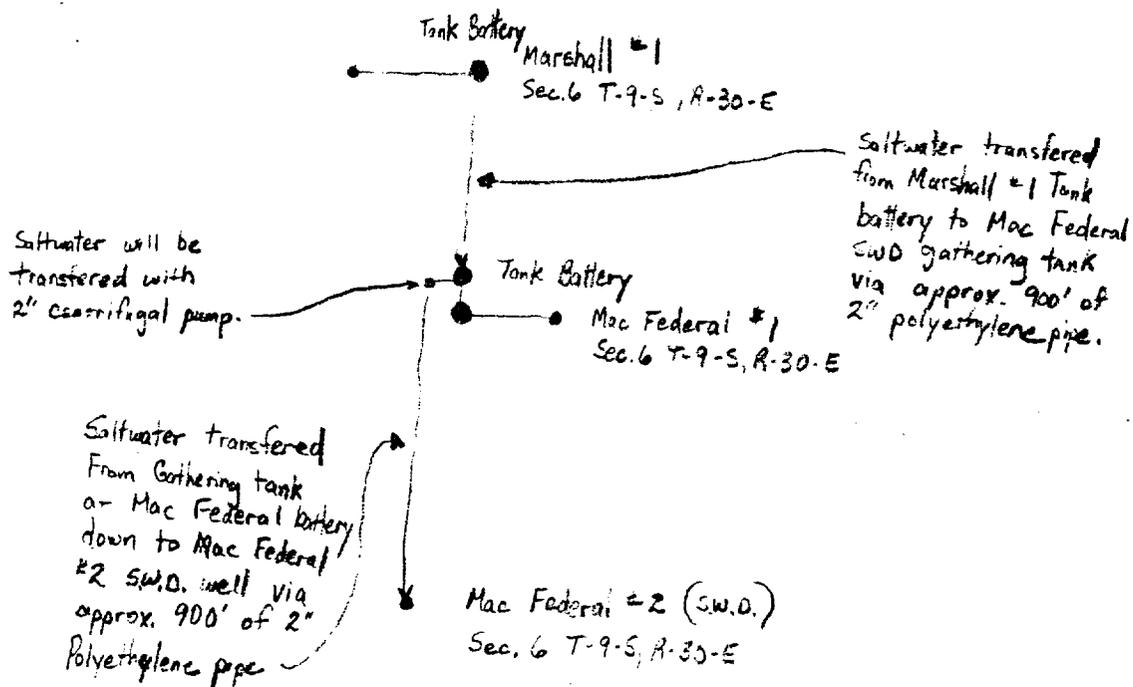
MAY 6 1968
J. W. SUTHERLAND
DISTRICT ENGINEER

NOTICE: INFORMATION ON THIS WELL

FILE NO. 1000 AND 1001
DATE 10/16/67

VIII. DISPOSAL SYSTEM DATA

- (1.) WE PROPOSE TO INJECT A MAXIMUM OF 400 BARRELS OF FLUID PER DAY AT A RATE OF $\frac{1}{2}$ BPM,
- (2.) THIS WILL BE A CLOSED SYSTEM,
- (3.) THE AVERAGE INJECTION PRESSURE WILL BE -0- WITH THE WELL ON A VACUUM. THE MAXIMUM PRESSURE WILL BE 10 #.
- (4.) THE SOURCE OF WATER IS FROM SAN ANDRES FORMATION PRODUCERS, AND SHOULD BE COMPATIBLE WITH WATER IN INJECTION FORMATION.
- (5.) SEE ATTACHMENT, WITH ENCLOSED WATER ANALYSIS.





TRETOLITE DIVISION

369 Marshall Avenue / Saint Louis, Missouri 63119
(314) WO 1-3500/TWX 910-780-1660/Telex 44-2417

WATER ANALYSIS REPORT

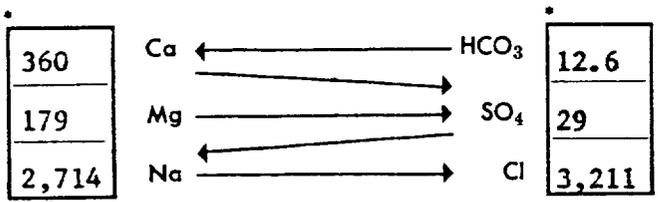
COMPANY Wolfson Oil Company ADDRESS Lovington, N.M. DATE: 2-7-79

SOURCE Mac Federal # 1 Kate Field DATE SAMPLED 2-25-79 ANALYSIS NO. 13755

Analysis	Mg/L	*Meq/L
1. pH	<u>6.17</u>	
2. H ₂ S (Qualitative)	<u>Pos.</u>	
3. Specific Gravity	<u>1.140</u>	
4. Dissolved Solids	<u>187,934</u>	
5. Suspended Solids		
6. Phenolphthalein Alkalinity (CaCO ₃)		
7. Methyl Orange Alkalinity (CaCO ₃)	<u>630</u>	
8. Bicarbonate (HCO ₃)	<u>769</u> ÷ 61	<u>12.6</u> HCO ₃
9. Chlorides (Cl)	<u>114,000</u> ÷ 35.5	<u>3,211</u> Cl
10. Sulfates (SO ₄)	<u>1,375</u> ÷ 48	<u>29</u> SO ₄
11. Calcium (Ca)	<u>7,200</u> ÷ 20	<u>360</u> Ca
12. Magnesium (Mg)	<u>2,187</u> ÷ 12.2	<u>179</u> Mg
13. Total Hardness (CaCO ₃)	<u>27,000</u>	
14. Total Iron (Fe)	<u>2.0</u>	
15. Barium (Qualitative)		
16. Strontium		

*Milli equivalents per liter

PROBABLE MINERAL COMPOSITION



Compound	Equiv. Wt.	X	Meq/L	=	Mg/L
Ca (HCO ₃) ₂	81.04		12.6		1,021
Ca SO ₄	68.07		29		1,975
Ca Cl ₂	55.50		318		17,649
Mg (HCO ₃) ₂	73.17				
Mg SO ₄	60.19				
Mg Cl ₂	47.62		179		8,520
Na HCO ₃	84.00				
Na ₂ SO ₄	71.03				
Na Cl	58.46		2,714		158,769

Saturation Values Distilled Water 20°C

Ca CO ₃	13 Mg/L
Ca SO ₄ • 2H ₂ O	2,090 Mg/L
Mg CO ₃	103 Mg/L

REMARKS Eng. Dept.-Dallas, Eng. Dept.-Midland

(2) Adkins-W. Roberts-Gray-File

Respectfully submitted
TRETOLITE COMPANY

Ray Shaffner

HALLIBURTON DIVISION LABORATORY

HALLIBURTON SERVICES
MIDLAND DIVISION
HOBBS, NEW MEXICO 88240

LABORATORY WATER ANALYSIS

No. W81-042

To Wolfson Oil Company

Date 1-15-81

3206 Republic National Bank Tower

Dallas, Texas 75201

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management; it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Company.

Submitted by [Signature] Date Rec. 1-15-81

Well No. MAC Federal #1 Depth _____ Formation _____

County Lea Field Cato Source _____

Resistivity _____ 0.051 @ 74°F. _____

Specific Gravity _____ 1.141 _____

pH _____ 6.0 _____

Calcium (Ca) _____ 8,700 _____ *MPL

Magnesium (Mg) _____ 1,200 _____

Chlorides (Cl) _____ 129,000 _____

Sulfates (SO₄) _____ 2,400 _____

Bicarbonates (HCO₃) _____ 694 _____

Soluble Iron (Fe) _____ Nil _____

Remarks: The submitted scale sample is 100% Calcium Carbonate,
and is completely acid soluble. *Milligrams per liter

Respectfully submitted,

Analyst: Brewer

HALLIBURTON COMPANY

cc:

By [Signature]
CHEMIST

NOTICE

THIS REPORT IS LIMITED TO THE DESCRIBED SAMPLE TESTED. ANY USER OF THIS REPORT AGREES THAT HALLIBURTON SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, WHETHER IT BE TO ACT OR OMISSION, RESULTING FROM SUCH REPORT OR ITS USE.

VIII. GEOLOGICAL DATA

1. The geological name of the injection formation is the San Andres Dolomite.
2. The San Andres is a hard dense dark brown f-xlyn Dolomite w/ scattered vugs and vertical fractures throughout (See attached core descriptions for more detail.)
3. The approximate thickness of the San Andres interval in this area is 700'.
4. The San Andres top in this area is 2612'. (From WORTH WELL SURVEYS NUCLEAR LOG) The Sub-sea elevation is +1432'.
5. The San Andres interval in this area is known to be productive of oil & gas and is the primary producer of the Cato-San Andres field. It produces from 2 distinct porosity intervals known as the Cato and Milensand intervals.

CORE DESCRIPTION
Sun #6 Woodman-Federal
Chaves County, N. M.

January 8, 1968

Donald R. Young

Midland

Core #1 3350-3400 Cut 50' Rec 46' (The 4' lost is probably 3351-55)

Top 6' brn shly dolo, 60% sat w/peer pore w/few anhy inclu

Bottom 40' brn f-xlyn dn to gran w/fair to good very fine
ppt and interxlyn pore bldg oil throughout and vert frac
throughout

Core #2 3400-3450 Rec 50' being:
2 brn f-xlyn dn dolo bldg O & G
8 same, tite
12 anhy
5 anhy dolo, tite
7 brn f-xlyn dense dolo bldg G-O-W
3 same;vert frac
13 same; tite

Core #3 3450-3491 Rec 41' being:
5 brn f-xlyn dn imy dolo
15 brn f-xlyn dn v-limey dolo
21 brn f-xlyn dn ls
3450-54 sli bldg oil
3461-64 sli bldg W & O
3484-88 vert frac and stained

Donald R. Young

Quanico Oil & Gas, Inc.

203 WEST MAIN ST. P.O. BOX 1714

EL DORADO, ARKANSAS 71730

PHONE (501) 863-7170

XII.

I have examined all available geologic and engineering data available on the proposed disposal zone, and find no evidence of any open faults or other hydrologic connection between this zone and any underground source of drinking water. This statement is backed up by the fact that this zone is productive of oil & gas in all of the surrounding wells.

 4-15-87
Douglas K. Alexander
VICE-President

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. 2. Restricted Delivery.

3. Article Addressed to: Anderson Oil Properties P.O. Box 8307 LA Jolla, CA 92038	4. Article Number P 171 570 430
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail
Always obtain signature of addressee or agent and <u>DATE DELIVERED.</u>	
5. Signature - Addressee X <i>[Signature]</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery	

PS Form 3811, Feb. 1986

DOMESTIC RETURN RECEIPT

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. 2. Restricted Delivery.

3. Article Addressed to: Apollo Energy P.O. Box 5315 Hobbs, NM 88241	4. Article Number P 171 570 626
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail
Always obtain signature of addressee or agent and <u>DATE DELIVERED.</u>	
5. Signature - Addressee X <i>[Signature]</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X <i>[Signature]</i>	
7. Date of Delivery	

PS Form 3811, Feb. 1986

DOMESTIC RETURN RECEIPT

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. 2. Restricted Delivery.

3. Article Addressed to: M.C. Gandy & Dale Gandy P.O. Box 763 Hobbs, NM, 88240	4. Article Number P 171 570 631
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail
Always obtain signature of addressee or agent and <u>DATE DELIVERED.</u>	
5. Signature - Addressee X <i>[Signature]</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery 4-20-87	

PS Form 3811, Feb. 1986

DOMESTIC RETURN RECEIPT

● **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. 2. Restricted Delivery.

3. Article Addressed to: Candy Corporation c/o Oil Reports & Gas Service P.O. Box 755 Hobbs, NM 88241	4. Article Number P 171 570 627
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail
	Always obtain signature of addressee or agent and DATE DELIVERED
5. Signature - Addressee X <i>Allen Dumas</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery 7-20-87	

PS Form 3811, Feb. 1986 DOMESTIC RETURN RECEIPT

● **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. 2. Restricted Delivery.

3. Article Addressed to: Orbit Enterprises P.O. Box 763 Hobbs, NM 88241	4. Article Number P 171 570 628
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail
	Always obtain signature of addressee or agent and DATE DELIVERED
5. Signature - Addressee X <i>Allen Dumas</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery 7-20-87	

PS Form 3811, Feb. 1986 DOMESTIC RETURN RECEIPT

P 171 570 632
RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to	BLM
Street and No.	P.O. Drawer 1857
P.O., State and ZIP Code	Roswell NM 88201
Postage	\$.
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 2.18
Postmark or Date	

* U.S.G.P.O. 1984-446-014 PS Form 3800, Feb. 1982



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
 OIL CONSERVATION DIVISION
 HOBBS DISTRICT OFFICE

GARREY CARRUTHERS
 GOVERNOR

April 20, 1987

POST OFFICE BOX 1980
 HOBBS, NEW MEXICO 88241-1980
 (505) 393-6161

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

RE: Proposed:

MC _____
 DHC _____
 NSL _____
 NSP _____
 SWD XX _____
 WFX _____
 PMX _____

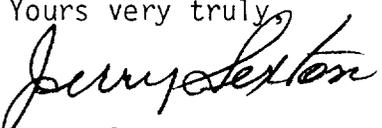
Gentlemen:

I have examined the application for the:

Quanico Oil & Gas Inc.	Mac Federal #2-P	6-9-30
Operator	Lease & Well No. Unit	S-T-R

and my recommendations are as follows:

OK -- Jerry Sexton

Yours very truly,

 Jerry Sexton
 Supervisor, District 1

/ed