

EXXON COMPANY, U.S.A.
POST OFFICE BOX 1600 • MIDLAND, TEXAS 79702-1600

MIDLAND PRODUCTION ORGANIZATION
OPERATIONS INTEGRITY

March 17, 1995

Application for Fluid Injection
New Mexico "S" State, Well No. 104
Lea County, New Mexico

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87504

Exxon Corporation respectfully requests administrative approval of the enclosed application for fluid injection in the subject well. This well has been previously approved administratively for fluid injection into the San Andres formation. We are now seeking approval to inject into the San Andres and Grayburg formation. In support of this request, Form C-108 and its attachments are enclosed. The proof of publication of a legal notice will be forwarded to you as soon as received along with copies of certified mail cards showing proof that the application copies were sent to offset operators and the surface owner.

If you have any questions concerning this application, please call me at 915/688-7871.

Sincerely,



Marsha Wilson
Operations Integrity

/mw
Attachments

c: New Mexico OCD
District I Office
Attn: Jerry Sexton
P. O. Box 1980
Hobbs, N.M. 88240

Offset Operators, Surface Owner

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Exxon Corporation
Address: P. O. Box 1600 Midland TX 79702
Contact party: Marsha Wilson Phone: 915/688-7871
- 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: Marsha Wilson Title Staff Office Assistant
Signature: Marsha Wilson Date: March 17, 1995
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal. Log sent with initial completion report dated 4/46.
- Crosssection showing geologic data for proposed injection interval submitted with original*
DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office. *application dated 3-18-92.

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.

Exxon Corporation		NM "S" State	
OPERATOR	LEASE		
104	1980' FEL 660' FSL	2	225 37E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP RANGE

Schematic

See Attached

Tubular DataSurface Casing

Size 10-3/4 " Cemented with 400 sx.
 TOC Surface feet determined by Used 400% excess
 Hole size 13-3/8"

Intermediate Casing

Size 7-5/8 " Cemented with 1400 sx.
 TOC Surface feet determined by
 Hole size 9-7/8"

Long string

Size 5-1/2 " Cemented with 500 sx.
 TOC 1025 feet determined by temp survey
 Hole size 6-3/4"
 Total depth 5195'

Injection interval

3650 feet to 4220 feet
 (perforated or open-hole, indicate which)

Tubing size 2-3/8 lined with cement lined set in a
 (material)

Baker TSN or Lockset packer at 3830 feet.
 (brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres and Grayburg
- Name of Field or Pool (if applicable) Eunice San Andres (South) Penrose-Skelly (Grayburg)
- Is this a new well drilled for injection? ☐ Yes ☒ No
 If no, for what purpose was the well originally drilled? Oil production in the San Angelo formation
- 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) Perfed 5050-5180' and plugged back by setting a CIBP @ 4955' capped w/30' cmt; perfed 3890-4220' and plugged by setting CIBP @ 4020' w/10' cmt cap, set add'l CIBP @ 3880' w/40' cmt cap; perfed 3660-3808'
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.
Underlying - Glorieta @ 4985 (Paddock pool)
Overlying - Queen not productive

SUPPLEMENT TO APPLICATION FOR AUTHORIZATION TO INJECT
NEW MEXICO "S" STATE #104
API #30-025-09954

- V. Map is attached.
- VI. Attached are wellbore sketches and tabular data on wells within the area of review.
- VII. Proposed Operations
1. Average daily rate - 200 BPD
Maximum daily rate - 700 BPD
Volume of fluids to be injected - 400,000 Bbls
 2. System is open.
 3. Average injection pressure - 200 psig
Maximum injection pressure - 775 psig
 4. The source of water that will be disposed of is from the Blinebry, Drinkard, Tubb, Abo, and Granite Wash pools. The water is being produced from wells in the Exxon operated New Mexico "S" State lease, located in Section 2, T-22-S, R-37-E. This salt water is already being disposed into the San Andres formation through a commercial well; therefore, there should be no compatibility problems. Additionally, water is trucked from the Exxon-operated Paddock Unit, Hardison, S State, V State, Penrose, G State, and Eumont Gas Com #1 leases.
 5. NA
- VIII. The proposed interval for injection (3650-4750) in the New Mexico "S" State #104 is a porous and permeable zone within the San Andres & Grayburg dolomite and limestone.

	Top	Base
Grayburg	3650 (SS-288)	3825 (SS-463) (top of San Andres) 175' thickness
San Andres	3825 (SS-463)	4985 (SS-1623) (top of Glorieta) 1160' thickness
Total Thickness 1335'		

The San Andres interval is stratigraphically equivalent to existing injection in the Warren Petroleum, Eunice Plant #161 (Sec. 3/T22S/R37E), the Agua, #C-2 State SWD (Sec. 2/T22S/R37E) and the Exxon New Mexico "S" State WS #4 (Sec. 2/T22S/R37E). Injected fluids will be confined by impermeable limestones and anhydrite that occur at the base of the overlying Queen formation and at the base of the San Andres formation. No updip pathways or open faults are known to exist that would provide a connection with fresh water intervals near the surface. (cross section attached)

Fresh water in this area occurs in formations above the Salado salt and anhydrite. The top of the anhydrite/salt at this location is approximately 2350'. This unit also serves as an effective barrier between injected fluids and fresh water zones near the surface. No fresh water occurs below the proposed injection zone.

- IX. Proposed stimulation program on Exxon New Mexico S State #104 SWD
 - 1. Add perforations at 3680-3825 and 4220-4750.
 - 2. Acidize perfs with 15% HCL using balls to divert.
 - 3. Clean wellbore and prepare to inject.
- X. Logs sent with initial completion report dated 4/46.
- XI. Chemical analysis on 3 fresh water wells within one mile of the proposed disposal well are included.
- XII. There are no indications of open faults or other hydrological connections between the proposed disposal interval and the shallower fresh water zones.
- XIII. A signed statement of mailing of notice is attached, along with proof of publication.

RESULT OF WATER ANALYSES

TO: Ms. Trisha Plemons LABORATORY NO. 39287
P. O. Box 3116, Midland, TX 79701 SAMPLE RECEIVED 3-16-92
RESULTS REPORTED 3-17-92

COMPANY Exxon Company, U.S.A. LEASE New Mexico "S"

FIELD OR POOL BDT

SECTION 3 BLOCK 3 SURVEY 1881 COUNTY LEE STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

- NO. 1 Raw water - taken @ windmill (100 yds S. of Chevron's Rollon Brunson Letter "B" Unit #6.
NO. 2 Raw water - taken @ windmill (200 yds W. of Texaco's Baker "B" Battery #1).
NO. 3 Raw water - taken from water supply well (50 yds N. of John Hendrix Corp. Cessator "L" #2).
NO. 4

REMARKS: Samples taken by Tom Elrod, Martin Water Laboratories, Inc. 3-16-92

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0018	1.0015	1.0026	
pH When Sampled				
pH When Received	7.20	7.21	7.17	
Bicarbonate as HCO ₃	293	281	325	
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	152	172	852	
Calcium as Ca	29	36	168	
Magnesium as Mg	19	20	105	
Sodium and/or Potassium	205	99	342	
Sulfate as SO ₄	233	88	488	
Chloride as Cl	81	47	582	
Iron as Fe	0.04	0.04	0.07	
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	860	570	2,010	
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen				
Hydrogen Sulfide	0.0	0.0	0.0	
Resistivity, ohm-cm at 77° F.	9.06	14.90	3.20	
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Nitrate, as N	1.0	2.0	4.6	

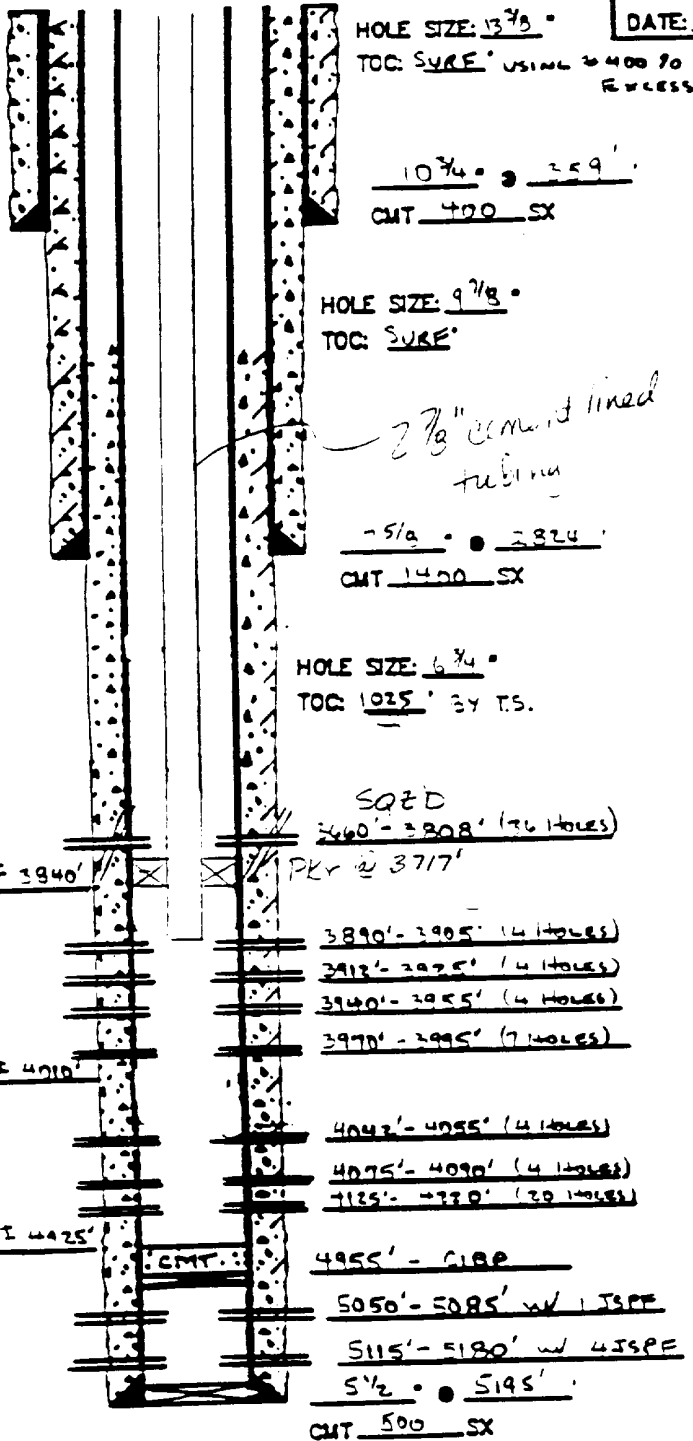
Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

WELL CORE SKETCH AND WELL HISTORY

ELEV.: KB 3363' - 11.4' ABOVE G.H.F.

LEASE & WELL NAME: NEW MEXICO "S" STATE #104
 FIELD: BLINERY-NEWARK-TOWN COUNTY: LEA ST. N. 1
 LOCATION: 1980' FSL 400 FSL SEC-2, T. 22-S.
 R-27 E. 2 MI. SE OF EUNICE, NEW MEXICO
 DATE: 3.25.1991 BY: MAF REV.: BY:



CASING RECORD

SURFACE CASING

O.D.	WT/FT	GRADE	SET AT
10 3/4"	40.5*	14-40	359'
7 5/8"	26.4*	5-90	2824'

PRODUCTION CASING

5 1/2"	14*	14-40	5195'

TUBING

NO. JTS.	O.D.	THD.	TYPE	WT.	GDE.	SET

WELL HISTORY:

4/46 - O.C. - PERF. THE SAN ANGELO FROM 5115' - 5180' w/ 4 ISPE
 IP = 464 BOPD, GOR 495

10/72 - ADDER PERFS IN SAN ANGELO
 PERF 5050' - 5085' w/ 1 ISPE

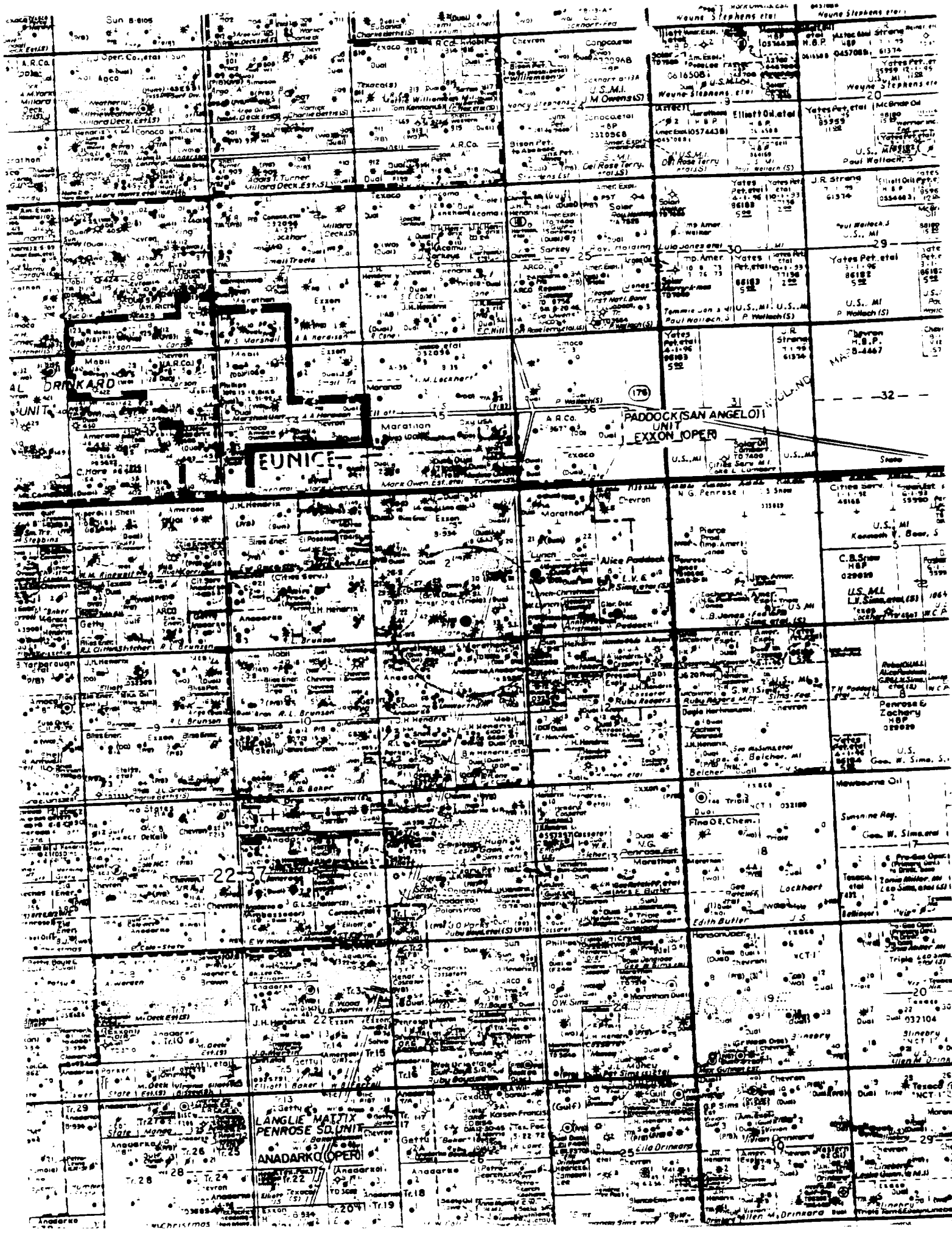
7/72 - PLUG BACK SAN ANGELO, RE-COMP. IN SAN ANGELO. SET CIBP 4955' CAPPED w/ 20' CMT. PERF'D w/ 1 SHOT/S
 3890' - 3905' - 4 SHOTS
 3912' - 3925' - 4 SHOTS
 3940' - 3955' - 4 SHOTS
 3970' - 3995' - 7 SHOTS
 4042' - 4055' - 4 SHOTS
 4075' - 4090' - 4 SHOTS
 4125' - 4220' - 20 SHOTS
 47 SHOTS TOTAL

3/80 - SET CIBP @ 4020' & DUMPED 1 SX (210') CMT ON TOP

8/80 - PLUG BACK SAN ANGELO AND RE-COMPLETE IN GEATOURG; SET CIBP @ 3880' & CAPPED w/ 4 SX (240') CMT. PERF'D FROM 3640' - 3808' w/ 36 HOLES. RIV w/ 1100 JTS. PS. SN. 120 JTS TSG. **THERE MAY BE A TAL IN STRING. **

After conversion

TD: 5195' PBD: 3840'
 ORIG PBD = 5185'



**WELLS WITHIN 1/2 MILE RADIUS OF
NEW MEXICO 'S' STATE #104
T-22-S, R-37-E LEA COUNTY**

WELL NAME	SECT. #	FOOTAGE	DATE DRILLED	DEPTH	COMPLETION (PERFS)	CSG	DEPTH	CMT(SX)
Walter Lynch #2	1	1980 FS, 660 FW	10-13-45	5220	5100-5160	13-3/8" 9-5/8" 7"	337 2854 5170	350 2100 350
Walter Lynch #3	1	660 FS, 660 FW	11-15-45	5220	5120-5180	13-3/8" 9-5/8" 7"	336 2856	250
Walter Lynch #5	1	330 FSL, 330 FWL	7/28/77	7897	7338-66	8-5/8" 5-1/2"	1175 7897	350 1230
Elliott B-12 #1	12	660 FN, 660 FW	4-3-85	5151	4124-4220	13-3/8" 7"	169 5151	150 450
Elliott B-12 #2	12	567 FN, 467 FW	12-12-75	7425	6221-7001 7326-7388	9-5/8" 7"	1150 7425	550 1250
Lou Wortham #5	11	990 FN, 1650 FW	12-20-70	4750	4116-4123	9-5/8" 7"	366 4750	200 450
Lou Wortham #3	11	660 FN, 1800 FW	11-26-61	3950	3742-3784	8 5/8" 5 1/2"	290 3950	225 350
Anadarko #5	11	660 FN, 1980 FW	7-10-46	5165	5087-5165	13-3/8" 8-5/8" 5-1/2"	310 2798 5087	300 3000 500
Lou Wortham #13	11	330 FN, 2080 FW	7-18-75	7390	6244-6339 7115-7211	8-5/8" 4-1/2"	1255 7390	675 1300
Lou Wortham #1-C	11	330 FN, 2310 FE	2-13-70	4700	3870-4186 4023-4186	9-5/8" 7"	354 4700	225 530
Lou Wortham #1-B	11	660 FN, 1980 FE	4-26-46	5150	5090-5150	13-3/8" 8-5/8" 5-1/2"	304 2794 5090	850 4000 500
Anadarko #13	11	330 FN, 1980 FE	12-2-78	7580	6344-6411	9-5/8" 7"	1288 7580	650 2000
Lou Wortham #3-C	11	660 FN, 990 FE	10-15-83	4320	3830-4320	8-5/8" 5-1/2"	302 3830	150 250
Lou Wortham #2-C	11	1878 FN, 2407 FE	5-11-70	4700	3866-4238	9-5/8" 7"	355 4700	250 675
Lou Wortham #1-A	11	660 FN, 660 FE	1-18-46	5147	5095-5147	13-3/8" 8-5/8" 5-1/2"	300 2807 5095	250 300
Lou Wortham #14	11	520 FN, 330 FE	4-22-76	7540	7289-7515	9-5/8" 7"	1265 7540	650 2680
Lou Wortham #19	11	680 FN, 880 FW	2-4-86	7400	6549-7024	9-5/8" 7"	1200 7400	700 1995
Lou Wortham #1	11	660 FNL, 2310 FEL	6-27-66	3820		8-5/8" 5-1/2"	301 3820	200 250

NOTE: See attached wellbore sketches for wells located in Section 2

DATE

2/5/86

WELLCORE
SKETCH

LEAS - WELL : PADDUCK WIT #24

FIELD: PADDUCK

FIELD SUPT: EB TAYLOR

TUBING: SIZE _____ GRADE _____
JTS _____ SET _____

BOTTOM HOLE ARRANGEMENT

DF
ELEV RKB 2370, 13' ABOVE
GL

Well History

2146 PERF 5070-5205
AC W/ 2000 GAL 15% HCL

2159 AC W/ 10,000 GAL 15% HCL

1168 PERF 5055-5070
AC W/ 3000 GAL 5% HCL3/84 CH CIP 4155' up
w/ 35' JMT

CIP W/ 105' 2 3/8" TUB

ILLEGIBLE

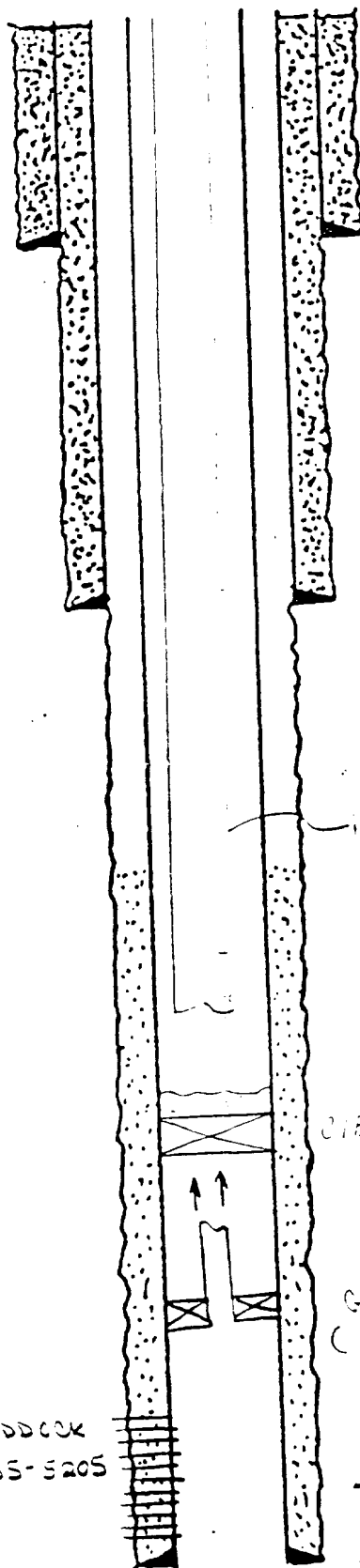
CIP 2 4955' up w/ 35' JMT

2 3/8" TUB (PC)

GUIDERSON ROCKWALL PKR @ 5016
(10 FT TENSION)

5 1/2 4" @ 5209

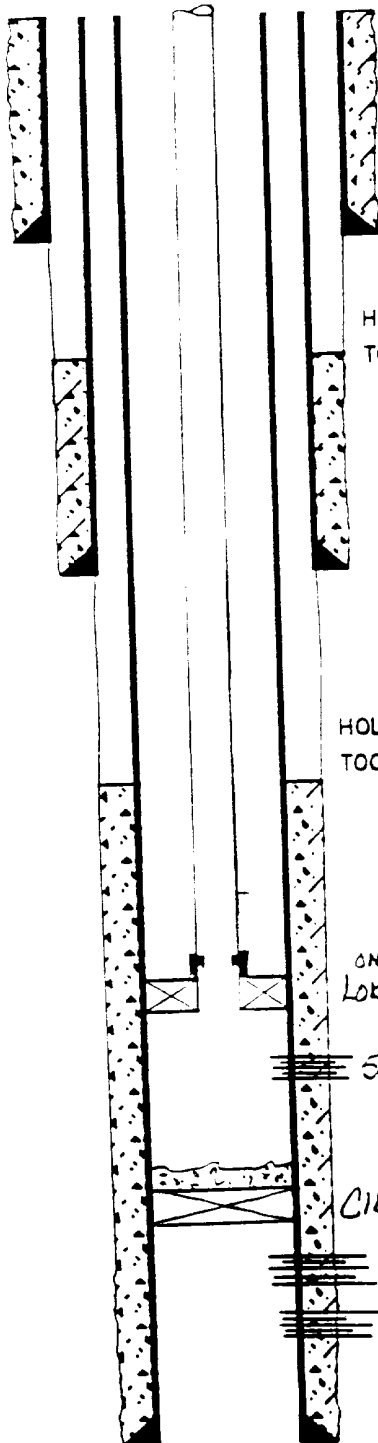
JMT W/ 300 SX TOL 2980 (TS)

PADDUCK
5055-5205

WELLBOR SKETCH AND WELL HISTORY

ELEV.: KB 3364 10 ABOVE 5 1/2" CHE

LEASE & WELL NAME: Paddock Unit #31
 FIELD: Paddock COUNTY: LEA ST.: NM
 LOCATION: 1980' F8L, 660' FEL, SEC 2, T22S, R37E
 DATE: 6-18-91 BY: RS Bose REV.: _____ BY: _____



CASING RECORD

SURFACE CASING

O.D.	WT/FT	GRADE	SET AT
<u>10 3/4</u>	<u>40.5</u>	<u>H-40</u>	<u>342</u>
<u>7 7/8</u>	<u>26.4</u>	<u>5-80</u>	<u>0-2430</u>
	<u>24</u>	<u>H-40</u>	<u>2430-2809</u>

PRODUCTION CASING

<u>5 1/2</u>	<u>14</u>	<u>J-55</u>	<u>0-4693</u>
<u>5 1/2</u>	<u>15.5</u>	<u>J-55</u>	<u>4693-5218</u>

TUBING

NO. JTS.	O.D.	THD.	TYPE	WT.	GDE.	SET AT
	2 3/8	8RD	EUE	4.7	J-55	4990

WELL HISTORY:

11/45 DEC PERF 5090'-5175' (4SPF) AND 5195'-5212' (4SPF). ACIDIZE EACH W/ 2000 GAL 20% HCL.

1/53 ACIDIZE 5090'-5212' w/ 1500 GAL GEL AND 10000 GAL UNISOL ACID

10/59 ACIDIZE 5090'-5212' w/ 10000 GAL ACID USING PAUL SEALERS

AFTER WORKOVER SKETCH

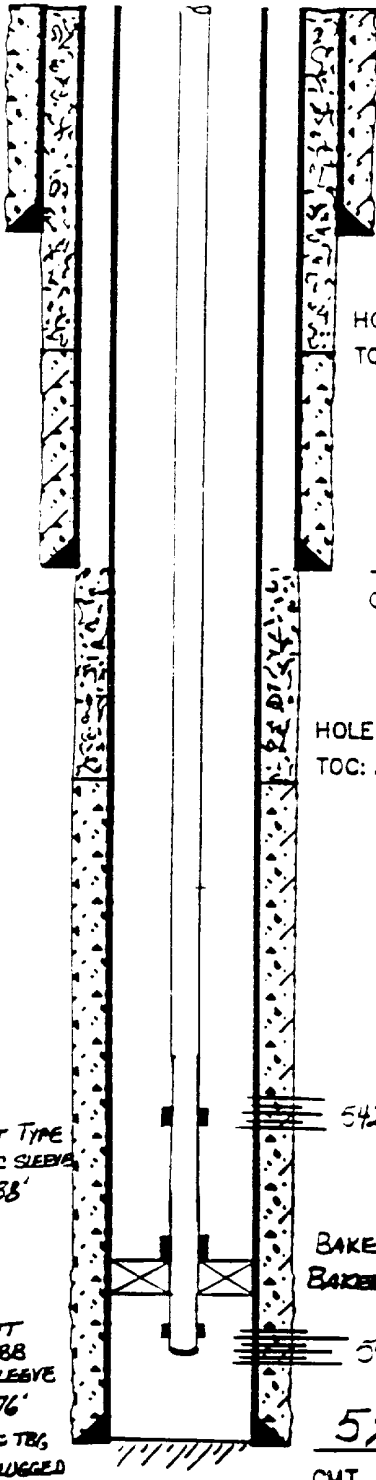
TD: 5220 PBD: 5214

WELL RE SKETCH AND WELL HISTORY

ELEV.: KB 3362 · 12 ABOVE BHF

LEASE & WELL NAME: NEW MEXICO 'S' STATE #23
 FIELD: B-D-T COUNTY: LEA ST.: NM
 LOCATION: 990' FEESL, SEC 2, T22S, R37E

DATE: 5-31-91 BY: RSB REV.: _____ BY: _____



HOLE SIZE: 13 3/4
 TOC: SURE CIRC 70SX

10 3/4 · 347
 CMT 300 SX

HOLE SIZE: 9 7/8
 TOC: SURE CIRC 60SX

7 7/8 · 2595
 CMT 1050 SX

HOLE SIZE: 6 3/4
 TOC: 2600 (TS)

CASING RECORD

SURFACE CASING

O.D.	WT/FT	GRADE	SET AT
<u>10 3/4</u>	<u>40.5</u>	<u>H-40</u>	<u>347</u>
<u>7 7/8</u>	<u>24</u>	<u>H-40</u>	<u>2595</u>

PRODUCTION CASING

<u>5 1/2</u>	<u>14</u>	<u>J-55</u>	<u>0-552</u>
<u>5 1/2</u>	<u>15.5</u>	<u>J-55</u>	<u>5528-6200</u>

TUBING

NO. JTS.	O.D.	THD.	TYPE	WT.	GDE.	SET AT
<u>196</u>	<u>2 3/8</u>	<u>REG</u>	<u>EUE</u>	<u>4.7</u>	<u>J-55</u>	<u>6110</u>

WELL HISTORY:

4/55 DEC PERF 5996'-6011' 6023'-48' 6060'-118'
6128'-46' 6154'-85' (2SPF), ACIDIZ W/
3000 GAL & 9000 GAL 15%.
PERF RUNNER 5428'-70' 5490'-5508'
5515'-45' (2SPF), ACIDIZ W/ 500 GALS
MUD ACID AND 3000 GALS 15%.

GARRETT
 TYPE BB
 CIRC SLEEVE
 @ 5538'

5428'-5545' (2SPF) BLINERBY

BAKER RECEPTACLE
 BAKER D-5 PKR @ 5975'

GARRETT
 TYPE BB
 CIRC SLEEVE
 @ 6076'

5996'-6185' (2SPF) TUB

END OF TBG
 BULLPLUGGED

5 1/2 · 6200
 CMT 400 SX

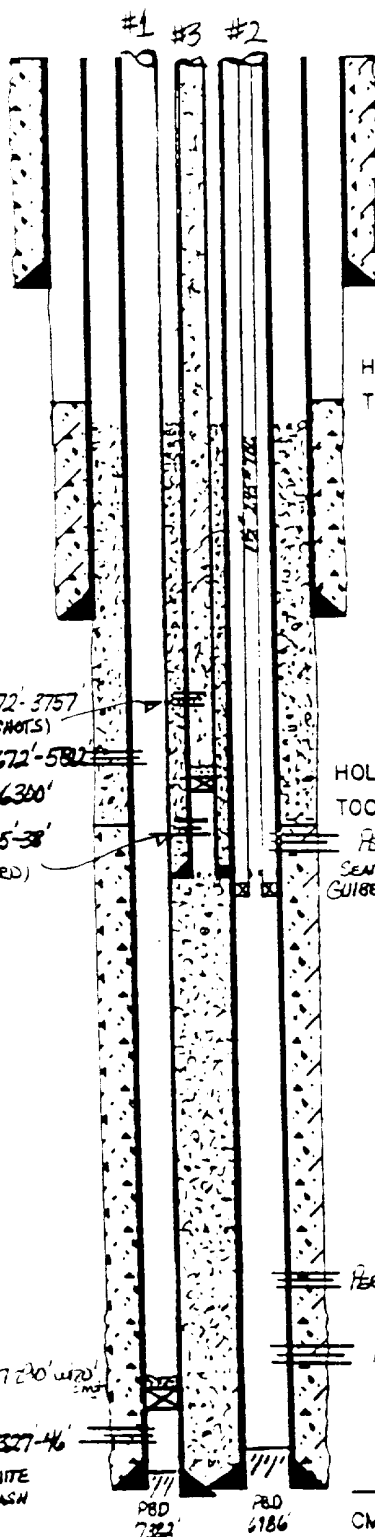
TD: 6200 PBD: 6199

WELL CORE SKETCH AND WELL HISTORY

ELEV.: KB 3367' 11' ABOVE GL

LEASE & WELL NAME: NEW MEXICO 'S' STATE 24
 FIELD: B-D-T COUNTY: LEA ST.: 14
 LOCATION: 1650' FSL, 1980' FEL 3402 T22S R37E

DATE: 2-8-90 BY: RSB REV.: _____ BY: _____



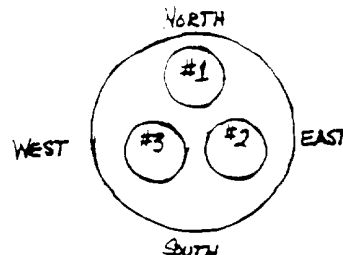
HOLE SIZE: 17 1/2"
 TOC: 325'

13 3/8" • 295'
 CMT 335' SX

HOLE SIZE: 12 1/4"
 TOC: 1600' (TS)

7 5/8" • 245'
 CMT 600' SX

HOLE SIZE: 8 3/4"
 TOC: 1875' (TS)
 PERF 6257'-6428' DENKARD
 SEATING NIPPE
 GIBBERSON KV T&G PER @ 6512'



PERF 6749'-6873' (ABO)

PERF 6880-86' (ABO)

2 7/8" • VARIOUS'
 CMT 1670' SX

CASING RECORD

SURFACE CASING

O.D.	WT/FT	GRADE	SET A
<u>13 3/8"</u>	<u>48</u>	<u>H-40</u>	<u>295'</u>
<u>9 5/8"</u>	<u>32.3</u>	<u>H-40</u>	<u>2645'</u>

PRODUCTION CASING

#1	2 7/8"	6.4	J-55	7405
#2	2 7/8"	6.4	J-55	7404
#3	2 7/8"	6.4	J-55	6506'

TUBING

NO. JTS.	O.D.	THD.	TYPE	WT.	GDE.	SE
<u>#2</u>	<u>203</u>	<u>1 1/2"</u>	<u>10RD</u>	<u>2.45</u>	<u>N-20</u>	<u>6'</u>

WELL HISTORY:

5/63 PERF DENKARD 6425'-6438', PERF ABO 6870'-6884'
 PERF GRANITE WASH 7327'-7346'. SAND FRAC GRIND
 WASH W/4000* ACIDIZE ABO W/1000 GALS. SPT
 ABO W/500X. REPERF 6880-86'. ACIDIZE ABO
 2000 GAL. SPT. REPERF 6880-86'. ACIDIZE W/5000
 ACIDIZE DENKARD W/2200 GAL. FRAC W/10000*
 SET CIBP @ 6300'. PERF GRANITE 3672'-3757'
 HOLES). SAND FRAC W/40000*.

10/63 SAND FRAC ABO W/2500*.

12/67 SAND FRAC GRANITE W/32500*.

3/75 PERF ABO 6749'-6873'. SAND FRAC. PERF 6257'-
 SAND FRAC. RAN TOG PER.

12/91 String #2 P.A.H.
 CMT to surface
 String #1 Set CIBP @ 7390 W/70' CMT
 PERF 5672-5812' (Blindry)
 Frac w/125 bbl 15% HCl w/10000*
 Then swab rods & 5981'

STRING #3 HAS BEEN SET SINCE 4/68

#1 ROD STRING: 2" x 1 1/4" x 12' 1/4" P.H.T., 210-3 1/2" x 25' RODS, 7'
 25' RODS, 22' OF 3/4" SUBS, 16' x 1 1/4" BUSH. KJ.
 1-2' x 3/4" SUB ON TOP OF PUMP

AFTER WORKOVER
 SKETCH

TD: 7411' PBD: _____

WELLBORE SKETCH AND WELL HISTORY

ELEV.: KB 3368 " 11 ' ABOVE GL

LEASE & WELL NAME: NEW MEXICO '8' STATE #25
 FIELD: B-D-T COUNTY: LEA ST.: NM
 LOCATION: 810' ESL, 2130' FWL, Sec 2, T22S, R37E

DATE: 8-1-90 BY: RSB REV.: _____ BY: _____

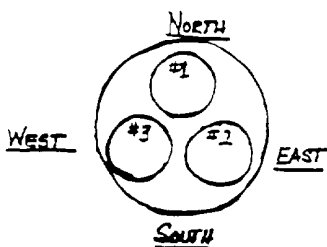
HOLE SIZE: 17 1/2 "
 TOC: 900 ' CIRC CXT

137 1/2 " • 305 '
 CMT 325 SX

HOLE SIZE: 12 1/4 "
 TOC: 1275 '(TS)

95 1/8 " • 2660 '
 CMT 600 SX

HOLE SIZE: 8 3/4 "
 TOC: 1500 '(TS)



PERF 6639'-94' (ISPF)
 PERF 6758'-6846' (ISPF)
 PERF 6877'-81' (ISPF)
 PERF 6884'-97' (ISPF) (ABO)

2 7/8 " • 7393 '
 CMT 1475 SX

AFTER WORKOVER
 SKETCH

CASING RECORD

SURFACE CASING

O.D.	WT/FT	GRADE	SET AT
<u>13 3/8</u>	<u>48</u>	<u>H-40</u>	<u>305</u>
<u>9 5/8</u>	<u>32.3</u>	<u>H-40</u>	<u>2660</u>

PRODUCTION CASING

#2	<u>2 7/8</u>	<u>6.4</u>	<u>J-55 NUC</u>	<u>7393</u>
#3	<u>2 7/8</u>	<u>6.4</u>	<u>J-55 NUC</u>	<u>5456</u>
#1	<u>2 7/8</u>	<u>6.4</u>	<u>J-55 NUC</u>	<u>7393</u>

TUBING

NO. JTS.	O.D.	THD.	TYPE	WT.	GDE.	SET
#3	<u>1 1/2</u>	<u>1020</u>		<u>1.97</u>		<u>381</u>

WELL HISTORY:

7/63 DEC PERF GRAYBURG IN STRING #3 3678'-374
PERF ABO IN STRING #2 6877'-81', 6884'-97' PERF
GRANITE WASH 7306'-18' & 7391'-59'

2/76 SET CIPP IN STRING #1 @ 7250' CAPPED W/35'C
PERF STRING #2 6758'-6846' PERF STRING #1
FROM 6255'-6486' (5320DS) PERF STRING #2
6639'-94'

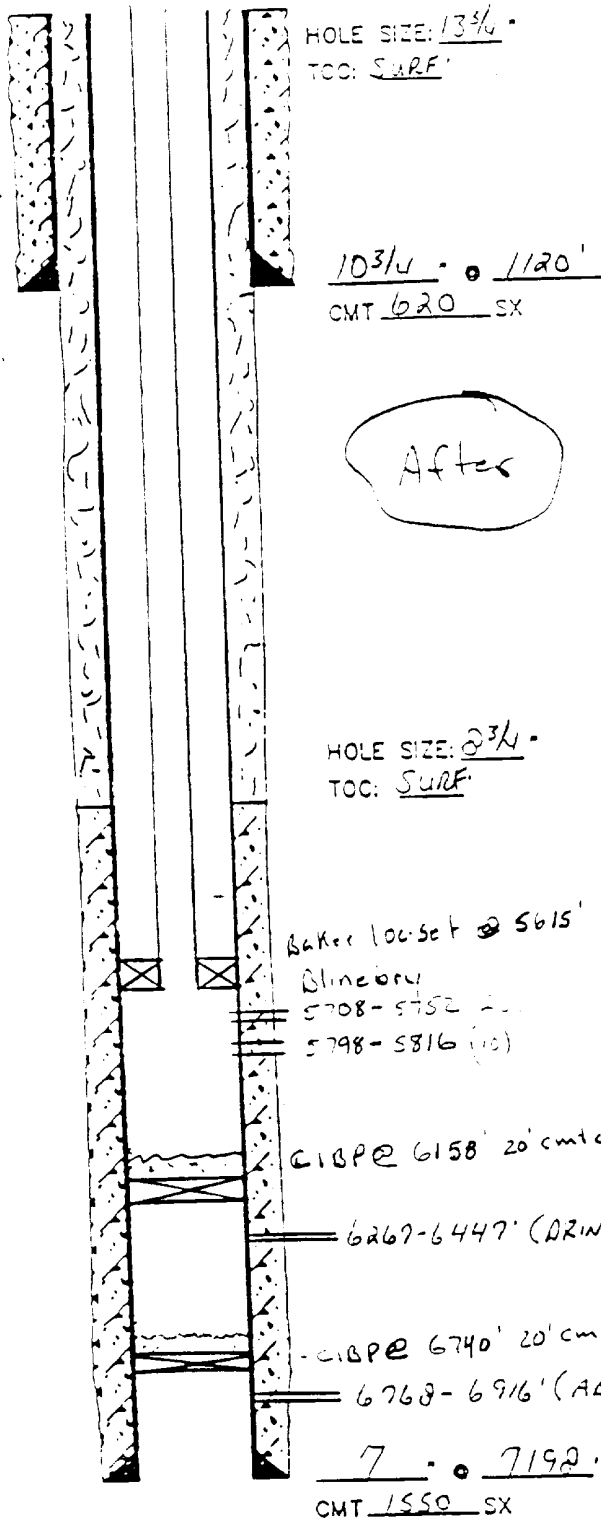
12/91 String #33 cemented 76 bbls
accident - cmt @ surface
P&AID

TD: 7395 ' PBD: _____

WELLBORE SKETCH AND WELL HISTORY

KB 3383 - 15.5' ABOVE

LEASE & WELL NAME: N.M. "C" ST. #28
 FIELD: BDT COUNTY: LEA STATE: NM
 LOCATION: SE/NW SEC. 2. T22S. R37E
 DATE: 11/22/85 BY: RWG REV: 4/17/90 BY: GWM



CASING RECORD

SURFACE CASING

O.D.	WT/FT	GRADE	SET AT
10 3/4"	40.5/41.85	K-55/A	1120'

PRODUCTION CASING

7	23/26	N-80	7192'
---	-------	------	-------

TUBING

NO. JTS.	O.D.	THD.	TYPE	WT.	GCE.	SET AT
184	2 1/8"	3rd	CJF	4.7		5700

WELL HISTORY:

5/76 DEC PERF 6768-916' (47) TRT W/
 12000 GAL K-1 + 13000 GAL 20% HCL
 IP 22180 421 MCF 218W
 PERF 6267-447' (51) TRT W/ 17500
 GAL K-1 + 19,500 GAL 20% HCL
 IP 2400 MCF

7190 Set CIBP @ 6740' capped w/ 20 cmt
 Set AP @ 6155' capped w/ 20 cmt
 Per 5708-5752 (25 ft) 5798-5816
 PPI Acid job w/ 27 bbl acid
 Frac 28735 gals Fluid 60351# 20/40 sand

TD: 7200' PBD: 7067'

WELLBORE SKETCH AND WELL HISTORY

KB 3370 " 16 ' ABOVE GL

LEASE & WELL NAME: NEW MEXICO "S" STATE #30
 FIELD: B-D-T COUNTY: LEA STATE: NM
 LOCATION: 2160' FSL, 690' FEL, SEC 2, TWP 22-S,
R 37E
 DATE: 1-11-91 BY: RJB REV: _____ BY: _____

HOLE SIZE: 13 3/4"
 TOC: SURF CIRC 100SX

10 3/4" @ 1144
 CMT 670 SX

CASING RECORD

SURFACE CASING

O.D.	WT/FT	GRADE	SET AT
<u>10 3/4</u>	<u>51</u>	<u>K-55</u>	<u>1144</u>

PRODUCTION CASING

<u>7</u>	<u>26</u>	<u>N-80</u>	<u>7180'-646</u>
<u>7</u>	<u>26</u>	<u>K-55</u>	<u>6460'-4446</u>
<u>7</u>	<u>23</u>	<u>K-55</u>	<u>4400'-1517</u>
<u>7</u>	<u>23</u>	<u>K-55</u>	<u>1517'-40</u>
<u>7</u>	<u>26</u>	<u>K-55</u>	<u>40'-SURF</u>

TUBING

NO. JTS.	O.D.	THD.	TYPE	WT.	GDE.	SET AT
	<u>2 3/8</u> "					

WELL HISTORY:

10/76 D&C AS DUAL COMPLETION.
 ACIDIZE GRANITE WASH w/ 7000 GALS
 GELLED 15% HCL PERE DRINKARD
6270-79, 6291-96, 6305-08, 6312-20
 (ISPE) ACIDIZE w/ 100 GAL 20% HCL
 FRAC w/ 7500 GAL K-1 PAD, 8500 GAL 20%
 HCL, RUN w/ 1000 R.R. BIT GRANITE
 WASH ON PUMP.

7/91 SET CIBP @ 7140' cap w/ 10' cm.
 SET 6270-6320' DRYF 6538-7108' AL
 HCL 7 w/ 4900 GALS - SXF

DV TOOL @
4084'
 (1400 SX)
 CIRC 10 BBL CMT
 OUT BY FROM STG
 1 JOB.

HOLE SIZE: 8 3/4"
 TOC: 6230' (TS)

PERFS 6270'-6320' (SQZ'D)
 (DRINKARD)

SEATING NIPPLE
 LOK-SET PKR @ 6500' w/ ON-OFF TOOL

6538'-6715' (18 HOLES)
 (ABO)

6784'-6885' (18 HOLES)
 (ABO)

6945'-7108' (18 HOLES)
 (ABO)

CIBP @ 7140' w/ 10' CMT.

7" @ 7180
 CMT 700 SX

2 6 1/4" HOLE
 (GRANITE WASH)

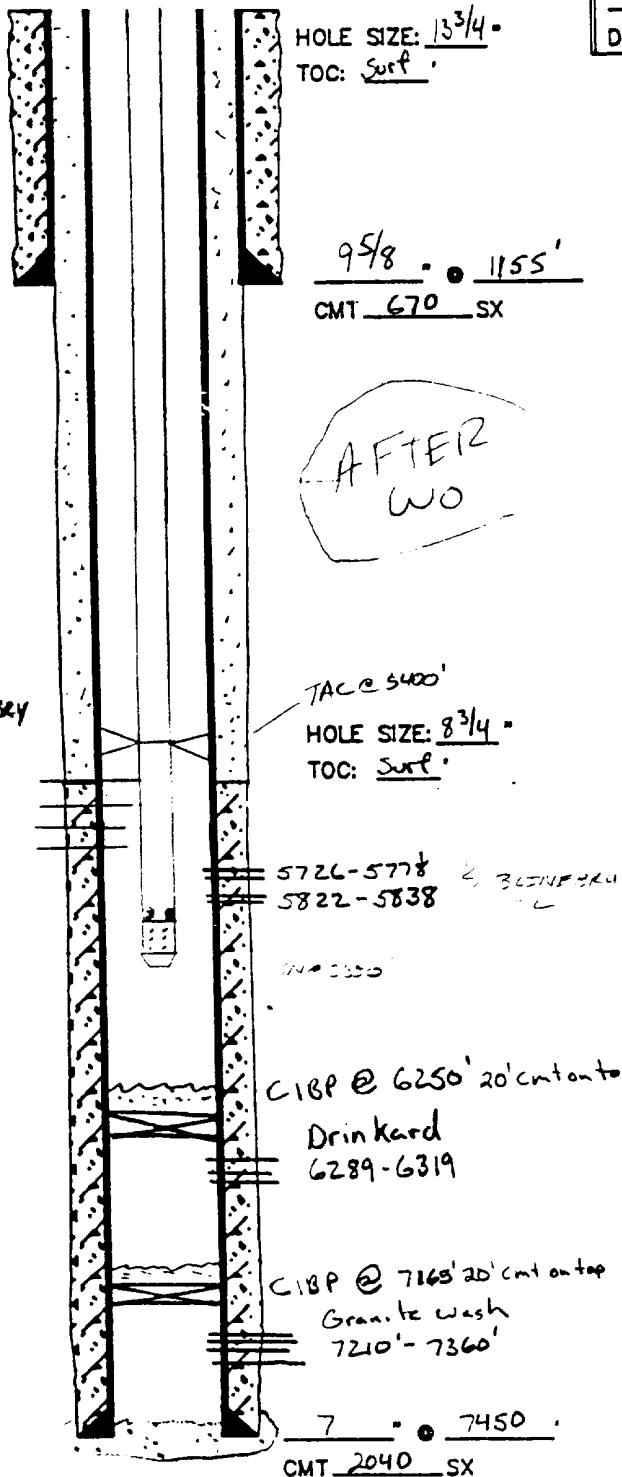
AFTER WORKOVER
 SKETCH

TD: 7610 PBD: 7610

WELLBORE SKETCH AND WELL HISTORY

ELEV.: KB 3375' 16' ABOVE GL

LEASE & WELL NAME: New Mexico "S" state #32
 FIELD: BDT COUNTY: Lea ST: N.M.
 LOCATION: Unit G Sec 2 Twp-22s R6E 37e
 DATE: 4/18/90 BY: HVM REV: PAS BY: 6/3/94



CASING RECORD

SURFACE CASING

O.D.	WT/FT	GRADE	SET AT
9 5/8"	36#	K-55 LTC	1155'

PRODUCTION CASING

O.D.	WT/FT	GRADE	SET AT
7"	20, 23, 26, 29	K-55	7450'
DEF. LOG, LINE FOR TALLY			

TUBING

NO. JTS.	O.D.	THD.	TYPE	WT.	GDE.	SET AT
184	2 3/8"	8rd	EUE	4.7		5700'

WELL HISTORY:

12/76 DFC Completed in Drinkard & GW
 Perf Granite Wash 7210 - 7360'
 Acid w/ 15% HCL, sand oil frac 7279-7360'
 w/ 30,000 gal gelled oil, 34000 # 20-40 sand
 Perf Drinkard 6289 - 6319, Acid frac
 w/ 25000 gal K-1 pad & 20% HCL
 8/90 Set CIBP @ 7165' w/ 20' cnt
 Set CIBP @ 6250' w/ 20' cnt

Perf Blinebry 5726 - 5838' 3000' sand
 Frac 738 bbls slurry, 55000 # 20/40
 PWD 20 Bbl BWI 200 KCF

6/94 Perf 5451-5643
 Frac w/ 169K # sand 1725 bbls 736 KCF

TD: 7450' PBD: 7407' 26# K55 4438 - 6237
 29# 095 6232 - 7450'

WELLBORE SKETCH AND WELL HISTORY

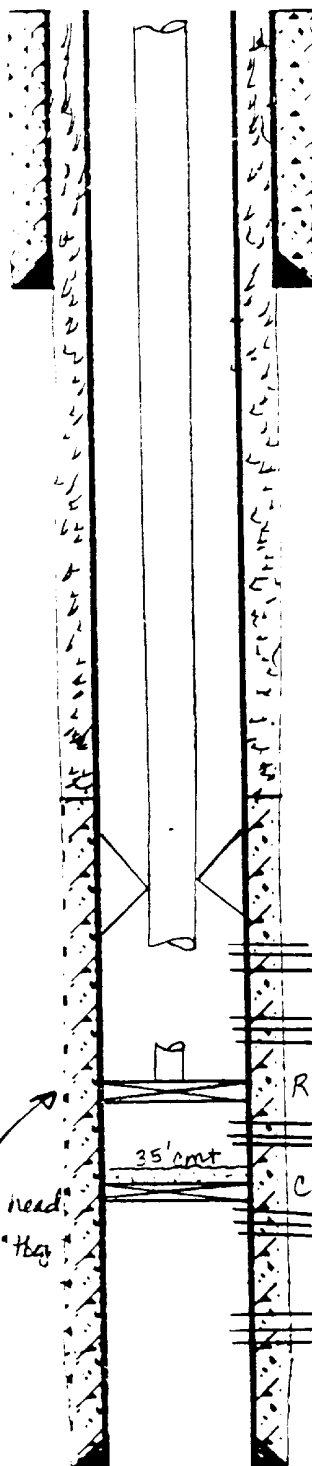
ELEV: KB 3367' ABOVE

LEASE & WELL NAME: NM S State #33

FIELD: B-D-T COUNTY: Lea ST: NM

LOCATION: 380' FSL & 860' FEL, Sec 2
T-22-S, R-37-E

DATE: 1/20/95 BY: TAP REV.: BY:



HOLE SIZE: 10 3/4"

TOC: Surface

10 3/4" @ 1132'

CMT 670 SX
Circ.

HOLE SIZE: 8 3/4"

TOC: Surface

TAC @ 5382'

Blinebury

5403-5557

5668-5788'

RBP @ 5964'

6237-6276' Drinkard

CIBP @ 7050'

7106-7172 Detrital

Granite Wash

7276-7339

7479-7530

7 @ 7680'

CMT 1840 SX

CASING RECORD

SURFACE CASING

O.D.	WT/FT	GRADE	SET AT
10 3/4"	40.5 & 41 B	K 55	1132

PRODUCTION CASING

7"	23 & 24	J 55	7680
----	---------	------	------

TUBING

NO. JTS.	O.D.	THD.	TYPE	WT.	GDE.	SET AT
174	2 3/8"					

WELL HISTORY:

76 - D & C GW Drinkard dual

77 - Sandfrac GW

6/93 - Set CIBP @ 7050' cap w/ 35' cmt
Part 5668-5788' frac 66 K⁵⁵ sd screened out
Part 5403-5557' frac 141 K⁵⁵ sd
IP 147 bopd / 1114 K⁵⁵ sd

TD: 7683' PBD: 7640'

4119190

Lease, Well: NEW MEXICO "S" STATE #34

Elev. 3351'

above

H2S 0 PPM

Field: BDT

Field Supt: McBeE

Tubing Size 2 3/8" Grade

Bottom Hole Arrangement

AFTER
WELLBORE
CONFIGURATION

10 3/4" @ 1138'

Well history:

11/76 D+C DUAL COMP.

Drinkard perfed, free w/ 12,000

gal. K-1 + 13,000 gals 20% HCL

Acidized w/ 2000 gals 7 1/2% HCL

IP = 1105 MCF/DAY

ABO perfed, free w/ 15,000 gal. K-1

+ 16,000 gals. 20% HCL

IP = 12 BLD, 798 MCF/DAY

Granite Wash was tested and
plugged back.

11/90 502 Drinkard Perfs 6216-6266

w/ 75 SXS Perf 6460-6492' Filter

Acid w/ 130,000 gals SAE

Squeezed

6216'-6263'

DRINKARD

Packer @ +/- 6435'

6460-6492

WANTZ ABO

CIBP @ 7500' PBD @ 7465'

7568'-7750'

GRANITE WASH

7" casing @ 7847'

TD @ 7847'

WELL CEMENT, 100% - 100% - 100%

WELL CEMENT, 100% - 100% - 100%

(Exceeds NM's 'SL' #6)

Circ.
124. Drlo. 12 p.

12 3/4" Hole

AFE 31929

Date 11-17-16

Field/Pool Name: Padlock (Cm. L. 1-1-1)

Lease Name/Well No.: Padlock Unit #1

Field Supt. Cost \$

10 3/4" - 40.5' csg.

Tbg. Size 2 3/8 Grade 150

set @ 1700' w/ 1000 sxs.

No. 171 set at 510-2

30 sxs @ 1700' (Circ.)

Bottom Arrangement Bull Plug, 1 Jnt.

9 7/8" Hole

Bottom Arrangement Bull Plug, 1 Jnt.

1220 - T.O.C. by T.S.

RDB Elev 3267, Zero Pt. 14, Ft. Above 0.154, Csg. "Fl.

Loc: Unit J Sec 2 T-22-S R-37.

198 - 3/4" rods

7 7/8", 26.4-# C-30 csg.

6/79 Set CIBP @ 4795' w/ 10 sxs

set @ 2310' w/ 1500 sxs.

Spot 20 sxs plug @ 3800'

20 sxs @ 3300' (Circ.)

20 sxs plug @ 3300'

30 sxs plug @ 1200'

Pulled 5 1/2" csg @ 78

6 3/4" Hole

20 sxs @ 3800'

ILLEGIBLE

CIBP @ 4945' w/ 10 sxs

5010-5025

5025

Sqrd. w/ 50 sxs

5040-5115

PRD. 5150

5120-5204 - Sqrd. w/ 2-50 sxs plug.

5 1/2", # csg.

set @ 5300' w/ 1100 sxs.

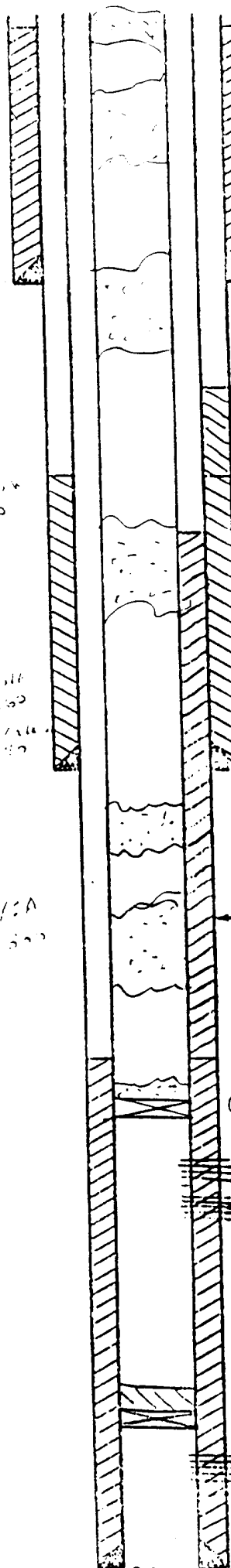
340 sxs meat, 100 sxs 2 1/2" qd.

5210 T.D.

5045-5105

WELL LOG

WELL NAME: _____



10 3/4" Hole
75 sxs @ 885

APR 31969

Date 12-5-78

Field/Pool Name: Eureka Co. Salt Ariduro

Lease Name/Well No.: N M S' State # 72
(Paddock Unit # 44)

Field Supt. _____ Cost \$ _____

10 3/4", 40.5 # 1440 csg.

Tbg. None

Size _____ Grade _____

No. _____ set

Jnts. _____ at _____

set @ 334' w/ 350 sxs.

100 sxs @ 815' (Circ.)

T.O.C. @ 610' by T.S.

Bottom
Arrangement _____

9 7/8" Hole

TOC @ 1350

by T.S.

40 sxs @ 1200'

RDB Elev 336' Zero Ft. Cor. "Flg"
Pt. _____ ' Above _____

Loc: Unit P Sec 2 T. 12.5
12-27-E

7 5/8", 26.4 # S-80 csg.

set @ 2617' w/ 2050 sxs.

20 sxs @ 2867'

9/80 Set CIBP @ 3700' spot 10 sxs

Spot 20 sxs @ 3300'

Pulled 5 1/2" csg @ 165'

20 sxs @ 2867'

40 sxs @ 1200'

100 sxs @ 815'

75 sxs @ 385'

10 sxs @ surface

6 3/4" Hole

20 sxs @ 3300'

ILLEGIBLE

CIBP @ 3700' w/ 100 sxs

3892-3986

4022-82

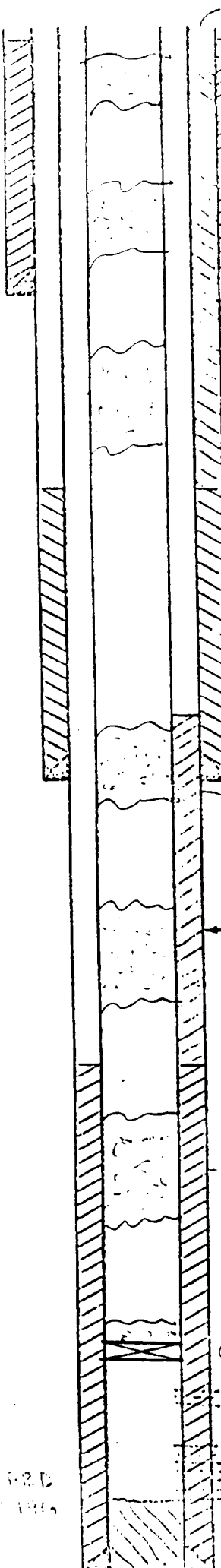
CIBP @ 3700' w/ 100 sxs on top

5075-5175

5 1/2", 14 # S-80 csg.

set @ 335' w/ 400 sxs.

TD Elev



Circ. by Sigs Rep.
10 3/4" Hole
10 SXS @ 360'
30 SXS @ 690'
10 3/4", 40.5 # C-J55 csg.
set @ 311' w/ 230 SXS.
35 SXS @ 1200' (Circ.)
9 7/8" Hole
2700 - TOC by T.S.
7 5/8", 26.4 # S-30 csg.
set @ 3319' w/ 1500 SXS.
20 SXS @ 2820' (Circ.)
6 3/4" Hole
20 SXS @ 3300'
20 SXS @ 3800'
CIBP @ 4950' w/ 10 SXS
5050 - 5060
5072
5176
5 1/2", 14 # W 40 csg.
set @ 5700' w/ 280 SXS.
(100 SXS @ 4950' and 180 SXS @ 5700')

(Exxon's NH'S/S: 4471)

APR 3/93 Date 11-17-73
Field/Tool Name: Paddock (Sigs Rep.)
Lease Name/Well No.: Paddock (Unit # 42)
Field Supt. JCSherrell Cost \$
Tbg. Size 2 3/8 Grade C-40
No. 168 set at 5173 @
Bottom Arrangement Bull Plug Nut, Perri.
Nip, S/N, 167 Jnts, Comb.
Sub 10 V X 8 knl Thrd, Tbg Sub 85.
RDB Elev 3370 Zero Ft. 13 Above Oil Str "Flg"

Loc: Unit N, Sec. 2, T-22-S, R-37E

① Tbg tally 3-20-57
1972 Well Service Report
Shows 203 rods -
5019

6/79 Set CIBP @ 4950' spot 10 SXS
Spot 20 SXS @ 3800'
20 SXS @ 3300'
20 SXS @ 2820'
35 SXS @ 1200'
Pulled 5 1/2" csg at 690'
30 SXS @ 690'
10 SXS @ 360'

RDB
1976

TD 5200

The following were mailed a copy of Form C-108 on March 17, 1995.

OFFSET OPERATORS

Exxon Corporation

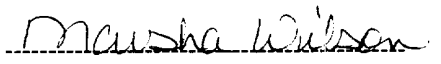
Marathon
P. O. Box 552
Midland, TX 79702

John H. Hendrix Corp.
223 W. Wall, Ste. 525
Midland, TX 79701

ORYX Energy Co.
P. O. Box 2880
Dallas, TX 75221-2880

SURFACE OWNER

William Owen Stephens
P. O. Box 115
Eunice, N.M. 88231


Marsha Wilson
Operations Integrity