

DATE IN 9/18/03	SUSPENSE 10/3/03	ENGINEER DRC	LOGGED IN LR	TYPE WFX	APP NO. PLR0326530792
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ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



### ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

#### Application Acronyms:

**[NSL-Non-Standard Location]** **[NSP-Non-Standard Proration Unit]** **[SD-Simultaneous Dedication]**  
**[DHC-Downhole Commingling]** **[CTB-Lease Commingling]** **[PLC-Pool/Lease Commingling]**  
**[PC-Pool Commingling]** **[OLS - Off-Lease Storage]** **[OLM-Off-Lease Measurement]**  
**[WFX-Waterflood Expansion]** **[PMX-Pressure Maintenance Expansion]**  
**[SWD-Salt Water Disposal]** **[IPI-Injection Pressure Increase]**  
**[EOR-Qualified Enhanced Oil Recovery Certification]** **[PPR-Positive Production Response]**

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☒ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR
- [D] Other: Specify \_\_\_\_\_
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☐ Does Not Apply
- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☒ Offset Operators, Leaseholders or Surface Owner
- [C] ☒ Application is One Which Requires Published Legal Notice
- [D] ☒ Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached
- [3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Mike Markes

Print or Type Name

Signature

South Exploitation Manager

Title

Date

Mike.Markes@meritenergy.com  
 e-mail Address



MERIT ENERGY COMPANY

DRC

13727 Noel Road · Suite 500 · Dallas, Texas 75240  
Ph 972.701.8377 · Fx 972.960.1252 · www.meritenergy.com

September 16, 2003

NMOCD  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Attn : Mr. David Catanach

RE : Application for Authorization to Inject Water  
Grayburg-Jackson Waterflood Project  
Seven Rivers Formation  
Sections 19 & 20, T-17-S, R-31-E  
Eddy County, New Mexico

RECEIVED

SEP 18 2003

OIL CONSERVATION  
DIVISION

Dear Mr. Catanach,

Merit Energy Company respectfully requests administrative approval of the attached C-108 application regarding its existing Grayburg-Jackson waterflood for the purpose of injecting water into the Seven Rivers formation as part of a secondary recovery project. This work will allow Merit to recover additional oil from the Seven Rivers formation. Copies of related Division Order No. R-2268 and Administrative Order No. WFX-700 are attached.

Merit respectfully requests that this application approved administratively at the earliest possible convenience so that operations can be advanced in a prudent manner. If you have any questions concerning the application, please contact me at (972) 628-1579.

Sincerely,

Jason Wacker  
Petroleum Engineer

NMOCD – Artesia  
BLM  
File



### 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 the 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, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

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

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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.

**MERIT ENERGY COMPANY**  
**APPLICATION FOR AUTHORITY TO INJECT**  
**GRAYBURG-JACKSON WATERFLOOD**

III. Well Data

a.

- i. Fren Oil Company #1  
660' FSL & 1980' FEL  
Section 19, T-17-S, R-31-E  
Eddy County, New Mexico
- ii. Surface Casing  
7", 20# @ 507' with 50 sx. TOC @ 100' (calculated).  
Hole size is unknown.  
  
Production Casing  
5-1/2", 17# @ 1850' with 100 sx. TOC @ 480' (calculated).  
Hole size is unknown.
- iii. Tubing will be 2-3/8", 4.7#, J-55, 8rd, EUE, IPC set at 1825'.
- iv. 5-1/2" Baker Model "AD-1" injection packer @ 1825'.

b.

- i. The injection interval will be the Seven Rivers formation in the Grayburg-Jackson field.
- ii. Water injection will be through open-hole 1850' – 2030'. This is the injection interval.
- iii. This well was originally drilled as a Seven Rivers producer.
- iv. No other completions are known to exist in this well.
- v. There are no known upper oil zones. The next lower oil zone is the Grayburg formation at +/-2800', which was not penetrated in this well.

WELL NAME: FREN OIL COMPANY #1			FIELD: GRAYBURG-JACKSON (SEVEN RIVERS)			
LOCATION: 660' FSL & 1980' FEL, SEC 19-T17S-R31E			COUNTY: EDDY	STATE: NM		
ELEVATION: GL=3587'; KB=UNK			SPUD DATE: 6/25/1943	COMP DATE: 8/1/1943		
API#: 30-015-05249		PREPARED BY:	JASON WACKER		DATE: 8/25/2003	
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 507'	7"	20#			
CASING:	0' - 1850'	5-1/2"	17#			
CASING:						
TUBING:	0' - 1825'	2-3/8"	4.7#	J-55	8 RD, EUE, IPO	
TUBING:						



**MERIT ENERGY COMPANY**  
**APPLICATION FOR AUTHORITY TO INJECT**  
**GRAYBURG-JACKSON WATERFLOOD**

III. Well Data

a.

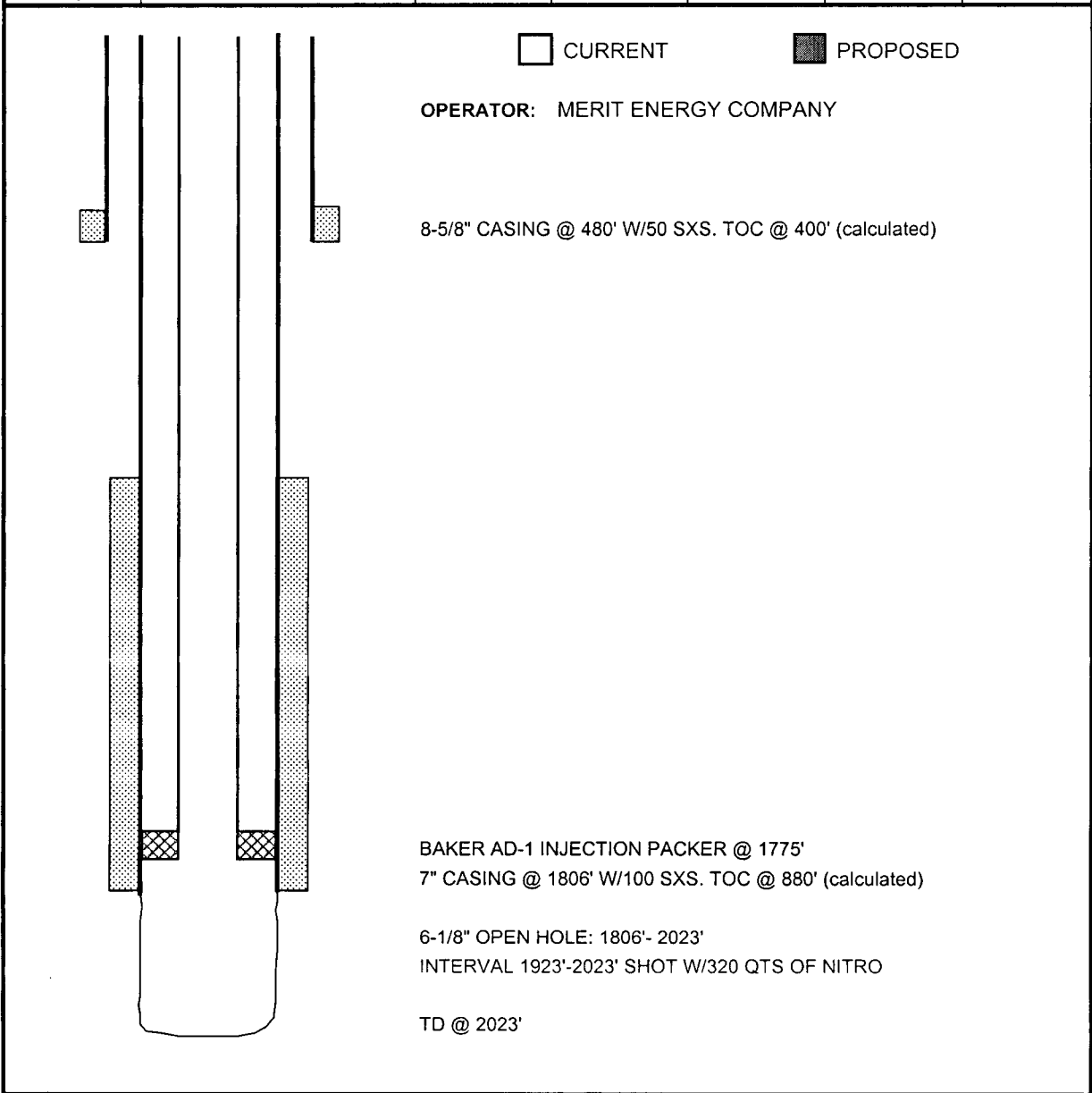
- i. Fren Oil Company #5  
660' FSL & 660' FEL  
Section 19, T-17-S, R-31-E  
Eddy County, New Mexico
- ii. Surface Casing  
8-5/8", 32# @ 480' with 50 sx. TOC @ 400' (calculated).  
Hole size is unknown.  
  
Production Casing  
7", 20# @ 1806' with 100 sx. TOC @ 880' (calculated).  
Hole size is unknown.
- iii. Tubing will be 2-3/8", 4.7#, J-55, 8rd, EUE, IPC set at 1775'.
- iv. 7" Baker Model "AD-1" injection packer @ 1775'.

b.

- i. The injection interval will be the Seven Rivers formation in the Grayburg-Jackson field.
- ii. Water injection will be through open-hole 1806' – 2023'. This is the injection interval.
- iii. This well was originally drilled as a Seven Rivers producer.
- iv. No other completions are known to exist in this well.
- v. There are no known upper oil zones. The next lower oil zone is the Grayburg formation at +/-2773', which was not penetrated in this well.

# MERIT ENERGY COMPANY WELLBORE SCHEMATIC

WELL NAME: FREN OIL COMPANY #5			FIELD: GRAYBURG-JACKSON (SEVEN RIVERS)			
LOCATION: 660' FSL & 660' FEL, SEC 19-T17S-R31E			COUNTY: EDDY	STATE: NM		
ELEVATION: GL=3592'; KB=UNK			SPUD DATE: 1/27/1944	COMP DATE: 2/25/1944		
API#: 30-015-05253		PREPARED BY:	JASON WACKER		DATE: 8/25/2003	
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 480'	8-5/8"	32#			
CASING:	0' - 1806'	7"	20#			
CASING:						
TUBING:	0' - 1775'	2-3/8"	4.7#	J-55	8RD, EUE, IPC	
TUBING:						



OPERATOR: MERIT ENERGY COMPANY

BAKER AD-1 INJECTION PACKER @ 1775'  
7" CASING @ 1806' W/100 SXS. TOC @ 880' (calculated)

TD @ 2023'

NOTE: FOR CALCULATED CEMENT TOPS A YIELD OF 1.32 CU FT/SX AND 50% FILLUP WERE ASSUMED.



## Catanach, David

---

**From:** Jason Wacker [Jason.Wacker@meritenergy.com]  
**Sent:** Friday, December 05, 2003 1:12 PM  
**To:** dcatanach@state.nm.us  
**Subject:** Fren Oil Company #5 Amendment to C-108



Fren Oil Company #5 Well Data ... FREN OIL 5.XLS

David,

Here is the amended Well Data Sheet and Wellbore Diagram for the Fren Oil Company #25. Merit will re-publish public notice in the Carlsbad Current Argus and notify offset operators of the amendment to the permit application. Thanks again!

(See attached file: Fren Oil Company #5 Well Data for C-108 revised.doc)  
(See attached file: FREN OIL 5.XLS)

Jason Wacker  
Merit Energy Company  
13727 Noel Road, Suite 500  
Dallas, Texas 75240

Phone: 972-628-1579  
Fax: 972-701-0351

Fren Oil Company #5 Well Data for C-108 revised.doc;FREN OIL 5.XLS

Addendum

**MERIT ENERGY COMPANY  
APPLICATION FOR AUTHORITY TO INJECT  
GRAYBURG-JACKSON WATERFLOOD**

**III. Well Data**

**a.**

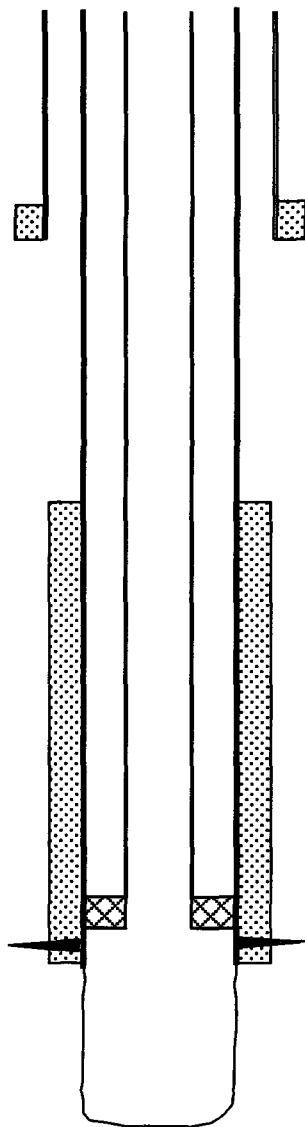
- i. Fren Oil Company #5  
660' FSL & 660' FEL  
Section 19, T-17-S, R-31-E  
Eddy County, New Mexico
- ii. Surface Casing  
8-5/8", 32# @ 480' with 50 sx. TOC @ 400' (calculated).  
Hole size is unknown.  
  
Production Casing  
7", 20# @ 1806' with 100 sx. TOC @ 880' (calculated).  
Hole size is unknown.
- iii. Tubing will be 2-3/8", 4.7#, J-55, 8rd, EUE, IPC set at 1700'.
- iv. 7" Baker Model "AD-1" injection packer @ 1700'.

**b.**

- i. The injection interval will be the Seven Rivers formation in the Grayburg-Jackson field.
- ii. Water injection will be through perforations 1750' – 1790' and open-hole 1806' – 2023'. This is the injection interval.
- iii. This well was originally drilled as a Seven Rivers producer.
- iv. No other completions are known to exist in this well.
- v. There are no known upper oil zones. The next lower oil zone is the Grayburg formation at +/-2773', which was not penetrated in this well.

## MERIT ENERGY COMPANY WELLBORE SCHEMATIC

WELL NAME: FREN OIL COMPANY #5			FIELD: GRAYBURG-JACKSON (SEVEN RIVERS)			
LOCATION: 660' FSL & 660' FEL, SEC 19-T17S-R31E			COUNTY: EDDY	STATE: NM		
ELEVATION: GL=3592'; KB=UNK			SPUD DATE: 1/27/1944	COMP DATE: 2/25/1944		
API#: 30-015-05253		PREPARED BY: JASON WACKER		DATE: 8/25/2003		
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 480'	8-5/8"	32#			
CASING:	0' - 1806'	7"	20#			
CASING:						
TUBING:	0' - 1775'	2-3/8"	4.7#	J-55	8RD, EUE, IPC	
TUBING:						



CURRENT



PROPOSED

OPERATOR: MERIT ENERGY COMPANY

8-5/8" CASING @ 480' W/50 SXS. TOC @ 400' (calculated)

BAKER AD-1 INJECTION PACKER @ 1700'  
SEVEN RIVERS PERFORATIONS 1750' - 1790'  
7" CASING @ 1806' W/100 SXS. TOC @ 880' (calculated)

6-1/8" OPEN HOLE: 1806' - 2023'  
INTERVAL 1923'-2023' SHOT W/320 QTS OF NITRO

TD @ 2023'

NOTE: FOR CALCULATED CEMENT TOPS A YIELD OF 1.32 CU FT/SX AND 50% FILLUP WERE ASSUMED.

**MERIT ENERGY COMPANY**  
**APPLICATION FOR AUTHORITY TO INJECT**  
**GRAYBURG-JACKSON WATERFLOOD**

III. Well Data

a.

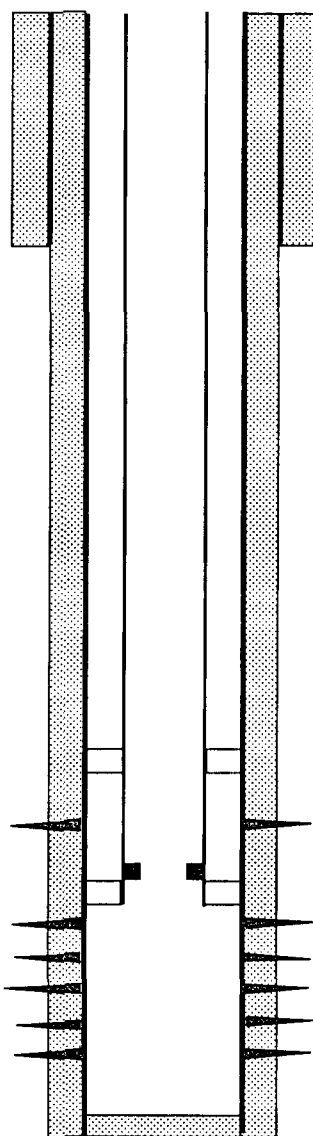
- i. Fren Oil Company #25  
1880' FSL & 410' FEL  
Section 19, T-17-S, R-31-E  
Eddy County, New Mexico
- ii. Surface Casing  
8-5/8", 24# @ 428', cement circulated to surface.  
Hole size is 12-1/4".  
  
Production Casing  
5-1/2", 15.5# @ 3731', cement circulated to surface.  
Hole size is 7-7/8".
- iii. Tubing will be 2-3/8", 4.7#, J-55, 8rd, EUE, IPC set at 2698'.  
An injection mandrel at +/-1950', between the two packers, and  
another mandrel in the lower injection packer will allow injection  
into both the Grayburg and Seven Rivers formations at different  
rates and pressures.
- iv. 5-1/2" Baker Model "TS-1" isolation packer @ 1775'.  
5-1/2" Baker Model "AD-1" injection packer @ 2698'.

b.

- i. The injection interval will be the Seven Rivers formation in the  
Grayburg-Jackson field.
- ii. Water injection will be through perforations 1810' – 2100'. This is  
the injection interval.
- iii. This well was originally drilled as a Grayburg injector.
- iv. The well is currently a Grayburg injector with perforations from  
2762' – 3300'.
- v. There are no known upper oil zones. The next lower oil zone is  
the Grayburg formation at +/-2671', which was penetrated in this  
well.

## MERIT ENERGY COMPANY WELLBORE SCHEMATIC

WELL NAME: FREN OIL COMPANY #25			FIELD: GRAYBURG-JACKSON			
LOCATION: 1880'FSL & 410'FEL, SEC 19-T17S-R31E			COUNTY: EDDY	STATE: NM		
ELEVATION: GL=3614'; KB=3628'			SPUD DATE: 7/17/1997	COMP DATE: 8/14/1997		
API#: 30-015-29537		PREPARED BY: JASON WACKER		DATE: 8/25/2003		
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 428'	8 5/8"	24#	J-55	ST&C	12 1/4"
CASING:	0' - 3731'	5 1/2"	15.5#	J-55	ST&C	7 7/8"
CASING:						
TUBING:	0' - 2697'	2 3/8"	4.7#	J-55	8RD, EUE, IPO	
TUBING:						



CURRENT



PROPOSED

OPERATOR: MERIT ENERGY COMPANY

8-5/8" CASING @ 428' W/725 SXS. CEMENT TO SURFACE.

### DETAIL OF PERFORATIONS

GRAYBURG: 2762', 64'

U.GRAYBURG: 2789', 99', 2821', 28', 30', 32'

M.GRAYBURG: 2852'

LOCO HILLS: 2880', 2903'

METEX: 2918', 28', 30', 55'

L.GRAYBURG: 2996', 3022', 24', 26', 48', 50'

PREMIER: 3079', 93', 3105', 09', 17', 23', 27', 31'

VACUUM: 3171', 3204', 29'

LOVINGTON: 3258', 62', 66', 81', 3300'

BAKER TENSION SET ISOLATION PACKER @ 1775'

NEW SEVEN RIVERS PERFORATIONS 1810' - 2100'

SEVEN RIVERS INJECTION MANDREL @1950'

SEATING NIPPLE WITH GRAYBURG INJECTION MANDREL @ 2697'

BAKER AD-1 PACKER @ 2698'

PERFORATIONS: 2762'- 3300' (OA) - 37 HOLES

PBTD @ 3681'

5-1/2" CASING @ 3731' W/2325 SXS. CEMENT TO SURFACE.

TD @ 3732'

## Catanach, David

---

**From:** Jason Wacker [Jason.Wacker@meritenergy.com]  
**Sent:** Friday, December 05, 2003 1:14 PM  
**To:** dcatanach@state.nm.us  
**Subject:** FREN OIL 25.XLS;Fren Oil Company #25 Well Data for C-108 revised.doc



FREN OIL 25.XLS Fren Oil Company  
#25 Well Data...

David,

Here is the amended Well Data Sheet and Wellbore Diagram for the Fren Oil Company #25. Merit will re-publish public notice in the Carlsbad Current Argus and notify offset operators of the amendment to the permit application. Thanks!

(See attached file: FREN OIL 25.XLS) (See attached file: Fren Oil Company #25 Well Data for C-108 revised.doc)

Jason Wacker  
Merit Energy Company  
13727 Noel Road, Suite 500  
Dallas, Texas 75240

Phone: 972-628-1579

Fax: 972-701-0351

FREN OIL 25.XLS;Fren Oil Company #25 Well Data for C-108 revised.doc

Addendum

**MERIT ENERGY COMPANY  
APPLICATION FOR AUTHORITY TO INJECT  
GRAYBURG-JACKSON WATERFLOOD**

**III. Well Data**

a.

i. Fren Oil Company #25  
1880' FSL & 410' FEL  
Section 19, T-17-S, R-31-E  
Eddy County, New Mexico

ii. Surface Casing  
8-5/8", 24# @ 428', cement circulated to surface.  
Hole size is 12-1/4".

Production Casing  
5-1/2", 15.5# @ 3731', cement circulated to surface.  
Hole size is 7-7/8".

iii. Tubing will be 2-3/8", 4.7#, J-55, 8rd, EUE, IPC set at 1680'.

iv. 5-1/2" Baker Model "AD-1" isolation packer @ 1680'.

b.

i. The injection interval will be the Seven Rivers formation in the Grayburg-Jackson field.

ii. Water injection will be through perforations 1729' – 2050'. This is the injection interval.

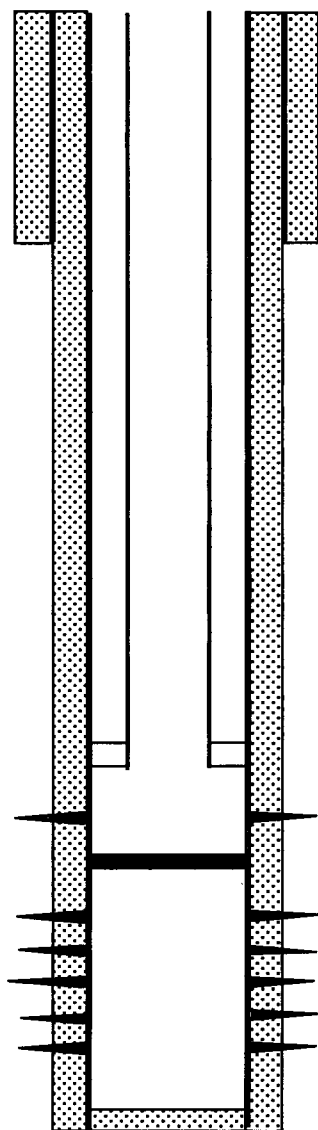
iii. This well was originally drilled as a Grayburg injector.

iv. The well is currently a Grayburg injector with perforations from 2762' – 3300'.

v. There are no known upper oil zones. The next lower oil zone is the Grayburg formation at +/-2671', which was penetrated in this well.

## MERIT ENERGY COMPANY WELLBORE SCHEMATIC

WELL NAME: FREN OIL COMPANY #25			FIELD: GRAYBURG-JACKSON			
LOCATION: 1880'FSL & 410'FEL, SEC 19-T17S-R31E			COUNTY: EDDY	STATE: NM		
ELEVATION: GL=3614'; KB=3628'			SPUD DATE: 7/17/1997	COMP DATE: 8/14/1997		
API#: 30-015-29537		PREPARED BY: JASON WACKER			DATE: 8/25/2003	
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 428'	8 5/8"	24#	J-55	ST&C	12 1/4"
CASING:	0' - 3731'	5 1/2"	15.5#	J-55	ST&C	7 7/8"
CASING:						
TUBING:	0' - 2697'	2 3/8"	4.7#	J-55	8RD, EUE, IPC	
TUBING:						



☐ CURRENT

☒ PROPOSED

OPERATOR: MERIT ENERGY COMPANY

8-5/8" CASING @ 428' W/725 SXS. CEMENT TO SURFACE.

### DETAIL OF PERFORATIONS

GRAYBURG: 2762', 64'

U.GRAYBURG: 2789', 99', 2821', 28', 30', 32'

M.GRAYBURG: 2852'

LOCO HILLS: 2880', 2903'

METEX: 2918', 28', 30', 55'

L.GRAYBURG: 2996', 3022', 24', 26', 48', 50'

PREMIER: 3079', 93', 3105', 09', 17', 23', 27', 31'

VACUUM: 3171', 3204', 29'

LOVINGTON: 3258', 62', 66', 81', 3300'

BAKER AD-1 PACKER @ 1680'

NEW SEVEN RIVERS PERFORATIONS 1729' - 2050'

CIBP @ 2100'

PERFORATIONS: 2762'- 3300' (OA) - 37 HOLES

PBTD @ 3681'

5-1/2" CASING @ 3731' W/2325 SXS. CEMENT TO SURFACE.

TD @ 3732'



## Catanach, David

---

**From:** Jason Wacker [Jason.Wacker@meritenergy.com]  
**Sent:** Monday, December 08, 2003 7:10 AM  
**To:** dcatanach@state.nm.us  
**Subject:** Exception Wells Within AOR

David,

Here is the list of exception wells for each of the four AORs listed in Merit's injection permit application for the Grayburg Jackson waterflood expansion. Thanks!

Fren Oil Co. #25  
Turner A #36  
Fren Oil Co. #12  
~~Max Friess #2~~  
Fren Oil Co. #13

Fren Oil Co. #1  
Fren Oil Co. #3  
Cedar Lake #3Y  
Fren Oil Co. #2  
Fren Oil Co. #12  
~~Max Friess #2~~  
Fren Oil Co. #13

Fren Oil Co. #5  
Fren Oil Co. #2  
Fren Oil Co. #12  
Max Friess #4  
~~Max Friess #2~~  
Fren Oil Co. #13  
Turner B #50

Turner B #12  
Fren Oil Co. #13  
Turner B #44

Jason Wacker  
Merit Energy Company  
13727 Noel Road, Suite 500  
Dallas, Texas 75240

Phone: 972-628-1579  
Fax: 972-701-0351



XI. Chemical Analysis of Fresh Water

There are no known producing fresh water wells within one mile of a proposed injection well.

XII. Affirmative Statement of Open Faults

Upon examination of the available geologic and engineering data, no evidence of open faults or any other hydraulic connection between the injection zone and any underground source of drinking water was found.

XIII. Proof of Notice and Proof of Publication

The Bureau of Land Management is the surface owner. They have been notified by letter with a copy of our application.

Merit Energy Company operates the Grayburg-Jackson Unit in sections 19 & 20, T17S, R31E, Eddy County, New Mexico. Offset operators in the area of review are as follows:

Glen Plemons  
PO Box 113  
Lovington, NM 88260

Hanson Energy  
R 342 S Haldeman Rd  
Artesia, NM 88210

Marbob Energy Corp  
PO Box 227  
Artesia, NM 88211

OXY USA WTP Limited Partnership  
PO Box 4294  
Houston, TX 77210

Premier Oil & Gas, Inc.  
PO Box 1246  
Artesia, NM 88210

Each of the previous operators was provided a letter by certified mail. Proof of notice is attached.

An Affidavit of Publication from the Carlsbad Current-Argus is attached

**WELL LISTING  
HALF MILE AREA OF REVIEW  
GRAYBURG JACKSON WATERFLOOD  
SEVEN RIVERS PILOT PROJECT**

API NUMBER	WELL NAME	WELL NUM	SECTION	TOWNSHIP	RANGE	OPERATOR	STATUS	SPUD DATE	TD
30015052520000	FREN OIL CO	4	19	17S	31E	ARCO	P&A	12/8/1943	2,054
30015052540000	FREN OIL CO	6	19	17S	31E	ARCO	P&A	8/10/1946	2,020
30015052570000	FREN OIL CO	9	19	17S	31E	ARCO	P&A	2/5/1947	3,445
30015054700000	FRIESS, MAX	3	30	17S	31E	ARCO	P&A	7/1/1957	3451
30015052410000	TURNER A	16	19	17S	31E	ARCO	P&A	3/2/1944	1,927
30015052420000	TURNER A	17	19	17S	31E	ARCO	P&A	8/29/1944	1,965
30015052450000	TURNER A	20	19	17S	31E	ARCO	P&A	4/16/1948	1,935
30015052460000	TURNER A	21	19	17S	31E	ARCO	P&A	10/10/1948	1,932
30015052860000	TURNER B	14	20	17S	31E	ARCO	P&A	6/15/1944	2,115
30015052940000	TURNER B	26	20	17S	31E	ARCO	P&A	10/15/1947	2,010
30015052950000	TURNER B	27	20	17S	31E	ARCO	P&A	10/22/1947	2,034
30015052960000	TURNER B	28	20	17S	31E	ARCO	P&A	4/22/1948	1,949
30015053010000	TURNER B	70	20	17S	31E	ARCO	P&A	8/12/1960	7,200
30015054450000	TURNER B	58	29	17S	31E	AVON ENERGY	DRY	7/27/1959	13714
30015052580000	FREN OIL CO	10	19	17S	31E	DEVON ENERGY	P&A	1/6/1947	2,034
30015052680000	FRIESS FEDERAL	2	19	17S	31E	DEVON ENERGY	P&A	7/17/1944	1,970
30015054630000	FRIESS	1	30	17S	31E	GLEN PLEMONS	OIL	9/15/1942	2,058
30015239340000	FRIESS FEDERAL	5	30	17S	31E	GLEN PLEMONS	OIL	-	2,570
30015054770000	CEDAR LAKE	3Y	30	17S	31E	HANSON ENERGY	OIL	6/14/1958	3,423
30015052850000	TURNER B	13	20	17S	31E	HONDO OIL & GAS	P&A	5/29/1944	2,051
30015052870000	TURNER B	15	20	17S	31E	HONDO OIL & GAS	P&A	8/31/1944	1,949
30015052880000	TURNER B	16	20	17S	31E	HONDO OIL & GAS	P&A	11/2/1944	1,974
30015052890000	TURNER B	17	20	17S	31E	HONDO OIL & GAS	P&A	11/12/1944	2,046
30015052720000	STATE BK	2	19	17S	31E	MACK ENERGY	P&A	8/24/1966	2,014
30015052740000	STATE BK	4	19	17S	31E	MACK ENERGY	P&A	6/4/1947	1,998
30015052690000	STATE BK	6	19	17S	31E	MACK ENERGY	P&A	9/20/1962	7,090
30015052620000	FREN OIL CO	16	19	17S	31E	MARBOB ENERGY	P&A	8/24/1961	7,067
30015052630000	FREN OIL CO	17	19	17S	31E	MARBOB ENERGY	P&A	12/11/1961	7,035
30015052650000	FREN OIL CO	19	19	17S	31E	MARBOB ENERGY	OIL	3/12/1962	7,100
30015052660000	FREN OIL CO	20	19	17S	31E	MARBOB ENERGY	P&A	5/27/1962	7,115

**WELL LISTING  
HALF MILE AREA OF REVIEW  
GRAYBURG JACKSON WATERFLOOD  
SEVEN RIVERS PILOT PROJECT**

30015302680000	LEE FEDERAL	2	20	17S	31E	MARBOB ENERGY	OIL	8/15/1998	5,300
30015304240000	LEE FEDERAL	6	20	17S	31E	MARBOB ENERGY	OIL	7/27/1999	5,170
30015304230000	LEE FEDERAL	7	20	17S	31E	MARBOB ENERGY	LOC	N/A	N/A
30015305980000	LEE FEDERAL	8	20	17S	31E	MARBOB ENERGY	LOC	N/A	N/A
30015305110000	LEE FEDERAL	10	20	17S	31E	MARBOB ENERGY	OIL	4/29/2001	5,231
30015326480000	LEE FEDERAL	17	20	17S	31E	MARBOB ENERGY	OIL	4/9/2003	5,191
30015052990000	TURNER B	65	20	17S	31E	MARBOB ENERGY	P&A	3/25/1960	7,497
30015052490000	FREN OIL CO	1	19	17S	31E	MERIT ENERGY	SHUT-IN	6/25/1943	2,040
30015052500000	FREN OIL CO	2	19	17S	31E	MERIT ENERGY	TA	10/2/1943	3,116
30015052510000	FREN OIL CO	3	19	17S	31E	MERIT ENERGY	SHUT-IN	3/12/1944	2,002
30015052530000	FREN OIL CO	5	19	17S	31E	MERIT ENERGY	SHUT-IN	1/27/1944	2,023
30015052550000	FREN OIL CO	7	19	17S	31E	MERIT ENERGY	INJ	10/19/1946	2,023
30015052560000	FREN OIL CO	8	19	17S	31E	MERIT ENERGY	INJ	11/27/1946	1,979
30015052590000	FREN OIL CO	11	19	17S	31E	MERIT ENERGY	SHUT-IN	5/4/1947	2,042
30015052600000	FREN OIL CO	12	19	17S	31E	MERIT ENERGY	INJ	12/14/1954	3,141
30015052610000	FREN OIL CO	13	19	17S	31E	MERIT ENERGY	INJ	3/6/1955	3,336
30015052640000	FREN OIL CO	18	19	17S	31E	MERIT ENERGY	OIL	1/2/1962	7,150
30015288220000	FREN OIL CO	23	19	17S	31E	MERIT ENERGY	OIL	6/12/1996	3,735
30015288550000	FREN OIL CO	24	19	17S	31E	MERIT ENERGY	OIL	7/20/1996	3,610
30015295370000	FREN OIL CO	WI-25	19	17S	31E	MERIT ENERGY	INJ	7/17/1997	3,732
30015052670000	FRIESS FEDERAL	1	19	17S	31E	MERIT ENERGY	P&A	9/18/1941	3,521
30015052350000	FRIESS FEDERAL	3	19	17S	31E	MERIT ENERGY	OIL	5/23/1962	7,085
30015288560000	FRIESS FEDERAL	4	19	17S	31E	MERIT ENERGY	OIL	5/29/1996	3,720
30015297190000	FRIESS FEDERAL	WI-5	19	17S	31E	MERIT ENERGY	INJ	12/6/1997	3,440
30015054590000	FRIESS, MAX	1	30	17S	31E	MERIT ENERGY	INJ	12/14/1943	2,057
30015054690000	FRIESS, MAX	2	30	17S	31E	MERIT ENERGY	INJ	4/26/1957	3,300
30015054710000	FRIESS, MAX	4	30	17S	31E	MERIT ENERGY	INJ	8/26/1957	3,397
30015266560000	FRIESS, MAX	5	30	17S	31E	MERIT ENERGY	OIL	3/12/1991	3,810
30015268820000	FRIESS, MAX	6	30	17S	31E	MERIT ENERGY	OIL	5/5/1992	3,937
30015200970000	TURNER A	35	19	17S	31E	MERIT ENERGY	INJ	12/2/1967	3,635
30015200980000	TURNER A	36	19	17S	31E	MERIT ENERGY	OIL	11/18/1967	3,442

**WELL LISTING  
HALF MILE AREA OF REVIEW  
GRAYBURG JACKSON WATERFLOOD  
SEVEN RIVERS PILOT PROJECT**

30015289170000	TURNER A	47	19	17S	31E	MERIT ENERGY	OIL	5/7/1996	3743
30015288370000	TURNER A	49	19	17S	31E	MERIT ENERGY	OIL	4/15/1996	3,670
30015287720000	TURNER A	50	19	17S	31E	MERIT ENERGY	OIL	2/15/1996	3,775
30015287580000	TURNER A	51	19	17S	31E	MERIT ENERGY	OIL	4/8/1996	3,665
30015052840000	TURNER B	12	20	17S	31E	MERIT ENERGY	TA	3/12/1944	2,022
30015054380000	TURNER B	23	29	17S	31E	MERIT ENERGY	TA	7/13/1946	2,102
30015053100000	TURNER B	41	20	17S	31E	MERIT ENERGY	INJ	5/14/1953	3,455
30015053140000	TURNER B	43	20	17S	31E	MERIT ENERGY	INJ	9/1/1955	3,238
30015053110000	TURNER B	44	20	17S	31E	MERIT ENERGY	INJ	10/30/1955	3,342
30015054370000	TURNER B	50	29	17S	31E	MERIT ENERGY	INJ	10/6/1957	3,375
30015053000000	TURNER B	67	20	17S	31E	MERIT ENERGY	INJ	5/26/1960	7,223
30015201090000	TURNER B	79	20	17S	31E	MERIT ENERGY	OIL	1/3/1968	3,530
30015265950000	TURNER B	89	29	17S	31E	MERIT ENERGY	OIL	12/30/1990	3,800
30015265960000	TURNER B	92	20	17S	31E	MERIT ENERGY	OIL	12/30/1990	3,800
30015266110000	TURNER B	93	20	17S	31E	MERIT ENERGY	OIL	1/18/1991	3,821
30015266120000	TURNER B	95	20	17S	31E	MERIT ENERGY	OIL	1/17/1991	3,700
30015266180000	TURNER B	96	20	17S	31E	MERIT ENERGY	OIL	1/27/1991	3,752
30015266170000	TURNER B	100	20	17S	31E	MERIT ENERGY	OIL	2/9/1991	3,580
30015266950000	TURNER B	101	20	17S	31E	MERIT ENERGY	OIL	6/7/1992	3,857
30015302110000	TURNER B	115	20	17S	31E	MERIT ENERGY	OIL	2/16/1999	3,600
30015289200000	TURNER B	118	20	17S	31E	MERIT ENERGY	OIL	6/18/1996	3760
30015324630000	CHERRY VANILLA	1	19	17S	31E	OXY USA WTP LP	GAS	10/30/2002	11,760
30015321190000	CHOCOLATE MOOSE	1	20	17S	31E	OXY USA WTP LP	DRY	12/20/2001	4,550
30015322630000	CHOCOLATE MOOSE	1-Y	20	17S	31E	OXY USA WTP LP	GAS	1/17/2002	11,736
30015106100000	FREN OIL CO COM	21	19	17S	31E	PREMIER OIL & GAS	TA	3/27/1965	12,299
30015054670000	FRIESS	3	30	17S	31E	SCHUSTER-SCHUST	P&A	2/6/1947	2,033
30015054570000	TURNER B	75	29	17S	31E	SINCLAIR	DRY	11/6/1960	9,900

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

RECEIVED

APR 04 1997

OIL CON. DIV.

DIST. 2

1. Type of Well  
☐ Oil Well ☐ Gas Well ☒ Other Water injection well

2. Name of Operator  
**DEVON ENERGY CORPORATION (NEVADA)**

3. Address and Telephone No.  
**20 NORTH BROADWAY, SUITE 1500, OKLAHOMA CITY, OKLAHOMA 73102 (405)552-4527**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**660' FNL & 660' FWL, Sec. 29-17S-31E**

5. Lease Designation and Serial No.

**LC-029395-B**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

**Turner "B" #50**

9. API Well No.

**30-015-05437**

10. Field and Pool, or Exploratory Area

**Grayburg Jackson**

11. County or Parish, State

**Eddy County, NM**

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

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other Cleaned out, perf'd & acidized

- ☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

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

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

The following work was done on the water injection well:

3/13/97 - Ran bit & scraper to 3340'.

3/14/97 - Perf'd 2914', 2916', 2918', 2946', 2948', 2950', & 2963' w/7 - .49" holes. Acidized 3154'-3320' w/2500 gals 15% HCl acid + 3000# rock salt.

3/15/97 - Acidized 2914'-3085' w/1800 gals 15% HCl acid + 3000# rock salt. Swabbed.

3/17/97 - Ran 7" AD-1 pkr, nickel plated seating nipple & 89 jts 2 3/8" IPC tubing. Set pkr @ 2870'. Tested @ 300 psi for 15 min, OK. Began injecting.

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

Signed Karen Byers

KAREN BYERS  
Title ENGINEERING TECHNICIAN

Date 03/26/97

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Conditions of approval, if any:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Oil and Gas Division  
Office of Oil Conservation  
Bureau of Land Management  
Box 90210-2331

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

APR 08 1997

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

2. Name of Operator  
DEVON ENERGY CORPORATION (NEVADA)

3. Address and Telephone No.  
20 NORTH BROADWAY, SUITE 1500, OKLAHOMA CITY, OKLAHOMA 73102 (405)552-4527

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
450 FSL & 400 FEL, Sec. 18-17S-31E

5. Lease Designation and Serial No.

029395-B

Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Turner "B" #44

9. API Well No.

30-015-05311

10. Field and Pool, or Exploratory Area

Grayburg Jackson

11. County or Parish, State

Eddy County, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Cleaned out, perf'd &amp; acidized</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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

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

The following work was done to the well:

2/17/97 to 2/18/97 - MIRU. POH w/pkr & tbg. RIH w/4 3/4" bit to 3284'. Cleaned out from 3283'-3342'.  
2/19/97 - Ran 5 1/2" scraper to 3342'. Acidized Grayburg perms 3130'-3334' w/3000 gals 15% HCl acid + 4500# rock salt.  
2/20/97 - Perf'd @ 2914'-3279' w/19 holes.  
2/21/97 - Acidized 2914'-3056' w/1450 gals 15% HCl acid & 30 ball sealers.  
2/22/97 - RIH w/4 1/2" AD-1 pkr & 91 jts plastic coated tbg. Set pkr @ 2860'. Ran chart.  
2/24/97 - Began injecting.

14 I hereby certify that the foregoing is true and correct

Signed Karen Byers  
(This space for Federal or State office use)

KAREN BYERS  
Title ENGINEERING TECHNICIAN

Date 03/26/97

Approved by \_\_\_\_\_  
Conditions of approval, if any:

Title

ACCEPTED FOR RECORD

APR 02 1997

Date



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

## 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 <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	7. DEED AGREEMENT NAME
2. NAME OF OPERATOR SINCLAIR OIL & GAS COMPANY	8. FARM OR LEASE NAME Turner "A"
3. ADDRESS OF OPERATOR P. O. BOX 1920, Hobbs, New Mexico 88240	9. WELL NO. 36
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1980' from the East line and 1800' from the North line	10. FIELD AND POOL, OR WILDCAT Grayburg Jackson
5. ELEVATIONS (Show whether DP, ST, GR, etc.)	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 19-T17S-R31E
6. PERMIT NO.	12. COUNTY OR PARISH Eddy
	13. STATE New Mexico

## 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)

FULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) Log, run 7" OD csg. perf. treat &amp; test.

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.)

11-29-67 Ran electric logs.

11-30-67 Ran 7" OD 26#, 23# &amp; 20# J-55 set @ 3450' and cemented w/350 sacks Incor Class C, 4% gel &amp; 100 sacks Incor Class C plus 100 gals. Watex. Temperature survey indicated top of cement @ 1800' from surface. WOC 24 hrs.

12-2-67 Pressure tested casing to 1000# for 30 mins. Tested O.K.

Jet perforated Grayburg Jackson, Premier 2934-41, 2971-73, 2975-80, 3037-40' w/34-3/8" holes. Vacuum 3093-96' w/6-3/8" holes. Jackson 3405-09-11-12-13-15-18' w/14-3/8" holes. Total 54 - 3/8" holes.

12-3-67 Acidized Jackson perfs. 3405-3418' w/750 gals. BDA plus 1000 gals. M.A. in 2 stages w/10 bbl. flush water. Max. Press. 5300#, Min. Press. 5150# @ 1/2BPM. 15" SIP 900#.

12-4-67 Re-acidized Jackson perfs. 3405-18' w/750 gals. BDA Max. Press. 2200#, Min. Press. 1500# @ 4 BPM. ISIP 500#, Vacuum in 1 min.

12-6-67 Acidized Vacuum perfs. 3093-96' w/250 gals. M.A. Max. Press. 1700#, Min. 1700# @ 3 BPM. Acidized Premier perfs. 3037-40' w/250 gals. M.A. Max. Press. 2250#, Min. 1750# @ 3.5 BPM. ISIP 1200#. 5 mins. SIP 850#. Acidized Premier perfs. 2971-2980' w/350 gals. Max. Press. 1850#, Min. 1500# @ 4.2 BPM. ISIP 1000#, 5 mins. SIP 400#. Acidized Premier perfs. 2934-41' w/400 gals. M.A. Max. Press. 1600#, Min. 800#. ISIP 1200#, 5 mins. SIP 750# @ 4 BPM.

12-8-67 Sand Water fraced Grayburg perfs. 2934-3418' w/40,000 gals. gelled water plus 40,000# sand in 4 stages using 66 B.S. Max. Press. 4100#, Min. 3000# @ 32.7 BPM. ISIP 1650#, 10 mins. SIP 1350#. 12 hr. SIP 0#. First New Oil 12-10-67.

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

SIGNED

TITLE

Superintendent

DATE

12-18-67

(This space for Federal or State office use)

APPROVED BY

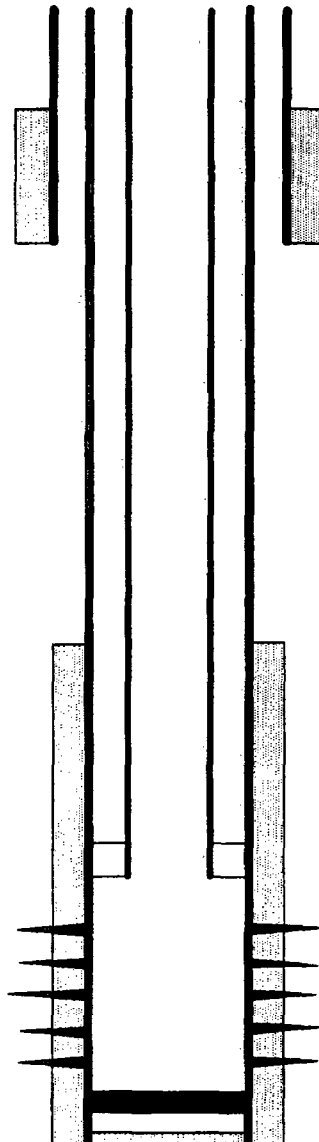
TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

# DEVON ENERGY OPERATING CORPORATION WELLBORE SCHEMATIC

WELL NAME: MAX FRIESS #4			FIELD: GRAYBURG-JACKSON			
LOCATION: 1980'FNL & 660'FEL, SEC 30-T17S-R31E			COUNTY: EDDY			STATE: NM
ELEVATION: GL=3616'; KB=UNK			SPUD DATE: 08/26/57		COMP DATE: 10/06/57	
API#: 30-015-05471		PREPARED BY: C.H. CARLETON			DATE: 10/08/96	
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 614'	10 3/4"	32.75#			
CASING:	0' - 3396'	7"	20#			
CASING:						
TUBING:	0' - 2840'	2 3/8"	4.7#	J-55	EUE 8rd	
TUBING:						



CURRENT



PROPOSED

OPERATOR: DEVON ENERGY OPERATING CORPORATION

10 3/4" CASING, SET W/100 SXS. TOC @ 260'(calc)

BAKER AD-1 PACKER @ 2840'

PERFORATIONS: 2903'- 3390' (OA)

PBTD @ 3390' (milled up CIBP)

7" CASING SET W/100 SXS. TOC @ 2210' (TEMP SURVEY)

TD @ 3397'

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN THE  
(Other instruct  
on re-

Form approved.  
Budget Bureau No. 1004-0135  
Expires August 31, 1985

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 <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	5. LEASE DESIGNATION AND SERIAL NO. LC 065014
2. NAME OF OPERATOR ARCO Oil and Gas Company	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR P.O. Box 1610, Midland, Texas 79702	7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 660 FNL & 660 FEL (Unit A)	8. FARM OR LEASE NAME Max Friess MA
	9. WELL NO. 2
	10. FIELD AND POOL, OR WILDCAT Fren Seven Rivers
	11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA 30-17S-31E
14. PERMIT NO. API#30-015-05469	12. COUNTY OR PARISH Eddy
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 3599 GR	13. STATE NM

FEB 10 1986

O. C. D.

ARTESIA, OFFICE

Check Appropriate Box To Indicate Nature of Notices, Reports, 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) Recomplete to Fren Seven Riv

(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.)

- 1-10-86: RU PU. WL set CIBP @ 3050. Dump 35' cmt on top. Test to 500#.  
Ran pipe rec log f/2410-surf. TOC @ 2366. Ran vertilog f/3005-surf. Ind pipe in good cond.
- 1-13-86: Perf 4 hole @ 2150'. Set FBRC @ 2094'. Press ann to 500#. EIR 3 BPM @ 1800#. Pmpd 65 bbl - could not bring to surf. Pmpd 15 bbl down surf. Set CR @ 2094. Cmdt w/125 sx "H". Standing press 1800#. Ran TS ind TOC @ 2030'. Perf'd 7" csg @ 1800' w/4 holes. Set CR @ 1750. Cmdt w/125 sx "H" Neat. SP 1500#.
- 1-15-86: DO cmt & CR f/1745-1815.
- 1-16-86: Press test to 600#. CO to TOC @ 2080. Perf seven rivers @ 1985, 90, 96, 97, 98, 99, 2000, 2012 - 2022, 33, 34, 35 (21 holes). Acddz w/ 2000 gal 15% NEFE. Swb load. RIH w/tbg, rods & pump. RDPV.
- 1-23-86 thru 1-30-86. Test production 0 BO, 4 BW Per/day.
- 1-30-86: Shut in pndg eval.

ACCEPTED FOR RECORD

FEB 7 1986

CARLSBAD, NEW MEXICO

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

915-684-0312

SIGNED Ken W. Gosnell

TITLE Engr. Tech. Spc.

DATE 2-4-86

(This space for Federal or State office use)

APPROVED BY

TITLE

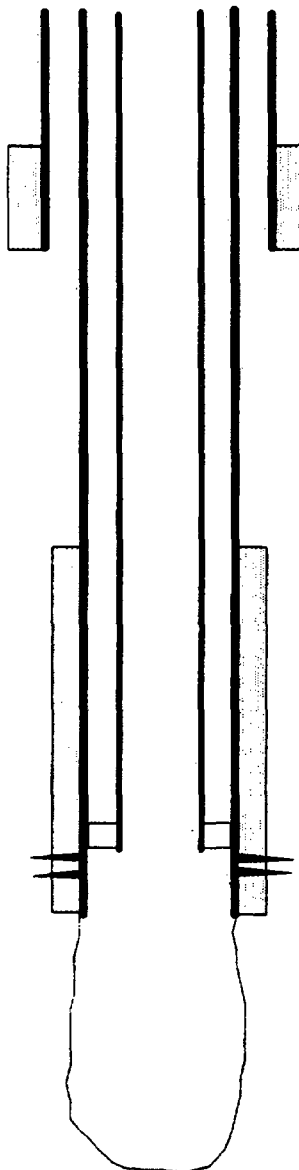
DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

# DEVON ENERGY OPERATING CORPORATION WELLBORE SCHEMATIC

WELL NAME: FREN OIL COMPANY #13			FIELD: GRAYBURG-JACKSON				
LOCATION: 660°FSL & 710°FEL, SEC 19-T17S-R31E			COUNTY: EDDY			STATE: NM	
ELEVATION: GL=3594'; KB=UNK			SPUD DATE: 03/05/55		COMP DATE: 06/13/55		
API#: 30-015-05261		PREPARED BY: C.H. CARLETON				DATE: 10/08/96	
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE	
CASING:	0' - 514'	8 5/8"	28#			10"	
CASING:	0' - 3194'	7"	20#	J-55		8"	
CASING:							
TUBING:	0' - 2971'	2 3/8"	4.7#	J-55	8rd		
TUBING:							



CURRENT



PROPOSED

OPERATOR: DEVON ENERGY OPERATING CORPORATION

8 5/8" CASING, SET W/75 SXS. TOC @ 390'(calc)

BAKER AD-1 PACKER @ 2971'  
PERFORATIONS: 3044'- 3186' (OA)  
7" CASING SET W/150 SXS. TOC @ 1980'

OPEN HOLE COMPLETION: 3194'- 3337'

PBTD @ 3333'  
TD @ 3337'

NOTE: FOR CALCULATED CEMENT TOPS A YIELD OF 1.32 CU FT/SX AND 50% FILLUP WERE ASSUMED.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

N.M. Cons. Division  
311 S. 1st St.  
Albuquerque, NM 87102-2834

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

1. Type of Well  
☐ Oil Well ☐ Gas Well ☒ Other Water Injection well

2. Name of Operator  
**DEVON ENERGY CORPORATION (NEVADA)**

3. Address and Telephone No.  
**20 NORTH BROADWAY, SUITE 1500, OKLAHOMA CITY, OKLAHOMA 73102 (405) 235-3611**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**610' FSL & 1980' FEL, Sec. 19-17S-31E**

5. Lease Designation and Serial No.

**LC-031844**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

**Fren Oil Co. #12**

9. API Well No.

**30-015-05260**

10. Field and Pool, or Exploratory Area

**Grayburg Jackson**

11. County or Parish, State

**Eddy County, NM**

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

TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input checked="" type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Other	<input type="checkbox"/> Dispose Water

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

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

This well was converted to a water injection well as follows:

11/4/97 to 11/10/97 - Cleaned out to 3200' (TD). Ran CBL & found TOC @ 1894'. -

11/11/97 to 11/13/97 - Acidized open hole 3080'-3200' w/3250 gals 15% HCl acid & 1500# rock salt.  
Perf'd Grayburg 2785'-3030' w/23 - .40" holes. Acidized perms 2785'-3030' w/2825 gals 15% HCl acid.

11/15/97 - Ran AD-1 pkr & 89 jts 2 3/8" IPC tubing to 2721'. Tested to 300 psi for 30 min, OK.

12/3/97 - Began injecting.

*Perf'd ID-3  
7-77-98  
TOC @ 1894'*

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

Signed Karen Byers  
(This space for Federal or State office use)

Karen Byers  
Title Engineering Technician

Date 12/5/97

Approved by \_\_\_\_\_  
Conditions of approval, if any:

Title \_\_\_\_\_

Date \_\_\_\_\_

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-104A  
March 19, 2001

Submit 1 copy of the final affected wells  
list along with 1 copy of this form per  
number of wells on that list to appropriate  
District Office

**Change of Operator**

**Previous Operator Information:**

OGRID: 013837  
Name: Mack Energy Corporation  
Address: P.O. Box 960  
Address:  
City, State, Zip: Artesia, NM 88211-0960

**New Operator Information:**

Effective Date: 5/1/03  
New Ogrid: 009946  
New Name: Warren Hanson dba Hanson Energy  
Address: R342 S. Haldeman Rd.  
Address:  
City, State, Zip: Artesia, NM 88210

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the attached list wells is true and complete to the best of my knowledge and belief.

New Operator

Signature: Warren Hanson

Printed name: Warren Hanson

Title: Owner

Date: 5/14/2003 Phone: 505-746-2262

Previous operator complete below:

Previous Operator: Mack Energy Corporation

Previous OGRID: 013837

Signature: Crissa D. Carter

Printed Name: Crissa D. Carter

NMOCD Approval

Signature: Jim W. Gurn

Printed Name: District Supervisor

District: \_\_\_\_\_

Date: MAY 29 2003

30-015-05477

Submit 5 Copies  
Appropriate District Office  
DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

RECEIVED

SEP 01 1992

Form C-104  
Revised 1-1-89  
See Instructions  
at Bottom of Page

REQUEST FOR ALLOWABLE AND AUTHORIZATION  
TO TRANSPORT OIL AND NATURAL GAS

O. C. D.  
STATE OFFICE

I.

Operator Mack Energy Corporation ✓	Well API No.
Address P.O. Box 276, Artesia, NM 88210	
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)	
New Well <input type="checkbox"/>	Change in Transporter of: <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Effective 8/1/92
Change in Operator <input checked="" type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>
If change of operator give name and address of previous operator Marbob Energy Corporation, P. O. Drawer 217, Artesia, NM 88210	

II. DESCRIPTION OF WELL AND LEASE

Lease Name Cedar Lake	Well No. 3Y	Pool Name, including Formation Grbg Jackson SR Q Grbg SA	Kind of Lease State, <del>LEASE</del> <del>LEASE</del>	Lease No. B-3627
Location Unit Letter D : 330 Feet From The north Line and 731 Feet From The west Section 30 Township 17S Range 31E, NMPM, Eddy County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Texas-New Mexico Pipeline Co	Address (Give address to which approved copy of this form is to be sent) P.O. Box 2528, Hobbs, NM 88240					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> Conoco, Inc.	Address (Give address to which approved copy of this form is to be sent) 10 Desta Drive West, Midland, TX 79705					
If well produces oil or liquids, give location of tanks.	Unit D	Sec. 30	Twp. 17S	Rge. 31E	Is gas actually connected? Yes	When ?

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Dif Res'
Date Spudded	Date Compl. Ready to Prod.		Total Depth			P.B.T.D.		
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay			Tubing Depth		
Perforations						Depth Casing Shoe		

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
			Perked ID 3
			9-11-92
			Big CP

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

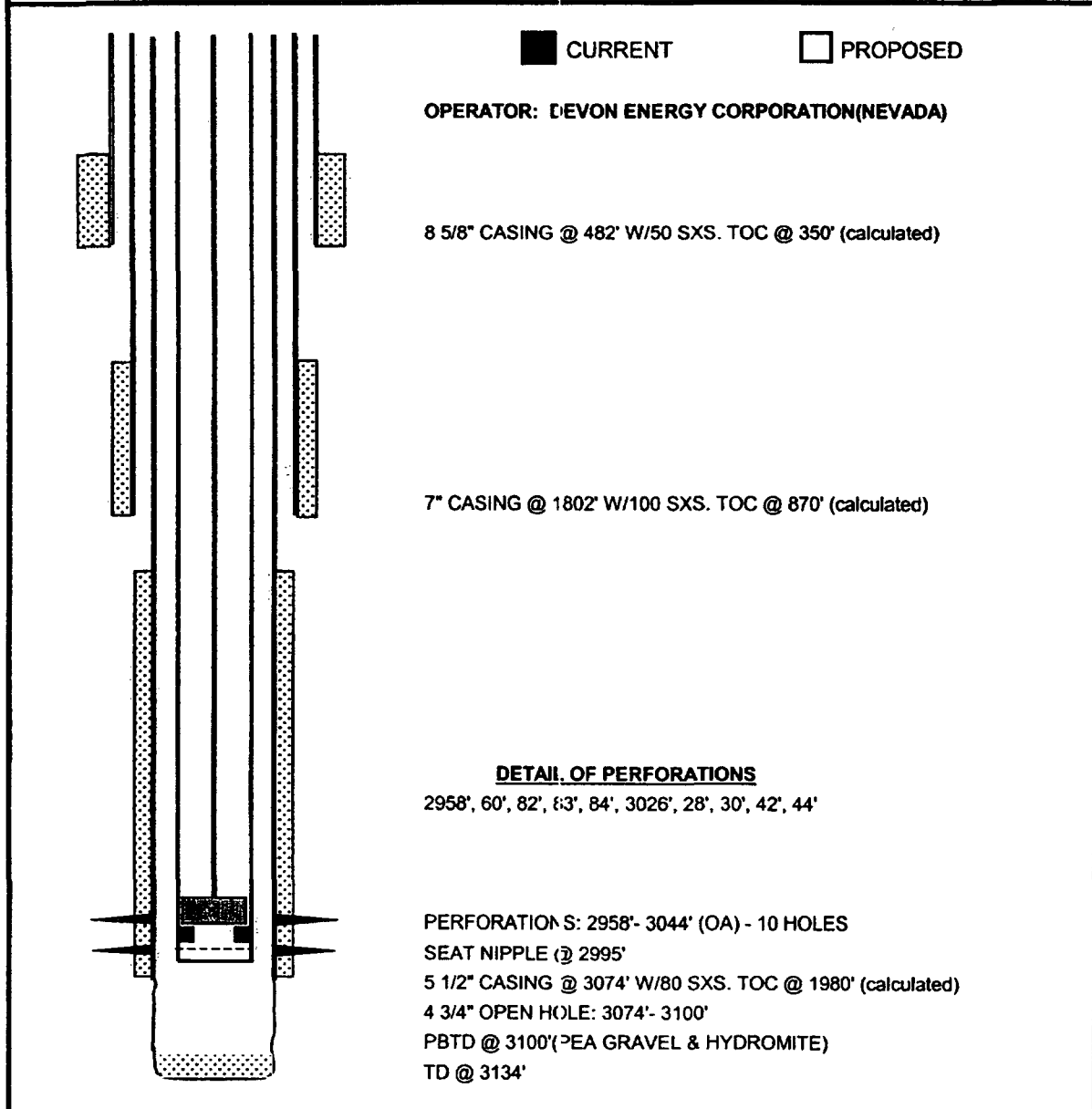
Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Producing Method (init. back nr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

## DEVON ENERGY CORPORATION WELLBORE SCHEMATIC

WELL NAME: FREN OIL COMPANY #3			FIELD: GRAYBURG-JACKSON			
LOCATION: 1980' FSL & 1980' FWL, SEC 19-T17S-R31E			COUNTY: EDDY			STATE: NM
ELEVATION: GL=3610'; KB=UNK			SPUD DATE: 03/12/44		COMP DATE: 04/15/44	
API#: 30-015-05251		PREPARED BY: C.H. CARLETON			DATE: 05/03/99	
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 482'	8 5/8"	24#			
CASING:	0' - 1802'	7"	20#			
CASING:	0' - 3074'	5 1/2"	15.5#	J-55		
TUBING:	0' - 3030'	2 3/8"	4.7#	J-55	EUE 8rd	
TUBING:						



NOTE: FOR CALCULATED CEMENT TOPS A YIELD OF 1.32 CU FT/SX AND 50% FILLUP WERE ASSUMED.



District I  
1635 N. French Dr., Hobbs, NM 88240  
District II  
811 South First, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-104A  
August 11, 2000

Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 87505

Submit 1 Copy of the final affected wells  
list along with 2 copies of this form per  
number of wells on that list to  
appropriate District Office

### Change of Operator

#### Previous Operator Information:

OGRID: 6137  
Name: Devon Energy Production Company, L.P.  
Address: 20 N. Broadway, Suite 1500  
Address: \_\_\_\_\_  
City, State, Zip: Oklahoma City, Oklahoma 73102-8260

#### New Operator Information:

Effective Date: 07/01/2002  
New Ogrid: 14591  
New Name: Merit Energy Company  
Address: 12222 Merit Drive, Suite 1500  
Address: \_\_\_\_\_  
City, State, Zip: Dallas, Texas 75251

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the attached list of wells is true and complete to the best of my knowledge and belief.

New Operator  
Signature: Arlene Valliquette

Printed Name: Arlene Valliquette

Title: Manager - Regulatory Affairs

Date: 06/27/2002 Phone: (972)701-8377



#### Previous operator complete below:

Previous  
Operator: Devon Energy Production Company, L.P.  
Previous  
OGRID: 6137  
Signature: [Signature]  
Printed  
Name: Bradley Foster-Operations Mngr

NMOCD Approval	
Signature:	<u>Jim W. [Signature]</u>
Printed Name:	<u>District Supervisor</u>
District:	_____
Date:	<u>SEP 17 2002</u>

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

It is necessary that Form C-104 be approved before this form can be approved an an initial allowable be assigned to any completed Oil or Gas well. Submit this form in QUADRUPLICATE.

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION  
TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Fren Oil Company Lease Max Fries  
Address 208 Mills Bldg., El Paso, Texas  
(Local or Field Office) (Principal Place of Business)  
Unit N, Well (S) No. 2, Sec. 19, T. 17S, R. 31E, Pool Premier  
County Eddy Kind of Lease Government  
If Oil well Location of Tanks SW/4 SE/4 Sec. 19-17S-31E  
Authorized Transporter Texas - New Mexico Pipe Line Company Address of Transporter  
Lees Mills, New Mexico Box # 1510, Midland, Texas  
(Local or Field Office) (Principal Place of Business)  
Per cent of Oil or Natural Gas to be Transported 100% Other Transporters authorized to transport Oil or Natural Gas  
from this unit are None  
%

REASON FOR FILING: (Please check proper box)

NEW WELL ☒ CHANGE IN OWNERSHIP ☐  
CHANGE IN TRANSPORTER ☐ OTHER (Explain under Remarks) ☒

REMARKS:

This well, originally producing from the Fren Pool, was deepened to the Premier pay, to a total depth of 3116 feet.  
Ran 3065 feet of 5 1/2" casing and cemented with 75 sacks of cement, up and into 7" casing.

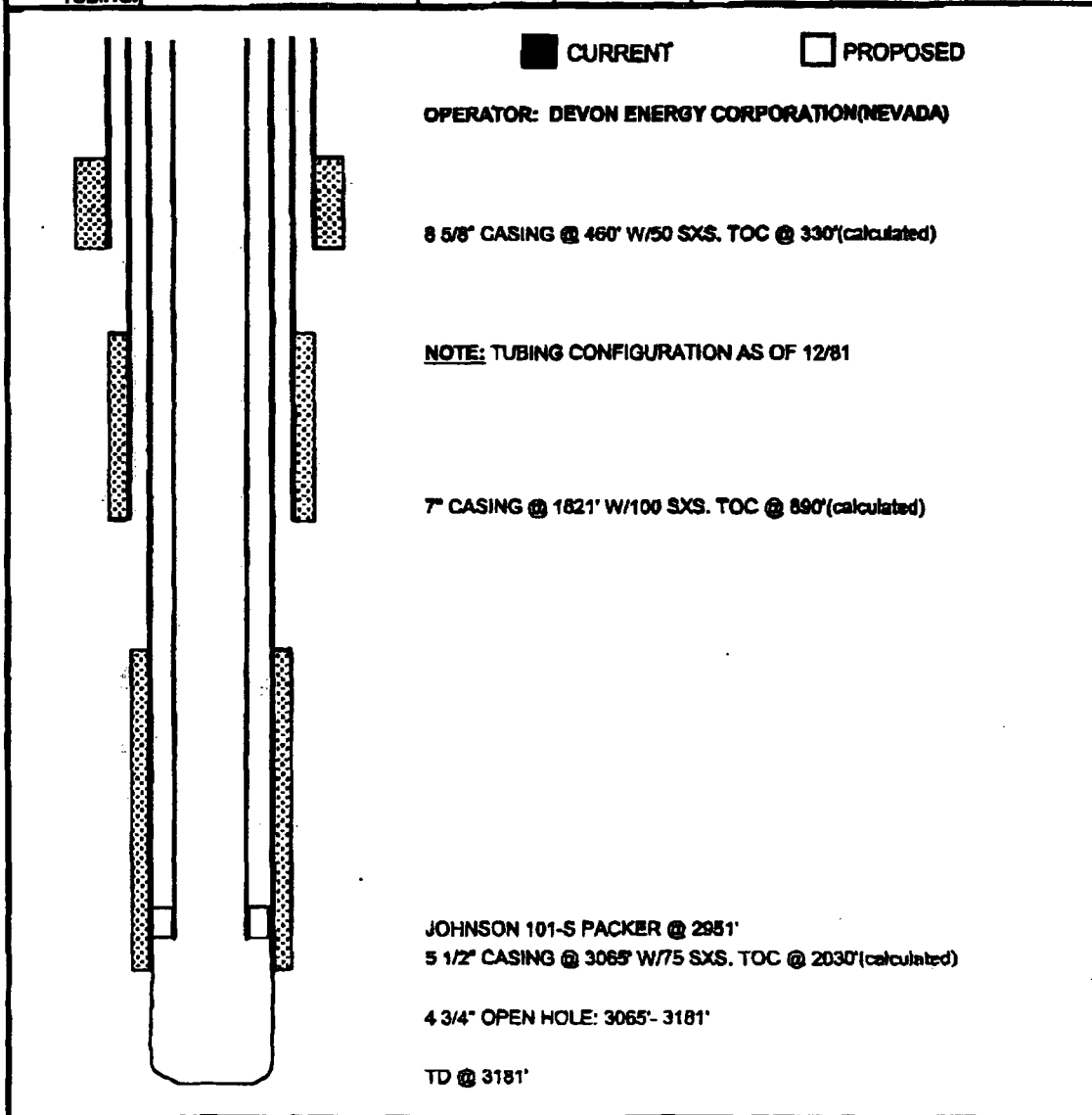
The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 2nd day of December, 1954

Approved \_\_\_\_\_, 19\_\_\_\_  
OIL CONSERVATION COMMISSION  
By L. G. Johnson Title Partner  
By Max Enginger Title Partner  
Title \_\_\_\_\_

## DEVON ENERGY CORPORATION WELLBORE SCHEMATIC

WELL NAME: FREN OIL COMPANY #2			FIELD: GRAYBURG-JACKSON			
LOCATION: 860FSL & 1980FWL, SEC 19-T17S-R31E			COUNTY: EDDY			STATE: NM
ELEVATION: GL=3581'; KB=UNK			SPUD DATE: 10/02/43		COMP DATE: 11/29/43	
API#: 30-015-05250		PREPARED BY: C.H. CARLETON				DATE: 05/03/99
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 460'	8 5/8"	24#			
CASING:	0' - 1821'	7"	20#			
CASING:	0' - 3065'	5 1/2"	15.5#	J-85		
TUBING:	0' - 2951'	2 3/8"	4.7#	J-55	EUE 8rd	
TUBING:						



NOTE: FOR CALCULATED CEMENT TOPS A YIELD OF 1.32 CU FT/SX AND 50% FILLUP WERE ASSUMED.

Well Master			
API Well#	30 015 23934 00 00	Status	A
Operator	GLEN PLEMONS	Type	O
Orig Op		Category	
Driller		Cmpl	S
Well Nm	FRIESS FEDERAL	WI Permit	
Field Nm	FRIESS FEDERAL	Orig WI Type	
Basin		Orig Cat	
Deep Frm		Lease/Unit #	
		Cur'nt NA	
		Orig	
		Mod Dt:	6/4/1995
		P/A	12/31/9999
Master Well File Comments		Multi- Lateral?	<input type="checkbox"/>
		Const	
		District	02
		H2S Plan?	Name
		Kickoff	Measured TVD
		Plug Back	0 0
		Hole	99999
		Loggers	0

<Shift>+<F2> will expand the comment field for viewing/editing!

No Well Records