

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

Mike Markes
Signature

South Exploitation Manager
Title

9/16/03
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

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? Yes No

II. OPERATOR: Merit Energy Company

ADDRESS: 13727 Noel Road, Suite 500, Dallas, Texas 75240

CONTACT PARTY: Jason Wacker PHONE: 972-628-1579

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: R-2268, WFX-700

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 geologic data on the injection zone including appropriate lithologic detail, geologic 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 sources 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).

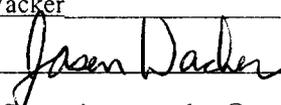
*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

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 sources 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: Jason Wacker TITLE: Petroleum Engineer

SIGNATURE:  DATE: 9/16/2003

E-MAIL ADDRESS: jason.wacker@meritenergy.com

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances 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 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.

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.

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.

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.

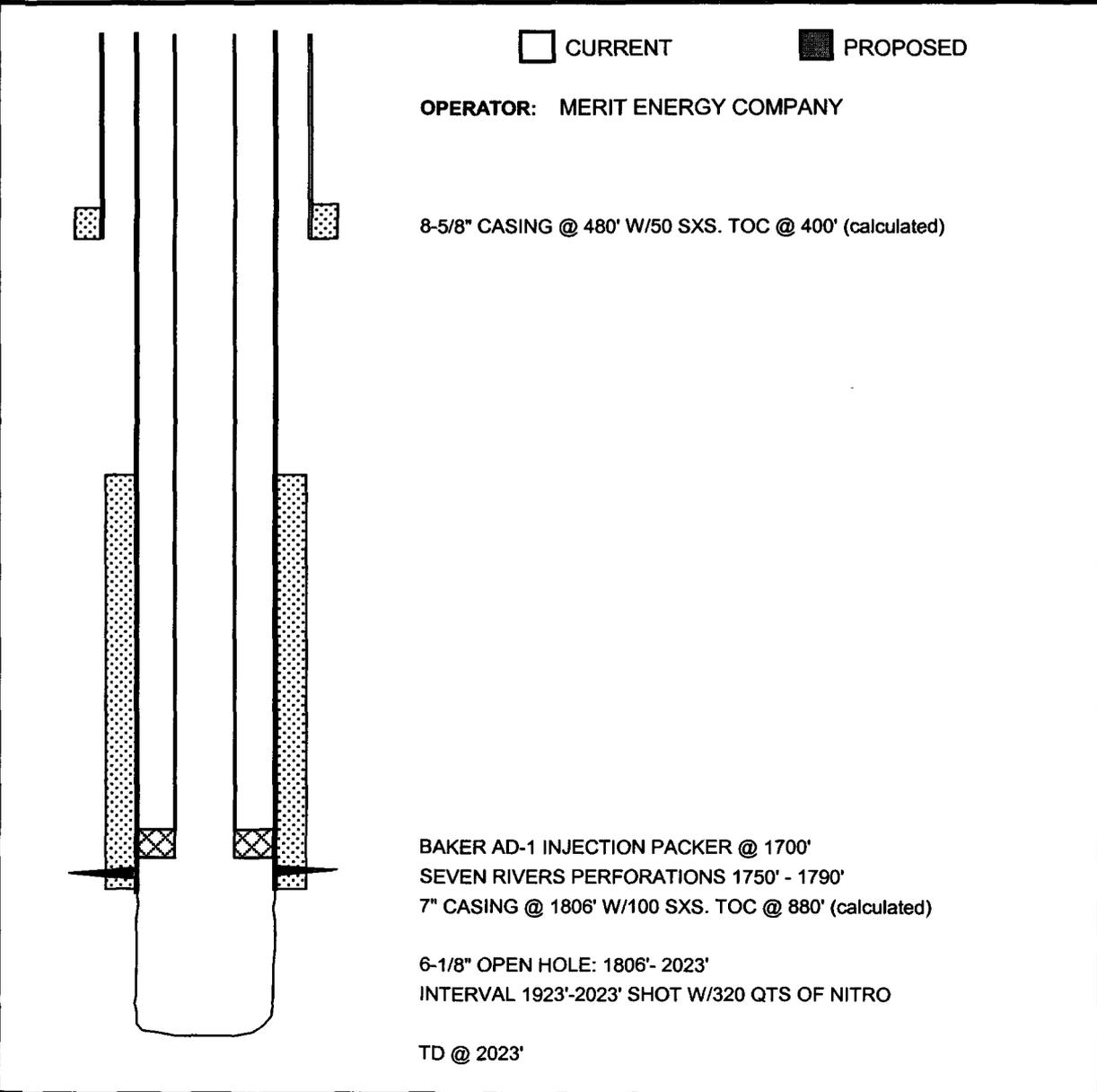
Production Casing
7", 20# @ 1806' with 100 sx. TOC @ 880' (calculated).
Hole size is unknown.
- iii. Tubing will be 2-3/8", 4.7#, J-55, 8rd, EUE, IPC set at 1700'.
- iv. 7" Baker Model "AD-1" injection packer @ 1700'.

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:						



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.

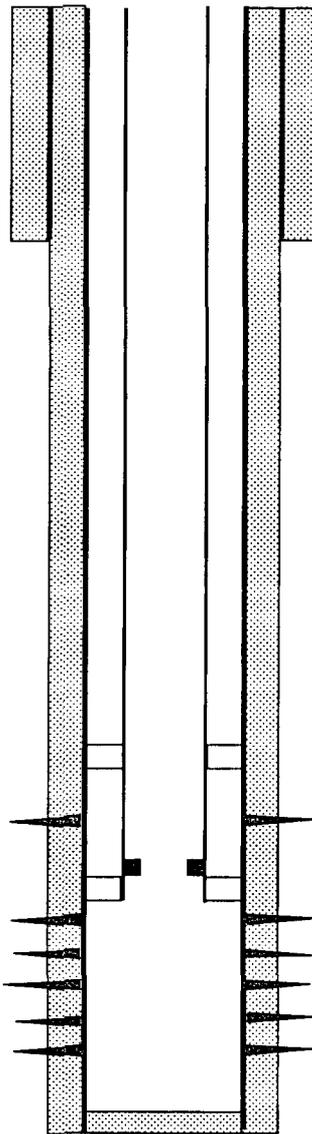
- iii. This well was originally drilled as a Grayburg injector.

- 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, 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 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.

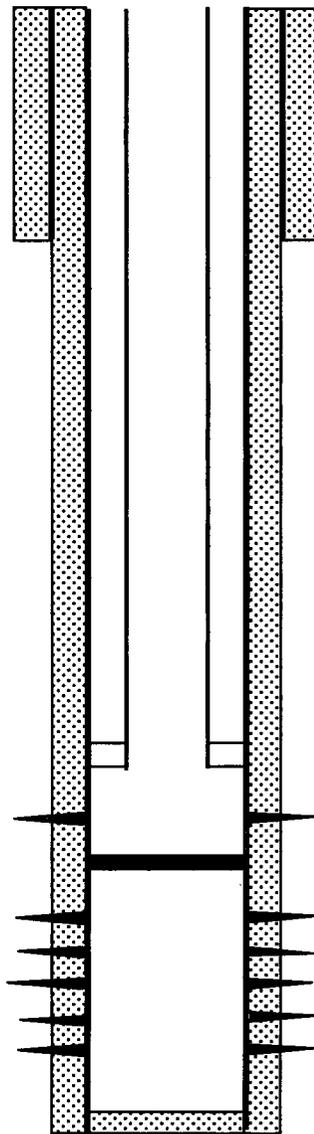
iii. This well was originally drilled as a Grayburg injector.

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 proposals.

RECEIVED

SUBMIT IN TRIPLICATE

APR 04 1997

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

2. Name of Operator
DEVON ENERGY CORPORATION (NEVADA)

OIL CON. DIV.
DIST. 2

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	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 & 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

ACCEPTED FOR RECORD
APR 08 1997
ack

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
(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 _____

Date _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Division
Office
90210 2334

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

457

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)
460 2155 FSL 20
150 FSL & 100 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
WIW

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 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 type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other <u>Cleaned out, perf'd & acidized</u>	<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:

ACCEPTED FOR RECORD
 (REG SGT) DAVID E. CLAW
 APR 02 1997
 BLM

N. M. O. G. C. CURT

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT 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. PERMIT NO.		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 19-T17S-R31E
15. ELEVATIONS (Show whether DP, RT, GR, etc.)		12. COUNTY OR PARISH Eddy
		13. STATE New Mexico

RECEIVED
DEC 19 1967
U.S. GEOLOGICAL SURVEY
ARTESIA, N.M.

RECEIVED

DEC 19 1967

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

FULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACURE TREAT

MULTIPLE COMPLETE

FRACURE TREATMENT

ALTERING CASING

SHOOT OR ACIDISE

ABANDON*

SHOOTING OR ACIDIZING

ABANDONMENT*

REPAIR WELL

CHANGE PLANS

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

(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.)*

- 11-29-67 Ran electric logs.
- 11-30-67 Ran 7"OD 26#, 23# & 20# J-55 set @ 3450' and cemented w/350 sacks Incor Class C, 4% gel & 100 sacks Incor Class C plus 100 gals. Latex. 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

[Signature]

TITLE

Superintendent

DATE

12-18-67

(This space for Federal or State office use)

APPROVED BY

[Signature]

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

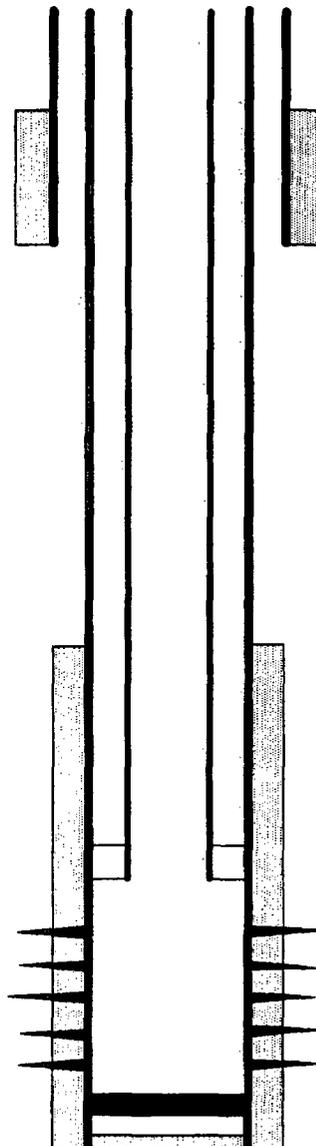
*See Instructions on Reverse Side

RECEIVED
DEC 19 1967
U.S. GEOLOGICAL SURVEY
ARTESIA, N.M.

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
APH#: 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)

PBD @ 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 THIS CATEGORY
(Other instructions on reverse side)

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

5. LEASE DESIGNATION AND SERIAL NO.
LC 065014

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

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

12. COUNTY OR PARISH
Eddy

13. STATE
NM

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL GAS WELL OTHER

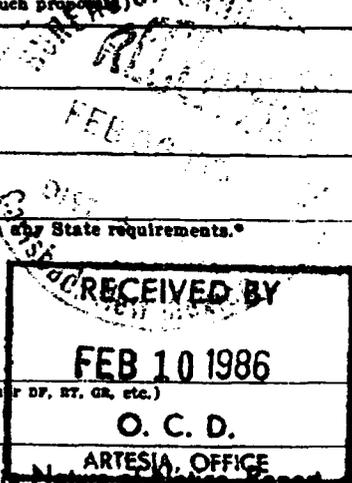
2. NAME OF OPERATOR
ARCO Oil and Gas Company ✓

3. ADDRESS OF OPERATOR
P.O. Box 1610, Midland, Texas 79702

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)

14. PERMIT NO.
API#30-015-05469

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3599 GR



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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Recomplete to Fren Seven Riv</u> <input checked="" type="checkbox"/>	

(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. Cmtd w/125 sx "H". Standing press 1800#. Ran TS ind TOC @ 2030'. Perf'd 7" csg @ 1800' w/4 holes. Set CR @ 1750. Cmtd 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

[Signature]

FEB 7 1986

Post ID-2
2-14-86
P44 G+bg.

CARLSBAD, NEW MEXICO

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

SIGNED Ken W. Gosnell TITLE 915-684-0312 Engr. Tech. Spc. DATE 2-4-86

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

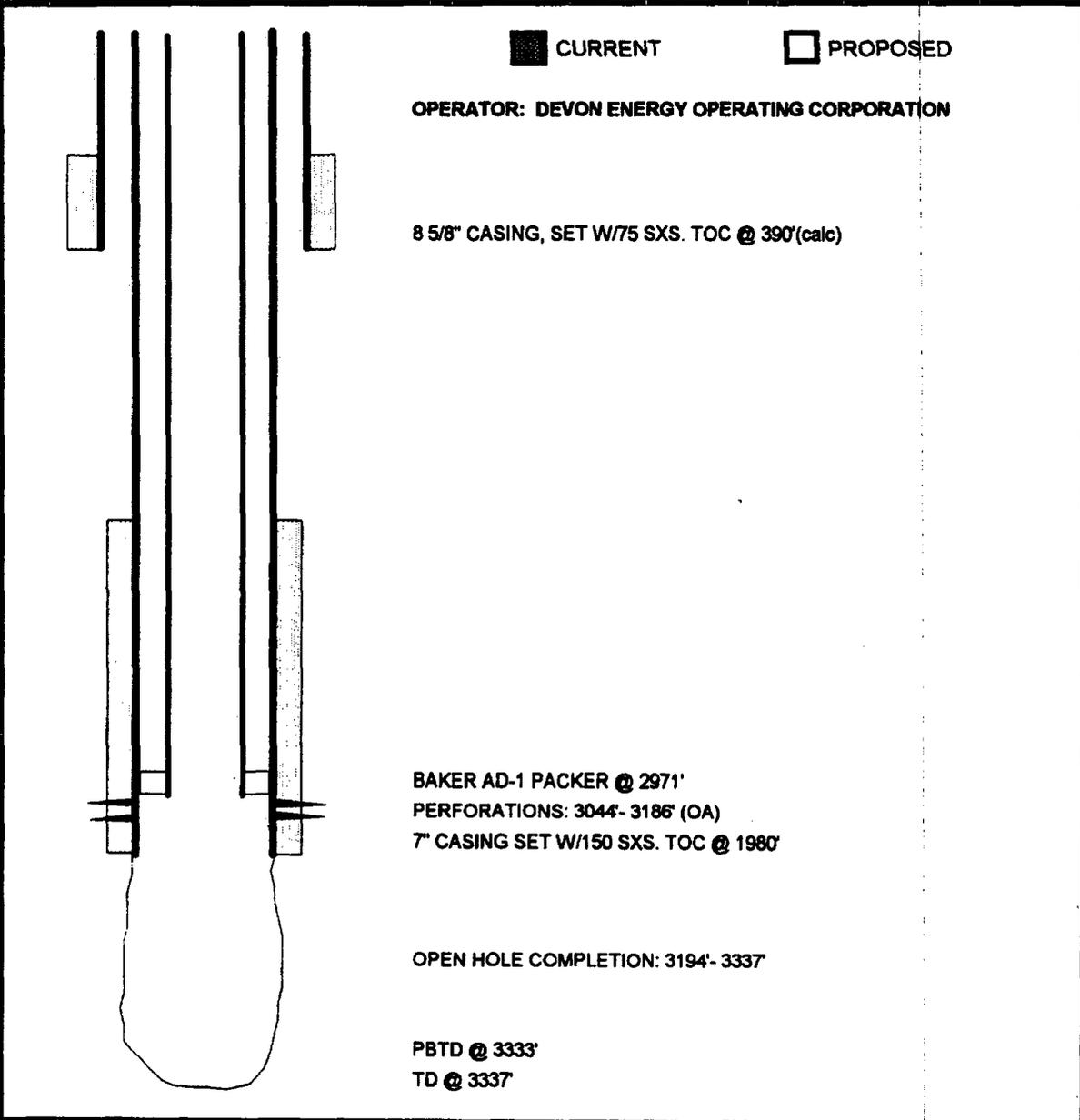
CONDITIONS OF APPROVAL, IF ANY: _____

*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

ITEM	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:						



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

4157

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 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 type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input checked="" 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.)*

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
7-37-98
TC W I W*

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

Form C-104A
March 19, 2001

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

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

<u>NMOCD Approval</u>	
Signature:	<u><i>Jim W. Seem</i></u>
Printed Name:	<u><i>District Supervisor</i></u>
District:	_____
Date:	<u>MAY 29 2003</u>

30-015-05477

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

RECEIVED

SEP 01 1992

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

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

REQUEST FOR ALLOWABLE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

O. C. D.
LAW ENFORCEMENT

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:
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <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 Jacskon SR Q Grbg SA	Kind of Lease State, LEASE	Lease No. B-3627
Location Unit Letter <u>D</u> : <u>330</u> Feet From The <u>north</u> Line and <u>731</u> Feet From The <u>west</u> Li Section <u>30</u> Township <u>17S</u> Range <u>31E</u> , NMPM, <u>Eddy</u> 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
			Plug 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.)

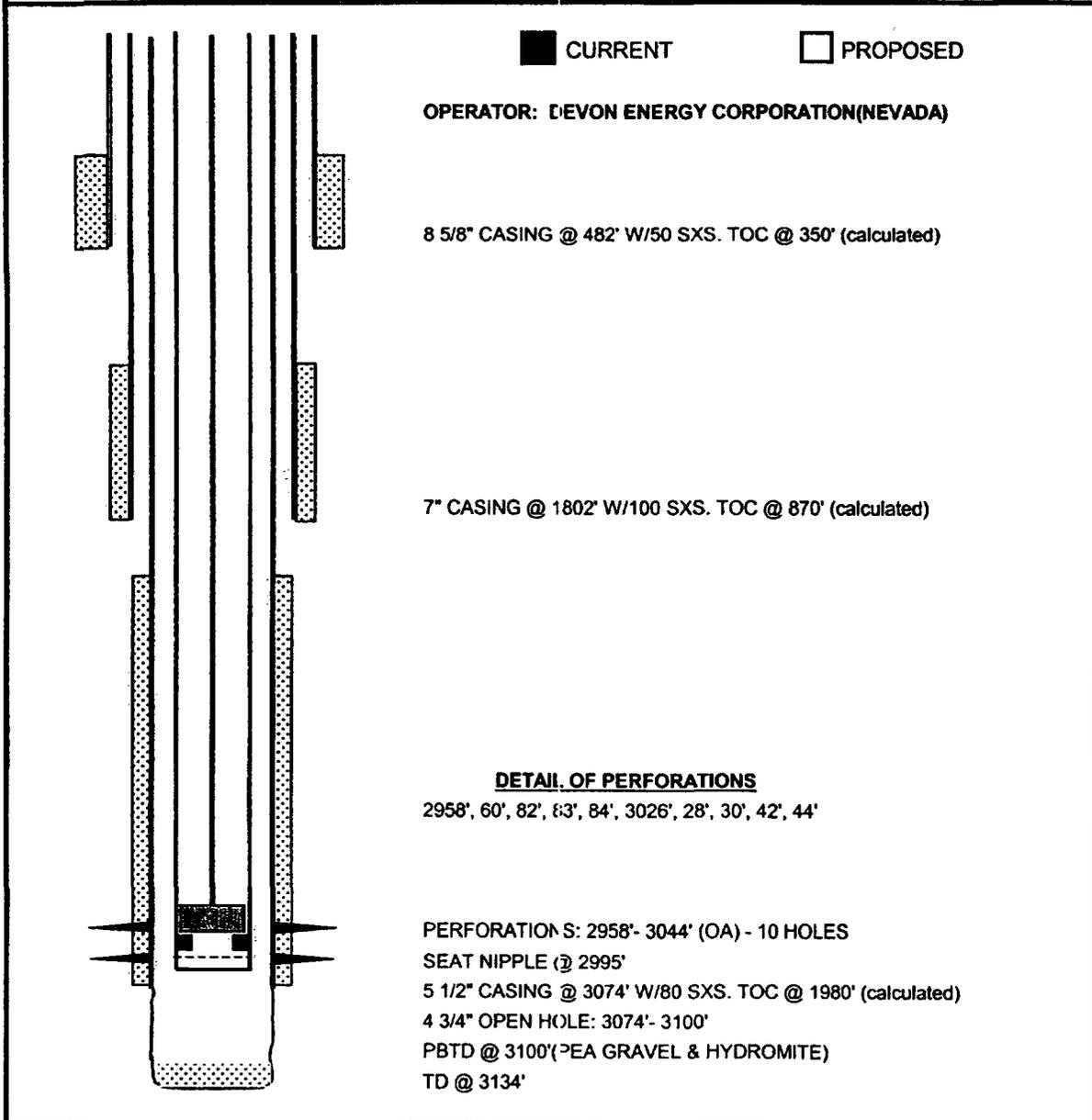
Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Producing Method (Initial back pr.)	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. Gunn</u>	
Printed Name: <u>District Supervisor</u>	
District: _____	
Date: _____	SEP 17 2002

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 initial allowable be assigned to any completed Oil or Gas well. Submit this form in QUADRUPPLICATE.

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Fren Oil Company Lease Max Fries

Address 208 Hills Bldg., El Paso, Texas
(Local or Field Office) (Principal Place of Business)

Unit H, Well 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 Hills, 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

Fren Oil Company

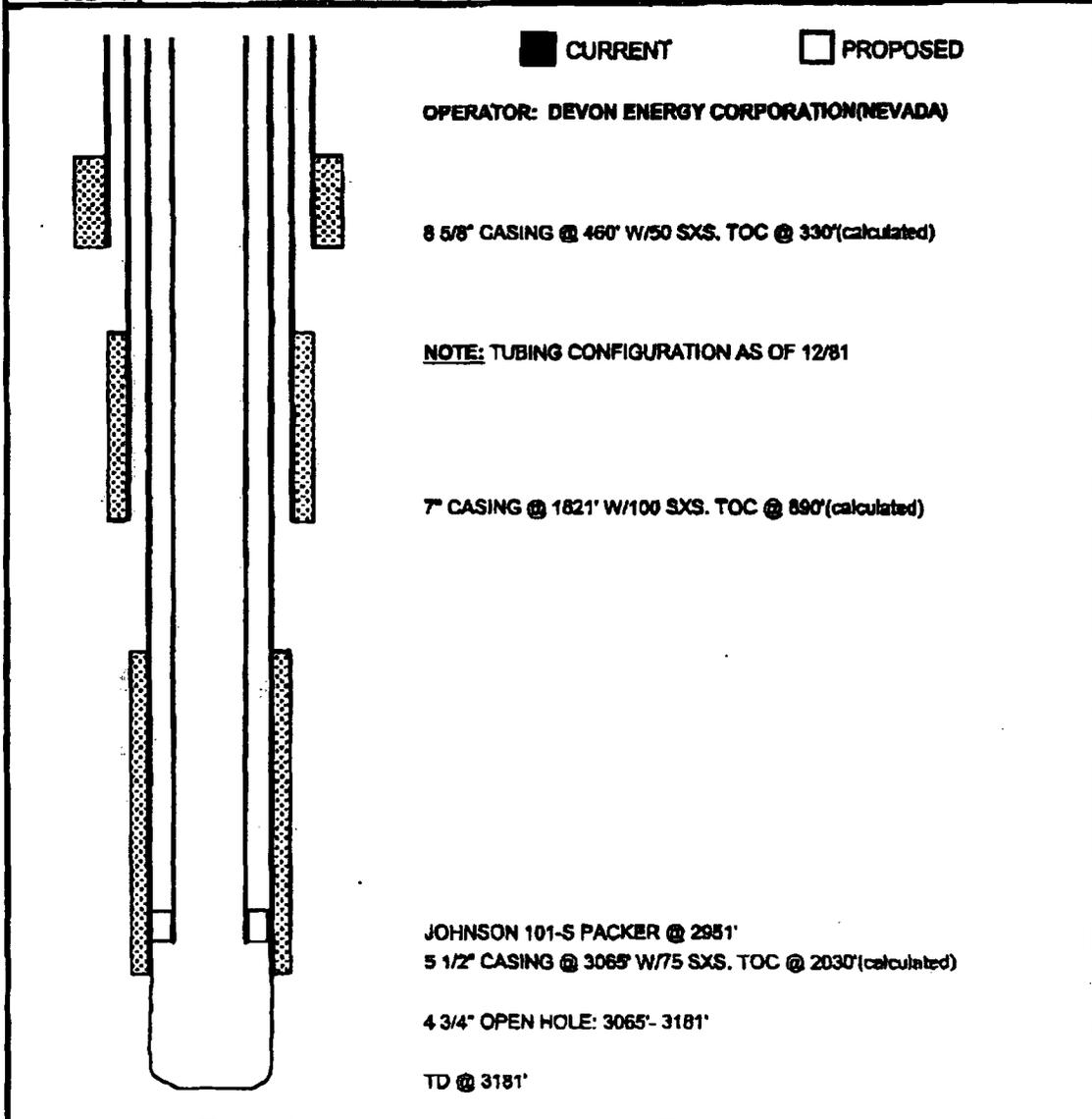
Approved _____, 19____

By Max Enginger
Title Partner

OIL CONSERVATION COMMISSION
By L. G. Johnson
Title _____

DEVON ENERGY CORPORATION WELLBORE SCHEMATIC

WELL NAME: FREN OIL COMPANY #2			FIELD: GRAYBURG-JACKSON			
LOCATION: 890FSL & 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#: 30-015-06250		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

Operator GLEN PLEMONS

Orig Op

Driller

Well Nm FRIESS FEDERAL

Field Nm FRIESS FEDERAL

Basin

Deep Frm

Well No 005

Status A

Type O

Category

Cmpl S

WI Permit

Orig WI Type

Orig Cat

Lease/Unit #

Cur'nt NA

Orig

Mod Dt: 6/4/1995

P/A 12/31/9999

Status Dt

Prmt App 07/11/1994

Prmt Exp

Spudded 12/31/9999

TD Rchd 12/31/9999

Cmpltd 02/01/1982

Auth Trs 12/31/9999

1st Prod 02/01/1982

1st Inj

PB Dt

Plug Pln

Multi- Lateral?

Const

District 02

H2S Plan? Name

Measured TVD

Kickoff

Plug Back 0 0

Hole 99999

Loggers 0

Master Well File Comments

[Redacted comment field]

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

No Well Records