

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Box Drawer DD, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

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

WELL API NO. 30-025-06900
5. Indicate Type of Lease STATE [ ] FEE [x]
6. State Oil / Gas Lease No.
7. Lease Name or Unit Agreement Name H.T. MATTERN NCT-B
8. Well No. 1
9. Pool Name or Wildcat PENROSE SKELLY GRAYBURG
10. Elevation (Show whether DF, RKB, RT,GR, etc.) 3483' GL

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMI (FORM C-101) FOR SUCH PROPOSALS.
1. Type of Well: OIL WELL [x] GAS WELL [ ] OTHER [ ]
2. Name of Operator CHEVRON USA INC
3. Address of Operator 15 SMITH RD, MIDLAND, TX 79705
4. Well Location
Unit Letter I : 2310' Feet From The SOUTH Line and 330' Feet From The EAST Line
Section 30 Township 21-S Range 37-E NMPM LEA COUNTY
11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:
PERFORM REMEDIAL WORK [ ] PLUG AND ABANDON [ ]
TEMPORARILY ABANDON [ ] CHANGE PLANS [ ]
PULL OR ALTER CASING [ ]
OTHER: DRILL DEEPER IN GRAYBURG & FRAC STIM [x]
SUBSEQUENT REPORT OF:
REMEDIAL WORK [ ] ALTERING CASING [ ]
COMMENCE DRILLING OPERATION [ ] PLUG AND ABANDONMENT [ ]
CASING TEST AND CEMENT JOB [ ]
OTHER: [ ]

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.
CHEVRON U.S.A. INC. INTENDS TO DRILL THE SUBJECT WELL DEEPER IN THE EXISTING GRAYBURG RESERVOIR. THE WELL IS CURRENTLY A SHUT-IN UPPER GRAYBURG PRODUCER. THIS WORK SHOULD RETURN THE WELL TO PROFITABLE STATUS.
\*\*\*\*A PIT WILL NOT BE USED FOR THIS DEEPENING. A STEEL FRAC TANK WILL BE UTILIZED.\*\*\*\*
THE CURRENT & PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR YOUR APPROVAL.
PLEASE SEE ATTACHMENT FOR THE INTENDED PROCEDURE.



I hereby certify that the information above is true and complete to the best of my knowledge and belief.
SIGNATURE Denise Pinkerton TITLE Regulatory Specialist DATE 4/5/2005
TYPE OR PRINT NAME Denise Pinkerton Telephone No. 432-687-7375

(This space for State Use)
APPROVED [Signature] TITLE PETROLEUM ENGINEER DATE
CONDITIONS OF APPROVAL, IF ANY: DeSoto/Nichols 12-93 ver 1.0
APR 08 2005

**H. T. Mattern (NCT-B) # 1**  
**Penrose Skelly Field**  
**T21S, R37E, Section 30**  
**Job: Drill Well Deeper To Lower Grayburg Formation And Frac Stimulate**

**Procedure:**

1. Displace flowline with fresh water. Have field specialist close valve at header. Pressure line according to the type of line. AGU, EMSU, and EMSUB buried fiberglass lines will be tested with 300 psi. All polypipe (SDR7 and SDR11) will be tested w/100 psi. All steel lines will be tested w/500 psi. If a leak is found, contact Donnie Ives for repair/replacement. If test is good, bleed off pressure and **open valve** at header. Document this process in the morning report.
2. MI & RU workover unit. Bleed pressure from well, if any. Pump down csg with 8.6 PPG cut brine water, if necessary to kill well. POH with rods and pump. Remove WH. Install BOP's and test to 1000 psi. POH LD 2 3/8" production tbg string. **Note: Minimize water pumped into well since deepening will be performed using foam due to low pressure Upper Grayburg interval.**
3. PU 4 3/4" MT bit and GIH on 2 7/8" work string to approximately 3790'. MI & RU foam unit(s). LD and cleanout 4 3/4" open hole to original TD at 3813'. Drill well deeper to a new TD of 3915'. Circulate well clean from 3915'. POH with 4 3/4" MT bit and drill string. LD MT bit.
4. PU & GIH 5 1/2" treating pkr on 2 7/8" work string. Set pkr at approximately 3550'. Pressure test pkr and csg to 500 psi.
5. MI & RU DS Services. Acidize Grayburg interval from 3652-3915' with 4,500 gals antisludge 15% HCl acid \*\*\* at a maximum rate of **6 BPM** and a maximum surface pressure of **3500 psi**. Pump job as follows:

Pump 1,500 gals acid at 6 BPM  
Pump 1,000 gals gelled 10 PPG brine containing 1500 lbs GRS at 6 BPM  
Pump 1,500 gals acid at 6 BPM  
Pump 1,000 gals gelled 10 PPG brine containing 1500 lbs GRS at 6 BPM  
Pump 1,500 gals acid at 6 BPM

Displace acid with 8.6 PPG cut brine water -- do not overdisplace. Record ISIP, 5, 10, & 15 minute SIP's. RD and release DS Services. **Note: It is not necessary to pickle tbg due to the low BHP.**

\*\*\* Acid system is to contain:

1 GPT A264	Corrosion Inhibitor
8 GPT L63	Iron Control Agent

2 PPT A179  
20 GPT U66  
2 GPT W53

Iron Control Aid  
Mutual Solvent  
Non-Emulsifier

6. Open well and flow/swab back spent treatment fluids. Recover 100% of spent acid and load before SI well for the night. Report oil cut, recovered fluid volumes, pressures, and/or swabbing fluid levels.
7. Open well. Pump down tbg with 8.6 PPG cut brine water to kill well, if necessary. Release pkr. POH with 2 7/8" work string and packer. LD pkr.
8. PU 4 3/4" MT bit and GIH on 2 7/8" work string to TD at 3915'. If fill is encountered, MI & RU foam unit(s) and cleanout to 3915' using foam. POH with 2 7/8" work string and MT bit. LD MT bit.
9. PU and GIH w/ 5 1/2" Lok-Set pkr & On-Off tool w/ 2.25" "F" profile on 110 jts. of 3 1/2" EUE 8R L-80 work string, testing to 7500 psi. Set Lok-Set pkr at 3550'. Pressure annulus to 500 psi to test csg and pkr. Install frac head. Leave pressure on csg during frac job to observe for communication.
10. MI & RU DS Services. Frac well down 3 1/2" tubing at **40 BPM** with 84,000 gals of YF130, 160,000 lbs. 16/30 mesh Jordan Sand, and 30,000 lbs **resin-coated** 16/30 mesh CR1630 proppant. Observe a maximum surface treating pressure of **7400 psi**. Pump job as follows:

Pump 2,000 gals 2% KCL water containing 55 gals Baker RE 4777-SCW Scale Inhibitor

Pump 1,000 gals 2% KCL water spacer

Pump 14,000 gals YF130 pad containing 5 GPT J451 Fluid Loss Additive

Pump 14,000 gals YF130 containing 0.5 PPG 16/30 mesh Jordan Sand & 5 GPT J451 FL Additive

Pump 12,000 gals YF130 containing 1.5 PPG 16/30 mesh Jordan Sand

Pump 12,000 gals YF130 containing 2.5 PPG 16/30 mesh Jordan Sand

Pump 12,000 gals YF130 containing 3.5 PPG 16/30 mesh Jordan Sand

Pump 14,000 gals YF130 containing 4.5 PPG 16/30 mesh Jordan Sand

Pump 6,000 gals YF130 containing 5 PPG **resin-coated** 16/30 mesh CR1630 proppant.

Flush to 3596' with 1,344 gals WF130. **Do not overflush.** Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. SWI. RD & Release DS Services. **Leave well SI overnight.**

11. Open well. GIH and swab well until there is no sand inflow. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. Release pkr and POH with 3 1/2" work string. Lay down work string and pkr.
12. PU and GIH with 4 3/4" MT bit on 2 7/8" work string to 3915'. If fill is tagged, clean out to 3915' using 8.6 PPG cut brine water and air unit (if necessary). POH with 2 7/8" work string and bit. LD 2 7/8" work string and bit.

13. PU and GIH w/ BP mud anchor jt of 2 7/8" tbg, 2 7/8" x 4' perforated sub, SN, 1 jt 2 7/8" EUE 8R J-55 IPC tbg, 6 jts 2 7/8" EUE 8R J-55 tbg, TAC, and 115 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 3600', with EOT at 3865' and SN at 3830'.
14. Remove BOP's and install WH. GIH with rods, weight bars, and pump per ALS recommended design. RD & release pulling unit.
15. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

AMH  
4/5/2005

Well: **H.T. Mattern 'B' # 1**

Field: **Penrose Skelly**

Reservoir: **Grayburg**

### Current Wellbore Diagram

**Location:**  
 2310' FSL & 330' FEL  
 Section: 30  
 Township: 21S  
 Range: 37E Unit: I  
 County: Lea State: NM

**Elevations:**  
 GL: 3483'  
 KB: 3493'  
 DF: 3492'

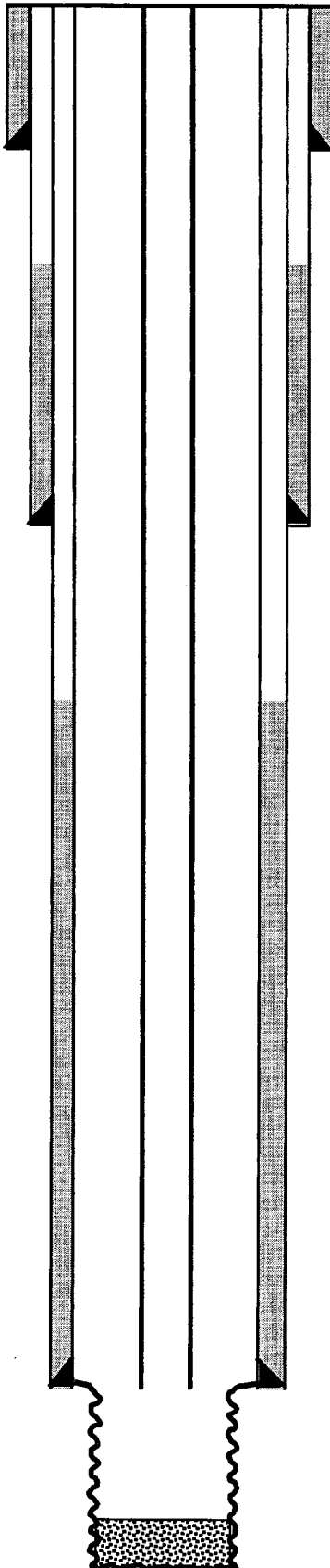
**Well ID Info:**  
 Chevno: FA7997  
 API No: 30-025-06900  
 L5/L6:  
 Spud Date: 3-2-37  
 Compl. Date: 4-12-37

**Surf. Csg:** 10 3/4" 32.75# SCLW  
**Set:** @ 317' w/250 sx cmt  
**Hole Size:** 13 3/4"  
**Circ:** NA **TOC:** NA  
**TOC By:** NA

**Interm. Csg:** 7 5/8" 22#, 8rd SCLW  
**Set:** @ 1252' w/ 250 sx cmt  
**Hole Size:** 9 5/8"  
**Circ:** NR **TOC:** NA  
**TOC By:** NA

**Tubing Detail: 5-20-89**

#Jts:	Size:	Footage
	KB Correction	10.00
1	Jts. 2 3/8" J-55 8Rd	31.50
127	Jts. 2 3/8" 4.7# 10Rd	3699.97
	2-3/8" API SN	1.10
	MA Jt. 2-3/8"	10.40
<b>128</b>	<b>Bottom Of Mtr &gt;&gt;</b>	<b>3752.97</b>



**Prod. Csg:** 5-1/2", 17#, 10rd SCLW  
**Set:** @ 3652' w/ 150 sx cmt  
**Hole Size:** 6 3/4"  
**Circ:** No **TOC:** 2710'  
**TOC By:** Temperature Survey

**4-3/4" Open Hole f/ 3652' to 3813'**  
**OH PB w/ Hydromite**

**PBTD:** 3790'  
**TD:** 3813'

**chay:** 3/15/05

Well: **H.T. Mattern 'B' # 1**

Field: **Penrose Skelly**

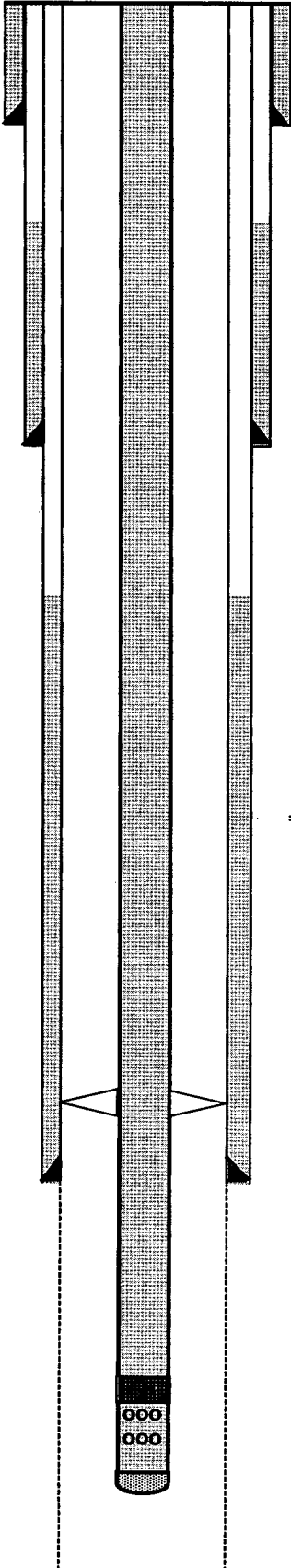
Reservoir: **Grayburg**

**Proposed  
Wellbore Diagram**

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2310' FSL & 330' FEL  
Section: 30  
Township: 21S  
Range: 37E Unit: I  
County: Lea State: NM

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GL: 3483'  
KB: 3493'  
DF: 3492'

**Well ID Info:**  
Chevno: FA7997  
API No: 30-025-06900  
L5/L6:  
Spud Date: 3-2-37  
Compl. Date: 4-12-37



**Surf. Csg:** 10 3/4" 32.75# SCLW  
**Set:** @ 317' w/250 sx cmt  
**Hole Size:** 13 3/4"  
**Circ:** NA **TOC:** NA  
**TOC By:** NA

**Interm. Csg:** 7 5/8" 22#, 8rd SCLW  
**Set:** @ 1252' w/ 250 sx cmt  
**Hole Size:** 9 5/8"  
**Circ:** NR **TOC:** NA  
**TOC By:** NA

**Tubing Detail:**

#Jts:	Size:	Footage
	KB Correction	10.00
115	Jts. 2 7/8" J-55 Tbg	3600.00
	TAC	3.70
6	Jts. 2 7/8" J-55 Tbg	186.00
1	Jt. 2 7/8" J-55 IPC Tbg	31.00
	SN	1.10
	2 7/8" x 4' Perf Tbg Sub	4.00
1	Jt. 2 7/8" J-55 Tbg w/ BP	31.60
<b>123</b>	<b>Bottom Of String &gt;&gt;</b>	<b>3867.40</b>

**Prod. Csg:** 5-1/2", 17#, 10rd SCLW  
**Set:** @ 3652' w/ 150 sx cmt  
**Hole Size:** 6 3/4"  
**Circ:** No **TOC:** 2710'  
**TOC By:** Temperature Survey

**4-3/4" Open Hole f/ 3652' to 3915'**

**PBTD:** 3790'  
**TD:** 3915'

**chay:** 3/15/05