Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd , Aztec, NM 87410
District IV – (505) 476-3460
1220 S St Francis Dr , Santa Fe, NM 87505

HOBBS OCD
MAY 17 2012
RECEIVED

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised August 1, 2011

	WELL API NO. 30-025-38339
	5. Indicate Type of Lease STATE ☐ FEE ☒
	6. State Oil & Gas Lease No.
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" (FORM C-101) FOR SUCH PROPOSALS) 1. Type of Well: Oil Well ☒ Gas Well ☐	7. Lease Name or Unit Agreement Name H.T. MATTERN NC T-B
	8. Well Number 27
2. Name of Operator CHEVRON U.S.A. INC.	9. OGRID 4323
3. Address of Operator 15 SMITH ROAD, MIDLAND, TEXAS 79705	10. Pool name or Wildcat PENROSE; SKELLY GRAYBURG
4. Well Location Unit Letter O: 1310 feet from the SOUTH line and 1705 feet from the EAST line Section 30 Township 21-S Range 37-E NMPM County LEA	
[redacted]	11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* [redacted]

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
OTHER: INTENT TO ACIDIZE, SCALE SQUEEZE				OTHER:			

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

CHEVRON U.S.A. INC. INTENDS TO SONIC HAMMER, ACIDIZE, & SCALE SQUEEZE THE SUBJECT WELL..
PLEASE FIND ATTACHED, THE INTENDED PROCEDURE, WELLBORE DIAGRAMS, AND C-144 INFO.

Spud Date: Rig Release Date:

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: 05-16-2012

Type or print name: DENISE PINKERTON E-mail address: leakejd@cvhevron.com PHONE: 432-687-7375

APPROVED BY: Mark Whitaker TITLE Compliance Officer DATE 05-18-2012
Conditions of Approval (if any):

MAY 21 2012

H.T. Mattern NCT B #27 **3.30.2012**
Penrose Skelly, Grayburg Reservoir
T21S, R37E, Sec.30, 1,310' FSL & 1,705' FEL
N 32° 26' 45.96", W -103° 11' 55.716" (NAD27)
Job: Sonic Hammer, Acidize & Scale Squeeze

Procedure:

This procedure is meant to be followed. It is up to the WSM, Remedial Engineer and Production Engineer to make the decisions necessary to do SAFELY what is best for the well. In the extent that this procedure does not reflect actual operations, please contact RE, PE and Superintendent for MOC

1. Verify that well does not have pressure or flow. If well has pressure, note tubing and casing pressures on wellview report. Bleed down well; if necessary, kill with cut brine fluid (8.6 ppg).

   - **Caliper elevators and tubular EACH DAY prior to handling tubing/tools. Note in JSA when and what items are callipered within the task step that includes that work.**

2. MI & RU workover unit.

3. Unseat pump, POOH with rods and pump. Examine rods for wear/pitting/paraffin. Do not hot water unless necessary. ND wellhead, unset TAC, NU BOP. POOH and LD 1 jt, PU 5-1/2" packer and set ~ @ 25', test BOP pipe rams to 250 psi/1000 psi. Note testing pressures on wellview report. Release and LD packer.

   Note: Prior to ND WH, e-mail or call Remedial Engineer to summarize what it was done to mitigate the well control hazard.

4. PU tubing and tag for fill (TAC 3,605', Bottom Perfs 3,960', EOT 4,065', PBTD 4,126'). POOH while scanning 2-7/8" prod tubing. LD all non-yellow band joints. If fill is tagged:
   A. Above 4,126' continue to step 5.
   B. Below 4,126' continue to step 7.

   Note: Strap pipe out of the hole to verify depths and note them on Wellview report.
   Send scan log report to hccf@chevron.com.

   - **Caliper elevators and tubular EACH DAY prior to handling tubing/tools. Note in JSA when and what items are callipered within the task step that includes that work.**

5. PU and RIH with 4-3/4" MT bit, 4 (3-1/2") drill collars on 2-7/8" 6.5# L-80 WS. RU power swivel and clean out to 4,126'. POOH with 2-7/8" WS and bit. LD bit & BHA.
   Note: If circulation is not expected, notify Remedial Engineer to discuss CO with bailer (continue to step 6) or foam/air unit (continue to supplemental procedure on back).

6. PU and RIH with 4-3/4" MT and Bulldog bailer on 2-7/8" 6.5# L-80 WS. Clean out to 4,126'. POOH with 2-7/8" WS and bit. LD bit & BHA.

   - **Expect trapped pressure inside tubing while breaking connections during bailing operations, discuss on JSA and mitigate hazard. Use mudbucket (remove bottom seals if applicable) while breaking connections.**

7. Contact sonic tool rep to be on site during job. PU and RIH with Sonic Hammer tool and work string to 3,965' or enough to cover the bottom perforations with a whole stand. Hydrotest tubing to 6,000 psi. Stand back tubing to top perforations. Install stripper head and stand pipe with sufficient treating line to move tools vertically ~ 65'. Rig up pressure gauges to allow monitoring of tubing and casing pressures.

8. MI & RU Petroplex. Titrate acids and verify concentration (HCl ±1.5%). Treat all intervals from 3,695' to 3,965' with 50 bbls of 8.6 ppg cut brine water per interval (refer to Table A). Pump down Sonic Hammer tool at 5 BPM while reciprocating tool across intervals. Do not exceed 5,000 psi tubing pressure. Leave annulus open in circulation mode while treating intervals with brine water.

9. Follow the brine water wash with 6,000 gals 15% NEFE HCl of total acid for all intervals. Spot 3 bbls of acid outside tubing, shut in casing, pump 1,200 gallons of acid @ 5 BPM over first treating interval from 3,695'-3,750', monitor casing pressure not exceeding 500 psi. Flush tubing with brine water after every acidized interval, make a connection and continue with remaining interval. Refer to Table A.

Table A: Perforation Intervals for acid.

Interval	Depth	Interval (Ft.)	Acid Volume (gal)
1	3695' - 3750'	55	1,200
2	3750' - 3805'	55	1,200
3	3805' - 3860'	55	1,200
4	3860' - 3915'	55	1,200
5	3915' - 3965'	50	1,200
			6,000

10. Shut in well for 1 hr for the acid to spend. Monitor casing pressure to keep it below 500 psi. Bleed off excess pressure if necessary.

11. Scale squeeze will with a total of 300 bbls 8.6 ppg brine water and 4 drums (220 gallons) Baker SCW-358 Scale Inhibitor Chemical. Continue moving uphole with Sonic Hammer. Pump at max rate of 5 BPM per pump schedule. Ensure top of tubing is flushed with brine water before making a connection.

Table B: Scale Sqz Pump Schedule

Step		Interval (ft)	Max Rate (BPM)	Volume Brine (bbl)	Volume Scale Chem (Gal)	Cum Volume (bbl)
1	Pump Chemical/brine while moving from	3965' - 3915'	5	10	44	11.0
2	Pump Brine while moving from	3965' - 3915'	5	40		51
3	Pump Chemical/brine while moving from	3965' - 3915'	5	10	44	62
4	Pump Brine while moving from	3965' - 3915'	5	12		74
5	Move pipe to next interval of	3915' - 3860'				74
6	Pump Brine while moving from	3915' - 3860'	5	28		102
7	Pump Chemical/brine while moving from	3915' - 3860'	5	10	44	113
8	Pump Brine while moving from	3915' - 3860'	5	12		125
9	Move pipe to next interval of	3860' - 3805'				125
10	Pump Brine while moving from	3860' - 3805'	5	28		153
11	Pump Chemical/brine while moving from	3860' - 3805'	5	10	44	164
12	Pump Brine while moving from	3860' - 3805'	5	11		175
13	Move pipe to next interval of	3805' - 3750'				175
14	Pump Brine while moving from	3805' - 3750'	5	29		204
15	Pump Chemical/brine while moving from	3805' - 3750'	5	10	44	215
16	Pump Brine while moving from	3805' - 3750'	5	11		226
17	Move pipe to next interval of	3750' - 3695'				226
18	Pump Brine while moving from	3750' - 3695'	5	79		305

12. Ensure Sonic Hammer is above all perforations. Do not exceed 500 psi casing pressure or 5 BPM while pumping scale squeeze or casing flush. RD and release pump truck.

13. Run back in the hole and tag for fill. If fill entry was indentified @ 4,126' or above, clean-out to 4,126' following steps 5 or 6.

14. POOH & LD 2-7/8" WS and Sonic Hammer tool.

15. RIH with 2-7/8" production tubing hydrotesting to 6,000 psi. Set TAC per ALCR recommendation. ND BOP. NU WH. RIH with rods and pump per ALCR. Hang well on. RD and release workover unit.

    Note: Prior to ND BOP, e-mail or call Remedial Engineer to summarize what it was done to mitigate the well control hazard.

16. Turn well over to production.

FOAM / AIR CLEANOUT PROCEDURE

- This procedure is an addition to the original procedure.

1. Install flowback manifold with two chokes. All components on flowback manifold must be rated to at least 5,000 psi. If possible, flowback manifold components should be hydrotested before delivery. Hardline pipes from 2" casing valve to manifold to half pit with gas buster.
2. Install flowback tank downwind from rig.
3. Position Air unit upwind from Rig next to water tanks. Have vacuum truck on standby to empty halfpit. (if needed)
4. RIH with 4-3/4" MT bit, 4 (3-1/2") drill collars on 2-7/8" 6.5# L-80 WS.
5. NU stripper head with **NO Outlets** (Check stripper cap for thread type - course threads preferred). **Stripper head to be stump tested to 1,000 psi before being delivered to rig**. Check chart or test at rig.
6. RU foam air unit. Make quality foam on surface before going down hole with foam/air. Install flapper float at surface before beginning to pump. Break circulation with foam/air. Evacuate fluid from well.

Pump high quality foam at all times. Do not pump dry air at any time. Fluid injection rates will generally be above 12 gallons per minute

Whenever there is pressure on the stripper head, have a dedicated person continuously monitor pressure at choke manifold and have a dedicated person at accumulator ready to close annular BOP in case stripper leaks. Do not allow pressure on stripper head to exceed 500 psi. If pressure cannot be controlled below 500 psi, stop pumping, close BOP and bleed off pressure.

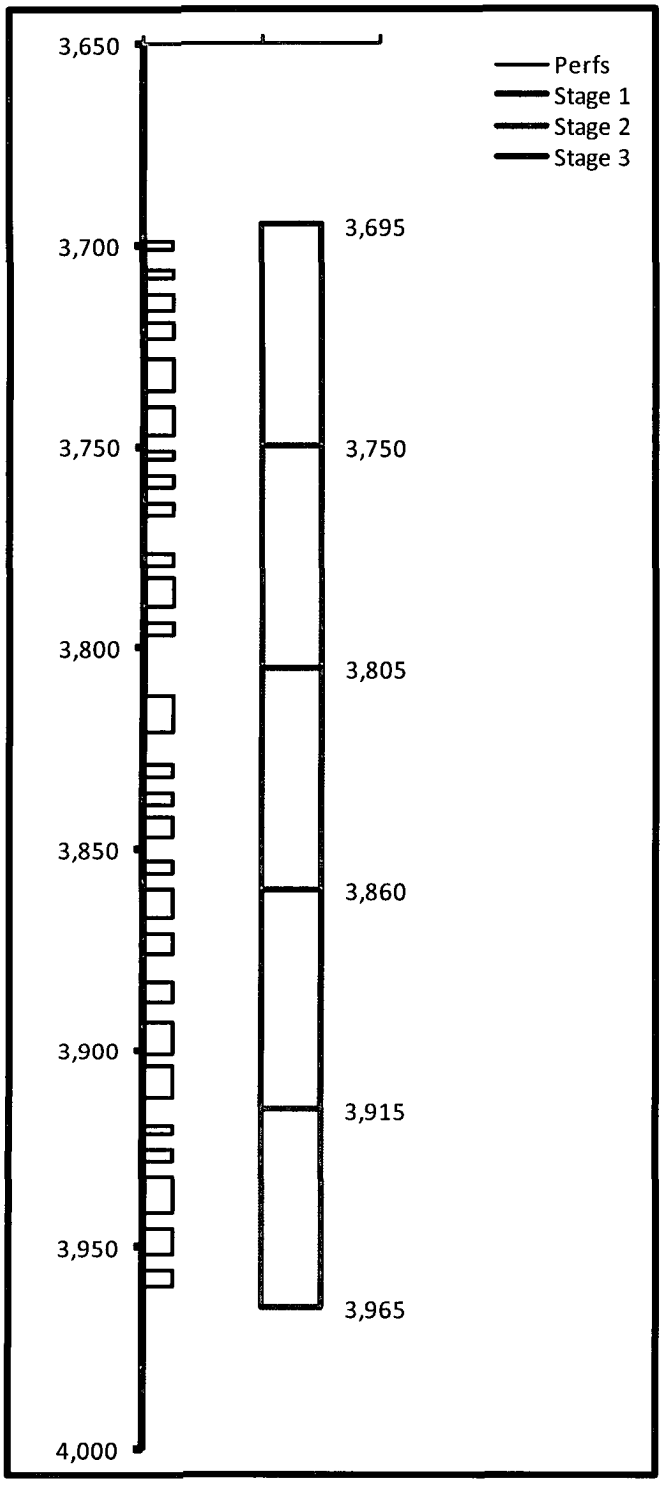
7. Clean out fill to 4,126' with low RPM's rotation and circulation, always keep pipe moving. Short trips can be beneficial to hole cleaning. Circulate well clean for at least 1 hour at the end of the day and pull up above the perforations before shut down for night. If the foam/air unit goes down, pull above the perforations.
8. When tripping out of hole, have special float bleed off tool available to relieve trapped pressure below float.

Ensure that high quality, stiff foam is pumped while circulating the fill. Stiff foam is required to prevent segregation while circulating. Monitor flow and pressures carefully when cleaning out.

Before rigging up power swivel to rotate, carefully inspect Kelly hose to ensure that it is in good condition. Ensure that swivel packing is in good condition.

Continue on with original procedure for completion.

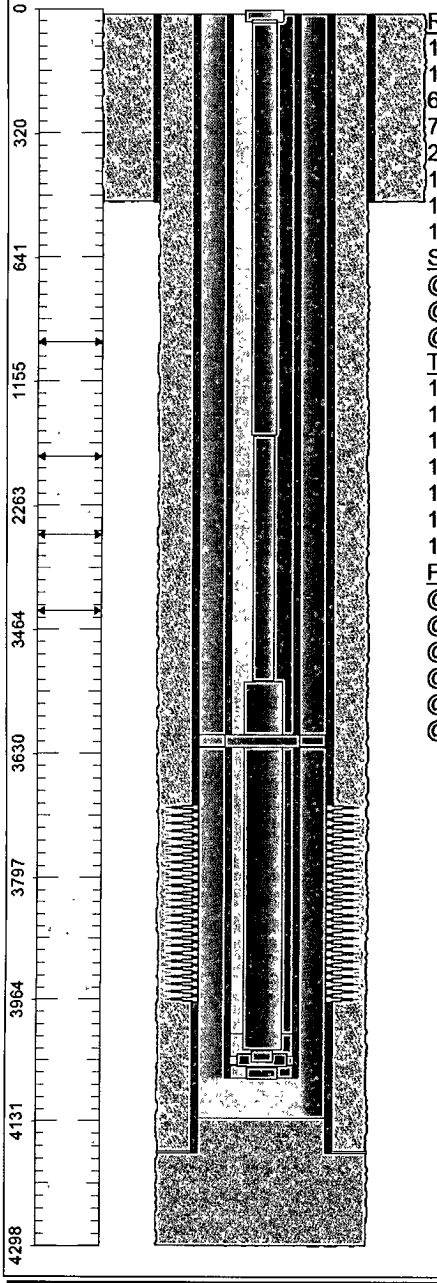
H. T. Mattern (NCT-B) # 27



Perfs Detail				
Top	Bottom	Interval Length	Status	Reservoir
ft	*ft*	*ft*		
3,699	3,701	2	Open	Grayburg
3,706	3,708	2	Open	Grayburg
3,712	3,716	4	Open	Grayburg
3,719	3,723	4	Open	Grayburg
3,728	3,736	8	Open	Grayburg
3,740	3,747	7	Open	Grayburg
3,751	3,753	2	Open	Grayburg
3,757	3,760	3	Open	Grayburg
3,764	3,767	3	Open	Grayburg
3,777	3,780	3	Open	Grayburg
3,783	3,790	7	Open	Grayburg
3,794	3,797	3	Open	Grayburg
3,812	3,821	9	Open	Grayburg
3,829	3,832	3	Open	Grayburg
3,836	3,839	3	Open	Grayburg
3,842	3,847	5	Open	Grayburg
3,853	3,856	3	Open	Grayburg
3,860	3,867	7	Open	Grayburg
3,871	3,876	5	Open	Grayburg
3,883	3,888	5	Open	Grayburg
3,893	3,901	8	Open	Grayburg
3,904	3,912	8	Open	Grayburg
3,919	3,921	2	Open	Grayburg
3,925	3,928	3	Open	Grayburg
3,932	3,941	9	Open	Grayburg
3,945	3,952	7	Open	Grayburg
3,956	3,960	4	Open	Grayburg
		0		
		0		
		0		
		0		
		0		
		0		
		0		
		0		
		0		
Total				
3,699	**3,960**	**129**		

Chevron U.S.A. Inc. Wellbore Diagram : MATB27G

Lease: OEU EUNICE FMT	**Well No.:** MATTERN H T /NCT-B/ 27	**Field:** PENROSE SKELLY	
Location: 1310FSL1705FEL	**Sec.:** N/A	**Blk:**	**Survey:** N/A
County: Lea **St.:** New Mexico	**Refno:** JT8875	**API:** 3002538339	**Cost Center:** UCU490300
Section:	**Township:** N/A		**Range:** N/A
Current Status: ACTIVE		**Dead Man Anchors Test Date:** NONE	
Directions:			



Rod String (Top-Bottom Depth) Desc
1 @(0-26) 1.500 (1 1/2 in.) Spray Metal x 26 - Spray Metal
1 @(26-32) 1.000 (1 in.) N-78 (D) x 6 Rod Sub
61 @(32-1557) 1.000 (1 in.) N-78 (D) x 25 Rod
79 @(1557-3532) 0.875 (7/8 in.) N-78 (D) x 25 Rod
20 @(3532-4032) 1.500 (1 1/2 in.) K x 25 Sinker Bar
1 @(4032-4036) Rod Guide (Coupling) 0.875" Guided Sub Three Guides & 3/4" Pins
1 @(4036-4056) Rod Pump (Insert) (NON-SERIALIZED) - 25-175-RHBC-3-20-0-17 ...
1 @(4056-4057) Strainer Nipple 1.250 OD x 0.5'

Surface Casing (Top-Bottom Depth) Desc
@(12-495) Wellbore Hole OD-12.2500
@(12-495) J-55 8.625 OD/ 24.00# Unknown Thread 8.097 ID 7.972 Drift
@(12-495) Cement

Tubing String Quantity (Top-Bottom Depth) Desc
117 @(12-3605) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347 Drift
1 @(3605-3608) Tubing Anchor/Catcher 2.875"
13 @(3608-4011) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347 Drift
1 @(4011-4042) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347 Drift -...
1 @(4042-4054) Blast Joint 2.875 OD - IPC Sub
1 @(4054-4055) Seat Nipple - Stainless 304 (2.875") Cup Type
1 @(4055-4065) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347 Drift -...

Production Casing (Top-Bottom Depth) Desc
@(3699-3960) Perforations - Open Penrose Skelly; Grayburg
@(3699-3960) Producing Interval (Completion) - Grayburg
@(12-4171) Cement
@(12-4171) J-55 5.500 OD/ 15.50# Unknown Thread 4.950 ID 4.825 Drift
@(4126-4298) Fill in Wellbore (Sand, etc)
@(495-4298) Wellbore Hole OD- 7.8750

Ground Elevation (MSL):: 3488.00	**Spud Date:** 05/10/2007	**Compl. Date:** 06/01/2007
Well Depth Datum:: CSI0000N	**Elevation (MSL)::** 0.00	**Correction Factor:** 12.00
Last Updated by: jackssl	**Date:** 03/12/2010	

Well **H. T. Mattern (NCT-B) # 27** Field **Penrose Skelly** Reservoir **Grayburg**

Location:
1310' FSL & 1705' FEL
Section 30
Township 21S
Range 37E
County Lea State NM

Elevations:
GL 3488'
KB 3500'
DF: 3499'

Current Wellbore Diagram

Well ID Info:
Chevno JT8875
API No 30-025-38339
L5/L6, UCU490300
Spud Date 5/10/2007
Compl Date
N 32° 26' 45 96", W -103° 11' 55 716" (NAD27)

Surf. Csg: 8 5/8", 24#, J-55
Set: @ 495' w/ 490 sks
Hole Size: 12 1/4"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Tubing Detail:

#Jts:	Size:	Footage
	KB Correction	12 00
117	Jts 2 7/8" EUE 8R J-55 Tbg	3,593 08
1	TAC	2 72
13	Jts. 2 7/8" EUE 8R J-55 Tbg	402 78
1	Jt 2 7/8" EUE 8R J-55 IPC Tbg	31 12
1	2-7/8" IPC blast joint	12 00
1	SN	1 10
1	Jt. 2 7/8" EUE 8R J-55 Tbg	10.00
135	**Bottom Of String >>**	**4064 80**

Rod Detail:

#Jts:	Size:	Footage
1	1-1/2" Polish rod SM x 26	26 00
1	1 000" N-78 (D) x 6 Rod Sub	6.00
61	1 000" N-78 (D) x 25 Rod	1,525 00
79	0 875" N-78 (D) x 25 Rod	1,975 00
20	1 500" K x 25 Sinker Bar	500 00
1	Rod Guide (Coupling) 0 875"	4 00
1	Pump 25-175-RHBC-3-20-0-17	20.00
1	Strainer Nipple 1 250 OD x 0 5'	0 50
165	**Length Of String >>**	**4056.50**

Perfs: **Status:**

3699-3701'	Grayburg - Open
3706-08'	Grayburg - Open
3712-16'	Grayburg - Open
3719-23'	Grayburg - Open
3728-36'	Grayburg - Open
3740-47'	Grayburg - Open
3751-53'	Grayburg - Open
3757-60'	Grayburg - Open
3764-67'	Grayburg - Open
3777-80'	Grayburg - Open
3783-90'	Grayburg - Open
3794-97'	Grayburg - Open
3812-21'	Grayburg - Open
3829-32'	Grayburg - Open
3836-39'	Grayburg - Open
3842-47'	Grayburg - Open
3853-56'	Grayburg - Open
3860-67'	Grayburg - Open
3871-76'	Grayburg - Open
3883-88'	Grayburg - Open
3893-3901'	Grayburg - Open
3904-12'	Grayburg - Open
3919-21'	Grayburg - Open
3925-28'	Grayburg - Open
3932-41'	Grayburg - Open
3945-52'	Grayburg - Open
3956-60'	Grayburg - Open

This wellbore diagram is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of the update date below. Verify what is in the hole with the well file in the Eunice Field Office. Discuss w/ WEO Engineer, WO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

COTD: 4126'
PBTD: 4126' (float collar)
TD: 4298'

Prod. Csg: 5 1/2", 15 50#, K-55
Set: @ 4171' w/ 1120 sks
Hole Size: 7 7/8"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Updated: 3 30 2012 **By:** Nash