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-101
May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

[1] Operator Name and Address	[2] OGRID Number
CHEVRON U.S.A. INC. 15 SMITH ROAD MIDLAND, TEXAS 79705	4323
	[3] API Number 30 – 025-07001

[3] Property Code	[5] Property Name	[6] Well No.
2701	MARK OWEN	1

[9] Proposed Pool 1	[10] Proposed Pool 2
PENROSE SKELLY; GRAYBURG	

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	34	21-S	37-E		1980	SOUTH	1980	EAST	LEA

[8] Proposed Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
D	O		P	3421 GL
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
NO	3884'	GRAYBURG		

Depth to Groundwater	Distance from nearest fresh water well	Distance from nearest surface water

Pit: Liner: Synthetic ☐ ____ mils thick Clay ☐ Pit Volume:_____bbls
Closed-Loop System ☐

Drilling Method:
Fresh Water ☐ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐

[21] Proposed Casing and Cement Program

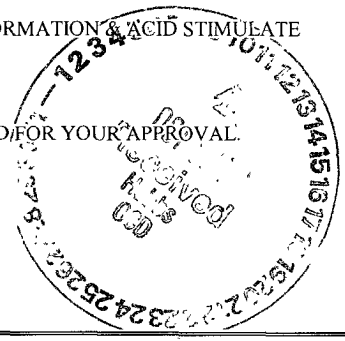
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
NO CHANGE					

[22] Describe the proposed program If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone Describe the blowout prevention program, if any. Use additional sheets if necessary

CHEVRON U.S.A. INC. INTENDS TO DEEPEN THE SUBJECT WELL TO THE BASE OF THE GRAYBURG FORMATION & ACID STIMULATE

A PIT WILL NOT BE USED FOR THIS DEEPENING.

THE INTENDED PROCEDURE, AND CURRENT AND PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR YOUR APPROVAL.



Permit Expires 1 Year From Approval Date Unless ~~Drilling Underway~~ Deepen

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief **I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Signature: Denise Pinkerton

Printed name: DENISE PINKERTON

Title: REGULATORY SPECIALIST

E-mail Address: leakejd@chevron.com

Date 10-09-2007 Phone: 432-687-7375

OIL CONSERVATION DIVISION

Approved by: Chris Williams

Title: ~~OC DISTRICT SUPERVISOR~~/GENERAL MANAGER

Approval Date: OCT 15 2007 Expiration Date:

Conditions of Approval Attached ☐

Owen # 1
Penrose Skelly Field
T21S, R37E, Section 34
Job: Drill Well Deeper To Base Of Grayburg Formation And Acid Stimulate

Procedure:

1. ***This procedure 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 10/8/2007. Verify what is in the hole with the well file in the Eunice Field office. Discuss w/ WEO Engineer, Workover Rep, OS, ALS, and FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.***

2. Displace flowline with fresh water. Have field specialist close valve at header. Pressure line according to the type of line. 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.

3. 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. Release TAC if possible. POH with 2 7/8" production tbg string. **Note: It is likely that there is frac sand in the wellbore. The pump has been reported as stuck. If so, back off rods and strip out of the hole. Also, there may be sand on top of the TAC. If TAC is stuck, run free point, cut tbg and cleanout wellbore by washing over tbg and jarring TAC free. THE FRAC SAND IN THE WELLBORE MAY CONTAIN RADIOACTIVE ISOTOPES, SO USE PROPER HANDLING AND DISPOSAL PROCEDURES. HAVE TRACER-TECH SERVICES ((866) 595-3115) PRESENT TO MONITOR FOR RADIOACTIVE ISOTOPES. Also, do not exceed 350 psi casing pressure due to cmt squeezed casing leaks at 250' and 988'.**

4. PU 5 3/8" MT bit and GIH on 2 7/8" work string to top of fill in wellbore. MI & RU air unit(s). LD and cleanout 5 ½"/5 3/8" open hole to TD at 3844'. Drill well deeper to a new TD of 3884'. Circulate well clean from 3884'.

5. MI & RU DS Services. Pump down tbg and spot 1000 gals anti-sludge 15% HCl acid* from TD up to 3075'. POH with 5 3/8" MT bit and drill string. LD MT bit. PU & GIH with 6" pkr on 2 7/8" work string to 3500'. Set pkr at 3500'. Pump down tbg and acidize open-hole from 3600-3884' with 4,000 gals anti-sludge 15% HCl acid * at a maximum rate of **4 BPM** and a maximum surface pressure of **2500 psi**. Displace acid with 8.6 PPG cut brine water -- do not overdisplace. Record ISIP, 5 & 10 minute SIP's. RD and release DS services. **Note: It is not necessary to pickle tbg due to low BHP.**

* Acid system is to contain:	1 GPT A264	Corrosion Inhibitor
	8 GPT L63	Iron Control Agent

2 PPT A179	Iron Control Aid
20 GPT U66	Mutual Solvent
2 GPT W53	Non-Emulsifier

6. Open well. GIH and swab back spent fluids. Recover 100% of treatment and load volumes before shutting well in for night, if possible. Report recovered fluid volumes, pressures, and/or swabbing fluid levels.

7. MI & RU pump truck. Pump down tbg with 50 bbls 8.6 PPG cut brine water containing 55 gals Baker RE-4777 Scale Inhibitor followed by 200 bbls 8.6 PPG cut brine water at **4 BPM** and **2500 psi maximum pressure**. RD and release pump truck. Release pkr. POH with 2 7/8" work string. LD 2 7/8" work string and packer.

8. 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, 8 jts 2 7/8" EUE 8R J-55 tbg, TAC, and 113 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 3500', with EOT at 3835' and SN at 3800'.

9. Remove BOP's and install WH. GIH with rods, weight bars, and pump per ALS recommended design. RD & release workover unit.

10. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

AMH
10/8/2007

Mark

Well: **Owen # 1**

Field: **Penrose Skelly**

Reservoir: **Grayburg**

J

Location:
1980' FSL & 1980' FEL
Section: 34
Township: 21S
Range: 37E
County: Lea State: NM

Elevations:
GL: 3421'
KB: 3427'
DF: 3426'

Current
Wellbore Diagram

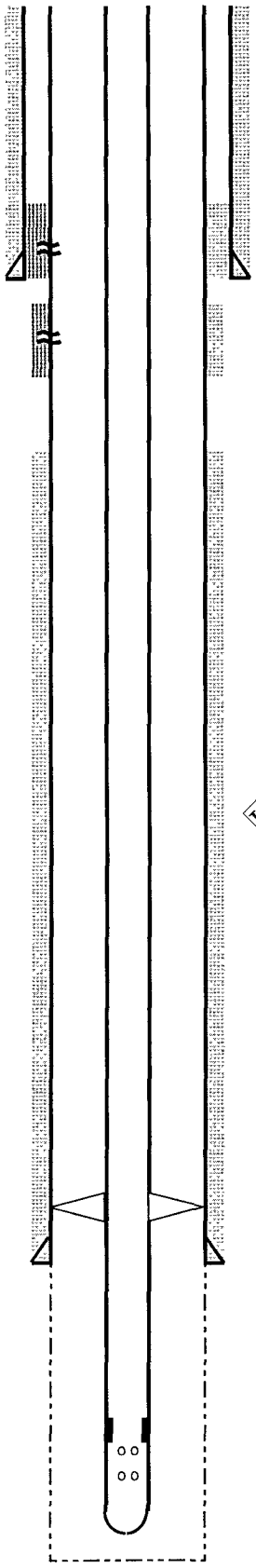
Well ID Info:
Refno: FA8098
API No: 30-025-07001
L5/L6: U490400
Spud Date: 10/20/39
Compl. Date: 11/28/39

fee
2701 Prop Code

Surf. Csg: 10 3/4", 51#, D-55
Set: @ 260' w/ 225 sks
Hole Size: 13 3/4"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Sqzd Csg Leak @ 250'

Sqzd Csg Leak @ 988'



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/ WEQ Engineer, WQ Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

Tubing Detail:

#Jts:	Size:	Footage
	KB Correction	6 00
108	Jts 2 7/8" EUE 8R J-55 Tbg	3406 46
	TAC	2 80
9	Jts 2 7/8" EUE 8R J-55 Tbg	283 38
1	Jt 2 7/8" EUE 8R J-55 IPC Tbg	32 57
	SN	1 10
	Cavins Desander	20 20
2	Jt 2 7/8" EUE 8R J-55 Tbg	60 67
	Dump Valve	0 50
120	**Bottom Of String >>**	**3813.68**

Prod. Csg: 6", 16#, C-55
Set: @ 3600' w/ 350 sks
Hole Size: 7 7/8"
Circ: No **TOC:** 1601'
TOC By: Calculated

5 1/2" OH fr/ 3600-3735' - Grayburg

5 3/8" OH fr/ 3735-3844' - Grayburg

COTD: 3844'
PBTD: 3844'
TD: 3844'

Updated: 10/8/07

By: A. M. Howell

Well: **Owen # 1** Field: **Penrose Skelly** Reservoir **Grayburg**

Location:
1980' FSL & 1980' FEL
Section: 34
Township: 21S
Range: 37E
County Lea State: NM

Elevations:
GL: 3421'
KB: 3427'
DF: 3426'

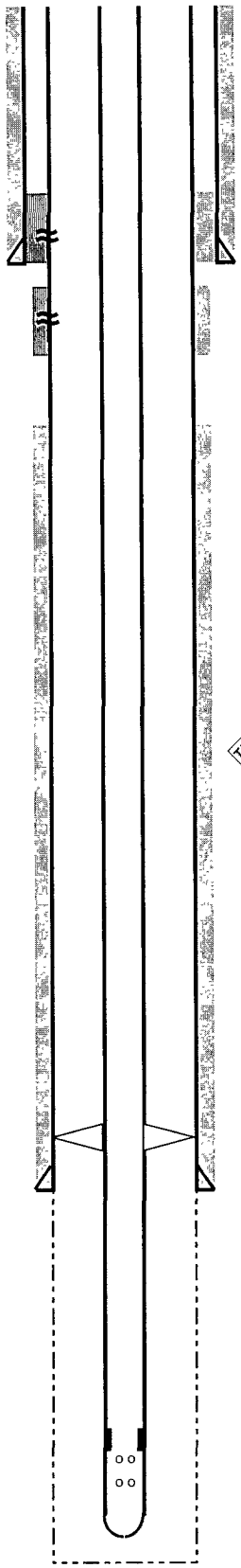
Proposed
Wellbore Diagram

Well ID Info:
Refno FA8098
API No: 30-025-07001
L5/L6: U490400
Spud Date 10/20/39
Compl. Date: 11/28/39

Surf. Csg: 10 3/4", 51#, D-55
Set: @ 260' w/ 225 sks
Hole Size: 13 3/4"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Sqzd Csg Leak @ 250'

Sqzd Csg Leak @ 988'



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Tubing Detail:

#Jts:	Size:	Footage
	KB Correction	6 00
113	Jts 2 7/8" EUE 8R J-55 Tbg	3503 00
	TAC	2 80
8	Jts 2 7/8" EUE 8R J-55 Tbg	248 00
1	Jt 2 7/8" EUE 8R J-55 IPC Tbg	32 57
	SN	1 10
	2 7/8" Perf Tbg Sub	4 00
1	Jt 2 7/8" EUE 8R J-55 Tbg	31 00
	Dump Valve	0 50
123	**Bottom Of String >>**	3828.97

Prod. Csg: 6", 16#, C-55
Set: @ 3600' w/ 350 sks
Hole Size: 7 7/8"
Circ: No **TOC:** 1601'
TOC By: Calculated

5 1/2" OH fr/ 3600-3735' - Grayburg

5 3/8" OH fr/ 3735-3884' - Grayburg

COTD: 3884'
PBTD: 3884'
TD: 3884'

Updated: 10/8/07 **By:** A. M. Howell