DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
P.O. Box Drawer DD, Artesia, NM 88211-0719
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Depart nt

OIL CONSERVATION DIVISION

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

Form C-101
Revised February 10,199
Instructions on bac
Submit to Appropriate District Offic
State Lease - 6 Copie
Fee Lease - 5 Copie
☐ AMENDED REPORT

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

1 Operator Name and Address	2 OGRID Number
CHEVRON USA INC 15 SMITH ROAD, MIDLAND, TX 79705	4323
	3 API Number 30-025-06937

4 Property Code	5 Property Name	6 Well No.
26970	W. T. MCCOMACK	8

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
H	32	21-S	37-E		1980'	NORTH	660'	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

9 Proposed Pool 1	10 Proposed Pool 2
PENROSE SKELLY GRAYBURG	

11 Work Type Code	12 WellType Code	13 Rotary or C.T.	14 Lease Type Code	15 Ground Level Elevation
P D	O	ROTARY	S	3459'
16 Multiple	**17 Proposed Depth**	**18 Formation**	**19 Contractor**	**20 Spud Date**
No	4000'	GRAYBURG		10/15/2002

21 Proposed Casing and Cement Program

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
NO CHANGE					

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

CHEVRON U.S.A. INTENDS TO DEEPEN THE SUBJECT WELL TO THE GRAYBURG & FRAC STIMULATE TO INCREASE PRODUCTION FROM THAT RESERVOIR. THE INTENDED PROCEDURE IS ATTACHED.

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

23 I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature Denise Leake

Printed Name Denise Leake

Title Regulatory Specialist

Date 10/1/2002 Telephone 915-687-7375

OIL CONSERVATION DIVISION

Approved By: ORIGINAL SIGNED BY PAUL F. KAUTZ PETROLEUM ENGINEER

Title:

Approval Date: OCT 21 2002 Expiration Date:

Conditions of Approval:
Attached ☐

DeSoto/Nichols 3-94 ver 1.10

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
P.O. Box Drawer DD, Artesia, NM 88211-0719
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Dep ment

OIL CONSERVATION DIVISION

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

Form C-102
Revised February 10,199
Instructions on bac
Submit to Appropriate District Offic
State Lease - 4 Copie
Fee Lease - 3 Copie
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-06937	50350	PENROSE SKELLY GRAYBURG

4 Property Code	5 Property Name	6 Well No.
2691	W. T. MCCOMACK	8

7 OGRID Number	8 Operator Name	9 Elevation
4323	CHEVRON USA INC	3459'

10 Surface Location

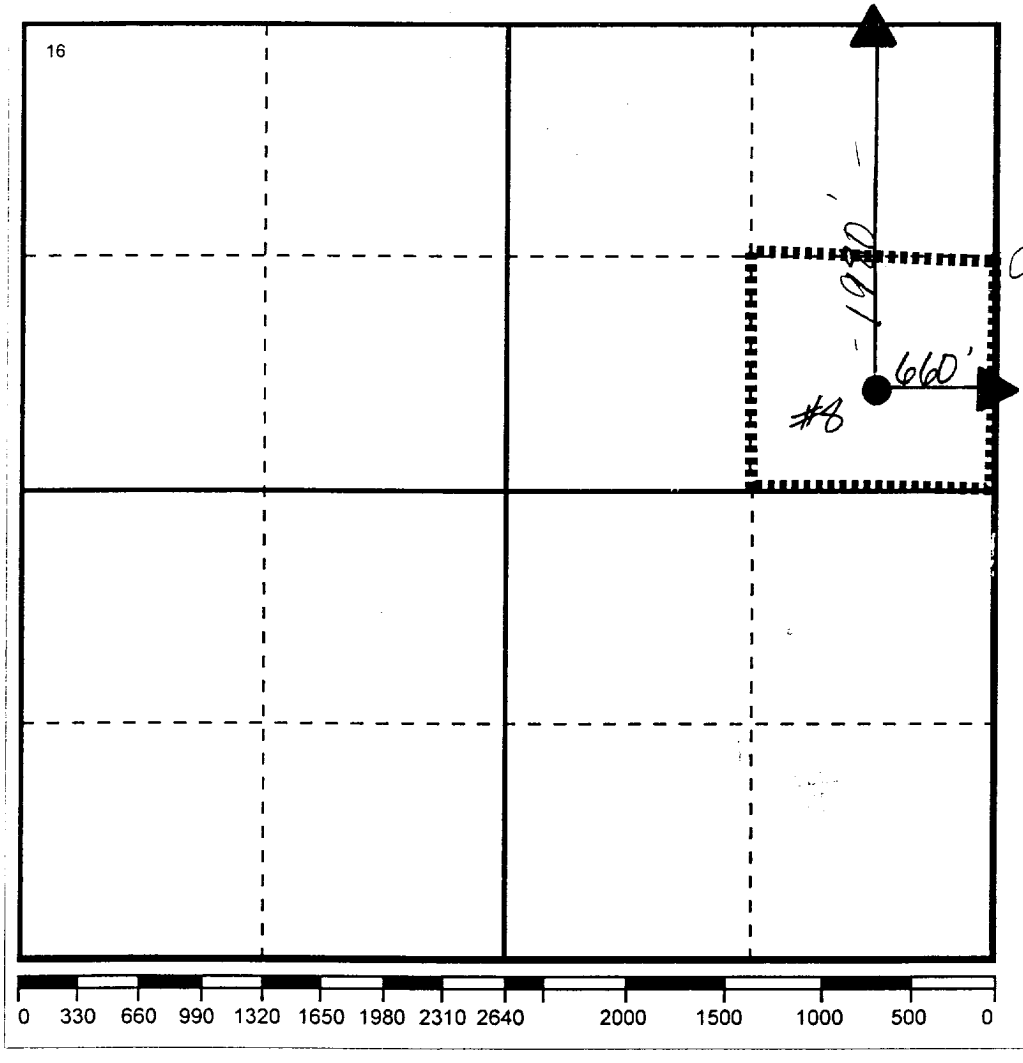
Ul or lot no	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
H	32	21-S	37-E		1980'	NORTH	660'	EAST	LEA

11 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

12 Dedicated Acre	13 Joint or Infill	14 Consolidation Code	15 Order No.
40	No		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature: Denise Leake

Printed Name: Denise Leake

Positio: Regulatory Specialist

Date: 10/1/2002

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Signature & Seal of Professional Surveyor

Certificate No.

DeSoto/Nichols 3/94 ver 1.10

W. T. McComack # 8
Penrose Skelly Field
T21S, R37E, Section 32
Job: Drill Well Deeper In Grayburg Formation

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 Larry Williams 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 pulling unit. Bleed pressure from well, if any. Pump down csg with 2% KCl water, if necessary to kill well. POH with rods and pump. Remove WH. Install BOP's and test to 1000 psi. **Note: Minimize water pumped into well since deepening will be performed using foam due to low pressure Upper Grayburg open-hole interval.**

3. PU 4 ¾" MT bit & DC's and GIH on 2 7/8" work string to COTD at 3755'. MI & RU foam unit(s). LD and cleanout to 3775' using foam. POH with 2 7/8" work string, DC's and MT bit. LD MT bit. PU 4 ¾" sealed bearing bit and GIH on 2 7/8" drill string to 3775'. MI & RU mud logging unit. LD and drill well deeper to a new TD of 4000' using foam. Conduct deviation survey at new TD of 4000'. POH with 4 ¾" bit and drill string. LD bit. RD and release foam unit(s).

4. MI & RU electric line unit. GIH and conduct logs as directed by Geology (Contact: **Robert Martin**, telephone **687-7267**). POH. RD & release electric line unit.

5. PU & GIH 5 ½" Lok-Set pkr and On-Off tool w/ 2.25" "F" profile on 2 7/8" EUE 8R L-80 work string. Set pkr at approximately 3550'.

6. MI & RU DS Services. Acidize open-hole from 3628-4000' with 6,000 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 500 gals gelled 10 PPG brine containing 1000 lbs GRS at 6 BPM
   Pump 1,500 gals acid at 6 BPM
   Pump 500 gals gelled 10 PPG brine containing 1000 lbs GRS at 6 BPM
   Pump 1,500 gals emulsified acid at 6 BPM
   Pump 500 gals gelled 10 PPG brine containing 1000 lbs GRS at 6 BPM
   Pump 1,500 gals non-emulsified acid at 6 BPM

Displace acid with 2% KCl 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	Iron Control Aid
	20 GPT U66	Mutual Solvent
	2 GPT W53	Non-Emulsifier

7. 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.

8. Open well. Pump down tbg with 2% KCl water to kill well, if necessary. Release pkr. POH with 2 7/8" work string and packer. LD pkr.

9. PU 4 ¾" MT bit and GIH on 2 7/8" work string to TD at 4000'. If fill is encountered, MI & RU foam unit(s) and cleanout to 4000' using foam. POH with 2 7/8" work string and MT bit. LD MT bit.

10. PU and GIH w/ 5 1/2" Lok-Set pkr & On-Off tool w/ 2.25" "F" profile and 115 jts. of 3 ½" EUE 8R L-80 work string, testing to 7000 psi. Set pkr at approximately 3550'. Install frac head. Pressure annulus to 500 psi to test csg and pkr. Leave pressure on csg during frac job to observe for communication.

11. MI & RU DS Services. Frac well down 3 ½" tubing at **40 BPM** with 68,000 gals of YF135/140, 127,000 lbs. 16/30 mesh Jordan Sand, and 33,000 lbs **resin-coated** 16/30 mesh CR4000 proppant. Observe a maximum surface treating pressure of **6500 psi**. Pump job as follows:

    Pump 28,000 gals YF140 pad containing 5 GPT J451 Fluid Loss Additive
    Pump 4,000 gals YF135 containing 1 PPG 16/30 mesh Jordan Sand
    Pump 4,000 gals YF135 containing 2 PPG 16/30 mesh Jordan Sand
    Pump 6,000 gals YF135 containing 3 PPG 16/30 mesh Jordan Sand
    Pump 8,000 gals YF135 containing 4 PPG 16/30 mesh Jordan Sand
    Pump 10,000 gals YF135 containing 5 PPG 16/30 mesh Jordan Sand
    Pump 2,500 gals YF135 containing 6 PPG 16/30 mesh Jordan Sand
    Pump 5,500 gals YF135 containing 6 PPG resin-coated 16/30 mesh CR4000 proppant

    Flush to 3550' with 1,300 gals WF135. **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.**

12. Open well and swab/backflow until well cleans up with no frac sand in returns and a stabilized flow rate is obtained. Report recovered fluid volumes, choke sizes and flowing pressures. SWI.

13. If well flows, GIH and set tbg plug in "F" profile. Release on-off tool and POH with 3 ½" work string and top half of on-off tool. Lay down work strings. PU and GIH w/ top half of on-off tool on 2 7/8" tbg, testing to 5000 psi. Displace annulus with inhibited packer fluid. Re-engage on-off tool. Remove BOP's and install flanged WH rated at 3000 psi WP. Pressure test tbg and WH to 3000 psi. Pressure test casing to 500 psi. GIH and swab fluid level in tubing down until differential across tbg plug is balanced. GIH and retrieve tbg plug from "F" nipple. Swab well if necessary to initiate flow. RD & release pulling unit.

14. If well does not flow, release pkr and POH with 3 ½" work string. Lay down work strings and pkr.

15. PU and GIH w/ BP mud anchor jt of 2 7/8" tbg, 2 7/8" x 4' perforated sub, SN, 10 jts 2 7/8" EUE 8R J-55 tbg, TAC, and 116 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 3600' with EOT suspended at 3965' and SN at 3930'.

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

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

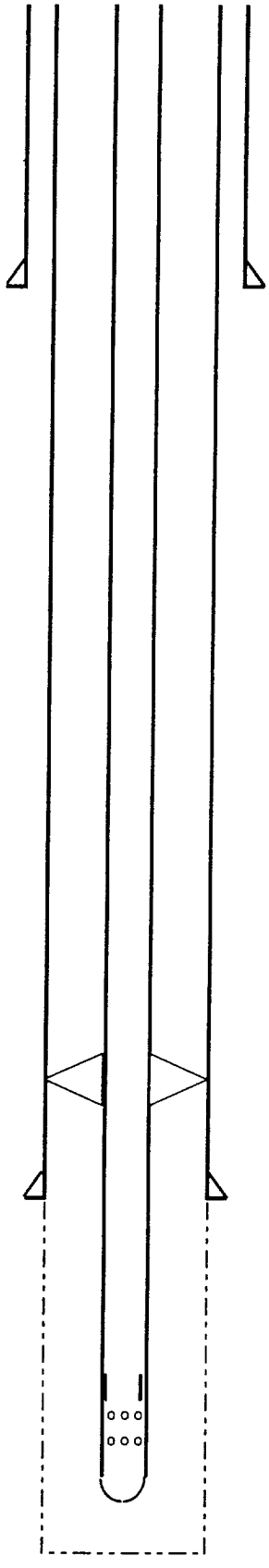
AMH
9/24/2002

Well: **W. T. M omack # 8** Field: **Penrose Skelly** Reservoir: **Grayburg**

Location:
1980' FNL & 660' FEL
Section: 32
Township: 21S
Range: 37E
County: Lea State: NM

Elevations:
GL: 3450'
KB: 3459'
DF: 3458'

Proposed
Wellbore Diagram



Well ID Info:
Refno: FA8034
API No: 30-025-06937
L5/L6: U491900
Spud Date: 8/24/39
Compl. Date: 10/22/39

Surf. Csg: 10 3/4", 51#, C-45
Set: @ 291' w/ 250 sks
Hole Size: 13 3/4"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Tbg Detail:
EOT @ 3965'
2 7/8" OD EUE 8R J-55 mud jt.
2 7/8" x 4' perf tbg sub
SN @ 3930'
10 jts. 2 7/8" EUE 8R J-55 tbg
TAC @ 3600'
116 jts. 2 3/8" EUE 8R J-55 tbg

Prod. Csg: 5 1/2", 14#, H-40
Set: @ 3628' w/ 400 sks
Hole Size: 6 3/4"
Circ: No **TOC:** 2360'
TOC By: Temperature Survey

COTD: 4000'
PBTD: 4000'
TD: 4000'

Open-Hole
Production Interval
3628-4000' (Grayburg)

Updated: 9/21/02

By: K. M. Jackson

W T MCCOMACK #8 - DEEPEN & FRAC STIM

API #30-025-06937

CHEVNO FA8036

IT IS PROPOSED TO DEEPEN TO THE GRAYBURG AND FRAC STIMULATE IN THE W. T. MCCOMACK # 8 TO INCREASE PRODUCTION FROM THAT RESERVOIR. THE WELL WAS INITIALLY COMPLETED IN THE GRAYBURG IN AUGUST 1939 WITH AN IP OF 81 BOPD, 2 BWPD, AND 192 MCFPD. THE WELL PRODUCED AS AN OPEN-HOLE COMPLETION IN THE UPPER GRAYBURG UNTIL JULY 1999 WHEN MCCOMACK # 8 WAS SHUT IN AS UNECONOMIC. THE LAST TEST ON THE WELL WAS 3 BOPD, 5 BWPD, AND 43 MCFPD. RECENTLY, SEVERAL PRODUCERS IN THE EUNICE AREA HAVE BEEN COMPLETED IN THE LOWER GRAYBURG WITH VERY GOOD RESULTS. LOG ANALYSIS OF THE LOWER GRAYBURG INTERVALS IN MCCOMACK # 19 (SOUTH OFFSET TO MCCOMACK # 8) SHOWS THE ZONES TO BE VERY SIMILAR TO THOSE IN THE RECENT SUCCESSFUL COMPLETIONS. FOR THAT REASON, IT IS BELIEVED THAT SIMILAR RESULTS COULD BE OBTAINED BY DEEPENING MCCOMACK # 8 APPROXIMATELY 230' AND COMPLETING IN THE LOWER GRAYBURG. IT WILL ALSO BE NECESSARY TO FRAC STIMULATE THE WELL. W. T. MCOMACK # 8 IS CURRENTLY ON THE NMOCD LIST OF LONG-TERM SI WELLS REQUIRING ACTION. T