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 Department

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 30-025-25198

4 Property Code	5 Property Name	6 Well No.
2669	HARRY LEONARD NCT-E	6

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
A	16	21-S	37-E		330'	NORTH	600'	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	O	ROTARY	S	3478' DF
16 Multiple	**17 Proposed Depth**	**18 Formation**	**19 Contractor**	**20 Spud Date**
No	6720'	GRAYBURG		4/30/2002

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 RECOMPLETE THE SUBJECT WELL TO THE PENROSE SKELLY GRAYBURG FIELD. THE INTENDED PROCEDURE, THE CURRENT WELLBORE DIAGRAM, AND THE PROPOSED WELLBORE DIAGRAM IS ATTACHED FOR YOUR APPROVAL.

Permit Expires 1 Year From Approval
Date Unless ~~Drilling~~ Underway
Plug-Back

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 J. Denise Leake

Printed Name Denise Leake

Title Regulatory Specialist

Date 4/22/2002 Telephone 915-687-7375

OIL CONSERVATION DIVISION

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

Approval Date: APR 30 2002 Expiration Date:

Conditions of Approval:
Attached ☐

DeSoto/Nichols 3-94 ver 1.10

S
C
A

Harry Leonard (NCT-E) # 6
Penrose Skelly Field
T21S, R37E, Section 16
Job: PB To Grayburg Formation, Acidize, And Frac

Procedure:

1. MI & RU pulling unit. Bleed pressure from well, if any. Pump down csg with 2% KCl water, if necessary to kill well. Remove WH. Install BOP's and test to 1000 psi.

2. PU and GIH with 4 ¾" MT bit and 2 7/8" work string to PBTD at 6685'. Reverse circulate well clean from 6685' using 2% KCl water. POH with work string and 4 ¾" bit. LD bit.

3. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH and conduct GR/CBL/CCL log from 6685' up to 2800'. POH. **Note: Tie the new log in flat with the Schlumberger Compensated Formation Density Log run 1/13/76.** POH. Inspect logs for good cement bond from approximately 4300' up to 3500'. If bond does not appear to be good across proposed completion interval, discuss with Engineering before proceeding. GIH and set CIBP at 6400'. POH. GIH with 3 1/8" DP slick casing gun and perforate from 3728-32', 3734-40', 3746-54', 3760-65', 3768-75', 3780-84', 3787-93', 3797-3800', 3809-16', 3821-26', 3836-42', 3846-51', 3855-60', 3883-87', 3891-96', and 3900-08 ' with 4 JSPF at 120 degree phasing, using 23 gram premium charges. POH. GIH and dump 35' cement on top of CIBP at 6400'. POH. RD & release electric line unit.

4. PU and GIH w/ 5 ½" PPI pkr (with 10' element spacing) and SCV on 2 7/8" work string to approximately 3700'. Test tbg to 5500 psi while GIH.

5. MI & RU DS Services. Acidize perfs 3728-3908' with 3,200 gals anti-sludge 15% HCl acid * at a maximum rate **as shown below** and a maximum surface pressure of **4000 psi**. Spot acid to bottom of tbg at beginning of each stage. Pump job as follows:

Interval	Amt. Acid	Max Rate	PPI Setting
3900-08'	200 gals	1 BPM	3899-3909'
3891-96'	200 gals	1 BPM	3888-98'
3883-87'	200 gals	1 BPM	3878-88'
3855-60'	200 gals	1 BPM	3854-64'
3846-51'	200 gals	1 BPM	3844-54'
3836-42'	200 gals	1 BPM	3834-44'
3821-26'	200 gals	1 BPM	3818-28'
3809-16'	200 gals	1 BPM	3808-18'
3797-3800'	200 gals	1 BPM	3796-3806'
3787-93'	200 gals	1 BPM	3786-96'

3780-84'	200 gals	1 BPM	3776-86'
3768-75'	200 gals	1 BPM	3766-76'
3760-65'	200 gals	1 BPM	3756-66'
3746-54'	200 gals	1 BPM	3745-55'
3734-40'	200 gals	1 BPM	3733-43'
3728-32'	200 gals	1 BPM	3723-33'

6. Displace acid with 2% KCl water -- do not overdisplace. Use a SCV to control displacement fluid. Record ISIP, 5 & 10 minute SIP's. RD and release DS Services. **Note: Pickle tubing in 2 runs of 250 gals acid each, prior to acidizing perfs. Pickle acid is to contain only 1/2 gal CI-25 and 1 gal NE-13. Also, if communication occurs during treatment of any interval, monitor casing pressure and attempt to complete stage w/o exceeding 1000 psi csg pressure. If cannot, then save remaining acid for high rate combined acid treatment of all zones after completion of the PPI job.**

   * Acid system is to contain:

1 GPT CI-25	Corrosion Inhibitor
2 GPT FE-270L	Iron Control
1 GPT FE-271L	Iron Control Catalyst
1 GPT FAW-18	Binding Agent
1 GPT NE-13	Non-Emulsifier

7. Release PPI pkr and PUH to approximately 3700'. Swab back all intervals together. 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. **Note: Selectively swab perfs as directed by Engineering if excessive water is produced.**

8. Open well. Release PPI pkr. POH with tbg and PPI packer. LD 2 7/8" work string and PPI tool.

9. PU and GIH w/ 5 ½" Lok-Set pkr & On-Off tool w/ 2.25" "F" profile and 118 jts. of 3 ½" EUE 8R L-80 work string, testing to 7000 psi. Set pkr at approximately 3650'. Install frac head. Pressure annulus to 500 psi to test csg and pkr. Leave pressure on csg during frac job to observe for communication.

10. MI & RU DS Services. Frac well down 3 ½" tubing at **40 BPM** with 56,500 gals of SpectraFrac G3500, 6,000 lbs. 100 mesh White Sand, 133,500 lbs. 16/30 mesh White Sand, and 24,500 lbs **resin-coated** 16/30 mesh proppant. Observe a maximum surface treating pressure of **6500 psi**. Pump job as follows:

    Pump 6,000 gals SpectraFrac G3500 pad
    Pump 6,000 gals SpectraFrac G3500 pad containing 1 PPG 100 mesh sand
    Pump 6,000 gals SpectraFrac G3500 pad
    Pump 3,500 gals SpectraFrac G3500 containing 1 PPG 16/30 mesh Ottawa Sand
    Pump 5,500 gals SpectraFrac G3500 containing 2 PPG 16/30 mesh Ottawa Sand

Pump 6,000 gals SpectraFrac G3500 containing 3 PPG 16/30 mesh Ottawa Sand
Pump 6,000 gals SpectraFrac G3500 containing 4 PPG 16/30 mesh Ottawa Sand
Pump 7,000 gals SpectraFrac G3500 containing 5 PPG 16/30 mesh Ottawa Sand
Pump 7,000 gals SpectraFrac G3500 containing 6 PPG 16/30 mesh Ottawa Sand
Pump 3,500 gals SpectraFrac G3500 containing 7 PPG **resin-coated** 16/30 mesh proppant

Flush to 3650' with 1,333 gals AquaFrac 3500. **Do not overflush.** Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. Open well and flowback through choke manifold at **1 BPM maximum rate** until square root of time plot indicates that closure has been obtained. SWI. RD & Release BJ Services.

11. Open well and 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.

12. 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 string. 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.

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

14. PU and GIH w/ BP mud anchor jt of 2 7/8" tbg, 2 7/8" x 4' perforated sub, SN, 12 jts 2 7/8" EUE 8R J-55 tbg, TAC, and 119 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 3700' with EOT at 4100' and SN at 4065'.

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

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

AMH
4/16/2002

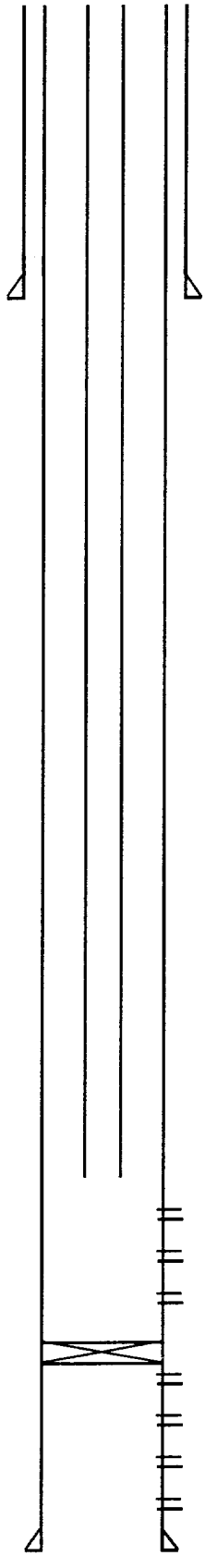
Well: **Harry Leon (NCT-E) # 6** Field: **Drinkard** Reservoir: **Drinkard**

Location:
330' FNL & 600' FEL
Section: 16
Township: 21S
Range: 37E
County: Lea State: NM

Elevations:
GL: 3465'
KB:3479'
DF:3478'

DV Tool @ 1290'

Current Wellbore Diagram



Well ID Info:
Chevno: EO8223
API No: 30-025-25198
L5/L6: U412800
Spud Date: 1/1/76
Compl. Date: 2/10/76

Surf. Csg: 8 5/8", 24#, K-55
Set: @ 1305' w/ 550 sks
Hole Size: 11"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Tbg Detail:
EOT @ 6411
1 jt. 2 3/8" tbg
SN @ 6380'
206 jts. 2 3/8" EUE 8R J-55 tbg

Perfs:	Status:
6461-63'	Drinkard - Open
6492-94'	Drinkard - Open
6512-14'	Drinkard - Open

CIBP @ 6550'
(no cmt on top)

6568-70'	Drinkard - Below CIBP
6601-03'	Drinkard - Below CIBP
6638-42'	Drinkard - Below CIBP
6669-71'	Drinkard - Below CIBP

COTD: 6685'
PBTD: 6685'
TD: 6720'

Prod. Csg: 5 1/2", 15.5#, K-55
Set: @ 6720' w/ 1050 sks
Hole Size: 7 7/8"
Circ: No **TOC:** 47'
TOC By: Tagged

Updated: 4/15/02 **By:** A. M. Howell

Well: **Harry Lec 1 (NCT-E) # 6** Field: **Penrose Skelly** Reservoir **Grayburg**

Location:
330' FNL & 600' FEL
Section: 16
Township: 21S
Range: 37E
County: Lea State: NM

Elevations:
GL: 3465'
KB:3479'
DF:3478'

DV Tool @ 1290'

Tbg Detail:
BP @ 4100'
1 jt. 2 7/8" tbg
2 7/8" x 4' perf sub
SN @ 4065'
12 jts. 2 7/8" EUE 8R J-55 tbg
TAC @ 3700'
119 jts. 2 7/8" EUE 8R J-55 tbg

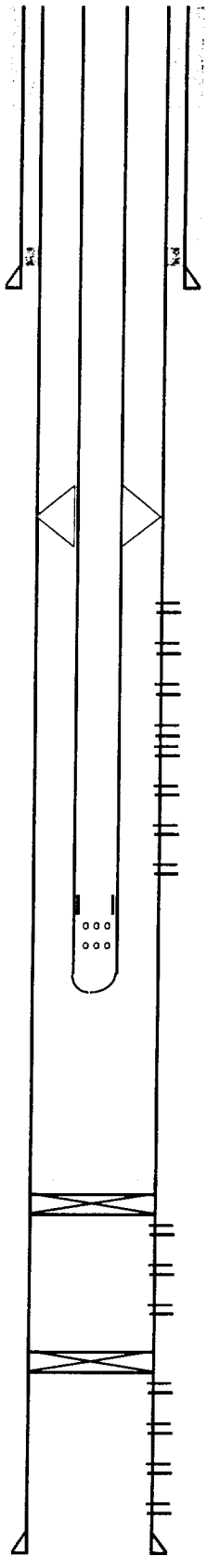
CIBP @ 6400'
(35' cmt on top)

CIBP @ 6550'
(no cmt on top)

COTD: 6365'
PBTD: 6365'
TD: 6720'

Updated: 4/15/02

Proposed
Wellbore Diagram



By: A. M. Howell

Well ID Info:
Chevno: EO8223
API No: 30-025-25198
L5/L6: U492000
Spud Date: 1/1/76
Compl. Date: 2/10/76

Surf. Csg: 8 5/8", 24#, K-55
Set: @ 1305' w/ 550 sks
Hole Size: 11"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Perfs:	Status:
3728-32'	Grayburg - Open
3734-40'	Grayburg - Open
3746-54'	Grayburg - Open
3760-65'	Grayburg - Open
3768-75'	Grayburg - Open
3780-84'	Grayburg - Open
3787-93'	Grayburg - Open
3797-3800'	Grayburg - Open
3760-65'	Grayburg - Open
3809-16'	Grayburg - Open
3821-26'	Grayburg - Open
3836-42'	Grayburg - Open
3846-51'	Grayburg - Open
3855-60'	Grayburg - Open
3883-87'	Grayburg - Open
3891-96'	Grayburg - Open
3900-08'	Grayburg - Open

Perfs:	Status:
6461-63'	Drinkard - Below CIBP
6492-94'	Drinkard - Below CIBP
6512-14'	Drinkard - Below CIBP
6568-70'	Drinkard - Below CIBP
6601-03'	Drinkard - Below CIBP
6638-42'	Drinkard - Below CIBP
6669-71'	Drinkard - Below CIBP

Prod. Csg: 5 1/2", 15.5#, K-55
Set: @ 6720' w/ 1050 sks
Hole Size: 7 7/8"
Circ: No **TOC:** 47'
TOC By: Tagged

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
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Revised February 10,199
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Fee Lease - 3 Copie
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-25198	50350	PENROSE SKELLY GRAYBURG

4 Property Code	5 Property Name	6 Well No.
2669	HARRY LEONARD NCT-E	6

7 OGRID Number	8 Operator Name	9 Elevation
4323	CHEVRON USA INC	3478' DF

10 Surface Location

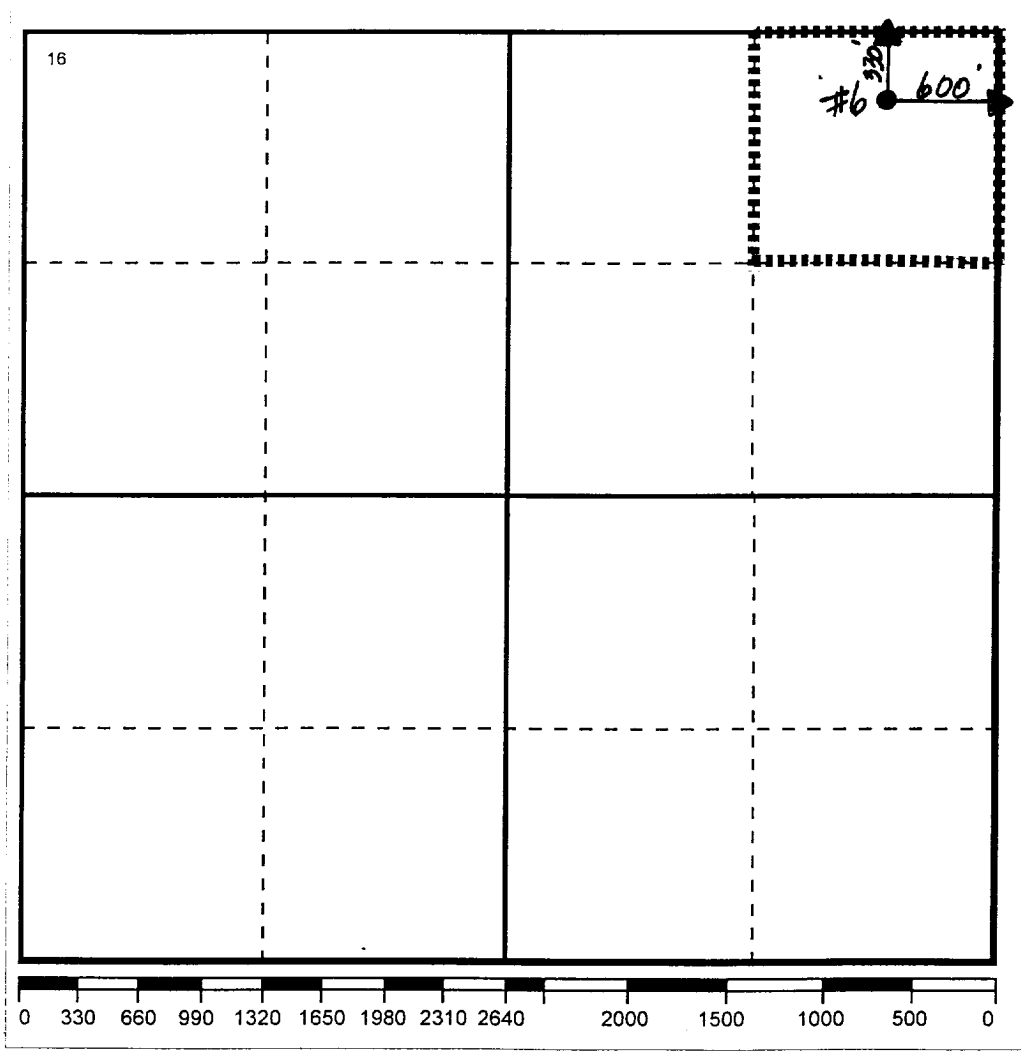
Ul or lot no	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
A	16	21-S	37-E		330'	NORTH	600'	EAST	LEA

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: 4/22/2002

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