#### DISTRICT I .... P.O. Box 1980, Hobbs, NM 88241-1980 DISTRICT II

P.O. Box Drawer DD, Artesia, NM 88211-0719

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-101

Revised February 10.199

Instructions on bac

Submit to Appropriate District Offic

# **OIL CONSERVATION DIVISION**

P.O. Box 2088

DISTRICT III State Lease - 6 Copie 1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, New Mexico 87504-2088 Fee Lease - 5 Copie DISTRICT IV P.O. Box 2088, Santa Fe, NM 87504-2088 AMENDED REPORT APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE Operator Name and Address **OGRID Number** CHEVRON USA INC 4323 15 SMITH RD, MIDLAND, TX 79705 API Number 30-025-06843 Property Code <sup>5</sup> Property Name Well No. 2615 **EUNICE KING** Surface Location Ul or lot no. Section Township Feet From The Feet From The Range Lot.ldn North/South Line East/West Line County G 28 37-E 1980 21-S **NORTH** 1980' EAST LEA Proposed Bottom Hole Location If Different From Surface Feet From The UI or lot no. Section Township Range Lot.ldn Feet From The North/South Line East/West Line County 9 Proposed Pool 1 10 Proposed Pool 2 PENROSE SKELLY GRAYBURG Work Type Code 15 Ground Level Elevation WellType Code Rotary or C.T. Lease Type Code o ROTARY 3447' GL Multiple 17 Proposed Depth 18 Formation 19 Contractor 20 Spud Date No 8063' **GRAYBURG** 4/15/2005 **Proposed Casing and Cement Program** WEIGHT PER FOOT SIZE OF HOLE SIZE OF CASING 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. INC. INTENDS TO RE-ENTER THE SUBJECT WELL AND RECOMPLETE FROM THE HARE SI MACKE RESERVOIR TO THE PENROSE SKELLY GRAYBURG RESERVOIR. \*\*\* A PIT WILL NOT BE USED FOR THIS PLUGBACK. A STEEL FRAC TANK WILL BE UTILIZED. THE CURRENT AND PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR YOUR APPROV PLEASE SEE ATTACHMENT FOR THE INTENDED PROCEDURE. Permit Expires 1 Year From Approval Date Unless Drilling Underway I hereby certify that the rules and regulations of the Oil Conservation OIL CONSERVATION DIVISION Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature Approved By: ETROLEUM ENGL Printed Name Denise Pinkerton Title: Title Regulatory Specialist Approval Date: Conditions of Approval Date 4/6/2005

Telephone

432-687-7375

Eunice King # 7 Penrose Skelly Field T21S, R37E, Section 28

Job: Reenter And Complete 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 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. Repair well location and lease road. Dig out around cut off csg strings. Weld on new csg and tubing heads. MI & RU workover unit. Install BOP's and test to 1000 psi. PU 6 ¼" MT bit, DC's, and 2 7/8" work string. Establish reverse circulation using 8.6 PPG cut brine. Drill out cement plug in 7" casing from surface to 350'. LD and cleanout 7" casing to 1000'. Reverse circulate well clean from 1000'. Pressure test csg to 500 psi. LD and drill out cement plug in 7" casing from 1000' to 1150'. LD and cleanout 7" casing to 2750'. Reverse circulate well clean from 2750'. Pressure test csg to 500 psi. LD and drill out cement plug in 7" casing from 2750' to 2950'. LD and cleanout 7" casing to 3450'. Reverse circulate well clean from 3450'. Pressure test csg to 500 psi. LD and drill out cement and CIBP in 7" casing from 3450' to 3600'. LD and cleanout 7" casing to 4844'. Reverse circulate well clean from 4844'. POH with 2 7/8" work string, DC's, and 6 ¼" bit. LD DC's and bit. Note: If any set of sqzd perfs fails pressure test, cmt squeeze before drilling ahead and uncovering next set of sqzd perfs. Also, well will be a producer, so a slight pressure loss is acceptable.
- 3. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH and conduct GR/CBL/CCL log from 4844' up to 2600'. POH. Inspect logs for good cement bond from approximately 4200' up to 3500'. If bond does not appear to be good across proposed completion interval, discuss with Engineering before proceeding. Cmt squeeze as necessary to obtain good cmt across completion interval. GIH with 3 1/8" DP slick casing gun and perforate from 3670-77', 3683-90', 3696-3702', 3714-22', 3732-38', 3758-66', 3774-78', 3784-90', 3798-3806', 3812-18', 3823-29', 3836-44', 3850-54', 3866-72', 3883-91', 3899-3907', and 3922-30' with 4 JSPF at 120 degree phasing, using 23 gram premium charges. POH. RD & release electric line unit. Note: Use casing collars from Welex Radioactivity Log dated 7/19/60 for depth correction.
- 4. PU and GIH w/7" PPI pkr (with 10' element spacing) and SCV on 2 7/8" work string to approximately 3650'. Test tbg to 5500 psi while GIH.
- 5. MI & RU DS Services. Acidize perfs 3670-3930' with 3,400 gals anti-sludge 15% HCl acid \* at a maximum rate **as shown below** and a maximum surface pressure of **3500 psi**. Spot acid across perfs at beginning of each stage and let soak to lower breakdown pressure and prevent communication. Pump job as follows:

Interval	Amt. Acid	Max Rate	<b>PPI Setting</b>
3922-30'	200 gals	½ BPM	3921-31'
3899-3907'	200 gals	½ BPM	3898-3908'
3883-91'	200 gals	½ BPM	3882-92'
3866-72'	200 gals	½ BPM	3864-74'
3850-54'	200 gals	½ BPM	3846-56'
3836-44'	200 gals	½ BPM	3835-45'
3823-29'	200 gals	½ BPM	3820-30'
3812-18'	200 gals	½ BPM	3810-20'
3798-3806'	200 gals	½ BPM	3797-3807
3784-90'	200 gals	½ BPM	3782-92'
3774-78'	200 gals	½ BPM	3770-80'
3758-66'	200 gals	½ BPM	3757-67'
3732-38'	200 gals	½ BPM	3730-40'
3714-22'	200 gals	½ BPM	3713-23'
3696-3702'	200 gals	½ BPM	3694-3704'
3683-90'	200 gals	½ BPM	3682-92'
3670-77'	200 gals	½ BPM	3668-78'

Displace acid with 8.6 PPG cut brine 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 1 run of 500 gals acid, prior to acidizing perfs. Pickle acid is to contain only 1/2 gal A264 and 1 gal W53. Also, if communication occurs during treatment of any interval, monitor casing pressure and attempt to complete stage w/o exceeding 350 psi csg pressure. If cannot, then move PPI to next setting depth and combine treatment volumes of the intervals. Do not exceed 350 psi casing pressure due to cmt sqzd perfs in wellbore.

* 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. Release PPI pkr and PUH to approximately 3650'. 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.
- 7. Open well. Release PPI pkr. POH with the and PPI packer. LD PPI tool.
- 8. PU and GIH w/7" 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 7500 psi. Set pkr at approximately 3550'. Install frac head. Pressure annulus to 350 psi to test csg and pkr. Leave pressure on csg during frac job to observe for communication.

9. MI & RU DS Services and Tracer-Tech Services (Mike Mathis (866) 595-3115). Frac well down 3 ½" 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. Tag frac with 2 radioactive isotopes (1 in main proppant stages, and 1 in resin-coated proppant stage). 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

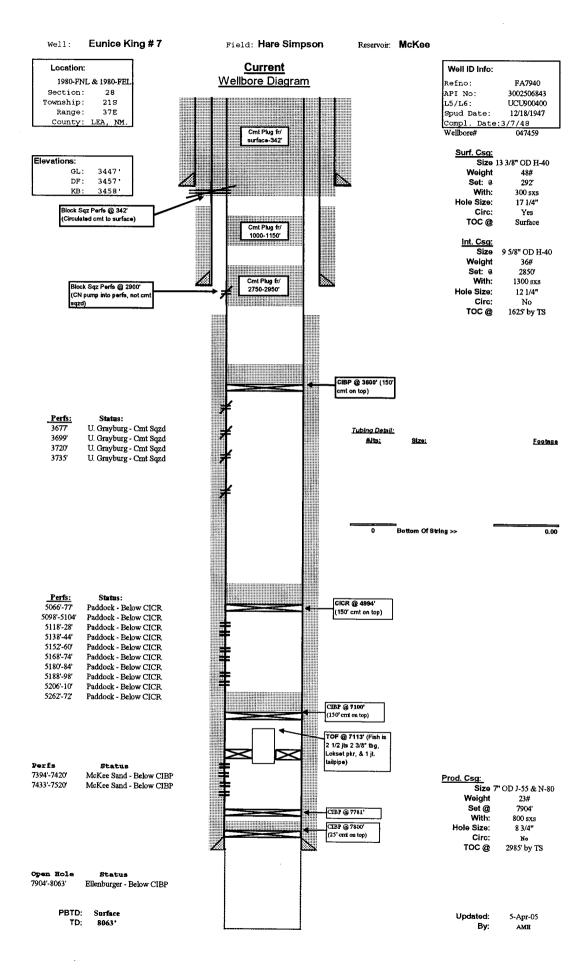
Pump 14,000 gals YF130 containing 4.5 PPG 16/30 mesh Jordan Sand

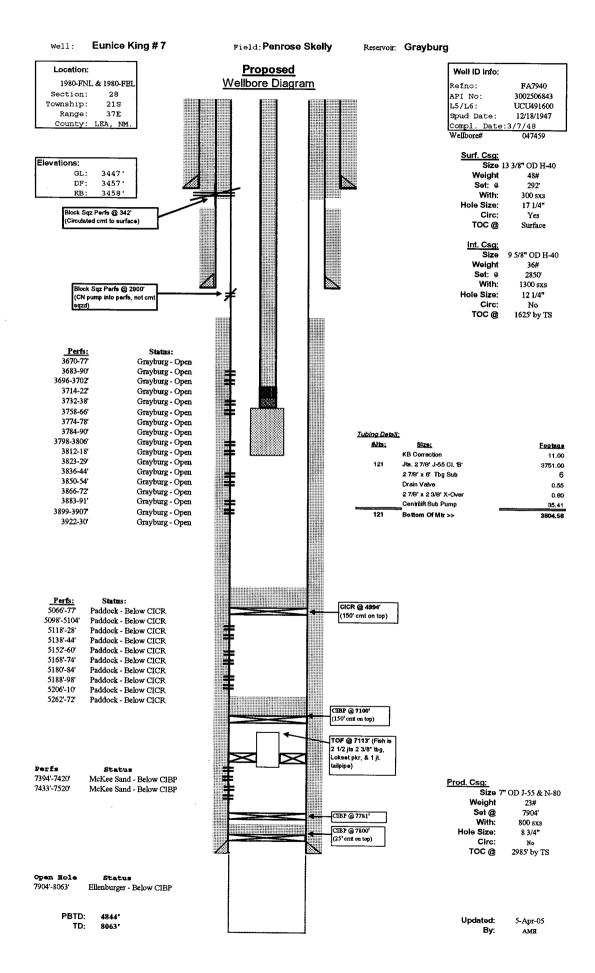
Pump 6,000 gals YF130 containing 5 PPG resin-coated 16/30 mesh CR1630 proppant.

Flush to 3642' with 1,449 gals WF130. <u>Do not overflush.</u> Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. SWI. RD & Release DS Services and Tracer-Tech Services. <u>Leave well SI overnight.</u>

- 10. Open well. Release pkr and POH with 3 ½" work string. Lay down work string and pkr.
- 11. PU and GIH with 6 1/4" MT bit on 2 7/8" work string to 4500'. If fill is found above 4500', clean out fill to 4500' using 8.6 PPG cut brine water and air unit (if necessary). POH with 2 7/8" work string and bit. LD bit.
- 12. PU & GIH with 7" pkr on 2 7/8" work string to 3500'. Set pkr at 3500'. Open well. GIH and swab well until there is no sand inflow. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH and conduct after-frac GR/Temp/CCL log from 4500' up to 3000'. POH. RD & release electric line unit. Note: Correlate logs and run flat with Baker Atlas GR/CBL/CCL Log conducted in Step # 3.
- 13. Release pkr. POH LD 2 7/8" work string and pkr.
- 14. PU and GIH w/ Centrilift sub pump assembly, drain sub, 2 7/8" x 6' tbg sub, SN, and 121 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Suspend tbg with bottom of sub pump assembly at approximately 3805'.
- 15. Remove BOP's and install WH. RD & release workover unit.
- 16. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

AMH 4/6/2005





#### DISTRICT I

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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-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

API Number	Pool Code	<sup>3</sup> Pool Name		
30-025-06843	50350	PENROSE SKELLY GRAYBURG		
Property Code	•	erty Name	<sup>6</sup> Well No.	
2615		ICE KING	7	
<sup>7</sup> OGRID Number 4323			<sup>9</sup> Elevation 3447' GL	

# <sup>10</sup> Surface Location

UI or lot no	Section	Township	Range	Lot.ldn	Feet From The	North/South Line	Feet From The	East/West Line	County
G	28	21-S	37-E		1980'	NORTH	1980'	EAST	LEA

### Bottom Hole Location If Different From Surface

UI or lot	no.	Section	Township	Range	Lot.idn	Feet From	The	North/South Line	Feet From The	East/West Line	County
<sup>12</sup> Dedic	cated 40	Acre	Joint or Infill	14	Consolidation	on Code	<sup>15</sup> Or	der No.			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

