Submit 3 copies to Appropriate District Office

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Box Drawer DD, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

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-103
Revised 1-1-89

WELL API NO. 30-025-06901

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 DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMI (FORM C-101) FOR SUCH PROPOSALS.

7. Lease Name or Unit Agreement Name: H. T. MATTERN NCT-B

1. Type of Well: OIL WELL ☑ GAS WELL ☐ OTHER

2. Name of Operator: CHEVRON USA INC

8. Well No. 4

3. Address of Operator: 15 SMITH ROAD, MIDLAND, TX 79705

9. Pool Name or Wildcat: PENROSE SKELLY GRAYBURG

4. Well Location

Unit Letter P : 330' Feet From The SOUTH Line and 330' Feet From The EAST Line

Section 30 Township 21-S Range 37-E NMPM LEA COUNTY

10. Elevation (Show whether DF, RKB, RT,GR, etc.) 3468' GL

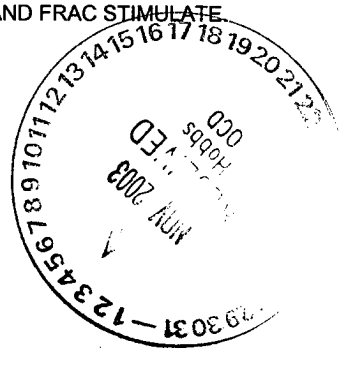
11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPERATION	☐	PLUG AND ABANDONMENT	☐
PULL OR ALTER CASING	☐			CASING TEST AND CEMENT JOB	☐		
OTHER: DRILL DEEPER IN GRAYBURG & FRAC	☑			OTHER:			☐

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

CHEVRON U.S.A. INTENDS TO DRILL THE SUBJECT WELL DEEPER IN THE GRAYBURG FORMATION AND FRAC STIMULATE.

THE INTENDED PROCEDURE AND WELLBORE DIAGRAMS IS ATTACHED FOR YOUR APPROVAL.



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

SIGNATURE Denise Leake TITLE Regulatory Specialist DATE 10/30/2003

TYPE OR PRINT NAME Denise Leake Telephone No. 915-687-7375

(This space for State Use)

APPROVED Gary W. Wink TITLE OC FIELD REPRESENTATIVE II/STAFF MANAGER DATE NOV 10 2003

CONDITIONS OF APPROVAL, IF ANY:

DeSoto/Nichols 12-93 ver 1.0

H. T. Mattern (NCT-B) # 4
Penrose Skelly Field
T21S, R37E, Section 30
Job: Drill Well Deeper To Grayburg Formation And Frac Stimulate

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 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. POH with 2 3/8" production tbg string. **Note: Minimize water pumped into well since deepening will be performed using foam due to low pressure Upper Grayburg interval.**

3. PU 4 ¾" MT bit and GIH on 2 7/8" work string to PBTD at 3780'. POH with 2 7/8" work string and bit. LD bit.

4. PU & GIH with 5 ½" sqz pkr and RBP on 2 7/8" work string to 3500'. Set pkr at 3500'. Pressure test pkr and csg to 500 psi. Locate suspected csg leak using pkr and RBP. Establish injection rate and pressure into casing leak with surface casing valve open. Attempt to establish circulation to surface. LD and set RBP at 3500'. Dump 20' of 20/40 sand on top of RBP. PUH and set pkr approximately 300' above csg leak. Pressure test csg and pkr to 500 psi. Leave pressure on casing while cmt squeezing. Monitor csg pressure for communication. **Note: If circulation to surface is established in Step # 4, use CICR instead of pkr for cement squeezing leak.**

5. RU DS Services cementing equipment. Cement squeeze casing leak using Class C cement mixed to 14.8 PPG w/ 1.35 CFY. Attempt to achieve at least 1000 psi squeeze pressure. Release pkr. Reverse out excess cement. PUH approximately 600' above csg leak and reset pkr. Pressure tbg and csg to 500 psi. RD and release DS Services cementing equipment. Shut well in and WOC overnight.

6. Open well. Bleed off pressure. POH with 2 7/8" work string and sqz packer. LD pkr.

7. PU and GIH with 4 ¾" MT bit on 2 7/8" tbg string to top of cement in 5 ½" csg. LD and drill out cement to 3480'. Reverse circulate well clean from 3480' using 8.6 PPG cut brine water. Pressure test casing to 500 psi. If csg leaks, repeat cmt sqz procedure. POH with 2 7/8" work string and MT bit. LD MT bit.

8. PU retrieving head for RBP and GIH to 3480'. LD and reverse circulate sand off top of RBP. Engage RBP at 3500'. Release and POH with RBP and work string. LD RBP and retrieving head.

9. PU 4 ¾" MT bit and GIH on 2 7/8" drill string to 3780'. MI & RU foam unit(s). LD and drill well deeper to 3920' using foam. Circulate well clean from 3920'. POH with 4 ¾" bit and drill string. LD bit. **Note: Geology will be monitoring drilling penetration rate while deepening well. Proposed TD may be adjusted during drilling operation.**

10. PU & GIH 5 ½" treating pkr on 2 7/8" work string. Set pkr at approximately 3500'. Pressure test pkr and csg to 350 psi. **Note: Do not exceed 350 psi csg pressure due to cmt sqzd csg leak.**

11. GIH and conduct open hole swab test of interval 3519-3920'. Report oil cut, recovered fluid volumes, pressures, and/or swabbing fluid levels. Obtain 1 qt. sample of formation fluids and deliver to Cardinal Laboratories in Hobbs for analysis.

12. MI & RU DS Services. Acidize Grayburg interval from 3519-3920' 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 2000 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 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

    Displace acid with 8.6 PPG cut brine 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

13. 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.

14. Open well. Pump down tbg with 8.6 PPG cut brine water to kill well, if necessary. Release pkr. POH with 2 7/8" work string and packer. LD pkr.

15. PU 4 ¾" MT bit and GIH on 2 7/8" work string to TD at 3920'. If fill is encountered, MI & RU foam unit(s) and cleanout to 3920' using foam. POH with 2 7/8" work string and MT bit. LD MT bit.

16. PU and GIH w/ 5 ½" Lok-Set pkr & On-Off tool w/ 2.25" "F" profile on 110 jts. of 3 ½" EUE 8R L-80 work string, testing to 7500 psi. Set Lok-Set pkr at 3400'. Pressure annulus to 350 psi to test csg and pkr. Install frac head. Leave pressure on csg during frac job to observe for communication.

17. MI & RU DS Services and Cardinal Surveys. Frac well down 3 ½" tubing at **40 BPM** with 66,000 gals of YF135, 138,000 lbs. 16/30 mesh Jordan Sand, and 30,000 lbs **resin-coated** 16/30 mesh CR4000 proppant. Observe a maximum surface treating pressure of **7400 psi**. Tag frac with 2 radioactive isotopes (1 in main proppant body and 1 in resin-coated stage). Pump job as follows:

    Pump 2,000 gals 2% KCL water containing 110 gals Baker SCW-358 Scale Inhibitor
    Pump 1,000 gals 2% KCL water spacer
    Pump 25,000 gals YF135 pad containing 5 GPT J451 Fluid Loss Additive
    Pump 5,000 gals YF135 containing 1.5 PPG 16/30 mesh Jordan Sand
    Pump 6,000 gals YF135 containing 2.5 PPG 16/30 mesh Jordan Sand
    Pump 7,000 gals YF135 containing 3.5 PPG 16/30 mesh Jordan Sand
    Pump 8,000 gals YF135 containing 4.5 PPG 16/30 mesh Jordan Sand
    Pump 10,000 gals YF135 containing 5.5 PPG 16/30 mesh Jordan Sand
    Pump 5,000 gals YF135 containing 6 PPG **resin-coated** 16/30 mesh CR4000 proppant

    Flush to 3475' with 1,319 gals WF135. **Do not overflush.** Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. SWI. RD & Release DS Services and Cardinal Surveys. **Leave well SI overnight.**

18. Open well. GIH and swab well until there is no sand inflow. Release pkr and POH with 3 ½" work string. Lay down 3 ½" work string and pkr.

19. PU 4 ¾" MT bit and GIH on 2 7/8" work string to TD at 3920'. If sand fill is encountered, MI & RU foam unit(s) and cleanout to 3920' using foam. POH with 2 7/8" work string and MT bit. LD bit.

20. PU 5 ½" pkr and GIH to 3400'. Set pkr at 3400'. GIH and swab well for 3 hours. MI & RU Cardinal Surveys electric line unit. Install lubricator and test to 1000 psi. GIH and conduct after-frac GR/Temp/CCL log from 3920' up to 3200'. POH. RD & release electric line unit. **Note: There are no logs for Mattern B # 4, so correct depth to 3920' at TD and log upward to 3200'.**

21. Release pkr. POH with 2 7/8" work string and pkr. LD work string and pkr.

21. 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 112 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 3490', with EOT at 3900' and SN at 3865'.

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

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

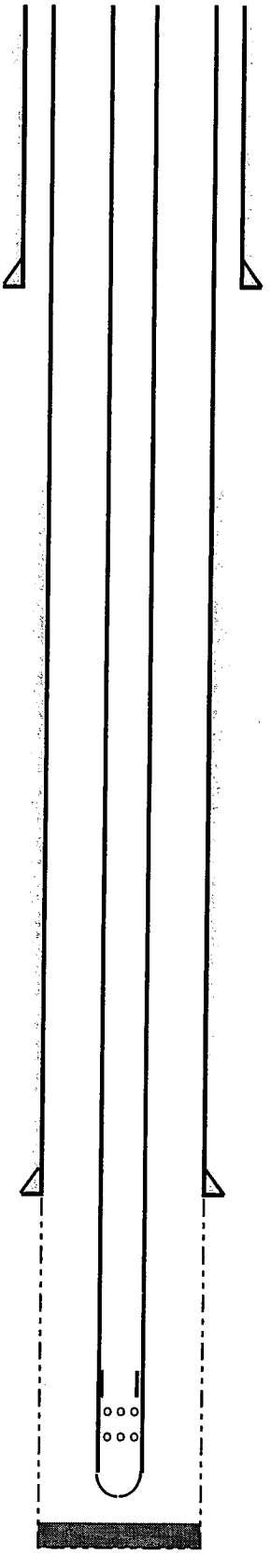
AMH
10/27/2003

Well: **H. T. Mattern (NCT-B) # 4** Field: **Penrose Skelly** Reservoir: **Grayburg**

Location:
330' FSL & 330' FEL
Section: 30
Township: 21S
Range: 37E
County: Lea State: NM

Elevations:
GL: 3468'
KB: 3479'
DF: 3478'

Current
Wellbore Diagram



Well ID Info:
Refno: FA7998
API No: 30-025-06901
L5/L6: U490300
Spud Date: 11/18/39
Compl. Date: 12/15/39

Surf. Csg: 9 5/8", 25.7#, Armco
Set: @ 251' w/ 250 sks
Hole Size: 13 3/4"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Tbg Detail:
EOT @ 3763'
2 3/8" OD EUE 8R J-55 mud jt.
2 3/8" x 4' perf tbg sub
SN @ 3727'
142 jts. 2 3/8" EUE 8R J-55 tbg

Prod. Csg: 5 1/2", 14#, H-40
Set: @ 3519' w/ 350 sks
Hole Size: 6 3/4"
Circ: No **TOC:** 2375'
TOC By: Temperature Survey

4 3/4" Open-Hole
Production Interval
3519-3780' (Grayburg)

COTD: 3780'
PBTD: 3780'
TD: 3800'

20' Hydromite Plug fr/ 3780-3

Updated: 10/21/03

By: A. M. Howell

Well: **H. T. Mattern (NCT-B) # 4** Field: **Penrose Skelly** Reservoir: **Grayburg**

Location:
330' FSL & 330' FEL
Section: 30
Township: 21S
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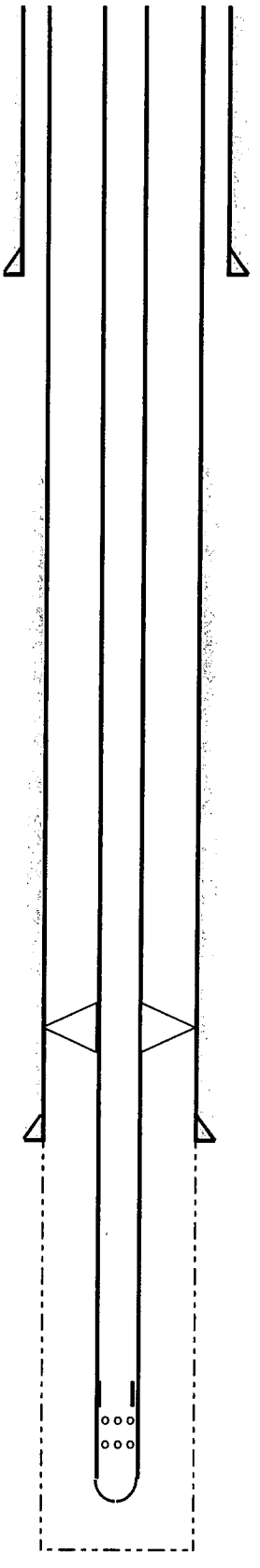
Proposed
Wellbore Diagram



Well ID Info:
Refno: FA7998
API No: 30-025-06901
L5/L6: U490300
Spud Date: 11/18/39
Compl. Date: 12/15/39

Surf. Csg: 9 5/8", 25.7#, Armc
Set: @ 251' w/ 250 sks
Hole Size: 13 3/4"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Tbg Detail:
EOT @ 3900'
2 7/8" OD EUE 8R J-55 mud jt.
2 7/8" x 4' perf tbg sub
SN @ 3865'
12 jts. 2 7/8" EUE 8R J-55 tbg
TAC @ 3490'
112 jts. 2 7/8" EUE 8R J-55 tbg

Prod. Csg: 5 1/2", 14#, H-40
Set: @ 3519' w/ 350 sks
Hole Size: 6 3/4"
Circ: No **TOC:** 2375'
TOC By: Temperature Survey

Open-Hole
Production Interval
3519-3920' (Grayburg)

COTD: 3920'
PBTD: 3920'
TD: 3920'

Updated: 10/21/03 **By:** A. M. Howell