

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

Form C-
May 27, 2

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Of

☐ AMENDED REPC

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

¹ Operator Name and Address CHEVRON U.S.A. INC 15 SMITH ROAD MIDLAND, TEXAS 79705		² OGRID Number 4323
		³ API Number 30 - 025-24764
³ Property Code 2685	⁵ Property Name H T MATTERN NCT-D	⁶ Well No 8
⁹ Proposed Pool 1 TUBB OIL & GAS		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no E	Section 6	Township 22-S	Range 37-E	Lot Idn	Feet from the 1980	North/South line NORTH	Feet from the 660	East/West line WEST	County LEA
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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
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Additional Well Information

¹¹ Work Type Code A	¹² Well Type Code O	¹³ Cable/Rotary	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 3467'
¹⁶ Multiple NO	¹⁷ Proposed Depth 6820'	¹⁸ Formation TUBB	¹⁹ Contractor	²⁰ Spud Date
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit	Liner Synthetic <input type="checkbox"/> mils thick Clay <input type="checkbox"/>	Pit Volume _____ bbls	Drilling Method Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>	
Closed-Loop System <input checked="" type="checkbox"/>				

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 RECOMPLETE THE SUBJECT WELL TO THE TUBB OIL & GAS RESERVOIR & THEN DOWNHOLE COMMINGLING PRODUCTION FROM THE BLINEBRY, DRINKARD & TUBB FORMATIONS

THE CURRENT & PROPOSED WELLBORE DIAGRAMS, AND THE INTENDED PROCEDURE IS ATTACHED FOR YOUR APPROVAL

RECEIVED

FEB - 4 2008

HOBBS OCD

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 01-30-2008

Phone 432-687-7375

pending DHC approval

Conditions of Approval: Approval to recomplete & test new zone, but cannot produce Downhole commingle until DHC is approved in Hobbs District office according to R-11363.

OIL CONSERVATION DIVISION

Approved by:

Title

Approval Date. FEB 05 2008 Expiration Date

Permit Expires 2 years From Approval
Date Unless Drilling is Underway

Adding

H. T. Mattern (NCT-D) # 8
Tubb Oil & Gas Field
T22S, R37E, Section 6
Job: Add Perfs And Frac 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 1/22/2008. 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 as required.
4. POH LD 2 3/8" tbg string.
5. PU and GIH with 4 3/4" MT bit and 2 7/8" work string to PBTD at 6786'. MI&RU air unit. Establish circulation using foam. Circulate well clean from 6786'. POH with work string and 4 3/4" bit. LD bit.
6. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH with 3 1/8" slick casing guns and perforate from 6536-44', 6575-83', 6592-98', 6614-22', 6626-32', 6642-48', and 6680-86' with 2 JSPF at 120 degree phasing, using 23 gram premium charges. POH. GIH with 3 1/8" slick casing guns and perforate from 5466-70', 5480-86', 5512-18', 5540-46', 5572-80', 6178-86', 6206-14', 6217-22', 6236-46', 6266-74', 6284-88', 6292-98', 6322-32', 6352-56', and 6381-83' 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 7/9/74 for depth correction.**
7. PU & GIH with 5 1/2" RBP w/ ball catcher and treating pkr on 2 7/8" work string. Set RBP at 6725'. PUH and set pkr at 6400'.
8. MI & RU DS Services. Acidize perfs 6520-6716' with 5,000 gals antisludge 20% HCl acid ** at a maximum rate of **6 BPM** and a maximum surface pressure of **6000 psi**. Spot acid to bottom of 2 7/8" tbg. Displace acid with 2% KCl water -- do not overdisplace. Drop 200

1.3 sp.gr. ball sealers evenly dispersed throughout acid. Record ISIP, 5, 10, & 15 minute SIP's. **Note: It is not necessary to pickle tubing due to low BHP.**

9. Bleed off pressure. Release pkr. LD to 6725 and engage RBP. PUH and reset RBP at 6400'. PUH and reset treating pkr at 6000'.

10. Acidize perms 6178-6383' with 5,000 gals regular antisludge 15% HCl acid ** at a maximum rate of **5 BPM** and a maximum surface pressure of **6000 psi**. Spot acid to bottom of 2 7/8" tbg. Start pumping acid into formation at 1/2 **BPM** and increase rate up to the maximum of **5 BPM** as the treating pressure drops off. Displace acid with 2% KCl water -- do not overdisplace. Drop 350 1.3 sp.gr. ball sealers evenly dispersed throughout acid. Record ISIP, 5, 10, & 15 minute SIP's.

11. Bleed off pressure. Release pkr. LD to 6400' with pkr to wipe balls off perms. Engage RBP at 6400'. PUH and reset RBP at 6000'. PUH and reset pkr at 5350'.

12. Acidize perms 5466-5714' with 5,000 gals regular antisludge 15% HCl acid ** at a maximum rate of **6 BPM** and a maximum surface pressure of **6000 psi**. Spot acid to bottom of 2 7/8" tbg. Displace acid with 2% KCl water -- do not overdisplace. Drop 250 1.3 sp.gr. ball sealers evenly dispersed throughout acid. Record ISIP, 5, 10, & 15 minute SIP's. RD & release DS Services.

** 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. Bleed off pressure. Release pkr. LD to 6000' with pkr to wipe balls off perms. Engage RBP at 6000'. LD and reset RBP at 6725'. PUH and reset pkr at 5400'.

14. GIH and swab back all intervals together. Recover 100% of treatment and load volumes before shutting well in for night. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. **Note: Selectively swab perforations as directed by Engineering after recovering load fluids.**

15. Open well. Release pkr. LD and engage RBP at 6725'. POH with 2 7/8" work string, pkr, and RBP. LD ball-catcher. PU and GIH w/ 5 1/2" Arrow-Set 10K pkr & RBP on 3 1/2" EUE 8R L-80 work string, testing to 8500 psi. Set RBP at 6450'. PUH and set pkr at approximately 6000'. Install frac head. Observe csg for communication during frac job.

16. MI & RU DS Services. Frac well down 3 1/2" work string at **40 BPM** with 69,000 gals of YF125, 134,000 lbs. 16/30 mesh Jordan Sand, and 30,000 lbs **resin-coated** 16/30 mesh CR1630 proppant. Observe a maximum surface treating pressure of **8000 psi**. 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 11,000 gals YF125 pad containing 5 GPT J451 Fluid Loss Additive
 Pump 11,000 gals YF125 containing 0.5 PPG 16/30 mesh Jordan Sand & 5 GPT J451 FL Additive
 Pump 9,000 gals YF125 containing 1.5 PPG 16/30 mesh Jordan Sand
 Pump 9,000 gals YF125 containing 2.5 PPG 16/30 mesh Jordan Sand
 Pump 11,000 gals YF125 containing 3.5 PPG 16/30 mesh Jordan Sand
 Pump 12,000 gals YF125 containing 4.5 PPG 16/30 mesh Jordan Sand
 Pump 6,000 gals YF125 containing 5 PPG **resin-coated** 16/30 mesh CR1630 proppant.

Flush to 6000' with 2,192 gals WF130. **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.**

17. Open well. GIH and swab well until there is no sand inflow. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. Release pkr and POH with 3 1/2" work string. Lay down 3 1/2" work string and pkr.
18. PU and GIH with 4 3/4" MT bit on 2 7/8" work string to top of RBP at 6450'. If fill is found above 6450', clean out fill using air unit and foam. POH with 2 7/8" work string and bit. LD bit. PU & GIH with retrieving head on 2 7/8" work string to top of RBP at 6450'. Engage and release RBP. PUH and reset RBP at 5400'. Pressure test csg to 500 psi. Release RBP and PUH to 2500'. Reset RBP at 2500'. Spot 20' sand on top of RBP at 2500'. Pressure test casing to 500 psi.
19. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH with 3 1/8" slick casing gun and perforate from 1220-21' with 4 JSPF at 120 degree phasing, using 23 gram premium charges. POH. Pump down casing and establish circulation through sqz perfs and out surface casing valve. GIH and set CICR at 1180'. Pressure test CICR to 500 psi. RD & release electric line unit. **Note: Use casing collars from Welex Radioactivity Log dated 7/9/74 for depth correction.**
20. PU & GIH with stinger on 2 7/8" tbg string to 1180'. Sting into CICR at 1180'. Establish injection rate into sqz perfs with surface casing valve open.
21. RU DS Services cementing equipment. Cement squeeze perfs 1220-21' using Class C cement mixed to 14.8 PPG w/ 1.35 CFY. Circulate cement out surface casing valve. Close surface csg valve and attempt to achieve at least 500 psi final squeeze pressure. Sting out of CICR. Reverse out excess cement. POH with 2 7/8" work string and stinger. LD stinger. RD and release DS Services cementing equipment. Shut well in and WOC overnight.
22. Open well. PU and GIH with 4 3/4" MT bit on 2 7/8" work string to top of CICR at 1180'. LD and drill out CICR and cement in 5 1/2" casing. Reverse circulate well clean using 8.6 PPG cut brine water. Pressure test casing and sqz perfs to 350 psi. Check for water flow out of surface casing. If csg leaks or water flow persists from surface casing valve, repeat cmt sqz procedure. LD and cleanout csg to top of RBP. Reverse circulate well clean from top of RBP at 2500' using 8.6 PPG cut brine water. POH with 2 7/8" work string and bit. LD bit. GIH with retrieving head and engage RBP. POH with work string and RBP. LD RBP.

23. PU and GIH with 4 3/4" MT bit and 2 7/8" work string to PBTD at 6786'. If fill is found above 6716', MI&RU air unit. Establish circulation using foam. Circulate well clean from 6786'. POH with work string and 4 3/4" bit. LD bit.
24. PU and GIH w/ BP mud anchor jt of 2 7/8" tbg, 2 7/8" x 4' perforated sub, SN, 42 jts 2 7/8" EUE 8R J-55 tbg, TAC, and 173 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 5375', with EOT at 6715' and SN at 6680'.
25. Remove BOP's and install WH. GIH with rods, weight bars, and pump per ALS recommended design. RD & release pulling unit.
26. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

AMH

1/23/2008

Well **H. T. Mattern (NCT-D) # 8**Field **Blinebry O&G &
Drinkard (DHC)**Reservoir **Blinebry & Drinkard****Location:**

1980' FNL & 660' FWL
 Section 6
 Township 22S
 Range 37E
 County Lea State NM

*UL-E***Elevations:**

GL 3467'
 KB 3479'
 DF 3478'

Current
Wellbore Diagram

Well ID Info:

Chevno EO0015
 API No 30-025-24764
 L5/L6 UCU467000
 Spud Date 6/14/74
 Compl Date 7/30/74

see

Surf. Csg: 8 5/8", 24#, K-55
Set: @ 1169' w/ 600 sks
Hole Size: 12 1/4"
Circ: Yes **TOC:** Surface
TOC By: Circulated

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

Perfs:
 5498-5500'
 5558-60'
 5600-02'
 5647-49'
 5672-74'
 5712-14'

Status:
 Blinebry - Open
 Blinebry - Open
 Blinebry - Open
 Blinebry - Open
 Blinebry - Open
 Blinebry - Open

*06660***Tubing Detail:**

#Jts:	Size:	Footage
	KB Correction	12.00
215	Jts 2 3/8" J-55 CI 'B'	6762.10
	SN	1.10
215	Bottom Of String >>	6775.20

COTD: 6786'
 PBTD: 6786'
 TD: 6820'

Updated: 1/22/2008

By: A M Howell

6520-22' Drinkard - Open
 6544-46' Drinkard - Open
 6573-75' Drinkard - Open
 6612-14' Drinkard - Open
 6666-68' Drinkard - Open
 6714-16' Drinkard - Open

19190

Prod. Csg: 5 1/2", 15 50#, K-55
Set: @ 6820' w/ 765 sks
Hole Size: 7 7/8"
Circ: No **TOC:** 2310'
TOC By: Temperature Survey

Well **H. T. Mattern (NCT-D) # 8**Field **Blinebry O&G,
Tubb O&G, &
Drinkard (DHC)**Reservoir **Blinebry, Tubb,
& Drinkard****Location:**1980' FNL & 660' FWL
Section 6
Township: 22S
Range 37E
County Lea State NM**Elevations:**GL 3467'
KB 3479'
DF 3478'**Proposed
Wellbore Diagram****Well ID Info:**Chevno EO0015
API No 30-025-24764
L5/L6 UCU477300
Spud Date 6/14/74
Compl Date 7/30/74

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

Surf. Csg: 8 5/8", 24#, K-55
Set: @ 1169' w/ 600 sks
Hole Size: 12 1/4"
Circ: Yes TOC: Surface
TOC By: Circulated

Sgz Perfs at 1220'

Tubing Detail:

#Jts	Size	Footage
	KB Correction	12 00
173	Jts 2 7/8" EUE 8R J-55 Tbg	5363 00
	TAC	2 72
42	Jts 2 7/8" EUE 8R J-55 Tbg	1302 00
	SN	1 10
	2 7/8" x 4' Perf Tbg Sub	4 10
1	Jt 2 7/8" EUE 8R J-55 Tbg	31 20
	Built Plug	0 50
216	Bottom Of String >>	6716.62

Perfs:
5466-70' Blinebry - Open
5480-86' Blinebry - Open
5498-5500' Blinebry - Open
5512-18' Blinebry - Open
5540-46' Blinebry - Open
5558-60' Blinebry - Open
5572-80' Blinebry - Open
5600-02' Blinebry - Open
5647-49' Blinebry - Open
5672-74' Blinebry - Open
5712-14' Blinebry - Open

6178-86' Tubb - Open
6206-14' Tubb - Open
6217-22' Tubb - Open
6236-46' Tubb - Open
6266-74' Tubb - Open
6284-88' Tubb - Open
6292-98' Tubb - Open
6322-32' Tubb - Open
6352-56' Tubb - Open
6381-83' Tubb - Open

6520-22' Drinkard - Open
6536-46' Drinkard - Open
6573-83' Drinkard - Open
6592-98' Drinkard - Open
6612-22' Drinkard - Open
6626-32' Drinkard - Open
6642-48' Drinkard - Open
6666-68' Drinkard - Open
6680-86' Drinkard - Open
6714-16' Drinkard - Open

COTD: 6786'
PBTD: 6786'
TD: 6820'

Updated: 1/22/2008

By: A M Howell

Prod. Csg: 5 1/2", 15 50#, K-55
Set: @ 6820' w/ 765 sks
Hole Size: 7 7/8"
Circ: No TOC: 2310'
TOC By: Temperature Survey