HOBBS OCD
AUG 0 2 2013
RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised November 14, 2012

☐ AMENDED REPORT

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

1. Operator Name and Address 2. CHEVRON U.S.A. INC. 3. 15 SMITH ROAD 4. MIDLAND, TEXAS 79705	2. OGRID Number 4323
	3. API Number 30-025-25165

4. Property Code	5. Property Name	6. Well No.
2682	H.T. MATTERN NCT-B	21

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
G	31	21S	37E		2310	NORTH	2310	EAST	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name	Pool Code
BLINEBRY OIL & GAS (OIL)	6660

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
RECOMPLETE	OIL		P	3481
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
	6772'	BLINEBRY		

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
			NO CHANGE			

Casing/Cement Program: Additional Comments

See attached page for Closed Loop Statement

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer

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 I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.
Signature: Denise Pinkerton

Printed name: DENISE PINKERTON

Title: REGULATORY SPECIALIST

E-mail Address: leakejd@chevron.com

Date: 07/17/2013 Phone: 432-687-7375

OIL CONSERVATION DIVISION

Approved By:

Title: Engineer

Approved Date: AUG 0 2 2013 Expiration Date:

Conditions of Approval Attached

AUG 05 2013

- DURING THIS PROCEDURE WE PLAN TO USE THE CLOSED LOOP SYSTEM WITH A STEEL TANK AND HAUL TO THE REQUIRED DISPOSAL, PER THE OCD RULE 19.15.17

Mattern B #21 **5.21.2013**
Blinebry Oil & Gas, Blinebry Reservoir
T21S, R37E, Sec. 31
N 32° 26' 10.212", W -103° 12' 2.304" (NAD27)
Job: PB to Blinebry and Frac

PREWORK:

1. Utilize the rig move check list.
2. Check anchors and verify that pull test has been completed in the last 24 months.
3. Ensure location of & distance to power lines is in accordance with MCA SWP. Complete and electrical variance and electrical variance RUMS if necessary.
4. Ensure that location is of adequate build and construction.
5. Ensure that elevators and other lifting equipment are inspected. For wells to be worked on or drilled in an H_2S field/area, include the anticipated maximum amount of H_2S that an individual could be exposed to along with the ROE calculations for 100 ppm and 500 ppm.
6. Review JSA and hazards with rig crew. Visually inspect wellhead, casing and tubing valves. Decide whether tubing and casing valves can be used; replace as needed.
7. Scout location and mark off anything that might be hazardous to daily operations.

Reminders:

8. Caliper all lifting equipment at the beginning of each day or when sizes change. **Note in JSA and record on Elevator Change-out Log when and what items are callipered.**
9. When NU anything over an open wellhead (BOP, EPA, etc.) ensure the hole is covered to avoid dropping anything downhole.
10. Ensure well is secure/shut in with blind rams between job stages (nothing in well).
11. If pumping any cement, plugging back a well or changing producing intervals, always contact the OCD and give the details.
12. Hold safety meetings with all personnel on location prior to any major or abnormal operation.

Procedure:

This procedure is meant to be followed. It is up to the WSM, Workover Engineer and Production Engineer to make decisions necessary to SAFELY do what is best for the well. In the extent that this procedure does not reflect actual operations, please contact WE, PE and Superintendent for MOC.

NOTE: Schedule Dickey Analytical to be present at Frac. (432-553-2526)

1. MIRU workover unit. Verify that well does not have pressure or flow. If well has pressure, note casing and tubing pressures on Wellview report. Bleed down well. Contact WE if well won't bleed down.

2. Unseat pump, POOH with rods and pump laying down all rods if the rig will be moving off. Examine rods for wear/pitting/paraffin. Do not hot water unless necessary. ND wellhead, unset TAC, NU BOP dressed with 2-3/8" pipe rams on top and blind rams on btm. NU EPA equipment & RU floor. POOH and LD 1 jt 2-3/8" tbg. PU 5-1/2" packer (Note: production csg shows 14# and 17# K55 mixed) along with a joint of 2-3/8" tubing and set below WH @ ~25'. Test BOP pipe rams to 250 psi/1000 psi. Note testing pressures on Wellview report. Release and LD packer.

3. POOH while scanning 2-3/8" prodn tubing. (TAC 6408', Perfs 6,481-6691', EOT 6,697, PBTD 6,736'). LD all non-yellow band joints.

   Note: Strap pipe out of the hole to verify depths and note them on Wellview report.
   Send scan log report to EAUI@chevron.com.

4. MIRU wireline unit. **Set up exclusion zone around WL unit.** R/U lubricator and test to 1000 psi against blind rams. RIH with 4.625" gauge ring to 6430' to make sure well is free of obstructions. Note in WV and

contact WE if gauge ring sets down, drags, or hangs up inside 5-1/2" csg. If gauge run was clear, RIH with 5-1/2" CIBP and set @ 6415'. PU and set down on CIBP to ensure it set. RIH with dump bailer and dump 35' of cmt on top of CIBP. POOH, fill up csg and test down to CIBP to 250/1000 psi. (Record csg test in WellView in time log and safety/inspections). Notify WE if pressure doesn't hold.

5. If CIBP/csg tested good to 250/1000 psi, continue to step #6. If test failed, PU 5-1/2" packer and TIH to top of CIBP. Set pkr and test again to 250/1000 psi. Test backside to 250/1000 psi. Notify WE after establishing which direction leak-off is occurring.

6. PU 5-1/2" RBP and RIH on 2-7/8" 6.5# L-80 WS. Set RBP at 6000'. Release from RBP and spot 750 gals of 10% acetic acid across proposed perfs 5487' – 5942'.

7. POOH with 2-7/8" WS and dump 300 lbs of sand on top of RBP. Allow 1-2 hrs for sand to settle onto RBP (Plan for EOD if possible).

8. MI & RU Baker Electric Line unit. **Set up an exclusion zone and establish radio silence when running perf guns**. Install Lubricator and test to 250/1000 psi against blind rams. GIH with 3 3/8" RHSC Gunslinger casing guns (0.42" EH & 47" penetration) and perforate from 5,487-94', 5,500-5,510', 5,516-5,523', 5,529-5,539', 5,546-5,557', 5,586-5,599', 5,609-5,917', 5,620-5,626', 5,633-5,643', 5,648-5,655', 5,662-5,674', 5,678-5,690, 5,695-5,701', 5,785-5,791', 5,834-5,843', 5,867-5,873', 5,894-5,901', and 5,934-5,942 with 3 JSPF at 120 degree phasing, using 32 gram premium charges. POOH. RD & release electric line unit. **Note: Reference Welex Gamma-Collar Perforation Record Log dated 1.5.1976 (attached).**

9. MIUL & strap ~172 jts 3 ½" 9.3# L80 tbg as frac string. Change out pipe rams to 3 ½". PU 5 ½" testing packer on one joint 3 ½" tubing and set @ ~25'. Test BOP pipe rams to 250/1000 psi. Note testing pressures on WellView report (Time log and safety/inspections). Release and LD packer.

10. PU and GIH w/ 5-1/2" Arrow-Set 10K pkr & On-Off tool w/ frac hardened 2.25" "F" profile, blast joint, and 3 ½", 9.3# 8RD L-80 work string, testing to 8000 psi. Set pkr at approximately ~5,400'. Install 10k frac valve and test 3-1/2" connection to 8000 psi with hydrotesters. Install goat head above FV. Pressure 3-1/2" x 5 1/2" annulus to 500 psi to test csg and pkr. Leave pressure on csg during frac job to observe for communication.

11. RDMO pulling unit. Schedule Dickey Analytical to be present at Frac. 432-553-2526

12. MI & RU DS Services. **Set up exclusion zone around stimulation unit & surface treating lines.** Frac well down 3 ½" tubing at **40 BPM** with 2,000 gals 2% KCl, 4,000 gals 15% HCl, 94,000 gals of Viking 3000, 8,000 100 mesh white, 176,000 lbs. 16/30 mesh white, and 30,000 lbs **resin-coated** Super LC 16/30 mesh. Observe a maximum surface treating pressure of **6400 psi**. Pump job per attached Baker frac design.

PROCEDURE

Stage	Fluid			Proppant		
	Type	Volume (gal)	Conc (ppa)	Type	Stage (lbs)	Cum (lbs)
1	2% KCl Water	2000		Spacer		
2	15% HCl	4000		Spacer		
3	Viking 3000	6000		Pad		
4	Viking 3000	8000	1.000	100% Sand, White, 100 m	8000	8000
5	Viking 3000	6000		Pad		8000
6	Viking 3000	14000	0.500	100% Sand, White, 16/30	7000	15000
7	Viking 3000	12000	1.500	100% Sand, White, 16/30	18000	33000
8	Viking 3000	12000	2.500	100% Sand, White, 16/30	30000	63000
9	Viking 3000	14000	3.500	100% Sand, White, 16/30	49000	112000
10	Viking 3000	16000	4.500	100% Sand, White, 16/30	72000	184000
11	Viking 3000	6000	5.000	100% Super LC, 16/30	30000	214000
12	30# Linear Gel	2053		Flush		214000
Total		102053				214000

TREATMENT SCHEDULE

Stage	Surface Treating Pressure (psi)	Rates			Volume				Stage Pump Time hh:mm:ss
		Slurry (bpm)	Clean Fluid (bpm)	Prop. Rate (lb/min)	Slurry		Fluid		
					Stage (bbls)	Cum (bbls)	Stage (bbls)	Cum (bbls)	
1	2773	6.0	6.0		47.6	47.6	47.6	47.6	00:07:56
2	5043	20.0	20.0		95.2	142.9	95.2	142.9	00:04:45
3	6051	40.0	40.0		142.9	285.7	142.9	285.7	00:03:34
4	5936	40.0	38.3	1606.8	199.2	484.9	190.5	476.2	00:04:58
5	6051	40.0	40.0		142.9	627.7	142.9	619.0	00:03:34
6	5998	40.0	39.1	821.4	340.9	968.6	333.3	952.4	00:08:31
7	5872	40.0	37.5	2359.9	305.1	1273.7	285.7	1238.1	00:07:37
8	5731	40.0	35.9	3773.4	316.0	1591.7	285.7	1523.8	00:07:57
9	5586	40.0	34.5	5076.5	386.1	1977.8	333.3	1857.1	00:09:39
10	5441	40.0	33.2	6281.7	456.5	2436.3	381.0	2238.1	00:11:27
11	6358	40.0	32.5	6826.6	175.8	2612.0	142.9	2381.0	00:04:23
12	4957	40.0	40.0		48.9	2660.9	48.9	2429.8	00:01:13
							Total Pump Time:		01:15:39

13. Flush to 5,487' **Do not overflush.** Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. SWI. RD & Release Baker Services. **Leave well SI overnight.**

14. Flowback well starting 24 hours after the frac. Open up at 20 bph and work up to 50 bph over the first 6 hours. Flow down until the well dies putting flowback down the flowline if possible. Consult with the pumper and OS if flowback is sent down the flowline.

15. MIRU pulling unit. Test 3 ½" pipe rams to 500 psi against packer.

16. ND frac valve, release packer, and circulate kill weight fluid. POOH laying down 3-1/2" frac string and LD 5-1/2" packer.

17. Close blind rams. Change 3 ½" pipe rams to 2 $^{7}/_{8}$". Open blind rams. PU/RIH and set 5 ½" 14-17# rated packer @ ~ 25' to test 2 $^{7}/_{8}$" pipe rams to 250/1000 psi. Release and LD packer.

18. PU and GIH with 4-3/4" MT bit on 2-7/8" work string and clean out to top of RBP at approximately 6,000' using 8.6 PPG cut brine water and air unit if necessary **(continue to supplemental procedure and in accordance with attached SOG).** POOH with 2-7/8" work string and bit. LD bit.

19. RIH with RBP retrieval tool on 2-7/8" 6.5# L-80 WS to pull RBP at 6000'. Wash down through any remaining sand and latch onto RBP. POOH with 2 7/8" 6.5# L-80 WS. LD RBP.

20. PU & GIH with 5-1/2" pkr on 2-7/8" WS. Set pkr at 5,450'. Open well. GIH and swab well until there is no sand inflow. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. Release pkr. POOH LD 2 7/8" work string and pkr.

21. RIH with 2-7/8" production tubing hydrotesting to 6,000 psi. Set TAC per ALCR recommendation. ND BOP. NU WH. RIH with rods and pump per ALCR. Hang well on. RD and release workover unit.

22. Turn well over to production.

FOAM / AIR CLEANOUT PROCEDURE

- This procedure is an addition to the original procedure.

1. Install flowback manifold with two chokes. All components on flowback manifold must be rated to at least 5,000 psi. If possible, flowback manifold components should be hydrotested before delivery. Hardline pipes from 2" casing valve to manifold to half pit with gas buster. **Set up an exclusion zone around flowback line.**
2. Install flowback tank downwind from rig.
3. Position Air unit upwind from Rig next to water tanks. Have vacuum truck on standby to empty halfpit. (if needed)
4. RIH with 4 3/4" MT bit, 4 (3-1/2") drill collars on 2-7/8" 6.5# L-80 WS.
5. NU stripper head with **NO Outlets** (Check stripper cap for thread type - course threads preferred). **Stripper head to be stump tested to 1,000 psi before being delivered to rig.** Check chart or test at rig.
6. RU foam air unit. Make quality foam on surface before going down hole with foam/air. Install flapper float at surface before beginning to pump. Break circulation with foam/air. Evacuate fluid from well.

Pump high quality foam at all times. Do not pump dry air at any time. Fluid injection rates will generally be above 12 gallons per minute

Whenever there is pressure on the stripper head, have a dedicated person continuously monitor pressure at choke manifold and have a dedicated person at accumulator ready to close annular BOP in case stripper leaks. Do not allow pressure on stripper head to exceed 500 psi. If pressure cannot be controlled below 500 psi, stop pumping, close BOP and bleed off pressure.

7. Clean out fill to 6,000' with low RPM's rotation and circulation, always keep pipe moving. Short trips can be beneficial to hole cleaning. Circulate well clean for at least 1 hour at the end of the day and pull up above the perforations before shut down for night. If the foam/air unit goes down, pull above the perforations.
8. When tripping out of hole, have special float bleed off tool available to relieve trapped pressure below float.

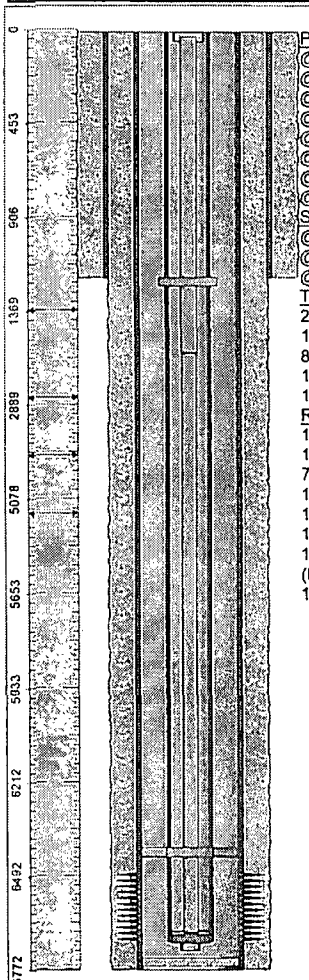
Ensure that high quality, stiff foam is pumped while circulating the fill. Stiff foam is required to prevent segregation while circulating. Monitor flow and pressures carefully when cleaning out.

Before rigging up power swivel to rotate, carefully inspect Kelly hose to ensure that it is in good condition. Ensure that swivel packing is in good condition.

Continue on with original procedure for completion.

Chevron U.S.A. Inc. Wellbore Diagram : MATB21

Lease: OEU EUNICE	**Well No.:** MATTERN H T /NCT-B/ 21	**Field:** DRINKARD	
Location: 2310FNL2310FEL	**Sec.:** N/A	**Blk:**	**Survey:** N/A
County: Lea **St.:** New Mexico	**Refno:** EO7652	**API:** 3002525165	**Cost Center:** UCU415000
Section: 31	**Township:** 021 S		**Range:** 037 E
Current Status: ACTIVE		**Dead Man Anchors Test Date:** 05/03/2013	
Directions:			



Production Casing (Top-Bottom Depth) Desc
@(1194-1194) DV Tool
@(6481-6691) Producing Interval (Completion) - Bare
@(6481-6691) Producing Interval 01 PR
@(6481-6691) Perforations - Open
@(6736-6736) Plug Back Total Depth
@(1200-6772) Wellbore Hole OD- 7.8750
@(14-6772) Unknown 5.500 OD/ 15.50# Round Short 4.950 ID 4.825 Drift
@(14-6772) Cement
Surface Casing (Top-Bottom Depth) Desc
@(14-1200) Wellbore Hole OD-11.0000
@(14-1200) Unknown 8.625 OD/ 24.00# Round Short 8.097 ID 7.972 Drift
@(14-1200) Cement
Tubing String Quantity (Top-Bottom Depth) Desc
203 @(14-6408) J-55 2.375 OD/ 4.70# T&C External Upset 1.995 ID 1.901
1 @(6408-6411) Tubing Anchor/Catcher 2.375"
8 @(6411-6657) J-55 2.375 OD/ 4.70# T&C External Upset 1.995 ID 1.901
1 @(6657-6658) Seat Nipple - Heavy Duty (2.375") Cup Type
1 @(6658-6689) J-55 2.375 OD/ 4.70# T&C External Upset 1.995 ID 1.901
Rod String Quantity (Top-Bottom Depth) Desc
1 @(14-36) 1.500 (1 1/2 in.) C x 22
1 @(36-46) 1 1/2" x 1 1/4" x 10' Polished Rod Liner
79 @(36-2011) 0.875 (7/8 in.) N-78 (D) x 25 Rod
186 @(2011-6661) 0.750 (3/4 in.) N-78 (D) x 25 Rod
1 @(6661-6663) 0.750 (3/4 in.) N-78 (D) x 2 Rod Sub
1 @(6663-6665) 0.750 (3/4 in.) N-78 (D) x 2 Rod Sub
1 @(6665-6687) Rod Pump (Insert) (NON-SERIALIZED) - 20-125-R H BC -16-4-3-3 (Bore = 1.25)
1 @(6687-6697) Gas Anchor (Rod) 1.000 OD x 10'

Ground Elevation (MSL): 3481.00	**Spud Date:** 12/12/1975	**Compl. Date:** 01/08/1975
Well Depth Datum: CSI0000N	**Elevation (MSL):** 3495.00	**Correction Factor:** 14.00
Last Updated by: fitecl	**Date:** 02/19/2013	

Well: H. T. Mattern (NCT-B) #21 Field: Blinebry Oil and Gas Reservoir: Blinebry

Proposed Wellbore Diagram

Location:
2310' FNL & 2310' FEL
Section: 31
Township: 21S
Range: 37E Unit: G
County: Lea State: NM

Elevations:
GL: 3481'
KB: 3495
DF:

Formations:	
T/Salt	1267'
T/Yates	2675'
T/7Rvrs	2940'
T/Queen	3445'
T/Grayburg	3713'
T/Glorieta	5150'
T/Blinebry	5487'
Tubb	6160'
Drinkard	6474'
Abo	

Tubing Detail

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, DS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

Well ID Info:
Chevno: EO7652
API No: 30-025-25165
L5/L6:
Spud Date: 12/12/75
Compl. Date: 1/08/76

Surf. Csg: 8-5/8", 24#, K-55
Set: @ 1200' w/550 sx cmt
Size of hole: 11"
Circ: Yes TOC: Surface
TOC By: Circulated

DV tool @ 1194'

Initial Completion:
Clrk Perfs: 5481'-6891'

Proposed Blinebry Perfs
5487-94
5500-5510
5516-23
5529-39
5546-57
5586-99
5609-17
5620-26 w/3 JHPF
5633-43
5648-55
5662-74
5678-90
5695-5701
5785-91
5834-43
5867-73
5894-5901
5934-42

CIBP @ 6415" w 35' of cmt on top

Drinkard Perfs
6481'-83'
6537'-39' w/4, 1/2" JHPF
6576'-78'
6608'-10'
6634'-36'
6666'-68'
6689'-91'

Prod. Csg: 5-1/2", 14 & 17#, K-55
Set: @ 6772' w/925' sx cmt
DV Tool @ 1194'
Size of hole: 7-7/8"
Circ: yes TOC: Surface
TOC By: Circ

PBTD: 6736'
TD: 6772'

6/6/2013
By: John Taxlarchou

Mattern, H.T#21-WBD Proposed.xls