Submit 1 Copy To Appropriate District State of New Me	xico	Form C-103	
Office District I – (575) 393-6161 Energy, Minerals and Natu	ral Resources	rces Revised August 1, 2011	
1625 N. French Dr., Hobbs, NM 88246 OBBS OCK		L API NO.	
District II – (575) 748-1283 811 S. First St., Artesia, NM 88210 OIL CONSERVATION		5-06658	
District III - (505) 334-6178 NOV 3 a 2012 1220 South St. Francis Dr.		dicate Type of Lease  STATE  FEE  /	
1000 Rio Brazos Rd., Aztec, NM 874Y0' U. V 2012 Sonto Eo. NIM 97505		ate Oil & Gas Lease No.	
District IV – (505) 476-3460 1220 S. St. Francis Dr., Santa Fe, NM, 87505	0. 50	ate Off & Gas Lease No.	
87505 RECEIVED			
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A		ase Name or Unit Agreement Name	
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM,C-101) FOR SUCH		MATTERN NCT-C	
PROPOSALS.)		ell Number 2	
1. Type of Well: Oil Well  Gas Well  Other			
2. Name of Operator	. 9. O	GRID Number 4323	
CHEVRON U.S.A. INC.		ool name or Wildcat	
3. Address of Operator 15 SMITH ROAD, MIDLAND, TEXAS 79705		ROSE; SKELLY, GRAYBURG	
		COSE, SKELET, GRATBURG 7	
4. Well Location			
Unit Letter: K 1980 feet from the SOUTH line and 1980 feet from the WEST line			
Section 18 Township 21-S Range 37-E NMPM County LEA			
11. Elevation (Show whether DR,	RKB, RT, GR, etc.)		
	·		
12. 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 OPNS. P AND A			
PULL OR ALTER CASING   MULTIPLE COMPL   CASING/CEMENT JOB			
DOWNHOLE COMMINGLE			
DOVINIOLE GOMMINIOLE			
OTHER CLEAN OUT, ACIDIZE, & SCALE SQUEEZE OTHER:			
13. Describe proposed or completed operations. (Clearly state all p	pertinent details, and give p	pertinent dates, including estimated date	
of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of			
proposed completion or recompletion.			
CHEVRONILLO A. DIO DIEDNEO EO CLEAN OUT. ACIDITE È COME COMPETE THE CURRECT MELL			
CHEVRON U.S.A. INC. INTENDS TO CLEAN OUT, ACIDIZE & SCALE SQUEEZE THE SUBJECT WELL.			
PLEASE FIND ATTACHED, THE INTENDED PROCEDURE, WELLBORE DIAGRAM, & C-144 INFORMATION.			
TELASETING ATTACHED, THE INTENDED PROCEDURE, WEELBORE DINGRAM, & C-144 IN ORMATION.			
Spud Date: Rig Release Da	nte:	·	
I hereby certify that the information above is true and complete to the best of my knowledge and belief.			
$\mathcal{N}_{\mathcal{M}}$ $\mathcal{N}_{\mathcal{M}}$			
SIGNATURE SIGNATURE SPECIALIST DATE 11-28-2012			
THE RESC	JLATORY SPECIALIST	DATE 11-28-2012	
Type or print name DENISE PINKERTON E-mail address: leak	JLATORY SPECIALIST	DATE 11-28-2012 PHONE: 432-687-7375	
Type or print name DENISE PINKERTON E-mail address: leak			

H.T. Mattern C #2 - [30-025-06658]

Penrose Skelly field

T21S, R37E, Section 18

N 32° 28' 37.416", W -103° 12' 13.428" (NAD27)

Job: Cleanout Open Hole, Acidize & Scale Squeeze

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

It should be noted, the anticipated maximum amount of H2S that an individual could be exposed to on location is as follows for given Radius of Exposure:

100 PPM ROE = 0.001589\* 21,000 PPM\* 49 MCF ^0.6258 = 103 FEET 500 PPM ROE = 0.0004546\* 21.000 PPM\* 49 MCF ^0.6258 = 47 FEET

## **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 are in accordance with MCA SWP. Complete an 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. Caliper all lifting equipment at the beginning of each day or when sizes change.
- 6. When NU anything over an open wellhead (EPA, etc.), ensure the hole is covered to avoid dropping anything downhole.
- 7. For wells to be worked on or drilled in an H2S field/area, include the anticipated maximum amount of H2S that an individual could be exposed to along with the ROE calculations for 100' and 500'.
- 8. If the possibility of trapped pressure exists, check for possible obstructions by:
  - Pumping through the fish/tubular this is not guaranteed with an old fish as the possibility of a hole above the obstruction could yield inconclusive results.
  - Dummy run make a dummy run through the fish/tubular with sandline, slickline, e-line
    or rods to verify no obstruction. Prior to making any dummy run contact RE and discuss.

If unable to verify that there is no obstruction above the connection to be broken, or if there is an obstruction:

Hot Tap at the connection to check for pressure and bleed off.

Observe and watch for signs/indicators of pressure as connection is being broken. Use mud bucket (with seals removed) and clear all non-essential personnel from the floor.

## **Procedure:**

- 1. Ensure location is in appropriate conditions, anchors have been tested within the last 24 months, power line distance has been verified to determine if variance is needed and the right tools are scheduled for the energized job.
- 2. Verify that well does not have pressure or flow. If well has pressure, note tubing and casing pressures on Wellview report. Bleed down well; if necessary, kill with cut brine fluid (8.6 ppg).
- 3. MI & RU workover unit.
- 4. Unseat pump, POOH with rods and pump. Examine rods for wear/pitting/paraffin and capture any samples for analysis. Do not hot water unless necessary. ND wellhead, unset TAC, NU BOP. POOH and LD 1 jt, PU 5.5" packer and set ~ @ 25', test BOP pipe rams to 250 psi/500 psi. Note testing pressures on WellView report. Release and LD packer.
- 5. PU tubing and tag for fill (TAC 3,601', EOT 3,852' PBTD 3,913', Csg shoe 3,674'). POOH while scanning 2-7/8" prod tubing. LD all non-yellow band joints. If fill is tagged:
  - A. Above 3,910' continue to step 6.
  - B. Below 3,910' POOH. LD bit and BHA, continue to step 7.

Note: Strap pipe out of the hole to verify depths and note them on Wellview report. Send scan log report to <a href="mailto:lgbi@chevron.com">lgbi@chevron.com</a>.

- 6. PU and RIH with 4-3/4" MT bit, 4 (3-1/2") drill collars on 2-7/8" 6.5# L-80 WS. RU power swivel and clean out to 3,913' PBTD with foam/air unit (continue to supplemental procedure and in accordance with attached SOG). POOH with 2-7/8" WS and bit. POOH, LD bit & BHA.
- 7. PU and RIH with 5-1/2" treating packer on 2-7/8" 6.5# L-80 WS. Set packer ~ 3,600'. Load and test backside to 300 psi. Monitor production/intermediate csg annulus for pressure.
- 8. MI & RU Petroplex. Titrate acids and verify concentration (HCl ±1.5%) report results in daily work summary. Treat well with 4,000 gals of 15% NEFE HCl acid at 5 BPM. Do not exceed 5,000 psi tubing pressure. Monitor casing pressure not to exceed 300 psi.
- 9. Displace acid to bottom (3,913') with 50 bbls 2% KCL. RDMO Petroplex.
- 10. MI & RU swabbing unit. Attempt to swab back load fluid from acid job ~145 bbl. The intent of swabbing is primarily to clean near wellbore. If very little fluid is recovered on swab runs contact Alex Smalls, stop swabbing and move on to scale sqz. Swab for a maximum of one day. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. RDMO swab unit.
- 11. MI & RU pump truck. Scale sqz well with 40 bbls 2% KCL mixed with 3 drums (165 gals) of Baker SWC-358 scale inhibitor chemical. Displace scale sqz with 110 bbls of 2% KCL. Pump at a max rate of 5 BPM. Do not exceed 5,000 psi.
- 12. Release packer, POOH and LD packer.
- 13. PU and RIH with 4-3/4" MT bit on 2-7/8" L-80 WS tag for fill. If fill entry was indentified @ 3,900' or above, clean-out to (3,913') per step 6.
- 14. POOH & LD 2-7/8" WS and BHA.

- 15. RIH with 2-7/8" production tubing hydrotesting to 5,000 psi. **Set TAC per ALCR recommendation** and record it on WellView.
- 16. ND BOP. NU WH. RIH with rods and pump per ALCR and record how much the pump was spaced-out on WellView. Hang well on.
- 17. RD and release workover unit. Turn well over to production (contacts on back). Clean location.

## FOAM / AIR CLEANOUT PROCEDURE

- This procedure is an addition to the original procedure.
  - 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.
  - 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.
  - NU stripper head with <u>NO Outlets</u> (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 3,913' 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.

## **WELL DATA SHEET**

Well Name: H. T. Mattern (NCT-C) #2 Penrose Skelly Lease Type: Field: Fee Location: 1980' FSL & 1980' FWL Sec: 18-K Township: 37E 21\$ Range: Refno: FA7762 API: 30-025-06658 UCU491800 County: State: New Mexico **Cost Center: Current Status: OIPR Current Producing Formation(s):** Grayburg KB: N 32° 28' 37.416", W -103° 12' 13.428" (NAD27) DF: 3519' GL: Spud Date: 6/21/1944 Surface Csq. Size: 9 5/8" Compl. Date: 7/16/1944 Wt.: 24# 293 Well was TA'd on 12/30/59 Set @: 200 Well was P&A'd on 9/22/61 Sxs cmt: Circ: unknown ReEnter Well OH 3674-3913' 6/2004 TOC: surface by calc Bottom TBG DETAIL: Top Depth | Depth Length 114 Unknown 2.875 OD/ 6.50#T&C External Upset 2.441 ID 2.347 Drift 3593.71 7; 3600.71 1 Tubing Anchor/Catcher 2.875" 3600.71 3603.51 2.8 4 Unknown 2.875 OD/ 6.50#T&C External Upset 126.77 3603.51 3730.28 2.441 ID 2.347 Drift 1 Unknown 2.875 OD/ 6.50#T&C External Upset 32.3 3730.28 3762.58 2.441 ID 2.347 Drift - Internal Plastic Ctg 1 Seat Nipple/Shoe - (2.875") 1.1 3762.58 3763.68 1 Unknown 2.875 OD/ 6.50#T&C External Upset 3763.68 3767.68 2.441 ID 2.347 Drift 1 (Cavins Desander (Sand Separator) 2 7/8" x 20' 20.18 3767.68' 3787.86 2 Unknown 2.875 OD/ 6.50#T&C External Upset 2.441 ID 2.347 Drift 63.51 3787.86 | 3851.37 1 Dump Valve (for use w/ Sand Separator) 3851.37 3852.17 ROD DETAIL: 1 1.500 (1 1/2 in.) C x 26 26 26 1 (0.875 (7/8 in.) Cx 8 Rod Sub 26 34 1 0.875 (7/8 in.) x 4 Rod Sub 34 38 1 0.875 (7/8 in.) x 6 Rod Sub 38 44 71 0.875 (7/8 in.) D x 25 Rod 1775 44 1819 Production Csq. 65 0.750 (3/4 in.) D x 25 Rod 1625 3444 1819 Size: 5 1/2" 12 1.500 (1 1/2 in.) x 25 Sinker Bar 300 3444 3744 Wt.: 14# 1 0.875 (7/8 in.) Dx 4 Rod Sub 3744 3748 3674 Set @: 1 Rod Pump (Insert) 20 3748 3768 Sxs Cmt: 200 Circ: TOC: 1575' by calc 4 3/4" OH fr/ 3674-3913 TD 3913'

epared by: S. Heidelberg
Date: 10/30/2012