Submit 1 Copy To Appropriate District	State of New Mexico		Form C-103
<u>District I</u> – (575) 393-6161	- (575) 393-6161 Energy, Minerals and Natural Resources		Revised August 1, 2011
Office District I – (575) 748-1283  State of New Mexico New Mexico State of New Mexico		WELL API NO. 30-025-34096	
811 S First St., Artesia, NM 88210		5. Indicate Type of	of Lease
District III – (505) 334-6178 1000 Rio Brazos Rd , Aztec, NM 87410	1220 South St. 1 failers D1.	STATE 2	
District IV – (505) 476-3460  1220 S St. Francis Dr., Santa Fe, NM 87505  Santa Fe, NM 87505		6. State Oil & Ga	s Lease No.
SUNDRY NOTICES (DO NOT USE THIS FORM FOR PROPOSALS DIFFERENT RESERVOIR. USE "APPLICATION OF THE PROPOSALS DIFFERENT RESERVOIR."	S AND REPORTS ON WELLS S TO DRILL OR TO DEEPEN OR PLUG BACK		Unit Agreement Name
PROPOSALS)  1. Type of Well: Oil Well  Gas	Well Other	8. Well Number	20
2. Name of Operator		9. OGRID Numb	er 4323
CHEVRON U.S.A. INC.		10.0	*****
3. Address of Operator 15 SMITH ROAD, MIDLAND, TEXA	AS 70705	10. Pool name or SKAGGS; DRINI	
4. Well Location	13 13 103	SKAGOS, DIGINI	AND
1	the NORTH line and 2225 feet from t	he WEST line	
	Township 20-S Range 37-		County LEA
	. Elevation (Show whether DR, RKB, RT		ounty EEA
		The same of the sa	
TEMPORARILY ABANDON CIPULL OR ALTER CASING MDOWNHOLE COMMINGLE  OTHER: INTENT TO ACIDIZE, SONION of starting any proposed work). proposed completion or recomp	HANGE PLANS COMMIC  ULTIPLE COMPL CASING  C HAMMER, & SC SQZ  OTHER  d operations. (Clearly state all pertinent of SEE RULE 19.15.7.14 NMAC. For Michael Company of the See RULE 19.15.7.14 NMAC.	ENCE DRILLING OPNS.  B/CEMENT JOB  :  details, and give pertinent date altiple Completions: Attach w	ALTERING CASING PAND A s, including estimated date tellbore diagram of
PLEASE FIND ATTACHED, THE	INTENDED PROCEDURE, WELLBO	RE DIAGRAM, & C-144 INF	ORMATION.
Spud Date:	Rig Release Date:		
I hereby certify that the information above	e is true and complete to the best of my	knowledge and belief.	
SIGNATURE SEMBLE FINE	TITLE: REGULATOR	Ç.	0-16-2012
Type or print name: DENISE PINKERT	ON E-mail address: leakejd@chey	ron.com PHONE:	432-687-7375
APPROVED BY: Conditions of Approval (if any):	TITLE DIST.	DA DA	те <u>/0-/9-20</u> /

C.H. Weir A #20 - [30-025-34096] Skaggs field T20S, R37E, Section 12 N 32° 35' 16.548", W -103° 12' 21.744" (NAD27) Job: Sonic Hammer, 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\* 950 PPM\* 194 MCF ^0.6258 = 35 FEET 500 PPM ROE = 0.0004546\* 950 PPM\* 194 MCF ^0.6258 = 16 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. MI & RU Workover unit.
- 2. Verify that well does not have pressure/flow. If well has pressure, record tubing and casing pressures on WellView report. Bleed down well; if necessary, kill with cut brine fluid (8.6 ppg).
- Caliper elevators and tubular EACH DAY prior to handling tubing/rods/tools. Note in JSA & WellView when and what items are callipered within the task step that includes that work.
- 3. Unseat pump. POOH with rods & pump. Examine rod string for paraffin/corrosion. Do not hot water, unless significant paraffin is seen. ND wellhead, unset TAC, NU BOP [Blinds on bottom, pipe rams on top].
- 4. POOH & LD 1 joint, PU 7" packer and set @ ~ 25'. Close and test BOP pipe rams to 250psi (low)/ 500psi (high). Record testing pressures on WellView report. Release and LD packer.
- 5. PU tubing and run back in hole to tag for fill.
  Depths: (TAC 6,730', Bottom Perfs 6,902', EOT 6,929', PBTD 6,955')
- 6. RU Scanners and POOH while scanning all 2-7/8" 6.5# J-55 production tubing. LD all non-yellow band joints. If fill is tagged:
  - a. Above 6,950' proceed to step #7.
  - b. Below 6,950' skip to step #8.

Strap pipe out of the hole to verify depths. Send scan report to lgbi@chevron.com.

- > Caliper elevators and tubular EACH DAY prior to handling tubing/rods/tools. Note in JSA & WellView when and what items are callipered within the task step that includes that work.
- 7. PU and RIH with 6-1/8" Milled Tooth (MT) Bit, 4 (3-1/2') drill collars on 2-7/8" 6.5# L-80 Workstring. RU power swivel and C/O to 6,955'. POOH with 2-7/8" WS and bit. LD bit and BHA.
  - \*Note: If circulation is not expected/achieved, notify Remedial Engineer and proceed to C/O <u>utilizing</u> <u>foam/air unit</u> (continue to supplemental procedure at end).
- 8. Contact sonic tool representative to be on-site during job. PU and RIH with Sonic Hammer tool and 2-7/8" Workstring to 6,910' or enough depth to cover the bottom stimulation interval (@ 6,902') with a whole stand. Hydrotest tubing to 6,000 psi. Stand back tubing to top perforations (@ 6,828'). Install stripper head and stand pipe with sufficient treating line to move tools vertically ~ 50'. RU pressure gauges to allow monitoring of tubing and casing pressures during job.
- 9. MI and RU Petroplex equipment. Titrate acids and verify concentration (HCI ± 1.5%). Treat all intervals from 6,825' to 6,905' with ~20 bbls of 8.6 ppg cut brine water per interval (see Table 1). Pump down Sonic Hammer tool at 5 BPM while reciprocating tool across intervals. Do not exceed 5,000 psi tubing pressure. Leave annulus open in circulation mode while treating intervals with brine water.

Rerf Intervals for Acid			
Interval	Depth	Net Feet	Acid Volume
(#)	:	(ft)	(gal)
11	6,825' - 6,865'	40	1,750
2	6,865' - 6,905'	40	1,750
Total		80	3,500

Table 1

- 10. Follow the brine water wash with 3,500 gals 15% NEFE HCl of total acid for all intervals. Spot 3 bbls of acid outside tubing, shut in casing, pump 1,750 gals of acid @ 5 BPM over first treating interval from 6,825' 6,865', monitor casing pressure not exceeding 500 psi on backside. Flush tubing with brine water after every acidizing interval, make a connection and continue with remaining interval. Refer to Table 1.
- 11. Shut in well for 1 hr to allow time for acid to spend. Monitor and bleed off excess pressure at surface if necessary to keep casing pressure below 500 psi.
- 12. Scale squeeze well with a total of 140 bbls 8.6 ppg brine water mixed with 2 drums (110 gallons)
  Baker SCW-358 Scale Inhibitor Chemical. Pump down Sonic Hammer tool at a max rate of 5 BPM.
  Start from lowest interval of 6,905' 6,865' and continue moving uphole per pump schedule (see
  Table 2). Ensure top of tubing is flushed with brine water before making a connection.

12 36	Scale Squeeze Pump Schedule					
,	Step -	alinterval _	Max Rate	Volume Brine	Volume Scale Chem.	Cum Volume
		ິ (ft)	(BPM)	(bbl)	(gal)	(bbl)
1	Pump Chemical/brine while moving from	6905' - 6865'	5	13	55	· 14
2	Pump Bring while moving from	6905' - 6865'	5	47		61
3	Move pipe to next interval of	6865' - 6825'				. 61
4	Pump Chemical/brine while moving from	6865' - 6825'	5	13	55 ·	76
5	Pump Brine while moving from	6865' - 6825'	5	67		143

Table 2

- 13. PU workstring to higher than top perforations. Displace tubing volume with 8.6 ppg cut brine water. Do not exceed 500 psi casing pressure or 5 BPM while pumping scale squeeze or casing flush. Release Petroplex.
- 14. TOH and LD 2-7/8" WS and Sonic Hammer tool.
- 15. RIH with 2-7/8" J-55 production tubing and hydrotest to 6,000 psi. Pump 8.6 ppg cut brine water containing soap and biocide per ALCR.
- 16. ND BOP, set TAC, NU WH. RIH with rods and pump per ALCR's recommendation/Rodstar design. Hang well on.
- 17. RD and release Workover unit. Turn well over to production.

#### **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 6-1/8" MT bit, 4 (3-1/2") drill collars on 2-7/8" 6.5# L-80 WS.
  - 5. 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.

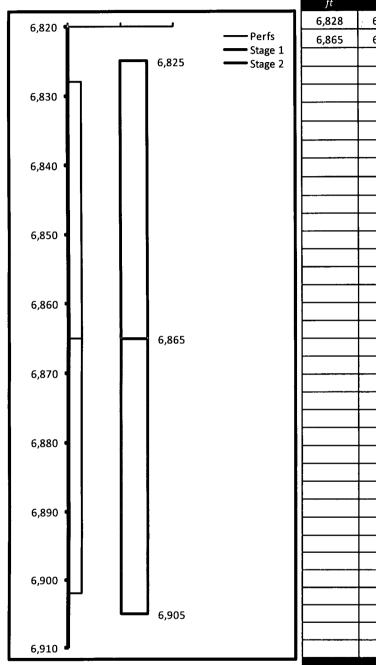
- 7. Clean out fill to 6,955' with low RPM's rotation and circulation, always keep pipe moving. Short trips can be beneficial to hole cleaning. Circulate well clean for at least 1 hour at the end of the day and pull up above the perforations before shut down for night. If the foam/air unit goes down, 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.

# CH Weir A #20



Perfs Detail				
Тор	Bottom	Interval Length	Status	Reservoir
ft	ft	ft		
6,828	6,865	37	Open	Drinkard
6,865	6,902	37	Open	Drinkard
		0		
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6.020	Total	7.4		
6,828	6,902	74		

74

# Chevron U.S.A. Inc. Wellbore Diagram: WEIRCHA20

Lease: OEU EUNICE	Well No.: WEIR, C. HA- 20	Field: FLD-SKAGGS	
Location: 2510FNL2225FWL	Sec.: N/A	Blk:	Survey: N/A
County: Lea St.: New Mexico	Refno: BR7378	<b>API:</b> 3002534096	Cost Center: UCL211300
Section: 12	Township: 020 S		Range: 037 E
Current Status: ACTIVE Dead Man Anchors Test Date: 03/26/2		s Test Date: 03/26/2007	

Directions: Rod String Quantity (Top-Bottom Depth) Desc @(21-47) 1.500 (1 1/2 in.) Spray Metal x 26 @(47-51) 1.000 (1 in.) N-78 (D) x 4 Rod Sub @(51-59) 1.000 (1 in.) N-78 (D) x 8 Rod Sub 85 @(59-2184) 1.000 (1 in.) N-78 (D) x 25 Rod 98 @(2184-4634) 0.875 (7/8 in.) N-78 (D) x 25 Rod 78 @(4634-6584) 0.750 (3/4 in.) D x 25 Rod 12 @(6584-6884) 1.500 (1 1/2 in.) K x 25 Sinker Bar 1 @(6884-6908) Rod Pump (Insert) (NON-SERIALIZED) - 25-150-RHBC-24-6 (Bore = 1.50) 1 @(6908-6918) Gas Anchor (Rod) 1.250 OD x 10' Surface Casing (Top-Bottom Depth) Desc @(21-1400) Wellbore Hole OD-12.2500 @(21-1400) K-55 9.625 OD/ 36.00# Round Short 8.921 ID 8.764 Drift @(36-1400) Cement <u>Tubing String Quantity (Top-Bottom Depth) Desc</u> 214 @(21-6730) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347 Drift 1 @(6730-6733) Tubing Anchor-Mechanical 7.000" Elder 'B' 4 @(6733-6860) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347 Drift 1 @(6860-6891) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347 Drift - Internal Pl... 1 @(6891-6893) Seat Nipple - Standard (2.875") Cup Type 1 @(6893-6897) Perforated Tubing Sub 2.875" 1 @(6897-6929) Bull Plug Mud Anchor 2.875" Production Liner (Top-Bottom Depth) Desc @(7810-7828) Perforations - Isolated - Penn @(7875-7879) Bridge Plug Cast Iron 5.500" @(7902-8036) Perforations - Isolated - Penn @(8056-8067) Perforations - Isolated - Silurian @(8430-8450) Plug - Cement on Top of Bridge Plug @(8450-8454) Bridge Plug Cast Iron 5.500" @(8471-8528) Perforations - Isolated - Silurian @(7006-9927) J-55 5.500 OD/ 17.00# Round Short 4.892 ID 4.767 Drift @(7006-9927) Cement @(7450-9927) Wellbore Hole OD- 6.1250 @(9887-9927) Plug - Cement Production Casing (Top-Bottom Depth) Desc @(6828-6902) Producing Interval (Completion) - Drinkard @(6828-6902) Perforations - Open - Drinkard @(6955-6975) Plug - Cement on Top of Bridge Plug (Plug Back) @(6975-6979) Bridge Plug Cast Iron 7.000" @(1400-7450) Wellbore Hole OD- 8.7500 @(21-7450) L-80 7.000 OD/ 23.00# Round Short 6.366 ID 6.241 Drift @(21-7450) Cement

Ground Elevation (MSL):: 3559.00	Spud Date: 09/17/1997	Compl. Date: 10/08/1998
Well Depth Datum:: CSI0000N	Elevation (MSL):: 0.00	Correction Factor: 21.00
Last Updated by: bujq	Date: 08/29/2012	