

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

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-025-06650
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name MITTIE WEATHERLY
8. Well Number 4
9. OGRID Number 4323
10. Pool name or Wildcat PENROSE; SKELLY GRAYBURG

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐

2. Name of Operator
CHEVRON U.S.A. INC.

3. Address of Operator
15 SMITH ROAD, MIDLAND, TEXAS 79705

4. Well Location

Unit Letter E: 1980 feet from the NORTH line and 660 feet from the WEST line

Section 17 Township 21-S Range 37-E NMPM County LEA

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3477'

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: INTENT TO ACIDIZE

OTHER:

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give 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.

CHEVRON U.S.A. INC. INTENDS TO CO2 ACIDIZE THE SUBJECT WELL.

PLEASE FIND ATTACHED, THE INTENDED PROCEDURE, WELLBORE DIAGRAM, & C-144 INFORMATION.

Spud Date:

Rig Release Date:

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

SIGNATURE:

Denise Pinkerton

TITLE REGULATORY SPECIALIST

DATE: 03-09-2012

Type or print name DENISE PINKERTON

E-mail address: leakejd@chevron.com

PHONE: 432-687-7375

For State Use Only

APPROVED BY:

[Signature]

TITLE

Staff

DATE 3-13-2012

Conditions of Approval (if any):

MAR 13 2012

Mittie Weatherly #4
Penrose Skelly Grayburg
1980' FNL & 660' FWL, Sec 17-E, Township 21S, Range 37E
Job: CO2 Acidize

1/27/2012

Procedure:

1. Ensure location is in appropriate conditions, anchors have been tested within the last 24 months, powerline distance has been verified to determine if variance is needed and the right tools are scheduled for the energized job.
2. MI & RU workover unit.
3. 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 water (8.6 ppg).
 - **Caliper elevators and tubular EACH DAY prior to handling tubing/tools. Note in JSA when and what items are callipered within the task step that includes that work.**
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 5-1/2" packer and set ~ @ 25', test BOP pipe rams to 250 psi/500 psi. Note testing pressures on wellview report. Release and LD packer.
 - **Caliper elevators and tubular EACH DAY prior to handling tubing/tools. Note in JSA when and what items are callipered within the task step that includes that work.**
5. PU tubing and tag for fill (according to well records tubing is ~ 65' above TD).
Bottom Perforations 3,816', Casing Shoe 3,839', EOT 3,881', OH 3,839'- 3,945' (TD).
POOH while scanning 2-7/8" production tubing. LD all non-yellow band joints. If fill is tagged:
 - A. Above 3,900' continue to step 6 or 7.
 - B. Below 3,900' skip to step 8.

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

 - **Caliper elevators and tubular EACH DAY prior to handling tubing/tools. Note in JSA when and what items are callipered within the task step that includes that work.**
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 TD at 3,945'. POOH with 2-7/8" WS and bit. LD bit & BHA. Continue to step 9.

Note: If circulation is not expected, notify Remedial Engineer to discuss CO with bailer (continue to step 7) or foam/air unit (continue to supplemental procedure on back).
7. PU and RIH with 4-3/4" MT bit and Bulldog bailer on 2-7/8" 6.5# L-80 WS. Clean out fill to TD at 3,945'. POOH. LD bit & bailer. Continue to step 9.
 - **Expect trapped pressure inside tubing while breaking connections during bailing operations, discuss on JSA and mitigate hazard. Use mudbucket (remove bottom seals if applicable) while breaking connections. PPE including face shields and goggles.**
8. PU and RIH with 4-3/4' MT bit, bit sub on 2-7/8" WS to 3600'. POOH and LD bit.

9. PU and RIH with 5-1/2" Arrow set 1-X packer on 2-7/8" 6.5# L-80 WS. Set packer at +/- 3,575'. Load backside with 8.6 ppg cut brine and test to 300 psi.
10. Prep location for CO2 Acid Treatment. RU 2 open tanks (equipped with gas buster) and set them on opposite sides of location if possible. This is to ensure the flow is directed downwind at all times. Steel lines are to be secured with safety restraints as shown on **Image A**. If CO2 team lacks safety restraints contact Guardian for rental. NU TIW valve rated for 10,000 psi (newly-tested and functioned). Have flowback crew and choke manifold ready for flowback stage. Ensure all flowback equipment has current inspection and is properly secure.
11. Pressure up and maintain 300 psi on backside throughout acid job, monitor it and bleed down as necessary.
12. MI & RU Team CO2. **Test lines to 6,000 psi.** Treat all perforations from 3,650' to 3,816 and OH from 3,839' to 3,945' per schedule on Table A. **Maximum treating pressure at surface is 5,000 psi.**
13. Pump 3 bbls of Brine water ahead @ 2 BPM.
Acidize following Table A below.

Team CO2

CO2 Foamed Acid Patent #7464754

CO2 Foamed Acid Pumping Schedule

Operator

Date

Well Name & Number

Job Description

County, State

Formation

Total Pump Rate bpm:

Company Rep.

Phone #

Chevron

1/13/2012

Mitte Weartherly #4

25,800 gal. of 75 quality foam

Lea County, New Mexico

Grayburg

8

Mr. Jason Lambright

(432) 687-7346

total	CO2	fluid
HHP Required	HHP Required	HHP Required
0.0	0.0	0.0

Well Data

Perforations/O H.	
Net ft. of pay	
Foamed gal./ft. of pay	#DIV/0!
PBTD or BP @	
Est. treating press.	
Tubing:	
Casing/Annular Vol.	
Hole Volume-bbls.:	

	Tubular Cap.-bbl./ft.	bbls.
		0.0
		0.0
		0.0

Stage #	Fluid Vol.-gal.	Foam Quality	CO2 Vol.-gal. tons	Acid Vol.-gal.	H2O Volume-gal.	CO2 rate	HCl/H2O rate	cum. CO2-gal. (tons/bbls)	cum HCl-gal.	cum H2O gal.
1 - Spearhead Acid	250	0	0	250	0	0.0	8.0	0.0	250.0	0.0
tons			0.00					0.0		
bbls			0.00	5.95				0.0	6.0	0.0
2 - Foamed Acid	6450	75	4837.5	1612.5	0	6.0	2.0	4837.5	1862.5	0.0
tons			21.31					21.3		
bbls			115.29	38.39				115.3	44.3	0.0
	Drop 500# salt block in brine									
3	6450	75	4837.5	1612.5	0	6.0	2.0	9675.0	3475.0	0.0
tons			21.31					42.6		
bbls			115.29	38.39				230.6	82.7	0.0
	Drop 500# salt block in brine									
4	6450	75	4837.5	1612.5	0	6.0	2.0	14512.5	5087.5	0.0
tons			21.31					63.9		
bbls			115.29	38.39				345.9	121.1	0.0
	Drop 500# salt block in brine									
5	6450	75	4837.5	1612.5	0	6.0	2.0	19350.0	6700.0	0.0
tons			21.31					85.2		
bbls			115.29	38.39				461.2	159.5	0.0
Flush	1250.0	75	937.5	0	313	6.0	2.0	20287.5	6700.0	312.5
tons			4.13					89.4		
bbls			22.34	0.00	7			483.5	159.5	7.4
Totals-gal.	27,300		20,288	6,700.0	313					
Totals-tons.			89.37							
Totals-bbls	650		483.50	159.52	7					

Shut-in for 4 hrs. and commence flowback

Table A: Pump Schedule

14. Shut in well for 4 hrs for the acid to spend. Monitor casing pressure to keep it below 300 psi. Bleed off excess pressure if necessary.

Note: Acid job MUST start in the morning. If acid job is deferred, contact Remedial Engineering to discuss postponing job until the following day.

15. Flow well back to open tank. Choke down the flow slowly opening choke to maintain liquid phase while preventing any ice plugs from forming in the surface lines. **It is intended to flow 24 hours a day as long as all the safety precautions are in place. Ensure light towers are in place.**
16. Flowback well dead ensuring CO₂ is removed from the wellbore. Ensure flowback crew/trained personnel has test-tubes to determine CO₂ concentration.
 - **Ensure all personnel on location are aware of CO₂/H₂S release and proper hazard mitigation and discussion is in place. Gas is to be vented downwind to either open tank at all times during flowback.**
 - **Consider a safety trailer and 4-way monitor system to monitor well flowback.**
17. POOH and LD packer. PU and RIH with 4-3/4" MT bit to wash down rock salt with fresh water to PBTD (3945').
18. RIH with 2-7/8" yellow-band production tubing hydrotesting to 6,000 psi.
19. ND BOP. Set TAC per ALCR recommendation. NU WH.
20. RIH with rods and pump per ALCR recommendation. Hang well on and pressure test the tubing and function test the pump. RD and release workover unit.
21. Turn well over to production.

FOAM / AIR CLEANOUT PROCEDURE

- This procedure is an addition to the original procedure.
- 1. **NU 7-1/16" x 3M Annular BOP and test it.**
- 2. 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.
- 3. Install flowback tank downwind from rig.
- 4. Position Air unit upwind from Rig next to water tanks. Have vacuum truck on standby to empty halfpit. (if needed)
- 5. RIH with 4-3/4' MT bit, bit sub (bore for float with dart-type float) 4 (3-1/2") drill collars on 2-7/8" 6.5# L-80 WS.
- 6. 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.
- 7. 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.

- 8. Clean out fill to TD (3,945') maintain circulation at optimum rate, allowing debris to clear bit before continuing to clean downhole, 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.
- 9. 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

Field: Penrose Skelly **Well Name:** Mittie Weatherly #4 **Lease Type:** Fee
Location: 1980' FNL & 660' FWL **Sec:** 17-E **Township:** 21S **Range:** 37E
County: Lea **State:** New Mexico **Refno:** FA7754 **API:** 30-025-06650 **Cost Center:** UCU494000
Current Status: PR
Current Producing Formation(s): Grayburg - single completion
Initial Prod Field/Formation(s): Eumont/Queen (Gas) and Penrose Skelly/Grayburg (Oil) - dual completion

fee-oil

Surface Csg.

Size: 8 5/8"
Wt.: 24#
Set @: 1269'
Sxs cmt: 800
Circ: Yes
TOC: surface
Hole Size: 11"

KB: 3488'
DF: 3487'
GL: 3477'
Spud Date: 12/3/1959
Compl. Date: 12/15/1959

1/04 - SQZ'D CSG LKS 325-357'
W/150 + 285 SKS CMT

Tubing Detail WellView 4/07:

#Jts:	Size:	Footage	
	KB Correction	11 00	DEPTH
107	Jts 2 7/8" 6 5# T&C EUE 2 441 ID 2 347 DRIFT	3388 11	3399 11
	TAC	2 78	3401 89
13	Jts 2 7/8" 6 5# T&C EUE 2 441 ID 2 347 DRIFT	409 98	3811 87
1	Jt 2 7/8" EUE 8R J-55 IPC(TK99) Tbg	31 27	3843 14
	2 875" HEAVY DUTY SN CUP TYPE	1 10	3844 24
	2 7/8" x 4" Perf Tbg Sub	4 00	3848 24
1	BULL PLUG MUD ANCHOR 2 7/8"	32 59	3880 83
122	Bottom Of String >>	3880.83	

ROD DETAIL LOWIS 4/07:

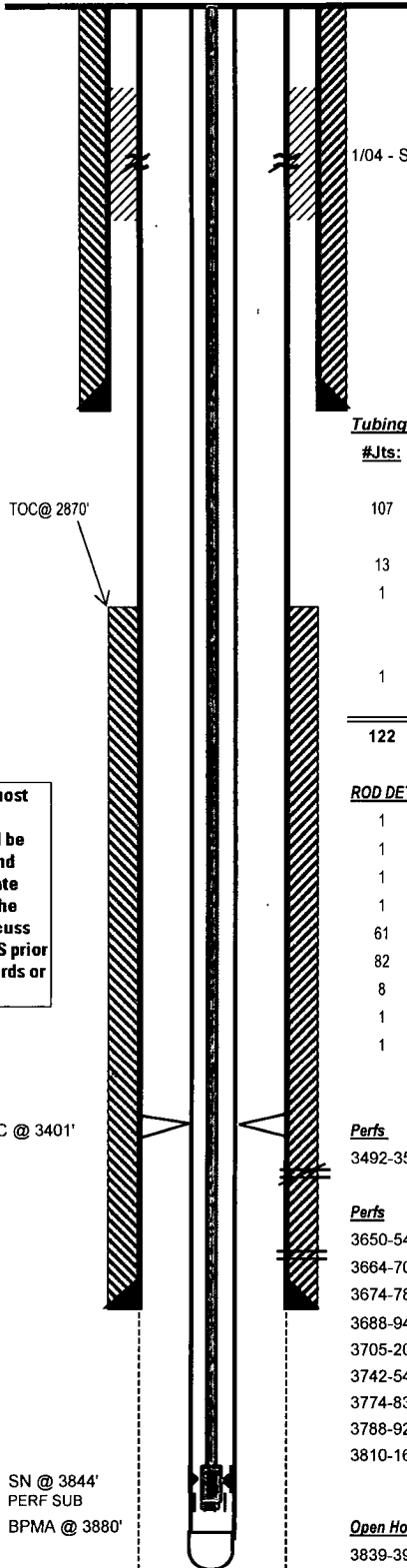
1	1 5" POLISH ROD	26	27
1	1" N-78 D ROD SUB	2	29
1	1" N-78 D ROD SUB	6	35
1	1" N-78 D ROD SUB	8	43
61	1" N-78 D RODS	1525	1568
82	7/8" N-78 D RODS	2050	3618
8	1 5" K SINKER BARS	200	3818
1	ROD PUMP 25-200-RHBC-20-4 (BORE=2 00)	20	3838
1	GAS ANCHOR 1 250 OD X 12'	12	3850
		3850	

Perfs **Status**
 3492-3528' Eumont/Queen (gas) - squeezed w/350 sx cmt

Perfs **Status**
 3650-54' Penrose Skelly/Grayburg - open
 3664-70' Penrose Skelly/Grayburg - open
 3674-78' Penrose Skelly/Grayburg - open
 3688-94' Penrose Skelly/Grayburg - open
 3705-20' Penrose Skelly/Grayburg - open
 3742-54' Penrose Skelly/Grayburg - open
 3774-83' Penrose Skelly/Grayburg - open
 3788-92' Penrose Skelly/Grayburg - open
 3810-16' Penrose Skelly/Grayburg - open

Open Hole **Status**
 3839-3945' Penrose Skelly/Grayburg - open

is 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 with WEO Engineer, WEO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or known issues pertaining to the well.



Production Csg.

Size: 5 1/2"
Wt.: 14#
Set @: 3839'
Sxs Cmt: 350
Circ: No
TOC: 2870'
Hole Size: 7 7/8"
OH Size: 4 3/4"

SN @ 3844'
 PERF SUB
 BPMA @ 3880'

Updated by: S HEIDELBERG

Date: 10/21/2011