

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., 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-103
May 27, 2004

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

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.)		WELL API NO. 30-025-30516
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator ConocoPhillips		6. State Oil & Gas Lease No. B1536
3. Address of Operator 4001 Penbrook Odessa, TX 79762		7. Lease Name or Unit Agreement Name State E
4. Well Location Unit Letter <u>P</u> : <u>330</u> feet from the <u>South</u> line and <u>660</u> feet from the <u>East</u> line Section <u>17</u> Township <u>22S</u> Range <u>36E</u> NMPM County <u>Lea</u>		8. Well Number # 14
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GL 3536		9. OGRID Number 217817
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>		
Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____		
Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____		

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 ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

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

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 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

ConocoPhillips proposes to re-Squeeze leaked off previously squeezed Abo Perforations thereby shutting off excessive amounts of produced water.

The well will then be returned to production in the Strawn. See attached procedure.



I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Kay Maddox TITLE Regulatory Agent DATE 09/20/2004

Type or print name Kay Maddox
For State Use Only

E-mail address:

Telephone No. (432)368-1207

APPROVED BY: Larry W. Wink FIELD REPRESENTATIVE II/STAFF MANAGER
Conditions of Approval (if any): _____ DATE _____



STATE E No. 14
Cement Squeeze & RTP Procedure
(Current Shut-In Well)

Location: 330' FSL & 660' FEL, Sec. 17 – T22S, R36E, Lea County, NM
Charges: Lease Expense (Cost Estimate \$90,000)
Spud Date: 01/23/1989
Shut-In Date: December 2001
API Number: 30025 - 30516
Zone/Pool: Strawn
Battery Destination: Existing Battery

TD: 9700'
PBTD: 8900' (RBP set in July 2003)
DV Tools: N/A

KBE: 3553'
GLE: 3536'
KBM: 16' above GL

Existing Casing:

Csg (in)	Size	Depth (ft)	Wt (lb/ft)	Grade	Conn	ID	Burst (psi)	Coll (psi)	Ten (Klbs)
13-3/8		1365	54.5	K-55	ST&C	12.615	2730	1130	547
8-5/8		6415	32	S-80	LT&C				
5-1/2 (Liner)		6080' (TOL) to 9700'	17	N-80	LT&C	4.892	7740	6280	348

Project Overview:

The State E #14 has been shut-in since December 2001. This well was originally completed as a single Strawn producer. In February '01, an attempt to recomplete to the Abo was unsuccessful. All Abo perforations were squeezed and the well was put back on production as a single Strawn well. After placing it back on production the well began to make excessive amounts of water and the well was subsequently shut-in. In July 2003 it was determined that the lower set of Abo perforations from 8742' to 8796' leaked off when tested to 1,000 PSIG.

This procedure will consist of re-squeezing the lower Abo perforations and returning the well back to production in the Strawn. Decline curves indicate that this well is capable of making 10-12 BOPD plus 30 MCFPD.

The 640-pumping unit was moved off this well and transferred to the SEMU 139. The downhole and surface equipment from the State E No. 10 well will be used to equip the No. 14. Currently the No. 10 well has an Oilwell C228-213-86 pumping unit on location.

Existing Perforations & Completion History:

Abo:

(Upper Set --

Squeezed 03/2001) 7801'-7815'

(Lower Set --

Squeezed 03/2001) 8744'-8749' 8761'-8773'
8753'-8757' 8776'-8779'
8782'-8798'

Strawn: 8960'-8966' 9082'-9102' 9270'-9296'
(Current Open) 8972'-8976' 9130'-9136' 9352'-9356'
9024'-9028' 9153'-9156' 9388'-9392'
9054'-9058' 9168'-9172' 9418'-9423'
9066'-9076' 9200'-9220' 9460'-9530' (4 spf)

Note: In July 2003 it was determined that the lower set of Abo perforations would not hold pressure and was the source of water production.

Well Control Requirements:

Well Control: Well Control equipment and procedures will be in accordance with the ConocoPhillips Well Control Manual, Second Edition, Revision Two, dated August 1994.

Well Category: The current open Abo zone tested all water and is normally pressured. The Strawn zone was originally normally pressured but is currently at a considerably less pressure. Anticipated reservoir pressure is less than 2,000 PSIG. Since 9.5 ppg kill fluid will be used throughout the procedure the well is not anticipated to flow at any time during the operation. This well is to be considered a Category 2 well due to the existence of H2S. Category 2 wells normally require two untested barriers, however the Hobbs area has been granted an exception, allowing the use of one untested barrier. Approval has been granted for use of a dynamic fluid column as that barrier.

BOPE Class 2: For operations the MPSP for this well is estimated to be less than 2000 PSIG. A Class 2 BOP stack is required. The stack will rated for 5,000 PSIG WP consisting of hydraulic operated tubing rams on top and a set of blind rams on bottom. NU shop tested BOP stack on top of companion flange. Test as per SOP.

Kill Fluid: Treated 9.5 ppg brine water for duration of operations

Strawn Artificial Lift Specs:

(See attached beam pump design for additional information)

PU Specs: Oilwell C228 – 213 – 86
Source: Spare unit transferred from State E No. 10 well.
Electrical: The unit currently has a Toshiba 15 hp motor.
PU Controller: Eagle

Tubing: 2 7/8" L-80 Tubing (Transferred from SEMU No. 135 well.)
Rod String: 6/6 Norris 97 Rod String (New String....Used String From No. 10 Well Junked)
Rod Pump: 25-125-RHBC-16-6-00 Type "A"
Stroke Length: 64"
PU Speed: 5 SPM

Procedure

- 1) RU pulling unit. NU 5,000 PSIG BOP stack and test as per SOP.
- 2) PU 2 7/8" workstring with 5 1/2" treating packer with 8 joints of 2 7/8" tubing below the packer and TIH to place the bottom of the tubing at 8810' (RBP set @ 8900' in July 2003). Packer setting depth would be approximately 8,554'. Dump 2 sks of sand down the tubing and allow the sand to settle overnight.
- 3) RU pump truck and spot 4 bbls (168 gals) of 15% HCL across the bottom set of Abo perforations from 8,744' to 8,798'. Top of acid spot at approximately 8,640'.
- 4) Set the packer and pressure test backside to 2,000 PSIG. Pump into squeeze perforations at a rate of 2 BPM, maximum pressure of 3,000 PSIG with the casing open. Once a rate has been established pump an additional 500 gals of 15% HCL to cleanup the squeeze perforations. Overdisplace the acid by a minimum of 2 bbls. Release the packer and TOOH.
- 5) PU 5 1/2" cement retainer and TIH to set retainer at 8,700'. After setting the retainer pull out and pressure test the casing to 2,000 PSIG. Sting back into the retainer and establish injection rates and pressures. Leave the backside open to the reverse pit. Perform cement squeeze as per the attached Schlumberger procedure. Attempt to perform hesitation squeeze during the last 3 bbls of slurry. PU and reverse out excess cement. TOOH with tubing. WOC 24 hours.
- 6) PU 4 3/4" bit and TIH to drill out retainer and cement. Pressure test squeeze perforations to 2,000 PSIG. TOOH with bit.
- 7) PU 5 1/2" retrieving head for the RBP and TIH to reverse sand off the top of the RBP. Latch on to the RBP and TOOH laying down the workstring.
- 8) PU and TIH with 2 7/8" L-80 production string hydrostatically testing each joint to 6,000 PSIG with packer and plug with ball catcher. Set the plug below the bottom Strawn perforation at 9530'.
- 9) RU pump truck. PU a couple of feet and pressure test the plug to 2,000 PSIG. Release the packer, spot 2,000 gals of xylene across the Strawn perforations. PU to set the top of the packer at 9,240'.

All Xylene treatment to contain the following Champion chemicals:

- 30 gals of DT-78 per 1,000 gals of Xylene
- 10 gals of RN-211 per 1,000 gals of Xylene

- 10) RU Schlumberger treating services. Install 10 M PSIG WP frac valve on the tubing. Install treating line with nitrogen actuated relief valve. Test the treating line to 6000 PSIG and set the relief valve at 4500 PSIG. Lay a relief line from the casing to the frac tank. Load the backside and leave casing valve open throughout the treatment. Pump the stimulation treatment as per the attached recommendation. Pump the treatment as follows at design rate of 5 BPM dropping 7/8", 1.1 sg RCN balls throughout treatment. Do not exceed 3,500 PSIG.

TREATING LINE TEST PRESSURE: A minimum 1000 psig over MATP	6000	PSIG
MAXIMUM ALLOWABLE WORKING PRESSURE: Based on weakest component in system. Burst pressure of 5 1/2" casing.	5320	PSIG
NITROGEN POP OFF SET PRESSURE: Relief pressure set at the lesser of : 300 psig less than 90% MAWP or, 300 psig over MATP	4500	PSIG
MAXIMUM ALLOWABLE TREATING PRESSURE: If reached, human action required.	3500	PSIG
9) MAXIMUM ANTICIPATED TREATING PRESSURE: Anticipated breakdown pressure based on Oxy State F-1 treatment.	3500	PSIG

	<u>Top Perf Depth</u>	<u>Bottom Perf Depth</u>	<u>Plug Depth</u>	<u>Packer Depth</u>	<u>Acid Gals.</u>	<u>Ball Sealers</u>
1 st Interval	9270	9530	9550	9240	3,000	300
2 nd Interval	8960	9220	9240	8900	3,000	300

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- 11) After all zones have been treated release the packer and TIH to retrieve the plug. TOOH with packer and plug.
 - 12) Transfer and set the Oilwell C228 – 213 – 86 pumping unit. Install the pump-off controller. Install the power lines and set the transformer bank.
 - 13) TIH with 2 7/8", L-80 production tubing with the open ended SN on bottom of the tubing and a 5 1/2" tubing anchor catcher. The bottom 2 7/8" joint to be polylined. Space the tubing out to set the seating nipple at approximately 9550' or 20' below the bottom Strawn perforation with the anchor at approximately 8900".
 - 14) ND the BOP stack and install the B-1 adapter flange. Pump 2 gals of corrosion inhibitor down the tubing to coat the rods and pump as they are run in the hole. PU standard strainer nipple on the bottom of the 1.25" RHBC Type "A" pump on a 6/6 Norris 97 rod string and RIH to place on beam pump. (See attached Strawn Beam Pump Design.) RD and move off.
 - 15) Notify Champion prior to placing the well on production. As soon as the well is started have it placed on scheduled CI and paraffin truck treatments.
 - 16) Operator to submit a change of status form for new production. Report daily well tests and fluid levels to the Midland office for 30 days or until it pumps off and the production rate has stabilized. Use the attached prepull spreadsheet for test reporting.