

Submit 1 Copy To Appropriate District 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

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

HOBBS OGD

OIL CONSERVATION DIVISION

MAY 29 2014

1220 South St. Francis Dr.
Santa Fe, NM 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 DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

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

2. Name of Operator
CROSS TIMBERS ENERGY, LLC

3. Address of Operator
400 WEST 7th STREET, FORT WORTH, TX 76102

4. Well Location
Unit Letter N : 611 feet from the S line and 2080 feet from the W line
Section 12 Township 17S Range 34E NMPM County LEA

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

4022 GR

WELL API NO.
30-025-23645

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

312479

7. Lease Name or Unit Agreement Name

NORTH VACUUM ABO UNIT

8. Well Number 150

9. OGRID Number 298299

10. Pool name or Wildcat
VACUUM; ABO, NORTH

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 ☐
CLOSED-LOOP SYSTEM ☐
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 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Repair tbg/pkr leak:

1. Pull well
2. RIH with plug & pkr, hunt leak, establish injection rate & psi
3. Swab test leak
4. Determine path forward depending on depth & nature of leak

See attached schematic & history.

The Oil Conservation Division

MUST BE NOTIFIED 24 Hours

Prior to the beginning of operations

Per Underground Injection Control Program Manual

11.6 C Packer shall be set within or less than 100 feet of the uppermost injection peris or open hole.

Spud Date: 01/10/1971

Rig Release Date: 01/29/1971

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

SIGNATURE Robbie A. Grigg TITLE Regulatory Compliance DATE 05/27/2014

Type or print name Robbie A Grigg E-mail address: rgrigg@mspartners.com PHONE: 817-334-7842

For State Use Only

APPROVED BY: Mary Brown TITLE Dist. Supervisor DATE 5/29/2014

Conditions of Approval (if any):

MAY 29 2014

Schematic & History

Well Name		NORTH VACUUM ABO UNIT 150		API/UWI		3002523645		County		Lea		State/Province		New Mexico		Field Name		VACUUM N									
Location				611 FSL & 2080 FWL				Township		17S		Range		34E		Section		12		Latitude (°)		32° 50' 51.684" N		Longitude (°)		103° 30' 55.548" W	
Section		Survey						Block				Township				Abstract											
Original KB Elevation (ft)				4,043.00				Ground/Corrected Ground Elevation (ft)				4,022.00				KB-Ground Distance (ft)				21.00				Spud Date			
Original Hole, 5/27/2014 5:14:04 PM																											
MD (ftKB)		TVD (ftKB)		Incl (°)		Vertical schematic (actual)																					
21.0						Tubing - IPC, TK-70; 2 3/8; J-55; 20.9-53.4; 3/20/2008																					
53.5						Tubing - IPC; 2 3/8; J-55; 53.4-59.6; 3/20/2008																					
59.7						Bad csg; 8 5/8; 7.875; 1,615.0-1,616.0; 1/16/1971; While drlg prod @ 4412', trip for bit chg, while RBIH tagged at 1615', reamed out w strg mill, RBIH w 7 7/8" bit & guide, did not feel, "indications are that csg is parted." Drilled ahead.																					
1,615.2						Tubing - IPC, TK-70; 2 3/8; J-55; 59.6-8,476.9; 3/20/2008																					
1,616.1						Baker model 416-84 anchor/seal asbly; 2.00; 8,476.9-8,479.0; 3/20/2008																					
1,696.2						Baker Model NB perm pkr; 4.89; 8,477.0-8,480.0; 9/9/1973																					
1,699.1						Millout guide & extension; 2 7/8; 8,480.0-8,488.0; 9/9/1973																					
1,736.8						Baker F nipple 1.81"; 2 7/8; 8,488.0-8,488.5; 9/9/1973																					
1,740.2						Perforated Sub; 2 3/8; 8,488.5-8,492.5; 9/9/1973																					
2,720.1						Baker R SN; 2 3/8; 8,492.5-8,493.0; 9/9/1973																					
6,984.3						Tbg sub; 2 3/8; 8,493.0-8,499.0; 9/9/1973																					
8,477.0						WLEG; 2 3/8; 8,499.0-8,500.0; 9/9/1973																					
8,479.0																											
8,480.0																											
8,487.9																											
8,488.5																											
8,492.5																											
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8,605.0																											
8,606.8																											
8,661.7																											
8,665.0																											
8,699.1																											
8,700.1																											
Jobs																											
Type		Start Date		Summary																							
Drilling Original & Initial Completion		1/10/1971		D&C in Abo. Suspected csg part in surf strg. Perf & BD Abo, swab tst 100% OC, acidize 10k gal, swab 96% OC, POP.																							
Convert To Injection		9/4/1973		PI rods & pmp, tag btm, pl tbg, PBTD @ 8652'. Perf Abo, acidize w 800 gal xylene, 200 gal 15% HCL. Swab, acidize 5000 gal 15% NEFE, BS, install injection equip (F profile 1.81" @ 8500', SN, Baker NB pkr @ 8477', 2-3/8" N-80 buttress thrd tbg).																							
Tubing/Pkr Change/Rpr		5/20/2003		PI tbg, 1st jt had 2 holes 4' from top collar, rplc, RBIH, sting into pkr, tst backside, hld 600# good. Circ 10# brine w/ pkr fluid, tst csg for 30", RDMO, RTI.																							
Tubing/Pkr Change/Rpr		3/18/2008		PI & LD tbg & sl asbly. RIH redressed seal, new IPC (TK-70) tbg, sting into pkr, tst backside to 500 psi, circ pkr fluid, tst backside, perform OCD MIT, RDMO, RTI.																							
Wellbore Sections																											
Section Des		Wellbore Name		Size (in)		Act Top (ftKB)		Act Btm (ftKB)		Start Date																	
SURFACE1		Original Hole		12 1/4		21.0		1,740.0		1/10/1971																	
Section Des		Wellbore Name		Size (in)		Act Top (ftKB)		Act Btm (ftKB)		Start Date																	
PROD1		Original Hole		7 7/8		1,740.0		8,700.0		1/12/1971																	
Surface 1,740.0 ftKB 1/11/1971																											
Comment																											
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des															
8 5/8		23.00		J-55		21.0		1,698.1		1,677.07		Casing Joints															
8 5/8						1,698.1		1,699.1		1.00		Float Collar															
8 5/8		23.00		J-55		1,699.1		1,739.0		39.93		Casing Joints															
8 5/8						1,739.0		1,740.0		1.00		Shoe															
Production 8,700.0 ftKB 1/30/1971																											
Comment																											
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des															
5 1/2		15.50		J-55		21.0		6,984.3		6,963.25		Casing Joints															
5 1/2		17.00		J-55		6,984.3		8,586.3		1,602.00		Casing Joints															
5 1/2		17.00		N-80		8,586.3		8,660.8		74.50		Casing Joints															
5 1/2						8,660.8		8,661.8		1.00		Float Collar															
5 1/2		17.00		N-80		8,661.8		8,699.0		37.25		Casing Joints															
5 1/2						8,699.0		8,700.0		1.00		Shoe															
Cement Stages																											
Description		Top (ftKB)		Btm (ftKB)		Top Meas Meth		Comment																			
Surface Casing Cement		21.0		1,740.0		Cement Returns		Lead: 800 sx Class H + 8% gel, 2% CaCl; Tail: 200 sx Clas H neat + 2% CaCl, circ.																			
Description		Top (ftKB)		Btm (ftKB)		Top Meas Meth		Comment																			
Production Casing Cement		2,720.0		8,700.0		Temperature Log		Lead: 2700 sx TILW + 1/4 pps flocele in first 1000 sx; Tail: 200 sx Incor neat, no circ. Ran temp svy.																			
Perforations																											
Top (ftKB)		Btm (ftKB)		Shot Dens (shot s/ft)		Date		Zone																Calculated Shot Total			
8,531.0		8,531.0		1.0		2/3/1971		Abo, Original Hole																1			
8,539.0		8,539.0		1.0		2/3/1971		Abo, Original Hole																1			
8,541.0		8,541.0		1.0		2/3/1971		Abo, Original Hole																1			
8,543.0		8,543.0		1.0		2/3/1971		Abo, Original Hole																1			
8,545.0		8,545.0		1.0		2/3/1971		Abo, Original Hole																1			
8,547.0		8,547.0		1.0		2/3/1971		Abo, Original Hole																1			
Casing Joints: 5 1/2; 17.00; N-80; 4,882; 8,545.5-8,546.0; 1/11/1971																											
Float Collar, 5 1/2; 8,660.7-8,661.7; 1/10/1971																											
Casing Joints: 5 1/2; 17.00; N-80; 4,890; 8,661.8-8,662.3; 1/10/1971																											
Shoe: 5 1/2; 8,699.0-8,700.0; 1/20/1971																											
TD - Original Hole, 8,700.0; 1/20/1971																											
Auto cement plug; 8,665.0-8,700.0; 1/20/1971; Automatically created cement plug from the casing cement because it had a tagged depth																											
Production Casing Cement; 2,720.0-8,700.0; 1/20/1971																											

Schematic & History

Original Hole, 5/27/2014 5:14:05 PM											
MD (ftKB)	TVD (ftKB)	Incl (°)	Vertical schematic (actual)								
21.0			Tubing - IPC, TK-70; 2 3/8; J-55; 20.9-53.4; 3/20/2008								
53.5			Tubing - IPC; 2 3/8; J-55; 53.4-59.6; 3/20/2008								
59.7			Bad csg; 8 5/8; 7.875; 1,615.0-1,616.0; 1/16/1971; While drlg prod @ 4412', trip for bit chg, while RBIH tagged at 1615', reamed out w strg mill, RBIH w 7 7/8" bit & guide, did not feel, "indications are that csg is parted." Drilled ahead.								
1,615.2			Casing joints: 8 5/8; 23.00; J-55; 8 100; 1/11/1971								
1,616.1			Surface Casing Cement: 21.0-1,740.0; 1/11/1971								
1,698.2			Float Collar: 8 5/8; 1,698.1-1,699.1; 1/11/1971								
1,699.1			Casing joints: 8 5/8; 23.00; J-55; 8 100; 1/11/1971								
1,738.6			Rope: 8 5/8; 1,738.6-1,740.0; 1/11/1971								
1,740.2			Surface Casing Cement: 21.0-1,740.0; 1/11/1971								
2,720.1			Casing joints: 5 1/2; 15.50; J-55; 4 882; 1/20/1971								
6,984.3			PROG: 7 7/8; 1,740.0-8,700.0; 1/20/1971								
8,477.0			Casing joints: 5 1/2; 17.00; J-55; 4 882; 1/20/1971								
8,479.0			Baker model 416-84 anchor/seal asmbly; 2.00; 8,476.9-8,479.0; 3/20/2008								
8,480.0			Baker Model NB perm pkr; 4.89; 8,477.0-8,480.0; 9/9/1973								
8,487.9			Millout guide & extension; 2 7/8; 8,480.0-8,488.0; 9/9/1973								
8,488.5			Baker F nipple 1.81"; 2 7/8; 8,488.0-8,488.5; 9/9/1973								
8,492.5			Perforated Sub; 2 3/8; 8,488.5-8,492.5; 9/9/1973								
8,493.1			Baker R SN; 2 3/8; 8,492.5-8,493.0; 9/9/1973								
8,499.0			Tbg sub; 2 3/8; 8,493.0-8,499.0; 9/9/1973								
8,500.0			WLEG; 2 3/8; 8,499.0-8,500.0; 9/9/1973								
8,530.6			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,538.1			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,539.0			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,540.0			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,541.0			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,543.0			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,544.9			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,545.9			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,546.9			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,548.9			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,549.9			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,570.9			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,573.2			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,575.1			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,577.1			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,579.1			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,580.1			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,581.0			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,582.0			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,583.0			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,585.0			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,586.3			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,586.9			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,588.9			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,589.9			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,590.9			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,591.9			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,592.8			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,594.2			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,601.1			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,602.0			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,603.0			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,604.0			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,605.0			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,660.6			Acidizing: 8,531.0-8,593.0; 2/3/1971; BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900 swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 1500, vac in 5".								
8,661.7			Casing joints: 5 1/2; 17.00; N-80; 4 892; 1/20/1971								
8,665.0			Auto cement plug; 8,665.0-8,700.0; 1/20/1971; Automatically created cement plug from the casing cement because it had a tagged depth								
8,669.1			Production Casing Cement: 2,720.0-8,700.0; 1/20/1971								
8,700.1											

Perforations					
Top (ftKB)	Btm (ftKB)	Shot Dens (shot s/ft)	Date	Zone	Calculated Shot Total
8,549.0	8,549.0	1.0	2/3/1971	Abo, Original Hole	1
8,571.0	8,571.0	1.0	2/3/1971	Abo, Original Hole	1
8,573.0	8,573.0	1.0	2/3/1971	Abo, Original Hole	1
8,575.0	8,575.0	1.0	2/3/1971	Abo, Original Hole	1
8,577.0	8,577.0	1.0	2/3/1971	Abo, Original Hole	1
8,579.0	8,579.0	1.0	2/3/1971	Abo, Original Hole	1
8,581.0	8,581.0	1.0	2/3/1971	Abo, Original Hole	1
8,583.0	8,583.0	1.0	2/3/1971	Abo, Original Hole	1
8,585.0	8,585.0	1.0	2/3/1971	Abo, Original Hole	1
8,587.0	8,587.0	1.0	2/3/1971	Abo, Original Hole	1
8,589.0	8,589.0	1.0	2/3/1971	Abo, Original Hole	1
8,593.0	8,593.0	1.0	2/3/1971	Abo, Original Hole	1
8,538.0	8,538.0	1.0	9/5/1973	Abo, Original Hole	1
8,539.0	8,539.0	1.0	9/5/1973	Abo, Original Hole	1
8,540.0	8,540.0	1.0	9/5/1973	Abo, Original Hole	1
8,546.0	8,546.0	1.0	9/5/1973	Abo, Original Hole	1
8,547.0	8,547.0	1.0	9/5/1973	Abo, Original Hole	1
8,548.0	8,548.0	1.0	9/5/1973	Abo, Original Hole	1
8,550.0	8,550.0	1.0	9/5/1973	Abo, Original Hole	1
8,571.0	8,571.0	1.0	9/5/1973	Abo, Original Hole	1
8,580.0	8,580.0	1.0	9/5/1973	Abo, Original Hole	1
8,581.0	8,581.0	1.0	9/5/1973	Abo, Original Hole	1
8,582.0	8,582.0	1.0	9/5/1973	Abo, Original Hole	1
8,590.0	8,590.0	1.0	9/5/1973	Abo, Original Hole	1
8,591.0	8,591.0	1.0	9/5/1973	Abo, Original Hole	1
8,592.0	8,592.0	1.0	9/5/1973	Abo, Original Hole	1
8,593.0	8,593.0	1.0	9/5/1973	Abo, Original Hole	1
8,594.0	8,594.0	1.0	9/5/1973	Abo, Original Hole	1
8,601.0	8,601.0	1.0	9/5/1973	Abo, Original Hole	1
8,602.0	8,602.0	1.0	9/5/1973	Abo, Original Hole	1
8,603.0	8,603.0	1.0	9/5/1973	Abo, Original Hole	1
8,604.0	8,604.0	1.0	9/5/1973	Abo, Original Hole	1
8,605.0	8,605.0	1.0	9/5/1973	Abo, Original Hole	1

Stim/Treat Stages					
Type	Start Date	Top (ftKB)	Btm (ftKB)	Com	
Acidizing	9/8/1973	8,531.0	8,605.0	Spot 500 gal 15%, pump 800 gal xylene, 200 15% HCL, swab, pmp 5000 gal 15% HCL NEFE, 50 BS, over-flush w FW, TP 0-3000, TR 5, ISIP 1500, vac in 5".	
Acidizing	2/3/1971	8,531.0	8,593.0	BD perfs @ 3 BPM, 3600-3800 psi, ISIP 3200, 5" SIP 900, swab, 100% OC, acidize 10k gal 15% NE, 18 BS, TP 3500-4200, TR 5.2, ISIP 3100, 10" 1500.	

Other In Hole					
Des	Com	OD (in)	Run Date	Top (ftKB)	Btm (ftKB)
Bad csg	While drlg prod @ 4412', trip for bit chg, while RBIH tagged at 1615', reamed out w strg mill, RBIH w 7 7/8" bit & guide, did not feel, "indications are that csg is parted." Drilled ahead.	8 5/8	1/16/1971	1,615.0	1,616.0

Original Hole, 5/27/2014 5:14:05 PM

MD (ftKB)	TVD (ftKB)	Incl (°)	Vertical schematic (actual)
21.0			Tubing - IPC, TK-70; 2 3/8; J-55; 20.9-53.4; 3/20/2008
53.5			Tubing - IPC, 2 3/8; J-55; 53.4-59.6; 3/20/2008
59.7			Bad csg; 8 5/8; 7.875; 1,615.0-1,616.0; 1/16/1971; While drlg prod @ 4412', trip for bit chg, while RBIH tagged at 1615', reamed out w strg mill, RBIH w 7 7/8" bit & guide, did not feel, "indications are that csg is parted." Drilled ahead.
1,615.2			
1,616.1			
1,698.2			
1,699.1			
1,738.8			
1,740.2			
2,720.1			
6,984.3			
8,477.0			
8,479.0			
8,480.0			
8,487.9			
8,488.5			
8,492.5			
8,493.1			
8,499.0			
8,500.0			
8,530.8			
8,538.1			
8,539.0			
8,540.0			
8,541.0			
8,543.0			
8,544.9			
8,545.9			
8,546.9			
8,547.9			
8,548.9			
8,549.9			
8,570.9			
8,573.2			
8,575.1			
8,577.1			
8,579.1			
8,580.1			
8,581.0			
8,582.0			
8,583.0			
8,585.0			
8,586.3			
8,586.9			
8,588.9			
8,589.9			
8,590.9			
8,591.9			
8,592.8			
8,594.2			
8,601.1			
8,602.0			
8,603.0			
8,604.0			
8,605.0			
8,606.8			
8,661.7			
8,665.0			
8,699.1			
8,700.1			

Item Des	OD (in)	Grade	Jts	Len (ft)