

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 87400

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

APR 01 2014

RECEIVED

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

WELL API NO.
30-025-37971

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 #305

9. OGRID Number
298299

10. Pool name or Wildcat
VACUUM; ABO, NORTH (61760)

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

CROSS TIMBERS ENERGY, LLC

3. Address of Operator

400 WEST 7th STREET, FORT WORTH, TX 76102

4. Well Location

Unit Letter J : 2600 feet from the S line and 2630 feet from the E line

Section 26 Township 17S Range 34E NMPM County LEA

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
4022 GR

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.

MIRU. POH rods, pmp & tbg. Perf Additional ABO formation ; acideze w/straddle pkr assy. TIH tbg, pmp & rods. RDMO. Return to production.
See attached detail.

Spud Date: 07/03/2006

Rig Release Date: 07/23/2006

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

3/31/2014

Type or print name

Robbie A Grigg

E-mail address:

rgrigg@mspartners.com

PHONE:

817-334-7842

For State Use Only

APPROVED BY:

[Signature]

TITLE

Petroleum Engineer

DATE

APR 01 2014

Conditions of Approval (if any):

APR 01 2014

TUBULARS:

Surface Casing: 8⁵/₈", 24#, J-55 @ 1,723'. Cmt'd w/750 sx cl "C" cmt w/4% gel & 200 sx cl "C" cmt w/2%CaCl₂.. Circ 116 sx to surf.

Production Casing: 5¹/₂", 17#, P-110 @ 9,145'. Cmt'd w/590 sx 50:50 Poz:"H" (11.8 PPG, 2.29 ft³/sx) & 345 sx cl "H" cmt (15.6 PPG, 1.33 ft³/sx).
Min Drift: 4.767". Internal yield: 10,640 psi.
Marker jt fr/8,016'-8,031'.

DV Tool: 4,992'. Cmt'd w/1,285 sx 50:50 Poz:"C" (11.8 PPG, 2.30 ft³/sx) followed by 200 sx cl "C" cmt (14.8 PPG, 1.33 ft³/sx)

Tubing: 254 jts 2⁷/₈", 6.5#, J-55, EUE, 8rd tbg (8,006'), TAC, 11 jts 2⁷/₈", 6.5#, J-55, EUE, 8rd tbg (347'), 1 jt 2⁷/₈", 6.5#, J-55, EUE, 8rd, IPC tbg (32'), SN, 4' perf'd sub, 4'x2⁷/₈" pup jt, 4 jts 2⁷/₈", 6.5#, J-55, EUE, 8rd BPMA. Landed @ 8,532'. SN @ 8,405'.

Rods: 1¹/₂"x24' SMPR, 1 – 2'x1" pony rod, 82 – 1", 94 - ⁷/₈" & 154 – ³/₄" D-90 rods, 6 – 1¹/₂" SB's, 4'x⁷/₈" stabilizer.

Pump: 1¹/₂" x 24' w/1¹/₄"x8' GAC.

Existing Perforations: 8,428'-32', 8,442'-48' & 8,456'-70' (2 JSPF, 48 holes), 9/29/06. 8,702'-11', 8,720'-24', 8,746'-52', 8,759'-64', 8,767'-70' & 8,782'-88' (1 JSPF, 33 holes) (9/22/06). Under CIBP.
8,802'-04', 8,818'-20', 8,840'-54', 8,869'-71', 8,897'-8,902', 8,917'-25' & 8,940'-44' (1 JSPF, 37 holes), 9/6/06. Under CIBP.
9,007'-70', 1 JSPF, 70 holes, 9/15/06. Under CIBP.

Proposed Perforations: 8,481', 8,487', 8,502', 8,506', 8,516', 8,519', 8,538', 8,549', 8,572', 8,581', 8,597', 8,602' & 8,610' (2 JSPF, 26 holes)

PBTD: 8,680'.

OPBTD: 9,095'

SPECIFICS OF OPERATION:

- 1) Safety is the highest priority. Hold tailgate safety meetings prior to each significant stage of the operation. Ensure all personnel understand the procedure, its objectives, and the precautions to be followed at all points.
- 2) MIRU workover rig & swab tank.
- 3) MI ~5 jts 2⁷/₈", 6.5#, J-55, EUE, 8rd tbg.
- 4) Hang well off.
- 5) Unseat pmp. POH w/rods & pmp. Send pmp to shop for R&R.
- 6) ND wellhead. Rel TAC. NU BOP.

- 7) POH w/2 $\frac{7}{8}$ " tbg.
- 8) If scale buildup is observed on tubulars, run 4 $\frac{3}{4}$ " bit & 5 $\frac{1}{2}$ " casing scraper to PBTD @ 8,560'. POH w/tbg. LD bit & scraper.
- 9) MIRU WL trk. Install packoff. RIH w/3 $\frac{1}{8}$ " select fire csg gun, loaded 2 JSPF. Correlate to Gray WL GR/CCL/CBL dated 8/30/06. Perf Abo w/3 $\frac{1}{8}$ " csg gun, 2 JSPF @: 8,610', 8,602', 8,597', 8,581', 8,572', 8,549', 8,538', 8,519', 8,516', 8,506', 8,502', 8,487' & 8,481' (129' OA, 69' net, 26 holes).
- 10) POH w/csg gun. RDMO WL trk.
- 11) PU & TIH w/2 $\frac{7}{8}$ " SN (run SV in place), 5 $\frac{1}{2}$ " straddle pkr ass'bly (space packing elements 12' apart) dressed for 17# csg, mech collar locator & 2 $\frac{7}{8}$ " tbg to ~8.630'.
- 12) Locate marker jt fr/8,016'-8,031'. Locate csg collar @ 8,610'.
- 13) Set pkr in blank pipe below btm perf @ 8,610'. Press tst pkr.
- 14) Rel pkr. PU & straddle perf @ 8,610'.
- 15) MIRU stimulation services.
- 16) Load hole w/FW.
- 17) Spot acid to EOT.
- 18) Acidize new Abo perfs w/1,300 gals 20% NEFE HCl as follows:

Top Interval	Btm Interval	Acid Vol (gals)
8,610'	8,610'	100
8,597'	8,602'	200
8,581'	8,581'	100
8,572'	8,572'	100
8,549'	8,549'	100
8,538'	8,538'	100
8,516'	8,519'	200
8,502'	8,506'	200
8,491'	8,497'	200
Total Acid		1,300

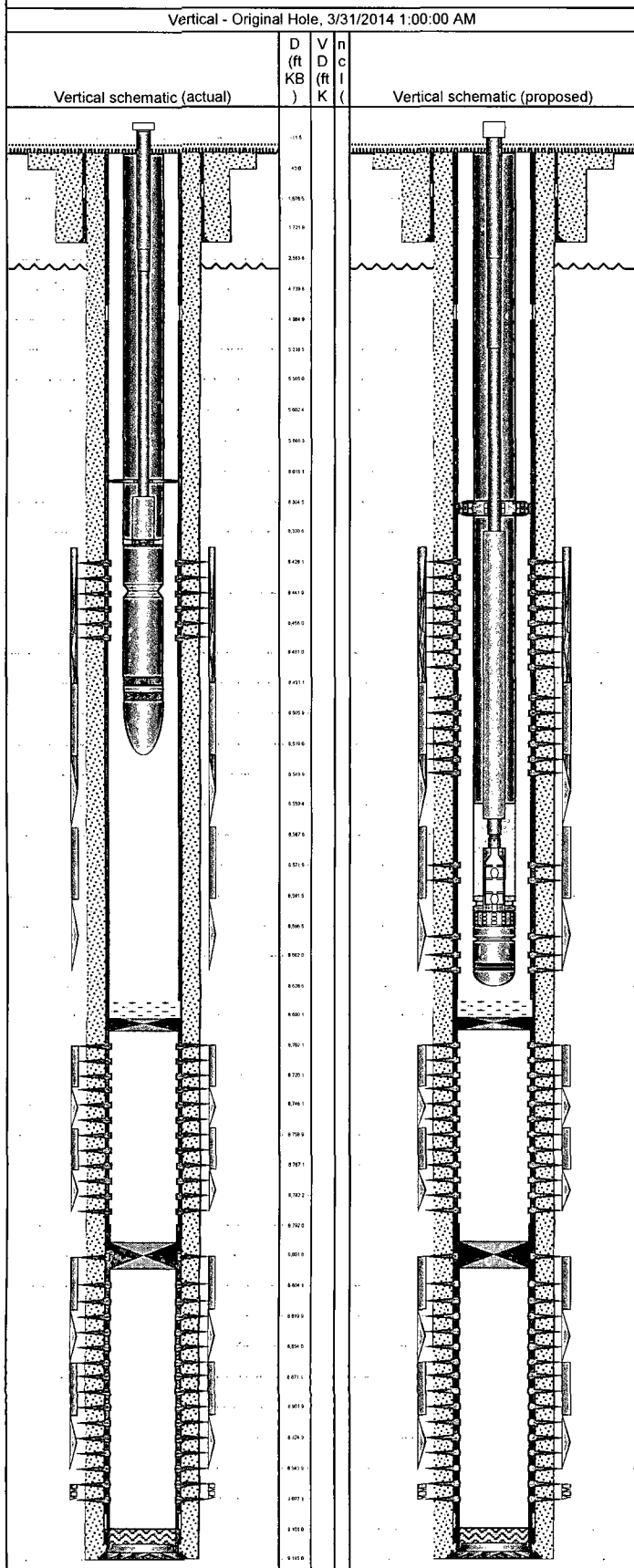
If perfs communicate, PU to next setting & continue.

- 19) PU to ~8,380' (above top existing perf @ 8,428').

- 20) Rev circ 2 bbls FW.
- 21) Set pkr.
- 22) Fish SV.
- 23) Acidize all perms w/remaining acid (if any).
- 24) Swab & test as necessary. Record volumes on hourly basis & report daily.
- 25) Rel straddle pkr ass'bly.
- 26) POH w/tbg & straddle pkr ass'bly. LD straddle pkr ass'bly.
- 27) TIH w/1 jt 2 $\frac{7}{8}$ ", 6.5#, J-55, EUE, 8rd tbg (bull plugged), 4' perf'd sub, SN, ~9 jts 2 $\frac{7}{8}$ " tbg, TAC & 2 $\frac{7}{8}$ " tbg to surf. Tag btm. PU & land tbg @ 1st connection.
- 28) ND BOP.
- 29) Set TAC.
- 30) NU WH.
- 31) TIH w/pmp & rods as pulled.
- 32) Space out pump. Hang well on.
- 33) RDMO workover rig.
- 34) Start well ppg.
- 35) Test well as necessary.

Proposed Schematic & Details

Well Name NORTH VACUUM ABO UNIT 305		API/UWI 3002537971	County Lea		State/Province New Mexico		Field Name VACUUM N	
Location 2600 FSL, 2630 FEL			Township 17S	Range 34E	Section 26	Latitude (°) 32° 48' 20.91" N		Longitude (°) 103° 31' 52.22" W
Section	Survey	Block			Township		Abstract	
Original KB Elevation (ft) 4,039.50		Ground/Corrected Ground Elevation (ft) 4,022.00		KB-Ground Distance (ft) 17.50		Spud Date 7/3/2006		



Jobs

Open Additional Pay - OAP, <dtmstart>

Type	Planned Start Date	Objective
Open Additional Pay - OAP	3/31/2014	Add perms and acidize to access frac.

Wellbore Sections

Section Des	Wellbore Name	Size (in)	Act Top (ftKB)	Act Btm (ftKB)	Start Date
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Cement Stages

Description	Top (ftKB)	Btm (ftKB)	Top Meas Meth	Comment
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Perforations

Top (ftKB)	Btm (ftKB)	Shot Dens (shot s/ft)	Date	Zone	Calculated Shot Total
8,481.0	8,481.0	2.0	3/31/2014	ABO, Original Hole	1
8,487.0	8,487.0	2.0	3/31/2014	ABO, Original Hole	1
8,502.0	8,502.0	2.0	3/31/2014	ABO, Original Hole	1
8,506.0	8,506.0	2.0	3/31/2014	ABO, Original Hole	1
8,516.0	8,516.0	2.0	3/31/2014	ABO, Original Hole	1
8,519.0	8,519.0	2.0	3/31/2014	ABO, Original Hole	1
8,538.0	8,538.0	2.0	3/31/2014	ABO, Original Hole	1
8,549.0	8,549.0	2.0	3/31/2014	ABO, Original Hole	1
8,572.0	8,572.0	2.0	3/31/2014	ABO, Original Hole	1
8,581.0	8,581.0	2.0	3/31/2014	ABO, Original Hole	1
8,597.0	8,597.0	2.0	3/31/2014	ABO, Original Hole	1
8,602.0	8,602.0	2.0	3/31/2014	ABO, Original Hole	1
8,610.0	8,610.0	2.0	3/31/2014	ABO, Original Hole	1

Stim/Treat Stages

Type	Start Date	Top (ftKB)	Btm (ftKB)	Com
Acidizing	3/31/2014	8,491.0	8,610.0	Proposed: 1300 gal 20% HCL NEFE, each perf cluster treated individually, w straddle pkr, per procedure. Remaining acid put away in all perms.

Other In Hole

Des	Com	OD (in)	Run Date	Top (ftKB)	Btm (ftKB)
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Tubing - Production set at 8,628.5ftKB on 3/31/2014 00:00

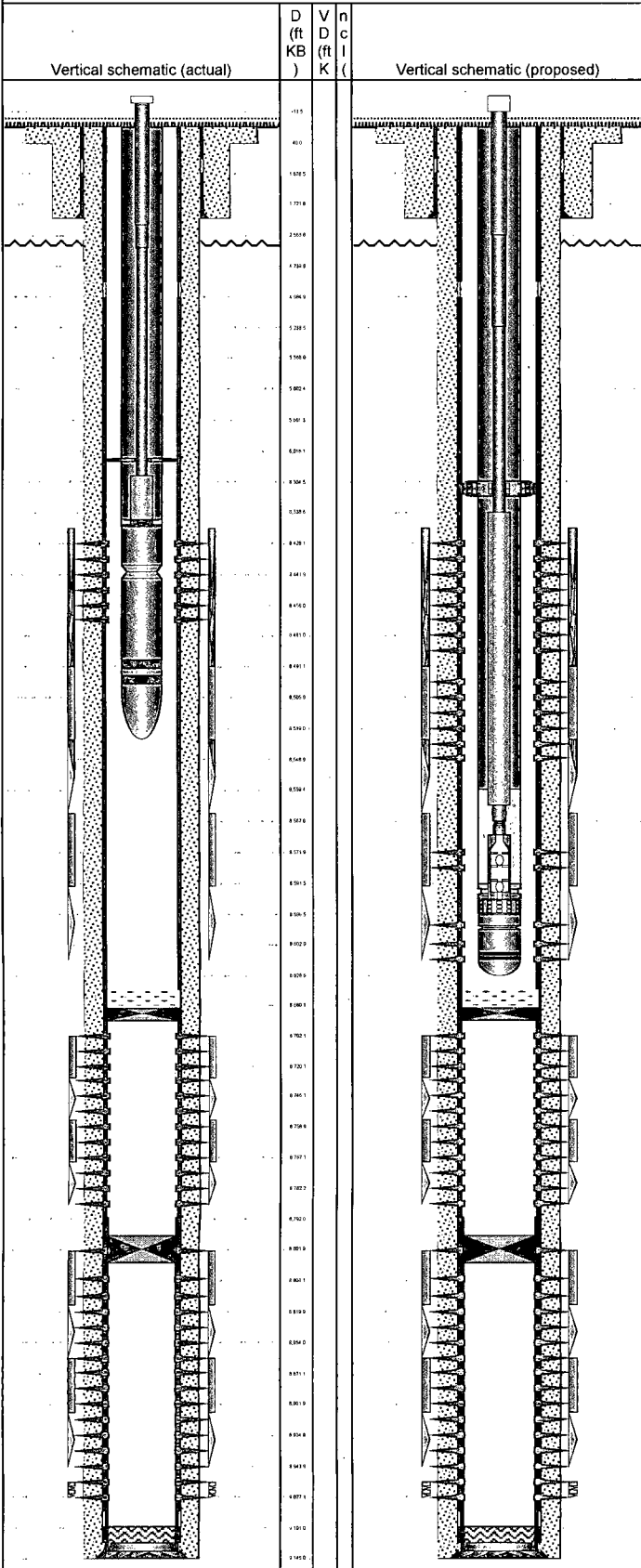
Set Depth (ftKB)	Comment				Run Date	Pull Date	
8,628.5					3/31/2014		
Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Jts	Top (ftKB)	Btm (ftKB)
Tubing	2 7/8	6.50	J-55	8,287.00	263	17.5	8,304.5
TAC	4 1/4			3.00	1	8,304.5	8,307.5
Tubing	2 7/8	6.50	J-55	252.00	8	8,307.5	8,559.5
IPC jt	2 7/8	6.50	J-55	32.00	1	8,559.5	8,591.5
Pump Seating Nipple	2 7/8			1.00	1	8,591.5	8,592.5
Perforated Sub	2 7/8			4.00	1	8,592.5	8,596.5
Bull Plug Mud Anchor Jt	2 7/8	6.50		32.00	1	8,596.5	8,628.5

Insert Pump on 3/31/2014 01:00

Item Des	OD (in)	Grade	Jts	Len (ft)
Polished Rod	1 1/2	SM	1	24.00
Sucker Rod	1	D-90	103	2,575.00

Proposed Schematic & Details

Vertical - Original Hole, 3/31/2014 1:00:00 AM



Item Des	OD (in)	Grade	Jts	Len (ft)
Sucker Rod	7/8	D-90	107	2,675.00
Sucker Rod	3/4	D-90	124	3,100.00
Sinker Bar	1 1/2	K	9	225.00
Stabilizer Rod	7/8	D	1	4.00
RHBO Tool	3/4		1	1.00
Rod Insert Pump	1 1/2		1	24.00