

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

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

WELL API NO. 30-025-41076
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Lookin Good 34 State Com
8. Well Number 1H
9. OGRID Number 14187
10. Pool name or Wildcat Grama Ridge; Bone Spring, North
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3722' GR

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 <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>	
2. Name of Operator Marshall & Winston, Inc.	
3. Address of Operator P. O. Box 50880, Midland, TX 798710-0880	
4. Well Location Unit Letter M : 330 feet from the South line and 360 feet from the West line Section 34 Township 20S Range 35E NMPM County Lea	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3722' 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: Toe Stage Perforation Scheme ☒

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.

Marshall & Winston, Inc. respectfully request approval for the "Suggested Toe Stage Perforation Scheme" (see attachment).

Spud Date:

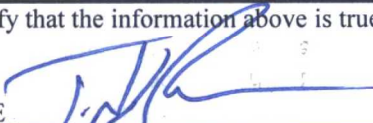
01/28/16

Rig Release Date:

03/08/16

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

SIGNATURE



TITLE Operations Manager

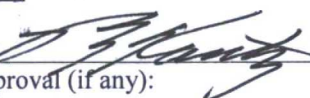
DATE 05/23/17

Type or print name Todd Passmore

E-mail address: tpassmore@mar-win.com PHONE: 432-684-6373

For State Use Only

APPROVED BY:



TITLE

Petroleum Engineer

DATE

05/31/17

Conditions of Approval (if any):

Marshall & Winston, Inc.
Lookin Good 34 State Com No. 1H
Lea County, NM

Suggested Toe Stage Perforation Scheme

Perforations Toe Stage

By: Vithal Pai 5/19/17

<u>14,930' – 14,780'</u>		TCP	6 SPF	60 deg phasing	0.38" EHD
		MD			
Stage 1	1 Toe	14,920'			8 holes
	2	14,900'	20'		7 holes
	3	14,880'	20'		7 holes
	4	14,860'	20'		6 holes
	5	14,840'	20'		6 holes
	6	14,820'	20'		5 holes
	7 Heel	14,800'	20'		5 holes
					Toe gun fires at 4,500 psi
					Guns 4 and 5 activate at 3000 psi
Total 44 holes					

Toe stage Acid Spot, Perforate and Breakdown

1. After the rig is moved pressure test the casing to 8,500 to 9,000 psi for about 10 minutes. (Rig Kill Truck up on back side & hold 1,000 psi)
2. RU 2" CTU and RIH with bit to PBTD and drill out any excess cement and record exact. PBTD. RU ProPetro to spot acid and breakdown the perforations
3. Circulate the hole with clean treated fresh water with surfactant, non-emulsifier and biocide. Spot about 5,000 gal of 15 % triple inhibited acid in the horizontal lateral.
4. TOH with CTU and bit and install the TCP gun assembly on the 2" CTU.
5. RIH with the annulus valve open to PBTD and make sure the guns are on depth based on the recorder PBTD.
6. Pro Petro to be rigged up to pump on the casing & CTU annulus with 3 frac pumps, a blender unit and a blender (and additional pump if required) and **monitor the tubing as a dead string**.
7. ProPetro will test all lines to 7,000 psi and **make sure there are no leaks**. Do not set pump KO trips until all the guns fire.
8. The guns will be set to activate as follows:
 - a. Gun 1 or toe gun will activate at 4,500 psi, the remaining guns will fire about 4 to 6 minutes apart after the previous gun has fired.
 - b. Move the CTU up to each subsequent depth and let the gun fire. After the gun has fired PU to the next perf location until all 7 guns are fired.
9. As soon as each gun activates and fires, you will get a break, start pumping via annulus at about 2 to 5 BPM.
10. As soon as you get all the breaks after all the guns have fired, pump 2,000 gal of 15% HCL.
11. Increase the rate to 10 to 20 BPM without exceeding 6,500 psi..
12. Pump a total of 1000 bbl of slick water as flush.
13. Shut down pumps and observe ISIP, 5 min, 10, min and 15 min SIPs.

14. Rig down CTU and ProPetro and report the frac pressures and frac gradient to the engineer. To modify the frac design if necessary.
15. PU CTU and QC/QA the guns to make sure they all fired.
16. Flowback the well for a day or two and report flowback pressures and flow rates.
17. Prepare to log the well.
18. Based on the logs select perforations for the remaining 24 stages.
19. Prepare to frac the well in about a week or so.

Fluids Pumped

7,000 gal 15% HCl acid containing
4.0 GPT Corrosion Inhibitor
2.0 GPT NE Surfactant
5.0 GPT Iron Control
0.5 GPT Friction Reducer

Flush 700 bbl fresh water containing
 1 GPT Surfactant
 1.0 GPT Friction Reducer
 0.3 GPT Biocide

HHP 3 Frac Pumps
 1 Blender Unit

Injection Rate 20 to 25 BPM at 6,000 psi = 3676 HHP