

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

Form C-103  
Revised July 18, 2013

WELL API NO. 30-025-42139
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No. N/A
7. Lease Name or Unit Agreement Name Monument AGI D
8. Well Number #2
9. OGRID Number 24650
10. Pool name or Wildcat Devonian-AGI

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 Acid Gas Injection ☒

2. Name of Operator  
Targa Midstream Services LLC

3. Address of Operator  
1000 Louisiana, Houston, TX 77002

4. Well Location

Unit Letter Q : 685 feet from the South line and 2362 feet from the East line

Section 36 Township 19S Range 36E NMPM Lea County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
3384 GL

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: Informational C-103 for Intermediate Borehole/Casing ☒

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.

Targa Midstream Services, LLC (Targa) is respectfully submitting this C-103 form to inform the NMOCD of lost circulation and remedies to address the lost circulation prior to setting the 9 5/8-inch casing within the 12 1/4-inch intermediate borehole at Monument AGI D #2. Please see attachment 1 for a chronological list of steps that have occurred concerning this issue and Targa's rigorous attempts to address them.

Targa intends to drill out the first cement plug to TD (8,310 feet) and run a final temperature survey to help pick the optimal stage tool (DVT) setting depth. Currently these are estimated to be 3,950' and 5,950'. After depths for the DV tools are confirmed, Targa will run the 9 5/8" casing string to TD. Then Targa is planning a 3 stage cement job and expandable packers will be utilized for each stage as follows:

1. Stage 1
  - a. Mix and pump 50 bbl Halliburton/Baroid N-SQUEEZE STOPPIT high loss LCM pill
  - b. Displace below csg shoe
  - c. Mix and pump 50 bbl DiamondSeal swellable Polymer LCM
  - d. Mix and pump WellLock Resin and circulate above DVT at 5950'.
2. Stage 2
  - a. Mix and pump 50 bbl DiamondSeal swellable Polymer LCM
  - b. Pump lead Class C cmt
  - c. Pump tail Class C cmt and circulate above DVT at 3950'.
3. Stage 3
  - a. Mix and pump 50 bbl DiamondSeal swellable Polymer LCM
  - b. Pump lead Class C cmt
  - c. Pump tail Class C cmt and circulate to surface

This cementing plan is designed to minimize any potential losses of cement to surrounding formations, while ensuring a good cement bond with the 9 5/8-inch casing is obtained. The final job will result in WellLock resin cement from TD to about 5950' and conventional cement above that to surface in two stages. We will then drill to the setting-depth for the injection string (approximately 8350') and set the 7" injection string with 300' of CRA casing at the base and WellLock resin cement from TD to about 1500' inside the 9 5/8" string with lead class C cement to surface. The 7-inch injection casing, within the 9 5/8-inch intermediate casing, includes CRA casing and WellLock resin cement that will help ensure the long term performance, functionality and effectiveness of this replacement AGI well.

Spud Date:

November 23, 2016

Rig Release Date:

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

SIGNATURE  TITLE Consultant to Targa Midstream Services, LLC DATE 12/20/2016

Type or print name \_\_\_\_\_ E-mail address: \_\_\_\_\_ PHONE: \_\_\_\_\_

**For State Use Only**

APPROVED BY:  TITLE Petroleum Engineer DATE 12/21/16

Conditions of Approval (if any): \_\_\_\_\_

# **ATTACHMENT 1**



## LOST RETURNS CHRONLOGY AND FUTURE STEPS OF TARGA MONUMENT AGI -D#2

<u>REPORT DAY</u>	<u>EVENT</u>	<u>COMMENTS</u>
Day 9-----	1 <sup>st</sup> Lost Circ event @ 3715'	Losing 65 bbl/hr. (5-10% losses) Healed Healed w/40 #/bbl LCM sweeps On trips we spotted LCM sweep across @ 3715'
Day 16-----	2 <sup>nd</sup> Lost Circ event-----	Drilling break @ 7868', instantly lost total returns, pumping 50 bbl pills. No response to 4 - 15 ppg LCM sweeps. Pumped 25 ppb and 45 ppb sweeps. No returns. Dry drill f/ 7910' - 8115'.
Day 18		
Day 20-----	TD'ed hole @ 8310.	TD'ed @ 8310'
Day 22-----	1 <sup>st</sup> Cmt. Plug 500 sks Class H neat	RU HOWCO & pumped cement plug From open ended DP @ 7797'. WOC 12 hrs. Tag TOC @ 7343' Drilled bridges f/ 7343' to 7426'. Still losing complete returns.
Day 23-24-----	2 <sup>nd</sup> Cmt plug Gravity Squeeze W/500 sk Class H	Temp Survey identified Leak @ 5969'. No other losses identified. Still no returns when pumping. HOWCO pumped gravity squeeze from 5413' w/ open ended DP. WOC 12 hrs.
Day 25-----	3 <sup>rd</sup> Cmt Plug SentinalCEM THIXATROPIC Cement	Tag TOC @ 5831' Wash & ream cmt. bridges F/ 5831' to 5969'. TIH to 6200'.  HOWCO pumped gravity squeeze from open ended DP @ 5413'. WOC 6 hrs. Tag TOC @ 5927', Wash thru cmt bridges f/ 5927' to 6001". TIH to 6200' w/no returns. Can get 10% returns by pumping @ 12 BPM. No returns at 8 BPM.
Day 27-----	4 <sup>th</sup> cmt. Plug  Diamondseal Polymer & Class C neat	HOWCO pumped 50 bbl Diamondseal swellable Polymer LCM lead & 500 sk (117 bbl) Class C neat thru open ended DP @ 5871'
Day 28		Tagged TOC @ 5191', drilled 564' of hard cement f/ 5191 to 5375'.  Run Temp survey and shows losses at

4010'.

Drill cmt w/o returns from 5375' to 5898'.  
Wash thru polymer from 5900' to 5970'

TIH to 6216. Pump 30#/bbl LCM sweep.  
Started getting 3-10% flowline returns  
pumping 8 BPM. RIH & tag fill at 7285'.  
Wash through fill & tag cmt at 7426'.  
Drill plug from 7426' to 7470'.

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