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

RECEIVED
MAY 22 2012
HOBBS OCD

Form C-103
Revised August 1, 2011

WELL API NO 30-025-40002	
5. Indicate Type of Lease STATE ☐ FEE ☒ BLM	
6. State Oil & Gas Lease No. N/A	
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	7. Lease Name or Unit Agreement Name Monument AGI
	8. Well Number #1
2. Name of Operator Targa Midstream Services, LP	9. OGRID Number 24650
3. Address of Operator 1000 Louisiana, Ste. 4300, Houston, TX 77002	10. Pool name or Wildcat Wildcat AGI in Devonian/Fusselman
4. Well Location Unit Letter O : 662 feet from the S line and 2513 feet from the E line Section 36 Township 19S Range 36E NMPM County Lea	
	11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3571 GR

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: conduct step rate and other reservoir tests ☒		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.

Operator proposes to conduct OCD-witnessed step rate test on Friday May 25th in afternoon followed by an injection test and warm back analysis to gather reservoir data to evaluate potential reservoir stimulation options. A description of the proposed test procedure, a well bore diagram and a rig up diagram are attached.

Testing is scheduled to begin on Friday May 25, 2012. Any questions please call Alberto Gutierrez of Geolex, Inc. on my cell phone at 505-259-4283

Spud Date | | 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 DATE 5/22/2012

Type or print name Alberto A. Gutierrez, RG E-mail address aag@geolex.com PHONE: 505-259-4283

For State Use Only

APPROVED BY: _____ TITLE _____ DATE 5-22-2012

Conditions of Approval (if any):

MAY 23 2012

Sundry Notices and Reports on Wells
C-103
Attachment
May 22, 2012

Testing will be starting on May 25, 2012 to evaluate the well's injection capabilities and develop reservoir data for a reservoir stimulation program. Following is the anticipated testing program that is meant to satisfy the OCD's requirements for a witnessed step rate test to raise the allowable injection pressure and provide the data needed to present a proposed well stimulation program to the NMOCC pursuant to Order Number R-13052 and 13052-A. **Please advise us of NMOCDs concurrence with this proposed test program or suggestions for improvement.**

Step Rate Test

The Step Rate Test will be run to measure injection rates and pressures and to determine the fracture pressure of the formation (or, alternatively, to determine that no formation fractures are generated below a given injection rate and pressure.) The written procedure and rig up diagram are included herein and verbal notice will be provided to the OCD Hobbs office at least 24 hours before starting the test. The step rate test procedure includes two attachments in addition to the procedure described herein. These attachments are:

1. A well schematic,
2. A rig up diagram.

Downhole pressure gauges will be used to measure bottom hole pressures at injection rates of 1.0 to 5.0 bpm. Starting pump rates and pressures will be lower than the current rates and pressures (if the well is currently injecting) and there will be at least 3 steps below the 0.2 psi/ft gradient and 3 steps above the break-over point. Rate changes will be 0.5 bpm unless the OCD witness determines that bigger rate changes are necessary due to small incremental increases in pressure. Each step will be 20 minutes in duration unless otherwise determined by the OCD. Step duration will not be changed during the test.

The Step Rate Test design will take into account the current Order's maximum surface injection pressure limitation of 1,660 psi as well as the plant's ultimate need to dispose of

approximately 5 MMCFD TAG (approx. 2,000 bpd (1.4 bpm) of TAG. Accordingly, the following rate schedule is proposed:

Step	Rate (bpm)	Time (min)	Barrels	Cumulative Barrels Pumped
1	1.00	60	60	60
2	1.50	20	30	100
3	2.00	20	40	130
4	2.50	20	50	180
5	3.00	20	60	240
6	3.50	20	70	310
7	4.00	20	80	390
8	4.50	20	90	480
9	5.00	20	100	580
		220	580	

3.7 hrs

If the injection pressure exceeds 1,660 psi (or if the injection pressure at 2.5 bpm is greater than 1,660 psi) and no breakover is witnessed, Targa may use the data collected to prepare a request to NMOCD for approval of a higher surface injection pressure limitation pursuant to paragraph D of Order No. R-13052.

24 hour verbal notice will be given to the Division's Hobbs office to allow witnessing if desired.

Transient (Falloff) Testing / Temperature Survey

This test will immediately follow the Step Rate Test.

Targa has designed an AGI system that will inject a maximum of approximately 2,000 bpd of (dense phase) acid gas, coupled with produced water and non-hazardous waste water of up to 500 bpd; for a total injection volume of up to 2,500 bpd (1.75 bbl/min).

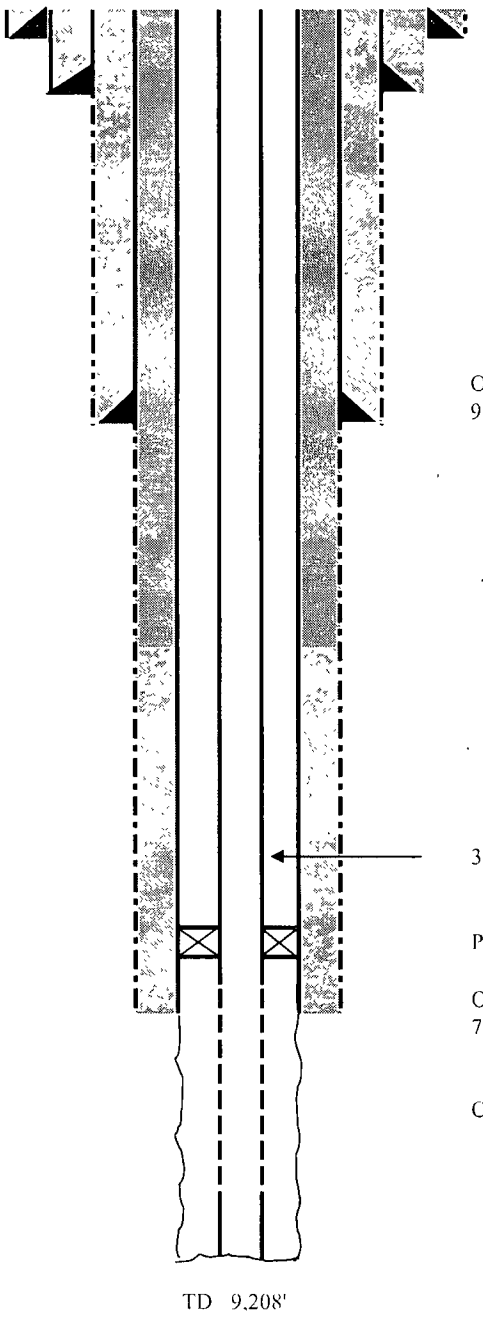
The proposed Falloff testing procedure encompassing the upper limits of the injection rate will be followed by a falloff period sufficient to test for any formation boundaries up to a minimum of ½ mile from the wellbore. The pressure data will be captured in downhole pressure gauges, or bombs, designed to record pressure data. The proposed injection test will proceed as follows:

- Position the downhole gauges at the bottom of the injection interval if possible (approx. 9,200 ft),

- Begin wastewater injection at 1.0 bpm and inject for 60 minutes (60 bbls total),
- Increase injection rate by 0.5 bpm each step and pump for 20 minutes up to a rate of 5.0 bpm (580 bbls cumulative total),
- Shut in and falloff for 120 hours (5 days),
- At end of 120 hours, pull out of hole with pressure bombs,
- Analyze pressure for transient pressures, and
- Use data from step rate test, temperature survey and transient testing to develop a stimulation plan for the well that would create the necessary injectivity for their AGI program (approximately 5 MMCFD of TAG)

TARGA MIDSTREAM SERVICES, LLP
MONUMENT AGI #1 COMPLETION SCHEMATIC

Spot	662 ft FSL, 2513 ft FEL
STR:	S36-T19S-R36E
County, St.:	Lea, NM



CONDUCTOR CASING
20" at 40 ft

SURFACE CASING
13 3/8", 48#/ft, K55, STC at 1036'

INTERMEDIATE CASING:
9 5/8", 40#/ft, J55, STC at 5042'

PRODUCTION CASING:
7", 23#/ft, J55, STC at 8361'

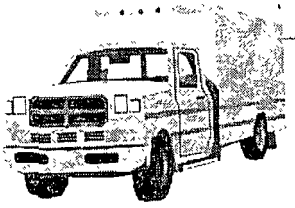
TUBING:
3 1/2", 9.3#, IPC

PACKER:
Permanent packer set at 8300 ft

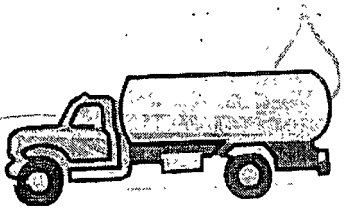
OPEN HOLE INTERVAL: 8,361 ft - 9,208 ft

Primary Target	Top Depth (from 1DW)
Devonian	8327

Reservoir Testing for API 30-025-40002 Rig Up Diagram

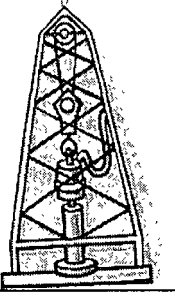


Schlumberger fiber optic wireline unit-



Pump Truck-

Equipped with gauges and meters to measure fluid volumes and rates.



Monument AGI #1 Wellhead