Submit 1 Copy To Appropriate District Office District I – (575) 393-6161 1625 N. French Dr., Hobbs, NM 88210 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, RECEIVED	Form C-103 Revised July 18, 2013 WELL API NO. Maljamar AGI#1 30-025-40420 Maljamar AGI#2 30-025-42628 5. Indicate Type of Lease STATE FEE FEDERAL 6 6. State Oil & Gas Lease No. NMLC029509A
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	7. Lease Name or Unit Agreement Name Maljamar AGI
1. Type of Well: Oil Well Gas Well Other: Acid Gas Injection Well	8. Well Number #1 and #2
2. Name of Operator Frontier Field Services LLC	9. OGRID Number 221115
3. Address of Operator 65 Mercado Street, Suite 250, Durango, CO 81301	10. Pool name or Wildcat AGI: Wolfcamp
4. Well Location AGI#1 Unit Letter <u>O</u> : <u>130</u> feet from the SOUTH line and <u>1.8</u> AGI#2 Unit Letter <u>O</u> : <u>400</u> feet from the SOUTH line and <u>2.3</u>	813 feet from the EAST line   100 feet from the EAST line
Section21Township17SRange32ENMPM11. Elevation (Show whether DR, RKB, RT, GR, etc.)AGI#1 4,016 (GR)AGI#2 4,019 (GR)	County <u>Lea</u>

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					
CLOSED-LOOP SYSTEM				OTHER: Startup and 1stQuarterly Report	3
OTHER:				per NMOCC Order R-13443	

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.

This represents the initial report on the startup of AGI#2 and the dual well AGI system at Frontier Field Services LLC's Maljamar Gas Processing Plant (see well schematic) pursuant to the quarterly reporting required under NMOCC Order R-13443. Well AGI#2 has bottom-hole PT sensors which provide data on reservoir pressure and temperature when the well is in operation and when it is not. This report includes an analysis of the surface and bottom-hole data from the startup of AGI#2 and the two well system's first Quarterly report required under the same order.

Well AGI#1 has been operating since 2012 and well AGI#2 was brought online in the same reservoir for a test period of November 15-December 21 2016. These two startup months are included along with this first quarter report pursuant to our letter to Phillip Goetze of NMOCD on January 9, 2017. Both wells were used during the November-December 2016 period and AGI#1 has been the only well used since December 21, 2016, and it was operated throughout the entire first quarter of 2017 (1/1/2017-3/31/2017) (see Figure 1). Average flow rate for the AGI#1 when it was operating during the entire reporting period was 2.309 MMSCFD. Average flow rate for the AGI#2 when it was operated between November 15 and December 21, 2017 was 1.821 MMSCFD. The surface injection parameters for both wells are shown on Figures 2 and 3, respectively. These two figures show the correlative behavior of injection pressure, injection temperature and annular pressure when both wells are operating and clearly demonstrate the continued integrity of both wells. Surface injection pressure and temperature readings when a well is not receiving flow, represent static TAG PT fluctuations in the trapped segment of the line to the well. Static TAG accumulated in the AGI#2 line when it was not in service was partially relieved to flare on 3/3/17 to reduce pressure in the line due to ambient temperature increases in shut-in condition.

During the period when each of the wells was operating, AGI#1 and AGI#2 showed average injection pressures of 2563 psig and 1991 psig, average injection temperatures of 96°F and 90°F and average surface annular pressures of 431psig and 619 psig, respectively (see Figures 2 and 3). AGI #2's bottom-hole pressure and temperature readings were available for most of the time period after early December when the bottom-hole sensors were commissioned into the plant historian system. Average AGI#2 bottom-hole pressure and temperature for the entire period when readings were available are 5096 psig and 124°F, respectively (see Figure 4). Finally, during the period when AGI#1 was operating, the differential pressure (surface injection pressure vs. annular pressure) averaged 2131 psig and when AGI#2 was operating the differential pressure averaged 1372 psig (see Figure 5). Bottom-hole pressure and temperature readings for the period since early December represent the reservoir conditions both when AGI#2 is in use and when it is not in use. The overall period

average bottom-hole pressure value of 5293 psig and temperature of 129°F are reflective of conditions in the reservoir and the difference between these averages and averages for when the AGI#2 is in use represent the cooling effect of the injection relative to reservoir conditions. The reservoir is warming back in the vicinity of the bottom-hole of AGI#2 after injection was shifted to the AGI#1 beginning on 12/21/2016. This effect is shown on Figure 4. All of the graphs in Figures 1-5 further confirm the continued integrity of both Maljamar AGI#1 and Maljamar AGI#2 and the overall analysis demonstrates that both wells are fully in compliance with all applicable requirements of the NMOCC orders governing the operation of this AGI system.

Spud Date:	]	Rig Release Date:			
I hereby certify that the in	formation above is true and cor	nplete to the best o	f my knowledge and belie	f.	
	MAR .				
SIGNATURE Type or print name	Alberto A. Gutierrez	TITLE <u>Con</u> E-mail addr	nsultant to Frontier Energ ess: aag@geolex.com	y <u>LLC</u> PHONI	DATE <u>4-12-2017</u> E: <u>505-842-8000</u>
For State Use Only	Maley Abrown:	fitle A	0/II	DATE_	4/20/2017
	Accepted for Record (	Inly			











## WELL SCHEMATICS

Maljamar AGI#1API# 30-025-40420Maljamar AGI#2API# 30-025-42628



130' FSL & 1831' FEL Section 22-T17S-R32E

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lol

lol

lol

County, St.: LEA COUNTY, NEW MEXICO

Location:

STR

### MALJAMAR AGI #1 AS BUILT WELL SCHEMATIC



# VERTICAL

CONDUCTOR CASING 20" Conductor at 40'

SURFACE CASING 13 3/8", 48.00#/ft, H40, STC at 890' Cemented to Surface

#### OH = 17 1/2" SSSV at 295'

INTERMEDIATE CASING:

8 5/8", 24.0 #/ft, J55, STC at 4,230' Cemented to Surface; verified w/CBL

#### **PRODUCTION CASING:**

5 1/2", 17 #/ft, L-80, LTC at 10,183' Cemented to Surface; verified w/CBL

#### **DEVIATION:**

Stuck string at ~5,200'. Req'd cmt plug 5,517'-5,800' Re-drill w/total deviation ~17' from original track, returned to track at ~6,100'

#### **ANNULAR FLUID:**

Diesel Fuel from top of packer to surface

#### **TUBING:**

SSSV at 295'. 2 7/8", 6.5#/ft, L-80, Prem at 9,452'

#### PACKER:

Permanent Injection Packer @ 9,452' Adj. Choke (if needed, placed in nipple below packer) Check valve (if needed, placed in nipple below packer)

TD: 10,183

PBTD: 10130

OH = 12 1/4"

DV Tool at 9,300'

Corrosion Resistant

Adjustable Choke (NA)

Alloy (CRA) Joint Packer at 9,452'

**Profile Nipple** 

Check Valve DV Tool at 9,753'

OH = 7 7/8"

2 7/8"

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