

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.	30-025-42139
5. Indicate Type of Lease STATE ☐ FEE ☒ FEDERAL ☐	
6. State Oil & Gas Lease No.	NA
7. Lease Name or Unit Agreement Name	
Monument AGI D	
8. Well Number	#2
9. OGRID Number	24650
10. Pool name or Wildcat AGI: Devonian	

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 Well ☒

2. Name of Operator
 Targa Midstream Services LLC

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

4. Well Location
 Unit Letter O : 685 feet from the SOUTH line and 2,362 feet from the EAST line
 Section 36 Township 19S Range 36E NMPM County Lea

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
 3,384 (GR)

HOBBS OCD

JAN 13 2017

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

RECEIVED 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: (Acid Gas Injection Start-up) ☐

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.

The 8 1/2-inch borehole for the production casing was drilled on December 30 and 31, 2016 from 8,310 to 8,350 feet; no geophysical logs were run or sidewall cores recovered in the 40-foot section of open hole. On January 1, 2017 the following casing segments were installed (see Attachment 1 for casing tally):

Casing Segment (top to bottom)	Segment Depths		OD (in)	Wt (lb/ft)	Grade	Connection	Pressure Testing		
	Top (ft)	Btm (ft)					BOP & BOPE	Casing Integrity	FIT Test Required

Production: TD = 8,350.0 (two stage cement)		Run Date: 1/1/17		Testing Dates: 1/2/17		1/5/17		
Casing #1 (195 jts)	-4.31 - 7,801.7	7.0	29.0	L-80	Ultra FJ	250, 2,500, & 5,000 psi	600 psi (15 min)	No
DVT #2	7,801.7 - 7,804.7							
ACP #2	7,804.7 - 7,829.8							
Casing #1 (5 jts)	7,829.8 - 8,035.6							
Casing #2 (11 jts)	8,035.6 - 8,321.3							
Float Collar	8,321.3 - 8,323.0							
Casing #2 (1 jts)	8,323.0 - 8,348.4	28CR	Ultra FJ					
Float Shoe	8,348.4 - 8,350.0							

Cementing of the 7-inch casing began late on the evening of January 1, 2017 with 22 barrels of Halliburton "WellLock" resin cement for the first stage from 7,802 to TD (8,350 ft – MD), and 7 barrels of resin were circulated to the surface. The second stage included a lead of 285 sacks (178 bbls) of "NeoCem" cement with a yield of 3.498 ft³/sack, and a tail of 69 barrels of "WellLock" resin cement. Approximately 24 sacks (15 bbls) of cement were circulated to the surface following the second stage as shown on the following summary table (see Attachment 2 for Halliburton Cement Report):

Casing Segment	Shoe Depth (ft)	Casing Size (in)	Hole Size (in)	Slurry Yield (ft ³ /sack)	Number of Sacks	Number of Barrels	Number of Sacks Circulated	Barrels Circulated	Date - Time Landed Plug	Projected Date-Time Test BOPE
Production	8,350	7.0	8.5							
Stage #1 - 7,802 to 8,350										
Lead	WellLock Resin			1.3	--	22	0	7	1/1/17 22:00	1/3/17 22:00
			Total Volume:		--	22				
Stage #2 - 0 to 7,802										
Lead	NeoCem Cement			3.498	285	178	24	15	1/2/17 4:00	1/4/17 4:00
Tail	WellLock Resin			1.299	--	69				
			Total Volume		--	247				

On January 2, 2017 the BOP/BOPE was successfully tested at 250, 2,500, and 5,000 psi and the casing was successfully tested at 600 psi after drilling through the DV tool on January 5, 2017 (Attachment 3).

Following a 44.5-hour WOC time the BHA was installed to drill out the DV tool, 7-inch casing float, "Well Lock" resin, and casing shoe, which was completed on January 6, 2017. The 6-inch open-hole portion of the well, from 8,350 to approximately 9,210 feet was drilled from January 6 to January 10, 2017. No significant losses of circulation were reported during the drilling of the open-hole injection zone. Furthermore, there were no significant encounters of H₂S or CO₂ that exceeded 7.03 ppm and 0.01 ppm, respectively.

Schlumberger open-hole geophysical logs were run on January 10 and 11, 2017 and Schlumberger CBL logs were run on January 12, 2017 after the 6-inch open-hole section was drilled. There was no pressure applied to the surface initially while running the CBL, but a second run was made from the casing shoe (8,350 ft) to approximately 4,020 ft. The CBL shows that the bond in the "Well Lock Resin" section of the well (6,840 ft and below) is good except for just below the DV tool (7,800 ft to 7,900 ft) where it is moderately good; there was very little difference between the log run with no pressure and the log run under 1,000 psi surface pressure below 6,840 ft.

In the upper "conventional cement" portion of the well (above 6,840 ft) the cement bond is moderate to good except for some poor sections at 770 ft to 930 ft and 1,050 ft to 1,200 ft; the portion of the upper section run under 1,000 psi surface pressure (4,020 ft and below) appear to indicate better bond with pressure than with no pressure. All of the 7-inch casing except for the bottom 60 feet was installed within the 9 5/8-inch intermediate casing.

All open-hole and cased-hole logs will be submitted to the NMOCD when final hard (continuous) copies are made available. Total measured depth of the 6-inch borehole is 9,210 feet (9,198 TVD) and the bottom hole location is Section 36 (O), T19S, R36E, (729 ft FSL and 2,138 ft FEL in Lea County. The drilling rig is scheduled to be released on January 13, 2017.

Spud Date:

November 23, 2016

Rig Release Date:

January 13, 2017

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

SIGNATURE

Dale T. Littlejohn

TITLE Consultant to Targa Midstream LLC

DATE 1-13-17

Type or print name

Dale T. Littlejohn

E-mail address: dale@geolex.com

PHONE: 505-842-8000

For State Use Only

APPROVED BY:

[Signature]

TITLE

DATE

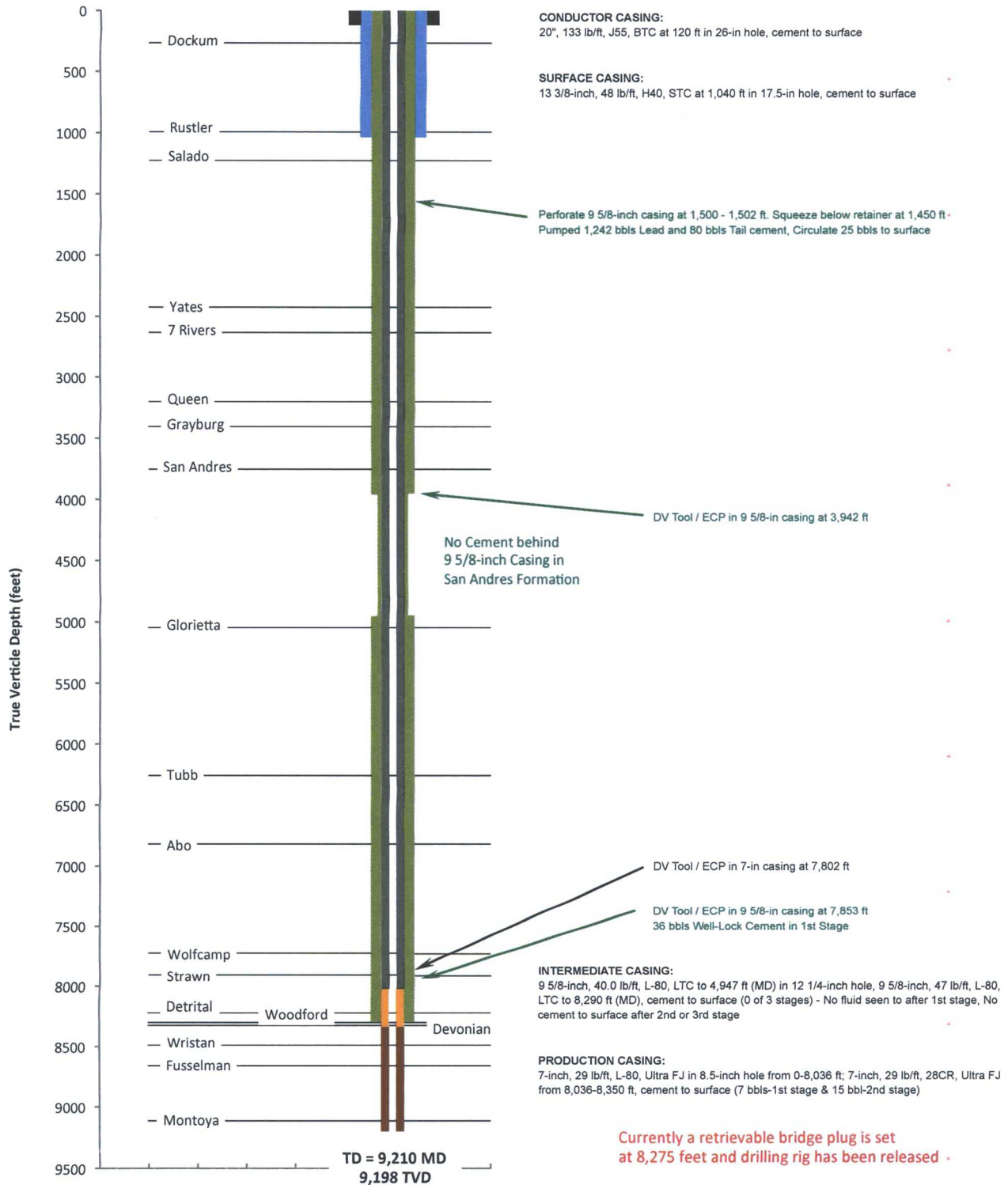
01/13/17

Conditions of Approval (if any):

Well Name: Targa Monument AGI #2 (API: 30-025-43470)

Surface Location: Section 36(O), T19S-R36E, (685' FSL & 2362' FEL)
Lea County, New Mexico - GL: 3,584' (KB: 25')

GEOLEX
INCORPORATED



TD Location: Section 36(O), T19S-R36E, (729' FSL & 2138' FEL)
Lea County, New Mexico - GL: 3,584' (KB: 25')



TARGA™

Targa Monument AGI D #2

Wellbore Completion Schematic

Figure 1

January 13, 2017



Monument AGI D #2

Casing O.D.:	7.00 IN	Block Wt:	40,000 lbs.	RKB to Mud Line:	
Lbs per Foot:	29 PPF	Mud Wt:	10.0 ppg	Water Depth:	
Grade:	L-80	Length from shoe to		TD Hole Section:	8,350.00'
Threads:	Ultra FJ	top of FC:	27.03 ft	Csg Shoe Depth:	8,350.00'
Casing I.D.:	6.184 IN	Foreman:	Rick Messenger	RKB to Wellhead:	25.00'
				Last Csg Depth:	8,310.00'

String Weight	RUN # of its	Centralizer s	LENGTH	DIST F/ RKB	Tot. Lngth	DETAILS	Volume Displaced by Casing	Cap. to Top
Put TD here >>>>>>				8,350.00'	0.00'			
40,040 lb	Shoe		1.53'	8,348.37'	1.63'	Weatherford Float Shoe	0.0 bbl	NA
40,663 lb	1	X	25.37'	8,323.00'	27.00'	7", 29#, 28CR, Ultra FJ	0.3 bbl	NA
40,704 lb	FC		1.58'	8,321.34'	28.66'	Weatherford Float Collar	0.3 bbl	NA
41,342 lb	2	X	25.96'	8,295.38'	54.62'	7", 29#, 28CR, Ultra FJ	0.6 bbl	#REF!
41,969 lb	3	X	25.53'	8,269.85'	80.15'	7", 29#, 28CR, Ultra FJ	0.8 bbl	#REF!
42,601 lb	4		25.68'	8,244.17'	105.83'	7", 29#, 28CR, Ultra FJ	1.1 bbl	#REF!
43,233 lb	5		25.73'	8,218.44'	131.56'	7", 29#, 28CR, Ultra FJ	1.4 bbl	#REF!
43,875 lb	6	X	26.15'	8,192.29'	157.71'	7", 29#, 28CR, Ultra FJ	1.7 bbl	#REF!
44,501 lb	7		25.46'	8,166.83'	183.17'	7", 29#, 28CR, Ultra FJ	1.9 bbl	#REF!
45,137 lb	8		25.90'	8,140.93'	209.07'	7", 29#, 28CR, Ultra FJ	2.2 bbl	#REF!
45,781 lb	9	X	26.21'	8,114.72'	235.28'	7", 29#, 28CR, Ultra FJ	2.5 bbl	#REF!
46,432 lb	10		26.48'	8,088.24'	261.76'	7", 29#, 28CR, Ultra FJ	2.8 bbl	#REF!
47,081 lb	11		26.39'	8,061.85'	288.15'	7", 29#, 28CR, Ultra FJ	3.0 bbl	#REF!
47,726 lb	12	X	26.27'	8,035.58'	314.42'	7", 29#, 28CR, Ultra FJ	3.3 bbl	#REF!
48,753 lb	13		41.81'	7,993.77'	356.23'	7", 29#, L-80, ULTRA FJ	3.8 bbl	#REF!
49,770 lb	14		41.35'	7,952.42'	397.58'	7", 29#, L-80, ULTRA FJ	4.2 bbl	#REF!
50,787 lb	15	X	41.39'	7,911.03'	438.97'	7", 29#, L-80, ULTRA FJ	4.6 bbl	#REF!
51,802 lb	16		41.33'	7,869.70'	480.30'	7", 29#, L-80, ULTRA FJ	5.1 bbl	#REF!
52,784 lb	17	X	39.95'	7,829.75'	520.25'	7", 29#, L-80, ULTRA FJ	5.5 bbl	#REF!
53,399 lb	ACP		25.08'	7,804.70'	545.30'	WEATHERFORD ACP	5.8 bbl	#REF!
53,473 lb	DVT		3.00'	7,801.70'	548.30'	WEATHERFORD DVT	5.8 bbl	#REF!
54,478 lb	18	X	40.90'	7,760.80'	589.20'	7", 29#, L-80, ULTRA FJ	6.2 bbl	#REF!
55,495 lb	19		41.37'	7,719.43'	630.57'	7", 29#, L-80, ULTRA FJ	6.7 bbl	#REF!
56,476 lb	20		39.95'	7,679.48'	670.52'	7", 29#, L-80, ULTRA FJ	7.1 bbl	#REF!
57,503 lb	21	X	41.76'	7,637.72'	712.28'	7", 29#, L-80, ULTRA FJ	7.5 bbl	#REF!
58,343 lb	22		34.20'	7,603.52'	746.48'	7", 29#, L-80, ULTRA FJ	7.9 bbl	#REF!
59,370 lb	23		41.78'	7,561.74'	788.26'	7", 29#, L-80, ULTRA FJ	8.3 bbl	#REF!
60,386 lb	24	X	41.38'	7,520.36'	829.64'	7", 29#, L-80, ULTRA FJ	8.8 bbl	#REF!
61,412 lb	25		41.72'	7,478.64'	871.36'	7", 29#, L-80, ULTRA FJ	9.2 bbl	#REF!
62,405 lb	26		40.44'	7,438.20'	911.80'	7", 29#, L-80, ULTRA FJ	9.6 bbl	#REF!
63,417 lb	27	X	41.18'	7,397.02'	952.98'	7", 29#, L-80, ULTRA FJ	10.1 bbl	#REF!
64,444 lb	28		41.78'	7,355.24'	994.76'	7", 29#, L-80, ULTRA FJ	10.5 bbl	#REF!
65,422 lb	29		39.83'	7,315.41'	1,034.59'	7", 29#, L-80, ULTRA FJ	10.9 bbl	#REF!
66,449 lb	30	X	41.79'	7,273.62'	1,076.38'	7", 29#, L-80, ULTRA FJ	11.4 bbl	#REF!
67,476 lb	31		41.77'	7,231.85'	1,118.15'	7", 29#, L-80, ULTRA FJ	11.8 bbl	#REF!
68,488 lb	32		41.20'	7,190.65'	1,159.35'	7", 29#, L-80, ULTRA FJ	12.2 bbl	#REF!
69,375 lb	33	X	36.08'	7,154.57'	1,195.43'	7", 29#, L-80, ULTRA FJ	12.6 bbl	#REF!
70,401 lb	34		41.76'	7,112.81'	1,237.19'	7", 29#, L-80, ULTRA FJ	13.1 bbl	#REF!
71,357 lb	35		38.89'	7,073.92'	1,276.08'	7", 29#, L-80, ULTRA FJ	13.5 bbl	#REF!
72,361 lb	36	X	40.88'	7,033.04'	1,316.96'	7", 29#, L-80, ULTRA FJ	13.9 bbl	#REF!
73,224 lb	37		35.12'	6,997.92'	1,352.08'	7", 29#, L-80, ULTRA FJ	14.3 bbl	#REF!
74,252 lb	38		41.82'	6,956.10'	1,393.90'	7", 29#, L-80, ULTRA FJ	14.7 bbl	#REF!
75,228 lb	39	X	39.75'	6,916.35'	1,433.65'	7", 29#, L-80, ULTRA FJ	15.1 bbl	#REF!
76,256 lb	40		41.83'	6,874.52'	1,475.48'	7", 29#, L-80, ULTRA FJ	15.6 bbl	#REF!
77,205 lb	41		38.61'	6,835.91'	1,514.09'	7", 29#, L-80, ULTRA FJ	16.0 bbl	#REF!
78,080 lb	42	X	35.60'	6,800.31'	1,549.69'	7", 29#, L-80, ULTRA FJ	16.4 bbl	#REF!
79,106 lb	43		41.76'	6,758.55'	1,591.45'	7", 29#, L-80, ULTRA FJ	16.8 bbl	#REF!
80,123 lb	44		41.37'	6,717.18'	1,632.82'	7", 29#, L-80, ULTRA FJ	17.2 bbl	#REF!
81,150 lb	45	X	41.83'	6,675.35'	1,674.65'	7", 29#, L-80, ULTRA FJ	17.7 bbl	#REF!
82,178 lb	46		41.81'	6,633.54'	1,716.46'	7", 29#, L-80, ULTRA FJ	18.1 bbl	#REF!
83,205 lb	47		41.81'	6,591.73'	1,758.27'	7", 29#, L-80, ULTRA FJ	18.6 bbl	#REF!
84,232 lb	48	X	41.79'	6,549.94'	1,800.06'	7", 29#, L-80, ULTRA FJ	19.0 bbl	#REF!
85,248 lb	49		41.36'	6,508.58'	1,841.42'	7", 29#, L-80, ULTRA FJ	19.4 bbl	#REF!
86,274 lb	50		41.75'	6,466.83'	1,883.17'	7", 29#, L-80, ULTRA FJ	19.9 bbl	#REF!
87,281 lb	51	X	40.96'	6,425.87'	1,924.13'	7", 29#, L-80, ULTRA FJ	20.3 bbl	#REF!
88,307 lb	52		41.75'	6,384.12'	1,965.88'	7", 29#, L-80, ULTRA FJ	20.8 bbl	#REF!
89,291 lb	53		40.04'	6,344.08'	2,005.92'	7", 29#, L-80, ULTRA FJ	21.2 bbl	#REF!
90,291 lb	54	X	40.71'	6,303.37'	2,046.63'	7", 29#, L-80, ULTRA FJ	21.6 bbl	#REF!
91,318 lb	55		41.82'	6,261.55'	2,088.45'	7", 29#, L-80, ULTRA FJ	22.0 bbl	#REF!
92,345 lb	56		41.78'	6,219.77'	2,130.23'	7", 29#, L-80, ULTRA FJ	22.5 bbl	#REF!
93,361 lb	57	X	41.35'	6,178.42'	2,171.58'	7", 29#, L-80, ULTRA FJ	22.9 bbl	#REF!



Cambrian

MANAGEMENT, LTD.

Monument AGI D #2

Casing O.D.:	7.00 IN	Block Wt:	40,000 lbs.	RKB to Mud Line:	
Lbs per Foot:	29 PPF	Mud Wt.:	10.0 ppg	Water Depth:	
Grade:	L-80	Length from shoe to		TD Hole Section:	8,350.00'
Threads:	Ultra FJ	top of FC:	27.03 ft	Csg Shoe Depth:	8,350.00'
Casing I.D.:	6.184 IN	Foreman:	Rick Messenger	RKB to Wellhead:	25.00'
				Last Csg Depth:	8,310.00'

String Weight	RUN # of its	Centralizer s	LENGTH	DIST F/ RKB	Tot. Length	DETAILS	Volume Displaced by Casing	Cap. to Top
94,243 lb	58		35.89'	6,142.53'	2,207.47'	7", 29#, L-80, ULTRA FJ	23.3 bbl	#REF!
95,269 lb	59		41.76'	6,100.77'	2,249.23'	7", 29#, L-80, ULTRA FJ	23.7 bbl	#REF!
96,287 lb	60	X	41.41'	6,059.36'	2,290.64'	7", 29#, L-80, ULTRA FJ	24.2 bbl	#REF!
97,275 lb	61		40.21'	6,019.15'	2,330.85'	7", 29#, L-80, ULTRA FJ	24.6 bbl	#REF!
98,301 lb	62		41.74'	5,977.41'	2,372.59'	7", 29#, L-80, ULTRA FJ	25.0 bbl	#REF!
99,327 lb	63	X	41.76'	5,935.65'	2,414.35'	7", 29#, L-80, ULTRA FJ	25.5 bbl	#REF!
100,319 lb	64		40.38'	5,895.27'	2,454.73'	7", 29#, L-80, ULTRA FJ	25.9 bbl	#REF!
101,346 lb	65		41.80'	5,853.47'	2,496.53'	7", 29#, L-80, ULTRA FJ	26.4 bbl	#REF!
102,372 lb	66	X	41.76'	5,811.71'	2,538.29'	7", 29#, L-80, ULTRA FJ	26.8 bbl	#REF!
103,386 lb	67		41.27'	5,770.44'	2,579.56'	7", 29#, L-80, ULTRA FJ	27.2 bbl	#REF!
104,398 lb	68		41.19'	5,729.25'	2,620.75'	7", 29#, L-80, ULTRA FJ	27.7 bbl	#REF!
105,280 lb	69	X	35.89'	5,693.36'	2,656.64'	7", 29#, L-80, ULTRA FJ	28.0 bbl	#REF!
106,306 lb	70		41.75'	5,651.61'	2,698.39'	7", 29#, L-80, ULTRA FJ	28.5 bbl	#REF!
107,332 lb	71		41.76'	5,609.85'	2,740.15'	7", 29#, L-80, ULTRA FJ	28.9 bbl	#REF!
108,352 lb	72	X	41.50'	5,568.35'	2,781.65'	7", 29#, L-80, ULTRA FJ	29.4 bbl	#REF!
109,368 lb	73		41.35'	5,527.00'	2,823.00'	7", 29#, L-80, ULTRA FJ	29.8 bbl	#REF!
110,241 lb	74		35.50'	5,491.50'	2,858.50'	7", 29#, L-80, ULTRA FJ	30.2 bbl	#REF!
111,123 lb	75	X	35.90'	5,455.60'	2,894.40'	7", 29#, L-80, ULTRA FJ	30.6 bbl	#REF!
112,151 lb	76		41.84'	5,413.76'	2,936.24'	7", 29#, L-80, ULTRA FJ	31.0 bbl	#REF!
113,042 lb	77		36.25'	5,377.51'	2,972.49'	7", 29#, L-80, ULTRA FJ	31.4 bbl	#REF!
113,930 lb	78	X	36.17'	5,341.34'	3,008.66'	7", 29#, L-80, ULTRA FJ	31.8 bbl	#REF!
114,808 lb	79		35.73'	5,305.61'	3,044.39'	7", 29#, L-80, ULTRA FJ	32.1 bbl	#REF!
115,709 lb	80		36.65'	5,268.96'	3,081.04'	7", 29#, L-80, ULTRA FJ	32.5 bbl	#REF!
116,605 lb	81	X	36.48'	5,232.48'	3,117.52'	7", 29#, L-80, ULTRA FJ	32.9 bbl	#REF!
117,512 lb	82		36.89'	5,195.59'	3,154.41'	7", 29#, L-80, ULTRA FJ	33.3 bbl	#REF!
118,394 lb	83		35.90'	5,159.69'	3,190.31'	7", 29#, L-80, ULTRA FJ	33.7 bbl	#REF!
119,401 lb	84	X	40.97'	5,118.72'	3,231.28'	7", 29#, L-80, ULTRA FJ	34.1 bbl	#REF!
120,303 lb	85		36.73'	5,081.99'	3,268.01'	7", 29#, L-80, ULTRA FJ	34.5 bbl	#REF!
121,329 lb	86		41.75'	5,040.24'	3,309.76'	7", 29#, L-80, ULTRA FJ	34.9 bbl	#REF!
122,329 lb	87	X	40.67'	4,999.57'	3,350.43'	7", 29#, L-80, ULTRA FJ	35.4 bbl	#REF!
123,355 lb	88		41.79'	4,957.78'	3,392.22'	7", 29#, L-80, ULTRA FJ	35.8 bbl	#REF!
124,383 lb	89		41.80'	4,915.98'	3,434.02'	7", 29#, L-80, ULTRA FJ	36.3 bbl	#REF!
125,410 lb	90	X	41.81'	4,874.17'	3,475.83'	7", 29#, L-80, ULTRA FJ	36.7 bbl	#REF!
126,437 lb	91		41.80'	4,832.37'	3,517.63'	7", 29#, L-80, ULTRA FJ	37.1 bbl	#REF!
127,464 lb	92		41.81'	4,790.56'	3,559.44'	7", 29#, L-80, ULTRA FJ	37.6 bbl	#REF!
128,487 lb	93	X	41.62'	4,748.94'	3,601.06'	7", 29#, L-80, ULTRA FJ	38.0 bbl	#REF!
129,462 lb	94		39.69'	4,709.25'	3,640.75'	7", 29#, L-80, ULTRA FJ	38.4 bbl	#REF!
130,490 lb	95		41.82'	4,667.43'	3,682.57'	7", 29#, L-80, ULTRA FJ	38.9 bbl	#REF!
131,510 lb	96	X	41.52'	4,625.91'	3,724.09'	7", 29#, L-80, ULTRA FJ	39.3 bbl	#REF!
132,538 lb	97		41.82'	4,584.09'	3,765.91'	7", 29#, L-80, ULTRA FJ	39.8 bbl	#REF!
133,565 lb	98		41.81'	4,542.28'	3,807.72'	7", 29#, L-80, ULTRA FJ	40.2 bbl	#REF!
134,592 lb	99	X	41.77'	4,500.51'	3,849.49'	7", 29#, L-80, ULTRA FJ	40.6 bbl	#REF!
135,619 lb	100		41.79'	4,458.72'	3,891.28'	7", 29#, L-80, ULTRA FJ	41.1 bbl	#REF!
136,589 lb	101		39.48'	4,419.24'	3,930.76'	7", 29#, L-80, ULTRA FJ	41.5 bbl	#REF!
137,615 lb	102	X	41.76'	4,377.48'	3,972.52'	7", 29#, L-80, ULTRA FJ	41.9 bbl	#REF!
138,642 lb	103		41.80'	4,335.68'	4,014.32'	7", 29#, L-80, ULTRA FJ	42.4 bbl	#REF!
139,669 lb	104		41.80'	4,293.88'	4,056.12'	7", 29#, L-80, ULTRA FJ	42.8 bbl	#REF!
140,550 lb	105	X	35.83'	4,258.05'	4,091.95'	7", 29#, L-80, ULTRA FJ	43.2 bbl	#REF!
141,528 lb	106		39.82'	4,218.23'	4,131.77'	7", 29#, L-80, ULTRA FJ	43.6 bbl	#REF!
142,556 lb	107		41.82'	4,176.41'	4,173.59'	7", 29#, L-80, ULTRA FJ	44.1 bbl	#REF!
143,581 lb	108	X	41.72'	4,134.69'	4,215.31'	7", 29#, L-80, ULTRA FJ	44.5 bbl	#REF!
144,477 lb	109		36.48'	4,098.21'	4,251.79'	7", 29#, L-80, ULTRA FJ	44.9 bbl	#REF!
145,497 lb	110		41.50'	4,056.71'	4,293.29'	7", 29#, L-80, ULTRA FJ	45.3 bbl	#REF!
146,523 lb	111	X	41.76'	4,014.95'	4,335.05'	7", 29#, L-80, ULTRA FJ	45.8 bbl	#REF!
147,550 lb	112		41.78'	3,973.17'	4,376.83'	7", 29#, L-80, ULTRA FJ	46.2 bbl	#REF!
148,577 lb	113		41.81'	3,931.36'	4,418.64'	7", 29#, L-80, ULTRA FJ	46.6 bbl	#REF!
149,604 lb	114	X	41.79'	3,889.57'	4,460.43'	7", 29#, L-80, ULTRA FJ	47.1 bbl	#REF!
150,629 lb	115		41.72'	3,847.85'	4,502.15'	7", 29#, L-80, ULTRA FJ	47.5 bbl	#REF!
151,474 lb	116		34.39'	3,813.46'	4,536.54'	7", 29#, L-80, ULTRA FJ	47.9 bbl	#REF!
152,478 lb	117	X	40.87'	3,772.59'	4,577.41'	7", 29#, L-80, ULTRA FJ	48.3 bbl	#REF!
153,505 lb	118		41.77'	3,730.82'	4,619.18'	7", 29#, L-80, ULTRA FJ	48.8 bbl	#REF!
154,532 lb	119		41.80'	3,689.02'	4,660.98'	7", 29#, L-80, ULTRA FJ	49.2 bbl	#REF!
155,559 lb	120	X	41.78'	3,647.24'	4,702.76'	7", 29#, L-80, ULTRA FJ	49.6 bbl	#REF!



Monument AGI D #2

Casing O.D.: 7.00 IN
Lbs per Foot: 29 PPF
Grade: L-80
Threads: Ultra FJ
Casing I.D.: 6.184 IN

Block Wt: 40,000 lbs.
Mud Wt.: 10.0 ppg
Length from shoe to
top of FC: 27.03 ft
Foreman: Rick Messenger

RKB to Mud Line:
Water Depth:
TD Hole Section: 8,350.00'
Csg Shoe Depth: 8,350.00'
RKB to Wellhead: 25.00'
Last Csg Depth: 8,310.00'

String Weight	RUN #of Jts	Centralizer s	LENGTH	DIST F/ RKB	Tot. Length	DETAILS	Volume Displaced by Casing	Cap. to Top
156,580 lb	121		41.57'	3,605.67'	4,744.33'	7", 29#, L-80, ULTRA FJ	50.1 bbl	#REF!
157,606 lb	122		41.73'	3,563.94'	4,786.06'	7", 29#, L-80, ULTRA FJ	50.5 bbl	#REF!
158,633 lb	123	X	41.80'	3,522.14'	4,827.86'	7", 29#, L-80, ULTRA FJ	51.0 bbl	#REF!
159,513 lb	124		35.83'	3,486.31'	4,863.69'	7", 29#, L-80, ULTRA FJ	51.3 bbl	#REF!
160,497 lb	125		40.06'	3,446.25'	4,903.75'	7", 29#, L-80, ULTRA FJ	51.8 bbl	#REF!
161,480 lb	126	X	39.99'	3,406.26'	4,943.74'	7", 29#, L-80, ULTRA FJ	52.2 bbl	#REF!
162,356 lb	127		35.66'	3,370.60'	4,979.40'	7", 29#, L-80, ULTRA FJ	52.6 bbl	#REF!
163,374 lb	128		41.40'	3,329.20'	5,020.80'	7", 29#, L-80, ULTRA FJ	53.0 bbl	#REF!
164,401 lb	129	X	41.80'	3,287.40'	5,062.60'	7", 29#, L-80, ULTRA FJ	53.4 bbl	#REF!
165,399 lb	130		40.64'	3,246.76'	5,103.24'	7", 29#, L-80, ULTRA FJ	53.9 bbl	#REF!
166,419 lb	131		41.50'	3,205.26'	5,144.74'	7", 29#, L-80, ULTRA FJ	54.3 bbl	#REF!
167,395 lb	132	X	39.73'	3,165.53'	5,184.47'	7", 29#, L-80, ULTRA FJ	54.7 bbl	#REF!
168,411 lb	133		41.31'	3,124.22'	5,225.78'	7", 29#, L-80, ULTRA FJ	55.2 bbl	#REF!
169,416 lb	134		40.93'	3,083.29'	5,266.71'	7", 29#, L-80, ULTRA FJ	55.6 bbl	#REF!
170,433 lb	135	X	41.36'	3,041.93'	5,308.07'	7", 29#, L-80, ULTRA FJ	56.0 bbl	#REF!
171,459 lb	136		41.77'	3,000.16'	5,349.84'	7", 29#, L-80, ULTRA FJ	56.5 bbl	#REF!
172,482 lb	137		41.64'	2,958.52'	5,391.48'	7", 29#, L-80, ULTRA FJ	56.9 bbl	#REF!
173,500 lb	138	X	41.41'	2,917.11'	5,432.89'	7", 29#, L-80, ULTRA FJ	57.4 bbl	#REF!
174,490 lb	139		40.31'	2,876.80'	5,473.20'	7", 29#, L-80, ULTRA FJ	57.8 bbl	#REF!
175,517 lb	140		41.80'	2,835.00'	5,515.00'	7", 29#, L-80, ULTRA FJ	58.2 bbl	#REF!
176,540 lb	141	X	41.61'	2,793.39'	5,556.61'	7", 29#, L-80, ULTRA FJ	58.7 bbl	#REF!
177,566 lb	142		41.76'	2,751.63'	5,598.37'	7", 29#, L-80, ULTRA FJ	59.1 bbl	#REF!
178,593 lb	143		41.78'	2,709.85'	5,640.15'	7", 29#, L-80, ULTRA FJ	59.5 bbl	#REF!
179,578 lb	144	X	40.09'	2,669.76'	5,680.24'	7", 29#, L-80, ULTRA FJ	60.0 bbl	#REF!
180,604 lb	145		41.78'	2,627.98'	5,722.02'	7", 29#, L-80, ULTRA FJ	60.4 bbl	#REF!
181,632 lb	146		41.82'	2,586.16'	5,763.84'	7", 29#, L-80, ULTRA FJ	60.8 bbl	#REF!
182,659 lb	147	X	41.78'	2,544.38'	5,805.62'	7", 29#, L-80, ULTRA FJ	61.3 bbl	#REF!
183,521 lb	148		35.08'	2,509.30'	5,840.70'	7", 29#, L-80, ULTRA FJ	61.7 bbl	#REF!
184,377 lb	149		34.83'	2,474.47'	5,875.53'	7", 29#, L-80, ULTRA FJ	62.0 bbl	#REF!
185,267 lb	150	X	36.24'	2,438.23'	5,911.77'	7", 29#, L-80, ULTRA FJ	62.4 bbl	#REF!
186,143 lb	151		35.65'	2,402.58'	5,947.42'	7", 29#, L-80, ULTRA FJ	62.8 bbl	#REF!
187,168 lb	152		41.70'	2,360.88'	5,989.12'	7", 29#, L-80, ULTRA FJ	63.2 bbl	#REF!
188,153 lb	153	X	40.11'	2,320.77'	6,029.23'	7", 29#, L-80, ULTRA FJ	63.7 bbl	#REF!
189,061 lb	154		36.92'	2,283.85'	6,066.15'	7", 29#, L-80, ULTRA FJ	64.0 bbl	#REF!
190,088 lb	155		41.81'	2,242.04'	6,107.96'	7", 29#, L-80, ULTRA FJ	64.5 bbl	#REF!
190,975 lb	156	X	36.11'	2,205.93'	6,144.07'	7", 29#, L-80, ULTRA FJ	64.9 bbl	#REF!
191,858 lb	157		35.91'	2,170.02'	6,179.98'	7", 29#, L-80, ULTRA FJ	65.2 bbl	#REF!
192,885 lb	158		41.81'	2,128.21'	6,221.79'	7", 29#, L-80, ULTRA FJ	65.7 bbl	#REF!
193,908 lb	159	X	41.63'	2,086.58'	6,263.42'	7", 29#, L-80, ULTRA FJ	66.1 bbl	#REF!
194,804 lb	160		36.47'	2,050.11'	6,299.89'	7", 29#, L-80, ULTRA FJ	66.5 bbl	#REF!
195,678 lb	161		35.58'	2,014.53'	6,335.47'	7", 29#, L-80, ULTRA FJ	66.9 bbl	#REF!
196,706 lb	162	X	41.81'	1,972.72'	6,377.28'	7", 29#, L-80, ULTRA FJ	67.3 bbl	#REF!
197,733 lb	163		41.80'	1,930.92'	6,419.08'	7", 29#, L-80, ULTRA FJ	67.8 bbl	#REF!
198,750 lb	164		41.39'	1,889.53'	6,460.47'	7", 29#, L-80, ULTRA FJ	68.2 bbl	#REF!
199,776 lb	165	X	41.74'	1,847.79'	6,502.21'	7", 29#, L-80, ULTRA FJ	68.6 bbl	#REF!
200,802 lb	166		41.77'	1,806.02'	6,543.98'	7", 29#, L-80, ULTRA FJ	69.1 bbl	#REF!
201,828 lb	167		41.77'	1,764.25'	6,585.75'	7", 29#, L-80, ULTRA FJ	69.5 bbl	#REF!
202,854 lb	168	X	41.73'	1,722.52'	6,627.48'	7", 29#, L-80, ULTRA FJ	70.0 bbl	#REF!
203,881 lb	169		41.78'	1,680.74'	6,669.26'	7", 29#, L-80, ULTRA FJ	70.4 bbl	#REF!
204,906 lb	170		41.74'	1,639.00'	6,711.00'	7", 29#, L-80, ULTRA FJ	70.8 bbl	#REF!
205,859 lb	171	X	38.79'	1,600.21'	6,749.79'	7", 29#, L-80, ULTRA FJ	71.3 bbl	#REF!
206,877 lb	172		41.43'	1,558.78'	6,791.22'	7", 29#, L-80, ULTRA FJ	71.7 bbl	#REF!
207,904 lb	173		41.77'	1,517.01'	6,832.99'	7", 29#, L-80, ULTRA FJ	72.1 bbl	#REF!
208,930 lb	174	X	41.76'	1,475.25'	6,874.75'	7", 29#, L-80, ULTRA FJ	72.6 bbl	#REF!
209,930 lb	175		40.68'	1,434.57'	6,915.43'	7", 29#, L-80, ULTRA FJ	73.0 bbl	#REF!
210,766 lb	176		34.05'	1,400.52'	6,949.48'	7", 29#, L-80, ULTRA FJ	73.4 bbl	#REF!
211,653 lb	177	X	36.08'	1,364.44'	6,985.56'	7", 29#, L-80, ULTRA FJ	73.7 bbl	#REF!
212,669 lb	178		41.36'	1,323.08'	7,026.92'	7", 29#, L-80, ULTRA FJ	74.2 bbl	#REF!
213,695 lb	179		41.73'	1,281.35'	7,068.65'	7", 29#, L-80, ULTRA FJ	74.6 bbl	#REF!
214,717 lb	180	X	41.62'	1,239.73'	7,110.27'	7", 29#, L-80, ULTRA FJ	75.1 bbl	#REF!
215,732 lb	181		41.29'	1,198.44'	7,151.56'	7", 29#, L-80, ULTRA FJ	75.5 bbl	#REF!
216,637 lb	182		36.82'	1,161.62'	7,188.38'	7", 29#, L-80, ULTRA FJ	75.9 bbl	#REF!
217,654 lb	183	X	41.39'	1,120.23'	7,229.77'	7", 29#, L-80, ULTRA FJ	76.3 bbl	#REF!



Casing O.D.:	7.00 IN	Block Wt:	40,000 lbs.	RKB to Mud Line:	
Lbs per Foot:	29 PPF	Mud Wt.:	10.0 ppg	Water Depth:	
Grade:	L-80	Length from shoe to		TD Hole Section:	8,350.00'
Threads:	Ultra FJ	top of FC:	27.03 ft	Csg Shoe Depth:	8,350.00'
Casing I.D.:	6.184 IN	Foreman:	Rick Messenger	RKB to Wellhead:	25.00'
				Last Csg Depth:	8,310.00'

4 of 5 pages

HALLIBURTON

Permian Basin, Odessa

Lab Results - Lead

Job Information

Request/Slurry	2354596/1	Rig Name	PATRIOT DRILLING/M #5	Date	DEC/11/2016
Submitted By	Olvín Hernandez Perez	Job Type	Intermediate Casing	Bulk Plant	Odessa, TX
Customer	Targa Resources Partners LP	Location	Lea	Well	Monument AGI #2

Well Information

Casing/Liner Size	9.625 in	Depth MD	8350 ft	BHST	58°C / 136°F
Hole Size	12.25 in	Depth TVD	8350 ft	BHCT	38°C / 101°F
Pressure	3800 psi				

Cement Information - Primary Design

Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.	Cement Properties	
		NeoCem™ Cement				Slurry Density	9 lbm/gal
100	% BWOC	Cement Blend				Slurry Yield	3.485 ft ³ /sack
14.1	gal/sack	Fresh Water				Water Requirement	14.101 gal/sack
26	lb/sk	HGS 4000 (PB)	Lab	17 10 16	ZA00771	Total Mix Fluid	14.101 gal/sack
0.5	% BWOC	HALAD-344 (PB)	Bulk Blend	28 11 16	A1027161X	Water Source	Fresh Water
0.5	% BWOC	CFR-3 (PB)	Bulk Blend	29 11 16	0503201601		
0.2	% BWOC	Fe-2 (citric acid)	Bulk Blend	28 11 16	GA5L27BK5E		
0.05	% BWOC	SA-1015 (PB)	Bulk Blend	28 11 16	6F1098W		
5	lb/sk	Microbond	Bulk Blend	22 09 16			
0.25	lb/sk	D-Air 5000	Bulk Blend	28 11 16	2016319ac		

Pilot Test Results Request ID 2354596/1

Thickening Time

DEC/12/2016

Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	70 Bc (hh:mm)
101	3800	28	6	10:01

Mixability (0 - 5) - 0 is not mixable

DEC/11/2016

Mixability rating (0 - 5)	Avg rpm mixing under load (~12,000)
5	12000

Pilot Test Results Request ID 2344215/5

UCA Comp. Strength, Historical Data

OCT/16/2016

End Temp (°F)	Pressure (psi)	50 psi (hh:mm)	500 psi (hh:mm)	8hr CS (psi)	12 hr CS (psi)	24 hr CS (psi)	48 hr CS (psi)
127	4000	9:18	22:50	6	164	512	553

API Rheology, Historical Data

OCT/17/2016

Temp (°F)	300	200	100	60	30	6	3	PV/YP
80	56	43	26	18	13	7	6	51.02 / 7.11

API Rheology, Historical Data

OCT/17/2016

Temp (°F)	300	200	100	60	30	6	3	Cond Time (min)	PV/YP
97	67	52	32	22	15	5	4	30	63.5 / 7.16

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API Fluid Loss, Historical Data**OCT/17/2016**

Test Temp (°F)	Test Pressure (psi)	Test Time (min)	Meas. Vol.	Calculated FL (<30 min)
97	1000	8.25	30	114

Free Fluid API 10B-2, Historical Data**OCT/18/2016**

Static T. (°F)	Static time (min)	Incl. (deg)	% Fluid
80	120	0	0

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Permian Basin, Odessa

Lab Results - Tail

Job Information

Request/Slurry	2354544/1	Rig Name	PATRIOT DRILLING/M #5	Date	DEC/10/2016
Submitted By	Olvin Hernandez Perez	Job Type	Intermediate Casing	Bulk Plant	Odessa, TX
Customer	Targa Resources Partners LP	Location	Lea	Well	Monument AGI #2

Well Information

Casing/Liner Size	9.625 in	Depth MD	8294 ft	BHST	61°C / 142°F
Hole Size	12.25 in	Depth TVD	8294 ft	BHCT	39°C / 103°F
Pressure	4400 psi				

Cement Information - Primary Design

Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.	Cement Properties
		WellLock® Resin				Slurry Density 9.282 lbm/gal
100	% BWOC	WellLock RI				
27	% BWOC	WellLock H1				

Pilot Test Results Request ID 2354544/1

Thickening Time

DEC/13/2016

Temp (°F)	Pressure (psi)	Batch Mix (min)	Reached in (min)	Start BC	100 Bc (hh:mm)
103	4400	30	28	43	17:35

Crush Compressive Strength

DEC/14/2016

Time 1 (hrs)	Strength 1	Time 2 (hrs)	Strength 2	Foam Q (%)
24	171	48	5085	0

FYSA Viscosity Profile & Gel Strength

DEC/12/2016

Test Temp (°F)	600	300	200	100	60	30	6	3	3D - 3 rpm Decay	6D - 6 rpm Decay	Gel 10 min FYSA reading (1 rpm)	K1 factor	K2 factor	Foam Quality	PV/YP	FYSA Direct YP
103	55	25	17	12	5	3	1	1	0	0	1	0.293	0.697	0	212.07 / 0.58	

FYSA Viscosity Profile & Gel Strength

DEC/12/2016

Test Temp (°F)	300	200	100	60	30	6	3	K1 factor	K2 factor	Foam Quality	PV/YP
80	75	50	25	16	8	1	1	0.293	0.697	0	593.05 / 0.36

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iCem[®] Service

TARGA RESOURCES INC

For:

Date: Monday, January 02, 2017

Case 1

Job Date: Sunday, January 01, 2017

Sincerely,

2.0 Real Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Comments
Event	1	Call Out	Call Out	1/1/2017	09:30:06	USER				CALLED OUT FOR TARGA RESOURCES MONUMENT AG1 D #2 MULTISTAGE
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	1/1/2017	10:30:06	USER				GATHERED CREW TO GO OVER JSA AND ROUTE TO LOCATION
Event	3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	1/1/2017	11:30:04	USER				
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	1/1/2017	13:30:03	USER				ARRIVED ON LOCATION, TESTED WATER VERIFIED CEMENT AND MATERIALS WERE ON LOCATION, GATHERED INFORMATION FROM COMPANY REP.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	1/1/2017	13:45:05	USER				GATHERED CREW TO GO OVER JSA AND RIG UP PROCEDURES
Event	6	Other	Rig Up Equipment	1/1/2017	14:00:05	USER				
Event	7	Casing on Bottom	Casing on Bottom	1/1/2017	15:00:06	USER				CASING WAS NOW ON BOTTOM AND RIG CREW WAS RIGGING DOWN CASING CREW AND CIRCULATING WELL
Event	8	Rig Up Completed	Rig Up Completed	1/1/2017	16:30:05	USER	0.20	0.00	1.00	FINISHED RIGGING UP AND WERE NOW GOING TO MIX WELL LOCK HAD SOME TROUBLE OFF LOADING FROM TRANSPORT, ALSO HAD SOME RAIN COMING

iCem Service

(v. 4.3.44)

IN THE AREA AND VERIFIED IT WOULD NOT AFFECT WELL LOCKWHILE WE WERE MIXING, WITH HEAD ENGINEER, IT WOULD NOT BE AFFECTED, PER OLVIN HERNANDEZ, WE LOADED AMOUNT REQUIRED OF R1 INTO BATCH MIXER WE ADDED THE R1 AND TURNED ON AGITATOR AND CIRCULATED UNTIL IT WAS COMPLETELY MIXED.

GATHERED EVERYONE ON LOCATION TO GO OVER JSA AND JOB PROCEDURES, VERIFIED ALL CALCULATIONS WITH COMPANY REP AND WEATHERFORD TOOL MAN

Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	1/2/2017	19:15:04	USER	8.74	0.00	2.00
Event	10	Start Job	Start Job	1/2/2017	19:40:56	COM5	8.69	0.00	0.00
Event	11	Pump Spacer 1	Pump Spacer 1	1/2/2017	19:41:50	COM5	8.33	3.20	228.00
Event	12	Test Lines	Test Lines	1/2/2017	19:47:23	COM5	8.52	0.00	6376.00
Event	13	Pump Spacer 1	Pump Spacer 1	1/2/2017	19:52:30	COM5	8.32	3.00	332.00
Event	14	Pump Spacer	Pump Spacer	1/2/2017	19:56:24	COM5	9.25	4.10	520.00
Event	15	Other	Pump Well Lock	1/2/2017	20:06:46	COM5	9.30	4.00	941.00
Event	16	Shutdown	Shutdown	1/2/2017	20:13:22	COM5	9.31	0.00	12.00
Event	17	Drop Top Plug	Drop Top Plug	1/2/2017	20:16:56	COM5	10.02	0.00	12.00

PUMPED 3 BBL WATER SPACER TO FILL LINES

TESTED LINES TO MAKE SURE THEY WERE SAFE AND HAD NO LEAKS

PUMPED 10 BBL WATER SPACER TO CALIBRATE EQUIPMENT

PUMPED 50 BBLs OF TUNES SPACER III WITH RED DYE

PUMPED 22.3 BBLs OF WELL LOCK RESIN AT 9.3 LB

SHUTDOWN TO DROP PLUG

DROPPED 7" WEATHERFORD 1ST STAGE

iCem Service

(v. 4.3.44)

Created: Monday, January 02, 2017

										PLUG
Event	18	Pump Displacement	Pump Displacement	1/2/2017	20:18:43	COM5	8.20	6.20	992.00	PUMPED DISPLACMENT WITH 309 BBLS OF RIG WATER
Event	19	Other	Other	1/2/2017	21:16:19	COM5				SLOWED RATE TO BUMP PLUG
Event	20	Set Packer	Set Packer	1/2/2017	21:34:22	COM5	9.09	1.90	1761.00	PACKER SET RIGHT BEFORE WE BUMPED PLUG PER WEATHERFORD TOOL MAN
Event	21	Bump Plug	Bump Plug	1/2/2017	21:36:52	COM5	9.14	0.00	2002.00	BUMPED PLUG AND PRESSURED UP AFEW TIMES TO ENSURE PACKER WAS SET
Event	22	Other	Other	1/2/2017	22:04:34	COM5	8.75	0.00	21.00	CHECKED FLOATS AND HAD 2 BBLS BACK TO THE TUBS
Event	23	Drop Ball	Drop Ball	1/2/2017	22:05:27	COM5	8.72	0.00	6.00	DROPPED BALL AND WAITED ABOUT 45 MINUTES
Event	24	Pressure Up Well	Pressure Up Well	1/2/2017	22:52:47	COM5	8.64	0.00	8.00	PRESSURED UP TO OPEN DV TOOL
Event	25	Open Multiple Stage Cementer	Open Multiple Stage Cementer	1/2/2017	22:53:33	COM5	8.88	1.10	547.00	OPENED DV TOOL AND CIRCULATED WELL, ONCE DV TOOL WAS OPEN WE STARTED MIXING WELL LOCK FOR 2ND STAGE
Event	26	Circulate Well	Circulate Well	1/2/2017	22:54:37	COM5	8.87	7.00	691.00	CIRCULATED ABOVE DV TOOL AND HAD ABOUT 7 BBLS OF WELL LOCK RESIN BACK TO THE PITS, AND CONTINUED CIRCULATING UNTIL MIXTURE OF WELL LOCK FOR 2ND STAGE WAS COMPLETE
Event	27	Pump Spacer 1	Pump Spacer 1	1/2/2017	01:41:21	COM5	8.24	3.00	222.00	BEGAN 2ND STAGE, PUMPED 10 BBL WATER

										SPACER WITH RED DYE
Event	28	Pump Spacer	Pump Spacer 2	1/2/2017	01:48:43	COM5	9.60	4.00	304.00	PUMPED 50 BBL TUNED SPACER III
Event	29	Pump Lead Cement	Pump Lead Cement	1/2/2017	02:08:20	COM5	8.98	4.00	302.00	PUMPED 285 SKS OR 177 BBLs OF OF NEOCEM PRIMARY CEMENT AT 9 LB, 3.5 YIELD, 14.2 GAL/SK
Event	30	Other	Other	1/2/2017	02:41:32	COM5	9.09	4.00	601.00	PUMPED 69.3 BBLs OF WELL LOCK AT 9.3 LB,
Event	31	Shutdown	Shutdown	1/2/2017	02:57:53	COM5	0.39	0.00	28.00	SHUTDOWN TO DROP 2ND STAGE PLUG
Event	32	Drop Top Plug	Drop Top Plug	1/2/2017	02:58:36	COM5				DROPPED 2ND STAGE CLOSING PLUG PROVIDED BY WEATHERFORD TOOL MAN
Event	33	Pump Displacement	Pump Displacement	1/2/2017	03:02:51	COM5	8.07	7.10	243.00	PUMPED DISPLACEMENT WITH 285 BBLs OF RIG WATER
Event	34	Other	Other	1/2/2017	03:45:37	COM5	8.76	3.10	1058.00	SLOWED RATE TO BUMP PLUG
Event	35	Bump Plug	Bump Plug	1/2/2017	03:53:51	COM5	9.03	0.00	2804.00	BUMPED PLUG AND HAD 15 BBLs OR 24 SKs OF CEMENT BACK TO SURFACE
Event	36	Other	Other	1/2/2017	03:56:32	COM5	8.66	0.00	15.00	CHECKED FLOATS AND HAD 2.5 BBLs BACK TO THE TUBS
Event	37	End Job	End Job	1/2/2017	03:58:17	COM5				CLEANED BATCH MIXER AND PUMP UNIT TO THE HALF ROUND
Event	38	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	1/2/2017	04:15:58	USER	8.22	5.20	157.00	GATHERED CREW TO GO OVER ISA AND RIG DOWN PROCEDURES
Event	39	Rig-Down Equipment	Rig-Down Equipment	1/2/2017	04:30:05	USER	8.19	4.00	82.00	
Event	40	Rig-Down Completed	Rig-Down Completed	1/2/2017	06:00:53	USER				COMPLETED RIG DOWN

iCem Service

(v. 4.3.44)

Created: Monday, January 02, 2017

						SAFELY
Event	41	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	1/2/2017	06:15:38 USER	GATHERED CREW TO GO OVER JSA AND ROUTE BACK TO FACILITY WITH CREW
Event	42	Depart Location	Depart Location	1/2/2017	06:30:05 USER	THANK YOU

The Road to Excellence Starts with Safety

Sold To #: 347474	Ship To #: 3767926	Quote #: 0022258383	Sales Order #: 0903759406
Customer: TARGA RESOURCES INC -		Customer Rep:	
Well Name: MONUMENT AGI D	Well #: 2	API/UVI #: 30-025-13470-00	
Field: AGI	City (SAP): HOBBS	County/Parish: LEA	State: NEW MEXICO
Legal Description: 36-19S-36E-685FSL-2362FEL			
Contractor: PATRIOT DRLG		Rig/Platform Name/Num: PATRIOT 5	
Job BOM: 392189			
Well Type: VERTICAL GAS			
Sales Person: HALAMERICA\HB31506		Srv Supervisor:	
Job			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	8350ft Job Depth TVD
Water Depth	Wk Ht Above Floor
Perforation Depth (MD)	From To

Well Data										
Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing		9.625	8.835	40			0	4950		
Casing		7	6.184	29	ULTRA FLUSH JOINT	L-80	0	8350		
Casing		9.625	8.681	47			4950	8288		
Open Hole Section			12.25				8288	8310		
Open Hole Section			8.75				8310	8350		

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make	
Guide Shoe	7			8350	Top Plug	7		HES	
Float Shoe	7				Bottom Plug	7		HES	
Float Collar	7				SSR plug set	7		HES	
Insert Float	7				Plug Container	7		HES	
Stage Tool	7				Centralizers	7		HES	

Fluid Data										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	9 lb/gal Tuned Spacer III	Tuned Spacer III	50	bbl	9	10.06				
	0.35 lbm/bbl	FE-2 (100001615)								
	38.75 gal/bbl	FRESH WATER								
	4 lbm/bbl	CHEM, FDP-C1193-15, 50 LB Sack - (975466)								
	0.30 gal/bbl	D-AIR 3000L, 5 GAL PAIL (101007444)								

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	1st Stage Primary - WellLock™ Resin	SBM CMT WellLock PKG	22.3	bbl	9.3				
32.26 gal/bbl		CHEM, WellLOCK R1, TOTE TANK (102161680)							
9.74 gal/bbl		CHEM, WELLOCK H1, 330 GALLON TOTE (102220519)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Solvent Cleanup - HES Equipment	Solvent Cleanup - HES Equipment	4	bbl	7.6				
42 gal/bbl		MUSOL A, 330 GAL TOTE - (790828)							
Cement Left in Pipe		Amount	40 ft	Reason				Shoe Joint	
Fluid Data									
Stage/Plug #: 2									
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	9 lb/gal Tuned Spacer III	Tuned Spacer III	50	bbl	9	10.06			
38.75 gal/bbl		FRESH WATER							
4 lbm/bbl		CHEM, FDP-C1193-15, 50 LB Sack - (975466)							
0.35 lbm/bbl		FE-2 (100001615)							
0.30 gal/bbl		D-AIR 3000L, 5 GAL PAIL (101007444)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	2nd Stage Lead - NeoCem™ Light	NeoCem™	285	sack	9	3.498		5	14.2
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	2nd Stage Tail - WellLock™ Resin	SBM CMT WellLock PKG	69.3	bbl	9.3				
9.74 gal/bbl		CHEM, WELLOCK H1, 330 GALLON TOTE (102220519)							
32.26 gal/bbl		CHEM, WellLOCK R1, TOTE TANK (102161680)							

Cement Left in Pipe	Amount	28.66 ft	Reason	Shoe Joint
Mix Water:pH ##	Mix Water:## ppm	Chloride:	Mix Water Temperature:## °F °C	
Cement Temperature:## °F °C	Plug Displaced by:## lb/gal kg/m3 XXXX	Disp. Temperature:## °F °C		
Plug Bumped?Yes/No	Bump Pressure:#### psi MPa	Floats Held?Yes/No		
Cement Returns:## bbl m3	Returns Density:## lb/gal kg/m3	Returns Temperature:## °F °C		
Comment				

Summary Report



Crew: _____
Job Start Date: 1/2/2017

Sales Order #: 0903759406
WO #: 0903759406
PO #: NA
AFE #:

Customer: TARGA RESOURCES INC -
UWI / API Number: 30-025-43470-00
Well Name: MONUMENT AGI D
Well No: 2

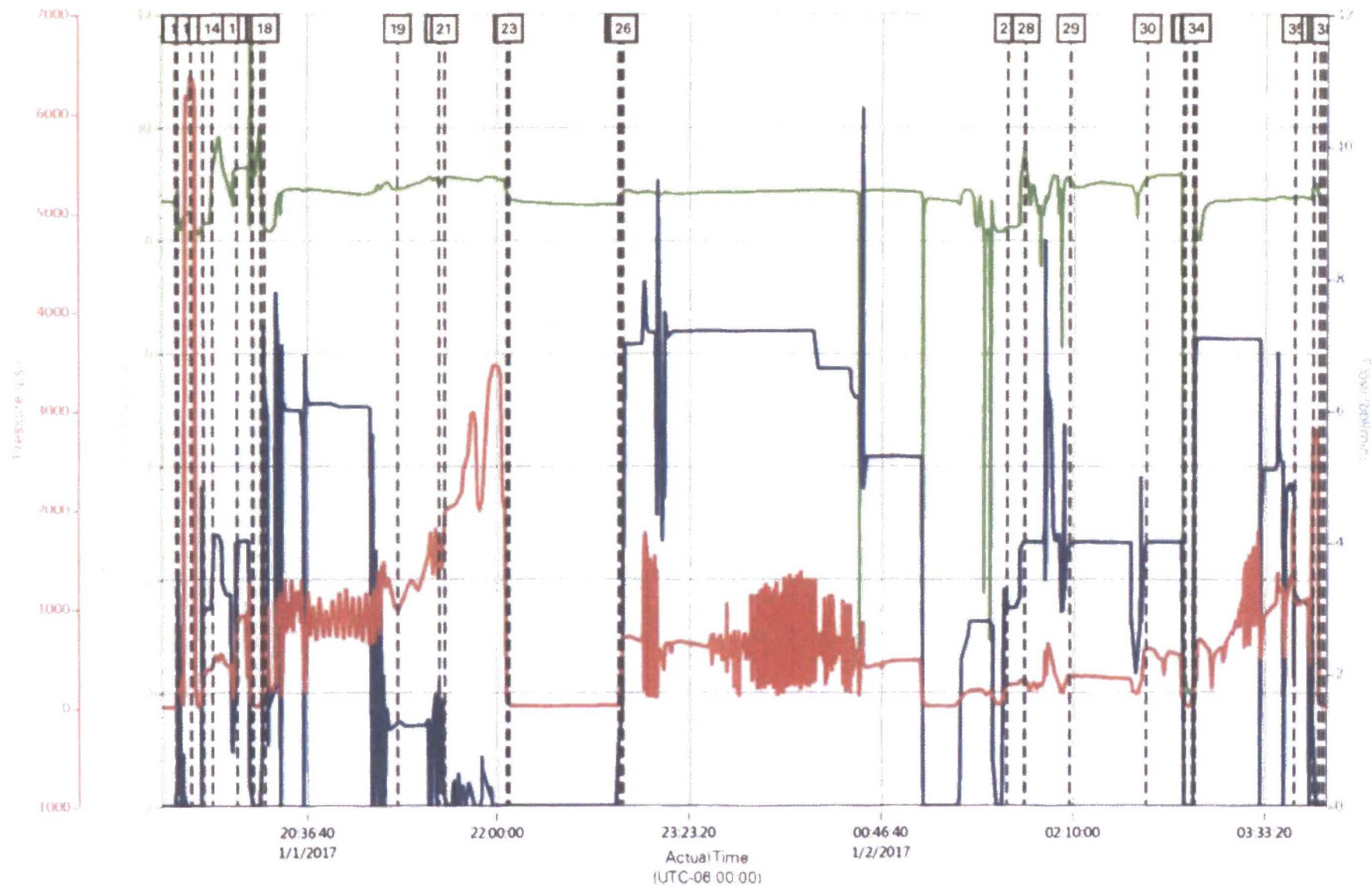
Field: AGI
County/Parish: LEA
State: NEW MEXICO
Latitude: 32 811432
Longitude: -103 306911
Sect / Twn / Rng: 36/19/36

Job Type: CMT MULTIPLE STAGES BOM
Service Supervisor:
Cust Rep Name:
Cust Rep Phone #:

Remarks:

The Information Stated Herein Is Correct	Customer Representative Signature	Date
	Customer Representative Printed Name	

TARGA RESOURCES MONUMENT AGI D #2 MULTISTAGE



DH Density (ppg) Comb Pump Rate (bbl/min) DS Pump Press (psil)

▼ HALLIBURTON | iCem® Service

Created: 2017-01-01 12:26 PM (UTC-08:00) Version: 4.3.44

Edit

Customer: TARGA RESOURCES

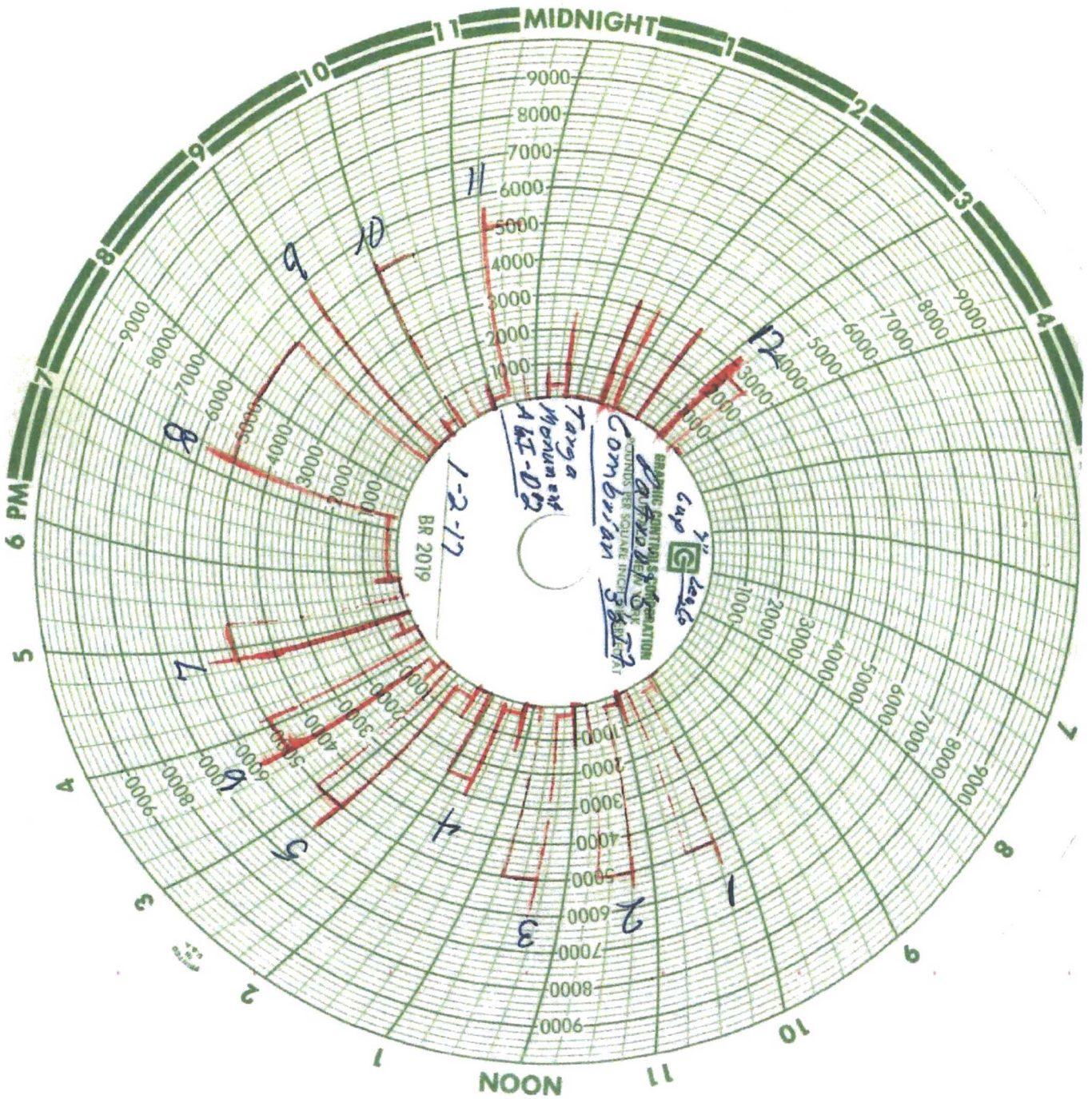
Job Date: 1/1/2017

Well: MONUMENT AGI D

Representative: RICK

Sales Order #: 0903759406

COPY for Date

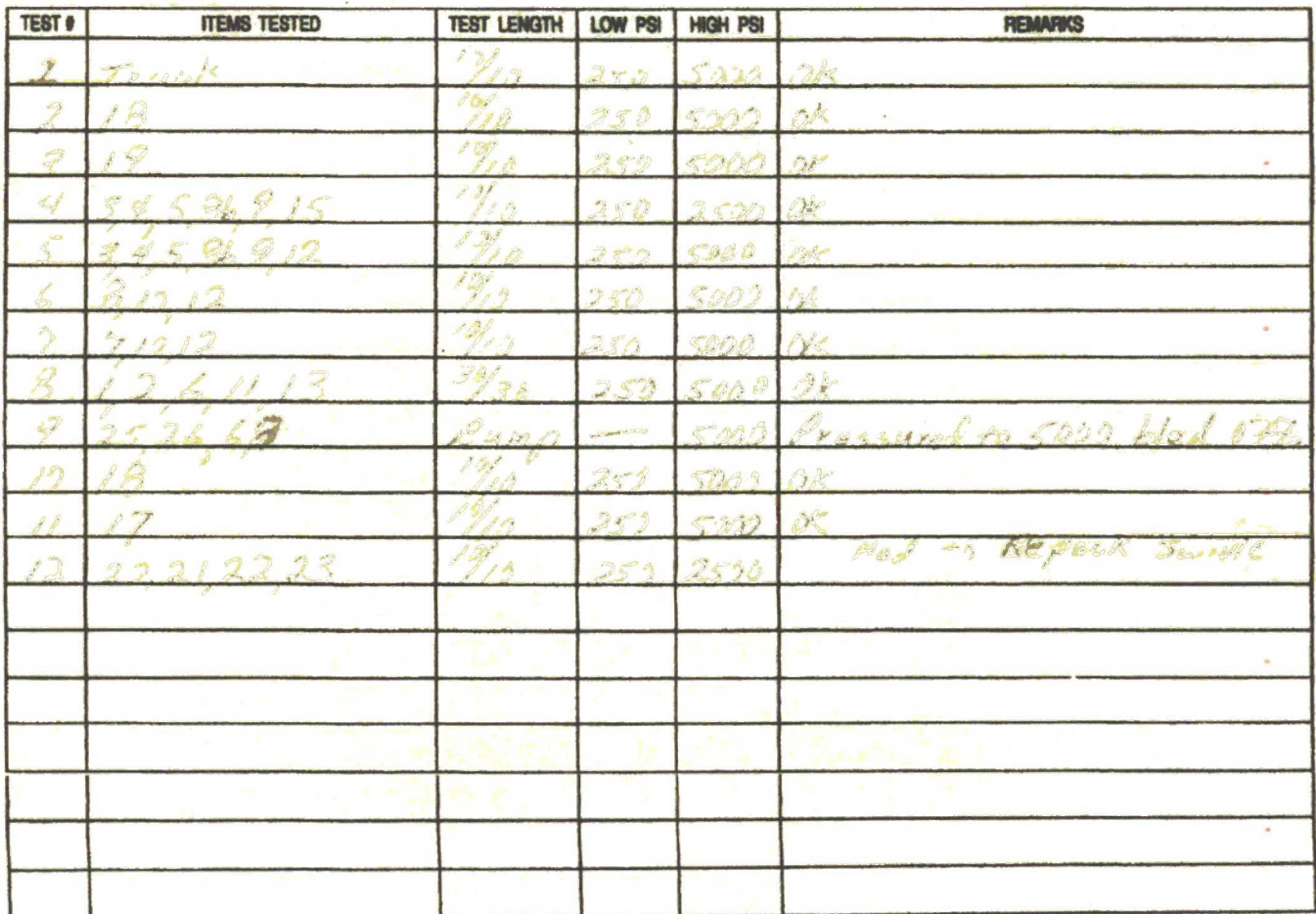




Pg. _____ of _____

Company: Continental Management LTD Date: 1-2-17 Invoice #: 877474
Lease: Targa Monument A62-1102 Drilling Contractor: Patriot Rig #: 5
Plug Size & Type: 7" Gap Drill Pipe Size: 3 1/2 ID Tester: D. N. F. H. H.
Required BOP: 5M Installed BOP: 10M

* Check Valve Must Be Open/Disabled To Test Kill Line Valves *



Chevron-Use-Only

MAN WELDING SERVICES, INC

**DSM & Rig manager
must be present**

Company Conbrion Management LTD Date 1-2-17

Lease Targa Monument A&I-D'2 County Lea

Drilling Contractor Perrier's Plug & Drill Pipe Size 7" Cdp 13 1/2 ID

Accumulator Pressure: 3000 Manifold Pressure: 1500 Annular Pressure: 1000

Accumulator Function Test - OO&GO#2

To Check - USABLE FLUID IN THE NITROGEN BOTTLES (III.A.2.c.i. or ii or iii)

- Make sure all rams and annular are open and if applicable HCR is closed.
- Ensure accumulator is pumped up to working pressure! (Shut off all pumps)
 1. Open HCR Valve. (If applicable)
 2. Close annular.
 3. Close all pipe rams.
 4. Open one set of the pipe rams to simulate closing the blind ram.
 5. Record remaining pressure 1500 psi. Test Fails if pressure is lower than required.
- - a. {1285 psi for a 1500 psi system} b. {1385 psi for a 2000 psi system} c. {1500 psi for a 3000 system}
 6. If annular is closed, open it at this time and close HCR.

To Check - PRECHARGE ON BOTTLES OR SPHERICAL (III.A.2.d.)

- Start with manifold pressure at, or above, maximum acceptable pre-charge pressure:
 - a. {800 psi for a 1500 psi system} b. {1100 psi for 2000 and 3000 psi system}
- 1. Open bleed line to the tank, slowly. (gauge needle will drop at the lowest bottle pressure)
 2. Close bleed line. Barely bump electric pump and see what pressure the needle jumps up to.
 3. Record pressure drop 1000 psi. Test fails if pressure drops below minimum.
- Minimum: a. {700 psi for a 1500 psi system} b. {900 psi for a 2000 & 3000 psi system}

To Check - THE CAPACITY OF THE ACCUMULATOR PUMPS (III.A.2.f.)

- Isolate the accumulator bottles or spherical from the pumps & manifold.
- Open the bleed off valve to the tank, {manifold psi should go to 0 psi} close bleed valve.
 1. Open the HCR valve, {if applicable}
 2. Close annular
 3. With pumps only, time how long it takes to regain the required manifold pressure.
 4. Record elapsed time 1:31. Test fails if it takes over 2 minutes.
- - a. {950 psi for a 1500 psi system} b. {1200 psi for a 2000 & 3000 psi system}

DSM Signed: _____

Rig Manager Signed _____

MONUMENT AGI #2 PATRIOT 5

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