



# NATURAL GAS ANALYSIS

PRIMARY DB KEY: NAME/DESCRIP: PAR STATE TANK BATTERY  
 LEASE #: 05-005-0643  
 FIELD/ AREA:

PROJECT NO.: 201907047 ANALYSIS NO.: 08  
 COMPANY NAME: RENEGADE OIL & GAS COMPANY ANALYSIS DATE: JULY 16, 2019 08:46  
 OFFICE / BRANCH: AURORA, CO SAMPLE DATE: JULY 9, 2019  
 CUSTOMER REF:  
 PRODUCER:  
 EFFECTIVE DATE:

## \*\*\*FIELD DATA\*\*\*

SAMPLE CYCLE: SAMPLE TYPE:  
 SAMPLE PRES.: 43 psig PROBE:  
 FLOW PRES.: psig CYLINDER NO.: 1124  
 LAB PRES.: psig SAMPLED BY: CODY BAYLIS  
 SAMPLE TEMP.: 68 °f SAMPLING COMPANY: RENEGADE  
 AMBIENT TEMP.: °f H2S BY STAIN TUBE: 1 ppm  
 H2O BY STAIN TUBE: #/mmcf CO2 BY STAIN TUBE: Mol %  
 FIELD COMMENTS:  
 LAB COMMENTS:

COMPONENTS	NORM. MOLE%	GPM @ 14.65	GPM @ 14.73
HELIUM	0.01	-	-
HYDROGEN	0.00	-	-
OXYGEN/ARGON	0.01	-	-
NITROGEN	1.36	-	-
CO2	3.15	-	-
METHANE	66.00	-	-
ETHANE	14.02	3.7455	3.7659
PROPANE	9.00	2.4766	2.4902
ISOBUTANE	0.97	0.3175	0.3192
N-BUTANE	3.15	0.9925	0.9979
ISOPENTANE	0.69	0.2524	0.2537
N-PENTANE	0.74	0.2684	0.2699
HEXANES+	0.90	0.3906	0.3927
TOTAL	100.00	8.4435	8.4895

BTU @ 60 DEG F

	14.65	14.73
GROSS DRY REAL =	1380.9 /scf	1388.5 /scf
GROSS SATURATED REAL =	1356.8 /scf	1364.4 /scf
RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F)	0.8567	
GRAVITY (LB/SCF)	0.06537	
COMPRESSIBILITY FACTOR :	0.99541	

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

The C6+ is derived from the following ratios of C6, C7 & C8+ respectively: 60% 30% 10%

The data presented herein has been acquired by means of current analytical techniques and represents the judicious conclusion EMPACT Analytical Systems, Inc. Results of the analysis can be affected by the sampling conditions, therefore, are only warranted through proper lab protocol. EMPACT assumes no responsibility for interpretation or any consequences from application of the reported information and is the sole liability of the user. The reproduction in any media of this reported information may not be made, in portion or as a whole, without the written permission of EMPACT Analytical Systems, Inc.