



PRIMARY DB KEY: NAME/DESCRIP : **WHITEHEAD 4-13**
 LEASE #:
 FIELD/ AREA:
 PROJECT NO. : **201908133** ANALYSIS NO. : **06**
 COMPANY NAME : **RENEGADE OIL & GAS COMPANY** ANALYSIS DATE: **AUGUST 28, 2019 08:14**
 OFFICE / BRANCH: **AURORA, CO** SAMPLE DATE : **AUGUST 21, 2019**
 CUSTOMER REF: TO:
 PRODUCER : EFFECTIVE DATE:

*****FIELD DATA*****

SAMPLE CYCLE: SAMPLE TYPE:
 SAMPLE PRES.: 13 psig PROBE : NO
 FLOW PRES.: psig CYLINDER NO. : 0212
 LAB PRES: psig SAMPLED BY : CODY BAYLIS
 SAMPLE TEMP.: 60 °f SAMPLING COMPANY: RENEGADE
 AMBIENT TEMP.: °f H2S BY STAIN TUBE: **1.25** 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	0.00	-	-
HYDROGEN	0.01	-	-
OXYGEN/ARGON	0.01	-	-
NITROGEN	1.41	-	-
CO2	3.19	-	-
METHANE	43.29	-	-
ETHANE	12.81	3.4361	3.4549
PROPANE	20.75	5.7339	5.7652
ISOBUTANE	2.22	0.7291	0.7330
N-BUTANE	8.99	2.8428	2.8584
ISOPENTANE	1.90	0.6969	0.7007
N-PENTANE	2.06	0.7492	0.7533
HEXANES+	3.36	1.4621	1.4701
TOTAL	100.00	15.6501	15.7356

BTU @ 60 DEG F

	14.65	14.73
GROSS DRY REAL =	1892.9 /scf	1903.3 /scf
GROSS SATURATED REAL =	1859.8 /scf	1870.2 /scf
RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F)	1.1826	
GRAVITY (LB/SCF)	0.09026	
COMPRESSIBILITY FACTOR :	0.99132	

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%**

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