



PRIMARY DB KEY: NAME/DESCRIP : **CRAIG 4-4**
 LEASE #: **GAS AT SEPARATOR**

PROJECT NO. : **201712120** ANALYSIS NO. : **15**
 COMPANY NAME : **NIGHTHAWK PRODUCTION COMPANY** ANALYSIS DATE: **DECEMBER 27, 2017 09:29**
 OFFICE / BRANCH: **HIGHLANDS RANCH, CO** SAMPLE DATE : **DECEMBER 20, 2017 15:10**
 CUSTOMER REF: TO:
 PRODUCER : EFFECTIVE DATE:

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

SAMPLE CYCLE: SAMPLE TYPE: **SPOT**
 SAMPLE PRES.: **11** psig PROBE : **NO**
 FLOW PRES.: psig CYLINDER NO. : **0489**
 LAB PRES: psig SAMPLED BY : **JOHN MOSER**
 SAMPLE TEMP. : **59.3** °f SAMPLING COMPANY: **EMPACT**
 AMBIENT TEMP.: °f H2S BY STAIN TUBE: **<0.25** ppm
 H2O BY STAIN TUBE #/mmcf CO2 BY STAIN TUBE: **-** Mol %
 FIELD COMMENTS:
 LAB COMMENTS:

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	0.19	-	-
HYDROGEN	0.00	-	-
OXYGEN/ARGON	0.04	-	-
NITROGEN	14.06	-	-
CO2	0.27	-	-
METHANE	46.59	-	-
ETHANE	13.55	3.6424	3.6226
PROPANE	13.78	3.8167	3.7960
ISOBUTANE	1.90	0.6249	0.6215
N-BUTANE	4.99	1.5813	1.5727
ISOPENTANE	1.21	0.4445	0.4420
N-PENTANE	1.30	0.4737	0.4711
HEXANES+	2.12	0.9252	0.9202
TOTAL	100.00	11.5087	11.4461

BTU @ 60 DEG F

	14.73	14.65
GROSS DRY REAL =	1502.7 /scf	1494.5 /scf
GROSS SATURATED REAL =	1476.6 /scf	1468.4 /scf

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F) 1.0183
 GRAVITY (LB/SCF) 0.07772
 COMPRESSIBILITY FACTOR : 0.99451

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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