



PRIMARY DB KEY: NAME/DESCRIP: **BIG SKY 4-11**
 LEASE #: **GAS AT SEPARATOR**

PROJECT NO.: **201712120** ANALYSIS NO.: **01**
 COMPANY NAME: **NIGHTHAWK PRODUCTION COMPANY** ANALYSIS DATE: **DECEMBER 27, 2017 07:30**
 OFFICE / BRANCH: **HIGHLANDS RANCH, CO** SAMPLE DATE: **DECEMBER 20, 2017 09:20**
 CUSTOMER REF: TO:
 PRODUCER: EFFECTIVE DATE:

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

SAMPLE CYCLE: SAMPLE TYPE: **SPOT**
 SAMPLE PRES.: **25** psig PROBE: **NO**
 FLOW PRES.: psig CYLINDER NO.: **0187**
 LAB PRES: psig SAMPLED BY: **JOHN MOSER**
 SAMPLE TEMP.: **72.6** °f SAMPLING COMPANY: **EMPACT**
 AMBIENT TEMP.: °f H2S BY STAIN TUBE: **3.0** 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	0.71	-	-
HYDROGEN	0.02	-	-
OXYGEN/ARGON	0.43	-	-
NITROGEN	53.45	-	-
CO2	2.91	-	-
METHANE	25.37	-	-
ETHANE	3.21	0.8599	0.8553
PROPANE	5.23	1.4436	1.4358
ISOBUTANE	1.21	0.3968	0.3947
N-BUTANE	3.78	1.1945	1.1880
ISOPENTANE	0.90	0.3295	0.3277
N-PENTANE	1.26	0.4581	0.4556
HEXANES+	1.52	0.6610	0.6574
TOTAL	100.00	5.3434	5.3145

BTU @ 60 DEG F

	14.73	14.65
GROSS DRY REAL =	775.5 /scf	771.2 /scf
GROSS SATURATED REAL =	762.0 /scf	757.7 /scf

RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F) 1.0234
 GRAVITY (LB/SCF) 0.07810
 COMPRESSIBILITY FACTOR : 0.99772

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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