



ISOTOPIC NATURAL GAS ANALYSIS

PRIMARY DB KEY: **05-045-15209** NAME/DESCRIP : **110165620 NP N30 EF 08C-31 595**
 LEASE #: **PRODUCTION CASING**
 FIELD/AREA:

PROJECT NO. : **202508083** ANALYSIS NO. : **01**
 COMPANY NAME : **QB ENERGY OPERATING, LLC** ANALYSIS DATE: **SEPTEMBER 05, 2025 00:00**
 OFFICE / BRANCH: **PARACHUTE, CO** SAMPLE DATE : **AUGUST 11, 2025 08:30**
 CUSTOMER REF: TO:
 PRODUCER : EFFECTIVE DATE:

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

SAMPLE CYCLE: SAMPLE TYPE: **SPOT**
 SAMPLE PRES. : **421** psig PROBE : **NO**
 FLOW PRES. : psig CYLINDER NO. : **ECA-790**
 LAB PRES: psig SAMPLED BY : **ALEX GALLEGOS**
 SAMPLE TEMP. : **70** °f SAMPLING COMPANY: **QB ENERGY**
 AMBIENT TEMP.: °f H2S BY STAIN TUBE: **-** ppm mol
 H2O BY STAIN TUBE: **-** #/mmcf CO2 BY STAIN TUBE: **-** Mol %
 FIELD COMMENTS:
 LAB COMMENTS:

COMPONENTS	NORM. MOLE%	GPM @ 14.65	d13C ‰ VPDB	dD ‰ VSMOW
HELIUM	0.00	-	-	-
HYDROGEN	0.01	-	-	-
OXYGEN/ARGON	0.00	-	-	-
NITROGEN	0.08	-	-	-
CO2	2.99	-	-5.6	-
METHANE	89.10	-	-36.9	-168
ETHANE	5.26	1.3991	-26.8	-
PROPANE	1.22	0.3348	-24.1	-
ISOBUTANE	0.31	0.1009	-24.2	-
N-BUTANE	0.23	0.0720	-23.3	-
ISOPENTANE	0.15	0.0510	0.0	-
N-PENTANE	0.08	0.0290	0.0	-
HEXANES+	0.58	0.3118	-	-
TOTAL	100.00	2.2986		

BTU @ 60 DEG F

14.65

GROSS DRY REAL = **1084.8** /scf
 GROSS SATURATED REAL = **1065.8** /scf

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F) **0.6516**
 GRAVITY (LB/SCF) **0.04973**
 COMPRESSIBILITY FACTOR : **0.99750**

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 NG Composition File #: **202508083-01-A-501**
 The Isotopic Data File #: **DIG-041010**

Note:Stable isotope results based on multi-point laboratory calibration

Precision δ¹³C < 0.5 ‰ Precision δD < 5.0 ‰

Values in red represent low peak heights. Interpret with caution.

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