



ISOTOPIC NATURAL GAS ANALYSIS

PRIMARY DB KEY: **05-045-15202** NAME/DESCRIP : **110165536 NP N30 EF02C-31 595**
 LEASE #: **PRODUCTION CASING**
 FIELD/AREA:

PROJECT NO. : **202507057** ANALYSIS NO. : **01**
 COMPANY NAME : **QB ENERGY OPERATING, LLC** ANALYSIS DATE: **JULY 17, 2025 14:02**
 OFFICE / BRANCH: **PARACHUTE, CO** SAMPLE DATE : **JULY 2, 2025 11:00**
 CUSTOMER REF: **TO:**
 PRODUCER : **QB ENERGY OPERATING, LLC** EFFECTIVE DATE:

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

SAMPLE CYCLE: **SAMPLE TYPE: SPOT**
 SAMPLE PRES. : **526 psig** PROBE : **NO PROBE**
 FLOW PRES. : **psig** CYLINDER NO. : **ECA-756**
 LAB PRES: **psig** SAMPLED BY : **MIKE HARVEY**
 SAMPLE TEMP. : **84 °f** SAMPLING COMPANY: **QB ENERGY OPERATING, LLC**
 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	0.07	-	-	-
CO2	4.02	-	-6.1	-
METHANE	89.12	-	-35.9	-172
ETHANE	4.67	1.2452	-26.7	-
PROPANE	1.01	0.2778	-24.4	-
ISOBUTANE	0.27	0.0879	-24.2	-
N-BUTANE	0.18	0.0570	-22.7	-
ISOPENTANE	0.12	0.0400	0.0	-
N-PENTANE	0.06	0.0220	0.0	-
HEXANES+	0.48	0.2548	-	-
TOTAL	100.00	1.9847		

BTU @ 60 DEG F

14.65
 GROSS DRY REAL = **1058.2 /scf**
 GROSS SATURATED REAL = **1039.7 /scf**

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F) **0.6508**
 GRAVITY (LB/SCF) **0.04967**
 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 #: **202507057-01-A-483**
 The Isotopic Data File #: **DIG-040453**

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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