



ISOTOPIC NATURAL GAS ANALYSIS

PRIMARY DB KEY: **05-045-07292** NAME/DESCRIP : **300107075 F33 BOULTON 33-6**
 LEASE #: **COC-56608A** CASING
 FIELD/AREA:

PROJECT NO. : **202503051** ANALYSIS NO. : **01**
 COMPANY NAME : **QB ENERGY OPERATING, LLC** ANALYSIS DATE: **MARCH 25, 2025 00:00**
 OFFICE / BRANCH: **PARACHUTE, CO** SAMPLE DATE : **MARCH 10, 2025**
 CUSTOMER REF: TO:
 PRODUCER : **QB ENERGY OPERATING, LLC** EFFECTIVE DATE:

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

SAMPLE CYCLE: SAMPLE TYPE: **SPOT**
 SAMPLE PRES. : **410** psig PROBE : **NO**
 FLOW PRES. : psig CYLINDER NO. : **ECA-728**
 LAB PRES: psig SAMPLED BY : **JOEY GRACEY**
 SAMPLE TEMP. : **50** °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	0.01	-	-	-
HYDROGEN	0.01	-	-	-
OXYGEN/ARGON	0.00	-	-	-
NITROGEN	0.21	-	-	-
CO2	0.06	-	0.0	-
METHANE	83.34	-	-40.8	-198
ETHANE	8.96	2.3932	-28.6	-
PROPANE	4.18	1.1511	-26.2	-
ISOBUTANE	0.99	0.3230	-26.8	-
N-BUTANE	1.13	0.3550	-25.4	-
ISOPENTANE	0.44	0.1530	0.0	-
N-PENTANE	0.36	0.1300	0.0	-
HEXANES+	0.30	0.1300	-	-
TOTAL	100.00	4.6353		

BTU @ 60 DEG F

14.65
 GROSS DRY REAL = 1221.8 /scf
 GROSS SATURATED REAL = 1200.4 /scf

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F) 0.6932
 GRAVITY (LB/SCF) 0.05290
 COMPRESSIBILITY FACTOR : 0.99680

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 #: **202503051-01-A-371**
 The Isotopic Data File #: **DIG-039225**

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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