



ISOTOPIC NATURAL GAS ANALYSIS

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

PROJECT NO. : **202503051** ANALYSIS NO. : **02**
 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. : **159** psig PROBE : **NO**
 FLOW PRES. : psig CYLINDER NO. : **ECA-737**
 LAB PRES: psig SAMPLED BY : **TERRY MARTINEZ**
 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	0.08	-	-	-
HYDROGEN	0.00	-	-	-
OXYGEN/ARGON	0.02	-	-	-
NITROGEN	2.39	-	-	-
CO2	0.02	-	0.0	-
METHANE	96.85	-	-44.0	-211
ETHANE	0.45	0.1199	-25.9	-
PROPANE	0.14	0.0360	-26.4	-
ISOBUTANE	0.03	0.0100	-26.6	-
N-BUTANE	0.01	0.0060	-25.7	-
ISOPENTANE	0.00	0.0000	0.0	-
N-PENTANE	0.00	0.0000	0.0	-
HEXANES+	0.01	0.0000	-	-
TOTAL	100.00	0.1719		

BTU @ 60 DEG F

14.65
 GROSS DRY REAL = **990.2** /scf
 GROSS SATURATED REAL = **972.9** /scf

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F) 0.5679
 GRAVITY (LB/SCF) 0.04334
 COMPRESSIBILITY FACTOR : 0.99800

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 #: **202503051-02-A-371**
 The Isotopic Data File #: **DIG-039226**

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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