



ISOTOPIC NATURAL GAS ANALYSIS

PRIMARY DB KEY: **05-045-08212** NAME/DESCRIP : **110170077 PC12 CHEVRON 42-8**
 LEASE #: **BRAIDEN HEAD**
 FIELD/AREA:
 PROJECT NO. : **202502080** ANALYSIS NO. : **05**
 COMPANY NAME : **QB ENERGY OPERATING, LLC** ANALYSIS DATE: **MARCH 03, 2025 18:31**
 OFFICE / BRANCH: **PARACHUTE, CO** SAMPLE DATE : **FEBRUARY 18, 2025**
 CUSTOMER REF: **TO:**
 PRODUCER : **QB ENERGY OPERATING, LLC** EFFECTIVE DATE:

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

SAMPLE CYCLE: SAMPLE TYPE: **SPOT**
 SAMPLE PRES. : **105** psig PROBE : **NO**
 FLOW PRES. : psig CYLINDER NO. : **ECA-714**
 LAB PRES: psig SAMPLED BY : **MIKE KELLEY**
 SAMPLE TEMP. : **41** °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	0.35	-	-3.4	-
METHANE	90.09	-	-36.5	-193
ETHANE	4.55	1.2135	-25.9	-
PROPANE	2.72	0.7467	-23.0	-
ISOBUTANE	0.43	0.1399	-22.8	-
N-BUTANE	0.80	0.2519	-22.5	-
ISOPENTANE	0.23	0.0800	-22.3	-
N-PENTANE	0.21	0.0760	-22.3	-
HEXANES+	0.39	0.1639	-	-
TOTAL	100.00	2.6719		

BTU @ 60 DEG F

14.65
 GROSS DRY REAL = **1135.3** /scf
 GROSS SATURATED REAL = **1115.5** /scf

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F) **0.6426**
 GRAVITY (LB/SCF) **0.04905**
 COMPRESSIBILITY FACTOR : **0.99730**

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 #: **202502080-05-A-359**
 The Isotopic Data File #: **DIG-039058**

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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