



ISOTOPIC NATURAL GAS ANALYSIS

PRIMARY DB KEY: **05-103-10810** NAME/DESCRIP : **PCU 297-15A2**
 LEASE #: **INTER CSG**
 FIELD/AREA:
 PROJECT NO. : **202505078** ANALYSIS NO. : **03**
 COMPANY NAME : **QB ENERGY OPERATING, LLC** ANALYSIS DATE: **MAY 23, 2025 00:00**
 OFFICE / BRANCH: **PARACHUTE, CO** SAMPLE DATE : **MAY 2, 2025**
 CUSTOMER REF: **TO:**
 PRODUCER : **QB ENERGY OPERATING LLC** EFFECTIVE DATE:

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

SAMPLE CYCLE: SAMPLE TYPE:
 SAMPLE PRES. : **467** psig PROBE :
 FLOW PRES. : psig CYLINDER NO. : **ECA-744**
 LAB PRES: psig SAMPLED BY : **NICK CROY**
 SAMPLE TEMP. : °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	1.42	-	-	-
OXYGEN/ARGON	0.00	-	-	-
NITROGEN	0.08	-	-	-
CO2	0.02	-	0.0	-
METHANE	90.89	-	-37.1	-175
ETHANE	4.81	1.2821	-26.2	-
PROPANE	1.62	0.4417	-24.8	-
ISOBUTANE	0.33	0.1109	-24.3	-
N-BUTANE	0.34	0.1099	-24.2	-
ISOPENTANE	0.14	0.0470	-23.1	-
N-PENTANE	0.10	0.0360	-24.0	-
HEXANES+	0.24	0.1209	-	-
TOTAL	100.00	2.1485		

BTU @ 60 DEG F

14.65

GROSS DRY REAL = **1093.3** /scf
 GROSS SATURATED REAL = **1074.2** /scf

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F) 0.6083
 GRAVITY (LB/SCF) 0.04643
 COMPRESSIBILITY FACTOR : 0.99760

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 #: **202505078-03-A-423**
 The Isotopic Data File #: **DIG-039755**

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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