



ISOTOPIC NATURAL GAS ANALYSIS

PRIMARY DB KEY: **05-045-21942** NAME/DESCRIP : **300108685 HMU 6-12DD (J6SEB)**
 LEASE #: **COC-55972E** **BRADEN HEAD**
 FIELD/AREA:

PROJECT NO. : **202504078** ANALYSIS NO. : **02**
 COMPANY NAME : **QB ENERGY OPERATING, LLC** ANALYSIS DATE: **APRIL 23, 2025 00:00**
 OFFICE / BRANCH: **PARACHUTE, CO** SAMPLE DATE : **APRIL 11, 2025**
 CUSTOMER REF: **TO:**
 PRODUCER : **QB ENERGY OPERATING LLC** EFFECTIVE DATE:

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

SAMPLE CYCLE: SAMPLE TYPE: **SPOT**
 SAMPLE PRES. : 162 psig PROBE :
 FLOW PRES. : psig CYLINDER NO. : **ECA-726**
 LAB PRES: psig SAMPLED BY : **MIKE KELLEY**
 SAMPLE TEMP. : 42 °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	0.00	-	-	-
OXYGEN/ARGON	0.00	-	-	-
NITROGEN	0.23	-	-	-
CO2	0.12	-	0.0	-
METHANE	93.06	-	-40.5	-174
ETHANE	4.40	1.1701	-29.4	-
PROPANE	1.21	0.3318	-27.2	-
ISOBUTANE	0.26	0.0879	-27.1	-
N-BUTANE	0.24	0.0749	-26.6	-
ISOPENTANE	0.11	0.0400	-26.6	-
N-PENTANE	0.07	0.0250	-27.2	-
HEXANES+	0.29	0.1169	-	-
TOTAL	100.00	1.8466		

BTU @ 60 DEG F

14.65
 GROSS DRY REAL = 1084.8 /scf
 GROSS SATURATED REAL = 1065.8 /scf

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F) 0.6071
 GRAVITY (LB/SCF) 0.04634
 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 #: **202504078-02-A-404**
 The Isotopic Data File #: **DIG-039551**

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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