



ISOTOPIC NATURAL GAS ANALYSIS

PRIMARY DB KEY: **05-045-13083** NAME/DESCRIP : **110170169 U2 UNOCAL 14B-9D**
 LEASE #: CASING
 FIELD/AREA: **GRAND VALLEY**

PROJECT NO. : **202511011** ANALYSIS NO. : **02**
 COMPANY NAME : **QB ENERGY OPERATING, LLC** ANALYSIS DATE: **NOVEMBER 17, 2025 00:00**
 OFFICE / BRANCH: **PARACHUTE, CO** SAMPLE DATE : **OCTOBER 29, 2025**
 CUSTOMER REF: TO:
 PRODUCER : **QB ENERGY OPERATING LLC** EFFECTIVE DATE:

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

SAMPLE CYCLE: SAMPLE TYPE: **SPOT**
 SAMPLE PRES. : **614** psig PROBE : **NO**
 FLOW PRES. : psig CYLINDER NO. : **ECA-816**
 LAB PRES: psig SAMPLED BY : **MIKE KELLEY**
 SAMPLE TEMP. : **52** °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	0.22	-	-	-
CO2	0.31	-	-9.6	-
METHANE	92.64	-	-38.0	-180
ETHANE	3.73	0.9944	-28.2	-
PROPANE	1.70	0.4637	-29.5	-
ISOBUTANE	0.29	0.0979	-28.8	-
N-BUTANE	0.49	0.1569	-30.8	-
ISOPENTANE	0.17	0.0580	-28.6	-
N-PENTANE	0.14	0.0510	-29.9	-
HEXANES+	0.29	0.1169	-	-
TOTAL	100.00	1.9388		

BTU @ 60 DEG F

14.65
 GROSS DRY REAL = **1095.5** /scf
 GROSS SATURATED REAL = **1076.3** /scf

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F) **0.6168**
 GRAVITY (LB/SCF) **0.04708**
 COMPRESSIBILITY FACTOR : **0.99750**

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 #: **202511011-02-A-563**
 The Isotopic Data File #: **DIG-042221**

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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