



ISOTOPIC NATURAL GAS ANALYSIS

PRIMARY DB KEY: **05-045-14501** NAME/DESCRIP : **110180266 M8 PUCKETT 41D-25D**
 LEASE #: CASING
 FIELD/AREA: **GRAND VALLEY**

PROJECT NO. : **202511015** ANALYSIS NO. : **02**
 COMPANY NAME : **QB ENERGY OPERATING, LLC** ANALYSIS DATE: **NOVEMBER 18, 2025 00:00**
 OFFICE / BRANCH: **PARACHUTE, CO** SAMPLE DATE : **OCTOBER 16, 2025**
 CUSTOMER REF: TO:
 PRODUCER : **QB ENERGY OPERATING LLC** EFFECTIVE DATE:

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

SAMPLE CYCLE: SAMPLE TYPE: **SPOT**
 SAMPLE PRES. : **622** psig PROBE : **NO**
 FLOW PRES. : psig CYLINDER NO. : **ECA-770**
 LAB PRES: psig SAMPLED BY : **MIKE KELLEY**
 SAMPLE TEMP. : **51** °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	1.22	-	-	-
OXYGEN/ARGON	0.00	-	-	-
NITROGEN	0.06	-	-	-
CO2	3.40	-	-4.9	-
METHANE	86.76	-	-37.2	-171
ETHANE	5.80	1.5460	-27.1	-
PROPANE	1.55	0.4287	-24.9	-
ISOBUTANE	0.36	0.1179	-25.5	-
N-BUTANE	0.31	0.0969	-24.1	-
ISOPENTANE	0.16	0.0550	-25.1	-
N-PENTANE	0.10	0.0360	0.0	-
HEXANES+	0.28	0.1169	-	-
TOTAL	100.00	2.3974		

BTU @ 60 DEG F

14.65
 GROSS DRY REAL = 1067.1 /scf
 GROSS SATURATED REAL = 1048.4 /scf

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F) 0.6461
 GRAVITY (LB/SCF) 0.04930
 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 #: **202511015-02-A-563**
 The Isotopic Data File #: **DIG-042229**

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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