



ISOTOPIC NATURAL GAS ANALYSIS

PRIMARY DB KEY: **05-045-09537** NAME/DESCRIP : **110220114 GASAWAY CNR 6243 699**
 LEASE #: **CASING**
 FIELD/AREA:

PROJECT NO. : **202411018** ANALYSIS NO. : **02**
 COMPANY NAME : **QB ENERGY OPERATING, LLC** ANALYSIS DATE: **NOVEMBER 13, 2024 00:00**
 OFFICE / BRANCH: **PARACHUTE, CO** SAMPLE DATE : **OCTOBER 31, 2024**
 CUSTOMER REF: TO:
 PRODUCER : **QB ENERGY OPERATING, LLC** EFFECTIVE DATE:

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

SAMPLE CYCLE: SAMPLE TYPE: **SPOT**
 SAMPLE PRES. : **998** psig PROBE : **NO**
 FLOW PRES. : psig CYLINDER NO. : **TBI-584**
 LAB PRES: psig SAMPLED BY : **ELDON KING**
 SAMPLE TEMP. : **48** °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	0.07	-	-	-
OXYGEN/ARGON	0.00	-	-	-
NITROGEN	0.12	-	-	-
CO2	1.16	-	-5.6	-
METHANE	88.73	-	-39.4	-191
ETHANE	6.76	1.8020	-28.7	-
PROPANE	2.05	0.5627	-26.2	-
ISOBUTANE	0.32	0.1079	-25.9	-
N-BUTANE	0.41	0.1289	-25.0	-
ISOPENTANE	0.15	0.0510	-24.1	-
N-PENTANE	0.08	0.0290	-24.8	-
HEXANES+	0.14	0.0780	-	-
TOTAL	100.00	2.7595		

BTU @ 60 DEG F

14.65
 GROSS DRY REAL = **1108.8** /scf
 GROSS SATURATED REAL = **1089.4** /scf

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F) 0.6375
 GRAVITY (LB/SCF) 0.04866
 COMPRESSIBILITY FACTOR : 0.99740

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 #: **202411018-02-A-278**
 The Isotopic Data File #: **DIG-037963**

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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