



ISOTOPIC NATURAL GAS ANALYSIS

PRIMARY DB KEY: **05-045-13973** NAME/DESCRIP : **110170058 GG7 CHEVRON 33A-7D**
 LEASE #: **200814** CASING

PROJECT NO. : **202412023** ANALYSIS NO. : **03**
 COMPANY NAME : **QB ENERGY OPERATING, LLC** ANALYSIS DATE: **DECEMBER 24, 2024 00:00**
 OFFICE / BRANCH: **PARACHUTE, CO** SAMPLE DATE : **DECEMBER 3, 2024 7:30**
 CUSTOMER REF: TO:
 PRODUCER : **QB ENERGY OPERATING, LLC** EFFECTIVE DATE:

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

SAMPLE CYCLE: SAMPLE TYPE: **SPOT**
 SAMPLE PRES. : **469** psig PROBE : **NO**
 FLOW PRES. : psig CYLINDER NO. : **ECA-749**
 LAB PRES: psig SAMPLED BY : **ALEX GALLEGOS**
 SAMPLE TEMP. : **23** °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	0.10	-	-	-
CO2	1.02	-	-7.0	-
METHANE	90.75	-	-38.5	-185
ETHANE	5.79	1.5460	-27.5	-
PROPANE	1.45	0.3977	-25.3	-
ISOBUTANE	0.30	0.0979	-24.9	-
N-BUTANE	0.26	0.0849	-24.1	-
ISOPENTANE	0.11	0.0360	-24.2	-
N-PENTANE	0.07	0.0250	-24.6	-
HEXANES+	0.13	0.0300	-	-
TOTAL	100.00	2.2175		

BTU @ 60 DEG F

14.65
 GROSS DRY REAL = **1084.4** /scf
 GROSS SATURATED REAL = **1065.4** /scf

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F) 0.6198
 GRAVITY (LB/SCF) 0.04730
 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 #: **202412023-03-A-297**
 The Isotopic Data File #: **DIG-038447**

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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