EMPACT

ISOTOPIC NATURAL GAS ANALYSIS

PRIMARY DB KEY:	**05-045-07856**	NAME/DESCRIP :	**UNOCAL 2 LOCATION: 335687, 14-9D**
LEASE #:			**SURFACE SAMPLE AT WELLHEAD**
FIELD/AREA:			
PROJECT NO. :	**202506130**	ANALYSIS NO. :	**03**
COMPANY NAME :	**QB ENERGY OPERATING, LLC**	ANALYSIS DATE:	JULY 09, 2025 00:00
OFFICE / BRANCH:	PARACHUTE, CO	SAMPLE DATE :	JUNE 23, 2025 11:28
CUSTOMER REF:		TO:	
PRODUCER :	QB ENERGY OPERATING, LLC	EFFECTIVE DATE:	
FIELD DATA			
SAMPLE CYCLE:		SAMPLE TYPE:	SPOT
SAMPLE PRES. :	psig	PROBE :	
FLOW PRES. :	psig	CYLINDER NO. :	1L TEDLAR
LAB PRES:	psig	SAMPLED BY :	DEREK HORN
SAMPLE TEMP. :	ºf	SAMPLING COMPANY:	QB ENERGY OPERATING, LLC
AMBIENT TEMP.:	ºf	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	2.43	-	-	-
NITROGEN	7.93	-	-	-
CO2	0.40	-	-22.0	-
METHANE	83.36	-	-35.9	-170
ETHANE	3.14	0.8372	-30.8	-
PROPANE	1.59	0.4366	-31.4	-
ISOBUTANE	0.27	0.0849	-30.1	-
N-BUTANE	0.47	0.1449	-31.1	-
ISOPENTANE	0.15	0.0510	-29.5	-
N-PENTANE	0.12	0.0430	-30.5	-
HEXANES+	0.15	0.0739	-	-
TOTAL	100.00	1.6715		

BTU @ 60 DEG F		**14.65**	
	GROSS DRY REAL =	979.2	**/scf**
	GROSS SATURATED REAL =	962.1	**/scf**

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F)	0.6544
GRAVITY (LB/SCF)	0.04995
COMPRESSIBILITY FACTOR :	0.99780

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 #: **202506130-03-A-459**
The Isotopic Data File #: **DIG-040329**

Note:Stable isotope results based on multi-point laboratory calibration
Presicion $\delta^{13}C$ < 0.5 ‰ **Precision δD < 5.0 ‰**
Values in red represent low peak heights. Interpret with caution.