



ISOTOPIC NATURAL GAS ANALYSIS

PRIMARY DB KEY: **05-077-09058** NAME/DESCRIP : **OP 15 PAD HYRUP #15-44C**
 LEASE #: **300108607** **BRADENHEAD**
 FIELD/AREA: **GRAND VALLEY - #31290**

PROJECT NO. : **202205091** ANALYSIS NO. : **01**
 COMPANY NAME : **CAERUS OIL & GAS LLC** ANALYSIS DATE: **MAY 27, 2022**
 OFFICE / BRANCH: **PARACHUTE, CO** SAMPLE DATE : **MAY 10, 2022 13:40**
 CUSTOMER REF: **TO:**
 PRODUCER : **CAERUS OIL & GAS LLC** EFFECTIVE DATE:

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

SAMPLE CYCLE: SAMPLE TYPE: **SPOT**
 SAMPLE PRES. : 203 psig PROBE : **NO**
 FLOW PRES. : psig CYLINDER NO. : **ECA-794**
 LAB PRES: psig SAMPLED BY : **MIKE KELLEY**
 SAMPLE TEMP. : 71 °f SAMPLING COMPANY: **CAERUS**
 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	0.01	-	-	-
OXYGEN/ARGON	0.00	-	-	-
NITROGEN	0.14	-	-	-
CO2	0.01	-	0.0	-
METHANE	93.37	-	-37.7	-178
ETHANE	4.57	1.2211	-26.8	-
PROPANE	1.11	0.3048	-24.5	-
ISOBUTANE	0.23	0.0749	-24.5	-
N-BUTANE	0.21	0.0660	-24.9	-
ISOPENTANE	0.09	0.0290	-23.2	-
N-PENTANE	0.06	0.0220	-25.0	-
HEXANES+	0.20	0.0819	-	-
TOTAL	100.00	1.7997		

BTU @ 60 DEG F

14.65
 GROSS DRY REAL = 1081.0 /scf
 GROSS SATURATED REAL = 1062.1 /scf

RELATIVE DENSITY (AIR=1 @14.696 PSIA 60F) 0.6016
 GRAVITY (LB/SCF) 0.04591
 COMPRESSIBILITY FACTOR : 0.99760

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 #: **202205091-01-H-299**
 The Isotopic Data File #: **DIG-027961**

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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