

GAS AND OIL ANALYTICAL SERVICES INC.

40 NE 46th ST  
OKLAHOMA CITY, OK 73105  
PHONE: 405-525-0577

LABORATORY REPORT NUMBER 151026  
EXTENDED GAS ANALYSIS

SWN	DATE SAMPLED 10/07/2015
BRET GRANBOUCHE	DATE RUN 10/20/2015
	STATION COSWWG1010

COMPONENT	MOLE %	GPM @ 14.696 PSIA	
HYDROGEN SULFIDE	0.0001		
NITROGEN	0.6660		
CARBON DIOXIDE	0.9590		
METHANE	76.7877		
ETHANE	9.0561	2.416	
PROPANE	5.9011	1.622	
ISO-BUTANE	1.1550	0.377	
N-BUTANE	3.1640	0.995	
ISO-PENTANE	0.5780	0.211	
N-PENTANE	0.6990	0.253	
CYCLOPENTANE	0.0822	0.024	
BENZENE	0.0328	0.009	
CYCLOHEXANE	0.0772	0.026	
N-HEXANE	0.1851	0.076	
OTHER HEXANES	0.3069	0.127	
METHYLCYCLOHEXANE	0.0663	0.027	
TOLUENE	0.0235	0.008	
N-HEPTANE	0.0525	0.024	
OTHER HEPTANES	0.1208	0.054	
ETHYLBENZENE	0.0019	0.001	
XYLENES	0.0067	0.003	
2 2 4 TRIMETHYLPENTANE	0.0000	0.000	
OTHER OCTANES PLUS	0.0781	0.042	
TOTAL	100.0000	6.295	
		14.65 PSIA	14.696 PSIA
TOTAL REAL BTU / CU. FT. (DRY)		1328.1	1332.3
TOTAL REAL BTU / CU. FT. (WET)		1304.9	1309.1

( ALL VALUES CALCULATED AT 60 DEG. F )

RELATIVE (REAL) DENSITY 0.7840

SAMPLED BY: SCOTT HUGGINS  
LOCATION: SANDWASH  
COUNTY/STATE: MOFFAT / CO  
PRES. PSIG 11  
TEMP(DEG F) 81  
CYLINDER NO. TM6-1483

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BENZENE = 328.0 PPMV

TOLUENE = 234.8 PPMV

ETHYLBENZENE = 18.9 PPMV

XYLENES = 67.1 PPMV

H2S = 1.0 PPMV

VALUES OBTAINED USING GPA STANDARD 2286