



OCD Received 10/29/2020

Well Name: SULLIVAN A 1F; BHD
 API #: API # 3004535372
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS200330
 Cust No: 35825-12360

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	SULLIVAN A 1F; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	37 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:	FEE	Ambient Temp:	80 DEG. F
Formation:	CH	Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3004535372	Sample Method:	Purge & Fill
	91118	Sample Date:	10/15/2020
	AREA 7 / RUN 705	Sample Time:	1.30 PM
Heat Trace:	N	Sampled By:	PAT HUDMAN
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6882	0.6736	0.0760	0.00	0.0067
CO2	0.0275	0.0269	0.0050	0.00	0.0004
Methane	88.5177	86.6350	15.0430	894.03	0.4903
Ethane	6.6630	6.5213	1.7860	117.92	0.0692
Propane	2.7341	2.6760	0.7550	68.79	0.0416
Iso-Butane	0.4576	0.4479	0.1500	14.88	0.0092
N-Butane	0.5669	0.5548	0.1790	18.49	0.0114
I-Pentane	0.1459	0.1428	0.0530	5.84	0.0036
N-Pentane	0.0864	0.0846	0.0310	3.46	0.0022
Hexane Plus	0.1127	0.1103	0.0500	5.94	0.0037
Total	100.0000	97.8732	18.1280	1129.35	0.6383

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0027	CYLINDER #:	5034
BTU/CU.FT IDEAL:	1132.0	CYLINDER PRESSURE:	38 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1135.0	ANALYSIS DATE:	10/16/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1115.3	ANALYSIS TIME:	07:58:21 AM
DRY BTU @ 15.025:	1157.7	ANALYSIS RUN BY:	SHYANN ELLEDGE
REAL SPECIFIC GRAVITY:	0.6397		

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500 Last Cal/Verify: 10/16/2020

GC Method: C6+ Gas



Well Name: SULLIVAN A 1F; CSG
 API #: API # 3004535372
 Source: CASING
 Sample Type: GAS
 Analysis No: HS200331
 Cust No: 35825-12365

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SULLIVAN A 1F; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: FEE
 Formation: CH
 Cust. Stn. No.: API # 3004535372
 91118

Source: CASING
 Well Flowing: Y
 Pressure: 66 PSIG
 Flow Temp: DEG. F
 Ambient Temp: 80 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 10/15/2020
 Sample Time: 1.35 PM
 Sampled By: PAT HUDMAN
 Sampled by (CO): HILCORP

AREA 7 / RUN 705

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3826	0.3787	0.0420	0.00	0.0037
CO2	1.3409	1.3274	0.2300	0.00	0.0204
Methane	78.3079	77.5174	13.3240	790.91	0.4337
Ethane	10.7893	10.6804	2.8960	190.94	0.1120
Propane	4.6715	4.6243	1.2920	117.54	0.0711
Iso-Butane	0.7943	0.7863	0.2610	25.83	0.0159
N-Butane	1.4184	1.4041	0.4490	46.27	0.0285
I-Pentane	0.5425	0.5370	0.1990	21.70	0.0135
N-Pentane	0.4571	0.4525	0.1660	18.32	0.0114
Hexane Plus	1.2955	1.2824	0.5800	68.29	0.0429
Total	100.0000	98.9905	19.4390	1279.81	0.7531

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0039
 BTU/CU.FT IDEAL: 1282.8
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1287.8
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1265.4
 DRY BTU @ 15.025: 1313.6
 REAL SPECIFIC GRAVITY: 0.7558

CYLINDER #: 6245
 CYLINDER PRESSURE: 64 PSIG
 ANALYSIS DATE: 10/16/2020
 ANALYSIS TIME: 08:10:30 AM
 ANALYSIS RUN BY: SHYANN ELLEDGE

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500 Last Cal/Verify: 10/16/2020

GC Method: C6+ Gas