



NMOCD REC'D
10/01/20

Well Name: SULLIVAN GAS COM D 1;
API #: API # 3004507733
Source: CASING
Sample Type: GAS
Analysis No: HS200315
Cust No: 35825-12380

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: SULLIVAN GAS COM D 1; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA: NMNM73872
Formation: DK
Cust. Stn. No.: API # 3004507733
75040
AREA 7 / RUN 705
Heat Trace: N
Remarks:

Source: CASING
Well Flowing: Y
Pressure: PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/22/2020
Sample Time: 8.15 AM
Sampled By: NATE NICHOLS
Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3535	0.3463	0.0390	0.00	0.0034
CO2	1.5568	1.5250	0.2670	0.00	0.0237
Methane	80.2905	78.6482	13.6590	810.93	0.4447
Ethane	9.9685	9.7646	2.6750	176.41	0.1035
Propane	3.8177	3.7396	1.0550	96.06	0.0581
Iso-Butane	0.7813	0.7653	0.2570	25.41	0.0157
N-Butane	1.1428	1.1194	0.3620	37.28	0.0229
I-Pentane	0.5201	0.5095	0.1910	20.81	0.0130
N-Pentane	0.3870	0.3791	0.1410	15.51	0.0096
Hexane Plus	1.1818	1.1576	0.5290	62.29	0.0391
Total	100.0000	97.9546	19.1750	1244.71	0.7337

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0037
BTU/CU.FT IDEAL: 1247.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1252.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1230.4
DRY BTU @ 15.025: 1277.3
REAL SPECIFIC GRAVITY: 0.7362

CYLINDER #: 7009
CYLINDER PRESSURE: 74 PSIG
ANALYSIS DATE: 09/26/2020
ANALYSIS TIME: 02:23:36 PM
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: 09/29/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SULLIVAN GAS COM D 1; CSG	CASING	09/29/2020
Stn. No.:	API # 3004507733	DK	35825-12380
Mtr. No.:	75040		

Smpl Date:	09/22/2020	07/10/2020
Test Date:	09/26/2020	07/14/2020
Run No:	HS200315	HS200077
Nitrogen:	0.3535	0.4674
CO2:	1.5568	0.5239
Methane:	80.2905	80.7810
Ethane:	9.9685	9.7809
Propane:	3.8177	4.5396
I-Butane:	0.7813	0.7626
N-Butane:	1.1428	1.2991
I-Pentane:	0.5201	0.5111
N-Pentane:	0.3870	0.4109
Hexane+:	1.1818	0.9235
BTU:	1252.2	1263.4
GPM:	19.1750	19.1750
SPG:	0.7362	0.7278



NMOCD REC'D
10/01/20

Well Name: SULLIVAN GAS COM D 1;
API #: API# 3004507733
Source: BRADENHEAD
Sample Type: GAS
Analysis No: HS200314
Cust No: 35825-12375

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: SULLIVAN GAS COM D 1; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA: NMNM73872
Formation: DK
Cust. Stn. No.: API# 3004507733
75040

AREA 7 / RUN 705

Heat Trace:

Remarks:

Source: BRADENHEAD
Well Flowing: Y
Pressure: 61 PSIA
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/22/2020
Sample Time: 8.30 AM
Sampled By: NATE NICHOLS
Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5186	0.5092	0.0570	0.00	0.0050
CO2	0.0167	0.0164	0.0030	0.00	0.0003
Methane	88.8218	87.2084	15.0950	897.10	0.4920
Ethane	6.4894	6.3715	1.7400	114.84	0.0674
Propane	2.5966	2.5494	0.7170	65.33	0.0395
Iso-Butane	0.4736	0.4650	0.1550	15.40	0.0095
N-Butane	0.5913	0.5806	0.1870	19.29	0.0119
I-Pentane	0.1870	0.1836	0.0690	7.48	0.0047
N-Pentane	0.1229	0.1207	0.0450	4.93	0.0031
Hexane Plus	0.1821	0.1788	0.0810	9.60	0.0060
Total	100.0000	98.1836	18.1490	1133.97	0.6393

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
BTU/CU.FT IDEAL: 1136.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1139.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1119.9
DRY BTU @ 15.025: 1162.5
REAL SPECIFIC GRAVITY: 0.6408

CYLINDER #: 6219
CYLINDER PRESSURE: 63 PSIG
ANALYSIS DATE: 09/26/2020
ANALYSIS TIME: 02:04:15 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: 09/29/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SULLIVAN GAS COM D 1; BHD	BRADENHEAD	09/29/2020
Stn. No.:	API# 3004507733	DK	35825-12375
Mtr. No.:	75040		

Smpl Date:	09/22/2020	07/10/2020
Test Date:	09/26/2020	07/14/2020
Run No:	HS200314	HS200076
Nitrogen:	0.5186	0.5254
CO2:	0.0167	0.0079
Methane:	88.8218	88.9546
Ethane:	6.4894	6.4431
Propane:	2.5966	2.5530
I-Butane:	0.4736	0.4654
N-Butane:	0.5913	0.5786
I-Pentane:	0.1870	0.1803
N-Pentane:	0.1229	0.1189
Hexane+:	0.1821	0.1728
BTU:	1139.7	1137.5
GPM:	18.1490	18.1300
SPG:	0.6408	0.6393