



NMOCD REC'D
9/24/20

Well Name: CULPEPPER MARTIN 1E;
API #: API #3004525114
Source: BRADENHEAD
Sample Type: GAS
Analysis No: HS200213
Cust No: 35825-12960

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: CULPEPPER MARTIN 1E; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA: FEE
Formation: MV / DK
Cust. Stn. No.: API #3004525114
3583930

Source: BRADENHEAD
Well Flowing: Y
Pressure: 110 PSIG
Flow Temp: DEG. F
Ambient Temp: 86 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/21/2020
Sample Time: 10.30 AM
Sampled By: DANIEL RIOS
Sampled by (CO): HILCORP

AREA 2 / RUN 201

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8004	0.7827	0.0880	0.00	0.0077
CO2	0.0019	0.0019	0.0000	0.00	0.0000
Methane	86.2307	84.3290	14.6570	870.93	0.4776
Ethane	7.2865	7.1258	1.9540	128.95	0.0756
Propane	4.0586	3.9691	1.1210	102.12	0.0618
Iso-Butane	0.5852	0.5723	0.1920	19.03	0.0117
N-Butane	0.6604	0.6458	0.2090	21.54	0.0133
I-Pentane	0.1468	0.1436	0.0540	5.87	0.0037
N-Pentane	0.1072	0.1048	0.0390	4.30	0.0027
Hexane Plus	0.1223	0.1196	0.0550	6.45	0.0040
Total	100.0000	97.7946	18.3690	1159.19	0.6582

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0029
BTU/CU.FT IDEAL: 1161.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1165.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1145.0
DRY BTU @ 15.025: 1188.6
REAL SPECIFIC GRAVITY: 0.6599

CYLINDER #: 6097
CYLINDER PRESSURE: 105 PSIG
ANALYSIS DATE: 08/25/2020
ANALYSIS TIME: 03:28:02 PM
ANALYSIS RUN BY: RICHARD WILSON

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: 09/17/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	CULPEPPER MARTIN 1E; BHD	BRADENHEAD	09/17/2020
Stn. No.:	API #3004525114	MV / DK	35825-12960
Mtr. No.:	3583930		

Smpl Date:	08/21/2020
Test Date:	08/25/2020
Run No:	HS200213
Nitrogen:	0.8004
CO2:	0.0019
Methane:	86.2307
Ethane:	7.2865
Propane:	4.0586
I-Butane:	0.5852
N-Butane:	0.6604
I-Pentane:	0.1468
N-Pentane:	0.1072
Hexane+:	0.1223
BTU:	1165.3
GPM:	18.3690
SPG:	0.6599



Well Name: CULPEPPER MARTIN 1E;
API #: API #3004525114
Source: CASING
Sample Type: GAS
Analysis No: HS200214
Cust No: 35825-12965

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: CULPEPPER MARTIN 1E; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA: FEE
Formation: MV / DK
Cust. Stn. No.: API #3004525114
3583930

AREA 2 / RUN 201

Heat Trace:

Remarks:

Source: CASING
Well Flowing: Y
Pressure: 51 PSIG
Flow Temp: DEG. F
Ambient Temp: 86 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/21/2020
Sample Time: 10.27 AM
Sampled By: DANIEL RIOS
Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2782	0.2712	0.0310	0.00	0.0027
CO2	2.2706	2.2133	0.3890	0.00	0.0345
Methane	78.8078	76.8177	13.4160	795.96	0.4365
Ethane	8.0011	7.7991	2.1490	141.60	0.0831
Propane	4.0046	3.9035	1.1080	100.76	0.0610
Iso-Butane	0.8777	0.8555	0.2880	28.54	0.0176
N-Butane	1.4855	1.4480	0.4700	48.46	0.0298
I-Pentane	0.8056	0.7853	0.2960	32.23	0.0201
N-Pentane	0.7239	0.7056	0.2630	29.02	0.0180
Hexane Plus	2.7450	2.6757	1.2290	144.69	0.0908
Total	100.0000	97.4749	19.6390	1321.26	0.7941

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0044
BTU/CU.FT IDEAL: 1324.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1330.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1307.1
DRY BTU @ 15.025: 1356.8
REAL SPECIFIC GRAVITY: 0.7973

CYLINDER #: 7044
CYLINDER PRESSURE: 27 PSIG
ANALYSIS DATE: 08/25/2020
ANALYSIS TIME: 04:15:50 PM
ANALYSIS RUN BY: RICHARD WILSON

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: 09/17/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	CULPEPPER MARTIN 1E; CSG	CASING	09/17/2020
Stn. No.:	API #3004525114	MV / DK	35825-12965
Mtr. No.:	3583930		

Smpl Date: 08/21/2020
Test Date: 08/25/2020
Run No: HS200214

Nitrogen: 0.2782
CO2: 2.2706
Methane: 78.8078
Ethane: 8.0011
Propane: 4.0046
I-Butane: 0.8777
N-Butane: 1.4855
I-Pentane: 0.8056
N-Pentane: 0.7239
Hexane+: 2.7450

BTU: 1330.2
GPM: 19.6390
SPG: 0.7973