



NMOCD REC'D
9/24/20

Well Name: CULPEPPER MARTIN 7C;
API #: API #3004530118
Source: BRADENHEAD
Sample Type: GAS
Analysis No: HS200216
Cust No: 35825-12975

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: CULPEPPER MARTIN 7C; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA: SF-078146
Formation: MV / DK
Cust. Stn. No.: API #3004530118
3627430

Source: BRADENHEAD
Well Flowing: Y
Pressure: 79 PSIG
Flow Temp: DEG. F
Ambient Temp: 92 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/21/2020
Sample Time: 11.48 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	0.5462	0.5438	0.0600	0.00	0.0053
CO2	0.0110	0.0110	0.0020	0.00	0.0002
Methane	88.9076	88.5129	15.1090	897.97	0.4925
Ethane	6.4606	6.4319	1.7320	114.33	0.0671
Propane	2.5668	2.5554	0.7090	64.58	0.0391
Iso-Butane	0.5049	0.5027	0.1660	16.42	0.0101
N-Butane	0.5483	0.5459	0.1730	17.89	0.0110
I-Pentane	0.1546	0.1539	0.0570	6.19	0.0039
N-Pentane	0.1047	0.1042	0.0380	4.20	0.0026
Hexane Plus	0.1953	0.1944	0.0870	10.29	0.0065
Total	100.0000	99.5561	18.1330	1131.87	0.6381

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
BTU/CU.FT IDEAL: 1134.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1137.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1117.8
DRY BTU @ 15.025: 1160.4
REAL SPECIFIC GRAVITY: 0.6396

CYLINDER #: 4123
CYLINDER PRESSURE: 32 PSIG
ANALYSIS DATE: 08/26/2020
ANALYSIS TIME: 11:08:01 AM
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 7C; BHD	BRADENHEAD	09/17/2020
Stn. No.:	API #3004530118	MV / DK	35825-12975
Mtr. No.:	3627430		

Smpl Date:	08/21/2020
Test Date:	08/26/2020
Run No:	HS200216
Nitrogen:	0.5462
CO2:	0.0110
Methane:	88.9076
Ethane:	6.4606
Propane:	2.5668
I-Butane:	0.5049
N-Butane:	0.5483
I-Pentane:	0.1546
N-Pentane:	0.1047
Hexane+:	0.1953
BTU:	1137.6
GPM:	18.1330
SPG:	0.6396



Well Name: CULPEPPER MARTIN 7C;
 API #: API #3004530118
 Source: CASING
 Sample Type: GAS
 Analysis No: HS200217
 Cust No: 35825-12980

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	CULPEPPER MARTIN 7C; CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	80 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:	SF-078146	Ambient Temp:	92 DEG. F
Formation:	MV / DK	Flow Rate:	MCF/D
Cust. Stn. No.:	API #3004530118	Sample Method:	Purge & Fill
	3627430	Sample Date:	08/21/2020
	AREA 2 / RUN 201	Sample Time:	11.45 AM
Heat Trace:		Sampled By:	DANIEL RIOS
Remarks:	SAMPLE CONTAINED SMALL AMOUNT OF CONDENSATE		

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5767	0.5660	0.0640	0.00	0.0056
CO2	0.9327	0.9154	0.1600	0.00	0.0142
Methane	79.9767	78.4972	13.6020	807.76	0.4430
Ethane	9.9769	9.7923	2.6770	176.56	0.1036
Propane	5.6303	5.5261	1.5560	141.66	0.0857
Iso-Butane	1.0068	0.9882	0.3310	32.74	0.0202
N-Butane	1.1473	1.1261	0.3630	37.43	0.0230
I-Pentane	0.3069	0.3012	0.1130	12.28	0.0076
N-Pentane	0.2037	0.1999	0.0740	8.17	0.0051
Hexane Plus	0.2420	0.2375	0.1080	12.76	0.0080
Total	100.0000	98.1499	19.0480	1229.36	0.7160

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0035	CYLINDER #:	6213
BTU/CU.FT IDEAL:	1232.2	CYLINDER PRESSURE:	78 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1236.5	ANALYSIS DATE:	08/26/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1215.0	ANALYSIS TIME:	10:23:32 AM
DRY BTU @ 15.025:	1261.3	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.7182		

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 7C; CSG	CASING	09/17/2020
Stn. No.:	API #3004530118	MV / DK	35825-12980
Mtr. No.:	3627430		

Smpl Date: 08/21/2020
Test Date: 08/26/2020
Run No: HS200217

Nitrogen: 0.5767
CO2: 0.9327
Methane: 79.9767
Ethane: 9.9769
Propane: 5.6303
I-Butane: 1.0068
N-Butane: 1.1473
I-Pentane: 0.3069
N-Pentane: 0.2037
Hexane+: 0.2420

BTU: 1236.5
GPM: 19.0480
SPG: 0.7182



Well Name: CULPEPPER MARTIN 7C;
 API #: API #3004530118
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS200218
 Cust No: 35825-12985

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: CULPEPPER MARTIN 7C; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: SF-078146
 Formation: MV / DK
 Cust. Stn. No.: API #3004530118
 3627430

Source: TUBING
 Well Flowing: Y
 Pressure: 79 PSIG
 Flow Temp: DEG. F
 Ambient Temp: 92 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 08/21/2020
 Sample Time: 11.40 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	0.2705	0.2666	0.0300	0.00	0.0026
CO2	1.2153	1.1977	0.2080	0.00	0.0185
Methane	78.6840	77.5465	13.3880	794.71	0.4358
Ethane	10.7338	10.5786	2.8810	189.96	0.1114
Propane	4.8062	4.7367	1.3290	120.93	0.0732
Iso-Butane	0.7780	0.7668	0.2560	25.30	0.0156
N-Butane	1.4272	1.4066	0.4520	46.56	0.0286
I-Pentane	0.5047	0.4974	0.1850	20.19	0.0126
N-Pentane	0.4139	0.4079	0.1510	16.59	0.0103
Hexane Plus	1.1664	1.1495	0.5220	61.48	0.0386
Total	100.0000	98.5543	19.4020	1275.72	0.7473

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0039
 BTU/CU.FT IDEAL: 1278.7
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1283.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1261.4
 DRY BTU @ 15.025: 1309.4
 REAL SPECIFIC GRAVITY: 0.7499

CYLINDER #: 4091
 CYLINDER PRESSURE: 76 PSIG
 ANALYSIS DATE: 08/26/2020
 ANALYSIS TIME: 10:55:49 AM
 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 7C; TBG	TUBING	09/17/2020
Stn. No.:	API #3004530118	MV / DK	35825-12985
Mtr. No.:	3627430		

Smpl Date:	08/21/2020
Test Date:	08/26/2020
Run No:	HS200218
Nitrogen:	0.2705
CO2:	1.2153
Methane:	78.6840
Ethane:	10.7338
Propane:	4.8062
I-Butane:	0.7780
N-Butane:	1.4272
I-Pentane:	0.5047
N-Pentane:	0.4139
Hexane+:	1.1664
BTU:	1283.7
GPM:	19.4020
SPG:	0.7499