



Well Name: MCCORD 12E; BHD
 API #: 3004526301
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS2021156
 Cust No: 35825-13870

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: MCCORD 12E; BHD
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: NMSF078214
 Formation:
 Cust. Stn. No.: 3004526301

Source: BRADENHEAD
 Well Flowing: Y
 Pressure: 70 PSIG
 Flow Temp: 90 DEG. F
 Ambient Temp: 90 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 07/23/2021
 Sample Time: 1.53 PM
 Sampled By: JACINTO C.
 Sampled by (CO): HILCORP

AREA 2 / RUN 0206

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	2.3001	1.8727	0.2540	0.00	0.0222
CO2	0.0036	0.0029	0.0010	0.00	0.0001
Methane	93.8018	76.3728	15.9330	947.40	0.5196
Ethane	2.4947	2.0312	0.6680	44.15	0.0259
Propane	0.7192	0.5856	0.1990	18.10	0.0109
Iso-Butane	0.1831	0.1491	0.0600	5.95	0.0037
N-Butane	0.1697	0.1382	0.0540	5.54	0.0034
I-Pentane	0.0695	0.0566	0.0250	2.78	0.0017
N-Pentane	0.0402	0.0327	0.0150	1.61	0.0010
Hexane Plus	0.2181	0.1776	0.0970	11.50	0.0072
Total	100.0000	81.4194	17.3060	1037.02	0.5958

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
 BTU/CU.FT IDEAL: 1039.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1041.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1023.6
 DRY BTU @ 15.025: 1062.6
 REAL SPECIFIC GRAVITY: 0.5968

CYLINDER #: 4199
 CYLINDER PRESSURE: 60 PSIG
 ANALYSIS DATE: 08/02/2021
 ANALYSIS TIME: 04:44:38 PM
 ANALYSIS RUN BY: SHYANN GALLEGOS

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: 08/06/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: MCCORD 12E; BHD
Stn. No.: 3004526301
Mtr. No.:

BRADENHEAD

08/06/2021
35825-13870

Smpl Date: 07/23/2021
Test Date: 08/02/2021
Run No: HS2021156

Nitrogen: 2.3001
CO2: 0.0036
Methane: 93.8018
Ethane: 2.4947
Propane: 0.7192
I-Butane: 0.1831
N-Butane: 0.1697
I-Pentane: 0.0695
N-Pentane: 0.0402
Hexane+: 0.2181

BTU: 1041.7
GPM: 17.3060
SPG: 0.5968



Well Name: MCCORD 12E; CSG

API #: 3004526301

Source: CASING

Sample Type: GAS

Analysis No: HS2021157

Cust No: 35825-13875

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: MCCORD 12E; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: NMSF078214
 Formation:
 Cust. Stn. No.: 3004526301

Source: CASING
 Well Flowing: Y
 Pressure: 167 PSIG
 Flow Temp: 90 DEG. F
 Ambient Temp: DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 07/23/2021
 Sample Time: 1.55 PM
 Sampled By: JACINTO C.
 Sampled by (CO): HILCORP

AREA 2 / RUN 0206

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8602	0.8617	0.0950	0.00	0.0083
CO2	1.0878	1.0897	0.1860	0.00	0.0165
Methane	77.4106	77.5466	13.1710	781.85	0.4288
Ethane	10.8441	10.8632	2.9110	191.91	0.1126
Propane	5.5796	5.5894	1.5430	140.39	0.0849
Iso-Butane	0.7760	0.7774	0.2550	25.23	0.0156
N-Butane	1.5536	1.5563	0.4920	50.68	0.0312
I-Pentane	0.4755	0.4763	0.1750	19.02	0.0118
N-Pentane	0.4413	0.4421	0.1610	17.69	0.0110
Hexane Plus	0.9713	0.9730	0.4350	51.20	0.0321
Total	100.0000	100.1757	19.4240	1277.97	0.7529

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0039
 BTU/CU.FT IDEAL: 1280.9
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1285.9
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1263.5
 DRY BTU @ 15.025: 1311.7
 REAL SPECIFIC GRAVITY: 0.7555

CYLINDER #: 6087
 CYLINDER PRESSURE: 157 PSIG
 ANALYSIS DATE: 08/02/2021
 ANALYSIS TIME: 04:33:00 PM
 ANALYSIS RUN BY: PATRICIA KING

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: 08/06/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: MCCORD 12E; CSG
Stn. No.: 3004526301
Mtr. No.:

CASING

08/06/2021
35825-13875

Smpl Date: 07/23/2021
Test Date: 08/02/2021
Run No: HS2021157

Nitrogen: 0.8602
CO2: 1.0878
Methane: 77.4106
Ethane: 10.8441
Propane: 5.5796
I-Butane: 0.7760
N-Butane: 1.5536
I-Pentane: 0.4755
N-Pentane: 0.4413
Hexane+: 0.9713

BTU: 1285.9
GPM: 19.4240
SPG: 0.7555



Well Name: MCCORD 12E; TBG

API #: 3004526301

Source: TUBING

Sample Type: GAS

Analysis No: HS2021158

Cust No: 35825-13880

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: MCCORD 12E; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: NMSF078214
 Formation:
 Cust. Stn. No.: 3004526301

Source: TUBING
 Well Flowing: Y
 Pressure: 151 PSIG
 Flow Temp: 90 DEG. F
 Ambient Temp: 90 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 07/23/2021
 Sample Time: 1.52 PM
 Sampled By: JACINTO C.
 Sampled by (CO): HILCORP

AREA 2 / RUN 0206

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8859	0.8891	0.0980	0.00	0.0086
CO2	1.0895	1.0934	0.1870	0.00	0.0166
Methane	79.0130	79.2975	13.4400	798.03	0.4377
Ethane	10.5332	10.5711	2.8260	186.41	0.1094
Propane	5.1219	5.1403	1.4160	128.87	0.0780
Iso-Butane	0.7178	0.7204	0.2360	23.34	0.0144
N-Butane	1.3215	1.3263	0.4180	43.11	0.0265
I-Pentane	0.3805	0.3819	0.1400	15.22	0.0095
N-Pentane	0.3349	0.3361	0.1220	13.43	0.0083
Hexane Plus	0.6018	0.6040	0.2690	31.72	0.0199
Total	100.0000	100.3601	19.1520	1240.13	0.7288

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
 BTU/CU.FT IDEAL: 1243.0
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1247.5
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1225.8
 DRY BTU @ 15.025: 1272.5
 REAL SPECIFIC GRAVITY: 0.7311

CYLINDER #: 7005
 CYLINDER PRESSURE: 141 PSIG
 ANALYSIS DATE: 08/02/2021
 ANALYSIS TIME: 04:21:11 PM
 ANALYSIS RUN BY: PATRICIA KING

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: 08/06/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	MCCORD 12E; TBG	TUBING	08/06/2021
Stn. No.:	3004526301		35825-13880
Mtr. No.:			

Smpl Date: 07/23/2021
Test Date: 08/02/2021
Run No: HS2021158

Nitrogen: 0.8859
CO2: 1.0895
Methane: 79.0130
Ethane: 10.5332
Propane: 5.1219
I-Butane: 0.7178
N-Butane: 1.3215
I-Pentane: 0.3805
N-Pentane: 0.3349
Hexane+: 0.6018

BTU: 1247.5
GPM: 19.1520
SPG: 0.7311

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 40765

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 40765
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	None	8/18/2021