



Well Name: HUERFANO UNIT 165; BHD

API #: 3004520037

Source: BRADENHEAD

Sample Type: GAS

Analysis No: HS20240063

Cust No: 35825-15710

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: HUERFANO UNIT 165; BHD
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation:
 Cust. Stn. No.: 3004520037

Source: BRADENHEAD
 Well Flowing: Y
 Pressure: 145 PSIG
 Flow Temp: 50 DEG. F
 Ambient Temp: 65 DEG. F
 Flow Rate: 10 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 05/01/2024
 Sample Time: 9.37 AM
 Sampled By: DIRK SCANLAN
 Sampled by (CO): HILCORP

AREA 6 / RUN 0610

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.0390	1.0270	0.1150	0.00	0.0100
CO2	0.3458	0.3418	0.0590	0.00	0.0053
Methane	90.4367	89.3903	15.3690	913.41	0.5009
Ethane	4.0049	3.9586	1.0740	70.87	0.0416
Propane	2.2810	2.2546	0.6300	57.39	0.0347
Iso-Butane	0.6345	0.6272	0.2080	20.63	0.0127
N-Butane	0.5621	0.5556	0.1780	18.34	0.0113
I-Pentane	0.2471	0.2442	0.0910	9.89	0.0062
N-Pentane	0.1327	0.1312	0.0480	5.32	0.0033
Hexane Plus	0.3162	0.3125	0.1410	16.67	0.0105
Total	100.0000	98.8430	17.9130	1112.52	0.6365

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
 BTU/CU.FT IDEAL: 1115.1
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1118.0
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1098.5
 DRY BTU @ 15.025: 1140.4
 REAL SPECIFIC GRAVITY: 0.6379

CYLINDER #: 52
 CYLINDER PRESSURE: 22 PSIG
 ANALYSIS DATE: 05/08/2024
 ANALYSIS TIME: 10:58:32 AM
 ANALYSIS RUN BY: ALEXIS MITCHELL

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: 05/13/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	HUERFANO UNIT 165; BHD	BRADENHEAD	05/13/2024
Stn. No.:	3004520037		35825-15710
Mtr. No.:			

Smpl Date: 05/01/2024
Test Date: 05/08/2024
Run No: HS20240063

Nitrogen: 1.0390
CO2: 0.3458
Methane: 90.4367
Ethane: 4.0049
Propane: 2.2810
I-Butane: 0.6345
N-Butane: 0.5621
I-Pentane: 0.2471
N-Pentane: 0.1327
Hexane+: 0.3162

BTU: 1118.0
GPM: 17.9130
SPG: 0.6379



Well Name: HUERFANO UNIT 165; CSG

API #: 3004520037

Source: CASING

Sample Type: GAS

Analysis No: HS20240064

Cust No: 35825-15715

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: HUERFANO UNIT 165; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: SAN JUAN
 Formation: DK
 Cust. Stn. No.: 3004520037

Source: CASING
 Well Flowing: Y
 Pressure: 145 PSIG
 Flow Temp: 50 DEG. F
 Ambient Temp: 65 DEG. F
 Flow Rate: 10 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 05/01/2024
 Sample Time: 9.35 AM
 Sampled By: DIRK SCANLAN
 Sampled by (CO): HILCORP

AREA 6 / RUN 0610

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.0365	1.0255	0.1140	0.00	0.0100
CO2	0.3703	0.3664	0.0630	0.00	0.0056
Methane	90.3859	89.4274	15.3610	912.90	0.5006
Ethane	4.0026	3.9602	1.0730	70.83	0.0416
Propane	2.2793	2.2551	0.6290	57.35	0.0347
Iso-Butane	0.6336	0.6269	0.2080	20.60	0.0127
N-Butane	0.5620	0.5560	0.1780	18.33	0.0113
I-Pentane	0.2479	0.2453	0.0910	9.92	0.0062
N-Pentane	0.1323	0.1309	0.0480	5.30	0.0033
Hexane Plus	0.3496	0.3459	0.1560	18.43	0.0116
Total	100.0000	98.9396	17.9210	1113.67	0.6376

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
 BTU/CU.FT IDEAL: 1116.2
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1119.3
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1099.8
 DRY BTU @ 15.025: 1141.7
 REAL SPECIFIC GRAVITY: 0.6391

CYLINDER #: 1870
 CYLINDER PRESSURE: 145 PSIG
 ANALYSIS DATE: 05/08/2024
 ANALYSIS TIME: 11:05:28 AM
 ANALYSIS RUN BY: ALEXIS MITCHELL

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: 05/13/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	HUERFANO UNIT 165; CSG	CASING	05/13/2024
Stn. No.:	3004520037	DK	35825-15715
Mtr. No.:			

Smpl Date: 05/01/2024
Test Date: 05/08/2024
Run No: HS20240064

Nitrogen:	1.0365
CO2:	0.3703
Methane:	90.3859
Ethane:	4.0026
Propane:	2.2793
I-Butane:	0.6336
N-Butane:	0.5620
I-Pentane:	0.2479
N-Pentane:	0.1323
Hexane+:	0.3496
BTU:	1119.3
GPM:	17.9210
SPG:	0.6391



Well Name: HUERFANO UNIT 165; TBG

API #: 3004520037

Source: TUBING

Sample Type: GAS

Analysis No: HS20240065

Cust No: 35825-15720

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: HUERFANO UNIT 165; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: SAN JUAN
 Formation: EUFAUCIO
 Cust. Stn. No.: 3004520037

Source: TUBING
 Well Flowing: Y
 Pressure: 145 PSIG
 Flow Temp: 50 DEG. F
 Ambient Temp: 65 DEG. F
 Flow Rate: 10 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 05/01/2024
 Sample Time: 9.30 AM
 Sampled By: DIRK SCANLAN
 Sampled by (CO): HILCORP

AREA 6 / RUN 0610

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.0358	1.0259	0.1140	0.00	0.0100
CO2	0.3592	0.3558	0.0610	0.00	0.0055
Methane	90.4173	89.5552	15.3660	913.21	0.5008
Ethane	4.0037	3.9655	1.0730	70.85	0.0416
Propane	2.2803	2.2586	0.6300	57.37	0.0347
Iso-Butane	0.6341	0.6281	0.2080	20.62	0.0127
N-Butane	0.5644	0.5590	0.1780	18.41	0.0113
I-Pentane	0.2460	0.2437	0.0900	9.84	0.0061
N-Pentane	0.1314	0.1301	0.0480	5.27	0.0033
Hexane Plus	0.3278	0.3247	0.1470	17.28	0.0108
Total	100.0000	99.0466	17.9150	1112.86	0.6369

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
 BTU/CU.FT IDEAL: 1115.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1118.3
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1098.8
 DRY BTU @ 15.025: 1140.7
 REAL SPECIFIC GRAVITY: 0.6383

CYLINDER #: 165
 CYLINDER PRESSURE: 20 PSIG
 ANALYSIS DATE: 05/08/2024
 ANALYSIS TIME: 11:13:21 AM
 ANALYSIS RUN BY: ALEXIS MITCHELL

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: 05/13/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: HUERFANO UNIT 165; TBG
Stn. No.: 3004520037
Mtr. No.:

TUBING
EUFAUCIO

05/13/2024
35825-15720

Smpl Date: 05/01/2024
Test Date: 05/08/2024
Run No: HS20240065

Nitrogen: 1.0358
CO2: 0.3592
Methane: 90.4173
Ethane: 4.0037
Propane: 2.2803
I-Butane: 0.6341
N-Butane: 0.5644
I-Pentane: 0.2460
N-Pentane: 0.1314
Hexane+: 0.3278

BTU: 1118.3
GPM: 17.9150
SPG: 0.6383

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 356449

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 356449
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	BH 145 psi at sampling - same gas all strings	8/27/2024