



Well Name: HUERFANO UNIT 159; BHD

API #: 3004520032

Source: BRADENHEAD

Sample Type: GAS

Analysis No: HS20240060

Cust No: 35825-15695

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: HUERFANO UNIT 159; BHD
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: NMSF077980A
 Formation:
 Cust. Stn. No.: 3004520032
 75-617-01

Source: BRADENHEAD
 Well Flowing: Y
 Pressure: 34 PSIG
 Flow Temp: 62 DEG. F
 Ambient Temp: 58 DEG. F
 Flow Rate: 78 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 05/01/2024
 Sample Time: 8.12 AM
 Sampled By: ASHTON HEMPHILL
 Sampled by (CO): HILCORP

AREA 6 / RUN 0608

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.9576	0.9576	0.1060	0.00	0.0093
CO2	0.9563	0.9563	0.1640	0.00	0.0145
Methane	73.7346	73.7328	12.5510	744.72	0.4084
Ethane	12.1477	12.1474	3.2620	214.98	0.1261
Propane	6.9224	6.9222	1.9150	174.17	0.1054
Iso-Butane	0.9674	0.9674	0.3180	31.46	0.0194
N-Butane	2.1074	2.1074	0.6670	68.75	0.0423
I-Pentane	0.6498	0.6498	0.2390	26.00	0.0162
N-Pentane	0.5960	0.5960	0.2170	23.89	0.0148
Hexane Plus	0.9608	0.9608	0.4300	50.64	0.0318
Total	100.0000	99.9977	19.8690	1334.61	0.7883

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0043
 BTU/CU.FT IDEAL: 1337.7
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1343.5
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1320.1
 DRY BTU @ 15.025: 1370.4
 REAL SPECIFIC GRAVITY: 0.7913

CYLINDER #: 4167
 CYLINDER PRESSURE: 19 PSIG
 ANALYSIS DATE: 05/08/2024
 ANALYSIS TIME: 01:10:52 PM
 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 159; BHD	BRADENHEAD	05/13/2024
Stn. No.:	3004520032		35825-15695
Mtr. No.:	75-617-01		

Smpl Date:	05/01/2024
Test Date:	05/08/2024
Run No:	HS20240060
Nitrogen:	0.9576
CO2:	0.9563
Methane:	73.7346
Ethane:	12.1477
Propane:	6.9224
I-Butane:	0.9674
N-Butane:	2.1074
I-Pentane:	0.6498
N-Pentane:	0.5960
Hexane+:	0.9608
BTU:	1343.5
GPM:	19.8690
SPG:	0.7913



Well Name: HUERFANO UNIT 159; CSG

API #: 3004520032

Source: CASING

Sample Type: GAS

Analysis No: HS20240061

Cust No: 35825-15700

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: HUERFANO UNIT 159; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: NMSF077980A
 Formation:
 Cust. Stn. No.: 3004520032
 75-617-01

Source: CASING
 Well Flowing: Y
 Pressure: 35 PSIG
 Flow Temp: 62 DEG. F
 Ambient Temp: 60 DEG. F
 Flow Rate: 77 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 05/01/2024
 Sample Time: 8.19 AM
 Sampled By: ASHTON HEMPHILL
 Sampled by (CO): HILCORP

Heat Trace: N
 AREA 6 / RUN 0608

Remarks: PRESSURED WITH HELIUM TO 30 LBS.

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.6891	0.3393	0.1860	0.00	0.0163
CO2	0.7009	0.1408	0.1200	0.00	0.0107
Methane	80.3063	16.1316	13.6610	811.09	0.4448
Ethane	7.9502	1.5970	2.1340	140.69	0.0825
Propane	4.9722	0.9988	1.3750	125.11	0.0757
Iso-Butane	0.5491	0.1103	0.1800	17.86	0.0110
N-Butane	1.6119	0.3238	0.5100	52.59	0.0323
I-Pentane	0.5098	0.1024	0.1870	20.40	0.0127
N-Pentane	0.5028	0.1010	0.1830	20.16	0.0125
Hexane Plus	1.2077	0.2426	0.5400	63.66	0.0400
Total	100.0000	20.0876	19.0760	1251.55	0.7386

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0037
 BTU/CU.FT IDEAL: 1254.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1259.1
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1237.2
 DRY BTU @ 15.025: 1284.3
 REAL SPECIFIC GRAVITY: 0.7411

CYLINDER #: 7051
 CYLINDER PRESSURE: PSIG
 ANALYSIS DATE: 05/08/2024
 ANALYSIS TIME: 11:59:06 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 159; CSG	CASING	05/13/2024
Stn. No.:	3004520032		35825-15700
Mtr. No.:	75-617-01		

Smpl Date: 05/01/2024
Test Date: 05/08/2024
Run No: HS20240061

Nitrogen: 1.6891
CO2: 0.7009
Methane: 80.3063
Ethane: 7.9502
Propane: 4.9722
I-Butane: 0.5491
N-Butane: 1.6119
I-Pentane: 0.5098
N-Pentane: 0.5028
Hexane+: 1.2077

BTU: 1259.1
GPM: 19.0760
SPG: 0.7411



Well Name: HUERFANO UNIT 159; TBG

API #: 3004520032

Source: TUBING

Sample Type: GAS

Analysis No: HS20240062

Cust No: 35825-15705

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: HUERFANO UNIT 159; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: NMSF077980A
 Formation:
 Cust. Stn. No.: 3004520032
 75-617-01

Source: TUBING
 Well Flowing: Y
 Pressure: 35 PSIG
 Flow Temp: 60 DEG. F
 Ambient Temp: 60 DEG. F
 Flow Rate: 77 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 05/01/2024
 Sample Time: 8.19 AM
 Sampled By: ASHTON HEMPHILL
 Sampled by (CO): HILCORP

AREA 6 / RUN 0608

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.7934	0.7949	0.0880	0.00	0.0077
CO2	1.1359	1.1381	0.1950	0.00	0.0173
Methane	72.5468	72.6876	12.3490	732.72	0.4018
Ethane	13.4851	13.5113	3.6210	238.65	0.1400
Propane	7.2759	7.2900	2.0130	183.07	0.1108
Iso-Butane	1.0084	1.0104	0.3310	32.79	0.0202
N-Butane	1.9968	2.0007	0.6320	65.14	0.0401
I-Pentane	0.5329	0.5339	0.1960	21.32	0.0133
N-Pentane	0.3708	0.3715	0.1350	14.86	0.0092
Hexane Plus	0.8540	0.8557	0.3820	45.01	0.0283
Total	100.0000	100.1941	19.9420	1333.57	0.7886

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0043
 BTU/CU.FT IDEAL: 1336.7
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1342.4
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1319.0
 DRY BTU @ 15.025: 1369.3
 REAL SPECIFIC GRAVITY: 0.7917

CYLINDER #: 4077
 CYLINDER PRESSURE: 75 PSIG
 ANALYSIS DATE: 05/08/2024
 ANALYSIS TIME: 11:49:41 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 159; TBG	TUBING	05/13/2024
Stn. No.:	3004520032		35825-15705
Mtr. No.:	75-617-01		

Smpl Date:	05/01/2024
Test Date:	05/08/2024
Run No:	HS20240062
Nitrogen:	0.7934
CO2:	1.1359
Methane:	72.5468
Ethane:	13.4851
Propane:	7.2759
I-Butane:	1.0084
N-Butane:	1.9968
I-Pentane:	0.5329
N-Pentane:	0.3708
Hexane+:	0.8540
BTU:	1342.4
GPM:	19.9420
SPG:	0.7917

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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 348396

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 348396
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	similar gas	8/27/2024