



Well Name: HUERFANITO UNIT 153;
 API #: 3004529386
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20240151
 Cust No: 35825-15910

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	HUERFANITO UNIT 153; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	7.9 PSIG
Location:		Flow Temp:	82 DEG. F
Lease/PA/CA:	E-53792	Ambient Temp:	82 DEG. F
Formation:		Flow Rate:	54 MCF/D
Cust. Stn. No.:	3004529386	Sample Method:	Purge & Fill
	99-408	Sample Date:	06/26/2024
	AREA 9 / RUN 0903	Sample Time:	11.25 AM
Heat Trace:	N	Sampled By:	KEITH HORTON
Remarks:	PRESSURED WITH HELIUM TO 30 LBS.	Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1591	0.0556	0.0180	0.00	0.0015
CO2	0.9621	0.3362	0.1650	0.00	0.0146
Methane	90.3561	31.5744	15.3540	912.60	0.5005
Ethane	6.2671	2.1900	1.6800	110.91	0.0651
Propane	1.2769	0.4462	0.3530	32.13	0.0194
Iso-Butane	0.2870	0.1003	0.0940	9.33	0.0058
N-Butane	0.1374	0.0480	0.0430	4.48	0.0028
I-Pentane	0.0638	0.0223	0.0230	2.55	0.0016
N-Pentane	0.0292	0.0102	0.0110	1.17	0.0007
Hexane Plus	0.4613	0.1612	0.2060	24.32	0.0153
Total	100.0000	34.9444	17.9470	1097.49	0.6272

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0026	CYLINDER #:	2090
BTU/CU.FT IDEAL:	1100.0	CYLINDER PRESSURE:	PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1102.9	ANALYSIS DATE:	07/01/2024
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1083.7	ANALYSIS TIME:	03:11:33 AM
DRY BTU @ 15.025:	1125.0	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.6286		

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: 07/03/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	HUERFANITO UNIT 153; BHD	BRADENHEAD	07/03/2024
Stn. No.:	3004529386		35825-15910
Mtr. No.:	99-408		

Smpl Date:	06/26/2024	05/31/2024
Test Date:	07/01/2024	06/06/2024
Run No:	HS20240151	HS20240128
Nitrogen:	0.1591	0.2078
CO2:	0.9621	1.0365
Methane:	90.3561	90.6142
Ethane:	6.2671	6.0001
Propane:	1.2769	1.4299
I-Butane:	0.2870	0.3220
N-Butane:	0.1374	0.1651
I-Pentane:	0.0638	0.0705
N-Pentane:	0.0292	0.0327
Hexane+:	0.4613	0.1212
BTU:	1102.9	1089.0
GPM:	17.9470	17.8490
SPG:	0.6286	0.6214



Well Name: HUERFANITO UNIT 153;
 API #: 3004529386
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20240152
 Cust No: 35825-15980

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	HUERFANITO UNIT 153; CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	9 PSIG
Location:		Flow Temp:	82 DEG. F
Lease/PA/CA:	E-5379-2	Ambient Temp:	82 DEG. F
Formation:	FRC	Flow Rate:	54 MCF/D
Cust. Stn. No.:	3004529386	Sample Method:	Purge & Fill
	ELB99408	Sample Date:	06/26/2024
	AREA 9 / RUN 0903	Sample Time:	11.46 AM
Heat Trace:	N	Sampled By:	KEITH HORTON
Remarks:	PRESSURED WITH HELIUM TO 30 LBS.	Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1543	0.0524	0.0170	0.00	0.0015
CO2	1.6207	0.5504	0.2770	0.00	0.0246
Methane	89.9946	30.5628	15.2910	908.95	0.4985
Ethane	6.4728	2.1982	1.7350	114.55	0.0672
Propane	1.1531	0.3916	0.3180	29.01	0.0176
Iso-Butane	0.2585	0.0878	0.0850	8.41	0.0052
N-Butane	0.1166	0.0396	0.0370	3.80	0.0023
I-Pentane	0.0554	0.0188	0.0200	2.22	0.0014
N-Pentane	0.0212	0.0072	0.0080	0.85	0.0005
Hexane Plus	0.1528	0.0519	0.0680	8.05	0.0051
Total	100.0000	33.9607	17.8560	1075.84	0.6238

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0025	CYLINDER #:	2040
BTU/CU.FT IDEAL:	1078.3	CYLINDER PRESSURE:	PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1081.0	ANALYSIS DATE:	07/01/2024
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1062.2	ANALYSIS TIME:	03:27:14 PM
DRY BTU @ 15.025:	1102.6	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.6252		

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: 07/03/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	HUERFANITO UNIT 153; CSG	CASING	07/03/2024
Stn. No.:	3004529386	FRC	35825-15980
Mtr. No.:	ELB99408		

Smpl Date: 06/26/2024
Test Date: 07/01/2024
Run No: HS20240152

Nitrogen: 0.1543
CO2: 1.6207
Methane: 89.9946
Ethane: 6.4728
Propane: 1.1531
I-Butane: 0.2585
N-Butane: 0.1166
I-Pentane: 0.0554
N-Pentane: 0.0212
Hexane+: 0.1528

BTU: 1081.0
GPM: 17.8560
SPG: 0.6252



Well Name: HUERFANITO UNIT 153;
 API #: 3004529386
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20240153
 Cust No: 35825-15985

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	HUERFANITO UNIT 153; TBG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	8 PSIG
Location:		Flow Temp:	82 DEG. F
Lease/PA/CA:		Ambient Temp:	82 DEG. F
Formation:	FRC	Flow Rate:	54 MCF/D
Cust. Stn. No.:	3004529386	Sample Method:	Purge & Fill
	ELB 99408	Sample Date:	06/26/2024
	AREA 9 / RUN 0903	Sample Time:	11.37 AM
Heat Trace:	N	Sampled By:	KEITH HORTON
Remarks:	PRESSURED WITH HELIUM TO 30 LBS.	Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4482	0.1887	0.0490	0.00	0.0043
CO2	1.0200	0.4294	0.1750	0.00	0.0155
Methane	87.2217	36.7196	14.8260	880.94	0.4831
Ethane	7.3004	3.0734	1.9580	129.20	0.0758
Propane	2.2250	0.9367	0.6150	55.98	0.0339
Iso-Butane	0.4755	0.2002	0.1560	15.46	0.0095
N-Butane	0.4886	0.2057	0.1540	15.94	0.0098
I-Pentane	0.2145	0.0903	0.0790	8.58	0.0053
N-Pentane	0.1325	0.0558	0.0480	5.31	0.0033
Hexane Plus	0.4736	0.1994	0.2120	24.96	0.0157
Total	100.0000	42.0992	18.2720	1136.38	0.6563

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0029	CYLINDER #:	2037
BTU/CU.FT IDEAL:	1139.0	CYLINDER PRESSURE:	PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1142.3	ANALYSIS DATE:	07/01/2024
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1122.4	ANALYSIS TIME:	03:19:42 AM
DRY BTU @ 15.025:	1165.2	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.6579		

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: 07/03/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	HUERFANITO UNIT 153; TBG	TUBING	07/03/2024
Stn. No.:	3004529386	FRC	35825-15985
Mtr. No.:	ELB 99408		

Smpl Date: 06/26/2024
Test Date: 07/01/2024
Run No: HS20240153

Nitrogen: 0.4482
CO2: 1.0200
Methane: 87.2217
Ethane: 7.3004
Propane: 2.2250
I-Butane: 0.4755
N-Butane: 0.4886
I-Pentane: 0.2145
N-Pentane: 0.1325
Hexane+: 0.4736

BTU: 1142.3
GPM: 18.2720
SPG: 0.6579

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 361077

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 361077
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	production casing and bradenhead gas the same	7/9/2024