



Well Name: UTE MOUNTAIN UTE #40;
 API #: API # 3004529354
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20220044
 Cust No: 35825-11195

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: UTE MOUNTAIN UTE #40; BHD
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: I-22-IND-2772
 Formation:
 Cust. Stn. No.: API # 3004529354

Source: BRADENHEAD
 Well Flowing: N
 Pressure: 92 PSIG
 Flow Temp: DEG. F
 Ambient Temp: 74 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 04/27/2022
 Sample Time: 11.40 AM
 Sampled By: KEVIN A.
 Sampled by (CO): HILCORP

AREA 2 / RUN 0200

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	2.1852	1.7244	0.2410	0.00	0.0211
CO2	0.0411	0.0324	0.0070	0.00	0.0006
Methane	91.3865	72.1160	15.5260	923.00	0.5062
Ethane	3.9547	3.1208	1.0600	69.99	0.0411
Propane	1.4812	1.1689	0.4090	37.27	0.0226
Iso-Butane	0.2200	0.1736	0.0720	7.15	0.0044
N-Butane	0.3685	0.2908	0.1160	12.02	0.0074
I-Pentane	0.1187	0.0937	0.0440	4.75	0.0030
N-Pentane	0.0885	0.0698	0.0320	3.55	0.0022
Hexane Plus	0.1556	0.1228	0.0700	8.20	0.0051
Total	100.0000	78.9132	17.5770	1065.93	0.6137

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0024
 BTU/CU.FT IDEAL: 1068.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1071.0
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1052.4
 DRY BTU @ 15.025: 1092.4
 REAL SPECIFIC GRAVITY: 0.6149

CYLINDER #: 4063
 CYLINDER PRESSURE: 44 PSIG
 ANALYSIS DATE: 05/02/2022
 ANALYSIS TIME: 04:19:39 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: 05/06/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	UTE MOUNTAIN UTE #40; BHD	BRADENHEAD	05/06/2022
Stn. No.:	API # 3004529354		35825-11195
Mtr. No.:			

Smpl Date:	04/27/2022	04/27/2021	05/14/2019
Test Date:	05/02/2022	05/04/2021	05/20/2019
Run No:	HS20220044	HS2021065	HS190065
Nitrogen:	2.1852	5.0943	3.1376
CO2:	0.0411	0.0505	0.0864
Methane:	91.3865	87.7927	90.2159
Ethane:	3.9547	4.1250	3.8964
Propane:	1.4812	1.5955	1.3900
I-Butane:	0.2200	0.2384	0.2052
N-Butane:	0.3685	0.4547	0.3377
I-Pentane:	0.1187	0.1614	0.1305
N-Pentane:	0.0885	0.1362	0.1305
Hexane+:	0.1556	0.3513	0.4698
BTU:	1071.0	1057.8	1073.1
GPM:	17.5770	17.5200	17.5950
SPG:	0.6149	0.6377	0.6272



Well Name: UTE MOUNTAIN UTE #40;
 API #: API # 3004529354
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20220045
 Cust No: 35825-11200

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: UTE MOUNTAIN UTE #40; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: I-22-IND-2772
 Formation:
 Cust. Stn. No.: API # 3004529354

Source: CASING
 Well Flowing:
 Pressure: 1047 PSIG
 Flow Temp: DEG. F
 Ambient Temp: 74 DEG. F
 Flow Rate: MCF/D
 Sample Method:
 Sample Date: 04/27/2022
 Sample Time: 11.40 AM
 Sampled By: KEVIN A.
 Sampled by (CO): HILCORP

AREA 2 / RUN 0200

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.3933	1.3778	0.1540	0.00	0.0135
CO2	0.3936	0.3892	0.0670	0.00	0.0060
Methane	90.7325	89.7224	15.4180	916.40	0.5026
Ethane	4.2752	4.2276	1.1460	75.66	0.0444
Propane	1.6118	1.5939	0.4450	40.55	0.0245
Iso-Butane	0.3650	0.3609	0.1200	11.87	0.0073
N-Butane	0.5159	0.5102	0.1630	16.83	0.0104
I-Pentane	0.2010	0.1988	0.0740	8.04	0.0050
N-Pentane	0.1580	0.1562	0.0570	6.33	0.0039
Hexane Plus	0.3537	0.3498	0.1580	18.64	0.0117
Total	100.0000	98.8868	17.8020	1094.33	0.6293

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
 BTU/CU.FT IDEAL: 1096.9
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1099.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1080.6
 DRY BTU @ 15.025: 1121.7
 REAL SPECIFIC GRAVITY: 0.6307

CYLINDER #: 6055
 CYLINDER PRESSURE: 217 PSIG
 ANALYSIS DATE: 05/03/2022
 ANALYSIS TIME: 08:21:16 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: 05/06/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	UTE MOUNTAIN UTE #40; CSG	CASING	05/06/2022
Stn. No.:	API # 3004529354		35825-11200
Mtr. No.:			

Smpl Date:	04/27/2022	04/27/2021	05/14/2019
Test Date:	05/03/2022	05/04/2021	05/20/2019
Run No:	HS20220045	HS2021066	HS190066
Nitrogen:	1.3933	1.1618	1.4712
CO2:	0.3936	0.4090	0.3301
Methane:	90.7325	90.5200	90.6223
Ethane:	4.2752	4.5539	4.3224
Propane:	1.6118	1.6785	1.5739
I-Butane:	0.3650	0.3723	0.3741
N-Butane:	0.5159	0.5338	0.5158
I-Pentane:	0.2010	0.2072	0.2074
N-Pentane:	0.1580	0.1645	0.1592
Hexane+:	0.3537	0.3990	0.4236
BTU:	1099.7	1107.9	1102.8
GPM:	17.8020	17.8700	17.8200
SPG:	0.6307	0.6337	0.6324



Well Name: UTE MOUNTAIN UTE #40;
 API #: API # 3004529354
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20220046
 Cust No: 35825-11205

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: UTE MOUNTAIN UTE #40; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: I-22-IND-2772
 Formation:
 Cust. Stn. No.: API # 3004529354

Source: TUBING
 Well Flowing: N
 Pressure: 1047 PSIG
 Flow Temp: DEG. F
 Ambient Temp: DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 04/27/2022
 Sample Time: 11.40 AM
 Sampled By: KEVIN A.
 Sampled by (CO): HILCORP

AREA 2 / RUN 0200

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.3631	1.3403	0.1500	0.00	0.0132
CO2	11.1634	10.9763	1.9100	0.00	0.1696
Methane	84.0943	82.6852	14.2900	849.35	0.4658
Ethane	1.7140	1.6853	0.4590	30.33	0.0178
Propane	0.5615	0.5521	0.1550	14.13	0.0085
Iso-Butane	0.1969	0.1936	0.0650	6.40	0.0040
N-Butane	0.2322	0.2283	0.0730	7.58	0.0047
I-Pentane	0.1227	0.1206	0.0450	4.91	0.0031
N-Pentane	0.0871	0.0856	0.0320	3.49	0.0022
Hexane Plus	0.4648	0.4570	0.2080	24.50	0.0154
Total	100.0000	98.3243	17.3870	940.69	0.7042

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
 BTU/CU.FT IDEAL: 942.9
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 945.3
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 928.9
 DRY BTU @ 15.025: 964.2
 REAL SPECIFIC GRAVITY: 0.7057

CYLINDER #: 6104
 CYLINDER PRESSURE: 1046 PSIG
 ANALYSIS DATE: 05/03/2022
 ANALYSIS TIME: 09:37:51 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: 05/06/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	UTE MOUNTAIN UTE #40; TBG	TUBING	05/06/2022
Stn. No.:	API # 3004529354		35825-11205
Mtr. No.:			

Smpl Date:	04/27/2022	04/27/2021	05/14/2019
Test Date:	05/03/2022	05/04/2021	05/20/2019
Run No:	HS20220046	HS2021067	HS190067
Nitrogen:	1.3631	1.3764	1.3938
CO2:	11.1634	10.6941	9.5293
Methane:	84.0943	83.9399	84.7776
Ethane:	1.7140	1.8999	2.1961
Propane:	0.5615	0.7719	0.7779
I-Butane:	0.1969	0.2239	0.2196
N-Butane:	0.2322	0.2682	0.2847
I-Pentane:	0.1227	0.1494	0.1412
N-Pentane:	0.0871	0.1191	0.1045
Hexane+:	0.4648	0.5572	0.5753
BTU:	945.3	961.8	976.2
GPM:	17.3870	17.4740	17.5050
SPG:	0.7057	0.7089	0.6994

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

COMMENTS

Action 106592

COMMENTS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 106592
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

COMMENTS

Created By	Comment	Comment Date
mkuehling	FOR RECORD ONLY	6/14/2022

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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811 S. First St., Artesia, NM 88210
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District III
1000 Rio Brazos Rd., Aztec, NM 87410
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 106592

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 106592
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	None	6/14/2022