



Well Name: UTE #12; BHD
 API #: 4003511426
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20220025
 Cust No: 35825-14330

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	UTE #12; BHD	Well Flowing:	N
County/State:	SAN JUAN NM	Pressure:	PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	74 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	4003511426	Sample Method:	Purge & Fill
		Sample Date:	04/27/2022
		Sample Time:	12.18 PM
		Sampled By:	KEVIN AHLGRIM
		Sampled by (CO):	HILCORP

Heat Trace: AREA 2/0200

Remarks: PRESSURED WITH HELIUM TO 30 LBS.

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.7929	0.2281	0.0880	0.00	0.0077
CO2	1.7238	0.4959	0.2950	0.00	0.0262
Methane	86.2504	24.8118	14.6700	871.13	0.4777
Ethane	3.6910	1.0618	0.9900	65.32	0.0383
Propane	2.4118	0.6938	0.6670	60.68	0.0367
Iso-Butane	0.6938	0.1996	0.2280	22.56	0.0139
N-Butane	1.5389	0.4427	0.4870	50.20	0.0309
I-Pentane	0.7658	0.2203	0.2810	30.64	0.0191
N-Pentane	0.5200	0.1496	0.1890	20.85	0.0130
Hexane Plus	1.6116	0.4636	0.7210	84.95	0.0533
Total	100.0000	28.7672	18.6160	1206.33	0.7168

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0035	CYLINDER #:	4043
BTU/CU.FT IDEAL:	1209.1	CYLINDER PRESSURE:	2 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1213.4	ANALYSIS DATE:	05/03/2022
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1192.3	ANALYSIS TIME:	11:21:44 AM
DRY BTU @ 15.025:	1237.7	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.719		

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 #12; BHD	BRADENHEAD	05/06/2022
Stn. No.:	4003511426		35825-14330
Mtr. No.:			

Smpl Date: 04/27/2022
Test Date: 05/03/2022
Run No: HS20220025

Nitrogen: 0.7929
CO2: 1.7238
Methane: 86.2504
Ethane: 3.6910
Propane: 2.4118
I-Butane: 0.6938
N-Butane: 1.5389
I-Pentane: 0.7658
N-Pentane: 0.5200
Hexane+: 1.6116

BTU: 1213.4
GPM: 18.6160
SPG: 0.7190



Well Name: UTE 12; INT
 API #: 3004511426
 Source: INTERMEDIATE CASING
 Sample Type: GAS
 Analysis No: HS20220028
 Cust No: 35825-14320

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE CASING
Well Name:	UTE 12; INT	Well Flowing:	N
County/State:	SAN JUAN NM	Pressure:	2 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	74 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	3004511426	Sample Method:	Purge & Fill
		Sample Date:	04/27/2022
		Sample Time:	12.18 PM
	AREA 2/0200	Sampled By:	KEVIN AHLGRIM
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:	PRESSURED WITH HELIUM TO 30 LBS.		

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.1600	0.3594	0.1280	0.00	0.0112
CO2	0.8175	0.2533	0.1400	0.00	0.0124
Methane	87.1426	26.9998	14.8290	880.14	0.4827
Ethane	2.8699	0.8892	0.7700	50.79	0.0298
Propane	1.5121	0.4685	0.4180	38.05	0.0230
Iso-Butane	0.4754	0.1473	0.1560	15.46	0.0095
N-Butane	0.9424	0.2920	0.2980	30.74	0.0189
I-Pentane	0.5338	0.1654	0.1960	21.36	0.0133
N-Pentane	0.3957	0.1226	0.1440	15.86	0.0099
Hexane Plus	4.1506	1.2860	1.8580	218.78	0.1374
Total	100.0000	30.9835	18.9370	1271.18	0.7481

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.004	CYLINDER #:	7006
BTU/CU.FT IDEAL:	1274.1	CYLINDER PRESSURE:	PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1279.2	ANALYSIS DATE:	05/03/2022
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1256.9	ANALYSIS TIME:	11:01:52 AM
DRY BTU @ 15.025:	1304.8	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.7508		

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 12; INT	INTERMEDIATE CASING	05/06/2022
Stn. No.:	3004511426		35825-14320
Mtr. No.:			

Smpl Date: 04/27/2022
Test Date: 05/03/2022
Run No: HS20220028

Nitrogen: 1.1600
CO2: 0.8175
Methane: 87.1426
Ethane: 2.8699
Propane: 1.5121
I-Butane: 0.4754
N-Butane: 0.9424
I-Pentane: 0.5338
N-Pentane: 0.3957
Hexane+: 4.1506

BTU: 1279.2
GPM: 18.9370
SPG: 0.7508



Well Name: UTE 12; CSG

API #: 3004511426

Source: CASING

Sample Type: GAS

Analysis No: HS20220026

Cust No: 35825-14315

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: UTE 12; CSG

County/State: SAN JUAN NM

Location:

Lease/PA/CA:

Formation:

Cust. Stn. No.: 3004511426

Heat Trace: AREA 2/0200

Remarks: N

Source: CASING

Well Flowing: N

Pressure: 1243 PSIG

Flow Temp: DEG. F

Ambient Temp: 74 DEG. F

Flow Rate: MCF/D

Sample Method:

Sample Date: 04/27/2022

Sample Time: 12.18 PM

Sampled By: KEVIN AHLGRIM

Sampled by (CO): HILCORP

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.7259	0.7190	0.0800	0.00	0.0070
CO2	2.6617	2.6365	0.4550	0.00	0.0404
Methane	89.8383	88.9872	15.2660	907.37	0.4976
Ethane	4.0584	4.0200	1.0880	71.82	0.0421
Propane	1.1840	1.1728	0.3270	29.79	0.0180
Iso-Butane	0.3519	0.3486	0.1150	11.44	0.0071
N-Butane	0.3909	0.3872	0.1240	12.75	0.0078
I-Pentane	0.2021	0.2002	0.0740	8.09	0.0050
N-Pentane	0.1335	0.1322	0.0490	5.35	0.0033
Hexane Plus	0.4533	0.4490	0.2030	23.89	0.0150
Total	100.0000	99.0527	17.7810	1070.51	0.6435

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
 BTU/CU.FT IDEAL: 1073.0
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1075.8
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1057.1
 DRY BTU @ 15.025: 1097.3
 REAL SPECIFIC GRAVITY: 0.6449

CYLINDER #: 7010
 CYLINDER PRESSURE: 1197 PSIG
 ANALYSIS DATE: 05/03/2022
 ANALYSIS TIME: 10:54:12 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 12; CSG
Stn. No.: 3004511426
Mtr. No.:

CASING

05/06/2022
35825-14315

Smpl Date: 04/27/2022
Test Date: 05/03/2022
Run No: HS20220026

Nitrogen: 0.7259
CO2: 2.6617
Methane: 89.8383
Ethane: 4.0584
Propane: 1.1840
I-Butane: 0.3519
N-Butane: 0.3909
I-Pentane: 0.2021
N-Pentane: 0.1335
Hexane+: 0.4533

BTU: 1075.8
GPM: 17.7810
SPG: 0.6449



Well Name: UTE #12; TBG

API #: 3004511426

Source: TUBING

Sample Type: GAS

Analysis No: HS20220027

Cust No: 35825-14325

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: UTE #12; TBG

County/State: SAN JUAN NM

Location:

Lease/PA/CA:

Formation:

Cust. Stn. No.: 3004511426

AREA 2/0200

Heat Trace:

Remarks:

Source: TUBING

Well Flowing: N

Pressure: 1243 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: 12.18 PM

Sampled By: KEVIN AHLGRIM

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6501	0.6436	0.0720	0.00	0.0063
CO2	1.8226	1.8044	0.3120	0.00	0.0277
Methane	90.7437	89.8377	15.4180	916.51	0.5026
Ethane	4.1938	4.1519	1.1240	74.22	0.0435
Propane	1.2245	1.2123	0.3380	30.81	0.0186
Iso-Butane	0.3526	0.3491	0.1160	11.47	0.0071
N-Butane	0.3841	0.3803	0.1210	12.53	0.0077
I-Pentane	0.1834	0.1816	0.0670	7.34	0.0046
N-Pentane	0.1165	0.1153	0.0420	4.67	0.0029
Hexane Plus	0.3287	0.3254	0.1470	17.33	0.0109
Total	100.0000	99.0016	17.7570	1074.87	0.6319

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0025
 BTU/CU.FT IDEAL: 1077.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1080.1
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1061.3
 DRY BTU @ 15.025: 1101.7
 REAL SPECIFIC GRAVITY: 0.6333

CYLINDER #: 7009
 CYLINDER PRESSURE: 774 PSIG
 ANALYSIS DATE: 05/03/2022
 ANALYSIS TIME: 11:11:55 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 #12; TBG	TUBING	05/06/2022
Stn. No.:	3004511426		35825-14325
Mtr. No.:			

Smpl Date: 04/27/2022
Test Date: 05/03/2022
Run No: HS20220027

Nitrogen: 0.6501
CO2: 1.8226
Methane: 90.7437
Ethane: 4.1938
Propane: 1.2245
I-Butane: 0.3526
N-Butane: 0.3841
I-Pentane: 0.1834
N-Pentane: 0.1165
Hexane+: 0.3287

BTU: 1080.1
GPM: 17.7570
SPG: 0.6333

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 106598

COMMENTS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 106598
	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
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 106598

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 106598
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

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