Well Name: UTE MOUNTAIN UTE 107;
API #: 3004535307
Source: BRADENHEAD
Sample Type: GAS

Analysis No: HS20220056
Cust No: 35825-11955

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	UTE MOUNTAIN UTE 107; BHD	Well Flowing:	N
County/State:	SAN JUAN NM	Pressure:	109 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:	I-22-IND-2772	Ambient Temp:	60 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	3004535307	Sample Method:	Purge & Fill
	91901189	Sample Date:	04/28/2022
		Sample Time:	8.48 AM
	AREA 2 / RUN 200	Sampled By:	KEVIN AHLGRIM
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6923	0.6659	0.0760	0.00	0.0067
CO2	0.0751	0.0722	0.0130	0.00	0.0011
Methane	84.6148	81.3868	14.3860	854.61	0.4687
Ethane	8.5369	8.2112	2.2900	151.08	0.0886
Propane	3.5308	3.3961	0.9750	88.84	0.0538
Iso-Butane	0.5434	0.5227	0.1780	17.67	0.0109
N-Butane	0.9310	0.8955	0.2940	30.37	0.0187
I-Pentane	0.3147	0.3027	0.1150	12.59	0.0078
N-Pentane	0.2738	0.2634	0.1000	10.98	0.0068
Hexane Plus	0.4872	0.4686	0.2180	25.68	0.0161
Total	100.0000	96.1851	18.6450	1191.82	0.6793

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0031	CYLINDER #:	005
BTU/CU.FT IDEAL:	1194.6	CYLINDER PRESSURE:	18 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1198.3	ANALYIS DATE:	05/03/2022
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1177.4	ANALYIS TIME:	03:18:44 PM
DRY BTU @ 15.025:	1222.3	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6811		

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 107; BHD	BRADENHEAD	05/06/2022
Stn. No.:	3004535307		35825-11955
Mtr. No.:	91901189		

Smpl Date:	04/28/2022	08/23/2019
Test Date:	05/03/2022	08/23/2019
Run No:	HS20220056	HS190240
Nitrogen:	0.6923	1.6751
CO2:	0.0751	0.0132
Methane:	84.6148	84.4027
Ethane:	8.5369	8.5077
Propane:	3.5308	3.4641
I-Butane:	0.5434	0.5143
N-Butane:	0.9310	0.8495
I-Pentane:	0.3147	0.2330
N-Pentane:	0.2738	0.1823
Hexane+:	0.4872	0.1581
BTU:	1198.3	1165.7
GPM:	18.6450	18.4320
SPG:	0.6811	0.6696

Well Name: UTE MOUNTAIN UTE 107;
API #: 3004535307
Source: INTERMEDIATE CASING
Sample Type: GAS

Analysis No: HS20220057
Cust No: 35825-11965

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE CASING
Well Name:	UTE MOUNTAIN UTE 107; INT	Well Flowing:	N
County/State:	SAN JUAN NM	Pressure:	1 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:	I-22-IND-2772	Ambient Temp:	60 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	3004535307	Sample Method:	Purge & Fill
	91901189	Sample Date:	04/28/2022
		Sample Time:	8.48 AM
	AREA 2 / RUN 200	Sampled By:	KEVIN AHLGRIM
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:	PRESSURED WITH HELIUM TO 30 LBS.		

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.5943	0.3944	0.1760	0.00	0.0154
CO2	0.1168	0.0289	0.0200	0.00	0.0018
Methane	98.1261	24.2738	16.6640	991.07	0.5435
Ethane	0.0097	0.0024	0.0030	0.17	0.0001
Propane	0.0044	0.0011	0.0010	0.11	0.0001
Iso-Butane	0.0024	0.0006	0.0010	0.08	0.0000
N-Butane	0.0113	0.0028	0.0040	0.37	0.0002
I-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.1350	0.0334	0.0600	7.12	0.0045
Total	100.0000	24.7374	16.9290	998.92	0.5656

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.002	CYLINDER #:	551
BTU/CU.FT IDEAL:	1001.2	CYLINDER PRESSURE:	PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1003.2	ANALYIS DATE:	05/03/2022
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	985.7	ANALYIS TIME:	03:05:04 PM
DRY BTU @ 15.025:	1023.3	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.5665		

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 107; INT	INTERMEDIATE CASING	05/06/2022
Stn. No.:	3004535307		35825-11965
Mtr. No.:	91901189		

Smpl Date:	04/28/2022	08/23/2019
Test Date:	05/03/2022	08/23/2019
Run No:	HS20220057	HS190242
Nitrogen:	1.5943	88.3984
CO2:	0.1168	0.0911
Methane:	98.1261	9.9919
Ethane:	0.0097	0.3873
Propane:	0.0044	0.2128
I-Butane:	0.0024	0.0873
N-Butane:	0.0113	0.1217
I-Pentane:	0.0000	0.0918
N-Pentane:	0.0000	0.0551
Hexane+:	0.1350	0.5626
BTU:	1003.2	155.9
GPM:	16.9290	11.9730
SPG:	0.5665	0.9455

Well Name: UTE MOUNTAIN UTE 107;
API #: 3004535307
Source: CASING
Sample Type: GAS

Analysis No: HS20220058
Cust No: 35825-11960

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	UTE MOUNTAIN UTE 107; CSG	Well Flowing:	N
County/State:	SAN JUAN NM	Pressure:	23 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:	I-22-IND-2772	Ambient Temp:	60 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	3004535307	Sample Method:	Purge & Fill
	91901189	Sample Date:	04/28/2022
		Sample Time:	8.50 AM
	AREA 2 / RUN 200	Sampled By:	KEVIN AHLGRIM
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.3918	1.3603	0.1540	0.00	0.0135
CO2	0.1129	0.1103	0.0190	0.00	0.0017
Methane	89.6546	87.6268	15.2440	905.51	0.4966
Ethane	3.2468	3.1734	0.8710	57.46	0.0337
Propane	1.4244	1.3922	0.3940	35.84	0.0217
Iso-Butane	0.6073	0.5936	0.1990	19.75	0.0122
N-Butane	0.7026	0.6867	0.2220	22.92	0.0141
I-Pentane	0.4253	0.4157	0.1560	17.02	0.0106
N-Pentane	0.2780	0.2717	0.1010	11.14	0.0069
Hexane Plus	2.1563	2.1075	0.9640	113.66	0.0714
Total	100.0000	97.7382	18.3240	1183.30	0.6823

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0032	CYLINDER #:	101
BTU/CU.FT IDEAL:	1186.0	CYLINDER PRESSURE:	25 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1189.8	ANALYIS DATE:	05/03/2022
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1169.1	ANALYIS TIME:	02:46:47 PM
DRY BTU @ 15.025:	1213.6	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6843		

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 107; CSG	CASING	05/06/2022
Stn. No.:	3004535307		35825-11960
Mtr. No.:	91901189		

Smpl Date:	04/28/2022	08/23/2019
Test Date:	05/03/2022	08/23/2019
Run No:	HS20220058	HS190241
Nitrogen:	1.3918	1.2840
CO2:	0.1129	0.0071
Methane:	89.6546	91.3354
Ethane:	3.2468	3.3368
Propane:	1.4244	1.4677
I-Butane:	0.6073	0.6090
N-Butane:	0.7026	0.6877
I-Pentane:	0.4253	0.3994
N-Pentane:	0.2780	0.2511
Hexane+:	2.1563	0.6218
BTU:	1189.8	1125.2
GPM:	18.3240	17.8970
SPG:	0.6843	0.6397

Well Name: UTE MOUNTAIN UTE 107;
API #: 3004535307
Source: TUBING
Sample Type: GAS

Analysis No: HS20220059
Cust No: 35825-11970

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	UTE MOUNTAIN UTE 107; TBG	Well Flowing:	
County/State:	SAN JUAN NM	Pressure:	573 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:	I-22-IND-2772	Ambient Temp:	60 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	3004535307	Sample Method:	Purge & Fill
	91901189	Sample Date:	04/28/2022
		Sample Time:	9.05 AM
	AREA 2 / RUN 200	Sampled By:	KEVIN AHLGRIM
Heat Trace:		Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8189	0.8010	0.0900	0.00	0.0079
CO2	1.6101	1.5749	0.2750	0.00	0.0245
Methane	97.0504	94.9310	16.4830	980.21	0.5376
Ethane	0.3073	0.3006	0.0820	5.44	0.0032
Propane	0.0364	0.0356	0.0100	0.92	0.0006
Iso-Butane	0.0129	0.0126	0.0040	0.42	0.0003
N-Butane	0.0142	0.0139	0.0040	0.46	0.0003
I-Pentane	0.0116	0.0113	0.0040	0.46	0.0003
N-Pentane	0.0080	0.0078	0.0030	0.32	0.0002
Hexane Plus	0.1302	0.1274	0.0580	6.86	0.0043
Total	100.0000	97.8161	17.0130	995.09	0.5790

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0021	CYLINDER #:	058
BTU/CU.FT IDEAL:	997.4	CYLINDER PRESSURE:	528 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	999.5	ANALYIS DATE:	05/03/2022
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	982.1	ANALYIS TIME:	02:30:48 PM
DRY BTU @ 15.025:	1019.5	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.58		

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 107; TBG	TUBING	05/06/2022
Stn. No.:	3004535307		35825-11970
Mtr. No.:	91901189		

Smpl Date:	04/28/2022	08/23/2019
Test Date:	05/03/2022	08/23/2019
Run No:	HS20220059	HS190243
Nitrogen:	0.8189	1.0593
CO2:	1.6101	1.7190
Methane:	97.0504	96.6348
Ethane:	0.3073	0.3201
Propane:	0.0364	0.0619
I-Butane:	0.0129	0.0136
N-Butane:	0.0142	0.0214
I-Pentane:	0.0116	0.0112
N-Pentane:	0.0080	0.0105
Hexane+:	0.1302	0.1482
BTU:	999.5	997.4
GPM:	17.0130	17.0120
SPG:	0.5800	0.5830

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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 105402

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 105402
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	109 psi on bradenhead at time of sampling	9/20/2022