



Well Name: UTE INDIANS A #46; BHD

API #: API # 3004534327

Source: BRADENHEAD

Sample Type: GAS

Analysis No: HS2021059

Cust No: 35825-11165

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: UTE INDIANS A #46; BHD
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: 142060462
 Formation:
 Cust. Stn. No.: API # 3004534327

Source: BRADENHEAD
 Well Flowing: N
 Pressure: 191 PSIG
 Flow Temp: DEG. F
 Ambient Temp: 42 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 04/27/2021
 Sample Time: 8.20 AM
 Sampled By: DANIEL RIOS
 Sampled by (CO): HILCORP

AREA 2 / RUN 0202

Heat Trace:

Remarks: H2S

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.2146	1.1923	0.1340	0.00	0.0117
CO2	0.0040	0.0039	0.0010	0.00	0.0001
Methane	83.8057	82.2663	14.2480	846.44	0.4642
Ethane	8.6269	8.4684	2.3140	152.67	0.0896
Propane	4.3032	4.2242	1.1890	108.27	0.0655
Iso-Butane	0.4215	0.4138	0.1380	13.71	0.0085
N-Butane	1.0230	1.0042	0.3230	33.37	0.0205
I-Pentane	0.2364	0.2321	0.0870	9.46	0.0059
N-Pentane	0.1966	0.1930	0.0710	7.88	0.0049
Hexane Plus	0.1681	0.1650	0.0750	8.86	0.0056
Total	100.0000	98.1632	18.5800	1180.66	0.6764

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0031
 BTU/CU.FT IDEAL: 1183.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1187.1
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1166.4
 DRY BTU @ 15.025: 1210.9
 REAL SPECIFIC GRAVITY: 0.6783

CYLINDER #: 4221
 CYLINDER PRESSURE: 174 PSIG
 ANALYSIS DATE: 05/05/2021
 ANALYSIS TIME: 08:21:24 AM
 ANALYSIS RUN BY: SHYANN GALLEGOS

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: 05/05/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	UTE INDIANS A #46; BHD	BRADENHEAD	05/05/2021
Stn. No.:	API # 3004534327		35825-11165
Mtr. No.:			

Smpl Date:	04/27/2021	05/13/2019
Test Date:	05/05/2021	05/17/2019
Run No:	HS2021059	HS190059
Nitrogen:	1.2146	1.1840
CO2:	0.0040	0.0059
Methane:	83.8057	82.2898
Ethane:	8.6269	8.5828
Propane:	4.3032	5.1857
I-Butane:	0.4215	0.5924
N-Butane:	1.0230	1.4062
I-Pentane:	0.2364	0.3039
N-Pentane:	0.1966	0.2429
Hexane+:	0.1681	0.2064
BTU:	1187.1	1218.2
GPM:	18.5800	18.7900
SPG:	0.6783	0.6980



Well Name: UTE INDIANS A #46; CSG

API #: API # 3004534327

Source: CASING

Sample Type: GAS

Analysis No: HS2021060

Cust No: 35825-11170

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: UTE INDIANS A #46; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: 142060462
 Formation:
 Cust. Stn. No.: API # 3004534327

Source: CASING
 Well Flowing: N
 Pressure: 331 PSIG
 Flow Temp: 42 DEG. F
 Ambient Temp: DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 04/27/2021
 Sample Time: 8.21 AM
 Sampled By: DANIEL RIOS
 Sampled by (CO): HILCORP

AREA 2 / RUN 0202

Heat Trace:

Remarks: H2S

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.3107	1.2900	0.1440	0.00	0.0127
CO2	0.5851	0.5759	0.1000	0.00	0.0089
Methane	95.0481	93.5463	16.1460	959.99	0.5265
Ethane	1.5044	1.4806	0.4030	26.62	0.0156
Propane	0.5779	0.5688	0.1600	14.54	0.0088
Iso-Butane	0.1859	0.1830	0.0610	6.05	0.0037
N-Butane	0.2504	0.2464	0.0790	8.17	0.0050
I-Pentane	0.1337	0.1316	0.0490	5.35	0.0033
N-Pentane	0.1083	0.1066	0.0390	4.34	0.0027
Hexane Plus	0.2955	0.2908	0.1320	15.58	0.0098
Total	100.0000	98.4200	17.3130	1040.63	0.5970

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0023
 BTU/CU.FT IDEAL: 1043.0
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1045.4
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1027.2
 DRY BTU @ 15.025: 1066.3
 REAL SPECIFIC GRAVITY: 0.5982

CYLINDER #: 4240
 CYLINDER PRESSURE: 332 PSIG
 ANALYSIS DATE: 05/04/2021
 ANALYSIS TIME: 01:36:28 PM
 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: 05/05/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	UTE INDIANS A #46; CSG	CASING	05/05/2021
Stn. No.:	API # 3004534327		35825-11170
Mtr. No.:			

Smpl Date:	04/27/2021	05/13/2019
Test Date:	05/04/2021	05/17/2019
Run No:	HS2021060	HS190060
Nitrogen:	1.3107	1.3289
CO2:	0.5851	0.9295
Methane:	95.0481	94.2384
Ethane:	1.5044	1.4468
Propane:	0.5779	0.5482
I-Butane:	0.1859	0.1994
N-Butane:	0.2504	0.2851
I-Pentane:	0.1337	0.1784
N-Pentane:	0.1083	0.1558
Hexane+:	0.2955	0.6895
BTU:	1045.4	1061.7
GPM:	17.3130	17.4410
SPG:	0.5982	0.6144



Well Name: UTE INDIANS A #46; TBG

API #: API # 3004534327

Source: TUBING

Sample Type: GAS

Analysis No: HS2021061

Cust No: 35825-11175

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: UTE INDIANS A #46; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: 142060462
 Formation:
 Cust. Stn. No.: API # 3004534327

Source: TUBING
 Well Flowing: N
 Pressure: 329 PSIG
 Flow Temp: DEG. F
 Ambient Temp: 42 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 04/27/2021
 Sample Time: 8.22 AM
 Sampled By: DANIEL RIOS
 Sampled by (CO): HILCORP

AREA 2 / RUN 0202

Heat Trace:

Remarks: H2S

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.2407	1.2272	0.1370	0.00	0.0120
CO2	0.9009	0.8911	0.1540	0.00	0.0137
Methane	94.2573	93.2340	16.0120	952.00	0.5221
Ethane	1.5577	1.5408	0.4170	27.57	0.0162
Propane	0.9234	0.9134	0.2550	23.23	0.0141
Iso-Butane	0.2426	0.2400	0.0800	7.89	0.0049
N-Butane	0.2766	0.2736	0.0870	9.02	0.0056
I-Pentane	0.1504	0.1488	0.0550	6.02	0.0037
N-Pentane	0.1293	0.1279	0.0470	5.18	0.0032
Hexane Plus	0.3211	0.3176	0.1430	16.93	0.0106
Total	100.0000	98.9144	17.3870	1047.84	0.6060

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0023
 BTU/CU.FT IDEAL: 1050.3
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1052.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1034.4
 DRY BTU @ 15.025: 1073.8
 REAL SPECIFIC GRAVITY: 0.6072

CYLINDER #: 6155
 CYLINDER PRESSURE: 166 PSIG
 ANALYSIS DATE: 05/04/2021
 ANALYSIS TIME: 11:05:46 AM
 ANALYSIS RUN BY: SHYANN GALLEGOS

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: 05/05/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	UTE INDIANS A #46; TBG	TUBING	05/05/2021
Stn. No.:	API # 3004534327		35825-11175
Mtr. No.:			

Smpl Date:	04/27/2021	05/13/2019
Test Date:	05/04/2021	05/17/2019
Run No:	HS2021061	HS190061
Nitrogen:	1.2407	1.4633
CO2:	0.9009	2.8813
Methane:	94.2573	92.4934
Ethane:	1.5577	1.4264
Propane:	0.9234	0.3875
I-Butane:	0.2426	0.1269
N-Butane:	0.2766	0.1929
I-Pentane:	0.1504	0.1308
N-Pentane:	0.1293	0.1415
Hexane+:	0.3211	0.7560
BTU:	1052.7	1035.2
GPM:	17.3870	17.3970
SPG:	0.6072	0.6304

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District IV
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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 27319

CONDITIONS OF APPROVAL

Operator:	HILCORP ENERGY COMPANY	1111 Travis Street	Houston, TX77002	OGRID:	372171	Action Number:	27319	Action Type:	GAS ANALYSIS
OCD Reviewer	Condition								
mkuehling	None								