



Well Name: UTE INDIANS A #46; BHD

API #: API # 3004534327

Source: BRADENHEAD

Sample Type: GAS

Analysis No: HS20220013

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: BIA142060462

Formation: DK

Cust. Stn. No.: API # 3004534327

52900026

AREA 2 / RUN 0202

Heat Trace: N

Remarks:

Source: BRADENHEAD

Well Flowing: N

Pressure: 196 PSIG

Flow Temp: 65 DEG. F

Ambient Temp: 65 DEG. F

Flow Rate: 0 MCF/D

Sample Method: Purge & Fill

Sample Date: 04/20/2022

Sample Time: 12.08 PM

Sampled By: VICTOR R.

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.6131	1.5843	0.1780	0.00	0.0156
CO2	0.0054	0.0053	0.0010	0.00	0.0001
Methane	84.1996	82.6941	14.3140	850.42	0.4664
Ethane	7.4846	7.3508	2.0070	132.45	0.0777
Propane	4.6431	4.5601	1.2830	116.83	0.0707
Iso-Butane	0.5005	0.4916	0.1640	16.28	0.0100
N-Butane	1.0259	1.0076	0.3240	33.47	0.0206
I-Pentane	0.2040	0.2004	0.0750	8.16	0.0051
N-Pentane	0.1658	0.1628	0.0600	6.65	0.0041
Hexane Plus	0.1580	0.1552	0.0710	8.33	0.0052
Total	100.0000	98.2122	18.4770	1172.58	0.6755

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
 BTU/CU.FT IDEAL: 1175.3
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1178.8
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1158.3
 DRY BTU @ 15.025: 1202.4
 REAL SPECIFIC GRAVITY: 0.6773

CYLINDER #: 6094
 CYLINDER PRESSURE: 175 PSIG
 ANALYSIS DATE: 04/25/2022
 ANALYSIS TIME: 11:15:42 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: 04/29/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	UTE INDIANS A #46; BHD	BRADENHEAD	04/29/2022
Stn. No.:	API # 3004534327	DK	35825-11165
Mtr. No.:	52900026		

Smpl Date:	04/20/2022	04/27/2021	05/13/2019
Test Date:	04/25/2022	05/05/2021	05/17/2019
Run No:	HS20220013	HS2021059	HS190059
Nitrogen:	1.6131	1.2146	1.1840
CO2:	0.0054	0.0040	0.0059
Methane:	84.1996	83.8057	82.2898
Ethane:	7.4846	8.6269	8.5828
Propane:	4.6431	4.3032	5.1857
I-Butane:	0.5005	0.4215	0.5924
N-Butane:	1.0259	1.0230	1.4062
I-Pentane:	0.2040	0.2364	0.3039
N-Pentane:	0.1658	0.1966	0.2429
Hexane+:	0.1580	0.1681	0.2064
BTU:	1178.8	1187.1	1218.2
GPM:	18.4770	18.5800	18.7900
SPG:	0.6773	0.6783	0.6980



Well Name: UTE INDIANS A #46; CSG

API #: 3004534327

Source: CASING

Sample Type: GAS

Analysis No: HS20220014

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: BIA142060462

Formation: DK

Cust. Stn. No.: 3004534327

52900026

AREA 2 / RUN 0202

Heat Trace: N

Remarks:

Source: CASING

Well Flowing: N

Pressure: 350 PSIG

Flow Temp: 65 DEG. F

Ambient Temp: 65 DEG. F

Flow Rate: 0 MCF/D

Sample Method:

Sample Date: 04/20/2022

Sample Time: 10.12 AM

Sampled By: VICTOR R.

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.2799	1.2792	0.1410	0.00	0.0124
CO2	0.4306	0.4304	0.0740	0.00	0.0065
Methane	95.3429	95.2926	16.1970	962.96	0.5281
Ethane	1.4573	1.4565	0.3910	25.79	0.0151
Propane	0.5145	0.5142	0.1420	12.95	0.0078
Iso-Butane	0.1662	0.1661	0.0540	5.40	0.0033
N-Butane	0.2382	0.2381	0.0750	7.77	0.0048
I-Pentane	0.1276	0.1275	0.0470	5.11	0.0032
N-Pentane	0.1043	0.1042	0.0380	4.18	0.0026
Hexane Plus	0.3385	0.3383	0.1510	17.84	0.0112
Total	100.0000	99.9471	17.3100	1042.00	0.5951

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0023
 BTU/CU.FT IDEAL: 1044.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1046.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1028.5
 DRY BTU @ 15.025: 1067.7
 REAL SPECIFIC GRAVITY: 0.5962

CYLINDER #: 6158
 CYLINDER PRESSURE: 330 PSIG
 ANALYSIS DATE: 04/25/2022
 ANALYSIS TIME: 10:21:53 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: 04/29/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	UTE INDIANS A #46; CSG	CASING	04/29/2022
Stn. No.:	3004534327	DK	35825-11170
Mtr. No.:	52900026		

Smpl Date:	04/20/2022	04/27/2021	05/13/2019
Test Date:	04/25/2022	05/04/2021	05/17/2019
Run No:	HS20220014	HS2021060	HS190060
Nitrogen:	1.2799	1.3107	1.3289
CO2:	0.4306	0.5851	0.9295
Methane:	95.3429	95.0481	94.2384
Ethane:	1.4573	1.5044	1.4468
Propane:	0.5145	0.5779	0.5482
I-Butane:	0.1662	0.1859	0.1994
N-Butane:	0.2382	0.2504	0.2851
I-Pentane:	0.1276	0.1337	0.1784
N-Pentane:	0.1043	0.1083	0.1558
Hexane+:	0.3385	0.2955	0.6895
BTU:	1046.7	1045.4	1061.7
GPM:	17.3100	17.3130	17.4410
SPG:	0.5962	0.5982	0.6144



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Farmington, NM 87401
(505) 325-6622

Analysis No: HS20220015
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: BIA142060462
Formation: DK
Cust. Stn. No.: API # 3004534327
52900026
AREA 2 / RUN 0202

Source: TUBIING
Well Flowing: N
Pressure: 348 PSIG
Flow Temp: 65 DEG. F
Ambient Temp: 65 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 04/20/2022
Sample Time: 12.10 PM
Sampled By: VICTOR R.
Sampled by (CO): HILCORP

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.2160	1.2122	0.1340	0.00	0.0118
CO2	0.8849	0.8821	0.1510	0.00	0.0134
Methane	94.1807	93.8876	16.0010	951.23	0.5217
Ethane	1.5584	1.5536	0.4180	27.58	0.0162
Propane	0.7950	0.7925	0.2190	20.00	0.0121
Iso-Butane	0.2070	0.2064	0.0680	6.73	0.0042
N-Butane	0.2868	0.2859	0.0910	9.36	0.0058
I-Pentane	0.1676	0.1671	0.0610	6.71	0.0042
N-Pentane	0.1466	0.1461	0.0530	5.88	0.0037
Hexane Plus	0.5570	0.5553	0.2490	29.36	0.0184
Total	100.0000	99.6888	17.4450	1056.84	0.6113

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0024
BTU/CU.FT IDEAL: 1059.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1061.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1043.3
DRY BTU @ 15.025: 1083.1
REAL SPECIFIC GRAVITY: 0.6126

CYLINDER #: 4158
CYLINDER PRESSURE: 71 PSIG
ANALYSIS DATE: 04/25/2022
ANALYSIS TIME: 10:34:17 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: 04/29/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	UTE INDIANS A #46; TBG	TUBIING	04/29/2022
Stn. No.:	API # 3004534327	DK	35825-11175
Mtr. No.:	52900026		

Smpl Date:	04/20/2022	04/27/2021	05/13/2019
Test Date:	04/25/2022	05/04/2021	05/17/2019
Run No:	HS20220015	HS2021061	HS190061
Nitrogen:	1.2160	1.2407	1.4633
CO2:	0.8849	0.9009	2.8813
Methane:	94.1807	94.2573	92.4934
Ethane:	1.5584	1.5577	1.4264
Propane:	0.7950	0.9234	0.3875
I-Butane:	0.2070	0.2426	0.1269
N-Butane:	0.2868	0.2766	0.1929
I-Pentane:	0.1676	0.1504	0.1308
N-Pentane:	0.1466	0.1293	0.1415
Hexane+:	0.5570	0.3211	0.7560
BTU:	1061.8	1052.7	1035.2
GPM:	17.4450	17.3870	17.3970
SPG:	0.6126	0.6072	0.6304

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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 103351

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 103351
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	BH 196 psi at time of sampling	9/19/2022