Well Name: UTE INDIANS A #55; BHD
API #: API # 3004534824
Source: BRADENHEAD
Sample Type: GAS

Analysis No: HS2021062
Cust No: 35825-10800

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	UTE INDIANS A #55; BHD	Well Flowing:	N
County/State:	SAN JUAN NM	Pressure:	52 PSIG
Location:		Flow Temp:	45 DEG. F
Lease/PA/CA:	142060462	Ambient Temp:	DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3004534824	Sample Method:	Purge & Fill
		Sample Date:	04/27/2021
		Sample Time:	10.20 AM
	AREA 2 / RUN 0200	Sampled By:	DANIEL RIOS
Heat Trace:		Sampled by (CO):	HILCORP
Remarks:	H2S		

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.7097	1.3340	0.1890	0.00	0.0165
CO2	0.0160	0.0125	0.0030	0.00	0.0002
Methane	84.2001	65.6962	14.3140	850.42	0.4664
Ethane	7.6625	5.9786	2.0550	135.60	0.0796
Propane	4.4486	3.4710	1.2290	111.93	0.0677
Iso-Butane	0.4096	0.3196	0.1340	13.32	0.0082
N-Butane	0.9902	0.7726	0.3130	32.30	0.0199
I-Pentane	0.1865	0.1455	0.0680	7.46	0.0046
N-Pentane	0.1501	0.1171	0.0550	6.02	0.0037
Hexane Plus	0.2267	0.1769	0.1010	11.95	0.0075
Total	100.0000	78.0240	18.4610	1169.01	0.6744

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

COMPRESSIBLITY FACTOR (1/Z):	1.003	CYLINDER #:	4121
BTU/CU.FT IDEAL:	1171.7	CYLINDER PRESSURE:	48 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1175.2	ANALYIS DATE:	05/04/2021
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1154.8	ANALYIS TIME:	03:45:07 PM
DRY BTU @ 15.025:	1198.7	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6762		

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 #55; BHD	BRADENHEAD	05/05/2021
Stn. No.:	API # 3004534824		35825-10800
Mtr. No.:			

Smpl Date:	04/27/2021	09/05/2018
Test Date:	05/04/2021	09/11/2018
Run No:	HS2021062	HS180197
Nitrogen:	1.7097	1.6269
CO2:	0.0160	0.0137
Methane:	84.2001	86.7107
Ethane:	7.6625	6.5590
Propane:	4.4486	3.5452
I-Butane:	0.4096	0.3367
N-Butane:	0.9902	0.7802
I-Pentane:	0.1865	0.1543
N-Pentane:	0.1501	0.1218
Hexane+:	0.2267	0.1515
BTU:	1175.2	1142.3
GPM:	18.4610	18.1830
SPG:	0.6762	0.6542

Well Name: UTE INDIANS A #55; CSG
API #: API # 3004534824
Source: CASING
Sample Type: GAS

Analysis No: HS2021063
Cust No: 35825-10805

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	UTE INDIANS A #55; CSG	Well Flowing:	N
County/State:	SAN JUAN NM	Pressure:	PSIG
Location:		Flow Temp:	45 DEG. F
Lease/PA/CA:	142060462	Ambient Temp:	DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3004534824	Sample Method:	Purge & Fill
		Sample Date:	04/27/2021
		Sample Time:	10.22 AM
	AREA 2 / RUN 0200	Sampled By:	DANIEL RIOS
Heat Trace:		Sampled by (CO):	HILCORP
Remarks:	H2S		

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	2.5538	2.5283	0.2820	0.00	0.0247
CO2	0.5929	0.5870	0.1010	0.00	0.0090
Methane	91.1154	90.2046	15.4800	920.27	0.5047
Ethane	3.0591	3.0285	0.8200	54.14	0.0318
Propane	1.0639	1.0533	0.2940	26.77	0.0162
Iso-Butane	0.3662	0.3625	0.1200	11.91	0.0073
N-Butane	0.4536	0.4491	0.1430	14.80	0.0091
I-Pentane	0.2592	0.2566	0.0950	10.37	0.0065
N-Pentane	0.1782	0.1764	0.0650	7.14	0.0044
Hexane Plus	0.3577	0.3541	0.1600	18.85	0.0118
Total	100.0000	99.0004	17.5600	1064.25	0.6255

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

COMPRESSIBLITY FACTOR (1/Z):	1.0024	CYLINDER #:	5017
BTU/CU.FT IDEAL:	1066.7	CYLINDER PRESSURE:	541 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1069.3	ANALYIS DATE:	05/04/2021
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1050.7	ANALYIS TIME:	02:11:35 PM
DRY BTU @ 15.025:	1090.7	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6268		

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 #55; CSG	CASING	05/05/2021
Stn. No.:	API # 3004534824		35825-10805
Mtr. No.:			

Smpl Date:	04/27/2021	09/05/2018
Test Date:	05/04/2021	09/11/2018
Run No:	HS2021063	HS180198
Nitrogen:	2.5538	1.9644
CO2:	0.5929	0.0100
Methane:	91.1154	92.7192
Ethane:	3.0591	1.8382
Propane:	1.0639	0.9547
I-Butane:	0.3662	0.3715
N-Butane:	0.4536	0.6896
I-Pentane:	0.2592	0.4300
N-Pentane:	0.1782	0.3714
Hexane+:	0.3577	0.6510
BTU:	1069.3	1099.4
GPM:	17.5600	17.6560
SPG:	0.6268	0.6305

Well Name: UTE INDIANS A #55; TBG
API #: API # 3004534824
Source: TUBING
Sample Type: GAS

Analysis No: HS2021064
Cust No: 35825-10810

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	UTE INDIANS A #55; TBG	Well Flowing:	N
County/State:	SAN JUAN NM	Pressure:	512 PSIG
Location:		Flow Temp:	45 DEG. F
Lease/PA/CA:	142060462	Ambient Temp:	DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3004534824	Sample Method:	Purge & Fill
		Sample Date:	04/27/2021
		Sample Time:	10.23 AM
	AREA 2 / RUN 0200	Sampled By:	DANIEL RIOS
Heat Trace:		Sampled by (CO):	HILCORP
Remarks:	PRESSURED WITH HELIUM TO 30LBS. H2S		

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	21.5585	5.5587	2.3760	0.00	0.2085
CO2	0.2024	0.0522	0.0350	0.00	0.0031
Methane	73.3741	18.9190	12.4600	741.08	0.4064
Ethane	2.3848	0.6149	0.6390	42.20	0.0248
Propane	0.7474	0.1927	0.2060	18.81	0.0114
Iso-Butane	0.2630	0.0678	0.0860	8.55	0.0053
N-Butane	0.3781	0.0975	0.1190	12.33	0.0076
I-Pentane	0.2470	0.0637	0.0900	9.88	0.0062
N-Pentane	0.1765	0.0455	0.0640	7.08	0.0044
Hexane Plus	0.6682	0.1723	0.2980	35.22	0.0221
Total	100.0000	25.7843	16.3730	875.15	0.6997

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

COMPRESSIBLITY FACTOR (1/Z):	1.0019	CYLINDER #:	4238
BTU/CU.FT IDEAL:	877.2	CYLINDER PRESSURE:	0 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	878.8	ANALYIS DATE:	05/04/2021
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	863.5	ANALYIS TIME:	12:23:08 AM
DRY BTU @ 15.025:	896.4	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.7007		

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 #55; TBG	TUBING	05/05/2021
Stn. No.:	API # 3004534824		35825-10810
Mtr. No.:			

Smpl Date:	04/27/2021	09/05/2018
Test Date:	05/04/2021	09/11/2018
Run No:	HS2021064	HS180199
Nitrogen:	21.5585	3.4341
CO2:	0.2024	9.4619
Methane:	73.3741	79.9291
Ethane:	2.3848	3.2104
Propane:	0.7474	1.9826
I-Butane:	0.2630	0.3645
N-Butane:	0.3781	0.5292
I-Pentane:	0.2470	0.2579
N-Pentane:	0.1765	0.2004
Hexane+:	0.6682	0.6299
BTU:	878.8	999.9
GPM:	16.3730	17.7300
SPG:	0.7007	0.7353

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 27324

CONDITIONS OF APPROVAL

Operator:			OGRID:	Action Number:	Action Type:
HILCORP ENERGY COMPANY	1111 Travis Street	Houston, TX77002	372171	27324	GAS ANALYSIS

OCD Reviewer	Condition
mkuehling	None