



30-045-29395

2030 Afton Place
Farmington, NM 87401
(505) 325-6622Analysis No: HS190068
Cust No: 35825-11210**Well/Lease Information**Customer Name: HILCORP (BHD PROJECT)
Well Name: UTE #22; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 3004529395Source: BRADENHEAD
Well Flowing: N
Pressure: 0 PSIG
Flow Temp: 0 DEG. F
Ambient Temp: 86 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/14/2019
Sample Time: 2.20 PM
Sampled By: KALAN DIBBLE
Sampled by (CO): HILCORPHeat Trace: AREA 2 / RUN 200
N
Remarks:

NMOC

JUN 17 2019

DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.4256	1.4158	0.1570	0.00	0.0138
CO2	0.0044	0.0044	0.0010	0.00	0.0001
Methane	89.4814	88.8639	15.2050	903.76	0.4956
Ethane	5.0580	5.0231	1.3560	89.51	0.0525
Propane	2.4052	2.3886	0.6640	60.52	0.0366
Iso-Butane	0.3579	0.3554	0.1170	11.64	0.0072
N-Butane	0.6661	0.6615	0.2100	21.73	0.0134
I-Pentane	0.1969	0.1955	0.0720	7.88	0.0049
N-Pentane	0.1819	0.1806	0.0660	7.29	0.0045
Hexane Plus	0.2226	0.2211	0.1000	11.73	0.0074
Total	100.0000	99.3099	17.9480	1114.06	0.6360

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
BTU/CU.FT IDEAL: 1116.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1119.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1100.1
DRY BTU @ 15.025: 1142.0
REAL SPECIFIC GRAVITY: 0.6374CYLINDER #: 7026
CYLINDER PRESSURE: 66 PSIG
ANALYSIS DATE: 05/20/2019
ANALYSIS TIME: 09:50:01 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: 05/24/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: UTE #22; BHD
Stn. No.: API # 3004529395
Mtr. No.:

BRADENHEAD

05/24/2019
35825-11210

Smpl Date: 05/14/2019
Test Date: 05/20/2019
Run No: HS190068
Nitrogen: 1.4256
CO2: 0.0044
Methane: 89.4814
Ethane: 5.0580
Propane: 2.4052
I-Butane: 0.3579
N-Butane: 0.6661
I-Pentane: 0.1969
N-Pentane: 0.1819
Hexane+: 0.2226
BTU: 1119.6
GPM: 17.9480
SPG: 0.6374



30-045-29395

2030 Afton Place
Farmington, NM 87401
(505) 325-6622Analysis No: HS190069
Cust No: 35825-11215**Well/Lease Information**Customer Name: HILCORP (BHD PROJECT)
Well Name: UTE #22; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 3004529395Source: CASING
Well Flowing: N
Pressure: 0 PSIG
Flow Temp: 0 DEG. F
Ambient Temp: 86 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/14/2019
Sample Time: 2.20 PM
Sampled By: KALAN DIBBLE
Sampled by (CO): HILCORPHeat Trace: N
Remarks:
AREA 2 / RUN 200NMOCD
JUN 17 2019
DISTRICT III**Analysis**

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	4.0445	3.9847	0.4470	0.00	0.0391
CO2	0.0016	0.0016	0.0000	0.00	0.0000
Methane	60.5787	59.6823	10.3250	611.84	0.3355
Ethane	15.3184	15.0918	4.1190	271.09	0.1590
Propane	10.0393	9.8908	2.7810	252.60	0.1528
Iso-Butane	3.0675	3.0221	1.0090	99.75	0.0616
N-Butane	3.7736	3.7178	1.1960	123.11	0.0757
I-Pentane	1.7061	1.6809	0.6270	68.26	0.0425
N-Pentane	0.9716	0.9572	0.3540	38.95	0.0242
Hexane Plus	0.4987	0.4913	0.2240	26.29	0.0165
Total	100.0000	98.5205	21.0820	1491.89	0.9071

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0056
BTU/CU.FT IDEAL: 1495.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1503.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1477.6
DRY BTU @ 15.025: 1533.9
REAL SPECIFIC GRAVITY: 0.9118CYLINDER #: 6011
CYLINDER PRESSURE: 61 PSIG
ANALYSIS DATE: 05/20/2019
ANALYSIS TIME: 10:15:56 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: 05/24/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: UTE #22; CSG
Stn. No.: API # 3004529395
Mtr. No.:

CASING

05/24/2019
35825-11215

Smpl Date: 05/14/2019
Test Date: 05/20/2019
Run No: HS190069
Nitrogen: 4.0445
CO2: 0.0016
Methane: 60.5787
Ethane: 15.3184
Propane: 10.0393
I-Butane: 3.0675
N-Butane: 3.7736
I-Pentane: 1.7061
N-Pentane: 0.9716
Hexane+: 0.4987
BTU: 1503.8
GPM: 21.0820
SPG: 0.9118



30-045-29395

2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: HS190070

Cust No: 35825-11220

Well/Lease InformationCustomer Name: HILCORP (BHD PROJECT)
Well Name: UTE #22; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 3004529395Source: TUBING
Well Flowing: N
Pressure: 0 PSIG
Flow Temp: 0 DEG. F
Ambient Temp: 86 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/14/2019
Sample Time: 2.20 PM
Sampled By: KALAN DIBBLE
Sampled by (CO): HILCORPHeat Trace: AREA 2 / RUN 200
N
Remarks:NMOC
JUN 17 2019
DISTRICT III**Analysis**

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	9.6903	9.6097	1.0710	0.00	0.0937
CO2	0.0090	0.0089	0.0020	0.00	0.0001
Methane	59.7158	59.2188	10.1670	603.13	0.3308
Ethane	14.6520	14.5301	3.9350	259.30	0.1521
Propane	9.0008	8.9259	2.4900	226.47	0.1370
Iso-Butane	2.5063	2.4854	0.8240	81.50	0.0503
N-Butane	2.7728	2.7497	0.8780	90.46	0.0556
I-Pentane	1.0003	0.9920	0.3670	40.02	0.0249
N-Pentane	0.4808	0.4768	0.1750	19.27	0.0120
Hexane Plus	0.1719	0.1705	0.0770	9.06	0.0057
Total	100.0000	99.1678	19.9860	1329.21	0.8623

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0045
BTU/CU.FT IDEAL: 1332.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1338.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1315.0
DRY BTU @ 15.025: 1365.1
REAL SPECIFIC GRAVITY: 0.8659CYLINDER #: 6069
CYLINDER PRESSURE: 101 PSIG
ANALYSIS DATE: 05/20/2019
ANALYSIS TIME: 10:35:59 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: 05/24/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: UTE #22; TBG
Stn. No.: API # 3004529395
Mtr. No.:

TUBING

05/24/2019
35825-11220

Smpl Date: 05/14/2019
Test Date: 05/20/2019
Run No: HS190070

Nitrogen: 9.6903
CO2: 0.0090
Methane: 59.7158
Ethane: 14.6520
Propane: 9.0008
I-Butane: 2.5063
N-Butane: 2.7728
I-Pentane: 1.0003
N-Pentane: 0.4808
Hexane+: 0.1719

BTU: 1338.3
GPM: 19.9860
SPG: 0.8659