



30-045-34776

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

Analysis No: HS190104
Cust No: 35825-11370

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: ALLISON UNIT 6N; INT CASING
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MV/DK
Cust. Stn. No.: API # 3004534776

Source: INTERMEDIATE
Well Flowing: N
Pressure: 231 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 05/30/2019
Sample Time: 11.11 AM
Sampled By: BROOKIE HEMPHILL
Sampled by (CO):

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1609	0.1616	0.0180	0.00	0.0016
CO2	1.5183	1.5246	0.2600	0.00	0.0231
Methane	95.1499	95.5472	16.1620	961.01	0.5270
Ethane	2.7365	2.7479	0.7330	48.43	0.0284
Propane	0.3323	0.3337	0.0920	8.36	0.0051
Iso-Butane	0.0487	0.0489	0.0160	1.58	0.0010
N-Butane	0.0237	0.0238	0.0070	0.77	0.0005
I-Pentane	0.0077	0.0077	0.0030	0.31	0.0002
N-Pentane	0.0018	0.0018	0.0010	0.07	0.0000
Hexane Plus	0.0202	0.0203	0.0090	1.06	0.0007
Total	100.0000	100.4175	17.3010	1021.60	0.5875

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
BTU/CU.FT IDEAL: 1024.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1026.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1008.3
DRY BTU @ 15.025: 1046.8
REAL SPECIFIC GRAVITY: 0.5885

CYLINDER #: 6022
CYLINDER PRESSURE: 230 PSIG
ANALYSIS DATE: 06/06/2019
ANALYSIS TIME: 09:25:35 AM
ANALYSIS RUN BY: PATRICIA KING

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500

GC Method: C6+ Gas

Last Cal/Verify: 06/11/2019

NMOC**JUN 13 2019****DISTRICT III**



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: ALLISON UNIT 6N; INT CASING
Stn. No.: API # 3004534776
Mtr. No.:

INTERMEDIATE
MV/DK

06/11/2019
35825-11370

Smpl Date: 05/30/2019
Test Date: 06/06/2019
Run No: HS190104
Nitrogen: 0.1609
CO2: 1.5183
Methane: 95.1499
Ethane: 2.7365
Propane: 0.3323
I-Butane: 0.0487
N-Butane: 0.0237
I-Pentane: 0.0077
N-Pentane: 0.0018
Hexane+: 0.0202
BTU: 1026.2
GPM: 17.3010
SPG: 0.5885



30-045-34776

2030 Afton Place
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Analysis No: HS190103
Cust No: 35825-11365

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: ALLISON UNIT 6N *CSG*
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MV/DK
Cust. Stn. No.: API # 3004534776

Source: N/A
Well Flowing:
Pressure: PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 05/30/2019
Sample Time: 11.15 AM
Sampled By: BROOKIE HEMPHILL
Sampled by (CO):

AREA 5 / RUN 508

Heat Trace:

Remarks: SOURCE ON CARD WAS ONLY MARKED AS OTHER

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5400	0.5332	0.0600	0.00	0.0052
CO2	0.0079	0.0078	0.0010	0.00	0.0001
Methane	96.3987	95.1777	16.3740	973.63	0.5340
Ethane	2.2445	2.2161	0.6010	39.72	0.0233
Propane	0.3721	0.3674	0.1030	9.36	0.0057
Iso-Butane	0.1100	0.1086	0.0360	3.58	0.0022
N-Butane	0.0626	0.0618	0.0200	2.04	0.0013
I-Pentane	0.0381	0.0376	0.0140	1.52	0.0009
N-Pentane	0.0133	0.0131	0.0050	0.53	0.0003
Hexane Plus	0.2128	0.2101	0.0950	11.22	0.0070
Total	100.0000	98.7334	17.3090	1041.60	0.5800

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
BTU/CU.FT IDEAL: 1044.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1046.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1028.1
DRY BTU @ 15.025: 1067.3
REAL SPECIFIC GRAVITY: 0.5811

CYLINDER #: 6039
CYLINDER PRESSURE: 72 PSIG
ANALYSIS DATE: 06/06/2019
ANALYSIS TIME: 09:33:54 AM
ANALYSIS RUN BY: SHYANN ELLEDGE

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500

GC Method: C6+ Gas

Last Cal/Verify: 06/11/2019

NMOC**JUN 13 2019****DISTRICT III**



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: ALLISON UNIT 6N
Stn. No.: API # 3004534776
Mtr. No.:

N/A
MV/DK

06/11/2019
35825-11365

Smpl Date: 05/30/2019
Test Date: 06/06/2019
Run No: HS190103
Nitrogen: 0.5400
CO2: 0.0079
Methane: 96.3987
Ethane: 2.2445
Propane: 0.3721
I-Butane: 0.1100
N-Butane: 0.0626
I-Pentane: 0.0381
N-Pentane: 0.0133
Hexane+: 0.2128
BTU: 1046.3
GPM: 17.3090
SPG: 0.5811



30-045-34776

2030 Afton Place
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Analysis No: HS190105
Cust No: 35825-11375

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: ALLISON UNIT 6N; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MV/DK
Cust. Stn. No.: API # 3004534776

Source: TUBING
Well Flowing: Y
Pressure: 149 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: 250 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/30/2019
Sample Time: 10.46 AM
Sampled By: BROOKIE HEMPHILL
Sampled by (CO):

Heat Trace: AREA 5 / RUN 508
N
Remarks: SAMPLE CONTAINED 2TBSP OF CONDENSATE

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0668	0.0671	0.0070	0.00	0.0006
CO2	3.0487	3.0614	0.5210	0.00	0.0463
Methane	95.8719	96.2711	16.2830	968.31	0.5310
Ethane	0.9285	0.9324	0.2490	16.43	0.0096
Propane	0.0589	0.0591	0.0160	1.48	0.0009
Iso-Butane	0.0112	0.0112	0.0040	0.36	0.0002
N-Butane	0.0048	0.0048	0.0020	0.16	0.0001
I-Pentane	0.0024	0.0024	0.0010	0.10	0.0001
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0068	0.0068	0.0030	0.36	0.0002
Total	100.0000	100.4163	17.0860	987.20	0.5891

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
BTU/CU.FT IDEAL: 989.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 991.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 974.3
DRY BTU @ 15.025: 1011.5
REAL SPECIFIC GRAVITY: 0.5902

CYLINDER #: 4106
CYLINDER PRESSURE: 150 PSIG
ANALYSIS DATE: 06/06/2019
ANALYSIS TIME: 09:44:29 AM
ANALYSIS RUN BY: PATRICIA KING

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500

GC Method: C6+ Gas

Last Cal/Verify: 06/11/2019

NMOC**JUN 13 2019****DISTRICT III**



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: ALLISON UNIT 6N; TBG
Stn. No.: API # 3004534776
Mtr. No.:

TUBING
MV/DK

06/11/2019
35825-11375

Smpl Date: 05/30/2019
Test Date: 06/06/2019
Run No: HS190105
Nitrogen: 0.0668
CO2: 3.0487
Methane: 95.8719
Ethane: 0.9285
Propane: 0.0589
I-Butane: 0.0112
N-Butane: 0.0048
I-Pentane: 0.0024
N-Pentane: 0.0000
Hexane+: 0.0068
BTU: 991.6
GPM: 17.0860
SPG: 0.5902