



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

Analysis No: HS190247
Cust No: 35825-11990

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: CAIN 2; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: PC/FRC
Cust. Stn. No.: 39498-308
API # 3004521830
AREA 3 / RUN 301

Source: BRADENHEAD
Well Flowing:
Pressure: 52 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 08/14/2019
Sample Time: 9.00 AM
Sampled By: PETE
Sampled by (CO): HILCORP

Heat Trace:
Remarks:

NMOC
SEP 09 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8722	0.8659	0.0960	0.00	0.0084
CO2	0.0089	0.0088	0.0020	0.00	0.0001
Methane	90.3058	89.6585	15.3470	912.09	0.5002
Ethane	4.2303	4.2000	1.1340	74.86	0.0439
Propane	2.6078	2.5891	0.7200	65.61	0.0397
Iso-Butane	0.6518	0.6471	0.2140	21.20	0.0131
N-Butane	0.6965	0.6915	0.2200	22.72	0.0140
I-Pentane	0.2629	0.2610	0.0960	10.52	0.0065
N-Pentane	0.1623	0.1611	0.0590	6.51	0.0040
Hexane Plus	0.2015	0.2001	0.0900	10.62	0.0067
Total	100.0000	99.2831	17.9780	1124.13	0.6367

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
BTU/CU.FT IDEAL: 1126.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1129.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1110.1
DRY BTU @ 15.025: 1152.4
REAL SPECIFIC GRAVITY: 0.6382

CYLINDER #: 4232
CYLINDER PRESSURE: 47 PSIG
ANALYSIS DATE: 08/26/2019
ANALYSIS TIME: 02:35:05 PM
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

Last Cal/Verify: 08/28/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: CAIN 2; BHD
Stn. No.: 39498-308
Mtr. No.: API # 3004521830

BRADENHEAD
PC/FRC

08/28/2019
35825-11990

Smpl Date: 08/14/2019
Test Date: 08/26/2019
Run No: HS190247

Nitrogen: 0.8722
CO2: 0.0089
Methane: 90.3058
Ethane: 4.2303
Propane: 2.6078
I-Butane: 0.6518
N-Butane: 0.6965
I-Pentane: 0.2629
N-Pentane: 0.1623
Hexane+: 0.2015

BTU: 1129.8
GPM: 17.9780
SPG: 0.6382



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

Analysis No: HS190248
Cust No: 35825-11995

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: CAIN 2; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: PC/ FRC
Cust. Stn. No.: 39498-308
API # 3004521830

Source: CASING
Well Flowing: Y
Pressure: 55 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/14/2019
Sample Time: 9.00 AM
Sampled By: PETE
Sampled by (CO): HILCORP

Heat Trace:
Remarks:

AREA 3 / RUN 301

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8590	0.8507	0.0950	0.00	0.0083
CO2	0.0505	0.0500	0.0090	0.00	0.0008
Methane	90.2521	89.3829	15.3380	911.55	0.4999
Ethane	4.2434	4.2025	1.1380	75.10	0.0441
Propane	2.6112	2.5860	0.7210	65.70	0.0398
Iso-Butane	0.6547	0.6484	0.2150	21.29	0.0131
N-Butane	0.6993	0.6926	0.2210	22.81	0.0140
I-Pentane	0.2627	0.2602	0.0960	10.51	0.0065
N-Pentane	0.1625	0.1609	0.0590	6.51	0.0040
Hexane Plus	0.2046	0.2026	0.0910	10.78	0.0068
Total	100.0000	99.0368	17.9830	1124.25	0.6373

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
BTU/CU.FT IDEAL: 1126.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1129.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1110.2
DRY BTU @ 15.025: 1152.5
REAL SPECIFIC GRAVITY: 0.6388

CYLINDER #: 6022
CYLINDER PRESSURE: 52 PSIG
ANALYSIS DATE: 08/26/2019
ANALYSIS TIME: 02:17:25 PM
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

Last Cal/Verify: 08/28/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: CAIN 2; CSG
Stn. No.: 39498-308
Mtr. No.: API # 3004521830

CASING
PC/ FRC

08/28/2019
35825-11995

Smpl Date: 08/14/2019
Test Date: 08/26/2019
Run No: HS190248

Nitrogen: 0.8590
CO2: 0.0505
Methane: 90.2521
Ethane: 4.2434
Propane: 2.6112
I-Butane: 0.6547
N-Butane: 0.6993
I-Pentane: 0.2627
N-Pentane: 0.1625
Hexane+: 0.2046

BTU: 1129.9
GPM: 17.9830
SPG: 0.6388