



30-045-26112

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

Analysis No: HS180210
Cust No: 35825-10860

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: MCCORD 11E; CSG
County/State: SAN JUAN NM
Location:
Field: AREA 1 / RUN 115
Formation: DK
Cust. Stn. No.: 95337

Source: CASING
Well Flowing: Y
Pressure: 207 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 09/25/2018
Sample Time: 9.00 AM
Sampled By: PETER JIM
Sampled by (CO): HILCORP

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5319	0.5300	0.0590	0.00	0.0051
CO2	1.2441	1.2396	0.2130	0.00	0.0189
Methane	79.0734	78.7901	13.4500	798.64	0.4380
Ethane	10.6798	10.6415	2.8660	189.00	0.1109
Propane	4.9950	4.9771	1.3810	125.68	0.0760
Iso-Butane	0.7584	0.7557	0.2490	24.66	0.0152
N-Butane	1.4034	1.3984	0.4440	45.78	0.0282
I-Pentane	0.4378	0.4362	0.1610	17.52	0.0109
N-Pentane	0.3877	0.3863	0.1410	15.54	0.0097
Hexane Plus	0.4885	0.4867	0.2190	25.75	0.0162
Total	100.0000	99.6416	19.1830	1242.57	0.7291

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
BTU/CU.FT IDEAL: 1245.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1249.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1228.2
DRY BTU @ 15.025: 1274.9
REAL SPECIFIC GRAVITY: 0.7314

CYLINDER #: 6027
CYLINDER PRESSURE: 208 PSIG
ANALYSIS DATE: 09/26/2018
ANALYSIS TIME: 08:25:19 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 Last Cal/Verify: 09/26/2018

GC Method: C6+ Gas

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HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: MCCORD 11E; CSG
Stn. No.: 95337
Mtr. No.:

CASING
DK

09/26/2018
35825-10860

Smpl Date: 09/25/2018
Test Date: 09/26/2018
Run No: HS180210

Nitrogen: 0.5319
CO2: 1.2441
Methane: 79.0734
Ethane: 10.6798
Propane: 4.9950
I-Butane: 0.7584
N-Butane: 1.4034
I-Pentane: 0.4378
N-Pentane: 0.3877
Hexane+: 0.4885

BTU: 1249.9
GPM: 19.1830
SPG: 0.7314



30-045-26112

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

Analysis No: HS180211
Cust No: 35825-10865

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: MCCORD 11E; TBG
County/State: SAN JUAN NM
Location:
Field: AREA 1 / RUN 115
Formation: DK
Cust. Stn. No.: 95337

Source: TUBING
Well Flowing:
Pressure: 168 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/25/2018
Sample Time: 9.00 AM
Sampled By: PETER JIM
Sampled by (CO): HILCORP

Heat Trace:

Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5443	0.5428	0.0600	0.00	0.0053
CO2	1.4797	1.4757	0.2530	0.00	0.0225
Methane	79.2917	79.0796	13.4870	800.85	0.4392
Ethane	10.5667	10.5384	2.8350	187.00	0.1097
Propane	4.8828	4.8697	1.3500	122.86	0.0743
Iso-Butane	0.7305	0.7285	0.2400	23.76	0.0147
N-Butane	1.3156	1.3121	0.4160	42.92	0.0264
I-Pentane	0.3811	0.3801	0.1400	15.25	0.0095
N-Pentane	0.3298	0.3289	0.1200	13.22	0.0082
Hexane Plus	0.4778	0.4765	0.2140	25.19	0.0158
Total	100.0000	99.7323	19.1150	1231.03	0.7256

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
BTU/CU.FT IDEAL: 1233.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1238.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1216.7
DRY BTU @ 15.025: 1263.0
REAL SPECIFIC GRAVITY: 0.7278

CYLINDER #: 7010
CYLINDER PRESSURE: 218 PSIG
ANALYSIS DATE: 09/26/2018
ANALYSIS TIME: 08:52:06 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 Last Cal/Verify: 09/26/2018

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: MCCORD 11E; TBG
Stn. No.: 95337
Mtr. No.:

TUBING
DK

09/26/2018
35825-10865

Smpl Date: 09/25/2018
Test Date: 09/26/2018
Run No: HS180211

Nitrogen: 0.5443
CO2: 1.4797
Methane: 79.2917
Ethane: 10.5667
Propane: 4.8828
I-Butane: 0.7305
N-Butane: 1.3156
I-Pentane: 0.3811
N-Pentane: 0.3298
Hexane+: 0.4778

BTU: 1238.2
GPM: 19.1150
SPG: 0.7278



30-045-26112

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

Analysis No: HS180209
Cust No: 35825-10855

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: MCCORD 11E; BHD
County/State: SAN JUAN NM
Location:
Field: AREA 1 / RUN 115
Formation: DK
Cust. Stn. No.: 95337

Source: BRADENHEAD
Well Flowing: Y
Pressure: 176 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/25/2018
Sample Time: 9.00 AM
Sampled By: PETER JIM
Sampled by (CO): HILCORP

Heat Trace:
Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5490	0.5464	0.0610	0.00	0.0053
CO2	0.5681	0.5654	0.0970	0.00	0.0086
Methane	80.3255	79.9504	13.6600	811.29	0.4449
Ethane	10.7070	10.6570	2.8720	189.48	0.1112
Propane	4.9559	4.9327	1.3700	124.70	0.0755
Iso-Butane	0.7343	0.7309	0.2410	23.88	0.0147
N-Butane	1.3025	1.2964	0.4120	42.49	0.0261
I-Pentane	0.3578	0.3561	0.1310	14.32	0.0089
N-Pentane	0.2924	0.2910	0.1060	11.72	0.0073
Hexane Plus	0.2075	0.2065	0.0930	10.94	0.0069
Total	100.0000	99.5328	19.0430	1228.81	0.7094

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0034
BTU/CU.FT IDEAL: 1231.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1235.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1214.4
DRY BTU @ 15.025: 1260.7
REAL SPECIFIC GRAVITY: 0.7116

CYLINDER #: 4189
CYLINDER PRESSURE: 157 PSIG
ANALYSIS DATE: 09/26/2018
ANALYSIS TIME: 08:37:03 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

Last Cal/Verify: 09/26/2018

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: MCCORD 11E; BHD
Stn. No.: 95337
Mtr. No.:

BRADENHEAD
DK

09/26/2018
35825-10855

Smpl Date: 09/25/2018
Test Date: 09/26/2018
Run No: HS180209
Nitrogen: 0.5490
CO2: 0.5681
Methane: 80.3255
Ethane: 10.7070
Propane: 4.9559
I-Butane: 0.7343
N-Butane: 1.3025
I-Pentane: 0.3578
N-Pentane: 0.2924
Hexane+: 0.2075
BTU: 1235.9
GPM: 19.0430
SPG: 0.7116