



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

API 30-045-34728

Analysis No: HS180148
Cust No: 35825-10185

36.8152618

108.1955032

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: MCCORD 1G; CSG
County/State: SAN JUAN NM
Location: F15-30N-13W
Field: AREA 1 / RUN 100
Formation: DK
Cust. Stn. No.: 36412-305

Source: CASING
Well Flowing: Y
Pressure: 136 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 08/28/2018
Sample Time: 11.30 AM
Sampled By: PETER JIM
Sampled by (CO): HILCORP

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5876	0.5859	0.0650	0.00	0.0057
CO2	1.3322	1.3283	0.2280	0.00	0.0202
Methane	75.8820	75.6619	12.9120	766.41	0.4203
Ethane	11.7846	11.7504	3.1630	208.55	0.1223
Propane	6.0083	5.9909	1.6610	151.17	0.0915
Iso-Butane	0.8415	0.8391	0.2760	27.36	0.0169
N-Butane	1.7587	1.7536	0.5570	57.37	0.0353
I-Pentane	0.5346	0.5330	0.1960	21.39	0.0133
N-Pentane	0.4877	0.4863	0.1770	19.55	0.0121
Hexane Plus	0.7828	0.7805	0.3500	41.26	0.0259
Total	100.0000	99.7099	19.5850	1293.08	0.7636

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.004
BTU/CU.FT IDEAL: 1296.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1301.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1278.7
DRY BTU @ 15.025: 1327.4
REAL SPECIFIC GRAVITY: 0.7664

CYLINDER #: 4149
CYLINDER PRESSURE: 135 PSIG
ANALYSIS DATE: 08/29/2018
ANALYSIS TIME: 08:49:15 AM
ANALYSIS RUN BY: CAMERON MANGAN

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: 08/30/2018

NMOC

SEP 18 2018

DISTRICT III

6



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

API 30-045-34728

Lease: MCCORD 1G; CSG
Stn. No.: 36412-305
Mtr. No.:

CASING
DK

08/30/2018
35825-10185

Smpl Date:	08/28/2018	05/15/2018
Test Date:	08/29/2018	05/17/2018
Run No:	HS180148	HS180045
Nitrogen:	0.5876	0.5884
CO2:	1.3322	1.3277
Methane:	75.8820	76.2937
Ethane:	11.7846	11.6545
Propane:	6.0083	5.8382
I-Butane:	0.8415	0.8142
N-Butane:	1.7587	1.6913
I-Pentane:	0.5346	0.5102
N-Pentane:	0.4877	0.4727
Hexane+:	0.7828	0.8091
BTU:	1301.3	1295.5
GPM:	19.5850	19.5410
SPG:	0.7664	0.7626



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API 30-045-34728

Analysis No: HS180147
Cust No: 35825-10180

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: MCCORD 1G;BHD
County/State: SAN JUAN NM
Location: F15-30N-13W
Field: AREA 1 / RUN 100
Formation: DK
Cust. Stn. No.: 36412-305

Source: BRADENHEAD
Well Flowing: Y
Pressure: 105 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 08/28/2018
Sample Time: 11.30 AM
Sampled By: PETER JIM
Sampled by (CO): HILCORP

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5881	0.5869	0.0650	0.00	0.0057
CO2	1.3259	1.3232	0.2270	0.00	0.0201
Methane	75.7664	75.6129	12.8930	765.24	0.4197
Ethane	11.8136	11.7897	3.1710	209.07	0.1226
Propane	6.0250	6.0128	1.6660	151.60	0.0917
Iso-Butane	0.8441	0.8424	0.2770	27.45	0.0169
N-Butane	1.7658	1.7622	0.5590	57.61	0.0354
I-Pentane	0.5434	0.5423	0.1990	21.74	0.0135
N-Pentane	0.4974	0.4964	0.1810	19.94	0.0124
Hexane Plus	0.8303	0.8286	0.3720	43.77	0.0275
Total	100.0000	99.7974	19.6100	1296.40	0.7657

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.004
BTU/CU.FT IDEAL: 1299.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1304.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1281.9
DRY BTU @ 15.025: 1330.7
REAL SPECIFIC GRAVITY: 0.7684

CYLINDER #: 6108
CYLINDER PRESSURE: 106 PSIG
ANALYSIS DATE: 08/29/2018
ANALYSIS TIME: 09:10:14 AM
ANALYSIS RUN BY: CAMERON MANGAN

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: 08/30/2018

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

APL 30-045-34728

Lease: MCCORD 1G;BHD
Stn. No.: 36412-305
Mtr. No.:

BRADENHEAD
DK

08/30/2018
35825-10180

Smpl Date:	08/28/2018	05/15/2018
Test Date:	08/29/2018	05/17/2018
Run No:	HS180147	HS180044
Nitrogen:	0.5881	0.5888
CO2:	1.3259	1.3287
Methane:	75.7664	76.2811
Ethane:	11.8136	11.6555
Propane:	6.0250	5.8440
I-Butane:	0.8441	0.8164
N-Butane:	1.7658	1.6982
I-Pentane:	0.5434	0.5134
N-Pentane:	0.4974	0.4765
Hexane+:	0.8303	0.7974
BTU:	1304.6	1295.5
GPM:	19.6100	19.5410
SPG:	0.7684	0.7626



2030 Afton Place
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API 30-045-34728

Analysis No: HS180149
Cust No: 35825-10190

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: MCCORD 1G; TBG
County/State: SAN JUAN NM
Location: F15-30N-13W
Field: AREA 1 / RUN 100
Formation: DK
Cust. Stn. No.: 36412-305

Source: TUBING
Well Flowing: Y
Pressure: 136 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 08/28/2018
Sample Time: 11.35 AM
Sampled By: PETER JIM
Sampled by (CO): HILCORP

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6188	0.6170	0.0680	0.00	0.0060
CO2	1.4135	1.4095	0.2420	0.00	0.0215
Methane	78.2084	77.9858	13.3030	789.90	0.4332
Ethane	11.2947	11.2626	3.0310	199.88	0.1173
Propane	5.3927	5.3774	1.4910	135.69	0.0821
Iso-Butane	0.7087	0.7067	0.2330	23.05	0.0142
N-Butane	1.3653	1.3614	0.4320	44.54	0.0274
I-Pentane	0.2883	0.2875	0.1060	11.53	0.0072
N-Pentane	0.2019	0.2013	0.0730	8.09	0.0050
Hexane Plus	0.5077	0.5063	0.2270	26.76	0.0168
Total	100.0000	99.7155	19.2060	1239.45	0.7307

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
BTU/CU.FT IDEAL: 1242.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1246.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1225.1
DRY BTU @ 15.025: 1271.8
REAL SPECIFIC GRAVITY: 0.733

CYLINDER #: 7009
CYLINDER PRESSURE: 140 PSIG
ANALYSIS DATE: 08/29/2018
ANALYSIS TIME: 08:27:09 AM
ANALYSIS RUN BY: CAMERON MANGAN

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: 08/30/2018

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

API 30-045-34728

Lease: MCCORD 1G; TBG
Stn. No.: 36412-305
Mtr. No.:

TUBING
DK

08/30/2018
35825-10190

Smpl Date:	08/28/2018	05/15/2018
Test Date:	08/29/2018	05/17/2018
Run No:	HS180149	HS180046
Nitrogen:	0.6188	0.5998
CO2:	1.4135	1.4111
Methane:	78.2084	77.7063
Ethane:	11.2947	11.3891
Propane:	5.3927	5.4175
I-Butane:	0.7087	0.7292
N-Butane:	1.3653	1.4366
I-Pentane:	0.2883	0.3913
N-Pentane:	0.2019	0.3547
Hexane+:	0.5077	0.5644
BTU:	1246.8	1260.5
GPM:	19.2060	19.3000
SPG:	0.7330	0.7416