



30-045-30841

2030 Afton Place
Farmington, NM 87401
(505) 325-6622Analysis No: HS190071
Cust No: 35825-11225**Well/Lease Information**

Customer Name: HILCORP (BHD PROJECT)
Well Name: STANOLIND GAS COM D #1B; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MV
Cust. Stn. No.: 98455
API # 3004530841
AREA 1 / RUN 106

Source: BRADENHEAD
Well Flowing: Y
Pressure: 18 PSIG
Flow Temp: 51 DEG. F
Ambient Temp: 53 DEG. F
Flow Rate: 35 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/15/2019
Sample Time: 9.18 AM
Sampled By: BRIAN HARVEY
Sampled by (CO): HILCORP

Heat Trace: N
Remarks:

NMOC
JUN 17 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.0001	0.9810	0.1100	0.00	0.0097
CO2	0.0305	0.0299	0.0050	0.00	0.0005
Methane	91.1395	89.4024	15.4870	920.51	0.5048
Ethane	4.3582	4.2751	1.1680	77.13	0.0452
Propane	1.7770	1.7431	0.4910	44.71	0.0271
Iso-Butane	0.6519	0.6395	0.2140	21.20	0.0131
N-Butane	0.5187	0.5088	0.1640	16.92	0.0104
I-Pentane	0.2852	0.2798	0.1050	11.41	0.0071
N-Pentane	0.0533	0.0523	0.0190	2.14	0.0013
Hexane Plus	0.1856	0.1821	0.0830	9.78	0.0061
Total	100.0000	98.0940	17.8460	1103.80	0.6253

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
BTU/CU.FT IDEAL: 1106.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1109.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1089.9
DRY BTU @ 15.025: 1131.4
REAL SPECIFIC GRAVITY: 0.6267

CYLINDER #: 6064
CYLINDER PRESSURE: 18 PSIG
ANALYSIS DATE: 05/22/2019
ANALYSIS TIME: 01:38:00 PM
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: 05/29/2019

GC Method: C6+ Gas

db



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: STANOLIND GAS COM D #1B; BHD
Stn. No.: 98455
Mtr. No.: API # 3004530841

BRADENHEAD
MV

05/29/2019
35825-11225

Smpl Date: 05/15/2019
Test Date: 05/22/2019
Run No: HS190071
Nitrogen: 1.0001
CO2: 0.0305
Methane: 91.1395
Ethane: 4.3582
Propane: 1.7770
I-Butane: 0.6519
N-Butane: 0.5187
I-Pentane: 0.2852
N-Pentane: 0.0533
Hexane+: 0.1856
BTU: 1109.2
GPM: 17.8460
SPG: 0.6267



30-045-30841

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

Analysis No: HS190072
Cust No: 35825-11230

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: STANOLIND GAS COM D #1B; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MV
Cust. Stn. No.: 98455
API # 3004530841
AREA 1 / RUN 106

NMOC

JUN 17 2019

DISTRICT III

Source: CASING
Well Flowing: Y
Pressure: 26 PSIG
Flow Temp: 51 DEG. F
Ambient Temp: 53 DEG. F
Flow Rate: 35 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/15/2019
Sample Time: 8.49 AM
Sampled By: BRIAN HARVEY
Sampled by (CO): HILCORP

Heat Trace: N
Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2786	0.2676	0.0310	0.00	0.0027
CO2	0.2956	0.2840	0.0510	0.00	0.0045
Methane	81.3182	78.1194	13.8350	821.31	0.4504
Ethane	8.9217	8.5708	2.3940	157.89	0.0926
Propane	4.6427	4.4601	1.2840	116.81	0.0707
Iso-Butane	0.7826	0.7518	0.2570	25.45	0.0157
N-Butane	1.3762	1.3221	0.4350	44.90	0.0276
I-Pentane	0.5016	0.4819	0.1840	20.07	0.0125
N-Pentane	0.4237	0.4070	0.1540	16.98	0.0106
Hexane Plus	1.4591	1.4017	0.6530	76.91	0.0483
Total	100.0000	96.0664	19.2780	1280.32	0.7356

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0038
BTU/CU.FT IDEAL: 1283.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1288.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1265.8
DRY BTU @ 15.025: 1314.0
REAL SPECIFIC GRAVITY: 0.7381

CYLINDER #: 6205
CYLINDER PRESSURE: 27 PSIG
ANALYSIS DATE: 05/22/2019
ANALYSIS TIME: 02:03:21 PM
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: 05/29/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	STANOLIND GAS COM D #1B; CSG	CASING	05/29/2019
Stn. No.:	98455	MV	35825-11230
Mtr. No.:	API # 3004530841		

Smpl Date:	05/15/2019
Test Date:	05/22/2019
Run No:	HS190072
Nitrogen:	0.2786
CO2:	0.2956
Methane:	81.3182
Ethane:	8.9217
Propane:	4.6427
I-Butane:	0.7826
N-Butane:	1.3762
I-Pentane:	0.5016
N-Pentane:	0.4237
Hexane+:	1.4591
BTU:	1288.2
GPM:	19.2780
SPG:	0.7381



30-045-30841

2030 Afton Place
Farmington, NM 87401
(505) 325-6622Analysis No: HS190073
Cust No: 35825-11235**Well/Lease Information**

Customer Name: HILCORP (BHD PROJECT)
Well Name: STANOLIND GAS COM D #1B; INT
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MV
Cust. Stn. No.: 98455
API # 3004530841
AREA 1 / RUN 106
Heat Trace: N
Remarks: PRESSURED WITH HELIUM TO 30LBS.

Source: INTERMEDIATE
Well Flowing: Y
Pressure: 0 PSIG
Flow Temp: 51 DEG. F
Ambient Temp: 53 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/15/2019
Sample Time: 9.26 AM
Sampled By: BRIAN HARVEY
Sampled by (CO): HILCORP

NMOC

JUN 17 2019

DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	99.2653	29.6959	10.9210	0.00	0.9601
CO2	0.1013	0.0303	0.0170	0.00	0.0015
Methane	0.5401	0.1616	0.0920	5.46	0.0030
Ethane	0.0164	0.0049	0.0040	0.29	0.0002
Propane	0.0000	0.0000	0.0000	0.00	0.0000
Iso-Butane	0.0000	0.0000	0.0000	0.00	0.0000
N-Butane	0.0000	0.0000	0.0000	0.00	0.0000
I-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0769	0.0230	0.0340	4.05	0.0025
Total	100.0000	29.9157	11.0680	9.80	0.9673

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0003
BTU/CU.FT IDEAL: 9.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 9.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 9.6
DRY BTU @ 15.025: 10.0
REAL SPECIFIC GRAVITY: 0.9672

CYLINDER #: 6155
CYLINDER PRESSURE: PSIG
ANALYSIS DATE: 05/22/2019
ANALYSIS TIME: 03:04:52 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: 05/29/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	STANOLIND GAS COM D #1B; INT	INTERMEDIATE	05/29/2019
Stn. No.:	98455	MV	35825-11235
Mtr. No.:	API # 3004530841		

Smpl Date: 05/15/2019
Test Date: 05/22/2019
Run No: HS190073

Nitrogen: 99.2653
CO2: 0.1013
Methane: 0.5401
Ethane: 0.0164
Propane: 0.0000
I-Butane: 0.0000
N-Butane: 0.0000
I-Pentane: 0.0000
N-Pentane: 0.0000
Hexane+: 0.0769

BTU: 9.8
GPM: 11.0680
SPG: 0.9672



30-045-30841

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

Analysis No: HS190074
Cust No: 35825-11240

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: STANOLIND GAS COM D #1B; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MV
Cust. Stn. No.: 98455
API # 3004530841
AREA 1 / RUN 106

NMOCB

JUN 17 2019

DISTRICT III

Source: TUBING
Well Flowing: N
Pressure: 28 PSIG
Flow Temp: 51 DEG. F
Ambient Temp: 53 DEG. F
Flow Rate: 35 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/15/2019
Sample Time: 9.06 AM
Sampled By: BRIAN HARVEY
Sampled by (CO): HILCORP

Heat Trace: N
Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2615	0.2587	0.0290	0.00	0.0025
CO2	1.1126	1.1007	0.1910	0.00	0.0169
Methane	77.7691	76.9343	13.2350	785.47	0.4308
Ethane	10.6081	10.4942	2.8480	187.73	0.1101
Propane	5.0501	4.9959	1.3970	127.07	0.0769
Iso-Butane	0.8540	0.8448	0.2810	27.77	0.0171
N-Butane	1.7377	1.7190	0.5500	56.69	0.0349
I-Pentane	0.6493	0.6423	0.2380	25.98	0.0162
N-Pentane	0.5435	0.5377	0.1980	21.79	0.0135
Hexane Plus	1.4141	1.3989	0.6330	74.54	0.0468
Total	100.0000	98.9265	19.6000	1307.03	0.7657

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0041
BTU/CU.FT IDEAL: 1310.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1315.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1292.5
DRY BTU @ 15.025: 1341.7
REAL SPECIFIC GRAVITY: 0.7686

CYLINDER #: 6093
CYLINDER PRESSURE: 28 PSIG
ANALYSIS DATE: 05/22/2019
ANALYSIS TIME: 02:23:00 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: 05/29/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: STANOLIND GAS COM D #1B; TBG
Stn. No.: 98455
Mtr. No.: API # 3004530841

TUBING
MV

05/29/2019
35825-11240

Smpl Date: 05/15/2019
Test Date: 05/22/2019
Run No: HS190074

Nitrogen: 0.2615
CO2: 1.1126
Methane: 77.7691
Ethane: 10.6081
Propane: 5.0501
I-Butane: 0.8540
N-Butane: 1.7377
I-Pentane: 0.6493
N-Pentane: 0.5435
Hexane+: 1.4141

BTU: 1315.4
GPM: 19.6000
SPG: 0.7686