



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

Analysis No: HS190084
Cust No: 35825-11285

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: SAN JUAN 27-5 UNIT 57; INT
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: DK/MV
Cust. Stn. No.: 75229-011
API # 3003907082

Source: INTERMEDIATE
Well Flowing: Y
Pressure: 32 PSIG
Flow Temp: DEG. F
Ambient Temp: 38 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 05/21/2019
Sample Time: 10.30 AM
Sampled By: MARIO O.
Sampled by (CO): HILCORP

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8121	0.7963	0.0900	0.00	0.0079
CO2	0.0053	0.0052	0.0010	0.00	0.0001
Methane	84.2023	82.5660	14.3170	850.44	0.4664
Ethane	7.7342	7.5839	2.0750	136.87	0.0803
Propane	4.7681	4.6754	1.3170	119.97	0.0726
Iso-Butane	0.5445	0.5339	0.1790	17.71	0.0109
N-Butane	1.0998	1.0784	0.3480	35.88	0.0221
I-Pentane	0.2658	0.2606	0.0970	10.63	0.0066
N-Pentane	0.2181	0.2139	0.0790	8.74	0.0054
Hexane Plus	0.3498	0.3430	0.1560	18.44	0.0116
Total	100.0000	98.0566	18.6590	1198.69	0.6839

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032
BTU/CU.FT IDEAL: 1201.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1205.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1184.3
DRY BTU @ 15.025: 1229.4
REAL SPECIFIC GRAVITY: 0.6858

CYLINDER #: 6166
CYLINDER PRESSURE: 32 PSIG
ANALYSIS DATE: 05/23/2019
ANALYSIS TIME: 01:25:54 PM
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

Last Cal/Verify: 07/02/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 27-5 UNIT 57; INT
Stn. No.: 75229-011
Mtr. No.: API # 3003907082

INTERMEDIATE
DK/MV

07/02/2019
35825-11285

Smpl Date: 05/21/2019
Test Date: 05/23/2019
Run No: HS190084

Nitrogen: 0.8121
CO2: 0.0053
Methane: 84.2023
Ethane: 7.7342
Propane: 4.7681
I-Butane: 0.5445
N-Butane: 1.0998
I-Pentane: 0.2658
N-Pentane: 0.2181
Hexane+: 0.3498

BTU: 1205.3
GPM: 18.6590
SPG: 0.6858



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

Analysis No: HS190083
Cust No: 35825-11280

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: SAN JUAN 27-5 UNIT 57; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: DK/MV
Cust. Stn. No.: 75229-011
API # 3003907082
AREA 14 / RUN 1400
Heat Trace: N
Remarks:

Source: CASING
Well Flowing: Y
Pressure: 126 PSIG
Flow Temp: DEG. F
Ambient Temp: 38 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 05/21/2019
Sample Time: 10.30 AM
Sampled By: MARIO O.
Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3409	0.3330	0.0380	0.00	0.0033
CO2	1.2296	1.2011	0.2110	0.00	0.0187
Methane	79.6180	77.7697	13.5440	804.14	0.4410
Ethane	9.1304	8.9185	2.4500	161.58	0.0948
Propane	5.2897	5.1669	1.4620	133.09	0.0805
Iso-Butane	1.0777	1.0527	0.3540	35.05	0.0216
N-Butane	1.9217	1.8771	0.6080	62.69	0.0386
I-Pentane	0.6298	0.6152	0.2310	25.20	0.0157
N-Pentane	0.4605	0.4498	0.1680	18.46	0.0115
Hexane Plus	0.3017	0.2947	0.1350	15.90	0.0100
Total	100.0000	97.6787	19.2010	1256.11	0.7356

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0037
BTU/CU.FT IDEAL: 1259.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1263.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1241.7
DRY BTU @ 15.025: 1289.0
REAL SPECIFIC GRAVITY: 0.7381

CYLINDER #: 4185
CYLINDER PRESSURE: 136 PSIG
ANALYSIS DATE: 05/23/2019
ANALYSIS TIME: 01:46:05 PM
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: 07/02/2019



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 27-5 UNIT 57; CSG
Stn. No.: 75229-011
Mtr. No.: API # 3003907082

CASING
DK/MV

07/02/2019
35825-11280

Smpl Date: 05/21/2019
Test Date: 05/23/2019
Run No: HS190083
Nitrogen: 0.3409
CO2: 1.2296
Methane: 79.6180
Ethane: 9.1304
Propane: 5.2897
I-Butane: 1.0777
N-Butane: 1.9217
I-Pentane: 0.6298
N-Pentane: 0.4605
Hexane+: 0.3017
BTU: 1263.7
GPM: 19.2010
SPG: 0.7381



2030 Afton Place
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Analysis No: HS190085
Cust No: 35825-11290

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: SAN JUAN 27-5 UNIT 57; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: DK/MV
Cust. Stn. No.: 75229-011
API # 3003907082

Source: TUBING
Well Flowing: Y
Pressure: 125 PSIG
Flow Temp: DEG. F
Ambient Temp: 38 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 05/21/2019
Sample Time: 10.23 AM
Sampled By: MARIO O.
Sampled by (CO): HILCORP

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1918	0.1886	0.0210	0.00	0.0019
CO2	1.0471	1.0294	0.1790	0.00	0.0159
Methane	83.0506	81.6492	14.1220	838.81	0.4600
Ethane	8.9248	8.7742	2.3940	157.94	0.0927
Propane	4.0013	3.9338	1.1060	100.68	0.0609
Iso-Butane	0.7291	0.7168	0.2390	23.71	0.0146
N-Butane	1.0518	1.0341	0.3330	34.31	0.0211
I-Pentane	0.3601	0.3540	0.1320	14.41	0.0090
N-Pentane	0.2532	0.2489	0.0920	10.15	0.0063
Hexane Plus	0.3902	0.3836	0.1750	20.57	0.0129
Total	100.0000	98.3126	18.7930	1200.58	0.6953

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0033
BTU/CU.FT IDEAL: 1203.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1207.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1186.3
DRY BTU @ 15.025: 1231.5
REAL SPECIFIC GRAVITY: 0.6973

CYLINDER #: 4119
CYLINDER PRESSURE: 130 PSIG
ANALYSIS DATE: 05/23/2019
ANALYSIS TIME: 02:36:05 PM
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: 07/02/2019



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 27-5 UNIT 57; TBG
Stn. No.: 75229-011
Mtr. No.: API # 3003907082

TUBING
DK/MV

07/02/2019
35825-11290

Smpl Date: 05/21/2019
Test Date: 05/23/2019
Run No: HS190085

Nitrogen: 0.1918
CO2: 1.0471
Methane: 83.0506
Ethane: 8.9248
Propane: 4.0013
I-Butane: 0.7291
N-Butane: 1.0518
I-Pentane: 0.3601
N-Pentane: 0.2532
Hexane+: 0.3902

BTU: 1207.3
GPM: 18.7930
SPG: 0.6973