



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

Analysis No: HS190109
Cust No: 35825-11395

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: SAN JUAN 30-5 UNIT 33; CSG
County/State:
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 3003907822

Source: CASING
Well Flowing: Y
Pressure: 110 PSIG
Flow Temp: DEG. F
Ambient Temp: 75 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 05/31/2019
Sample Time: 3.06 PM
Sampled By: GREG CRESSWELL
Sampled by (CO): HILCORP

AREA 12 / RUN 1201

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0790	0.0793	0.0090	0.00	0.0008
CO2	1.3944	1.3996	0.2380	0.00	0.0212
Methane	96.1720	96.5311	16.3360	971.34	0.5327
Ethane	1.8990	1.9061	0.5090	33.61	0.0197
Propane	0.2770	0.2780	0.0760	6.97	0.0042
Iso-Butane	0.0670	0.0673	0.0220	2.18	0.0013
N-Butane	0.0351	0.0352	0.0110	1.15	0.0007
I-Pentane	0.0202	0.0203	0.0070	0.81	0.0005
N-Pentane	0.0081	0.0081	0.0030	0.32	0.0002
Hexane Plus	0.0482	0.0484	0.0220	2.54	0.0016
Total	100.0000	100.3734	17.2330	1018.91	0.5829

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
BTU/CU.FT IDEAL: 1021.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1023.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1005.7
DRY BTU @ 15.025: 1044.0
REAL SPECIFIC GRAVITY: 0.584

CYLINDER #: 6125
CYLINDER PRESSURE: 134 PSIG
ANALYSIS DATE: 06/06/2019
ANALYSIS TIME: 11:22:26 AM
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: 06/11/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 30-5 UNIT 33; CSG
Stn. No.: API # 3003907822
Mtr. No.:

CASING

06/11/2019
35825-11395

Smpl Date: 05/31/2019
Test Date: 06/06/2019
Run No: HS190109
Nitrogen: 0.0790
CO2: 1.3944
Methane: 96.1720
Ethane: 1.8990
Propane: 0.2770
I-Butane: 0.0670
N-Butane: 0.0351
I-Pentane: 0.0202
N-Pentane: 0.0081
Hexane+: 0.0482
BTU: 1023.5
GPM: 17.2330
SPG: 0.5840



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

Analysis No: HS190110
Cust No: 35825-11400

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: SAN JUAN 30-5 UNIT 33; INT
County/State:
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 3003907822

Source: INTERMEDIATE
Well Flowing: Y
Pressure: 55 PSIG
Flow Temp: DEG. F
Ambient Temp: 75 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 05/31/2019
Sample Time: 11.30 AM
Sampled By: GREG CRESSWELL
Sampled by (CO): HILCORP

Heat Trace: AREA 12 / RUN 1201

Remarks: N

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1876	0.1885	0.0210	0.00	0.0018
CO2	0.4502	0.4522	0.0770	0.00	0.0068
Methane	90.5467	90.9577	15.3860	914.52	0.5015
Ethane	6.1216	6.1494	1.6410	108.33	0.0636
Propane	1.8968	1.9054	0.5240	47.73	0.0289
Iso-Butane	0.1753	0.1761	0.0570	5.70	0.0035
N-Butane	0.3290	0.3305	0.1040	10.73	0.0066
I-Pentane	0.0779	0.0783	0.0290	3.12	0.0019
N-Pentane	0.0630	0.0633	0.0230	2.53	0.0016
Hexane Plus	0.1519	0.1526	0.0680	8.01	0.0050
Total	100.0000	100.4540	17.9300	1100.66	0.6213

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
BTU/CU.FT IDEAL: 1103.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1106.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1086.9
DRY BTU @ 15.025: 1128.3
REAL SPECIFIC GRAVITY: 0.6227

CYLINDER #: 5021
CYLINDER PRESSURE: 52 PSIG
ANALYSIS DATE: 06/06/2019
ANALYSIS TIME: 01:41:38 AM
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: 06/11/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 30-5 UNIT 33; INT
Stn. No.: API # 3003907822
Mtr. No.:

INTERMEDIATE

06/11/2019
35825-11400

Smpl Date: 05/31/2019
Test Date: 06/06/2019
Run No: HS190110
Nitrogen: 0.1876
CO2: 0.4502
Methane: 90.5467
Ethane: 6.1216
Propane: 1.8968
I-Butane: 0.1753
N-Butane: 0.3290
I-Pentane: 0.0779
N-Pentane: 0.0630
Hexane+: 0.1519
BTU: 1106.1
GPM: 17.9300
SPG: 0.6227