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

Analysis No: HS190119
Cust No: 35825-11435

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	SAN JUAN 30-5 UNIT 75; BHD	Well Flowing:	Y
County/State:		Pressure:	45 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	75 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3003922708	Sample Method:	
		Sample Date:	06/05/2019
		Sample Time:	2.00 PM
	AREA 12 / RUN 1204	Sampled By:	GREG CRESSWELL
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

NMOCD
JUL 23 2019
DISTRICT III

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2453	0.2452	0.0270	0.00	0.0024
CO2	0.0138	0.0138	0.0020	0.00	0.0002
Methane	93.7249	93.6841	15.9220	946.62	0.5191
Ethane	5.5229	5.5205	1.4800	97.74	0.0573
Propane	0.3293	0.3292	0.0910	8.29	0.0050
Iso-Butane	0.0795	0.0795	0.0260	2.59	0.0016
N-Butane	0.0179	0.0179	0.0060	0.58	0.0004
I-Pentane	0.0230	0.0230	0.0080	0.92	0.0006
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0434	0.0434	0.0190	2.29	0.0014
Total	100.0000	99.9566	17.5810	1059.02	0.5880

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0023	CYLINDER #:	5031
BTU/CU.FT IDEAL:	1061.5	CYLINDER PRESSURE:	47 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1063.9	ANALYIS DATE:	06/10/2019
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1045.4	ANALYIS TIME:	01:50:12 PM
DRY BTU @ 15.025:	1085.2	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.5892		

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: 06/19/2019**
GC Method: C6+ Gas

HILCORP (BHD PROJECT)

WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 30-5 UNIT 75; BHD	BRADENHEAD	06/19/2019
Stn. No.:	API # 3003922708		35825-11435
Mtr. No.:			

Smpl Date:	06/05/2019
Test Date:	06/10/2019
Run No:	HS190119
Nitrogen:	0.2453
CO2:	0.0138
Methane:	93.7249
Ethane:	5.5229
Propane:	0.3293
I-Butane:	0.0795
N-Butane:	0.0179
I-Pentane:	0.0230
N-Pentane:	0.0000
Hexane+:	0.0434
BTU:	1063.9
GPM:	17.5810
SPG:	0.5892

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Analysis No: HS190120
Cust No: 35825-11440

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	SAN JUAN 30-5 UNIT 75; CSG	Well Flowing:	Y
County/State:		Pressure:	107 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	75 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3003922708	Sample Method:	
		Sample Date:	06/05/2019
		Sample Time:	2.00 PM
	AREA 12 / RUN 1204	Sampled By:	GREG CRESSWELL
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0742	0.0732	0.0080	0.00	0.0007
CO2	0.7992	0.7882	0.1370	0.00	0.0121
Methane	98.6873	97.3329	16.7600	996.74	0.5466
Ethane	0.3470	0.3422	0.0930	6.14	0.0036
Propane	0.0317	0.0313	0.0090	0.80	0.0005
Iso-Butane	0.0239	0.0236	0.0080	0.78	0.0005
N-Butane	0.0095	0.0094	0.0030	0.31	0.0002
I-Pentane	0.0093	0.0092	0.0030	0.37	0.0002
N-Pentane	0.0028	0.0028	0.0010	0.11	0.0001
Hexane Plus	0.0151	0.0149	0.0070	0.80	0.0005
Total	100.0000	98.6277	17.0290	1006.05	0.5650

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.002	CYLINDER #:	4144
BTU/CU.FT IDEAL:	1008.4	CYLINDER PRESSURE:	122 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1010.4	ANALYIS DATE:	06/10/2019
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	992.8	ANALYIS TIME:	01:15:58 PM
DRY BTU @ 15.025:	1030.6	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.566		

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: 06/19/2019**
GC Method: C6+ Gas

HILCORP (BHD PROJECT)

WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 30-5 UNIT 75; CSG	CASING	06/19/2019
Stn. No.:	API # 3003922708		35825-11440
Mtr. No.:			

Smpl Date:	06/05/2019
Test Date:	06/10/2019
Run No:	HS190120
Nitrogen:	0.0742
CO2:	0.7992
Methane:	98.6873
Ethane:	0.3470
Propane:	0.0317
I-Butane:	0.0239
N-Butane:	0.0095
I-Pentane:	0.0093
N-Pentane:	0.0028
Hexane+:	0.0151
BTU:	1010.4
GPM:	17.0290
SPG:	0.5660

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Analysis No: HS190121
Cust No: 35825-11445

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	SAN JUAN 30-5 UNIT 75; TBG	Well Flowing:	Y
County/State:		Pressure:	80 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	75 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	API #3003922708	Sample Method:	
		Sample Date:	06/05/2019
		Sample Time:	2.00 PM
	AREA 12 / RUN 1204	Sampled By:	GREG CRESSWELL
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0906	0.0905	0.0100	0.00	0.0009
CO2	2.8239	2.8204	0.4830	0.00	0.0429
Methane	96.6907	96.5718	16.4220	976.58	0.5356
Ethane	0.3226	0.3222	0.0860	5.71	0.0033
Propane	0.0258	0.0258	0.0070	0.65	0.0004
Iso-Butane	0.0185	0.0185	0.0060	0.60	0.0004
N-Butane	0.0072	0.0072	0.0020	0.23	0.0001
I-Pentane	0.0069	0.0069	0.0030	0.28	0.0002
N-Pentane	0.0020	0.0020	0.0010	0.08	0.0000
Hexane Plus	0.0118	0.0118	0.0050	0.62	0.0004
Total	100.0000	99.8771	17.0250	984.75	0.5842

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0021	CYLINDER #:	6061
BTU/CU.FT IDEAL:	987.0	CYLINDER PRESSURE:	113 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	989.1	ANALYIS DATE:	06/10/2019
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	971.9	ANALYIS TIME:	01:28:33 PM
DRY BTU @ 15.025:	1008.9	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.5852		

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: 06/19/2019**
GC Method: C6+ Gas

HILCORP (BHD PROJECT)

WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 30-5 UNIT 75; TBG	TUBING	06/19/2019
Stn. No.:	API #3003922708		35825-11445
Mtr. No.:			

Smpl Date:	06/05/2019
Test Date:	06/10/2019
Run No:	HS190121
Nitrogen:	0.0906
CO2:	2.8239
Methane:	96.6907
Ethane:	0.3226
Propane:	0.0258
I-Butane:	0.0185
N-Butane:	0.0072
I-Pentane:	0.0069
N-Pentane:	0.0020
Hexane+:	0.0118
BTU:	989.1
GPM:	17.0250
SPG:	0.5852