



Well Name: SAN JUAN 32-8 UNIT 34M;
 API #: API # 3004533113
 Source: CASING
 Sample Type: GAS
 Analysis No: HS200239
 Cust No: 35825-13090

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SAN JUAN 32-8 UNIT 34M; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: MV/DK
 Cust. Stn. No.: API # 3004533113
 8320301
 AREA 4 /RUN 0406
 Heat Trace: N
 Remarks:

Source: CASING
 Well Flowing: Y
 Pressure: 122 PSIG
 Flow Temp: 80.3 DEG. F
 Ambient Temp: 78 DEG. F
 Flow Rate: 124 MCF/D
 Sample Method:
 Sample Date: 08/21/2020
 Sample Time: 9.00 AM
 Sampled By: TC SCANLAN
 Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2320	0.2245	0.0260	0.00	0.0022
CO2	0.7390	0.7152	0.1260	0.00	0.0112
Methane	95.0906	92.0341	16.1540	960.42	0.5267
Ethane	2.7479	2.6596	0.7360	48.63	0.0285
Propane	0.7254	0.7021	0.2000	18.25	0.0110
Iso-Butane	0.1367	0.1323	0.0450	4.45	0.0027
N-Butane	0.1349	0.1306	0.0430	4.40	0.0027
I-Pentane	0.0486	0.0470	0.0180	1.94	0.0012
N-Pentane	0.0248	0.0240	0.0090	0.99	0.0006
Hexane Plus	0.1201	0.1162	0.0540	6.33	0.0040
Total	100.0000	96.7856	17.4110	1045.41	0.5910

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0023
 BTU/CU.FT IDEAL: 1047.8
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1050.2
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1031.9
 DRY BTU @ 15.025: 1071.2
 REAL SPECIFIC GRAVITY: 0.5921

CYLINDER #: 4127
 CYLINDER PRESSURE: 117 PSIG
 ANALYSIS DATE: 08/28/2020
 ANALYSIS TIME: 02:31:41 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: 09/03/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-8 UNIT 34M; CSG	CASING	09/03/2020
Stn. No.:	API # 3004533113	MV/DK	35825-13090
Mtr. No.:	8320301		

Smpl Date:	08/21/2020
Test Date:	08/28/2020
Run No:	HS200239
Nitrogen:	0.2320
CO2:	0.7390
Methane:	95.0906
Ethane:	2.7479
Propane:	0.7254
I-Butane:	0.1367
N-Butane:	0.1349
I-Pentane:	0.0486
N-Pentane:	0.0248
Hexane+:	0.1201
BTU:	1050.2
GPM:	17.4110
SPG:	0.5921



Well Name: SAN JUAN 32-8 UNIT 34M;
API #: API # 3004533113
Source: INTERMEDIATE CASING
Sample Type: GAS
Analysis No: HS200240
Cust No: 35825-13095

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE CASING
Well Name:	SAN JUAN 32-8 UNIT 34M; INT	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	122 PSIG
Location:		Flow Temp:	80.3 DEG. F
Lease/PA/CA:		Ambient Temp:	78 DEG. F
Formation:	MV/DK	Flow Rate:	124 MCF/D
Cust. Stn. No.:	API # 3004533113	Sample Method:	
	8320301	Sample Date:	08/21/2020
		Sample Time:	9.00 AM
	AREA 4 / RUN 0406	Sampled By:	TC SCANLAN
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1231	0.1198	0.0140	0.00	0.0012
CO2	0.6038	0.5877	0.1030	0.00	0.0092
Methane	94.9329	92.3958	16.1270	958.82	0.5258
Ethane	2.8561	2.7798	0.7650	50.54	0.0297
Propane	0.7337	0.7141	0.2030	18.46	0.0112
Iso-Butane	0.1450	0.1411	0.0480	4.72	0.0029
N-Butane	0.1464	0.1425	0.0460	4.78	0.0029
I-Pentane	0.0628	0.0611	0.0230	2.51	0.0016
N-Pentane	0.0332	0.0323	0.0120	1.33	0.0008
Hexane Plus	0.3630	0.3533	0.1620	19.13	0.0120
Total	100.0000	97.3275	17.5030	1060.30	0.5973

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0023
BTU/CU.FT IDEAL:	1062.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1065.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1046.7
DRY BTU @ 15.025:	1086.5
REAL SPECIFIC GRAVITY:	0.5984

CYLINDER #:	6142
CYLINDER PRESSURE:	115 PSIG
ANALYSIS DATE:	08/28/2020
ANALYSIS TIME:	02:41:33 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: 09/03/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-8 UNIT 34M; INT	INTERMEDIATE CASING	09/03/2020
Stn. No.:	API # 3004533113	MV/DK	35825-13095
Mtr. No.:	8320301		

Smpl Date:	08/21/2020
Test Date:	08/28/2020
Run No:	HS200240
Nitrogen:	0.1231
CO2:	0.6038
Methane:	94.9329
Ethane:	2.8561
Propane:	0.7337
I-Butane:	0.1450
N-Butane:	0.1464
I-Pentane:	0.0628
N-Pentane:	0.0332
Hexane+:	0.3630
BTU:	1065.2
GPM:	17.5030
SPG:	0.5984



Well Name: SAN JUAN 32-8 UNIT 34M;
 API #: API # 3004533113
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS200241
 Cust No: 35825-13100

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SAN JUAN 32-8 UNIT 34M; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: MV/DK
 Cust. Stn. No.: API # 3004533113
 8320301
 AREA 4 / RUN 0406
 Heat Trace: N
 Remarks:

Source: TUBING
 Well Flowing: Y
 Pressure: 122 PSIG
 Flow Temp: 80.3 DEG. F
 Ambient Temp: 78 DEG. F
 Flow Rate: 124 MCF/D
 Sample Method:
 Sample Date: 08/21/2020
 Sample Time: 9.00 AM
 Sampled By: TC SCANLAN
 Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0945	0.0936	0.0100	0.00	0.0009
CO2	2.8792	2.8513	0.4920	0.00	0.0437
Methane	95.1585	94.2357	16.1640	961.10	0.5271
Ethane	1.3973	1.3838	0.3740	24.73	0.0145
Propane	0.2813	0.2786	0.0780	7.08	0.0043
Iso-Butane	0.0637	0.0631	0.0210	2.07	0.0013
N-Butane	0.0461	0.0457	0.0150	1.50	0.0009
I-Pentane	0.0231	0.0229	0.0080	0.92	0.0006
N-Pentane	0.0112	0.0111	0.0040	0.45	0.0003
Hexane Plus	0.0451	0.0447	0.0200	2.38	0.0015
Total	100.0000	99.0305	17.1860	1000.23	0.5951

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
 BTU/CU.FT IDEAL: 1002.5
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1004.8
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 987.3
 DRY BTU @ 15.025: 1024.9
 REAL SPECIFIC GRAVITY: 0.5962

CYLINDER #: 6225
 CYLINDER PRESSURE: 118 PSIG
 ANALYSIS DATE: 08/28/2020
 ANALYSIS TIME: 02:59:39 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: 09/03/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-8 UNIT 34M; TBG	TUBING	09/03/2020
Stn. No.:	API # 3004533113	MV/DK	35825-13100
Mtr. No.:	8320301		

Smpl Date:	08/21/2020
Test Date:	08/28/2020
Run No:	HS200241
Nitrogen:	0.0945
CO2:	2.8792
Methane:	95.1585
Ethane:	1.3973
Propane:	0.2813
I-Butane:	0.0637
N-Butane:	0.0461
I-Pentane:	0.0231
N-Pentane:	0.0112
Hexane+:	0.0451
BTU:	1004.8
GPM:	17.1860
SPG:	0.5962