



OCD Received
8/26/2020

Well Name: SAN JUAN 30-6 UNIT 41;
API #: API # 3003918201
Source: BRADENHEAD
Sample Type: GAS
Analysis No: HS200186
Cust No: 35825-12830

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT) Source: BRADENHEAD
Well Name: SAN JUAN 30-6 UNIT 41; BHD Well Flowing: Y
County/State: RIO ARRIBA NM Pressure: 34 PSIG
Location: Flow Temp: 90 DEG. F
Lease/PA/CA: Ambient Temp: 98 DEG. F
Formation: MV Flow Rate: 63 MCF/D
Cust. Stn. No.: API # 3003918201 Sample Method: Purge & Fill
7195001 Sample Date: 08/10/2020
Sample Time: 1.59 PM
Sampled By: PHILL TRAYER
Sampled by (CO): HILCORP
AREA 12 / RUN 1201
Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1022	0.1015	0.0110	0.00	0.0010
CO2	0.3489	0.3465	0.0600	0.00	0.0053
Methane	95.5673	94.9054	16.2330	965.23	0.5293
Ethane	3.1075	3.0860	0.8330	54.99	0.0323
Propane	0.5951	0.5910	0.1640	14.97	0.0091
Iso-Butane	0.0974	0.0967	0.0320	3.17	0.0020
N-Butane	0.0789	0.0784	0.0250	2.57	0.0016
I-Pentane	0.0322	0.0320	0.0120	1.29	0.0008
N-Pentane	0.0135	0.0134	0.0050	0.54	0.0003
Hexane Plus	0.0570	0.0566	0.0250	3.00	0.0019
Total	100.0000	99.3075	17.4000	1045.77	0.5835

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
BTU/CU.FT IDEAL: 1048.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1050.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1032.2
DRY BTU @ 15.025: 1071.5
REAL SPECIFIC GRAVITY: 0.5846

CYLINDER #: 4021
CYLINDER PRESSURE: 61 PSIG
ANALYSIS DATE: 08/14/2020
ANALYSIS TIME: 01:15:45 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: 08/19/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 30-6 UNIT 41; BHD	BRADENHEAD	08/19/2020
Stn. No.:	API # 3003918201	MV	35825-12830
Mtr. No.:	7195001		

Smpl Date: 08/10/2020
Test Date: 08/14/2020
Run No: HS200186

Nitrogen: 0.1022
CO2: 0.3489
Methane: 95.5673
Ethane: 3.1075
Propane: 0.5951
I-Butane: 0.0974
N-Butane: 0.0789
I-Pentane: 0.0322
N-Pentane: 0.0135
Hexane+: 0.0570

BTU: 1050.5
GPM: 17.4000
SPG: 0.5846



Well Name: SAN JUAN 30-6 UNIT 41;
 API #: API # 3003918201
 Source: INTERMEDIATE CASING
 Sample Type: GAS
 Analysis No: HS200188
 Cust No: 35825-12840

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE CASING
Well Name:	SAN JUAN 30-6 UNIT 41; INT	Well Flowing:	Y
County/State:	RIO ARRIBA NM	Pressure:	34 PSIG
Location:		Flow Temp:	90 DEG. F
Lease/PA/CA:		Ambient Temp:	98 DEG. F
Formation:	MV	Flow Rate:	63 MCF/D
Cust. Stn. No.:	API # 3003918201	Sample Method:	Purge & Fill
	7195001	Sample Date:	08/10/2020
	AREA 12 / RUN 1201	Sample Time:	1.53 PM
Heat Trace:		Sampled By:	PHILL TRAYER
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1126	0.1102	0.0120	0.00	0.0011
CO2	2.3401	2.2900	0.4000	0.00	0.0356
Methane	87.9028	86.0213	14.9390	887.82	0.4869
Ethane	6.8701	6.7231	1.8420	121.58	0.0713
Propane	1.8533	1.8136	0.5120	46.63	0.0282
Iso-Butane	0.2105	0.2060	0.0690	6.85	0.0042
N-Butane	0.3342	0.3270	0.1060	10.90	0.0067
I-Pentane	0.0944	0.0924	0.0350	3.78	0.0024
N-Pentane	0.0663	0.0649	0.0240	2.66	0.0017
Hexane Plus	0.2157	0.2111	0.0960	11.37	0.0071
Total	100.0000	97.8596	18.0350	1091.58	0.6452

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0027	CYLINDER #:	7039
BTU/CU.FT IDEAL:	1094.1	CYLINDER PRESSURE:	70 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1097.1	ANALYSIS DATE:	08/14/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1078.0	ANALYSIS TIME:	11:15:33 AM
DRY BTU @ 15.025:	1119.1	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6466		

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: 08/19/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 30-6 UNIT 41; INT	INTERMEDIATE CASING	08/19/2020
Stn. No.:	API # 3003918201	MV	35825-12840
Mtr. No.:	7195001		

Smpl Date: 08/10/2020
Test Date: 08/14/2020
Run No: HS200188

Nitrogen: 0.1126
CO2: 2.3401
Methane: 87.9028
Ethane: 6.8701
Propane: 1.8533
I-Butane: 0.2105
N-Butane: 0.3342
I-Pentane: 0.0944
N-Pentane: 0.0663
Hexane+: 0.2157

BTU: 1097.1
GPM: 18.0350
SPG: 0.6466



Well Name: SAN JUAN 30-6 UNIT 41;
 API #: API # 3003918201
 Source: CASING
 Sample Type: GAS
 Analysis No: HS200187
 Cust No: 35825-12835

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	SAN JUAN 30-6 UNIT 41; CSG	Well Flowing:	Y
County/State:	RIO ARRIBA NM	Pressure:	34 PSIG
Location:		Flow Temp:	90 DEG. F
Lease/PA/CA:		Ambient Temp:	98 DEG. F
Formation:	MV	Flow Rate:	63 MCF/D
Cust. Stn. No.:	API # 3003918201	Sample Method:	Purge & Fill
	7195001	Sample Date:	08/10/2020
	AREA 12 / RUN 1201	Sample Time:	1.48 PM
Heat Trace:	N	Sampled By:	PHILL TRAYER
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1130	0.1130	0.0120	0.00	0.0011
CO2	2.3418	2.3410	0.4010	0.00	0.0356
Methane	88.5287	88.4996	15.0430	894.14	0.4904
Ethane	6.4329	6.4308	1.7240	113.84	0.0668
Propane	1.6978	1.6972	0.4690	42.72	0.0258
Iso-Butane	0.1968	0.1967	0.0650	6.40	0.0039
N-Butane	0.3089	0.3088	0.0980	10.08	0.0062
I-Pentane	0.0910	0.0910	0.0330	3.64	0.0023
N-Pentane	0.0651	0.0651	0.0240	2.61	0.0016
Hexane Plus	0.2240	0.2239	0.1000	11.81	0.0074
Total	100.0000	99.9671	17.9690	1085.24	0.6411

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0026	CYLINDER #:	4203
BTU/CU.FT IDEAL:	1087.7	CYLINDER PRESSURE:	78 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1090.6	ANALYSIS DATE:	08/14/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1071.6	ANALYSIS TIME:	11:26:29 AM
DRY BTU @ 15.025:	1112.4	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6425		

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: 08/19/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 30-6 UNIT 41; CSG	CASING	08/19/2020
Stn. No.:	API # 3003918201	MV	35825-12835
Mtr. No.:	7195001		

Smpl Date: 08/10/2020
Test Date: 08/14/2020
Run No: HS200187

Nitrogen: 0.1130
CO2: 2.3418
Methane: 88.5287
Ethane: 6.4329
Propane: 1.6978
I-Butane: 0.1968
N-Butane: 0.3089
I-Pentane: 0.0910
N-Pentane: 0.0651
Hexane+: 0.2240

BTU: 1090.6
GPM: 17.9690
SPG: 0.6425



Well Name: SAN JUAN 30-6 UNIT 41;
 API #: API # 3003918201
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS200189
 Cust No: 35825-12845

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	SAN JUAN 30-6 UNIT 41; TBG	Well Flowing:	Y
County/State:	RIO ARRIBA NM	Pressure:	34 PSIG
Location:		Flow Temp:	90 DEG. F
Lease/PA/CA:		Ambient Temp:	98 DEG. F
Formation:	MV	Flow Rate:	63 MCF/D
Cust. Stn. No.:	API # 3003918201	Sample Method:	Purge & Fill
	7195001	Sample Date:	08/10/2020
	AREA 12 / RUN 1201	Sample Time:	1.35 PM
Heat Trace:	N	Sampled By:	PHILL TRAYER
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0966	0.0959	0.0110	0.00	0.0009
CO2	2.0512	2.0370	0.3510	0.00	0.0312
Methane	93.3695	92.7233	15.8610	943.03	0.5172
Ethane	3.3953	3.3718	0.9100	60.09	0.0353
Propane	0.7234	0.7184	0.2000	18.20	0.0110
Iso-Butane	0.1079	0.1072	0.0350	3.51	0.0022
N-Butane	0.1148	0.1140	0.0360	3.75	0.0023
I-Pentane	0.0388	0.0385	0.0140	1.55	0.0010
N-Pentane	0.0229	0.0227	0.0080	0.92	0.0006
Hexane Plus	0.0796	0.0790	0.0360	4.20	0.0026
Total	100.0000	99.3078	17.4620	1035.24	0.6042

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0023	CYLINDER #:	5025
BTU/CU.FT IDEAL:	1037.6	CYLINDER PRESSURE:	33 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1040.0	ANALYSIS DATE:	08/14/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1021.9	ANALYSIS TIME:	01:24:24 PM
DRY BTU @ 15.025:	1060.8	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6053		

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: 08/19/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 30-6 UNIT 41; TBG	TUBING	08/19/2020
Stn. No.:	API # 3003918201	MV	35825-12845
Mtr. No.:	7195001		

Smpl Date: 08/10/2020
Test Date: 08/14/2020
Run No: HS200189

Nitrogen: 0.0966
CO2: 2.0512
Methane: 93.3695
Ethane: 3.3953
Propane: 0.7234
I-Butane: 0.1079
N-Butane: 0.1148
I-Pentane: 0.0388
N-Pentane: 0.0229
Hexane+: 0.0796

BTU: 1040.0
GPM: 17.4620
SPG: 0.6053