



OCD Received
5/21/2020

Well Name: SAN JUAN 29-6 UNIT 6B;
API #: API # 3003929753
Source: BRADENHEAD
Sample Type: GAS
Analysis No: HS200017
Cust No: 35825-12115

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: SAN JUAN 29-6 UNIT 6B; BHD
County/State: RIO ARRIBA NM
Location:
Lease/PA/CA:
Formation: MV
Cust. Stn. No.: API # 3003929753
8300001

Source: BRADENHEAD
Well Flowing:
Pressure: PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 05/15/2020
Sample Time: 12.15 PM
Sampled By: CORY S.
Sampled by (CO): HILCORP

AREA 13 / RUN 1306

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.7199	0.7074	0.0790	0.00	0.0070
CO2	0.0095	0.0093	0.0020	0.00	0.0001
Methane	91.3443	89.7641	15.5200	922.58	0.5060
Ethane	4.8140	4.7307	1.2900	85.19	0.0500
Propane	1.9858	1.9514	0.5480	49.96	0.0302
Iso-Butane	0.4462	0.4385	0.1460	14.51	0.0090
N-Butane	0.4095	0.4024	0.1290	13.36	0.0082
I-Pentane	0.1513	0.1487	0.0550	6.05	0.0038
N-Pentane	0.0596	0.0586	0.0220	2.39	0.0015
Hexane Plus	0.0599	0.0589	0.0270	3.16	0.0020
Total	100.0000	98.2700	17.8180	1097.20	0.6177

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0025
BTU/CU.FT IDEAL: 1099.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1102.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1083.3
DRY BTU @ 15.025: 1124.6
REAL SPECIFIC GRAVITY: 0.619

CYLINDER #: 4188
CYLINDER PRESSURE: 20 PSIG
ANALYSIS DATE: 05/20/2020
ANALYSIS TIME: 10:33:40 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: 05/21/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 29-6 UNIT 6B; BHD	BRADENHEAD	05/21/2020
Stn. No.:	API # 3003929753	MV	35825-12115
Mtr. No.:	8300001		

Smpl Date:	05/15/2020
Test Date:	05/20/2020
Run No:	HS200017
Nitrogen:	0.7199
CO2:	0.0095
Methane:	91.3443
Ethane:	4.8140
Propane:	1.9858
I-Butane:	0.4462
N-Butane:	0.4095
I-Pentane:	0.1513
N-Pentane:	0.0596
Hexane+:	0.0599
BTU:	1102.5
GPM:	17.8180
SPG:	0.6190



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

Analysis No: HS200019
Cust No: 35825-12125

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE
Well Name:	SAN JUAN 29-6 UNIT 6B; INT	Well Flowing:	
County/State:	RIO ARRIBA NM	Pressure:	PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:	MV	Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3003929753	Sample Method:	Purge & Fill
	8300001	Sample Date:	05/19/2020
		Sample Time:	12.20 PM
	AREA 13 / RUN 1306	Sampled By:	CORY S.
Heat Trace:		Sampled by (CO):	HILCORP
Remarks:	PRESSURED WITH HELIUM TO 30LBS.		

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	17.4684	5.8913	1.9250	0.00	0.1690
CO2	0.0225	0.0076	0.0040	0.00	0.0003
Methane	78.9073	26.6118	13.3980	796.96	0.4371
Ethane	2.1897	0.7385	0.5870	38.75	0.0227
Propane	0.9601	0.3238	0.2650	24.16	0.0146
Iso-Butane	0.1545	0.0521	0.0510	5.02	0.0031
N-Butane	0.1696	0.0572	0.0540	5.53	0.0034
I-Pentane	0.0460	0.0155	0.0170	1.84	0.0011
N-Pentane	0.0291	0.0098	0.0110	1.17	0.0007
Hexane Plus	0.0528	0.0178	0.0240	2.78	0.0017
Total	100.0000	33.7254	16.3360	876.22	0.6538

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0018
BTU/CU.FT IDEAL:	878.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	879.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	864.5
DRY BTU @ 15.025:	897.4
REAL SPECIFIC GRAVITY:	0.6548

CYLINDER #:	7006
CYLINDER PRESSURE:	PSIG
ANALYSIS DATE:	05/20/2020
ANALYSIS TIME:	10:44:54 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: 05/21/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 29-6 UNIT 6B; INT	INTERMEDIATE	05/21/2020
Stn. No.:	API # 3003929753	MV	35825-12125
Mtr. No.:	8300001		

Smpl Date: 05/19/2020
Test Date: 05/20/2020
Run No: HS200019

Nitrogen: 17.4684
CO2: 0.0225
Methane: 78.9073
Ethane: 2.1897
Propane: 0.9601
I-Butane: 0.1545
N-Butane: 0.1696
I-Pentane: 0.0460
N-Pentane: 0.0291
Hexane+: 0.0528

BTU: 879.8
GPM: 16.3360
SPG: 0.6548



Well Name: SAN JUAN 29-6 UNIT 6B;
 API #: API # 3003929753
 Source: CASING
 Sample Type: GAS
 Analysis No: HS200018
 Cust No: 35825-12120

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	SAN JUAN 29-6 UNIT 6B; CSG	Well Flowing:	
County/State:	RIO ARRIBA NM	Pressure:	75 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:	MV	Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3003929753	Sample Method:	Purge & Fill
	8300001	Sample Date:	05/15/2020
	AREA 13 / RUN 1306	Sample Time:	12.10 PM
Heat Trace:		Sampled By:	CORY S.
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1997	0.1945	0.0220	0.00	0.0019
CO2	1.6388	1.5958	0.2800	0.00	0.0249
Methane	90.4654	88.0889	15.3730	913.70	0.5011
Ethane	4.7404	4.6159	1.2710	83.89	0.0492
Propane	1.6832	1.6390	0.4650	42.35	0.0256
Iso-Butane	0.2296	0.2236	0.0750	7.47	0.0046
N-Butane	0.3726	0.3628	0.1180	12.16	0.0075
I-Pentane	0.1104	0.1075	0.0400	4.42	0.0028
N-Pentane	0.0929	0.0905	0.0340	3.72	0.0023
Hexane Plus	0.4670	0.4547	0.2090	24.62	0.0155
Total	100.0000	97.3732	17.8870	1092.32	0.6354

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0026	CYLINDER #:	4132
BTU/CU.FT IDEAL:	1094.8	CYLINDER PRESSURE:	72 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1097.7	ANALYSIS DATE:	05/20/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1078.6	ANALYSIS TIME:	10:34:07 AM
DRY BTU @ 15.025:	1119.7	ANALYSIS RUN BY:	PATRICIA KING
REAL SPECIFIC GRAVITY:	0.6368		

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: 05/21/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 29-6 UNIT 6B; CSG	CASING	05/21/2020
Stn. No.:	API # 3003929753	MV	35825-12120
Mtr. No.:	8300001		

Smpl Date:	05/15/2020
Test Date:	05/20/2020
Run No:	HS200018
Nitrogen:	0.1997
CO2:	1.6388
Methane:	90.4654
Ethane:	4.7404
Propane:	1.6832
I-Butane:	0.2296
N-Butane:	0.3726
I-Pentane:	0.1104
N-Pentane:	0.0929
Hexane+:	0.4670
BTU:	1097.7
GPM:	17.8870
SPG:	0.6368



Well Name: SAN JUAN 29-6 UNIT 6B;
API #: API # 3003929753
Source: TUBING
Sample Type: GAS
Analysis No: HS200020
Cust No: 35825-12130

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT) Source: TUBING
Well Name: SAN JUAN 29-6 UNIT 6B; TBG Well Flowing: Y
County/State: RIO ARRIBA NM Pressure: 61 PSIG
Location: Flow Temp: DEG. F
Lease/PA/CA: Ambient Temp: DEG. F
Formation: MV Flow Rate: MCF/D
Cust. Stn. No.: API # 3003929753 Sample Method: Purge & Fill
8300001 Sample Date: 05/15/2020
AREA 13 / RUN 1306 Sample Time: 12.04 PM
Sampled By: CORY S.
Sampled by (CO): HILCORP
Heat Trace:
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1505	0.1467	0.0170	0.00	0.0015
CO2	1.3787	1.3437	0.2360	0.00	0.0209
Methane	82.8958	80.7924	14.0980	837.25	0.4592
Ethane	8.6838	8.4634	2.3300	153.68	0.0902
Propane	3.7204	3.6260	1.0280	93.61	0.0566
Iso-Butane	0.7441	0.7252	0.2440	24.20	0.0149
N-Butane	0.9488	0.9247	0.3000	30.95	0.0190
I-Pentane	0.3885	0.3786	0.1430	15.54	0.0097
N-Pentane	0.2661	0.2593	0.0970	10.67	0.0066
Hexane Plus	0.8233	0.8024	0.3680	43.40	0.0272
Total	100.0000	97.4624	18.8610	1209.29	0.7059

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0034
BTU/CU.FT IDEAL: 1212.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1216.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1195.0
DRY BTU @ 15.025: 1240.6
REAL SPECIFIC GRAVITY: 0.708

CYLINDER #: 5036
CYLINDER PRESSURE: 60 PSIG
ANALYSIS DATE: 05/20/2020
ANALYSIS TIME: 10:15:07 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: 05/21/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 29-6 UNIT 6B; TBG	TUBING	05/21/2020
Stn. No.:	API # 3003929753	MV	35825-12130
Mtr. No.:	8300001		

Smpl Date: 05/15/2020
Test Date: 05/20/2020
Run No: HS200020

Nitrogen: 0.1505
CO2: 1.3787
Methane: 82.8958
Ethane: 8.6838
Propane: 3.7204
I-Butane: 0.7441
N-Butane: 0.9488
I-Pentane: 0.3885
N-Pentane: 0.2661
Hexane+: 0.8233

BTU: 1216.2
GPM: 18.8610
SPG: 0.7080