



Well Name: SAN JUAN 29-7 UNIT NP

API #: API # 3003924839

Source: BRADENHEAD

Sample Type: GAS

Analysis No: HS200190

Cust No: 35825-12855

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SAN JUAN 29-7 UNIT NP 525 FRC; BHD
 County/State: RIO ARRIBA NM
 Location:
 Lease/PA/CA: SF078424
 Formation: FRC
 Cust. Stn. No.: API # 3003924839
 92-875-01

Source: BRADENHEAD
 Well Flowing: Y
 Pressure: 120 PSIG
 Flow Temp: 107 DEG. F
 Ambient Temp: 86 DEG. F
 Flow Rate: 0 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 08/12/2020
 Sample Time: 12.58 PM
 Sampled By: MARC YATES
 Sampled by (CO): HILCORP

Heat Trace: N
 AREA 10 / RUN 1001

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2088	0.2085	0.0230	0.00	0.0020
CO2	0.3925	0.3920	0.0670	0.00	0.0060
Methane	89.4528	89.3429	15.2020	903.47	0.4955
Ethane	5.7917	5.7846	1.5530	102.50	0.0601
Propane	2.7077	2.7044	0.7480	68.13	0.0412
Iso-Butane	0.4750	0.4744	0.1560	15.45	0.0095
N-Butane	0.4056	0.4051	0.1280	13.23	0.0081
I-Pentane	0.1116	0.1115	0.0410	4.47	0.0028
N-Pentane	0.0650	0.0649	0.0240	2.61	0.0016
Hexane Plus	0.3893	0.3888	0.1740	20.52	0.0129
Total	100.0000	99.8771	18.1160	1130.37	0.6398

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
 BTU/CU.FT IDEAL: 1133.0
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1136.0
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1116.2
 DRY BTU @ 15.025: 1158.8
 REAL SPECIFIC GRAVITY: 0.6412

CYLINDER #: 6192
 CYLINDER PRESSURE: 87 PSIG
 ANALYSIS DATE: 08/18/2020
 ANALYSIS TIME: 08:48:19 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: 09/11/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 29-7 UNIT NP 525 FRC;	BRADENHEAD	09/11/2020
Stn. No.:	API # 3003924839	FRC	35825-12855
Mtr. No.:	92-875-01		

Smpl Date:	08/12/2020
Test Date:	08/18/2020
Run No:	HS200190
Nitrogen:	0.2088
CO2:	0.3925
Methane:	89.4528
Ethane:	5.7917
Propane:	2.7077
I-Butane:	0.4750
N-Butane:	0.4056
I-Pentane:	0.1116
N-Pentane:	0.0650
Hexane+:	0.3893
BTU:	1136.0
GPM:	18.1160
SPG:	0.6412



Well Name: SAN JUAN 29-7 UNIT NP
 API #: API # 3003924839
 Source: CASING
 Sample Type: GAS
 Analysis No: HS200191
 Cust No: 35825-12850

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	SAN JUAN 29-7 UNIT NP 525 FRC; CSG	Well Flowing:	Y
County/State:	RIO ARRIBA NM	Pressure:	120 PSIG
Location:		Flow Temp:	107 DEG. F
Lease/PA/CA:	SF078474	Ambient Temp:	86 DEG. F
Formation:	FRC	Flow Rate:	0 MCF/D
Cust. Stn. No.:	API # 3003924839	Sample Method:	
	92-875-01	Sample Date:	08/12/2020
	AREA 10 / RUN 1001	Sample Time:	12.59 PM
Heat Trace:	N	Sampled By:	MARC YATES
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8924	0.8879	0.0980	0.00	0.0086
CO2	0.4402	0.4380	0.0750	0.00	0.0067
Methane	95.9389	95.4502	16.3010	968.98	0.5314
Ethane	0.8883	0.8838	0.2380	15.72	0.0092
Propane	0.0034	0.0034	0.0010	0.09	0.0001
Iso-Butane	0.0000	0.0000	0.0000	0.00	0.0000
N-Butane	0.0000	0.0000	0.0000	0.00	0.0000
I-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	1.8368	1.8274	0.8210	96.82	0.0608
Total	100.0000	99.4907	17.5340	1081.61	0.6168

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0025	CYLINDER #:	6045
BTU/CU.FT IDEAL:	1084.1	CYLINDER PRESSURE:	89 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1086.8	ANALYSIS DATE:	08/18/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1067.9	ANALYSIS TIME:	09:03:08 AM
DRY BTU @ 15.025:	1108.6	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6181		

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: 09/11/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 29-7 UNIT NP 525 FRC;	CASING	09/11/2020
Stn. No.:	API # 3003924839	FRC	35825-12850
Mtr. No.:	92-875-01		

Smpl Date:	08/12/2020
Test Date:	08/18/2020
Run No:	HS200191
Nitrogen:	0.8924
CO2:	0.4402
Methane:	95.9389
Ethane:	0.8883
Propane:	0.0034
I-Butane:	0.0000
N-Butane:	0.0000
I-Pentane:	0.0000
N-Pentane:	0.0000
Hexane+:	1.8368
BTU:	1086.8
GPM:	17.5340
SPG:	0.6181