



OCD Received
5/12/2020

Well Name: CANYON LARGO UNIT
API #: API # 3003905554
Source: BRADENHEAD
Sample Type: GAS
Analysis No: HS200007
Cust No: 35825-10970

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: CANYON LARGO UNIT #20; BHD
County/State: RIO ARRIBA NM
Location:
Lease/PA/CA: FEE
Formation: NAC,OA,KL, FC, PC
Cust. Stn. No.: API # 3003905554
74-432-01
AREA 14 / RUN 1409
Heat Trace: N
Remarks:

Source: BRADENHEAD
Well Flowing: N
Pressure: 120 PSIG
Flow Temp: DEG. F
Ambient Temp: 70 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 05/01/2020
Sample Time: 10.05 AM
Sampled By: SIMON RUDDER
Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.9487	0.9343	0.1050	0.00	0.0092
CO2	0.0346	0.0341	0.0060	0.00	0.0005
Methane	84.6755	83.3866	14.3960	855.22	0.4690
Ethane	7.4616	7.3480	2.0010	132.05	0.0775
Propane	4.1143	4.0517	1.1370	103.52	0.0626
Iso-Butane	0.9370	0.9227	0.3070	30.47	0.0188
N-Butane	0.9630	0.9483	0.3040	31.42	0.0193
I-Pentane	0.3536	0.3482	0.1300	14.15	0.0088
N-Pentane	0.2022	0.1991	0.0740	8.11	0.0050
Hexane Plus	0.3095	0.3048	0.1380	16.31	0.0102
Total	100.0000	98.4778	18.5980	1191.24	0.6810

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0031	CYLINDER #:	4181
BTU/CU.FT IDEAL:	1194.0	CYLINDER PRESSURE:	121 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1197.7	ANALYSIS DATE:	05/06/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1176.9	ANALYSIS TIME:	11:13:43 AM
DRY BTU @ 15.025:	1221.7	ANALYSIS RUN BY:	SHYANN ELLEDGE
REAL SPECIFIC GRAVITY:	0.6829		

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: 05/11/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	CANYON LARGO UNIT #20; BHD	BRADENHEAD	05/11/2020
Stn. No.:	API # 3003905554	NAC,OA,KL, FC, PC	35825-10970
Mtr. No.:	74-432-01		

Smpl Date:	05/01/2020	03/25/2019
Test Date:	05/06/2020	03/28/2019
Run No:	HS200007	HS190012
Nitrogen:	0.9487	0.9269
CO2:	0.0346	0.0727
Methane:	84.6755	84.3756
Ethane:	7.4616	7.4799
Propane:	4.1143	4.2037
I-Butane:	0.9370	0.9470
N-Butane:	0.9630	0.9969
I-Pentane:	0.3536	0.3743
N-Pentane:	0.2022	0.2228
Hexane+:	0.3095	0.4002
BTU:	1197.7	1205.3
GPM:	18.5980	18.6510
SPG:	0.6829	0.6881



Well Name: CANYON LARGO UNIT
 API #: API # 3003905554
 Source: CASING
 Sample Type: GAS
 Analysis No: HS200008
 Cust No: 35825-10975

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	CANYON LARGO UNIT #20; CSG	Well Flowing:	N
County/State:	RIO ARRIBA NM	Pressure:	120 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:	FEE	Ambient Temp:	70 DEG. F
Formation:	NAC,OA,KL,FC, PC	Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3003905554	Sample Method:	Purge & Fill
	74-432-01	Sample Date:	05/01/2020
	AREA 14 / AREA 1409	Sample Time:	10.00 AM
Heat Trace:	N	Sampled By:	SIMON RUDDER
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.9376	0.9239	0.1030	0.00	0.0091
CO2	0.0343	0.0338	0.0060	0.00	0.0005
Methane	84.5911	83.3553	14.3820	854.37	0.4686
Ethane	7.4775	7.3683	2.0050	132.33	0.0776
Propane	4.1383	4.0778	1.1430	104.12	0.0630
Iso-Butane	0.9421	0.9283	0.3090	30.64	0.0189
N-Butane	0.9732	0.9590	0.3080	31.75	0.0195
I-Pentane	0.3589	0.3537	0.1320	14.36	0.0089
N-Pentane	0.2080	0.2050	0.0760	8.34	0.0052
Hexane Plus	0.3390	0.3340	0.1520	17.87	0.0112
Total	100.0000	98.5391	18.6160	1193.77	0.6826

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0031	CYLINDER #:	6012
BTU/CU.FT IDEAL:	1196.5	CYLINDER PRESSURE:	123 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1200.3	ANALYSIS DATE:	05/06/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1179.4	ANALYSIS TIME:	11:23:07 AM
DRY BTU @ 15.025:	1224.3	ANALYSIS RUN BY:	SHYANN ELLEDGE
REAL SPECIFIC GRAVITY:	0.6844		

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: 05/11/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	CANYON LARGO UNIT #20; CSG	CASING	05/11/2020
Stn. No.:	API # 3003905554	NAC,OA,KL,FC, PC	35825-10975
Mtr. No.:	74-432-01		

Smpl Date:	05/01/2020	03/25/2019
Test Date:	05/06/2020	03/28/2019
Run No:	HS200008	HS190013
Nitrogen:	0.9376	0.9297
CO2:	0.0343	0.0519
Methane:	84.5911	84.2960
Ethane:	7.4775	7.5048
Propane:	4.1383	4.2220
I-Butane:	0.9421	0.9532
N-Butane:	0.9732	1.0042
I-Pentane:	0.3589	0.3779
N-Pentane:	0.2080	0.2254
Hexane+:	0.3390	0.4349
BTU:	1200.3	1207.9
GPM:	18.6160	18.6720
SPG:	0.6844	0.6895



Well Name: CANYON LARGO UNIT
 API #: API # 3003905554
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS200009
 Cust No: 35825-10980

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	CANYON LARGO UNIT #20; TBG	Well Flowing:	N
County/State:	RIO ARRIBA NM	Pressure:	10 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:	FEE	Ambient Temp:	70 DEG. F
Formation:	NAC,OA,KL,FC, PC	Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3003905554	Sample Method:	Purge & Fill
	74-432-01	Sample Date:	05/01/2020
	AREA 14 / AREA 1409	Sample Time:	10.10 AM
Heat Trace:	N	Sampled By:	SIMON RUDDER
Remarks:	PRESSURED WITH HELIUM TO 30LBS.	Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.0157	0.4749	0.1120	0.00	0.0098
CO2	0.0394	0.0184	0.0070	0.00	0.0006
Methane	85.5777	40.0132	14.5490	864.33	0.4740
Ethane	6.9650	3.2566	1.8680	123.26	0.0723
Propane	3.7747	1.7649	1.0430	94.98	0.0575
Iso-Butane	0.8615	0.4028	0.2830	28.02	0.0173
N-Butane	0.8833	0.4130	0.2790	28.82	0.0177
I-Pentane	0.3277	0.1532	0.1200	13.11	0.0082
N-Pentane	0.1839	0.0860	0.0670	7.37	0.0046
Hexane Plus	0.3711	0.1735	0.1660	19.56	0.0123
Total	100.0000	46.7565	18.4940	1179.44	0.6743

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0031	CYLINDER #:	4042
BTU/CU.FT IDEAL:	1182.2	CYLINDER PRESSURE:	PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1185.7	ANALYSIS DATE:	05/06/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1165.1	ANALYSIS TIME:	11:32:41 AM
DRY BTU @ 15.025:	1209.4	ANALYSIS RUN BY:	SHYANN ELLEDGE
REAL SPECIFIC GRAVITY:	0.676		

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: 05/11/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	CANYON LARGO UNIT #20; TBG	TUBING	05/11/2020
Stn. No.:	API # 3003905554	NAC,OA,KL,FC, PC	35825-10980
Mtr. No.:	74-432-01		

Smpl Date:	05/01/2020	03/25/2019
Test Date:	05/06/2020	03/28/2019
Run No:	HS200009	HS190014
Nitrogen:	1.0157	1.2064
CO2:	0.0394	0.5209
Methane:	85.5777	80.9561
Ethane:	6.9650	8.6894
Propane:	3.7747	4.8004
I-Butane:	0.8615	0.6805
N-Butane:	0.8833	1.5358
I-Pentane:	0.3277	0.4515
N-Pentane:	0.1839	0.3991
Hexane+:	0.3711	0.7599
BTU:	1185.7	1245.8
GPM:	18.4940	19.0090
SPG:	0.6760	0.7244