



Well Name: PAGE 2A; BHD
 API #: API # 3004523067
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20230024
 Cust No: 35825-12135

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	PAGE 2A; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	36 PSIG
Location:		Flow Temp:	59 DEG. F
Lease/PA/CA:		Ambient Temp:	50 DEG. F
Formation:	MV	Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3004523067	Sample Method:	Purge & Fill
	3463830	Sample Date:	05/04/2023
		Sample Time:	8.48 AM
	RUN 1 / AREA 104	Sampled By:	DALE W.
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1959	0.1923	0.0220	0.00	0.0019
CO2	0.0045	0.0044	0.0010	0.00	0.0001
Methane	90.8787	89.2078	15.4440	917.87	0.5034
Ethane	4.9024	4.8123	1.3140	86.76	0.0509
Propane	2.3407	2.2977	0.6460	58.89	0.0356
Iso-Butane	0.4707	0.4620	0.1540	15.31	0.0094
N-Butane	0.5831	0.5724	0.1840	19.02	0.0117
I-Pentane	0.2065	0.2027	0.0760	8.26	0.0051
N-Pentane	0.1378	0.1353	0.0500	5.52	0.0034
Hexane Plus	0.2797	0.2746	0.1250	14.74	0.0093
Total	100.0000	98.1615	18.0160	1126.39	0.6309

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0027	CYLINDER #:	1418
BTU/CU.FT IDEAL:	1129.0	CYLINDER PRESSURE:	34 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1132.0	ANALYSIS DATE:	05/10/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1112.3	ANALYSIS TIME:	03:29:17 PM
DRY BTU @ 15.025:	1154.7	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.6323		

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: 05/17/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	PAGE 2A; BHD	BRADENHEAD	05/17/2023
Stn. No.:	API # 3004523067	MV	35825-12135
Mtr. No.:	3463830		

Smpl Date:	05/04/2023	05/21/2020
Test Date:	05/10/2023	05/27/2020
Run No:	HS20230024	HS200021
Nitrogen:	0.1959	0.2092
CO2:	0.0045	0.0067
Methane:	90.8787	90.6073
Ethane:	4.9024	4.9934
Propane:	2.3407	2.3658
I-Butane:	0.4707	0.4870
N-Butane:	0.5831	0.6078
I-Pentane:	0.2065	0.2179
N-Pentane:	0.1378	0.1508
Hexane+:	0.2797	0.3541
BTU:	1132.0	1137.8
GPM:	18.0160	18.0590
SPG:	0.6323	0.6362



Well Name: PAGE 2A; CSG
 API #: API #3004523067
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20230025
 Cust No: 35825-12140

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	PAGE 2A; CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	84 PSIG
Location:		Flow Temp:	59 DEG. F
Lease/PA/CA:		Ambient Temp:	50 DEG. F
Formation:	MV	Flow Rate:	MCF/D
Cust. Stn. No.:	API #3004523067	Sample Method:	Purge & Fill
	3463830	Sample Date:	05/04/2023
		Sample Time:	8.41 AM
	RUN 1 / 104	Sampled By:	DALE W.
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0769	0.0758	0.0080	0.00	0.0007
CO2	2.3958	2.3617	0.4100	0.00	0.0364
Methane	93.8564	92.5222	15.9440	947.95	0.5199
Ethane	2.6892	2.6510	0.7210	47.59	0.0279
Propane	0.5800	0.5718	0.1600	14.59	0.0088
Iso-Butane	0.1130	0.1114	0.0370	3.67	0.0023
N-Butane	0.0994	0.0980	0.0310	3.24	0.0020
I-Pentane	0.0461	0.0454	0.0170	1.84	0.0011
N-Pentane	0.0233	0.0230	0.0080	0.93	0.0006
Hexane Plus	0.1199	0.1182	0.0540	6.32	0.0040
Total	100.0000	98.5785	17.3900	1026.15	0.6037

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0023	CYLINDER #:	206
BTU/CU.FT IDEAL:	1028.5	CYLINDER PRESSURE:	82 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1030.9	ANALYSIS DATE:	05/10/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1013.0	ANALYSIS TIME:	02:31:00 PM
DRY BTU @ 15.025:	1051.5	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.6049		

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: 05/17/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	PAGE 2A; CSG	CASING	05/17/2023
Stn. No.:	API #3004523067	MV	35825-12140
Mtr. No.:	3463830		

Smpl Date:	05/04/2023	05/21/2020
Test Date:	05/10/2023	05/27/2020
Run No:	HS20230025	HS200022
Nitrogen:	0.0769	0.1209
CO2:	2.3958	0.7907
Methane:	93.8564	92.1936
Ethane:	2.6892	4.1655
Propane:	0.5800	1.5163
I-Butane:	0.1130	0.3074
N-Butane:	0.0994	0.3466
I-Pentane:	0.0461	0.1364
N-Pentane:	0.0233	0.0927
Hexane+:	0.1199	0.3299
BTU:	1030.9	1096.2
GPM:	17.3900	17.7910
SPG:	0.6049	0.6212



Well Name: PAGE 2A; TBG
 API #: API #3004523067
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20230026
 Cust No: 35825-12145

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	PAGE 2A; TBG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	84 PSIG
Location:		Flow Temp:	59 DEG. F
Lease/PA/CA:		Ambient Temp:	50 DEG. F
Formation:	MV	Flow Rate:	MCF/D
Cust. Stn. No.:	API #3004523067	Sample Method:	Purge & Fill
	3463830	Sample Date:	05/04/2023
		Sample Time:	8.30 AM
	RUN 1 / AREA 104	Sampled By:	DALE W.
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0702	0.0693	0.0080	0.00	0.0007
CO2	2.3645	2.3327	0.4040	0.00	0.0359
Methane	92.2649	91.0230	15.6750	931.88	0.5111
Ethane	3.8443	3.7926	1.0300	68.03	0.0399
Propane	0.8298	0.8186	0.2290	20.88	0.0126
Iso-Butane	0.1870	0.1845	0.0610	6.08	0.0038
N-Butane	0.1431	0.1412	0.0450	4.67	0.0029
I-Pentane	0.0763	0.0753	0.0280	3.05	0.0019
N-Pentane	0.0338	0.0333	0.0120	1.35	0.0008
Hexane Plus	0.1861	0.1836	0.0830	9.81	0.0062
Total	100.0000	98.6541	17.5750	1045.75	0.6157

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0024	CYLINDER #:	222
BTU/CU.FT IDEAL:	1048.2	CYLINDER PRESSURE:	82 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1050.7	ANALYSIS DATE:	05/10/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1032.4	ANALYSIS TIME:	02:23:30 PM
DRY BTU @ 15.025:	1071.7	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.617		

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: 05/17/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	PAGE 2A; TBG	TUBING	05/17/2023
Stn. No.:	API #3004523067	MV	35825-12145
Mtr. No.:	3463830		

Smpl Date:	05/04/2023	05/21/2020
Test Date:	05/10/2023	05/27/2020
Run No:	HS20230026	HS200023
Nitrogen:	0.0702	0.0729
CO2:	2.3645	2.3520
Methane:	92.2649	92.1004
Ethane:	3.8443	3.9388
Propane:	0.8298	0.8726
I-Butane:	0.1870	0.1999
N-Butane:	0.1431	0.1477
I-Pentane:	0.0763	0.0819
N-Pentane:	0.0338	0.0388
Hexane+:	0.1861	0.1950
BTU:	1050.7	1053.3
GPM:	17.5750	17.5980
SPG:	0.6170	0.6184

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District III
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District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 218890

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 218890
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	same gas all strings	10/6/2023