



Well Name: MONTOYA 1R; BHD
 API #: 3004532335
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20240092
 Cust No: 35825-11790

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	MONTOYA 1R; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	60 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	3004532335	Sample Method:	Purge & Fill
	85-973	Sample Date:	05/08/2024
		Sample Time:	10.00 AM
	RUN 2 / AREA 0211	Sampled By:	PETER JIM
Heat Trace:		Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1680	0.1670	0.0190	0.00	0.0016
CO2	0.0023	0.0023	0.0000	0.00	0.0000
Methane	91.0681	90.5013	15.4770	919.79	0.5044
Ethane	5.2350	5.2024	1.4030	92.64	0.0543
Propane	1.6304	1.6203	0.4500	41.02	0.0248
Iso-Butane	0.6762	0.6720	0.2220	21.99	0.0136
N-Butane	0.4065	0.4040	0.1280	13.26	0.0082
I-Pentane	0.3795	0.3771	0.1390	15.18	0.0095
N-Pentane	0.0789	0.0784	0.0290	3.16	0.0020
Hexane Plus	0.3551	0.3529	0.1590	18.72	0.0118
Total	100.0000	99.3777	18.0260	1125.77	0.6302

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0027	CYLINDER #:	2167
BTU/CU.FT IDEAL:	1128.4	CYLINDER PRESSURE:	64 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1131.4	ANALYSIS DATE:	05/16/2024
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1111.7	ANALYSIS TIME:	04:04:44 AM
DRY BTU @ 15.025:	1154.1	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.6316		

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: 05/22/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	MONTOYA 1R; BHD	BRADENHEAD	05/22/2024
Stn. No.:	3004532335		35825-11790
Mtr. No.:	85-973		

Smpl Date:	05/08/2024	07/28/2021	07/25/2019
Test Date:	05/16/2024	08/04/2021	08/07/2019
Run No:	HS20240092	HS2021162	HS190208
Nitrogen:	0.1680	9.1322	0.1433
CO2:	0.0023	0.0000	0.8145
Methane:	91.0681	83.4231	84.6261
Ethane:	5.2350	4.3890	8.0878
Propane:	1.6304	1.3464	3.0661
I-Butane:	0.6762	0.5510	0.6116
N-Butane:	0.4065	0.3255	0.8711
I-Pentane:	0.3795	0.3086	0.4136
N-Pentane:	0.0789	0.0584	0.2945
Hexane+:	0.3551	0.4658	1.0714
BTU:	1131.4	1026.6	1214.9
GPM:	18.0260	17.3540	18.7760
SPG:	0.6316	0.6599	0.6980



Well Name: MONTOYA 1R; CSG

API #: 3004532335

Source: CASING

Sample Type: GAS

Analysis No: HS20240093

Cust No: 35825-11800

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: MONTOYA 1R; CSG

County/State: SAN JUAN NM

Location:

Lease/PA/CA:

Formation:

Cust. Stn. No.: 3004532335
85-973

AREA 2 / RUN 0211

Heat Trace:

Remarks:

Source: CASING

Well Flowing: Y

Pressure: 80 PSIG

Flow Temp: DEG. F

Ambient Temp: DEG. F

Flow Rate: MCF/D

Sample Method:

Sample Date: 05/08/2024

Sample Time: 10.00 AM

Sampled By: PETER JIM

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1810	0.1809	0.0200	0.00	0.0018
CO2	2.4164	2.4156	0.4140	0.00	0.0367
Methane	82.3643	82.3377	14.0090	831.88	0.4562
Ethane	7.7887	7.7862	2.0900	137.84	0.0809
Propane	3.2405	3.2394	0.8960	81.53	0.0493
Iso-Butane	0.7357	0.7355	0.2420	23.92	0.0148
N-Butane	1.1075	1.1071	0.3500	36.13	0.0222
I-Pentane	0.5872	0.5870	0.2150	23.49	0.0146
N-Pentane	0.4761	0.4759	0.1730	19.09	0.0119
Hexane Plus	1.1026	1.1022	0.4930	58.12	0.0365
Total	100.0000	99.9675	18.9020	1212.00	0.7249

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0035
 BTU/CU.FT IDEAL: 1214.8
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1219.1
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1197.9
 DRY BTU @ 15.025: 1243.5
 REAL SPECIFIC GRAVITY: 0.7271

CYLINDER #: 2200
 CYLINDER PRESSURE: 90 PSIG
 ANALYSIS DATE: 05/16/2024
 ANALYSIS TIME: 04:38:21 PM
 ANALYSIS RUN BY: ALEXIS MITCHELL

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: 05/22/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	MONTOYA 1R; CSG	CASING	05/22/2024
Stn. No.:	3004532335		35825-11800
Mtr. No.:	85-973		

Smpl Date:	05/08/2024	07/28/2021	07/25/2019
Test Date:	05/16/2024	08/04/2021	08/07/2019
Run No:	HS20240093	HS2021163	HS190210
Nitrogen:	0.1810	0.1498	0.1365
CO2:	2.4164	2.7867	1.3761
Methane:	82.3643	80.8455	82.5456
Ethane:	7.7887	8.2178	7.9481
Propane:	3.2405	3.9400	3.5462
I-Butane:	0.7357	0.8924	0.7909
N-Butane:	1.1075	1.4076	1.2344
I-Pentane:	0.5872	0.5904	0.5528
N-Pentane:	0.4761	0.4859	0.4530
Hexane+:	1.1026	0.6839	1.4164
BTU:	1219.1	1222.4	1252.0
GPM:	18.9020	18.9780	19.0590
SPG:	0.7271	0.7349	0.7309



Well Name: MONTOYA 1R; TBG

API #: 3004532335

Source: TUBING

Sample Type: GAS

Analysis No: HS20240094

Cust No: 35825-11875

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: MONTOYA 1R; TBG

County/State: SAN JUAN NM

Location:

Lease/PA/CA:

Formation:

Cust. Stn. No.: 3004532335
85-973

AREA 2 / RUN 0211

Heat Trace:

Remarks:

Source: TUBING

Well Flowing:

Pressure: 40 PSIG

Flow Temp: DEG. F

Ambient Temp: DEG. F

Flow Rate: MCF/D

Sample Method:

Sample Date: 05/08/2024

Sample Time: 10.00 AM

Sampled By: PETER JIM

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1604	0.1600	0.0180	0.00	0.0016
CO2	0.8091	0.8069	0.1380	0.00	0.0123
Methane	85.1352	84.9035	14.4760	859.87	0.4716
Ethane	7.9175	7.8960	2.1240	140.12	0.0822
Propane	3.0155	3.0073	0.8330	75.87	0.0459
Iso-Butane	0.6077	0.6060	0.1990	19.76	0.0122
N-Butane	0.8743	0.8719	0.2760	28.52	0.0175
I-Pentane	0.3797	0.3787	0.1390	15.19	0.0095
N-Pentane	0.2704	0.2697	0.0980	10.84	0.0067
Hexane Plus	0.8302	0.8279	0.3710	43.76	0.0275
Total	100.0000	99.7279	18.6720	1193.93	0.6869

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032
 BTU/CU.FT IDEAL: 1196.7
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1200.5
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1179.6
 DRY BTU @ 15.025: 1224.5
 REAL SPECIFIC GRAVITY: 0.6889

CYLINDER #: 1881
 CYLINDER PRESSURE: 45 PSIG
 ANALYSIS DATE: 05/16/2024
 ANALYSIS TIME: 04:29:04 AM
 ANALYSIS RUN BY: ALEXIS MITCHELL

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: 05/22/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	MONTOYA 1R; TBG	TUBING	05/22/2024
Stn. No.:	3004532335		35825-11875
Mtr. No.:	85-973		

Smpl Date:	05/08/2024	07/20/2021	07/25/2019
Test Date:	05/16/2024	08/04/2021	08/07/2019
Run No:	HS20240094	HS2021164	HS190209
Nitrogen:	0.1604	0.1709	0.1635
CO2:	0.8091	0.5940	0.0070
Methane:	85.1352	84.3587	90.9564
Ethane:	7.9175	8.5002	5.3050
Propane:	3.0155	3.4461	1.6741
I-Butane:	0.6077	0.7345	0.7351
N-Butane:	0.8743	0.9238	0.4109
I-Pentane:	0.3797	0.4312	0.3798
N-Pentane:	0.2704	0.2528	0.0731
Hexane+:	0.8302	0.5878	0.2951
BTU:	1200.5	1208.2	1131.3
GPM:	18.6720	18.7420	18.0300
SPG:	0.6889	0.6904	0.6316

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District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
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 352747

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 352747
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	for record	8/5/2024