



Well Name: MADDOX GAS COM #2;
 API #: 3004508993
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20240170
 Cust No: 35825-16045

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	MADDOX GAS COM #2; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:	DK	Flow Rate:	MCF/D
Cust. Stn. No.:	3004508993	Sample Method:	Purge & Fill
	ELB73104	Sample Date:	07/05/2024
	AREA 2 / RUN 0210	Sample Time:	8.00 AM
Heat Trace:	N	Sampled By:	JACOB SANDOVAL
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	32.3192	32.1290	3.5620	0.00	0.3126
CO2	1.0300	1.0239	0.1760	0.00	0.0157
Methane	56.0749	55.7449	9.5230	566.36	0.3106
Ethane	5.8266	5.7923	1.5610	103.11	0.0605
Propane	2.5750	2.5598	0.7110	64.79	0.0392
Iso-Butane	0.3599	0.3578	0.1180	11.70	0.0072
N-Butane	0.7219	0.7177	0.2280	23.55	0.0145
I-Pentane	0.2466	0.2451	0.0900	9.87	0.0061
N-Pentane	0.2114	0.2102	0.0770	8.47	0.0053
Hexane Plus	0.6345	0.6308	0.2830	33.44	0.0210
Total	100.0000	99.4115	16.3290	821.30	0.7927

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.002
BTU/CU.FT IDEAL:	823.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	824.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	810.4
DRY BTU @ 15.025:	841.3
REAL SPECIFIC GRAVITY:	0.7939

CYLINDER #:	8016
CYLINDER PRESSURE:	17 PSIG
ANALYSIS DATE:	07/11/2024
ANALYSIS TIME:	02:50:47 PM
ANALYSIS RUN BY:	SARAH BALLARD

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: 07/15/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	MADDOX GAS COM #2; BHD	BRADENHEAD	07/15/2024
Stn. No.:	3004508993	DK	35825-16045
Mtr. No.:	ELB73104		

Smpl Date:	07/05/2024
Test Date:	07/11/2024
Run No:	HS20240170
Nitrogen:	32.3192
CO2:	1.0300
Methane:	56.0749
Ethane:	5.8266
Propane:	2.5750
I-Butane:	0.3599
N-Butane:	0.7219
I-Pentane:	0.2466
N-Pentane:	0.2114
Hexane+:	0.6345
BTU:	824.8
GPM:	16.3290
SPG:	0.7939



Well Name: MADDOX GAS COM #2;
 API #: 3004508993
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20240171
 Cust No: 35825-16050

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	MADDOX GAS COM #2; CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:	DK	Flow Rate:	MCF/D
Cust. Stn. No.:	3004508993	Sample Method:	Purge & Fill
	ELB73104	Sample Date:	07/05/2024
	AREA 2 / RUN 0210	Sample Time:	8.00 AM
Heat Trace:	N	Sampled By:	JACOB SANDOVAL
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	14.6993	14.7623	1.6210	0.00	0.1422
CO2	1.2862	1.2917	0.2200	0.00	0.0195
Methane	70.6772	70.9801	12.0110	713.84	0.3915
Ethane	7.3716	7.4032	1.9760	130.46	0.0765
Propane	3.2427	3.2566	0.8960	81.59	0.0494
Iso-Butane	0.4627	0.4647	0.1520	15.05	0.0093
N-Butane	0.9267	0.9307	0.2930	30.23	0.0186
I-Pentane	0.3136	0.3149	0.1150	12.55	0.0078
N-Pentane	0.2709	0.2721	0.0980	10.86	0.0067
Hexane Plus	0.7491	0.7523	0.3350	39.49	0.0248
Total	100.0000	100.4286	17.7170	1034.05	0.7463

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0027	CYLINDER #:	1467
BTU/CU.FT IDEAL:	1036.4	CYLINDER PRESSURE:	45 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1039.3	ANALYSIS DATE:	07/11/2024
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1021.2	ANALYSIS TIME:	02:42:30 PM
DRY BTU @ 15.025:	1060.1	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.7481		

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: 07/15/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	MADDOX GAS COM #2; CSG	CASING	07/15/2024
Stn. No.:	3004508993	DK	35825-16050
Mtr. No.:	ELB73104		

Smpl Date: 07/05/2024
Test Date: 07/11/2024
Run No: HS20240171

Nitrogen: 14.6993
CO2: 1.2862
Methane: 70.6772
Ethane: 7.3716
Propane: 3.2427
I-Butane: 0.4627
N-Butane: 0.9267
I-Pentane: 0.3136
N-Pentane: 0.2709
Hexane+: 0.7491

BTU: 1039.3
GPM: 17.7170
SPG: 0.7481



Well Name: MADDOX GAS COM #2;
 API #: 3004508993
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20240172
 Cust No: 35825-16055

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	MADDOX GAS COM #2; TBG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:	DK	Flow Rate:	MCF/D
Cust. Stn. No.:	3004508993	Sample Method:	Purge & Fill
	ELB73104	Sample Date:	07/05/2024
	AREA 2 / RUN 0210	Sample Time:	8.00 AM
Heat Trace:	N	Sampled By:	JACOB SANDOVAL
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	12.0593	12.1486	1.3300	0.00	0.1166
CO2	1.2584	1.2677	0.2150	0.00	0.0191
Methane	73.5673	74.1125	12.5020	743.03	0.4075
Ethane	7.4946	7.5501	2.0090	132.63	0.0778
Propane	3.2257	3.2496	0.8910	81.16	0.0491
Iso-Butane	0.4638	0.4672	0.1520	15.08	0.0093
N-Butane	0.8907	0.8973	0.2810	29.06	0.0179
I-Pentane	0.2800	0.2821	0.1030	11.20	0.0070
N-Pentane	0.2354	0.2371	0.0860	9.44	0.0059
Hexane Plus	0.5248	0.5287	0.2350	27.66	0.0174
Total	100.0000	100.7409	17.8040	1049.26	0.7276

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0027
BTU/CU.FT IDEAL:	1051.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1054.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1036.2
DRY BTU @ 15.025:	1075.6
REAL SPECIFIC GRAVITY:	0.7292

CYLINDER #:	2055
CYLINDER PRESSURE:	89 PSIG
ANALYSIS DATE:	07/11/2024
ANALYSIS TIME:	02:58:57 PM
ANALYSIS RUN BY:	SARAH BALLARD

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: 07/15/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	MADDOX GAS COM #2; TBG	TUBING	07/15/2024
Stn. No.:	3004508993	DK	35825-16055
Mtr. No.:	ELB73104		

Smpl Date: 07/05/2024
Test Date: 07/11/2024
Run No: HS20240172

Nitrogen: 12.0593
CO2: 1.2584
Methane: 73.5673
Ethane: 7.4946
Propane: 3.2257
I-Butane: 0.4638
N-Butane: 0.8907
I-Pentane: 0.2800
N-Pentane: 0.2354
Hexane+: 0.5248

BTU: 1054.5
GPM: 17.8040
SPG: 0.7292

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

CONDITIONS

Action 364168

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 364168
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	high nitrogen all samples	8/26/2024