



Well Name: CARSON GAS COM 1E;
 API #: 30-045-25508
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20240138
 Cust No: 35825-13655

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: CARSON GAS COM 1E; BHD
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: DK
 Cust. Stn. No.: 30-045-25508

Source: BRADENHEAD
 Well Flowing: N
 Pressure: PSIG
 Flow Temp: DEG. F
 Ambient Temp: 70 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 06/25/2024
 Sample Time: 7.40 AM
 Sampled By: WAYNE JOHNSON
 Sampled by (CO): HILCORP

AREA 2 / RUN 0209

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3453	0.3382	0.0380	0.00	0.0033
CO2	0.0209	0.0205	0.0040	0.00	0.0003
Methane	88.3597	86.5378	15.0190	892.43	0.4894
Ethane	6.6184	6.4819	1.7750	117.13	0.0687
Propane	2.6407	2.5862	0.7290	66.44	0.0402
Iso-Butane	0.4724	0.4627	0.1550	15.36	0.0095
N-Butane	0.7059	0.6913	0.2230	23.03	0.0142
I-Pentane	0.2523	0.2471	0.0930	10.09	0.0063
N-Pentane	0.1873	0.1834	0.0680	7.51	0.0047
Hexane Plus	0.3971	0.3889	0.1780	20.93	0.0131
Total	100.0000	97.9380	18.2820	1152.93	0.6497

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0029
 BTU/CU.FT IDEAL: 1155.6
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1159.0
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1138.8
 DRY BTU @ 15.025: 1182.2
 REAL SPECIFIC GRAVITY: 0.6514

CYLINDER #: 4109
 CYLINDER PRESSURE: 41 PSIG
 ANALYSIS DATE: 06/26/2024
 ANALYSIS TIME: 02:51:42 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: 06/28/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	CARSON GAS COM 1E; BHD	BRADENHEAD	06/28/2024
Stn. No.:	30-045-25508	DK	35825-13655
Mtr. No.:			

Smpl Date:	06/25/2024	04/26/2021
Test Date:	06/26/2024	05/10/2021
Run No:	HS20240138	HS2021087
Nitrogen:	0.3453	0.9496
CO2:	0.0209	0.0200
Methane:	88.3597	91.6218
Ethane:	6.6184	4.3440
Propane:	2.6407	1.6397
I-Butane:	0.4724	0.4443
N-Butane:	0.7059	0.4790
I-Pentane:	0.2523	0.1575
N-Pentane:	0.1873	0.1104
Hexane+:	0.3971	0.2337
BTU:	1159.0	1101.9
GPM:	18.2820	17.7920
SPG:	0.6514	0.6213



Well Name: CARSON GAS COM 1E;
 API #: 30-045-25508
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20240139
 Cust No: 35825-13660

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: CARSON GAS COM 1E; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: DK
 Cust. Stn. No.: 30-045-25508

Source: CASING
 Well Flowing: N
 Pressure: PSIG
 Flow Temp: DEG. F
 Ambient Temp: 70 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 06/25/2024
 Sample Time: 7.40 AM
 Sampled By: WAYNE JOHNSON
 Sampled by (CO): HILCORP

AREA 2 / RUN 0209

Heat Trace:
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5584	0.5615	0.0620	0.00	0.0054
CO2	1.7399	1.7496	0.2980	0.00	0.0264
Methane	80.5218	80.9694	13.6970	813.27	0.4460
Ethane	9.2935	9.3452	2.4940	164.47	0.0965
Propane	4.0834	4.1061	1.1290	102.74	0.0622
Iso-Butane	0.6489	0.6525	0.2130	21.10	0.0130
N-Butane	1.3155	1.3228	0.4160	42.92	0.0264
I-Pentane	0.5248	0.5277	0.1930	21.00	0.0131
N-Pentane	0.4991	0.5019	0.1820	20.01	0.0124
Hexane Plus	0.8147	0.8192	0.3650	42.94	0.0270
Total	100.0000	100.5559	19.0490	1228.44	0.7284

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
 BTU/CU.FT IDEAL: 1231.3
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1235.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1214.2
 DRY BTU @ 15.025: 1260.4
 REAL SPECIFIC GRAVITY: 0.7307

CYLINDER #: 4175
 CYLINDER PRESSURE: 131 PSIG
 ANALYSIS DATE: 06/26/2024
 ANALYSIS TIME: 03:07:58 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: 06/28/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	CARSON GAS COM 1E; CSG	CASING	06/28/2024
Stn. No.:	30-045-25508	DK	35825-13660
Mtr. No.:			

Smpl Date:	06/25/2024	04/26/2021
Test Date:	06/26/2024	05/10/2021
Run No:	HS20240139	HS2021088
Nitrogen:	0.5584	0.4631
CO2:	1.7399	1.7961
Methane:	80.5218	81.1272
Ethane:	9.2935	9.6562
Propane:	4.0834	4.0664
I-Butane:	0.6489	0.5914
N-Butane:	1.3155	1.1327
I-Pentane:	0.5248	0.3706
N-Pentane:	0.4991	0.3183
Hexane+:	0.8147	0.4780
BTU:	1235.7	1208.4
GPM:	19.0490	18.8880
SPG:	0.7307	0.7130



Well Name: CARSON GAS COM 1E;
 API #: 30-045-25508
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20240140
 Cust No: 35825-13665

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: CARSON GAS COM 1E; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: DK
 Cust. Stn. No.: 30-045-25508

Source: TUBING
 Well Flowing: N
 Pressure: PSIG
 Flow Temp: DEG. F
 Ambient Temp: 70 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 06/25/2024
 Sample Time: 7.40 AM
 Sampled By: WAYNE JOHNSON
 Sampled by (CO): HILCORP

AREA 2 / RUN 0209

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5673	0.5703	0.0630	0.00	0.0055
CO2	1.7116	1.7207	0.2930	0.00	0.0260
Methane	82.5232	82.9639	14.0310	833.48	0.4571
Ethane	9.0892	9.1377	2.4380	160.85	0.0944
Propane	3.6282	3.6476	1.0030	91.29	0.0552
Iso-Butane	0.5118	0.5145	0.1680	16.64	0.0103
N-Butane	0.9342	0.9392	0.2950	30.48	0.0187
I-Pentane	0.2875	0.2890	0.1050	11.50	0.0072
N-Pentane	0.2409	0.2422	0.0880	9.66	0.0060
Hexane Plus	0.5061	0.5088	0.2260	26.68	0.0167
Total	100.0000	100.5339	18.7100	1180.58	0.6971

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032
 BTU/CU.FT IDEAL: 1183.3
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1187.1
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1166.4
 DRY BTU @ 15.025: 1210.9
 REAL SPECIFIC GRAVITY: 0.6991

CYLINDER #: 4156
 CYLINDER PRESSURE: 133 PSIG
 ANALYSIS DATE: 06/26/2024
 ANALYSIS TIME: 03:00:23 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: 06/28/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	CARSON GAS COM 1E; TBG	TUBING	06/28/2024
Stn. No.:	30-045-25508	DK	35825-13665
Mtr. No.:			

Smpl Date:	06/25/2024	04/26/2021
Test Date:	06/26/2024	05/10/2021
Run No:	HS20240140	HS2021089
Nitrogen:	0.5673	0.4951
CO2:	1.7116	1.7827
Methane:	82.5232	81.8833
Ethane:	9.0892	9.3975
Propane:	3.6282	3.8005
I-Butane:	0.5118	0.5360
N-Butane:	0.9342	0.9793
I-Pentane:	0.2875	0.2990
N-Pentane:	0.2409	0.2509
Hexane+:	0.5061	0.5757
BTU:	1187.1	1197.4
GPM:	18.7100	18.8000
SPG:	0.6991	0.7061

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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 359868

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 359868
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	similar gas	8/27/2024