



Well Name: CARSON GAS COM 1E;
 API #: API # 3004525508
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS2021087
 Cust No: 35825-13655

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	CARSON GAS COM 1E; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	47 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:	DK	Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3004525508	Sample Method:	
		Sample Date:	04/26/2021
		Sample Time:	9.45 AM
		Sampled By:	JESSE RANGEL
		Sampled by (CO):	HILCORP

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.9496	0.9210	0.1050	0.00	0.0092
CO2	0.0200	0.0194	0.0030	0.00	0.0003
Methane	91.6218	88.8599	15.5680	925.38	0.5075
Ethane	4.3440	4.2131	1.1640	76.88	0.0451
Propane	1.6397	1.5903	0.4530	41.26	0.0250
Iso-Butane	0.4443	0.4309	0.1460	14.45	0.0089
N-Butane	0.4790	0.4646	0.1510	15.63	0.0096
I-Pentane	0.1575	0.1528	0.0580	6.30	0.0039
N-Pentane	0.1104	0.1071	0.0400	4.43	0.0028
Hexane Plus	0.2337	0.2267	0.1040	12.32	0.0077
Total	100.0000	96.9858	17.7920	1096.63	0.6200

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0025	CYLINDER #:	6166
BTU/CU.FT IDEAL:	1099.2	CYLINDER PRESSURE:	26 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1101.9	ANALYSIS DATE:	05/10/2021
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1082.7	ANALYSIS TIME:	01:01:05 PM
DRY BTU @ 15.025:	1124.0	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6213		

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: 05/13/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	CARSON GAS COM 1E; BHD	BRADENHEAD	05/13/2021
Stn. No.:	API # 3004525508	DK	35825-13655
Mtr. No.:			

Smpl Date: 04/26/2021
Test Date: 05/10/2021
Run No: HS2021087

Nitrogen: 0.9496
CO2: 0.0200
Methane: 91.6218
Ethane: 4.3440
Propane: 1.6397
I-Butane: 0.4443
N-Butane: 0.4790
I-Pentane: 0.1575
N-Pentane: 0.1104
Hexane+: 0.2337

BTU: 1101.9
GPM: 17.7920
SPG: 0.6213



Well Name: CARSON GAS COM 1E;
 API #: API # 3004525508
 Source: CASING
 Sample Type: GAS
 Analysis No: HS2021088
 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.: API # 3004525508

Source: CASING
 Well Flowing: Y
 Pressure: 132 PSIG
 Flow Temp: DEG. F
 Ambient Temp: DEG. F
 Flow Rate: MCF/D
 Sample Method:
 Sample Date: 04/26/2021
 Sample Time: 9.45 AM
 Sampled By: JESSE RANGEL
 Sampled by (CO): HILCORP

Heat Trace: AREA 2 / RUN 0209
 N
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4631	0.4562	0.0510	0.00	0.0045
CO2	1.7961	1.7695	0.3070	0.00	0.0273
Methane	81.1272	79.9254	13.7970	819.38	0.4494
Ethane	9.6562	9.5132	2.5910	170.89	0.1003
Propane	4.0664	4.0062	1.1240	102.31	0.0619
Iso-Butane	0.5914	0.5826	0.1940	19.23	0.0119
N-Butane	1.1327	1.1159	0.3580	36.95	0.0227
I-Pentane	0.3706	0.3651	0.1360	14.83	0.0092
N-Pentane	0.3183	0.3136	0.1160	12.76	0.0079
Hexane Plus	0.4780	0.4709	0.2140	25.20	0.0158
Total	100.0000	98.5186	18.8880	1201.55	0.7109

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0034
 BTU/CU.FT IDEAL: 1204.3
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1208.4
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1187.4
 DRY BTU @ 15.025: 1232.6
 REAL SPECIFIC GRAVITY: 0.713

CYLINDER #: 6167
 CYLINDER PRESSURE: 124 PSIG
 ANALYSIS DATE: 05/10/2021
 ANALYSIS TIME: 12:20:45 AM
 ANALYSIS RUN BY: SHYANN GALLEGOS

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: 05/13/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	CARSON GAS COM 1E; CSG	CASING	05/13/2021
Stn. No.:	API # 3004525508	DK	35825-13660
Mtr. No.:			

Smpl Date: 04/26/2021
Test Date: 05/10/2021
Run No: HS2021088

Nitrogen: 0.4631
CO2: 1.7961
Methane: 81.1272
Ethane: 9.6562
Propane: 4.0664
I-Butane: 0.5914
N-Butane: 1.1327
I-Pentane: 0.3706
N-Pentane: 0.3183
Hexane+: 0.4780

BTU: 1208.4
GPM: 18.8880
SPG: 0.7130



Well Name: CARSON GAS COM 1E;
 API #: API # 3004525508
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS2021089
 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.: API # 3004525508

Source: TUBING
 Well Flowing: Y
 Pressure: 131 PSIG
 Flow Temp: DEG. F
 Ambient Temp: DEG. F
 Flow Rate: MCF/D
 Sample Method:
 Sample Date: 04/26/2021
 Sample Time: 9.45 AM
 Sampled By: JESSE RANGEL
 Sampled by (CO): HILCORP

Heat Trace: AREA 2 / RUN 0209
 N
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4951	0.4878	0.0550	0.00	0.0048
CO2	1.7827	1.7563	0.3050	0.00	0.0271
Methane	81.8833	80.6713	13.9240	827.02	0.4536
Ethane	9.3975	9.2584	2.5210	166.31	0.0976
Propane	3.8005	3.7443	1.0500	95.62	0.0579
Iso-Butane	0.5360	0.5281	0.1760	17.43	0.0108
N-Butane	0.9793	0.9648	0.3100	31.95	0.0197
I-Pentane	0.2990	0.2946	0.1100	11.96	0.0074
N-Pentane	0.2509	0.2472	0.0910	10.06	0.0063
Hexane Plus	0.5757	0.5672	0.2580	30.35	0.0191
Total	100.0000	98.5200	18.8000	1190.70	0.7040

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0033
 BTU/CU.FT IDEAL: 1193.5
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1197.4
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1176.6
 DRY BTU @ 15.025: 1221.4
 REAL SPECIFIC GRAVITY: 0.7061

CYLINDER #: 4066
 CYLINDER PRESSURE: 134 PSIG
 ANALYSIS DATE: 05/10/2021
 ANALYSIS TIME: 12:37:00 AM
 ANALYSIS RUN BY: RICHARD WILSON

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: 05/13/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	CARSON GAS COM 1E; TBG	TUBING	05/13/2021
Stn. No.:	API # 3004525508	DK	35825-13665
Mtr. No.:			

Smpl Date: 04/26/2021
Test Date: 05/10/2021
Run No: HS2021089

Nitrogen: 0.4951
CO2: 1.7827
Methane: 81.8833
Ethane: 9.3975
Propane: 3.8005
I-Butane: 0.5360
N-Butane: 0.9793
I-Pentane: 0.2990
N-Pentane: 0.2509
Hexane+: 0.5757

BTU: 1197.4
GPM: 18.8000
SPG: 0.7061

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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 30076

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 30076
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	None	6/18/2021