



Well Name: OWEN 2 D; BHD

API #: 3004532004

Source: BRADENHEAD

Sample Type: GAS

Analysis No: HS20240066

Cust No: 35825-15725

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: OWEN 2 D; BHD
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: SF078243
 Formation: MV
 Cust. Stn. No.: 3004532004
 WIH36537

Source: BRADENHEAD
 Well Flowing: Y
 Pressure: 35 PSIG
 Flow Temp: 71 DEG. F
 Ambient Temp: 58 DEG. F
 Flow Rate: 0 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 05/03/2024
 Sample Time: 9.30 AM
 Sampled By: SHAWN FINCHER
 Sampled by (CO): HILCORP

Heat Trace: N
 AREA 2 / RUN 0203

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	15.9419	15.7949	1.7560	0.00	0.1542
CO2	0.0023	0.0023	0.0000	0.00	0.0000
Methane	83.3530	82.5846	14.1500	841.87	0.4617
Ethane	0.6763	0.6701	0.1810	11.97	0.0070
Propane	0.0177	0.0175	0.0050	0.45	0.0003
Iso-Butane	0.0059	0.0058	0.0020	0.19	0.0001
N-Butane	0.0029	0.0029	0.0010	0.09	0.0001
I-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0000	0.0000	0.0000	0.00	0.0000
Total	100.0000	99.0781	16.0950	854.57	0.6234

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0016
 BTU/CU.FT IDEAL: 856.5
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 857.9
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 843.0
 DRY BTU @ 15.025: 875.1
 REAL SPECIFIC GRAVITY: 0.6241

CYLINDER #: 1896
 CYLINDER PRESSURE: 33 PSIG
 ANALYSIS DATE: 05/13/2024
 ANALYSIS TIME: 10:07:49 AM
 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: 05/17/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	OWEN 2 D; BHD	BRADENHEAD	05/17/2024
Stn. No.:	3004532004	MV	35825-15725
Mtr. No.:	WIH36537		

Smpl Date:	05/03/2024
Test Date:	05/13/2024
Run No:	HS20240066
Nitrogen:	15.9419
CO2:	0.0023
Methane:	83.3530
Ethane:	0.6763
Propane:	0.0177
I-Butane:	0.0059
N-Butane:	0.0029
I-Pentane:	0.0000
N-Pentane:	0.0000
Hexane+:	0.0000
BTU:	857.9
GPM:	16.0950
SPG:	0.6241



Well Name: OWEN 2 D; CSG

API #: 3004532004

Source: CASING

Sample Type: GAS

Analysis No: HS20240067

Cust No: 35825-15730

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: OWEN 2 D; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: SF078243
 Formation: MV
 Cust. Stn. No.: 3004532004
 WIH36537

Source: CASING
 Well Flowing: Y
 Pressure: 310 PSIG
 Flow Temp: 71 DEG. F
 Ambient Temp: 58 DEG. F
 Flow Rate: 0 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 05/03/2024
 Sample Time: 9.30 AM
 Sampled By: SHAWN FINCHER
 Sampled by (CO): HILCORP

AREA 2 / RUN 0203

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2958	0.2969	0.0330	0.00	0.0029
CO2	0.1823	0.1830	0.0310	0.00	0.0028
Methane	82.9505	83.2675	14.1040	837.80	0.4595
Ethane	9.0676	9.1023	2.4320	160.47	0.0941
Propane	5.2130	5.2329	1.4400	131.16	0.0794
Iso-Butane	0.9028	0.9063	0.2960	29.36	0.0181
N-Butane	0.9105	0.9140	0.2880	29.70	0.0183
I-Pentane	0.2047	0.2055	0.0750	8.19	0.0051
N-Pentane	0.1169	0.1173	0.0420	4.69	0.0029
Hexane Plus	0.1559	0.1565	0.0700	8.22	0.0052
Total	100.0000	100.3822	18.8110	1209.59	0.6882

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032
 BTU/CU.FT IDEAL: 1212.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1216.3
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1195.1
 DRY BTU @ 15.025: 1240.7
 REAL SPECIFIC GRAVITY: 0.6901

CYLINDER #: 2154
 CYLINDER PRESSURE: 234 PSIG
 ANALYSIS DATE: 05/13/2024
 ANALYSIS TIME: 09:58:26 AM
 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: 05/17/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	OWEN 2 D; CSG	CASING	05/17/2024
Stn. No.:	3004532004	MV	35825-15730
Mtr. No.:	WIH36537		

Smpl Date: 05/03/2024
Test Date: 05/13/2024
Run No: HS20240067

Nitrogen: 0.2958
CO2: 0.1823
Methane: 82.9505
Ethane: 9.0676
Propane: 5.2130
I-Butane: 0.9028
N-Butane: 0.9105
I-Pentane: 0.2047
N-Pentane: 0.1169
Hexane+: 0.1559

BTU: 1216.3
GPM: 18.8110
SPG: 0.6901



Well Name: OWEN 2 D; TBG

API #: 3004532004

Source: TUBING

Sample Type: GAS

Analysis No: HS20240068

Cust No: 35825-15735

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: OWEN 2 D; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: SF078243
 Formation: MV
 Cust. Stn. No.: 3004532004
 WIH36537

Source: TUBING
 Well Flowing: Y
 Pressure: 40 PSIG
 Flow Temp: 71 DEG. F
 Ambient Temp: 58 DEG. F
 Flow Rate: 0 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 05/03/2024
 Sample Time: 9.30 AM
 Sampled By: SHAWN FINCHER
 Sampled by (CO): WALSH

AREA 2 / RUN 0203

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2387	0.2386	0.0260	0.00	0.0023
CO2	0.5546	0.5544	0.0950	0.00	0.0084
Methane	82.0408	82.0080	13.9540	828.61	0.4544
Ethane	9.0829	9.0793	2.4370	160.74	0.0943
Propane	4.5812	4.5794	1.2660	115.27	0.0697
Iso-Butane	0.9295	0.9291	0.3050	30.23	0.0187
N-Butane	1.1329	1.1324	0.3580	36.96	0.0227
I-Pentane	0.4069	0.4067	0.1490	16.28	0.0101
N-Pentane	0.2852	0.2851	0.1040	11.43	0.0071
Hexane Plus	0.7473	0.7470	0.3340	39.39	0.0247
Total	100.0000	99.9600	19.0280	1238.91	0.7126

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0035
 BTU/CU.FT IDEAL: 1241.8
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1246.1
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1224.4
 DRY BTU @ 15.025: 1271.1
 REAL SPECIFIC GRAVITY: 0.7148

CYLINDER #: 1914
 CYLINDER PRESSURE: 38 PSIG
 ANALYSIS DATE: 05/13/2024
 ANALYSIS TIME: 09:50:26 AM
 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: 05/17/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	OWEN 2 D; TBG	TUBING	05/17/2024
Stn. No.:	3004532004	MV	35825-15735
Mtr. No.:	WIH36537		

Smpl Date: 05/03/2024
Test Date: 05/13/2024
Run No: HS20240068

Nitrogen:	0.2387
CO2:	0.5546
Methane:	82.0408
Ethane:	9.0829
Propane:	4.5812
I-Butane:	0.9295
N-Butane:	1.1329
I-Pentane:	0.4069
N-Pentane:	0.2852
Hexane+:	0.7473
BTU:	1246.1
GPM:	19.0280
SPG:	0.7148

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 352834

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 352834
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	same gas all strings	8/27/2024