



Well Name: OWEN 2A; BHD
 API #: 3004530235
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20240078
 Cust No: 35825-15740

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	OWEN 2A; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	90 PSIG
Location:		Flow Temp:	41 DEG. F
Lease/PA/CA:	SF-078243	Ambient Temp:	42 DEG. F
Formation:	MV	Flow Rate:	0 MCF/D
Cust. Stn. No.:	3004530235	Sample Method:	Purge & Fill
	ELB98244	Sample Date:	05/08/2024
	AREA 2 / RUN 0203	Sample Time:	8.00 AM
Heat Trace:	N	Sampled By:	SHAWN FINCHER
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.7324	0.7314	0.0810	0.00	0.0071
CO2	0.0096	0.0096	0.0020	0.00	0.0001
Methane	89.5170	89.3961	15.2110	904.12	0.4958
Ethane	5.6525	5.6449	1.5150	100.03	0.0587
Propane	2.7805	2.7767	0.7680	69.96	0.0423
Iso-Butane	0.5734	0.5726	0.1880	18.65	0.0115
N-Butane	0.4824	0.4817	0.1520	15.74	0.0097
I-Pentane	0.1240	0.1238	0.0450	4.96	0.0031
N-Pentane	0.0583	0.0582	0.0210	2.34	0.0015
Hexane Plus	0.0699	0.0698	0.0310	3.68	0.0023
Total	100.0000	99.8648	18.0140	1119.48	0.6321

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0026
BTU/CU.FT IDEAL:	1122.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1125.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1105.4
DRY BTU @ 15.025:	1147.5
REAL SPECIFIC GRAVITY:	0.6335

CYLINDER #:	104
CYLINDER PRESSURE:	74 PSIG
ANALYSIS DATE:	05/14/2024
ANALYSIS TIME:	12:07:07 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 2A; BHD	BRADENHEAD	05/17/2024
Stn. No.:	3004530235	MV	35825-15740
Mtr. No.:	ELB98244		

Smpl Date: 05/08/2024
Test Date: 05/14/2024
Run No: HS20240078

Nitrogen: 0.7324
CO2: 0.0096
Methane: 89.5170
Ethane: 5.6525
Propane: 2.7805
I-Butane: 0.5734
N-Butane: 0.4824
I-Pentane: 0.1240
N-Pentane: 0.0583
Hexane+: 0.0699

BTU: 1125.0
GPM: 18.0140
SPG: 0.6335



Well Name: OWEN 2A; TBG
 API #: 3004530235
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20240080
 Cust No: 35825-15750

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	OWEN 2A; TBG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	6 PSIG
Location:		Flow Temp:	41 DEG. F
Lease/PA/CA:	SF-078243	Ambient Temp:	42 DEG. F
Formation:	MV	Flow Rate:	0 MCF/D
Cust. Stn. No.:	3004530235	Sample Method:	Purge & Fill
	ELB98244	Sample Date:	05/08/2024
	AREA 2 / RUN 0203	Sample Time:	8.00 AM
Heat Trace:	N	Sampled By:	SHAWN FINCHER
Remarks:	PRESSURED WITH HELIUM TO 30 LBS.	Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1893	0.0687	0.0210	0.00	0.0018
CO2	0.6752	0.2450	0.1160	0.00	0.0103
Methane	83.4797	30.2915	14.1970	843.14	0.4624
Ethane	8.5275	3.0943	2.2880	150.91	0.0885
Propane	3.7750	1.3698	1.0430	94.98	0.0575
Iso-Butane	0.7810	0.2834	0.2560	25.40	0.0157
N-Butane	1.0219	0.3708	0.3230	33.34	0.0205
I-Pentane	0.4051	0.1470	0.1490	16.21	0.0101
N-Pentane	0.2695	0.0978	0.0980	10.80	0.0067
Hexane Plus	0.8758	0.3178	0.3920	46.16	0.0290
Total	100.0000	36.2861	18.8830	1220.95	0.7025

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0034	CYLINDER #:	1894
BTU/CU.FT IDEAL:	1223.8	CYLINDER PRESSURE:	PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1227.9	ANALYSIS DATE:	05/14/2024
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1206.5	ANALYSIS TIME:	11:46:40 AM
DRY BTU @ 15.025:	1252.5	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.7046		

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 2A; TBG	TUBING	05/17/2024
Stn. No.:	3004530235	MV	35825-15750
Mtr. No.:	ELB98244		

Smpl Date: 05/08/2024
Test Date: 05/14/2024
Run No: HS20240080

Nitrogen: 0.1893
CO2: 0.6752
Methane: 83.4797
Ethane: 8.5275
Propane: 3.7750
I-Butane: 0.7810
N-Butane: 1.0219
I-Pentane: 0.4051
N-Pentane: 0.2695
Hexane+: 0.8758

BTU: 1227.9
GPM: 18.8830
SPG: 0.7046



Well Name: OWEN 2A; CSG

API #: 3004530235

Source: CASING

Sample Type: GAS

Analysis No: HS20240079

Cust No: 35825-15745

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: OWEN 2A; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: SF-078243
 Formation: MV
 Cust. Stn. No.: 3004530235
 ELB98244

Source: CASING
 Well Flowing: Y
 Pressure: 20 PSIG
 Flow Temp: 41 DEG. F
 Ambient Temp: 42 DEG. F
 Flow Rate: 0 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 05/08/2024
 Sample Time: 8.00 AM
 Sampled By: SHAWN FINCHER
 Sampled by (CO): HILCORP

Heat Trace: AREA 2 / RUN 0203
 N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2275	0.2275	0.0250	0.00	0.0022
CO2	0.6167	0.6166	0.1060	0.00	0.0094
Methane	80.1483	80.1311	13.6360	809.50	0.4439
Ethane	9.5234	9.5214	2.5560	168.54	0.0989
Propane	5.1184	5.1173	1.4150	128.78	0.0779
Iso-Butane	1.0962	1.0960	0.3600	35.65	0.0220
N-Butane	1.3854	1.3851	0.4380	45.20	0.0278
I-Pentane	0.5351	0.5350	0.1960	21.41	0.0133
N-Pentane	0.3826	0.3825	0.1390	15.34	0.0095
Hexane Plus	0.9664	0.9662	0.4330	50.94	0.0320
Total	100.0000	99.9787	19.3040	1275.35	0.7370

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0038
 BTU/CU.FT IDEAL: 1278.3
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1283.2
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1260.9
 DRY BTU @ 15.025: 1308.9
 REAL SPECIFIC GRAVITY: 0.7395

CYLINDER #: 1874
 CYLINDER PRESSURE: 23 PSIG
 ANALYSIS DATE: 05/14/2024
 ANALYSIS TIME: 11:54:38 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 2A; CSG	CASING	05/17/2024
Stn. No.:	3004530235	MV	35825-15745
Mtr. No.:	ELB98244		

Smpl Date: 05/08/2024
Test Date: 05/14/2024
Run No: HS20240079

Nitrogen:	0.2275
CO2:	0.6167
Methane:	80.1483
Ethane:	9.5234
Propane:	5.1184
I-Butane:	1.0962
N-Butane:	1.3854
I-Pentane:	0.5351
N-Pentane:	0.3826
Hexane+:	0.9664
BTU:	1283.2
GPM:	19.3040
SPG:	0.7395

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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 355531

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 355531
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	BH = 90 - similar gas	8/27/2024