



Well Name: NYE FEDERAL COM 3P;
 API #: 3004533668
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20230144
 Cust No: 35825-15200

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT) Source: BRADENHEAD
 Well Name: NYE FEDERAL COM 3P; BHD Well Flowing: Y
 County/State: SAN JUAN NM Pressure: PSIG
 Location: Flow Temp: DEG. F
 Lease/PA/CA: Ambient Temp: DEG. F
 Formation: Flow Rate: MCF/D
 Cust. Stn. No.: 3004533668 Sample Method:
 Sample Date: 07/12/2023
 Sample Time: 1.30 PM
 Sampled By: CURT W.
 Sampled by (CO): HILCORP

Heat Trace: AREA 7 / RUN 704

Remarks: PRESSURED WITH HELIUM TO 30 LBS.

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	86.9772	10.0563	9.5720	0.00	0.8412
CO2	0.1514	0.0175	0.0260	0.00	0.0023
Methane	8.6662	1.0020	1.4700	87.53	0.0480
Ethane	1.7540	0.2028	0.4690	31.04	0.0182
Propane	1.0932	0.1264	0.3010	27.51	0.0166
Iso-Butane	0.2465	0.0285	0.0810	8.02	0.0049
N-Butane	0.3166	0.0366	0.1000	10.33	0.0064
I-Pentane	0.1799	0.0208	0.0660	7.20	0.0045
N-Pentane	0.1410	0.0163	0.0510	5.65	0.0035
Hexane Plus	0.4740	0.0548	0.2110	24.98	0.0157
Total	100.0000	11.5620	12.3470	202.25	0.9614

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0006	CYLINDER #:	237
BTU/CU.FT IDEAL:	202.7	CYLINDER PRESSURE:	9 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	202.8	ANALYSIS DATE:	07/18/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	199.3	ANALYSIS TIME:	09:38:04 AM
DRY BTU @ 15.025:	206.9	ANALYSIS RUN BY:	ACEDA GOODNOH
REAL SPECIFIC GRAVITY:	0.9616		

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: 07/24/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	NYE FEDERAL COM 3P; BHD	BRADENHEAD	07/24/2023
Stn. No.:	3004533668		35825-15200
Mtr. No.:			

Smpl Date: 07/12/2023
Test Date: 07/18/2023
Run No: HS20230144

Nitrogen: 86.9772
CO2: 0.1514
Methane: 8.6662
Ethane: 1.7540
Propane: 1.0932
I-Butane: 0.2465
N-Butane: 0.3166
I-Pentane: 0.1799
N-Pentane: 0.1410
Hexane+: 0.4740

BTU: 202.8
GPM: 12.3470
SPG: 0.9616



Well Name: NYE FEDERAL COM 3P; INT
 API #: 3004533668
 Source: INTERMEDIATE CASING
 Sample Type: GAS
 Analysis No: HS20230146
 Cust No: 35825-15210

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE CASING
Well Name:	NYE FEDERAL COM 3P; INT	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	3004533668	Sample Method:	
		Sample Date:	07/12/2023
		Sample Time:	1.30 PM
		Sampled By:	CURT W.
		Sampled by (CO):	HILCORP

Heat Trace: AREA 7 / RUN 704

Remarks: PRESSURED WITH HELIUM TO 30 LBS.

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2730	0.1100	0.0300	0.00	0.0026
CO2	0.7093	0.2858	0.1210	0.00	0.0108
Methane	81.9985	33.0396	13.9460	828.18	0.4542
Ethane	9.5357	3.8422	2.5580	168.75	0.0990
Propane	4.1543	1.6739	1.1480	104.53	0.0632
Iso-Butane	0.6907	0.2783	0.2270	22.46	0.0139
N-Butane	1.0811	0.4356	0.3420	35.27	0.0217
I-Pentane	0.3626	0.1461	0.1330	14.51	0.0090
N-Pentane	0.2755	0.1110	0.1000	11.04	0.0069
Hexane Plus	0.9193	0.3704	0.4110	48.46	0.0304
Total	100.0000	40.2929	19.0160	1233.20	0.7117

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0035	CYLINDER #:	8011
BTU/CU.FT IDEAL:	1236.1	CYLINDER PRESSURE:	17 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1240.4	ANALYSIS DATE:	07/18/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1218.8	ANALYSIS TIME:	09:56:01 AM
DRY BTU @ 15.025:	1265.2	ANALYSIS RUN BY:	ACEDA GOODNOH
REAL SPECIFIC GRAVITY:	0.7139		

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: 07/24/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	NYE FEDERAL COM 3P; INT	INTERMEDIATE CASING	07/24/2023
Stn. No.:	3004533668		35825-15210
Mtr. No.:			

Smpl Date: 07/12/2023
Test Date: 07/18/2023
Run No: HS20230146

Nitrogen: 0.2730
CO2: 0.7093
Methane: 81.9985
Ethane: 9.5357
Propane: 4.1543
I-Butane: 0.6907
N-Butane: 1.0811
I-Pentane: 0.3626
N-Pentane: 0.2755
Hexane+: 0.9193

BTU: 1240.4
GPM: 19.0160
SPG: 0.7139



Well Name: NYE FEDERAL COM 3P;
 API #: 3004533668
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20230147
 Cust No: 35825-15215

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT) Source: TUBING
 Well Name: NYE FEDERAL COM 3P; TBG Well Flowing: Y
 County/State: SAN JUAN NM Pressure: PSIG
 Location: Flow Temp: DEG. F
 Lease/PA/CA: Ambient Temp: DEG. F
 Formation: Flow Rate: MCF/D
 Cust. Stn. No.: 3004533668 Sample Method:
 Sample Date: 07/12/2023
 Sample Time: 1.30 PM
 Sampled By: CURT W.
 Sampled by (CO): HILCORP

Heat Trace: AREA 7 / RUN 704
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2309	0.2304	0.0250	0.00	0.0022
CO2	1.5104	1.5072	0.2590	0.00	0.0230
Methane	82.6207	82.4460	14.0510	834.47	0.4576
Ethane	8.8214	8.8028	2.3670	156.11	0.0916
Propane	3.5939	3.5863	0.9930	90.43	0.0547
Iso-Butane	0.7000	0.6985	0.2300	22.76	0.0140
N-Butane	0.9457	0.9437	0.2990	30.85	0.0190
I-Pentane	0.3847	0.3839	0.1410	15.39	0.0096
N-Pentane	0.2725	0.2719	0.0990	10.92	0.0068
Hexane Plus	0.9198	0.9179	0.4110	48.48	0.0304
Total	100.0000	99.7886	18.8750	1209.42	0.7090

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0034	CYLINDER #:	15
BTU/CU.FT IDEAL:	1212.2	CYLINDER PRESSURE:	36 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1216.4	ANALYSIS DATE:	07/18/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1195.2	ANALYSIS TIME:	10:05:00 AM
DRY BTU @ 15.025:	1240.8	ANALYSIS RUN BY:	ACEDA GOODNOH
REAL SPECIFIC GRAVITY:	0.7111		

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: 07/24/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	NYE FEDERAL COM 3P; TBG	TUBING	07/24/2023
Stn. No.:	3004533668		35825-15215
Mtr. No.:			

Smpl Date: 07/12/2023
Test Date: 07/18/2023
Run No: HS20230147

Nitrogen: 0.2309
CO2: 1.5104
Methane: 82.6207
Ethane: 8.8214
Propane: 3.5939
I-Butane: 0.7000
N-Butane: 0.9457
I-Pentane: 0.3847
N-Pentane: 0.2725
Hexane+: 0.9198

BTU: 1216.4
GPM: 18.8750
SPG: 0.7111



Well Name: NYE FEDERAL COM 3P;
 API #: 3004533668
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20230145
 Cust No: 35825-15205

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT) Source: CASING
 Well Name: NYE FEDERAL COM 3P; CSG Well Flowing: Y
 County/State: SAN JUAN NM Pressure: PSIG
 Location: Flow Temp: DEG. F
 Lease/PA/CA: Ambient Temp: DEG. F
 Formation: Flow Rate: MCF/D
 Cust. Stn. No.: 3004533668 Sample Method:
 Sample Date: 07/12/2023
 Sample Time: 1.30 PM
 Sampled By: CURT W.
 Sampled by (CO): HILCORP

AREA 7 / RUN 704

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.7827	0.5829	0.0860	0.00	0.0076
CO2	0.3148	0.2344	0.0540	0.00	0.0048
Methane	80.5752	60.0042	13.7070	813.81	0.4463
Ethane	9.8384	7.3266	2.6400	174.11	0.1021
Propane	4.5866	3.4156	1.2680	115.40	0.0698
Iso-Butane	0.9210	0.6859	0.3020	29.95	0.0185
N-Butane	1.0745	0.8002	0.3400	35.05	0.0216
I-Pentane	0.4237	0.3155	0.1550	16.95	0.0106
N-Pentane	0.3336	0.2484	0.1210	13.37	0.0083
Hexane Plus	1.1495	0.8560	0.5140	60.59	0.0380
Total	100.0000	74.4697	19.1870	1259.24	0.7276

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0037	CYLINDER #:	1087
BTU/CU.FT IDEAL:	1262.2	CYLINDER PRESSURE:	38 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1266.8	ANALYSIS DATE:	07/18/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1244.8	ANALYSIS TIME:	09:47:17 AM
DRY BTU @ 15.025:	1292.2	ANALYSIS RUN BY:	ACEDA GOODNOH
REAL SPECIFIC GRAVITY:	0.73		

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: 07/24/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	NYE FEDERAL COM 3P; CSG	CASING	07/24/2023
Stn. No.:	3004533668		35825-15205
Mtr. No.:			

Smpl Date: 07/12/2023
Test Date: 07/18/2023
Run No: HS20230145

Nitrogen:	0.7827
CO2:	0.3148
Methane:	80.5752
Ethane:	9.8384
Propane:	4.5866
I-Butane:	0.9210
N-Butane:	1.0745
I-Pentane:	0.4237
N-Pentane:	0.3336
Hexane+:	1.1495
BTU:	1266.8
GPM:	19.1870
SPG:	0.7300

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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 248931

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 248931
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	intermediate and production casing has same gas - bradenhead analysis looks like incorrect data	9/18/2023