



NMOCD REC'D
9/29/20

Well Name: WAYNE MOORE COM 1A;
API #: API # 3004523978
Source: BRADENHEAD
Sample Type: GAS
Analysis No: HS200264
Cust No: 35825-13195

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: WAYNE MOORE COM 1A; BHD
County/State: NM
Location:
Lease/PA/CA:
Formation: MV/PC
Cust. Stn. No.: API # 3004523978
14-396-01

Source: BRADENHEAD
Well Flowing:
Pressure: 95 PSIG
Flow Temp: 102 DEG. F
Ambient Temp: DEG. F
Flow Rate: 83 MCF/D
Sample Method: Purge & Fill
Sample Date: 08/25/2020
Sample Time: 1.26 PM
Sampled By: MIKE ARCHULETA
Sampled by (CO): HILCORP

Heat Trace: AREA 4 / RUN 0408

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.4959	1.4721	0.1650	0.00	0.0145
CO2	0.2358	0.2320	0.0400	0.00	0.0036
Methane	97.9705	96.4087	16.6380	989.50	0.5427
Ethane	0.2242	0.2206	0.0600	3.97	0.0023
Propane	0.0114	0.0112	0.0030	0.29	0.0002
Iso-Butane	0.0000	0.0000	0.0000	0.00	0.0000
N-Butane	0.0000	0.0000	0.0000	0.00	0.0000
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	0.0622	0.0612	0.0280	3.28	0.0021
Total	100.0000	98.4058	16.9340	997.04	0.5653

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.002
BTU/CU.FT IDEAL: 999.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1001.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 983.9
DRY BTU @ 15.025: 1021.4
REAL SPECIFIC GRAVITY: 0.5662

CYLINDER #: 4180
CYLINDER PRESSURE: 23 PSIG
ANALYSIS DATE: 09/02/2020
ANALYSIS TIME: 10:26:53 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: 09/28/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	WAYNE MOORE COM 1A; BHD	BRADENHEAD	09/28/2020
Stn. No.:	API # 3004523978	MV/PC	35825-13195
Mtr. No.:	14-396-01		

Smpl Date:	08/25/2020
Test Date:	09/02/2020
Run No:	HS200264
Nitrogen:	1.4959
CO2:	0.2358
Methane:	97.9705
Ethane:	0.2242
Propane:	0.0114
I-Butane:	0.0000
N-Butane:	0.0000
I-Pentane:	0.0000
N-Pentane:	0.0000
Hexane+:	0.0622
BTU:	1001.3
GPM:	16.9340
SPG:	0.5662



Well Name: WAYNE MOORE COM 1A;
API #: API # 3004523978
Source: CASING
Sample Type: GAS
Analysis No: HS200265
Cust No: 35825-13200

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: WAYNE MOORE COM 1A; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MV/PC
Cust. Stn. No.: API # 3004523978
14-396-01

Source: CASING
Well Flowing: Y
Pressure: 105 PSIG
Flow Temp: 102 DEG. F
Ambient Temp: DEG. F
Flow Rate: 83 MCF/D
Sample Method: Purge & Fill
Sample Date: 08/25/2020
Sample Time: 1.34 PM
Sampled By: MIKE ARCHULETA
Sampled by (CO): HILCORP

AREA 4 / RUN 0408

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0840	0.0842	0.0090	0.00	0.0008
CO2	2.3279	2.3339	0.3980	0.00	0.0354
Methane	86.7287	86.9515	14.7440	875.96	0.4804
Ethane	5.9139	5.9291	1.5860	104.66	0.0614
Propane	2.9154	2.9229	0.8050	73.35	0.0444
Iso-Butane	0.4749	0.4761	0.1560	15.44	0.0095
N-Butane	0.6044	0.6060	0.1910	19.72	0.0121
I-Pentane	0.1883	0.1888	0.0690	7.53	0.0047
N-Pentane	0.1425	0.1429	0.0520	5.71	0.0035
Hexane Plus	0.6200	0.6216	0.2770	32.68	0.0205
Total	100.0000	100.2570	18.2870	1135.06	0.6728

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
BTU/CU.FT IDEAL: 1137.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1141.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1121.2
DRY BTU @ 15.025: 1164.0
REAL SPECIFIC GRAVITY: 0.6745

CYLINDER #: 6041
CYLINDER PRESSURE: 100 PSIG
ANALYSIS DATE: 09/02/2020
ANALYSIS TIME: 10:04:19 AM
ANALYSIS RUN BY: PATRICIA KING

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: 09/28/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	WAYNE MOORE COM 1A; CSG	CASING	09/28/2020
Stn. No.:	API # 3004523978	MV/PC	35825-13200
Mtr. No.:	14-396-01		

Smpl Date:	08/25/2020
Test Date:	09/02/2020
Run No:	HS200265
Nitrogen:	0.0840
CO2:	2.3279
Methane:	86.7287
Ethane:	5.9139
Propane:	2.9154
I-Butane:	0.4749
N-Butane:	0.6044
I-Pentane:	0.1883
N-Pentane:	0.1425
Hexane+:	0.6200
BTU:	1141.1
GPM:	18.2870
SPG:	0.6745



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Farmington, NM 87401
(505) 325-6622
GAS

Analysis No: HS200266
Cust No: 35825-13205

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE
Well Name:	WAYNE MOORE COM 1A; INT	Well Flowing:	N
County/State:	SAN JUAN NM	Pressure:	105 PSIG
Location:		Flow Temp:	93 DEG. F
Lease/PA/CA:		Ambient Temp:	98 DEG. F
Formation:	MV/PC	Flow Rate:	0 MCF/D
Cust. Stn. No.:	API # 3004523978	Sample Method:	Purge & Fill
	14-396-01	Sample Date:	08/27/2020
	AREA 4 / RUN 0408	Sample Time:	11.50 AM
Heat Trace:	N	Sampled By:	JOHN RANTS
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1764	0.1744	0.0190	0.00	0.0017
CO2	2.0851	2.0618	0.3570	0.00	0.0317
Methane	84.9667	84.0164	14.4450	858.16	0.4706
Ethane	7.1746	7.0944	1.9240	126.97	0.0745
Propane	2.9452	2.9123	0.8140	74.10	0.0448
Iso-Butane	0.5353	0.5293	0.1760	17.41	0.0107
N-Butane	0.8407	0.8313	0.2660	27.43	0.0169
I-Pentane	0.3225	0.3189	0.1180	12.90	0.0080
N-Pentane	0.2474	0.2446	0.0900	9.92	0.0062
Hexane Plus	0.7061	0.6982	0.3160	37.22	0.0234
Total	100.0000	98.8816	18.5250	1164.11	0.6885

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0031	CYLINDER #:	6131
BTU/CU.FT IDEAL:	1166.8	CYLINDER PRESSURE:	118 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1170.4	ANALYSIS DATE:	09/04/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1150.0	ANALYSIS TIME:	07:55:02 AM
DRY BTU @ 15.025:	1193.8	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6904		

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: 09/28/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	WAYNE MOORE COM 1A; INT	INTERMEDIATE	09/28/2020
Stn. No.:	API # 3004523978	MV/PC	35825-13205
Mtr. No.:	14-396-01		

Smpl Date: 08/27/2020
Test Date: 09/04/2020
Run No: HS200266

Nitrogen: 0.1764
CO2: 2.0851
Methane: 84.9667
Ethane: 7.1746
Propane: 2.9452
I-Butane: 0.5353
N-Butane: 0.8407
I-Pentane: 0.3225
N-Pentane: 0.2474
Hexane+: 0.7061

BTU: 1170.4
GPM: 18.5250
SPG: 0.6904



Well Name: WAYNE MOORE COM 1A;
API #: API # 3004523978
Source: TUBING
Sample Type: GAS
Analysis No: HS200267
Cust No: 35825-13210

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: WAYNE MOORE COM 1A; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MV/PC
Cust. Stn. No.: API # 3004523978
14-396-01

Source: TUBING
Well Flowing: Y
Pressure: 95 PSIG
Flow Temp: 102 DEG. F
Ambient Temp: DEG. F
Flow Rate: 83 MCF/D
Sample Method: Purge & Fill
Sample Date: 08/25/2020
Sample Time: 1.40 PM
Sampled By: MIKE ARCHULETA
Sampled by (CO): HILCORP

AREA 4 / RUN 0408

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1483	0.1488	0.0160	0.00	0.0014
CO2	2.2054	2.2131	0.3770	0.00	0.0335
Methane	87.9223	88.2275	14.9430	888.02	0.4870
Ethane	5.8598	5.8802	1.5710	103.70	0.0608
Propane	2.1056	2.1129	0.5820	52.98	0.0321
Iso-Butane	0.3651	0.3664	0.1200	11.87	0.0073
N-Butane	0.5075	0.5093	0.1600	16.56	0.0102
I-Pentane	0.1636	0.1642	0.0600	6.55	0.0041
N-Pentane	0.0999	0.1002	0.0360	4.00	0.0025
Hexane Plus	0.6225	0.6247	0.2780	32.81	0.0206
Total	100.0000	100.3473	18.1430	1116.49	0.6595

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0028
BTU/CU.FT IDEAL: 1119.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1122.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1102.7
DRY BTU @ 15.025: 1144.7
REAL SPECIFIC GRAVITY: 0.6611

CYLINDER #: 6023
CYLINDER PRESSURE: 97 PSIG
ANALYSIS DATE: 09/02/2020
ANALYSIS TIME: 10:21:56 AM
ANALYSIS RUN BY: PATRICIA KING

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: 09/28/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	WAYNE MOORE COM 1A; TBG	TUBING	09/28/2020
Stn. No.:	API # 3004523978	MV/PC	35825-13210
Mtr. No.:	14-396-01		

Smpl Date:	08/25/2020
Test Date:	09/02/2020
Run No:	HS200267
Nitrogen:	0.1483
CO2:	2.2054
Methane:	87.9223
Ethane:	5.8598
Propane:	2.1056
I-Butane:	0.3651
N-Butane:	0.5075
I-Pentane:	0.1636
N-Pentane:	0.0999
Hexane+:	0.6225
BTU:	1122.2
GPM:	18.1430
SPG:	0.6611