



NMOCB

APR 05 2018

DISTRICT III

2030 Afton Place
Farmington, NM 87401
(505) 325-6622Analysis No: HS180018
Cust No: 35825-10120**Well/Lease Information**Customer Name: HILCORP (BHD PROJECT)
Well Name: HANCOCK A 5; BHD
County/State: SAN JUAN NM
Location:
Field: AREA 6 / RUN 609
Formation: PC
Cust. Stn. No.:Source: BRADENHEAD
Well Flowing: N
Pressure: 5 PSIG
Flow Temp: DEG. F
Ambient Temp: 52 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 03/15/2018
Sample Time: 3.51 PM
Sampled By: CHORINA R.
Sampled by (CO): HILCORP

Heat Trace: N

Remarks: PRESSURED WITH HELIUM TO 30 LBS.

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4078	0.1266	0.0450	0.00	0.0039
CO2	0.5372	0.1668	0.0920	0.00	0.0082
Methane	91.7043	28.4720	15.5820	926.21	0.5080
Ethane	4.6996	1.4591	1.2600	83.17	0.0488
Propane	1.6130	0.5008	0.4450	40.58	0.0246
Iso-Butane	0.3208	0.0996	0.1050	10.43	0.0064
N-Butane	0.2693	0.0836	0.0850	8.79	0.0054
I-Pentane	0.1037	0.0322	0.0380	4.15	0.0026
N-Pentane	0.0641	0.0199	0.0230	2.57	0.0016
Hexane Plus	0.2802	0.0870	0.1250	14.77	0.0093
Total	100.0000	31.0476	17.8000	1090.67	0.6187

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0025
BTU/CU.FT IDEAL: 1093.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1095.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1076.8
DRY BTU @ 15.025: 1117.8
REAL SPECIFIC GRAVITY: 0.62CYLINDER #: 4167
CYLINDER PRESSURE: PSIG
ANALYSIS DATE: 03/20/2018
ANALYSIS TIME: 11:57:20 AM
ANALYSIS RUN BY: SHYANN ELLEDGE

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: 04/04/2018

GC Method: C6+ Gas

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HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: HANCOCK A 5; BHD
Stn. No.:
Mtr. No.:

BRADENHEAD
PC

04/04/2018
35825-10120

Smpl Date: 03/15/2018
Test Date: 03/20/2018
Run No: HS180018

Nitrogen: 0.4078
CO2: 0.5372
Methane: 91.7043
Ethane: 4.6996
Propane: 1.6130
I-Butane: 0.3208
N-Butane: 0.2693
I-Pentane: 0.1037
N-Pentane: 0.0641
Hexane+: 0.2802

BTU: 1095.9
GPM: 17.8000
SPG: 0.6200



API # 30-045-20820

NMOCD

APR 05 2018

DISTRICT III

2030 Afton Place
Farmington, NM 87401
(505) 325-6622Analysis No: HS180019
Cust No: 35825-10125**Well/Lease Information**Customer Name: HILCORP (BHD PROJECT)
Well Name: HANCOCK A 5; CSG
County/State: SAN JUAN NM
Location:
Field: AREA 6 / RUN 609
Formation: PC
Cust. Stn. No.:Source: CASING
Well Flowing: N
Pressure: 45 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 03/15/2018
Sample Time: 12.10 PM
Sampled By: CHORINA R.
Sampled by (CO): HILCORPHeat Trace: N
Remarks:**Analysis**

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0949	0.0933	0.0100	0.00	0.0009
CO2	0.5288	0.5196	0.0900	0.00	0.0080
Methane	91.4380	89.8524	15.5380	923.52	0.5065
Ethane	5.0843	4.9961	1.3630	89.98	0.0528
Propane	1.7545	1.7241	0.4840	44.14	0.0267
Iso-Butane	0.3631	0.3568	0.1190	11.81	0.0073
N-Butane	0.2916	0.2865	0.0920	9.51	0.0059
I-Pentane	0.1128	0.1108	0.0410	4.51	0.0028
N-Pentane	0.0697	0.0685	0.0250	2.79	0.0017
Hexane Plus	0.2623	0.2578	0.1170	13.83	0.0087
Total	100.0000	98.2659	17.8790	1100.10	0.6213

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
BTU/CU.FT IDEAL: 1102.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1105.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1086.3
DRY BTU @ 15.025: 1127.6
REAL SPECIFIC GRAVITY: 0.6227CYLINDER #: 4026
CYLINDER PRESSURE: 46 PSIG
ANALYSIS DATE: 03/20/2018
ANALYSIS TIME: 01:07:49 PM
ANALYSIS RUN BY: SHYANN ELLEDGE

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: 04/04/2018

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: HANCOCK A 5; CSG
Stn. No.:
Mtr. No.:

CASING
PC

04/04/2018
35825-10125

Smpl Date: 03/15/2018
Test Date: 03/20/2018
Run No: HS180019
Nitrogen: 0.0949
CO2: 0.5288
Methane: 91.4380
Ethane: 5.0843
Propane: 1.7545
I-Butane: 0.3631
N-Butane: 0.2916
I-Pentane: 0.1128
N-Pentane: 0.0697
Hexane+: 0.2623
BTU: 1105.5
GPM: 17.8790
SPG: 0.6227