



2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: GW170031
Cust No: 33050-10195

30-045-23081

Well/Lease Information

Customer Name: GREAT WESTERN DRILLING
Well Name: J.E. DECKER #3A BHD
County/State: SAN JUAN
Location:
Field:
Formation:
Cust. Stn. No.:

Source: BRADENHEAD
Well Flowing: Y
Pressure: 58 PSIG
Flow Temp: DEG. F
Ambient Temp: 64 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 10/19/2017
Sample Time: 12.00 PM
Sampled By: CULLAN
Sampled by (CO): GWDC

OIL CONS. DIV DIST. 3
NOV 07 2017

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2183	0.2162	0.0240	0.00	0.0021
CO2	1.1904	1.1788	0.2040	0.00	0.0181
Methane	75.1099	74.3766	12.7810	758.61	0.4160
Ethane	12.3654	12.2447	3.3190	218.83	0.1284
Propane	6.7753	6.7092	1.8740	170.47	0.1032
Iso-Butane	1.1359	1.1248	0.3730	36.94	0.0228
N-Butane	1.8303	1.8124	0.5790	59.71	0.0367
I-Pentane	0.5629	0.5574	0.2070	22.52	0.0140
N-Pentane	0.4481	0.4437	0.1630	17.96	0.0112
Hexane Plus	0.3635	0.3600	0.1630	19.16	0.0120
Total	100.0000	99.0238	19.6870	1304.21	0.7645

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.004
BTU/CU.FT IDEAL: 1307.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1312.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1289.7
DRY BTU @ 15.025: 1338.8
REAL SPECIFIC GRAVITY: 0.7673

CYLINDER #: 4164
CYLINDER PRESSURE: 61 PSIG
DATE RUN: 10/26/17 12:00 PM
ANALYSIS RUN BY: CAMERON MANGAN

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500

GC Method: C6+ Gas

Last Cal/Verify: 10/30/2017



2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: GW170027
Cust No: 33050-10325

Well/Lease Information

Customer Name: GREAT WESTERN DRILLING
Well Name: J.E. DECKER 3A; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: BMV
Cust. Strn. No.: API 30-045-23031

Source: CASING
Well Flowing:
Pressure: 268 PSIG
Flow Temp: DEG. F
Ambient Temp: 64 DEG. F
Flow Rate: 33 MCF/D
Sample Method: Purge & Fill
Date Sampled: 10/19/2017
Sample Time: 11.40 AM
Sampled By: CULLAN
Sampled by (CO): GWDC

OIL CONS. DIV DIST. 3
NOV 07 2017

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1826	0.1805	0.0200	0.00	0.0018
CO2	1.1886	1.1750	0.2040	0.00	0.0181
Methane	75.0664	74.2055	12.7750	758.17	0.4158
Ethane	12.3500	12.2084	3.3160	218.56	0.1282
Propane	6.7710	6.6933	1.8730	170.37	0.1031
Iso-Butane	1.1417	1.1286	0.3750	37.13	0.0229
N-Butane	1.8472	1.8260	0.5850	60.26	0.0371
I-Pentane	0.5820	0.5753	0.2140	23.29	0.0145
N-Pentane	0.4691	0.4637	0.1710	18.80	0.0117
Hexane Plus	0.4014	0.3968	0.1800	21.16	0.0133
Total	100.0000	98.8531	19.7130	1307.73	0.7664

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0041
BTU/CU.FT IDEAL: 1310.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1316.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1293.3
DRY BTU @ 15.025: 1342.6
REAL SPECIFIC GRAVITY: 0.7692

CYLINDER #: 6008
CYLINDER PRESSURE: 272 PSIG
DATE RUN: 10/26/17 11:40 AM
ANALYSIS RUN BY: CAMERON MANGAN

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: 10/30/2017

GC Method: C6+ Gas



2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: GW170026
Cust No: 33050-10320

Well/Lease Information

Customer Name: GREAT WESTERN DRILLING
Well Name: J.E. DECKER 3-A; TBG
County/State: SAN JUAN NM
Location:
Field:
Formation: BMV
Cust. Stn. No.: API 30-045-23031

Source: TUBING
Well Flowing: Y
Pressure: 112 PSIG
Flow Temp: DEG. F
Ambient Temp: 64 DEG. F
Flow Rate: 33 MCF/D
Sample Method: Purge & Fill
Date Sampled: 10/19/2017
Sample Time: 11.50 AM
Sampled By: CULLAN
Sampled by (CO): GWDC

OIL CONS. DIV DIST. 3
NOV 07 2017

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1175	0.1154	0.0130	0.00	0.0011
CO2	1.6823	1.6526	0.2880	0.00	0.0256
Methane	82.7367	81.2781	14.0690	835.64	0.4583
Ethane	9.0269	8.8677	2.4210	159.75	0.0937
Propane	3.5854	3.5222	0.9910	90.21	0.0546
Iso-Butane	0.7182	0.7055	0.2360	23.36	0.0144
N-Butane	0.8824	0.8668	0.2790	28.79	0.0177
I-Pentane	0.3481	0.3420	0.1280	13.93	0.0087
N-Pentane	0.2095	0.2058	0.0760	8.40	0.0052
Hexane Plus	0.6930	0.6808	0.3100	36.53	0.0229
Total	100.0000	98.2369	18.8110	1196.60	0.7022

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0033
BTU/CU.FT IDEAL: 1199.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1203.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1182.4
DRY BTU @ 15.025: 1227.4
REAL SPECIFIC GRAVITY: 0.7043

CYLINDER #: 6002
CYLINDER PRESSURE: 113 PSIG
DATE RUN: 10/26/17 11:50 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: 10/30/2017

GC Method: C6+ Gas