



Gas Analytical Services, Inc.

P.O. Box 1028
 Bridgeport, WV 26330-0461
 Phone: (304) 623-0020
 FAX: (304) 624-8065

| | |
|------------|------------|
| Analysis#: | 5561 |
| Run Date: | 10/19/2009 |
| Run Time: | 12:12 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 9/22/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | J M WHITAKER 1 100118 WH MTR | Collected By: | B VANDER |
| Meter: | 80853401 | Effective Date: | 10/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 29.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 75.1576 | |
| Ethane | 14.4209 | 3.85 |
| Propane | 6.7674 | 1.86 |
| I-Butane | 0.3103 | 0.10 |
| N-Butane | 1.3330 | 0.42 |
| I-Pentane | 0.1553 | 0.06 |
| N-Pentane | 0.1774 | 0.06 |
| Nitrogen | 1.4462 | |
| CO2 | 0.0799 | |
| Hexanes+ | 0.1520 | 0.07 |
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| Total: | 100.0000 | 6.42 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1266.7769 |
| BTU/SCF (Saturated): | 1245.6692 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99638 |
| Z Factor (Saturated): | 0.99634 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1266.7769 |
| BTU/SCF (Saturated): | 1245.6692 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99638 |
| Z Factor (Saturated): | 0.99633 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7304 |
| Real Gravity: | 0.7328 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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|------------|-----------|
| Analysis#: | 1858 |
| Run Date: | 3/25/2009 |
| Run Time: | 16:32 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

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|--------------|------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/18/2009 |
| Field: | | Sample Time: | 12:15 |
| Station: | TRIVIS SLONE ALLOC MTR | Collected By: | C HICKS |
| Meter: | 80853801 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 15.00 PSIG |
| | | Sample Temp. (°F): | N/G |

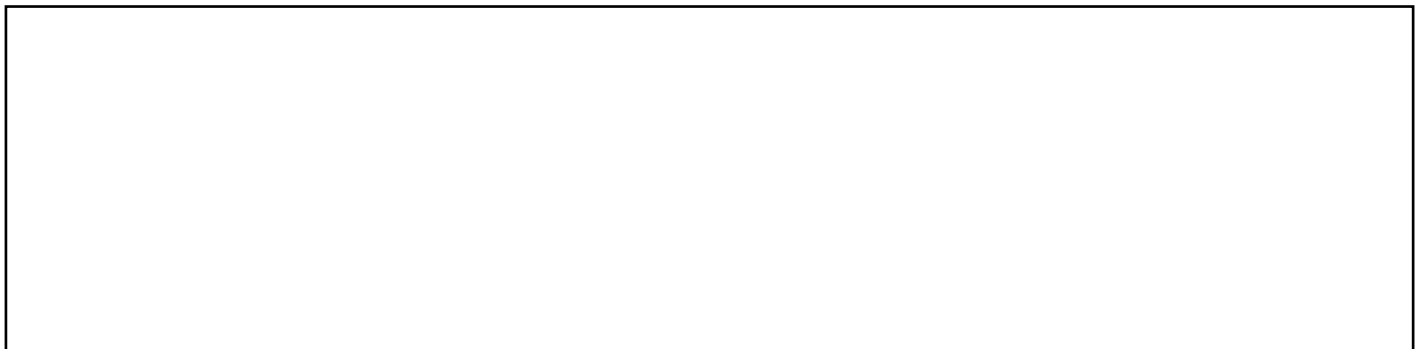
| Component | MOL% | GPM |
|-----------|----------|-------|
| Methane | 62.0070 | |
| Ethane | 22.9289 | 6.12 |
| Propane | 10.3281 | 2.84 |
| I-Butane | 0.5762 | 0.19 |
| N-Butane | 2.2043 | 0.69 |
| I-Pentane | 0.2550 | 0.09 |
| N-Pentane | 0.3404 | 0.12 |
| Nitrogen | 1.0175 | |
| CO2 | 0.0959 | |
| Hexanes+ | 0.2467 | 0.11 |
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| Total: | 100.0000 | 10.16 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1429.3241 |
| BTU/SCF (Saturated): | 1405.3856 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99513 |
| Z Factor (Saturated): | 0.99509 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1429.3241 |
| BTU/SCF (Saturated): | 1405.3856 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99512 |
| Z Factor (Saturated): | 0.99508 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8287 |
| Real Gravity: | 0.8324 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| Analysis#: | 6150 |
| Run Date: | 12/3/2009 |
| Run Time: | 10:18 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|---------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 11/23/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | JONAS SLONE 100154 WH MTR | Collected By: | B VANDERI |
| Meter: | 80854401 | Effective Date: | 12/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 15.00 PSIG |
| | | Sample Temp. (°F): | N/G |

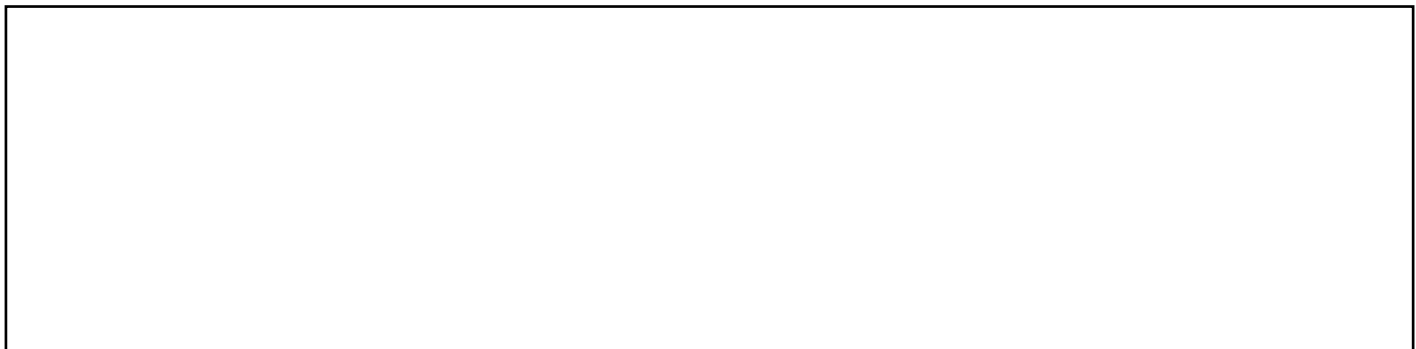
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 65.9210 | |
| Ethane | 21.5028 | 5.74 |
| Propane | 9.1104 | 2.50 |
| I-Butane | 0.4967 | 0.16 |
| N-Butane | 1.9262 | 0.61 |
| I-Pentane | 0.2260 | 0.08 |
| N-Pentane | 0.2944 | 0.11 |
| Nitrogen | 0.2105 | |
| CO2 | 0.0848 | |
| Hexanes+ | 0.2272 | 0.10 |
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| Total: | 100.0000 | 9.30 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1396.6456 |
| BTU/SCF (Saturated): | 1373.2751 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99544 |
| Z Factor (Saturated): | 0.99540 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1396.6456 |
| BTU/SCF (Saturated): | 1373.2751 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99543 |
| Z Factor (Saturated): | 0.99539 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7992 |
| Real Gravity: | 0.8025 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
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Analysis#: 6322
Run Date: 12/17/2009
Run Time: 11:34
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 12/10/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | DELLA SLONE GUARDIAN 100153 WH | Collected By: | B VANDERF |
| Meter: | 80854801 | Effective Date: | 1/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 10.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 66.4766 | |
| Ethane | 21.6670 | 5.78 |
| Propane | 8.6779 | 2.38 |
| I-Butane | 0.4439 | 0.14 |
| N-Butane | 1.7370 | 0.55 |
| I-Pentane | 0.2066 | 0.08 |
| N-Pentane | 0.2707 | 0.10 |
| Nitrogen | 0.2266 | |
| CO2 | 0.0738 | |
| Hexanes+ | 0.2199 | 0.10 |
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| Total: | 100.0000 | 9.13 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1384.0682 |
| BTU/SCF (Saturated): | 1360.9154 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99554 |
| Z Factor (Saturated): | 0.99550 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1384.0682 |
| BTU/SCF (Saturated): | 1360.9154 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99553 |
| Z Factor (Saturated): | 0.99549 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7912 |
| Real Gravity: | 0.7944 |

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| | |
|------------|-----------|
| Analysis#: | 4461 |
| Run Date: | 8/11/2009 |
| Run Time: | 18:20 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | |
|---------------------------------|-----------------------------|
| Customer: Chesapeake Energy | Sample Date: 7/31/2009 |
| Field: | Sample Time: 0:00 |
| Station: S B WEBB 100188 WH MTR | Collected By: C HICKS |
| Meter: 80856401 | Effective Date: 8/1/2009 |
| Sample Type: Spot | Sample Pressure: 34.00 PSIG |
| | Sample Temp. (°F): N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 69.2123 | |
| Ethane | 19.5685 | 5.22 |
| Propane | 8.2497 | 2.27 |
| I-Butane | 0.4309 | 0.14 |
| N-Butane | 1.6831 | 0.53 |
| I-Pentane | 0.1962 | 0.07 |
| N-Pentane | 0.2427 | 0.09 |
| Nitrogen | 0.1831 | |
| CO2 | 0.0707 | |
| Hexanes+ | 0.1628 | 0.07 |
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| Total: | 100.0000 | 8.39 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1356.6508 |
| BTU/SCF (Saturated): | 1333.9773 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99576 |
| Z Factor (Saturated): | 0.99572 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1356.6508 |
| BTU/SCF (Saturated): | 1333.9773 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99575 |
| Z Factor (Saturated): | 0.99571 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7736 |
| Real Gravity: | 0.7766 |

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Analysis#: 5560
Run Date: 10/19/2009
Run Time: 12:11
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 9/29/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | MARYLAND BEVERLY 100198 WH MTR | Collected By: | B VANDER |
| Meter: | 80856701 | Effective Date: | 10/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 36.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 72.7498 | |
| Ethane | 17.2297 | 4.60 |
| Propane | 7.2636 | 2.00 |
| I-Butane | 0.0015 | |
| N-Butane | 1.7990 | 0.57 |
| I-Pentane | 0.1734 | 0.06 |
| N-Pentane | 0.2182 | 0.08 |
| Nitrogen | 0.3019 | |
| CO2 | 0.0506 | |
| Hexanes+ | 0.2123 | 0.09 |
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| Total: | 100.0000 | 7.40 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1315.9641 |
| BTU/SCF (Saturated): | 1293.9985 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99607 |
| Z Factor (Saturated): | 0.99603 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1315.9641 |
| BTU/SCF (Saturated): | 1293.9985 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99606 |
| Z Factor (Saturated): | 0.99602 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7489 |
| Real Gravity: | 0.7515 |

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| | |
|------------|----------|
| Analysis#: | 2064 |
| Run Date: | 4/7/2009 |
| Run Time: | 10:12 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/24/2009 |
| Field: | | Sample Time: | 11:30 |
| Station: | ADAMS & COMBS 100202 WH MTR | Collected By: | C HICKS |
| Meter: | 80856901 | Effective Date: | 5/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 39.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|-------|
| Methane | 62.8217 | |
| Ethane | 24.2510 | 6.47 |
| Propane | 9.3144 | 2.56 |
| I-Butane | 0.5007 | 0.16 |
| N-Butane | 1.8511 | 0.58 |
| I-Pentane | 0.2216 | 0.08 |
| N-Pentane | 0.3113 | 0.11 |
| Nitrogen | 0.3090 | |
| CO2 | 0.0975 | |
| Hexanes+ | 0.3217 | 0.14 |
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| Total: | 100.0000 | 10.10 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1422.6395 |
| BTU/SCF (Saturated): | 1398.8124 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99521 |
| Z Factor (Saturated): | 0.99518 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1422.6395 |
| BTU/SCF (Saturated): | 1398.8124 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99520 |
| Z Factor (Saturated): | 0.99517 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8169 |
| Real Gravity: | 0.8205 |

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| | |
|------------|----------|
| Analysis#: | 7204 |
| Run Date: | 3/8/2010 |
| Run Time: | 10:10 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------|--------------------|-----------|
| Customer: | Chesapeake Energy | Sample Date: | 2/25/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | S B WEBB 1 100112 WH MTR | Collected By: | B VANDER |
| Meter: | 80857201 | Effective Date: | 3/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 8.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 69.8715 | |
| Ethane | 18.9444 | 5.05 |
| Propane | 8.0421 | 2.21 |
| I-Butane | 0.0014 | |
| N-Butane | 2.1337 | 0.67 |
| I-Pentane | 0.0107 | |
| N-Pentane | 0.4476 | 0.16 |
| Nitrogen | 0.2467 | |
| CO2 | 0.0867 | |
| Hexanes+ | 0.2152 | 0.09 |
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| Total: | 100.0000 | 8.18 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1351.1664 |
| BTU/SCF (Saturated): | 1328.5884 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99580 |
| Z Factor (Saturated): | 0.99576 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1351.1664 |
| BTU/SCF (Saturated): | 1328.5884 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99579 |
| Z Factor (Saturated): | 0.99575 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7710 |
| Real Gravity: | 0.7739 |

Gross Heating Values are Based
on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 2270 |
| Run Date: | 4/14/2009 |
| Run Time: | 14:29 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | |
|---|--|--|
| Customer: Chesapeake Energy Field: Station: ZADA HUTCH 100206 WH MTR Meter: 80857301 Sample Type: Spot | Sample Date: 4/7/2009 Sample Time: 10:30 Collected By: B VANDER Effective Date: 5/1/2009 Sample Pressure: 39.00 PSIG Sample Temp. (°F): N/G | |
|---|--|--|

| Component | MOL% | GPM |
|---------------|----------|-------|
| Methane | 54.2806 | |
| Ethane | 27.6211 | 7.37 |
| Propane | 12.3188 | 3.39 |
| I-Butane | 0.6743 | 0.22 |
| N-Butane | 2.7211 | 0.86 |
| I-Pentane | 0.3276 | 0.12 |
| N-Pentane | 0.4741 | 0.17 |
| Nitrogen | 1.0583 | |
| CO2 | 0.1348 | |
| Hexanes+ | 0.3893 | 0.17 |
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| Total: | 100.0000 | 12.30 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1521.9523 |
| BTU/SCF (Saturated): | 1496.3949 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99431 |
| Z Factor (Saturated): | 0.99428 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1521.9523 |
| BTU/SCF (Saturated): | 1496.3949 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99430 |
| Z Factor (Saturated): | 0.99427 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8879 |
| Real Gravity: | 0.8926 |

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| Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8. |
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|------------|-----------|
| Analysis#: | 6673 |
| Run Date: | 1/29/2010 |
| Run Time: | 8:55 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 1/21/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | JOSEPH PIGMAN 100209 WH MTR | Collected By: | C HICKS |
| Meter: | 80857501 | Effective Date: | 2/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 37.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 65.2230 | |
| Ethane | 22.2618 | 5.94 |
| Propane | 8.9710 | 2.47 |
| I-Butane | 0.0043 | |
| N-Butane | 2.3020 | 0.72 |
| I-Pentane | 0.2144 | 0.08 |
| N-Pentane | 0.2816 | 0.10 |
| Nitrogen | 0.4576 | |
| CO2 | 0.0867 | |
| Hexanes+ | 0.1976 | 0.09 |
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| Total: | 100.0000 | 9.40 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1393.2367 |
| BTU/SCF (Saturated): | 1369.9241 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99545 |
| Z Factor (Saturated): | 0.99541 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1393.2367 |
| BTU/SCF (Saturated): | 1369.9241 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99544 |
| Z Factor (Saturated): | 0.99540 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7996 |
| Real Gravity: | 0.8029 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 1565 |
| Run Date: | 3/11/2009 |
| Run Time: | 14:13 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|---------------------|-------------------------|---------------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/5/2009 |
| Field: | | Sample Time: | 2:00 |
| Station: | W R SMITH 100211 WH MTR | Collected By: | B VANDER |
| Meter: | 80857601 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 44.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|---------------|-----------------|-------------|
| Methane | 63.2767 | |
| Ethane | 23.2418 | 6.20 |
| Propane | 9.7038 | 2.67 |
| I-Butane | 0.5056 | 0.17 |
| N-Butane | 1.8455 | 0.58 |
| I-Pentane | 0.2148 | 0.08 |
| N-Pentane | 0.2845 | 0.10 |
| Nitrogen | 0.6195 | |
| CO2 | 0.0832 | |
| Hexanes+ | 0.2246 | 0.10 |
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| | | |
| Total: | 100.0000 | 9.90 |

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|-----------------------|-----------|
| BTU/SCF (Dry): | 1412.6543 |
| BTU/SCF (Saturated): | 1389.0034 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99528 |
| Z Factor (Saturated): | 0.99525 |

| | |
|-----------------------|-----------|
| BTU/SCF (Dry): | 1412.6543 |
| BTU/SCF (Saturated): | 1389.0034 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99527 |
| Z Factor (Saturated): | 0.99524 |

| | |
|----------------|--------|
| Ideal Gravity: | 0.8136 |
| Real Gravity: | 0.8171 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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|------------|-----------|
| Analysis#: | 2778 |
| Run Date: | 5/12/2009 |
| Run Time: | 9:49 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | |
|--|--|
| Customer: Chesapeake Energy Field: Station: H H SMITH 100216 WH MTR Meter: 80857701 Sample Type: Spot | Sample Date: 4/29/2009 Sample Time: 1:45 Collected By: B VANDER Effective Date: 6/1/2009 Sample Pressure: 41.00 PSIG Sample Temp. (°F): N/G |
|--|--|

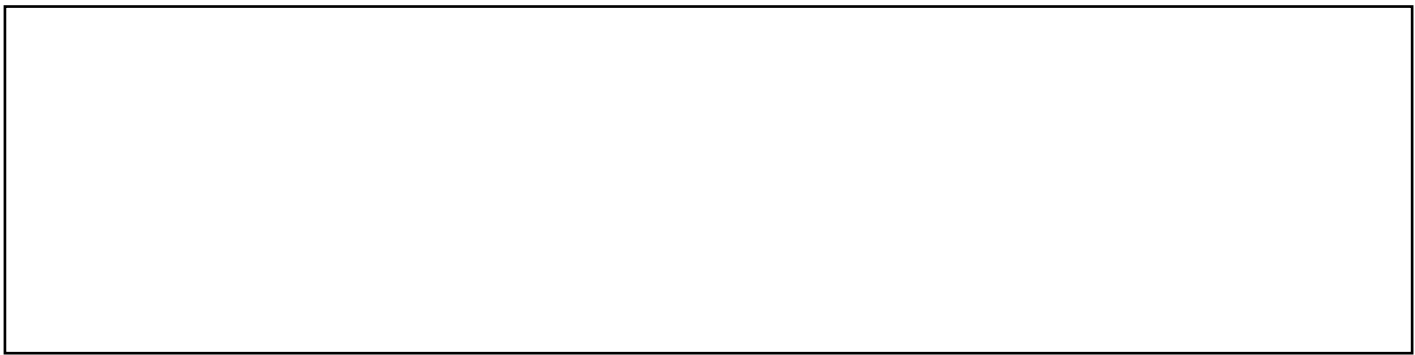
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 63.6314 | |
| Ethane | 23.2326 | 6.20 |
| Propane | 8.9494 | 2.46 |
| I-Butane | 0.4621 | 0.15 |
| N-Butane | 1.7357 | 0.55 |
| I-Pentane | 0.1986 | 0.07 |
| N-Pentane | 0.2679 | 0.10 |
| Nitrogen | 1.2338 | |
| CO2 | 0.0874 | |
| Hexanes+ | 0.2011 | 0.09 |
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| | | |
| Total: | 100.0000 | 9.62 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1389.1957 |
| BTU/SCF (Saturated): | 1365.9525 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99544 |
| Z Factor (Saturated): | 0.99540 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1389.1957 |
| BTU/SCF (Saturated): | 1365.9525 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99543 |
| Z Factor (Saturated): | 0.99539 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8054 |
| Real Gravity: | 0.8088 |

Gross Heating Values are Based
on GPA 2145-03, 2172, 2261.
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| | |
|------------|-----------|
| Analysis#: | 1572 |
| Run Date: | 3/11/2009 |
| Run Time: | 14:58 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/5/2009 |
| Field: | | Sample Time: | 9:45 |
| Station: | W R SMITH ETAL 100213 WH MTR | Collected By: | B VANDERI |
| Meter: | 80857801 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 44.00 PSIG |
| | | Sample Temp. (°F): | N/G |

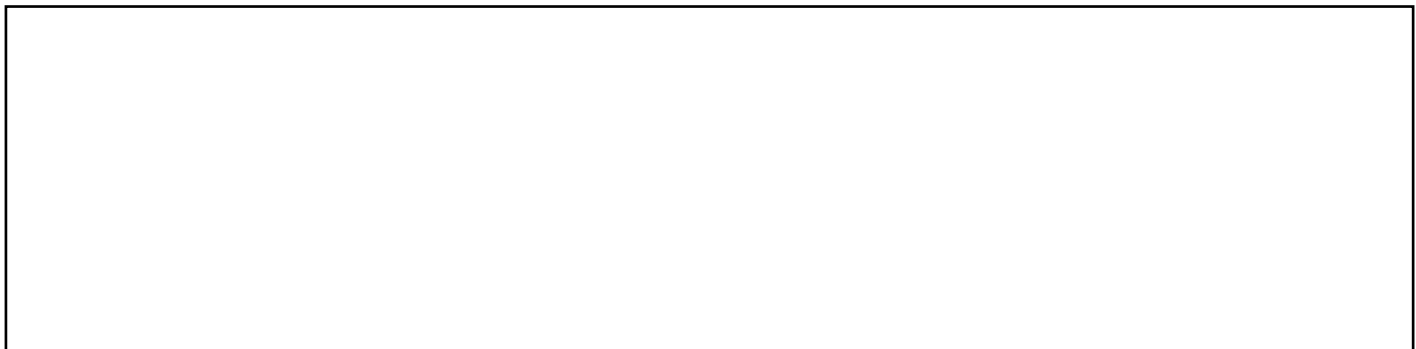
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 65.3117 | |
| Ethane | 21.8461 | 5.83 |
| Propane | 8.8720 | 2.44 |
| I-Butane | 0.5007 | 0.16 |
| N-Butane | 1.7377 | 0.55 |
| I-Pentane | 0.2069 | 0.08 |
| N-Pentane | 0.2758 | 0.10 |
| Nitrogen | 0.9920 | |
| CO2 | 0.0588 | |
| Hexanes+ | 0.1983 | 0.09 |
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| Total: | 100.0000 | 9.25 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1381.3385 |
| BTU/SCF (Saturated): | 1358.2336 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99552 |
| Z Factor (Saturated): | 0.99548 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1381.3385 |
| BTU/SCF (Saturated): | 1358.2336 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99551 |
| Z Factor (Saturated): | 0.99548 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7976 |
| Real Gravity: | 0.8009 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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|------------|-----------|
| Analysis#: | 8609 |
| Run Date: | 5/18/2010 |
| Run Time: | 11:42 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 5/10/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | HINDMAN SETTLEMNT SCH 100220 W | Collected By: | C HICKS |
| Meter: | 80858001 | Effective Date: | 6/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 44.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 69.5982 | |
| Ethane | 20.8464 | 5.56 |
| Propane | 7.2986 | 2.01 |
| I-Butane | 0.3640 | 0.12 |
| N-Butane | 1.1954 | 0.38 |
| I-Pentane | 0.0013 | |
| N-Pentane | 0.2341 | 0.08 |
| Nitrogen | 0.3679 | |
| CO2 | 0.0536 | |
| Hexanes+ | 0.0405 | 0.02 |
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| Total: | 100.0000 | 8.17 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1326.2506 |
| BTU/SCF (Saturated): | 1304.1019 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99597 |
| Z Factor (Saturated): | 0.99594 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1326.2506 |
| BTU/SCF (Saturated): | 1304.1019 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99596 |
| Z Factor (Saturated): | 0.99593 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7558 |
| Real Gravity: | 0.7585 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|----------|
| Analysis#: | 2120 |
| Run Date: | 4/7/2009 |
| Run Time: | 17:12 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/1/2009 |
| Field: | | Sample Time: | 12:15 |
| Station: | EVANS OIL & GAS CO ALLOC MTR | Collected By: | B VANDERF |
| Meter: | 80858101 | Effective Date: | 5/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 74.00 PSIG |
| | | Sample Temp. (°F): | N/G |

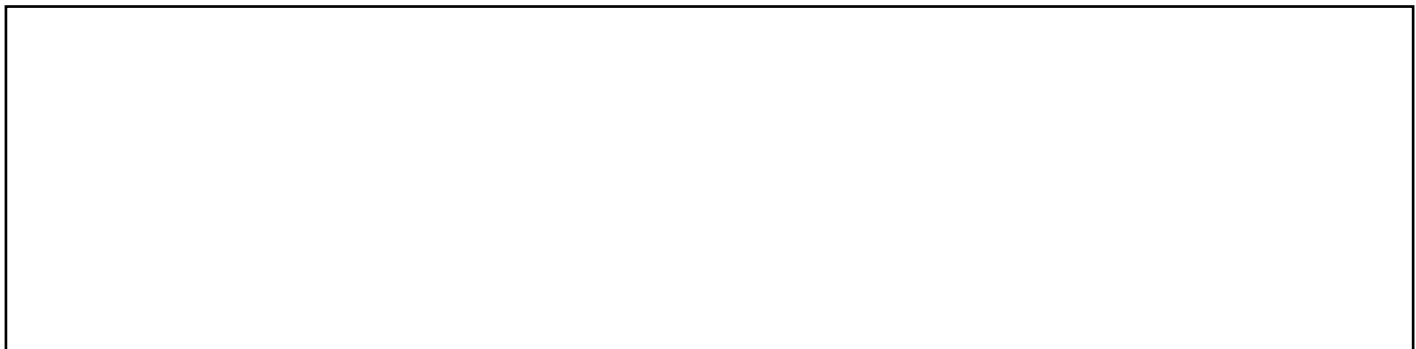
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 80.7574 | |
| Ethane | 6.9220 | 1.85 |
| Propane | 4.5109 | 1.24 |
| I-Butane | 0.4298 | 0.14 |
| N-Butane | 1.1967 | 0.38 |
| I-Pentane | 0.2119 | 0.08 |
| N-Pentane | 0.2567 | 0.09 |
| Nitrogen | 5.3501 | |
| CO2 | 0.0590 | |
| Hexanes+ | 0.3055 | 0.13 |
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| Total: | 100.0000 | 3.91 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1145.0957 |
| BTU/SCF (Saturated): | 1126.1064 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99707 |
| Z Factor (Saturated): | 0.99702 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1145.0957 |
| BTU/SCF (Saturated): | 1126.1064 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99707 |
| Z Factor (Saturated): | 0.99702 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6946 |
| Real Gravity: | 0.6964 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 2546 |
| Run Date: | 4/29/2009 |
| Run Time: | 9:49 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/21/2009 |
| Field: | | Sample Time: | 11:00 |
| Station: | DAN MARTIN 100225 WH MTR | Collected By: | B VANDERF |
| Meter: | 80858201 | Effective Date: | 5/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 47.00 PSIG |
| | | Sample Temp. (°F): | N/G |

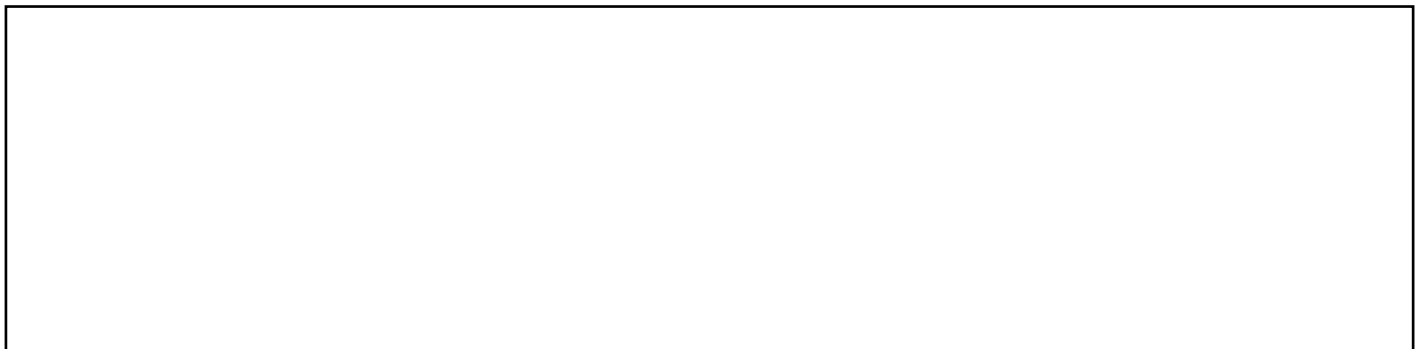
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 64.1062 | |
| Ethane | 23.0092 | 6.14 |
| Propane | 8.7316 | 2.40 |
| I-Butane | 0.4522 | 0.15 |
| N-Butane | 1.6746 | 0.53 |
| I-Pentane | 0.1900 | 0.07 |
| N-Pentane | 0.2611 | 0.09 |
| Nitrogen | 1.3003 | |
| CO2 | 0.0774 | |
| Hexanes+ | 0.1974 | 0.09 |
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| Total: | 100.0000 | 9.47 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1381.2974 |
| BTU/SCF (Saturated): | 1358.1913 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99550 |
| Z Factor (Saturated): | 0.99546 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1381.2974 |
| BTU/SCF (Saturated): | 1358.1913 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99549 |
| Z Factor (Saturated): | 0.99545 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8009 |
| Real Gravity: | 0.8042 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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|------------|-----------|
| Analysis#: | 2280 |
| Run Date: | 4/14/2009 |
| Run Time: | 16:42 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/9/2009 |
| Field: | | Sample Time: | 9:30 |
| Station: | W R SMITH ETAL 100227 SLS MTR | Collected By: | B VANDERF |
| Meter: | 80858301 | Effective Date: | 5/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 40.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 69.2660 | |
| Ethane | 19.8463 | 5.29 |
| Propane | 7.2806 | 2.00 |
| I-Butane | 0.3646 | 0.12 |
| N-Butane | 1.3716 | 0.43 |
| I-Pentane | 0.1622 | 0.06 |
| N-Pentane | 0.2199 | 0.08 |
| Nitrogen | 1.2386 | |
| CO2 | 0.0584 | |
| Hexanes+ | 0.1918 | 0.08 |
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| Total: | 100.0000 | 8.06 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1324.1501 |
| BTU/SCF (Saturated): | 1302.0392 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99595 |
| Z Factor (Saturated): | 0.99592 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1324.1501 |
| BTU/SCF (Saturated): | 1302.0392 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99595 |
| Z Factor (Saturated): | 0.99591 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7639 |
| Real Gravity: | 0.7667 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.

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| | |
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| Analysis#: | 3362 |
| Run Date: | 6/11/2009 |
| Run Time: | 10:35 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/1/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | KENTUCKY/WV GAS CO 100233 WH M | Collected By: | C HICKS |
| Meter: | 80858501 | Effective Date: | 7/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 28.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 74.7282 | |
| Ethane | 14.5070 | 3.87 |
| Propane | 7.0211 | 1.93 |
| I-Butane | 0.3361 | 0.11 |
| N-Butane | 1.4996 | 0.47 |
| I-Pentane | 0.1751 | 0.06 |
| N-Pentane | 0.2148 | 0.08 |
| Nitrogen | 1.2925 | |
| CO2 | 0.0539 | |
| Hexanes+ | 0.1717 | 0.07 |
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| Total: | 100.0000 | 6.59 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1280.1106 |
| BTU/SCF (Saturated): | 1258.7716 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99630 |
| Z Factor (Saturated): | 0.99625 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1280.1106 |
| BTU/SCF (Saturated): | 1258.7716 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99629 |
| Z Factor (Saturated): | 0.99625 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7369 |
| Real Gravity: | 0.7393 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.



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| | |
|------------|-----------|
| Analysis#: | 2559 |
| Run Date: | 4/29/2009 |
| Run Time: | 13:27 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | |
|---|------------------------------------|
| Customer: Chesapeake Energy | Sample Date: 4/20/2009 |
| Field: | Sample Time: 10:30 |
| Station: DORA PERKINS 100231 SLS MTR | Collected By: B VANDERF |
| Meter: 80858601 | Effective Date: 5/1/2009 |
| Sample Type: Spot | Sample Pressure: 40.00 PSIG |
| | Sample Temp. (°F): N/G |

| Component | MOL% | GPM |
|------------------|-----------------|-------------|
| Methane | 74.7577 | |
| Ethane | 14.3745 | 3.83 |
| Propane | 6.1970 | 1.70 |
| I-Butane | 0.4235 | 0.14 |
| N-Butane | 1.3976 | 0.44 |
| I-Pentane | 0.2182 | 0.08 |
| N-Pentane | 0.2833 | 0.10 |
| Nitrogen | 2.0378 | |
| CO2 | 0.0206 | |
| Hexanes+ | 0.2898 | 0.13 |
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| Total: | 100.0000 | 6.42 |

| Analytical Results at Base Conditions (Real) | |
|---|-----------|
| BTU/SCF (Dry): | 1267.2112 |
| BTU/SCF (Saturated): | 1246.0956 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99636 |
| Z Factor (Saturated): | 0.99632 |

| Analytical Results at Contract Conditions (Real) | |
|---|-----------|
| BTU/SCF (Dry): | 1267.2112 |
| BTU/SCF (Saturated): | 1246.0956 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99636 |
| Z Factor (Saturated): | 0.99631 |

| Calculated Specific Gravities | |
|--------------------------------------|--------|
| Ideal Gravity: | 0.7359 |
| Real Gravity: | 0.7383 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 2779 |
| Run Date: | 5/12/2009 |
| Run Time: | 10:05 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/28/2009 |
| Field: | | Sample Time: | 11:30 |
| Station: | BEN J SLONE 100229 SLS MTR | Collected By: | C HICKS |
| Meter: | 80858701 | Effective Date: | 6/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 40.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 69.2704 | |
| Ethane | 19.5814 | 5.22 |
| Propane | 7.2807 | 2.00 |
| I-Butane | 0.3782 | 0.12 |
| N-Butane | 1.4077 | 0.44 |
| I-Pentane | 0.1743 | 0.06 |
| N-Pentane | 0.2278 | 0.08 |
| Nitrogen | 1.4464 | |
| CO2 | 0.0557 | |
| Hexanes+ | 0.1774 | 0.08 |
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| Total: | 100.0000 | 8.00 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1321.1538 |
| BTU/SCF (Saturated): | 1299.0956 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99597 |
| Z Factor (Saturated): | 0.99593 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1321.1538 |
| BTU/SCF (Saturated): | 1299.0956 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99596 |
| Z Factor (Saturated): | 0.99592 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7641 |
| Real Gravity: | 0.7669 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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 FAX: (304) 624-8065

| | |
|------------|----------|
| Analysis#: | 1474 |
| Run Date: | 3/4/2009 |
| Run Time: | 17:06 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 2/24/2009 |
| Field: | | Sample Time: | 12:30 |
| Station: | KENTUCKY/WV GAS CO 100234 WH M | Collected By: | B VANDERF |
| Meter: | 80858801 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 48.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|---------------|-----------------|-------------|
| Methane | 65.7836 | |
| Ethane | 22.3211 | 5.95 |
| Propane | 8.5744 | 2.36 |
| I-Butane | 0.4528 | 0.15 |
| N-Butane | 1.6041 | 0.50 |
| I-Pentane | 0.2028 | 0.07 |
| N-Pentane | 0.2605 | 0.09 |
| Nitrogen | 0.5015 | |
| CO2 | 0.0999 | |
| Hexanes+ | 0.1993 | 0.09 |
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| Total: | 100.0000 | 9.21 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1380.3384 |
| BTU/SCF (Saturated): | 1357.2494 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99555 |
| Z Factor (Saturated): | 0.99551 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1380.3384 |
| BTU/SCF (Saturated): | 1357.2494 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99554 |
| Z Factor (Saturated): | 0.99550 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7923 |
| Real Gravity: | 0.7955 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 2265 |
| Run Date: | 4/14/2009 |
| Run Time: | 14:03 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | |
|---|-----------------------------|
| Customer: Chesapeake Energy | Sample Date: 4/9/2009 |
| Field: | Sample Time: 10:45 |
| Station: M M COLLINS ETAL 1002332 WH MT | Collected By: B VANDERF |
| Meter: 80858901 | Effective Date: 5/1/2009 |
| Sample Type: Spot | Sample Pressure: 39.00 PSIG |
| | Sample Temp. (°F): N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 68.3946 | |
| Ethane | 20.3195 | 5.42 |
| Propane | 7.6618 | 2.11 |
| I-Butane | 0.3945 | 0.13 |
| N-Butane | 1.4575 | 0.46 |
| I-Pentane | 0.1746 | 0.06 |
| N-Pentane | 0.2324 | 0.08 |
| Nitrogen | 1.0124 | |
| CO2 | 0.0566 | |
| Hexanes+ | 0.2961 | 0.13 |
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| Total: | 100.0000 | 8.39 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1343.7443 |
| BTU/SCF (Saturated): | 1321.2921 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99582 |
| Z Factor (Saturated): | 0.99578 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1343.7443 |
| BTU/SCF (Saturated): | 1321.2921 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99581 |
| Z Factor (Saturated): | 0.99577 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7739 |
| Real Gravity: | 0.7768 |

Gross Heating Values are Based
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Analysis#: 6670
 Run Date: 1/29/2010
 Run Time: 8:52
 Cylinder#:

FRACTIONAL ANALYSIS

| | |
|--------------------------------------|-----------------------------|
| Customer: Chesapeake Energy | Sample Date: 1/18/2010 |
| Field: | Sample Time: 10:00 |
| Station: ELIZA NICKLES 100244 WH MTR | Collected By: C HICKS |
| Meter: 80859101 | Effective Date: 2/1/2010 |
| Sample Type: Spot | Sample Pressure: 44.00 PSIG |
| | Sample Temp. (°F): N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 71.2619 | |
| Ethane | 19.0336 | 5.08 |
| Propane | 6.7811 | 1.86 |
| I-Butane | 0.3417 | 0.11 |
| N-Butane | 1.2155 | 0.38 |
| I-Pentane | 0.1371 | 0.05 |
| N-Pentane | 0.1810 | 0.07 |
| Nitrogen | 0.8877 | |
| CO2 | 0.0561 | |
| Hexanes+ | 0.1043 | 0.05 |
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| Total: | 100.0000 | 7.60 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1304.1254 |
| BTU/SCF (Saturated): | 1282.3624 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99612 |
| Z Factor (Saturated): | 0.99608 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1304.1254 |
| BTU/SCF (Saturated): | 1282.3624 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99611 |
| Z Factor (Saturated): | 0.99608 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7476 |
| Real Gravity: | 0.7502 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 6120 |
| Run Date: | 12/1/2009 |
| Run Time: | 10:16 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 11/19/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | J H HAMMONDS | Collected By: | C HICKS |
| Meter: | 80859401 | Effective Date: | 12/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 20.00 PSIG |
| | | Sample Temp. (°F): | N/G |

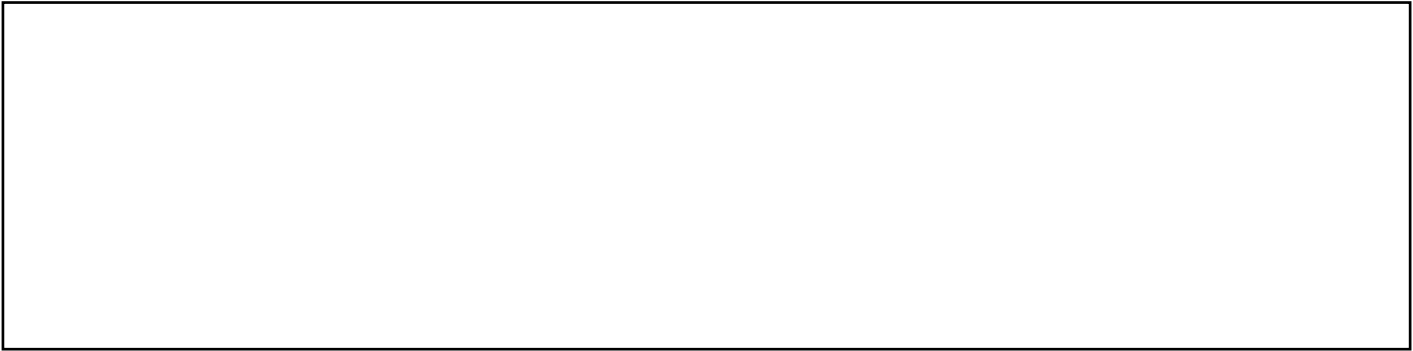
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 77.6446 | |
| Ethane | 12.5158 | 3.34 |
| Propane | 5.7345 | 1.58 |
| I-Butane | 0.3051 | 0.10 |
| N-Butane | 1.2171 | 0.38 |
| I-Pentane | 0.1564 | 0.06 |
| N-Pentane | 0.1885 | 0.07 |
| Nitrogen | 1.9942 | |
| CO2 | 0.0616 | |
| Hexanes+ | 0.1822 | 0.08 |
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| Total: | 100.0000 | 5.61 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1229.7614 |
| BTU/SCF (Saturated): | 1209.2970 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99662 |
| Z Factor (Saturated): | 0.99658 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1229.7614 |
| BTU/SCF (Saturated): | 1209.2970 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99662 |
| Z Factor (Saturated): | 0.99658 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7125 |
| Real Gravity: | 0.7146 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1750 |
| Run Date: | 3/19/2009 |
| Run Time: | 18:00 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/12/2009 |
| Field: | | Sample Time: | 9:00 |
| Station: | BILL CORNETT 100262 WH MTR | Collected By: | B VANDERI |
| Meter: | 80859601 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 49.00 PSIG |
| | | Sample Temp. (°F): | N/G |

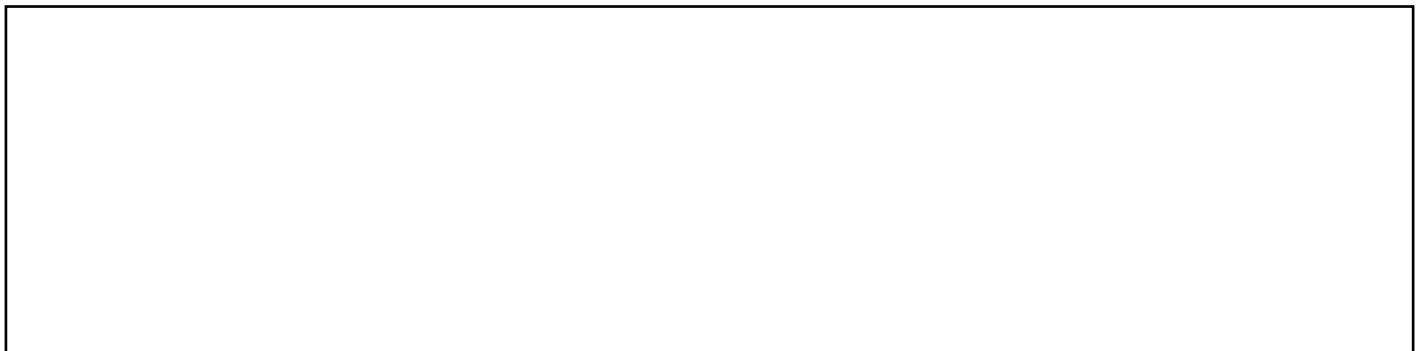
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 70.6422 | |
| Ethane | 18.0142 | 4.81 |
| Propane | 7.1508 | 1.96 |
| I-Butane | 0.3620 | 0.12 |
| N-Butane | 1.3192 | 0.41 |
| I-Pentane | 0.1529 | 0.06 |
| N-Pentane | 0.2089 | 0.08 |
| Nitrogen | 1.9276 | |
| CO2 | 0.0500 | |
| Hexanes+ | 0.1722 | 0.07 |
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| Total: | 100.0000 | 7.51 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1298.3685 |
| BTU/SCF (Saturated): | 1276.7081 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99612 |
| Z Factor (Saturated): | 0.99608 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1298.3685 |
| BTU/SCF (Saturated): | 1276.7081 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99611 |
| Z Factor (Saturated): | 0.99608 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7550 |
| Real Gravity: | 0.7576 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 6680 |
| Run Date: | 1/29/2010 |
| Run Time: | 11:01 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 1/18/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | J W & SUSAN CORNETT 100269 WH | Collected By: | C HICKS |
| Meter: | 80859701 | Effective Date: | 2/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 45.00 PSIG |
| | | Sample Temp. (°F): | N/G |

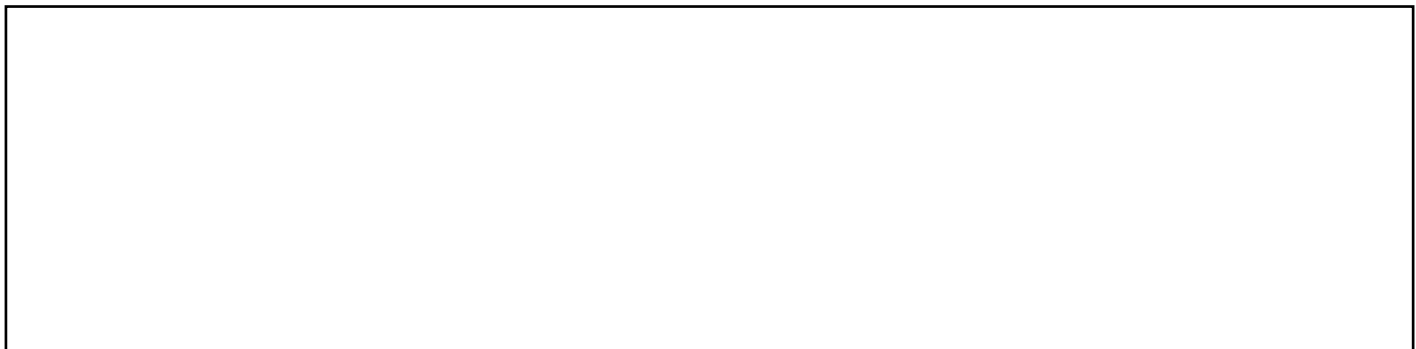
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 70.5674 | |
| Ethane | 18.7789 | 5.01 |
| Propane | 7.3451 | 2.02 |
| I-Butane | 0.3643 | 0.12 |
| N-Butane | 1.3634 | 0.43 |
| I-Pentane | 0.1548 | 0.06 |
| N-Pentane | 0.2036 | 0.07 |
| Nitrogen | 1.0310 | |
| CO2 | 0.0342 | |
| Hexanes+ | 0.1573 | 0.07 |
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| Total: | 100.0000 | 7.78 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1316.8926 |
| BTU/SCF (Saturated): | 1294.9093 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99602 |
| Z Factor (Saturated): | 0.99598 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1316.8926 |
| BTU/SCF (Saturated): | 1294.9093 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99602 |
| Z Factor (Saturated): | 0.99598 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7569 |
| Real Gravity: | 0.7596 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1670 |
| Run Date: | 3/17/2009 |
| Run Time: | 15:52 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|---------------------|-------------------------|---------------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/2/2009 |
| Field: | | Sample Time: | 10:15 |
| Station: | H H SMITH 100275 WH MTR | Collected By: | B VANDER |
| Meter: | 80860001 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 48.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|---------------|----------|------|
| Methane | 70.0165 | |
| Ethane | 18.9874 | 5.06 |
| Propane | 7.4346 | 2.04 |
| I-Butane | 0.3754 | 0.12 |
| N-Butane | 1.3846 | 0.44 |
| I-Pentane | 0.1576 | 0.06 |
| N-Pentane | 0.2224 | 0.08 |
| Nitrogen | 1.1924 | |
| CO2 | 0.0489 | |
| Hexanes+ | 0.1802 | 0.08 |
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| Total: | 100.0000 | 7.88 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1320.4324 |
| BTU/SCF (Saturated): | 1298.3877 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99599 |
| Z Factor (Saturated): | 0.99595 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1320.4324 |
| BTU/SCF (Saturated): | 1298.3877 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99598 |
| Z Factor (Saturated): | 0.99594 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7608 |
| Real Gravity: | 0.7636 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 6671 |
| Run Date: | 1/29/2010 |
| Run Time: | 8:53 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 1/19/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | W A COMBS 100289 WH MTR | Collected By: | C HICKS |
| Meter: | 80860201 | Effective Date: | 2/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 45.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 74.3659 | |
| Ethane | 15.8182 | 4.22 |
| Propane | 6.0352 | 1.66 |
| I-Butane | 0.3066 | 0.10 |
| N-Butane | 1.1314 | 0.36 |
| I-Pentane | 0.1339 | 0.05 |
| N-Pentane | 0.1817 | 0.07 |
| Nitrogen | 1.7856 | |
| CO2 | 0.0189 | |
| Hexanes+ | 0.2226 | 0.10 |
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| Total: | 100.0000 | 6.56 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1261.2626 |
| BTU/SCF (Saturated): | 1240.2468 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99641 |
| Z Factor (Saturated): | 0.99636 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1261.2626 |
| BTU/SCF (Saturated): | 1240.2468 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99640 |
| Z Factor (Saturated): | 0.99636 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7295 |
| Real Gravity: | 0.7318 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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| | |
|------------|----------|
| Analysis#: | 3216 |
| Run Date: | 6/3/2009 |
| Run Time: | 13:07 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 5/28/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | D H TOLLIVER 100292 WH MTR | Collected By: | C HICKS |
| Meter: | 80860601 | Effective Date: | 7/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 47.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 67.6071 | |
| Ethane | 21.3153 | 5.69 |
| Propane | 7.9973 | 2.20 |
| I-Butane | 0.4344 | 0.14 |
| N-Butane | 1.5634 | 0.49 |
| I-Pentane | 0.1865 | 0.07 |
| N-Pentane | 0.2497 | 0.09 |
| Nitrogen | 0.3967 | |
| CO2 | 0.0660 | |
| Hexanes+ | 0.1836 | 0.08 |
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| Total: | 100.0000 | 8.76 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1362.2886 |
| BTU/SCF (Saturated): | 1339.5137 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99570 |
| Z Factor (Saturated): | 0.99566 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1362.2886 |
| BTU/SCF (Saturated): | 1339.5137 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99569 |
| Z Factor (Saturated): | 0.99566 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7792 |
| Real Gravity: | 0.7822 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

P.O. Box 1028
 Bridgeport, WV 26330-0461
 Phone: (304) 623-0020
 FAX: (304) 624-8065

| | |
|------------|----------|
| Analysis#: | 6409 |
| Run Date: | 1/4/2010 |
| Run Time: | 11:25 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 12/16/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | GULLETT HEIRS ALLOC MTR | Collected By: | B VANDERF |
| Meter: | 80860701 | Effective Date: | 1/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 18.00 PSIG |
| | | Sample Temp. (°F): | N/G |

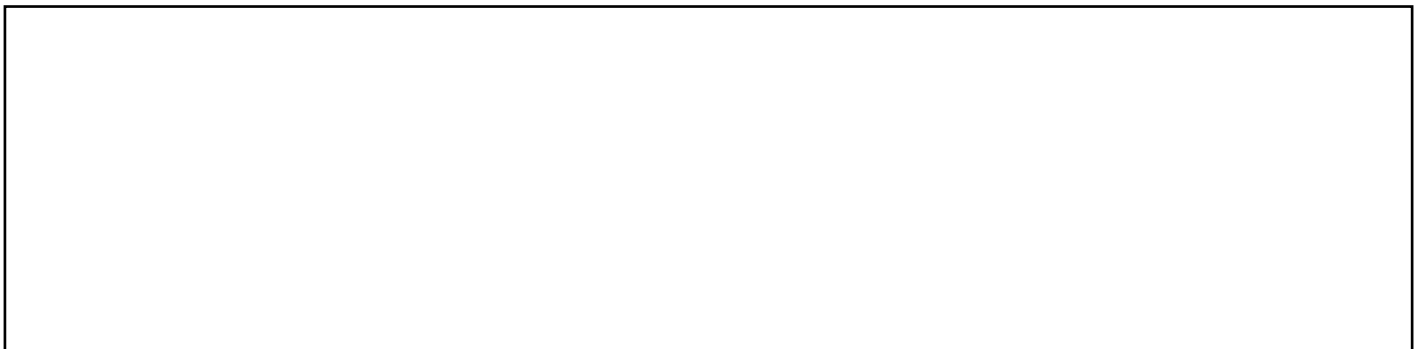
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 78.5084 | |
| Ethane | 12.6128 | 3.36 |
| Propane | 5.6113 | 1.54 |
| I-Butane | 0.2918 | 0.10 |
| N-Butane | 1.1658 | 0.37 |
| I-Pentane | 0.1538 | 0.06 |
| N-Pentane | 0.1894 | 0.07 |
| Nitrogen | 1.3052 | |
| CO2 | 0.0458 | |
| Hexanes+ | 0.1157 | 0.05 |
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| Total: | 100.0000 | 5.55 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1231.5062 |
| BTU/SCF (Saturated): | 1211.0109 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99664 |
| Z Factor (Saturated): | 0.99660 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1231.5062 |
| BTU/SCF (Saturated): | 1211.0109 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99664 |
| Z Factor (Saturated): | 0.99659 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7060 |
| Real Gravity: | 0.7081 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1571 |
| Run Date: | 3/11/2009 |
| Run Time: | 14:43 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/3/2009 |
| Field: | | Sample Time: | 11:00 |
| Station: | FELIX KING ETAL 100303 WH MTR | Collected By: | B VANDERI |
| Meter: | 80861201 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 47.00 PSIG |
| | | Sample Temp. (°F): | N/G |

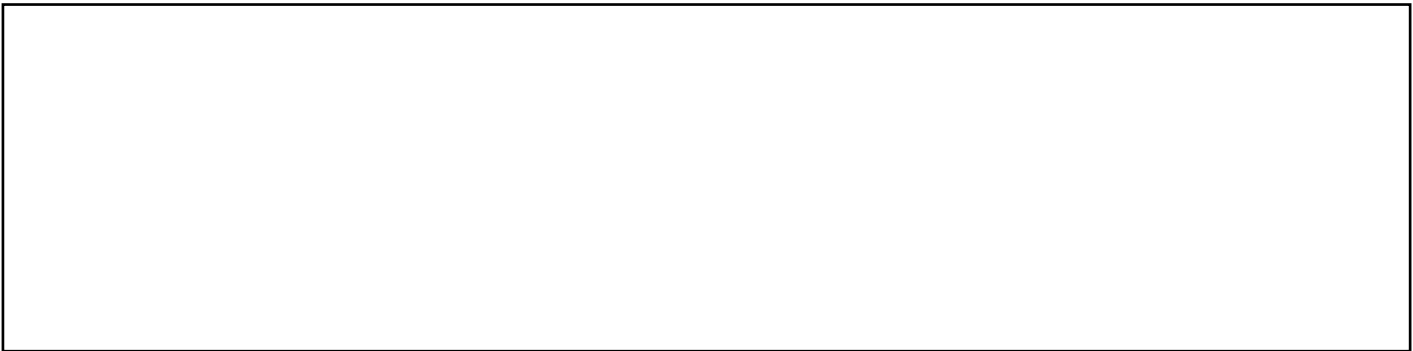
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 73.6615 | |
| Ethane | 16.7636 | 4.47 |
| Propane | 6.4912 | 1.78 |
| I-Butane | 0.3557 | 0.12 |
| N-Butane | 1.2577 | 0.40 |
| I-Pentane | 0.1667 | 0.06 |
| N-Pentane | 0.2111 | 0.08 |
| Nitrogen | 0.8984 | |
| CO2 | 0.0258 | |
| Hexanes+ | 0.1683 | 0.07 |
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| Total: | 100.0000 | 6.98 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1288.1349 |
| BTU/SCF (Saturated): | 1266.6520 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99625 |
| Z Factor (Saturated): | 0.99621 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1288.1349 |
| BTU/SCF (Saturated): | 1266.6520 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99624 |
| Z Factor (Saturated): | 0.99620 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7371 |
| Real Gravity: | 0.7396 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 2271 |
| Run Date: | 4/14/2009 |
| Run Time: | 14:32 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | |
|--|--|
| <p>Customer: Chesapeake Energy Field: Station: TROY HAYS 100309 WH MTR Meter: 80861301 Sample Type: Spot</p> | <p>Sample Date: 4/7/2009 Sample Time: 1:00 Collected By: B VANDER Effective Date: 5/1/2009 Sample Pressure: 52.00 PSIG Sample Temp. (°F): N/G</p> |
|--|--|

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 72.8346 | |
| Ethane | 17.3295 | 4.62 |
| Propane | 6.2852 | 1.73 |
| I-Butane | 0.3469 | 0.11 |
| N-Butane | 1.2124 | 0.38 |
| I-Pentane | 0.1539 | 0.06 |
| N-Pentane | 0.2067 | 0.07 |
| Nitrogen | 1.4137 | |
| CO2 | 0.0398 | |
| Hexanes+ | 0.1773 | 0.08 |
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| Total: | 100.0000 | 7.05 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1282.5735 |
| BTU/SCF (Saturated): | 1261.1868 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99626 |
| Z Factor (Saturated): | 0.99622 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1282.5735 |
| BTU/SCF (Saturated): | 1261.1868 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99626 |
| Z Factor (Saturated): | 0.99622 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7392 |
| Real Gravity: | 0.7417 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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Analysis#: 5808
Run Date: 11/4/2009
Run Time: 8:58
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|-----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 10/22/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | GULLETT HEIRS 100310 WH MTR | Collected By: | B VANDER |
| Meter: | 80861801 | Effective Date: | 11/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 38.00 PSIG |
| | | Sample Temp. (°F): | N/G |

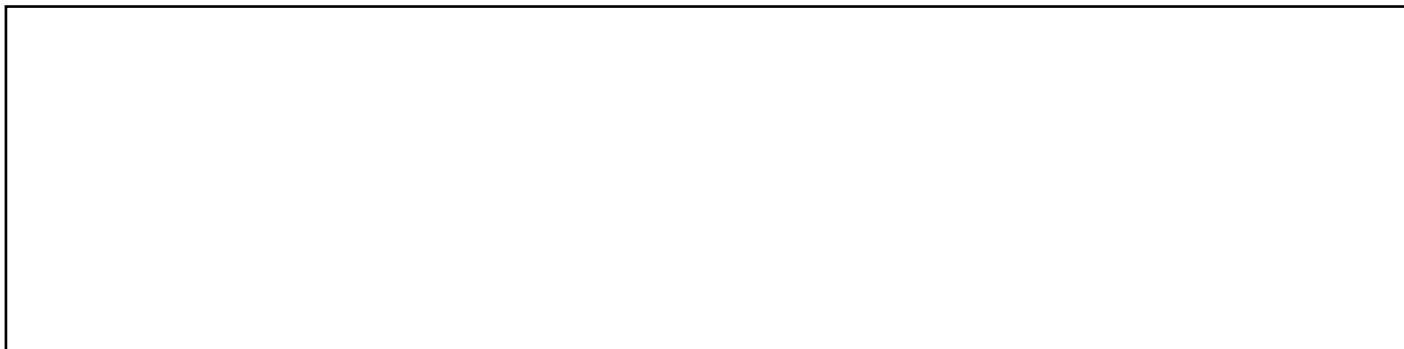
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 77.5616 | |
| Ethane | 12.8196 | 3.42 |
| Propane | 5.9066 | 1.62 |
| I-Butane | 0.3189 | 0.10 |
| N-Butane | 1.2591 | 0.40 |
| I-Pentane | 0.1589 | 0.06 |
| N-Pentane | 0.1968 | 0.07 |
| Nitrogen | 1.5625 | |
| CO2 | 0.0338 | |
| Hexanes+ | 0.1822 | 0.08 |
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| Total: | 100.0000 | 5.75 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1241.0164 |
| BTU/SCF (Saturated): | 1220.3560 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99657 |
| Z Factor (Saturated): | 0.99652 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1241.0164 |
| BTU/SCF (Saturated): | 1220.3560 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99656 |
| Z Factor (Saturated): | 0.99652 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7147 |
| Real Gravity: | 0.7169 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1573 |
| Run Date: | 3/11/2009 |
| Run Time: | 15:00 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/3/2009 |
| Field: | | Sample Time: | 1:00 |
| Station: | KENTUCKY/WV GAS CO 100319 WH M | Collected By: | B VANDERF |
| Meter: | 80862001 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 50.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 72.2970 | |
| Ethane | 17.8752 | 4.77 |
| Propane | 6.4061 | 1.76 |
| I-Butane | 0.3260 | 0.11 |
| N-Butane | 1.1360 | 0.36 |
| I-Pentane | 0.1462 | 0.05 |
| N-Pentane | 0.1814 | 0.07 |
| Nitrogen | 1.4603 | |
| CO2 | 0.0424 | |
| Hexanes+ | 0.1294 | 0.06 |
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| Total: | 100.0000 | 7.18 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1282.9043 |
| BTU/SCF (Saturated): | 1261.5111 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99625 |
| Z Factor (Saturated): | 0.99621 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1282.9043 |
| BTU/SCF (Saturated): | 1261.5111 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99625 |
| Z Factor (Saturated): | 0.99621 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7398 |
| Real Gravity: | 0.7423 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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 Phone: (304) 623-0020
 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 6669 |
| Run Date: | 1/29/2010 |
| Run Time: | 8:47 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 1/22/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | BOOTEN BATES ETAL 100323 WH MT | Collected By: | C HICKS |
| Meter: | 80862501 | Effective Date: | 2/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 48.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 68.2647 | |
| Ethane | 20.8546 | 5.56 |
| Propane | 7.8850 | 2.17 |
| I-Butane | 0.4161 | 0.14 |
| N-Butane | 1.5288 | 0.48 |
| I-Pentane | 0.1778 | 0.06 |
| N-Pentane | 0.2381 | 0.09 |
| Nitrogen | 0.3758 | |
| CO2 | 0.0624 | |
| Hexanes+ | 0.1967 | 0.09 |
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| Total: | 100.0000 | 8.59 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1355.9745 |
| BTU/SCF (Saturated): | 1333.3097 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99575 |
| Z Factor (Saturated): | 0.99571 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1355.9745 |
| BTU/SCF (Saturated): | 1333.3097 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99574 |
| Z Factor (Saturated): | 0.99571 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7748 |
| Real Gravity: | 0.7778 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 6821 |
| Run Date: | 2/10/2010 |
| Run Time: | 9:25 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 1/28/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | BATES HEIRS 1003327 WH MTR | Collected By: | C HICKS |
| Meter: | 80862801 | Effective Date: | 2/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 49.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 73.5371 | |
| Ethane | 17.6488 | 4.71 |
| Propane | 6.2368 | 1.71 |
| I-Butane | 0.3363 | 0.11 |
| N-Butane | 1.1719 | 0.37 |
| I-Pentane | 0.1442 | 0.05 |
| N-Pentane | 0.1931 | 0.07 |
| Nitrogen | 0.5820 | |
| CO2 | 0.0025 | |
| Hexanes+ | 0.1473 | 0.06 |
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| Total: | 100.0000 | 7.08 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1290.0270 |
| BTU/SCF (Saturated): | 1268.5099 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99625 |
| Z Factor (Saturated): | 0.99621 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1290.0270 |
| BTU/SCF (Saturated): | 1268.5099 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99624 |
| Z Factor (Saturated): | 0.99620 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7344 |
| Real Gravity: | 0.7369 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1679 |
| Run Date: | 3/17/2009 |
| Run Time: | 17:51 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/12/2009 |
| Field: | | Sample Time: | 12:30 |
| Station: | KIT HONEYCUT 100337 WH MTR | Collected By: | B VANDERI |
| Meter: | 80863301 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 56.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 74.7622 | |
| Ethane | 16.1970 | 4.32 |
| Propane | 6.1277 | 1.68 |
| I-Butane | 0.3368 | 0.11 |
| N-Butane | 1.1431 | 0.36 |
| I-Pentane | 0.1572 | 0.06 |
| N-Pentane | 0.1957 | 0.07 |
| Nitrogen | 0.8805 | |
| CO2 | 0.0301 | |
| Hexanes+ | 0.1697 | 0.07 |
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| Total: | 100.0000 | 6.67 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1274.5916 |
| BTU/SCF (Saturated): | 1253.3442 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99635 |
| Z Factor (Saturated): | 0.99631 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1274.5916 |
| BTU/SCF (Saturated): | 1253.3442 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99634 |
| Z Factor (Saturated): | 0.99630 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7285 |
| Real Gravity: | 0.7309 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 2792 |
| Run Date: | 5/12/2009 |
| Run Time: | 16:04 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 5/4/2009 |
| Field: | | Sample Time: | 12:45 |
| Station: | W J AMBURGEY 100342 WH MTR | Collected By: | B VANDERF |
| Meter: | 80863401 | Effective Date: | 6/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 60.00 PSIG |
| | | Sample Temp. (°F): | N/G |

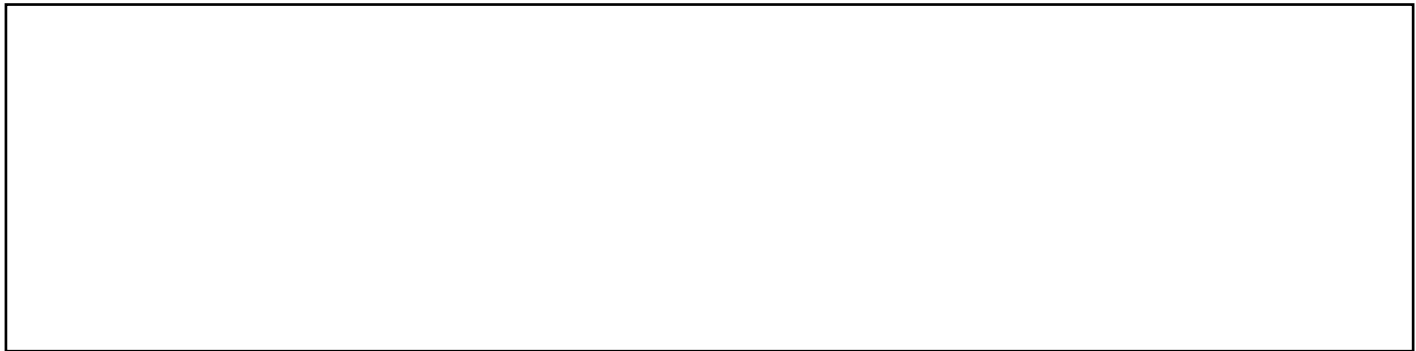
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 75.6419 | |
| Ethane | 14.0594 | 3.75 |
| Propane | 6.2757 | 1.72 |
| I-Butane | 0.4910 | 0.16 |
| N-Butane | 1.5884 | 0.50 |
| I-Pentane | 0.2550 | 0.09 |
| N-Pentane | 0.3270 | 0.12 |
| Nitrogen | 1.0373 | |
| CO2 | 0.0151 | |
| Hexanes+ | 0.3092 | 0.13 |
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| Total: | 100.0000 | 6.47 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1285.3977 |
| BTU/SCF (Saturated): | 1263.9659 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99628 |
| Z Factor (Saturated): | 0.99624 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1285.3977 |
| BTU/SCF (Saturated): | 1263.9659 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99627 |
| Z Factor (Saturated): | 0.99623 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7369 |
| Real Gravity: | 0.7393 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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| | |
|------------|-----------|
| Analysis#: | 2962 |
| Run Date: | 5/21/2009 |
| Run Time: | 10:18 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 5/11/2009 |
| Field: | | Sample Time: | 1:15 |
| Station: | HENRY BATES ETAL 100347 WH MTR | Collected By: | B VANDERF |
| Meter: | 80863601 | Effective Date: | 6/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 59.00 PSIG |
| | | Sample Temp. (°F): | N/G |

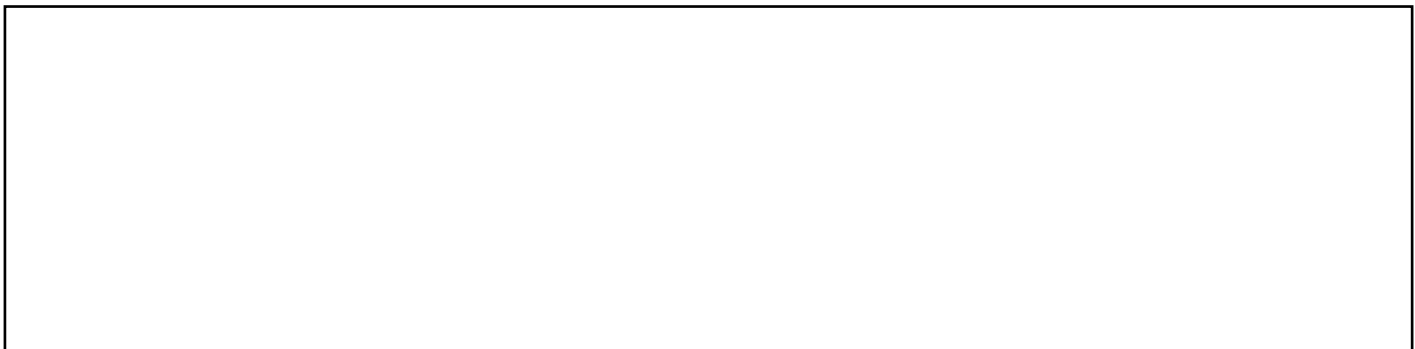
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 72.5681 | |
| Ethane | 14.8915 | 3.97 |
| Propane | 7.4989 | 2.06 |
| I-Butane | 0.6344 | 0.21 |
| N-Butane | 2.1449 | 0.67 |
| I-Pentane | 0.3641 | 0.13 |
| N-Pentane | 0.4758 | 0.17 |
| Nitrogen | 0.9233 | |
| CO2 | 0.0185 | |
| Hexanes+ | 0.4805 | 0.21 |
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| Total: | 100.0000 | 7.42 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1342.6930 |
| BTU/SCF (Saturated): | 1320.2673 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99586 |
| Z Factor (Saturated): | 0.99582 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1342.6930 |
| BTU/SCF (Saturated): | 1320.2673 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99586 |
| Z Factor (Saturated): | 0.99581 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7721 |
| Real Gravity: | 0.7750 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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 Phone: (304) 623-0020
 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 2794 |
| Run Date: | 5/12/2009 |
| Run Time: | 16:07 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 5/4/2009 |
| Field: | | Sample Time: | 2:00 |
| Station: | H H SMITH ETUX 100361 WH MTR | Collected By: | B VANDERF |
| Meter: | 80864001 | Effective Date: | 6/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 61.00 PSIG |
| | | Sample Temp. (°F): | N/G |

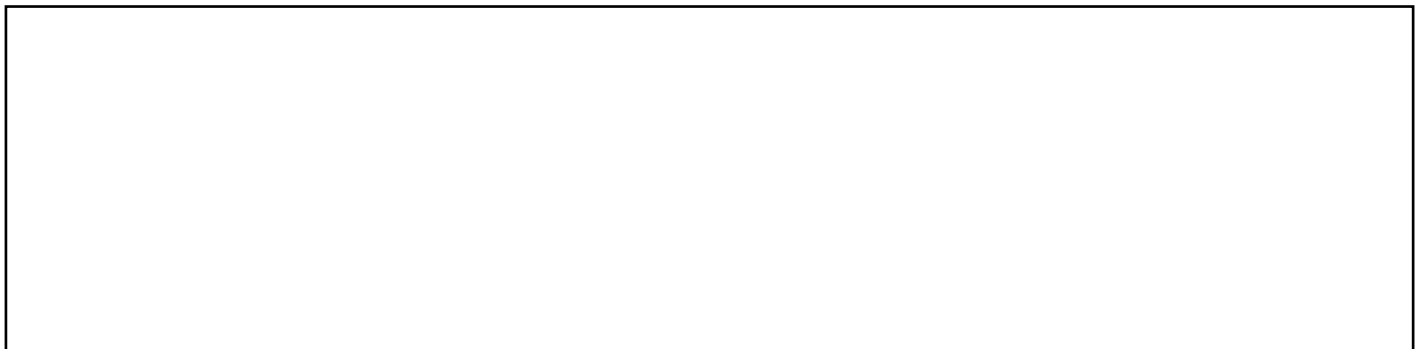
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 69.7306 | |
| Ethane | 16.4307 | 4.38 |
| Propane | 8.4128 | 2.31 |
| I-Butane | 0.7259 | 0.24 |
| N-Butane | 2.4071 | 0.76 |
| I-Pentane | 0.4025 | 0.15 |
| N-Pentane | 0.5164 | 0.19 |
| Nitrogen | 0.8888 | |
| CO2 | 0.0185 | |
| Hexanes+ | 0.4667 | 0.20 |
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| Total: | 100.0000 | 8.23 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1378.8772 |
| BTU/SCF (Saturated): | 1355.8226 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99558 |
| Z Factor (Saturated): | 0.99554 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1378.8772 |
| BTU/SCF (Saturated): | 1355.8226 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99557 |
| Z Factor (Saturated): | 0.99553 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7946 |
| Real Gravity: | 0.7978 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 2802 |
| Run Date: | 5/13/2009 |
| Run Time: | 8:34 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 5/6/2009 |
| Field: | | Sample Time: | 9:45 |
| Station: | HILLARD HALL 100355 WH MTR | Collected By: | B VANDERF |
| Meter: | 80864101 | Effective Date: | 6/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 59.00 PSIG |
| | | Sample Temp. (°F): | N/G |

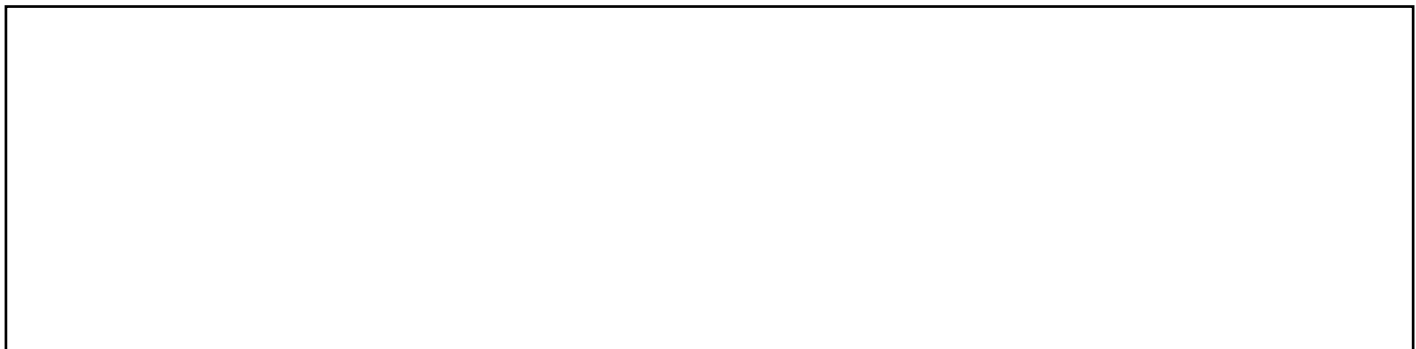
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 74.8554 | |
| Ethane | 17.1887 | 4.59 |
| Propane | 5.7063 | 1.57 |
| I-Butane | 0.2937 | 0.10 |
| N-Butane | 1.0563 | 0.33 |
| I-Pentane | 0.1269 | 0.05 |
| N-Pentane | 0.1697 | 0.06 |
| Nitrogen | 0.4654 | |
| CO2 | 0.0135 | |
| Hexanes+ | 0.1241 | 0.05 |
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| Total: | 100.0000 | 6.75 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1273.6199 |
| BTU/SCF (Saturated): | 1252.3870 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99637 |
| Z Factor (Saturated): | 0.99633 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1273.6199 |
| BTU/SCF (Saturated): | 1252.3870 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99637 |
| Z Factor (Saturated): | 0.99633 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7231 |
| Real Gravity: | 0.7254 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|----------|
| Analysis#: | 2060 |
| Run Date: | 4/3/2009 |
| Run Time: | 16:30 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|---------------------|--------------------------------|---------------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/27/2009 |
| Field: | | Sample Time: | 11:00 |
| Station: | H H HAMMONS ETAL 100358 WH MTR | Collected By: | C HICKS |
| Meter: | 80864201 | Effective Date: | 5/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 11.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|---------------|----------|------|
| Methane | 76.1902 | |
| Ethane | 12.2621 | 3.27 |
| Propane | 6.5622 | 1.80 |
| I-Butane | 0.6460 | 0.21 |
| N-Butane | 0.9182 | 0.29 |
| I-Pentane | 0.3893 | 0.14 |
| N-Pentane | 0.4530 | 0.16 |
| Nitrogen | 1.9973 | |
| CO2 | 0.0694 | |
| Hexanes+ | 0.5123 | 0.22 |
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| Total: | 100.0000 | 6.09 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1270.1733 |
| BTU/SCF (Saturated): | 1249.0078 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99635 |
| Z Factor (Saturated): | 0.99631 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1270.1733 |
| BTU/SCF (Saturated): | 1249.0078 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99635 |
| Z Factor (Saturated): | 0.99630 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7385 |
| Real Gravity: | 0.7409 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 2946 |
| Run Date: | 5/20/2009 |
| Run Time: | 17:36 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 5/12/2009 |
| Field: | | Sample Time: | 12:00 |
| Station: | CANNIE HALL ETAL 100354 WH MTR | Collected By: | B VANDER |
| Meter: | 80864301 | Effective Date: | 6/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 58.00 PSIG |
| | | Sample Temp. (°F): | N/G |

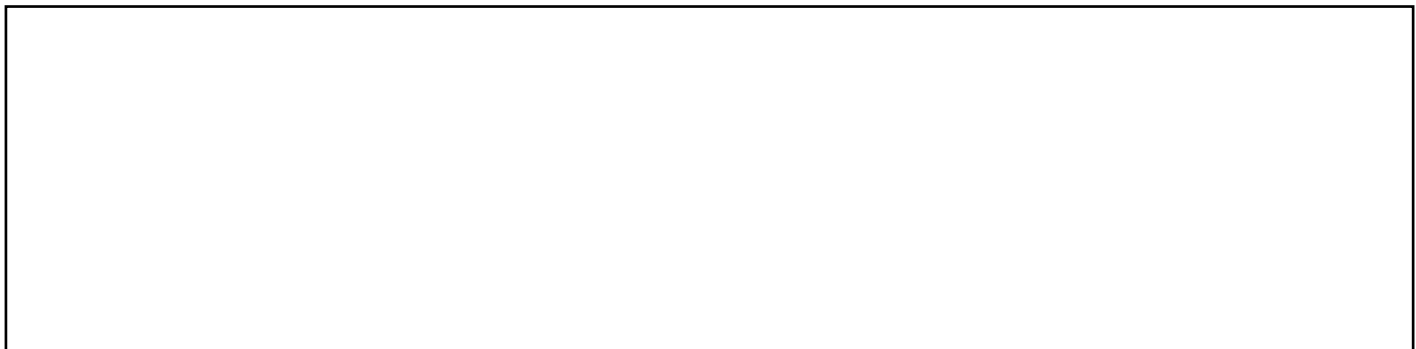
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 73.7996 | |
| Ethane | 17.8073 | 4.75 |
| Propane | 6.0174 | 1.65 |
| I-Butane | 0.3111 | 0.10 |
| N-Butane | 1.1245 | 0.35 |
| I-Pentane | 0.1342 | 0.05 |
| N-Pentane | 0.1828 | 0.07 |
| Nitrogen | 0.4319 | |
| CO2 | 0.0422 | |
| Hexanes+ | 0.1490 | 0.06 |
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| Total: | 100.0000 | 7.03 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1286.8198 |
| BTU/SCF (Saturated): | 1265.3572 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99627 |
| Z Factor (Saturated): | 0.99623 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1286.8198 |
| BTU/SCF (Saturated): | 1265.3572 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99627 |
| Z Factor (Saturated): | 0.99623 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7316 |
| Real Gravity: | 0.7340 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1369 |
| Run Date: | 2/25/2009 |
| Run Time: | 13:30 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 2/16/2009 |
| Field: | | Sample Time: | 10:30 |
| Station: | J H HAMMONS ETAL 100365 WH MTR | Collected By: | C HICKS |
| Meter: | 80864401 | Effective Date: | 3/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 24.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 73.9152 | |
| Ethane | 13.4884 | 3.60 |
| Propane | 7.4499 | 2.05 |
| I-Butane | 0.6243 | 0.20 |
| N-Butane | 2.1719 | 0.68 |
| I-Pentane | 0.3911 | 0.14 |
| N-Pentane | 0.4519 | 0.16 |
| Nitrogen | 0.9910 | |
| CO2 | 0.0434 | |
| Hexanes+ | 0.4729 | 0.21 |
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| Total: | 100.0000 | 7.04 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1330.3153 |
| BTU/SCF (Saturated): | 1308.1068 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99596 |
| Z Factor (Saturated): | 0.99591 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1330.3153 |
| BTU/SCF (Saturated): | 1308.1068 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99595 |
| Z Factor (Saturated): | 0.99591 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7654 |
| Real Gravity: | 0.7682 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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Bridgeport, WV 26330-0461
Phone: (304) 623-0020
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Analysis#: 2943
Run Date: 5/20/2009
Run Time: 17:29
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|---------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 5/11/2009 |
| Field: | | Sample Time: | 11:00 |
| Station: | LINDSAY AMBUREY ALLOC MTR | Collected By: | B VANDER |
| Meter: | 80864501 | Effective Date: | 6/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 46.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 72.2555 | |
| Ethane | 17.2044 | 4.59 |
| Propane | 7.0019 | 1.92 |
| I-Butane | 0.4595 | 0.15 |
| N-Butane | 1.5838 | 0.50 |
| I-Pentane | 0.2179 | 0.08 |
| N-Pentane | 0.2784 | 0.10 |
| Nitrogen | 0.7287 | |
| CO2 | 0.0280 | |
| Hexanes+ | 0.2419 | 0.11 |
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| Total: | 100.0000 | 7.45 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1317.5703 |
| BTU/SCF (Saturated): | 1295.5767 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99604 |
| Z Factor (Saturated): | 0.99600 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1317.5703 |
| BTU/SCF (Saturated): | 1295.5767 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99604 |
| Z Factor (Saturated): | 0.99600 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7539 |
| Real Gravity: | 0.7566 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 2941 |
| Run Date: | 5/20/2009 |
| Run Time: | 17:25 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|---------------------|--------------------------------|---------------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 5/12/2009 |
| Field: | | Sample Time: | 11:00 |
| Station: | BECKHAM BATES ETUX 100369 WH M | Collected By: | B VANDERF |
| Meter: | 80864601 | Effective Date: | 6/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 60.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|---------------|----------|------|
| Methane | 72.6124 | |
| Ethane | 18.4455 | 4.92 |
| Propane | 6.4161 | 1.76 |
| I-Butane | 0.3438 | 0.11 |
| N-Butane | 1.2498 | 0.39 |
| I-Pentane | 0.1506 | 0.05 |
| N-Pentane | 0.1929 | 0.07 |
| Nitrogen | 0.3997 | |
| CO2 | 0.0453 | |
| Hexanes+ | 0.1439 | 0.06 |
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| Total: | 100.0000 | 7.36 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1302.3467 |
| BTU/SCF (Saturated): | 1280.6146 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99616 |
| Z Factor (Saturated): | 0.99612 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1302.3467 |
| BTU/SCF (Saturated): | 1280.6146 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99615 |
| Z Factor (Saturated): | 0.99612 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7412 |
| Real Gravity: | 0.7438 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|----------|
| Analysis#: | 9941 |
| Run Date: | 8/5/2010 |
| Run Time: | 17:12 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|---------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/26/2010 |
| Field: | | Sample Time: | 0:00 |
| Station: | BOB ADAMS ALLOC MTR | Collected By: | C HICKS |
| Meter: | 80864701 | Effective Date: | 8/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 42.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 73.8508 | |
| Ethane | 17.9173 | 4.78 |
| Propane | 5.9591 | 1.64 |
| I-Butane | 0.3031 | 0.10 |
| N-Butane | 1.0789 | 0.34 |
| I-Pentane | 0.1299 | 0.05 |
| N-Pentane | 0.1818 | 0.07 |
| Nitrogen | 0.4243 | |
| CO2 | 0.0398 | |
| Hexanes+ | 0.1150 | 0.05 |
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| Total: | 100.0000 | 7.03 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1284.0718 |
| BTU/SCF (Saturated): | 1262.6567 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99629 |
| Z Factor (Saturated): | 0.99625 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1284.0718 |
| BTU/SCF (Saturated): | 1262.6567 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99629 |
| Z Factor (Saturated): | 0.99625 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7297 |
| Real Gravity: | 0.7321 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.



Gas Analytical Services, Inc.

P.O. Box 1028
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Phone: (304) 623-0020
FAX: (304) 624-8065

Analysis#: 3572
Run Date: 6/25/2009
Run Time: 10:48
Cylinder#:

FRACTIONAL ANALYSIS

Customer: Chesapeake Energy
Field:
Station: AMBURGEY HEIRS 100374 WH MTR
Meter: 80864801
Sample Type: Spot
Sample Date: 6/18/2009
Sample Time: 10:00
Collected By: B VANDER...
Effective Date: 7/1/2009
Sample Pressure: 60.00 PSIG
Sample Temp. (°F): N/G

Table with 3 columns: Component, MOL%, GPM. Rows include Methane, Ethane, Propane, I-Butane, N-Butane, I-Pentane, N-Pentane, Nitrogen, CO2, Hexanes+, and Total.

Analytical Results at Base Conditions (Real)
BTU/SCF (Dry): 1290.9442
BTU/SCF (Saturated): 1269.4097
PSIA: 14.7300
Temperature (°F): 60.00
Z Factor (Dry): 0.99624
Z Factor (Saturated): 0.99620

Analytical Results at Contract Conditions (Real)
BTU/SCF (Dry): 1290.9442
BTU/SCF (Saturated): 1269.4097
PSIA: 14.7300
Temperature (°F): 60.00
Z Factor (Dry): 0.99624
Z Factor (Saturated): 0.99620

Calculated Specific Gravities
Ideal Gravity: 0.7343
Real Gravity: 0.7368

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.



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| | |
|------------|-----------|
| Analysis#: | 3574 |
| Run Date: | 6/25/2009 |
| Run Time: | 11:54 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

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|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/17/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | VERDA & G W FUGATE 100377 WH M | Collected By: | B VANDER |
| Meter: | 80864901 | Effective Date: | 7/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 47.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 70.6870 | |
| Ethane | 19.5536 | 5.22 |
| Propane | 6.9743 | 1.92 |
| I-Butane | 0.3795 | 0.12 |
| N-Butane | 1.3413 | 0.42 |
| I-Pentane | 0.1632 | 0.06 |
| N-Pentane | 0.2159 | 0.08 |
| Nitrogen | 0.4510 | |
| CO2 | 0.0553 | |
| Hexanes+ | 0.1789 | 0.08 |
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| Total: | 100.0000 | 7.90 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1324.2804 |
| BTU/SCF (Saturated): | 1302.1665 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99599 |
| Z Factor (Saturated): | 0.99595 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1324.2804 |
| BTU/SCF (Saturated): | 1302.1665 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99599 |
| Z Factor (Saturated): | 0.99595 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7557 |
| Real Gravity: | 0.7584 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

P.O. Box 1028
Bridgeport, WV 26330-0461
Phone: (304) 623-0020
FAX: (304) 624-8065

Analysis#: 3945
Run Date: 7/15/2009
Run Time: 14:20
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/8/2009 |
| Field: | | Sample Time: | 0:00 |
| Station: | W J AMBURGEY ETAL 100385 WH MT | Collected By: | B VANDERF |
| Meter: | 80865001 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 59.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 74.6030 | |
| Ethane | 16.3386 | 4.36 |
| Propane | 6.1449 | 1.69 |
| I-Butane | 0.3801 | 0.12 |
| N-Butane | 1.2700 | 0.40 |
| I-Pentane | 0.1749 | 0.06 |
| N-Pentane | 0.2261 | 0.08 |
| Nitrogen | 0.6487 | |
| CO2 | 0.0285 | |
| Hexanes+ | 0.1852 | 0.08 |
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| Total: | 100.0000 | 6.79 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1284.3252 |
| BTU/SCF (Saturated): | 1262.9084 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99629 |
| Z Factor (Saturated): | 0.99625 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1284.3252 |
| BTU/SCF (Saturated): | 1262.9084 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99628 |
| Z Factor (Saturated): | 0.99625 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7322 |
| Real Gravity: | 0.7346 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 3361 |
| Run Date: | 6/11/2009 |
| Run Time: | 10:34 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | |
|---|--|
| Customer: Chesapeake Energy Field: Station: ELIJAH BANKS ETAL 100395 WH MT Meter: 80865101 Sample Type: Spot | Sample Date: 6/2/2009 Sample Time: 10:00 Collected By: B VANDER Effective Date: 7/1/2009 Sample Pressure: 43.00 PSIG Sample Temp. (°F): N/G |
|---|--|

| Component | MOL% | GPM |
|---------------|-----------------|-------------|
| Methane | 69.1067 | |
| Ethane | 14.9378 | 3.98 |
| Propane | 8.7348 | 2.40 |
| I-Butane | 0.7962 | 0.26 |
| N-Butane | 2.9008 | 0.91 |
| I-Pentane | 0.5389 | 0.20 |
| N-Pentane | 0.7571 | 0.27 |
| Nitrogen | 0.9831 | |
| CO2 | 0.0290 | |
| Hexanes+ | 1.2156 | 0.53 |
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| Total: | 100.0000 | 8.55 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1427.0205 |
| BTU/SCF (Saturated): | 1403.1283 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99521 |
| Z Factor (Saturated): | 0.99517 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1427.0205 |
| BTU/SCF (Saturated): | 1403.1283 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99520 |
| Z Factor (Saturated): | 0.99516 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8264 |
| Real Gravity: | 0.8300 |

| |
|---|
| Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8. |
|---|



**Gas Analytical Services, Inc.**

P.O. Box 1028
 Bridgeport, WV 26330-0461
 Phone: (304) 623-0020
 FAX: (304) 624-8065

Analysis#: 3433
 Run Date: 6/16/2009
 Run Time: 19:57
 Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|----------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/10/2009 |
| Field: | | Sample Time: | 0:00 |
| Station: | T A MARTIN ALLOC MTR | Collected By: | B VANDER |
| Meter: | 80865201 | Effective Date: | 7/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 62.00 PSIG |
| | | Sample Temp. (°F): | N/G |

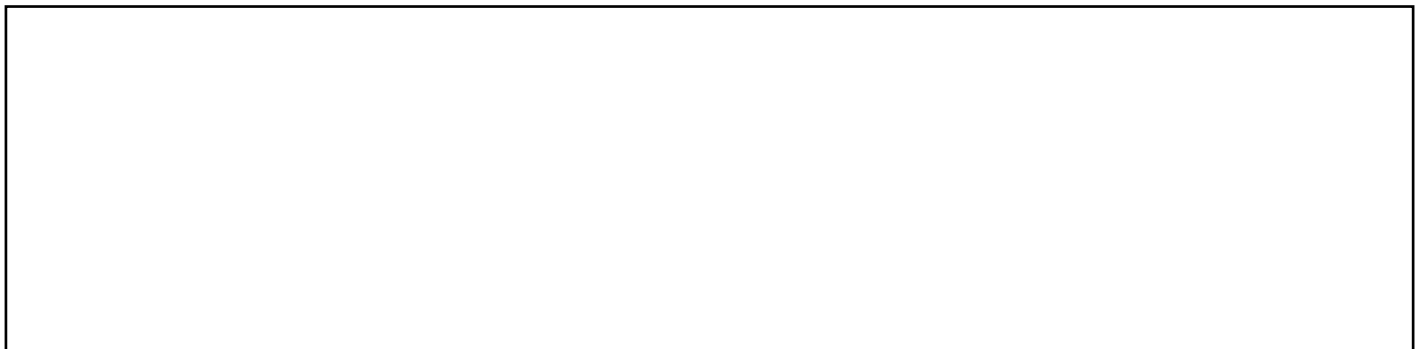
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 72.5450 | |
| Ethane | 15.6919 | 4.19 |
| Propane | 7.2716 | 2.00 |
| I-Butane | 0.5978 | 0.20 |
| N-Butane | 1.9239 | 0.60 |
| I-Pentane | 0.3146 | 0.11 |
| N-Pentane | 0.3964 | 0.14 |
| Nitrogen | 0.8464 | |
| CO2 | 0.0173 | |
| Hexanes+ | 0.3951 | 0.17 |
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| Total: | 100.0000 | 7.41 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1332.8011 |
| BTU/SCF (Saturated): | 1310.5461 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99594 |
| Z Factor (Saturated): | 0.99589 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1332.8011 |
| BTU/SCF (Saturated): | 1310.5461 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99593 |
| Z Factor (Saturated): | 0.99589 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7649 |
| Real Gravity: | 0.7677 |

Gross Heating Values are Based
on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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 Phone: (304) 623-0020
 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 3346 |
| Run Date: | 6/10/2009 |
| Run Time: | 13:35 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/2/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | BELLE HAMMONDS 100428 WH MTR | Collected By: | B VANDERF |
| Meter: | 80866301 | Effective Date: | 7/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 53.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 72.7732 | |
| Ethane | 18.5660 | 4.95 |
| Propane | 6.2422 | 1.72 |
| I-Butane | 0.3310 | 0.11 |
| N-Butane | 1.1601 | 0.36 |
| I-Pentane | 0.1382 | 0.05 |
| N-Pentane | 0.1885 | 0.07 |
| Nitrogen | 0.3998 | |
| CO2 | 0.0490 | |
| Hexanes+ | 0.1520 | 0.07 |
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| Total: | 100.0000 | 7.33 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1298.0626 |
| BTU/SCF (Saturated): | 1276.4044 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99619 |
| Z Factor (Saturated): | 0.99615 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1298.0626 |
| BTU/SCF (Saturated): | 1276.4044 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99618 |
| Z Factor (Saturated): | 0.99615 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7384 |
| Real Gravity: | 0.7409 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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Phone: (304) 623-0020
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| | |
|------------|-----------|
| Analysis#: | 3351 |
| Run Date: | 6/11/2009 |
| Run Time: | 9:34 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/4/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | D W WALLEN 100438 WH MTR | Collected By: | C HICKS |
| Meter: | 80866401 | Effective Date: | 7/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 52.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 73.5590 | |
| Ethane | 18.0239 | 4.81 |
| Propane | 6.0021 | 1.65 |
| I-Butane | 0.3326 | 0.11 |
| N-Butane | 1.1466 | 0.36 |
| I-Pentane | 0.1386 | 0.05 |
| N-Pentane | 0.1859 | 0.07 |
| Nitrogen | 0.4151 | |
| CO2 | 0.0468 | |
| Hexanes+ | 0.1494 | 0.07 |
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| Total: | 100.0000 | 7.12 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1289.6223 |
| BTU/SCF (Saturated): | 1268.1108 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99625 |
| Z Factor (Saturated): | 0.99621 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1289.6223 |
| BTU/SCF (Saturated): | 1268.1108 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99625 |
| Z Factor (Saturated): | 0.99621 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7332 |
| Real Gravity: | 0.7357 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

P.O. Box 1028
 Bridgeport, WV 26330-0461
 Phone: (304) 623-0020
 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 3577 |
| Run Date: | 6/25/2009 |
| Run Time: | 11:56 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/17/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | JOE TIGNOR 100426 WH MTR | Collected By: | B VANDERF |
| Meter: | 80866501 | Effective Date: | 7/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 64.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 76.5447 | |
| Ethane | 16.0533 | 4.28 |
| Propane | 5.1635 | 1.42 |
| I-Butane | 0.2845 | 0.09 |
| N-Butane | 0.9675 | 0.30 |
| I-Pentane | 0.1217 | 0.04 |
| N-Pentane | 0.1585 | 0.06 |
| Nitrogen | 0.5275 | |
| CO2 | 0.0340 | |
| Hexanes+ | 0.1448 | 0.06 |
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| Total: | 100.0000 | 6.25 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1253.8490 |
| BTU/SCF (Saturated): | 1232.9596 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99651 |
| Z Factor (Saturated): | 0.99647 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1253.8490 |
| BTU/SCF (Saturated): | 1232.9596 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99650 |
| Z Factor (Saturated): | 0.99647 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7116 |
| Real Gravity: | 0.7138 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

P.O. Box 1028
 Bridgeport, WV 26330-0461
 Phone: (304) 623-0020
 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 3584 |
| Run Date: | 6/25/2009 |
| Run Time: | 13:31 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/18/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | N L COMBS 100442 WH MTR | Collected By: | B VANDERI |
| Meter: | 80866601 | Effective Date: | 7/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 53.00 PSIG |
| | | Sample Temp. (°F): | N/G |

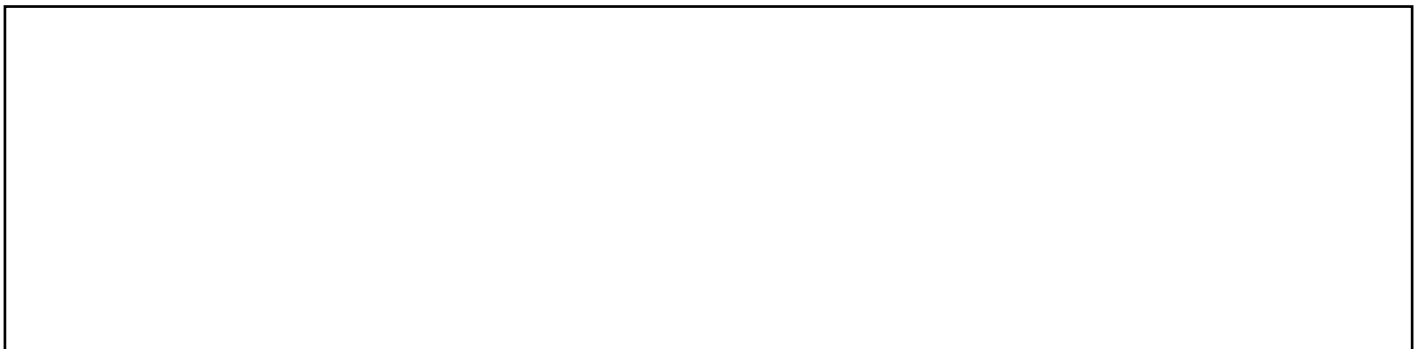
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 71.8343 | |
| Ethane | 18.4872 | 4.93 |
| Propane | 6.5025 | 1.79 |
| I-Butane | 0.3572 | 0.12 |
| N-Butane | 1.2976 | 0.41 |
| I-Pentane | 0.1636 | 0.06 |
| N-Pentane | 0.2289 | 0.08 |
| Nitrogen | 0.8987 | |
| CO2 | 0.0172 | |
| Hexanes+ | 0.2128 | 0.09 |
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| Total: | 100.0000 | 7.48 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1304.9579 |
| BTU/SCF (Saturated): | 1283.1804 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99612 |
| Z Factor (Saturated): | 0.99608 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1304.9579 |
| BTU/SCF (Saturated): | 1283.1804 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99612 |
| Z Factor (Saturated): | 0.99608 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7477 |
| Real Gravity: | 0.7503 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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 Phone: (304) 623-0020
 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 3582 |
| Run Date: | 6/25/2009 |
| Run Time: | 13:18 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/18/2009 |
| Field: | | Sample Time: | 10:10 |
| Station: | OPAL RISNER ETAL ALLOC MTR | Collected By: | B VANDERF |
| Meter: | 80866701 | Effective Date: | 7/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 63.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 75.2734 | |
| Ethane | 17.0348 | 4.54 |
| Propane | 5.4636 | 1.50 |
| I-Butane | 0.2915 | 0.10 |
| N-Butane | 1.0062 | 0.32 |
| I-Pentane | 0.1248 | 0.05 |
| N-Pentane | 0.1653 | 0.06 |
| Nitrogen | 0.4795 | |
| CO2 | 0.0270 | |
| Hexanes+ | 0.1339 | 0.06 |
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| Total: | 100.0000 | 6.63 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1267.4578 |
| BTU/SCF (Saturated): | 1246.3315 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99641 |
| Z Factor (Saturated): | 0.99637 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1267.4578 |
| BTU/SCF (Saturated): | 1246.3315 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99641 |
| Z Factor (Saturated): | 0.99637 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7195 |
| Real Gravity: | 0.7218 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

P.O. Box 1028
Bridgeport, WV 26330-0461
Phone: (304) 623-0020
FAX: (304) 624-8065

Analysis#: 6667
Run Date: 1/29/2010
Run Time: 8:44
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 1/21/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | PGH CONSOL COAL CO 100445 WH M | Collected By: | C HICKS |
| Meter: | 80866901 | Effective Date: | 2/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 53.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 76.5472 | |
| Ethane | 15.8670 | 4.23 |
| Propane | 5.2635 | 1.45 |
| I-Butane | 0.2826 | 0.09 |
| N-Butane | 0.9660 | 0.30 |
| I-Pentane | 0.1203 | 0.04 |
| N-Pentane | 0.1586 | 0.06 |
| Nitrogen | 0.5788 | |
| CO2 | 0.0361 | |
| Hexanes+ | 0.1799 | 0.08 |
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| Total: | 100.0000 | 6.25 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1254.7455 |
| BTU/SCF (Saturated): | 1233.8408 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99650 |
| Z Factor (Saturated): | 0.99646 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1254.7455 |
| BTU/SCF (Saturated): | 1233.8408 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99650 |
| Z Factor (Saturated): | 0.99646 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7128 |
| Real Gravity: | 0.7150 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.

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Gas Analytical Services, Inc.

P.O. Box 1028
 Bridgeport, WV 26330-0461
 Phone: (304) 623-0020
 FAX: (304) 624-8065

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|------------|----------|
| Analysis#: | 4382 |
| Run Date: | 8/4/2009 |
| Run Time: | 18:34 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

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|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/27/2009 |
| Field: | | Sample Time: | 9:45 |
| Station: | PITTSB CONSOL COAL CO 100444 W | Collected By: | B VANDERF |
| Meter: | 80867001 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 72.00 PSIG |
| | | Sample Temp. (°F): | N/G |

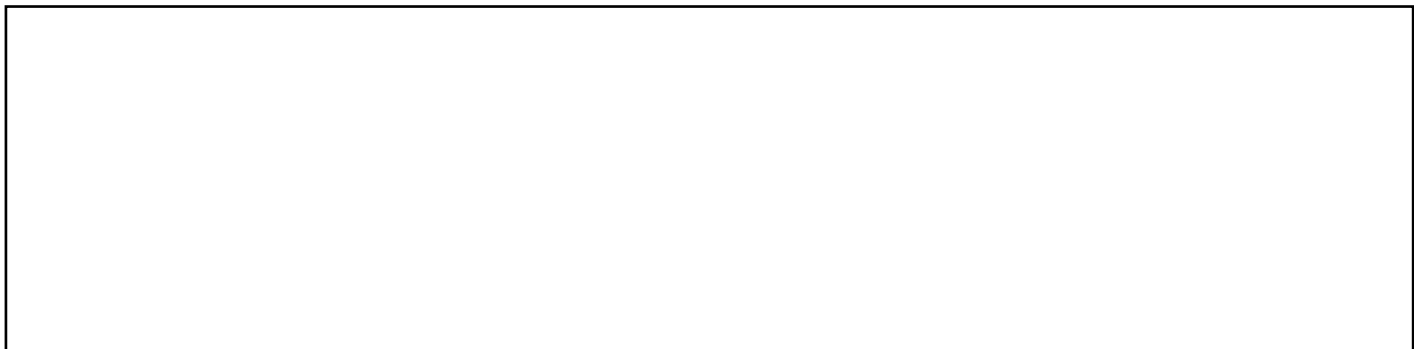
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 77.5514 | |
| Ethane | 14.7195 | 3.93 |
| Propane | 4.9310 | 1.36 |
| I-Butane | 0.2807 | 0.09 |
| N-Butane | 0.9312 | 0.29 |
| I-Pentane | 0.1216 | 0.04 |
| N-Pentane | 0.1565 | 0.06 |
| Nitrogen | 1.1369 | |
| CO2 | 0.0347 | |
| Hexanes+ | 0.1365 | 0.06 |
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| Total: | 100.0000 | 5.83 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1232.4656 |
| BTU/SCF (Saturated): | 1211.9495 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99663 |
| Z Factor (Saturated): | 0.99659 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1232.4656 |
| BTU/SCF (Saturated): | 1211.9495 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99663 |
| Z Factor (Saturated): | 0.99659 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7046 |
| Real Gravity: | 0.7067 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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|------------|-----------|
| Analysis#: | 4076 |
| Run Date: | 7/21/2009 |
| Run Time: | 12:25 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/14/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | HETTIE COLLINS ETAL 100447 WH | Collected By: | B VANDERF |
| Meter: | 80867101 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 66.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 76.7426 | |
| Ethane | 15.9922 | 4.27 |
| Propane | 5.0657 | 1.39 |
| I-Butane | 0.2709 | 0.09 |
| N-Butane | 0.9271 | 0.29 |
| I-Pentane | 0.1154 | 0.04 |
| N-Pentane | 0.1550 | 0.06 |
| Nitrogen | 0.5434 | |
| CO2 | 0.0406 | |
| Hexanes+ | 0.1471 | 0.06 |
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| Total: | 100.0000 | 6.20 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1250.2202 |
| BTU/SCF (Saturated): | 1229.3938 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99653 |
| Z Factor (Saturated): | 0.99649 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1250.2202 |
| BTU/SCF (Saturated): | 1229.3938 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99653 |
| Z Factor (Saturated): | 0.99649 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7096 |
| Real Gravity: | 0.7118 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 4072 |
| Run Date: | 7/21/2009 |
| Run Time: | 10:51 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | |
|---|-----------------------------|
| Customer: Chesapeake Energy | Sample Date: 7/14/2009 |
| Field: | Sample Time: 10:00 |
| Station: PGH CONSOL COAL CO 100448 WH M | Collected By: B VANDERI |
| Meter: 80867201 | Effective Date: 8/1/2009 |
| Sample Type: Spot | Sample Pressure: 70.00 PSIG |
| | Sample Temp. (°F): N/G |

| Component | MOL% | GPM |
|---------------|-----------------|-------------|
| Methane | 75.7551 | |
| Ethane | 16.4848 | 4.40 |
| Propane | 5.4294 | 1.49 |
| I-Butane | 0.2946 | 0.10 |
| N-Butane | 1.0205 | 0.32 |
| I-Pentane | 0.1259 | 0.05 |
| N-Pentane | 0.1765 | 0.06 |
| Nitrogen | 0.5307 | |
| CO2 | 0.0304 | |
| Hexanes+ | 0.1521 | 0.07 |
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| Total: | 100.0000 | 6.49 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1263.6671 |
| BTU/SCF (Saturated): | 1242.6072 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99644 |
| Z Factor (Saturated): | 0.99640 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1263.6671 |
| BTU/SCF (Saturated): | 1242.6072 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99643 |
| Z Factor (Saturated): | 0.99640 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7178 |
| Real Gravity: | 0.7201 |

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| Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8. |
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|------------|-----------|
| Analysis#: | 4077 |
| Run Date: | 7/21/2009 |
| Run Time: | 14:05 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/13/2009 |
| Field: | | Sample Time: | 0:00 |
| Station: | L W FIELDS 100451 WH MTR | Collected By: | B VANDERF |
| Meter: | 80867301 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 67.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 75.7815 | |
| Ethane | 16.6268 | 4.44 |
| Propane | 5.3861 | 1.48 |
| I-Butane | 0.2951 | 0.10 |
| N-Butane | 0.9737 | 0.31 |
| I-Pentane | 0.1210 | 0.04 |
| N-Pentane | 0.1574 | 0.06 |
| Nitrogen | 0.4990 | |
| CO2 | 0.0364 | |
| Hexanes+ | 0.1230 | 0.05 |
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| Total: | 100.0000 | 6.48 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1261.3589 |
| BTU/SCF (Saturated): | 1240.3387 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99645 |
| Z Factor (Saturated): | 0.99642 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1261.3589 |
| BTU/SCF (Saturated): | 1240.3387 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99645 |
| Z Factor (Saturated): | 0.99641 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7160 |
| Real Gravity: | 0.7183 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.

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Analysis#: 4100
Run Date: 7/22/2009
Run Time: 9:39
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/14/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | PGH CONSOL COAL CO 100453 WH M | Collected By: | B VANDER |
| Meter: | 80867401 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 70.00 PSIG |
| | | Sample Temp. (°F): | N/G |

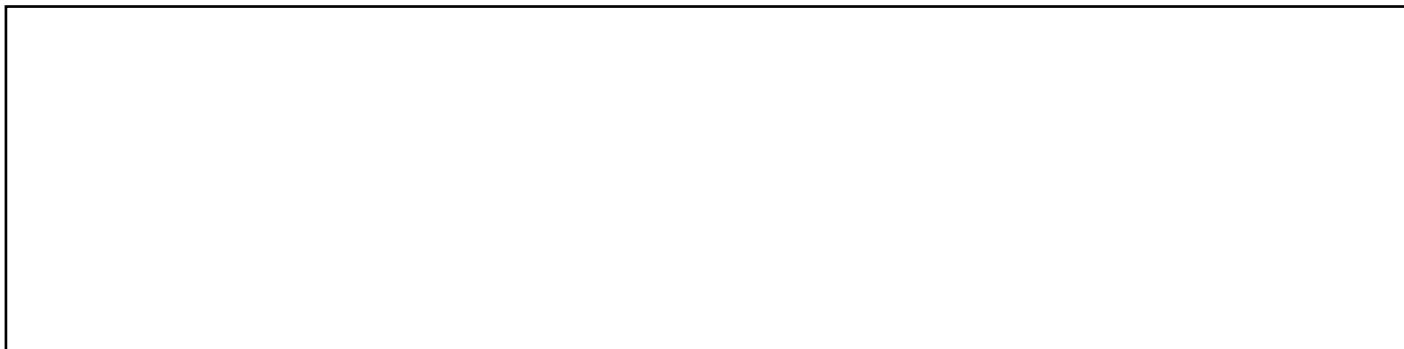
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 77.4192 | |
| Ethane | 15.3338 | 4.09 |
| Propane | 5.0009 | 1.37 |
| I-Butane | 0.2721 | 0.09 |
| N-Butane | 0.9195 | 0.29 |
| I-Pentane | 0.1144 | 0.04 |
| N-Pentane | 0.1523 | 0.06 |
| Nitrogen | 0.6219 | |
| CO2 | 0.0359 | |
| Hexanes+ | 0.1300 | 0.06 |
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| Total: | 100.0000 | 6.00 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1242.4266 |
| BTU/SCF (Saturated): | 1221.7360 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99658 |
| Z Factor (Saturated): | 0.99655 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1242.4266 |
| BTU/SCF (Saturated): | 1221.7360 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99658 |
| Z Factor (Saturated): | 0.99654 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7053 |
| Real Gravity: | 0.7074 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 4069 |
| Run Date: | 7/21/2009 |
| Run Time: | 10:41 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/13/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | ELIZA COLLINS 100457 WH MTR | Collected By: | B VANDERF |
| Meter: | 80867701 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 68.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 76.6325 | |
| Ethane | 16.0677 | 4.29 |
| Propane | 5.1296 | 1.41 |
| I-Butane | 0.2827 | 0.09 |
| N-Butane | 0.9206 | 0.29 |
| I-Pentane | 0.1178 | 0.04 |
| N-Pentane | 0.1532 | 0.06 |
| Nitrogen | 0.5297 | |
| CO2 | 0.0382 | |
| Hexanes+ | 0.1280 | 0.06 |
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| Total: | 100.0000 | 6.24 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1251.2831 |
| BTU/SCF (Saturated): | 1230.4379 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99652 |
| Z Factor (Saturated): | 0.99649 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1251.2831 |
| BTU/SCF (Saturated): | 1230.4379 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99652 |
| Z Factor (Saturated): | 0.99648 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7101 |
| Real Gravity: | 0.7123 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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|------------|-----------|
| Analysis#: | 4078 |
| Run Date: | 7/21/2009 |
| Run Time: | 14:02 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/13/2009 |
| Field: | | Sample Time: | 0:00 |
| Station: | ELIZA COLLINS 100463 WH MTR | Collected By: | B VANDERF |
| Meter: | 80867801 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 68.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 75.7180 | |
| Ethane | 16.6327 | 4.44 |
| Propane | 5.3823 | 1.48 |
| I-Butane | 0.2929 | 0.10 |
| N-Butane | 0.9982 | 0.31 |
| I-Pentane | 0.1260 | 0.05 |
| N-Pentane | 0.1672 | 0.06 |
| Nitrogen | 0.4904 | |
| CO2 | 0.0421 | |
| Hexanes+ | 0.1502 | 0.07 |
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| Total: | 100.0000 | 6.51 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1263.4728 |
| BTU/SCF (Saturated): | 1242.4160 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99644 |
| Z Factor (Saturated): | 0.99640 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1263.4728 |
| BTU/SCF (Saturated): | 1242.4160 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99644 |
| Z Factor (Saturated): | 0.99640 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7173 |
| Real Gravity: | 0.7196 |

Gross Heating Values are Based
on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 6533 |
| Run Date: | 1/21/2010 |
| Run Time: | 8:55 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 1/11/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | T S NAPIER/N TAYLOR 100469 WH | Collected By: | C HICKS |
| Meter: | 80867901 | Effective Date: | 2/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 52.00 PSIG |
| | | Sample Temp. (°F): | N/G |

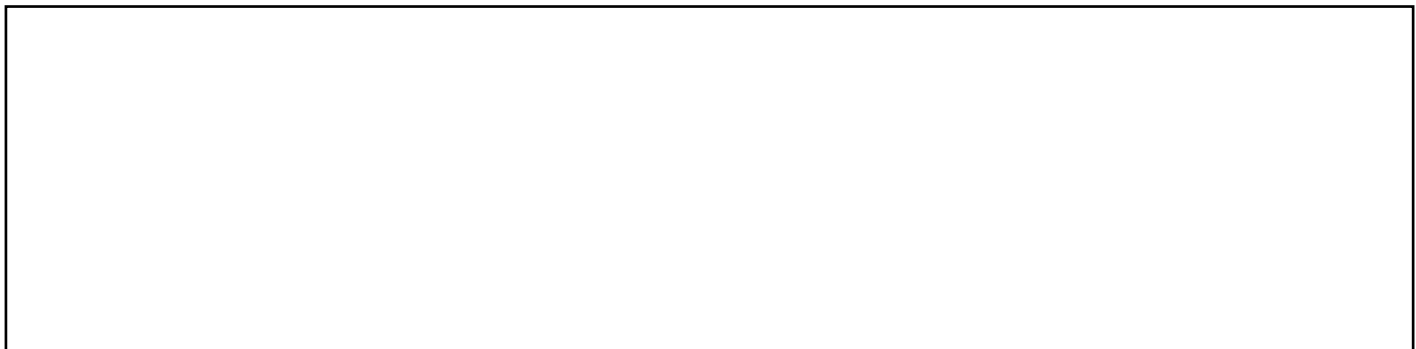
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 78.7642 | |
| Ethane | 14.4952 | 3.87 |
| Propane | 4.5901 | 1.26 |
| I-Butane | 0.2564 | 0.08 |
| N-Butane | 0.8195 | 0.26 |
| I-Pentane | 0.1087 | 0.04 |
| N-Pentane | 0.1366 | 0.05 |
| Nitrogen | 0.6534 | |
| CO2 | 0.0751 | |
| Hexanes+ | 0.1008 | 0.04 |
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| Total: | 100.0000 | 5.60 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1224.4569 |
| BTU/SCF (Saturated): | 1204.0786 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99670 |
| Z Factor (Saturated): | 0.99667 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1224.4569 |
| BTU/SCF (Saturated): | 1204.0786 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99670 |
| Z Factor (Saturated): | 0.99666 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6949 |
| Real Gravity: | 0.6969 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| Analysis#: | 4463 |
| Run Date: | 8/11/2009 |
| Run Time: | 18:34 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

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|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 8/3/2009 |
| Field: | | Sample Time: | 0:00 |
| Station: | W A COMBS HEIRS 100446 WH MTR | Collected By: | B VANDERF |
| Meter: | 80868001 | Effective Date: | 9/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 58.00 PSIG |
| | | Sample Temp. (°F): | N/G |

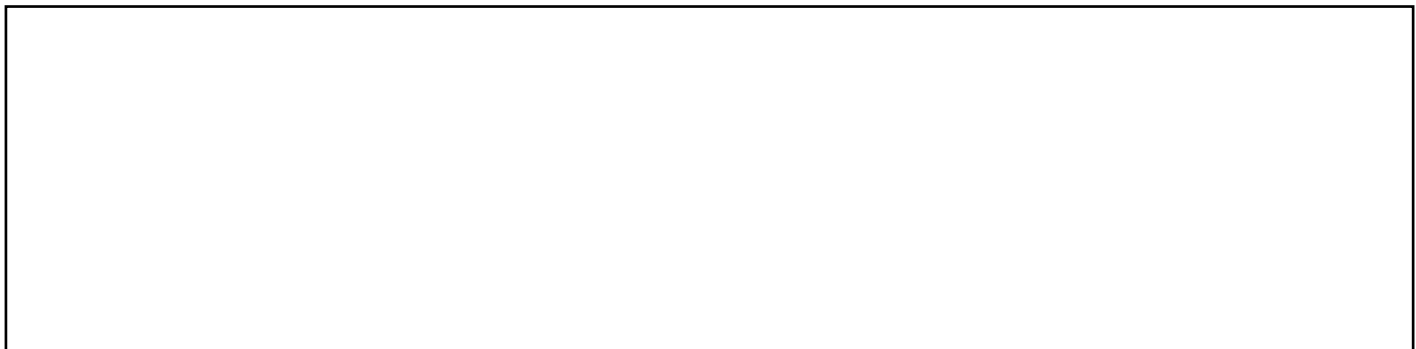
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 73.3119 | |
| Ethane | 16.6543 | 4.44 |
| Propane | 6.6180 | 1.82 |
| I-Butane | 0.3439 | 0.11 |
| N-Butane | 1.2766 | 0.40 |
| I-Pentane | 0.1532 | 0.06 |
| N-Pentane | 0.2074 | 0.07 |
| Nitrogen | 1.2282 | |
| CO2 | 0.0391 | |
| Hexanes+ | 0.1674 | 0.07 |
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| Total: | 100.0000 | 6.97 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1285.3359 |
| BTU/SCF (Saturated): | 1263.9025 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99625 |
| Z Factor (Saturated): | 0.99621 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1285.3359 |
| BTU/SCF (Saturated): | 1263.9025 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99625 |
| Z Factor (Saturated): | 0.99621 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7392 |
| Real Gravity: | 0.7417 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|----------|
| Analysis#: | 4381 |
| Run Date: | 8/4/2009 |
| Run Time: | 18:31 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|---------------------|---------------------|---------------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/30/2009 |
| Field: | | Sample Time: | 0:00 |
| Station: | H H SMITH ALLOC MTR | Collected By: | D CARLISLI |
| Meter: | 80868101 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 60.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|---------------|----------|------|
| Methane | 76.5240 | |
| Ethane | 14.2281 | 3.80 |
| Propane | 5.6331 | 1.55 |
| I-Butane | 0.2955 | 0.10 |
| N-Butane | 1.0677 | 0.34 |
| I-Pentane | 0.1323 | 0.05 |
| N-Pentane | 0.1711 | 0.06 |
| Nitrogen | 1.7598 | |
| CO2 | 0.0382 | |
| Hexanes+ | 0.1502 | 0.07 |
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| Total: | 100.0000 | 5.97 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1237.8145 |
| BTU/SCF (Saturated): | 1217.2075 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99657 |
| Z Factor (Saturated): | 0.99653 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1237.8145 |
| BTU/SCF (Saturated): | 1217.2075 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99657 |
| Z Factor (Saturated): | 0.99653 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7147 |
| Real Gravity: | 0.7169 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

P.O. Box 1028
Bridgeport, WV 26330-0461
Phone: (304) 623-0020
FAX: (304) 624-8065

| | |
|------------|----------|
| Analysis#: | 4369 |
| Run Date: | 8/4/2009 |
| Run Time: | 17:57 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/30/2009 |
| Field: | | Sample Time: | 0:00 |
| Station: | LEODICIE SMITH 100461 WH MTR | Collected By: | D CARLISLI |
| Meter: | 80868201 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 61.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 76.4238 | |
| Ethane | 14.5123 | 3.87 |
| Propane | 5.6646 | 1.56 |
| I-Butane | 0.2912 | 0.10 |
| N-Butane | 1.0640 | 0.33 |
| I-Pentane | 0.1281 | 0.05 |
| N-Pentane | 0.1709 | 0.06 |
| Nitrogen | 1.5633 | |
| CO2 | 0.0347 | |
| Hexanes+ | 0.1471 | 0.06 |
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| Total: | 100.0000 | 6.03 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1242.0807 |
| BTU/SCF (Saturated): | 1221.3989 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99655 |
| Z Factor (Saturated): | 0.99651 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1242.0807 |
| BTU/SCF (Saturated): | 1221.3989 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99655 |
| Z Factor (Saturated): | 0.99651 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7152 |
| Real Gravity: | 0.7174 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.

Empty box for additional notes or comments.



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| | |
|------------|-----------|
| Analysis#: | 5717 |
| Run Date: | 11/2/2009 |
| Run Time: | 9:28 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 10/21/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | GRANT COMBS ETAL 100467 WH MTR | Collected By: | B VANDER |
| Meter: | 80868301 | Effective Date: | 11/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 60.00 PSIG |
| | | Sample Temp. (°F): | N/G |

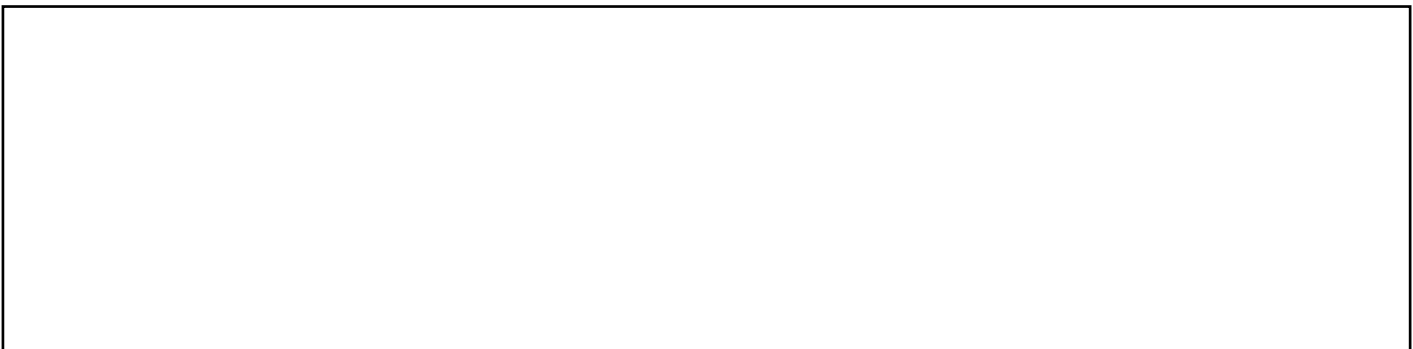
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 76.7696 | |
| Ethane | 14.1107 | 3.76 |
| Propane | 5.5444 | 1.52 |
| I-Butane | 0.2905 | 0.09 |
| N-Butane | 1.0712 | 0.34 |
| I-Pentane | 0.1342 | 0.05 |
| N-Pentane | 0.1796 | 0.06 |
| Nitrogen | 1.7352 | |
| CO2 | 0.0198 | |
| Hexanes+ | 0.1448 | 0.06 |
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| Total: | 100.0000 | 5.88 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1236.0480 |
| BTU/SCF (Saturated): | 1215.4716 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99659 |
| Z Factor (Saturated): | 0.99655 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1236.0480 |
| BTU/SCF (Saturated): | 1215.4716 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99658 |
| Z Factor (Saturated): | 0.99654 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7130 |
| Real Gravity: | 0.7151 |

Gross Heating Values are Based
on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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| | |
|------------|----------|
| Analysis#: | 4855 |
| Run Date: | 9/3/2009 |
| Run Time: | 12:11 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 8/26/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | FRANCIS SPODEN ETAL ALLOC MTR | Collected By: | B VANDERI |
| Meter: | 80868401 | Effective Date: | 9/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 17.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 71.1734 | |
| Ethane | 19.2765 | 5.14 |
| Propane | 6.7631 | 1.86 |
| I-Butane | 0.3900 | 0.13 |
| N-Butane | 1.3107 | 0.41 |
| I-Pentane | 0.1645 | 0.06 |
| N-Pentane | 0.2287 | 0.08 |
| Nitrogen | 0.4492 | |
| CO2 | 0.0539 | |
| Hexanes+ | 0.1900 | 0.08 |
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| Total: | 100.0000 | 7.76 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1319.3716 |
| BTU/SCF (Saturated): | 1297.3431 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99603 |
| Z Factor (Saturated): | 0.99599 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1319.3716 |
| BTU/SCF (Saturated): | 1297.3431 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99602 |
| Z Factor (Saturated): | 0.99599 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7524 |
| Real Gravity: | 0.7551 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1297 |
| Run Date: | 2/18/2009 |
| Run Time: | 17:30 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 2/12/2009 |
| Field: | | Sample Time: | 10:15 |
| Station: | GOODLOE BROTHERS CO ALLOC MTR | Collected By: | B VANDER |
| Meter: | 80868601 | Effective Date: | 3/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 57.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|---------------|----------|------|
| Methane | 71.1919 | |
| Ethane | 18.6845 | 4.98 |
| Propane | 6.9741 | 1.92 |
| I-Butane | 0.3871 | 0.13 |
| N-Butane | 1.3485 | 0.42 |
| I-Pentane | 0.1816 | 0.07 |
| N-Pentane | 0.2363 | 0.09 |
| Nitrogen | 0.7524 | |
| CO2 | 0.0516 | |
| Hexanes+ | 0.1920 | 0.08 |
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| Total: | 100.0000 | 7.69 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1316.5913 |
| BTU/SCF (Saturated): | 1294.6124 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99604 |
| Z Factor (Saturated): | 0.99600 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1316.5913 |
| BTU/SCF (Saturated): | 1294.6124 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99603 |
| Z Factor (Saturated): | 0.99599 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7541 |
| Real Gravity: | 0.7568 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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Analysis#: 1367
Run Date: 2/25/2009
Run Time: 13:19
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|-----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 2/17/2009 |
| Field: | | Sample Time: | 1:00 |
| Station: | IRA BACK ETAL 100487 WH MTR | Collected By: | B VANDER |
| Meter: | 80868801 | Effective Date: | 3/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 49.00 PSIG |
| | | Sample Temp. (°F): | N/G |

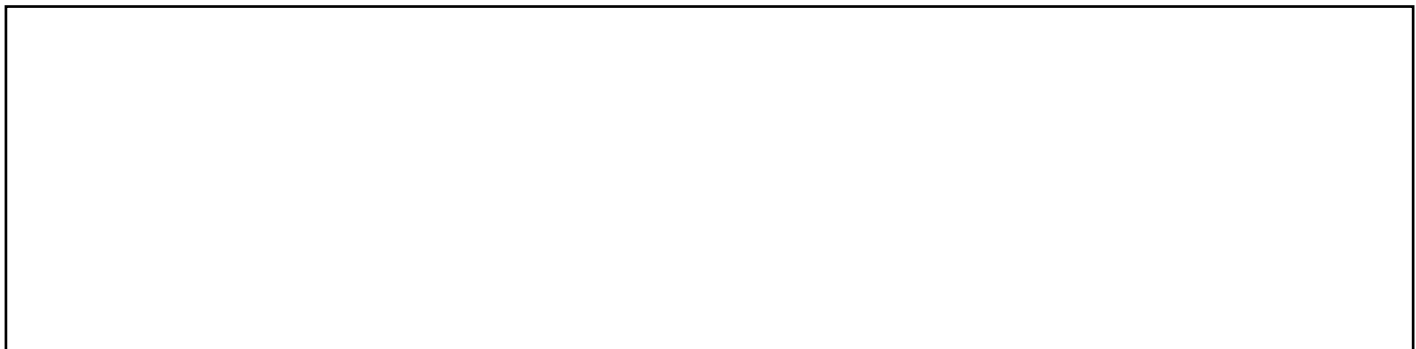
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 73.4720 | |
| Ethane | 17.4524 | 4.66 |
| Propane | 6.2751 | 1.72 |
| I-Butane | 0.3416 | 0.11 |
| N-Butane | 1.1822 | 0.37 |
| I-Pentane | 0.1567 | 0.06 |
| N-Pentane | 0.1990 | 0.07 |
| Nitrogen | 0.7101 | |
| CO2 | 0.0371 | |
| Hexanes+ | 0.1738 | 0.08 |
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| Total: | 100.0000 | 7.07 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1289.4634 |
| BTU/SCF (Saturated): | 1267.9563 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99624 |
| Z Factor (Saturated): | 0.99621 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1289.4634 |
| BTU/SCF (Saturated): | 1267.9563 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99624 |
| Z Factor (Saturated): | 0.99620 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7363 |
| Real Gravity: | 0.7388 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1285 |
| Run Date: | 2/18/2009 |
| Run Time: | 13:02 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 2/12/2009 |
| Field: | | Sample Time: | 11:00 |
| Station: | GOODLOE BROS CO INC 100486 WH | Collected By: | B VANDER |
| Meter: | 80868901 | Effective Date: | 3/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 58.00 PSIG |
| | | Sample Temp. (°F): | N/G |

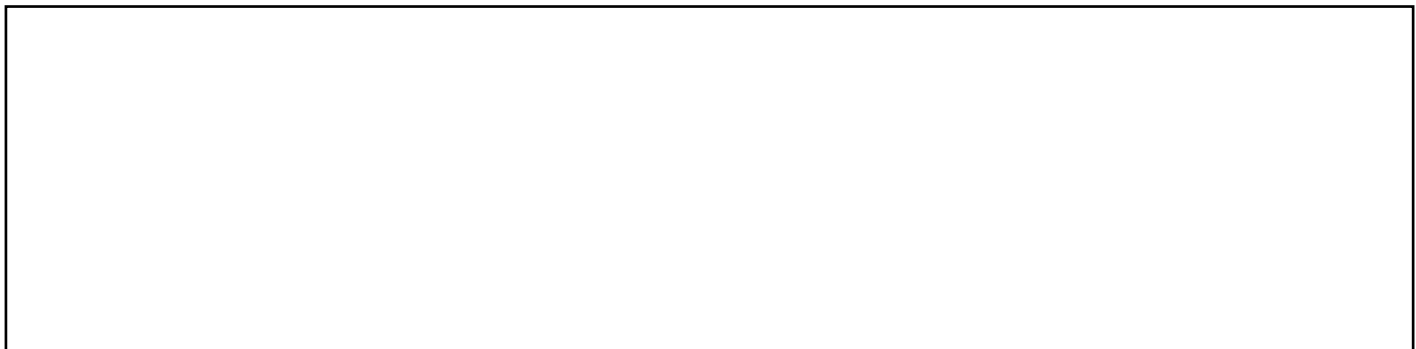
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 74.9359 | |
| Ethane | 16.8668 | 4.50 |
| Propane | 5.7344 | 1.58 |
| I-Butane | 0.2976 | 0.10 |
| N-Butane | 0.9857 | 0.31 |
| I-Pentane | 0.1236 | 0.05 |
| N-Pentane | 0.1564 | 0.06 |
| Nitrogen | 0.7285 | |
| CO2 | 0.0331 | |
| Hexanes+ | 0.1380 | 0.06 |
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| Total: | 100.0000 | 6.66 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1267.2354 |
| BTU/SCF (Saturated): | 1246.1136 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99640 |
| Z Factor (Saturated): | 0.99636 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1267.2354 |
| BTU/SCF (Saturated): | 1246.1136 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99640 |
| Z Factor (Saturated): | 0.99636 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7223 |
| Real Gravity: | 0.7246 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1376 |
| Run Date: | 2/25/2009 |
| Run Time: | 14:24 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 2/19/2009 |
| Field: | | Sample Time: | 10:30 |
| Station: | THE JENKINS COAL CO 100548 WH | Collected By: | C HICKS |
| Meter: | 80890601 | Effective Date: | 3/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 42.00 PSIG |
| | | Sample Temp. (°F): | N/G |

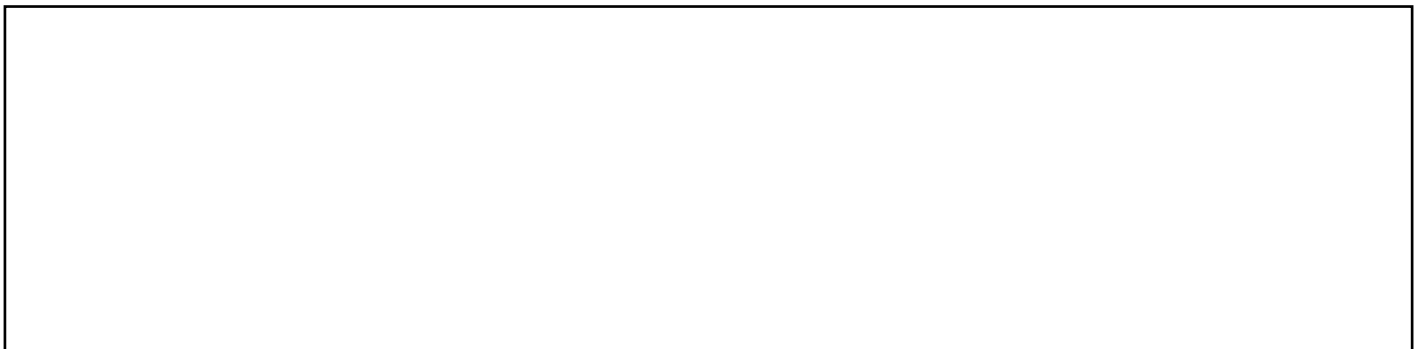
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 63.7401 | |
| Ethane | 19.5452 | 5.21 |
| Propane | 10.6477 | 2.93 |
| I-Butane | 0.8386 | 0.27 |
| N-Butane | 2.6686 | 0.84 |
| I-Pentane | 0.4056 | 0.15 |
| N-Pentane | 0.4929 | 0.18 |
| Nitrogen | 1.1686 | |
| CO2 | 0.0547 | |
| Hexanes+ | 0.4380 | 0.19 |
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| Total: | 100.0000 | 9.77 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1440.8121 |
| BTU/SCF (Saturated): | 1416.6796 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99505 |
| Z Factor (Saturated): | 0.99501 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1440.8121 |
| BTU/SCF (Saturated): | 1416.6796 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99504 |
| Z Factor (Saturated): | 0.99500 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8371 |
| Real Gravity: | 0.8409 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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Analysis#: 1377
Run Date: 2/25/2009
Run Time: 14:31
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 2/19/2009 |
| Field: | | Sample Time: | 11:30 |
| Station: | THE JENKINS COAL CO 100552 WH | Collected By: | B VANDER |
| Meter: | 80890701 | Effective Date: | 3/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 41.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 71.0624 | |
| Ethane | 15.8255 | 4.22 |
| Propane | 7.9191 | 2.18 |
| I-Butane | 0.6278 | 0.20 |
| N-Butane | 1.9841 | 0.62 |
| I-Pentane | 0.3070 | 0.11 |
| N-Pentane | 0.3794 | 0.14 |
| Nitrogen | 1.4691 | |
| CO2 | 0.0096 | |
| Hexanes+ | 0.4160 | 0.18 |
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| Total: | 100.0000 | 7.65 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1339.6611 |
| BTU/SCF (Saturated): | 1317.2876 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99586 |
| Z Factor (Saturated): | 0.99581 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1339.6611 |
| BTU/SCF (Saturated): | 1317.2876 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99585 |
| Z Factor (Saturated): | 0.99581 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7757 |
| Real Gravity: | 0.7786 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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Analysis#: 10756
 Run Date: 9/22/2010
 Run Time: 16:20
 Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 9/8/2010 |
| Field: | | Sample Time: | 0:00 |
| Station: | EVANS OIL & GAS CO ALLOC MTR | Collected By: | C HICKS |
| Meter: | 80890801 | Effective Date: | 10/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 62.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 75.0033 | |
| Ethane | 13.5010 | 3.60 |
| Propane | 5.4925 | 1.51 |
| I-Butane | 0.2839 | 0.09 |
| N-Butane | 1.0711 | 0.34 |
| I-Pentane | 0.1284 | 0.05 |
| N-Pentane | 0.1764 | 0.06 |
| Nitrogen | 3.9967 | |
| CO2 | 0.0388 | |
| Hexanes+ | 0.3079 | 0.13 |
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| Total: | 100.0000 | 5.78 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1213.7007 |
| BTU/SCF (Saturated): | 1193.5137 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99665 |
| Z Factor (Saturated): | 0.99660 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1213.7007 |
| BTU/SCF (Saturated): | 1193.5137 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99664 |
| Z Factor (Saturated): | 0.99660 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7232 |
| Real Gravity: | 0.7253 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

P.O. Box 1028
 Bridgeport, WV 26330-0461
 Phone: (304) 623-0020
 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 10358 |
| Run Date: | 8/25/2010 |
| Run Time: | 13:26 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | |
|-----------------------------|-----------------------------|
| Customer: Chesapeake Energy | Sample Date: 8/21/2010 |
| Field: | Sample Time: 0:00 |
| Station: CALVIN CORP | Collected By: C HICKS |
| Meter: 80892101 | Effective Date: 9/1/2010 |
| Sample Type: Spot | Sample Pressure: 23.00 PSIG |
| | Sample Temp. (°F): N/G |

| Component | MOL% | GPM |
|-----------|----------|-------|
| Methane | 61.2398 | |
| Ethane | 19.6503 | 5.24 |
| Propane | 11.3911 | 3.13 |
| I-Butane | 0.9758 | 0.32 |
| N-Butane | 3.1568 | 0.99 |
| I-Pentane | 0.5557 | 0.20 |
| N-Pentane | 0.7536 | 0.27 |
| Nitrogen | 1.3564 | |
| CO2 | 0.0237 | |
| Hexanes+ | 0.8968 | 0.39 |
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| Total: | 100.0000 | 10.54 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1497.6331 |
| BTU/SCF (Saturated): | 1472.5100 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99457 |
| Z Factor (Saturated): | 0.99454 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1497.6331 |
| BTU/SCF (Saturated): | 1472.5100 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99456 |
| Z Factor (Saturated): | 0.99452 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8745 |
| Real Gravity: | 0.8789 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 7955 |
| Run Date: | 4/15/2010 |
| Run Time: | 13:08 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/7/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | CALVIN CORP | Collected By: | C HICKS |
| Meter: | 80892301 | Effective Date: | 5/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 40.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 71.6767 | |
| Ethane | 13.6688 | 3.65 |
| Propane | 7.6909 | 2.11 |
| I-Butane | 0.7264 | 0.24 |
| N-Butane | 2.3763 | 0.75 |
| I-Pentane | 0.4537 | 0.17 |
| N-Pentane | 0.6122 | 0.22 |
| Nitrogen | 2.0722 | |
| CO2 | 0.0293 | |
| Hexanes+ | 0.6935 | 0.30 |
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| Total: | 100.0000 | 7.44 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1347.5446 |
| BTU/SCF (Saturated): | 1325.0374 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99578 |
| Z Factor (Saturated): | 0.99574 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1347.5446 |
| BTU/SCF (Saturated): | 1325.0374 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99577 |
| Z Factor (Saturated): | 0.99573 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7876 |
| Real Gravity: | 0.7906 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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Analysis#: 2460
Run Date: 4/23/2009
Run Time: 7:39
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/13/2009 |
| Field: | | Sample Time: | 10:15 |
| Station: | HENRY J SCHMIDT 100568 WH MTR | Collected By: | B VANDERF |
| Meter: | 80892701 | Effective Date: | 5/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 33.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 75.0707 | |
| Ethane | 13.2882 | 3.54 |
| Propane | 6.2333 | 1.71 |
| I-Butane | 0.4730 | 0.15 |
| N-Butane | 1.5616 | 0.49 |
| I-Pentane | 0.2595 | 0.09 |
| N-Pentane | 0.3321 | 0.12 |
| Nitrogen | 2.4015 | |
| CO2 | 0.0271 | |
| Hexanes+ | 0.3530 | 0.15 |
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| Total: | 100.0000 | 6.25 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1265.8650 |
| BTU/SCF (Saturated): | 1244.7743 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99636 |
| Z Factor (Saturated): | 0.99632 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1265.8650 |
| BTU/SCF (Saturated): | 1244.7743 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99636 |
| Z Factor (Saturated): | 0.99631 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7393 |
| Real Gravity: | 0.7417 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 2801 |
| Run Date: | 5/13/2009 |
| Run Time: | 8:33 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/27/2009 |
| Field: | | Sample Time: | 1:00 |
| Station: | HENRY J SCHMIDT 100570 WH MTR | Collected By: | B VANDERI |
| Meter: | 80892801 | Effective Date: | 6/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 34.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 79.5311 | |
| Ethane | 11.0932 | 2.96 |
| Propane | 4.7331 | 1.30 |
| I-Butane | 0.2353 | 0.08 |
| N-Butane | 0.9380 | 0.29 |
| I-Pentane | 0.1188 | 0.04 |
| N-Pentane | 0.1632 | 0.06 |
| Nitrogen | 3.0200 | |
| CO2 | 0.0180 | |
| Hexanes+ | 0.1493 | 0.06 |
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| Total: | 100.0000 | 4.79 |

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|-----------------------|-----------|
| BTU/SCF (Dry): | 1182.2579 |
| BTU/SCF (Saturated): | 1162.6179 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99691 |
| Z Factor (Saturated): | 0.99686 |

| | |
|-----------------------|-----------|
| BTU/SCF (Dry): | 1182.2579 |
| BTU/SCF (Saturated): | 1162.6179 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99690 |
| Z Factor (Saturated): | 0.99686 |

| | |
|----------------|--------|
| Ideal Gravity: | 0.6927 |
| Real Gravity: | 0.6946 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.



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| | |
|------------|-----------|
| Analysis#: | 2441 |
| Run Date: | 4/22/2009 |
| Run Time: | 14:27 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|---------------------|-------------------------------|---------------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/13/2009 |
| Field: | | Sample Time: | 12:45 |
| Station: | HENRY J SCHMIDT 100576 WH MTR | Collected By: | B VANDERI |
| Meter: | 80893301 | Effective Date: | 5/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 33.00 PSIG |
| | | Sample Temp. (°F): | N/G |

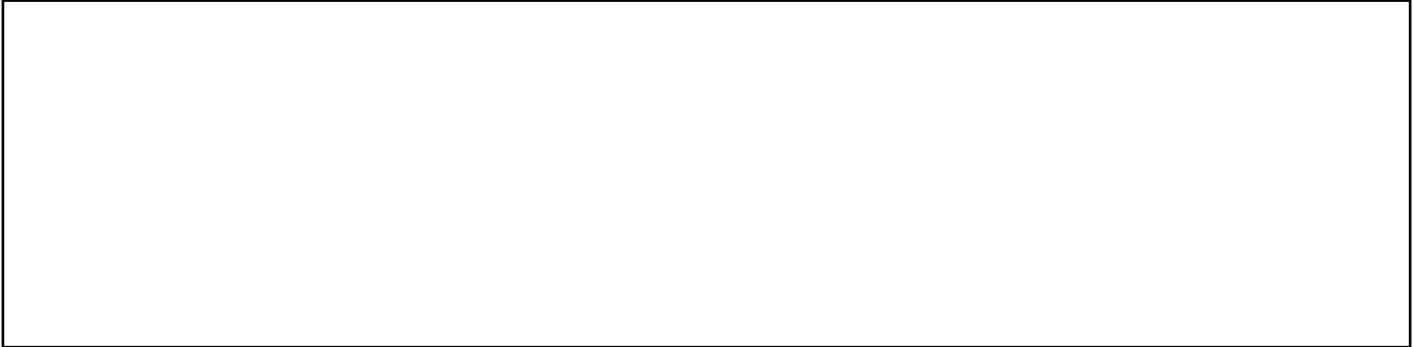
| Component | MOL% | GPM |
|---------------|-----------------|-------------|
| Methane | 77.9422 | |
| Ethane | 11.7754 | 3.14 |
| Propane | 4.8546 | 1.33 |
| I-Butane | 0.3796 | 0.12 |
| N-Butane | 1.1078 | 0.35 |
| I-Pentane | 0.1871 | 0.07 |
| N-Pentane | 0.2254 | 0.08 |
| Nitrogen | 3.2615 | |
| CO2 | 0.0000 | |
| Hexanes+ | 0.2664 | 0.12 |
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| Total: | 100.0000 | 5.21 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1203.0922 |
| BTU/SCF (Saturated): | 1183.0902 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99676 |
| Z Factor (Saturated): | 0.99672 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1203.0922 |
| BTU/SCF (Saturated): | 1183.0902 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99676 |
| Z Factor (Saturated): | 0.99671 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7081 |
| Real Gravity: | 0.7101 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1857 |
| Run Date: | 3/25/2009 |
| Run Time: | 16:28 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | |
|--|------------------------------------|
| Customer: Chesapeake Energy | Sample Date: 3/19/2009 |
| Field: | Sample Time: 10:15 |
| Station: EVANS O & G TRUST 100581 WH MT | Collected By: B VANDERH |
| Meter: 80893601 | Effective Date: 4/1/2009 |
| Sample Type: Spot | Sample Pressure: 32.00 PSIG |
| | Sample Temp. (°F): N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 81.3763 | |
| Ethane | 8.8298 | 2.36 |
| Propane | 3.8132 | 1.05 |
| I-Butane | 0.2229 | 0.07 |
| N-Butane | 0.7679 | 0.24 |
| I-Pentane | 0.1158 | 0.04 |
| N-Pentane | 0.1291 | 0.05 |
| Nitrogen | 4.6359 | |
| CO2 | 0.0000 | |
| Hexanes+ | 0.1091 | 0.05 |
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| Total: | 100.0000 | 3.86 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1127.5652 |
| BTU/SCF (Saturated): | 1108.8752 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99720 |
| Z Factor (Saturated): | 0.99716 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1127.5652 |
| BTU/SCF (Saturated): | 1108.8752 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99720 |
| Z Factor (Saturated): | 0.99715 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6748 |
| Real Gravity: | 0.6764 |

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| Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8. |
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| | |
|------------|----------|
| Analysis#: | 2112 |
| Run Date: | 4/7/2009 |
| Run Time: | 15:30 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/1/2009 |
| Field: | | Sample Time: | 10:15 |
| Station: | EVANS O & G TRUST 100591 WH MT | Collected By: | C HICKS |
| Meter: | 80894301 | Effective Date: | 5/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 73.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 70.3953 | |
| Ethane | 11.2155 | 2.99 |
| Propane | 4.5532 | 1.25 |
| I-Butane | 0.2276 | 0.07 |
| N-Butane | 0.9003 | 0.28 |
| I-Pentane | 0.1075 | 0.04 |
| N-Pentane | 0.1459 | 0.05 |
| Nitrogen | 12.3195 | |
| CO2 | 0.0241 | |
| Hexanes+ | 0.1111 | 0.05 |
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| Total: | 100.0000 | 4.73 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1082.2080 |
| BTU/SCF (Saturated): | 1064.3093 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99717 |
| Z Factor (Saturated): | 0.99713 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1082.2080 |
| BTU/SCF (Saturated): | 1064.3093 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99717 |
| Z Factor (Saturated): | 0.99713 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7278 |
| Real Gravity: | 0.7296 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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Analysis#: 1855
Run Date: 3/25/2009
Run Time: 15:51
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/19/2009 |
| Field: | | Sample Time: | 11:30 |
| Station: | WILLIAM COMPTON 100594 WH MTR | Collected By: | B VANDER |
| Meter: | 80894401 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 32.00 PSIG |
| | | Sample Temp. (°F): | N/G |

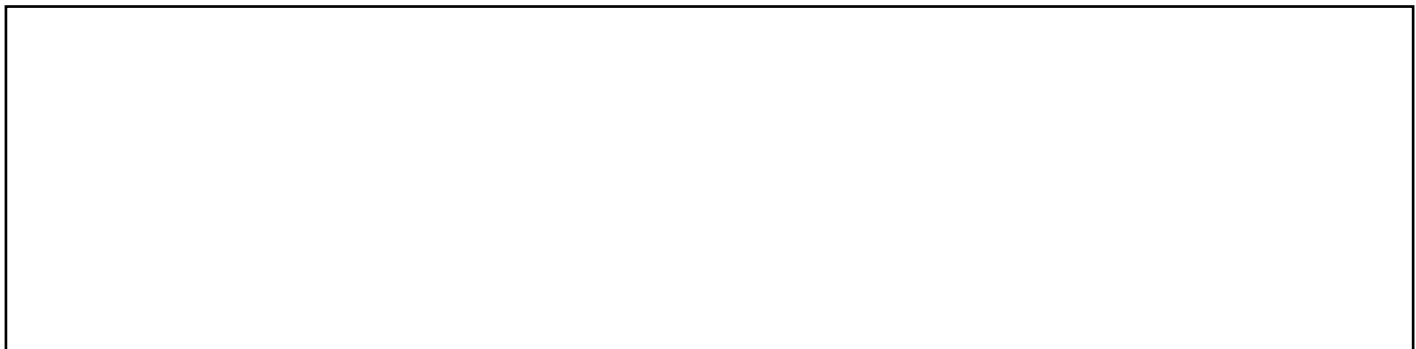
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 78.1488 | |
| Ethane | 11.4425 | 3.05 |
| Propane | 5.0045 | 1.38 |
| I-Butane | 0.2306 | 0.08 |
| N-Butane | 0.9529 | 0.30 |
| I-Pentane | 0.1194 | 0.04 |
| N-Pentane | 0.1482 | 0.05 |
| Nitrogen | 3.8043 | |
| CO2 | 0.0187 | |
| Hexanes+ | 0.1301 | 0.06 |
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| Total: | 100.0000 | 4.96 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1180.0896 |
| BTU/SCF (Saturated): | 1160.4875 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99689 |
| Z Factor (Saturated): | 0.99684 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1180.0896 |
| BTU/SCF (Saturated): | 1160.4875 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99688 |
| Z Factor (Saturated): | 0.99684 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6996 |
| Real Gravity: | 0.7015 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 8181 |
| Run Date: | 4/29/2010 |
| Run Time: | 9:33 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/24/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | EVANS O & G TRUST 100592 WH MT | Collected By: | M CHAPMA |
| Meter: | 80894501 | Effective Date: | 5/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 49.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 79.7986 | |
| Ethane | 11.2698 | 3.01 |
| Propane | 4.9884 | 1.37 |
| I-Butane | 0.3117 | 0.10 |
| N-Butane | 1.1115 | 0.35 |
| I-Pentane | 0.1801 | 0.07 |
| N-Pentane | 0.2061 | 0.07 |
| Nitrogen | 1.9581 | |
| CO2 | 0.0385 | |
| Hexanes+ | 0.1372 | 0.06 |
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| Total: | 100.0000 | 5.03 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1206.4775 |
| BTU/SCF (Saturated): | 1186.4170 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99679 |
| Z Factor (Saturated): | 0.99674 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1206.4775 |
| BTU/SCF (Saturated): | 1186.4170 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99679 |
| Z Factor (Saturated): | 0.99674 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6970 |
| Real Gravity: | 0.6990 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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Analysis#: 5271
 Run Date: 9/29/2009
 Run Time: 12:17
 Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 9/25/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | EVANS O & G TRUST 100595 WH MT | Collected By: | C HICKS |
| Meter: | 80894801 | Effective Date: | 10/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 12.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 75.8579 | |
| Ethane | 14.2714 | 3.81 |
| Propane | 6.1980 | 1.70 |
| I-Butane | 0.3131 | 0.10 |
| N-Butane | 1.3391 | 0.42 |
| I-Pentane | 0.1637 | 0.06 |
| N-Pentane | 0.2370 | 0.09 |
| Nitrogen | 1.3669 | |
| CO2 | 0.0433 | |
| Hexanes+ | 0.2096 | 0.09 |
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| | | |
| Total: | 100.0000 | 6.27 |

Analytical Results at Base Conditions (Real)

| | |
|-----------------------|-----------|
| BTU/SCF (Dry): | 1262.7769 |
| BTU/SCF (Saturated): | 1241.7374 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99642 |
| Z Factor (Saturated): | 0.99638 |

Analytical Results at Contract Conditions (Real)

| | |
|-----------------------|-----------|
| BTU/SCF (Dry): | 1262.7769 |
| BTU/SCF (Saturated): | 1241.7374 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99641 |
| Z Factor (Saturated): | 0.99637 |

Calculated Specific Gravities

| | |
|----------------|--------|
| Ideal Gravity: | 0.7266 |
| Real Gravity: | 0.7289 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

P.O. Box 1028
Bridgeport, WV 26330-0461
Phone: (304) 623-0020
FAX: (304) 624-8065

Analysis#: 5574
Run Date: 10/20/2009
Run Time: 8:47
Cylinder#:

FRACTIONAL ANALYSIS

Customer: Chesapeake Energy
Field:
Station: EVANS O & G TRUST 100583 WH MT
Meter: 80894901
Sample Type: Spot
Sample Date: 9/30/2009
Sample Time: 10:00
Collected By: C HICKS
Effective Date: 10/1/2009
Sample Pressure: 8.00 PSIG
Sample Temp. (°F): N/G

Table with 3 columns: Component, MOL%, GPM. Rows include Methane, Ethane, Propane, I-Butane, N-Butane, I-Pentane, N-Pentane, Nitrogen, CO2, Hexanes+, and Total.

Table with 2 columns: Analytical Results at Base Conditions (Real), BTU/SCF (Dry), BTU/SCF (Saturated), PSIA, Temperature (°F), Z Factor (Dry), Z Factor (Saturated).

Table with 2 columns: Analytical Results at Contract Conditions (Real), BTU/SCF (Dry), BTU/SCF (Saturated), PSIA, Temperature (°F), Z Factor (Dry), Z Factor (Saturated).

Table with 2 columns: Calculated Specific Gravities, Ideal Gravity, Real Gravity.

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 5273 |
| Run Date: | 9/29/2009 |
| Run Time: | 12:33 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 9/25/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | EVANS O & G TRUST 100596 WH MT | Collected By: | C HICKS |
| Meter: | 80895001 | Effective Date: | 10/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 15.00 PSIG |
| | | Sample Temp. (°F): | N/G |

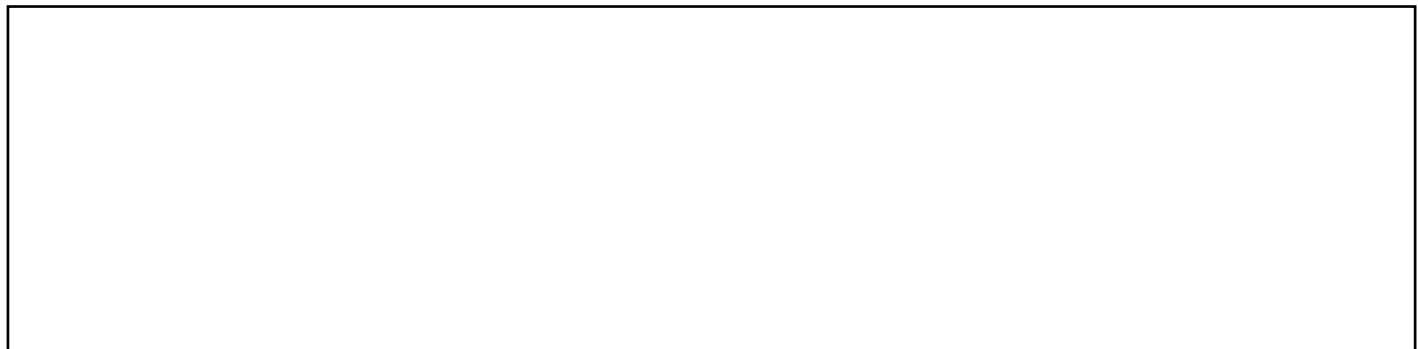
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 76.7114 | |
| Ethane | 13.5850 | 3.62 |
| Propane | 5.8901 | 1.62 |
| I-Butane | 0.3028 | 0.10 |
| N-Butane | 1.2792 | 0.40 |
| I-Pentane | 0.1584 | 0.06 |
| N-Pentane | 0.2292 | 0.08 |
| Nitrogen | 1.5970 | |
| CO2 | 0.0383 | |
| Hexanes+ | 0.2086 | 0.09 |
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| Total: | 100.0000 | 5.97 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1248.4370 |
| BTU/SCF (Saturated): | 1227.6469 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99651 |
| Z Factor (Saturated): | 0.99647 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1248.4370 |
| BTU/SCF (Saturated): | 1227.6469 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99651 |
| Z Factor (Saturated): | 0.99646 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7197 |
| Real Gravity: | 0.7219 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1860 |
| Run Date: | 3/25/2009 |
| Run Time: | 16:36 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/17/2009 |
| Field: | | Sample Time: | 9:45 |
| Station: | EVANS O & G TRUST 100599 WH MT | Collected By: | B VANDERI |
| Meter: | 80895101 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 32.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 78.6536 | |
| Ethane | 12.0530 | 3.22 |
| Propane | 5.1235 | 1.41 |
| I-Butane | 0.2451 | 0.08 |
| N-Butane | 0.9791 | 0.31 |
| I-Pentane | 0.1098 | 0.04 |
| N-Pentane | 0.1481 | 0.05 |
| Nitrogen | 2.5398 | |
| CO2 | 0.0263 | |
| Hexanes+ | 0.1217 | 0.05 |
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| Total: | 100.0000 | 5.16 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1199.6965 |
| BTU/SCF (Saturated): | 1179.7532 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99681 |
| Z Factor (Saturated): | 0.99676 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1199.6965 |
| BTU/SCF (Saturated): | 1179.7532 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99680 |
| Z Factor (Saturated): | 0.99676 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6986 |
| Real Gravity: | 0.7006 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|------------|
| Analysis#: | 5569 |
| Run Date: | 10/19/2009 |
| Run Time: | 12:42 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 9/30/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | EVANS O & G TRUST 100597 WH MT | Collected By: | C HICKS |
| Meter: | 80895201 | Effective Date: | 10/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 11.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 76.9145 | |
| Ethane | 13.6193 | 3.63 |
| Propane | 5.9486 | 1.63 |
| I-Butane | 0.2999 | 0.10 |
| N-Butane | 1.2249 | 0.39 |
| I-Pentane | 0.1452 | 0.05 |
| N-Pentane | 0.1973 | 0.07 |
| Nitrogen | 1.4625 | |
| CO2 | 0.0310 | |
| Hexanes+ | 0.1568 | 0.07 |
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| Total: | 100.0000 | 5.94 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1246.1989 |
| BTU/SCF (Saturated): | 1225.4476 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99653 |
| Z Factor (Saturated): | 0.99649 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1246.1989 |
| BTU/SCF (Saturated): | 1225.4476 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99653 |
| Z Factor (Saturated): | 0.99649 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7167 |
| Real Gravity: | 0.7189 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1859 |
| Run Date: | 3/25/2009 |
| Run Time: | 16:34 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/17/2009 |
| Field: | | Sample Time: | 11:45 |
| Station: | EVANS O & G TRUST 100600 WH MT | Collected By: | B VANDERF |
| Meter: | 80895401 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 32.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 78.6873 | |
| Ethane | 11.7810 | 3.14 |
| Propane | 5.0578 | 1.39 |
| I-Butane | 0.2355 | 0.08 |
| N-Butane | 0.9419 | 0.30 |
| I-Pentane | 0.1166 | 0.04 |
| N-Pentane | 0.1451 | 0.05 |
| Nitrogen | 2.9002 | |
| CO2 | 0.0140 | |
| Hexanes+ | 0.1206 | 0.05 |
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| Total: | 100.0000 | 5.05 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1192.0526 |
| BTU/SCF (Saturated): | 1172.2422 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99684 |
| Z Factor (Saturated): | 0.99680 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1192.0526 |
| BTU/SCF (Saturated): | 1172.2422 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99684 |
| Z Factor (Saturated): | 0.99680 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6974 |
| Real Gravity: | 0.6993 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1862 |
| Run Date: | 3/25/2009 |
| Run Time: | 16:49 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/17/2009 |
| Field: | | Sample Time: | 12:45 |
| Station: | EVANS O & G TRUST 100601 WH MT | Collected By: | B VANDERF |
| Meter: | 80895701 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 32.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 79.7757 | |
| Ethane | 11.4702 | 3.06 |
| Propane | 4.7711 | 1.31 |
| I-Butane | 0.2294 | 0.07 |
| N-Butane | 0.8988 | 0.28 |
| I-Pentane | 0.1017 | 0.04 |
| N-Pentane | 0.1345 | 0.05 |
| Nitrogen | 2.4873 | |
| CO2 | 0.0208 | |
| Hexanes+ | 0.1105 | 0.05 |
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| Total: | 100.0000 | 4.86 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1187.1022 |
| BTU/SCF (Saturated): | 1167.3772 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99689 |
| Z Factor (Saturated): | 0.99685 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1187.1022 |
| BTU/SCF (Saturated): | 1167.3772 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99689 |
| Z Factor (Saturated): | 0.99685 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6900 |
| Real Gravity: | 0.6919 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 1856 |
| Run Date: | 3/25/2009 |
| Run Time: | 16:14 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/17/2009 |
| Field: | | Sample Time: | 11:00 |
| Station: | EVANS O & G TRUST 100602 WH MT | Collected By: | B VANDERF |
| Meter: | 80896701 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 32.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 79.1655 | |
| Ethane | 11.8857 | 3.17 |
| Propane | 4.8585 | 1.34 |
| I-Butane | 0.2292 | 0.07 |
| N-Butane | 0.9147 | 0.29 |
| I-Pentane | 0.1036 | 0.04 |
| N-Pentane | 0.1392 | 0.05 |
| Nitrogen | 2.5661 | |
| CO2 | 0.0190 | |
| Hexanes+ | 0.1185 | 0.05 |
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| Total: | 100.0000 | 5.01 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1191.7452 |
| BTU/SCF (Saturated): | 1171.9392 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99686 |
| Z Factor (Saturated): | 0.99682 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1191.7452 |
| BTU/SCF (Saturated): | 1171.9392 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99686 |
| Z Factor (Saturated): | 0.99681 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6939 |
| Real Gravity: | 0.6958 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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Analysis#: 1861
Run Date: 3/25/2009
Run Time: 16:47
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/18/2009 |
| Field: | | Sample Time: | 9:30 |
| Station: | J H HOWARD HEIRS ALLOC MTR | Collected By: | C HICKS |
| Meter: | 80929001 | Effective Date: | 4/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 24.00 PSIG |
| | | Sample Temp. (°F): | N/G |

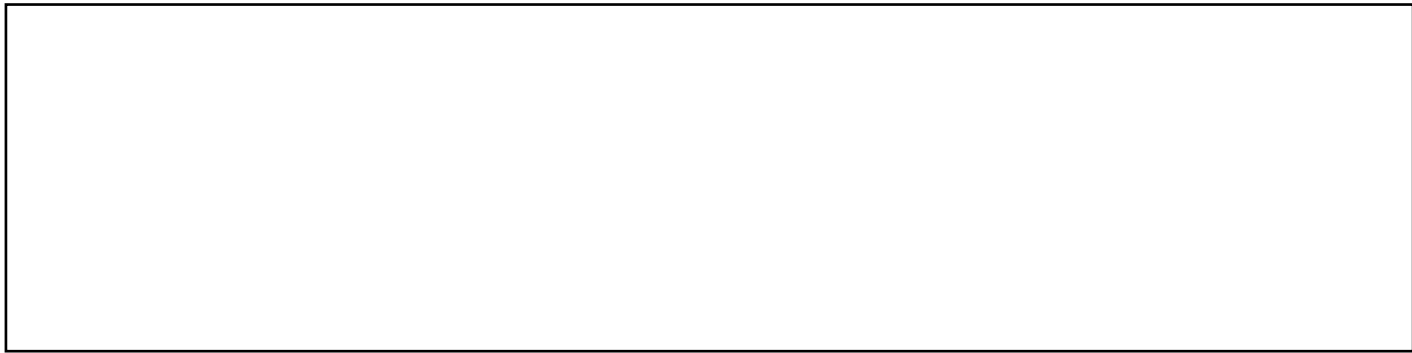
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 77.8923 | |
| Ethane | 11.9712 | 3.19 |
| Propane | 5.6336 | 1.55 |
| I-Butane | 0.3912 | 0.13 |
| N-Butane | 1.3311 | 0.42 |
| I-Pentane | 0.2205 | 0.08 |
| N-Pentane | 0.2528 | 0.09 |
| Nitrogen | 1.9941 | |
| CO2 | 0.0613 | |
| Hexanes+ | 0.2519 | 0.11 |
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| Total: | 100.0000 | 5.57 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1235.3970 |
| BTU/SCF (Saturated): | 1214.8353 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99659 |
| Z Factor (Saturated): | 0.99655 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1235.3970 |
| BTU/SCF (Saturated): | 1214.8353 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99659 |
| Z Factor (Saturated): | 0.99654 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7162 |
| Real Gravity: | 0.7184 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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| | |
|------------|-----------|
| Analysis#: | 7642 |
| Run Date: | 3/31/2010 |
| Run Time: | 8:33 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/24/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | INLAND GAS CO TR FEE 100503 WH | Collected By: | B VANDER |
| Meter: | 80939201 | Effective Date: | 4/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 18.00 PSIG |
| | | Sample Temp. (°F): | N/G |

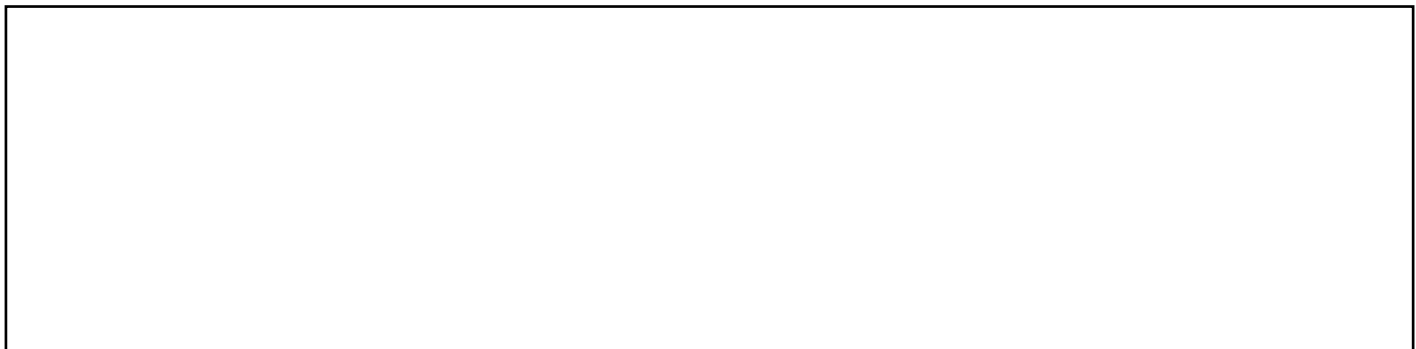
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 69.7345 | |
| Ethane | 18.2592 | 4.87 |
| Propane | 8.2281 | 2.26 |
| I-Butane | 0.4992 | 0.16 |
| N-Butane | 1.8452 | 0.58 |
| I-Pentane | 0.2583 | 0.09 |
| N-Pentane | 0.3441 | 0.12 |
| Nitrogen | 0.4938 | |
| CO2 | 0.0297 | |
| Hexanes+ | 0.3079 | 0.13 |
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| Total: | 100.0000 | 8.21 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1359.7673 |
| BTU/SCF (Saturated): | 1337.0409 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99573 |
| Z Factor (Saturated): | 0.99569 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1359.7673 |
| BTU/SCF (Saturated): | 1337.0409 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99573 |
| Z Factor (Saturated): | 0.99569 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7784 |
| Real Gravity: | 0.7814 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 3369 |
| Run Date: | 6/12/2009 |
| Run Time: | 9:31 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|---------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/1/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | J H HAMMONS 100240 WH MTR | Collected By: | C HICKS |
| Meter: | 80939301 | Effective Date: | 7/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 28.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 70.7624 | |
| Ethane | 16.2547 | 4.34 |
| Propane | 8.1659 | 2.24 |
| I-Butane | 0.5786 | 0.19 |
| N-Butane | 2.1832 | 0.69 |
| I-Pentane | 0.3248 | 0.12 |
| N-Pentane | 0.4087 | 0.15 |
| Nitrogen | 0.8043 | |
| CO2 | 0.0318 | |
| Hexanes+ | 0.4856 | 0.21 |
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| Total: | 100.0000 | 7.94 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1361.1096 |
| BTU/SCF (Saturated): | 1338.3632 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99572 |
| Z Factor (Saturated): | 0.99568 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1361.1096 |
| BTU/SCF (Saturated): | 1338.3632 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99571 |
| Z Factor (Saturated): | 0.99567 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7827 |
| Real Gravity: | 0.7857 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

P.O. Box 1028
Bridgeport, WV 26330-0461
Phone: (304) 623-0020
FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 2273 |
| Run Date: | 4/14/2009 |
| Run Time: | 14:51 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/8/2009 |
| Field: | | Sample Time: | 11:30 |
| Station: | REBECCA BAILEY 1 100048 WH MTR | Collected By: | C HICKS |
| Meter: | 80939401 | Effective Date: | 5/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 25.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 65.9008 | |
| Ethane | 17.6027 | 4.70 |
| Propane | 10.1272 | 2.78 |
| I-Butane | 0.7256 | 0.24 |
| N-Butane | 2.8147 | 0.89 |
| I-Pentane | 0.4237 | 0.15 |
| N-Pentane | 0.5359 | 0.19 |
| Nitrogen | 1.2922 | |
| CO2 | 0.0294 | |
| Hexanes+ | 0.5478 | 0.24 |
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| Total: | 100.0000 | 9.19 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1424.0048 |
| BTU/SCF (Saturated): | 1400.1665 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99520 |
| Z Factor (Saturated): | 0.99515 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1424.0048 |
| BTU/SCF (Saturated): | 1400.1665 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99519 |
| Z Factor (Saturated): | 0.99514 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8275 |
| Real Gravity: | 0.8312 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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Analysis#: 4857
 Run Date: 9/3/2009
 Run Time: 12:40
 Cylinder#:

FRACTIONAL ANALYSIS

| | |
|-------------------------------------|-----------------------------|
| Customer: Chesapeake Energy | Sample Date: 8/24/2009 |
| Field: | Sample Time: 10:00 |
| Station: JASPER HICKS 100017 WH MTR | Collected By: C HICKS |
| Meter: 80939501 | Effective Date: 9/1/2009 |
| Sample Type: Spot | Sample Pressure: 24.00 PSIG |
| | Sample Temp. (°F): N/G |

| Component | MOL% | GPM |
|---------------|-----------------|-------------|
| Methane | 76.8196 | |
| Ethane | 13.1291 | 3.50 |
| Propane | 6.1488 | 1.69 |
| I-Butane | 0.2857 | 0.09 |
| N-Butane | 1.2517 | 0.39 |
| I-Pentane | 0.1514 | 0.06 |
| N-Pentane | 0.1739 | 0.06 |
| Nitrogen | 1.8319 | |
| CO2 | 0.0653 | |
| Hexanes+ | 0.1426 | 0.06 |
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| Total: | 100.0000 | 5.85 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1240.5369 |
| BTU/SCF (Saturated): | 1219.8854 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99655 |
| Z Factor (Saturated): | 0.99651 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1240.5369 |
| BTU/SCF (Saturated): | 1219.8854 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99655 |
| Z Factor (Saturated): | 0.99651 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7176 |
| Real Gravity: | 0.7198 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|----------|
| Analysis#: | 7790 |
| Run Date: | 4/7/2010 |
| Run Time: | 9:18 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/31/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | J E & M STEPHENS 2 100003 WH M | Collected By: | B VANDERF |
| Meter: | 80942701 | Effective Date: | 4/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 19.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 70.9793 | |
| Ethane | 15.6951 | 4.19 |
| Propane | 8.3308 | 2.29 |
| I-Butane | 0.5796 | 0.19 |
| N-Butane | 2.3287 | 0.73 |
| I-Pentane | 0.3651 | 0.13 |
| N-Pentane | 0.4922 | 0.18 |
| Nitrogen | 0.6708 | |
| CO2 | 0.0456 | |
| Hexanes+ | 0.5128 | 0.22 |
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| Total: | 100.0000 | 7.93 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1368.8007 |
| BTU/SCF (Saturated): | 1345.9213 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99567 |
| Z Factor (Saturated): | 0.99563 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1368.8007 |
| BTU/SCF (Saturated): | 1345.9213 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99566 |
| Z Factor (Saturated): | 0.99562 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7863 |
| Real Gravity: | 0.7894 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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Analysis#: 1292
 Run Date: 2/18/2009
 Run Time: 17:14
 Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 2/10/2009 |
| Field: | | Sample Time: | 10:15 |
| Station: | J & M STEPHENS 3 100028 WH MTR | Collected By: | C HICKS |
| Meter: | 80942801 | Effective Date: | 3/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 31.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 80.4108 | |
| Ethane | 12.0044 | 3.20 |
| Propane | 4.6488 | 1.28 |
| I-Butane | 0.2822 | 0.09 |
| N-Butane | 1.0441 | 0.33 |
| I-Pentane | 0.1752 | 0.06 |
| N-Pentane | 0.2198 | 0.08 |
| Nitrogen | 0.9245 | |
| CO2 | 0.0376 | |
| Hexanes+ | 0.2526 | 0.11 |
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| Total: | 100.0000 | 5.15 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1220.3695 |
| BTU/SCF (Saturated): | 1200.0656 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99674 |
| Z Factor (Saturated): | 0.99670 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1220.3695 |
| BTU/SCF (Saturated): | 1200.0656 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99673 |
| Z Factor (Saturated): | 0.99669 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6951 |
| Real Gravity: | 0.6971 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 2543 |
| Run Date: | 4/29/2009 |
| Run Time: | 9:45 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/22/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | MARTHA STEPHENS 4 100024 WH MT | Collected By: | C HICKS |
| Meter: | 80943101 | Effective Date: | 5/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 26.00 PSIG |
| | | Sample Temp. (°F): | N/G |

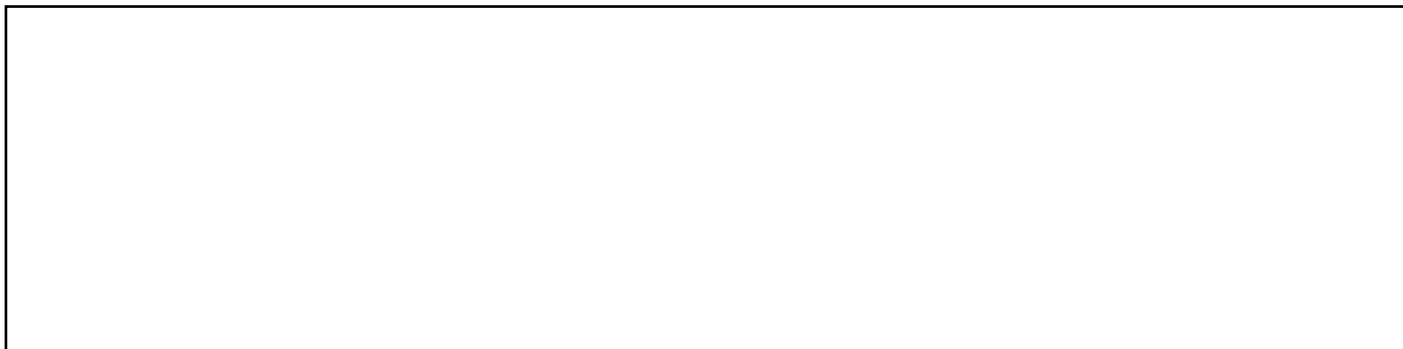
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 76.7801 | |
| Ethane | 12.3110 | 3.28 |
| Propane | 5.8393 | 1.60 |
| I-Butane | 0.3033 | 0.10 |
| N-Butane | 1.2080 | 0.38 |
| I-Pentane | 0.1592 | 0.06 |
| N-Pentane | 0.1895 | 0.07 |
| Nitrogen | 2.9568 | |
| CO2 | 0.0852 | |
| Hexanes+ | 0.1676 | 0.07 |
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| Total: | 100.0000 | 5.56 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1218.9916 |
| BTU/SCF (Saturated): | 1198.7152 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99665 |
| Z Factor (Saturated): | 0.99661 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1218.9916 |
| BTU/SCF (Saturated): | 1198.7152 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99665 |
| Z Factor (Saturated): | 0.99661 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7163 |
| Real Gravity: | 0.7184 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|------------|
| Analysis#: | 5957 |
| Run Date: | 11/11/2009 |
| Run Time: | 14:28 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 11/4/2009 |
| Field: | | Sample Time: | 0:00 |
| Station: | WILLIE SHEPHERD 100184 WH MTR | Collected By: | B VANDERF |
| Meter: | 80943201 | Effective Date: | 12/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 14.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 76.6608 | |
| Ethane | 13.3486 | 3.56 |
| Propane | 6.1665 | 1.69 |
| I-Butane | 0.2989 | 0.10 |
| N-Butane | 1.2654 | 0.40 |
| I-Pentane | 0.1502 | 0.05 |
| N-Pentane | 0.1796 | 0.06 |
| Nitrogen | 1.7546 | |
| CO2 | 0.0405 | |
| Hexanes+ | 0.1349 | 0.06 |
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| Total: | 100.0000 | 5.92 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1243.9681 |
| BTU/SCF (Saturated): | 1223.2566 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99653 |
| Z Factor (Saturated): | 0.99649 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1243.9681 |
| BTU/SCF (Saturated): | 1223.2566 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99653 |
| Z Factor (Saturated): | 0.99649 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7186 |
| Real Gravity: | 0.7208 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1382 |
| Run Date: | 2/25/2009 |
| Run Time: | 15:15 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 2/16/2009 |
| Field: | | Sample Time: | 1:30 |
| Station: | ALBERT SHEPHERD 1 100042 WH MT | Collected By: | C HICKS |
| Meter: | 80943301 | Effective Date: | 3/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 24.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 73.5529 | |
| Ethane | 14.9673 | 3.99 |
| Propane | 7.6317 | 2.10 |
| I-Butane | 0.3535 | 0.12 |
| N-Butane | 1.5624 | 0.49 |
| I-Pentane | 0.1966 | 0.07 |
| N-Pentane | 0.2252 | 0.08 |
| Nitrogen | 1.2332 | |
| CO2 | 0.0951 | |
| Hexanes+ | 0.1821 | 0.08 |
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| Total: | 100.0000 | 6.93 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1296.4288 |
| BTU/SCF (Saturated): | 1274.8070 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99618 |
| Z Factor (Saturated): | 0.99613 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1296.4288 |
| BTU/SCF (Saturated): | 1274.8070 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99617 |
| Z Factor (Saturated): | 0.99613 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7472 |
| Real Gravity: | 0.7498 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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| | |
|------------|----------|
| Analysis#: | 4819 |
| Run Date: | 9/1/2009 |
| Run Time: | 18:58 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|---------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 8/25/2009 |
| Field: | | Sample Time: | 0:00 |
| Station: | JANE HALE 1 100039 WH MTR | Collected By: | B VANDERF |
| Meter: | 80943701 | Effective Date: | 9/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 24.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 76.1861 | |
| Ethane | 13.6136 | 3.63 |
| Propane | 6.3113 | 1.73 |
| I-Butane | 0.4423 | 0.14 |
| N-Butane | 1.6469 | 0.52 |
| I-Pentane | 0.2606 | 0.10 |
| N-Pentane | 0.3352 | 0.12 |
| Nitrogen | 0.8414 | |
| CO2 | 0.0189 | |
| Hexanes+ | 0.3437 | 0.15 |
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| Total: | 100.0000 | 6.39 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1286.5509 |
| BTU/SCF (Saturated): | 1265.0997 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99628 |
| Z Factor (Saturated): | 0.99624 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1286.5509 |
| BTU/SCF (Saturated): | 1265.0997 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99628 |
| Z Factor (Saturated): | 0.99623 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7356 |
| Real Gravity: | 0.7380 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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| | |
|------------|-----------|
| Analysis#: | 1289 |
| Run Date: | 2/18/2009 |
| Run Time: | 16:58 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 2/10/2009 |
| Field: | | Sample Time: | 11:15 |
| Station: | MILLIE HICKS 1 100047 WH MTR | Collected By: | C HICKS |
| Meter: | 80943801 | Effective Date: | 3/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 31.00 PSIG |
| | | Sample Temp. (°F): | N/G |

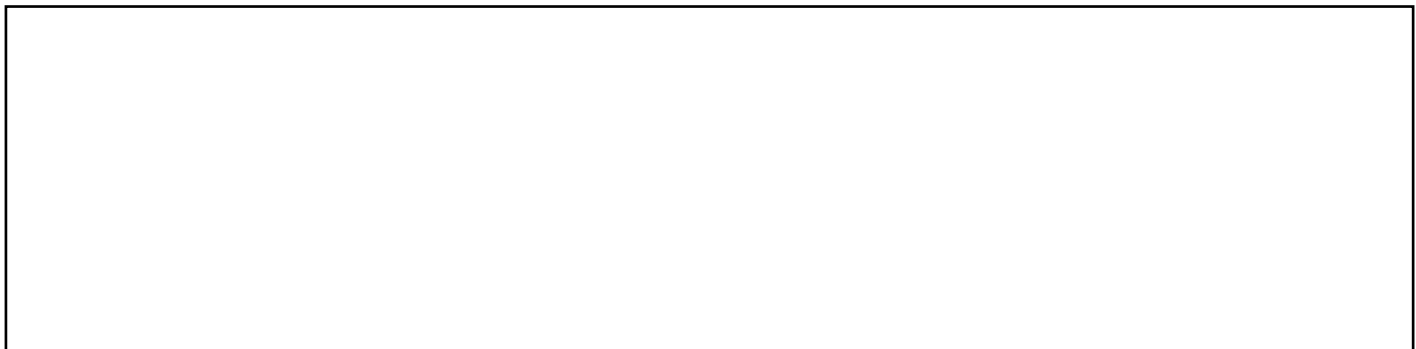
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 77.8416 | |
| Ethane | 12.6846 | 3.38 |
| Propane | 6.0735 | 1.67 |
| I-Butane | 0.2815 | 0.09 |
| N-Butane | 1.2231 | 0.38 |
| I-Pentane | 0.1603 | 0.06 |
| N-Pentane | 0.1799 | 0.07 |
| Nitrogen | 1.3604 | |
| CO2 | 0.0443 | |
| Hexanes+ | 0.1508 | 0.07 |
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| Total: | 100.0000 | 5.72 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1241.0226 |
| BTU/SCF (Saturated): | 1220.3624 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99657 |
| Z Factor (Saturated): | 0.99653 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1241.0226 |
| BTU/SCF (Saturated): | 1220.3624 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99657 |
| Z Factor (Saturated): | 0.99653 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7127 |
| Real Gravity: | 0.7149 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 4472 |
| Run Date: | 8/12/2009 |
| Run Time: | 10:27 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|---------------------|-------------------------------|---------------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/31/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | JOHN J HOWARD HEIRS 100325 WH | Collected By: | C HICKS |
| Meter: | 80943901 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 41.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|---------------|----------|------|
| Methane | 74.3487 | |
| Ethane | 14.5177 | 3.87 |
| Propane | 6.9972 | 1.92 |
| I-Butane | 0.3381 | 0.11 |
| N-Butane | 1.5096 | 0.47 |
| I-Pentane | 0.1804 | 0.07 |
| N-Pentane | 0.2233 | 0.08 |
| Nitrogen | 1.6535 | |
| CO2 | 0.0543 | |
| Hexanes+ | 0.1772 | 0.08 |
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| Total: | 100.0000 | 6.60 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1277.0664 |
| BTU/SCF (Saturated): | 1255.7805 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99630 |
| Z Factor (Saturated): | 0.99626 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1277.0664 |
| BTU/SCF (Saturated): | 1255.7805 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99630 |
| Z Factor (Saturated): | 0.99625 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7387 |
| Real Gravity: | 0.7411 |

| |
|---|
| Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8. |
|---|





Gas Analytical Services, Inc.

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 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 2789 |
| Run Date: | 5/12/2009 |
| Run Time: | 15:52 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|---------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 5/7/2009 |
| Field: | | Sample Time: | 9:45 |
| Station: | J H HAMMONS 100243 WH MTR | Collected By: | C HICKS |
| Meter: | 80944101 | Effective Date: | 6/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 29.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|---------------|-----------------|-------------|
| Methane | 79.8523 | |
| Ethane | 11.9123 | 3.18 |
| Propane | 4.8465 | 1.33 |
| I-Butane | 0.3342 | 0.11 |
| N-Butane | 1.2065 | 0.38 |
| I-Pentane | 0.2435 | 0.09 |
| N-Pentane | 0.3242 | 0.12 |
| Nitrogen | 0.8812 | |
| CO2 | 0.0299 | |
| Hexanes+ | 0.3694 | 0.16 |
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| Total: | 100.0000 | 5.37 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1238.2120 |
| BTU/SCF (Saturated): | 1217.5988 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99662 |
| Z Factor (Saturated): | 0.99658 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1238.2120 |
| BTU/SCF (Saturated): | 1217.5988 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99662 |
| Z Factor (Saturated): | 0.99658 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7058 |
| Real Gravity: | 0.7079 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.

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| | |
|------------|----------|
| Analysis#: | 7799 |
| Run Date: | 4/7/2010 |
| Run Time: | 12:19 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/1/2010 |
| Field: | | Sample Time: | 0:00 |
| Station: | WILLIAM & ELIZABETH SHEPH ALLO | Collected By: | B VANDERL |
| Meter: | 80944201 | Effective Date: | 5/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 36.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 77.0278 | |
| Ethane | 13.5413 | 3.61 |
| Propane | 5.9040 | 1.62 |
| I-Butane | 0.3547 | 0.12 |
| N-Butane | 1.3348 | 0.42 |
| I-Pentane | 0.1967 | 0.07 |
| N-Pentane | 0.2651 | 0.10 |
| Nitrogen | 1.0407 | |
| CO2 | 0.0306 | |
| Hexanes+ | 0.3043 | 0.13 |
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| Total: | 100.0000 | 6.07 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1262.7653 |
| BTU/SCF (Saturated): | 1241.7260 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99644 |
| Z Factor (Saturated): | 0.99640 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1262.7653 |
| BTU/SCF (Saturated): | 1241.7260 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99643 |
| Z Factor (Saturated): | 0.99639 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7230 |
| Real Gravity: | 0.7253 |

Gross Heating Values are Based
on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 1374 |
| Run Date: | 2/25/2009 |
| Run Time: | 14:07 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|---------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 2/16/2009 |
| Field: | | Sample Time: | 2:30 |
| Station: | J H HAMMONS 100245 WH MTR | Collected By: | C HICKS |
| Meter: | 80944301 | Effective Date: | 3/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 25.00 PSIG |
| | | Sample Temp. (°F): | N/G |

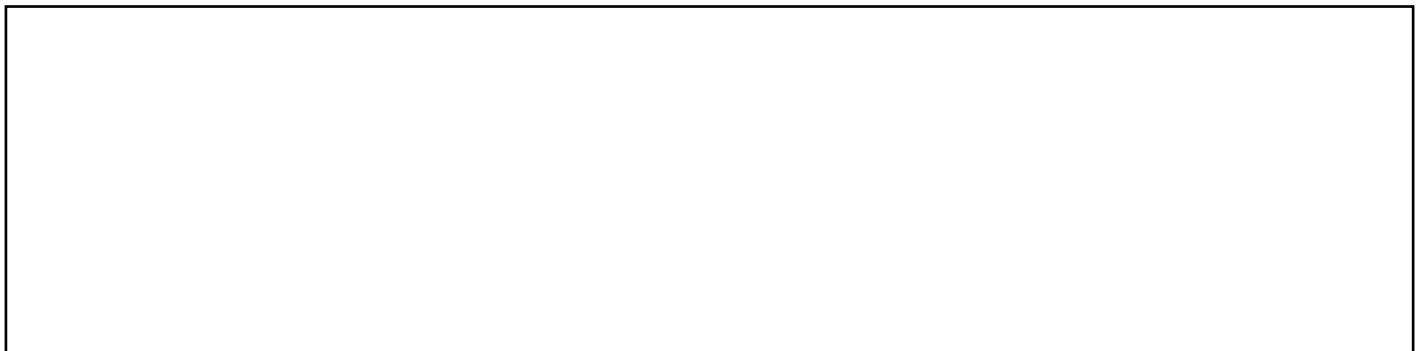
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 65.8217 | |
| Ethane | 18.1614 | 4.84 |
| Propane | 10.4626 | 2.88 |
| I-Butane | 0.7003 | 0.23 |
| N-Butane | 2.6522 | 0.83 |
| I-Pentane | 0.3998 | 0.15 |
| N-Pentane | 0.5180 | 0.19 |
| Nitrogen | 0.6871 | |
| CO2 | 0.0743 | |
| Hexanes+ | 0.5226 | 0.23 |
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| Total: | 100.0000 | 9.35 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1432.5699 |
| BTU/SCF (Saturated): | 1408.5819 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99515 |
| Z Factor (Saturated): | 0.99511 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1432.5699 |
| BTU/SCF (Saturated): | 1408.5819 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99514 |
| Z Factor (Saturated): | 0.99510 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8272 |
| Real Gravity: | 0.8309 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|----------|
| Analysis#: | 4850 |
| Run Date: | 9/3/2009 |
| Run Time: | 12:06 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 8/25/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | W B SHEPHERD 2 100040 WH MTR | Collected By: | B VANDER |
| Meter: | 80944401 | Effective Date: | 9/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 23.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 74.6326 | |
| Ethane | 14.6024 | 3.90 |
| Propane | 7.1769 | 1.97 |
| I-Butane | 0.3372 | 0.11 |
| N-Butane | 1.5194 | 0.48 |
| I-Pentane | 0.1785 | 0.07 |
| N-Pentane | 0.2143 | 0.08 |
| Nitrogen | 1.0929 | |
| CO2 | 0.0659 | |
| Hexanes+ | 0.1799 | 0.08 |
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| Total: | 100.0000 | 6.69 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1286.0522 |
| BTU/SCF (Saturated): | 1264.6105 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99626 |
| Z Factor (Saturated): | 0.99622 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1286.0522 |
| BTU/SCF (Saturated): | 1264.6105 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99626 |
| Z Factor (Saturated): | 0.99621 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7387 |
| Real Gravity: | 0.7412 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 4473 |
| Run Date: | 8/12/2009 |
| Run Time: | 10:28 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 8/3/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | SYLVANIA CORNETT 100219 WH MTR | Collected By: | B VANDERI |
| Meter: | 80944801 | Effective Date: | 9/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 52.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 68.5293 | |
| Ethane | 21.1361 | 5.64 |
| Propane | 7.5554 | 2.08 |
| I-Butane | 0.4008 | 0.13 |
| N-Butane | 1.3945 | 0.44 |
| I-Pentane | 0.1619 | 0.06 |
| N-Pentane | 0.2233 | 0.08 |
| Nitrogen | 0.3818 | |
| CO2 | 0.0628 | |
| Hexanes+ | 0.1541 | 0.07 |
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| Total: | 100.0000 | 8.50 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1346.8926 |
| BTU/SCF (Saturated): | 1324.3851 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99582 |
| Z Factor (Saturated): | 0.99578 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1346.8926 |
| BTU/SCF (Saturated): | 1324.3851 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99581 |
| Z Factor (Saturated): | 0.99577 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7693 |
| Real Gravity: | 0.7722 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 4070 |
| Run Date: | 7/21/2009 |
| Run Time: | 10:42 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | |
|-------------------------------------|-----------------------------|
| Customer: Chesapeake Energy | Sample Date: 7/14/2009 |
| Field: | Sample Time: 10:00 |
| Station: D H TOLLIVER 100315 WH MTR | Collected By: B VANDER |
| Meter: 80944901 | Effective Date: 8/1/2009 |
| Sample Type: Spot | Sample Pressure: 56.00 PSIG |
| | Sample Temp. (°F): N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 74.0832 | |
| Ethane | 16.9187 | 4.51 |
| Propane | 6.2030 | 1.70 |
| I-Butane | 0.3501 | 0.11 |
| N-Butane | 1.2221 | 0.38 |
| I-Pentane | 0.1541 | 0.06 |
| N-Pentane | 0.2070 | 0.07 |
| Nitrogen | 0.6498 | |
| CO2 | 0.0255 | |
| Hexanes+ | 0.1865 | 0.08 |
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| Total: | 100.0000 | 6.91 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1286.7743 |
| BTU/SCF (Saturated): | 1265.3143 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99627 |
| Z Factor (Saturated): | 0.99623 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1286.7743 |
| BTU/SCF (Saturated): | 1265.3143 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99626 |
| Z Factor (Saturated): | 0.99623 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7335 |
| Real Gravity: | 0.7359 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 4273 |
| Run Date: | 7/29/2009 |
| Run Time: | 17:29 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | |
|-----------------------------------|----------------------------|
| Customer: Chesapeake Energy | Sample Date: 7/20/2009 |
| Field: | Sample Time: 0:00 |
| Station: S B WEBB 2 100111 WH MTR | Collected By: B VANDERF |
| Meter: 80954901 | Effective Date: 8/1/2009 |
| Sample Type: Spot | Sample Pressure: 9.00 PSIG |
| | Sample Temp. (°F): N/G |

| Component | MOL% | GPM |
|---------------|----------|------|
| Methane | 75.5260 | |
| Ethane | 15.8254 | 4.22 |
| Propane | 6.2416 | 1.72 |
| I-Butane | 0.3204 | 0.10 |
| N-Butane | 1.2643 | 0.40 |
| I-Pentane | 0.1537 | 0.06 |
| N-Pentane | 0.1905 | 0.07 |
| Nitrogen | 0.2593 | |
| CO2 | 0.0472 | |
| Hexanes+ | 0.1716 | 0.07 |
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| Total: | 100.0000 | 6.64 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1281.8386 |
| BTU/SCF (Saturated): | 1260.4655 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99632 |
| Z Factor (Saturated): | 0.99628 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1281.8386 |
| BTU/SCF (Saturated): | 1260.4655 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99632 |
| Z Factor (Saturated): | 0.99628 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7267 |
| Real Gravity: | 0.7291 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 4265 |
| Run Date: | 7/29/2009 |
| Run Time: | 16:58 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|------------------------|--------------------|-----------|
| Customer: | Chesapeake Energy | Sample Date: | 7/24/2009 |
| Field: | | Sample Time: | 0:00 |
| Station: | S B WEBB 100185 WH MTR | Collected By: | B VANDERF |
| Meter: | 80955601 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 9.00 PSIG |
| | | Sample Temp. (°F): | N/G |

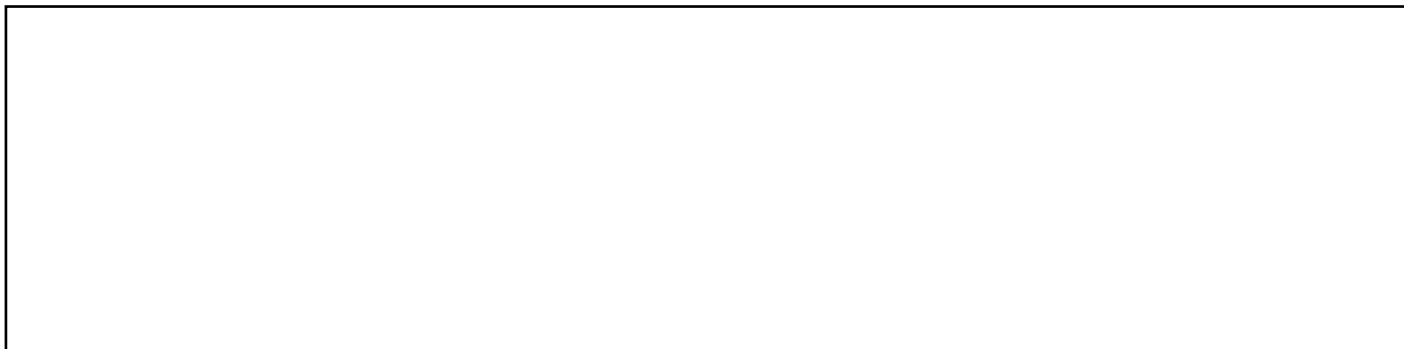
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 71.6013 | |
| Ethane | 18.0020 | 4.80 |
| Propane | 7.5049 | 2.06 |
| I-Butane | 0.3936 | 0.13 |
| N-Butane | 1.5932 | 0.50 |
| I-Pentane | 0.1905 | 0.07 |
| N-Pentane | 0.2393 | 0.09 |
| Nitrogen | 0.2212 | |
| CO2 | 0.0776 | |
| Hexanes+ | 0.1764 | 0.08 |
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| Total: | 100.0000 | 7.73 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1330.0577 |
| BTU/SCF (Saturated): | 1307.8470 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99596 |
| Z Factor (Saturated): | 0.99592 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1330.0577 |
| BTU/SCF (Saturated): | 1307.8470 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99596 |
| Z Factor (Saturated): | 0.99592 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7574 |
| Real Gravity: | 0.7602 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|----------|
| Analysis#: | 4383 |
| Run Date: | 8/4/2009 |
| Run Time: | 18:36 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|---------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/27/2009 |
| Field: | | Sample Time: | 1:00 |
| Station: | E A HAMMOND 100187 WH MTR | Collected By: | B VANDERF |
| Meter: | 80955901 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 42.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|-------|
| Methane | 57.1825 | |
| Ethane | 26.9225 | 7.18 |
| Propane | 11.4149 | 3.14 |
| I-Butane | 0.6315 | 0.21 |
| N-Butane | 2.4322 | 0.76 |
| I-Pentane | 0.2975 | 0.11 |
| N-Pentane | 0.4145 | 0.15 |
| Nitrogen | 0.2345 | |
| CO2 | 0.1203 | |
| Hexanes+ | 0.3496 | 0.15 |
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| Total: | 100.0000 | 11.70 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1499.1492 |
| BTU/SCF (Saturated): | 1473.9889 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99456 |
| Z Factor (Saturated): | 0.99453 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1499.1492 |
| BTU/SCF (Saturated): | 1473.9889 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99455 |
| Z Factor (Saturated): | 0.99452 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8645 |
| Real Gravity: | 0.8689 |

Gross Heating Values are Based
on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.

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Gas Analytical Services, Inc.

P.O. Box 1028
 Bridgeport, WV 26330-0461
 Phone: (304) 623-0020
 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 5185 |
| Run Date: | 9/24/2009 |
| Run Time: | 9:12 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 9/14/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | FRANCES G SPODEN 100484 WH MTR | Collected By: | C HICKS |
| Meter: | 83051901 | Effective Date: | 10/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 56.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 73.1409 | |
| Ethane | 18.6776 | 4.98 |
| Propane | 6.0362 | 1.66 |
| I-Butane | 0.3222 | 0.11 |
| N-Butane | 1.0231 | 0.32 |
| I-Pentane | 0.1147 | 0.04 |
| N-Pentane | 0.1492 | 0.05 |
| Nitrogen | 0.3873 | |
| CO2 | 0.0426 | |
| Hexanes+ | 0.1062 | 0.05 |
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| Total: | 100.0000 | 7.21 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1288.8059 |
| BTU/SCF (Saturated): | 1267.3077 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99626 |
| Z Factor (Saturated): | 0.99622 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1288.8059 |
| BTU/SCF (Saturated): | 1267.3077 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99625 |
| Z Factor (Saturated): | 0.99621 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7322 |
| Real Gravity: | 0.7347 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 7937 |
| Run Date: | 4/15/2010 |
| Run Time: | 12:46 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/7/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | W R SMITH ETAL 100212 WH MTR | Collected By: | C HICKS |
| Meter: | 83960101 | Effective Date: | 5/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 49.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|-------|
| Methane | 62.6710 | |
| Ethane | 24.4946 | 6.53 |
| Propane | 9.5647 | 2.63 |
| I-Butane | 0.4985 | 0.16 |
| N-Butane | 1.7797 | 0.56 |
| I-Pentane | 0.2054 | 0.07 |
| N-Pentane | 0.2680 | 0.10 |
| Nitrogen | 0.2976 | |
| CO2 | 0.0835 | |
| Hexanes+ | 0.1370 | 0.06 |
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| Total: | 100.0000 | 10.11 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1417.3730 |
| BTU/SCF (Saturated): | 1393.6383 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99525 |
| Z Factor (Saturated): | 0.99522 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1417.3730 |
| BTU/SCF (Saturated): | 1393.6383 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99524 |
| Z Factor (Saturated): | 0.99521 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8131 |
| Real Gravity: | 0.8166 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 2440 |
| Run Date: | 4/22/2009 |
| Run Time: | 14:26 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/15/2009 |
| Field: | | Sample Time: | 9:45 |
| Station: | GREEN SLONE 3 100121 WH MTR | Collected By: | C HICKS |
| Meter: | 83988201 | Effective Date: | 5/1/2009 |
| Sample Type: | Continuous | Sample Pressure: | 12.00 PSIG |
| | | Sample Temp. (°F): | N/G |

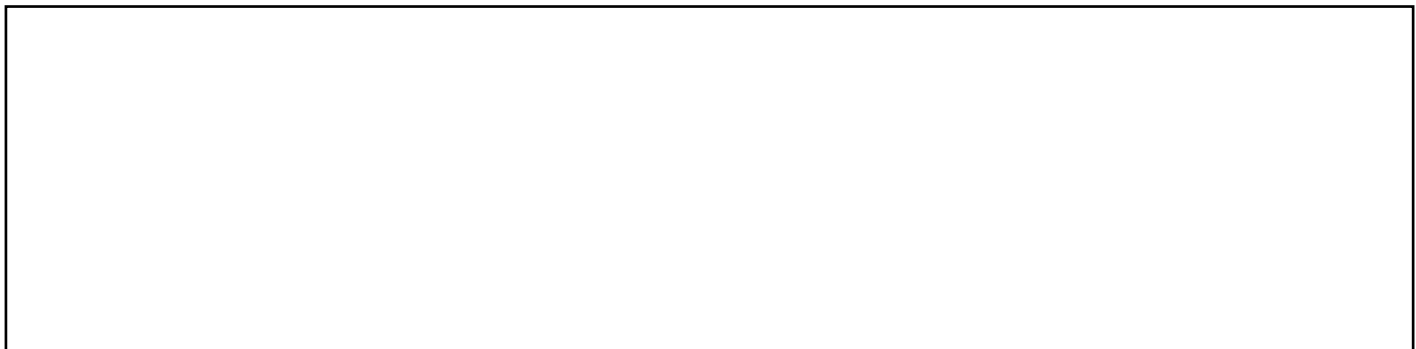
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 64.5173 | |
| Ethane | 21.6470 | 5.77 |
| Propane | 9.4508 | 2.60 |
| I-Butane | 0.5459 | 0.18 |
| N-Butane | 2.0443 | 0.64 |
| I-Pentane | 0.2568 | 0.09 |
| N-Pentane | 0.3316 | 0.12 |
| Nitrogen | 0.8535 | |
| CO2 | 0.0807 | |
| Hexanes+ | 0.2721 | 0.12 |
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| Total: | 100.0000 | 9.52 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1404.2463 |
| BTU/SCF (Saturated): | 1380.7444 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99535 |
| Z Factor (Saturated): | 0.99531 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1404.2463 |
| BTU/SCF (Saturated): | 1380.7444 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99534 |
| Z Factor (Saturated): | 0.99530 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8109 |
| Real Gravity: | 0.8144 |

Gross Heating Values are Based
on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 9052 |
| Run Date: | 6/14/2010 |
| Run Time: | 9:28 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/2/2010 |
| Field: | Lab Only or EM Stations | Sample Time: | 10:00 |
| Station: | 100178 Winston/Slone | Collected By: | B VANDERF |
| Meter: | 83998801 | Effective Date: | 7/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 22.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|------------------|-------------|------------|
| Methane | 66.8404 | |
| Ethane | 21.8074 | 5.82 |
| Propane | 8.4027 | 2.31 |
| I-Butane | 0.4123 | 0.13 |
| N-Butane | 1.6055 | 0.50 |
| I-Pentane | 0.1801 | 0.07 |
| N-Pentane | 0.2392 | 0.09 |
| Nitrogen | 0.2696 | |
| CO2 | 0.0794 | |
| Hexanes+ | 0.1634 | 0.07 |
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| Total: | 100.0000 | 8.99 |

| Analytical Results at Base Conditions (Real) | |
|---|-----------|
| BTU/SCF (Dry): | 1372.5697 |
| BTU/SCF (Saturated): | 1349.6162 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99562 |
| Z Factor (Saturated): | 0.99559 |

| Analytical Results at Contract Conditions (Real) | |
|---|-----------|
| BTU/SCF (Dry): | 1372.5697 |
| BTU/SCF (Saturated): | 1349.6162 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99561 |
| Z Factor (Saturated): | 0.99558 |

| Calculated Specific Gravities | |
|--------------------------------------|--------|
| Ideal Gravity: | 0.7845 |
| Real Gravity: | 0.7876 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.

Empty box for additional analysis notes or comments.



Gas Analytical Services, Inc.

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| | |
|------------|-----------|
| Analysis#: | 1378 |
| Run Date: | 2/25/2009 |
| Run Time: | 14:42 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 2/16/2009 |
| Field: | | Sample Time: | 12:15 |
| Station: | JOHN J HOWARD HEIRS 100346 WH | Collected By: | C HICKS |
| Meter: | 84013601 | Effective Date: | 3/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 25.00 PSIG |
| | | Sample Temp. (°F): | N/G |

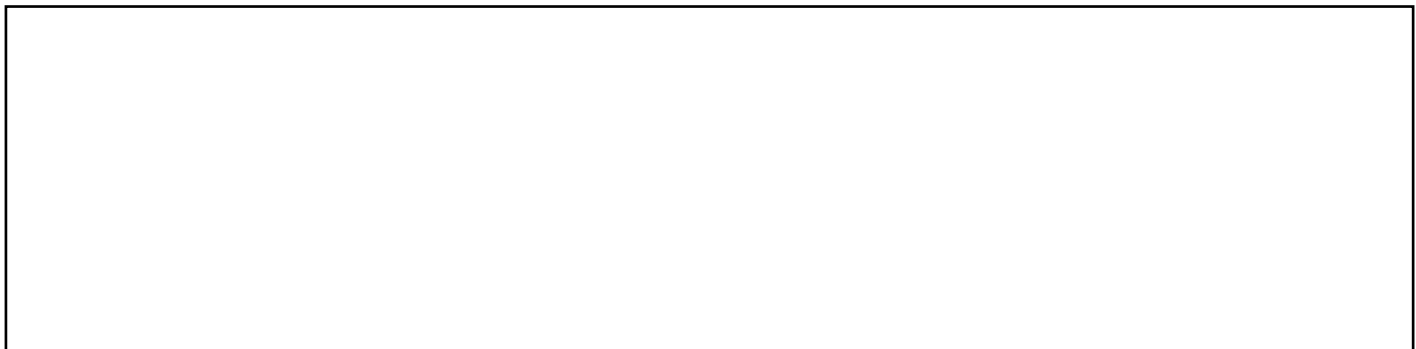
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 81.9261 | |
| Ethane | 11.0300 | 2.94 |
| Propane | 4.1957 | 1.15 |
| I-Butane | 0.2714 | 0.09 |
| N-Butane | 0.8891 | 0.28 |
| I-Pentane | 0.1572 | 0.06 |
| N-Pentane | 0.1696 | 0.06 |
| Nitrogen | 1.0685 | |
| CO2 | 0.1158 | |
| Hexanes+ | 0.1766 | 0.08 |
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| Total: | 100.0000 | 4.66 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1194.6578 |
| BTU/SCF (Saturated): | 1174.8003 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99690 |
| Z Factor (Saturated): | 0.99685 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1194.6578 |
| BTU/SCF (Saturated): | 1174.8003 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99689 |
| Z Factor (Saturated): | 0.99685 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6813 |
| Real Gravity: | 0.6831 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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 Phone: (304) 623-0020
 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 9585 |
| Run Date: | 7/14/2010 |
| Run Time: | 12:37 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/8/2010 |
| Field: | Lab Only or EM Stations | Sample Time: | 0:00 |
| Station: | 100366 | Collected By: | B VANDER |
| Meter: | 84038801 | Effective Date: | 8/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 16.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 76.9630 | |
| Ethane | 11.7305 | 3.13 |
| Propane | 6.2160 | 1.71 |
| I-Butane | 0.5292 | 0.17 |
| N-Butane | 1.7226 | 0.54 |
| I-Pentane | 0.3320 | 0.12 |
| N-Pentane | 0.3956 | 0.14 |
| Nitrogen | 1.6370 | |
| CO2 | 0.0660 | |
| Hexanes+ | 0.4081 | 0.18 |
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| Total: | 100.0000 | 5.99 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1272.3754 |
| BTU/SCF (Saturated): | 1251.1731 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99635 |
| Z Factor (Saturated): | 0.99631 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1272.3754 |
| BTU/SCF (Saturated): | 1251.1731 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99635 |
| Z Factor (Saturated): | 0.99630 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7361 |
| Real Gravity: | 0.7385 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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Phone: (304) 623-0020
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Analysis#: 3309
Run Date: 6/9/2009
Run Time: 18:39
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|---------------------|--------------------------------|---------------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/4/2009 |
| Field: | | Sample Time: | 0:00 |
| Station: | OPAL RISNER ETAL 100441 WH MTR | Collected By: | B VANDERF |
| Meter: | 84039801 | Effective Date: | 7/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 64.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|---------------|-----------------|-------------|
| Methane | 75.6919 | |
| Ethane | 16.7318 | 4.46 |
| Propane | 5.3234 | 1.46 |
| I-Butane | 0.2850 | 0.09 |
| N-Butane | 0.9705 | 0.31 |
| I-Pentane | 0.1136 | 0.04 |
| N-Pentane | 0.1519 | 0.05 |
| Nitrogen | 0.6118 | |
| CO2 | 0.0280 | |
| Hexanes+ | 0.0921 | 0.04 |
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| Total: | 100.0000 | 6.45 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1258.1598 |
| BTU/SCF (Saturated): | 1237.1953 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99647 |
| Z Factor (Saturated): | 0.99643 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1258.1598 |
| BTU/SCF (Saturated): | 1237.1953 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99647 |
| Z Factor (Saturated): | 0.99643 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7151 |
| Real Gravity: | 0.7173 |

Gross Heating Values are Based
on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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FAX: (304) 624-8065

| | |
|------------|----------|
| Analysis#: | 3718 |
| Run Date: | 7/2/2009 |
| Run Time: | 10:58 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/15/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | KENTUCKY/WV GAS CO 100316 WH M | Collected By: | B VANDER |
| Meter: | 84039901 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 31.00 PSIG |
| | | Sample Temp. (°F): | N/G |

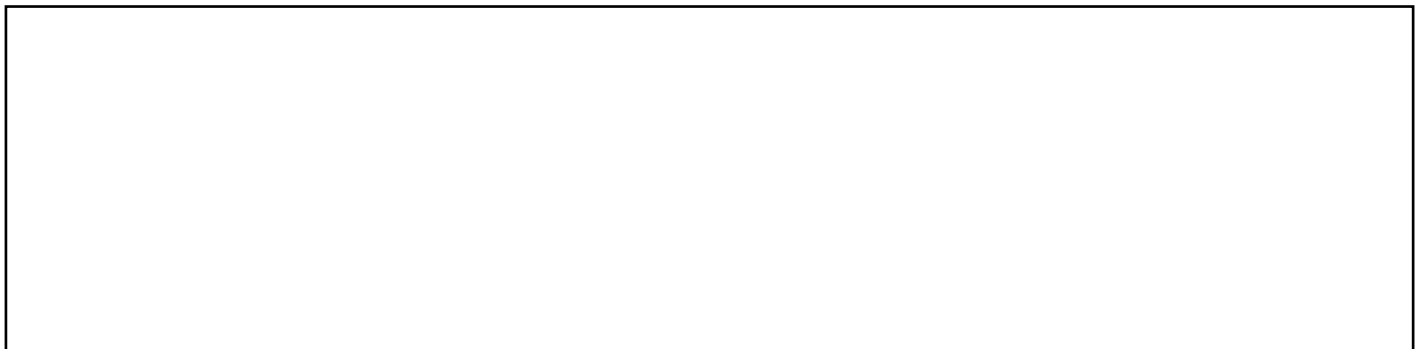
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 74.6734 | |
| Ethane | 14.4131 | 3.84 |
| Propane | 6.8252 | 1.88 |
| I-Butane | 0.4364 | 0.14 |
| N-Butane | 1.6246 | 0.51 |
| I-Pentane | 0.2342 | 0.09 |
| N-Pentane | 0.2973 | 0.11 |
| Nitrogen | 1.1662 | |
| CO2 | 0.0349 | |
| Hexanes+ | 0.2947 | 0.13 |
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| Total: | 100.0000 | 6.70 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1292.4612 |
| BTU/SCF (Saturated): | 1270.9075 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99622 |
| Z Factor (Saturated): | 0.99618 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1292.4612 |
| BTU/SCF (Saturated): | 1270.9075 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99621 |
| Z Factor (Saturated): | 0.99617 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7430 |
| Real Gravity: | 0.7455 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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| | |
|------------|------------|
| Analysis#: | 6309 |
| Run Date: | 12/17/2009 |
| Run Time: | 11:14 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|---------------------|-------------------------|---------------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 12/5/2009 |
| Field: | Lab Only or EM Stations | Sample Time: | 10:00 |
| Station: | 100306 | Collected By: | C HICKS |
| Meter: | 84040001 | Effective Date: | 1/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 85.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|---------------|----------|------|
| Methane | 77.0366 | |
| Ethane | 13.6850 | 3.65 |
| Propane | 5.9693 | 1.64 |
| I-Butane | 0.3400 | 0.11 |
| N-Butane | 1.1904 | 0.37 |
| I-Pentane | 0.1504 | 0.05 |
| N-Pentane | 0.1690 | 0.06 |
| Nitrogen | 1.3412 | |
| CO2 | 0.0087 | |
| Hexanes+ | 0.1094 | 0.05 |
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| Total: | 100.0000 | 5.93 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1245.9244 |
| BTU/SCF (Saturated): | 1225.1780 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99654 |
| Z Factor (Saturated): | 0.99650 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1245.9244 |
| BTU/SCF (Saturated): | 1225.1780 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99654 |
| Z Factor (Saturated): | 0.99649 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7149 |
| Real Gravity: | 0.7171 |

| |
|---|
| Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8. |
|---|





Gas Analytical Services, Inc.

P.O. Box 1028
Bridgeport, WV 26330-0461
Phone: (304) 623-0020
FAX: (304) 624-8065

Analysis#: 3315
Run Date: 6/10/2009
Run Time: 7:54
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/2/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | BELLE HAMMONDS ETAL 100468 WH | Collected By: | B VANDERF |
| Meter: | 84040101 | Effective Date: | 7/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 53.00 PSIG |
| | | Sample Temp. (°F): | N/G |

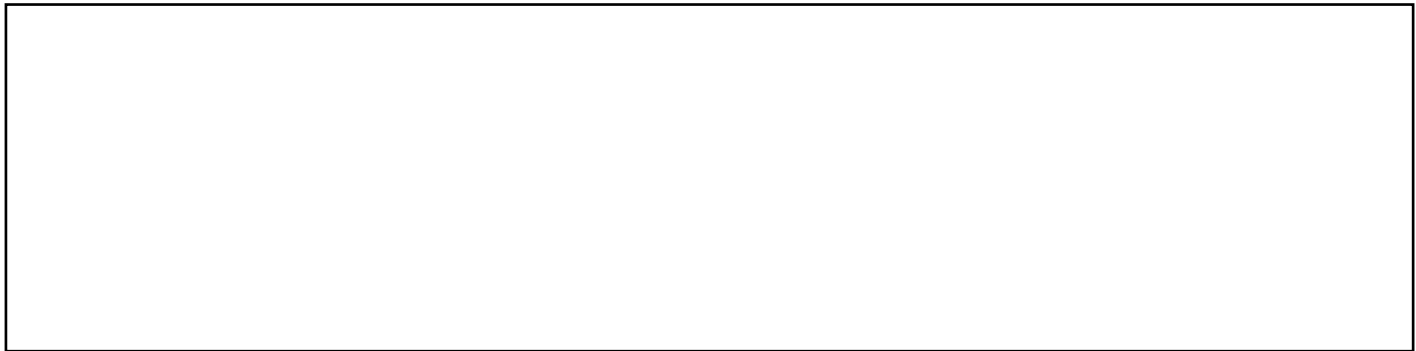
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 74.7067 | |
| Ethane | 17.3777 | 4.64 |
| Propane | 5.6630 | 1.56 |
| I-Butane | 0.3050 | 0.10 |
| N-Butane | 1.0467 | 0.33 |
| I-Pentane | 0.1198 | 0.04 |
| N-Pentane | 0.1697 | 0.06 |
| Nitrogen | 0.4276 | |
| CO2 | 0.0415 | |
| Hexanes+ | 0.1423 | 0.06 |
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| Total: | 100.0000 | 6.79 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1275.1012 |
| BTU/SCF (Saturated): | 1253.8419 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99636 |
| Z Factor (Saturated): | 0.99632 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1275.1012 |
| BTU/SCF (Saturated): | 1253.8419 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99635 |
| Z Factor (Saturated): | 0.99632 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7240 |
| Real Gravity: | 0.7263 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

P.O. Box 1028
Bridgeport, WV 26330-0461
Phone: (304) 623-0020
FAX: (304) 624-8065

Analysis#: 3704
Run Date: 7/2/2009
Run Time: 8:27
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|-----------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/15/2009 |
| Field: | | Sample Time: | 10:00 |
| Station: | GULLETT HEIRS 100295 WH MTR | Collected By: | B VANDERF |
| Meter: | 84040201 | Effective Date: | 8/1/2009 |
| Sample Type: | Spot | Sample Pressure: | 33.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 76.3662 | |
| Ethane | 13.4707 | 3.59 |
| Propane | 6.2495 | 1.72 |
| I-Butane | 0.2970 | 0.10 |
| N-Butane | 1.2672 | 0.40 |
| I-Pentane | 0.1493 | 0.05 |
| N-Pentane | 0.1771 | 0.06 |
| Nitrogen | 1.8337 | |
| CO2 | 0.0443 | |
| Hexanes+ | 0.1450 | 0.06 |
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| | | |
| Total: | 100.0000 | 5.98 |

Analytical Results at Base Conditions (Real)

| | |
|-----------------------|-----------|
| BTU/SCF (Dry): | 1245.6499 |
| BTU/SCF (Saturated): | 1224.9095 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99652 |
| Z Factor (Saturated): | 0.99647 |

Analytical Results at Contract Conditions (Real)

| | |
|-----------------------|-----------|
| BTU/SCF (Dry): | 1245.6499 |
| BTU/SCF (Saturated): | 1224.9095 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99651 |
| Z Factor (Saturated): | 0.99647 |

Calculated Specific Gravities

| | |
|----------------|--------|
| Ideal Gravity: | 0.7206 |
| Real Gravity: | 0.7228 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.



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| | |
|------------|-----------|
| Analysis#: | 9330 |
| Run Date: | 6/25/2010 |
| Run Time: | 12:10 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 6/19/2010 |
| Field: | Lab Only or EM Stations | Sample Time: | 0:00 |
| Station: | J H HAMMONS ETAL 9 100278 WH M | Collected By: | C HICKS |
| Meter: | 84071201 | Effective Date: | 7/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 28.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 81.5934 | |
| Ethane | 11.6030 | 3.10 |
| Propane | 4.2495 | 1.17 |
| I-Butane | 0.2502 | 0.08 |
| N-Butane | 0.9351 | 0.29 |
| I-Pentane | 0.1393 | 0.05 |
| N-Pentane | 0.1818 | 0.07 |
| Nitrogen | 0.8238 | |
| CO2 | 0.0384 | |
| Hexanes+ | 0.1855 | 0.08 |
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| Total: | 100.0000 | 4.84 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1203.9379 |
| BTU/SCF (Saturated): | 1183.9187 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99685 |
| Z Factor (Saturated): | 0.99681 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1203.9379 |
| BTU/SCF (Saturated): | 1183.9187 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99685 |
| Z Factor (Saturated): | 0.99681 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6835 |
| Real Gravity: | 0.6854 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

P.O. Box 1028
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Phone: (304) 623-0020
FAX: (304) 624-8065

Analysis#: 6348
Run Date: 12/21/2009
Run Time: 9:32
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 12/7/2009 |
| Field: | Lab Only or EM Stations | Sample Time: | 10:00 |
| Station: | 100318 | Collected By: | B VANDERI |
| Meter: | 84071301 | Effective Date: | 1/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 18.00 PSIG |
| | | Sample Temp. (°F): | N/G |

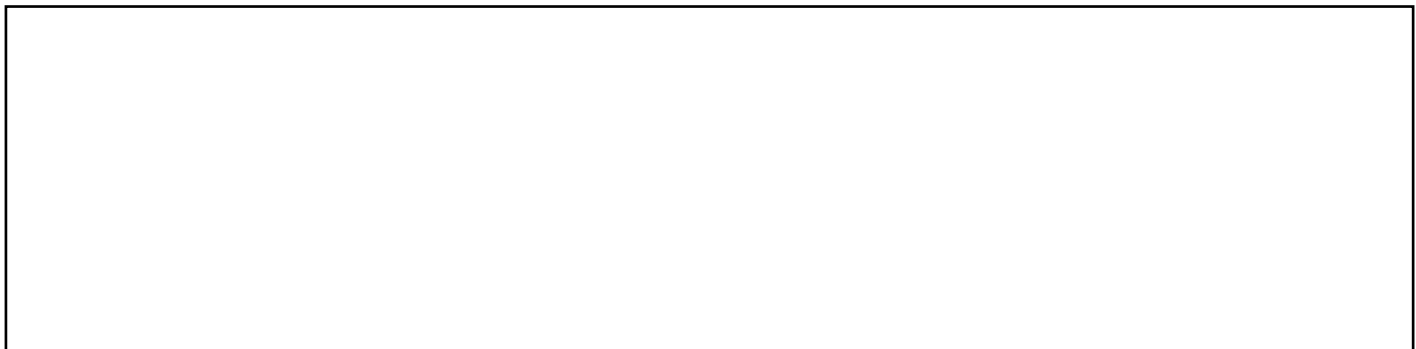
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 74.3361 | |
| Ethane | 14.6989 | 3.92 |
| Propane | 7.0117 | 1.93 |
| I-Butane | 0.4614 | 0.15 |
| N-Butane | 1.7423 | 0.55 |
| I-Pentane | 0.2601 | 0.09 |
| N-Pentane | 0.3349 | 0.12 |
| Nitrogen | 0.7867 | |
| CO2 | 0.0326 | |
| Hexanes+ | 0.3353 | 0.15 |
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| Total: | 100.0000 | 6.91 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1308.3079 |
| BTU/SCF (Saturated): | 1286.4788 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99612 |
| Z Factor (Saturated): | 0.99608 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1308.3079 |
| BTU/SCF (Saturated): | 1286.4788 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99612 |
| Z Factor (Saturated): | 0.99607 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7491 |
| Real Gravity: | 0.7517 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 8525 |
| Run Date: | 5/17/2010 |
| Run Time: | 13:02 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 5/1/2010 |
| Field: | Lab Only or EM Stations | Sample Time: | 10:00 |
| Station: | 100169 | Collected By: | C HICKS |
| Meter: | 84105301 | Effective Date: | 6/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 17.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 64.6504 | |
| Ethane | 22.0222 | 5.87 |
| Propane | 9.7279 | 2.67 |
| I-Butane | 0.5374 | 0.18 |
| N-Butane | 2.0498 | 0.64 |
| I-Pentane | 0.2436 | 0.09 |
| N-Pentane | 0.3195 | 0.12 |
| Nitrogen | 0.2328 | |
| CO2 | 0.0390 | |
| Hexanes+ | 0.1774 | 0.08 |
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| Total: | 100.0000 | 9.65 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1413.3556 |
| BTU/SCF (Saturated): | 1389.6951 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99531 |
| Z Factor (Saturated): | 0.99527 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1413.3556 |
| BTU/SCF (Saturated): | 1389.6951 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99530 |
| Z Factor (Saturated): | 0.99526 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.8094 |
| Real Gravity: | 0.8129 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|------------|
| Analysis#: | 6213 |
| Run Date: | 12/10/2009 |
| Run Time: | 9:32 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 12/3/2009 |
| Field: | Lab Only or EM Stations | Sample Time: | 10:00 |
| Station: | 100253 | Collected By: | B VANDERI |
| Meter: | 84105801 | Effective Date: | 1/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 12.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 73.0384 | |
| Ethane | 16.3682 | 4.37 |
| Propane | 7.2539 | 1.99 |
| I-Butane | 0.3596 | 0.12 |
| N-Butane | 1.4459 | 0.45 |
| I-Pentane | 0.1704 | 0.06 |
| N-Pentane | 0.2269 | 0.08 |
| Nitrogen | 0.8950 | |
| CO2 | 0.0501 | |
| Hexanes+ | 0.1916 | 0.08 |
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| Total: | 100.0000 | 7.15 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1302.5000 |
| BTU/SCF (Saturated): | 1280.7698 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99615 |
| Z Factor (Saturated): | 0.99610 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1302.5000 |
| BTU/SCF (Saturated): | 1280.7698 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99614 |
| Z Factor (Saturated): | 0.99610 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7467 |
| Real Gravity: | 0.7493 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

P.O. Box 1028
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 Phone: (304) 623-0020
 FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 9314 |
| Run Date: | 7/15/2010 |
| Run Time: | 16:22 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|-----------|
| Customer: | Chesapeake Energy | Sample Date: | 6/19/2010 |
| Field: | Lab Only or EM Stations | Sample Time: | 0:00 |
| Station: | 100382 | Collected By: | C HICKS |
| Meter: | 84106001 | Effective Date: | 7/1/2010 |
| Sample Type: | Spot | Sample Pressure: | N/G |
| | | Sample Temp. (°F): | N/G |

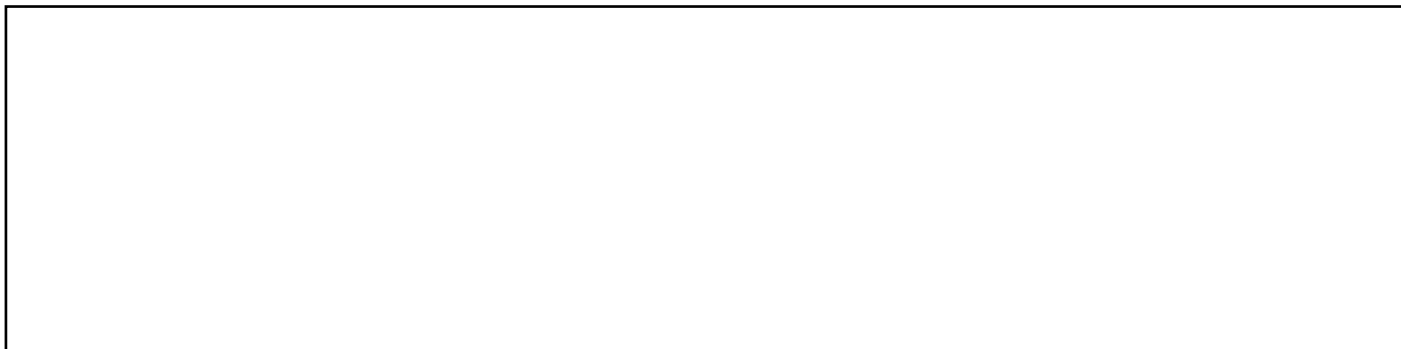
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 74.6202 | |
| Ethane | 14.5656 | 3.89 |
| Propane | 6.9617 | 1.91 |
| I-Butane | 0.4961 | 0.16 |
| N-Butane | 1.6789 | 0.53 |
| I-Pentane | 0.2557 | 0.09 |
| N-Pentane | 0.3086 | 0.11 |
| Nitrogen | 0.8027 | |
| CO2 | 0.0498 | |
| Hexanes+ | 0.2607 | 0.11 |
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| Total: | 100.0000 | 6.80 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1301.4600 |
| BTU/SCF (Saturated): | 1279.7502 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99617 |
| Z Factor (Saturated): | 0.99612 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1301.4600 |
| BTU/SCF (Saturated): | 1279.7502 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99616 |
| Z Factor (Saturated): | 0.99612 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7453 |
| Real Gravity: | 0.7479 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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Phone: (304) 623-0020
FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 7507 |
| Run Date: | 3/24/2010 |
| Run Time: | 8:53 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/20/2010 |
| Field: | Lab Only or EM Stations | Sample Time: | 10:00 |
| Station: | 100499 | Collected By: | C HICKS |
| Meter: | 84106601 | Effective Date: | 4/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 20.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 71.9645 | |
| Ethane | 19.0098 | 5.07 |
| Propane | 6.5302 | 1.79 |
| I-Butane | 0.3472 | 0.11 |
| N-Butane | 1.1872 | 0.37 |
| I-Pentane | 0.1425 | 0.05 |
| N-Pentane | 0.1985 | 0.07 |
| Nitrogen | 0.4571 | |
| CO2 | 0.0424 | |
| Hexanes+ | 0.1206 | 0.05 |
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| Total: | 100.0000 | 7.51 |

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|-----------------------|-----------|
| BTU/SCF (Dry): | 1305.4896 |
| BTU/SCF (Saturated): | 1283.7023 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99613 |
| Z Factor (Saturated): | 0.99609 |

| | |
|-----------------------|-----------|
| BTU/SCF (Dry): | 1305.4896 |
| BTU/SCF (Saturated): | 1283.7023 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99613 |
| Z Factor (Saturated): | 0.99609 |

| | |
|----------------|--------|
| Ideal Gravity: | 0.7435 |
| Real Gravity: | 0.7461 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.

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Phone: (304) 623-0020
FAX: (304) 624-8065

| | |
|------------|-----------|
| Analysis#: | 7668 |
| Run Date: | 3/31/2010 |
| Run Time: | 12:47 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/27/2010 |
| Field: | Lab Only or EM Stations | Sample Time: | 10:00 |
| Station: | 100475 | Collected By: | C HICKS |
| Meter: | 84106701 | Effective Date: | 4/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 21.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 70.6900 | |
| Ethane | 19.2615 | 5.14 |
| Propane | 6.7834 | 1.86 |
| I-Butane | 0.3641 | 0.12 |
| N-Butane | 1.3260 | 0.42 |
| I-Pentane | 0.1611 | 0.06 |
| N-Pentane | 0.2392 | 0.09 |
| Nitrogen | 0.9320 | |
| CO2 | 0.0584 | |
| Hexanes+ | 0.1843 | 0.08 |
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| Total: | 100.0000 | 7.77 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1314.3337 |
| BTU/SCF (Saturated): | 1292.3931 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99604 |
| Z Factor (Saturated): | 0.99601 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1314.3337 |
| BTU/SCF (Saturated): | 1292.3931 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99604 |
| Z Factor (Saturated): | 0.99600 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7546 |
| Real Gravity: | 0.7573 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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| | |
|------------|-----------|
| Analysis#: | 7499 |
| Run Date: | 3/23/2010 |
| Run Time: | 10:23 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/20/2010 |
| Field: | Lab Only or EM Stations | Sample Time: | 10:00 |
| Station: | 100501 | Collected By: | C HICKS |
| Meter: | 84106801 | Effective Date: | 4/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 20.00 PSIG |
| | | Sample Temp. (°F): | N/G |

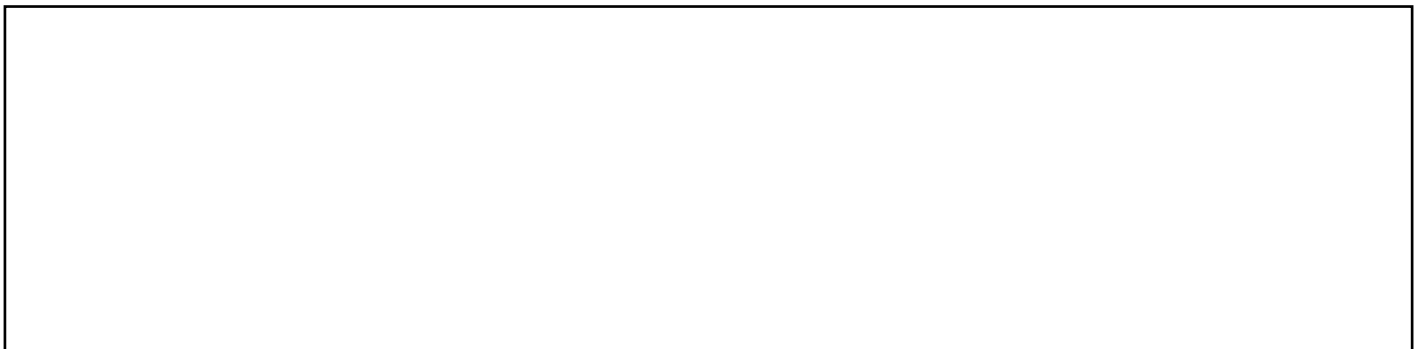
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 69.1177 | |
| Ethane | 20.5788 | 5.49 |
| Propane | 7.4992 | 2.06 |
| I-Butane | 0.4046 | 0.13 |
| N-Butane | 1.4361 | 0.45 |
| I-Pentane | 0.1720 | 0.06 |
| N-Pentane | 0.2481 | 0.09 |
| Nitrogen | 0.4086 | |
| CO2 | 0.0000 | |
| Hexanes+ | 0.1349 | 0.06 |
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| Total: | 100.0000 | 8.34 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1343.3849 |
| BTU/SCF (Saturated): | 1320.9386 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99585 |
| Z Factor (Saturated): | 0.99581 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1343.3849 |
| BTU/SCF (Saturated): | 1320.9386 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99584 |
| Z Factor (Saturated): | 0.99581 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7663 |
| Real Gravity: | 0.7692 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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| | |
|------------|------------|
| Analysis#: | 6222 |
| Run Date: | 12/10/2009 |
| Run Time: | 10:29 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

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|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 12/3/2009 |
| Field: | Lab Only or EM Stations | Sample Time: | 10:00 |
| Station: | FRANCIS G SPODEN 100476 WH MTR | Collected By: | B VANDERF |
| Meter: | 84107001 | Effective Date: | 1/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 18.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 70.8745 | |
| Ethane | 19.5304 | 5.21 |
| Propane | 6.8466 | 1.88 |
| I-Butane | 0.3804 | 0.12 |
| N-Butane | 1.3201 | 0.42 |
| I-Pentane | 0.1616 | 0.06 |
| N-Pentane | 0.2246 | 0.08 |
| Nitrogen | 0.4214 | |
| CO2 | 0.0635 | |
| Hexanes+ | 0.1769 | 0.08 |
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| Total: | 100.0000 | 7.85 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1322.0332 |
| BTU/SCF (Saturated): | 1299.9581 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99601 |
| Z Factor (Saturated): | 0.99597 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1322.0332 |
| BTU/SCF (Saturated): | 1299.9581 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99600 |
| Z Factor (Saturated): | 0.99597 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7541 |
| Real Gravity: | 0.7568 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

P.O. Box 1028
Bridgeport, WV 26330-0461
Phone: (304) 623-0020
FAX: (304) 624-8065

Analysis#: 6304
Run Date: 12/17/2009
Run Time: 11:09
Cylinder#:

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|-----------|
| Customer: | Chesapeake Energy | Sample Date: | 12/8/2009 |
| Field: | Lab Only or EM Stations | Sample Time: | 10:00 |
| Station: | 100474 | Collected By: | C HICKS |
| Meter: | 84107101 | Effective Date: | 1/1/2010 |
| Sample Type: | Spot | Sample Pressure: | N/G |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 69.7828 | |
| Ethane | 20.0743 | 5.35 |
| Propane | 7.1226 | 1.96 |
| I-Butane | 0.3970 | 0.13 |
| N-Butane | 1.3806 | 0.43 |
| I-Pentane | 0.1684 | 0.06 |
| N-Pentane | 0.2339 | 0.08 |
| Nitrogen | 0.5939 | |
| CO2 | 0.0478 | |
| Hexanes+ | 0.1987 | 0.09 |
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| Total: | 100.0000 | 8.10 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1332.0267 |
| BTU/SCF (Saturated): | 1309.7778 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99593 |
| Z Factor (Saturated): | 0.99589 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1332.0267 |
| BTU/SCF (Saturated): | 1309.7778 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99592 |
| Z Factor (Saturated): | 0.99588 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7618 |
| Real Gravity: | 0.7646 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.



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| | |
|------------|------------|
| Analysis#: | 6327 |
| Run Date: | 12/17/2009 |
| Run Time: | 12:08 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | |
|--------------------------------|-----------------------------|
| Customer: Chesapeake Energy | Sample Date: 12/8/2009 |
| Field: Lab Only or EM Stations | Sample Time: 10:00 |
| Station: 100481 | Collected By: C HICKS |
| Meter: 84107201 | Effective Date: 1/1/2010 |
| Sample Type: Spot | Sample Pressure: 16.00 PSIG |
| | Sample Temp. (°F): N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 72.1972 | |
| Ethane | 18.4027 | 4.91 |
| Propane | 6.5137 | 1.79 |
| I-Butane | 0.3935 | 0.13 |
| N-Butane | 1.2951 | 0.41 |
| I-Pentane | 0.1755 | 0.06 |
| N-Pentane | 0.2340 | 0.08 |
| Nitrogen | 0.5365 | |
| CO2 | 0.0451 | |
| Hexanes+ | 0.2067 | 0.09 |
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| Total: | 100.0000 | 7.47 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1308.9198 |
| BTU/SCF (Saturated): | 1287.0735 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99611 |
| Z Factor (Saturated): | 0.99607 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1308.9198 |
| BTU/SCF (Saturated): | 1287.0735 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99610 |
| Z Factor (Saturated): | 0.99606 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7469 |
| Real Gravity: | 0.7495 |

Gross Heating Values are Based
 on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 8022 |
| Run Date: | 4/21/2010 |
| Run Time: | 12:51 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 4/15/2010 |
| Field: | Lab Only or EM Stations | Sample Time: | 10:00 |
| Station: | 100478 | Collected By: | C HICKS |
| Meter: | 84107301 | Effective Date: | 5/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 26.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 77.6371 | |
| Ethane | 15.9892 | 4.27 |
| Propane | 4.5736 | 1.26 |
| I-Butane | 0.2305 | 0.08 |
| N-Butane | 0.6971 | 0.22 |
| I-Pentane | 0.0778 | 0.03 |
| N-Pentane | 0.1044 | 0.04 |
| Nitrogen | 0.5410 | |
| CO2 | 0.0289 | |
| Hexanes+ | 0.1204 | 0.05 |
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| Total: | 100.0000 | 5.95 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1232.8536 |
| BTU/SCF (Saturated): | 1212.3275 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99665 |
| Z Factor (Saturated): | 0.99661 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1232.8536 |
| BTU/SCF (Saturated): | 1212.3275 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99665 |
| Z Factor (Saturated): | 0.99661 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6982 |
| Real Gravity: | 0.7003 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
Compressibility is Calculated using AGA-8.





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P.O. Box 1028
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|------------|-----------|
| Analysis#: | 7662 |
| Run Date: | 3/31/2010 |
| Run Time: | 12:39 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 3/27/2010 |
| Field: | Lab Only or EM Stations | Sample Time: | 10:00 |
| Station: | 100477 | Collected By: | C HICKS |
| Meter: | 84107601 | Effective Date: | 4/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 21.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 69.5438 | |
| Ethane | 20.2557 | 5.40 |
| Propane | 7.2435 | 1.99 |
| I-Butane | 0.3878 | 0.13 |
| N-Butane | 1.4018 | 0.44 |
| I-Pentane | 0.1664 | 0.06 |
| N-Pentane | 0.2394 | 0.09 |
| Nitrogen | 0.5090 | |
| CO2 | 0.0681 | |
| Hexanes+ | 0.1845 | 0.08 |
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| Total: | 100.0000 | 8.19 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1335.7291 |
| BTU/SCF (Saturated): | 1313.4160 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99590 |
| Z Factor (Saturated): | 0.99586 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1335.7291 |
| BTU/SCF (Saturated): | 1313.4160 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99589 |
| Z Factor (Saturated): | 0.99586 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7636 |
| Real Gravity: | 0.7664 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.

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| | |
|------------|----------|
| Analysis#: | 9816 |
| Run Date: | 8/4/2010 |
| Run Time: | 10:48 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/24/2010 |
| Field: | Lab Only or EM Stations | Sample Time: | 0:00 |
| Station: | Lindey/Ambargey 100372 | Collected By: | C HICKS |
| Meter: | 1010037201 | Effective Date: | 8/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 54.00 PSIG |
| | | Sample Temp. (°F): | N/G |

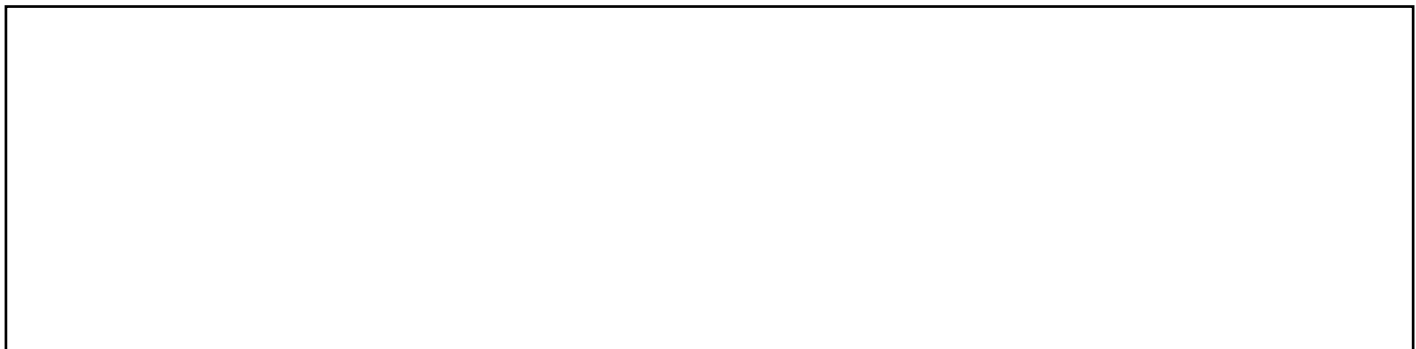
| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 69.3040 | |
| Ethane | 20.7171 | 5.53 |
| Propane | 7.3368 | 2.02 |
| I-Butane | 0.3720 | 0.12 |
| N-Butane | 1.3686 | 0.43 |
| I-Pentane | 0.1567 | 0.06 |
| N-Pentane | 0.2159 | 0.08 |
| Nitrogen | 0.3242 | |
| CO2 | 0.0473 | |
| Hexanes+ | 0.1574 | 0.07 |
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| Total: | 100.0000 | 8.31 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1339.5552 |
| BTU/SCF (Saturated): | 1317.1746 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99588 |
| Z Factor (Saturated): | 0.99584 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1339.5552 |
| BTU/SCF (Saturated): | 1317.1746 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99587 |
| Z Factor (Saturated): | 0.99584 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7638 |
| Real Gravity: | 0.7666 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261.
 Compressibility is Calculated using AGA-8.





Gas Analytical Services, Inc.

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 FAX: (304) 624-8065

| | |
|------------|----------|
| Analysis#: | 9924 |
| Run Date: | 8/4/2010 |
| Run Time: | 17:28 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

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|--------------|-------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 7/26/2010 |
| Field: | Lab Only or EM Stations | Sample Time: | 0:00 |
| Station: | RL Adams 100375 | Collected By: | C HICKS |
| Meter: | 1010037501 | Effective Date: | 8/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 42.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 75.5091 | |
| Ethane | 16.8784 | 4.50 |
| Propane | 5.4627 | 1.50 |
| I-Butane | 0.2818 | 0.09 |
| N-Butane | 0.9884 | 0.31 |
| I-Pentane | 0.1144 | 0.04 |
| N-Pentane | 0.1536 | 0.06 |
| Nitrogen | 0.4792 | |
| CO2 | 0.0181 | |
| Hexanes+ | 0.1143 | 0.05 |
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| Total: | 100.0000 | 6.55 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1264.2122 |
| BTU/SCF (Saturated): | 1243.1426 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99644 |
| Z Factor (Saturated): | 0.99640 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1264.2122 |
| BTU/SCF (Saturated): | 1243.1426 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99643 |
| Z Factor (Saturated): | 0.99639 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7173 |
| Real Gravity: | 0.7196 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 10672 |
| Run Date: | 9/21/2010 |
| Run Time: | 11:32 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 9/3/2010 |
| Field: | Lab Only or EM Stations | Sample Time: | 0:00 |
| Station: | Jethro Amburgey ETAL 100417 CT | Collected By: | C HICKS |
| Meter: | 1010041701 | Effective Date: | 10/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 55.00 PSIG |
| | | Sample Temp. (°F): | 74 |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 72.8052 | |
| Ethane | 15.6369 | 4.17 |
| Propane | 7.2046 | 1.98 |
| I-Butane | 0.5289 | 0.17 |
| N-Butane | 1.8074 | 0.57 |
| I-Pentane | 0.2909 | 0.11 |
| N-Pentane | 0.4017 | 0.15 |
| Nitrogen | 0.7833 | |
| CO2 | 0.0201 | |
| Hexanes+ | 0.5210 | 0.23 |
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| Total: | 100.0000 | 7.38 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1332.4391 |
| BTU/SCF (Saturated): | 1310.1891 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99594 |
| Z Factor (Saturated): | 0.99590 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1332.4391 |
| BTU/SCF (Saturated): | 1310.1891 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99594 |
| Z Factor (Saturated): | 0.99590 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.7641 |
| Real Gravity: | 0.7669 |

Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8.





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| | |
|------------|-----------|
| Analysis#: | 6531 |
| Run Date: | 1/19/2010 |
| Run Time: | 12:02 |
| Cylinder#: | |

FRACTIONAL ANALYSIS

| | | | |
|--------------|--------------------|--------------------|------------|
| Customer: | Chesapeake Energy | Sample Date: | 1/11/2010 |
| Field: | | Sample Time: | 10:00 |
| Station: | VINA COLLINS ET AL | Collected By: | C HICKS |
| Meter: | 1010049601 | Effective Date: | 2/1/2010 |
| Sample Type: | Spot | Sample Pressure: | 50.00 PSIG |
| | | Sample Temp. (°F): | N/G |

| Component | MOL% | GPM |
|-----------|----------|------|
| Methane | 81.1466 | |
| Ethane | 12.4653 | 3.33 |
| Propane | 4.0789 | 1.12 |
| I-Butane | 0.2420 | 0.08 |
| N-Butane | 0.7222 | 0.23 |
| I-Pentane | 0.0989 | 0.04 |
| N-Pentane | 0.1209 | 0.04 |
| Nitrogen | 0.9242 | |
| CO2 | 0.1053 | |
| Hexanes+ | 0.0957 | 0.04 |
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| Total: | 100.0000 | 4.88 |

| Analytical Results at Base Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1194.4095 |
| BTU/SCF (Saturated): | 1174.5542 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99690 |
| Z Factor (Saturated): | 0.99686 |

| Analytical Results at Contract Conditions (Real) | |
|--|-----------|
| BTU/SCF (Dry): | 1194.4095 |
| BTU/SCF (Saturated): | 1174.5542 |
| PSIA: | 14.7300 |
| Temperature (°F): | 60.00 |
| Z Factor (Dry): | 0.99689 |
| Z Factor (Saturated): | 0.99685 |

| Calculated Specific Gravities | |
|-------------------------------|--------|
| Ideal Gravity: | 0.6795 |
| Real Gravity: | 0.6813 |

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|--|
| Gross Heating Values are Based on GPA 2145-03, 2172, 2261. Compressibility is Calculated using AGA-8. |
|--|