



| Container Identification PB-1 | | Laboratory Number OE69349A | | | | | | | | | | | | | | | | |
|---|--|---|--|-----------|-----------|--------|---------|----------|----------------|--|--|--|--|------------------|--|--|--|--|
| Operator Name PARAMOUNT RESOURCES LTD. | | | | | | | | | | | | | | | | | | |
| Unique Well Identifier NOT AVAILABLE | Well Name PARA et al MOUNT CODY I-02 | | Elevation KB m 379.50 GRD m 367.90 | | | | | | | | | | | | | | | |
| Field or Area MOUNT CODY | Pool or Zone FANTASQUE | Sampler's Company SOLID PRODUCTION SERVICES | | | | | | | | | | | | | | | | |
| Test Type | Test No. | Test Recovery | Name of Sampler | | | | | | | | | | | | | | | |
| Test Interval or Perfs 897.00-917.00 mKB | | Sampling Point FRAC MANIFOLD | <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Separator</th> <th>Reservoir</th> <th>Source</th> <th>Sampled</th> <th>Received</th> </tr> <tr> <td>Pressure (kPa)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Temperature (°C)</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> | Separator | Reservoir | Source | Sampled | Received | Pressure (kPa) | | | | | Temperature (°C) | | | | |
| Separator | Reservoir | Source | Sampled | Received | | | | | | | | | | | | | | |
| Pressure (kPa) | | | | | | | | | | | | | | | | | | |
| Temperature (°C) | | | | | | | | | | | | | | | | | | |
| Date Sampled Mar 13, 2001 | Date Received Mar 20, 2001 | Date Reported Mar 05, 2001 | Analyst H,H,D | | | | | | | | | | | | | | | |
| Other Information | | | | | | | | | | | | | | | | | | |

Sample Properties

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|---|--|
| Colour of Clean Oil Dk. Brown | Colour Number ASTM D-1500 D-8 A.S.T.M. |
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B.S. & W. (Volume Fraction)

| Water | Sediment | Total |
|----------------------|----------|--------|
| Trace | Trace | Trace |
| Free Sediment | | 3 vol% |

Density - After Cleaning

| API Gravity @ 15°C 25.36 | <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Relative</th> <th>Absolute kg/m³</th> </tr> <tr> <td>0.9021</td> <td>901.3</td> </tr> </table> | Relative | Absolute kg/m ³ | 0.9021 | 901.3 |
|------------------------------------|--|----------|----------------------------|--------|-------|
| Relative | Absolute kg/m ³ | | | | |
| 0.9021 | 901.3 | | | | |

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|---|---|
| Total Sulphur Mass Fraction 0.00543 | Pour Point / °C (A.S.T.M. D-97) -27 |
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Viscosity

| Temp °C | Absolute mPa·s | Kinematic mm ² s ⁻¹ |
|---------|----------------|---|
| 20 | 76.35 | 85.00 |
| 30 | 36.58 | 41.00 |
| 40 | 19.59 | 22.10 |

Distillation

| Volume Fraction | Temp / °C |
|-----------------|-----------|
| 0.05 | 71.9 |
| 0.10 | 92.2 |
| 0.15 | 104.3 |
| 0.20 | 124.5 |
| 0.25 | 143.8 |
| 0.30 | 159.9 |
| 0.35 | 177.1 |
| 0.40 | 203.4 |
| 0.45 | 228.7 |
| 0.50 | 251.0 |
| 0.55 | 269.2 |
| 0.60 | 296.5 |
| 0.65 | 316.7 |
| 0.70 | 337.0 |
| 0.75 | 366.3 |
| F.B.P. | 368.3 |

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| Method A.S.T.M. -D86* |
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| Initial Boiling Point 46.6 |
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|---|
| Absolute Barometric Pressure (kPa) 88.5 |
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| Room Temp (°C) 21.0 |
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| Characterization Factor 11.7 |
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| 200 °C Naphtha 0.39 |
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| 275 °C Kerosene 0.56 |
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| 350 °C Light Gas Oil 0.72 |
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| Recovered 0.78 |
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| Residue 0.19 |
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| Distillation Loss 0.03 |
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Remarks:

BS&W performed on oil portion only. The distillation temperatures have been corrected to 101.3 kPa (abs).

