## CARGO REPORT

### VLGC. PERTAMINA GAS 1

**Port** : KALBUT STS W/ ARIMBI  
**Date** : 02 May 2018  
**Trim** : 1.30

<table>
<thead>
<tr>
<th>Cargo</th>
<th>BUTANE</th>
<th>BUTANE</th>
<th>PROPAINE</th>
<th>PROPAINE</th>
<th>BUTANE</th>
<th>BUTANE</th>
<th>PROPAINE</th>
<th>PROPAINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mol Weight</td>
<td>58.09</td>
<td>58.09</td>
<td>44.10</td>
<td>44.10</td>
<td>58.09</td>
<td>58.09</td>
<td>44.10</td>
<td>44.10</td>
</tr>
<tr>
<td>Liq. Temp</td>
<td>-1.4</td>
<td>-1.6</td>
<td>-39.3</td>
<td>-39.5</td>
<td>-1.7</td>
<td>-1.6</td>
<td>-39.0</td>
<td>-28.9</td>
</tr>
<tr>
<td>Vap. Temp</td>
<td>6.6</td>
<td>6.6</td>
<td>-21.5</td>
<td>-21.5</td>
<td>7.0</td>
<td>7.0</td>
<td>-18.1</td>
<td>-18.1</td>
</tr>
<tr>
<td>Pressure</td>
<td>0.18</td>
<td>0.18</td>
<td>0.20</td>
<td>0.20</td>
<td>0.18</td>
<td>0.18</td>
<td>0.21</td>
<td>0.21</td>
</tr>
<tr>
<td>V.C.F</td>
<td>1.03143</td>
<td>1.03174</td>
<td>1.13962</td>
<td>1.14024</td>
<td>1.03194</td>
<td>1.03174</td>
<td>1.13868</td>
<td>1.11448</td>
</tr>
<tr>
<td>Liq. Density @15°C</td>
<td>0.5773</td>
<td>0.5773</td>
<td>0.5072</td>
<td>0.5072</td>
<td>0.5773</td>
<td>0.5773</td>
<td>0.5072</td>
<td>0.5072</td>
</tr>
<tr>
<td>Temp. Corrected</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>S/G Corrected</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Trim Corrected</td>
<td>-0.073</td>
<td>-0.074</td>
<td>-0.080</td>
<td>-0.080</td>
<td>-0.080</td>
<td>-0.080</td>
<td>-0.081</td>
<td>-0.081</td>
</tr>
<tr>
<td>Heel Corrected</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Liq. VOL at 20°C</td>
<td>7482.561</td>
<td>7481.864</td>
<td>5237.188</td>
<td>5237.101</td>
<td>8623.498</td>
<td>8624.055</td>
<td>5650.021</td>
<td>5651.249</td>
</tr>
<tr>
<td>Shrinkage factor</td>
<td>0.99931</td>
<td>0.99931</td>
<td>0.99811</td>
<td>0.99812</td>
<td>0.99930</td>
<td>0.99931</td>
<td>0.99812</td>
<td>0.99812</td>
</tr>
<tr>
<td>Liq. Volume @15°C</td>
<td>7712.428</td>
<td>7714.012</td>
<td>5957.103</td>
<td>5960.326</td>
<td>8891.643</td>
<td>8891.643</td>
<td>6286.363</td>
<td>6286.363</td>
</tr>
<tr>
<td>Liq. WT(MT VAC)</td>
<td>4452.384</td>
<td>4453.299</td>
<td>3021.443</td>
<td>3023.077</td>
<td>8617.462</td>
<td>8618.104</td>
<td>5639.396</td>
<td>5640.625</td>
</tr>
<tr>
<td>Filling %</td>
<td>81.58 %</td>
<td>81.46 %</td>
<td>47.09 %</td>
<td>47.06 %</td>
<td>77.52 %</td>
<td>77.54 %</td>
<td>52.99 %</td>
<td>52.94 %</td>
</tr>
<tr>
<td>TankVolume100%</td>
<td>9171.70</td>
<td>9164.46</td>
<td>11120.60</td>
<td>11123.81</td>
<td>11123.81</td>
<td>11123.81</td>
<td>10662.93</td>
<td>10673.87</td>
</tr>
<tr>
<td>Vapour Vol.</td>
<td>1689.139</td>
<td>1702.596</td>
<td>5883.412</td>
<td>5890.769</td>
<td>2500.312</td>
<td>2497.765</td>
<td>5016.192</td>
<td>5016.192</td>
</tr>
<tr>
<td>Shrinkage factor</td>
<td>0.99957</td>
<td>0.99957</td>
<td>0.99865</td>
<td>0.99865</td>
<td>0.99958</td>
<td>0.99958</td>
<td>0.99872</td>
<td>0.99872</td>
</tr>
<tr>
<td>Vapour Vol. Corrected</td>
<td>1688.413</td>
<td>1701.864</td>
<td>5875.469</td>
<td>5882.816</td>
<td>2499.262</td>
<td>2496.716</td>
<td>5006.492</td>
<td>5006.492</td>
</tr>
<tr>
<td>Total WT in VAC</td>
<td>4457.361</td>
<td>4458.316</td>
<td>3036.356</td>
<td>3038.009</td>
<td>5141.127</td>
<td>5140.507</td>
<td>3269.540</td>
<td>3201.037</td>
</tr>
<tr>
<td>Total (P&amp;S) in VAC</td>
<td>8915.677</td>
<td>8074.365</td>
<td>10281.934</td>
<td>10281.934</td>
<td>6470.577</td>
<td>6470.577</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total WT in AIR</td>
<td>4448.670</td>
<td>4449.622</td>
<td>3029.524</td>
<td>3031.174</td>
<td>5131.101</td>
<td>5130.483</td>
<td>3262.183</td>
<td>3193.835</td>
</tr>
<tr>
<td>Total (P&amp;S) in AIR</td>
<td>8898.291</td>
<td>6060.698</td>
<td>10261.584</td>
<td>10261.584</td>
<td>6456.018</td>
<td>6456.018</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BUTANE</th>
<th>PROPAINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty Before Discharge</td>
<td>20,411.801</td>
</tr>
<tr>
<td>Qty After Discharge</td>
<td>19,159.876</td>
</tr>
<tr>
<td>Cargo Charge</td>
<td>1,251.925</td>
</tr>
<tr>
<td>Shore/Shuttle ship's Figure</td>
<td>1,251.523</td>
</tr>
<tr>
<td>Surveyor figure</td>
<td>N/A</td>
</tr>
<tr>
<td>Bill of Lading Before</td>
<td>N/A</td>
</tr>
<tr>
<td>New Bill of Lading</td>
<td>N/A</td>
</tr>
<tr>
<td>Difference</td>
<td>0.40</td>
</tr>
<tr>
<td>Percentage</td>
<td>0.03 %</td>
</tr>
</tbody>
</table>

**Remark**: Cargo quantity onboard including COOLANT

HADI WIBOWO  
LOADING MASTER  
SURVEYOR  
CHIEF. OFFICER

PT. PERTAMINA (PERSERO)  
JL. YOS SUDARSO NO. 32 – 34  
TANJUNG PRIOK  
JAKARTA 14320 – INDONESIA  
PERTAMINA GAS 1
<table>
<thead>
<tr>
<th></th>
<th>PG1</th>
<th>SUTTLE SHIP'S</th>
<th>DIFFERENCE</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>C4</td>
<td>1251.925</td>
<td>1251.523</td>
<td>0.402</td>
<td>0.032 %</td>
</tr>
<tr>
<td>C3</td>
<td>1252.104</td>
<td>1251.657</td>
<td>0.447</td>
<td>0.036 %</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2504.029</td>
<td>2503.180</td>
<td>0.849</td>
<td>0.034 %</td>
</tr>
</tbody>
</table>
### Maximum Tank Sounding

<table>
<thead>
<tr>
<th>P</th>
<th>S</th>
<th>P</th>
<th>S</th>
<th>P</th>
<th>S</th>
<th>P</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.000</td>
<td>28.000</td>
<td>20.000</td>
<td>20.000</td>
<td>30.000</td>
<td>30.000</td>
<td>20.000</td>
<td>20.000</td>
</tr>
</tbody>
</table>

10.5

<table>
<thead>
<tr>
<th>b</th>
<th>p</th>
<th>N/A</th>
<th>1152.95</th>
<th>2035.418</th>
<th>PROPANE</th>
<th>BUTANE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>3265.726</td>
<td>3265.726</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VOLUME</th>
<th>trim1</th>
<th>trim2</th>
<th>pumping time</th>
<th>-52596.83</th>
<th>Commence:</th>
<th>15-Dec, 06:25</th>
<th>from to</th>
<th>total:</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.183</td>
<td>qty DISCH</td>
<td>0.000</td>
<td>Completed:</td>
<td>15-Dec, 17:35</td>
<td>1</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.18</td>
<td>1106.99</td>
<td>1106.01</td>
<td>ave. rate</td>
<td>0.0</td>
<td>stoppages:</td>
<td>0.00</td>
<td>2</td>
<td>0.00</td>
</tr>
<tr>
<td>23.19</td>
<td>1106.99</td>
<td>1106.01</td>
<td>total:</td>
<td>-52596.83</td>
<td>3</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>correction</td>
<td>25.280754</td>
<td>25.280754</td>
<td>ave. rate</td>
<td>0.0</td>
<td>stoppages:</td>
<td>0.00</td>
<td>4</td>
<td>0.00</td>
</tr>
<tr>
<td>correction</td>
<td>0</td>
<td>0</td>
<td>pumping time</td>
<td>29.40</td>
<td>Commence:</td>
<td>04-Jan, 08:30</td>
<td>5</td>
<td>0.00</td>
</tr>
<tr>
<td>Volume</td>
<td>1106.7254</td>
<td>total:</td>
<td>29.40</td>
<td>TOTAL 2&amp;3</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRIM</th>
<th>1106.7254</th>
<th>total:</th>
<th>29.40</th>
<th>TOTAL 2&amp;3</th>
<th>0.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.27</td>
<td>2</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>2</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

37449.166

<table>
<thead>
<tr>
<th>Vol. Corr</th>
<th>42644.210</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.999</td>
<td>-2.0</td>
</tr>
<tr>
<td>0.999243</td>
<td>-1.5</td>
</tr>
<tr>
<td>Vol. @ 15</td>
<td>45128.214</td>
</tr>
<tr>
<td>Filling</td>
<td>94.50%</td>
</tr>
<tr>
<td>7.0</td>
<td>4452.384</td>
</tr>
<tr>
<td>7.5</td>
<td>4453.299</td>
</tr>
<tr>
<td>0.999563</td>
<td>8915.677</td>
</tr>
</tbody>
</table>

25271.676 FALSE

25220.574

<table>
<thead>
<tr>
<th>CTK 1P</th>
<th>CTK 1S</th>
<th>CTK 2P</th>
<th>CTK 2S</th>
<th>CTK 3P</th>
<th>CTK 3S</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPANE</td>
<td>PROPANE</td>
<td>PROPANE</td>
<td>PROPANE</td>
<td>PROPANE</td>
<td>PROPANE</td>
</tr>
<tr>
<td>Vapour:</td>
<td>0.000</td>
<td>0.000</td>
<td>14.913</td>
<td>14.932</td>
<td>0.000</td>
</tr>
<tr>
<td>Liquid:</td>
<td>0.000</td>
<td>0.000</td>
<td>3021.443</td>
<td>3023.077</td>
<td>0.000</td>
</tr>
<tr>
<td>On Board:</td>
<td>0.000</td>
<td>0.000</td>
<td>3036.356</td>
<td>3038.009</td>
<td>0.000</td>
</tr>
<tr>
<td>Surv. Fig:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CTK 1P</th>
<th>CTK 1S</th>
<th>CTK 2P</th>
<th>CTK 2S</th>
<th>CTK 3P</th>
<th>CTK 3S</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUTANE</td>
<td>BUTANE</td>
<td>BUTANE</td>
<td>BUTANE</td>
<td>BUTANE</td>
<td>BUTANE</td>
</tr>
<tr>
<td>Vapour:</td>
<td>4.977</td>
<td>5.017</td>
<td>0.000</td>
<td>0.000</td>
<td>7.369</td>
</tr>
<tr>
<td>Liquid:</td>
<td>452.384</td>
<td>453.299</td>
<td>0.000</td>
<td>0.000</td>
<td>5133.758</td>
</tr>
<tr>
<td>On Board:</td>
<td>4457.361</td>
<td>4458.316</td>
<td>0.000</td>
<td>0.000</td>
<td>5141.127</td>
</tr>
<tr>
<td>Surv. Fig:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>