

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0010_08)								
شماره پیمان: 053 – 073 – 9184	HEAT AND MASS BALANCE FOR GAS DEHYDRATION PACKAGE							شماره صفحه : 1 از 4	
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال		نسخه
	BK	GCS	MF	120	PR	PF	0002		V02

طرح نگهداشت و افزایش تولید 27 مخزن

HEAT AND MASS BALANCE FOR GAS DEHYDRATION PACKAGE

نگهداشت و افزایش تولید میدان نفتی بینک

V02	OCT. 2024	IFA	MFS	M.Fakharian	M. Sadeghian	
V01	MAY. 2024	IFA	MFS	M.Fakharian	S.Faramarzpour	
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Status:

IFA: Issued For Approval

IFI: Issued For Information

AFC: Approved For Construction

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0010_08)																									
شماره پیمان: 053 - 073 - 9184	<table><tr><th colspan="8">HEAT AND MASS BALANCE FOR GAS DEHYDRATION PACKAGE</th></tr><tr><th>پروژه</th><th>بسته کاری</th><th>صادر کننده</th><th>تسهیلات</th><th>رشته</th><th>نوع مدرک</th><th>سریال</th><th>نسخه</th></tr><tr><td>BK</td><td>GCS</td><td>MF</td><td>120</td><td>PR</td><td>PF</td><td>0002</td><td>V02</td></tr></table>	HEAT AND MASS BALANCE FOR GAS DEHYDRATION PACKAGE								پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	BK	GCS	MF	120	PR	PF	0002	V02	شماره صفحه : 2 از 4
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BK	GCS	MF	120	PR	PF	0002	V02																			

REVISION RECORD SHEET

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 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد 08_0010_CO-GCS-HD-BK)																									
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<table><tr><th>Stream No.</th><th>Unit</th><th>01</th><th>02</th><th>02A</th><th>03</th><th>04</th><th>05</th><th>06</th><th>07</th><th>08</th><th>09</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th><th>16A</th><th>16B</th></tr><tr><th>Description</th><th></th><th>Wet gas to Contactor</th><th>Dry gas from Contactor</th><th>Dry Gas from Gas/TEG Hx.</th><th>Lean TEG to Contactor</th><th>Liquid from Scrubber</th><th>Rich TEG from Contactor</th><th>Rich TEG from Reflux Condenser</th><th>Gas from Flash Drum</th><th>Rich TEG from Flash Drum</th><th>Rich TEG from Particle Filter</th><th>Rich TEG from Carbon Filter</th><th>Rich TEG to Still Column</th><th>Lean TEG to TEG/TEG Hx.</th><th>Lean TEG to Pump</th><th>Lean TEG to Gas/TEG Hx.</th><th>Off Gas from Still Column</th><th>Stripping Gas</th><th>Fuel Gas to Reboiler Burner</th></tr><tr><td>Vapour Fraction</td><td></td><td>0.9995</td><td>1.0000</td><td>1.0000</td><td>0.0000</td><td>0.0000</td><td>0.0470</td><td>0.0521</td><td>1.0000</td><td>0.0000</td><td>0.0010</td><td>0.0020</td><td>0.0273</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>1.0000</td><td>1.0000</td><td>1.0000</td></tr><tr><td>Temperature</td><td>C</td><td>59.89</td><td>63.62</td><td>65.95</td><td>68.00</td><td>59.89</td><td>62.35</td><td>73.63</td><td>73.63</td><td>73.62</td><td>73.60</td><td>140.00</td><td>191.47</td><td>119.43</td><td>120.45</td><td>86.16</td><td>36.78</td><td>36.78</td><td>36.78</td></tr><tr><td>Pressure</td><td>bar_g</td><td>53.9</td><td>53.6</td><td>53.1</td><td>54.9</td><td>53.9</td><td>4.8</td><td>4.5</td><td>4.5</td><td>4.5</td><td>3.8</td><td>3.3</td><td>3.100</td><td>0.3</td><td>0.2</td><td>55.1</td><td>0.2</td><td>4.9</td><td>4.9</td></tr><tr><td>Molecular Weight</td><td></td><td>24.56</td><td>24.58</td><td>24.58</td><td>147.91</td><td>18.04</td><td>98.24</td><td>98.24</td><td>33.62</td><td>101.79</td><td>101.79</td><td>101.79</td><td>101.79</td><td>147.83</td><td>147.83</td><td>147.83</td><td>22.12</td><td>24.52</td><td>24.52</td></tr><tr><td>Mass Density</td><td>kg/m3</td><td>57.70</td><td>56.24</td><td>55.00</td><td>1045.15</td><td>980.74</td><td>313.20</td><td>272.20</td><td>6.59</td><td>1017.63</td><td>961.71</td><td>900.56</td><td>310.83</td><td>981.71</td><td>1020.22</td><td>1022.81</td><td>0.91</td><td>5.74</td><td>5.74</td></tr><tr><td>Mass Flow</td><td>kg/h</td><td>17252.5</td><td>17.0</td><td>17172.3</td><td>775.0</td><td>5.9</td><td>849.5</td><td>849.5</td><td>15.2</td><td>834.3</td><td>834.3</td><td>834.3</td><td>834.3</td><td>775.0</td><td>775.0</td><td>775.0</td><td>119.6</td><td>60.0</td><td>9.3</td></tr><tr><td>Molar Flow</td><td>kgmole/h</td><td>702.4</td><td>698.6</td><td>698.6</td><td>5.2</td><td>0.3</td><td>8.6</td><td>8.6</td><td>0.5</td><td>8.2</td><td>8.2</td><td>8.2</td><td>8.2</td><td>5.2</td><td>5.2</td><td>5.2</td><td>5.4</td><td>2.4</td><td>0.4</td></tr><tr><td>Phase Molecular Weight</td><td></td><td>24.57</td><td>24.58</td><td>24.58</td><td>-</td><td>-</td><td>33.23</td><td>33.62</td><td>33.62</td><td>33.62</td><td>35.08</td><td>36.09</td><td>32.86</td><td>-</td><td>-</td><td>-</td><td>22.12</td><td>24.52</td><td>24.52</td></tr><tr><td>Phase Mass Density</td><td>kg/m3</td><td>57.68</td><td>56.24</td><td>55.00</td><td>-</td><td>-</td><td>7.12</td><td>6.59</td><td>6.59</td><td>6.59</td><td>5.99</td><td>5.52</td><td>4.00</td><td>-</td><td>-</td><td>-</td><td>0.91</td><td>5.74</td><td>5.74</td></tr><tr><td>Phase Mass Flow</td><td>kg/h</td><td>17246.8</td><td>17172.3</td><td>17172.3</td><td>-</td><td>-</td><td>13.5</td><td>15.2</td><td>15.2</td><td>0.0</td><td>0.29</td><td>0.59</td><td>7.36</td><td>-</td><td>-</td><td>-</td><td>119.6</td><td>60.0</td><td>9.3</td></tr><tr><td>Phase Molar Flow</td><td>kgmole/h</td><td>702.0</td><td>698.6</td><td>698.6</td><td>-</td><td>-</td><td>0.4</td><td>0.5</td><td>0.5</td><td>0.0</td><td>0.01</td><td>0.02</td><td>0.22</td><td>-</td><td>-</td><td>-</td><td>5.4</td><td>2.4</td><td>0.4</td></tr><tr><td>Phase Std Gas Flow</td><td>MMSCFD</td><td>14.07</td><td>14.00</td><td>14.00</td><td>-</td><td>-</td><td>0.01</td><td>0.01</td><td>0.01</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>-</td><td>-</td><td>-</td><td>0.11</td><td>0.05</td><td>0.01</td></tr><tr><td>Phase Actual Volume Flow</td><td>m3/h</td><td>299.00</td><td>305.33</td><td>312.23</td><td>-</td><td>-</td><td>1.89</td><td>2.30</td><td>2.30</td><td>0.00</td><td>0.05</td><td>0.11</td><td>1.84</td><td>-</td><td>-</td><td>-</td><td>131.41</td><td>10.46</td><td>1.62</td></tr><tr><td>Phase Viscosity</td><td>cP</td><td>0.01410</td><td>0.01418</td><td>0.01421</td><td>-</td><td>-</td><td>0.01229</td><td>0.01269</td><td>0.01269</td><td>0.01269</td><td>0.01</td><td>0.01</td><td>0.01</td><td>-</td><td>-</td><td>-</td><td>0.01092</td><td>0.01147</td><td>0.01147</td></tr><tr><td>Phase Molecular Weight</td><td></td><td>-</td><td>-</td><td>-</td><td>147.91</td><td>-</td><td>101.44</td><td>101.79</td><td>101.79</td><td>101.79</td><td>101.86</td><td>101.92</td><td>103.73</td><td>147.83</td><td>147.83</td><td>147.83</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Phase Mass Density</td><td>kg/m3</td><td>-</td><td>-</td><td>-</td><td>1045.15</td><td>-</td><td>1022.96</td><td>1017.63</td><td>1017.63</td><td>1017.63</td><td>1017.81</td><td>1017.98</td><td>982.13</td><td>981.71</td><td>1020.22</td><td>1022.81</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Phase Mass Flow</td><td>kg/h</td><td>-</td><td>-</td><td>-</td><td>775.0</td><td>-</td><td>836.0</td><td>834.3</td><td>0.0</td><td>834.3</td><td>834.0</td><td>833.7</td><td>826.9</td><td>775.00</td><td>775.00</td><td>775.00</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Phase Molar Flow</td><td>kgmole/h</td><td>-</td><td>-</td><td>-</td><td>5.2</td><td>-</td><td>8.2</td><td>8.2</td><td>0.0</td><td>8.2</td><td>8.2</td><td>8.0</td><td>5.24</td><td>5.24</td><td>5.24</td><td>5.24</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Phase Std Ideal Liq Vol Flow</td><td>m3/h</td><td>-</td><td>-</td><td>-</td><td>0.687</td><td>-</td><td>0.753</td><td>0.751</td><td>0.000</td><td>0.751</td><td>0.751</td><td>0.750</td><td>0.741</td><td>0.69</td><td>0.69</td><td>0.69</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Phase Actual Volume Flow</td><td>m3/h</td><td>-</td><td>-</td><td>-</td><td>0.742</td><td>-</td><td>0.817</td><td>0.820</td><td>0.000</td><td>0.820</td><td>0.819</td><td>0.819</td><td>0.842</td><td>0.79</td><td>0.76</td><td>0.76</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Phase Viscosity</td><td>cP</td><td>-</td><td>-</td><td>-</td><td>7.92403</td><td>-</td><td>7.17125</td><td>5.33104</td><td>5.33104</td><td>5.33104</td><td>5.34944</td><td>5.36942</td><td>1.39084</td><td>0.67</td><td>2.36</td><td>2.31</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Phase Molecular Weight</td><td></td><td>18.04</td><td>-</td><td>-</td><td>-</td><td>18.04</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Phase Mass Density</td><td>kg/m3</td><td>980.74</td><td>-</td><td>-</td><td>-</td><td>980.74</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Phase Mass Flow</td><td>kg/h</td><td>5.9</td><td>-</td><td>-</td><td>-</td><td>5.86</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Phase Molar Flow</td><td>kgmole/h</td><td>0.3</td><td>-</td><td>-</td><td>-</td><td>0.32</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Phase Std Ideal Liq Vol Flow</td><td>m3/h</td><td>0.006</td><td>-</td><td>-</td><td>-</td><td>0.01</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Phase Actual Volume Flow</td><td>m3/h</td><td>0.006</td><td>-</td><td>-</td><td>-</td><td>0.01</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Phase Viscosity</td><td>cP</td><td>0.49379</td><td>-</td><td>-</td><td>-</td><td>0.49</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Comp Mole Frac (H2O)</td><td></td><td>0.0045</td><td>0.0002</td><td>0.0002</td><td>0.0158</td><td>0.9974</td><td>0.3193</td><td>0.3193</td><td>0.0212</td><td>0.3357</td><td>0.3357</td><td>0.3357</td><td>0.3357</td><td>0.0164</td><td>0.0164</td><td>0.0164</td><td>0.4985</td><td>0.0103</td><td>0.0103</td></tr><tr><td>Comp Mole Frac (CO2)</td><td></td><td>0.0318</td><td>0.0319</td><td>0.0319</td><td>0.0001</td><td>0.0003</td><td>0.0053</td><td>0.0053</td><td>0.0774</td><td>0.0014</td><td>0.0014</td><td>0.0014</td><td>0.0014</td><td>0.0001</td><td>0.0001</td><td>0.0001</td><td>0.0163</td><td>0.0316</td><td>0.0316</td></tr><tr><td>Comp Mole Frac (H2S)</td><td></td><td>0.0544</td><td>0.0541</td><td>0.0541</td><td>0.0004</td><td>0.0013</td><td>0.0438</td><td>0.0438</td><td>0.3220</td><td>0.0285</td><td>0.0285</td><td>0.0285</td><td>0.0285</td><td>0.0004</td><td>0.0004</td><td>0.0004</td><td>0.0673</td><td>0.0541</td><td>0.0541</td></tr><tr><td>Comp Mole Frac (Methane)</td><td></td><td>0.6427</td><td>0.6460</td><td>0.6460</td><td>0.0005</td><td>0.0009</td><td>0.0142</td><td>0.0142</td><td>0.2607</td><td>0.0006</td><td>0.0006</td><td>0.0006</td><td>0.0006</td><td>0.0005</td><td>0.0005</td><td>0.0005</td><td>0.2897</td><td>0.6389</td><td>0.6389</td></tr><tr><td>Comp Mole Frac (Ethane)</td><td></td><td>0.1383</td><td>0.1389</td><td>0.1389</td><td>0.0002</td><td>0.0001</td><td>0.0074</td><td>0.0074</td><td>0.1267</td><td>0.0009</td><td>0.0009</td><td>0.0009</td><td>0.0009</td><td>0.0002</td><td>0.0002</td><td>0.0002</td><td>0.0633</td><td>0.1375</td><td>0.1375</td></tr><tr><td>Comp Mole Frac (Propane)</td><td></td><td>0.0778</td><td>0.0781</td><td>0.0781</td><td>0.0002</td><td>0.0000</td><td>0.0063</td><td>0.0063</td><td>0.0998</td><td>0.0012</td><td>0.0012</td><td>0.0012</td><td>0.0012</td><td>0.0002</td><td>0.0002</td><td>0.0002</td><td>0.0366</td><td>0.0773</td><td>0.0773</td></tr><tr><td>Comp Mole Frac (i-Butane)</td><td></td><td>0.0084</td><td>0.0084</td><td>0.0084</td><td>0.0000</td><td>0.0000</td><td>0.0009</td><td>0.0009</td><td>0.0127</td><td>0.0002</td><td>0.0002</td><td>0.0002</td><td>0.0002</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0041</td><td>0.0084</td><td>0.0084</td></tr><tr><td>Comp Mole Frac (n-Butane)</td><td></td><td>0.0187</td><td>0.0188</td><td>0.0188</td><td>0.0001</td><td>0.0000</td><td>0.0026</td><td>0.0026</td><td>0.0350</td><td>0.0008</td><td>0.0008</td><td>0.0008</td><td>0.0008</td><td>0.0001</td><td>0.0001</td><td>0.0001</td><td>0.0096</td><td>0.0186</td><td>0.0186</td></tr><tr><td>Comp Mole Frac (i-Pentane)</td><td></td><td>0.0070</td><td>0.0070</td><td>0.0070</td><td>0.0000</td><td>0.0000</td><td>0.0009</td><td>0.0009</td><td>0.0123</td><td>0.0003</td><td>0.0003</td><td>0.0003</td><td>0.0003</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0036</td><td>0.0070</td><td>0.0070</td></tr><tr><td>Comp Mole Frac (n-Pentane)</td><td></td><td>0.0038</td><td>0.0038</td><td>0.0038</td><td>0.0000</td><td>0.0000</td><td>0.0007</td><td>0.0007</td><td>0.0080</td><td>0.0003</td><td>0.0003</td><td>0.0003</td><td>0.0003</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0021</td><td>0.0038</td><td>0.0038</td></tr><tr><td>Comp Mole Frac (n-Hexane)</td><td></td><td>0.0066</td><td>0.0066</td><td>0.0066</td><td>0.0000</td><td>0.0000</td><td>0.0018</td><td>0.0018</td><td>0.0161</td><td>0.0010</td><td>0.0010</td><td>0.0010</td><td>0.0010</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0044</td><td>0.0065</td><td>0.0065</td></tr><tr><td>Comp Mole Frac (n-Heptane)</td><td></td><td>0.0020</td><td>0.0020</td><td>0.0020</td><td>0.0000</td><td>0.0000</td><td>0.0008</td><td>0.0008</td><td>0.0052</td><td>0.0005</td><td>0.0005</td><td>0.0005</td><td>0.0005</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0017</td><td>0.0020</td><td>0.0020</td></tr><tr><td>Comp Mole Frac (n-Octane)</td><td></td><td>0.0006</td><td>0.0006</td><td>0.0006</td><td>0.0000</td><td>0.0000</td><td>0.0003</td><td>0.0003</td><td>0.0016</td><td>0.0003</td><td>0.0003</td><td>0.0003</td><td>0.0003</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0007</td><td>0.0006</td><td>0.0006</td></tr><tr><td>Comp Mole Frac (n-Nonane)</td><td></td><td>0.0003</td><td>0.0003</td><td>0.0003</td><td>0.0000</td><td>0.0000</td><td>0.0003</td><td>0.0003</td><td>0.0008</td><td>0.0002</td><td>0.0002</td><td>0.0002</td><td>0.0002</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0005</td><td>0.0003</td><td>0.0003</td></tr><tr><td>Comp Mole Frac (n-Decane)</td><td></td><td>0.0001</td><td>0.0001</td><td>0.0001</td><td>0.0000</td><td>0.0000</td><td>0.0001</td><td>0.0001</td><td>0.0002</td><td>0.0001</td><td>0.0001</td><td>0.0001</td><td>0.0001</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0002</td><td>0.0001</td><td>0.0001</td></tr><tr><td>Comp Mole Frac (n-C11)</td><td></td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td></tr><tr><td>Comp Mole Frac (Nitrogen)</td><td></td><td>0.0030</td><td>0.0030</td><td>0.0030</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0004</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.0014</td><td>0.0030</td><td>0.0030</td></tr><tr><td>Comp Mole Frac (TEGlycol)</td><td></td><td>0.0000</td><td>0.0000</td><td>0.0000</td><td>0.9827</td><td>0.0000</td><td>0.5953</td><td>0.5953</td><td>0.0000</td><td>0.6280</td><td>0.6280</td><td>0.6280</td><td>0.6280</td><td>0.9821</td><td>0.9821</td><td>0.9821</td><td>0.0000</td><td>0.0000</td><td>0.0000</td></tr></table>																			Stream No.	Unit	01	02	02A	03	04	05	06	07	08	09	10	11	12	13	14	15	16A	16B	Description		Wet gas to Contactor	Dry gas from Contactor	Dry Gas from Gas/TEG Hx.	Lean TEG to Contactor	Liquid from Scrubber	Rich TEG from Contactor	Rich TEG from Reflux Condenser	Gas from Flash Drum	Rich TEG from Flash Drum	Rich TEG from Particle Filter	Rich TEG from Carbon Filter	Rich TEG to Still Column	Lean TEG to TEG/TEG Hx.	Lean TEG to Pump	Lean TEG to Gas/TEG Hx.	Off Gas from Still Column	Stripping Gas	Fuel Gas to Reboiler Burner	Vapour Fraction		0.9995	1.0000	1.0000	0.0000	0.0000	0.0470	0.0521	1.0000	0.0000	0.0010	0.0020	0.0273	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000	Temperature	C	59.89	63.62	65.95	68.00	59.89	62.35	73.63	73.63	73.62	73.60	140.00	191.47	119.43	120.45	86.16	36.78	36.78	36.78	Pressure	bar_g	53.9	53.6	53.1	54.9	53.9	4.8	4.5	4.5	4.5	3.8	3.3	3.100	0.3	0.2	55.1	0.2	4.9	4.9	Molecular Weight		24.56	24.58	24.58	147.91	18.04	98.24	98.24	33.62	101.79	101.79	101.79	101.79	147.83	147.83	147.83	22.12	24.52	24.52	Mass Density	kg/m3	57.70	56.24	55.00	1045.15	980.74	313.20	272.20	6.59	1017.63	961.71	900.56	310.83	981.71	1020.22	1022.81	0.91	5.74	5.74	Mass Flow	kg/h	17252.5	17.0	17172.3	775.0	5.9	849.5	849.5	15.2	834.3	834.3	834.3	834.3	775.0	775.0	775.0	119.6	60.0	9.3	Molar Flow	kgmole/h	702.4	698.6	698.6	5.2	0.3	8.6	8.6	0.5	8.2	8.2	8.2	8.2	5.2	5.2	5.2	5.4	2.4	0.4	Phase Molecular Weight		24.57	24.58	24.58	-	-	33.23	33.62	33.62	33.62	35.08	36.09	32.86	-	-	-	22.12	24.52	24.52	Phase Mass Density	kg/m3	57.68	56.24	55.00	-	-	7.12	6.59	6.59	6.59	5.99	5.52	4.00	-	-	-	0.91	5.74	5.74	Phase Mass Flow	kg/h	17246.8	17172.3	17172.3	-	-	13.5	15.2	15.2	0.0	0.29	0.59	7.36	-	-	-	119.6	60.0	9.3	Phase Molar Flow	kgmole/h	702.0	698.6	698.6	-	-	0.4	0.5	0.5	0.0	0.01	0.02	0.22	-	-	-	5.4	2.4	0.4	Phase Std Gas Flow	MMSCFD	14.07	14.00	14.00	-	-	0.01	0.01	0.01	0.00	0.00	0.00	0.00	-	-	-	0.11	0.05	0.01	Phase Actual Volume Flow	m3/h	299.00	305.33	312.23	-	-	1.89	2.30	2.30	0.00	0.05	0.11	1.84	-	-	-	131.41	10.46	1.62	Phase Viscosity	cP	0.01410	0.01418	0.01421	-	-	0.01229	0.01269	0.01269	0.01269	0.01	0.01	0.01	-	-	-	0.01092	0.01147	0.01147	Phase Molecular Weight		-	-	-	147.91	-	101.44	101.79	101.79	101.79	101.86	101.92	103.73	147.83	147.83	147.83	-	-	-	Phase Mass Density	kg/m3	-	-	-	1045.15	-	1022.96	1017.63	1017.63	1017.63	1017.81	1017.98	982.13	981.71	1020.22	1022.81	-	-	-	Phase Mass Flow	kg/h	-	-	-	775.0	-	836.0	834.3	0.0	834.3	834.0	833.7	826.9	775.00	775.00	775.00	-	-	-	Phase Molar Flow	kgmole/h	-	-	-	5.2	-	8.2	8.2	0.0	8.2	8.2	8.0	5.24	5.24	5.24	5.24	-	-	-	Phase Std Ideal Liq Vol Flow	m3/h	-	-	-	0.687	-	0.753	0.751	0.000	0.751	0.751	0.750	0.741	0.69	0.69	0.69	-	-	-	Phase Actual Volume Flow	m3/h	-	-	-	0.742	-	0.817	0.820	0.000	0.820	0.819	0.819	0.842	0.79	0.76	0.76	-	-	-	Phase Viscosity	cP	-	-	-	7.92403	-	7.17125	5.33104	5.33104	5.33104	5.34944	5.36942	1.39084	0.67	2.36	2.31	-	-	-	Phase Molecular Weight		18.04	-	-	-	18.04	-	-	-	-	-	-	-	-	-	-	-	-	-	Phase Mass Density	kg/m3	980.74	-	-	-	980.74	-	-	-	-	-	-	-	-	-	-	-	-	-	Phase Mass Flow	kg/h	5.9	-	-	-	5.86	-	-	-	-	-	-	-	-	-	-	-	-	-	Phase Molar Flow	kgmole/h	0.3	-	-	-	0.32	-	-	-	-	-	-	-	-	-	-	-	-	-	Phase Std Ideal Liq Vol Flow	m3/h	0.006	-	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	Phase Actual Volume Flow	m3/h	0.006	-	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	Phase Viscosity	cP	0.49379	-	-	-	0.49	-	-	-	-	-	-	-	-	-	-	-	-	-	Comp Mole Frac (H2O)		0.0045	0.0002	0.0002	0.0158	0.9974	0.3193	0.3193	0.0212	0.3357	0.3357	0.3357	0.3357	0.0164	0.0164	0.0164	0.4985	0.0103	0.0103	Comp Mole Frac (CO2)		0.0318	0.0319	0.0319	0.0001	0.0003	0.0053	0.0053	0.0774	0.0014	0.0014	0.0014	0.0014	0.0001	0.0001	0.0001	0.0163	0.0316	0.0316	Comp Mole Frac (H2S)		0.0544	0.0541	0.0541	0.0004	0.0013	0.0438	0.0438	0.3220	0.0285	0.0285	0.0285	0.0285	0.0004	0.0004	0.0004	0.0673	0.0541	0.0541	Comp Mole Frac (Methane)		0.6427	0.6460	0.6460	0.0005	0.0009	0.0142	0.0142	0.2607	0.0006	0.0006	0.0006	0.0006	0.0005	0.0005	0.0005	0.2897	0.6389	0.6389	Comp Mole Frac (Ethane)		0.1383	0.1389	0.1389	0.0002	0.0001	0.0074	0.0074	0.1267	0.0009	0.0009	0.0009	0.0009	0.0002	0.0002	0.0002	0.0633	0.1375	0.1375	Comp Mole Frac (Propane)		0.0778	0.0781	0.0781	0.0002	0.0000	0.0063	0.0063	0.0998	0.0012	0.0012	0.0012	0.0012	0.0002	0.0002	0.0002	0.0366	0.0773	0.0773	Comp Mole Frac (i-Butane)		0.0084	0.0084	0.0084	0.0000	0.0000	0.0009	0.0009	0.0127	0.0002	0.0002	0.0002	0.0002	0.0000	0.0000	0.0000	0.0041	0.0084	0.0084	Comp Mole Frac (n-Butane)		0.0187	0.0188	0.0188	0.0001	0.0000	0.0026	0.0026	0.0350	0.0008	0.0008	0.0008	0.0008	0.0001	0.0001	0.0001	0.0096	0.0186	0.0186	Comp Mole Frac (i-Pentane)		0.0070	0.0070	0.0070	0.0000	0.0000	0.0009	0.0009	0.0123	0.0003	0.0003	0.0003	0.0003	0.0000	0.0000	0.0000	0.0036	0.0070	0.0070	Comp Mole Frac (n-Pentane)		0.0038	0.0038	0.0038	0.0000	0.0000	0.0007	0.0007	0.0080	0.0003	0.0003	0.0003	0.0003	0.0000	0.0000	0.0000	0.0021	0.0038	0.0038	Comp Mole Frac (n-Hexane)		0.0066	0.0066	0.0066	0.0000	0.0000	0.0018	0.0018	0.0161	0.0010	0.0010	0.0010	0.0010	0.0000	0.0000	0.0000	0.0044	0.0065	0.0065	Comp Mole Frac (n-Heptane)		0.0020	0.0020	0.0020	0.0000	0.0000	0.0008	0.0008	0.0052	0.0005	0.0005	0.0005	0.0005	0.0000	0.0000	0.0000	0.0017	0.0020	0.0020	Comp Mole Frac (n-Octane)		0.0006	0.0006	0.0006	0.0000	0.0000	0.0003	0.0003	0.0016	0.0003	0.0003	0.0003	0.0003	0.0000	0.0000	0.0000	0.0007	0.0006	0.0006	Comp Mole Frac (n-Nonane)		0.0003	0.0003	0.0003	0.0000	0.0000	0.0003	0.0003	0.0008	0.0002	0.0002	0.0002	0.0002	0.0000	0.0000	0.0000	0.0005	0.0003	0.0003	Comp Mole Frac (n-Decane)		0.0001	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0002	0.0001	0.0001	Comp Mole Frac (n-C11)		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	Comp Mole Frac (Nitrogen)		0.0030	0.0030	0.0030	0.0000	0.0000	0.0000	0.0000	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0014	0.0030	0.0030	Comp Mole Frac (TEGlycol)		0.0000	0.0000	0.0000	0.9827	0.0000	0.5953	0.5953	0.0000	0.6280	0.6280	0.6280	0.6280	0.9821	0.9821	0.9821	0.0000	0.0000	0.0000
Stream No.	Unit	01	02	02A	03	04	05	06	07	08	09	10	11	12	13	14	15	16A	16B																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Description		Wet gas to Contactor	Dry gas from Contactor	Dry Gas from Gas/TEG Hx.	Lean TEG to Contactor	Liquid from Scrubber	Rich TEG from Contactor	Rich TEG from Reflux Condenser	Gas from Flash Drum	Rich TEG from Flash Drum	Rich TEG from Particle Filter	Rich TEG from Carbon Filter	Rich TEG to Still Column	Lean TEG to TEG/TEG Hx.	Lean TEG to Pump	Lean TEG to Gas/TEG Hx.	Off Gas from Still Column	Stripping Gas	Fuel Gas to Reboiler Burner																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Vapour Fraction		0.9995	1.0000	1.0000	0.0000	0.0000	0.0470	0.0521	1.0000	0.0000	0.0010	0.0020	0.0273	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Temperature	C	59.89	63.62	65.95	68.00	59.89	62.35	73.63	73.63	73.62	73.60	140.00	191.47	119.43	120.45	86.16	36.78	36.78	36.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Pressure	bar_g	53.9	53.6	53.1	54.9	53.9	4.8	4.5	4.5	4.5	3.8	3.3	3.100	0.3	0.2	55.1	0.2	4.9	4.9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Molecular Weight		24.56	24.58	24.58	147.91	18.04	98.24	98.24	33.62	101.79	101.79	101.79	101.79	147.83	147.83	147.83	22.12	24.52	24.52																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Mass Density	kg/m3	57.70	56.24	55.00	1045.15	980.74	313.20	272.20	6.59	1017.63	961.71	900.56	310.83	981.71	1020.22	1022.81	0.91	5.74	5.74																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Mass Flow	kg/h	17252.5	17.0	17172.3	775.0	5.9	849.5	849.5	15.2	834.3	834.3	834.3	834.3	775.0	775.0	775.0	119.6	60.0	9.3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Molar Flow	kgmole/h	702.4	698.6	698.6	5.2	0.3	8.6	8.6	0.5	8.2	8.2	8.2	8.2	5.2	5.2	5.2	5.4	2.4	0.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Molecular Weight		24.57	24.58	24.58	-	-	33.23	33.62	33.62	33.62	35.08	36.09	32.86	-	-	-	22.12	24.52	24.52																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Mass Density	kg/m3	57.68	56.24	55.00	-	-	7.12	6.59	6.59	6.59	5.99	5.52	4.00	-	-	-	0.91	5.74	5.74																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Mass Flow	kg/h	17246.8	17172.3	17172.3	-	-	13.5	15.2	15.2	0.0	0.29	0.59	7.36	-	-	-	119.6	60.0	9.3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Molar Flow	kgmole/h	702.0	698.6	698.6	-	-	0.4	0.5	0.5	0.0	0.01	0.02	0.22	-	-	-	5.4	2.4	0.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Std Gas Flow	MMSCFD	14.07	14.00	14.00	-	-	0.01	0.01	0.01	0.00	0.00	0.00	0.00	-	-	-	0.11	0.05	0.01																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Actual Volume Flow	m3/h	299.00	305.33	312.23	-	-	1.89	2.30	2.30	0.00	0.05	0.11	1.84	-	-	-	131.41	10.46	1.62																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Viscosity	cP	0.01410	0.01418	0.01421	-	-	0.01229	0.01269	0.01269	0.01269	0.01	0.01	0.01	-	-	-	0.01092	0.01147	0.01147																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Molecular Weight		-	-	-	147.91	-	101.44	101.79	101.79	101.79	101.86	101.92	103.73	147.83	147.83	147.83	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Mass Density	kg/m3	-	-	-	1045.15	-	1022.96	1017.63	1017.63	1017.63	1017.81	1017.98	982.13	981.71	1020.22	1022.81	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Mass Flow	kg/h	-	-	-	775.0	-	836.0	834.3	0.0	834.3	834.0	833.7	826.9	775.00	775.00	775.00	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Molar Flow	kgmole/h	-	-	-	5.2	-	8.2	8.2	0.0	8.2	8.2	8.0	5.24	5.24	5.24	5.24	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Std Ideal Liq Vol Flow	m3/h	-	-	-	0.687	-	0.753	0.751	0.000	0.751	0.751	0.750	0.741	0.69	0.69	0.69	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Actual Volume Flow	m3/h	-	-	-	0.742	-	0.817	0.820	0.000	0.820	0.819	0.819	0.842	0.79	0.76	0.76	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Viscosity	cP	-	-	-	7.92403	-	7.17125	5.33104	5.33104	5.33104	5.34944	5.36942	1.39084	0.67	2.36	2.31	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Molecular Weight		18.04	-	-	-	18.04	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Mass Density	kg/m3	980.74	-	-	-	980.74	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Mass Flow	kg/h	5.9	-	-	-	5.86	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Molar Flow	kgmole/h	0.3	-	-	-	0.32	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Std Ideal Liq Vol Flow	m3/h	0.006	-	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Actual Volume Flow	m3/h	0.006	-	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Phase Viscosity	cP	0.49379	-	-	-	0.49	-	-	-	-	-	-	-	-	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (H2O)		0.0045	0.0002	0.0002	0.0158	0.9974	0.3193	0.3193	0.0212	0.3357	0.3357	0.3357	0.3357	0.0164	0.0164	0.0164	0.4985	0.0103	0.0103																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (CO2)		0.0318	0.0319	0.0319	0.0001	0.0003	0.0053	0.0053	0.0774	0.0014	0.0014	0.0014	0.0014	0.0001	0.0001	0.0001	0.0163	0.0316	0.0316																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (H2S)		0.0544	0.0541	0.0541	0.0004	0.0013	0.0438	0.0438	0.3220	0.0285	0.0285	0.0285	0.0285	0.0004	0.0004	0.0004	0.0673	0.0541	0.0541																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (Methane)		0.6427	0.6460	0.6460	0.0005	0.0009	0.0142	0.0142	0.2607	0.0006	0.0006	0.0006	0.0006	0.0005	0.0005	0.0005	0.2897	0.6389	0.6389																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (Ethane)		0.1383	0.1389	0.1389	0.0002	0.0001	0.0074	0.0074	0.1267	0.0009	0.0009	0.0009	0.0009	0.0002	0.0002	0.0002	0.0633	0.1375	0.1375																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (Propane)		0.0778	0.0781	0.0781	0.0002	0.0000	0.0063	0.0063	0.0998	0.0012	0.0012	0.0012	0.0012	0.0002	0.0002	0.0002	0.0366	0.0773	0.0773																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (i-Butane)		0.0084	0.0084	0.0084	0.0000	0.0000	0.0009	0.0009	0.0127	0.0002	0.0002	0.0002	0.0002	0.0000	0.0000	0.0000	0.0041	0.0084	0.0084																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (n-Butane)		0.0187	0.0188	0.0188	0.0001	0.0000	0.0026	0.0026	0.0350	0.0008	0.0008	0.0008	0.0008	0.0001	0.0001	0.0001	0.0096	0.0186	0.0186																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (i-Pentane)		0.0070	0.0070	0.0070	0.0000	0.0000	0.0009	0.0009	0.0123	0.0003	0.0003	0.0003	0.0003	0.0000	0.0000	0.0000	0.0036	0.0070	0.0070																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (n-Pentane)		0.0038	0.0038	0.0038	0.0000	0.0000	0.0007	0.0007	0.0080	0.0003	0.0003	0.0003	0.0003	0.0000	0.0000	0.0000	0.0021	0.0038	0.0038																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (n-Hexane)		0.0066	0.0066	0.0066	0.0000	0.0000	0.0018	0.0018	0.0161	0.0010	0.0010	0.0010	0.0010	0.0000	0.0000	0.0000	0.0044	0.0065	0.0065																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (n-Heptane)		0.0020	0.0020	0.0020	0.0000	0.0000	0.0008	0.0008	0.0052	0.0005	0.0005	0.0005	0.0005	0.0000	0.0000	0.0000	0.0017	0.0020	0.0020																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (n-Octane)		0.0006	0.0006	0.0006	0.0000	0.0000	0.0003	0.0003	0.0016	0.0003	0.0003	0.0003	0.0003	0.0000	0.0000	0.0000	0.0007	0.0006	0.0006																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (n-Nonane)		0.0003	0.0003	0.0003	0.0000	0.0000	0.0003	0.0003	0.0008	0.0002	0.0002	0.0002	0.0002	0.0000	0.0000	0.0000	0.0005	0.0003	0.0003																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (n-Decane)		0.0001	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0002	0.0001	0.0001																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (n-C11)		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (Nitrogen)		0.0030	0.0030	0.0030	0.0000	0.0000	0.0000	0.0000	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0014	0.0030	0.0030																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Comp Mole Frac (TEGlycol)		0.0000	0.0000	0.0000	0.9827	0.0000	0.5953	0.5953	0.0000	0.6280	0.6280	0.6280	0.6280	0.9821	0.9821	0.9821	0.0000	0.0000	0.0000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0010_08)																									
شماره پیمان: 053 – 073 – 9184	<table><tr><th colspan="8">HEAT AND MASS BALANCE FOR GAS DEHYDRATION PACKAGE</th></tr><tr><th>نسخه</th><th>سریال</th><th>نوع مدرک</th><th>رشته</th><th>تهیهات</th><th>صادرکننده</th><th>بسته کاری</th><th>پروژه</th></tr><tr><td>V02</td><td>0002</td><td>PF</td><td>PR</td><td>120</td><td>MF</td><td>GCS</td><td>BK</td></tr></table>	HEAT AND MASS BALANCE FOR GAS DEHYDRATION PACKAGE								نسخه	سریال	نوع مدرک	رشته	تهیهات	صادرکننده	بسته کاری	پروژه	V02	0002	PF	PR	120	MF	GCS	BK	شماره صفحه: 4 از 4
HEAT AND MASS BALANCE FOR GAS DEHYDRATION PACKAGE																										
نسخه	سریال	نوع مدرک	رشته	تهیهات	صادرکننده	بسته کاری	پروژه																			
V02	0002	PF	PR	120	MF	GCS	BK																			

		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد 08_0010 BK-HD-GCS-CO)																			
		HEAT AND MASS BALANCE FOR GAS DEHYDRATION PACKAGE																			
شماره پیمان:		پروژه	بسته کاری	صادرکننده	تهیهات	رشته	نوع مدرک		سریال		نسخه		شماره صفحه: 4 از 4								
053 - 073 - 9184		BK	GCS	MF	120	PR	PF		0002		V02		V02								
		Winter Case																			
	Stream No.	Unit	01	02	02A	03	04	05	06	07	08	09	10	11	12	13	14	15	16A	16B	
	Description		Wet gas to Contactor	Dry gas from Contactor	Dry Gas from Gas/TEG HEX.	Lean TEG to Contactor	Liquid from Scrubber	Rich TEG from Contactor	Rich TEG from Reflux Condenser	Gas from Flash Drum	Rich TEG from Flash Drum	Rich TEG from Particle Filter	Rich TEG from Carbon Filter	Rich TEG to Still Column	Lean TEG to TEG/TEG HEX.	Lean TEG to Pump	Lean TEG to Gas/TEG HEX.	Off Gas from Still Column	Stripping Gas	Fuel Gas to Reboiler Burner	
OVERALL PHASE	Vapour Fraction		1.0000	1.0000	1.0000	0.0000	0.0000	0.0388	0.0429	1.0000	0.0000	0.0008	0.0015	0.0208	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000	
	Temperature	C	60.00	63.89	66.87	68.00	60.00	62.96	74.53	74.53	74.53	74.52	140.00	192.68	123.57	124.60	86.85	19.00	19.00		
	Pressure	bar_g	53.9	53.6	53.1	54.9	53.9	4.8	4.5	4.5	4.5	3.8	3.3	3.100	0.3	0.2	55.1	0.2	4.9	4.9	
	Molecular Weight		21.55	21.55	21.55	147.66	24.35	101.75	101.75	29.82	104.98	104.98	104.98	104.98	147.65	147.65	147.65	20.58	21.56	21.56	
	Mass Density	kg/m3	48.15	47.02	45.94	1045.12	139.81	362.74	318.74	5.79	1020.00	976.13	929.31	378.29	980.94	1018.21	1020.88	0.85	5.34	5.34	
	Mass Flow	kg/h	15170.9	15108.5	15108.5	775.0	0.0	837.4	837.4	10.5	826.9	826.9	826.9	826.9	775.0	775.0	775.0	97.1	45.0	8.80	
	Molar Flow	kgmole/h	704.0	701.0	701.0	5.2	0.0	8.2	8.2	0.4	7.9	7.9	7.9	7.9	5.2	5.2	5.2	4.7	2.1	0.41	
GAS PHASE	Phase Molecular Weight		21.55	21.55	21.55	-	21.55	29.28	29.82	29.82	31.11	32.10	31.39	-	-	-	-	20.58	21.56	21.56	
	Phase Mass Density	kg/m3	48.15	47.02	45.94	-	48.15	6.22	5.79	5.79	5.79	5.27	4.87	3.81	-	-	-	0.85	5.34	5.34	
	Phase Mass Flow	kg/h	15170.9	15108.5	15108.5	-	0.0	9.3	10.5	10.5	0.0	0.19	0.39	5.15	-	-	-	97.1	45.0	8.80	
	Phase Molar Flow	kgmole/h	704.0	701.0	701.0	-	0.0	0.3	0.4	0.4	0.0	0.01	0.01	0.16	-	-	-	4.7	2.1	0.41	
	Phase Std Gas Flow	MMSCFD	14.11	14.05	14.05	-	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	-	-	-	0.09	0.04	0.01	
	Phase Actual Volume Flow	m3/h	315.04	321.31	328.86	-	0.00	1.50	1.82	1.82	0.00	0.04	0.08	1.35	-	-	-	114.89	8.42	1.65	
	Phase Viscosity	cP	0.01386	0.01396	0.01402	-	0.01386	0.01258	0.01299	0.01299	0.01299	0.01	0.01	0.01	-	-	-	0.01093	0.01103	0.01	
LIQUID PHASE	Phase Molecular Weight		-	-	-	147.66	24.35	104.67	104.98	104.98	104.98	105.03	105.09	106.54	147.65	147.65	147.65	-	-	-	
	Phase Mass Density	kg/m3	-	-	-	1045.12	139.81	1025.57	1020.00	1020.00	1020.00	1020.12	1020.23	984.70	980.94	1018.21	1020.88	-	-	-	
	Phase Mass Flow	kg/h	-	-	-	775.0	0.0	828.0	826.9	0.0	826.9	826.7	826.5	821.7	775.00	775.00	775.00	-	-	-	
	Phase Molar Flow	kgmole/h	-	-	-	5.2	0.0	7.9	7.9	0.0	7.9	7.9	7.9	7.7	5.25	5.25	5.25	-	-	-	
	Phase Std Ideal Liq Vol Flow	m3/h	-	-	-	0.687	0.000	0.744	0.743	0.000	0.743	0.742	0.742	0.735	0.69	0.69	0.69	-	-	-	
	Phase Actual Volume Flow	m3/h	-	-	-	0.742	0.000	0.807	0.811	0.000	0.811	0.810	0.810	0.834	0.79	0.76	0.76	-	-	-	
	Phase Viscosity	cP	-	-	-	7.92632	0.01796	7.30175	5.45335	5.45335	5.45335	5.46663	5.48042	1.40594	0.66	2.15	2.11	-	-	-	
WATER PHASE	Phase Molecular Weight		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Phase Mass Density	kg/m3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Phase Mass Flow	kg/h	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Phase Molar Flow	kgmole/h	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Phase Std Ideal Liq Vol Flow	m3/h	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Phase Actual Volume Flow	m3/h	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Phase Viscosity	cP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
COMPOSITION (MOLE FRACTION)	Comp Mole Frac (H2O)		0.0036	0.0002	0.0002	0.0178	0.0036	0.3009	0.3009	0.0199	0.3135	0.3135	0.3135	0.3135	0.0179	0.0179	0.0179	0.5052	0.0036	0.0036	
	Comp Mole Frac (CO2)		0.0252	0.0253	0.0253	0.0001	0.0257	0.0043	0.0043	0.0712	0.0013	0.0013	0.0013	0.0013	0.0001	0.0001	0.0001	0.0132	0.0252	0.0252	
	Comp Mole Frac (H2S)		0.0471	0.0468	0.0468	0.0003	0.0568	0.0394	0.0394	0.3059	0.0275	0.0275	0.0275	0.0275	0.0003	0.0003	0.0003	0.0664	0.0471	0.0471	
	Comp Mole Frac (Methane)		0.7399	0.7429	0.7429	0.0005	0.6504	0.0161	0.0161	0.3556	0.0009	0.0009	0.0009	0.0009	0.0005	0.0005	0.0005	0.3283	0.7398	0.7398	
	Comp Mole Frac (Ethane)		0.1142	0.1146	0.1146	0.0002	0.1403	0.0063	0.0063	0.1270	0.0009	0.0009	0.0009	0.0009	0.0002	0.0002	0.0002	0.0519	0.1142	0.1142	
	Comp Mole Frac (Propane)		0.0474	0.0476	0.0476	0.0001	0.0750	0.0041	0.0041	0.0747	0.0009	0.0009	0.0009	0.0009	0.0001	0.0001	0.0001	0.0224	0.0474	0.0474	
	Comp Mole Frac (i-Butane)		0.0039	0.0039	0.0039	0.0000	0.0077	0.0004	0.0004	0.0073	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0020	0.0039	0.0039	
	Comp Mole Frac (n-Butane)		0.0081	0.0081	0.0081	0.0000	0.0164	0.0012	0.0012	0.0185	0.0004	0.0004	0.0004	0.0004	0.0000	0.0000	0.0000	0.0043	0.0081	0.0081	
	Comp Mole Frac (i-Pentane)		0.0031	0.0031	0.0031	0.0000	0.0075	0.0005	0.0005	0.0069	0.0002	0.0002	0.0002	0.0002	0.0000	0.0000	0.0000	0.0017	0.0031	0.0031	
	Comp Mole Frac (n-Pentane)		0.0014	0.0014	0.0014	0.0000	0.0036	0.0003	0.0003	0.0036	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0009	0.0015	0.0015	
	Comp Mole Frac (n-Hexane)		0.0022	0.0022	0.0022	0.0000	0.0074	0.0007	0.0007	0.0066	0.0004	0.0004	0.0004	0.0004	0.0000	0.0000	0.0000	0.0017	0.0022	0.0022	
	Comp Mole Frac (n-Heptane)		0.0005	0.0005	0.0005	0.0000	0.0021	0.0002	0.0002	0.0016	0.0002	0.0002	0.0002	0.0002	0.0000	0.0000	0.0000	0.0005	0.0005	0.0005	
	Comp Mole Frac (n-Octane)		0.0001	0.0001	0.0001	0.0000	0.0005	0.0001	0.0001	0.0003	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0002	0.0001	0.0001	
	Comp Mole Frac (n-Nonane)		0.0001	0.0001	0.0001	0.0000	0.0007	0.0001	0.0001	0.0003	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0002	0.0001	0.0001	
	Comp Mole Frac (n-Decane)		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	Comp Mole Frac (n-C11)		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	Comp Mole Frac (Nitrogen)		0.0031	0.0031	0.0031	0.0000	0.0022	0.0000	0.0000	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0014	0.0031	0.0031	
	Comp Mole Frac (TEGlycol)		0.0000	0.0000	0.0000	0.9809	0.0000	0.6254	0.6254	0.0000	0.6534	0.6534	0.6534	0.6534	0.9808	0.9808	0.9808	0.0000	0.0000	0.0000	