# Table 1

## Summary of Sediment Sample Chemical Characterization Results

### Cap Sante Marine Cleanup

<table>
<thead>
<tr>
<th></th>
<th>SED-1</th>
<th>SED-2</th>
<th>SED-3</th>
<th>SED-4</th>
<th>SED-5</th>
<th>SED-6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>KW08A/KW09A/KW10A</td>
<td>KW08B/KW09B/KW10B</td>
<td>KW08C/KW09C/KW10C</td>
<td>KW08D/KW10D</td>
<td>KW08E/KW10E</td>
<td>KW08F/KW10F</td>
</tr>
</tbody>
</table>

### Diesel-Range Hydrocarbons

<table>
<thead>
<tr>
<th>Parameter</th>
<th>SED-1</th>
<th>SED-2</th>
<th>SED-3</th>
<th>SED-4</th>
<th>SED-5</th>
<th>SED-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>NWTPH-Dx (mg/kg)</td>
<td>Diesel Range</td>
<td>36</td>
<td>92</td>
<td>27</td>
<td>87</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>Motor Oil Range</td>
<td>100</td>
<td>200</td>
<td>67</td>
<td>240</td>
<td>260</td>
</tr>
</tbody>
</table>

### Gasoline-Range Hydrocarbons

<table>
<thead>
<tr>
<th>Parameter</th>
<th>SED-1</th>
<th>SED-2</th>
<th>SED-3</th>
<th>SED-4</th>
<th>SED-5</th>
<th>SED-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>NWTPH-G (mg/kg)</td>
<td>Gasoline Range</td>
<td>20 U</td>
<td>23 U</td>
<td>12 U</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

### Extractable Petroleum Hydrocarbons

<table>
<thead>
<tr>
<th>Parameter</th>
<th>SED-1</th>
<th>SED-2</th>
<th>SED-3</th>
<th>SED-4</th>
<th>SED-5</th>
<th>SED-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method WA-EPH (µg/kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, C8-C10 Aromatics</td>
<td>4,100 U</td>
<td>4,100 U</td>
<td>2,900 U</td>
<td>5,500 U</td>
<td>4,600 U</td>
<td>5,500 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C10-C12 Aromatics</td>
<td>4,100 U</td>
<td>4,100 U</td>
<td>2,900 U</td>
<td>5,500 U</td>
<td>4,600 U</td>
<td>5,500 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C12-C16 Aromatics</td>
<td>4,100 U</td>
<td>4,100 U</td>
<td>2,900 U</td>
<td>5,500 U</td>
<td>4,600 U</td>
<td>5,500 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C16-C21 Aromatics</td>
<td>6,600</td>
<td>24,000</td>
<td>3,200</td>
<td>5,500 U</td>
<td>15,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C21-C34 Aromatics</td>
<td>17,000</td>
<td>37,000</td>
<td>11,000</td>
<td>18,000</td>
<td>32,000</td>
<td>18,000</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, C8-C10 Aliphatics</td>
<td>4,100 U</td>
<td>4,100 U</td>
<td>2,900 U</td>
<td>5,500 U</td>
<td>4,600 U</td>
<td>5,500 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C10-C12 Aliphatics</td>
<td>4,100 U</td>
<td>4,100 U</td>
<td>2,900 U</td>
<td>5,500 U</td>
<td>4,600 U</td>
<td>5,500 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C12-C16 Aliphatics</td>
<td>4,100 U</td>
<td>14,000</td>
<td>2,900 U</td>
<td>5,500 U</td>
<td>15,000</td>
<td>5,500 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C16-C21 Aliphatics</td>
<td>4,100 U</td>
<td>39,000</td>
<td>2,900 U</td>
<td>6,100</td>
<td>34,000</td>
<td>16,000</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C21-C34 Aliphatics</td>
<td>37,000</td>
<td>100,000</td>
<td>25,000</td>
<td>83,000</td>
<td>130,000</td>
<td>93,000</td>
</tr>
</tbody>
</table>

### Volatile Petroleum Hydrocarbons

<table>
<thead>
<tr>
<th>Parameter</th>
<th>SED-1</th>
<th>SED-2</th>
<th>SED-3</th>
<th>SED-4</th>
<th>SED-5</th>
<th>SED-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method WA-VPH (µg/kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzene</td>
<td>2,100 UJ</td>
<td>1,900 UJ</td>
<td>1,100 U</td>
<td>3,100 UJ</td>
<td>2,500 UJ</td>
<td>3,100 UJ</td>
</tr>
<tr>
<td>Toluene</td>
<td>2,100 UJ</td>
<td>1,900 UJ</td>
<td>1,100 U</td>
<td>3,100 UJ</td>
<td>2,500 UJ</td>
<td>3,100 UJ</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>2,100 UJ</td>
<td>1,900 UJ</td>
<td>1,100 U</td>
<td>3,100 UJ</td>
<td>2,500 UJ</td>
<td>3,100 UJ</td>
</tr>
<tr>
<td>m,p-Xylene</td>
<td>4,200 UJ</td>
<td>3,800 UJ</td>
<td>2,300 U</td>
<td>6,200 UJ</td>
<td>5,000 UJ</td>
<td>6,200 UJ</td>
</tr>
<tr>
<td>o-Xylene</td>
<td>2,100 UJ</td>
<td>1,900 UJ</td>
<td>1,100 U</td>
<td>3,100 UJ</td>
<td>2,500 UJ</td>
<td>3,100 UJ</td>
</tr>
<tr>
<td>Methyl tert-Butyl Ether</td>
<td>2,100 UJ</td>
<td>1,900 UJ</td>
<td>1,100 U</td>
<td>3,100 UJ</td>
<td>2,500 UJ</td>
<td>3,100 UJ</td>
</tr>
<tr>
<td>Volatile Petroleum Hydrocarbons, &gt;C8-C10 Aromatics</td>
<td>21,000 UJ</td>
<td>19,000 UJ</td>
<td>11,000 U</td>
<td>31,000 UJ</td>
<td>25,000 UJ</td>
<td>31,000 UJ</td>
</tr>
<tr>
<td>Volatile Petroleum Hydrocarbons, &gt;C10-C12 Aromatics</td>
<td>21,000 UJ</td>
<td>19,000 UJ</td>
<td>11,000 U</td>
<td>31,000 UJ</td>
<td>25,000 UJ</td>
<td>31,000 UJ</td>
</tr>
<tr>
<td>Volatile Petroleum Hydrocarbons, &gt;C12-C13 Aromatics</td>
<td>21,000 UJ</td>
<td>19,000 UJ</td>
<td>11,000 U</td>
<td>31,000 UJ</td>
<td>25,000 UJ</td>
<td>31,000 UJ</td>
</tr>
<tr>
<td>Volatile Petroleum Hydrocarbons, &gt;C8-C10 Aliphatics</td>
<td>21,000 UJ</td>
<td>19,000 UJ</td>
<td>11,000 U</td>
<td>31,000 UJ</td>
<td>25,000 UJ</td>
<td>31,000 UJ</td>
</tr>
<tr>
<td>Volatile Petroleum Hydrocarbons, &gt;C10-C12 Aliphatics</td>
<td>21,000 UJ</td>
<td>19,000 UJ</td>
<td>11,000 U</td>
<td>31,000 UJ</td>
<td>25,000 UJ</td>
<td>31,000 UJ</td>
</tr>
</tbody>
</table>

### Conventional Chemistry Parameters (%)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>SED-1</th>
<th>SED-2</th>
<th>SED-3</th>
<th>SED-4</th>
<th>SED-5</th>
<th>SED-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Solids (EPA Method 160.3)</td>
<td>48.80</td>
<td>47.70</td>
<td>63.80</td>
<td>35.80</td>
<td>44.10</td>
<td>35.40</td>
</tr>
<tr>
<td>Total Organic Carbon (PLUMB 81 TC)</td>
<td>2.08</td>
<td>1.77</td>
<td>1.33</td>
<td>3.27</td>
<td>1.65</td>
<td>1.69</td>
</tr>
</tbody>
</table>
# TABLE 1
## SUMMARY OF SEDIMENT SAMPLE CHEMICAL CHARACTERIZATION RESULTS
### CAP SANTE MARINE CLEANUP
#### PORT OF ANACORTES

<table>
<thead>
<tr>
<th></th>
<th>SED-7 KW08G/KW10G</th>
<th>SED-8 KW08H/KW10H</th>
<th>SED-9 KW08I/KW10I</th>
<th>SED-10 KW08J/KW10J</th>
<th>SED-11 KW08K/KW10K</th>
<th>SED-12 KW08L/KW10L</th>
<th>REF-2 KW44M</th>
<th>REF-4 KW44N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIESEL-RANGE HYDROCARBONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NWTPH-Dx (mg/kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diesel Range</td>
<td>42</td>
<td>83</td>
<td>72</td>
<td>35</td>
<td>70</td>
<td>72</td>
<td>6.5 U</td>
<td>8.4 U</td>
</tr>
<tr>
<td>Motor Oil Range</td>
<td>110</td>
<td>200</td>
<td>220</td>
<td>110</td>
<td>370</td>
<td>180</td>
<td>13 U</td>
<td>17 U</td>
</tr>
<tr>
<td><strong>GASOLINE-RANGE HYDROCARBONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NWTPH-G (mg/kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gasoline Range</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>EXTRACTIBLE PETROLEUM HYDROCARBONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method WA-EPH (µg/kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, C8-C10 Aromatics</td>
<td>4,800 U</td>
<td>5,100 U</td>
<td>5,000 U</td>
<td>5,200 U</td>
<td>5,200 U</td>
<td>5,400 U</td>
<td>2,600 U</td>
<td>3,400 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C10-C12 Aromatics</td>
<td>4,800 U</td>
<td>5,100 U</td>
<td>5,000 U</td>
<td>5,200 U</td>
<td>5,200 U</td>
<td>5,400 U</td>
<td>2,600 U</td>
<td>3,400 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C12-C16 Aromatics</td>
<td>4,800 U</td>
<td>5,100 U</td>
<td>5,000 U</td>
<td>5,200 U</td>
<td>5,200 U</td>
<td>5,400 U</td>
<td>2,600 U</td>
<td>3,400 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C16-C21 Aromatics</td>
<td>4,800 U</td>
<td>7,100</td>
<td>9,100</td>
<td>5,200 U</td>
<td>6,000</td>
<td>12,000</td>
<td>2,600 U</td>
<td>3,400 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C21-C34 Aromatics</td>
<td>13,000</td>
<td>8,600</td>
<td>14,000</td>
<td>8,200</td>
<td>12,000</td>
<td>15,000</td>
<td>2,600 U</td>
<td>3,400 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, C8-C10 Aliphatics</td>
<td>4,800 U</td>
<td>5,100 U</td>
<td>5,000 U</td>
<td>5,200 U</td>
<td>5,200 U</td>
<td>5,400 U</td>
<td>2,600 U</td>
<td>3,400 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C10-C12 Aliphatics</td>
<td>4,800 U</td>
<td>5,100 U</td>
<td>5,000 U</td>
<td>5,200 U</td>
<td>5,200 U</td>
<td>5,400 U</td>
<td>2,600 U</td>
<td>3,400 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C12-C16 Aliphatics</td>
<td>4,800 U</td>
<td>5,300</td>
<td>5,000 U</td>
<td>5,200 U</td>
<td>5,200 U</td>
<td>5,400 U</td>
<td>2,600 U</td>
<td>3,400 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C16-C21 Aliphatics</td>
<td>9,400</td>
<td>19,000</td>
<td>19,000</td>
<td>15,000</td>
<td>20,000</td>
<td>6,800</td>
<td>2,600 U</td>
<td>3,400 U</td>
</tr>
<tr>
<td>Extractable Petroleum Hydrocarbons, &gt;C21-C34 Aliphatics</td>
<td>50,000</td>
<td>89,000</td>
<td>110,000</td>
<td>84,000</td>
<td>110,000</td>
<td>94,000</td>
<td>3,500</td>
<td>3,400 U</td>
</tr>
<tr>
<td><strong>VOLATILE PETROLEUM HYDROCARBONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method WA-VPH (µg/kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzene</td>
<td>2.500 UJ</td>
<td>2.800 UJ</td>
<td>2.500 UJ</td>
<td>2.500 UJ</td>
<td>2.800 UJ</td>
<td>3.100 UJ</td>
<td>930 U</td>
<td>1,200 U</td>
</tr>
<tr>
<td>Toluene</td>
<td>2.500 UJ</td>
<td>2.800 UJ</td>
<td>2.500 UJ</td>
<td>2.500 UJ</td>
<td>2.800 UJ</td>
<td>3.100 UJ</td>
<td>930 U</td>
<td>1,200 U</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>2.500 UJ</td>
<td>2.800 UJ</td>
<td>2.500 UJ</td>
<td>2.500 UJ</td>
<td>2.800 UJ</td>
<td>3.100 UJ</td>
<td>930 U</td>
<td>1,200 U</td>
</tr>
<tr>
<td>m,p-Xylene</td>
<td>5,000 UJ</td>
<td>5,600 UJ</td>
<td>5,000 UJ</td>
<td>5,000 UJ</td>
<td>5,600 UJ</td>
<td>6,200 UJ</td>
<td>1,900 U</td>
<td>2,500 U</td>
</tr>
<tr>
<td>o-Xylene</td>
<td>2,500 UJ</td>
<td>2,800 UJ</td>
<td>2.500 UJ</td>
<td>2.500 UJ</td>
<td>2.800 UJ</td>
<td>3.100 UJ</td>
<td>930 U</td>
<td>1,200 U</td>
</tr>
<tr>
<td>Methyl tert-Butyl Ether</td>
<td>2,500 UJ</td>
<td>2,800 UJ</td>
<td>2.500 UJ</td>
<td>2.500 UJ</td>
<td>2.800 UJ</td>
<td>3.100 UJ</td>
<td>930 U</td>
<td>1,200 U</td>
</tr>
<tr>
<td>Volatile Petroleum Hydrocarbons, &gt;C8-C10 Aromatics</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>25,000 UJ</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>31,000 UJ</td>
<td>9,300 U</td>
<td>12,000 U</td>
</tr>
<tr>
<td>Volatile Petroleum Hydrocarbons, &gt;C10-C12 Aromatics</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>25,000 UJ</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>31,000 UJ</td>
<td>9,300 U</td>
<td>12,000 U</td>
</tr>
<tr>
<td>Volatile Petroleum Hydrocarbons, &gt;C12-C13 Aromatics</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>25,000 UJ</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>31,000 UJ</td>
<td>9,300 U</td>
<td>12,000 U</td>
</tr>
<tr>
<td>Volatile Petroleum Hydrocarbons, &gt;C8-C10 Aliphatics</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>25,000 UJ</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>31,000 UJ</td>
<td>9,300 U</td>
<td>12,000 U</td>
</tr>
<tr>
<td>Volatile Petroleum Hydrocarbons, &gt;C12-C13 Aliphatics</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>25,000 UJ</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>31,000 UJ</td>
<td>9,300 U</td>
<td>12,000 U</td>
</tr>
<tr>
<td>Volatile Petroleum Hydrocarbons, &gt;C8-C10 Aliphatics</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>25,000 UJ</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>31,000 UJ</td>
<td>9,300 U</td>
<td>12,000 U</td>
</tr>
<tr>
<td>Volatile Petroleum Hydrocarbons, &gt;C10-C12 Aliphatics</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>25,000 UJ</td>
<td>25,000 UJ</td>
<td>28,000 UJ</td>
<td>31,000 UJ</td>
<td>9,300 U</td>
<td>12,000 U</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>CONVENTIONAL CHEMISTRY PARAMETERS</strong> (%)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Solids (EPA Method 160.3)</td>
<td>39.40</td>
<td>38.90</td>
<td>38.80</td>
<td>39.00</td>
<td>37.20</td>
<td>35.40</td>
<td>70.90</td>
<td>58.50</td>
</tr>
<tr>
<td>Total Organic Carbon (PLUMB 81 TC)</td>
<td>2.44</td>
<td>2.87</td>
<td>2.36</td>
<td>2.49</td>
<td>1.99</td>
<td>3.20</td>
<td>1.33</td>
<td>1.53</td>
</tr>
</tbody>
</table>

mg/kg = milligrams per kilogram (ppm).
µg/kg = micrograms per kilogram (ppb).
U = The compound was not detected at the given reporting limit
UJ = The compound was not detected; the given reporting limit is an estimate
NA = Not Analyzed.
## Table 2

**Preliminary Soil Cleanup Levels for Constituents of Potential Concern and Other Detected Constituents in Soil**

**CAP SANTÉ MARINE**

**ANACORTES, WASHINGTON**

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Protection of Human Health</th>
<th>Protection of Groundwater</th>
<th>Other Factors</th>
<th>Preliminary Cleanup Level (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MTCA Method B</td>
<td>MTCA Method B</td>
<td>MTCA Method B</td>
<td>MTCA Method B</td>
</tr>
<tr>
<td></td>
<td>Soil-Direct Contact</td>
<td>Soil-Direct Contact</td>
<td>Protective of Groundwater</td>
<td>Protective of Groundwater</td>
</tr>
<tr>
<td>Total Metals (mg/kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chromium III</td>
<td>120,000</td>
<td>1,000,000</td>
<td>1,000,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Hexavalent Chromium</td>
<td>240</td>
<td>19</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>Lead</td>
<td>2,500</td>
<td>1,967</td>
<td>141</td>
<td>141</td>
</tr>
<tr>
<td>Zinc</td>
<td>24,000</td>
<td>101</td>
<td>5</td>
<td>86</td>
</tr>
</tbody>
</table>

**TOTAL PETROLEUM HYDROCARBONS (mg/kg)**

|                      |                |               |               |               |               |
|----------------------|----------------|---------------|---------------|---------------|
|                       | Gasoline-Range | Diesel-Range  | Motor Oil-Range | PAHs (µg/kg) |
| Naphthalene          | –              | –             | –             | 1,600,000 |
| 2-Methylnaphthalene | –              | –             | –             | –             |
| 1-Methylnaphthalene | –              | –             | –             | –             |
| Acenaphthylene       | –              | –             | –             | 4,800,000 |
| Acenaphthene         | –              | –             | –             | 4,800,000 |
| Fluoranthene         | –              | –             | –             | 3,200,000 |
| Pyrene               | –              | –             | –             | 2,400,000 |
| Benzo(a)pyrene       | –              | –             | –             | 137 |
| Benzo(a)anthracene   | –              | –             | –             | 130 |
| Benzo(b)fluoranthene | –              | –             | –             | 440 |
| Benzo(k)fluoranthene | –              | –             | –             | 440 |
| Chrysene             | –              | –             | –             | 140 |
| Dibenzo(a,h)anthracene | –             | –             | –             | 640 |
| Indeno(1,2,3-cd)pyrene | –             | –             | –             | 1,200 |
| Total cPAH - benzo(a)pyrene TEQ (h) | – | – | – | 137 |

**VOLATILES (µg/kg)**

|                      |                |               |               |               |               |
|----------------------|----------------|---------------|---------------|---------------|
|                      | Chloromethane  | Methylene Chloride | Acetone | Carbon Disulfide |
| CHLOROMETHANE        | 76,900 | 850 | 43 | 850 |
| Methylene Chloride   | 133,000 | 2,570 | 1,234 | 1,234 |
| Acetone              | –              | –             | –             | –             |
| Carbon Disulfide     | –              | –             | –             | –             |
| Tetrachloroethane    | 100 | – | 57 | 57 |
| 1,2-Dichloroethane   | 11,000 | – | 12 | 12 |
| 1,2-Dibromoethane    | 11.8 | – | – | – |
| 1,2-Dichlorobenzene  | 15,000 | – | 865 | 865 |
| 1,3,5-Trimethylbenzene | –        | – | – | – |
| 1,2,4-Trimethylbenzene | –       | – | – | – |
| Isopropylbenzene     | –              | –             | –             | –             |
| n-Propylbenzene      | –              | –             | –             | –             |
| sec-Butylbenzene     | –              | –             | –             | –             |
| 4-Isopropyltoluene   | –              | –             | –             | –             |
| n-Butylbenzene       | –              | –             | –             | –             |
| 1,2,4-Trichlorobenzene | –       | – | 8,000 | 8,000 |
| Methyl tert-butyl ether (MTBE) | – | – | 100 | 100 |
| 1,2-Dibromoethene (EDB) | 11.8 | – | – | – |
| 1,2-Dichloroethane (EDC) | 11,000 | – | 180 | 180 |
| Xylene               | 18,200 | – | 1,030 | 1,030 |
| Toluene              | –              | –             | –             | –             |
| Xylene               | 160,000,000 | – | – | 160,000,000 |
| Ethane               | –              | –             | –             | –             |
| Ethane               | –              | –             | –             | –             |

**PCBs (µg/kg)**

|                      |                |               |               |               |               |
|----------------------|----------------|---------------|---------------|---------------|
|                      | Total PCBs | 500 | 0.4 | 0.020 | 1.000 | 0.4 | 0.020 |

---

**Notes:**

- MTCA Method A: Unrestricted Land Use - Groundwater as Background
- MTCA Method B: Soil-Direct Contact - Protective of MTCA Method A
- Unsaturated Zone: Carcinogen - Non Carcinogen
- Saturated Zone: Carcinogen
- Protection of Human Health: Other Factors: Preliminary Cleanup Level (a)
(a) Preliminary cleanup level based on lowest soil criteria corrected for background, as indicated by shading. Further adjustments to those preliminary cleanup levels that are found to be lower than the practical quantitation limits may be necessary, in accordance with WAC 173-340-740(5)(c).

(b) Calculated using fixed parameter 3-phase partitioning model, WAC 173-340-747(4) and preliminary groundwater cleanup levels shown in Table 3 of this report.

(c) Calculated using fixed parameter 3-phase partitioning model, WAC 173-340-747(4)(e) and preliminary groundwater cleanup levels shown in Table 3 of this report.

(d) Natural background (statewide 90th percentile value) from Natural Background Soil Metals Concentrations in Washington State, Ecology 1994.

(e) Background concentration is for total chromium.

(f) MTCA Method A cleanup level is 100 mg/kg when benzene is not present and 30 mg/kg when benzene is present.

(g) Preliminary cleanup levels protective of groundwater as marine surface water from cPAHs in the saturated zone soil are shown for informational purposes. Concentrations of cPAHs higher than these preliminary cleanup levels are present in the saturated zone. It can be empirically demonstrated that these higher concentrations are protective of groundwater as marine surface water.

(h) Toxicity equivalency methodology in WAC 173-340-708(8).

Note: Shaded cell indicates basis for preliminary cleanup level.
### Table 3

*Summary of Detected Constituents in Unsaturated Zone Soil and Comparison of Analytical Results to Preliminary Soil Cleanup Levels*

**Cap Sante Marine Anacortes, WA**

#### Diesel Range Hydrocarbons

<table>
<thead>
<tr>
<th>Compound</th>
<th>EPA Method 8260B (µg/kg)</th>
<th>NWTPH-Dx (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Heptane</td>
<td>0.8</td>
<td>6.8</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>0.8</td>
<td>7.2</td>
</tr>
<tr>
<td>Toluene</td>
<td>0.7</td>
<td>6.7</td>
</tr>
<tr>
<td>Xylenes</td>
<td>0.7</td>
<td>7.2</td>
</tr>
<tr>
<td>Total BTEX</td>
<td>2.1</td>
<td>7.5</td>
</tr>
</tbody>
</table>

#### Gasoline Range Hydrocarbons

<table>
<thead>
<tr>
<th>Compound</th>
<th>EPA Method 8260B (µg/kg)</th>
<th>NWTPH-Dx (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Heptane</td>
<td>0.7</td>
<td>6.8</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>0.8</td>
<td>7.2</td>
</tr>
<tr>
<td>Propylbenzene</td>
<td>0.7</td>
<td>6.8</td>
</tr>
<tr>
<td>n-Propylbenzene</td>
<td>0.7</td>
<td>6.8</td>
</tr>
<tr>
<td>Total alkylbenzenes</td>
<td>2.1</td>
<td>7.5</td>
</tr>
</tbody>
</table>

#### Volatile Organic Compounds (VOCs)

<table>
<thead>
<tr>
<th>Compound</th>
<th>EPA Method 8260B (µg/kg)</th>
<th>NWTPH-Dx (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>0.7</td>
<td>6.5</td>
</tr>
<tr>
<td>Methylchloroform</td>
<td>0.7</td>
<td>6.5</td>
</tr>
<tr>
<td>Chloroform</td>
<td>0.7</td>
<td>6.5</td>
</tr>
<tr>
<td>Chloromethane</td>
<td>0.7</td>
<td>6.5</td>
</tr>
<tr>
<td>Total chlorinated hydrocarbons</td>
<td>3.7</td>
<td>11.0</td>
</tr>
</tbody>
</table>

**Poly cyclic Aromatic Hydrocarbons (PAHs)**

<table>
<thead>
<tr>
<th>Compound</th>
<th>EPA Method 8260B (µg/kg)</th>
<th>NWTPH-Dx (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>0.8</td>
<td>6.8</td>
</tr>
<tr>
<td>Acenaphthylene</td>
<td>0.8</td>
<td>6.8</td>
</tr>
<tr>
<td>Fluorene</td>
<td>0.8</td>
<td>6.8</td>
</tr>
<tr>
<td>Total PAHs</td>
<td>3.7</td>
<td>11.0</td>
</tr>
</tbody>
</table>

**Metallics**

<table>
<thead>
<tr>
<th>Metal</th>
<th>EPA Method 8260B (µg/kg)</th>
<th>NWTPH-Dx (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>250</td>
<td>68</td>
</tr>
</tbody>
</table>

**Source:** S:\Projects\529\013\WIP\T\Cap Sante Soil Data\Soil Unsat-Detects LANDAU ASSOCIATES
| TABLE 3  
SUMMARY OF DETECTED CONSTITUENTS IN UNSATURATED ZONE SOIL AND COMPARISON OF ANALYTICAL RESULTS TO PRELIMINARY SOIL CLEANUP LEVELS  
CAP SANTE MARINE ANACORTES, WA |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsaturated Zone</td>
<td>Preliminary Soil Cleanup Level</td>
<td>LA89B</td>
<td>LA89C</td>
<td>LB08B</td>
<td>LB08C</td>
<td>LB08D</td>
<td>LB08E</td>
<td>LB08F</td>
</tr>
<tr>
<td><strong>DIESEL-RANGE HYDROCARBONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAPHTHA (mg/kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diesel</td>
<td>180</td>
<td>12</td>
<td>12</td>
<td>0.5</td>
<td>0.5</td>
<td>0.6</td>
<td>0.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Motor Oil</td>
<td>2,000</td>
<td>14</td>
<td>U</td>
<td>18</td>
<td>17</td>
<td>220</td>
<td>220</td>
<td>158</td>
</tr>
<tr>
<td><strong>GASOLINE-RANGE HYDROCARBONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAPHTHA (mg/kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gasoline</td>
<td>5.6</td>
<td>U</td>
<td>3.0</td>
<td>U</td>
<td>3.1</td>
<td>U</td>
<td>3.4</td>
<td>U</td>
</tr>
<tr>
<td><strong>OLATILE ORGANIC COMPOUNDS (VOCs)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chloromethane</td>
<td>1.2</td>
<td>U</td>
<td>0.5</td>
<td>U</td>
<td>0.6</td>
<td>0.7</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Methylene Chloride</td>
<td>1.3</td>
<td>U</td>
<td>0.5</td>
<td>U</td>
<td>0.6</td>
<td>0.7</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Ethylene Chlorohydrin</td>
<td>1.6</td>
<td>U</td>
<td>0.5</td>
<td>U</td>
<td>0.6</td>
<td>0.7</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>m,p-Xylene</td>
<td>5.2</td>
<td>U</td>
<td>0.5</td>
<td>U</td>
<td>0.6</td>
<td>0.7</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>t-Xylene</td>
<td>10.9</td>
<td>U</td>
<td>1.2</td>
<td>U</td>
<td>0.5</td>
<td>U</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Secondary Butyl Alcohol</td>
<td>15.6</td>
<td>U</td>
<td>1.2</td>
<td>U</td>
<td>0.5</td>
<td>U</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Primary Butyl Alcohol</td>
<td>4.0</td>
<td>U</td>
<td>1.2</td>
<td>U</td>
<td>0.5</td>
<td>U</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>1.5</td>
<td>U</td>
<td>0.5</td>
<td>U</td>
<td>0.6</td>
<td>0.7</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>1-Propanol</td>
<td>15.0</td>
<td>U</td>
<td>1.2</td>
<td>U</td>
<td>0.5</td>
<td>U</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>n-Propanol</td>
<td>5.3</td>
<td>U</td>
<td>3.0</td>
<td>U</td>
<td>3.1</td>
<td>U</td>
<td>3.4</td>
<td>U</td>
</tr>
<tr>
<td><strong>POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naphthalene</td>
<td>138,000</td>
<td>19</td>
<td>U</td>
<td>27</td>
<td>U</td>
<td>2.0</td>
<td>U</td>
<td>3.0</td>
</tr>
<tr>
<td>Acenaphthylene</td>
<td>8,000,000</td>
<td>33</td>
<td>27</td>
<td>U</td>
<td>2.0</td>
<td>5.0</td>
<td>10.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Acenaphthene</td>
<td>500,000</td>
<td>16</td>
<td>U</td>
<td>1.0</td>
<td>1.0</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Fluorene</td>
<td>547,000</td>
<td>8.9</td>
<td>U</td>
<td>2.4</td>
<td>U</td>
<td>2.6</td>
<td>U</td>
<td>2.7</td>
</tr>
<tr>
<td>Phenanthrene</td>
<td>12,285,000</td>
<td>6.6</td>
<td>U</td>
<td>6.6</td>
<td>U</td>
<td>6.6</td>
<td>U</td>
<td>6.6</td>
</tr>
<tr>
<td>Anthracene</td>
<td>92,000</td>
<td>11</td>
<td>U</td>
<td>1.0</td>
<td>1.0</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Fluoranthene</td>
<td>2,400,000</td>
<td>18</td>
<td>13</td>
<td>U</td>
<td>6.6</td>
<td>U</td>
<td>10</td>
<td>0.6</td>
</tr>
<tr>
<td>Benzo(a)anthracene</td>
<td>5.6</td>
<td>U</td>
<td>2.4</td>
<td>U</td>
<td>2.6</td>
<td>U</td>
<td>2.7</td>
<td>U</td>
</tr>
<tr>
<td>Benzo(b)fluoranthene</td>
<td>980</td>
<td>6.4</td>
<td>U</td>
<td>2.2</td>
<td>U</td>
<td>2.4</td>
<td>U</td>
<td>2.5</td>
</tr>
<tr>
<td>Benzo(k)fluoranthene</td>
<td>900</td>
<td>6.4</td>
<td>U</td>
<td>2.2</td>
<td>U</td>
<td>2.4</td>
<td>U</td>
<td>2.5</td>
</tr>
<tr>
<td>Benzo(a)pyrene</td>
<td>6.4</td>
<td>U</td>
<td>2.2</td>
<td>U</td>
<td>2.4</td>
<td>U</td>
<td>2.5</td>
<td>U</td>
</tr>
<tr>
<td>Dibenzo(ah)anthracene</td>
<td>6.4</td>
<td>U</td>
<td>2.2</td>
<td>U</td>
<td>2.4</td>
<td>U</td>
<td>2.5</td>
<td>U</td>
</tr>
<tr>
<td>Dibenz(e,h)pyrene</td>
<td>6.4</td>
<td>U</td>
<td>2.2</td>
<td>U</td>
<td>2.4</td>
<td>U</td>
<td>2.5</td>
<td>U</td>
</tr>
<tr>
<td>Benzo(g,h,i)perylene</td>
<td>6.4</td>
<td>U</td>
<td>2.2</td>
<td>U</td>
<td>2.4</td>
<td>U</td>
<td>2.5</td>
<td>U</td>
</tr>
<tr>
<td>Indeno(1,2,3-cd)pyrene</td>
<td>6.4</td>
<td>U</td>
<td>2.2</td>
<td>U</td>
<td>2.4</td>
<td>U</td>
<td>2.5</td>
<td>U</td>
</tr>
<tr>
<td>Benzo(ghi)perylene</td>
<td>6.4</td>
<td>U</td>
<td>2.2</td>
<td>U</td>
<td>2.4</td>
<td>U</td>
<td>2.5</td>
<td>U</td>
</tr>
<tr>
<td>Chrysene</td>
<td>6.4</td>
<td>U</td>
<td>2.2</td>
<td>U</td>
<td>2.4</td>
<td>U</td>
<td>2.5</td>
<td>U</td>
</tr>
<tr>
<td>Benzo(a)pyrene</td>
<td>6.4</td>
<td>U</td>
<td>2.2</td>
<td>U</td>
<td>2.4</td>
<td>U</td>
<td>2.5</td>
<td>U</td>
</tr>
<tr>
<td>Indeno(1,2,3-cd)pyrene</td>
<td>6.4</td>
<td>U</td>
<td>2.2</td>
<td>U</td>
<td>2.4</td>
<td>U</td>
<td>2.5</td>
<td>U</td>
</tr>
<tr>
<td><strong>TOTAL METALS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chromium</td>
<td>2,000</td>
<td>14</td>
<td>19</td>
<td>9</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Copper</td>
<td>26</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Lead</td>
<td>250</td>
<td>3.0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Zinc</td>
<td>101</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

mg/kg = milligrams per kilogram (ppm).
µg/kg = micrograms per kilogram (ppb).
M = Estimated value detected and confirmed by analyst, but with low spectral match parameters.
ND = Not detected.
NA = Not analyzed.
(a) Toxicity equivalency methodology is WAC 173-340-708(8).
Notes:
Bold indicates a detected compound.
*Bold values exceed preliminary cleanup levels.*
### TABLE 4

**SUMMARY OF DETECTED CONTAMINANTS IN SATURATED ZONE SOIL AND COMPARISON OF ANALYTICAL RESULTS TO PRELIMINARY SOIL CLEANUP LEVELS**

**CAP SANTE MARINE ANCORTES, WA**

<table>
<thead>
<tr>
<th>Compound</th>
<th>Preliminary</th>
<th>MW-3D (8-5.1)</th>
<th>MW-3D (8-5.7)</th>
<th>MW-3D (8-9.10)</th>
<th>SB-3 (6-7.1)</th>
<th>SB-3 (8-9.10)</th>
<th>SB-7 (8-9.10)</th>
<th>SB-8 (8-9.10)</th>
<th>SB-8 (8-9.10)</th>
<th>SB-9 (8-9.10)</th>
<th>SB-9 (8-9.10)</th>
<th>SB-9 (8-9.10)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NAPHTHALENE HYDROCARBONS</strong></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>Diesel</td>
<td>2,000</td>
<td>3,000</td>
<td>6.3 J</td>
<td>6.7 J</td>
<td>3.4 U</td>
<td>6.4 U</td>
<td>6.7 U</td>
<td>6.4 U</td>
<td>6.7 U</td>
<td>6.4 U</td>
<td>6.7 U</td>
<td>6.4 U</td>
</tr>
<tr>
<td>Motor Oil</td>
<td>2,000</td>
<td>47 J</td>
<td>12 U</td>
<td>12 U</td>
<td>15 U</td>
<td>14 U</td>
<td>13 U</td>
<td>16 U</td>
<td>14 U</td>
<td>13 U</td>
<td>16 U</td>
<td>14 U</td>
</tr>
<tr>
<td><strong>GASOLINE-RANGE HYDROCARBONS</strong></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>Gasoline</td>
<td>4,000,000</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>2.2 U</td>
<td>0.9 U</td>
<td>0.7 U</td>
<td>1.4 U</td>
<td>0.9 U</td>
<td>0.7 U</td>
<td>1.4 U</td>
<td>0.9 U</td>
</tr>
</tbody>
</table>

**VOLATILE ORGANIC COMPOUNDS (VOCs)**

<table>
<thead>
<tr>
<th>Compound</th>
<th>EPA Method</th>
<th>MW-3D (8-5.1)</th>
<th>MW-3D (8-5.7)</th>
<th>MW-3D (8-9.10)</th>
<th>SB-3 (6-7.1)</th>
<th>SB-3 (8-9.10)</th>
<th>SB-7 (8-9.10)</th>
<th>SB-8 (8-9.10)</th>
<th>SB-8 (8-9.10)</th>
<th>SB-9 (8-9.10)</th>
<th>SB-9 (8-9.10)</th>
<th>SB-9 (8-9.10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform</td>
<td>43</td>
<td>3,800</td>
<td>48</td>
<td>43</td>
<td>14 U</td>
<td>12 U</td>
<td>13 U</td>
<td>14 U</td>
<td>13 U</td>
<td>14 U</td>
<td>13 U</td>
<td>14 U</td>
</tr>
<tr>
<td>Toluene</td>
<td>5,700</td>
<td>58</td>
<td>58</td>
<td>58</td>
<td>58</td>
<td>58</td>
<td>58</td>
<td>58</td>
<td>58</td>
<td>58</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>6,400</td>
<td>11,000</td>
<td>1,600</td>
<td>1,600</td>
<td>1,600</td>
<td>1,600</td>
<td>1,600</td>
<td>1,600</td>
<td>1,600</td>
<td>1,600</td>
<td>1,600</td>
<td>1,600</td>
</tr>
<tr>
<td>m,p-Xylene</td>
<td>1,000</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.7 U</td>
<td>0.7 U</td>
<td>0.7 U</td>
<td>0.7 U</td>
<td>0.7 U</td>
<td>0.7 U</td>
<td>0.7 U</td>
<td>0.7 U</td>
</tr>
<tr>
<td>n-Xylene</td>
<td>1,400</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
</tr>
<tr>
<td>Total Xylenes</td>
<td>160,000,000</td>
<td>27,900</td>
<td>1,310</td>
<td>1,310</td>
<td>1,310</td>
<td>1,310</td>
<td>1,310</td>
<td>1,310</td>
<td>1,310</td>
<td>1,310</td>
<td>1,310</td>
<td>1,310</td>
</tr>
</tbody>
</table>

**POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)**

<table>
<thead>
<tr>
<th>Compound</th>
<th>EPA Method</th>
<th>MW-3D (8-5.1)</th>
<th>MW-3D (8-5.7)</th>
<th>MW-3D (8-9.10)</th>
<th>SB-3 (6-7.1)</th>
<th>SB-3 (8-9.10)</th>
<th>SB-7 (8-9.10)</th>
<th>SB-8 (8-9.10)</th>
<th>SB-8 (8-9.10)</th>
<th>SB-9 (8-9.10)</th>
<th>SB-9 (8-9.10)</th>
<th>SB-9 (8-9.10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>7,000</td>
<td>11,000</td>
<td>1,700</td>
<td>1,700</td>
<td>1,700</td>
<td>1,700</td>
<td>1,700</td>
<td>1,700</td>
<td>1,700</td>
<td>1,700</td>
<td>1,700</td>
<td>1,700</td>
</tr>
</tbody>
</table>
## TABLE 4
SUMMARY OF DETECTED CONSTITUENTS IN SATURATED ZONE SOIL
AND COMPARISON OF ANALYTICAL RESULTS TO PRELIMINARY SOIL CLEANUP LEVELS
CAP SANTE MARINE ANACORTES, WA

<table>
<thead>
<tr>
<th>Preliminary Soil Cleanup Level</th>
<th>MW-3D</th>
<th>MW-3D</th>
<th>MW-3D</th>
<th>SB-2</th>
<th>SB-2</th>
<th>SB-3</th>
<th>SB-4</th>
<th>SB-7</th>
<th>SB-8</th>
<th>SB-8</th>
<th>SB-9</th>
<th>SB-14</th>
<th>SB-14</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(6.5-7)</td>
<td>(6-8.5)</td>
<td>(8.5-10)</td>
<td>(9-10)</td>
<td>(9.7-11)</td>
<td>(7-8)</td>
<td>(7.5-9)</td>
<td>(8-9)</td>
<td>(9-10)</td>
<td>(8-9)</td>
<td>(9-10)</td>
<td>(8-9)</td>
<td>(8-9)</td>
</tr>
<tr>
<td>Pyrene</td>
<td>177,000</td>
<td>160</td>
<td>111</td>
<td>13</td>
<td>111</td>
<td>12</td>
<td>9.2</td>
<td>12</td>
<td>8.7</td>
<td>18</td>
<td>13</td>
<td>9.6</td>
<td>10</td>
</tr>
<tr>
<td>Benzo[a]anthracene</td>
<td>6.4</td>
<td>65 U</td>
<td>64 U</td>
<td>65 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
</tr>
<tr>
<td>Benzo[b]fluoranthene</td>
<td>22</td>
<td>65 U</td>
<td>65 U</td>
<td>64 U</td>
<td>65 U</td>
<td>62 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
<td>13</td>
<td>64 U</td>
</tr>
<tr>
<td>Benzo[k]fluoranthene</td>
<td>17</td>
<td>65 U</td>
<td>65 U</td>
<td>64 U</td>
<td>65 U</td>
<td>62 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
<td>64 U</td>
<td>64 U</td>
</tr>
<tr>
<td>Indeno(1,2,3-cd)pyrenes</td>
<td>82</td>
<td>65 U</td>
<td>65 U</td>
<td>64 U</td>
<td>65 U</td>
<td>62 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
<td>64 U</td>
<td>64 U</td>
</tr>
<tr>
<td>Benzo[ghi]perylene</td>
<td>32</td>
<td>65 U</td>
<td>65 U</td>
<td>64 U</td>
<td>65 U</td>
<td>62 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
<td>64 U</td>
<td>64 U</td>
</tr>
<tr>
<td>Other Carcinogens</td>
<td>28</td>
<td>65 U</td>
<td>65 U</td>
<td>64 U</td>
<td>65 U</td>
<td>62 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
<td>62 U</td>
<td>64 U</td>
<td>64 U</td>
<td>64 U</td>
</tr>
<tr>
<td>TOTAL METALS</td>
<td>120,000</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Copper</td>
<td>30</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Lead</td>
<td>81</td>
<td>2 U</td>
<td>2 U</td>
<td>6 U</td>
<td>3 U</td>
<td>3 U</td>
<td>2 U</td>
<td>3 U</td>
<td>3 U</td>
<td>3 U</td>
<td>3 U</td>
<td>3 U</td>
<td>3 U</td>
</tr>
<tr>
<td>Zinc</td>
<td>99</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

ND = Not Detected
NA = Not Analyzed
U = The compound was not detected at the given reporting limit.
J = The compound was detected; the given concentration is an estimate.
M = Estimated value detected and confirmed by analyst, but with low spectral match parameters.

(a) Listed value is for chromium(III). Hexavalent chromium was analyzed for and not detected.

Notes:
Bolded value indicates a detected result.
Dashed-lined boxed values exceed preliminary cleanup levels protective of groundwater as marine surface water, but an empirical demonstration shows these values are protective of groundwater as marine surface water. Values are less than preliminary cleanup levels protective of direct human contact.

Source: S:\Projects\529\13\WP\T\Cap Sante Soil Data_Soil-Sat Detects LANDAU ASSOCIATES
TABLE 5
SUMMARY OF SURVEYED ELEVATIONS AND CALCULATED GROUNDWATER ELEVATIONS
CAP SANTE MARINE
ANACORTES, WASHINGTON

<table>
<thead>
<tr>
<th>Well</th>
<th>Surface Elevation (ft, MLLW)</th>
<th>Reference Elevation (a) (ft, MLLW)</th>
<th>5/3/2007</th>
<th>Measured Depth to Groundwater (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MW-01</td>
<td>11.87</td>
<td>11.59</td>
<td>8.06</td>
<td>3.53</td>
</tr>
<tr>
<td>MW-02</td>
<td>12.74</td>
<td>12.30</td>
<td>6.76</td>
<td>5.54</td>
</tr>
<tr>
<td>MW-03</td>
<td>11.39</td>
<td>11.04</td>
<td>6.45</td>
<td>4.59</td>
</tr>
<tr>
<td>MW-04</td>
<td>11.32</td>
<td>11.02</td>
<td>6.64</td>
<td>4.38</td>
</tr>
<tr>
<td>Surface Water, Cap Sante Waterway</td>
<td>1.47 (b)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) Top of PVC well casing.
(b) Based on staff gauge located at Cap Sante Marina.
<table>
<thead>
<tr>
<th>Monitoring Well</th>
<th>Estimated Hydraulic Conductivity (cm/sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MW-01</td>
<td>1.37E-02</td>
</tr>
<tr>
<td>MW-02</td>
<td>6.08E-02</td>
</tr>
<tr>
<td>MW-03</td>
<td>6.33E-02</td>
</tr>
<tr>
<td>MW-04</td>
<td>7.32E-02</td>
</tr>
</tbody>
</table>

cm/sec = Centimeters per second.
TABLE 7
PRELIMINARY GROUNDWATER CLEANUP LEVELS FOR CONSTITUENTS OF CONCERN
AND OTHER DETECTED CONSTITUENTS
CAP SANTE MARINE
ANACORTES, WASHINGTON

<table>
<thead>
<tr>
<th>Constituent</th>
<th>AWQC for Protection of Aquatic Life - Acute (b)</th>
<th>AWQC for Protection of Human Health - Organisms Only (c)</th>
<th>Protection of Aquatic Life - Chronic</th>
<th>Protection of Human Health - Organisms Only</th>
<th>MTCA Method B Standard Formula Surface Water Values - Non Carcinogen</th>
<th>MTCA Method B Standard Formula Surface Water Values - Carcinogen</th>
<th>Concentration Associated with 10^-6 Risk (if carcinogen)</th>
<th>Background (d)</th>
<th>Preliminary Cleanup Level (e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL METALS (mg/L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chromium (III)</td>
<td>0.005</td>
<td>0.003</td>
<td>--</td>
<td>0.004</td>
<td>0.003</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.020</td>
</tr>
<tr>
<td>Chromium (VI)</td>
<td>0.21</td>
<td>0.01</td>
<td>--</td>
<td>0.21</td>
<td>0.0081</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.0081</td>
</tr>
<tr>
<td>Copper</td>
<td>1.1</td>
<td>0.05</td>
<td>--</td>
<td>1.1</td>
<td>0.05</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.05</td>
</tr>
<tr>
<td>Lead</td>
<td>0.90</td>
<td>0.05</td>
<td>--</td>
<td>0.90</td>
<td>0.05</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.05</td>
</tr>
<tr>
<td>Zinc</td>
<td>0.090</td>
<td>0.081</td>
<td>--</td>
<td>0.09</td>
<td>0.081</td>
<td>26</td>
<td>16.5</td>
<td>--</td>
<td>0.16</td>
</tr>
<tr>
<td>TOTAL DIESEL RANGE PETROLEUM HYDROCARBONS (µg/L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gasoline-Range</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Diesel-Range</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>MOTOR OIL-RANGE</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>VOLATILES (µg/L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Carbon Disulfide</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1,3,5-Trimethylbenzene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Heptane</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1,2-Dibromoethane (EDB)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1,2-Dichloroethane (EDC)</td>
<td>--</td>
<td>--</td>
<td>99</td>
<td>--</td>
<td>--</td>
<td>5</td>
<td>--</td>
<td>--</td>
<td>37</td>
</tr>
<tr>
<td>Benzene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Toluene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Xylene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1-Methylnaphthalene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1-Methylnaphthalene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Anthracene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Fluoranthene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Pyrene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Benzo(a)pyrene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Benzo(a)anthracene</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Benzo(b)fluoranthen</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Benzo(k)fluoranthen</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Chrysen</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Dibenzo(a,h)anthracen</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Indeno(1,2,3-cd)pyren</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>cPAH TEQ</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>PCBS (µg/L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total PCBs</td>
<td>0.03</td>
<td>0.03</td>
<td>0.000017</td>
<td>0.03</td>
<td>0.000017</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.01</td>
</tr>
<tr>
<td>National Recommended Water Quality Criteria (a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kirkland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Recommended Water Quality Criteria (a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7/25/2007 E:\edmdatalp\proj\10229\013\file\ECOL Dr Inves Data Rpt\ECOL Review-Inves Data Rpt\Tbl 7 GW Cleanup Levels LANDAU ASSOCIATES
TABLE 7
PRELIMINARY GROUNDWATER CLEANUP LEVELS FOR CONSTITUENTS OF CONCERN
AND OTHER DETECTED CONSTITUENTS
CAP SANTE MARINE
ANACORTES, WASHINGTON

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Preliminary Cleanup Level (µg/L)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>800</td>
<td>(i)</td>
</tr>
<tr>
<td>Toluene</td>
<td>800</td>
<td>(i)</td>
</tr>
<tr>
<td>Xylenes</td>
<td>1,000</td>
<td>(i)</td>
</tr>
<tr>
<td>Methylnaphthalene</td>
<td>800 µg/L when benzene is present, 1,000 µg/L when benzene is not present</td>
<td>(j)</td>
</tr>
</tbody>
</table>

Note: Shaded cell indicates basis for preliminary cleanup level.
### TABLE 8

**SUMMARY OF DETECTED CONSITITUENTS IN GROUNDWATER AND COMPARISON OF ANALYTICAL RESULTS TO PRELIMINARY CLEANUP LEVELS**

**CAP SANTE MARINE**

**ANACORTES, WASHINGTON**

<table>
<thead>
<tr>
<th>Cleanup Levels</th>
<th>MW-01</th>
<th>MW-02</th>
<th>MW-03S</th>
<th>MW-04</th>
<th>SBW-1</th>
<th>SBW-1b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Groundwater</td>
<td>KX91C/H</td>
<td>KX91A/F</td>
<td>KX91B/G</td>
<td>KX91D/I</td>
<td>LA86A,C/LD18A</td>
<td>LA86B,D/LD18B</td>
</tr>
</tbody>
</table>

#### GASOLINE-RANGE HYDROCARBONS

**NWTPH-G (mg/L)**

<table>
<thead>
<tr>
<th></th>
<th>MW-01</th>
<th>MW-02</th>
<th>MW-03S</th>
<th>MW-04</th>
<th>SBW-1</th>
<th>SBW-1b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gasoline</td>
<td>0.8</td>
<td>0.25</td>
<td>U</td>
<td>0.25</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.25</td>
<td>U</td>
<td>0.25</td>
<td>U</td>
<td>0.25</td>
</tr>
</tbody>
</table>

#### VOLATILE ORGANIC COMPOUNDS (VOCs)

**EPA Method 8260 (µg/L)**

<table>
<thead>
<tr>
<th></th>
<th>MW-01</th>
<th>MW-02</th>
<th>MW-03S</th>
<th>MW-04</th>
<th>SBW-1</th>
<th>SBW-1b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acetone</td>
<td>--</td>
<td>15</td>
<td>U</td>
<td>15</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>Carbon Disulfide</td>
<td>--</td>
<td>1.0</td>
<td>U</td>
<td>1.0</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>Benzene</td>
<td>51</td>
<td>1.0</td>
<td>U</td>
<td>1.0</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>Toluene</td>
<td>15,000</td>
<td>1.0</td>
<td>U</td>
<td>1.0</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>Ethylbenzene</td>
<td>2,100</td>
<td>1.0</td>
<td>U</td>
<td>1.0</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>m,p-Xylene</td>
<td>1,000</td>
<td>2.0</td>
<td>U</td>
<td>2.0</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>o-Xylene</td>
<td>1,000</td>
<td>1.0</td>
<td>U</td>
<td>1.0</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>1,3,5-Trimethylbenzene</td>
<td>--</td>
<td>1.0</td>
<td>U</td>
<td>1.0</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>Isopropylbenzene</td>
<td>--</td>
<td>1.0</td>
<td>U</td>
<td>1.0</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>n-Propylbenzene</td>
<td>--</td>
<td>1.0</td>
<td>U</td>
<td>1.0</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>sec-Butylbenzene</td>
<td>--</td>
<td>1.0</td>
<td>U</td>
<td>1.0</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>4-isopropyltoluene</td>
<td>--</td>
<td>1.0</td>
<td>U</td>
<td>1.0</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>Naphthalene</td>
<td>--</td>
<td>2.5</td>
<td>U</td>
<td>2.5</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>Methyl tert-Butyl Ether</td>
<td>20</td>
<td>1.6</td>
<td>U</td>
<td>1.0</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>Hexane</td>
<td>--</td>
<td>0.2</td>
<td>U</td>
<td>0.2</td>
<td>U</td>
</tr>
</tbody>
</table>

#### POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

**EPA Method 8270 (µg/L)**

<table>
<thead>
<tr>
<th></th>
<th>MW-01</th>
<th>MW-02</th>
<th>MW-03S</th>
<th>MW-04</th>
<th>SBW-1</th>
<th>SBW-1b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acenaphthen</td>
<td>643</td>
<td>0.10</td>
<td>U</td>
<td>0.27</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Fluorene</td>
<td>3,460</td>
<td>0.10</td>
<td>U</td>
<td>0.15</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>Phenanthrene</td>
<td>--</td>
<td>0.10</td>
<td>U</td>
<td>0.24</td>
<td>0.80</td>
</tr>
<tr>
<td></td>
<td>Anthracene</td>
<td>25,900</td>
<td>0.10</td>
<td>U</td>
<td>0.10</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>Dibenzofuran</td>
<td>32</td>
<td>0.10</td>
<td>U</td>
<td>0.10</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>Naphthalene</td>
<td>4,940</td>
<td>0.10</td>
<td>U</td>
<td>0.10</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>2-Methylnaphthalene</td>
<td>--</td>
<td>0.10</td>
<td>U</td>
<td>0.10</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>1-Methylnaphthalene</td>
<td>--</td>
<td>0.10</td>
<td>U</td>
<td>0.10</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>Total Naphthalenes</td>
<td>160</td>
<td>0.10</td>
<td>U</td>
<td>0.10</td>
<td>U</td>
</tr>
</tbody>
</table>

#### METALS

**EPA Method 6010 (µg/L)**

<table>
<thead>
<tr>
<th></th>
<th>MW-01</th>
<th>MW-02</th>
<th>MW-03S</th>
<th>MW-04</th>
<th>SBW-1</th>
<th>SBW-1b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Lead</td>
<td>8.1</td>
<td>1</td>
<td>U</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Dissolved Lead</td>
<td>8.1</td>
<td>1</td>
<td>U</td>
<td>1</td>
<td>U</td>
</tr>
</tbody>
</table>
# TABLE 8
SUMMARY OF DETECTED CONSTITUENTS IN GROUNDWATER AND COMPARISON OF ANALYTICAL RESULTS TO PRELIMINARY CLEANUP LEVELS
CAP SANTE MARINE
ANACORTES, WAHSINGTON

<table>
<thead>
<tr>
<th>Preliminary Groundwater Cleanup Levels</th>
<th>MW-01</th>
<th>MW-02</th>
<th>MW-03S</th>
<th>MW-04</th>
<th>SBW-1</th>
<th>SBW-1b</th>
</tr>
</thead>
<tbody>
<tr>
<td>KM91B/G</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KM91D/I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LA86A,C / LD18A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LA86B,D / LD18B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HEXAVALENT CHROMIUM**

<table>
<thead>
<tr>
<th></th>
<th>EPA Method 3500CRD (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexavalent chromium</td>
<td>0.05</td>
</tr>
</tbody>
</table>

**CONVENTIONAL CHEMISTRY PARAMETERS**

<table>
<thead>
<tr>
<th></th>
<th>Conductivity (umhos/cm)</th>
<th>Total Dissolved Solids (mg/L)</th>
<th>Salinity (ppt)</th>
<th>Chloride (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2600</td>
<td>12900</td>
<td>14800</td>
<td>23800</td>
</tr>
<tr>
<td></td>
<td>1460</td>
<td>7770</td>
<td>9030</td>
<td>15500</td>
</tr>
<tr>
<td></td>
<td>1.30</td>
<td>7.20</td>
<td>8.50</td>
<td>14.2</td>
</tr>
<tr>
<td></td>
<td>495</td>
<td>3950</td>
<td>4950</td>
<td>8940</td>
</tr>
</tbody>
</table>

**FIELD PARAMETERS**

<table>
<thead>
<tr>
<th></th>
<th>pH (Standard Units)</th>
<th>Conductivity (µS/cm)</th>
<th>Turbidity (NTU)</th>
<th>Dissolved Oxygen (mg/L)</th>
<th>Temperature (°C)</th>
<th>Ferrous Iron (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7.65</td>
<td>1,926</td>
<td>low</td>
<td>0.00</td>
<td>13.2</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>7.42</td>
<td>12,375</td>
<td>999</td>
<td>-0.05</td>
<td>10.7</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>7.42</td>
<td>11,284</td>
<td>low</td>
<td>0.00</td>
<td>11.3</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>7.92</td>
<td>22,800</td>
<td>low</td>
<td>-0.06</td>
<td>11.9</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>7.41</td>
<td>17,973</td>
<td>361</td>
<td>1.75</td>
<td>17.0</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>7.41</td>
<td>17,973</td>
<td>4.5</td>
<td>1.75</td>
<td>17.0</td>
<td>1.8</td>
</tr>
</tbody>
</table>

mg/L = milligrams per liter (ppm).
µg/L = micrograms per liter (ppb).
U = The compound was not detected at the given reporting limit
UJ = The compound was not detected; the given reporting limit is an estimate
J = The compound was detected; the given concentration is an estimate

Notes:
Box indicates concentration greater than the preliminary cleanup level
Bold indicates detected concentration.

7/25/2007  \Edmdata\projects\529\013\FileRm\RI\Ecol Dr Inves Data Rpt\Ecol Review-Inves Data Rpt_Tbl 8 Groundwater-Detects_Tbl 8
Source: S:\Projects\529\013\WIP\Cap Sante GW Data_Groundwater-Detects