## Jobs Safety Analysis

<table>
<thead>
<tr>
<th>Task</th>
<th>Hazards</th>
<th>Recommendations</th>
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</thead>
<tbody>
<tr>
<td><strong>Task 1</strong></td>
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<tr>
<td>1. Temperature of vent water</td>
<td>The depth sounder could break and prevent the team for continuing the mission.</td>
<td>Make sure all tools are working properly and efficient.</td>
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<tr>
<td>2. Thickness of ice</td>
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<td>3. Depth of sea</td>
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<tr>
<td>4. Connect ESP cable to power &amp; communication hub</td>
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<td><strong>Task 2</strong></td>
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<tr>
<td>1. Identify 4 cube serial numbers</td>
<td>The cameras identifying the serial numbers could malfunction causing the ROV to be unable to complete the task.</td>
<td>Make sure that cameras are waterproofed and checked before competition.</td>
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<td>2. Transport 4 cubes to collection basket</td>
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<td><strong>Task 3</strong></td>
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<tr>
<td>1. Collect oil samples(2)</td>
<td>The engineered claw could bust or lose connection on the hydraulic line.</td>
<td>Make sure all connections are secure and efficient.</td>
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<tr>
<td>2. Return oil samples to the surface</td>
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<tr>
<td>3. Analyze gas chromatograph</td>
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<td>4. To determine oil origin</td>
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<td><strong>Task 4</strong></td>
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<tr>
<td>1. Take a picture of two Coral Colonies</td>
<td>Too much force put on the claw by the driver and/or the ROV itself, causing the sample to be crushed.</td>
<td>Program the claw to close slower to decrease the chances of crushing the coral.</td>
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<tr>
<td>2. Determine the growth, stability, and health of the Coral</td>
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<td>3. Collect two Coral samples to the surface</td>
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<tr>
<td>Task 5</td>
<td>1. Install Flange onto the Wellhead</td>
<td>If there is too much force, the PVC items could be destroyed or may be damaged to the point of being non-functional.</td>
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</table>
| 2. Secure w/1 bolt | 3. Install cap over flange | 4. Secure w/2 bolts | Commented [PD1]:
Commented [22R1]:
Commented [23R1]: