

## **OIL ANALYSIS REPORT**

### Area **EAST CRANE** 170831 (S/N GH-9141A)

Hoist Fluid AW HYDRAULIC OIL ISO 32 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

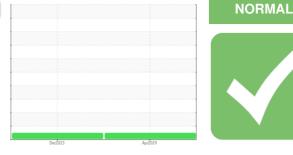
All component wear rates are normal.

#### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



Sample Rating Trend



| SAMPLE INFORM  | <b>MATION</b>   | method   | limit/base  | current  | history1   | history2   |
|--|---|--|---|--|--|--|
| Sample Number  |   | Client Info  |   | PP   | PP   |  |
| Sample Date  |   | Client Info  |   | 18 Apr 2024  | 14 Dec 2023  |  |
| Machine Age  | hrs   | Client Info  |   | 0  | 0  |  |
| Oil Age  | hrs   | Client Info  |   | 0  | 0  |  |
| Oil Changed  |   | Client Info  |   | N/A  | N/A  |  |
| Sample Status  |   |  |   | NORMAL   | NORMAL   |  |
| CONTAMINATION  | N   | method   | limit/base  | current  | history1   | history2   |
| Water  |   | WC Method  | >0.05   | NEG  | NEG  |  |
| WEAR METALS  |   | method   | limit/base  | current  | history1   | history2   |
| Iron   | ppm   | ASTM D5185(m)  | >171  | 6  | 6  |  |
| Chromium   | ppm   | ASTM D5185(m)  | >4  | 0  | 0  |  |
| Nickel   | ppm   | ASTM D5185(m)  | >4  | 0  | <1   |  |
| Titanium   | ppm   | ASTM D5185(m)  |   | 0  | 0  |  |
| Silver   | ppm   | ASTM D5185(m)  |   | 0  | <1   |  |
| Aluminum   | ppm   | ASTM D5185(m)  | >7  | 0  | 0  |  |
| Lead   | ppm   | ASTM D5185(m)  | >87   | <1   | 1  |  |
| Copper   | ppm   | ASTM D5185(m)  | >95   | 7  | 7  |  |
| Tin  | ppm   | ASTM D5185(m)  | >5  | 0  | 0  |  |
| Antimony   | ppm   | ASTM D5185(m)  |   | 0  | 0  |  |
| Vanadium   | ppm   | ASTM D5185(m)  |   | 0  | 0  |  |
| Beryllium  | ppm   | ASTM D5185(m)  |   | 0  | 0  |  |
| Cadmium  | ppm   | ASTM D5185(m)  |   | 0  | 0  |  |
|  |   |  |   |  |  |  |
| ADDITIVES  |   | method   | limit/base  | current  | history1   | history2   |
| ADDITIVES<br>Boron   | ppm   | method<br>ASTM D5185(m)  | limit/base<br>5   | current<br><1  | history1<br><1   | history2   |
|  | ppm<br>ppm  |  |   |  | · · · · · ·  |  |
| Boron  |   | ASTM D5185(m)  | 5   | <1   | <1   |  |
| Boron<br>Barium  | ppm   | ASTM D5185(m)<br>ASTM D5185(m)   | 5<br>5  | <1<br>0  | <1<br><1   |  |
| Boron<br>Barium<br>Molybdenum  | ppm<br>ppm  | ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)  | 5<br>5  | <1<br>0<br>0   | <1<br><1<br>0  |  |
| Boron<br>Barium<br>Molybdenum<br>Manganese   | ppm<br>ppm<br>ppm   | ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)   | 5<br>5<br>5<br>25   | <1<br>0<br>0<br>0  | <1<br><1<br>0<br>0   |  |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium  | ppm<br>ppm<br>ppm<br>ppm                                    | ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)  | 5<br>5<br>5<br>25   | <1<br>0<br>0<br>0<br>6   | <1<br><1<br>0<br>0<br>6  |  |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium   | ppm<br>ppm<br>ppm<br>ppm<br>ppm                             | ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)   | 5<br>5<br>5<br>25<br>200  | <1<br>0<br>0<br>0<br>6<br>42   | <1<br><1<br>0<br>0<br>6<br>45  |  |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus   | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm                      | ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)  | 5<br>5<br>5<br>25<br>200<br>300   | <1<br>0<br>0<br>0<br>6<br>42<br>219  | <1<br><1<br>0<br>0<br>6<br>45<br>230   |  |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc   | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm                      | ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)  | 5<br>5<br>5<br>25<br>200<br>300<br>370  | <1<br>0<br>0<br>6<br>42<br>219<br>251  | <1<br><1<br>0<br>6<br>45<br>230<br>261   |  |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur   | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm        | ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)   | 5<br>5<br>5<br>25<br>200<br>300<br>370  | <1<br>0<br>0<br>6<br>42<br>219<br>251<br>2602  | <1<br><1<br>0<br>0<br>6<br>45<br>230<br>261<br>2834  |  |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>Lithium  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm        | ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)  | 5<br>5<br>25<br>200<br>300<br>370<br>2500   | <1<br>0<br>0<br>6<br>42<br>219<br>251<br>2602<br><1  | <1<br><1<br>0<br>6<br>45<br>230<br>261<br>2834<br><1   |  |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>Lithium<br>CONTAMINANTS  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm        | ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)   | 5<br>5<br>25<br>200<br>300<br>370<br>2500   | <1<br>0<br>0<br>6<br>42<br>219<br>251<br>2602<br><1<br>current   | <1<br><1<br>0<br>0<br>6<br>45<br>230<br>261<br>2834<br><1<br>history1  | <br><br><br><br><br><br>history2                                     |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>Lithium<br>CONTAMINANTS<br>Silicon   | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br>ASTM D5185(m)<br><b>method</b><br>ASTM D5185(m)  | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>2500<br><b>limit/base</b><br>>32  | <1<br>0<br>0<br>6<br>42<br>219<br>251<br>2602<br><1<br>current<br>1  | <1<br><1<br>0<br>0<br>6<br>45<br>230<br>261<br>2834<br><1<br><u>history1</u><br>3  | <br><br><br><br><br><br>history2                                     |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>Lithium<br>CONTAMINANTS<br>Silicon<br>Sodium  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185(m)<br>ASTM D5185(m)  | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>2500<br><b>limit/base</b><br>>32  | <1<br>0<br>0<br>6<br>42<br>219<br>251<br>2602<br><1<br><i>current</i><br>1<br>0  | <1 <1 0 0 6 45 230 261 2834 <1 history1 3 0  | <br><br><br><br><br><br><br>history2                                 |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>Lithium<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185(m)<br>ASTM D5185(m)  | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>2500<br><b>limit/base</b><br>>32  | <1<br>0<br>0<br>6<br>42<br>219<br>251<br>2602<br><1<br><i>current</i><br>1<br>0<br><1<br><i>current</i>                | <1 <1 0 0 6 45 230 261 2834 <1 history1 3 0 0 0 history1   | <br><br><br><br><br><br>history2<br><br>                             |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>Lithium<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>FLUID CLEANLIN<br>Particles >4µm  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185(m)<br>ASTM D5185(m)   | 5<br>5<br>5<br>200<br>300<br>370<br>2500<br>2500<br><b>Imit/base</b><br>>32<br>20<br><b>Imit/base</b><br>>20                                  | <1<br>0<br>0<br>4<br>42<br>219<br>251<br>2602<br><1<br><i>current</i><br>1<br>0<br><1<br><i>current</i><br>295         | <1 <1 0 0 6 45 230 261 2834 <1  1 history1 3 0 0 history1 2017   | <br><br><br><br><br><br>history2<br><br><br>history2                 |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>Lithium<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >6µm  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185(m)<br>ASTM D5185(m)   | 5<br>5<br>5<br>200<br>300<br>370<br>2500<br>2500<br><b>imit/base</b><br>>20<br><b>imit/base</b><br>>5000<br>>1300                             | <1<br>0<br>0<br>6<br>42<br>219<br>251<br>2602<br><1<br><i>current</i><br>1<br>0<br><1<br><i>current</i><br>295<br>83   | <1 <1 0 0 6 45 230 261 2834 <1 history1 3 0 0 history1 2017 562  | <br><br><br><br><br><br>history2<br><br>history2<br><br>history2     |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>Lithium<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >14µm                                       | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185(m)<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647 | 5<br>5<br>5<br>200<br>300<br>370<br>2500<br>2500<br>imit/base<br>>32<br>imit/base<br>>20<br>imit/base<br>>5000<br>>1300<br>>160               | <1<br>0<br>0<br>6<br>42<br>219<br>251<br>2602<br><1<br><i>current</i><br>1<br>0<br><1<br>295<br>83<br>10               | <1 <li>&lt;1 </li> <li>&lt;1 </li> <li>0 </li> <li>0 </li> <li>6 </li> <li>45 </li> <li>230 </li> <li>261 </li> <li>2834 </li> <li>&lt;1 </li> <li>history1 </li> <li>3 </li> <li>0 </li> <li>0 </li> <li>history1 </li> <li>2017 </li> <li>562 </li> <li>18 </li> |  |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>Lithium<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >14µm<br>Particles >21µm                    | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185(m)<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647    | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>2500<br><b>imit/base</b><br>>32<br>>20<br><b>imit/base</b><br>>5000<br>>1300<br>>160<br>>40 | <1<br>0<br>0<br>0<br>6<br>42<br>219<br>251<br>2602<br><1<br>Current<br>1<br>0<br><1<br>Current<br>295<br>83<br>10<br>3 | <1 <1 0 0 6 45 230 261 2834 <1 history1 3 0 0 history1 2017 562  | <br><br><br><br><br><br>history2<br><br><br><br>history2             |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>Lithium<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >14µm<br>Particles >21µm<br>Particles >38µm | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185(m)<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647       | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>2500<br><b>imit/base</b><br>>32<br><b>imit/base</b><br>>5000<br>>1300<br>>160<br>>40<br>>10 | <1<br>0<br>0<br>6<br>42<br>219<br>251<br>2602<br><1<br><i>current</i><br>1<br>0<br><1<br>295<br>83<br>10               | <1    <1   0   0   6   45   230   261   2834   <1   history1   3   0   0   history1   2017   562   18   4  | <br><br><br><br><br><br><br>history2<br><br>history2<br><br>history2 |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>Lithium<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >14µm<br>Particles >21µm                    | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185(m)<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647    | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>2500<br><b>imit/base</b><br>>32<br><b>imit/base</b><br>>5000<br>>1300<br>>160<br>>40<br>>10 | <1<br>0<br>0<br>0<br>42<br>219<br>251<br>2602<br><1<br>Current<br>1<br>0<br><1<br>295<br>83<br>10<br>3<br>1            | <1    <1   0   0   6   45   230   261   2834   <1   history1   3   0   0   history1   2017   562   18   4   0  | <br><br><br><br><br><br>history2<br><br>history2<br><br>history2     |

Report Id: HIBSTJ [WCAMIS] 02630199 (Generated: 04/22/2024 14:14:43) Rev: 1

Contact/Location: Sam Nash - HIBSTJ



# **OIL ANALYSIS REPORT**

| Particle Trend  |   | FLUID DEGRAD   | ATION                   | method                           | limit/base   | current             | history1       | history2  |
|---|---|--|-------------------------|----------------------------------|--|---------------------|----------------|---|
| Honorman 4μm  |   | Acid Number (AN)   | mg KOH/g                | ASTM D974*                       | 0.57   | 0.30                | 0.29           |   |
|   |   | VISUAL   |                         | method                           | limit/base   | current             | history1       | history2  |
|   |   | White Metal  | scalar                  | Visual*                          | NONE   | NONE                | NONE           |   |
|   |   | Yellow Metal   | scalar                  | Visual*                          | NONE   | NONE                | NONE           |   |
|   |   | Precipitate  | scalar                  | Visual*                          | NONE   | NONE                | NONE           |   |
| 53  | 24  | Silt   |                         | Visual*                          | NONE   | NONE                | NONE           |   |
| Dec14/23  | Apr18/24                                      | Debris   | scalar                  | Visual*                          | NONE   | NONE                | NONE           |   |
|   |   | Sand/Dirt  | scalar                  | Visual*                          | NONE   | NONE                | NONE           |   |
| Acid Number   |   | Appearance   | scalar                  | Visual*                          | NORML  | NORML               | NORML          |   |
|   |   | Odor   | scalar                  | Visual*                          | NORML  | NORML               | NORML          |   |
| Base  |   | Emulsified Water   | scalar                  | Visual*                          | >0.05  | NEG                 | NEG            |   |
| Base  |   | Free Water   | scalar                  | Visual*                          |  | NEG                 | NEG            |   |
| Abnormal  |   | FLUID PROPER   | TIES                    | method                           | limit/base   | current             | history1       | history2  |
|   |   | Visc @ 40°C  | cSt                     | ASTM D7279(m)                    | 32   | 33.7                | 34.0           |   |
| Dec14/23 -  | Apr18/24 -                                    | SAMPLE IMAGE   | S                       | method                           | limit/base   | current             | history1       | history2  |
| ්<br>Viscosity @ 40°C<br>Abnormal   | Ар  | Color  |                         |                                  |  |                     |                | no image  |
| Base<br>Abnormal  |   | Bottom   |                         |                                  |  |                     |                | no image  |
|   |   | GRAPHS   |                         |                                  |  |                     |                |   |
| Dec14/23  | μr. a t                                       | Ferrous Alloys   |                         |                                  |  | Particle Count      |                |   |
| Dec   | V   | 10 iron 1  |                         |                                  | 491,520  | 1                   |                | 1 <sup>26</sup>   |
| Particle Trend  |   | E 5- nickel  |                         |                                  | 122,880  | Severe              |                | -24   |
| 4μm   |   |  |                         |                                  | 30,720   |                     |                | -22   |
| - 6μm<br>   |   | 0  |                         |                                  | - € 7,680  | Abnormal            |                | -20   |
|   |   | Dec14/23   |                         |                                  | Apr18/24<br>(per 1 ml  |                     |                | -20<br>-18<br>-16                                       |
|   |   |  | la.                     |                                  | Apr18/24<br>18/24<br>19/26<br>10/24<br>19/20<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/24<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>18/274<br>1 |                     |                | 16  |
|   |   | Non-ferrous Meta   | 15                      |                                  |  | $\sim$              | <b>S</b>       | 10  |
|   |   | copper   |                         |                                  | 120<br>numper  |                     |                | -14<br>-12  |
| Dec14/23 -  | V Cr O  | ق 5- tin   |                         |                                  | ≅ 30   |                     |                | -12   |
|   | A   |  |                         |                                  | 8  | -                   |                | -10   |
|   |   | Dec14/23   |                         |                                  | Apr18/24   | -                   |                | - 8   |
|   |   | Deci   |                         |                                  | Aprl   |                     |                | 20 716  |
|   |   | Viscosity @ 40°C   |                         |                                  |  | Acid Number         | 14μ 21μ        | 38μ 71μ   |
|   |   | 40 Abnormal  |                         |                                  | B/H00 Bw   | Abnormal            |                |   |
|   |   | (2) 35 - Base  |                         |                                  | ມີ<br>ພິຍ 0.50   | Base                | ******         |   |
|   |   | 형 30 - <mark>Abnormal</mark>   |                         |                                  | a U.SU   | Abnormal            |                |   |
|   |   | 25   |                         |                                  | <u>-</u><br>0.00   |                     |                |   |
|   |   | Dec14/23   |                         |                                  | Apr18/24   | Dec14/23            |                | And 8/24  |
|   |   | Dec  |                         |                                  | Api  |                     |                | a v   |
| Sar<br>Sar<br>Sar<br>Solution<br>Sar<br>Solution<br>Sar<br>Solution<br>Sar<br>Sar<br>Sar<br>Sar<br>Sar<br>Sar<br>Sar<br>Sar | nple No.<br>Number<br>que Number<br>t Package | : 5763331<br>: IND 2   | Recei<br>Teste<br>Diagr | ved : 19<br>d : 22<br>losed : 22 | 9 Apr 2024<br>2 Apr 2024<br>2 Apr 2024 - W   | SUITE 1<br>es Davis | Cont           | OWER STREE<br>ST.JOHNS, N<br>CA A1C 6K<br>act: Sam Nasl |
| To discuss this same<br>To discuss this same<br>Test denoted (*) out  | nple report, o<br>tside scope                 | contact Customer Serv<br>of accreditation, (m) m<br>ation are based on the | ethod mo                | odified, (e) te                  | ested at exteri  | nal lab.            | ntha.m.nash@e> |   |

Report Id: HIBSTJ [WCAMIS] 02630199 (Generated: 04/22/2024 14:14:43) Rev: 1

Contact/Location: Sam Nash - HIBSTJ Page 2 of 2