



# OIL ANALYSIS REPORT

|                 |                 |
|-----------------|-----------------|
| WEAR            | <b>NORMAL</b>   |
| CONTAMINATION   | <b>NORMAL</b>   |
| FLUID CONDITION | <b>ABNORMAL</b> |

Area  
**Main Deck**  
Machine Id  
**ARVA Crane Port Slewing (S/N 1804)**  
Component  
**Gearbox**  
Fluid  
**PETRO CANADA TRAXON 80W90 (6 LTR)**

## RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.  
Resample at the next service interval to monitor.

## WEAR

All component wear rates are normal.

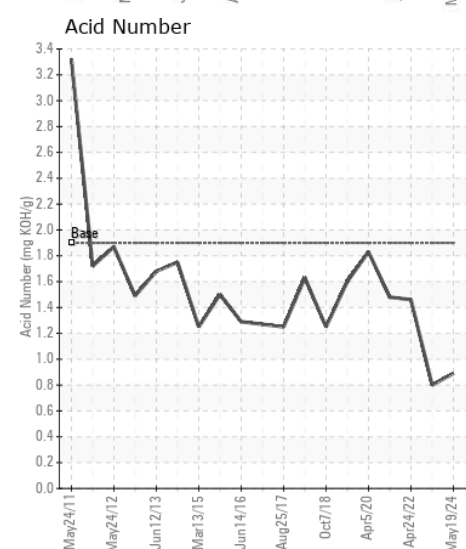
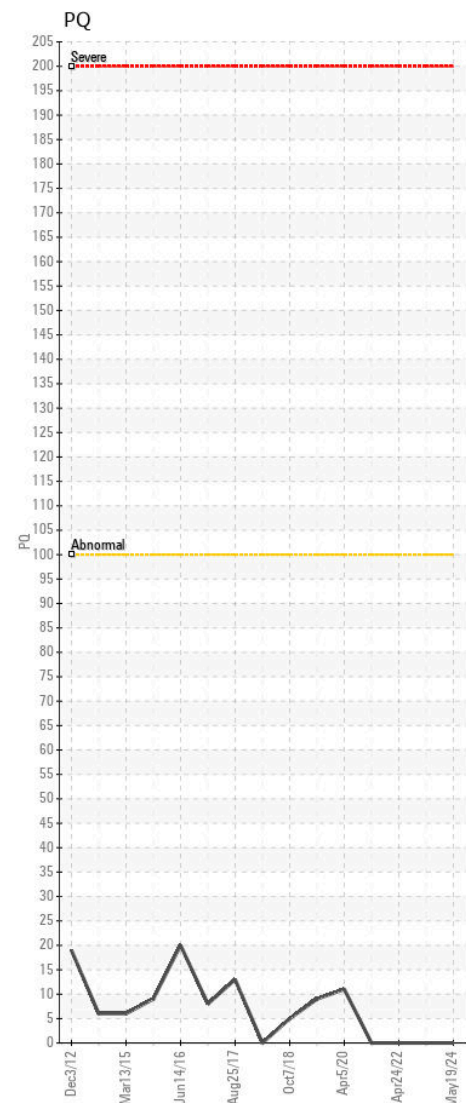
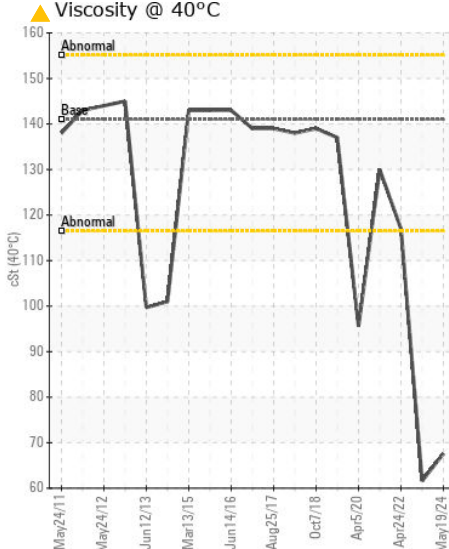
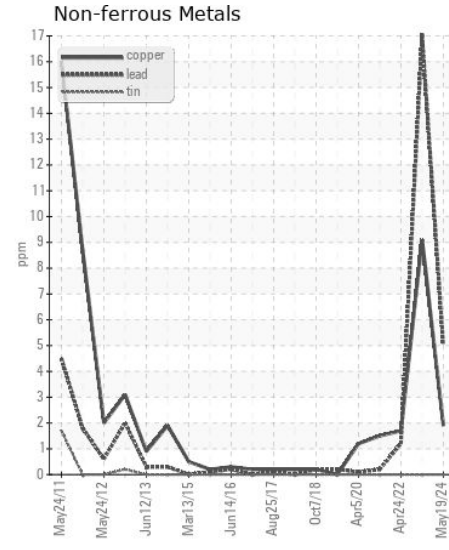
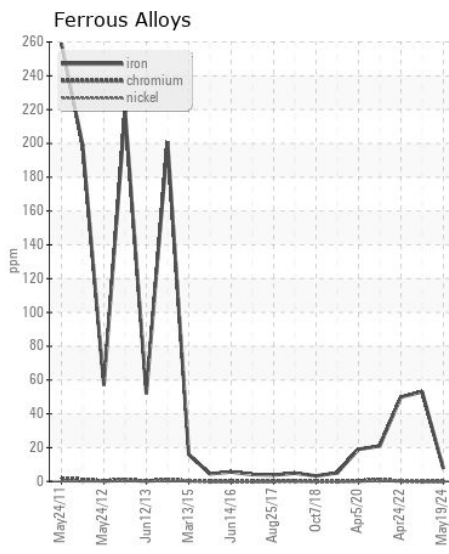
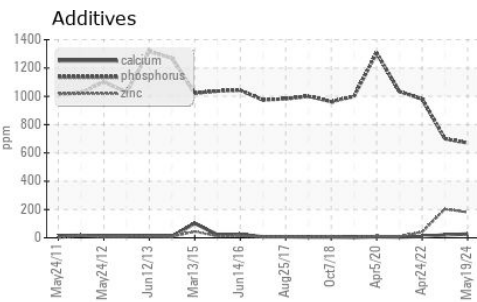
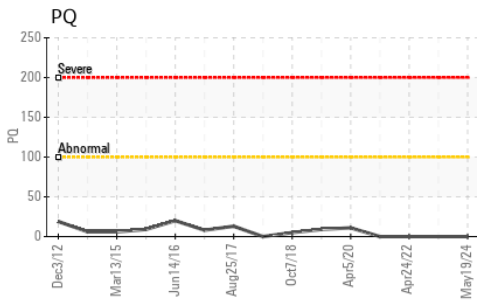
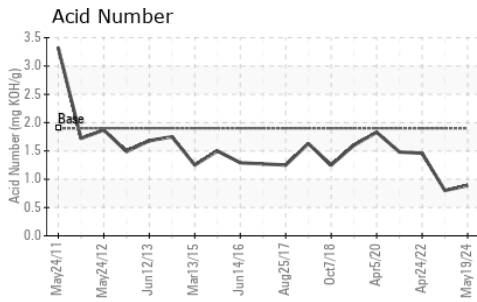
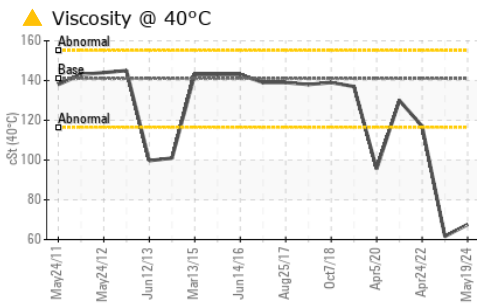
## CONTAMINATION

There is no indication of any contamination in the oil.

## FLUID CONDITION

Viscosity of sample indicates oil is within SAE 80 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| Test             | UOM      | Method        | Limit/Abn | Current            | History1    | History2    |
|------------------|----------|---------------|-----------|--------------------|-------------|-------------|
| Sample Number    |          | Client Info   |           | <b>WC0772095</b>   | WC0700688   | WC0603750   |
| Sample Date      |          | Client Info   |           | <b>19 May 2024</b> | 21 May 2023 | 24 Apr 2022 |
| Machine Age      |          | Client Info   |           | <b>6576</b>        | 6034        | 5535        |
| Oil Age          |          | Client Info   |           | <b>371</b>         | 0           | 0           |
| Filter Age       |          | Client Info   |           | <b>0</b>           | 0           | 0           |
| Oil Changed      |          | Client Info   |           | <b>Not Changd</b>  | Changed     | N/A         |
| Filter Changed   |          | Client Info   |           | <b>None</b>        | None        | None        |
| Sample Status    |          |               |           | <b>ABNORMAL</b>    | ABNORMAL    | NORMAL      |
| PQ               |          | ASTM D8184*   |           | <b>0</b>           | 0           | 0           |
| Iron             | ppm      | ASTM D5185(m) | >150      | <b>8</b>           | 53          | 50          |
| Chromium         | ppm      | ASTM D5185(m) | >10       | <b>0</b>           | 0           | <1          |
| Nickel           | ppm      | ASTM D5185(m) | >10       | <b>0</b>           | <1          | <1          |
| Titanium         | ppm      | ASTM D5185(m) |           | <b>0</b>           | 0           | 0           |
| Silver           | ppm      | ASTM D5185(m) |           | <b>0</b>           | 0           | 0           |
| Aluminum         | ppm      | ASTM D5185(m) | >5        | <b>0</b>           | 0           | <1          |
| Lead             | ppm      | ASTM D5185(m) | >65       | <b>5</b>           | 17          | 1           |
| Copper           | ppm      | ASTM D5185(m) | >80       | <b>2</b>           | 9           | 2           |
| Tin              | ppm      | ASTM D5185(m) | >8        | <b>0</b>           | 0           | 0           |
| Vanadium         | ppm      | ASTM D5185(m) |           | <b>0</b>           | 0           | 0           |
| White Metal      | scalar   | Visual*       | NONE      | <b>NONE</b>        | NONE        | NONE        |
| Yellow Metal     | scalar   | Visual*       | NONE      | <b>NONE</b>        | NONE        | NONE        |
| Silicon          | ppm      | ASTM D5185(m) | >20       | <b>0</b>           | 2           | 2           |
| Potassium        | ppm      | ASTM D5185(m) | >20       | <b>0</b>           | <1          | <1          |
| Water            |          | WC Method     | >0.2      | <b>NEG</b>         | NEG         | NEG         |
| Silt             | scalar   | Visual*       | NONE      | <b>VLITE</b>       | NONE        | NONE        |
| Debris           | scalar   | Visual*       | NONE      | <b>VLITE</b>       | NONE        | VLITE       |
| Sand/Dirt        | scalar   | Visual*       | NONE      | <b>NONE</b>        | VLITE       | NONE        |
| Appearance       | scalar   | Visual*       | NORML     | <b>NORML</b>       | NORML       | NORML       |
| Odor             | scalar   | Visual*       | NORML     | <b>NORML</b>       | NORML       | NORML       |
| Emulsified Water | scalar   | Visual*       | >0.2      | <b>NEG</b>         | NEG         | .2%         |
| Sodium           | ppm      | ASTM D5185(m) |           | <b>0</b>           | <1          | <1          |
| Boron            | ppm      | ASTM D5185(m) | 243       | <b>124</b>         | 87          | 222         |
| Barium           | ppm      | ASTM D5185(m) | 1         | <b>0</b>           | 0           | 0           |
| Molybdenum       | ppm      | ASTM D5185(m) |           | <b>0</b>           | 0           | 0           |
| Manganese        | ppm      | ASTM D5185(m) |           | <b>0</b>           | <1          | <1          |
| Magnesium        | ppm      | ASTM D5185(m) | 2         | <b>&lt;1</b>       | 0           | 0           |
| Calcium          | ppm      | ASTM D5185(m) | 6         | <b>27</b>          | 21          | 9           |
| Phosphorus       | ppm      | ASTM D5185(m) | 987       | <b>670</b>         | 700         | 981         |
| Zinc             | ppm      | ASTM D5185(m) | 1         | <b>181</b>         | 203         | 41          |
| Sulfur           | ppm      | ASTM D5185(m) | 21530     | <b>13501</b>       | 12808       | 22961       |
| Acid Number (AN) | mg KOH/g | ASTM D974*    | 1.9       | <b>0.89</b>        | 0.80        | 1.46        |
| Visc @ 40°C      | cSt      | ASTM D7279(m) | 141.0     | <b>67.6</b>        | 61.6        | 117         |



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0772095 **Received** : 24 May 2024  
**Lab Number** : 02637546 **Tested** : 24 May 2024  
**Unique Number** : 5786708 **Diagnosed** : 24 May 2024 - Kevin Marson  
**Test Package** : MAR 2 ( Additional Tests: TAN Man )

**CANADIAN COAST GUARD**  
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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.