



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

Area  
**NDA**  
Machine Id  
Component  
**NDA**  
Fluid  
**Port Genset**  
**CHEVRON DELO 710 LS (5 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>MW0065471</b>   | MW0065470   | MW0065475   |
| Sample Date    |     | Client Info |           | <b>05 Apr 2024</b> | 12 Mar 2024 | 20 Feb 2024 |
| Machine Age    | hrs | Client Info |           | <b>13025</b>       | 12758       | 12486       |
| Oil Age        | hrs | Client Info |           | <b>267</b>         | 272         | 250         |
| Filter Age     | hrs | Client Info |           | <b>267</b>         | 272         | 250         |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | Changed     | Changed     |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | Changed     | Changed     |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

**WEAR**

All component wear rates are normal.

|              |        |             |      |              |      |      |
|--------------|--------|-------------|------|--------------|------|------|
| Iron         | ppm    | ASTM D5185m | >50  | <b>0</b>     | 4    | 1    |
| Chromium     | ppm    | ASTM D5185m | >4   | <b>&lt;1</b> | <1   | <1   |
| Nickel       | ppm    | ASTM D5185m | >2   | <b>0</b>     | <1   | 0    |
| Titanium     | ppm    | ASTM D5185m |      | <b>0</b>     | <1   | 0    |
| Silver       | ppm    | ASTM D5185m | >5   | <b>0</b>     | 0    | 0    |
| Aluminum     | ppm    | ASTM D5185m | >12  | <b>&lt;1</b> | 2    | 2    |
| Lead         | ppm    | ASTM D5185m | >17  | <b>0</b>     | <1   | <1   |
| Copper       | ppm    | ASTM D5185m | >70  | <b>0</b>     | <1   | <1   |
| Tin          | ppm    | ASTM D5185m | >15  | <b>&lt;1</b> | <1   | <1   |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>     | <1   | 0    |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |

**CONTAMINATION**

There is no indication of any contamination in the oil.

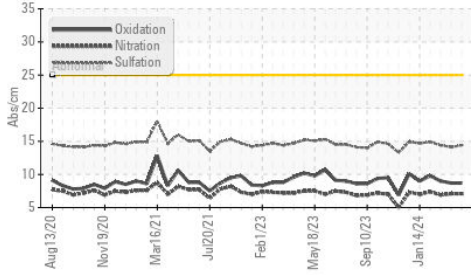
|                  |          |             |       |                |       |       |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon          | ppm      | ASTM D5185m | >25   | <b>2</b>       | 4     | 2     |
| Potassium        | ppm      | ASTM D5185m | >20   | <b>0</b>       | 3     | <1    |
| Fuel             |          | WC Method   | >4.0  | <b>&lt;1.0</b> | <1.0  | <1.0  |
| Water            |          | WC Method   | >0.1  | <b>NEG</b>     | NEG   | NEG   |
| Glycol           |          | WC Method   |       | <b>NEG</b>     | NEG   | NEG   |
| Soot %           | %        | *ASTM D7844 |       | <b>0.1</b>     | 0.1   | 0.1   |
| Nitration        | Abs/cm   | *ASTM D7624 | >20   | <b>7.1</b>     | 7.1   | 6.9   |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30   | <b>14.4</b>    | 14.1  | 14.4  |
| Silt             | scalar   | *Visual     | NONE  | <b>NONE</b>    | NONE  | NONE  |
| Debris           | scalar   | *Visual     | NONE  | <b>NONE</b>    | NONE  | NONE  |
| Sand/Dirt        | scalar   | *Visual     | NONE  | <b>NONE</b>    | NONE  | NONE  |
| Appearance       | scalar   | *Visual     | NORML | <b>NORML</b>   | NORML | NORML |
| Odor             | scalar   | *Visual     | NORML | <b>NORML</b>   | NORML | NORML |
| Emulsified Water | scalar   | *Visual     | >0.1  | <b>NEG</b>     | NEG   | NEG   |

**FLUID CONDITION**

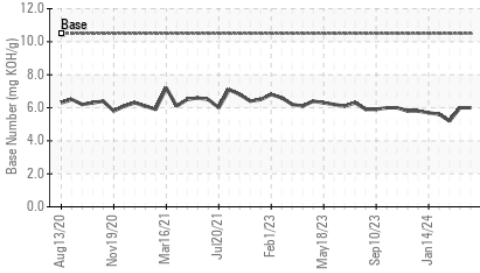
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

|                  |          |             |      |              |      |      |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium           | ppm      | ASTM D5185m |      | <b>0</b>     | 0    | <1   |
| Boron            | ppm      | ASTM D5185m |      | <b>48</b>    | 43   | 38   |
| Barium           | ppm      | ASTM D5185m |      | <b>1</b>     | 0    | 0    |
| Molybdenum       | ppm      | ASTM D5185m |      | <b>43</b>    | 46   | 40   |
| Manganese        | ppm      | ASTM D5185m |      | <b>&lt;1</b> | <1   | <1   |
| Magnesium        | ppm      | ASTM D5185m |      | <b>10</b>    | 8    | 10   |
| Calcium          | ppm      | ASTM D5185m |      | <b>3257</b>  | 3260 | 3054 |
| Phosphorus       | ppm      | ASTM D5185m |      | <b>0</b>     | 3    | <1   |
| Zinc             | ppm      | ASTM D5185m |      | <b>0</b>     | <1   | 0    |
| Sulfur           | ppm      | ASTM D5185m |      | <b>2817</b>  | 2049 | 1972 |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25  | <b>8.7</b>   | 8.7  | 9.0  |
| Base Number (BN) | mg KOH/g | ASTM D2896  | 10.5 | <b>6.0</b>   | 6.0  | 5.2  |
| Visc @ 100°C     | cSt      | ASTM D445   | 15.5 | <b>14.2</b>  | 14.2 | 14.1 |

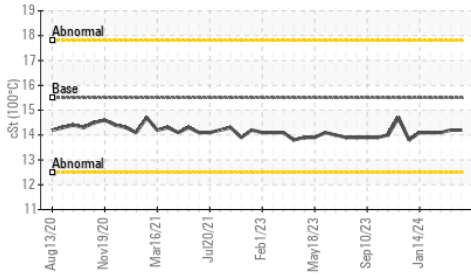
FT-IR (Direct Trend)



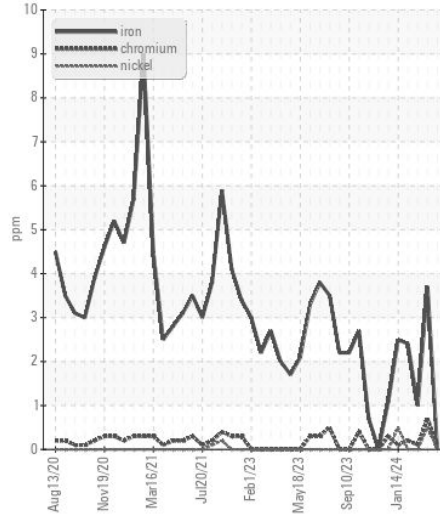
Base Number



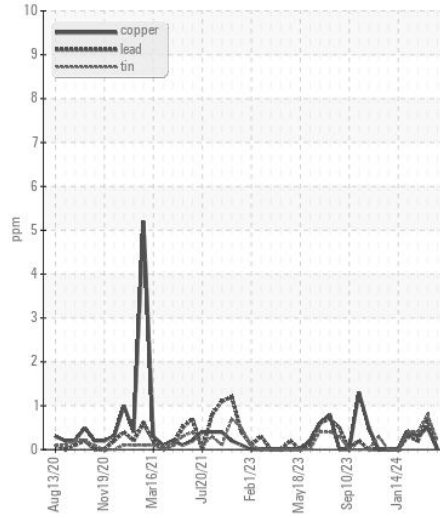
Viscosity @ 100°C



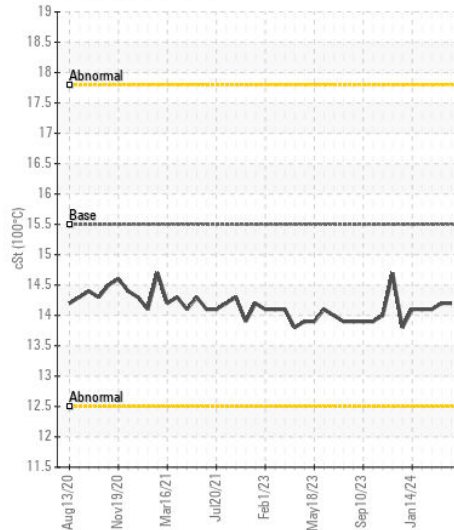
Ferrous Alloys



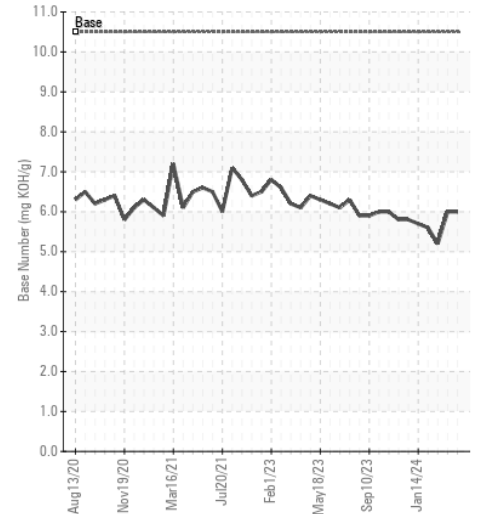
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0065471  
**Lab Number** : 06178400  
**Unique Number** : 11029726  
**Test Package** : MAR 2

**Received** : 14 May 2024  
**Tested** : 14 May 2024  
**Diagnosed** : 14 May 2024 - Wes Davis

**AMERICAN RIVER TRANSPORTATION CO.**  
 P.O. BOX 2889  
 ST. LOUIS, MO  
 US 63111  
 Contact: BRIAN GRIEWING  
 brian.griewing@adm.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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