



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

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

Machine Id  
**DODGE 20 LEG M7**  
 Component  
**Gearbox**  
 Fluid  
**MOBIL SHC 630 (4 GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

## WEAR

Gear wear is indicated. All other component wear rates are normal.

## CONTAMINATION

There is no indication of any contamination in the oil.

## FLUID CONDITION

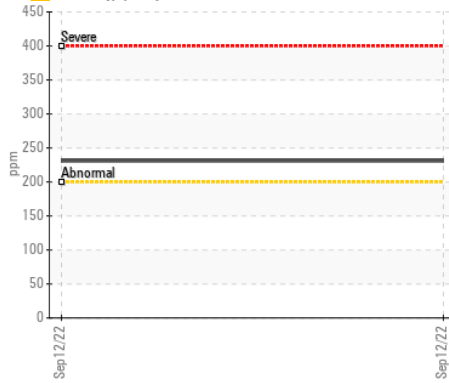
Viscosity of sample indicates oil is within ISO 150 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

| Test             | UOM      | Method      | Limit/Abn | Current     | History1 | History2 |
|------------------|----------|-------------|-----------|-------------|----------|----------|
| Sample Number    |          | Client Info |           | TR05645595  | ---      | ---      |
| Sample Date      |          | Client Info |           | 12 Sep 2022 | ---      | ---      |
| Machine Age      | yrs      | Client Info |           | 0           | ---      | ---      |
| Oil Age          | yrs      | Client Info |           | 7           | ---      | ---      |
| Filter Age       | yrs      | Client Info |           | 0           | ---      | ---      |
| Oil Changed      |          | Client Info |           | Not Changd  | ---      | ---      |
| Filter Changed   |          | Client Info |           | N/A         | ---      | ---      |
| Sample Status    |          |             |           | ABNORMAL    | ---      | ---      |
| Iron             | ppm      | ASTM D5185m | >200      | ▲ 231       | ---      | ---      |
| Chromium         | ppm      | ASTM D5185m | >10       | <1          | ---      | ---      |
| Nickel           | ppm      | ASTM D5185m |           | <1          | ---      | ---      |
| Titanium         | ppm      | ASTM D5185m |           | 0           | ---      | ---      |
| Silver           | ppm      | ASTM D5185m |           | <1          | ---      | ---      |
| Aluminum         | ppm      | ASTM D5185m | >25       | <1          | ---      | ---      |
| Lead             | ppm      | ASTM D5185m | >50       | 0           | ---      | ---      |
| Copper           | ppm      | ASTM D5185m | >200      | <1          | ---      | ---      |
| Tin              | ppm      | ASTM D5185m | >10       | 0           | ---      | ---      |
| Vanadium         | ppm      | ASTM D5185m |           | 0           | ---      | ---      |
| White Metal      | scalar   | *Visual     | NONE      | NONE        | ---      | ---      |
| Yellow Metal     | scalar   | *Visual     | NONE      | NONE        | ---      | ---      |
| Silicon          | ppm      | ASTM D5185m | >50       | 19          | ---      | ---      |
| Potassium        | ppm      | ASTM D5185m | >20       | 0           | ---      | ---      |
| Water            |          | WC Method   | >0.2      | NEG         | ---      | ---      |
| Silt             | scalar   | *Visual     | NONE      | NONE        | ---      | ---      |
| Debris           | scalar   | *Visual     | NONE      | NONE        | ---      | ---      |
| Sand/Dirt        | scalar   | *Visual     | NONE      | NONE        | ---      | ---      |
| Appearance       | scalar   | *Visual     | NORML     | NORML       | ---      | ---      |
| Odor             | scalar   | *Visual     | NORML     | NORML       | ---      | ---      |
| Emulsified Water | scalar   | *Visual     | >0.2      | NEG         | ---      | ---      |
| Sodium           | ppm      | ASTM D5185m |           | 0           | ---      | ---      |
| Boron            | ppm      | ASTM D5185m |           | 4           | ---      | ---      |
| Barium           | ppm      | ASTM D5185m |           | 0           | ---      | ---      |
| Molybdenum       | ppm      | ASTM D5185m |           | <1          | ---      | ---      |
| Manganese        | ppm      | ASTM D5185m |           | 2           | ---      | ---      |
| Magnesium        | ppm      | ASTM D5185m |           | 0           | ---      | ---      |
| Calcium          | ppm      | ASTM D5185m |           | 3           | ---      | ---      |
| Phosphorus       | ppm      | ASTM D5185m |           | 723         | ---      | ---      |
| Zinc             | ppm      | ASTM D5185m |           | 3           | ---      | ---      |
| Sulfur           | ppm      | ASTM D5185m |           | 255         | ---      | ---      |
| Acid Number (AN) | mg KOH/g | ASTM D8045  |           | 0.21        | ---      | ---      |
| Visc @ 100°C     | cSt      | ASTM D445   | 25.9      | ● 15.3      | ---      | ---      |

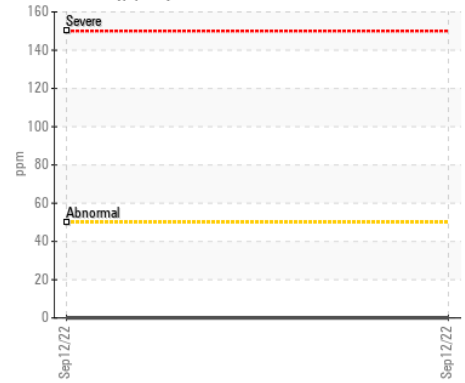
▲ Ferrous Alloys



▲ Iron (ppm)



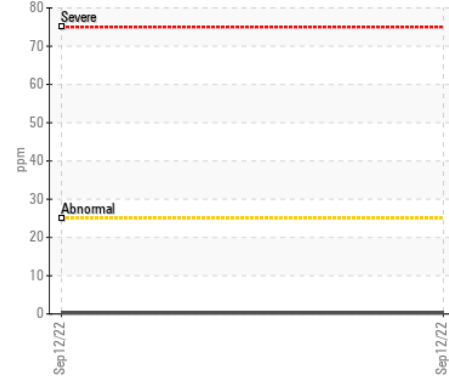
Lead (ppm)



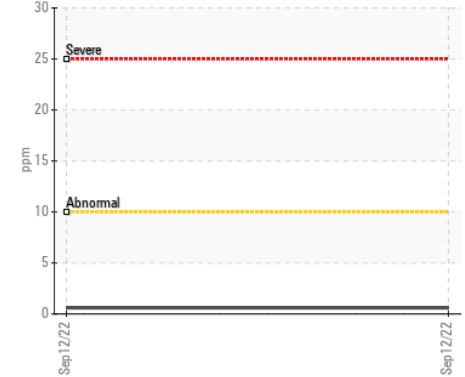
● Viscosity @ 100°C



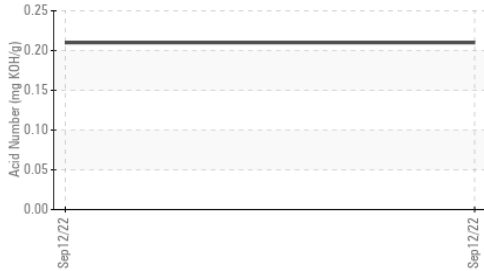
Aluminum (ppm)



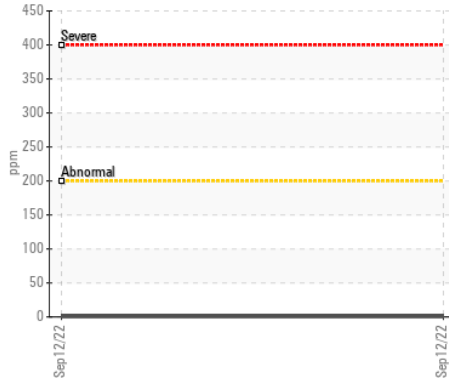
Chromium (ppm)



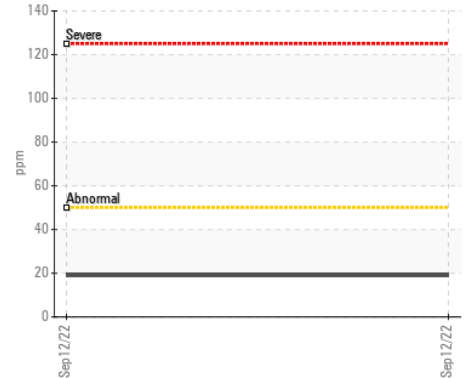
Acid Number



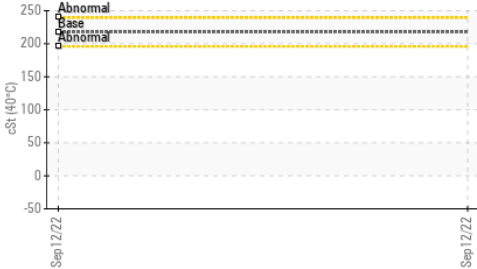
Copper (ppm)



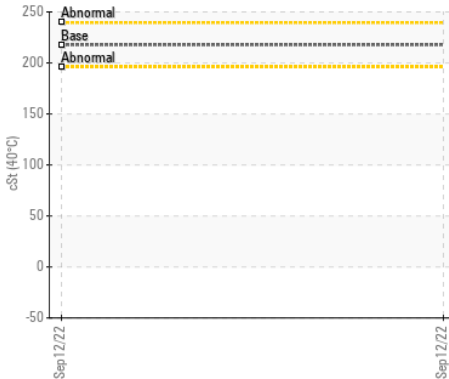
Silicon (ppm)



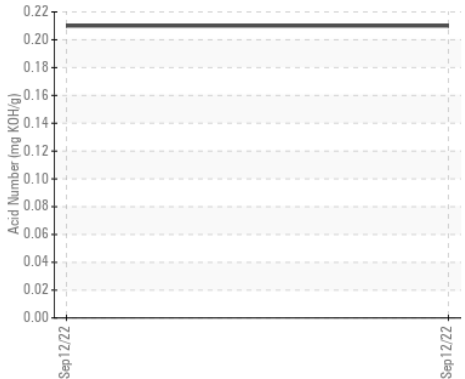
Viscosity @ 40°C



Viscosity @ 40°C



Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR05645595 **Received** : 19 Sep 2022  
**Lab Number** : 05645595 **Tested** : 21 Sep 2022  
**Unique Number** : 10140134 **Diagnosed** : 21 Sep 2022 - Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: KV100 )

**HIGHLINE GRAIN GROWERS**  
 9025 S CRAIG RD  
 CHENEY, WA  
 US 99004  
 Contact: RONALD GROGAN

To discuss this sample report, contact Customer Service at 1-800-827-0711.

\* - 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)

T:  
F: