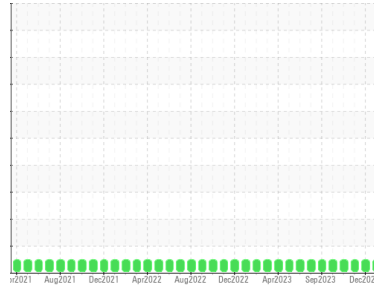


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
FARIBAULT
 Machine Id
[FARIBAULT] Unit 04 DB020104E
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON MONOGRADE HD 40W (350 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Fresh rebuild, new oil)

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 |
|---------------|-----------------|--------------------|-------------|-------------|
| Sample Number | Client Info | PCA0098888 | PCA0098884 | PCA0098883 |
| Sample Date | Client Info | 29 Feb 2024 | 04 Dec 2023 | 30 Nov 2023 |
| Machine Age | hrs Client Info | 2 | 14688 | 14647 |
| Oil Age | hrs Client Info | 2 | 14688 | 14647 |
| Oil Changed | Client Info | Changed | Oil Added | Oil Added |
| Sample Status | | NORMAL | NORMAL | NORMAL |

CONTAMINATION

| method | limit/base | current | history1 | history2 |
|--------|----------------|------------|----------|----------|
| Water | WC Method >0.1 | NEG | NEG | NEG |

WEAR METALS

| method | limit/base | current | history1 | history2 |
|----------|---------------------|--------------|----------|----------|
| Iron | ppm ASTM D5185m >50 | 10 | 4 | 2 |
| Chromium | ppm ASTM D5185m >4 | <1 | 2 | <1 |
| Nickel | ppm ASTM D5185m >2 | 0 | 0 | 0 |
| Titanium | ppm ASTM D5185m | 0 | <1 | <1 |
| Silver | ppm ASTM D5185m >3 | 0 | 0 | 0 |
| Aluminum | ppm ASTM D5185m >9 | 2 | <1 | <1 |
| Lead | ppm ASTM D5185m >30 | 1 | 0 | 0 |
| Copper | ppm ASTM D5185m >35 | <1 | 1 | <1 |
| Tin | ppm ASTM D5185m >4 | <1 | 0 | 0 |
| Vanadium | ppm ASTM D5185m | 0 | <1 | <1 |
| Cadmium | ppm ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| method | limit/base | current | history1 | history2 |
|------------|-----------------|-------------|----------|----------|
| Boron | ppm ASTM D5185m | 0 | 1 | 1 |
| Barium | ppm ASTM D5185m | 0 | 0 | 0 |
| Molybdenum | ppm ASTM D5185m | 3 | 2 | 2 |
| Manganese | ppm ASTM D5185m | 0 | <1 | <1 |
| Magnesium | ppm ASTM D5185m | 941 | 930 | 923 |
| Calcium | ppm ASTM D5185m | 1005 | 1045 | 1007 |
| Phosphorus | ppm ASTM D5185m | 1059 | 1095 | 1074 |
| Zinc | ppm ASTM D5185m | 1326 | 1384 | 1360 |
| Sulfur | ppm ASTM D5185m | 3102 | 3392 | 3350 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|-----------------------|--------------|----------|----------|
| Silicon | ppm ASTM D5185m >+100 | 63 | 4 | 5 |
| Sodium | ppm ASTM D5185m | <1 | 5 | 2 |
| Potassium | ppm ASTM D5185m >20 | <1 | 0 | 0 |
| Fuel | % ASTM D3524 >4.0 | 0.4 | 1.1 | 1.0 |

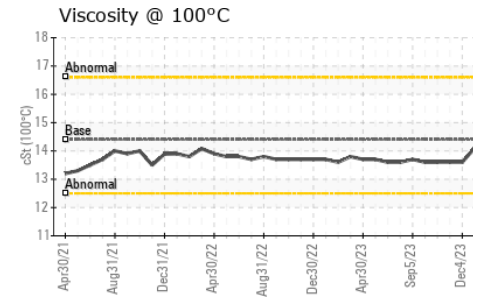
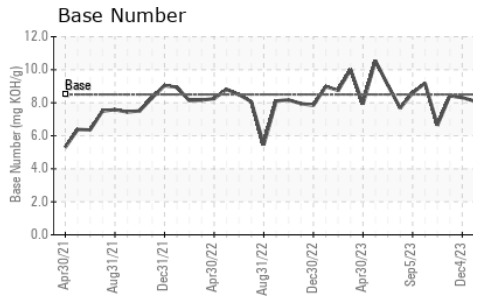
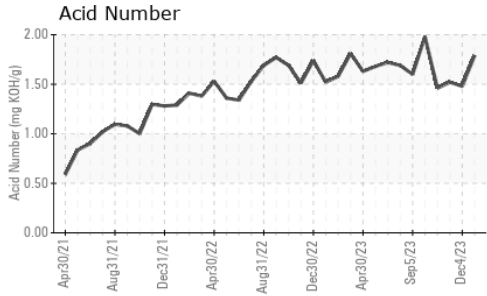
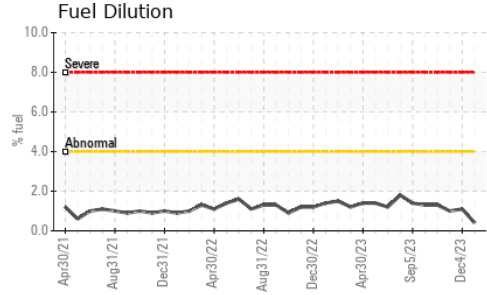
INFRA-RED

| method | limit/base | current | history1 | history2 |
|-----------|--------------------------|-------------|----------|----------|
| Soot % | % *ASTM D7844 | 0 | 0.1 | 0.1 |
| Nitration | Abs/cm *ASTM D7624 >20 | 2.8 | 3.7 | 3.6 |
| Sulfation | Abs/.1mm *ASTM D7415 >30 | 12.2 | 12.8 | 12.8 |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|------------------|--------------------------|-------------|----------|----------|
| Oxidation | Abs/.1mm *ASTM D7414 >25 | 5.4 | 6.6 | 6.5 |
| Acid Number (AN) | mg KOH/g ASTM D8045 | 1.79 | 1.48 | 1.52 |
| Base Number (BN) | mg KOH/g ASTM D2896 8.5 | 8.10 | 8.31 | 8.42 |

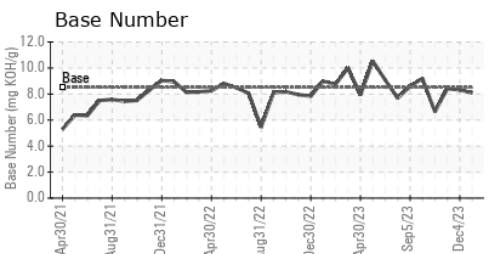
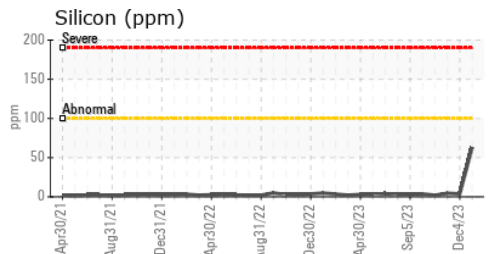
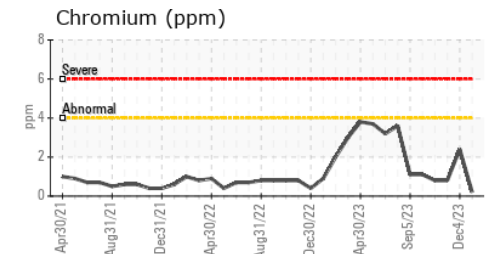
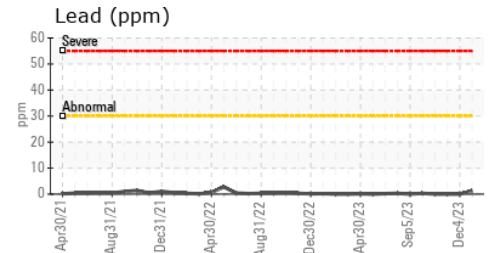
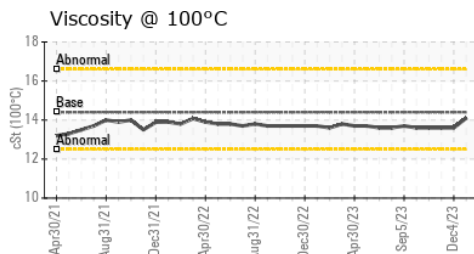
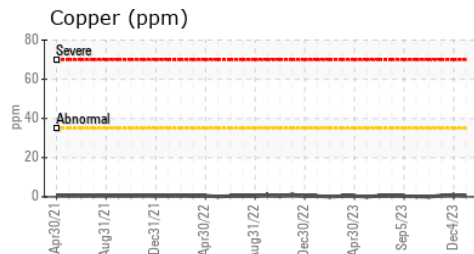
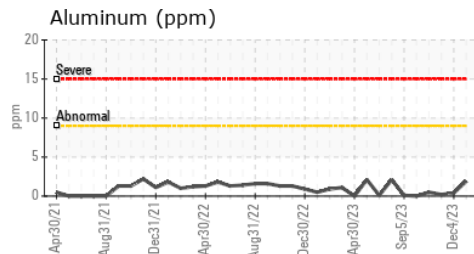
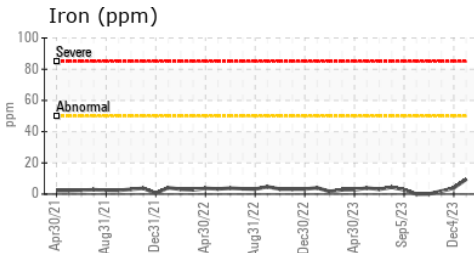
OIL ANALYSIS REPORT



| 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 |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|-------------|----------|------|
| Visc @ 100°C | cSt | ASTM D445 | 14.4 | 14.1 | 13.6 | 13.6 |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0098888 **Received** : 05 Mar 2024
Lab Number : **06108845** **Tested** : 07 Mar 2024
Unique Number : 10912342 **Diagnosed** : 07 Mar 2024 - Sean Felton
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

Magellan Midstream LP - Faribault
 22535 Bagley Avenue
 Faribault, MN
 US 55021
 Contact: Jon Coulter
 Jon.Coulter@magellanlp.com
 T: (507)381-9649
 F:

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)