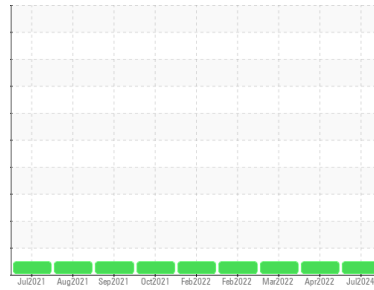


OIL ANALYSIS REPORT



Machine Id
Ramsey Ridge 3
Component
Natural Gas Engine
Fluid
PETRO CANADA SENTRON LD 3000 (--- GAL)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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 | | PCA0117097 | PCA0068092 | PCA0068096 |
| Sample Date | Client Info | | 09 Jul 2024 | 07 Apr 2022 | 08 Mar 2022 |
| Machine Age | hrs | Client Info | 136745 | 140778 | 140057 |
| Oil Age | hrs | Client Info | 1293 | 0 | 0 |
| Oil Changed | Client Info | | Not Chngd | Not Chngd | Not Chngd |
| 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 | <1 | 5 | 6 |
| Chromium | ppm | ASTM D5185m >4 | 0 | 0 | <1 |
| Nickel | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >9 | <1 | 2 | 3 |
| Lead | ppm | ASTM D5185m >30 | 0 | <1 | 2 |
| Copper | ppm | ASTM D5185m >35 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185m >4 | 0 | <1 | <1 |
| Antimony | ppm | ASTM D5185m | --- | --- | --- |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|------------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m 5 | 0 | 2 | <1 |
| Barium | ppm | ASTM D5185m 1 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m 2 | <1 | 1 | 1 |
| Manganese | ppm | ASTM D5185m 1 | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m 5 | 5 | 9 | 11 |
| Calcium | ppm | ASTM D5185m 1220 | 1315 | 1509 | 1612 |
| Phosphorus | ppm | ASTM D5185m 298 | 280 | 346 | 357 |
| Zinc | ppm | ASTM D5185m 350 | 333 | 451 | 454 |
| Sulfur | ppm | ASTM D5185m 1995 | 2668 | 2232 | 2404 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|------------|----------|----------|
| Silicon | ppm | ASTM D5185m >+100 | 1 | 2 | 2 |
| Sodium | ppm | ASTM D5185m >20 | 2 | 0 | 0 |
| Potassium | ppm | ASTM D5185m >20 | 0 | 2 | 2 |
| Fuel | % | ASTM D3524 >4.0 | 0.0 | 0.7 | 0.3 |

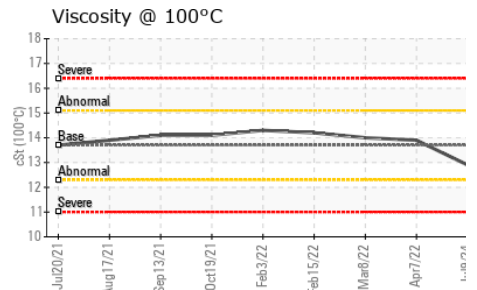
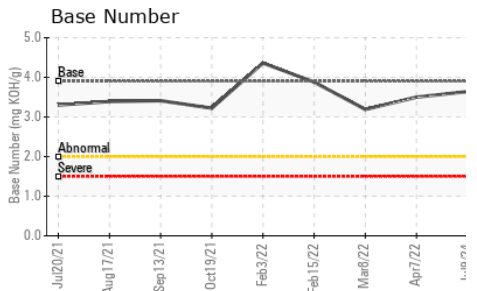
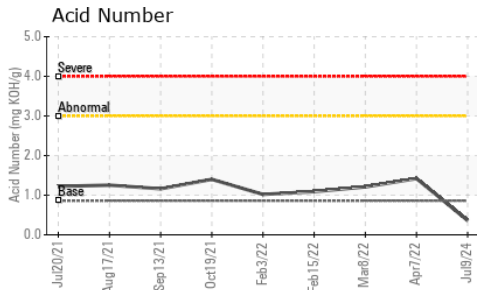
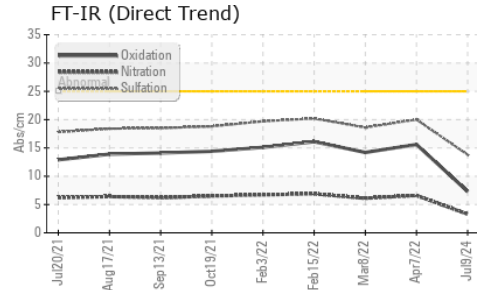
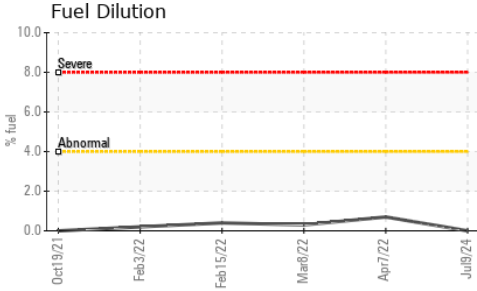
INFRA-RED

| | method | limit/base | current | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot % | % | *ASTM D7844 | 0 | 0.1 | 0.1 |
| Nitration | Abs/cm | *ASTM D7624 >15 | 3.3 | 6.6 | 6.1 |
| Sulfation | Abs/.1mm | *ASTM D7415 >25 | 13.8 | 20.0 | 18.6 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Oxidation | Abs/.1mm | *ASTM D7414 >20 | 7.3 | 15.6 | 14.2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.86 | 0.36 | 1.42 | 1.21 |
| Base Number (BN) | mg KOH/g | ASTM D2896 3.9 | 3.64 | 3.50 | 3.19 |

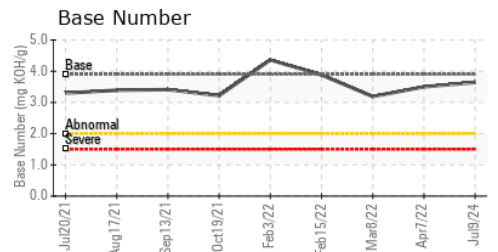
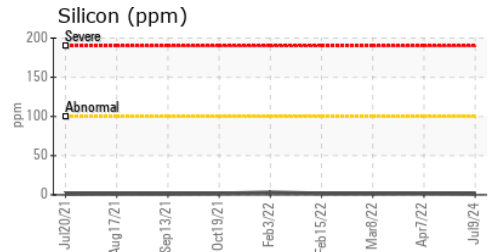
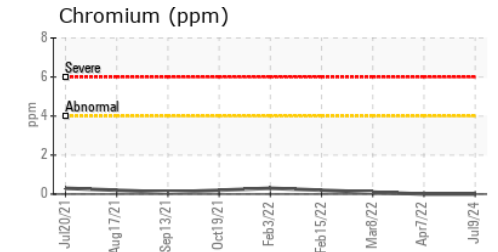
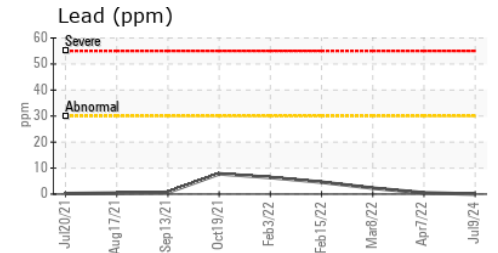
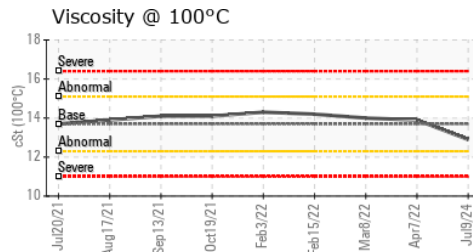
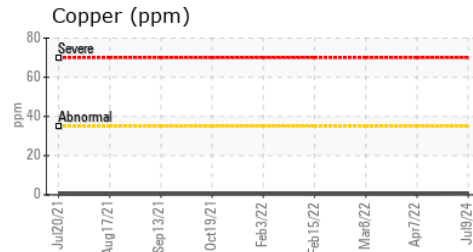
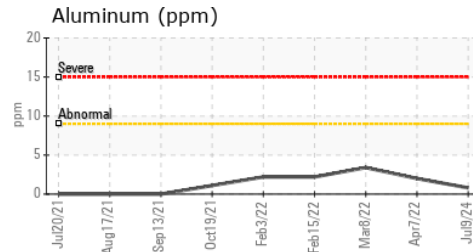
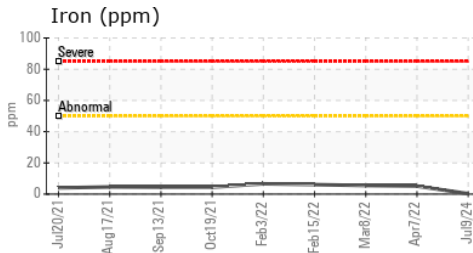
OIL ANALYSIS REPORT



| 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 | 13.7 | 12.9 | 13.9 |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : PCA0117097

Lab Number : 06237981

Unique Number : 11126815

Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

Received : 16 Jul 2024

Tested : 17 Jul 2024

Diagnosed : 18 Jul 2024 - Sean Felton

ENERVEST OPERATING - RAMSEY RIDGE

2368 RAMSEY RIDGE

CLINCHCO, VA

US 24226

Contact: Service Manager

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)

T:

F: