WEAR
CONTAMINATION
FLUID CONDITION

ABNORMAL ABNORMAL

Area

## **JAMES BARROW [48515]**

3940019857

Port IPS

**SAE 80W90 (18 LTR)** 

| RECOMMENDATION  | Test             | UOM    | Method                | Limit/Abn | Current      | History1 | History2 |
|---|------------------|--------|-----------------------|-----------|--------------|----------|----------|
| We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. | Sample Number    |        | Client Info           |           | VPA023562    |          |          |
|   | Sample Date      |        | Client Info           |           | 11 Apr 2024  |          |          |
|   | Machine Age      | hrs    | Client Info           |           | 935          |          |          |
|   | Oil Age          | hrs    | Client Info           |           | 0            |          |          |
|   | Filter Age       | hrs    | Client Info           |           | 0            |          |          |
|   | Oil Changed      |        | Client Info           |           | N/A          |          |          |
|   | Filter Changed   |        | Client Info           |           | N/A          |          |          |
|   | Sample Status    |        |                       |           | ABNORMAL     |          |          |
| WEAR  | PQ               |        | ASTM D8184*           |           | 0            |          |          |
| Iron ppm levels are abnormal.   | Iron             | ppm    | ASTM D5185(m)         | >200      | <b>^</b> 266 |          |          |
|   | Chromium         | ppm    | ASTM D5185(m)         | >10       | 2            |          |          |
|   | Nickel           | ppm    | ASTM D5185(m)         | >10       | 3            |          |          |
|   | Titanium         | ppm    | ASTM D5185(m)         |           | <1           |          |          |
|   | Silver           | ppm    | ASTM D5185(m)         |           | 0            |          |          |
|   | Aluminum         | ppm    | ASTM D5185(m)         |           | 6            |          |          |
|   | Lead             | ppm    | ASTM D5185(m)         |           | 1            |          |          |
|   | Copper           | ppm    | ASTM D5185(m)         |           | 16           |          |          |
|   | Tin              | ppm    | ASTM D5185(m)         |           | 0            |          |          |
|   | Vanadium         | ppm    | ASTM D5185(m)         |           | 0            |          |          |
|   | White Metal      | scalar | Visual*               | NONE      | NONE         |          |          |
|   | Yellow Metal     | scalar | Visual*               | NONE      | NONE         |          |          |
| CONTAMINATION   | Silicon          | ppm    | ASTM D5185(m)         |           | 2            |          |          |
| There is a moderate concentration of water present in the oil.  | Potassium        | ppm    | ASTM D5185(m)         | >20       | <1           |          |          |
|   | Water            | %      | ASTM D6304*           | >0.2      | <b>0.207</b> |          |          |
|   | ppm Water        | ppm    | ASTM D6304*           | >2000     | <u> </u>     |          |          |
|   | Silt             | scalar | Visual*               | NONE      | NONE         |          |          |
|   | Debris           | scalar | Visual*               | NONE      | VLITE        |          |          |
|   | Sand/Dirt        | scalar | Visual*               | NONE      | NONE         |          |          |
|   | Appearance       | scalar | Visual*               | NORML     | NORML        |          |          |
|   | Odor             | scalar | Visual*               | NORML     | NORML        |          |          |
|   | Emulsified Water | scalar | Visual*               | >0.2      | <b>.2</b> %  |          |          |
| FLUID CONDITION   | Sodium           | ppm    | ASTM D5185(m)         | >50       | 1            |          |          |
|   | Boron            | ppm    | ASTM D5185(m)         |           | 216          |          |          |
| Viscosity of sample indicates oil is within SAE 90 range, advise investigate. The oil is no longer serviceable as a result of the abnormal  |                  | ppm    | ASTM D5185(m)         |           | 0            |          |          |
|   | Danulli          | phili  | VO 1 IAI DO 100 (III) | U         | U            |          |          |

Molybdenum

Manganese

Magnesium

Phosphorus

Visc @ 40°C

Calcium

Zinc

Sulfur

ppm

ppm

ppm

ppm

ppm

ppm

ppm

and/or severe wear.

0

2

6

12

43

108

1304

21552

ASTM D5185(m) O

ASTM D5185(m) O

ASTM D5185(m) 20

ASTM D5185(m) 1000

ASTM D5185(m) 22000

20

ASTM D5185(m)

ASTM D5185(m)





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : VPA023562 : 02628939

Unique Number : 5762071

Received : 15 Apr 2024 **Tested** Diagnosed Test Package: MOB 1 (Additional Tests: KF, PQ)

: 17 Apr 2024

: 17 Apr 2024 - Kevin Marson

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.

**PECKS MARINE** 

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Contact: Service Manager

T: F: