



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



Machine Id  
**WL0414**  
Component  
**Rear Differential**  
Fluid

**PETRO CANADA PRODURO TO-4 SYNTHETIC ALL SEASON (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|----------|----------|
| Sample Number  |     | Client Info |           | <b>GFL0089818</b>  | ---      | ---      |
| Sample Date    |     | Client Info |           | <b>02 Feb 2024</b> | ---      | ---      |
| Machine Age    | hrs | Client Info |           | <b>3102</b>        | ---      | ---      |
| Oil Age        | hrs | Client Info |           | <b>0</b>           | ---      | ---      |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | ---      | ---      |
| Oil Changed    |     | Client Info |           | <b>Not Changed</b> | ---      | ---      |
| Filter Changed |     | Client Info |           | <b>Not Changed</b> | ---      | ---      |
| Sample Status  |     |             |           | <b>ABNORMAL</b>    | ---      | ---      |

**WEAR**

All component wear rates are normal.

|              |        |               |      |              |     |     |
|--------------|--------|---------------|------|--------------|-----|-----|
| Iron         | ppm    | ASTM D5185(m) | >500 | <b>58</b>    | --- | --- |
| Chromium     | ppm    | ASTM D5185(m) | >3   | <b>0</b>     | --- | --- |
| Nickel       | ppm    | ASTM D5185(m) | >3   | <b>&lt;1</b> | --- | --- |
| Titanium     | ppm    | ASTM D5185(m) | >2   | <b>0</b>     | --- | --- |
| Silver       | ppm    | ASTM D5185(m) | >2   | <b>0</b>     | --- | --- |
| Aluminum     | ppm    | ASTM D5185(m) | >30  | <b>2</b>     | --- | --- |
| Lead         | ppm    | ASTM D5185(m) | >13  | <b>0</b>     | --- | --- |
| Copper       | ppm    | ASTM D5185(m) | >103 | <b>5</b>     | --- | --- |
| Tin          | ppm    | ASTM D5185(m) | >5   | <b>0</b>     | --- | --- |
| Vanadium     | ppm    | ASTM D5185(m) |      | <b>0</b>     | --- | --- |
| White Metal  | scalar | Visual*       | NONE | <b>NONE</b>  | --- | --- |
| Yellow Metal | scalar | Visual*       | NONE | <b>NONE</b>  | --- | --- |

**CONTAMINATION**

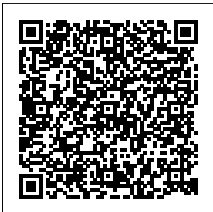
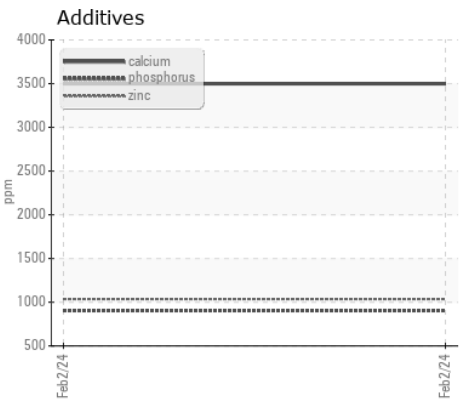
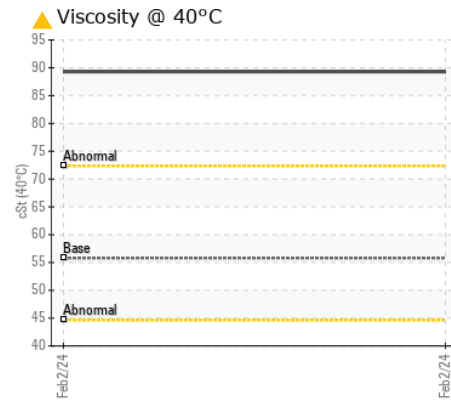
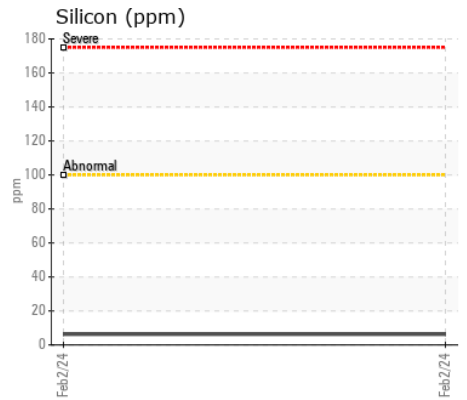
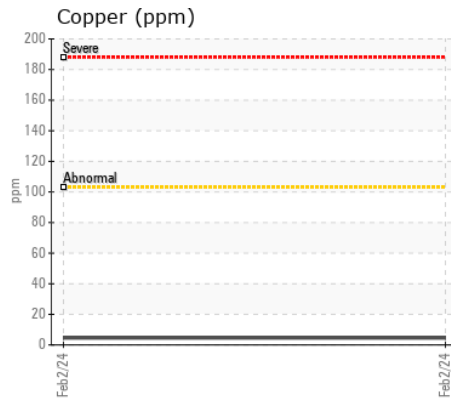
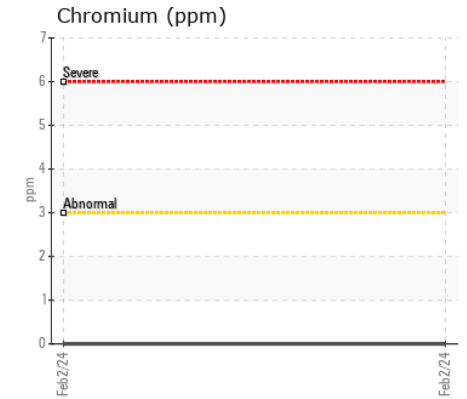
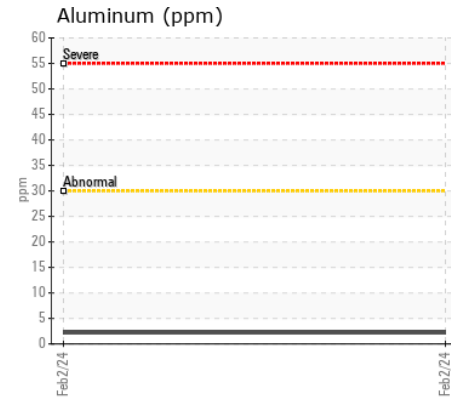
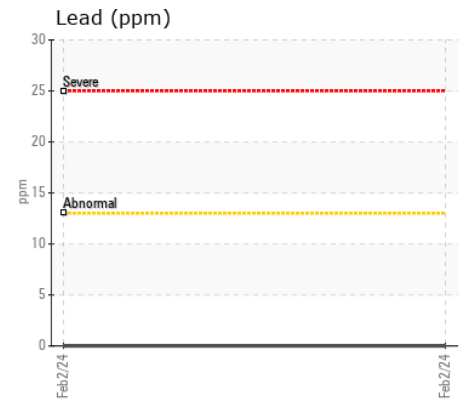
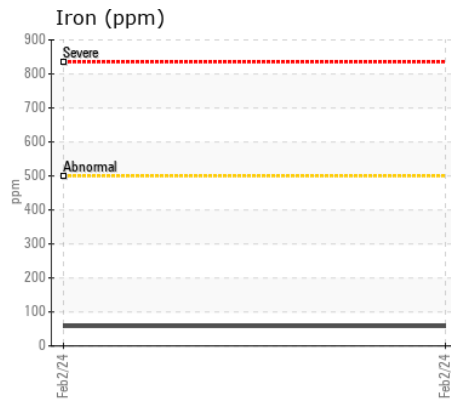
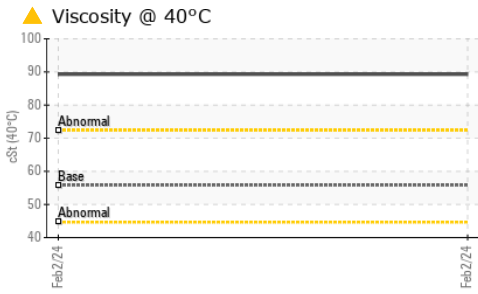
There is no indication of any contamination in the oil.

|                  |        |               |       |              |     |     |
|------------------|--------|---------------|-------|--------------|-----|-----|
| Silicon          | ppm    | ASTM D5185(m) | >100  | <b>6</b>     | --- | --- |
| Potassium        | ppm    | ASTM D5185(m) | >20   | <b>2</b>     | --- | --- |
| Water            |        | WC Method     | >.2   | <b>NEG</b>   | --- | --- |
| Silt             | scalar | Visual*       | NONE  | <b>NONE</b>  | --- | --- |
| Debris           | scalar | Visual*       | NONE  | <b>NONE</b>  | --- | --- |
| Sand/Dirt        | scalar | Visual*       | NONE  | <b>NONE</b>  | --- | --- |
| Appearance       | scalar | Visual*       | NORML | <b>NORML</b> | --- | --- |
| Odor             | scalar | Visual*       | NORML | <b>NORML</b> | --- | --- |
| Emulsified Water | scalar | Visual*       | >.2   | <b>NEG</b>   | --- | --- |

**FLUID CONDITION**

The viscosity of the oil is higher than normal, possibly indicating the addition of a heavier grade of oil. The condition of the oil is acceptable for the time in service.

|             |     |               |       |               |     |     |
|-------------|-----|---------------|-------|---------------|-----|-----|
| Sodium      | ppm | ASTM D5185(m) |       | <b>&lt;1</b>  | --- | --- |
| Boron       | ppm | ASTM D5185(m) | 5     | <b>&lt;1</b>  | --- | --- |
| Barium      | ppm | ASTM D5185(m) | 0     | <b>0</b>      | --- | --- |
| Molybdenum  | ppm | ASTM D5185(m) | 0     | <b>4</b>      | --- | --- |
| Manganese   | ppm | ASTM D5185(m) | 1     | <b>&lt;1</b>  | --- | --- |
| Magnesium   | ppm | ASTM D5185(m) | 10    | <b>10</b>     | --- | --- |
| Calcium     | ppm | ASTM D5185(m) | 3068  | <b>3499</b>   | --- | --- |
| Phosphorus  | ppm | ASTM D5185(m) | 1081  | <b>905</b>    | --- | --- |
| Zinc        | ppm | ASTM D5185(m) | 1199  | <b>1036</b>   | --- | --- |
| Sulfur      | ppm | ASTM D5185(m) | 4636  | <b>3596</b>   | --- | --- |
| Visc @ 40°C | cSt | ASTM D7279(m) | 55.79 | <b>▲ 89.3</b> | --- | --- |



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0089818  
**Lab Number** : 02616048  
**Unique Number** : 5733158  
**Test Package** : MOB 1

**GFL Environmental - DO NOT USE** GFL582  
 9401 Trans Canada Hwy  
 Chemainus, BC  
 CA V0R 1K4  
 Contact: service

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.

T:  
 F: