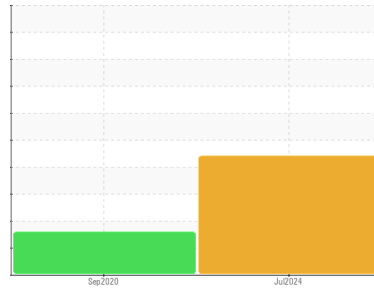


# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**158120**

Component  
**Gearbox**

Fluid  
**PETRO CANADA SYNDURO SHB ISO 460 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check for visible metal particles in the oil. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. 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. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

Copper and tin ppm levels are abnormal. Light concentration of visible metal present. Gear wear is indicated. Bearing and/or bushing wear is indicated.

### Contamination

Light concentration of visible dirt/debris present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PC0080436</b>	PC0036181	---
Sample Date	Client Info			<b>04 Jul 2024</b>	10 Sep 2020	---
Machine Age	days	Client Info		<b>0</b>	0	---
Oil Age	days	Client Info		<b>0</b>	100	---
Oil Changed	Client Info			<b>N/A</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	<b>NEG</b>	NEG	---

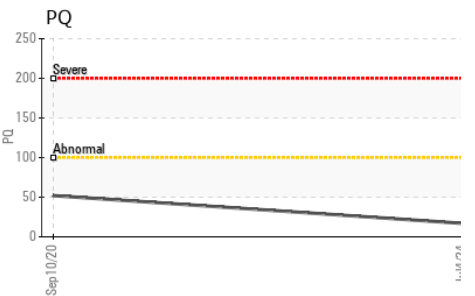
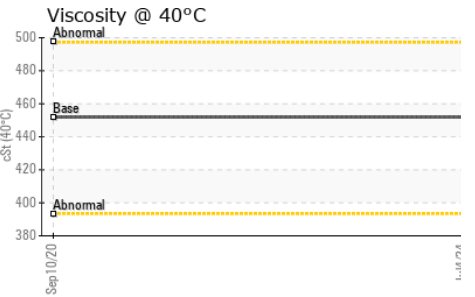
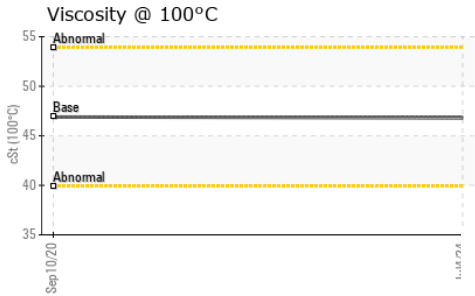
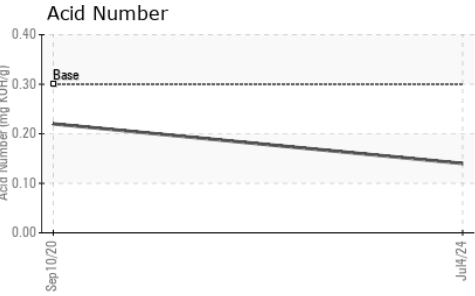
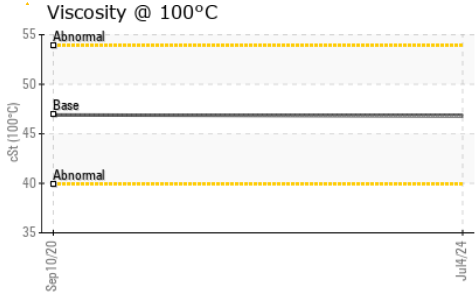
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		<b>17</b>	52	---
Iron	ppm	ASTM D5185(m)	>200	<b>39</b>	49	---
Chromium	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185(m)	>15	<b>4</b>	<1	---
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	0	---
Lead	ppm	ASTM D5185(m)	>100	<b>18</b>	10	---
Copper	ppm	ASTM D5185(m)	>200	<b>▲ 629</b>	<b>▲ 318</b>	---
Tin	ppm	ASTM D5185(m)	>25	<b>▲ 64</b>	<b>▲ 25</b>	---
Antimony	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
Barium	ppm	ASTM D5185(m)	5.0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	5.0	<b>0</b>	0	---
Calcium	ppm	ASTM D5185(m)	5.0	<b>1</b>	<1	---
Phosphorus	ppm	ASTM D5185(m)	100	<b>20</b>	36	---
Zinc	ppm	ASTM D5185(m)	5.0	<b>32</b>	9	---
Sulfur	ppm	ASTM D5185(m)	1900	<b>1262</b>	1718	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	<b>5</b>	4	---
Sodium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.3	<b>0.14</b>	0.22	---

# OIL ANALYSIS REPORT



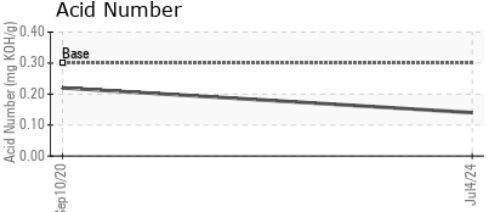
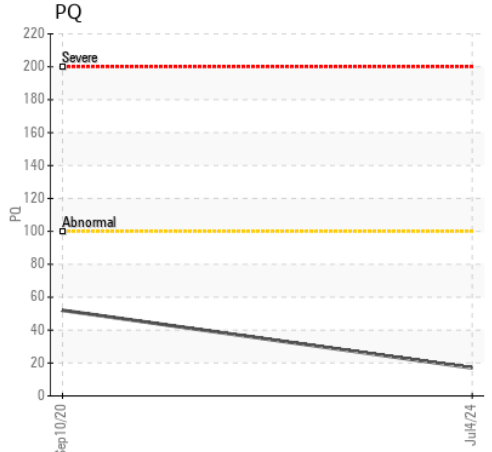
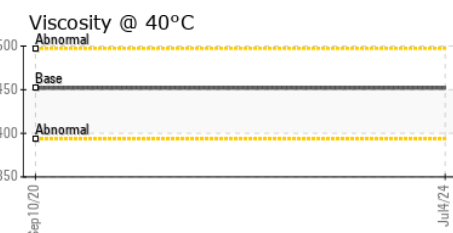
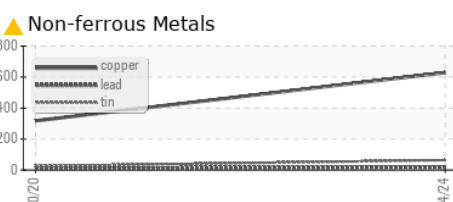
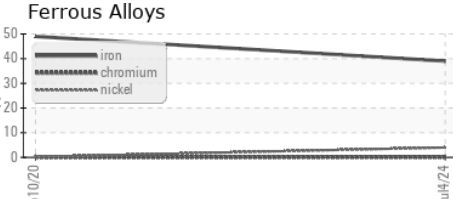
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE ▲ MODER	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	LIGHT	---
Debris	scalar	Visual*	NONE	VLITE	---
Sand/Dirt	scalar	Visual*	NONE ▲ MODER	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	.2%
Free Water	scalar	Visual*		NEG	.2%

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	452	452	---
Visc @ 100°C	cSt	ASTM D7279(m)	46.9	46.9	---
Viscosity Index (VI)	Scale	ASTM D2270*	162	161	---

### SAMPLE IMAGES

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0080436 **Received** : 10 Jul 2024  
**Lab Number** : 02647209 **Tested** : 11 Jul 2024  
**Unique Number** : 5812761 **Diagnosed** : 11 Jul 2024 - Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: Bottom, KV100, TAN Man, VI )

**Dryden Fibre**  
 Box 3001, 1 Duke Street  
 Dryden, ON  
 CA P8N 2Z7  
 Contact: Adebukola Adekanye  
 aadekanye@drydenfibre.ca  
 T: (807)223-9950  
 F: (807)223-9176

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.