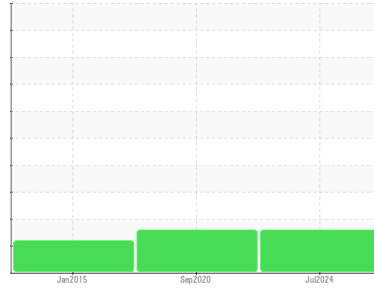


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
157200

Component
Gearbox

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

DIAGNOSIS

Recommendation

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. Bearing and/or bushing wear is indicated.

Contamination

There is no indication of any contamination 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			PC0080435	PC0036177	CB0020081
Sample Date	Client Info			04 Jul 2024	10 Sep 2020	15 Jan 2015
Machine Age	days	Client Info		0	0	0
Oil Age	days	Client Info		0	100	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

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

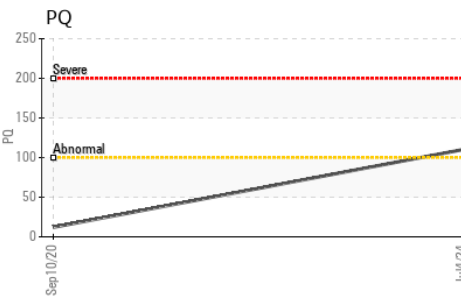
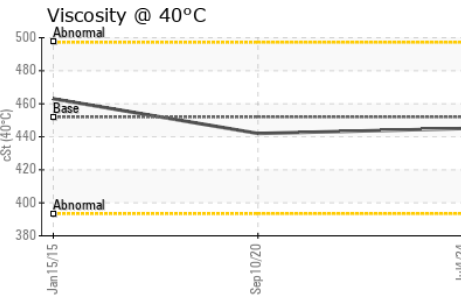
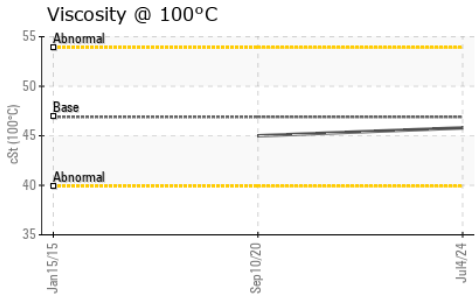
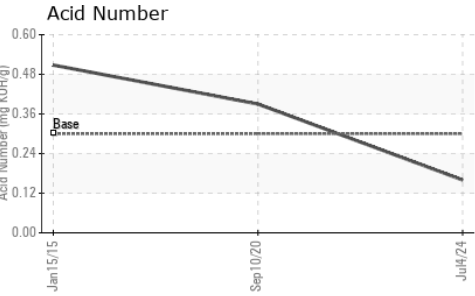
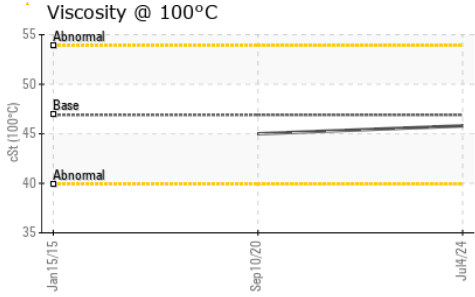
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		110	12	---
Iron	ppm	ASTM D5185(m)	>200	60	<1	<1
Chromium	ppm	ASTM D5185(m)	>15	9	0	0
Nickel	ppm	ASTM D5185(m)	>15	7	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	<1	0	0
Lead	ppm	ASTM D5185(m)	>100	11	<1	<1
Copper	ppm	ASTM D5185(m)	>200	▲ 350	6	<1
Tin	ppm	ASTM D5185(m)	>25	▲ 28	<1	0
Antimony	ppm	ASTM D5185(m)	>5	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1	<1	<1
Barium	ppm	ASTM D5185(m)	5.0	0	0	0
Molybdenum	ppm	ASTM D5185(m)		<1	0	0
Manganese	ppm	ASTM D5185(m)		1	0	0
Magnesium	ppm	ASTM D5185(m)	5.0	0	0	0
Calcium	ppm	ASTM D5185(m)	5.0	<1	<1	<1
Phosphorus	ppm	ASTM D5185(m)	100	20	68	446
Zinc	ppm	ASTM D5185(m)	5.0	8	2	3
Sulfur	ppm	ASTM D5185(m)	1900	1518	1839	103
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	10	6	25
Sodium	ppm	ASTM D5185(m)		<1	0	0
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.3	0.16	0.39	0.508

OIL ANALYSIS REPORT

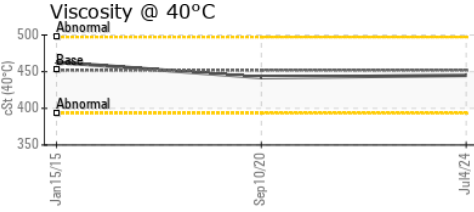
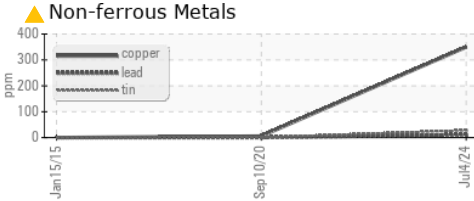
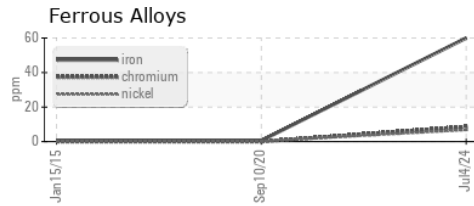


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	VLITE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	1%
Free Water	scalar	Visual*		NEG	▲ 1%

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	452	445	442
Visc @ 100°C	cSt	ASTM D7279(m)	46.9	45.8	45.0
Viscosity Index (VI)	Scale	ASTM D2270*	162	159	157

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0080435 **Received** : 10 Jul 2024
Lab Number : 02647207 **Tested** : 11 Jul 2024
Unique Number : 5812759 **Diagnosed** : 12 Jul 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: 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.