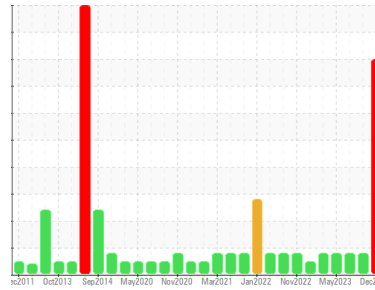




PROBLEM SUMMARY

Sample Rating Trend



WEAR



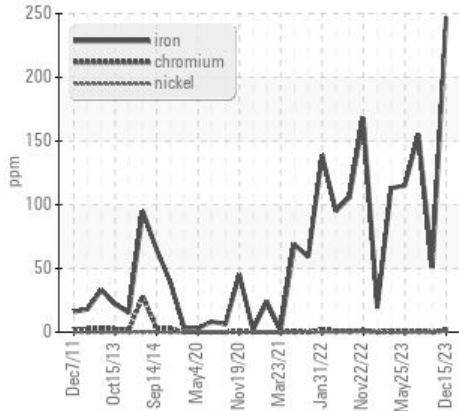
Machine Id
ROOTS 007-10010 EAST AERATION BLOWER

Component
Drive End Blower

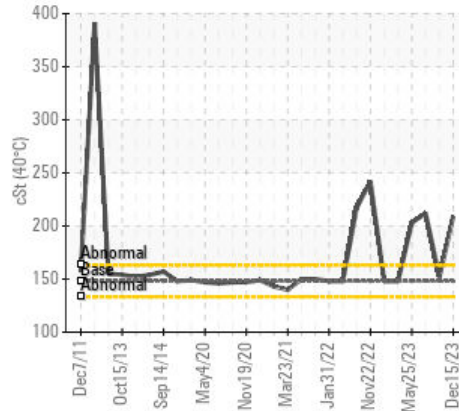
Fluid
PETRO CANADA SYNDURO SHB ISO150 (1 LTR)

COMPONENT CONDITION SUMMARY

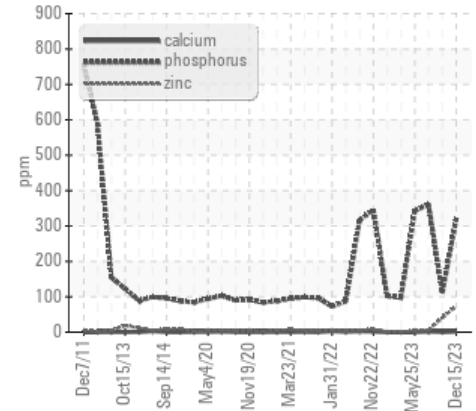
Ferrous Alloys



Viscosity @ 40°C



Additives



RECOMMENDATION

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. 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. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ATTENTION	ABNORMAL
Iron	ppm	ASTM D5185(m)	>20	247	51	155
Free Water	scalar	Visual*		1%	NEG	NEG
Visc @ 40°C	cSt	ASTM D7279(m)	148	209	152	212

Customer Id: GPCOB
Sample No.: WC0818452
Lab Number: 02604517
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

To change component or sample information:
Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Breathers	---	---	?	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.
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.
Check Water Access	---	---	?	We advise that you check for the source of water entry.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

22 Sep 2023 Diag: Kevin Marson

ADDITIVES



Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



24 Jul 2023 Diag: Kevin Marson

WEAR



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. Iron ppm levels are abnormal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 220 range, advise investigate. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

[view report](#)



25 May 2023 Diag: Bill Quesnel

WEAR



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. Iron ppm levels are abnormal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

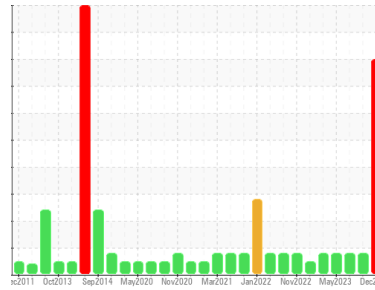
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
ROOTS 007-10010 EAST AERATION BLOWER

Component
Drive End Blower

Fluid
PETRO CANADA SYNDURO SHB ISO150 (1 LTR)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. 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. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

Wear

Iron ppm levels are severe. A sharp increase in the iron level is noted.

Contamination

Free water present.

Fluid Condition

Viscosity of sample indicates oil is within ISO 220 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. 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		WC0818452	WC0839716	WC0839714
Sample Date	Client Info		15 Dec 2023	22 Sep 2023	24 Jul 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			SEVERE	ATTENTION	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		8	3	46
Iron	ppm	ASTM D5185(m) >20	247	51	155
Chromium	ppm	ASTM D5185(m) >20	2	0	1
Nickel	ppm	ASTM D5185(m) >20	<1	<1	0
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >20	6	<1	1
Lead	ppm	ASTM D5185(m) >20	0	0	0
Copper	ppm	ASTM D5185(m) >20	<1	<1	<1
Tin	ppm	ASTM D5185(m) >20	0	0	0
Antimony	ppm	ASTM D5185(m)	14	6	3
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	7	2	19
Barium	ppm	ASTM D5185(m) 5.0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)	1	0	<1
Magnesium	ppm	ASTM D5185(m) 5.0	<1	0	1
Calcium	ppm	ASTM D5185(m) 5.0	2	<1	2
Phosphorus	ppm	ASTM D5185(m) 100	318	111	361
Zinc	ppm	ASTM D5185(m) 5.0	73	41	6
Sulfur	ppm	ASTM D5185(m) 1900	12964	3365	13947
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

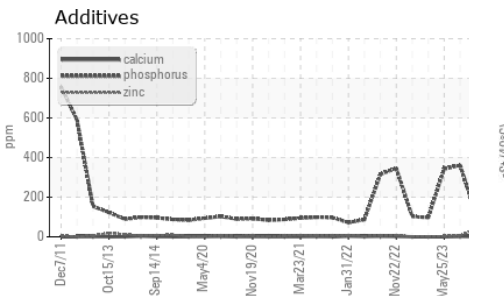
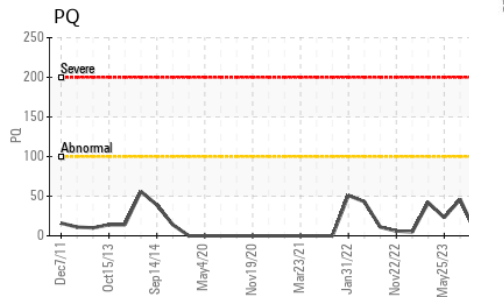
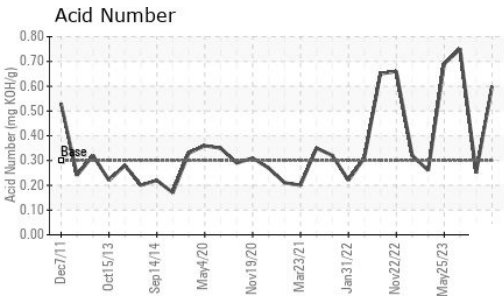
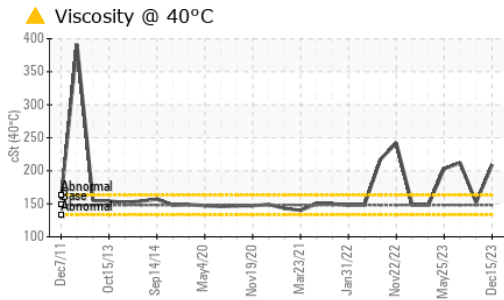
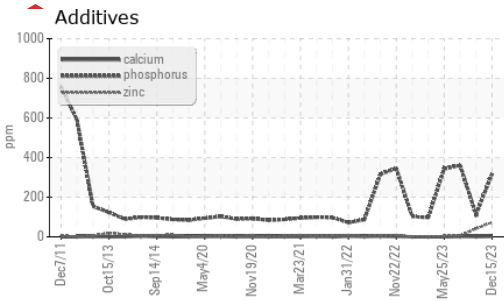
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	8	2	4
Sodium	ppm	ASTM D5185(m)	2	1	1
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	0.60	0.25	0.75

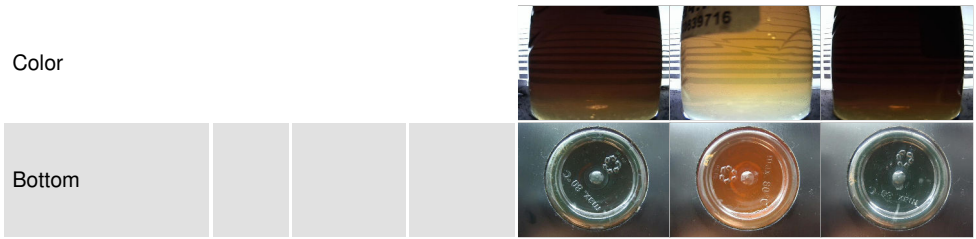
OIL ANALYSIS REPORT



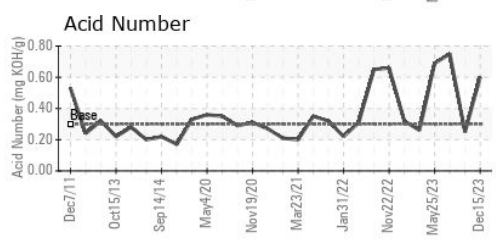
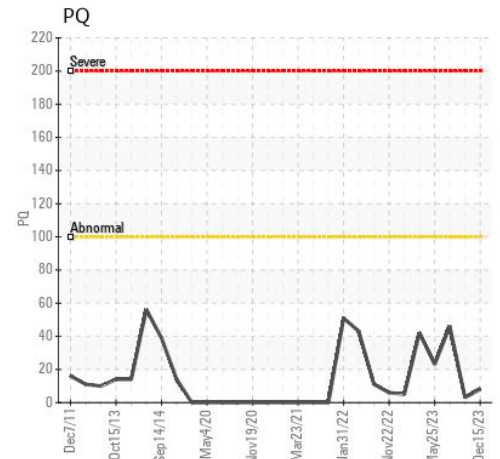
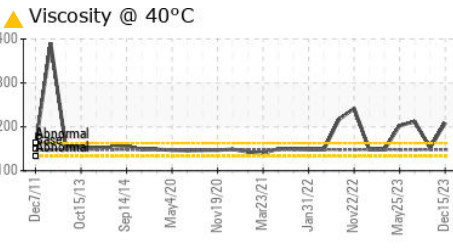
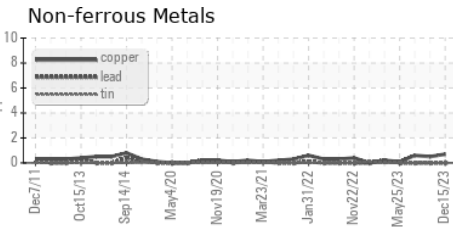
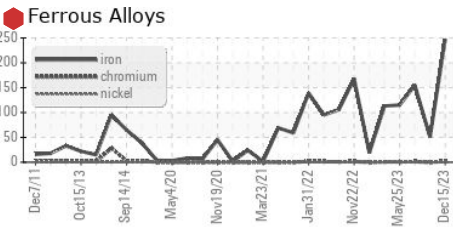
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	VLITE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	.2%	NEG	NEG
Free Water	scalar	Visual*	▲ 1%	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	▲ 209	152	212

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0818452 **Received** : 20 Dec 2023
Lab Number : 02604517 **Diagnosed** : 21 Dec 2023
Unique Number : 5697602 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

DXP - SCS - Sabic IP Cobourg
 44 Normar Road
 Cobourg, ON
 CA K9A 4L7
 Contact: George DiFrancesco
 george.difrancesco@sabic.com
 T: (905)373-3988
 F: (905)373-3844

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.