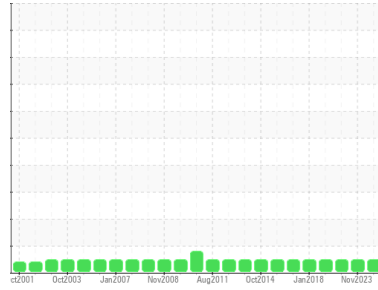


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Cargo [450335848]
Machine
Offloading Hose Reel - A (S/N Sample Tag XX-32201A-S1)
Component
Gear Drive
Fluid
PETRO CANADA ENDURATEX EP 220 (16 LTR)

DIAGNOSIS

- Recommendation**
Resample at the next service interval to monitor.
- Wear**
All component wear rates are normal.
- Contamination**
There is no indication of any contamination in the oil.
- Fluid Condition**
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0080752	PC0076632	PC
Sample Date	Client Info	14 May 2024	01 Nov 2023	17 Jan 2020
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	NORMAL

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*	3	0	44
Iron	ppm ASTM D5185(m) >161	9	4	84
Chromium	ppm ASTM D5185(m) >2	0	0	<1
Nickel	ppm ASTM D5185(m) >2	0	0	<1
Titanium	ppm ASTM D5185(m)	0	0	<1
Silver	ppm ASTM D5185(m)	0	<1	<1
Aluminum	ppm ASTM D5185(m) >3	<1	1	<1
Lead	ppm ASTM D5185(m) >9	0	0	<1
Copper	ppm ASTM D5185(m) >5	<1	<1	1
Tin	ppm ASTM D5185(m) >2	0	0	0
Antimony	ppm ASTM D5185(m) >5	0	0	<1
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

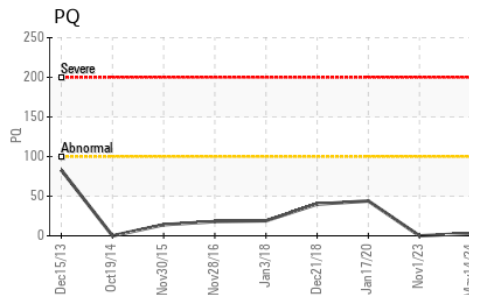
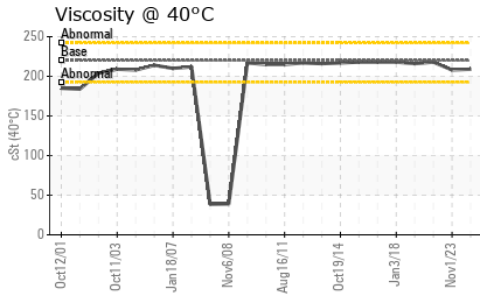
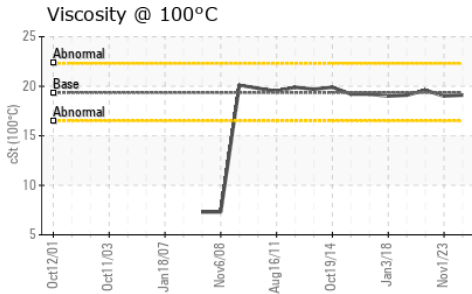
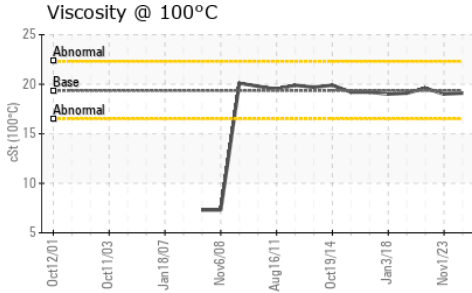
method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 60	21	19	48
Barium	ppm ASTM D5185(m) 0	0	<1	<1
Molybdenum	ppm ASTM D5185(m) 0	0	0	0
Manganese	ppm ASTM D5185(m) 0	<1	0	1
Magnesium	ppm ASTM D5185(m) 0	<1	<1	<1
Calcium	ppm ASTM D5185(m) 0	10	7	2
Phosphorus	ppm ASTM D5185(m) 270	249	245	244
Zinc	ppm ASTM D5185(m) 0	4	3	34
Sulfur	ppm ASTM D5185(m) 11200	7541	7509	10847
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >23	5	6	8
Sodium	ppm ASTM D5185(m)	<1	<1	1
Potassium	ppm ASTM D5185(m) >20	<1	0	<1

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974* 0.40	0.37	0.40	0.327

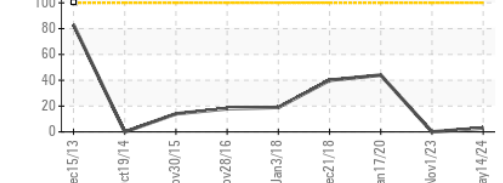
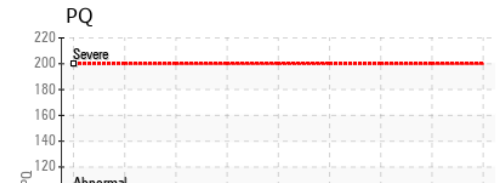
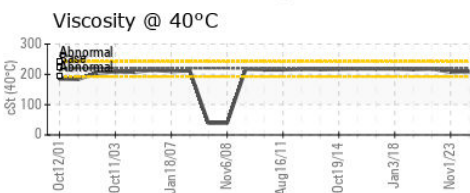
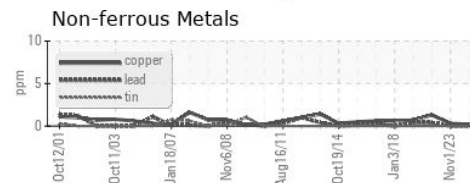
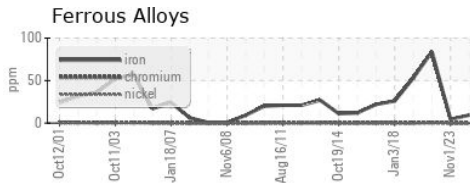


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	209	208
Visc @ 100°C	cSt	ASTM D7279(m)	19.35	19.1	19.0
Viscosity Index (VI)	Scale	ASTM D2270*	99	102	102

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter					

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0080752 **Received** : 28 May 2024
Lab Number : **02638302** **Tested** : 29 May 2024
Unique Number : 5787464 **Diagnosed** : 29 May 2024 - Kevin Marson
Test Package : MAR 2 (Additional Tests: KV100, TAN Man, VI)

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 F: (709)724-2835

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.