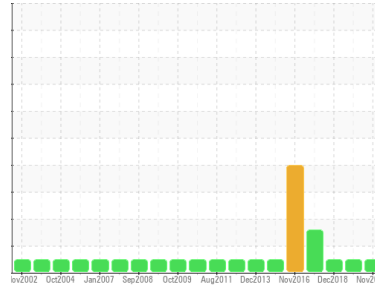


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Cargo [450210459]
Machine Id
Offloading Hose Reel - C (S/N Sample Tag XX-32201C-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	PC	PC	PC
Sample Date	Client Info	01 Nov 2023	17 Jan 2020	21 Dec 2018
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*	0	12	13	
Iron	ppm	ASTM D5185(m) >161	4	9	5
Chromium	ppm	ASTM D5185(m) >2	0	<1	0
Nickel	ppm	ASTM D5185(m) >2	0	<1	0
Titanium	ppm	ASTM D5185(m)	0	<1	0
Silver	ppm	ASTM D5185(m)	<1	<1	0
Aluminum	ppm	ASTM D5185(m) >3	<1	0	0
Lead	ppm	ASTM D5185(m) >9	0	0	<1
Copper	ppm	ASTM D5185(m) >5	<1	<1	0
Tin	ppm	ASTM D5185(m) >2	0	0	0
Antimony	ppm	ASTM D5185(m) >5	0	<1	0
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

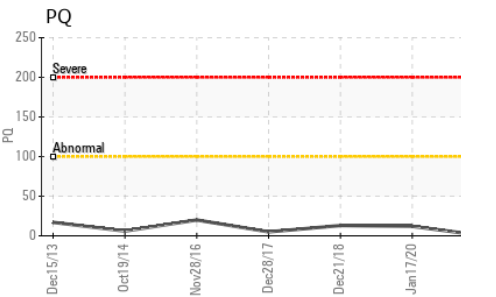
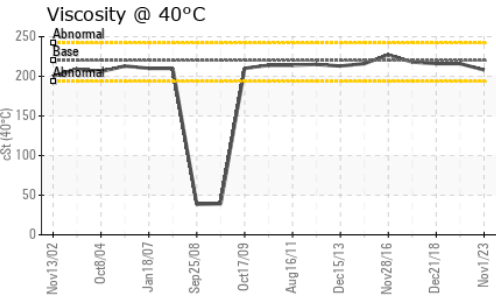
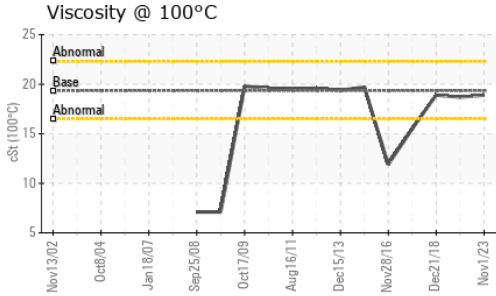
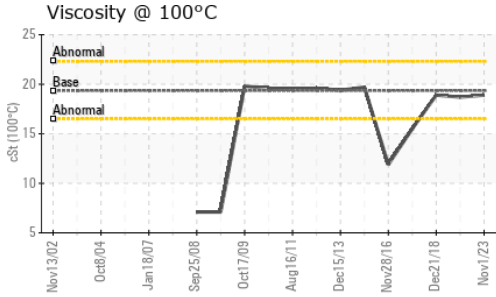
method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m) 60	20	58	58
Barium	ppm	ASTM D5185(m) 0	<1	<1	<1
Molybdenum	ppm	ASTM D5185(m) 0	0	0	0
Manganese	ppm	ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	0	<1	<1
Calcium	ppm	ASTM D5185(m) 0	6	1	1
Phosphorus	ppm	ASTM D5185(m) 270	248	242	231
Zinc	ppm	ASTM D5185(m) 0	3	14	9
Sulfur	ppm	ASTM D5185(m) 11200	7674	10649	10239
Lithium	ppm	ASTM D5185(m)	<1	<1	0

CONTAMINANTS

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

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974* 0.40	0.39	0.353	0.24

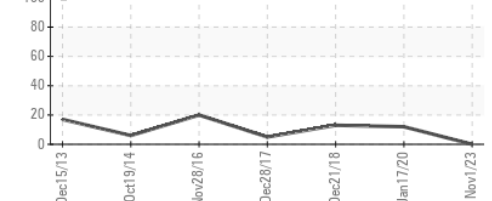
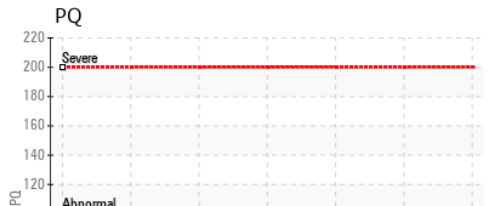
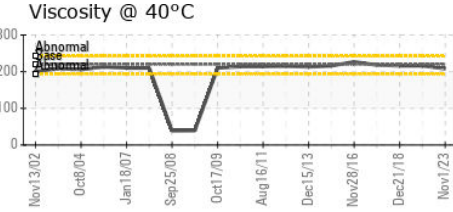
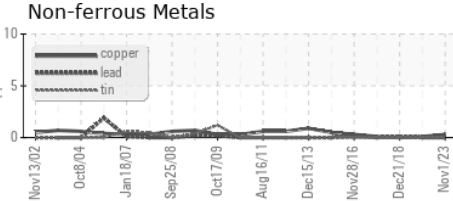
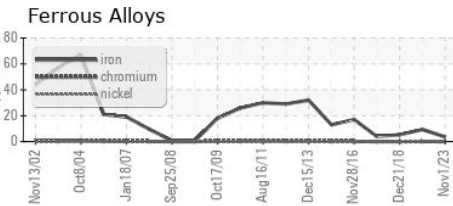


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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	216	216
Visc @ 100°C	cSt	ASTM D7279(m)	19.35	18.7	18.9
Viscosity Index (VI)	Scale	ASTM D2270*	99	96	97

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	
Bottom				no image	

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : 02599121
Unique Number : 5684201
Test Package : MAR 2 (Additional Tests: KV100, TAN Man, VI)
Received : 27 Nov 2023
Diagnosed : 28 Nov 2023
Diagnostician : Kevin Marson

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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.