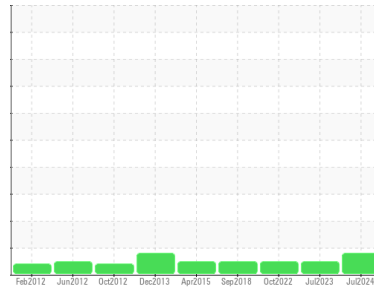




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area

Caster/Turret

Machine Id

Truck Assembly C

Component

Gearbox

Fluid

ESSO SPARTAN EP 220 (--- LTR)

DIAGNOSIS

Recommendation

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

Titanium ppm levels are marginal. All other component wear rates are normal.

Contamination

The water content is negligible. 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		WC0968468	WC0838965	WC0756746
Sample Date	Client Info		17 Jul 2024	13 Jul 2023	26 Oct 2022
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			MARGINAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*	>DFLT	4	15	39
Iron	ppm	ASTM D5185(m)	>200	23	36
Chromium	ppm	ASTM D5185(m)	>15	0	<1
Nickel	ppm	ASTM D5185(m)	>15	<1	0
Titanium	ppm	ASTM D5185(m)		▲ 20	0
Silver	ppm	ASTM D5185(m)		0	0
Aluminum	ppm	ASTM D5185(m)	>25	2	<1
Lead	ppm	ASTM D5185(m)	>100	0	<1
Copper	ppm	ASTM D5185(m)	>200	1	2
Tin	ppm	ASTM D5185(m)	>25	0	0
Antimony	ppm	ASTM D5185(m)	>5	0	0
Vanadium	ppm	ASTM D5185(m)		0	0
Beryllium	ppm	ASTM D5185(m)		0	0
Cadmium	ppm	ASTM D5185(m)		0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	.5	<1	3
Barium	ppm	ASTM D5185(m)		0	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)		<1	<1
Magnesium	ppm	ASTM D5185(m)	0	<1	2
Calcium	ppm	ASTM D5185(m)	1.7	6	6
Phosphorus	ppm	ASTM D5185(m)	250	303	211
Zinc	ppm	ASTM D5185(m)	.3	4	5
Sulfur	ppm	ASTM D5185(m)		9394	10018
Lithium	ppm	ASTM D5185(m)		<1	<1

CONTAMINANTS

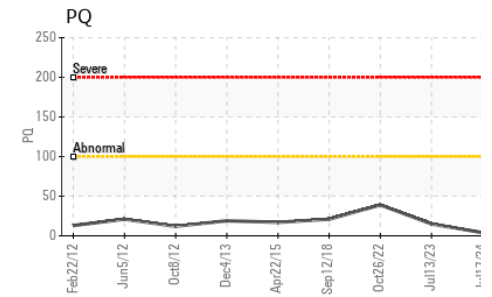
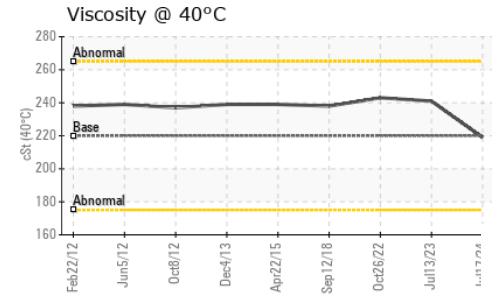
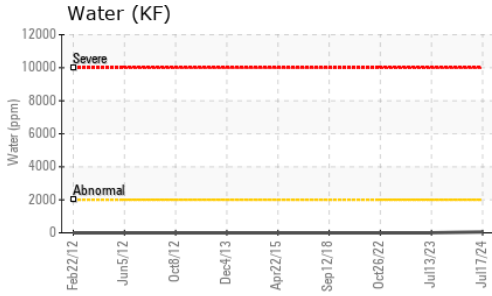
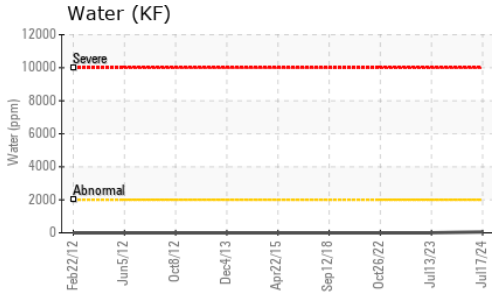
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	8	13
Sodium	ppm	ASTM D5185(m)		<1	1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1
Water	%	ASTM D6304*	>0.2	0.005	---
ppm Water	ppm	ASTM D6304*	>2000	55	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.75	0.34	0.52



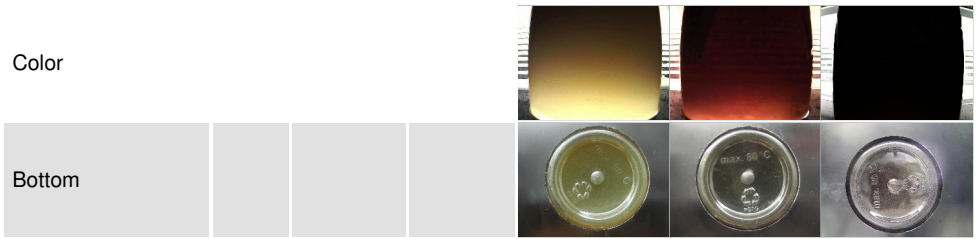
OIL ANALYSIS REPORT



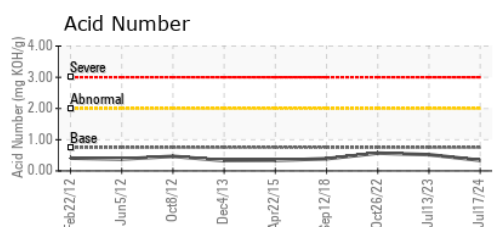
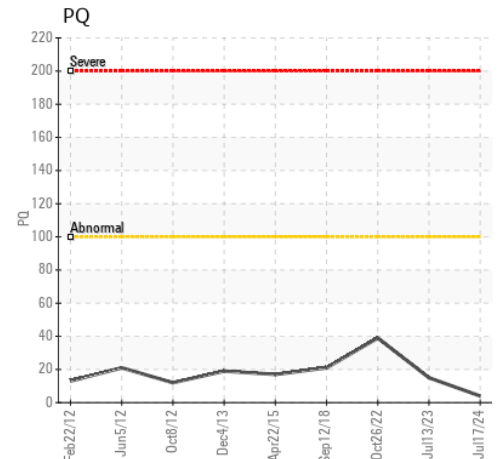
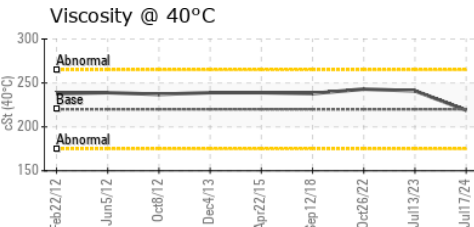
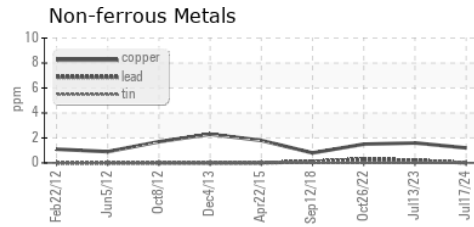
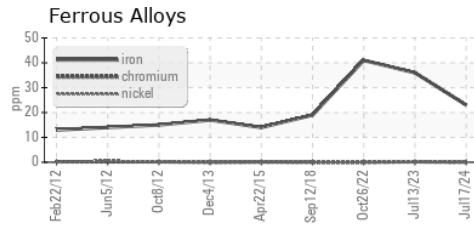
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	LIGHT	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	HAZY	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	219	241

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. : WC0968468
Lab Number : 02648507
Unique Number : 5814059
Test Package : IND 2 (Additional Tests: KF)

Received : 17 Jul 2024
Tested : 21 Jul 2024
Diagnosed : 21 Jul 2024 - Kevin Marson

STELCO - BOSC - Basic Oxygen Slab Caster
 2330 Regional Road #3, Door: BOSC8
 NANTICOKE, ON
 CA N0A 1L0
 Contact: Tom Walden
 Thomas.Walden@stelco.com
 T: (519)587-4541
 F: (519)587-7702

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.