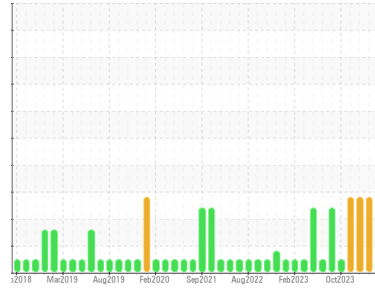




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
BOF/OG SYSTEM
 Machine Id
D - O.G. Motor Lube System # 8
 Component
Tank Hydraulic System
 Fluid
PETRO CANADA HARMONY AW 32 (45 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. 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	WC0926483	WC0910449	WC0901973
Sample Date	Client Info	22 Mar 2024	16 Feb 2024	22 Jan 2024
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	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 >5	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184* >DFLT	0	0	0
Iron	ppm ASTM D5185(m) >20	0	0	<1
Chromium	ppm ASTM D5185(m) >20	0	0	0
Nickel	ppm ASTM D5185(m) >20	0	0	0
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m)	0	0	0
Aluminum	ppm ASTM D5185(m) >20	0	<1	<1
Lead	ppm ASTM D5185(m) >20	<1	2	2
Copper	ppm ASTM D5185(m) >20	<1	<1	<1
Tin	ppm ASTM D5185(m) >20	0	0	0
Antimony	ppm ASTM D5185(m)	0	0	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)	0	0	0
Barium	ppm ASTM D5185(m)	0	0	0
Molybdenum	ppm ASTM D5185(m)	0	0	0
Manganese	ppm ASTM D5185(m)	0	0	0
Magnesium	ppm ASTM D5185(m) 110	<1	<1	<1
Calcium	ppm ASTM D5185(m) 60	47	49	50
Phosphorus	ppm ASTM D5185(m) 330	328	344	349
Zinc	ppm ASTM D5185(m) 390	422	429	428
Sulfur	ppm ASTM D5185(m) 660	4110	4463	4440
Lithium	ppm ASTM D5185(m)	<1	<1	<1

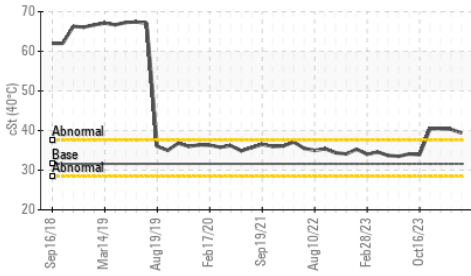
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >15	<1	2	2
Sodium	ppm ASTM D5185(m)	<1	<1	0
Potassium	ppm ASTM D5185(m) >20	<1	<1	<1

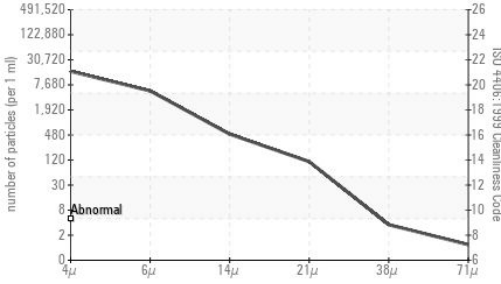


OIL ANALYSIS REPORT

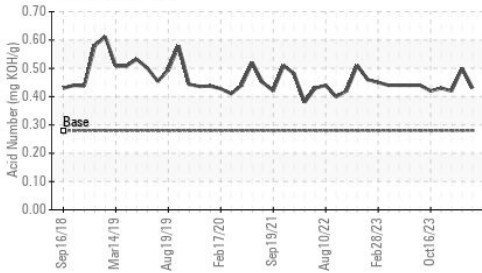
▲ Viscosity @ 40°C



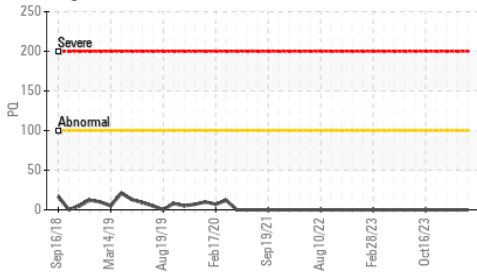
Particle Count



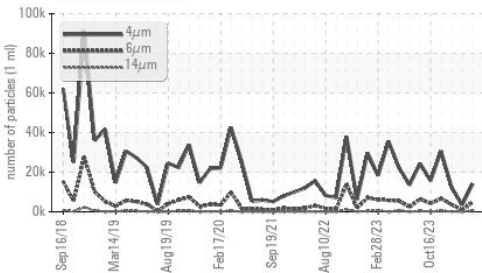
Acid Number



PQ



Particle Trend



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		14103	3445	12425
Particles >6µm	ASTM D7647	>10240000	4804	997	3573
Particles >14µm	ASTM D7647	>10240000	442	82	228
Particles >21µm	ASTM D7647	>25600000	97	18	42
Particles >38µm	ASTM D7647	>6400000	3	1	2
Particles >71µm	ASTM D7647	>1600000	1	0	1
Oil Cleanliness	ISO 4406 (c)	>--/30/30	21/19/16	19/17/14	21/19/15

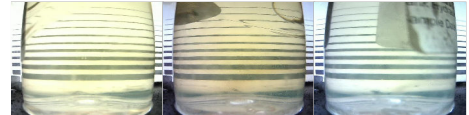
FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.28	0.43	0.50	0.42

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	▲ WGOIL	▲ WGOIL
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>5	NEG	.2%	NEG
Free Water	scalar	Visual*		NEG	▲ 1%	▲ 1%

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	31.61	▲ 39.4	▲ 40.3	▲ 40.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color



Bottom



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : WC0926483
 Lab Number : **02623943**
 Unique Number : 5749062
 Test Package : IND 2 (Additional Tests: PQ)

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.