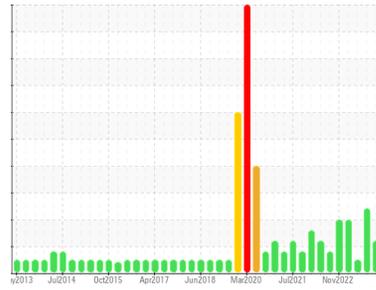




OIL ANALYSIS REPORT

Sample Rating Trend



Area
6
 Machine Id
6-3-648 Coal Mill L/P Trunion Gear
 Component
Pump
 Fluid
MOBIL MOBILGEAR SHC 460 (300 LTR)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

Wear

Tin ppm levels are abnormal. Bearing and/or bushing wear is indicated.

Contamination

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

Fluid Condition

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0925351	WC0902064	WC0842714
Sample Date	Client Info	05 Apr 2024	20 Feb 2024	14 Sep 2023
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	NORMAL

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >90	3	21	<1
Chromium	ppm	ASTM D5185(m) >5	0	0	0
Nickel	ppm	ASTM D5185(m) >5	0	0	<1
Titanium	ppm	ASTM D5185(m) >3	0	0	0
Silver	ppm	ASTM D5185(m) >3	0	0	0
Aluminum	ppm	ASTM D5185(m) >7	<1	2	0
Lead	ppm	ASTM D5185(m) >12	<1	▲ 9	0
Copper	ppm	ASTM D5185(m) >30	<1	6	<1
Tin	ppm	ASTM D5185(m) >9	▲ 16	▲ 114	3
Antimony	ppm	ASTM D5185(m)	1	14	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

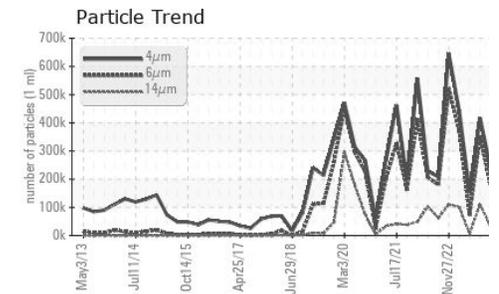
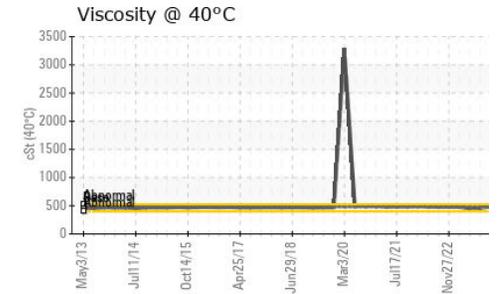
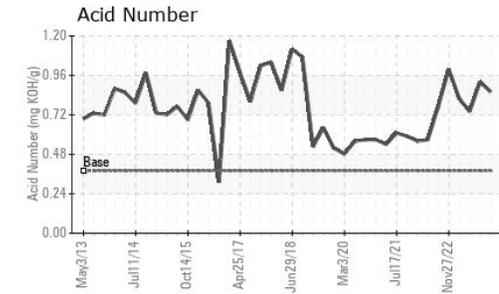
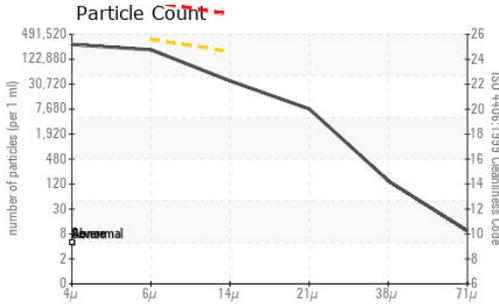
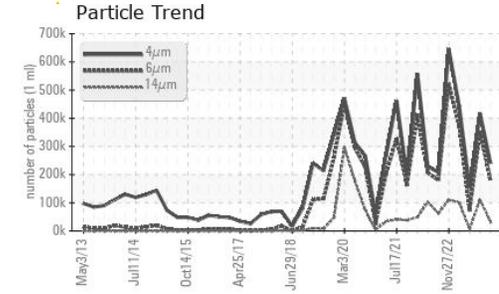
method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m) 5.7	2	11	9
Barium	ppm	ASTM D5185(m) 0.0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 0.0	0	0	0
Manganese	ppm	ASTM D5185(m) 0.0	0	0	0
Magnesium	ppm	ASTM D5185(m) 0.0	<1	<1	0
Calcium	ppm	ASTM D5185(m) 0.0	1	6	<1
Phosphorus	ppm	ASTM D5185(m) 180	378	386	446
Zinc	ppm	ASTM D5185(m) 0.8	<1	<1	2
Sulfur	ppm	ASTM D5185(m) 4270	● 1563	4531	4875
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >60	13	4	3
Sodium	ppm	ASTM D5185(m)	0	<1	<1
Potassium	ppm	ASTM D5185(m) >20	0	<1	4

FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	240340	416462	153995	
Particles >6µm	ASTM D7647	179454	● 350907	76683	
Particles >14µm	ASTM D7647	32079	110891	6237	
Particles >21µm	ASTM D7647	6805	30741	1814	
Particles >38µm	ASTM D7647	127	989	90	
Particles >71µm	ASTM D7647	8	5	9	
Oil Cleanliness	ISO 4406 (c)	>--/25/24	25/25/22	● 26/26/24	24/23/20

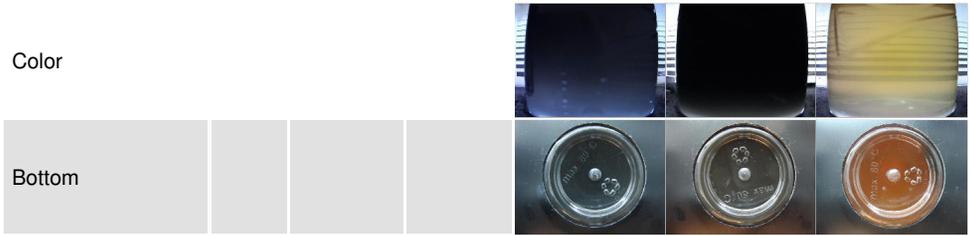


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.38	0.86	0.92	0.74

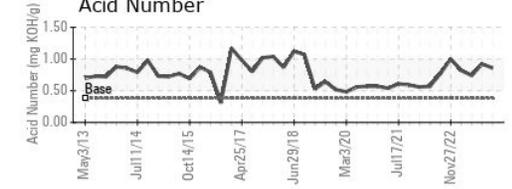
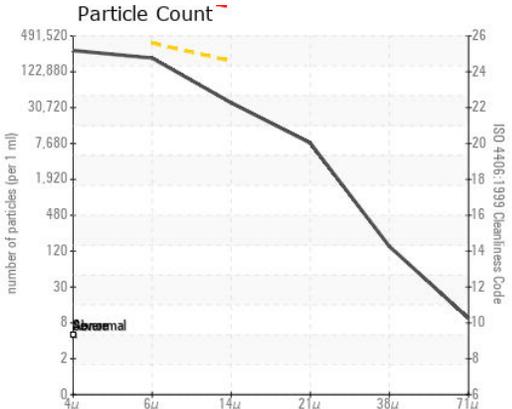
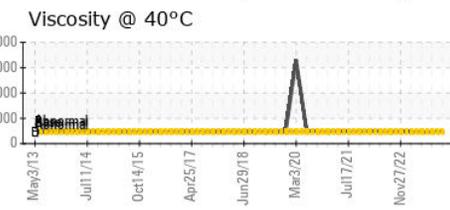
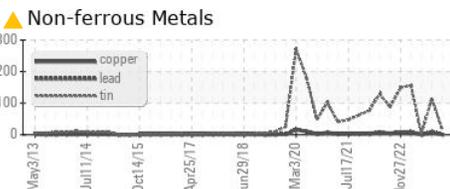
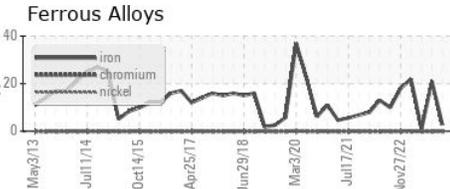
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	NONE	VLITE
Debris	scalar	Visual*	NONE	VLITE	NONE	NONE
Sand/Dirt	scalar	Visual*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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	477	481	454	449

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. : WC0925351 **Received** : 16 Apr 2024
Lab Number : **02629373** **Tested** : 17 Apr 2024
Unique Number : 5762505 **Diagnosed** : 17 Apr 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

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.

ST. MARYS CEMENT CO.
 400 BOWMANVILLE AVENUE
 BOWMANVILLE, ON
 CA L1C 7B5
 Contact: Lou Traiforos
 lou.traiforos@vcimentos.com
 T: (905)440-5874
 F: (905)623-4695