



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[202305611994]
 Machine Id
10588329 SKIP HOIST LUBE
 Component
Bearing
 Fluid
ESSO SPARTAN EP 220 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0866331	WC0565002	WC0565052
Sample Date		Client Info		09 Jan 2024	16 Jul 2023	27 Apr 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	<1	<1	1
Chromium	ppm	ASTM D5185(m)	>5	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	<1	0	0
Titanium	ppm	ASTM D5185(m)	>5	0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<1	0	0
Lead	ppm	ASTM D5185(m)	>50	2	2	2
Copper	ppm	ASTM D5185(m)	>150	<1	<1	1
Tin	ppm	ASTM D5185(m)	>10	7	6	▲ 19
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

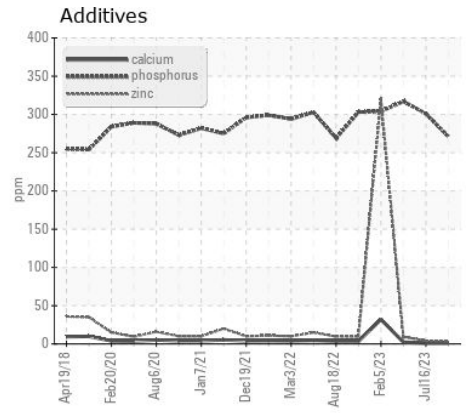
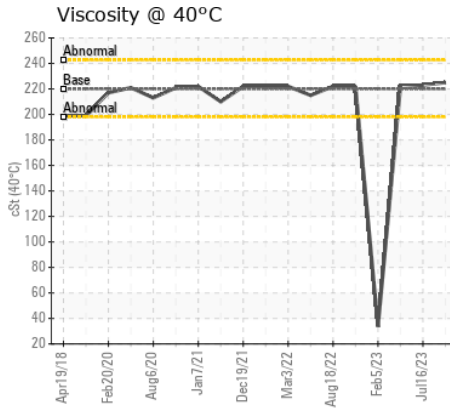
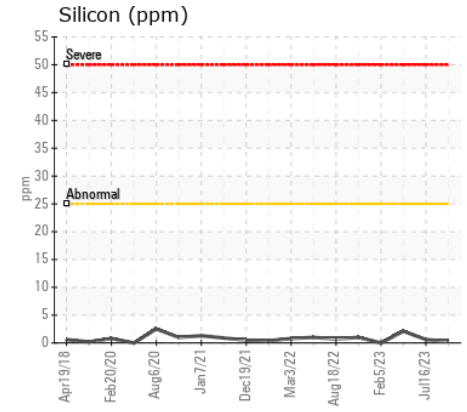
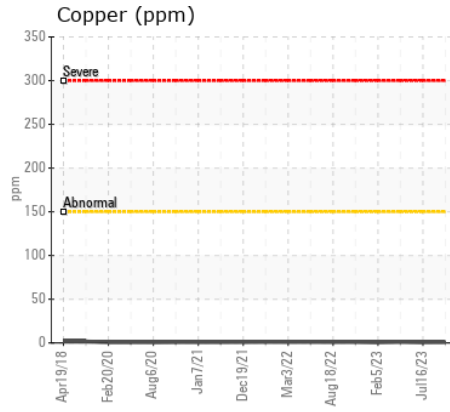
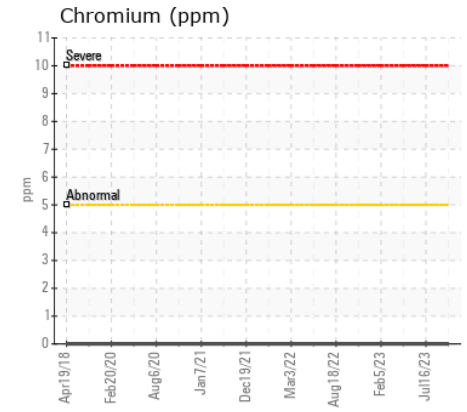
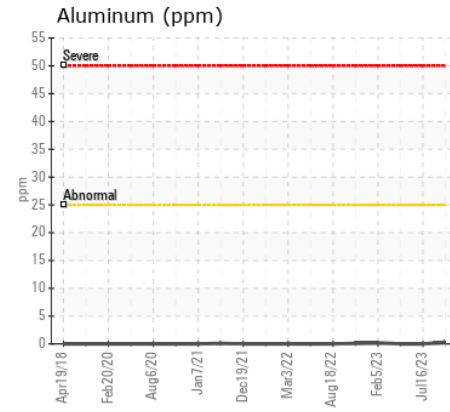
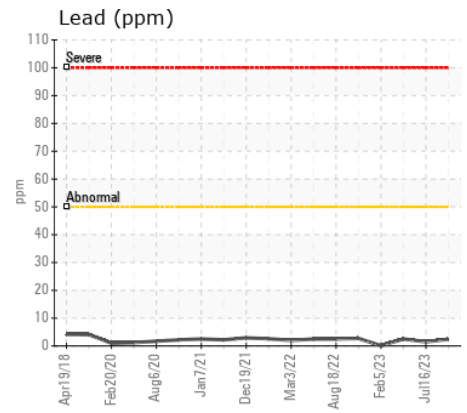
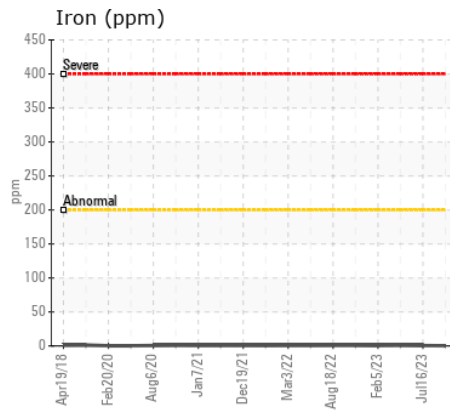
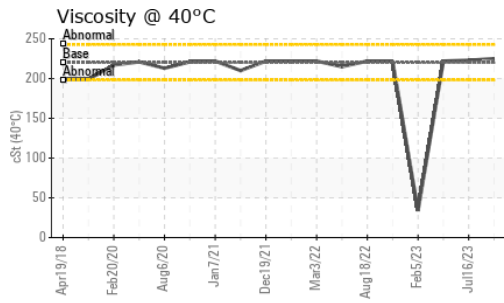
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<1	<1	2
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		0	<1	<1
Boron	ppm	ASTM D5185(m)	.5	<1	<1	2
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)	0	<1	0	0
Calcium	ppm	ASTM D5185(m)	1.7	1	1	2
Phosphorus	ppm	ASTM D5185(m)	250	271	301	317
Zinc	ppm	ASTM D5185(m)	.3	3	4	9
Sulfur	ppm	ASTM D5185(m)		8587	8557	9244
Visc @ 40°C	cSt	ASTM D7279(m)	220	225	223	222



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0866331 **Received** : 10 Jan 2024
Lab Number : 02607820 **Diagnosed** : 10 Jan 2024
Unique Number : 5708906 **Diagnostician** : Kevin Marson
Test Package : MOB 1

Vale - Creighton Mine
 CREIGHTON MINE MNTCE. (PLANT 17)
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 CA P0M 1N0
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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.