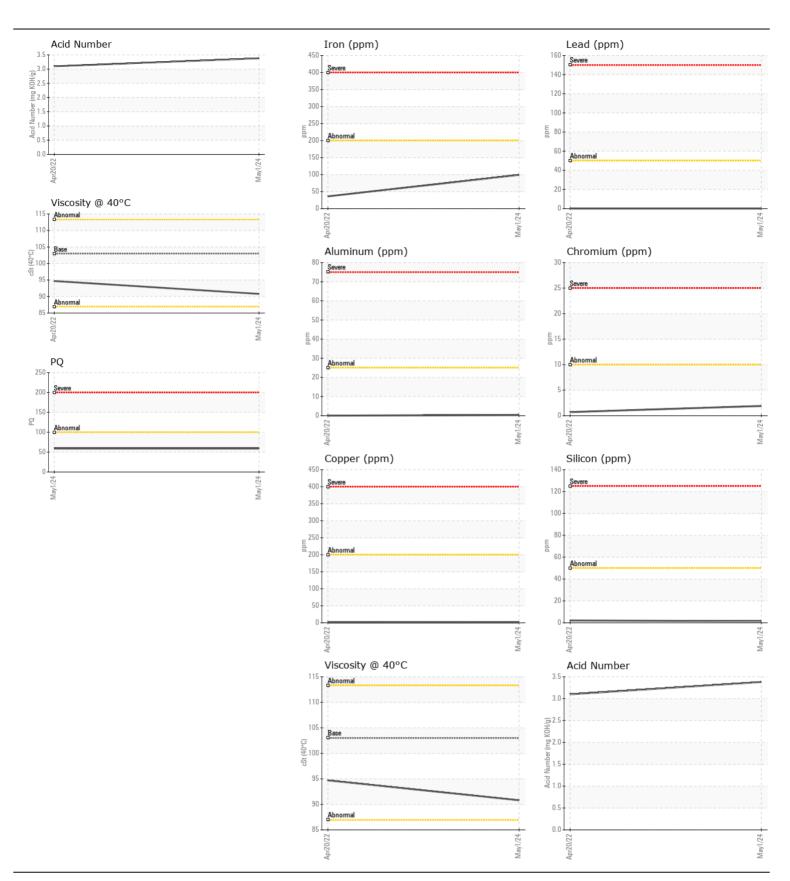
WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**

Machine Id

SPARTAN 4020

Pump Gearbox

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0895839	WC0702356	
	Sample Date		Client Info		01 May 2024	20 Apr 2022	
	Machine Age	hrs	Client Info		1004	1000	
	Oil Age	hrs	Client Info		96	100	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				NORMAL	NORMAL	
WEAR	PQ		ASTM D8184*		59		
	Iron	nnm	ASTM D5185(m)	>200	99	36	
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)				
	Nickel	ppm	ASTM D5185(m)		2 <1	<1	
	Titanium	ppm	ASTM D5185(III) ASTM D5185(m)	>10	0	<1 0	
	Silver	ppm	ASTM D5185(III) ASTM D5185(m)		0	0	
	Aluminum	ppm	ASTM D5185(m)	>25	ں <1	0	
	Lead	ppm	ASTM D5185(III) ASTM D5185(m)		0	0	
	Copper	ppm	ASTM D5185(m)		<1	<1	
	Tin	ppm	ASTM D5185(m)		0	0	
	Vanadium	ppm	ASTM D5185(m)	>10	0	0	
	White Metal	ppm scalar	Visual*	NONE	VLITE	NONE	
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
<u></u>			· · · · · · · · · · · · · · · · · · ·		·····		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>50	2	2	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	2	<1	
	Water		WC Method	>0.2	NEG	NEG	
	Silt	scalar	Visual*	NONE	NONE	VLITE	
	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	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		4	1	
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185(m)		294	294	
	Barium	ppm	ASTM D5185(m)		0	0	
	Molybdenum	ppm	ASTM D5185(m)		0	0	
	Manganese	ppm	ASTM D5185(m)		<1	<1	
	Magnesium	ppm	ASTM D5185(m)		1	0	
	Calcium	ppm	ASTM D5185(m)		3	3	
	Phosphorus	ppm	ASTM D5185(m)		2142	2072	
	Zinc	ppm	ASTM D5185(m)		4	3	
	Sulfur	ppm	ASTM D5185(m)		22980	22628	
	Acid Number (AN)	mg KOH/g	ASTM D974*		3.38	3.10	





CALA ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Sample No. : WC0895839 Received : 17 May 2024 Lab Number : 02636391 **Tested** : 21 May 2024

Unique Number : 5785553 : 21 May 2024 - Kevin Marson Diagnosed

Test Package: MOB 2 (Additional Tests: PQ, 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.

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