WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL ABNORMAL

Machine Id

MANITOU 625MT FOR 421

Component Front Left Planetary

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.	Sample Number		Client Info		WC0925863		
	Sample Date		Client Info		30 Jun 2024		
	Machine Age	hrs	Client Info		11332		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		N/A		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>500	71		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>10	<1		
	Nickel	ppm	ASTM D5185(m)		<1		
	Titanium	ppm	ASTM D5185(m)		<1		
	Silver	ppm	ASTM D5185(m)		0		
	Aluminum	ppm	ASTM D5185(m)	>25	2		
	Lead	ppm	ASTM D5185(m)	>25	6		
	Copper	ppm	ASTM D5185(m)	>75	230		
	Tin	ppm	ASTM D5185(m)	>10	0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	VLITE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>75	31		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)		<1		
	Water	le le	WC Method	>0.2	NEG		
	Silt	scalar	Visual*	NONE	VLITE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>50	2		
Viscosity of sample indicates oil is within SAE 40 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	200	24		
	Barium	ppm	ASTM D5185(m)	0	2		
	Molybdenum	ppm	ASTM D5185(m)	0	2		
	Manganese	ppm	ASTM D5185(m)		1		
	Magnesium	ppm	ASTM D5185(m)	0	20		
	Calcium	ppm	ASTM D5185(m)	20	3449		
	Phosphorus	ppm	ASTM D5185(m)	1000	805		
	Zinc	ppm	ASTM D5185(m)	20	1173		
	Sulfur	ppm	ASTM D5185(m)	22000	3938		

Visc @ 40°C

96.9

ASTM D7279(m) 135





CALA ISO 17025:2017 Accredited

Laboratory Sample No. Lab Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

: WC0925863 : 02645586 Unique Number : 5803125 Test Package : MOB 1

Received **Tested**

Diagnosed

: 04 Jul 2024 : 04 Jul 2024 : 05 Jul 2024 - Kevin Marson

Agnico Eagle Canada 1350 Government Rd. W, MACASSA COMPLEX Kirkland Lake, ON

CA P2N 3J1 Contact: Mitch Lamontagne

AEM_KL_macassaoilsampleresults@agnicoeagle.com

T: (705)567-5208 F: (705)567-5221