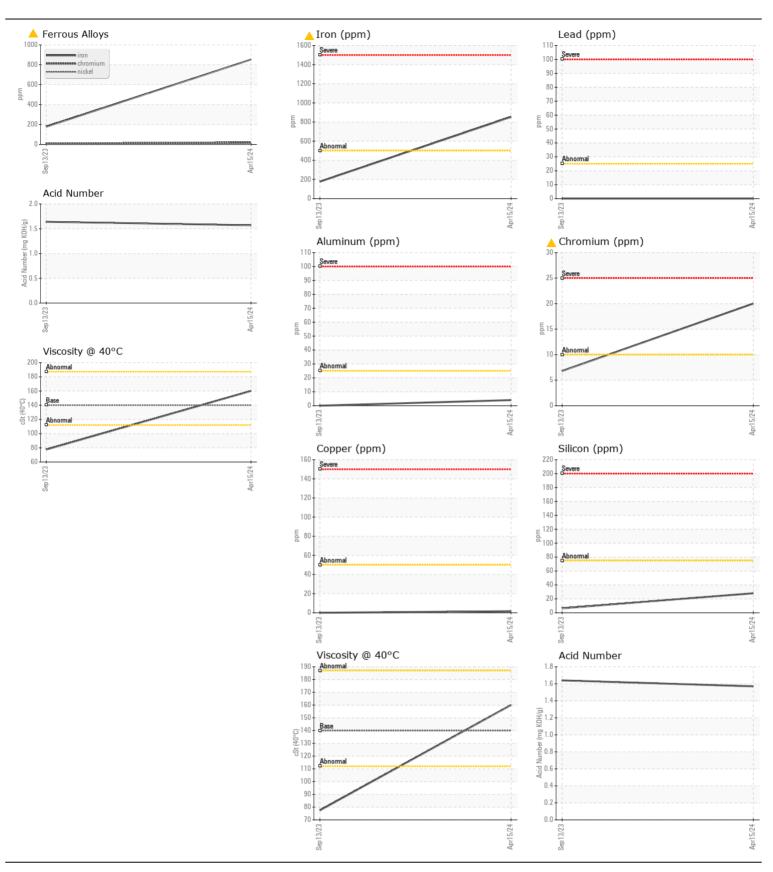
**WEAR** CONTAMINATION **FLUID CONDITION**  **ABNORMAL NORMAL NORMAL** 

Machine Id

## MANITOU MHT12330 MH9040 (S/N P20967)

Component Front Left Final Drive

GEAR OIL LS 80W90 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. We recommend an early resample to monitor this condition.	Sample Number		Client Info		HPL0005069	HPL0002433	
	Sample Date		Client Info		15 Apr 2024	13 Sep 2023	
	Machine Age	hrs	Client Info		0	364	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		N/A	N/A	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				ABNORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185m	>500	<u>▲</u> 853	177	
Gear wear is indicated.	Chromium	ppm	ASTM D5185m	>10	<u> </u>	7	
	Nickel	ppm	ASTM D5185m	>10	2	<1	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m	>25	4	0	
	Lead	ppm	ASTM D5185m	>25	0	0	
	Copper	ppm	ASTM D5185m	>50	2	0	
	Tin	ppm	ASTM D5185m	>10	<1	<1	
	Vanadium	ppm	ASTM D5185m		<1	<1	
	White Metal	scalar	*Visual	NONE	MODER	▲ HEAVY	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>75	28	6	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	8	8	
	Water		WC Method	>0.2	NEG	NEG	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	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 D5185m		4	8	
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m	150	19	<1	
	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		7	6	
	Manganese	ppm	ASTM D5185m		22	13	
	Magnesium	ppm	ASTM D5185m	10	9	14	
	Calcium	ppm	ASTM D5185m	70	569	2857	
	Phosphorus	ppm	ASTM D5185m	2000	1870	1034	
	Zinc	ppm	ASTM D5185m	50	277	1257	
	Sulfur	ppm	ASTM D5185m	20000	28386	11585	
	Acid Number (AN)	mg KOH/g	ASTM D8045		1.57	1.64	
	Visc @ 40°C	cSt	ASTM D445	140	160	77.5	





Certificate L2367

Laboratory Sample No.

: HPL0005069 Lab Number : 06152158 Unique Number: 10982236 Test Package : MOB 2

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 17 Apr 2024 : 18 Apr 2024 **Tested** 

: 22 Apr 2024 - Don Baldridge Diagnosed

410 STEVENSON DR BOLINGBROOK, IL US 60440 Contact: DAVE KOEHNE davidk@stevensoncrane.com

STEVENSON CRANE

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) T: (630)972-9199