



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area

88-19

Machine Id

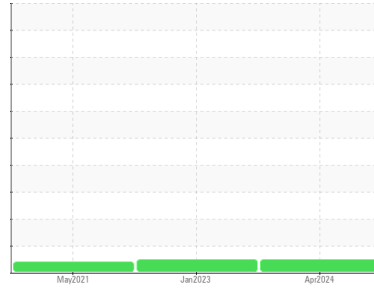
Manipulator 60 North A-Axis West (S/N SC006127)

Component

Planetary

Fluid

MOBIL MOBILGEAR 600 XP 220 (--- LTR)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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		WC0910146	WC0701621	WC0565806
Sample Date	Client Info		10 Apr 2024	03 Jan 2023	24 May 2021
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		18	12	---
Iron	ppm	ASTM D5185m >150	4	5	20
Chromium	ppm	ASTM D5185m >10	0	<1	2
Nickel	ppm	ASTM D5185m >10	<1	0	<1
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m	<1	0	4
Aluminum	ppm	ASTM D5185m >25	<1	<1	<1
Lead	ppm	ASTM D5185m >100	1	1	9
Copper	ppm	ASTM D5185m >50	7	6	37
Tin	ppm	ASTM D5185m >10	<1	<1	2
Antimony	ppm	ASTM D5185m >5	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	<1	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	55	53	227
Barium	ppm	ASTM D5185m	12	<1	2
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	2	<1	3
Magnesium	ppm	ASTM D5185m	1	0	<1
Calcium	ppm	ASTM D5185m	2	0	2
Phosphorus	ppm	ASTM D5185m	430	406	993
Zinc	ppm	ASTM D5185m	5	5	38
Sulfur	ppm	ASTM D5185m	18014	15089	16636

CONTAMINANTS

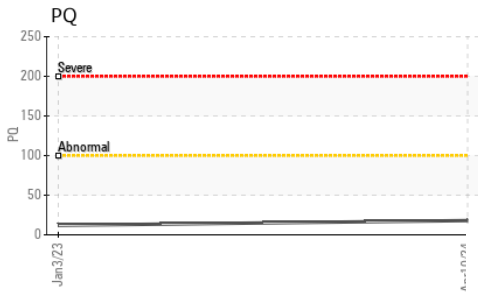
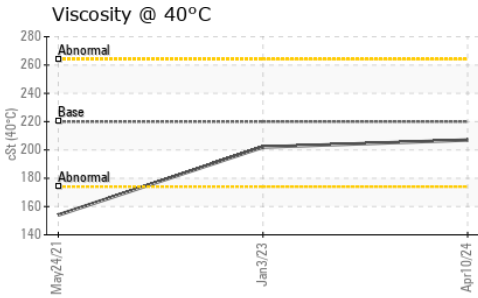
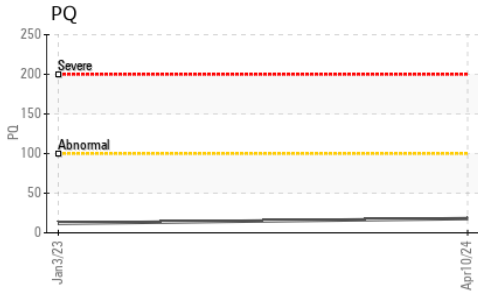
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	3	1	6
Sodium	ppm	ASTM D5185m	4	<1	3
Potassium	ppm	ASTM D5185m >20	2	0	1
Water	%	ASTM D6304 >0.1	NEG	NEG	NEG

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.98	0.85	1.378



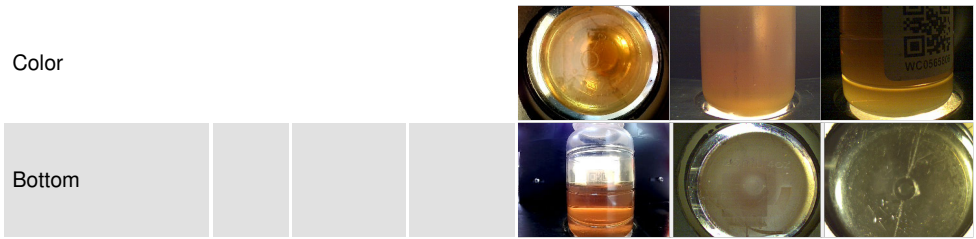
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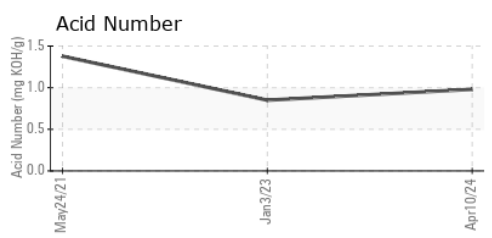
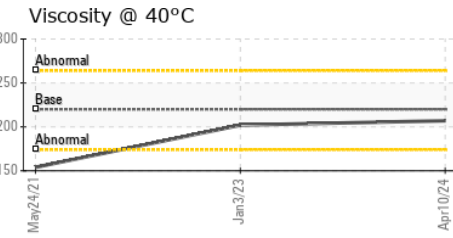
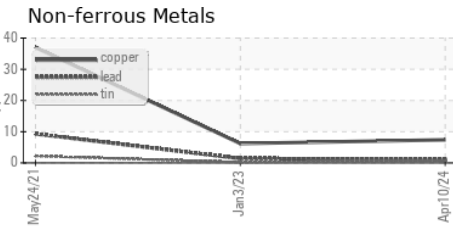
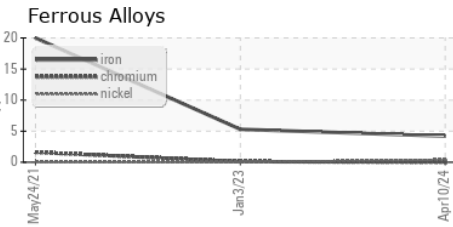
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	220	207	202	154

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0910146 **Received** : 16 Apr 2024
Lab Number : 06150535 **Tested** : 18 Apr 2024
Unique Number : 10980613 **Diagnosed** : 18 Apr 2024 - Jonathan Hester
Test Package : PLANT

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