

PROBLEM SUMMARY

Area SAULT STE MARIE & HEARST [11071993] Machine Id YAM1 RADAR PEDESTALS

Oil Fluid

MOBIL SHC 630 (19 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS							
Sample Status				ABNORMAL	NORMAL	NORMAL	
Particles >4µm		ASTM D7647	>5000	<u> </u>	1248	2617	
Oil Cleanliness		ISO 4406 (c)	>19/17/14	21/17/14	17/15/11	19/17/11	

Customer Id: NAVSSM Sample No.: WC894377 Lab Number: 02586522 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 <u>gloria.gonzalez@wearcheck.com</u>



RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description		
Resample			?	We recommend an early resample to monitor this condition.		

HISTORICAL DIAGNOSIS

30 Sep 2020 Diag: Kevin Marson



Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The condition of the oil is acceptable for the time in service.

view report

view report

04 Oct 2019 Diag: Kevin Marson



Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for topup/fill. We recommend an early resample to monitor this condition.All component wear rates are normal. Particles acceptable for this fluid. The condition of the oil is suitable for further service. The oil is still serviceable provided





06 Sep 2017 Diag: Kevin Marson

>4μm are abnormal. Additive levels indicate the addition of a different brand, or type of oil. The AN level is that the contaminant(s) can be reduced to acceptable levels.



OIL ANALYSIS REPORT

Area SAULT STE MARIE & HEARST [11071993] Machine Id YAM1 RADAR PEDESTALS Component

Oil

Fluid MOBIL SHC 630 (19 GAL)

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		WC894377	WC894358	WC894356
Sample Date		Client Info		15 Sep 2023	30 Sep 2020	04 Oct 2019
Machine Age	yrs	Client Info		0	0	0
Oil Age	yrs	Client Info		1	3	2
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	1	4	2
Chromium	ppm	ASTM D5185(m)	>20	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>20	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	0
Lead	ppm	ASTM D5185(m)	>20	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>20	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>20	0	<1	0
Antimony	ppm	ASTM D5185(m)		0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	1	1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		15	14	12
Barium	ppm	ASTM D5185(m)		<1	1	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	<1	0
Magnesium	ppm	ASTM D5185(m)		1	1	<1
Calcium	ppm	ASTM D5185(m)		4	1	<1
Phosphorus	ppm	ASTM D5185(m)		272	418	442
Zinc	ppm	ASTM D5185(m)		11	25	21
Sulfur	ppm	ASTM D5185(m)		4597	4580	4787
Lithium	ppm	ASTM D5185(m)		2	2	1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	4	5	5
Sodium	ppm	ASTM D5185(m)		<1	2	0
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	🔺 13419	1248	2617
Particles >6µm		ASTM D7647	>1300	964	277	777
Particles >14µm		ASTM D7647	>160	101	14	15
Particles >21µm		ASTM D7647	>40	19	5	4
Particles >38µm		ASTM D7647	>10	1	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	A 21/17/14	17/15/11	19/17/11

Acid Number (AN) mg KOH/g ASTM D974*

FLUID DEGRADATION

0.76 0.02 1.12

history1

current

Report Id: NAVSSM [WCAMIS] 02586522 (Generated: 10/10/2023 15:23:42) Rev: 1 Contact

method

limit/base

Contact/Location: Joe Cardoso - NAVSSM

history2



Pr.1

OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	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*		NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	217.7	217	223	225
SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Color						



Bottom

Sep 15/23

1c+4/19



Diagnostician : Kevin Marson

475 AIRPORT RD SAULT STE MARIE, ON CA P6A 5K6 Contact: Joe Cardoso cardojm@navcanada.ca T: (705)779-3641 F: (705)779-2304



Test Package : IND 2 (Additional Tests: PRTCOUNT, 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.

Unique Number : 5655588

CALA