



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HL 5731 PME Lubricating Oil Purifier
 Component
Lube System
 Fluid
ESSO NUTO H ISO 68 (4 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0929733	WC0552068	WC66002536
Sample Date		Client Info		30 May 2024	31 May 2021	04 May 2018
Machine Age	hrs	Client Info		11423	2211	19285
Oil Age	hrs	Client Info		61	211	725
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	N/A	Not Changd
Filter Changed		Client Info		None	N/A	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	<1	1	7
Chromium	ppm	ASTM D5185(m)	>10	0	0	0
Nickel	ppm	ASTM D5185(m)	>10	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>10	0	0	0
Lead	ppm	ASTM D5185(m)	>20	0	4	<1
Copper	ppm	ASTM D5185(m)	>20	<1	5	28
Tin	ppm	ASTM D5185(m)	>10	0	0	2
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

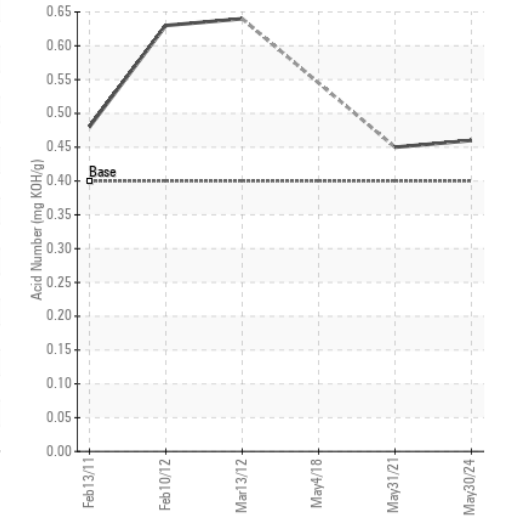
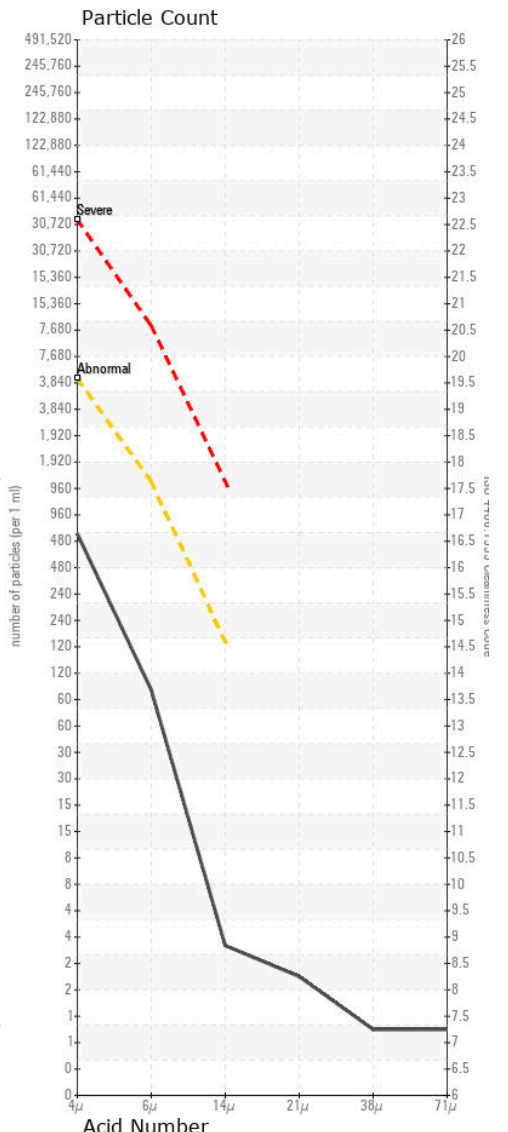
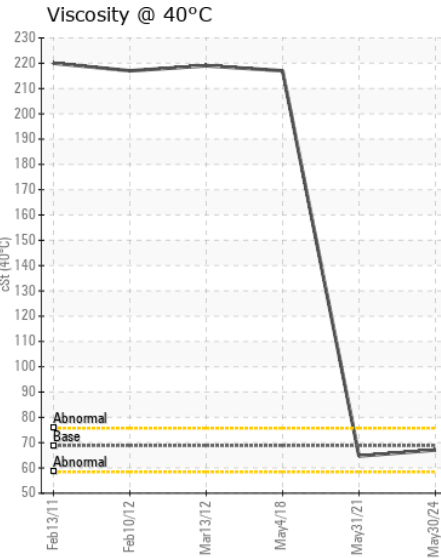
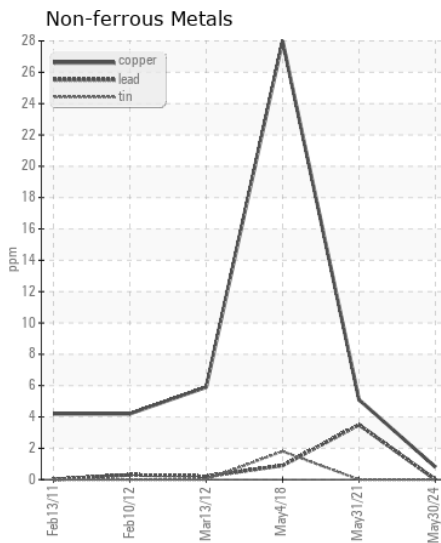
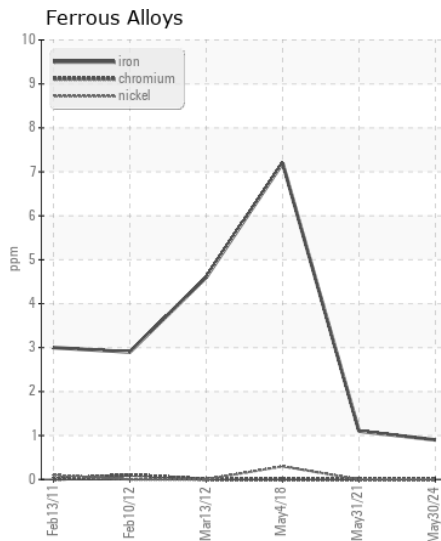
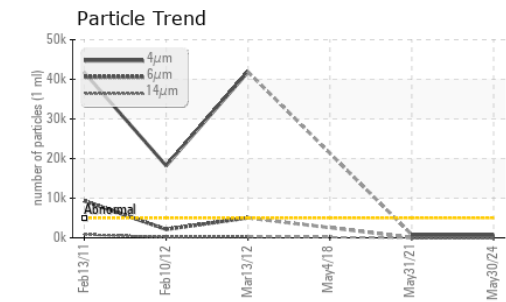
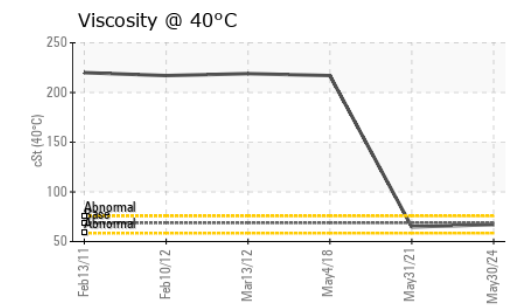
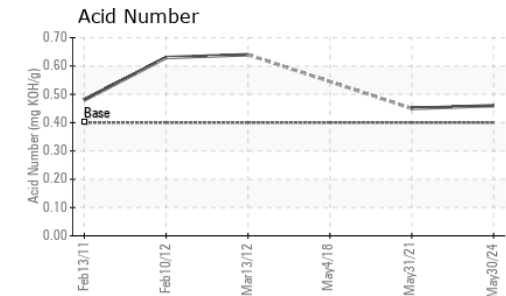
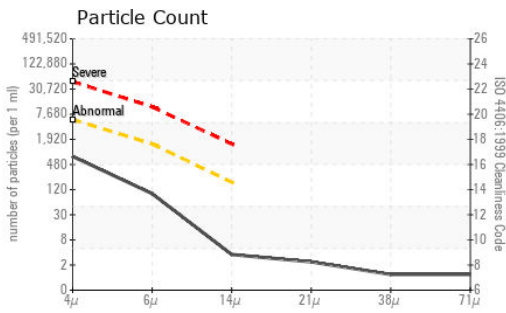
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>15	6	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Water		WC Method	>0.05	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	658	809	---
Particles >6µm		ASTM D7647	>1300	85	52	---
Particles >14µm		ASTM D7647	>160	3	4	---
Particles >21µm		ASTM D7647	>40	2	3	---
Particles >38µm		ASTM D7647	>10	1	0	---
Particles >71µm		ASTM D7647	>3	1	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/14/9	17/13/9	---
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*	>0.05	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		0	<1	<1
Boron	ppm	ASTM D5185(m)	0	0	<1	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		0	<1	0
Magnesium	ppm	ASTM D5185(m)	5	<1	<1	<1
Calcium	ppm	ASTM D5185(m)	50	54	51	15
Phosphorus	ppm	ASTM D5185(m)	330	370	351	280
Zinc	ppm	ASTM D5185(m)	420	461	457	7
Sulfur	ppm	ASTM D5185(m)	3100	7030	7154	6366
Acid Number (AN)	mg KOH/g	ASTM D974*	.40	0.46	0.45	---
Visc @ 40°C	cSt	ASTM D7279(m)	68.8	67.1	64.7	217



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0929733
Lab Number : 02639993
Unique Number : 5789155
Test Package : MAR 2 (Additional Tests: TAN Man)
Received : 05 Jun 2024
Tested : 06 Jun 2024
Diagnosed : 06 Jun 2024 - Wes Davis

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