



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
IRIG [6409633]
 Machine Id
IRIG-PRM-PMUD-0302 - 2MP IRIG-PRM-PMUD-0302 #2 MUD PUMP
 Component
Pump
 Fluid
MOBIL SHC 634 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		HLC0003019	HLC0002835	HLC0002800
Sample Date		Client Info		01 Jan 2024	23 Nov 2023	02 Nov 2023
Machine Age	hrs	Client Info		18882	18472	18222
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Filtered	Filtered	Filtered
Filter Changed		Client Info		Cleaned	Cleaned	Cleaned
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	2	44	45
Chromium	ppm	ASTM D5185m	>5	0	2	3
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m	>3	0	2	2
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>7	<1	▲ 34	▲ 33
Lead	ppm	ASTM D5185m	>12	0	0	0
Copper	ppm	ASTM D5185m	>30	0	5	6
Tin	ppm	ASTM D5185m	>9	0	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

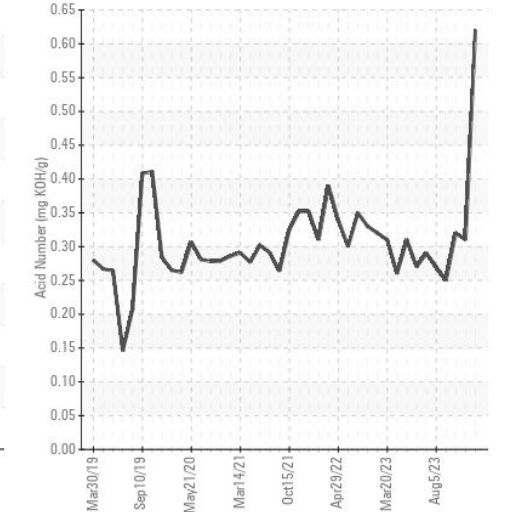
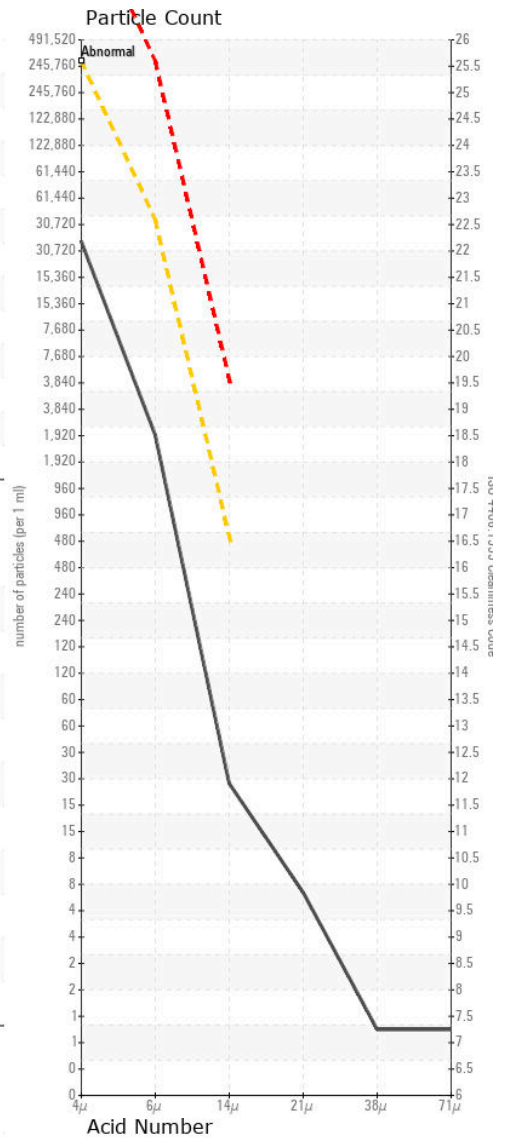
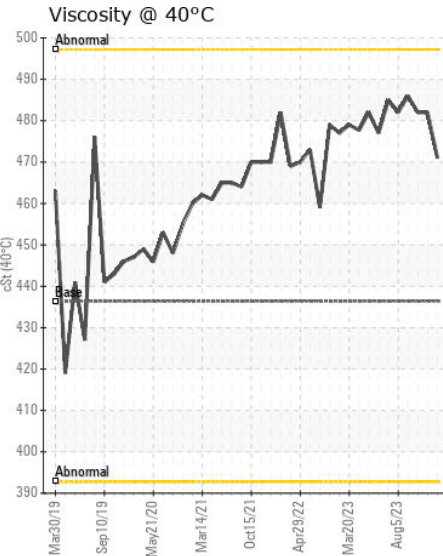
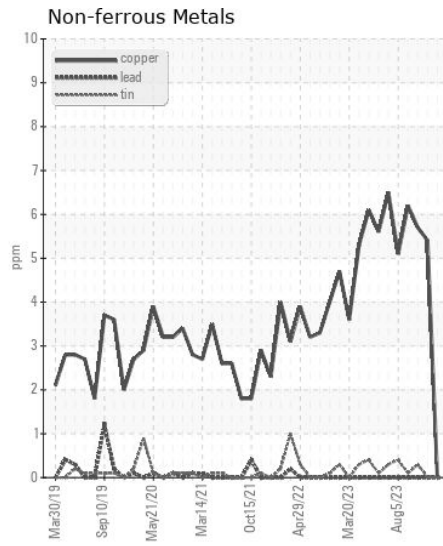
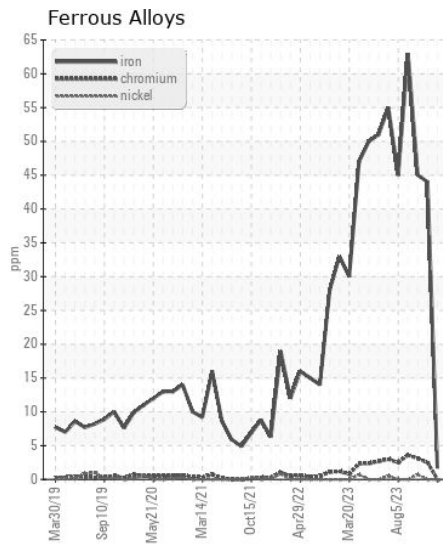
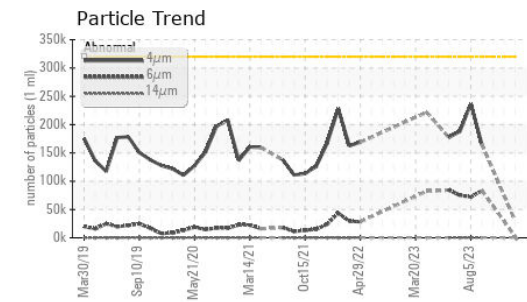
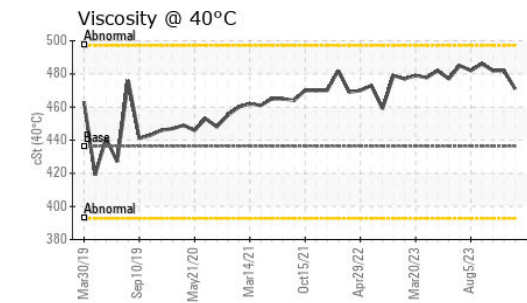
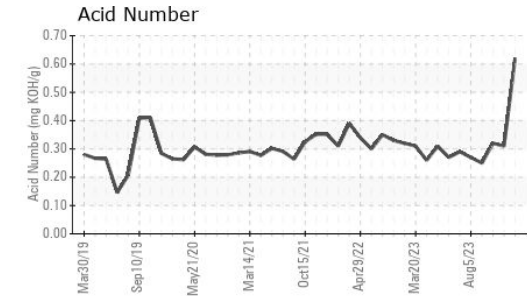
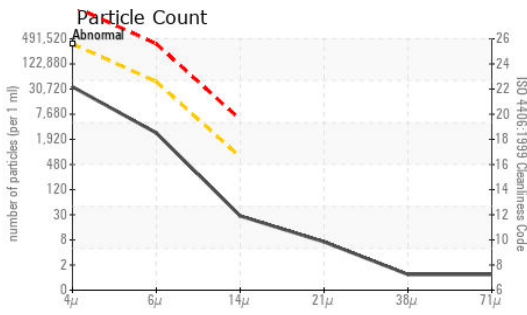
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>60	27	▲ 89	▲ 86
Potassium	ppm	ASTM D5185m	>20	<1	30	35
Water		WC Method	>.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>320000	30105	---	---
Particles >6µm		ASTM D7647	>40000	2386	---	---
Particles >14µm		ASTM D7647	>640	25	---	---
Particles >21µm		ASTM D7647	>160	6	---	---
Particles >38µm		ASTM D7647	>40	1	---	---
Particles >71µm		ASTM D7647	>10	1	---	---
Oil Cleanliness		ISO 4406 (c)	>25/22/16	22/18/12	---	---
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	>.1	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 D5185m		2	42	45
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	5	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		0	4	0
Calcium	ppm	ASTM D5185m		0	19	0
Phosphorus	ppm	ASTM D5185m		495	416	341
Zinc	ppm	ASTM D5185m		0	2	0
Sulfur	ppm	ASTM D5185m		0	209	0
Acid Number (AN)	mg KOH/g	ASTM D8045		0.62	0.31	0.32
Visc @ 40°C	cSt	ASTM D445	436.4	471	482	482



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HLC0003019 **Received** : 16 Jan 2024
Lab Number : 06061027 **Diagnosed** : 17 Jan 2024
Unique Number : 10832409 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: PrtCount)

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

* - 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)