



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**Shredder**  
Machine Id  
**Mill DFR -Shredder**  
Component  
**Hydraulic Power Pack**  
Fluid  
**SHELL HYDRAULIC S1 M 68 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PE0000749</b>	PE0000731	PE0000614
Sample Date		Client Info		<b>07 Feb 2024</b>	21 Nov 2023	13 Oct 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>12</b>	14	13
Iron	ppm	ASTM D5185m	>20	<b>2</b>	<1	0
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	0	<1
Lead	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>20	<b>12</b>	5	3
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

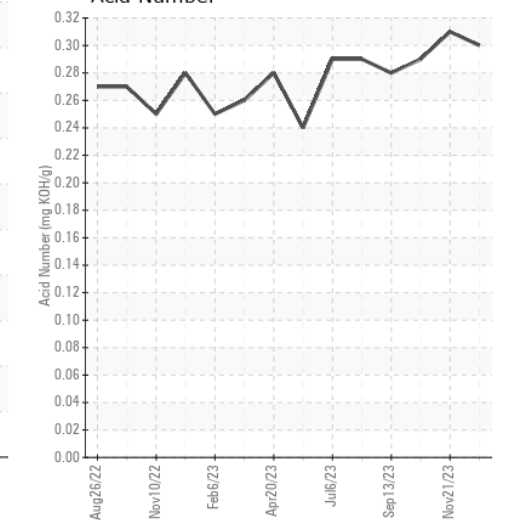
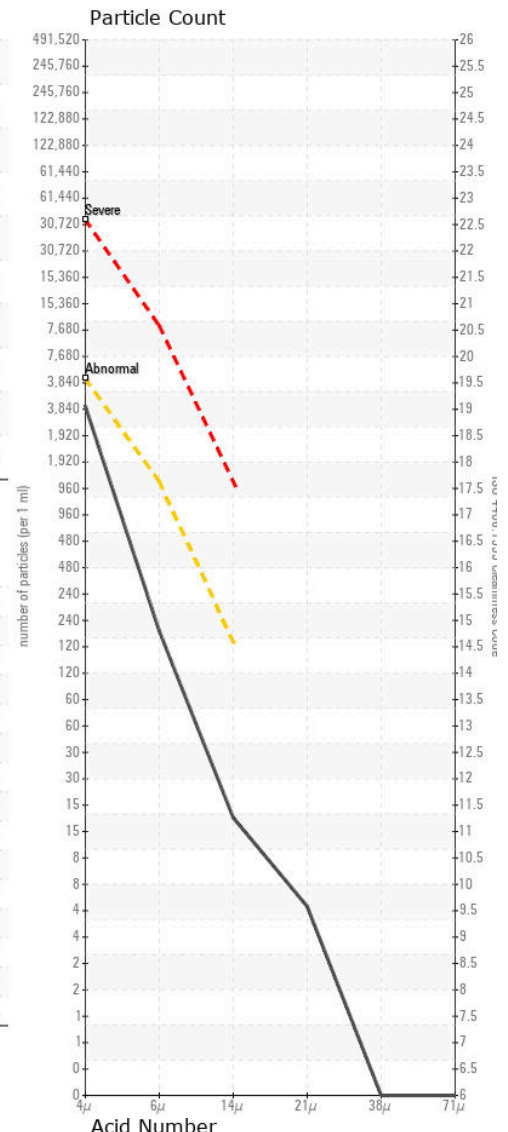
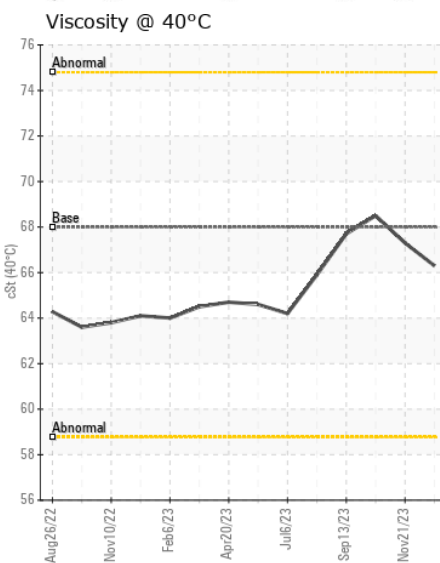
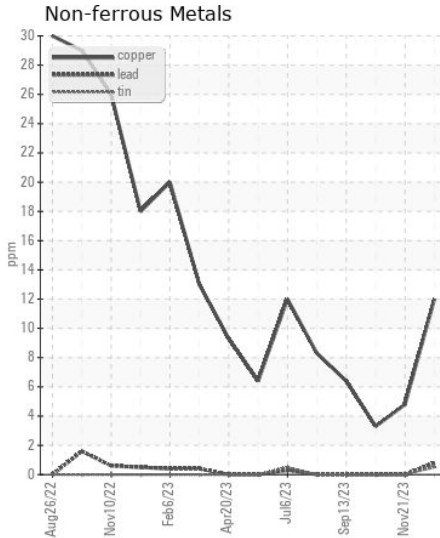
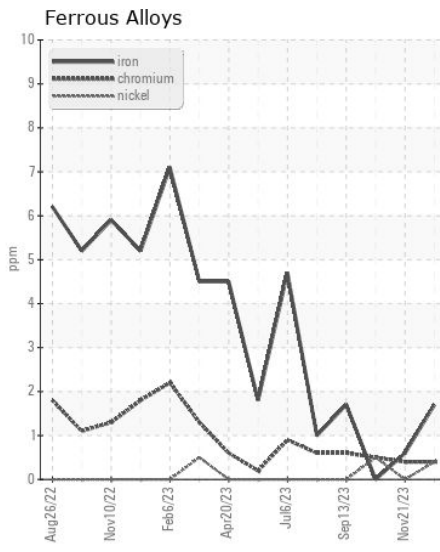
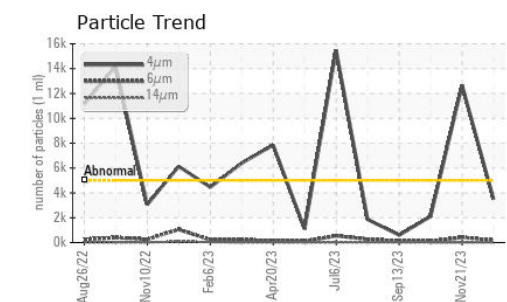
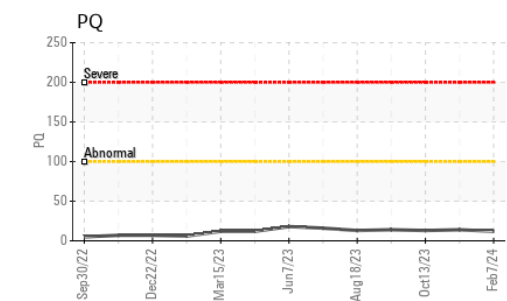
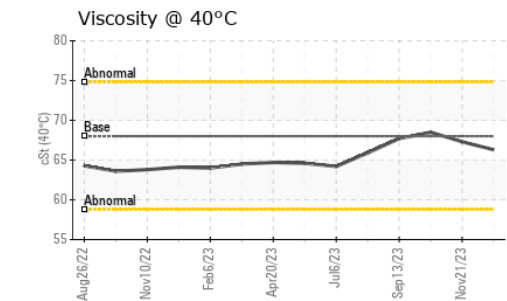
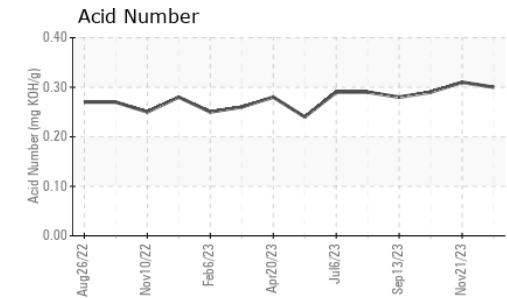
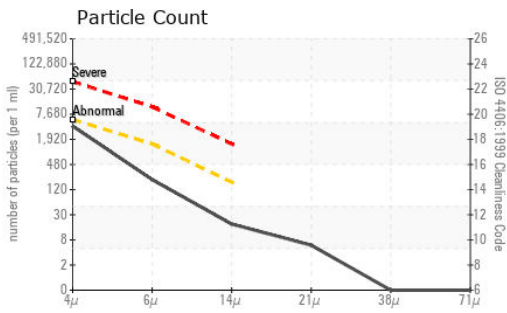
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	1
Water		WC Method	>0.05	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>3489</b>	▲ 12660	2102
Particles >6µm		ASTM D7647	>1300	<b>184</b>	413	115
Particles >14µm		ASTM D7647	>160	<b>16</b>	12	12
Particles >21µm		ASTM D7647	>40	<b>5</b>	4	5
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/15/11</b>	▲ 21/16/11	18/14/11
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	<b>NEG</b>	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		<b>0</b>	1	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>13</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>7</b>	6	9
Calcium	ppm	ASTM D5185m		<b>46</b>	44	48
Phosphorus	ppm	ASTM D5185m		<b>323</b>	276	236
Zinc	ppm	ASTM D5185m		<b>339</b>	338	319
Sulfur	ppm	ASTM D5185m		<b>849</b>	744	690
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.30</b>	0.31	0.29
Visc @ 40°C	cSt	ASTM D445	68	<b>66.3</b>	67.3	68.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PE0000749  
**Lab Number** : 06085964  
**Unique Number** : 10873409  
**Test Package** : PLANT ( Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN )

**Received** : 12 Feb 2024  
**Tested** : 13 Feb 2024  
**Diagnosed** : 13 Feb 2024 - Don Baldrige

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)

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