PLANT

PetroCard™ MORE THAN JUST FUEL.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
Shredder
Machine Id
ORU (Oil Recirculate Unit)-Shredder
Component
Hydraulic Power Pack
Fluid
SHELL HYDRAULIC S1 M 68 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

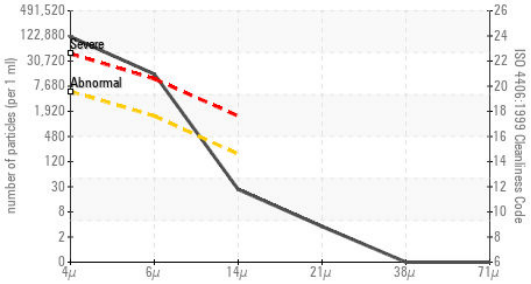
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

FLUID CONDITION

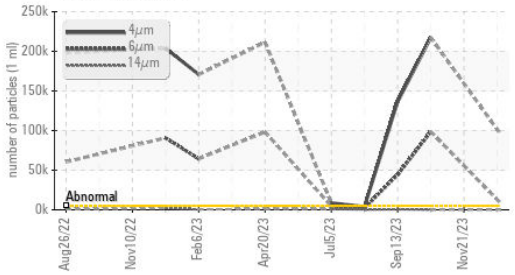
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PE0000743	PE0000729	PE0000616
Sample Date		Client Info		09 Jan 2024	21 Nov 2023	13 Oct 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	SEVERE	SEVERE
PQ		ASTM D8184		24	161	192
Iron	ppm	ASTM D5185m	>20	8	51	85
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>20	0	0	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	2	2	3
Tin	ppm	ASTM D5185m	>20	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>15	<1	1	1
Potassium	ppm	ASTM D5185m	>20	0	2	2
Water		WC Method	>0.05	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	101531	---	217509
Particles >6µm		ASTM D7647	>1300	13014	---	98686
Particles >14µm		ASTM D7647	>160	23	---	127
Particles >21µm		ASTM D7647	>40	3	---	2
Particles >38µm		ASTM D7647	>10	0	---	0
Particles >71µm		ASTM D7647	>3	0	---	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	24/21/12	---	25/24/14
Silt	scalar	*Visual	NONE	NONE	LIGHT	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	MILKY	HAZY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	0.2%	0.2%
Sodium	ppm	ASTM D5185m		<1	4	3
Boron	ppm	ASTM D5185m		0	1	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	1
Magnesium	ppm	ASTM D5185m		0	7	6
Calcium	ppm	ASTM D5185m		37	45	47
Phosphorus	ppm	ASTM D5185m		311	283	209
Zinc	ppm	ASTM D5185m		383	347	286
Sulfur	ppm	ASTM D5185m		771	782	647
Acid Number (AN)	mg KOH/g	ASTM D8045		0.39	0.35	0.30
Visc @ 40°C	cSt	ASTM D445	68	64.8	68.9	68.8

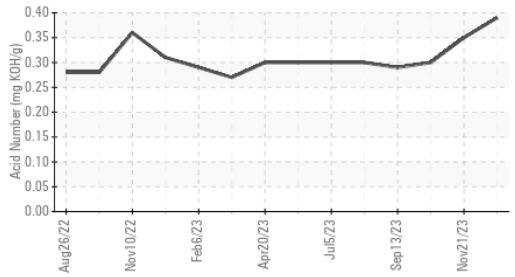
Particle Count



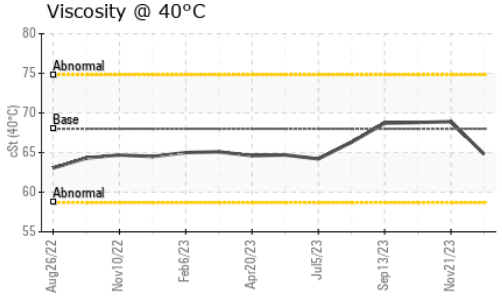
Particle Trend



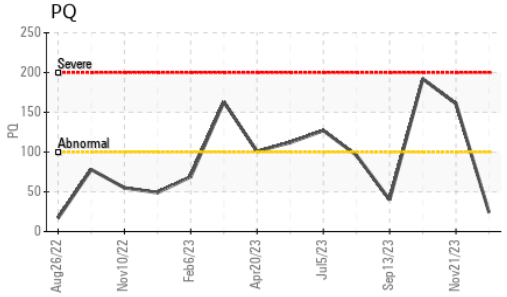
Acid Number



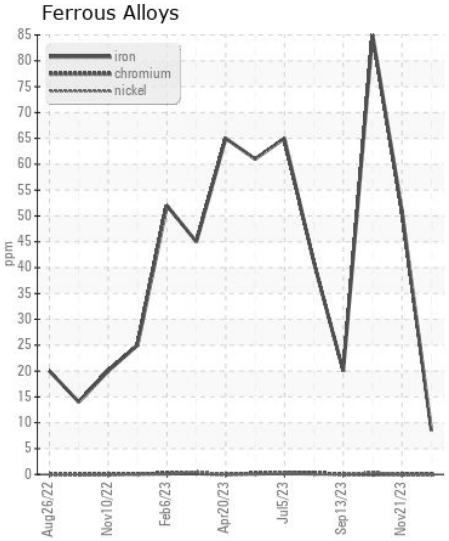
Viscosity @ 40°C



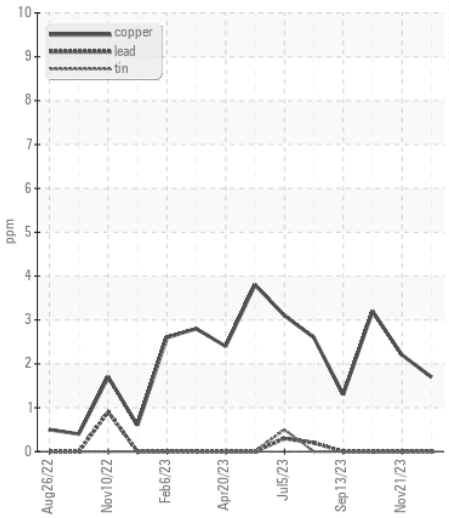
PQ



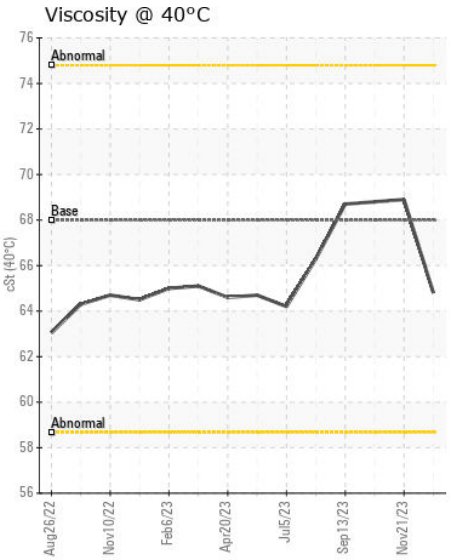
Ferrous Alloys



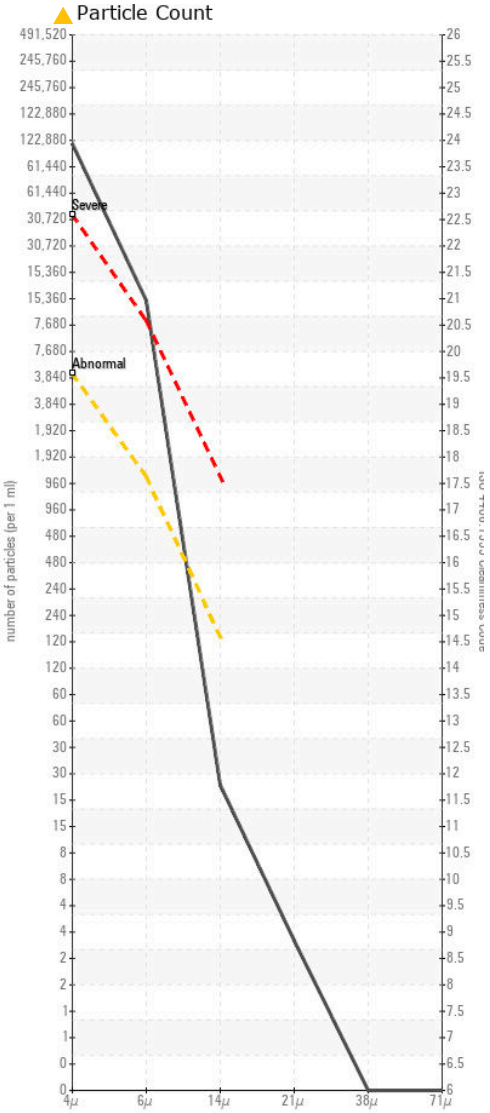
Non-ferrous Metals



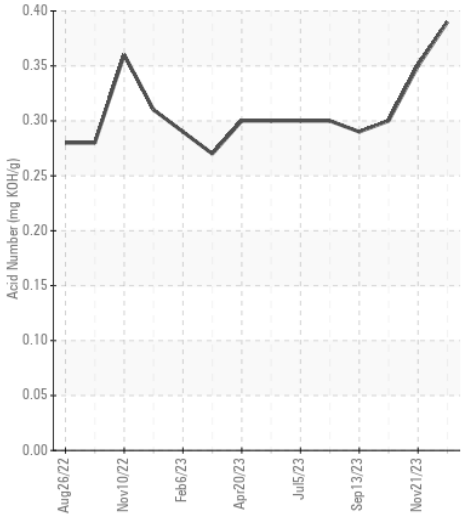
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0000743 **Recieved** : 16 Jan 2024
Lab Number : 06060934 **Diagnosed** : 17 Jan 2024
Unique Number : 10832316 **Diagnostician** : Jonathan Hester
Test Package : PLANT (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

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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