



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Machine Id
RELANCE ELECTRIC PAC LINE 2
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 32 (280 GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PTK0004429	PTK0003778	PTK0003334
Sample Date		Client Info		28 Aug 2023	19 Sep 2022	08 Mar 2022
Machine Age	days	Client Info		0	0	0
Oil Age	days	Client Info		0	0	0
Filter Age	days	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				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	2	<1	1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	0	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	11	4	4
Tin	ppm	ASTM D5185m	>10	0	0	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

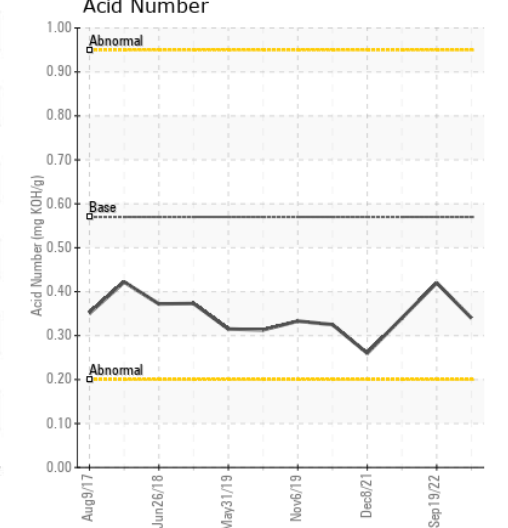
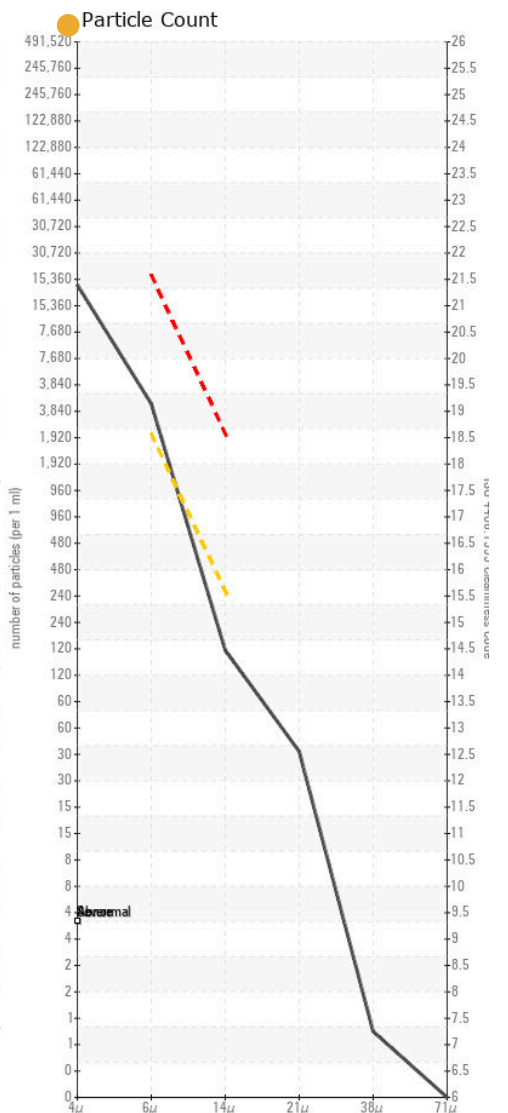
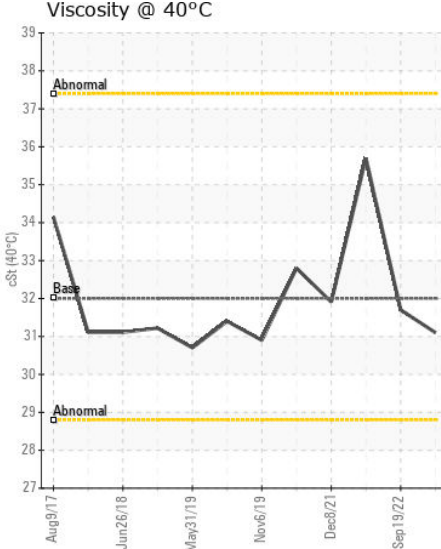
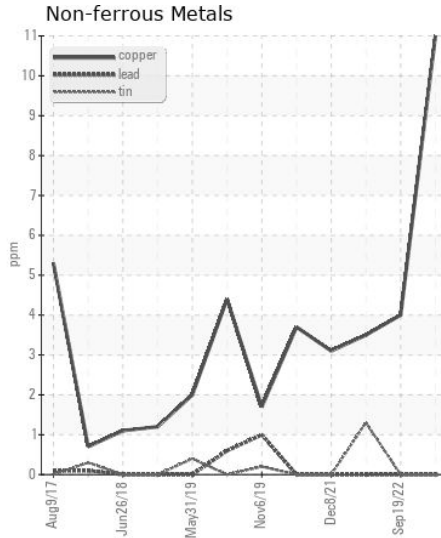
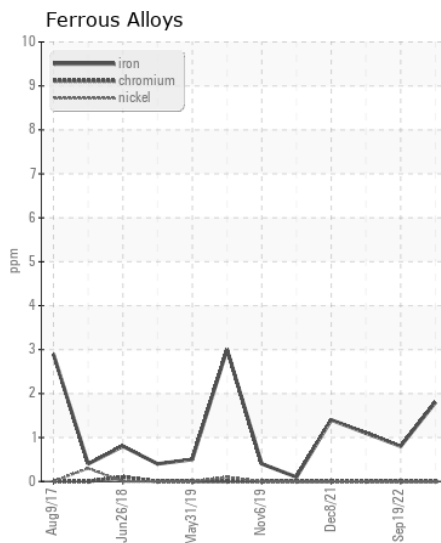
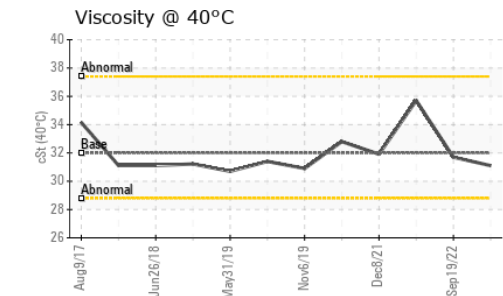
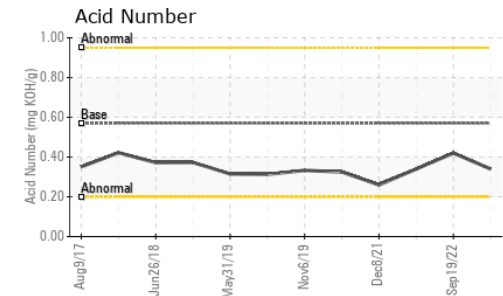
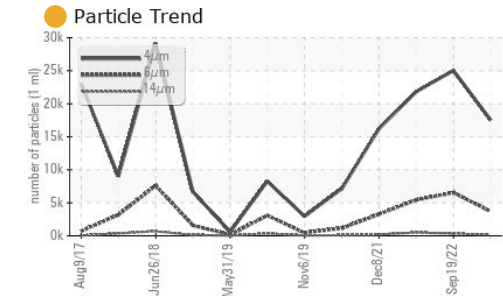
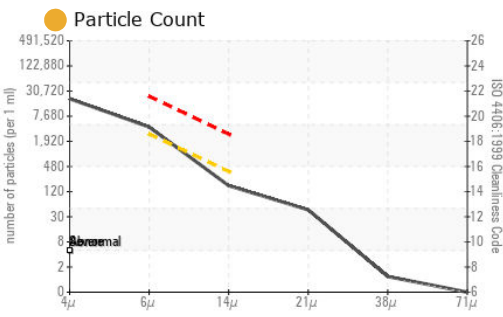
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<1	<1	<1
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		17527	25035	21819
Particles >6µm		ASTM D7647	>2500	3697	6534	5433
Particles >14µm		ASTM D7647	>320	147	331	500
Particles >21µm		ASTM D7647	>80	39	72	102
Particles >38µm		ASTM D7647	>20	1	1	3
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/15	19/14	20/16	22/20/16
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE	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	>0.1	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		<1	<1	0
Boron	ppm	ASTM D5185m	5	0	0	2
Barium	ppm	ASTM D5185m	5	6	0	0
Molybdenum	ppm	ASTM D5185m	5	<1	<1	1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	25	5	<1	<1
Calcium	ppm	ASTM D5185m	200	64	67	77
Phosphorus	ppm	ASTM D5185m	300	342	346	379
Zinc	ppm	ASTM D5185m	370	414	418	411
Sulfur	ppm	ASTM D5185m	2500	937	975	751
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.34	0.42	0.34
Visc @ 40°C	cSt	ASTM D445	32	31.1	31.7	35.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PTK0004429 **Received** : 07 Sep 2023
Lab Number : 05944540 **Tested** : 08 Sep 2023
Unique Number : 10635152 **Diagnosed** : 08 Sep 2023 - Wes Davis
Test Package : MOB 2

HEIDTMAN STEEL
 10 NORTHGATE INDUSTRIAL DR
 GRANITE CITY, IL
 US 62040
 Contact: Rudy Villar
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 T:
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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)