



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	SEVERE

Area **Store 9 - Marietta [141328]**

Machine Id **FF450DX913173**

Component **Hydraulic System**

Fluid **HITACHI HYDRAULIC SUPER EX 46HN (85)**

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		LEC0041888	LEC020245	LEC3228
Sample Date		Client Info		21 Jul 2023	05 Aug 2009	13 Jun 2008
Machine Age	hrs	Client Info		13378	2358	1536
Oil Age	hrs	Client Info		1000	2388	1536
Filter Age	hrs	Client Info		250	632	1536
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				SEVERE	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	1	8	5
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	1	<1
Lead	ppm	ASTM D5185m	>10	0	2	<1
Copper	ppm	ASTM D5185m	>75	<1	7	6
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

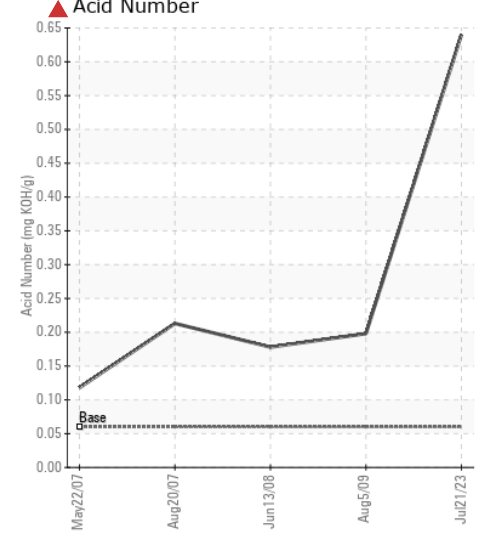
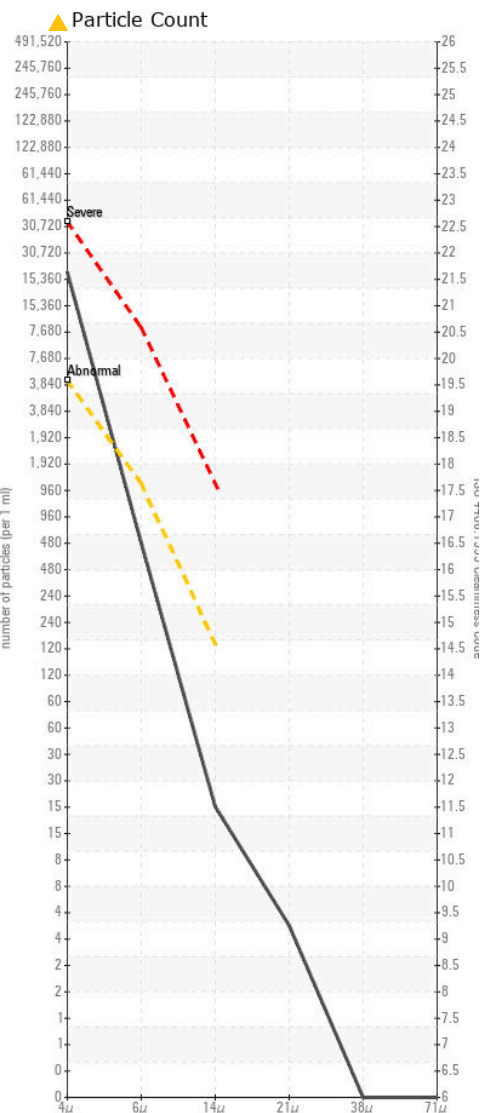
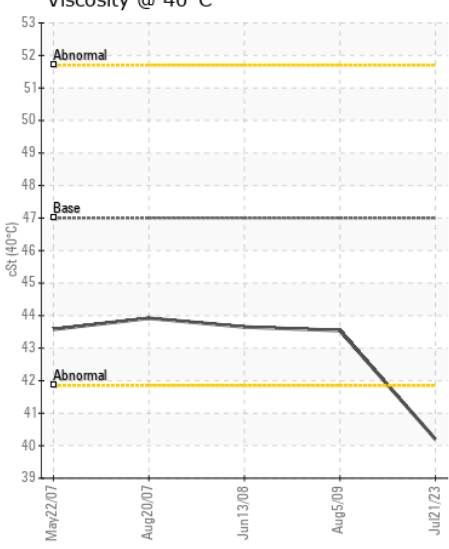
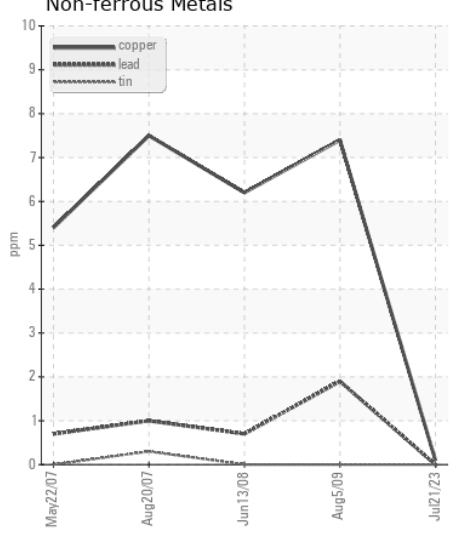
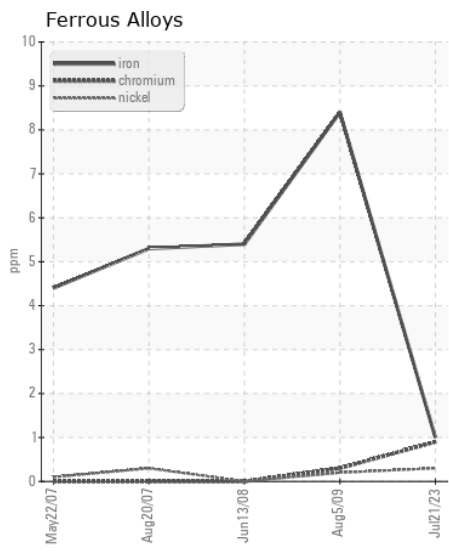
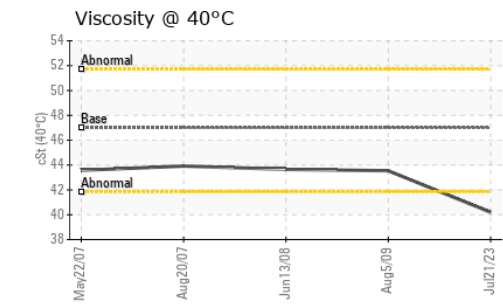
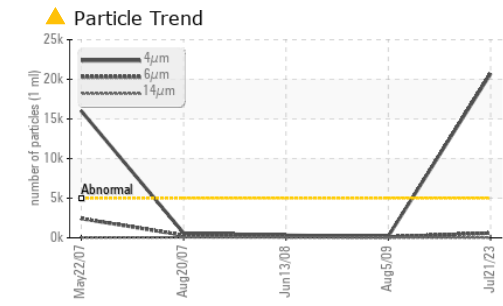
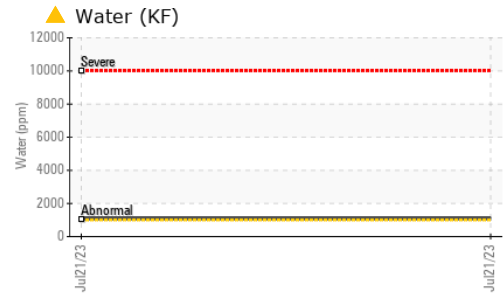
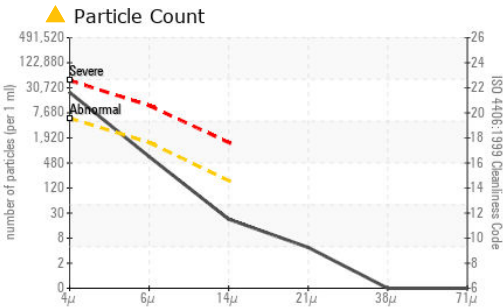
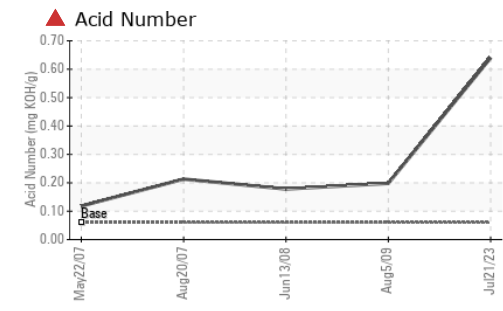
Appearance is hazy. There is a high amount of silt (particulates < 6 microns in size) present in the oil. There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>20	2	5	4
Potassium	ppm	ASTM D5185m	>20	5	<1	0
Water	%	ASTM D6304	>0.1	▲ 0.107	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 1078.7	---	---
Particles >4µm		ASTM D7647	>5000	▲ 20721	196	319
Particles >6µm		ASTM D7647	>1300	598	107	174
Particles >14µm		ASTM D7647	>160	19	18	29
Particles >21µm		ASTM D7647	>40	4	6	10
Particles >38µm		ASTM D7647	>10	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/16/11	15/14/11	15/15/12
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	● HAZY	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	0.2%	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

Sodium	ppm	ASTM D5185m		33	<1	0
Boron	ppm	ASTM D5185m		0	2	0
Barium	ppm	ASTM D5185m		<1	<1	0
Molybdenum	ppm	ASTM D5185m		0	2	1
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		<1	19	26
Calcium	ppm	ASTM D5185m		10	73	90
Phosphorus	ppm	ASTM D5185m	827	22	363	375
Zinc	ppm	ASTM D5185m	0	51	97	85
Sulfur	ppm	ASTM D5185m	13	48	1438	796
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	▲ 0.64	0.198	0.178
Visc @ 40°C	cSt	ASTM D445	47	40.2	43.54	43.65



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0041888 **Received** : 25 Jul 2023
Lab Number : 05906508 **Tested** : 31 Jul 2023
Unique Number : 10573160 **Diagnosed** : 31 Jul 2023 - Jonathan Hester
Test Package : CONST (Additional Tests: KF, PQ)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.com
 T:
 F: (740)373-5570

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)