



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Store 9 - Marietta [150857]

Machine Id
FF450DX913173

Component
Hydraulic System

Fluid
HITACHI HYDRAULIC SUPER EX 46HN (85)

RECOMMENDATION

We advise that you check for the source of water entry. Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil.

WEAR

All component wear rates are normal.

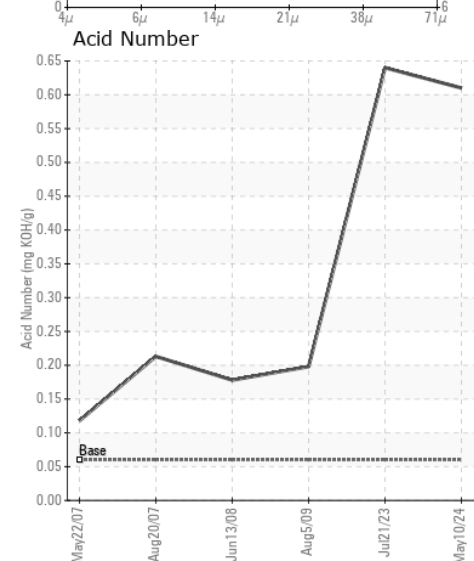
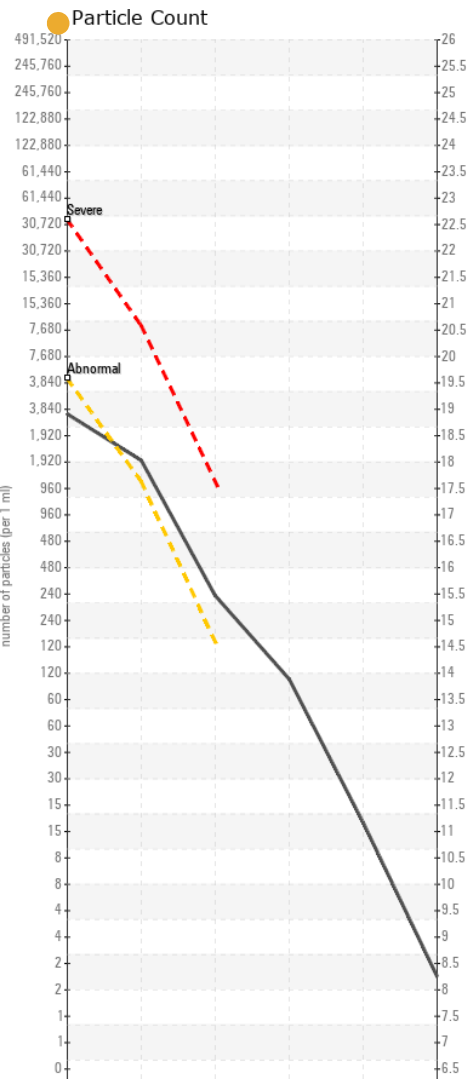
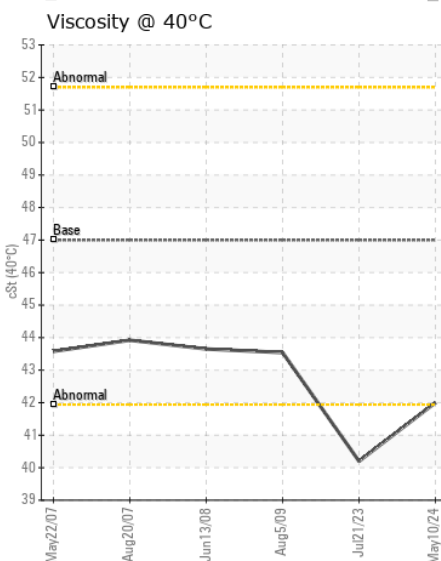
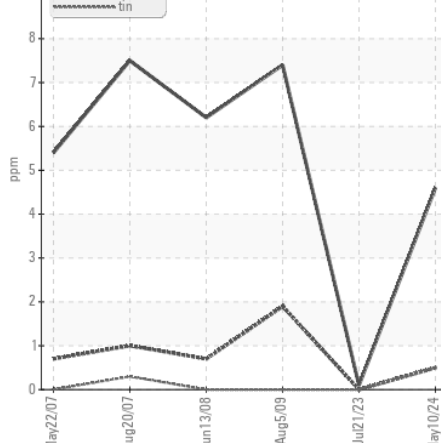
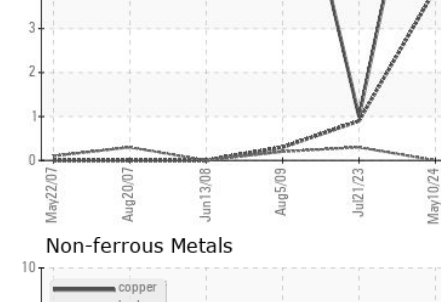
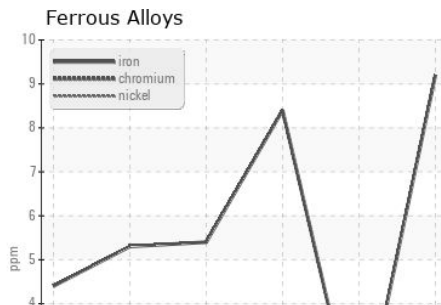
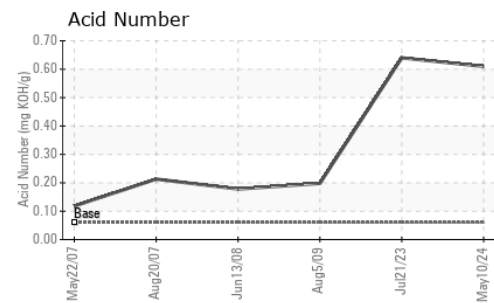
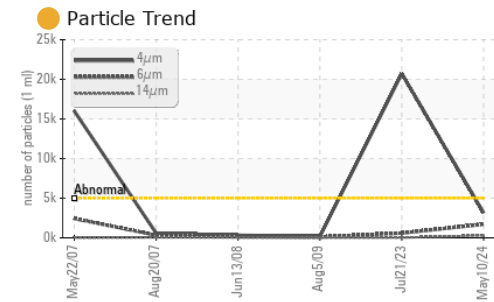
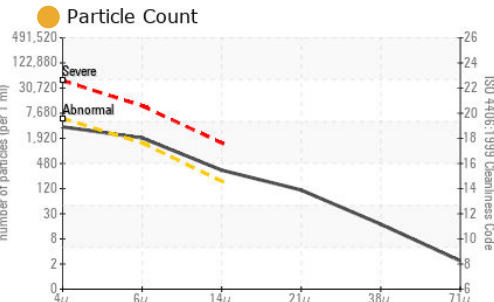
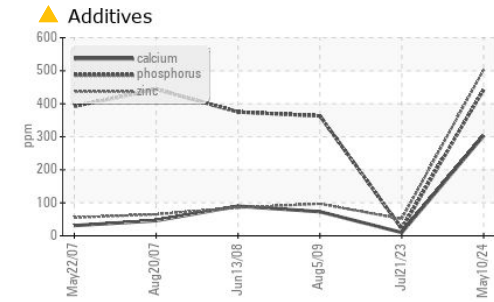
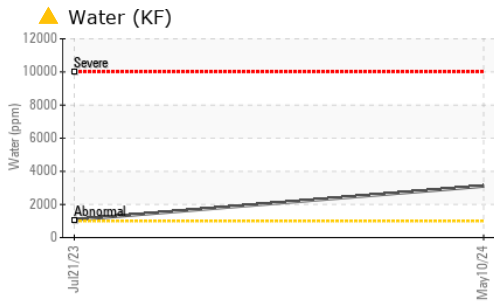
CONTAMINATION

Appearance is milky. There is a moderate amount of particulates present in the oil. There is a light concentration of water present in the oil.

FLUID CONDITION

Zinc level above manufacturer's recommendations. The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0049842	LEC0041888	LEC020245
Sample Date		Client Info		10 May 2024	21 Jul 2023	05 Aug 2009
Machine Age	hrs	Client Info		14410	13378	2358
Oil Age	hrs	Client Info		2032	1000	2388
Filter Age	hrs	Client Info		1282	250	632
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Changed
Sample Status				ABNORMAL	SEVERE	NORMAL
PQ		ASTM D8184		24	11	---
Iron	ppm	ASTM D5185m	>20	9	1	8
Chromium	ppm	ASTM D5185m	>10	4	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	<1	1
Lead	ppm	ASTM D5185m	>10	<1	0	2
Copper	ppm	ASTM D5185m	>75	5	<1	7
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	6	2	5
Potassium	ppm	ASTM D5185m	>20	<1	5	<1
Water	%	ASTM D6304	>0.1	▲ 0.311	▲ 0.107	---
ppm Water	ppm	ASTM D6304	>1000	▲ 3110	▲ 1078.7	---
Particles >4µm		ASTM D7647	>5000	● 3149	▲ 20721	196
Particles >6µm		ASTM D7647	>1300	● 1716	598	107
Particles >14µm		ASTM D7647	>160	● 292	19	18
Particles >21µm		ASTM D7647	>40	● 98	4	6
Particles >38µm		ASTM D7647	>10	● 15	0	0
Particles >71µm		ASTM D7647	>3	2	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	● 19/18/15	▲ 22/16/11	15/14/11
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	● MILKY	● HAZY	NORML
Odor	scalar	*Visual	NORML	● NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	● 0.2%	0.2%	NEG
Sodium	ppm	ASTM D5185m		2	33	<1
Boron	ppm	ASTM D5185m		2	0	2
Barium	ppm	ASTM D5185m		2	<1	<1
Molybdenum	ppm	ASTM D5185m		0	0	2
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		23	<1	19
Calcium	ppm	ASTM D5185m		303	10	73
Phosphorus	ppm	ASTM D5185m	827	443	22	363
Zinc	ppm	ASTM D5185m	0	▲ 503	51	97
Sulfur	ppm	ASTM D5185m	13	1319	48	1438
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.61	▲ 0.64	0.198
Visc @ 40°C	cSt	ASTM D445	47	42.0	40.2	43.54



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0049842 **Received** : 14 May 2024
Lab Number : 06178601 **Tested** : 20 May 2024
Unique Number : 11029927 **Diagnosed** : 20 May 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: KF, PQ)

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Certificate L2367
 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)