



OIL ANALYSIS REPORT

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

Area  
**Store 9 - Marietta**  
 Machine Id  
**1FF300GXCJF731090**

Component  
**Hydraulic System**  
 Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (77 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0050230</b>	LEC0042082	LEC0035745
Sample Date		Client Info		<b>09 Jul 2024</b>	10 Jul 2023	08 May 2023
Machine Age	hrs	Client Info		<b>4655</b>	4255	3917
Oil Age	hrs	Client Info		<b>4655</b>	0	0
Filter Age	hrs	Client Info		<b>400</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>16</b>	7	12
Iron	ppm	ASTM D5185m	>32	<b>2</b>	<1	2
Chromium	ppm	ASTM D5185m	>9	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>3</b>	<1	<1
Lead	ppm	ASTM D5185m	>28	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m	>5	<b>0</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**

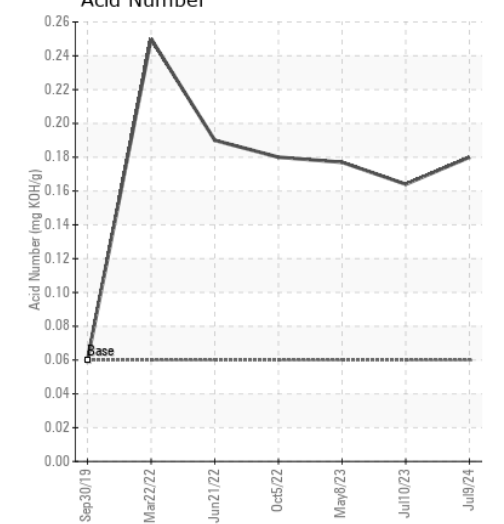
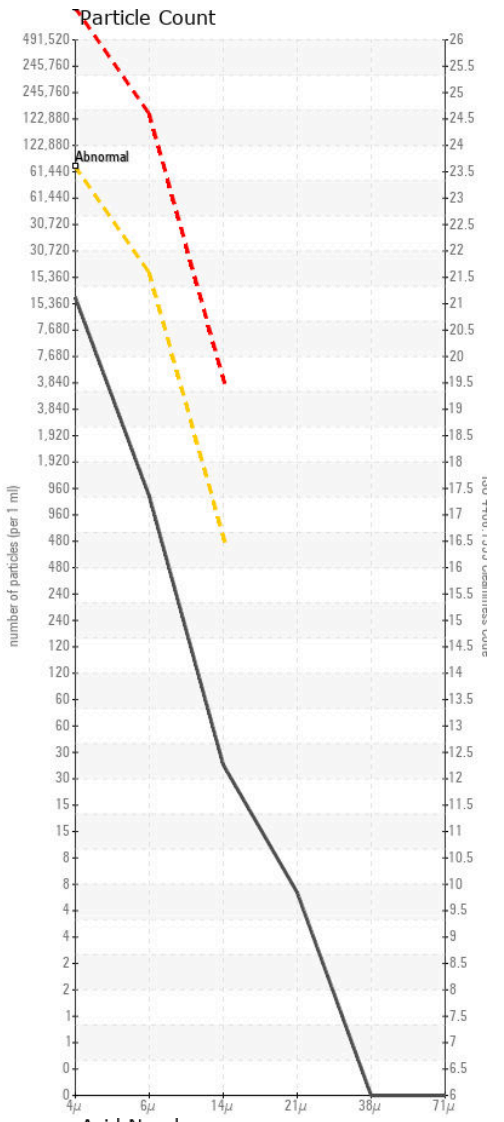
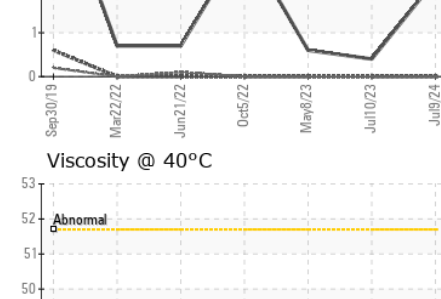
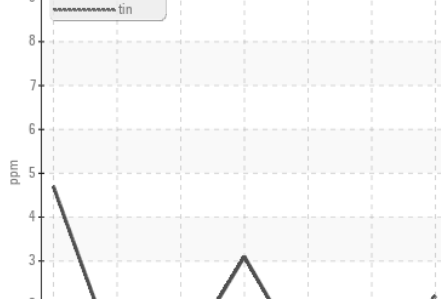
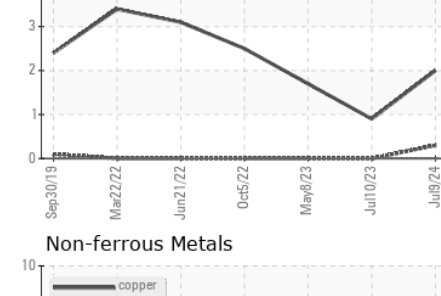
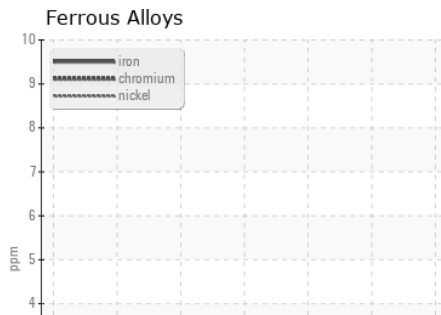
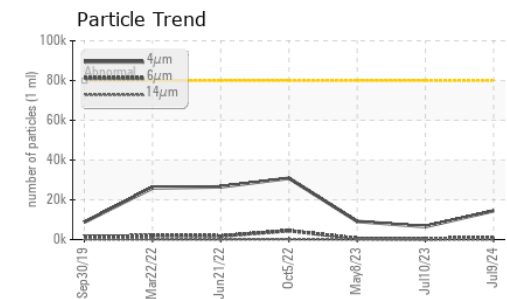
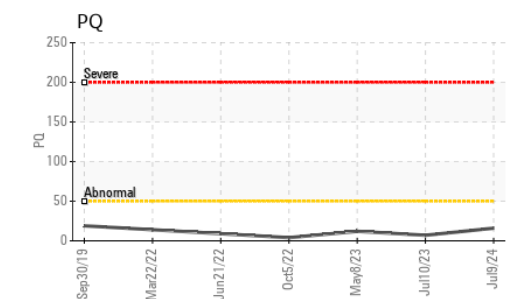
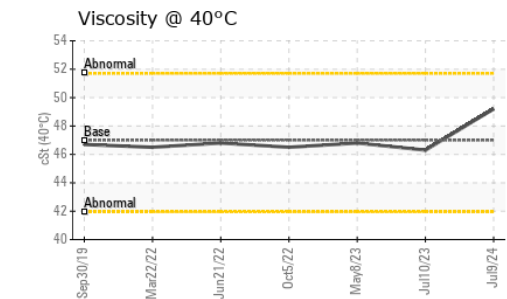
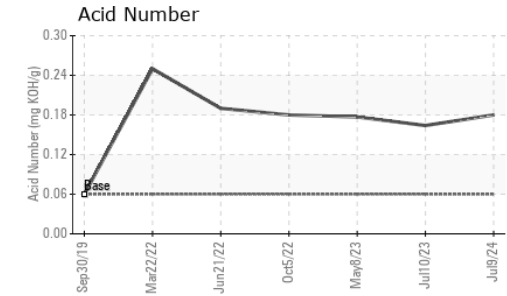
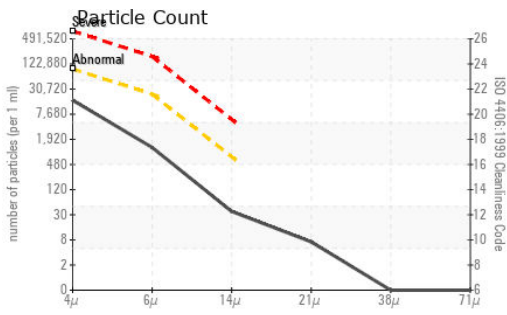
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>14470</b>	6493	9137
Particles >6µm		ASTM D7647	>20000	<b>1075</b>	366	582
Particles >14µm		ASTM D7647	>640	<b>32</b>	23	16
Particles >21µm		ASTM D7647	>160	<b>6</b>	4	4
Particles >38µm		ASTM D7647	>40	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>21/17/12</b>	20/16/12	20/16/11
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	>0.075	<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	>21	<b>0</b>	0	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	6	6
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>2</b>	0	<1
Calcium	ppm	ASTM D5185m		<b>8</b>	2	2
Phosphorus	ppm	ASTM D5185m	827	<b>390</b>	440	535
Zinc	ppm	ASTM D5185m	0	<b>40</b>	0	1
Sulfur	ppm	ASTM D5185m	13	<b>152</b>	0	19
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.18</b>	0.164	0.177
Visc @ 40°C	cSt	ASTM D445	47	<b>49.2</b>	46.3	46.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0050230 **Received** : 15 Jul 2024  
**Lab Number** : 06235783 **Tested** : 16 Jul 2024  
**Unique Number** : 11124617 **Diagnosed** : 16 Jul 2024 - Don Baldridge  
**Test Package** : CONST ( Additional Tests: PQ )

**APEX PIPELINE**  
 P.O. BOX 580  
 NITRO, WV  
 US 25143  
 Contact: KELLY TUCKER

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)

T: (304)204-0080  
 F: (304)204-0083