



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
HITACHI FF00ASP920190
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 46 (55 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0197383	JR0098879	WC0464587
Sample Date		Client Info		28 Dec 2023	11 Aug 2021	07 Jan 2021
Machine Age	hrs	Client Info		11748	11748	11149
Oil Age	hrs	Client Info		11748	1000	2000
Filter Age	hrs	Client Info		0	1000	2000
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ABNORMAL	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		19	20	---
Iron	ppm	ASTM D5185m	>20	2	4	7
Chromium	ppm	ASTM D5185m	>10	0	2	4
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	0	0
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m	>75	<1	2	4
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

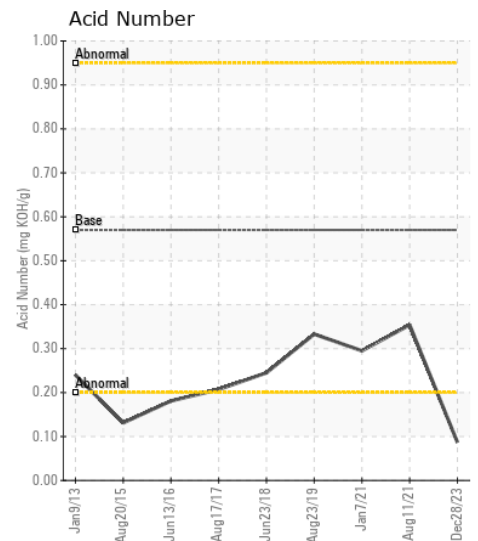
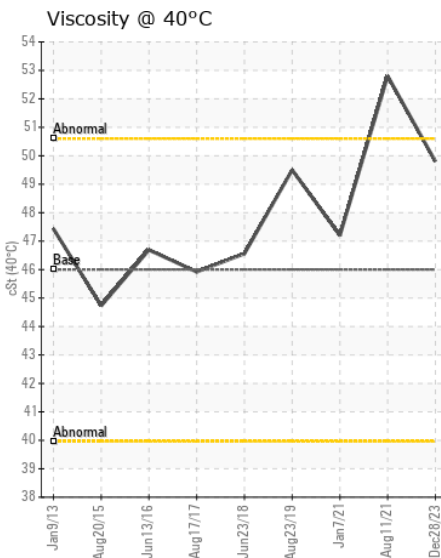
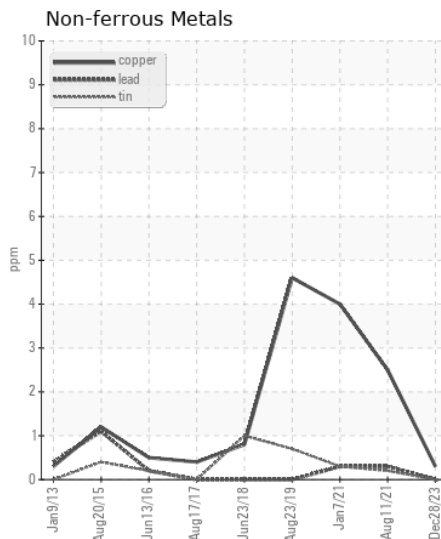
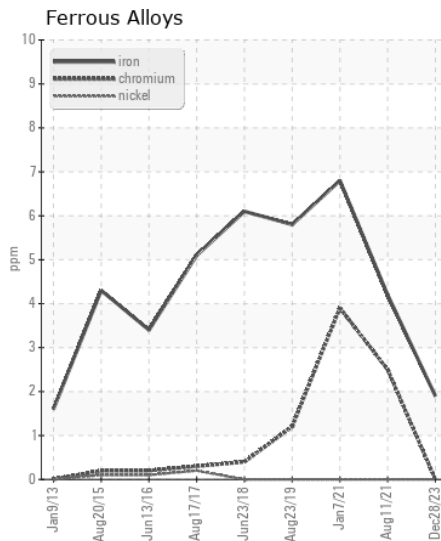
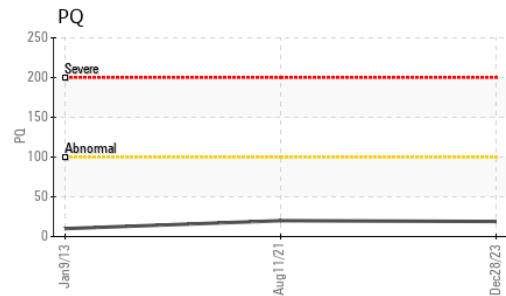
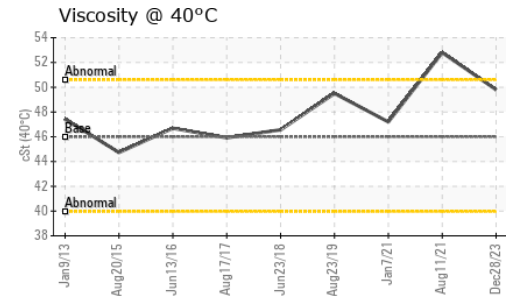
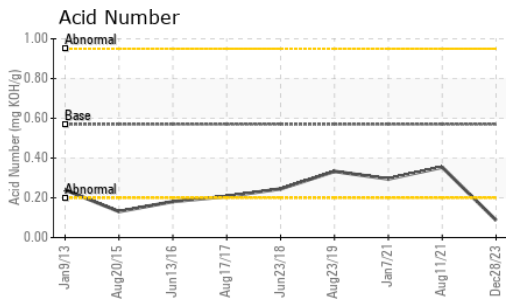
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>20	3	1	2
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>10000	---	▲ 10792	▲ 18389
Particles >6µm		ASTM D7647	>1300	---	1026	549
Particles >14µm		ASTM D7647	>160	---	61	7
Particles >21µm		ASTM D7647	>40	---	19	3
Particles >38µm		ASTM D7647	>10	---	1	2
Particles >71µm		ASTM D7647	>3	---	0	0
Oil Cleanliness		ISO 4406 (c)	>20/17/14	---	▲ 21/17/13	▲ 21/16/10
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	NONE	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	0	0
Boron	ppm	ASTM D5185m	5	3	1	1
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	<1	<1
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	25	0	3	3
Calcium	ppm	ASTM D5185m	200	114	35	42
Phosphorus	ppm	ASTM D5185m	300	675	352	409
Zinc	ppm	ASTM D5185m	370	40	322	255
Sulfur	ppm	ASTM D5185m	2500	206	647	568
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.087	0.354	0.295
Visc @ 40°C	cSt	ASTM D445	46	49.8	52.8	47.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0197383 **Received** : 02 Jan 2024
Lab Number : 06048732 **Diagnosed** : 03 Jan 2024
Unique Number : 10809340 **Diagnostician** : Don Baldridge
Test Package : CONST (Additional Tests: PQ)

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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