



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HITACHI HCMDD560E00010035
 Component
Swing Drive
 Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0212958	JR0197578	JR0163462
Sample Date		Client Info		15 Apr 2024	19 Jan 2024	24 Mar 2023
Machine Age	hrs	Client Info		8043	7983	6044
Oil Age	hrs	Client Info		60	1939	957
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Not Changd	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		21	31	16
Iron	ppm	ASTM D5185m	>151	15	44	27
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>21	1	2	<1
Lead	ppm	ASTM D5185m	>51	0	<1	0
Copper	ppm	ASTM D5185m	>51	0	<1	0
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

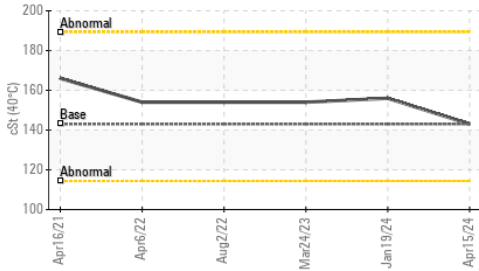
Silicon	ppm	ASTM D5185m	>31	2	6	4
Potassium	ppm	ASTM D5185m	>20	1	1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

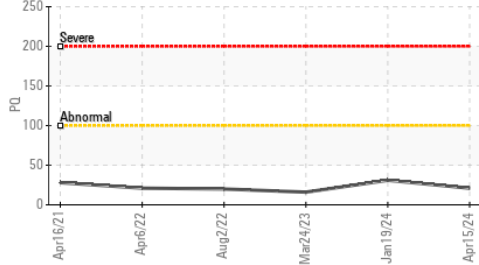
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>170	1	0	1
Boron	ppm	ASTM D5185m	400	38	101	99
Barium	ppm	ASTM D5185m	200	0	0	0
Molybdenum	ppm	ASTM D5185m	12	10	2	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	12	81	209	168
Calcium	ppm	ASTM D5185m	150	136	103	91
Phosphorus	ppm	ASTM D5185m	1650	2285	1615	1562
Zinc	ppm	ASTM D5185m	125	61	2	8
Sulfur	ppm	ASTM D5185m	22500	23970	24111	25465
Visc @ 40°C	cSt	ASTM D445	143	143	156	154

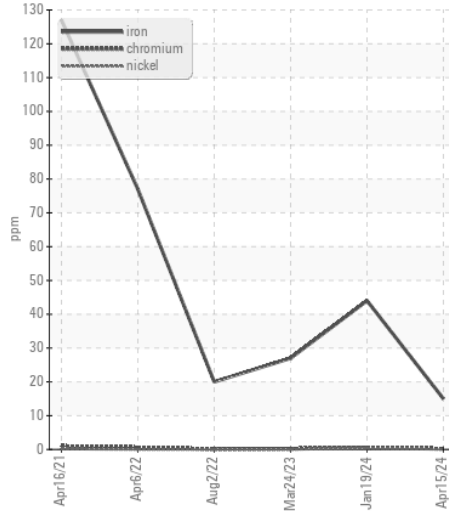
Viscosity @ 40°C



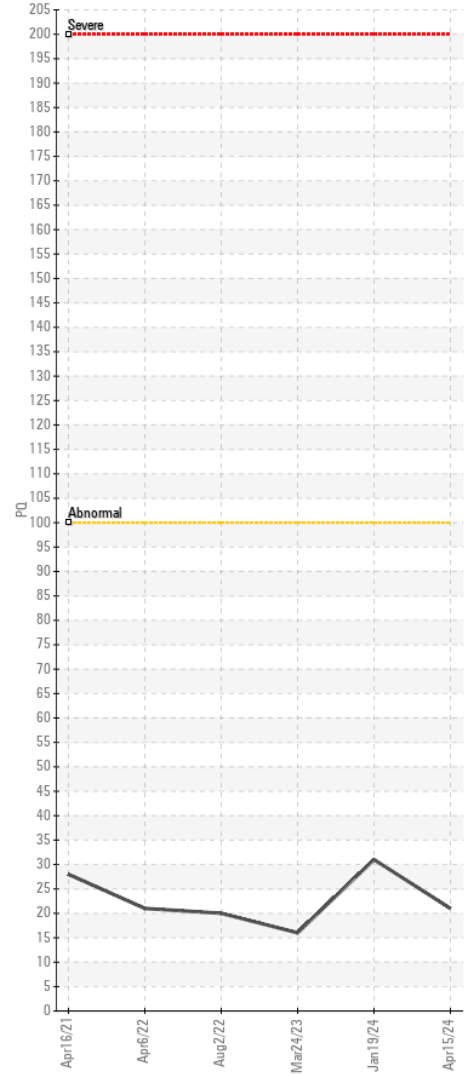
PQ



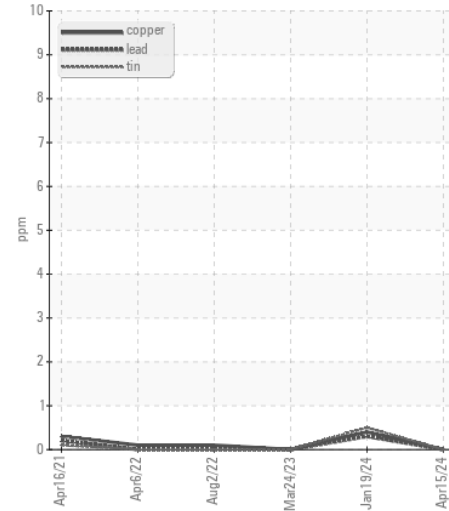
Ferrous Alloys



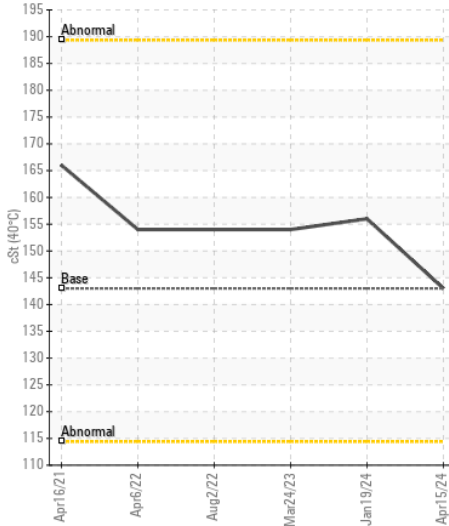
PQ



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212958 **Received** : 17 Apr 2024
Lab Number : 06152272 **Tested** : 18 Apr 2024
Unique Number : 10982350 **Diagnosed** : 22 Apr 2024 - Sean Felton
Test Package : CONST (Additional Tests: PQ)

JRE - GARNER
 4161 AUBURN CHURCH RD
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 US 27529
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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)