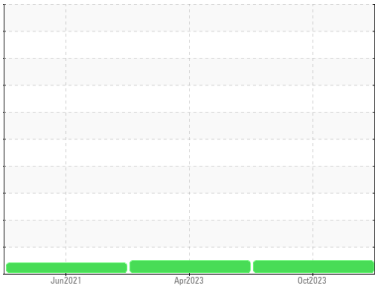
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
[13869424]
Machine Id
M-1412A (S/N 1802557)
Component
Gearbox
Fluid
IRVING HDH SAE 75W90 (12 LTR)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0764284**	WC0764263	WC0371116
Sample Date		Client Info		**05 Oct 2023**	13 Apr 2023	16 Jun 2021
Machine Age	yrs	Client Info		**0**	1	2
Oil Age	yrs	Client Info		**1**	1	1
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**0**	0	4
Iron	ppm	ASTM D5185(m)	>200	**7**	14	12
Chromium	ppm	ASTM D5185(m)	>15	**0**	<1	<1
Nickel	ppm	ASTM D5185(m)	>15	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	<1	1
Silver	ppm	ASTM D5185(m)		**<1**	3	<1
Aluminum	ppm	ASTM D5185(m)	>25	**0**	0	<1
Lead	ppm	ASTM D5185(m)	>100	**<1**	1	3
Copper	ppm	ASTM D5185(m)	>200	**2**	8	5
Tin	ppm	ASTM D5185(m)	>25	**0**	<1	<1
Antimony	ppm	ASTM D5185(m)	>5	**2**	2	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

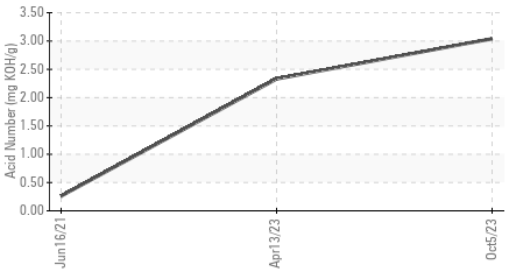
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**134**	82	17
Barium	ppm	ASTM D5185(m)		**<1**	<1	2
Molybdenum	ppm	ASTM D5185(m)		**0**	<1	1
Manganese	ppm	ASTM D5185(m)		**0**	<1	1
Magnesium	ppm	ASTM D5185(m)		**0**	<1	5
Calcium	ppm	ASTM D5185(m)		**10**	20	86
Phosphorus	ppm	ASTM D5185(m)		**958**	888	212
Zinc	ppm	ASTM D5185(m)		**42**	68	60
Sulfur	ppm	ASTM D5185(m)		**20407**	17464	6822
Lithium	ppm	ASTM D5185(m)		**<1**	<1	2

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	**<1**	<1	3
Sodium	ppm	ASTM D5185(m)		**2**	4	13
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	<1

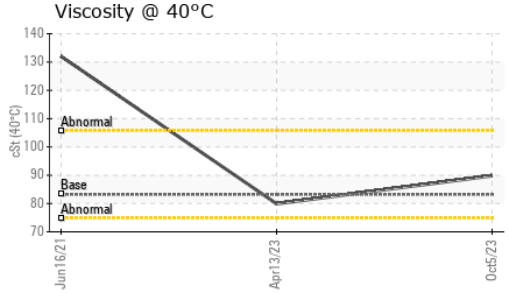
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**3.04**	2.33	0.26

OIL ANALYSIS REPORT

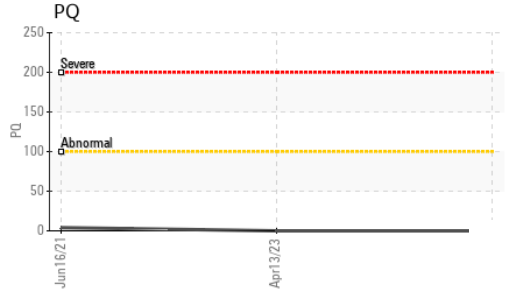
Acid Number



Viscosity @ 40°C

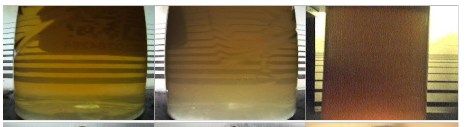


PQ



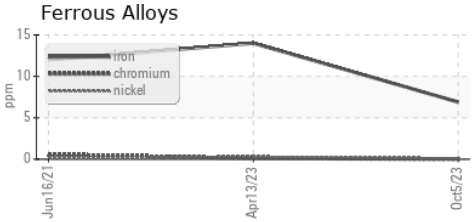
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**LIGHT**	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	83.2	**89.8**	79.9	▲ 132

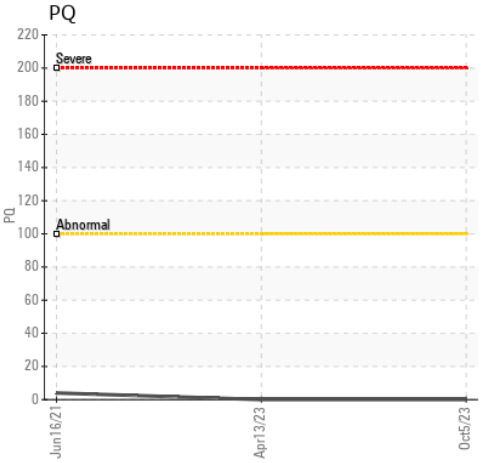
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

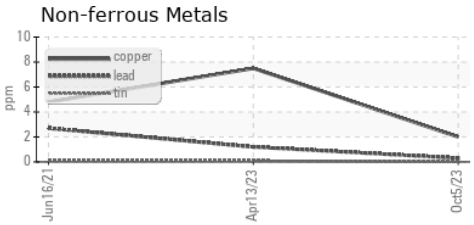
Ferrous Alloys



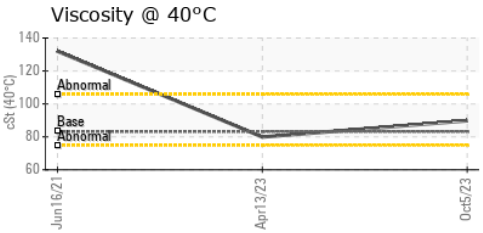
PQ



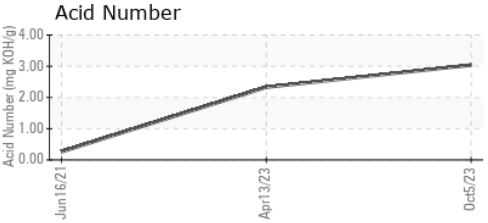
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



CALA Testing Accreditation No. 1005078
ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0764284 **Received** : 23 Oct 2023
Lab Number : 02591179 **Diagnosed** : 25 Oct 2023
Unique Number : 5668258 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: TAN Man)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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