



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
THORNES ENTERPRISES LTD
Machine Id
MITSUBISHI 17126
Component
Front Main Engine
Fluid
IRVING 15W40 (180 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		OF0000358	OF0000351	OF0000350
Sample Date		Client Info		15 Dec 2023	09 May 2022	12 Apr 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		600	302	168
Filter Age	hrs	Client Info		600	302	168
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Not Changed
Sample Status				NORMAL	MARGINAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	3	2	2
Chromium	ppm	ASTM D5185(m)	>8	0	0	<1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>3	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	1	<1	<1
Lead	ppm	ASTM D5185(m)	>18	<1	2	2
Copper	ppm	ASTM D5185(m)	>80	1	3	2
Tin	ppm	ASTM D5185(m)	>14	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	<1

CONTAMINATION

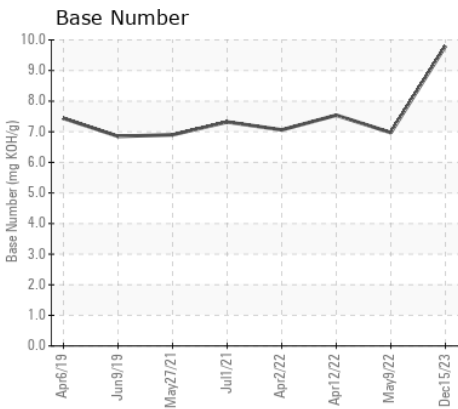
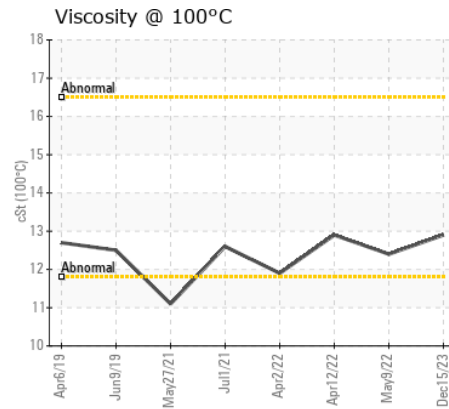
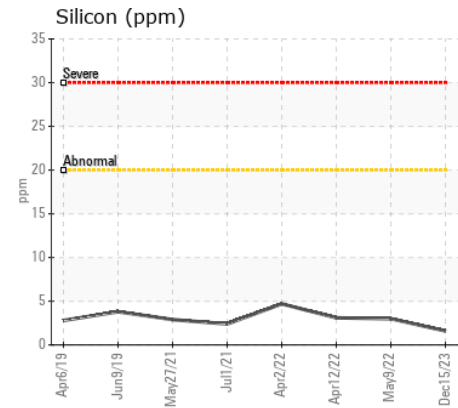
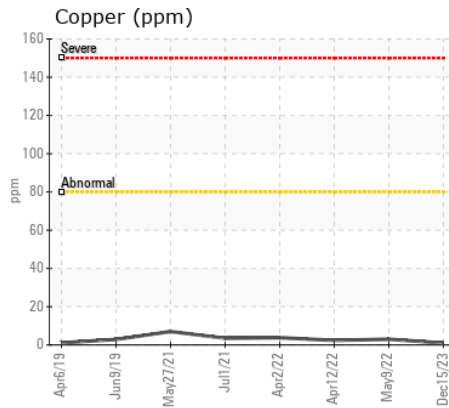
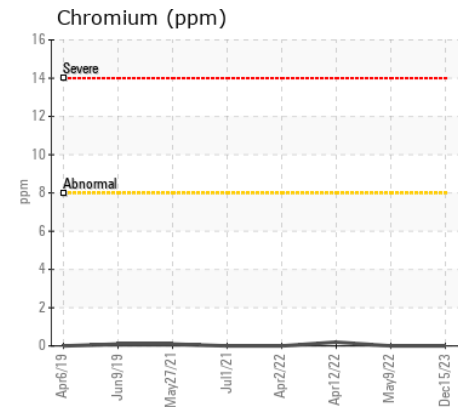
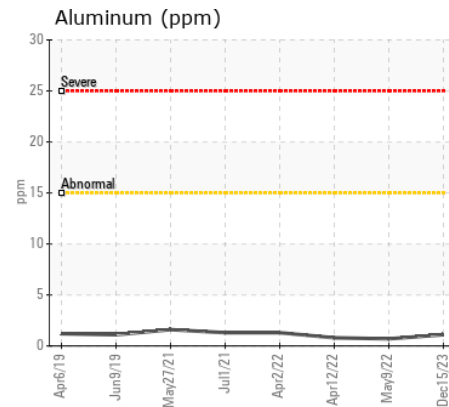
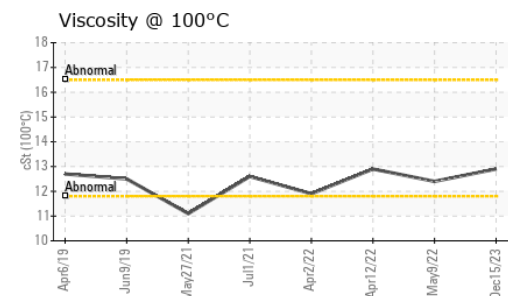
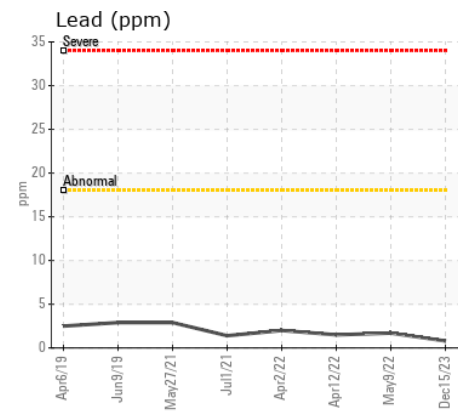
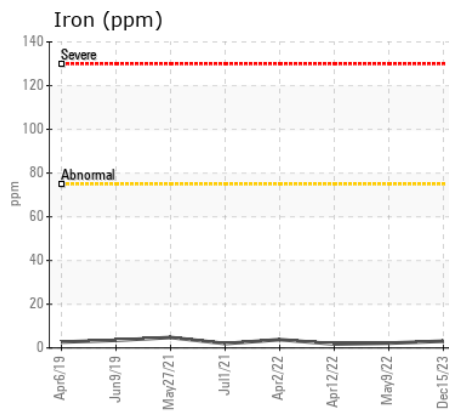
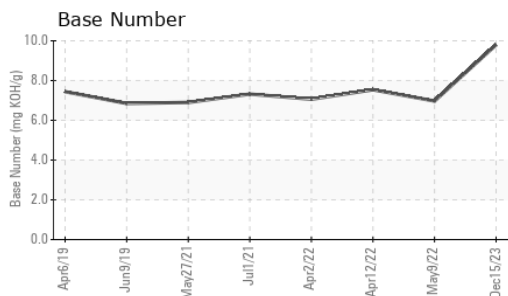
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	2	3	3
Potassium	ppm	ASTM D5185(m)	>20	0	<1	2
Fuel		WC Method	>4.0	<1.0	▲ 3.6	▲ 2.3
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.8	6.7	3.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.6	18.0	13.6
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)	>101	<1	<1	<1
Boron	ppm	ASTM D5185(m)		4	10	8
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		54	1	▲ 1
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		897	11	9
Calcium	ppm	ASTM D5185(m)		1052	2016	2023
Phosphorus	ppm	ASTM D5185(m)		983	920	918
Zinc	ppm	ASTM D5185(m)		1114	1003	995
Sulfur	ppm	ASTM D5185(m)		2691	3041	3033
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.8	10.2	4.8
Base Number (BN)	mg KOH/g	ASTM D2896*		9.80	6.97	7.54
Visc @ 100°C	cSt	ASTM D7279(m)		12.9	12.4	12.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : OF0000358 **Received** : 17 Jan 2024
Lab Number : 02609278 **Diagnosed** : 18 Jan 2024
Unique Number : 5710364 **Diagnostician** : Wes Davis
Test Package : MOB 2

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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.