



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
8130
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL06073722	IL05758676	IL05601314
Sample Date		Client Info		29 Jan 2024	02 Feb 2023	11 Jul 2022
Machine Age	mls	Client Info		0	0	0
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	MARGINAL

WEAR

Piston, ring and cylinder wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	▲ 175	65	47
Chromium	ppm	ASTM D5185m	>20	2	1	<1
Nickel	ppm	ASTM D5185m	>4	1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	▲ 23	13	7
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	4	1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

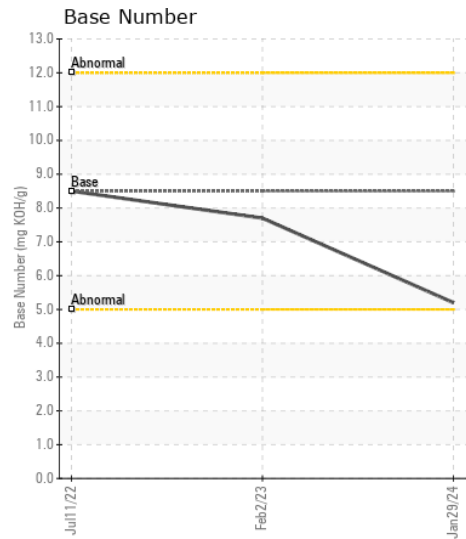
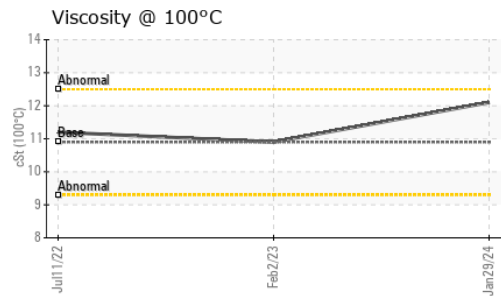
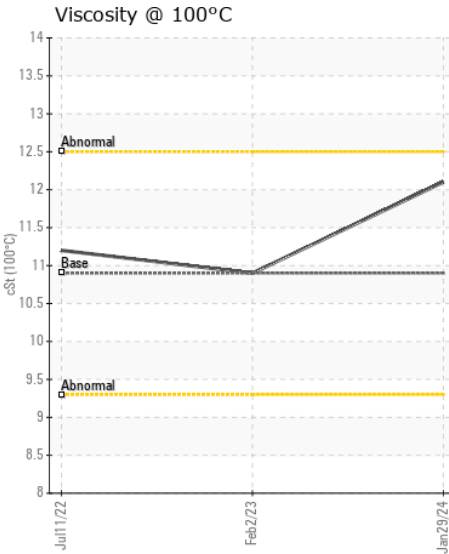
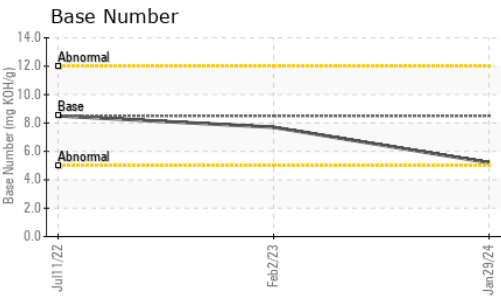
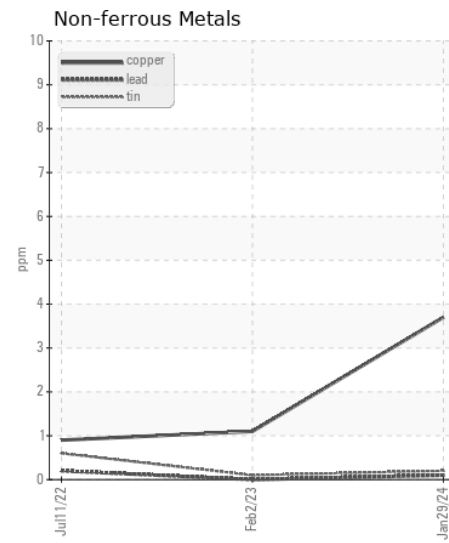
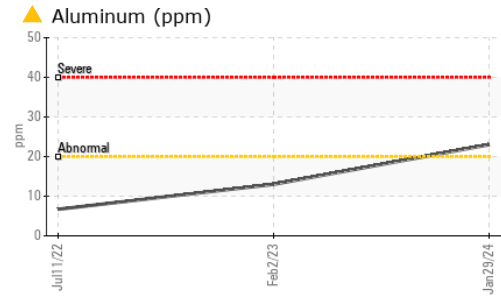
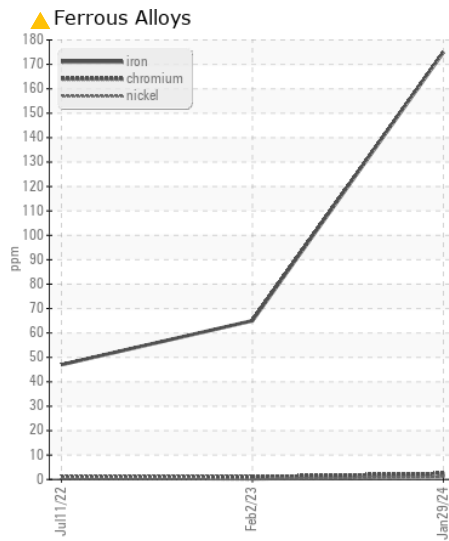
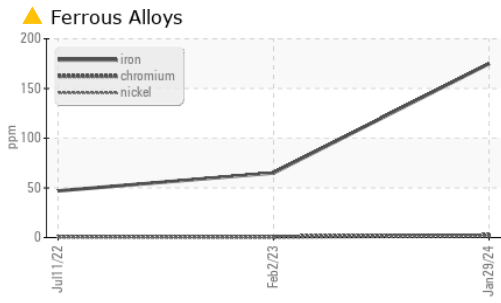
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	14	10	7
Potassium	ppm	ASTM D5185m	>20	24	14	7
Fuel		WC Method	>5	<1.0	<1.0	▲ 2.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.8	0.8	0.6
Nitration	Abs/cm	*ASTM D7624	>20	18.0	12.8	12.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	33.2	22.8	24.5
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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	3	2
Boron	ppm	ASTM D5185m	250	22	30	36
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	65	61	51
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m	450	483	539	543
Calcium	ppm	ASTM D5185m	3000	1920	1698	1634
Phosphorus	ppm	ASTM D5185m	1150	862	756	699
Zinc	ppm	ASTM D5185m	1350	1100	936	891
Sulfur	ppm	ASTM D5185m	4250	2828	2807	2842
Oxidation	Abs/.1mm	*ASTM D7414	>25	36.1	22.7	23.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.2	7.7	8.5
Visc @ 100°C	cSt	ASTM D445	10.9	12.1	10.9	11.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL06073722 **Received** : 30 Jan 2024
Lab Number : 06073722 **Diagnosed** : 31 Jan 2024
Unique Number : 10850399 **Diagnostician** : Don Baldridge
Test Package : FLEET

IDEALASE-NORCROSS
 4571 NORTH BUFORD HWY
 NORCROSS, GA
 US 30071-2808
 Contact: RICK MARKS

Certificate L2367
 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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