



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
8117308
Component
Diesel Engine
Fluid
{not provided} (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL0034845	IL06009317	IL05934007
Sample Date		Client Info		01 Feb 2024	25 Oct 2023	09 Aug 2023
Machine Age	mls	Client Info		225102	213150	203036
Oil Age	mls	Client Info		0	40000	40000
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				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	13	5	25
Chromium	ppm	ASTM D5185m	>20	<1	<1	2
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	6	3	11
Lead	ppm	ASTM D5185m	>40	<1	<1	6
Copper	ppm	ASTM D5185m	>330	3	<1	1
Tin	ppm	ASTM D5185m	>15	<1	<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

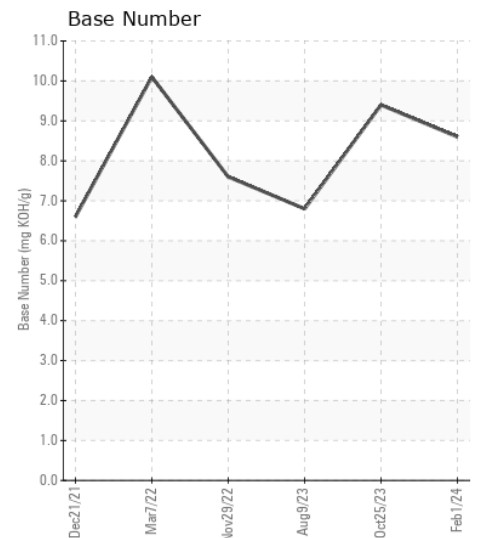
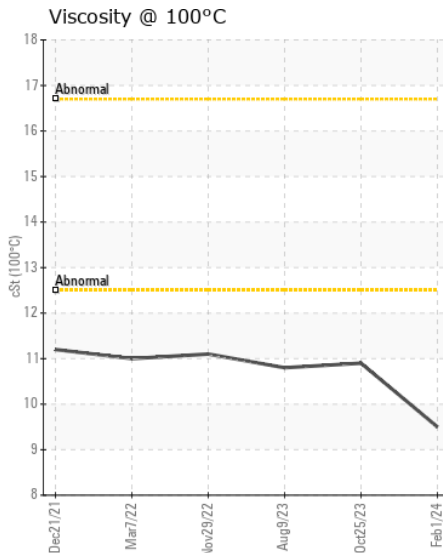
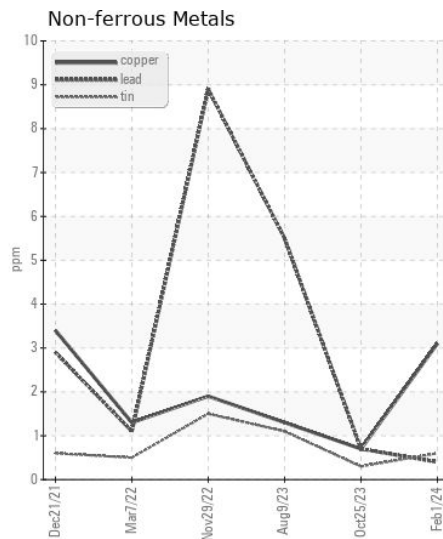
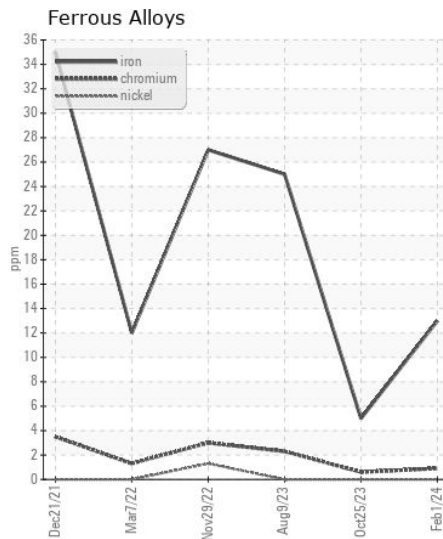
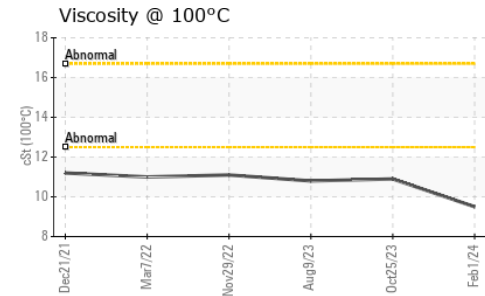
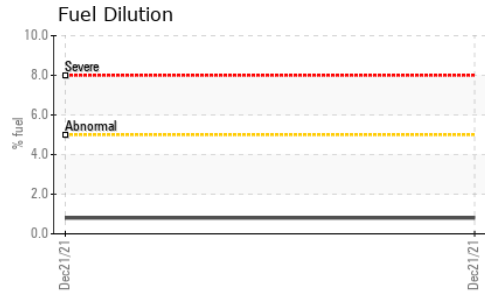
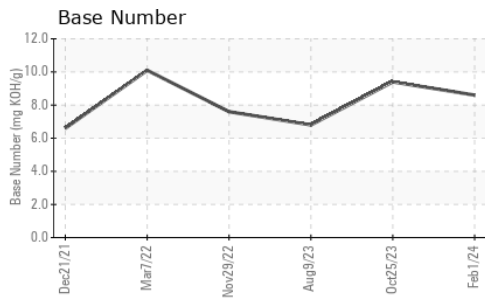
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	13	6	6
Potassium	ppm	ASTM D5185m	>20	9	4	14
Fuel	%	ASTM D3524	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.1	7.1	11.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	22.3	24.2
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 suitable for further service.

Sodium	ppm	ASTM D5185m		4	3	3
Boron	ppm	ASTM D5185m		51	43	20
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		44	37	45
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		471	481	501
Calcium	ppm	ASTM D5185m		1517	1569	1725
Phosphorus	ppm	ASTM D5185m		771	705	712
Zinc	ppm	ASTM D5185m		885	868	919
Sulfur	ppm	ASTM D5185m		2843	2321	2816
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.1	20.8	25.7
Base Number (BN)	mg KOH/g	ASTM D2896		8.6	9.4	6.8
Visc @ 100°C	cSt	ASTM D445		9.5	10.9	10.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0034845 **Received** : 12 Feb 2024
Lab Number : 06085893 **Tested** : 13 Feb 2024
Unique Number : 10873338 **Diagnosed** : 13 Feb 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: FuelDilution)

IDEALRELEASE OF ATLANTA - FULTON
 4675 BAKERS FERRY ROAD
 ATLANTA, GA
 US 30331
 Contact: DAVID JOHNS
 davidjohns@idearelease.com
 T: (404)699-5571
 F: (404)699-7420

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)