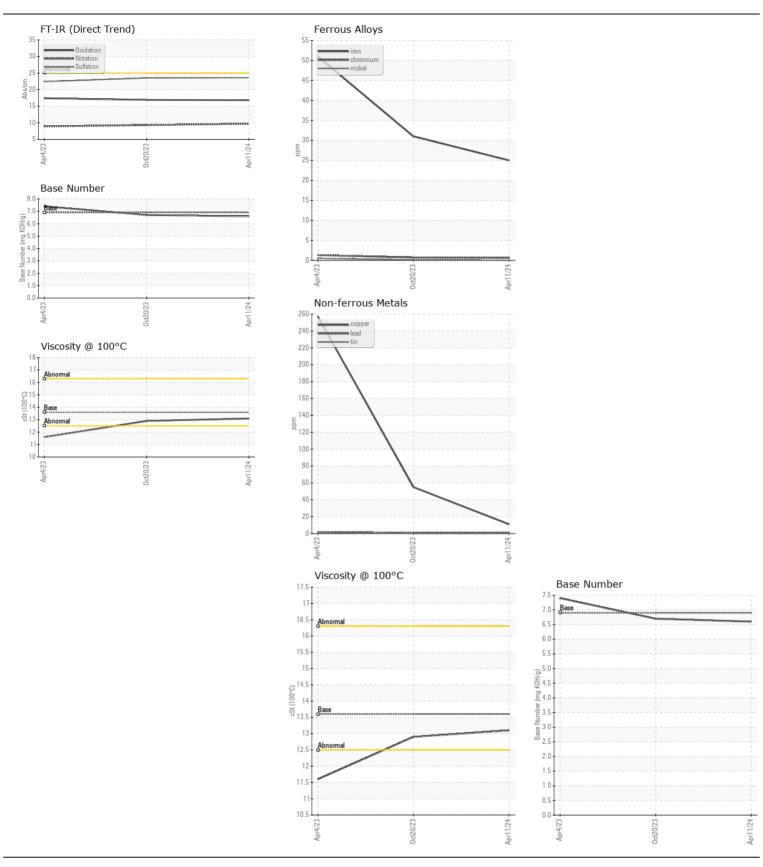
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

7310747
Component
Diocol En

Diesel Engine VALVOLINE 15W40 (GAL)							
	Toot	LIOM	Mathad	Limit/Aba	Commons	Lliatom	Lliatary
RECOMMENDATION	Test Sample Number	UOM	Method Client Info	Limit/Abn	Current IL0036577	History1 IL0033201	History2 IL05828600
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Date		Client Info		11 Apr 2024	20 Oct 2023	04 Apr 2023
	Machine Age	mls	Client Info		63955	43980	22986
	Oil Age	mls	Client Info		0	0	0
	Filter Age	mls	Client Info		0	0	0
	Oil Changed	11110	Client Info		Changed	Changed	N/A
	Filter Changed		Client Info		Changed	Changed	N/A
	Sample Status				NORMAL	NORMAL	ATTENTION
WEAD		nnm	ASTM D5185m	> 100	25	31	51
WEAR	Iron Chromium	ppm	ASTM D5185m		25 <1	<1	1
Metal levels are typical for a new component breaking in.	Nickel	ppm	ASTM D5185m		0	<1	<1
	Titanium	ppm	ASTM D5185m	>4	<1	0	0
	Silver	ppm	ASTM D5185m	. 2	0	0	0
	Aluminum	ppm	ASTM D5185m		22	33	64
	Lead	ppm	ASTM D5185m		<1	1	2
	Copper	ppm	ASTM D5185m		11	55	257
	Tin	ppm	ASTM D5185m		0	0	1
	Vanadium	ppm	ASTM D5185m	710	<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	nnm	ASTM D5185m	\ 25	9	10	16
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		49	92	161
	Fuel	ppiii	WC Method	>5	<1.0	<1.0	0.5
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	70.L	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	1.9	1.8	1.4
	Nitration	Abs/cm	*ASTM D7624	>20	9.7	9.3	8.9
	Sulfation	Abs/.1mm	*ASTM D7415		23.6	23.5	22.4
	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	Sodium	ppm	ASTM D5185m		3	0	4
	Boron	ppm	ASTM D5185m	39	113	88	51
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	<1	0
	Molybdenum	ppm	ASTM D5185m	49	76	81	64
	Manganese	ppm	ASTM D5185m		<1	<1	4
	Magnesium	ppm	ASTM D5185m	616	606	524	389
	Calcium	ppm	ASTM D5185m	1554	1444	1328	1770
	Phosphorus	ppm	ASTM D5185m	899	899	826	998
	Zinc	ppm	ASTM D5185m		1063	1025	1239
	Sulfur	ppm	ASTM D5185m	2624	3019	2594	2937
	Oxidation	Abs/.1mm	*ASTM D7414		16.8	16.9	17.4
	Base Number (BN)				6.6	6.7	7.4
	Visc @ 100°C	cSt	ASTM D445	13.6	13.1	12.9	11.6







Certificate L2367

Laboratory Sample No.

Lab Number : 06193567 Unique Number : 11050319 Test Package : FLEET

: IL0036577

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received

: 29 May 2024 **Tested** : 30 May 2024 Diagnosed

: 30 May 2024 - Wes Davis

US 33610-9565 Contact: Russ Cook russcook@idealease.com T: (813)626-9285

TAMPA IDEALEASE

5951 ORIENT ROAD

* - 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) F: (844)270-1356

TAMPA, FL