



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
141728
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- 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		IL06217736	IL05931887	IL05655158
Sample Date		Client Info		07 Jun 2024	01 Aug 2023	04 Aug 2022
Machine Age	hrs	Client Info		11387	10403	9154
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	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	ABNORMAL

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	67	28	76
Chromium	ppm	ASTM D5185m	>20	2	<1	2
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	▲ 21	9	▲ 29
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	3	1	3
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

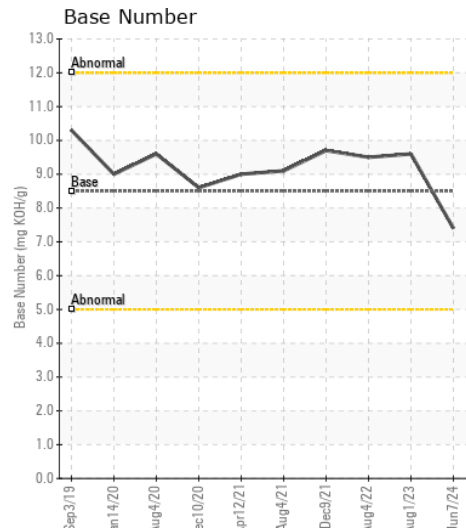
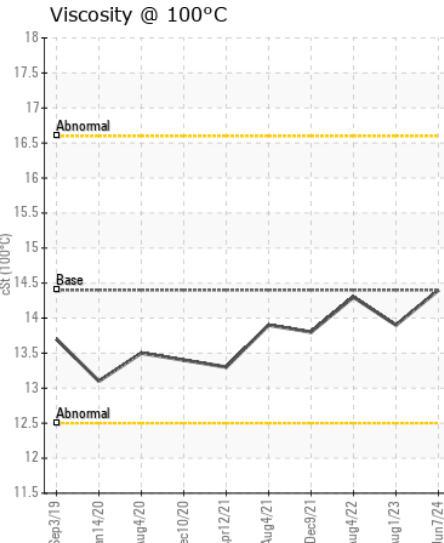
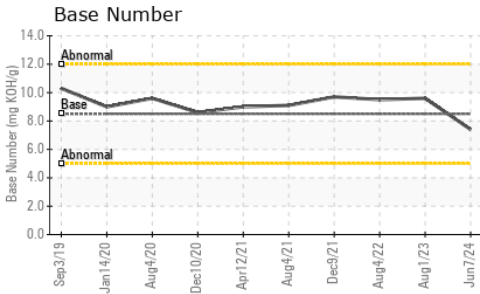
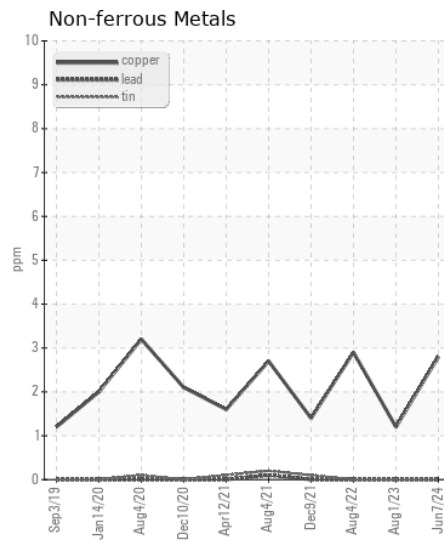
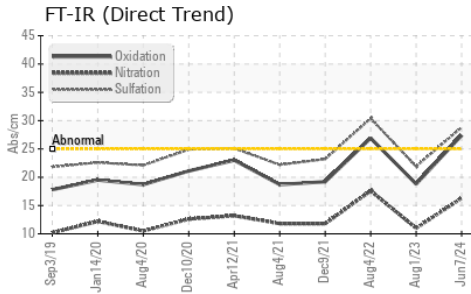
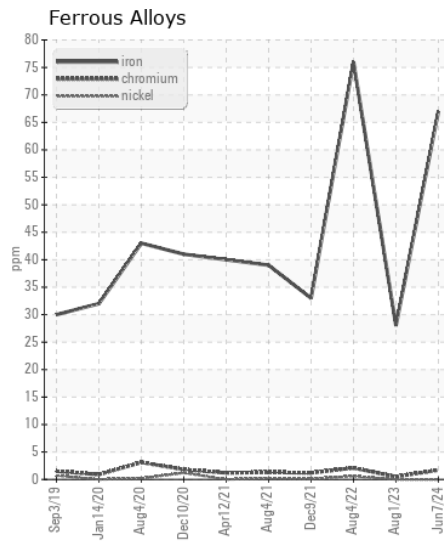
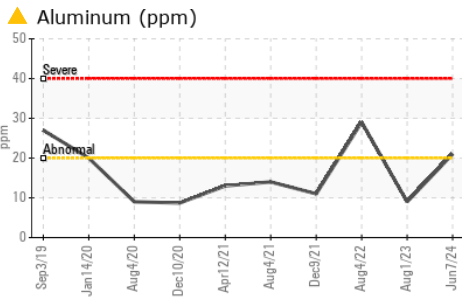
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	4	5
Potassium	ppm	ASTM D5185m	>20	6	<1	12
Fuel		WC Method	>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	2.1	1.2	2.5
Nitration	Abs/cm	*ASTM D7624	>20	16.3	11.0	17.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.8	21.9	30.4
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

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	>216	2	2	1
Boron	ppm	ASTM D5185m	250	<1	<1	4
Barium	ppm	ASTM D5185m	10	0	0	2
Molybdenum	ppm	ASTM D5185m	100	66	58	63
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	1030	933	984
Calcium	ppm	ASTM D5185m	3000	1224	1064	1286
Phosphorus	ppm	ASTM D5185m	1150	1076	992	1117
Zinc	ppm	ASTM D5185m	1350	1358	1184	1371
Sulfur	ppm	ASTM D5185m	4250	3568	3331	3886
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.4	18.8	26.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.4	9.6	9.5
Visc @ 100°C	cSt	ASTM D445	14.4	14.4	13.9	14.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL06217736
Lab Number : 06217736
Unique Number : 11090600
Test Package : FLEET
Received : 24 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 25 Jun 2024 - Don Baldrige

RUSH TRUCK LEASING - CINCINNATI IDEALEASE
 11777 HIGHWAY DRIVE
 CINCINNATI, OH
 US 45241
 Contact: ROBERT BAIER
 baierr@rushenterprises.com
 T: (513)657-7901
 F: (513)733-0537

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)