



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
7273R
Component
Front Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

We advise that you check the fuel injection system. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL06214162	IL0032305	IL0022180
Sample Date		Client Info		10 Jun 2024	01 Jul 2023	30 Jul 2021
Machine Age	mls	Client Info		3	169366	113837
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	14	36	21
Chromium	ppm	ASTM D5185m	>20	1	2	2
Nickel	ppm	ASTM D5185m	>4	0	0	1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	3	4	3
Lead	ppm	ASTM D5185m	>40	3	4	5
Copper	ppm	ASTM D5185m	>330	1	<1	2
Tin	ppm	ASTM D5185m	>15	2	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

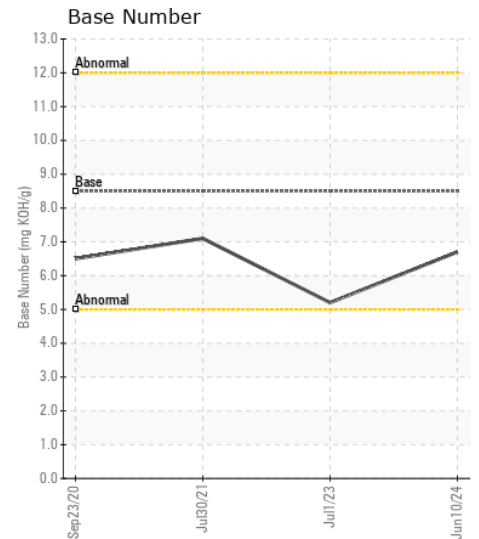
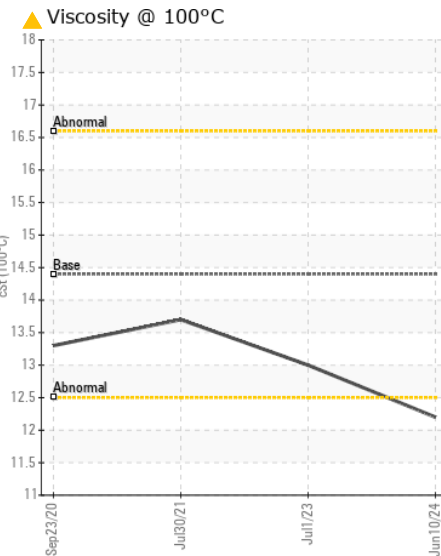
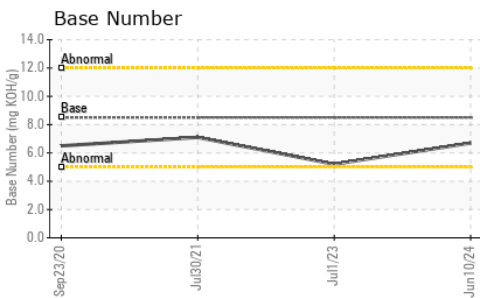
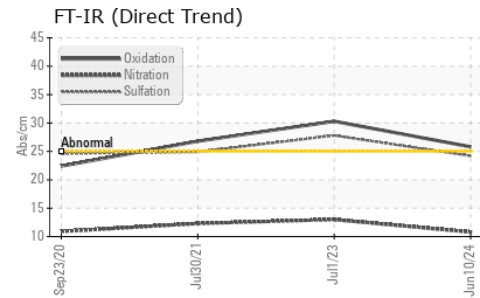
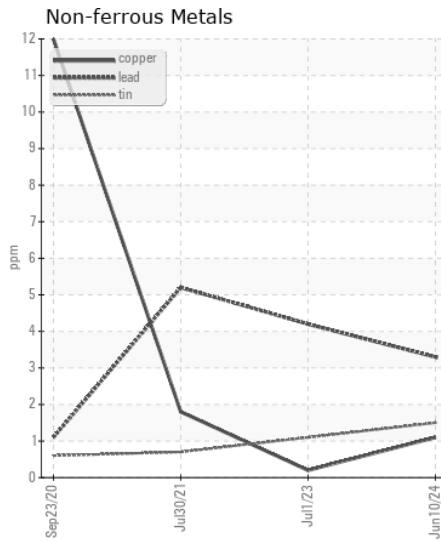
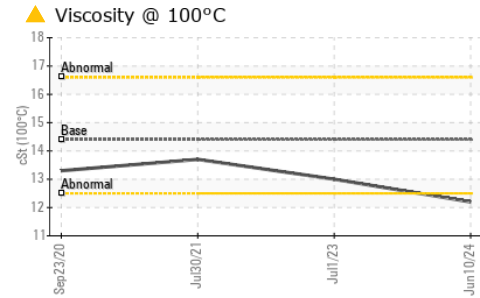
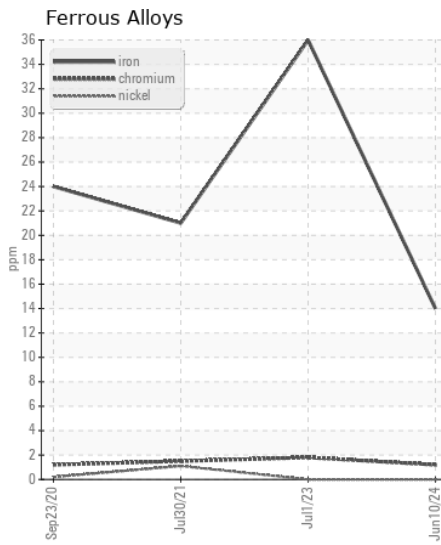
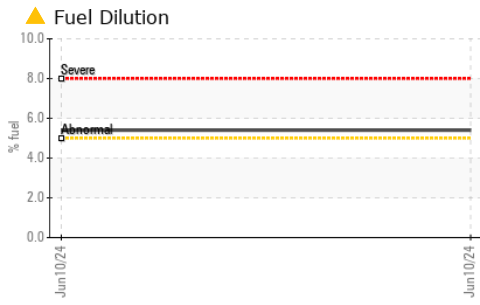
There is a moderate amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	4	5	8
Potassium	ppm	ASTM D5185m	>20	3	0	5
Fuel	%	ASTM D3524	>5	▲ 5.4	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.8	13.0	12.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.2	27.8	24.9
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

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m	>158	2	<1	3
Boron	ppm	ASTM D5185m	250	4	10	22
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	57	59	39
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	932	924	546
Calcium	ppm	ASTM D5185m	3000	1054	1268	1798
Phosphorus	ppm	ASTM D5185m	1150	1033	965	733
Zinc	ppm	ASTM D5185m	1350	1206	1273	881
Sulfur	ppm	ASTM D5185m	4250	3687	3624	1844
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.8	30.3	26.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.7	5.2	7.1
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 12.2	13.0	13.7



Certificate L2367

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

Sample No. : IL06214162

Lab Number : 06214162

Unique Number : 11087026

Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 18 Jun 2024

Tested : 21 Jun 2024

Diagnosed : 21 Jun 2024 - Sean Felton

RUSH TRUCK CENTER - CHICAGO IDEALEASE

4655 SOUTH CENTRAL AVENUE

CHICAGO, IL

US 60638

Contact: BRUCE VAUGHN

VaughnB@RushEnterprises.com

T:

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)

F: (708)496-8818