



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
2426
 Component
Diesel Engine
 Fluid
ROYAL PURPLE MOTOR OIL 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0720121	WC0720067	WC0720079
Sample Date		Client Info		07 Jun 2024	22 Apr 2024	29 Feb 2024
Machine Age	mls	Client Info		166848	123339	72205
Oil Age	mls	Client Info		0	100000	52205
Filter Age	mls	Client Info		0	50000	47205
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	29	84	44
Chromium	ppm	ASTM D5185m	>20	1	6	3
Nickel	ppm	ASTM D5185m	>4	<1	2	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	13	41	27
Lead	ppm	ASTM D5185m	>40	0	0	3
Copper	ppm	ASTM D5185m	>330	90	▲ 406	316
Tin	ppm	ASTM D5185m	>15	1	3	1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

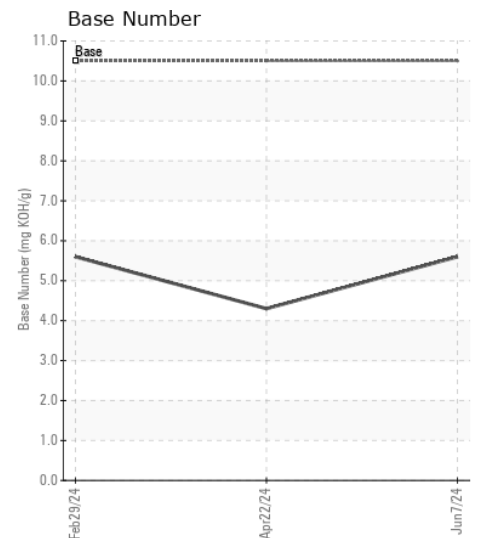
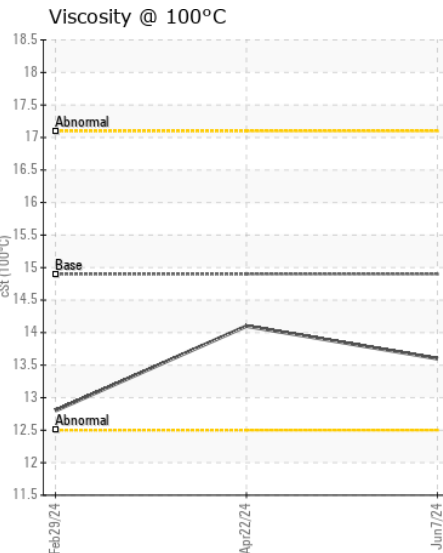
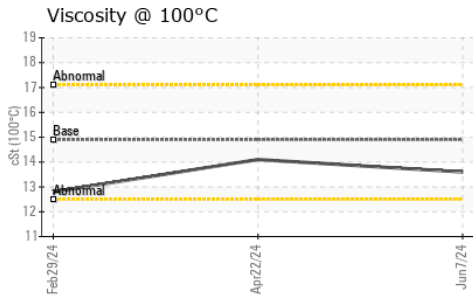
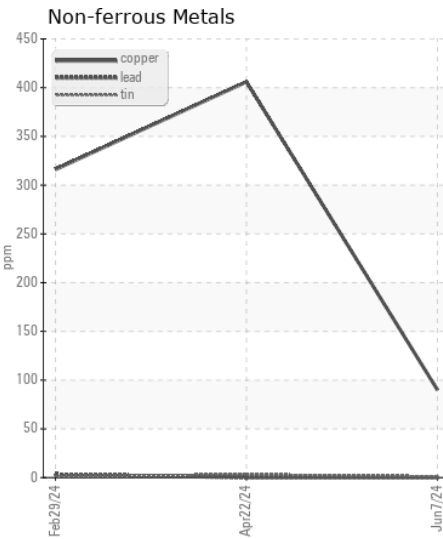
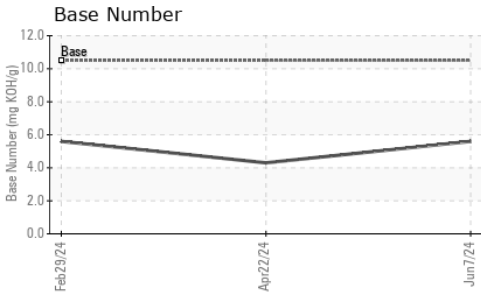
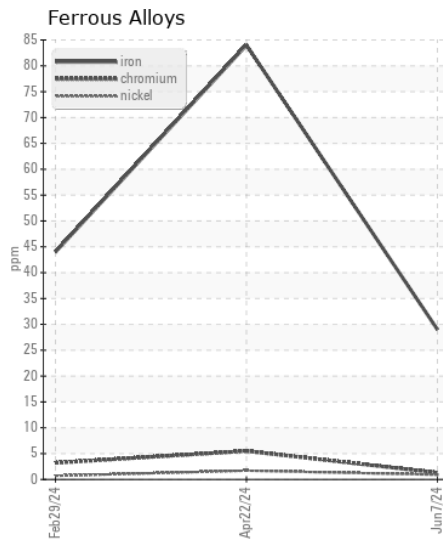
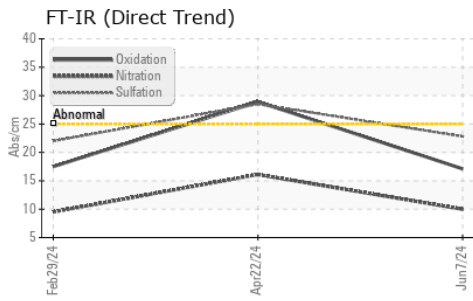
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	10	6
Potassium	ppm	ASTM D5185m	>20	29	94	59
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	0.8	1.4	0.7
Nitration	Abs/cm	*ASTM D7624	>20	10.0	16.1	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.8	28.5	22.0
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		3	3	3
Boron	ppm	ASTM D5185m	0	<1	0	<1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	100	1	9	7
Manganese	ppm	ASTM D5185m		1	2	1
Magnesium	ppm	ASTM D5185m	60	30	102	104
Calcium	ppm	ASTM D5185m	3050	2556	2605	2538
Phosphorus	ppm	ASTM D5185m	1050	975	977	935
Zinc	ppm	ASTM D5185m	1200	1158	1161	1123
Sulfur	ppm	ASTM D5185m	12500	3692	2876	2844
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1	28.9	17.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	5.6	4.3	5.6
Visc @ 100°C	cSt	ASTM D445	14.9	13.6	14.1	12.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0720121
Lab Number : 06213279
Unique Number : 11086143
Test Package : FLEET

Received : 18 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 19 Jun 2024 - Wes Davis

DILLON TRANSPORTATION
 974 TN WALTZ PARKWAY
 ASHLAND CITY, TN
 US 37015

Contact: MASON NICHOLSON
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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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