



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
2342
 Component
Diesel Engine
 Fluid
ROYAL PURPLE MOTOR OIL 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0719977	WC0719978	WC0719943
Sample Date		Client Info		26 May 2024	26 May 2024	28 Jan 2024
Machine Age	mls	Client Info		350198	0	302072
Oil Age	mls	Client Info		50000	50000	100000
Filter Age	mls	Client Info		50000	50000	50000
Oil Changed		Client Info		Not Chngd	Not Chngd	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	41	40	75
Chromium	ppm	ASTM D5185m	>20	1	1	2
Nickel	ppm	ASTM D5185m	>4	1	1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	6	6	17
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	22	20	35
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

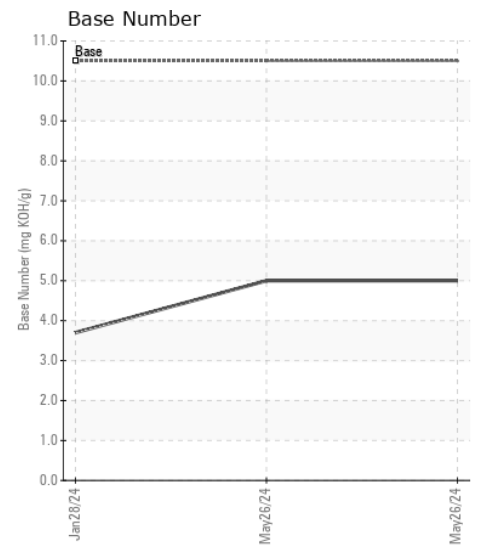
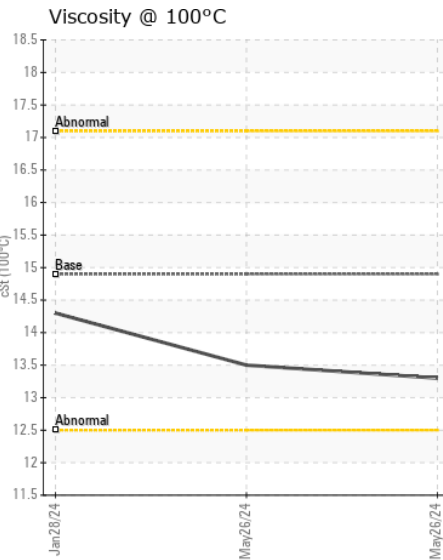
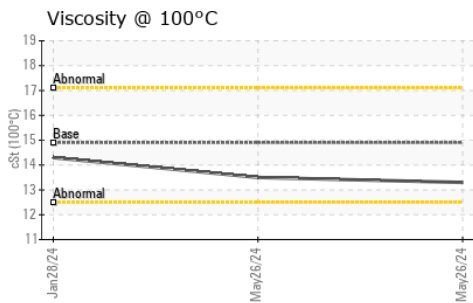
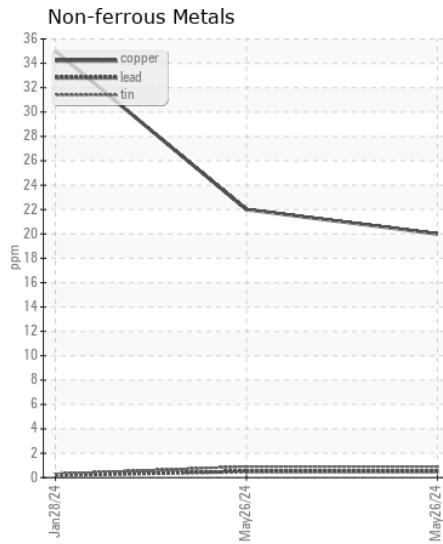
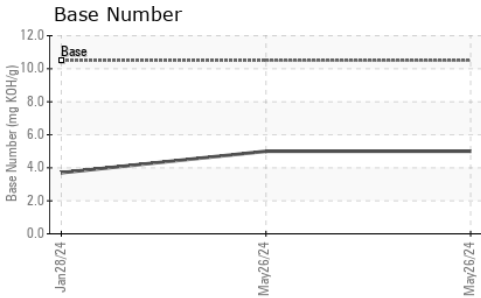
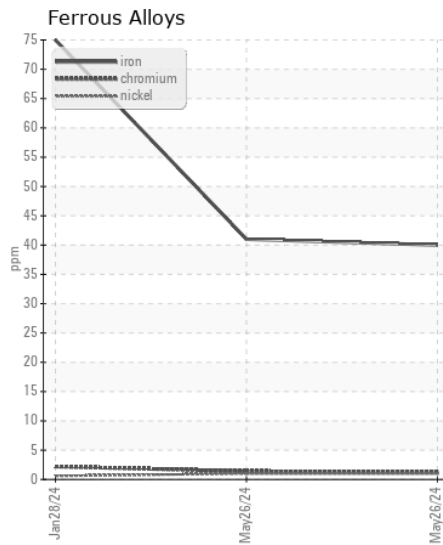
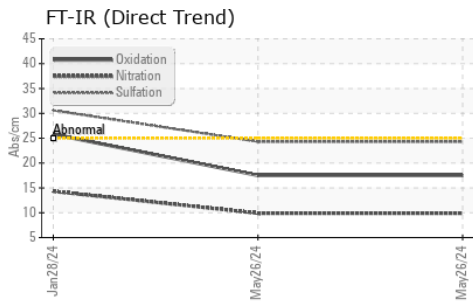
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	10	9	15
Potassium	ppm	ASTM D5185m	>20	12	12	31
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	1.1	1.1	2
Nitration	Abs/cm	*ASTM D7624	>20	9.9	9.9	14.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.3	24.3	30.6
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		0	0	3
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	0	<1	<1	0
Molybdenum	ppm	ASTM D5185m	100	2	4	4
Manganese	ppm	ASTM D5185m		1	1	<1
Magnesium	ppm	ASTM D5185m	60	18	48	67
Calcium	ppm	ASTM D5185m	3050	2580	2548	2722
Phosphorus	ppm	ASTM D5185m	1050	1036	1010	1010
Zinc	ppm	ASTM D5185m	1200	1152	1151	1200
Sulfur	ppm	ASTM D5185m	12500	3471	3404	3304
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	17.5	25.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	5.0	5.0	▲ 3.7
Visc @ 100°C	cSt	ASTM D445	14.9	13.3	13.5	14.3



Certificate L2367

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

Sample No. : WC0719977

Lab Number : 06219206

Unique Number : 11097403

Test Package : FLEET

Received : 24 Jun 2024

Tested : 25 Jun 2024

Diagnosed : 26 Jun 2024 - Jonathan Hester

DILLON TRANSPORTATION

4445 NORTH INTERSTATE WAY

KINGMAN, AZ

US 86401

Contact: T LAMOREAUX

t.lamoreaux@dillontransportation.com

T:

F:

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)