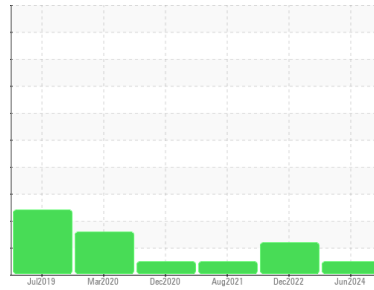


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
DT638
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (44 mls)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0120541	PCA0080470	PCA0050633
Sample Date	Client Info			24 Jun 2024	19 Dec 2022	19 Aug 2021
Machine Age	mls	Client Info		246874	200163	0
Oil Age	mls	Client Info		46711	57245	0
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	50	82	22
Chromium	ppm	ASTM D5185m	>20	2	2	<1
Nickel	ppm	ASTM D5185m	>5	1	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	6	6	<1
Lead	ppm	ASTM D5185m	>40	4	2	<1
Copper	ppm	ASTM D5185m	>330	3	4	3
Tin	ppm	ASTM D5185m	>15	2	1	<1
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

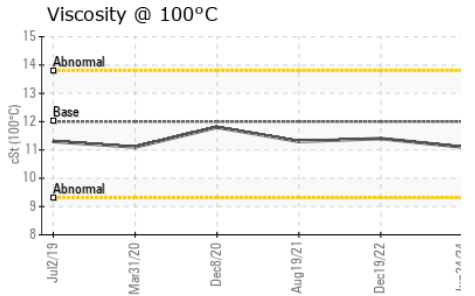
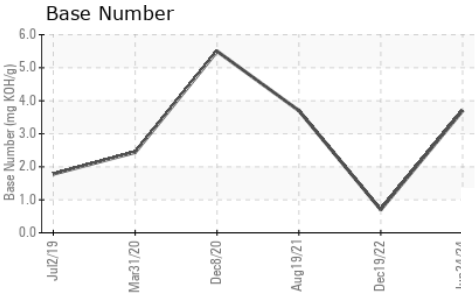
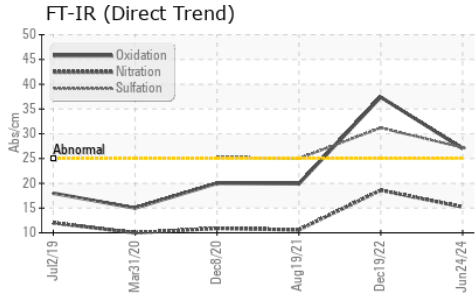
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	4	1	7
Barium	ppm	ASTM D5185m	0	1	2	0
Molybdenum	ppm	ASTM D5185m	50	69	55	36
Manganese	ppm	ASTM D5185m	0	1	1	<1
Magnesium	ppm	ASTM D5185m	950	943	875	742
Calcium	ppm	ASTM D5185m	1050	1110	1171	1208
Phosphorus	ppm	ASTM D5185m	995	961	966	819
Zinc	ppm	ASTM D5185m	1180	1231	1204	937
Sulfur	ppm	ASTM D5185m	2600	2230	2117	2316

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	8	7	3
Sodium	ppm	ASTM D5185m		4	5	6
Potassium	ppm	ASTM D5185m	>20	6	13	9

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	0.8	1	0.5
Nitration	Abs/cm	*ASTM D7624	>20	15.2	18.6	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.2	31.2	25

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.0	37.4	19.9
Base Number (BN)	mg KOH/g	ASTM D2896		3.7	▲ 0.7	3.7

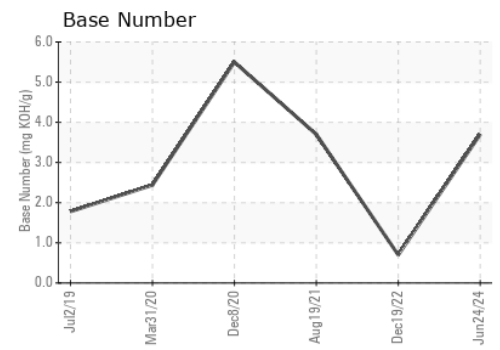
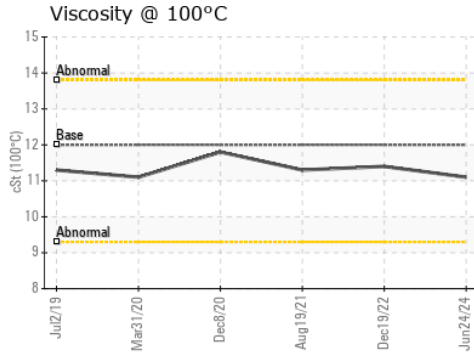
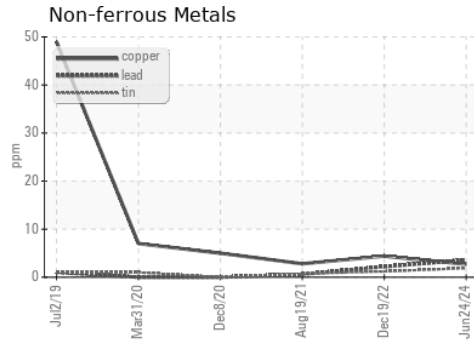
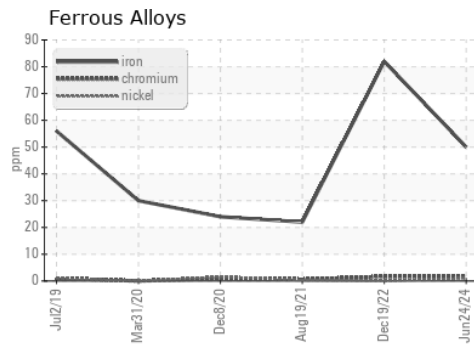
OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.1	11.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0120541 **Received** : 28 Jun 2024
Lab Number : 06223128 **Tested** : 28 Jun 2024
Unique Number : 11101325 **Diagnosed** : 30 Jun 2024 - Don Baldrige
Test Package : FLEET

NW WHITE & CO - GREER DIVISION
 1060 ROGERS BRIDGE RD
 DUNCAN, SC
 US 29334
 Contact: Matt Quinlan
 mquinlan@nwwhite.com
 T: (864)905-8506
 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)