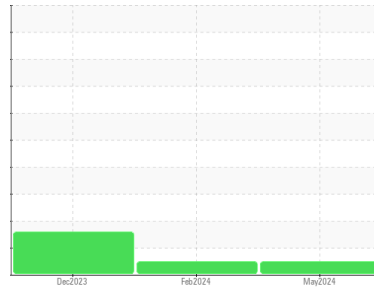


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
2227123
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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			PCA0124271	PCA0114817	PCA0099544
Sample Date	Client Info			23 May 2024	04 Feb 2024	25 Dec 2023
Machine Age	mls	Client Info		0	39604	20000
Oil Age	mls	Client Info		20000	19604	20000
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	0.2
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	>100	29	21	35
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	2	4	2
Titanium	ppm	ASTM D5185m		22	17	<1
Silver	ppm	ASTM D5185m	>3	0	7	17
Aluminum	ppm	ASTM D5185m	>20	19	23	33
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	231	349	193
Tin	ppm	ASTM D5185m	>15	<1	2	4
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0

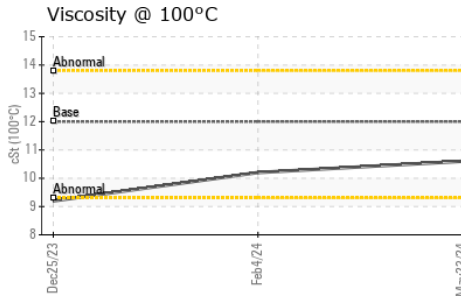
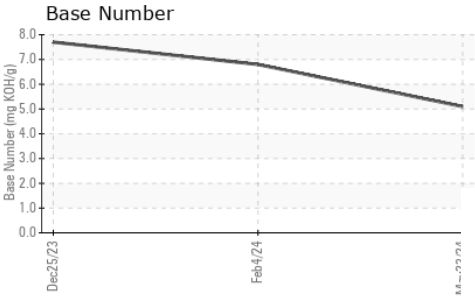
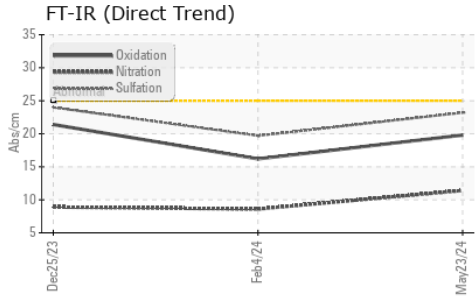
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	0	32	228
Barium	ppm	ASTM D5185m	0	0	14	0
Molybdenum	ppm	ASTM D5185m	50	45	60	108
Manganese	ppm	ASTM D5185m	0	1	2	4
Magnesium	ppm	ASTM D5185m	950	762	745	639
Calcium	ppm	ASTM D5185m	1050	1336	1266	1406
Phosphorus	ppm	ASTM D5185m	995	973	980	696
Zinc	ppm	ASTM D5185m	1180	1155	1084	817
Sulfur	ppm	ASTM D5185m	2600	2655	3370	2317

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	7	17	▲ 57
Sodium	ppm	ASTM D5185m		5	0	4
Potassium	ppm	ASTM D5185m	>20	44	57	85

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	11.4	8.6	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	19.7	24.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.8	16.2	21.4
Base Number (BN)	mg KOH/g	ASTM D2896		5.1	6.8	7.7

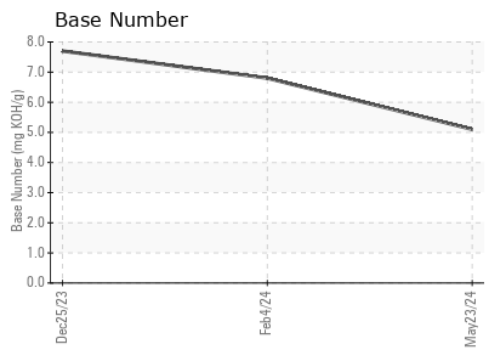
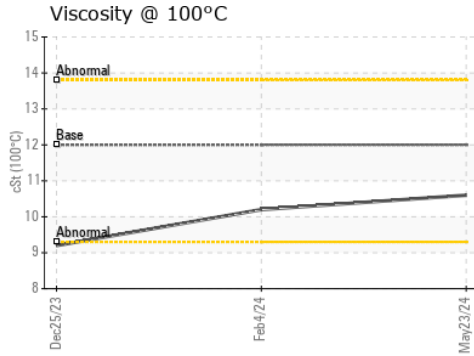
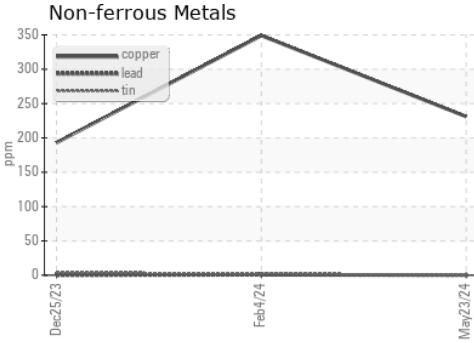
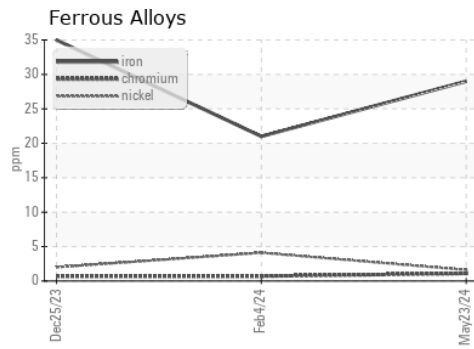
OIL ANALYSIS REPORT



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	10.6	10.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0124271 **Received** : 03 Jun 2024
Lab Number : **06197278** **Tested** : 03 Jun 2024
Unique Number : 11059401 **Diagnosed** : 03 Jun 2024 - Wes Davis
Test Package : FLEET

PERDUE FARMS - SALISBURY
 7036 ZION CHURCH ROAD
 SALISBURY, MD
 US 21802
 Contact: RICHARD O'NEAL
 richard.oneal@perdue.com
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 F: (410)341-2164

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)