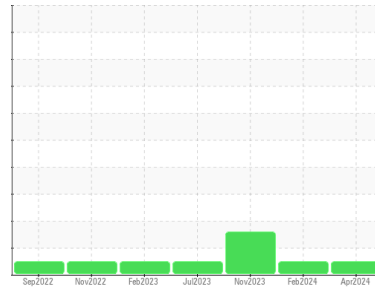


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
2126977
 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

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			PCA0125016	PCA0114766	PCA0113260
Sample Date	Client Info			26 Apr 2024	10 Feb 2024	26 Nov 2023
Machine Age	mls	Client Info		186294	0	142597
Oil Age	mls	Client Info		0	40000	21980
Oil Changed	Client Info			Not Changed	Changed	Not Changed
Sample Status				NORMAL	NORMAL	MARGINAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<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	>100	19	38	32
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	2	4	2
Titanium	ppm	ASTM D5185m		34	8	1
Silver	ppm	ASTM D5185m	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>20	4	7	5
Lead	ppm	ASTM D5185m	>40	0	3	<1
Copper	ppm	ASTM D5185m	>330	6	14	12
Tin	ppm	ASTM D5185m	>15	0	2	1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		0	<1	<1

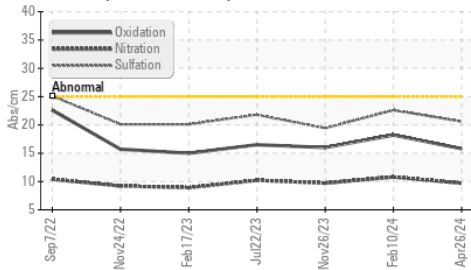
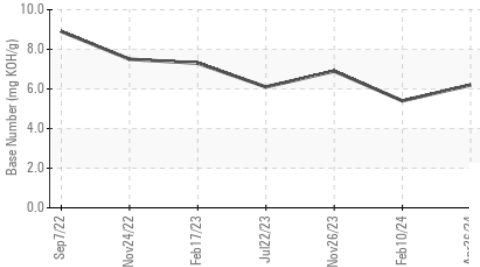
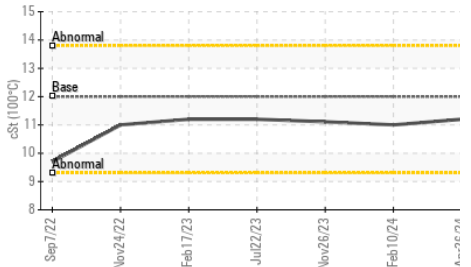
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	20	6	4
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	38	49	59
Manganese	ppm	ASTM D5185m	0	<1	2	1
Magnesium	ppm	ASTM D5185m	950	765	780	910
Calcium	ppm	ASTM D5185m	1050	1405	1093	1036
Phosphorus	ppm	ASTM D5185m	995	1076	888	980
Zinc	ppm	ASTM D5185m	1180	1273	1056	1200
Sulfur	ppm	ASTM D5185m	2600	4093	3150	3925

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	6	8
Sodium	ppm	ASTM D5185m		2	3	0
Potassium	ppm	ASTM D5185m	>20	9	20	15

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	0.8	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.7	10.8	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	22.6	19.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.8	18.2	16.0
Base Number (BN)	mg KOH/g	ASTM D2896		6.2	5.4	6.9

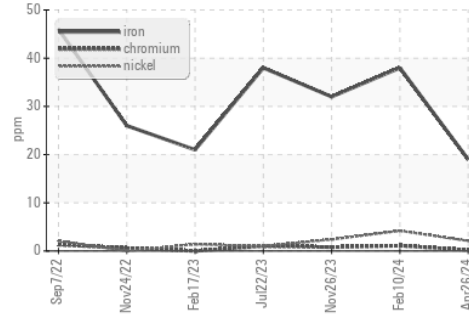
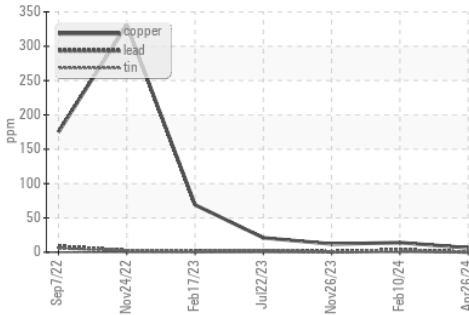
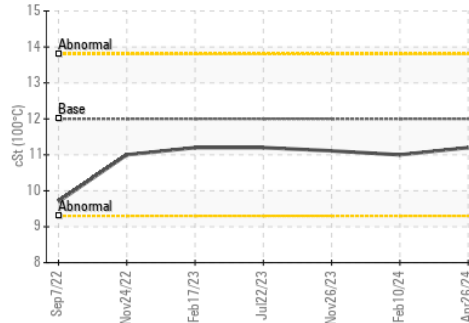
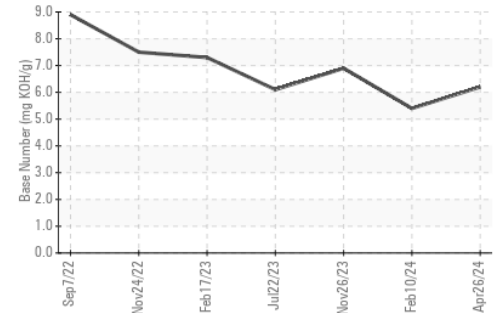
OIL ANALYSIS REPORT

FT-IR (Direct Trend)

Base Number

Viscosity @ 100°C


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	▲ 0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445 12.00	11.2	11.0	11.11

GRAPHS

Ferrous Alloys

Non-ferrous Metals

Viscosity @ 100°C

Base Number


Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0125016 **Received** : 25 Jun 2024
Lab Number : **06219409** **Tested** : 25 Jun 2024
Unique Number : 11097606 **Diagnosed** : 25 Jun 2024 - Wes Davis
Test Package : FLEET

PERDUE FARMS - GEORGETOWN
 20621 SAVANAH RD
 GEORGETOWN, DE
 US 19947
 Contact: ROBERT LOCKWOOD
 Robert.Lockwood@Perdue.com

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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F: