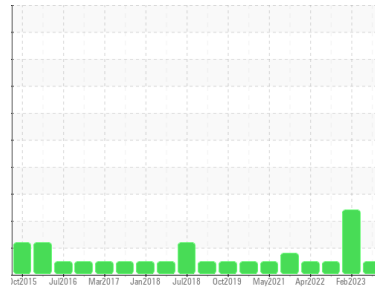


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
26369 (S/N EN173853)
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (46 QTS)

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		PCA0120168	PCA0089406	PCA0078382
Sample Date	Client Info		27 Jun 2024	22 Feb 2023	29 Jul 2022
Machine Age	mls	Client Info	457464	433867	413096
Oil Age	mls	Client Info	24149	10248	0
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			NORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<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 >100	31	43	29
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >2	<1	<1	<1
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >25	4	26	5
Lead	ppm	ASTM D5185m >40	6	6	2
Copper	ppm	ASTM D5185m >330	65	3	12
Tin	ppm	ASTM D5185m >15	3	1	2
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	2	<1	10
Barium	ppm	ASTM D5185m 0	0	0	<1
Molybdenum	ppm	ASTM D5185m 50	47	59	60
Manganese	ppm	ASTM D5185m 0	2	3	<1
Magnesium	ppm	ASTM D5185m 950	685	973	866
Calcium	ppm	ASTM D5185m 1050	1445	1197	1154
Phosphorus	ppm	ASTM D5185m 995	908	974	880
Zinc	ppm	ASTM D5185m 1180	1178	1288	1171
Sulfur	ppm	ASTM D5185m 2600	2918	2885	2858

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	13	▲ 25	4
Sodium	ppm	ASTM D5185m	5	12	2
Potassium	ppm	ASTM D5185m >20	5	4	8

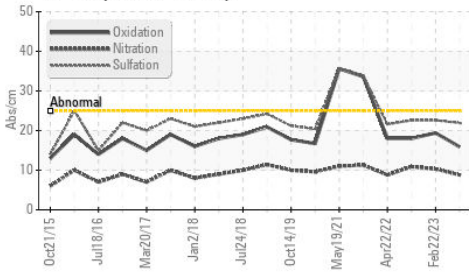
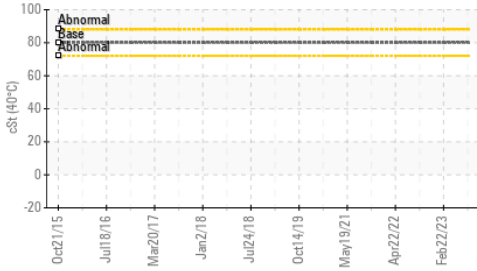
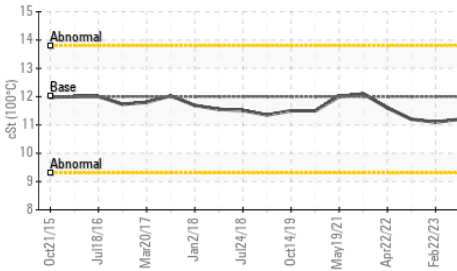
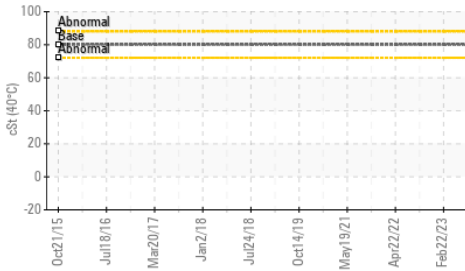
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.4	0.6	0.5
Nitration	Abs/cm	*ASTM D7624 >20	8.8	10.3	10.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.9	22.6	22.6

FLUID DEGRADATION

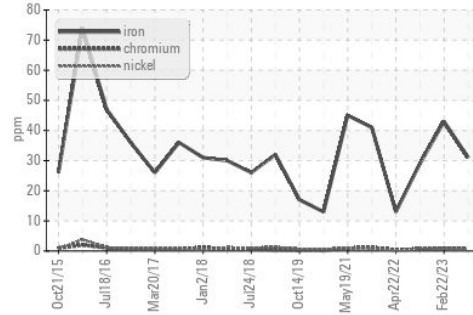
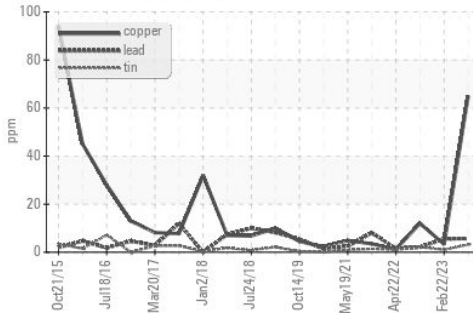
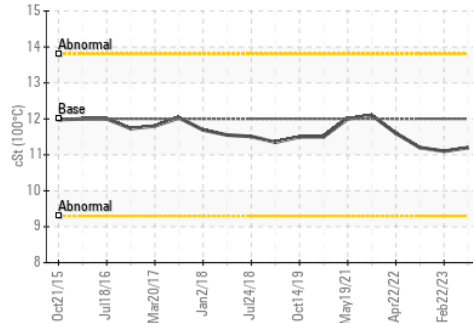
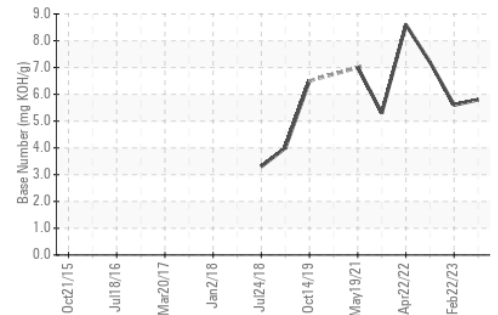
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	15.9	19.4	18.0
Base Number (BN)	mg KOH/g	ASTM D2896	5.8	5.6	7.2

OIL ANALYSIS REPORT

FT-IR (Direct Trend)

Viscosity @ 40°C

Viscosity @ 100°C

Viscosity @ 40°C


VISUAL	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	11.2	11.1

GRAPHS
Ferrous Alloys

Non-ferrous Metals

Viscosity @ 100°C

Base Number


Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0120168 **Received** : 02 Jul 2024
Lab Number : 06225902 **Tested** : 05 Jul 2024
Unique Number : 11109395 **Diagnosed** : 05 Jul 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: KV40)

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)

PERDUE FARMS - Lewiston
 210 GRIFFINS QUARTER RD
 LEWISTON, NC
 US 27849
 Contact: NELSON WALLACE
 nelson.wallace2@perdue.com

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F: