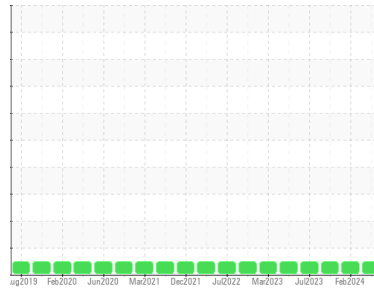


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
FLEET
Machine Id
1926694
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			PCA0114782	PCA0118389	PCA0106348
Sample Date	Client Info			31 Mar 2024	04 Feb 2024	12 Dec 2023
Machine Age	mls	Client Info		0	474017	453256
Oil Age	mls	Client Info		20000	20000	40000
Oil Changed	Client Info			Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

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	52	24	46
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		18	17	<1
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	8	2	4
Lead	ppm	ASTM D5185m	>40	0	1	<1
Copper	ppm	ASTM D5185m	>330	11	5	7
Tin	ppm	ASTM D5185m	>15	1	1	1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	<1

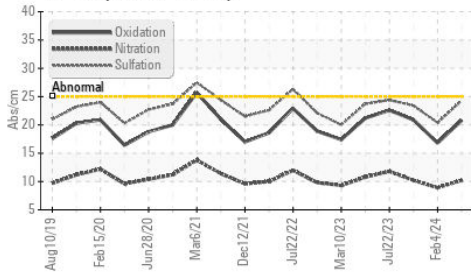
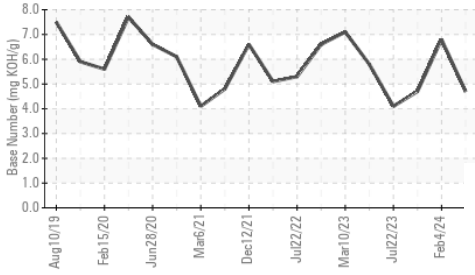
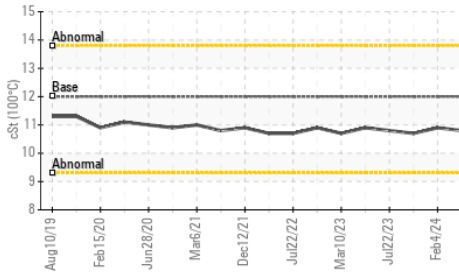
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	5	8	0
Barium	ppm	ASTM D5185m	0	0	13	11
Molybdenum	ppm	ASTM D5185m	50	46	47	57
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	779	756	871
Calcium	ppm	ASTM D5185m	1050	1244	1138	1029
Phosphorus	ppm	ASTM D5185m	995	933	981	875
Zinc	ppm	ASTM D5185m	1180	1175	1131	1164
Sulfur	ppm	ASTM D5185m	2600	3131	3464	2990

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	4	5
Sodium	ppm	ASTM D5185m		12	2	11
Potassium	ppm	ASTM D5185m	>20	1	3	4

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.2	8.9	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.3	20.4	23.4

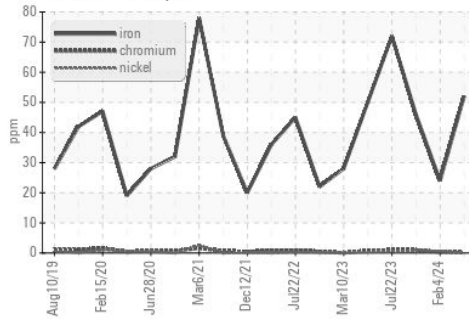
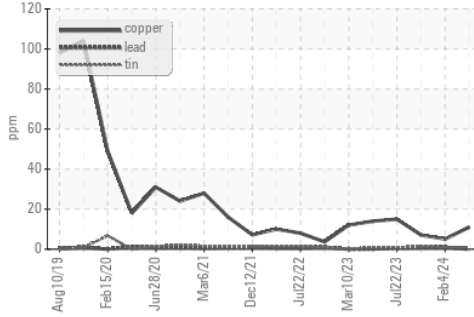
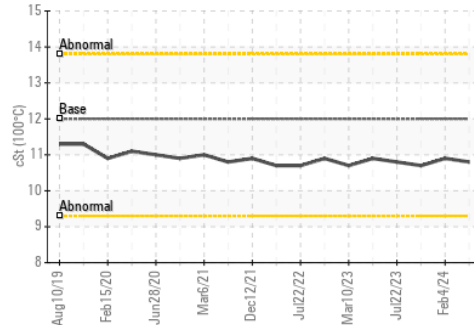
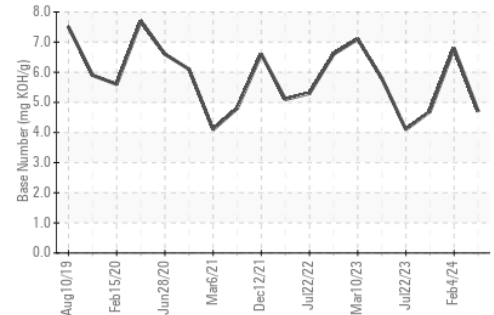
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.8	16.8	20.9
Base Number (BN)	mg KOH/g	ASTM D2896		4.7	6.8	4.7

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	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	10.8	10.9

GRAPHS
Ferrous Alloys

Non-ferrous Metals

Viscosity @ 100°C

Base Number


Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0114782
Lab Number : 06143847
Unique Number : 10968655
Test Package : FLEET

Received : 10 Apr 2024
Tested : 11 Apr 2024
Diagnosed : 11 Apr 2024 - Wes Davis

PERDUE FARMS - SALISBURY
 7036 ZION CHURCH ROAD
 SALISBURY, MD
 US 21802

Contact: RICHARD O'NEAL
 richard.oneal@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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