



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
2227012
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- QTS)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0123203	PCA0106376	PCA0118427
Sample Date		Client Info		24 May 2024	06 Apr 2024	02 Mar 2024
Machine Age	mls	Client Info		190479	167898	152282
Oil Age	mls	Client Info		15000	30000	15000
Filter Age	mls	Client Info		15000	15000	15000
Oil Changed		Client Info		Not Chngd	Changed	Not Chngd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	10	20	11
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>4	0	2	<1
Titanium	ppm	ASTM D5185m		16	25	22
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	1	2	2
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	5	8	7
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

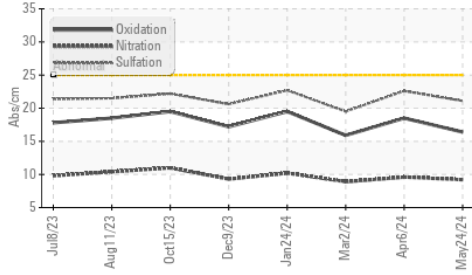
Silicon	ppm	ASTM D5185m	>25	2	5	4
Potassium	ppm	ASTM D5185m	>20	3	4	4
Fuel	%	ASTM D3524	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.6	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	22.6	19.5
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

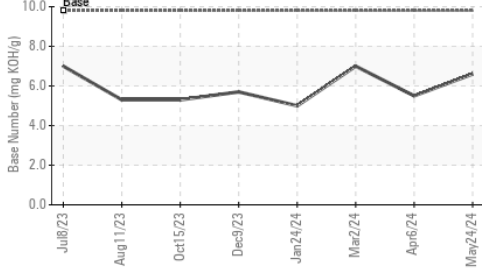
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	2	1
Boron	ppm	ASTM D5185m	0	0	7	15
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	46	44	42
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	794	780	776
Calcium	ppm	ASTM D5185m	1070	1321	1290	1187
Phosphorus	ppm	ASTM D5185m	1150	1027	959	987
Zinc	ppm	ASTM D5185m	1270	1204	1174	1176
Sulfur	ppm	ASTM D5185m	2060	3464	3236	3525
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	18.5	15.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.6	5.5	7.0
Visc @ 100°C	cSt	ASTM D445	15.4	11.0	11.1	11.3

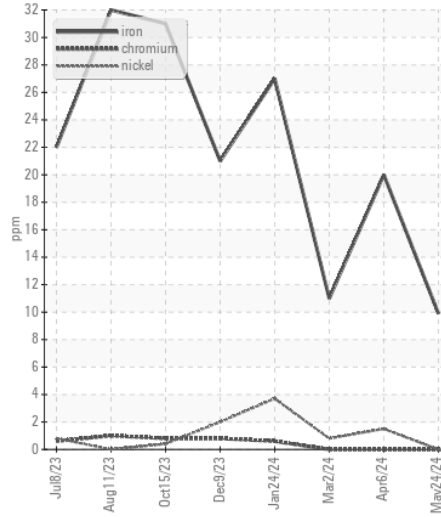
FT-IR (Direct Trend)



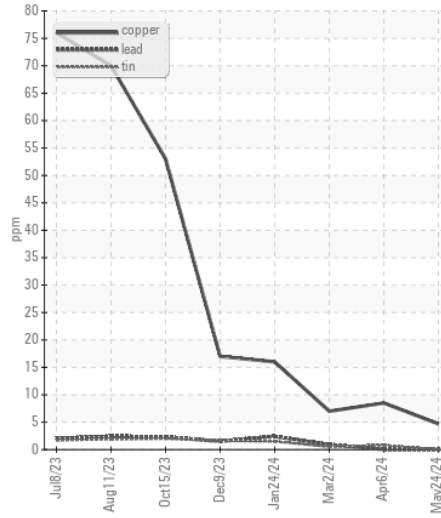
Base Number



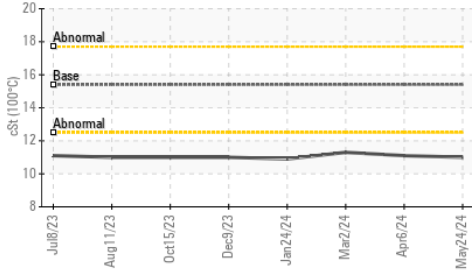
Ferrous Alloys



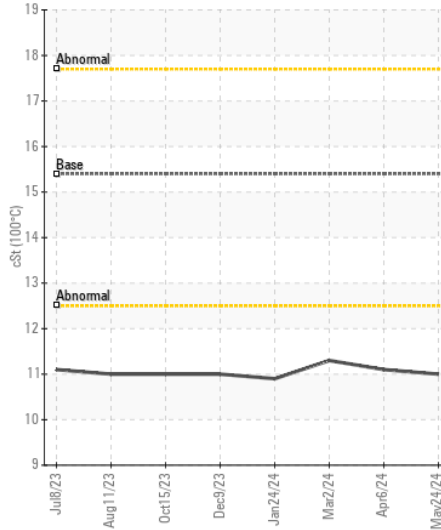
Non-ferrous Metals



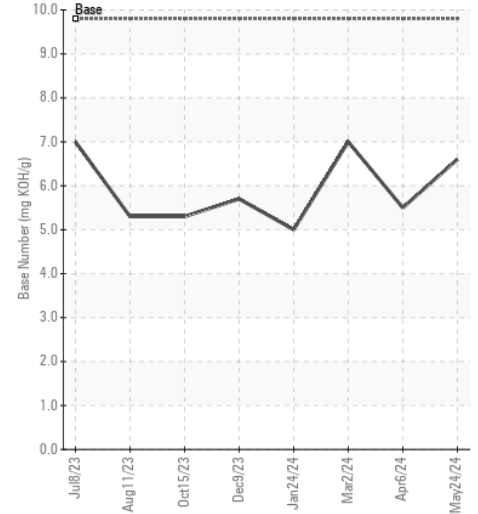
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0123203 **Received** : 03 Jun 2024
Lab Number : 06197272 **Tested** : 04 Jun 2024
Unique Number : 11059395 **Diagnosed** : 04 Jun 2024 - Sean Felton
Test Package : FLEET (Additional Tests: FuelDilution)

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)

T: (410)543-3628
 F: (410)341-2164