



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
2227061
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- 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		PCA0113269	PCA0124563	PCA0113264
Sample Date		Client Info		09 Jun 2024	14 Apr 2024	08 Jan 2024
Machine Age	mls	Client Info		0	86361	64874
Oil Age	mls	Client Info		20000	45000	21388
Filter Age	mls	Client Info		20000	45000	21388
Oil Changed		Client Info		Not Chngd	Changed	Not Chngd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	12	38	17
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	2	▲ 7	1
Titanium	ppm	ASTM D5185m		10	8	<1
Silver	ppm	ASTM D5185m	>3	2	2	4
Aluminum	ppm	ASTM D5185m	>20	4	10	7
Lead	ppm	ASTM D5185m	>40	0	0	6
Copper	ppm	ASTM D5185m	>330	91	● 228	381
Tin	ppm	ASTM D5185m	>15	0	1	2
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.

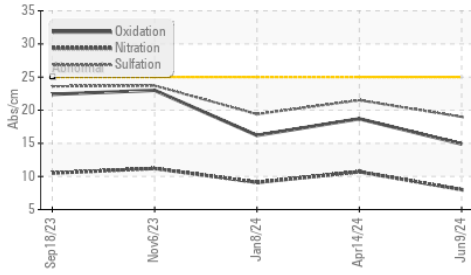
Silicon	ppm	ASTM D5185m	>25	5	12	9
Potassium	ppm	ASTM D5185m	>20	6	21	16
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.0	10.7	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	21.5	19.4
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

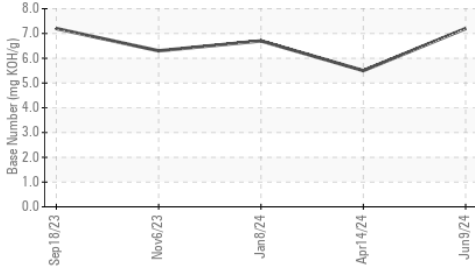
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	4	3
Boron	ppm	ASTM D5185m	2	10	9	7
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	52	61	57
Manganese	ppm	ASTM D5185m	0	<1	2	1
Magnesium	ppm	ASTM D5185m	950	934	930	830
Calcium	ppm	ASTM D5185m	1050	1219	1263	1072
Phosphorus	ppm	ASTM D5185m	995	1059	997	906
Zinc	ppm	ASTM D5185m	1180	1294	1226	1023
Sulfur	ppm	ASTM D5185m	2600	3469	2767	2802
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	18.7	16.2
Base Number (BN)	mg KOH/g	ASTM D2896		7.2	5.5	6.7
Visc @ 100°C	cSt	ASTM D445	12.00	10.4	10.2	10.3

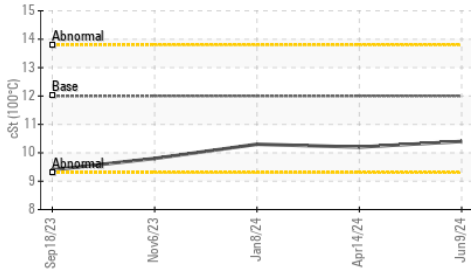
FT-IR (Direct Trend)



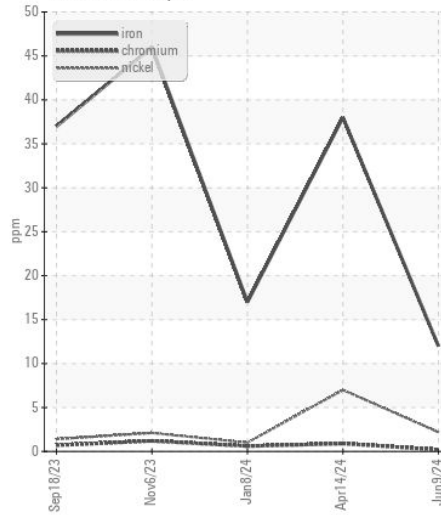
Base Number



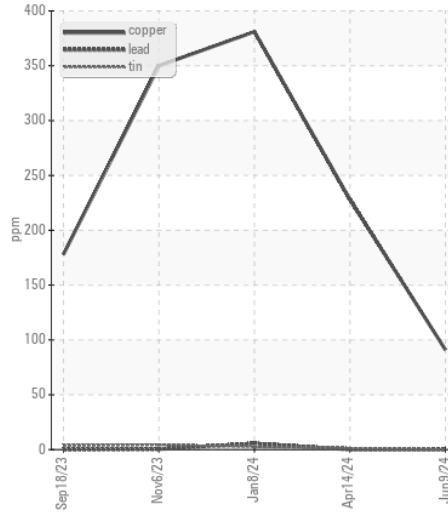
Viscosity @ 100°C



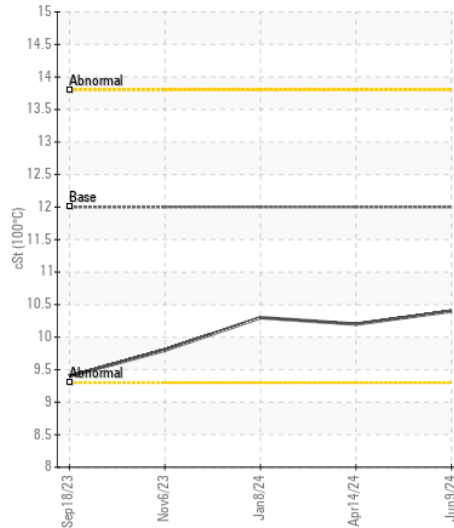
Ferrous Alloys



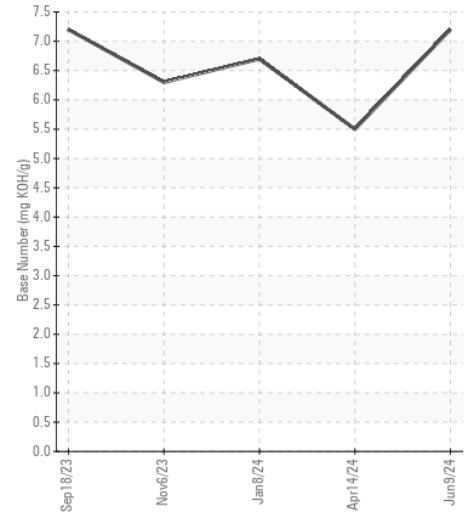
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0113269
Lab Number : 06219428
Unique Number : 11097625
Test Package : FLEET

Received : 25 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 25 Jun 2024 - Wes Davis

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)

T:
F: