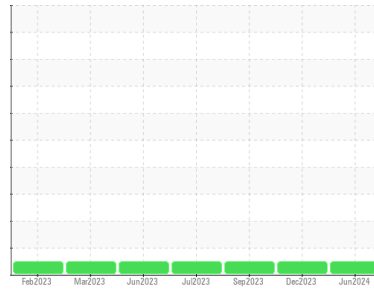


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
FUEL
Machine Id
341
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (28 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		PCA0109600	PCA0109678	PCA0098667
Sample Date	Client Info		17 Jun 2024	05 Dec 2023	29 Sep 2023
Machine Age	mls	Client Info	76341	56544	32234
Oil Age	mls	Client Info	6000	6000	16000
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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	>200	14	15	16
Chromium	ppm	ASTM D5185m	>20	1	<1	2
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	2	5
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	9	8	10
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>30	2	1	2
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	2	7	14	12
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	61	60	57
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	950	970	941	961
Calcium	ppm	ASTM D5185m	1050	1139	1128	1120
Phosphorus	ppm	ASTM D5185m	995	989	1039	1020
Zinc	ppm	ASTM D5185m	1180	1273	1251	1242
Sulfur	ppm	ASTM D5185m	2600	3051	3085	3186

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>30	4	4	4
Sodium	ppm	ASTM D5185m		<1	2	2
Potassium	ppm	ASTM D5185m	>20	20	16	28

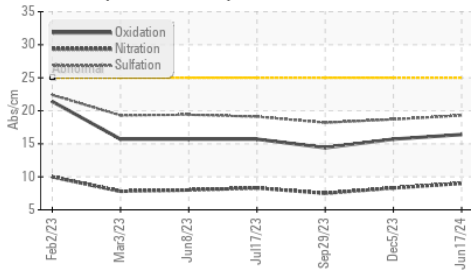
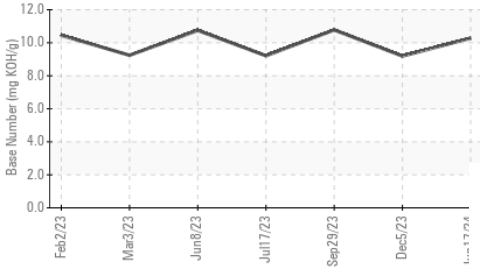
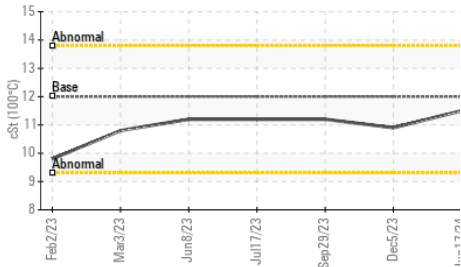
INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.0	8.3	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.3	18.7	18.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	15.7	14.4
Base Number (BN)	mg KOH/g	ASTM D2896		10.28	9.19	10.78

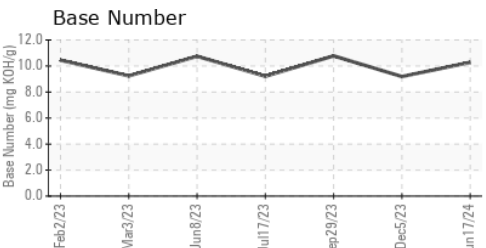
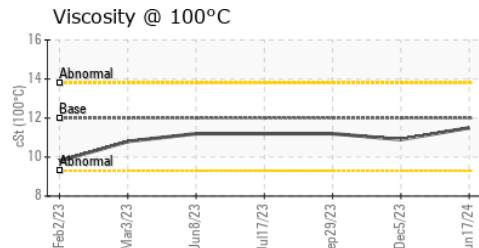
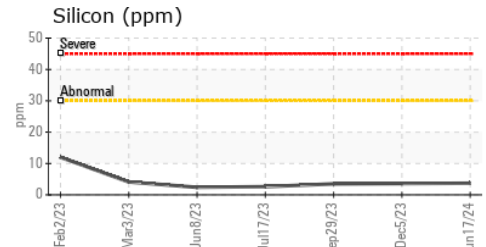
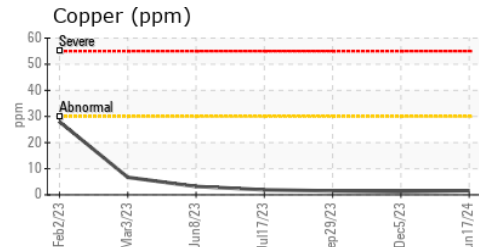
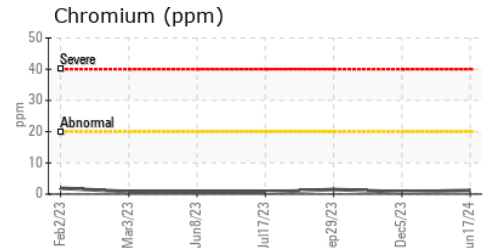
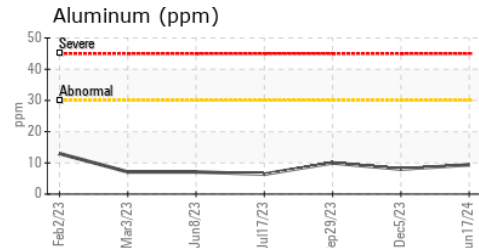
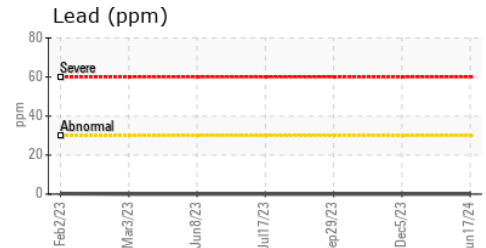
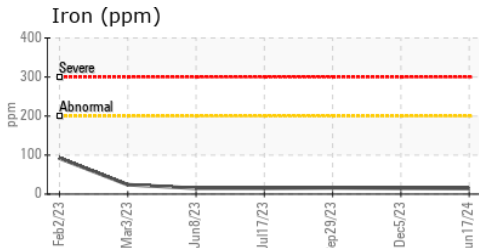
OIL ANALYSIS REPORT

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	11.5	10.9

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109600
Lab Number : 06230404
Unique Number : 11113897
Test Package : MOB 2

DENNIS K BURKE INC - INTERNAL SAMPLES
 555 CONSTITUTION DR
 TAUNTON, MA
 US 02780
 Contact: GREG DUNKER

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: (617)889-6422