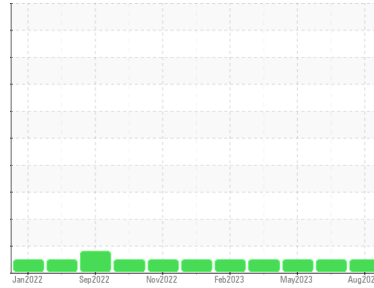


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
20079
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

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		PCA0102960	PCA0098102	PCA0095303
Sample Date	Client Info		03 Aug 2023	19 Jun 2023	05 May 2023
Machine Age	hrs	Client Info	8480	8124	7818
Oil Age	hrs	Client Info	356	306	272
Oil Changed	Client Info		Not Changed	Not Changd	Not Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	11	2	8
Chromium	ppm	ASTM D5185m >20	<1	0	0
Nickel	ppm	ASTM D5185m >4	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	3	0	5
Lead	ppm	ASTM D5185m >40	<1	0	0
Copper	ppm	ASTM D5185m >330	<1	0	<1
Tin	ppm	ASTM D5185m >15	<1	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	2
Barium	ppm	ASTM D5185m 0	1	0	0
Molybdenum	ppm	ASTM D5185m 60	62	47	65
Manganese	ppm	ASTM D5185m 0	<1	0	0
Magnesium	ppm	ASTM D5185m 1010	938	761	1018
Calcium	ppm	ASTM D5185m 1070	1059	866	1124
Phosphorus	ppm	ASTM D5185m 1150	991	821	1040
Zinc	ppm	ASTM D5185m 1270	1207	1013	1312
Sulfur	ppm	ASTM D5185m 2060	3218	3198	3472

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	3	2
Sodium	ppm	ASTM D5185m	7	3	8
Potassium	ppm	ASTM D5185m >20	3	<1	1

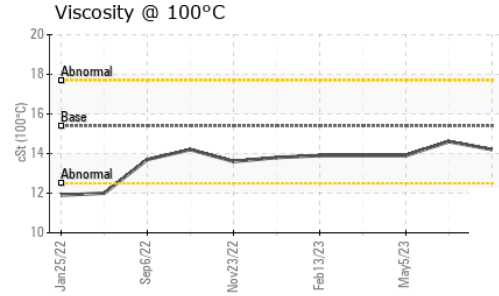
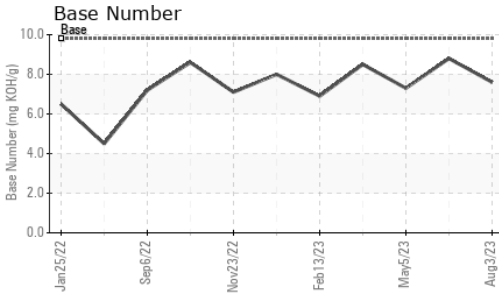
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.9	0.3	0.7
Nitration	Abs/cm	*ASTM D7624 >20	8.9	5.6	8.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.6	18.4	19.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	15.0	14.6	14.9
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	7.6	8.8	7.3

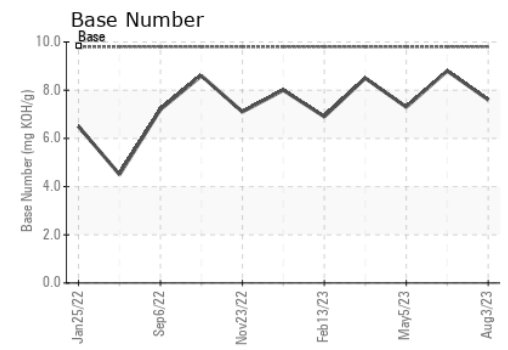
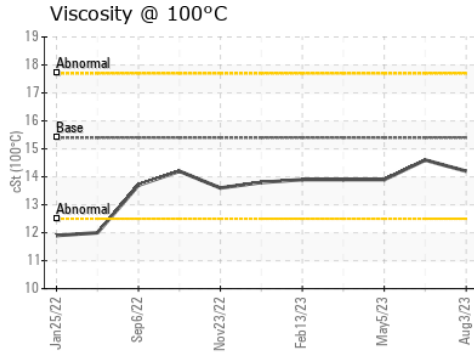
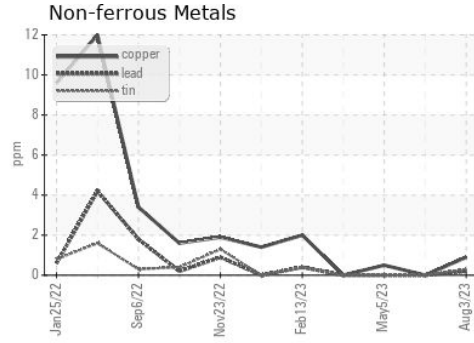
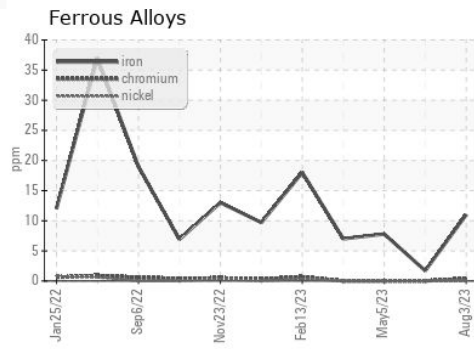
OIL ANALYSIS REPORT



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	15.4	14.2	14.6	13.9

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0102960
Lab Number : **05921290**
Unique Number : 10593204
Test Package : FLEET

LRS - BETHEL HEIGHTS (NWA AR)
 848 HWY 264 E
 BETHEL HEIGHTS, AR
 US 72764
 Contact: ROBERT HEATH
 rhealth@lrsrecycles.com
 T: (479)305-8958
 F:

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)