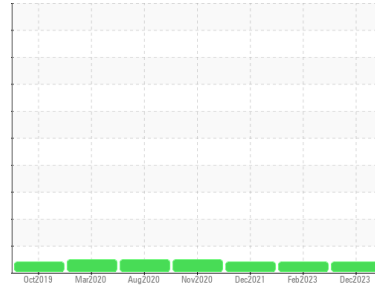




Machine Id
Chevrolet 4363
 Component
Gasoline Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)



DIAGNOSIS

Recommendation
 Oil and filter change at the time of sampling has been noted. 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 oil viscosity is higher than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0091671	PCA0071433	PCA0045580
Sample Date	Client Info		07 Dec 2023	16 Feb 2023	09 Dec 2021
Machine Age	mls	Client Info	70200	58519	50612
Oil Age	mls	Client Info	11681	7907	11597
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ATTENTION	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<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 >150	24	21	35
Chromium	ppm	ASTM D5185m >20	1	<1	1
Nickel	ppm	ASTM D5185m >5	<1	<1	2
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >40	5	4	6
Lead	ppm	ASTM D5185m >50	1	<1	2
Copper	ppm	ASTM D5185m >155	42	43	65
Tin	ppm	ASTM D5185m >10	0	<1	<1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<1	4	27
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 50	56	45	17
Manganese	ppm	ASTM D5185m 0	<1	2	2
Magnesium	ppm	ASTM D5185m 950	857	798	813
Calcium	ppm	ASTM D5185m 1050	891	971	1324
Phosphorus	ppm	ASTM D5185m 995	814	759	704
Zinc	ppm	ASTM D5185m 1180	1085	1068	903
Sulfur	ppm	ASTM D5185m 2600	2359	2607	2437

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >30	10	8	14
Sodium	ppm	ASTM D5185m >400	4	4	6
Potassium	ppm	ASTM D5185m >20	<1	2	2

INFRA-RED

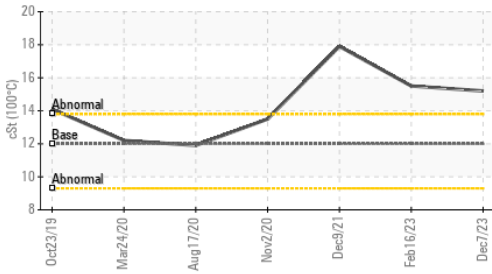
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	20.1	16.2	21.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	34.1	42.8	46.6

FLUID DEGRADATION

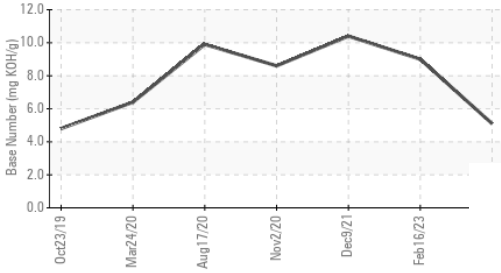
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	40.2	34.9	38.9
Base Number (BN)	mg KOH/g	ASTM D2896	5.1	9.0	10.4

OIL ANALYSIS REPORT

▲ Viscosity @ 100°C



Base Number

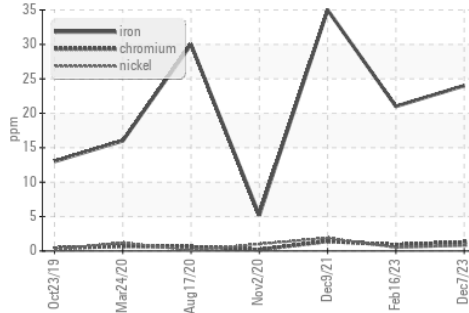


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

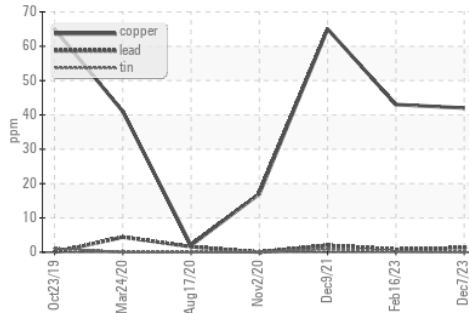
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445 12.00	▲ 15.2	▲ 15.5	▲ 17.9

GRAPHS

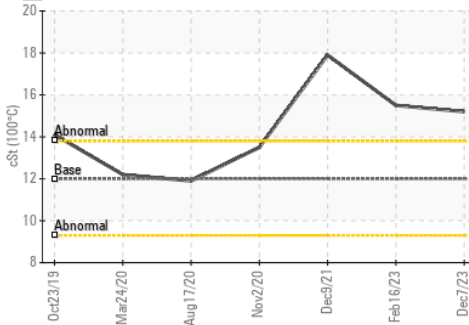
Ferrous Alloys



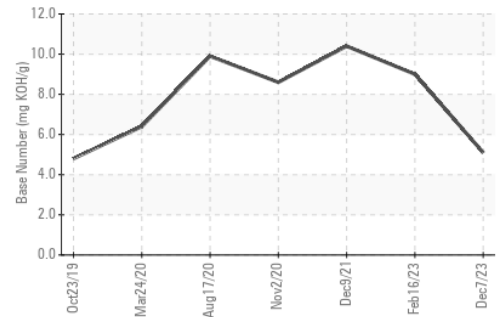
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0091671 **Received** : 20 Dec 2023
Lab Number : 06040285 **Diagnosed** : 21 Dec 2023
Unique Number : 10795514 **Diagnostician** : Sean Felton
Test Package : FLEET (Additional Tests: FT-IR(Diff))

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)

ICSB370 - Alton
 4525 North Alby Road
 Godfrey, IL
 US 62035

Contact: Chad Ingold
 c.ingold@illinois-central.com

T: (618)466-5400

F: