



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CHEVY CHEVY 2500

Component
Diesel Engine

Fluid
TRC PRO-SPEC IV XP SYN BLEND 15W40 (10 LTR)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.

CONTAMINATION

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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 oil is no longer serviceable as a result of the abnormal and/or severe wear.

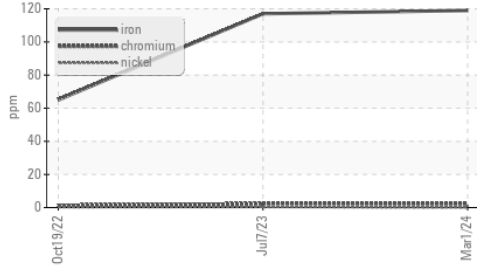
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02620736	TR02570522	TR02519325
Sample Date		Client Info		01 Mar 2024	07 Jul 2023	19 Oct 2022
Machine Age	hrs	Client Info		185000	145000	105000
Oil Age	hrs	Client Info		20000	20000	20000
Filter Age	hrs	Client Info		20000	20000	20000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	Not Changd	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184*		0	0	---
Iron	ppm	ASTM D5185(m)	>100	▲ 119	▲ 117	65
Chromium	ppm	ASTM D5185(m)	>20	2	2	1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	5	4	3
Lead	ppm	ASTM D5185(m)	>40	<1	<1	1
Copper	ppm	ASTM D5185(m)	>330	2	6	19
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

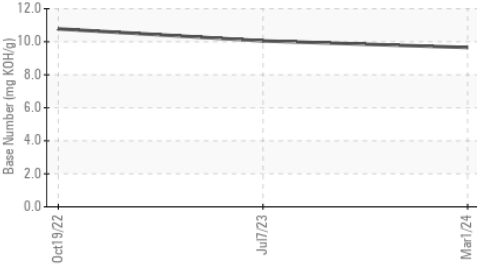
Silicon	ppm	ASTM D5185(m)	>25	7	8	8
Potassium	ppm	ASTM D5185(m)	>20	7	3	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.9	0.9	0.6
Nitration	Abs/cm	ASTM D7624*	>20	14.8	13.7	12.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.8	26.0	24.1
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

Sodium	ppm	ASTM D5185(m)		3	3	2
Boron	ppm	ASTM D5185(m)		2	<1	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		1	<1	<1
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		20	17	16
Calcium	ppm	ASTM D5185(m)		4004	4087	3997
Phosphorus	ppm	ASTM D5185(m)		840	842	878
Zinc	ppm	ASTM D5185(m)		930	932	976
Sulfur	ppm	ASTM D5185(m)		3231	3014	2979
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.1	20.3	16.3
Base Number (BN)	mg KOH/g	ASTM D2896*		9.65	10.05	10.78
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	16.0	16.1	15.4

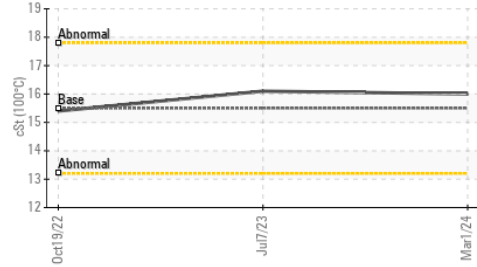
▲ Ferrous Alloys



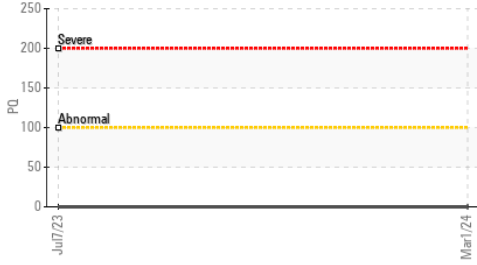
Base Number



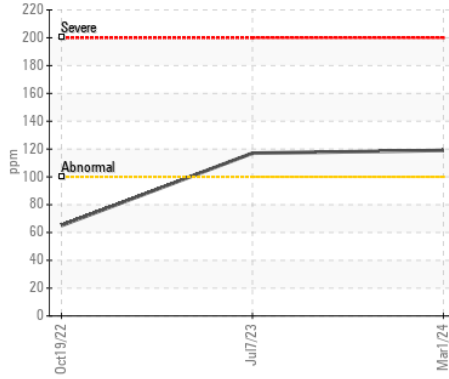
Viscosity @ 100°C



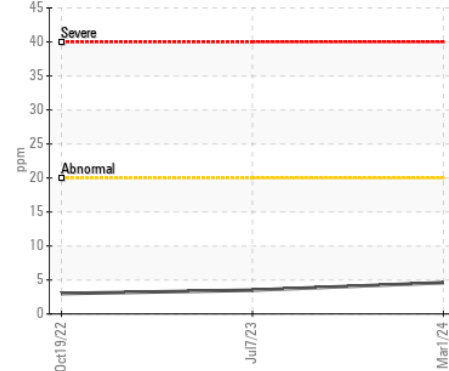
PQ



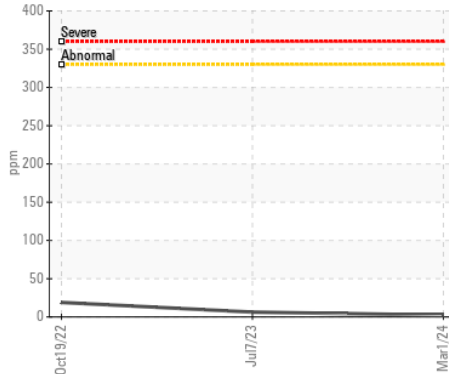
▲ Iron (ppm)



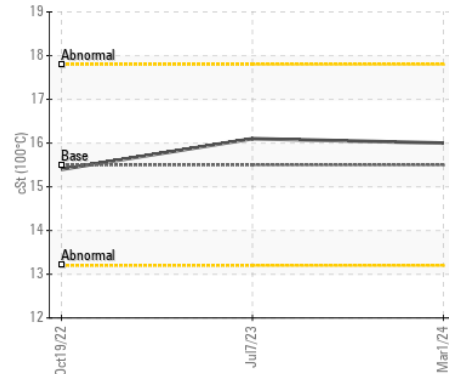
Aluminum (ppm)



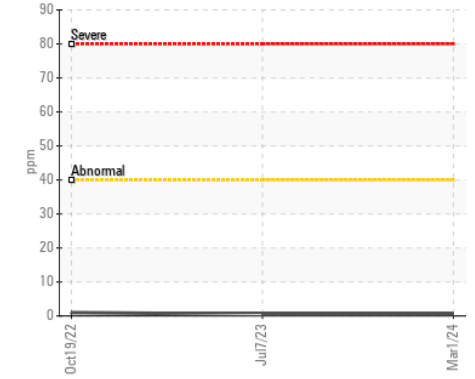
Copper (ppm)



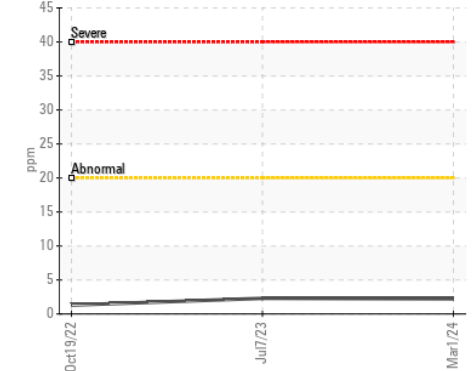
Viscosity @ 100°C



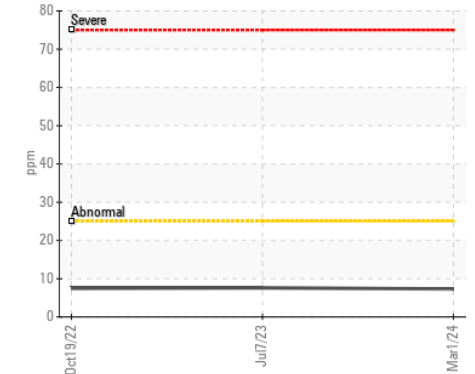
Lead (ppm)



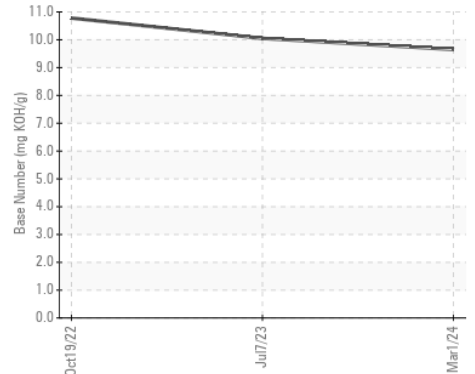
Chromium (ppm)



Silicon (ppm)



Base Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : TR02620736 **Received** : 08 Mar 2024
Lab Number : 02620736 **Tested** : 11 Mar 2024
Unique Number : 5737846 **Diagnosed** : 11 Mar 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: PQ)

DELCO COLONY
 BOX # 39
 NEW DAYTON, AB
 CA T0K 1P0
 Contact: Peter
 vfcserv@telus.net
 T: (403)222-2155
 F: (403)222-2167

To discuss this sample report, contact Customer Service at 1-800-827-0711.

* - 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)