



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**CHEVROLET K1212979**  
 Component  
**Gasoline Engine**  
 Fluid  
**TRC PRO-SPEC MULTI VISC 5W30 (6 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TR06176279</b>	TR06069173	TR05967203
Sample Date		Client Info		<b>21 Apr 2024</b>	17 Jan 2024	13 Sep 2023
Machine Age	mls	Client Info		<b>136339</b>	129033	120706
Oil Age	mls	Client Info		<b>7306</b>	8327	13822
Filter Age	mls	Client Info		<b>7306</b>	8327	6763
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>46</b>	62	82
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	1	2
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>40	<b>3</b>	4	2
Lead	ppm	ASTM D5185m	>50	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>155	<b>10</b>	17	21
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

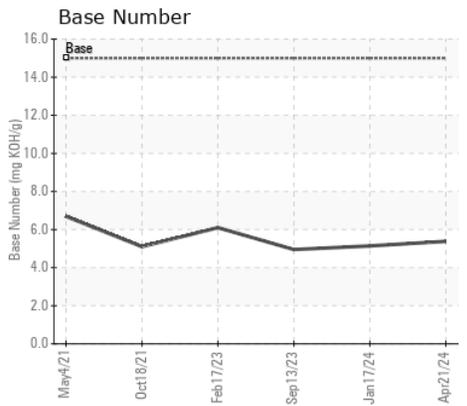
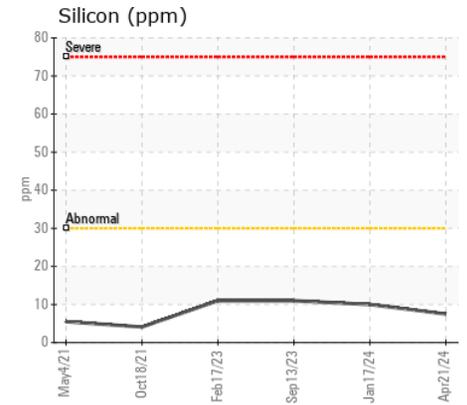
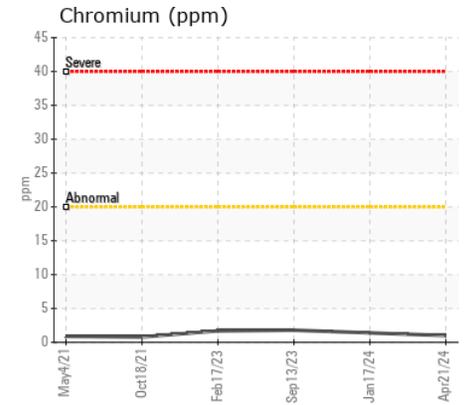
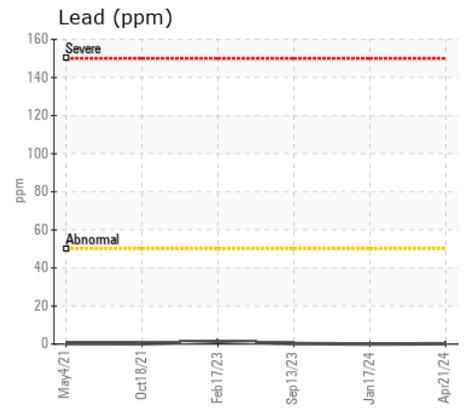
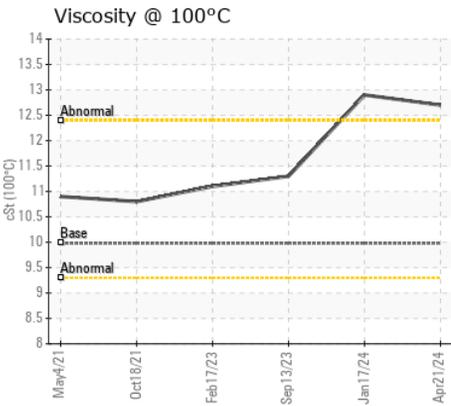
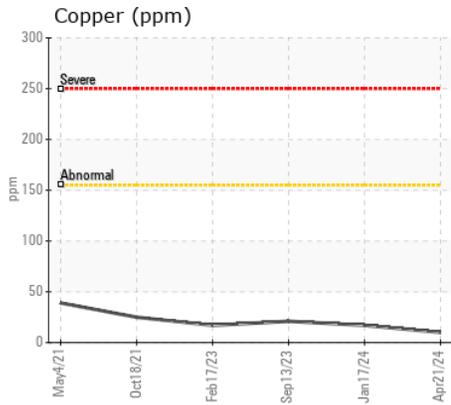
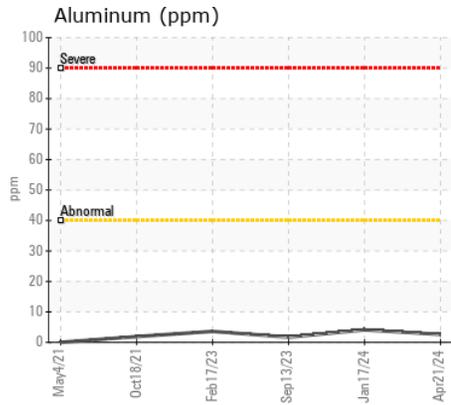
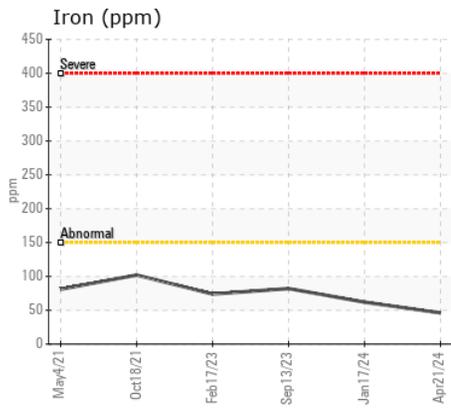
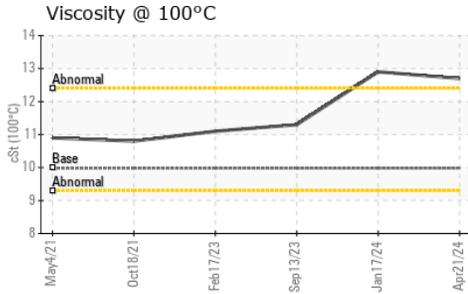
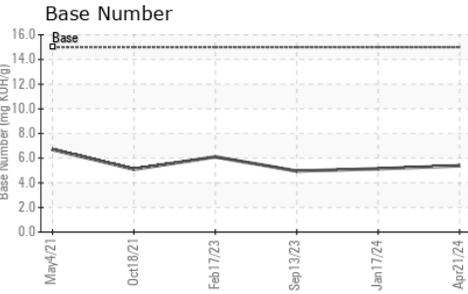
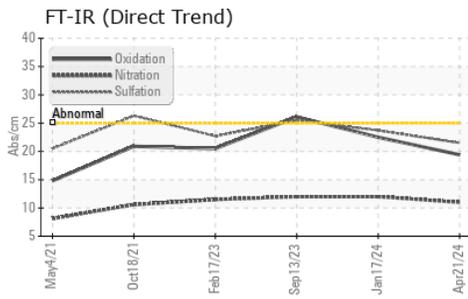
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>8</b>	10	11
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	1
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.0</b>	12.0	12.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.5</b>	23.7	25.5
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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	>400	<b>2</b>	2	6
Boron	ppm	ASTM D5185m		<b>26</b>	23	13
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>228</b>	224	228
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	2
Magnesium	ppm	ASTM D5185m		<b>425</b>	377	426
Calcium	ppm	ASTM D5185m	4200	<b>1479</b>	1183	1244
Phosphorus	ppm	ASTM D5185m	800	<b>641</b>	556	585
Zinc	ppm	ASTM D5185m	800	<b>832</b>	710	759
Sulfur	ppm	ASTM D5185m		<b>2359</b>	1818	1881
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.4</b>	22.5	26.1
Base Number (BN)	mg KOH/g	ASTM D2896	15	<b>5.38</b>	5.14	4.95
Visc @ 100°C	cSt	ASTM D445	9.98	<b>12.7</b>	12.9	11.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06176279  
**Lab Number** : 06176279  
**Unique Number** : 11022332  
**Test Package** : MOB 2  
**Received** : 10 May 2024  
**Tested** : 13 May 2024  
**Diagnosed** : 13 May 2024 - Wes Davis

**EAGLE CREEK COLONY**  
 333 2100 ROAD SOUTH BOX 78  
 GALATA, MT  
 US 59444  
 Contact: MARK OPHEIM

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)