TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
GMC SIERRA 2500 4203
Component
Diesel Engine
Fluid
TRC MOLY XL PRO-SPEC IV 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

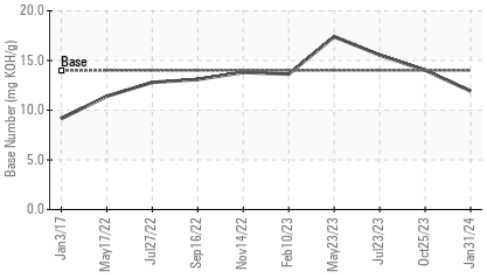
There is no indication of any contamination in the oil.

FLUID CONDITION

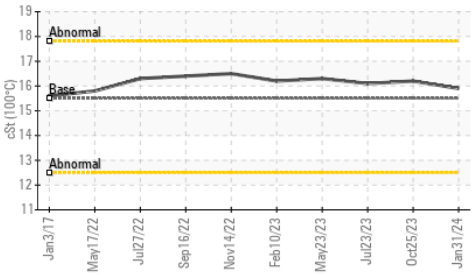
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06086203	TR05993800	TR05912045
Sample Date		Client Info		31 Jan 2024	25 Oct 2023	23 Jul 2023
Machine Age	mls	Client Info		188690	183426	178121
Oil Age	mls	Client Info		5000	5000	5000
Filter Age	mls	Client Info		5000	5000	5000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	12	12	9
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	4	2
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	0	1	<1
Tin	ppm	ASTM D5185m	>15	0	1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	8	10	8
Potassium	ppm	ASTM D5185m	>20	<1	4	3
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	0.6	0.1	0.6
Nitration	Abs/cm	*ASTM D7624	>20	11.9	6.5	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	18.9	20.3
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		2	3	3
Boron	ppm	ASTM D5185m		0	<1	3
Barium	ppm	ASTM D5185m		0	20	0
Molybdenum	ppm	ASTM D5185m		137	143	120
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		21	16	14
Calcium	ppm	ASTM D5185m	1300	4529	4281	4251
Phosphorus	ppm	ASTM D5185m		967	929	890
Zinc	ppm	ASTM D5185m	1300	1187	1040	1050
Sulfur	ppm	ASTM D5185m		4591	5592	5122
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.0	12.1	12.4
Base Number (BN)	mg KOH/g	ASTM D2896	14	11.91	14.02	15.55
Visc @ 100°C	cSt	ASTM D445	15.5	15.9	16.2	16.1

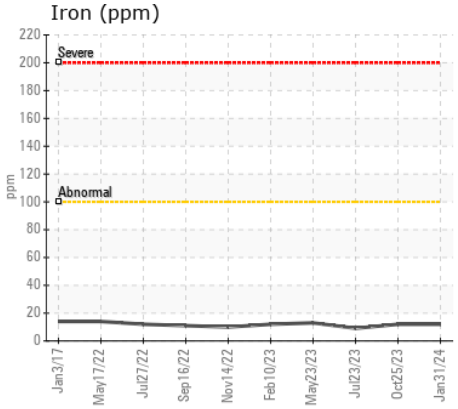
Base Number



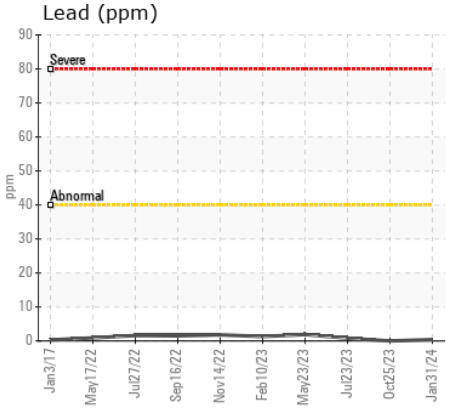
Viscosity @ 100°C



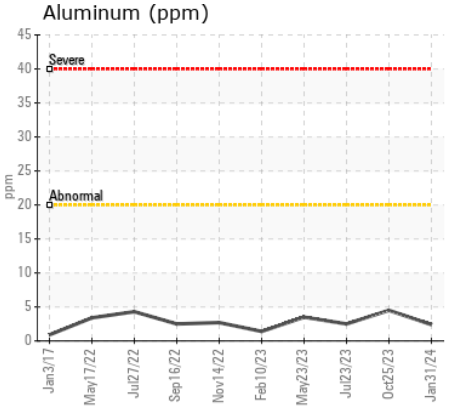
Iron (ppm)



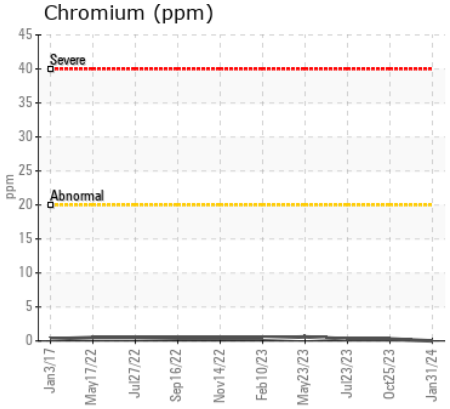
Lead (ppm)



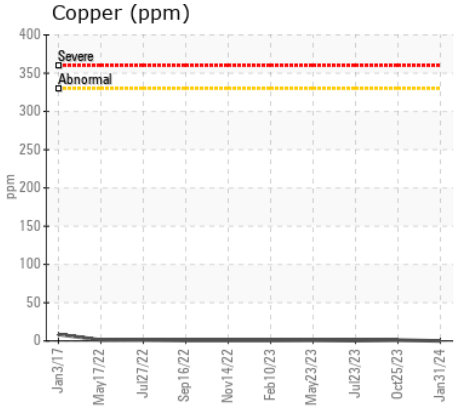
Aluminum (ppm)



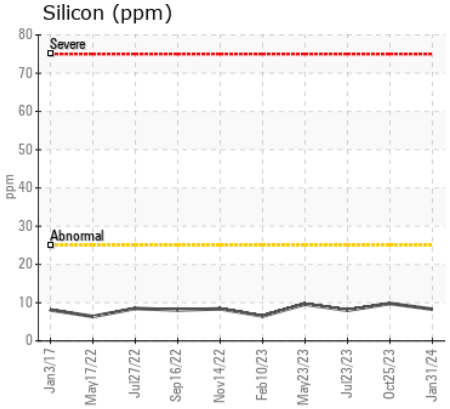
Chromium (ppm)



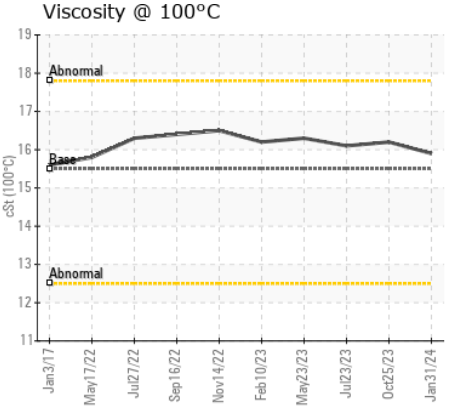
Copper (ppm)



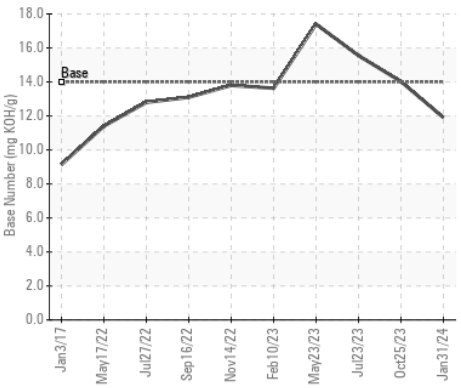
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: TR06086203	**Received**	: 12 Feb 2024
Lab Number	: 06086203	**Tested**	: 13 Feb 2024
Unique Number	: 10873648	**Diagnosed**	: 13 Feb 2024 - Wes Davis
Test Package	: MOB 2		

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)

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