



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
GMC VAN V-109
 Component
Gasoline Engine
 Fluid
NAPA 10W30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06218431	TR05988313	TR05634478
Sample Date		Client Info		06 Jun 2024	21 Sep 2023	22 Aug 2022
Machine Age	mls	Client Info		161140	154419	140150
Oil Age	mls	Client Info		5000	5000	8000
Filter Age	mls	Client Info		5000	5000	8000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	72	23	17
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	<1	0
Titanium	ppm	ASTM D5185m		2	<1	2
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>40	4	4	2
Lead	ppm	ASTM D5185m	>50	12	11	3
Copper	ppm	ASTM D5185m	>155	19	17	14
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

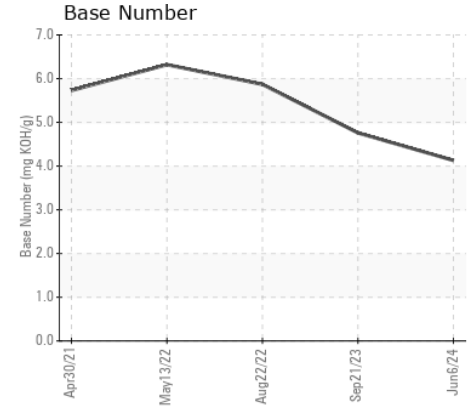
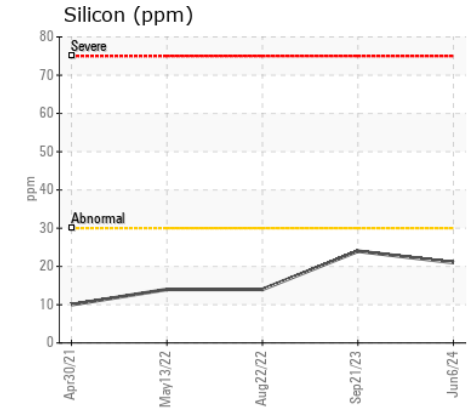
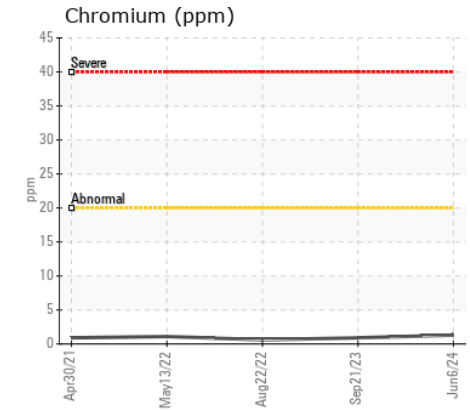
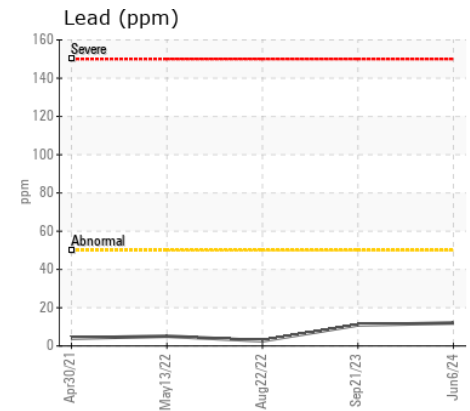
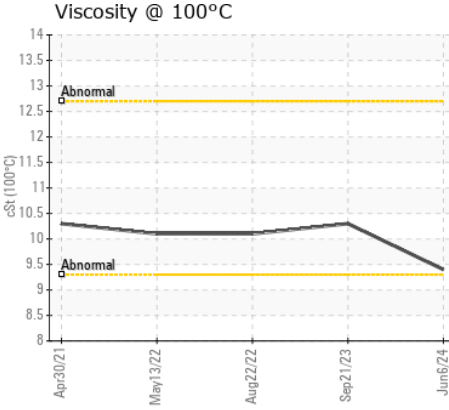
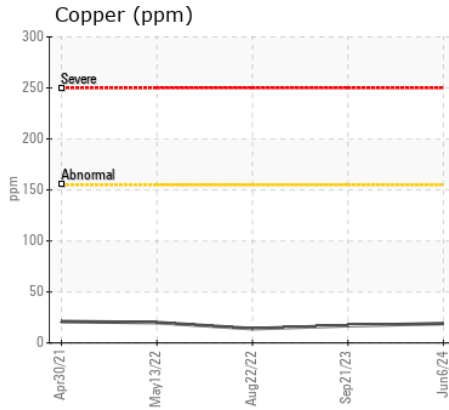
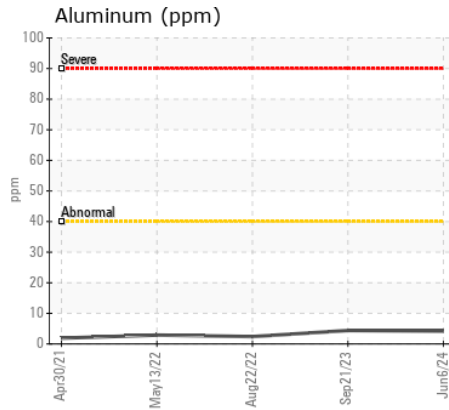
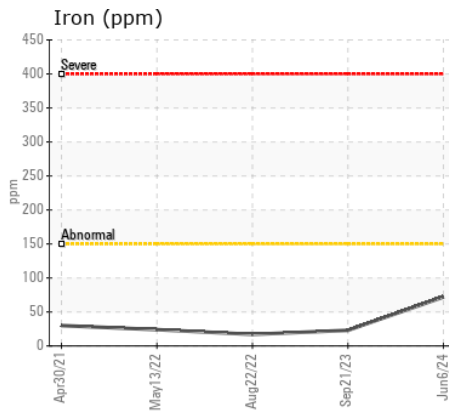
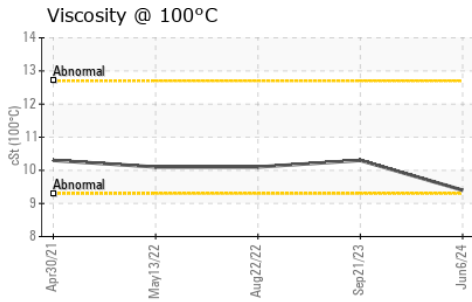
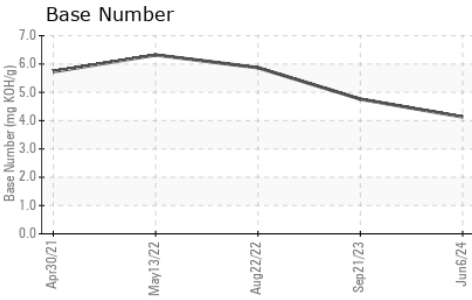
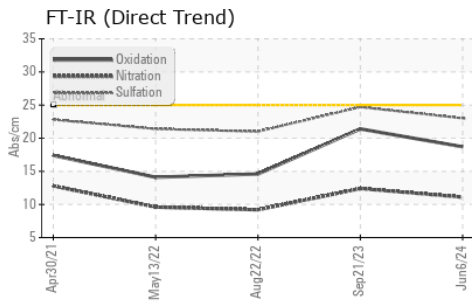
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	21	24	14
Potassium	ppm	ASTM D5185m	>20	4	2	<1
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
Soot %	%	*ASTM D7844		0.1	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.1	12.4	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.0	24.7	21.0
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

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	9	4	2
Boron	ppm	ASTM D5185m		46	35	48
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		113	277	241
Manganese	ppm	ASTM D5185m		2	1	<1
Magnesium	ppm	ASTM D5185m		450	466	424
Calcium	ppm	ASTM D5185m		1071	1221	1215
Phosphorus	ppm	ASTM D5185m		635	650	626
Zinc	ppm	ASTM D5185m		726	798	760
Sulfur	ppm	ASTM D5185m		2833	1945	1765
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.7	21.4	14.6
Base Number (BN)	mg KOH/g	ASTM D2896		4.13	4.76	5.87
Visc @ 100°C	cSt	ASTM D445		9.4	10.3	10.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06218431 **Received** : 24 Jun 2024
Lab Number : 06218431 **Tested** : 25 Jun 2024
Unique Number : 11096628 **Diagnosed** : 25 Jun 2024 - Sean Felton
Test Package : MOB 2 (Additional Tests: PQ)

CHERRY HILL FARMS
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 US 84655
 Contact: JOHN AAGARD

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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