



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
1220
Component
Gasoline Engine
Fluid
SAE 0W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0950732	WC0924603	WC0905170
Sample Date		Client Info		29 Jun 2024	30 Apr 2024	23 Feb 2024
Machine Age	mls	Client Info		196346	188400	179714
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	22	35	55
Chromium	ppm	ASTM D5185m	>20	<1	1	2
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>40	6	8	15
Lead	ppm	ASTM D5185m	>50	0	<1	<1
Copper	ppm	ASTM D5185m	>155	57	63	97
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

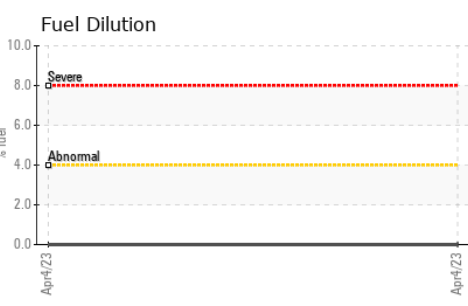
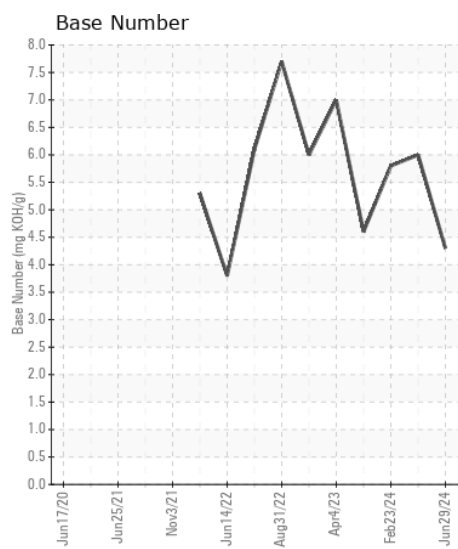
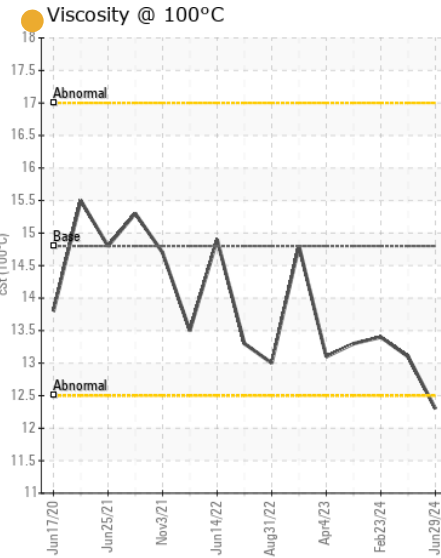
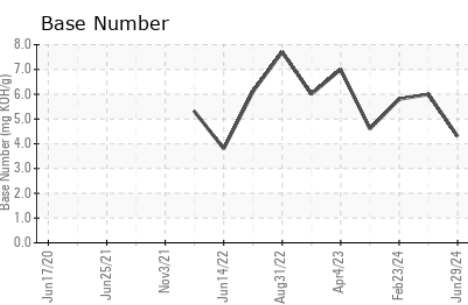
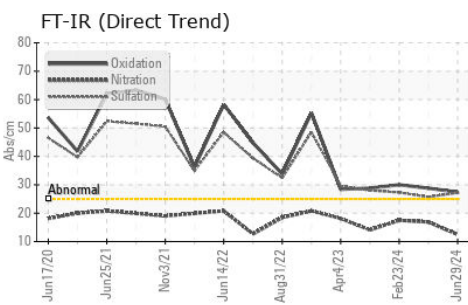
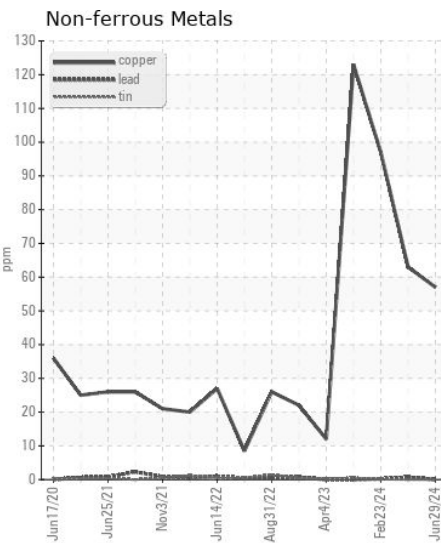
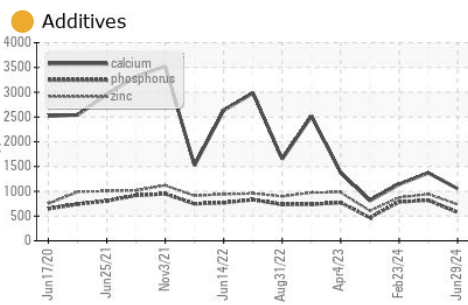
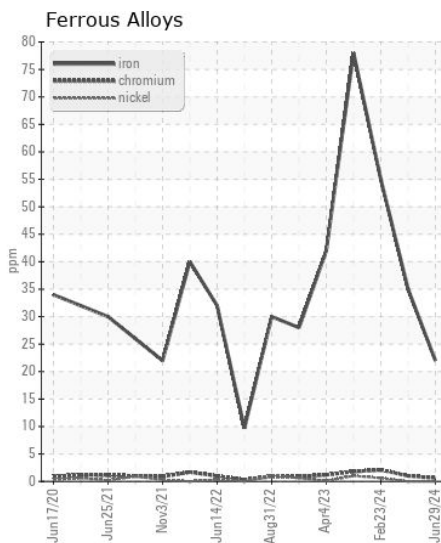
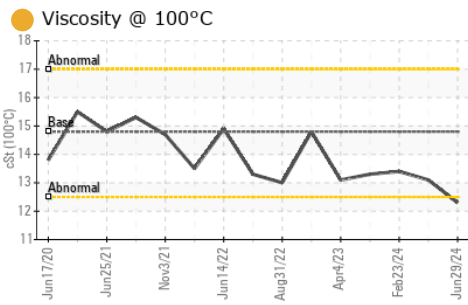
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	13	27	25
Potassium	ppm	ASTM D5185m	>20	4	2	6
Fuel	%	ASTM D3524	>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	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	12.5	16.9	17.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.2	25.7	27.3
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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 oil viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>400	3	4	5
Boron	ppm	ASTM D5185m		35	69	82
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		203	68	89
Manganese	ppm	ASTM D5185m		20	10	10
Magnesium	ppm	ASTM D5185m		700	1016	865
Calcium	ppm	ASTM D5185m		1053	1370	1141
Phosphorus	ppm	ASTM D5185m		576	817	784
Zinc	ppm	ASTM D5185m		734	942	873
Sulfur	ppm	ASTM D5185m		2033	2101	1880
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.4	28.8	30.0
Base Number (BN)	mg KOH/g	ASTM D2896		4.3	6.0	5.8
Visc @ 100°C	cSt	ASTM D445	14.8	12.3	13.1	13.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0950732 **Received** : 03 Jul 2024
Lab Number : 06227059 **Tested** : 05 Jul 2024
Unique Number : 11110552 **Diagnosed** : 05 Jul 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)
 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)

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