CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
13436
Component
Gasoline Engine
Fluid
GASOLINE ENGINE OIL SAE 5W20 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

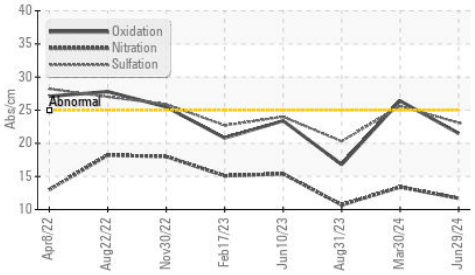
There is no indication of any contamination in the oil.

FLUID CONDITION

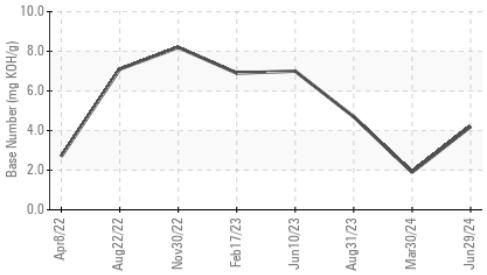
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0950733**	WC0905251	WC0810034
Sample Date		Client Info		**29 Jun 2024**	30 Mar 2024	31 Aug 2023
Machine Age	mls	Client Info		**41277**	37692	32339
Oil Age	mls	Client Info		**0**	0	0
Filter Age	mls	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	Changed
Filter Changed		Client Info		**N/A**	N/A	Changed
Sample Status				**NORMAL**	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>150	**21**	56	14
Chromium	ppm	ASTM D5185m	>20	**<1**	2	<1
Nickel	ppm	ASTM D5185m	>5	**0**	2	0
Titanium	ppm	ASTM D5185m		**0**	<1	<1
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>40	**6**	12	5
Lead	ppm	ASTM D5185m	>50	**0**	<1	0
Copper	ppm	ASTM D5185m	>155	**37**	97	46
Tin	ppm	ASTM D5185m	>10	**0**	1	<1
Vanadium	ppm	ASTM D5185m		**0**	<1	0
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>30	**11**	26	8
Potassium	ppm	ASTM D5185m	>20	**3**	12	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**	0	0
Nitration	Abs/cm	*ASTM D7624	>20	**11.7**	13.4	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	**23.1**	25.6	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	>50	**3**	13	5
Boron	ppm	ASTM D5185m	75	**10**	8	31
Barium	ppm	ASTM D5185m	5	**0**	0	0
Molybdenum	ppm	ASTM D5185m	100	**245**	85	67
Manganese	ppm	ASTM D5185m		**15**	15	1
Magnesium	ppm	ASTM D5185m	12	**508**	661	598
Calcium	ppm	ASTM D5185m	2100	**1292**	1491	1189
Phosphorus	ppm	ASTM D5185m	650	**688**	861	697
Zinc	ppm	ASTM D5185m	850	**861**	1098	868
Sulfur	ppm	ASTM D5185m	2500	**1699**	2394	2719
Oxidation	Abs/.1mm	*ASTM D7414	>25	**21.5**	26.4	16.8
Base Number (BN)	mg KOH/g	ASTM D2896		**4.2**	▲ 1.9	4.7
Visc @ 100°C	cSt	ASTM D445	7.5	**10.8**	10.0	10.5

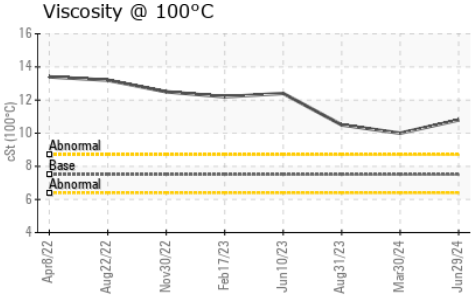
FT-IR (Direct Trend)



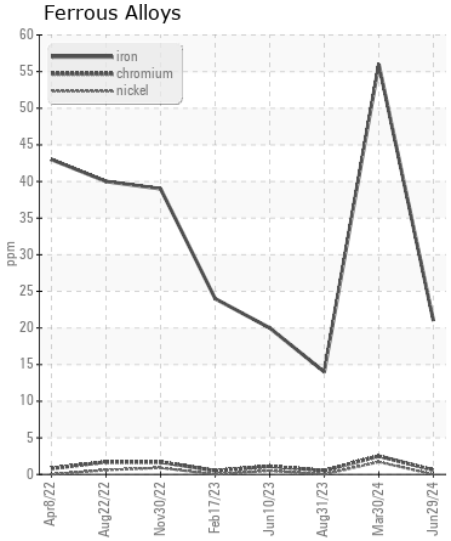
Base Number



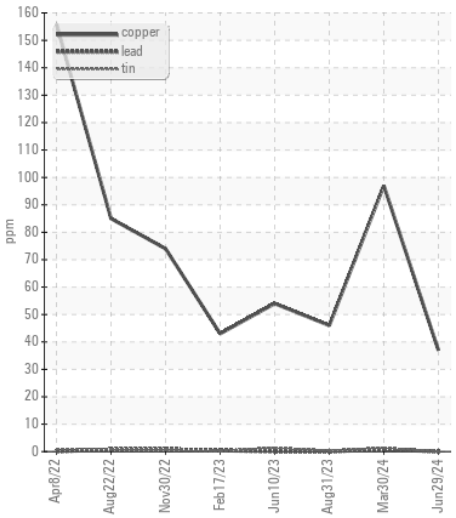
Viscosity @ 100°C



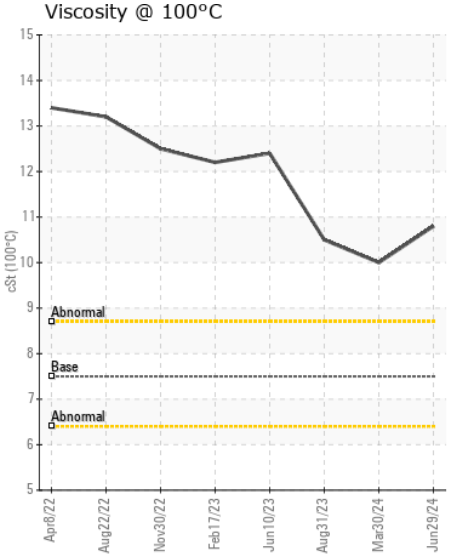
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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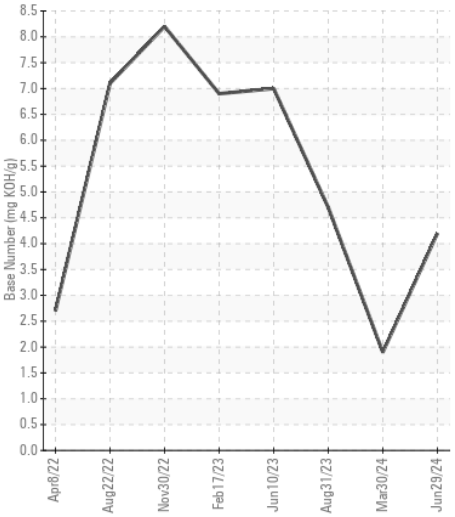

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0950733 **Received** : 03 Jul 2024
Lab Number : 06227045 **Tested** : 05 Jul 2024
Unique Number : 11110538 **Diagnosed** : 05 Jul 2024 - Don Baldridge
Test Package : CONST (Additional Tests: 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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