



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
23556
Component
Diesel Engine
Fluid
EXXON 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0875958	WC0875755	WC0717608
Sample Date		Client Info		17 May 2024	02 Nov 2023	25 May 2023
Machine Age	mls	Client Info		310169	280728	254546
Oil Age	mls	Client Info		20000	0	0
Filter Age	mls	Client Info		20000	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	5	4	9
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		2	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	4	6
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	1	2	6
Tin	ppm	ASTM D5185m	>15	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

CONTAMINATION

There is no indication of any contamination in the oil.

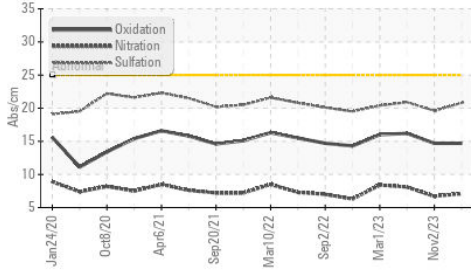
Silicon	ppm	ASTM D5185m	>25	4	3	3
Potassium	ppm	ASTM D5185m	>20	3	5	8
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.1	6.7	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8	19.6	20.9
Silt	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

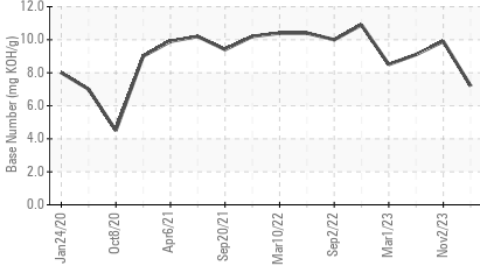
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	<1	2
Boron	ppm	ASTM D5185m		331	5	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		74	82	62
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		514	977	989
Calcium	ppm	ASTM D5185m		1390	1097	1161
Phosphorus	ppm	ASTM D5185m		1011	946	1026
Zinc	ppm	ASTM D5185m		1183	1251	1304
Sulfur	ppm	ASTM D5185m		3577	3139	3737
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.7	14.7	16.2
Base Number (BN)	mg KOH/g	ASTM D2896		7.2	9.9	9.1
Visc @ 100°C	cSt	ASTM D445	14.4	13.7	13.2	13.7

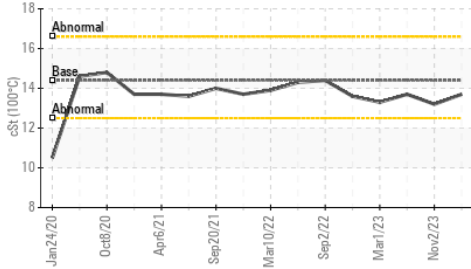
FT-IR (Direct Trend)



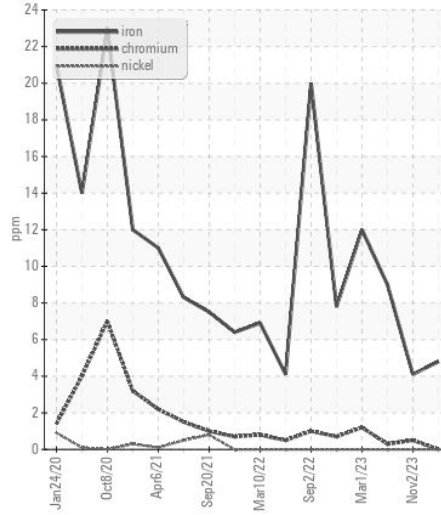
Base Number



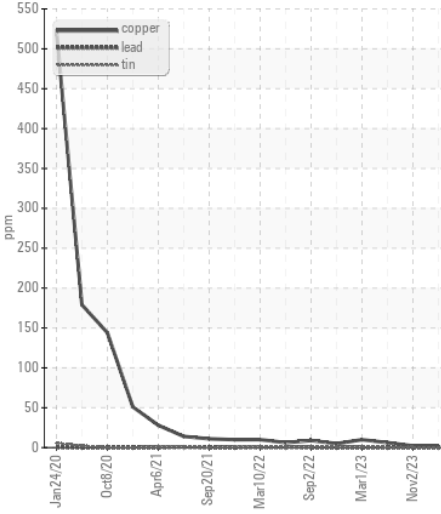
Viscosity @ 100°C



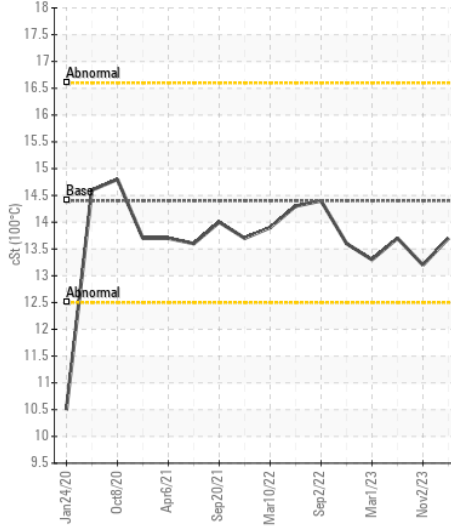
Ferrous Alloys



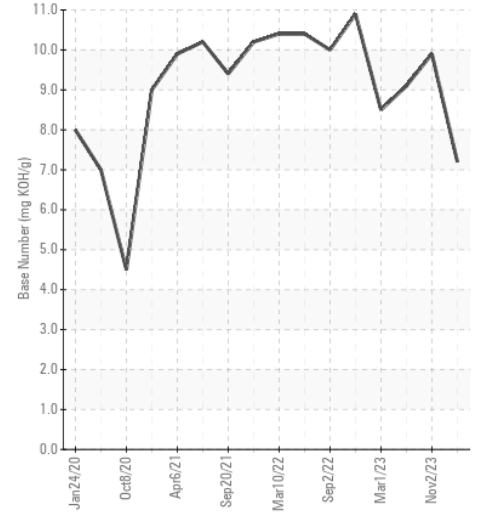
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0875958

Lab Number : 06191729

Unique Number : 11048481

Test Package : FLEET

Received : 24 May 2024

Tested : 29 May 2024

Diagnosed : 29 May 2024 - Angela Borella

SALEM NATIONALEASE CORPORATION

198 PARK PLAZA DRIVE

WINSTON SALEM, NC

US 27105

Contact: Audrey Hopkins

Audrey.Hopkins@salemcorp.com

T: (336)767-9642

F: x:

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)