



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
31130
Component
Diesel Engine
Fluid
EXXON 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0933289	WC0903486	WC0885572
Sample Date		Client Info		10 May 2024	22 Mar 2024	02 Feb 2024
Machine Age	mls	Client Info		182871	161020	139017
Oil Age	mls	Client Info		21851	22003	24845
Filter Age	mls	Client Info		21851	22003	24845
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	>100	10	8	14
Chromium	ppm	ASTM D5185m	>20	1	1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	8	17
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	5	6	12
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

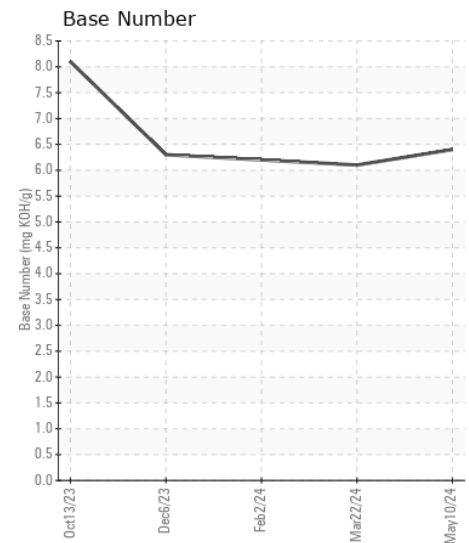
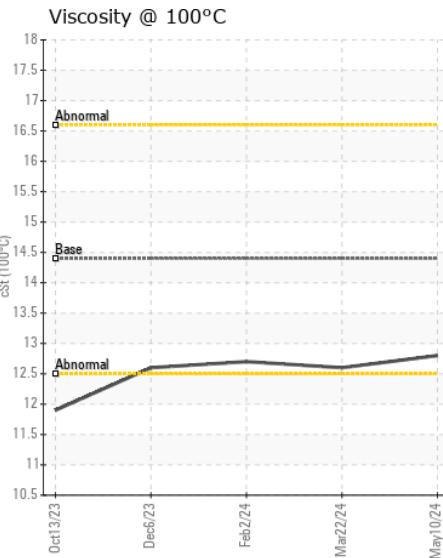
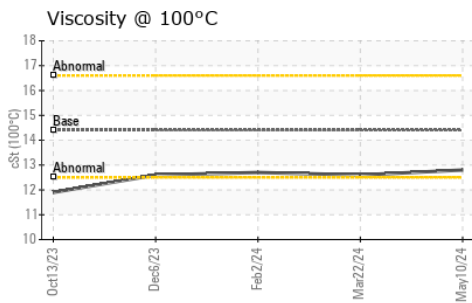
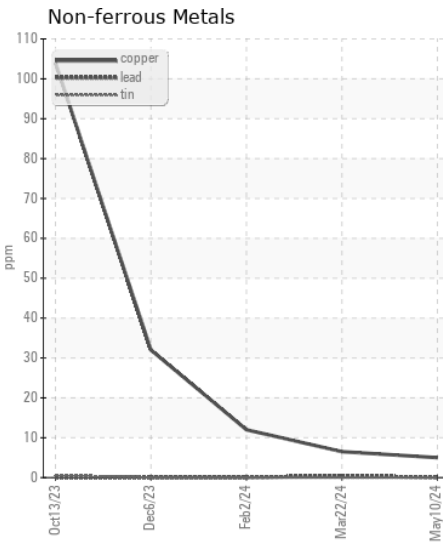
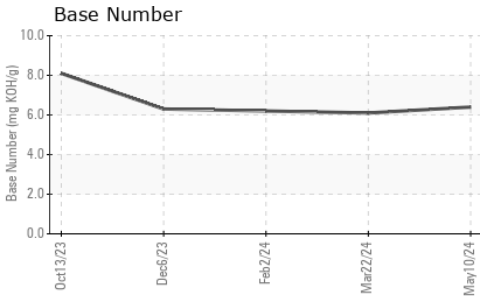
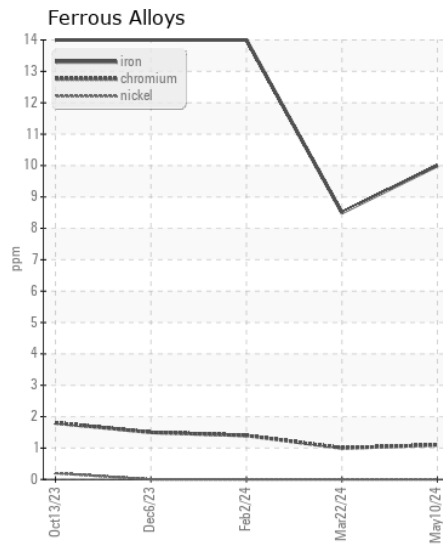
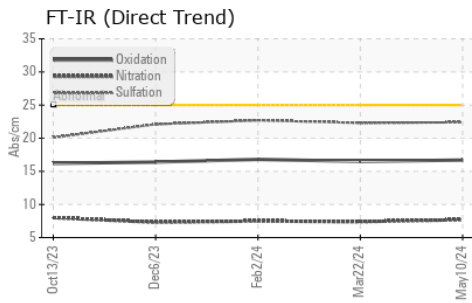
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	4	5
Potassium	ppm	ASTM D5185m	>20	9	16	32
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	0.4	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.7	7.4	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	22.3	22.7
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		2	2	1
Boron	ppm	ASTM D5185m		222	243	225
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		90	84	84
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		399	385	482
Calcium	ppm	ASTM D5185m		1472	1471	1502
Phosphorus	ppm	ASTM D5185m		1025	947	1077
Zinc	ppm	ASTM D5185m		1265	1263	1372
Sulfur	ppm	ASTM D5185m		3430	3436	3254
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	16.5	16.8
Base Number (BN)	mg KOH/g	ASTM D2896		6.4	6.1	6.2
Visc @ 100°C	cSt	ASTM D445	14.4	12.8	12.6	12.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0933289
Lab Number : 06211113
Unique Number : 11083977
Test Package : FLEET

Received : 14 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 19 Jun 2024 - Sean Felton

SALEM NATIONALEASE CORPORATION
 198 PARK PLAZA DRIVE
 WINSTON SALEM, NC
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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)