



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
INTERNATIONAL 35821
Component
Front Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (44 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		WC0936739	WC0882304	WC05268924
Sample Date		Client Info		11 Jun 2024	27 Dec 2023	29 Mar 2021
Machine Age	mls	Client Info		354440	354438	0
Oil Age	mls	Client Info		10000	0	0
Filter Age	mls	Client Info		10000	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				ABNORMAL	ATTENTION	NORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	▲ 101	29	21
Chromium	ppm	ASTM D5185m	>20	<1	<1	2
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	4
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	11	2	4
Lead	ppm	ASTM D5185m	>40	1	1	6
Copper	ppm	ASTM D5185m	>330	4	2	3
Tin	ppm	ASTM D5185m	>15	<1	0	1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

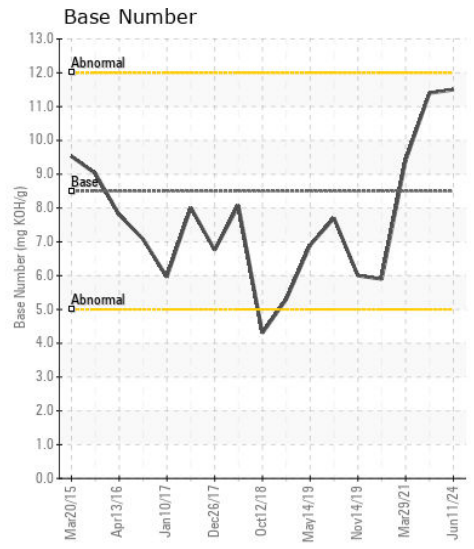
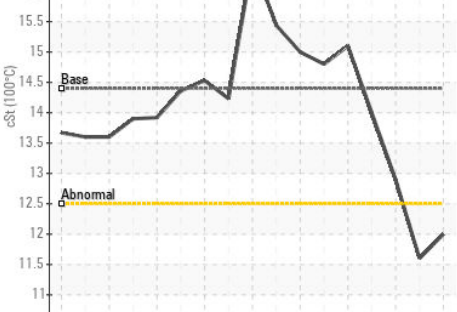
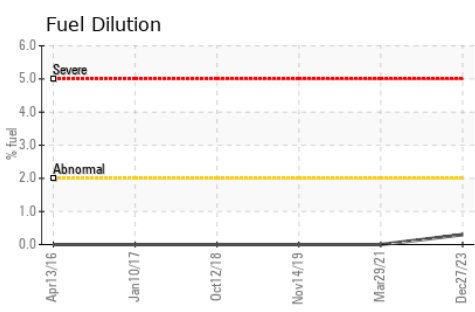
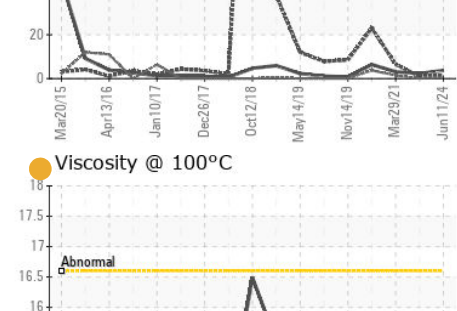
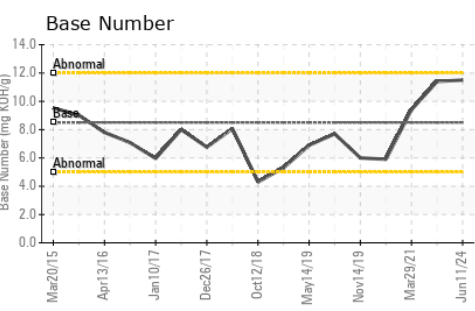
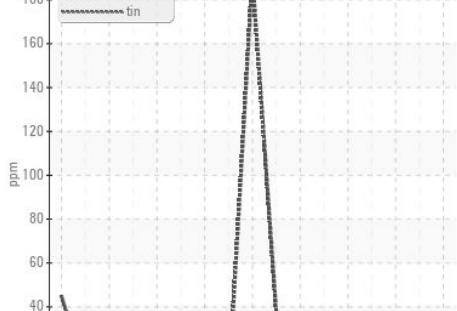
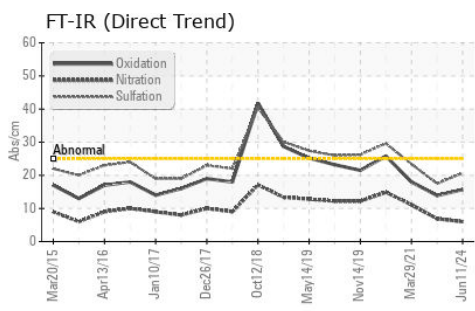
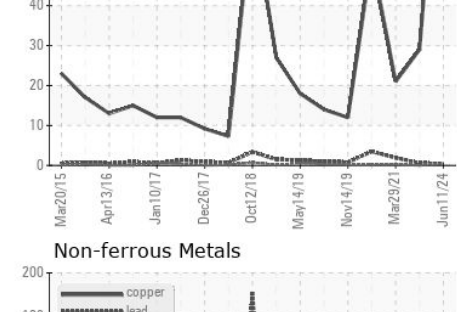
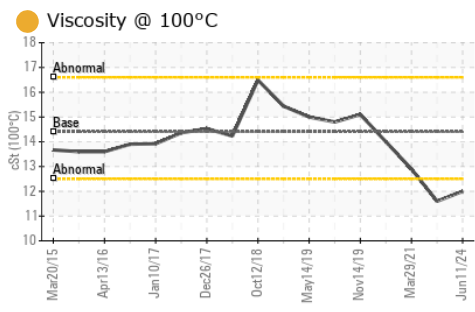
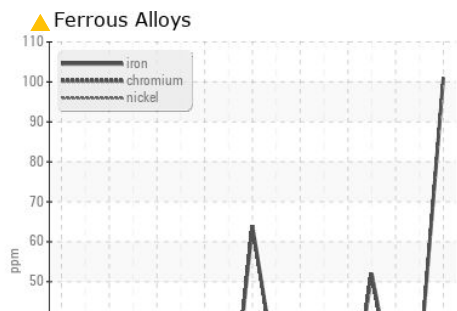
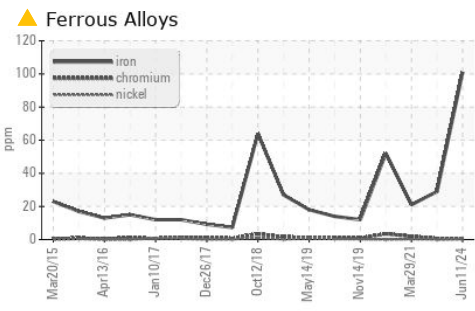
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	13	15	11
Potassium	ppm	ASTM D5185m	>20	3	<1	<1
Fuel	%	ASTM D3524	>2.0	<1.0	0.3	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.3	0.7
Nitration	Abs/cm	*ASTM D7624	>20	6.0	6.9	11.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	17.5	23.4
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>158	1	1	4
Boron	ppm	ASTM D5185m	250	279	15	9
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	108	67	63
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m	450	747	910	891
Calcium	ppm	ASTM D5185m	3000	1427	1121	1239
Phosphorus	ppm	ASTM D5185m	1150	826	1026	987
Zinc	ppm	ASTM D5185m	1350	963	1244	1163
Sulfur	ppm	ASTM D5185m	4250	3261	3194	2642
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	13.9	18
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	11.5	11.4	9.4
Visc @ 100°C	cSt	ASTM D445	14.4	● 12.0	● 11.6	12.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0936739 **Received** : 21 Jun 2024
Lab Number : 06217540 **Tested** : 25 Jun 2024
Unique Number : 11090404 **Diagnosed** : 25 Jun 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)
 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)

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: