



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area NSE-AL-TRACTOR (NEW SOUTH EXPRESS)

Machine Id
AUTOCAR NSE21006

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		NL0002235	NL0001749	NL0000885
Sample Date		Client Info		10 Apr 2024	06 Dec 2023	02 Jun 2022
Machine Age	mls	Client Info		11986	10157	3638
Oil Age	mls	Client Info		1829	0	289
Filter Age	mls	Client Info		0	0	289
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	51	17	54
Chromium	ppm	ASTM D5185m	>20	2	1	2
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	13	6	6
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	0	1	2
Tin	ppm	ASTM D5185m	>15	<1	0	<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

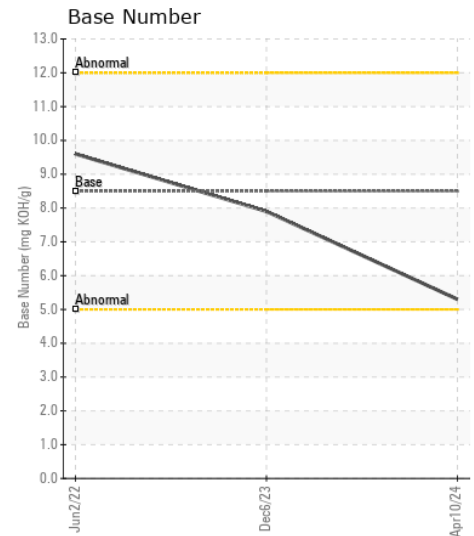
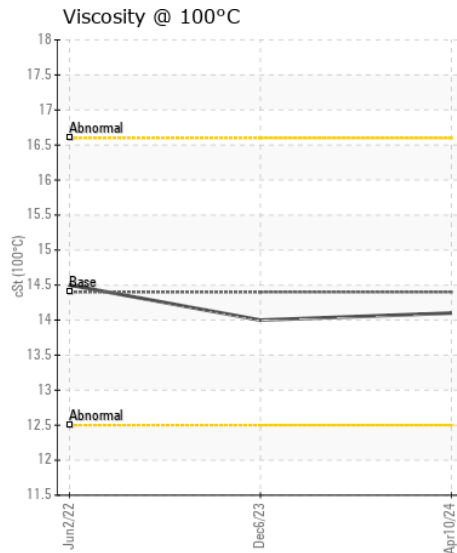
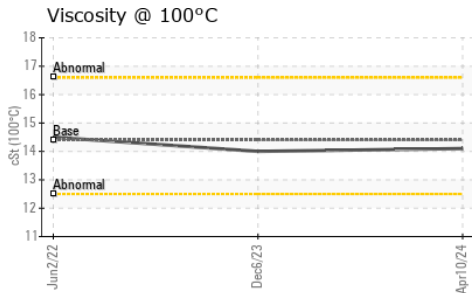
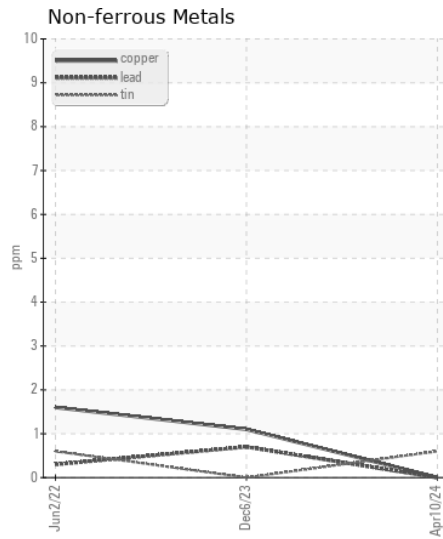
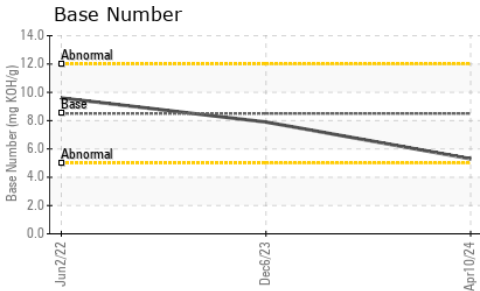
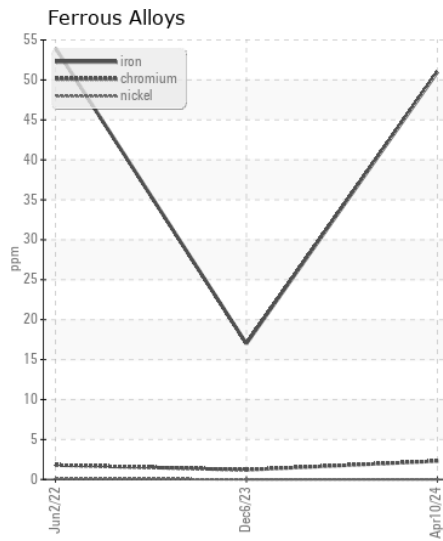
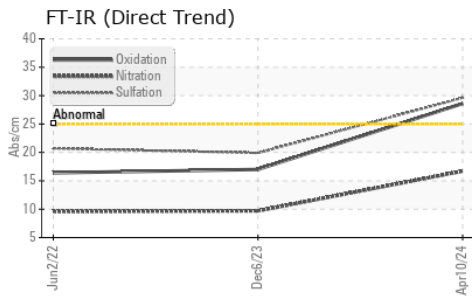
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	4	5
Potassium	ppm	ASTM D5185m	>20	3	<1	1
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	2.6	1	1.2
Nitration	Abs/cm	*ASTM D7624	>20	16.7	9.7	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.6	19.9	20.7
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	>216	2	<1	1
Boron	ppm	ASTM D5185m	250	3	<1	4
Barium	ppm	ASTM D5185m	10	0	0	<1
Molybdenum	ppm	ASTM D5185m	100	62	59	59
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	450	906	974	901
Calcium	ppm	ASTM D5185m	3000	1030	1026	1052
Phosphorus	ppm	ASTM D5185m	1150	1010	1027	985
Zinc	ppm	ASTM D5185m	1350	1195	1291	1195
Sulfur	ppm	ASTM D5185m	4250	2969	3027	2948
Oxidation	Abs/.1mm	*ASTM D7414	>25	28.6	17.0	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.3	7.9	9.6
Visc @ 100°C	cSt	ASTM D445	14.4	14.1	14.0	14.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : NL0002235
Lab Number : 06157362
Unique Number : 10992785
Test Package : FLEET

Received : 23 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 25 Apr 2024 - Jonathan Hester

KIRK NATIONALEASE - SHOP 49
 601 England Rd.
 Lincoln, AL
 US 35096

Contact: Skip Womack
 shop49@knl.cc

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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