



OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**NSE-AL-TRACTOR (NEW SOUTH EXPRESS)**

Machine Id  
**AUTOCAR NSE21008**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>NL0002290</b>	NL0002155	NL0001746
Sample Date		Client Info		<b>10 May 2024</b>	27 Feb 2024	11 Dec 2023
Machine Age	hrs	Client Info		<b>14389</b>	14389	13360
Oil Age	hrs	Client Info		<b>0</b>	0	9570
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>9</b>	<1	11
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	4	7
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

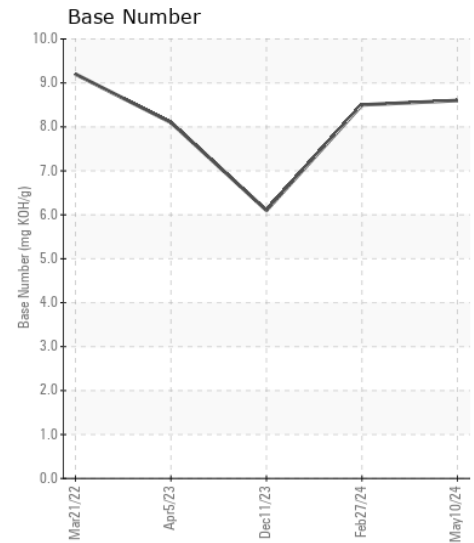
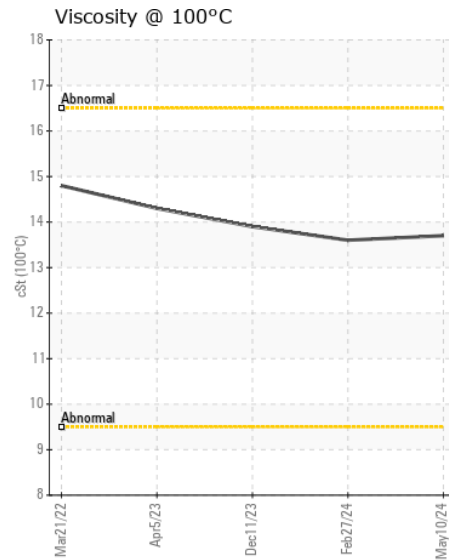
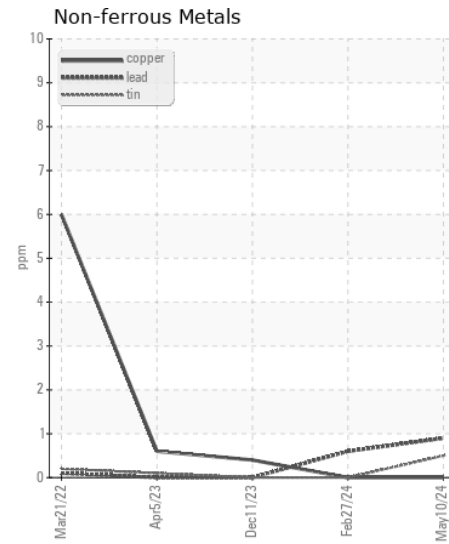
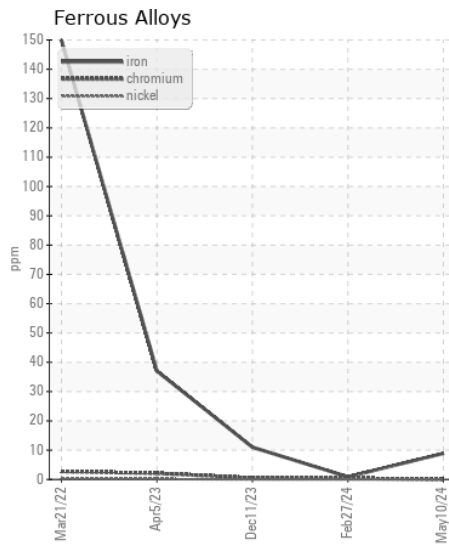
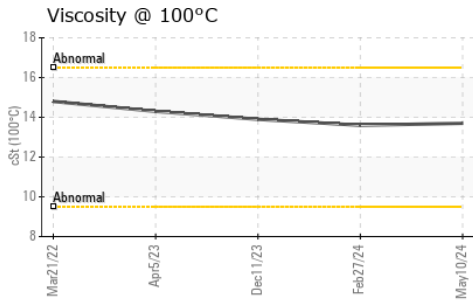
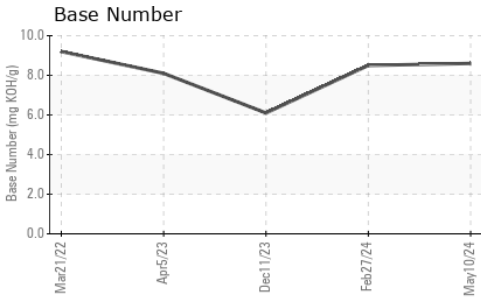
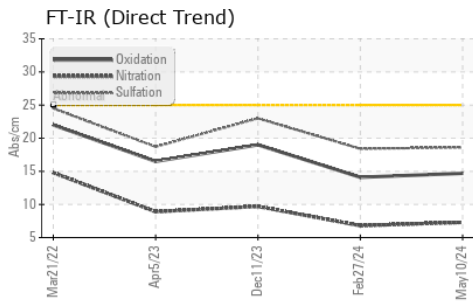
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	2	3
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	12	13
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.4	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.3</b>	6.8	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.6</b>	18.4	23.0
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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	>75	<b>&lt;1</b>	5	2
Boron	ppm	ASTM D5185m		<b>2</b>	5	84
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>59</b>	62	7
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>934</b>	1046	122
Calcium	ppm	ASTM D5185m		<b>1020</b>	1185	1839
Phosphorus	ppm	ASTM D5185m		<b>1064</b>	1150	946
Zinc	ppm	ASTM D5185m		<b>1240</b>	1412	1144
Sulfur	ppm	ASTM D5185m		<b>3530</b>	3459	3187
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.7</b>	14.1	19.0
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.6</b>	8.5	6.1
Visc @ 100°C	cSt	ASTM D445		<b>13.7</b>	13.6	13.9



Certificate L2367

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

**Sample No.** : NL0002290

**Lab Number** : 06187016

**Unique Number** : 11043768

**Test Package** : FLEET

**Received** : 21 May 2024

**Tested** : 23 May 2024

**Diagnosed** : 23 May 2024 - Sean Felton

**KIRK NATIONALEASE - SHOP 49**

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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)