



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

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

Machine Id  
**AUTOCAR NSE21018**

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		NL0002151	NL0001935	---
Sample Date		Client Info		02 Apr 2024	27 Dec 2023	---
Machine Age	mls	Client Info		11853	10660	---
Oil Age	mls	Client Info		1193	0	---
Filter Age	mls	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	49	64	---
Chromium	ppm	ASTM D5185m	>20	3	3	---
Nickel	ppm	ASTM D5185m	>4	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	22	22	---
Lead	ppm	ASTM D5185m	>40	<1	<1	---
Copper	ppm	ASTM D5185m	>330	2	2	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

**CONTAMINATION**

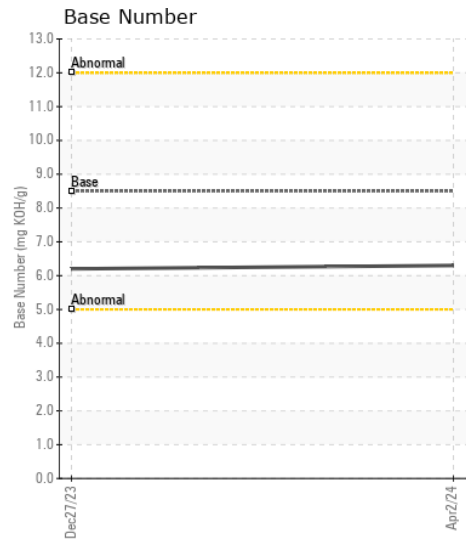
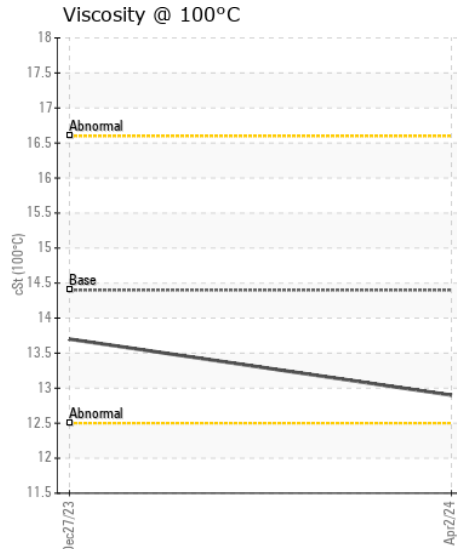
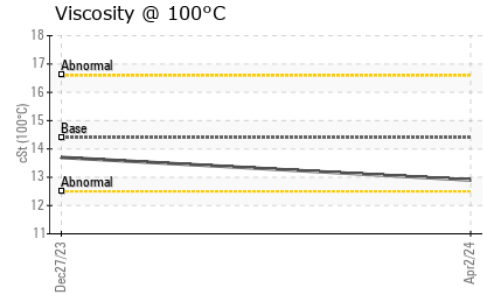
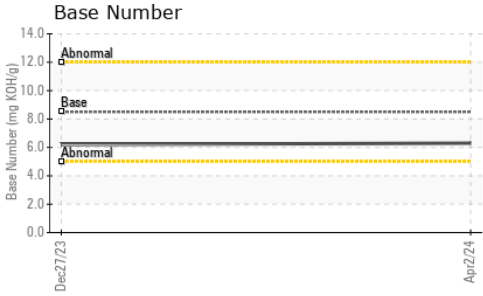
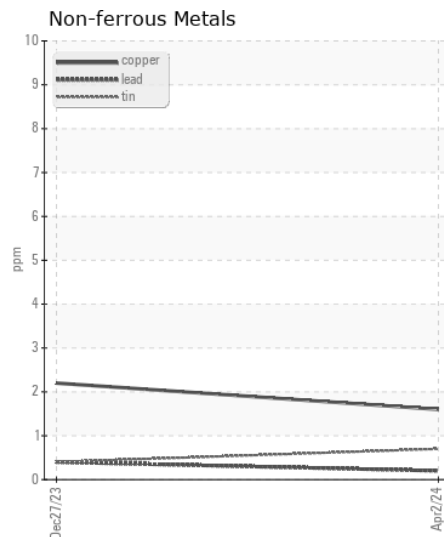
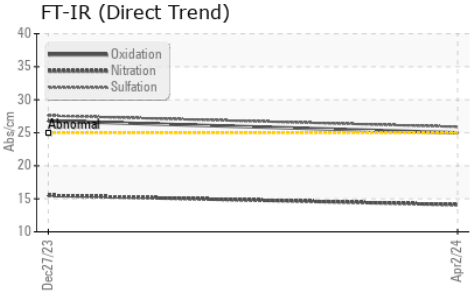
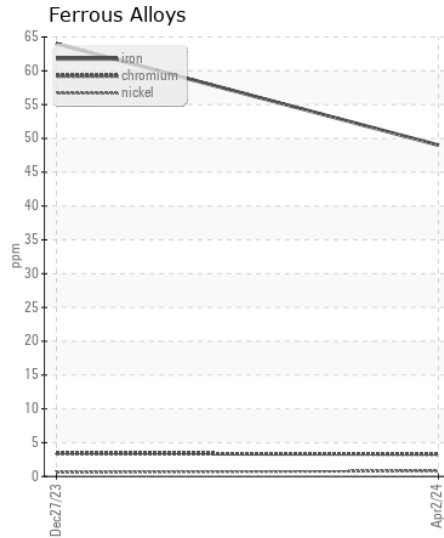
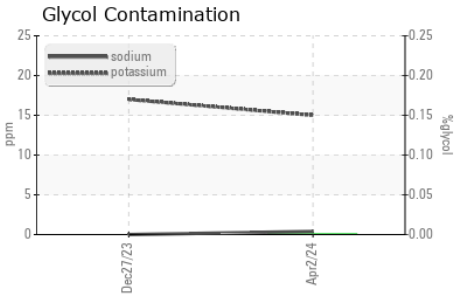
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	7	---
Potassium	ppm	ASTM D5185m	>20	15	17	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol	%	*ASTM D2982		0.0	NEG	---
Soot %	%	*ASTM D7844	>3	1.7	2.1	---
Nitration	Abs/cm	*ASTM D7624	>20	14.1	15.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.9	27.6	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	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	<1	0	---
Boron	ppm	ASTM D5185m	250	2	0	---
Barium	ppm	ASTM D5185m	10	1	8	---
Molybdenum	ppm	ASTM D5185m	100	59	61	---
Manganese	ppm	ASTM D5185m		1	1	---
Magnesium	ppm	ASTM D5185m	450	880	936	---
Calcium	ppm	ASTM D5185m	3000	1042	1068	---
Phosphorus	ppm	ASTM D5185m	1150	979	926	---
Zinc	ppm	ASTM D5185m	1350	1157	1207	---
Sulfur	ppm	ASTM D5185m	4250	2870	2825	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.0	26.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.3	6.2	---
Visc @ 100°C	cSt	ASTM D445	14.4	12.9	13.7	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : NL0002151 **Received** : 16 Apr 2024  
**Lab Number** : 06149770 **Tested** : 17 Apr 2024  
**Unique Number** : 10979848 **Diagnosed** : 18 Apr 2024 - Don Baldrige  
**Test Package** : FLEET ( Additional Tests: Glycol )

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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)