



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

NSE-AL-TRACTOR (NEW SOUTH EXPRESS)

Machine Id
AUTOCAR NSE21006

Component
Diesel Engine

Fluid
PETRO CANADA 15W40 (17 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		NL0002207	NL0002235	NL0001749
Sample Date		Client Info		03 Jul 2024	10 Apr 2024	06 Dec 2023
Machine Age	hrs	Client Info		13097	11986	10157
Oil Age	hrs	Client Info		598	1829	0
Filter Age	hrs	Client Info		598	0	0
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	16	51	17
Chromium	ppm	ASTM D5185m	>20	<1	2	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	13	6
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	<1	0	1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

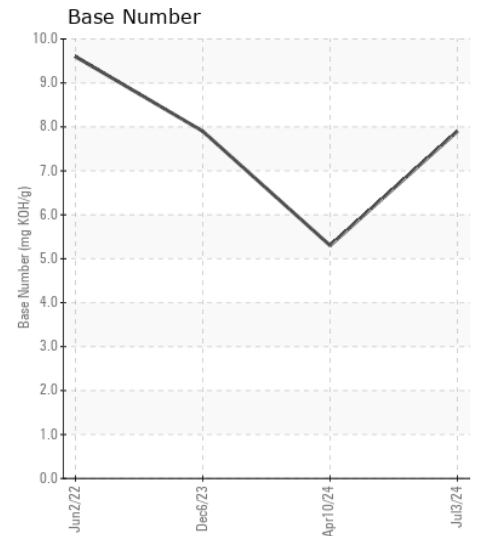
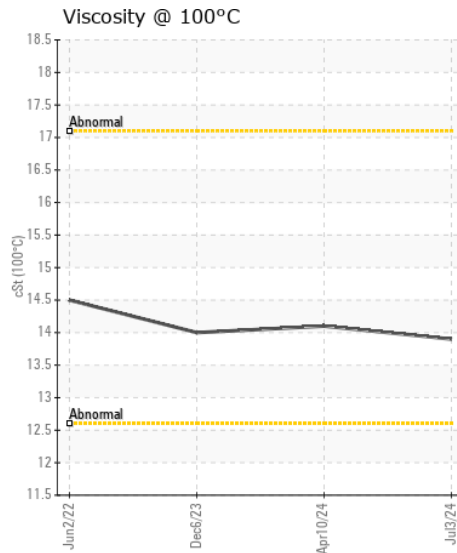
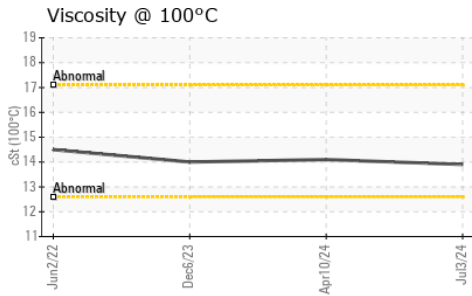
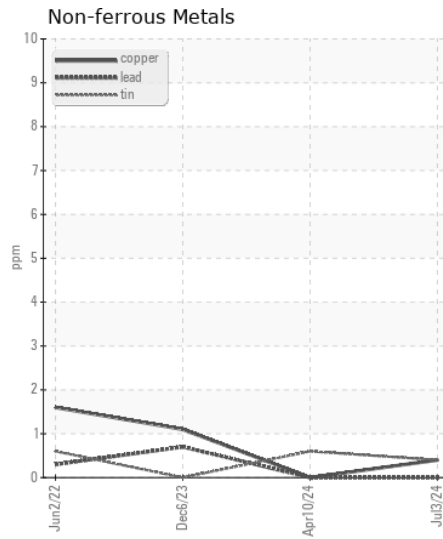
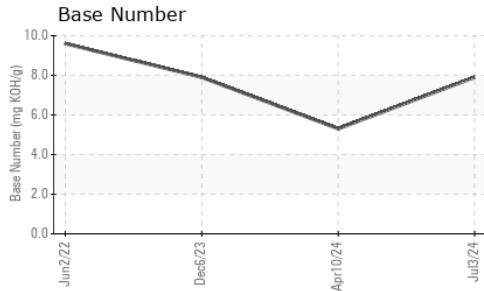
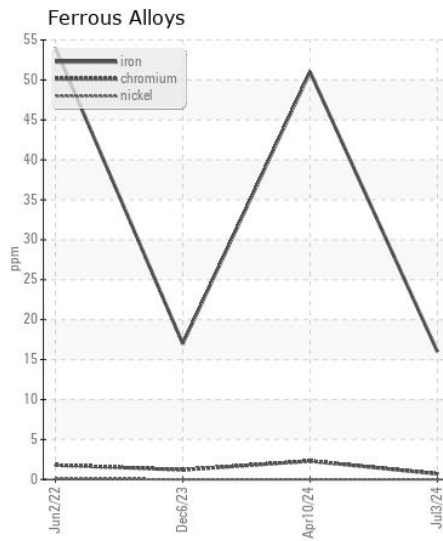
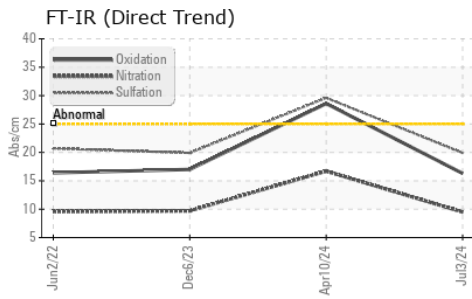
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	6	4
Potassium	ppm	ASTM D5185m	>20	3	3	<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	0.9	2.6	1
Nitration	Abs/cm	*ASTM D7624	>20	9.5	16.7	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	29.6	19.9
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		2	3	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		57	62	59
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		922	906	974
Calcium	ppm	ASTM D5185m		1041	1030	1026
Phosphorus	ppm	ASTM D5185m		1084	1010	1027
Zinc	ppm	ASTM D5185m		1292	1195	1291
Sulfur	ppm	ASTM D5185m		3684	2969	3027
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	28.6	17.0
Base Number (BN)	mg KOH/g	ASTM D2896		7.9	5.3	7.9
Visc @ 100°C	cSt	ASTM D445		13.9	14.1	14.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : NL0002207
Lab Number : 06231884
Unique Number : 11115377
Test Package : FLEET

Received : 09 Jul 2024
Tested : 10 Jul 2024
Diagnosed : 10 Jul 2024 - Wes Davis

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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