

WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

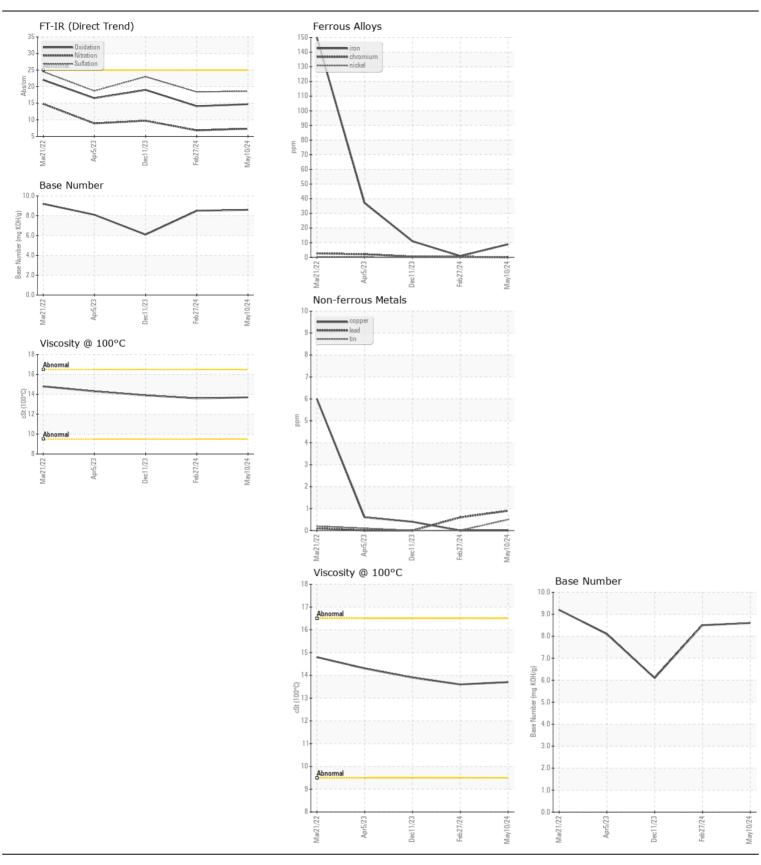
## MSE-AL-TRACTOR (NEW SOUTH EXPRESS)

## AUTOCAR NSE21008

Diesel Engine

DIESEL ENGINE OIL (--- GAL)

Resample at the next service interval to monitor.	DIESEL ENGINE OIL ( GAL)							
Resample at the next service interval to monitor.   Sample Number   Client Info   10 Mography 20 27 February 41 flbsc 2013   Machine Age   Nrs   Client Info   14389   13380   13380   Client Info   0 0 0 9 9570   Filter Age   Nrs   Client Info   0 0 0 9570   Filter Age   Nrs   Client Info   Changed   Cha	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Date   Client Info   1948/208   276 pt 2014   10 ce 2024   10 ce 2025   10							,	,
Machine Age   Insight   14389   13380   1338		•						
Oil Ago   hrs   Client Info   O   O   O   O   O   O   O   O   O			hrs			-		
Filter Age   brs   Client Info   Changed   C		J						
Client Info								
Filter Changed Sample Status								
Normal   N								
Iron		_				_	U	_
Chromium   ppm   ASTM 05165m   20   0   0   0   0   0   0								
Nickel   ppm   ASTIM D515m   3		Iron	ppm	ASTM D5185m	>100	9	<1	11
Nicket   ppm   ASTM Distilism   0		Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Silver   ppm   ASTM D6185m   >2		Nickel	ppm	ASTM D5185m	>4	0	0	0
Aluminum   ppm   ASTM D5185m   >20   4   4   7		Titanium	ppm	ASTM D5185m		0	0	0
Lead   ppm   ASTM D5185m   340   <1   <1   0		Silver	ppm	ASTM D5185m	>3	0	0	0
Copper		Aluminum	ppm	ASTM D5185m	>20	4	4	7
Copper		Lead	ppm	ASTM D5185m	>40	<1	<1	0
Tin		Copper		ASTM D5185m	>330	0	0	<1
Vanadium   ppm   ASTM D5185m   NONE   NONE						<1	0	
White Metal Yellow Metal Scalar   Visual NONE NONE NONE NONE NONE NONE NONE NON		Vanadium				0	<1	<1
Vellow Metal   Scalar   Visual   NONE   NONE   NONE   NONE   NONE					NONE	NONE		
Potassium   ppm   ASTM D5185m   >25   4   2   3		Yellow Metal	scalar		NONE		NONE	NONE
Potassium   ppm   ASTM 05185m   >20   6   12   13								
Fuel   WC Method   So.2   NEG   NE	CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	2	3
Water   WC Method   >0.2   NEG   N		Potassium	ppm	ASTM D5185m	>20	6	12	13
Glycol   WC Method   NEG   NEG   NEG   NEG   NEG   Soot %   % * ASTM D7844   ×3   0.4   0.4   0.9   NItration   Abs/.mm * ASTM D7842   ×20   7.3   6.8   9.7   NItration   Abs/.mm * ASTM D7845   ×30   18.6   18.4   23.0   NONE   NON		Fuel		WC Method	>5	<1.0	<1.0	<1.0
Soot % %   *ASTM D7844   >3   0.4   0.4   0.9     Nitration   Abs/cm *ASTM D7824   >20   7.3   6.8   9.7     Sulfation   Abs/lmm *ASTM D7815   >30   18.6   18.4   23.0     Silt   Scalar *Visual   NONE		Water		WC Method	>0.2	NEG	NEG	NEG
Nitration   Abs/cm   *ASTM D7624   >20   7.3   6.8   9.7		Glycol		WC Method		NEG	NEG	NEG
Sulfation   Abs/.tmm   *ASTM D7415   >30   18.6   18.4   23.0		Soot %	%	*ASTM D7844	>3	0.4	0.4	0.9
Silt   Scalar   *Visual   NONE   NORML   NORM		Nitration	Abs/cm	*ASTM D7624	>20	7.3	6.8	9.7
Debris   Scalar   *Visual   NONE		Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6	18.4	23.0
Sand/Dirt   Scalar   *Visual   NONE   NONE   NONE   NONE   Appearance   Scalar   *Visual   NORML   N		Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance Odor scalar *Visual NORML ODEN NORML Emulsified Water scalar *Visual NORML Emulsified Water scalar *Visual NORML		Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odor   Scalar *Visual   NORML   NORML   NORML   NORML   NEG   NEG   NEG		Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water   scalar *Visual   >0.2   NEG   NEG   NEG		Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Sodium   ppm   ASTM D5185m   >75   <1   5   2		Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Boron   ppm   ASTM D5185m   2   5   84		<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Boron   ppm   ASTM D5185m   2   5   84	ELLUD COMPUTION						_	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.    Barium   ppm   ASTM D5185m   59   62   7	FLUID CONDITION				>75			
oil. The condition of the oil is suitable for further service.    Molybdenum   ppm   ASTM D5185m   59   62   7	The BN result indicates that there is suitable alkalinity remaining in the							
Molybdenum         ppm         ASIM D5185m         59         62         7           Manganese         ppm         ASTM D5185m         <1         <1         0           Magnesium         ppm         ASTM D5185m         934         1046         122           Calcium         ppm         ASTM D5185m         1020         1185         1839           Phosphorus         ppm         ASTM D5185m         1064         1150         946           Zinc         ppm         ASTM D5185m         1240         1412         1144           Sulfur         ppm         ASTM D5185m         3530         3459         3187           Oxidation         Abs/.1mm         *ASTM D7414         >25         14.7         14.1         19.0           Base Number (BN)         mg KOH/g         ASTM D2896         8.6         8.5         6.1	, ,							
Magnesium         ppm         ASTM D5185m         934         1046         122           Calcium         ppm         ASTM D5185m         1020         1185         1839           Phosphorus         ppm         ASTM D5185m         1064         1150         946           Zinc         ppm         ASTM D5185m         1240         1412         1144           Sulfur         ppm         ASTM D5185m         3530         3459         3187           Oxidation         Abs/.1mm         *ASTM D7414         >25         14.7         14.1         19.0           Base Number (BN)         mg KOH/g         ASTM D2896         8.6         8.5         6.1		-	ppm					
Calcium         ppm         ASTM D5185m         1020         1185         1839           Phosphorus         ppm         ASTM D5185m         1064         1150         946           Zinc         ppm         ASTM D5185m         1240         1412         1144           Sulfur         ppm         ASTM D5185m         3530         3459         3187           Oxidation         Abs/.1mm         *ASTM D7414         >25         14.7         14.1         19.0           Base Number (BN)         mg KOH/g         ASTM D2896         8.6         8.5         6.1								
Phosphorus         ppm         ASTM D5185m         1064         1150         946           Zinc         ppm         ASTM D5185m         1240         1412         1144           Sulfur         ppm         ASTM D5185m         3530         3459         3187           Oxidation         Abs/.1mm         *ASTM D7414         >25         14.7         14.1         19.0           Base Number (BN)         mg KOH/g         ASTM D2896         8.6         8.5         6.1		•						
Zinc         ppm         ASTM D5185m         1240         1412         1144           Sulfur         ppm         ASTM D5185m         3530         3459         3187           Oxidation         Abs/.1mm         *ASTM D7414         >25         14.7         14.1         19.0           Base Number (BN)         mg KOH/g         ASTM D2896         8.6         8.5         6.1								
Sulfur         ppm         ASTM D5185m         3530         3459         3187           Oxidation         Abs/.1mm         *ASTM D7414         >25         14.7         14.1         19.0           Base Number (BN)         mg KOH/g         ASTM D2896         8.6         8.5         6.1								
Oxidation         Abs/.1mm         *ASTM D7414         >25         14.7         14.1         19.0           Base Number (BN)         mg KOH/g         ASTM D2896         8.6         8.5         6.1								
Base Number (BN)         mg KOH/g         ASTM D2896         8.6         8.5         6.1								
					>25			
Visc @ 100°C cSt ASTM D445								
		Visc @ 100°C	cSt	ASTM D445		13.7	13.6	13.9







Certificate L2367

Laboratory Sample No.

: NL0002290 Lab Number : 06187016 Unique Number : 11043768

Test Package : FLEET

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

Diagnosed

: 23 May 2024 : 23 May 2024 - Sean Felton

: 21 May 2024

**KIRK NATIONALEASE - SHOP 49** 601 England Rd.

Lincoln, AL US 35096 Contact: Skip Womack shop49@knl.cc

T: (205)548-3004 F: (205)548-3006

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)