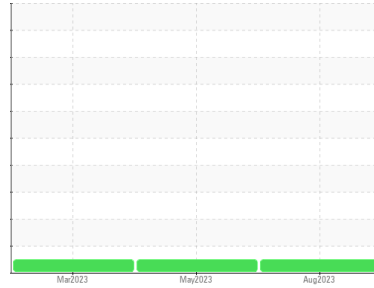




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
HER SON
 Machine Id
FREIGHTLINER PRESON - #462
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER15W40 (45 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KL0012783	KL0012364	KL0011378
Sample Date	Client Info		08 Aug 2023	22 May 2023	08 Mar 2023
Machine Age	kms	Client Info	624817	624817	585475
Oil Age	kms	Client Info	624817	39342	1
Oil Changed	Client Info		Not Changed	Not Changed	Not Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >80	18	7	13
Chromium	ppm	ASTM D5185m >5	<1	<1	<1
Nickel	ppm	ASTM D5185m >2	<1	<1	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >30	2	2	4
Lead	ppm	ASTM D5185m >30	0	0	0
Copper	ppm	ASTM D5185m >150	3	2	4
Tin	ppm	ASTM D5185m >5	<1	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	27	35	47
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	119	117	49
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 0	678	731	944
Calcium	ppm	ASTM D5185m	1229	1243	1050
Phosphorus	ppm	ASTM D5185m	728	764	1079
Zinc	ppm	ASTM D5185m	874	915	1350
Sulfur	ppm	ASTM D5185m	2690	3611	3646

CONTAMINANTS

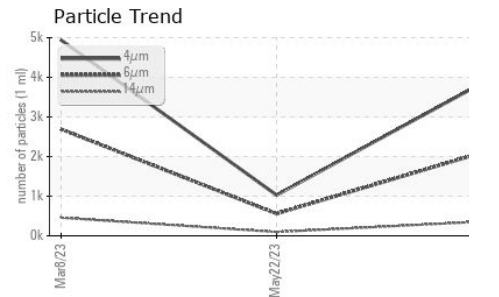
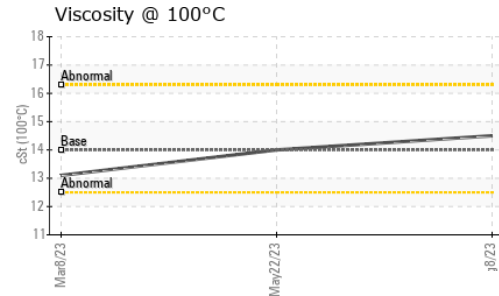
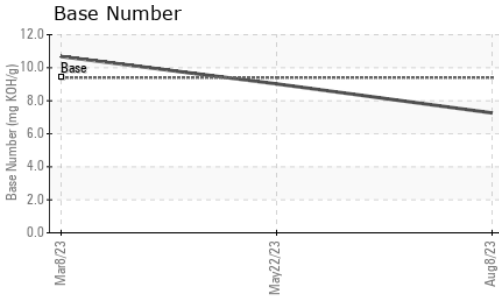
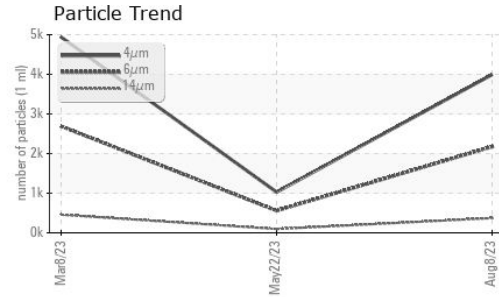
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	4	4	8
Sodium	ppm	ASTM D5185m	2	2	<1
Potassium	ppm	ASTM D5185m >20	2	<1	0

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.3	0.8	0.3
Nitration	Abs/cm	*ASTM D7624 >20	11.4	9.6	10.3
Sulfation	Abs./1mm	*ASTM D7415 >30	23.5	20.9	39.4



OIL ANALYSIS REPORT



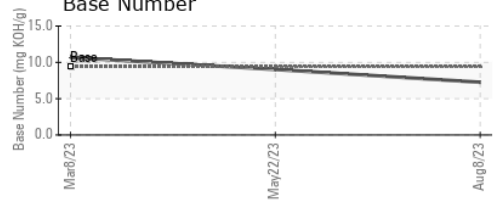
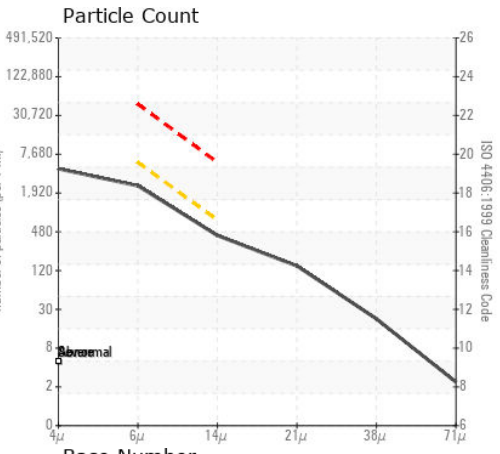
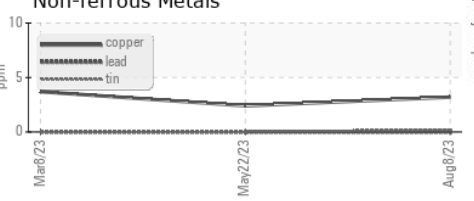
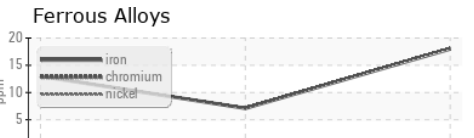
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		3993	1027	4940
Particles >6µm	ASTM D7647	>5000	2175	559	2691
Particles >14µm	ASTM D7647	>640	370	95	458
Particles >21µm	ASTM D7647	>160	125	32	154
Particles >38µm	ASTM D7647	>40	19	5	24
Particles >71µm	ASTM D7647	>10	2	1	2
Oil Cleanliness	ISO 4406 (c)	>19/16	18/16	16/14	19/16

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	17.5	45.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	7.26	9.02	10.68

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14	14.5	14.0	13.1

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0012783 **Received** : 22 Aug 2023
Lab Number : 05931665 **Diagnosed** : 24 Aug 2023
Unique Number : 10616936 **Diagnostician** : Don Baldrige
Test Package : MOB 2 (Additional Tests: PrtCount)

CONOR
 JUAREZ 348
 HERMOSILLO,
 MX 83140
 Contact: EDUARDO GARCIA
 egarcia.comsa@gmail.com
 T: (526)622-1581 x:81
 F: x:

Certificate L2367
 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)