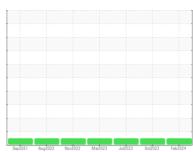


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



MIXERS Machine Id [MIXERS] M219

Diesel Engine

KENDALL 15W40 (--- GAL)

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

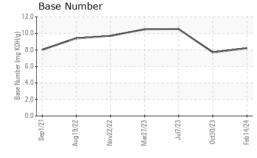
Fluid Condition

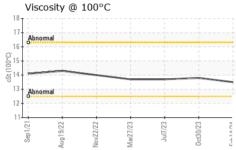
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0110023	LP0000667	LP0000184
Sample Date		Client Info		14 Feb 2024	30 Oct 2023	07 Jul 2023
Machine Age	hrs	Client Info		6164	5612	4971
Oil Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method	70.L	NEG	NEG	NEG
-						
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	9	11	7
Chromium	ppm	ASTM D5185m		<1	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		1	1	1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	1	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	6.3	32	25	32
Barium	ppm	ASTM D5185m	0.6	<1	0	0
Molybdenum	ppm	ASTM D5185m	0.4	83	76	80
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	277	130	194	245
Calcium	ppm	ASTM D5185m	1514	1865	1845	1968
Phosphorus	ppm	ASTM D5185m	634	950	971	1042
Zinc	ppm	ASTM D5185m	743	1124	1189	1258
Sulfur	ppm	ASTM D5185m	2592	3484	3344	4386
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	4	3
Silicon Sodium	ppm	ASTM D5185m ASTM D5185m	>25	5 0	4	3
	• • • • • • • • • • • • • • • • • • • •					
Sodium	ppm	ASTM D5185m		0	3	3
Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	>20	0 3	3 <1	3
Sodium Potassium INFRA-RED	ppm	ASTM D5185m ASTM D5185m method	>20 limit/base	0 3 current	3 <1 history1	3 3 history2
Sodium Potassium INFRA-RED Soot %	ppm ppm	ASTM D5185m ASTM D5185m method *ASTM D7844	>20 limit/base >3	0 3 current	3 <1 history1 0.1	3 3 history2 0.7
Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624	>20 limit/base >3 >20	0 3 current 0.8 9.8	3 <1 history1 0.1 6.4	3 3 history2 0.7 9.6 20.4
Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415 method	>20 limit/base >3 >20 >3 >20 limit/base	0 3 current 0.8 9.8 20.3 current	3 <1 history1 0.1 6.4 18.0 history1	3 3 history2 0.7 9.6 20.4 history2
Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	>20 limit/base >3 >20 >30	0 3 current 0.8 9.8 20.3	3 <1 history1 0.1 6.4 18.0	3 3 history2 0.7 9.6 20.4



OIL ANALYSIS REPORT



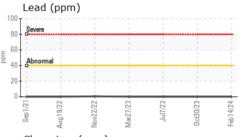


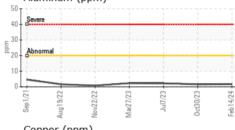
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

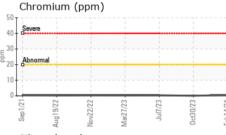
I LOID I HOI	LITTIEO				
Visc @ 100°C	cSt	ASTM D445	13.5	13.8	13.7

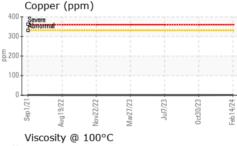
Т :						
Severe	i			į		
-						
Abnorm	al					
_		_	_		=	=
Sep1/27	3/22	2/22	7/23	Jul7/23	0/23	4/24
Sep	Aug19/22	Nov22/22	Mar27/23	3	Oct30/2	Feb14/24
	A		Σ		0	1
		(ppm)				

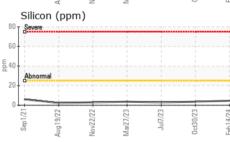
FILLID PROPERTIES

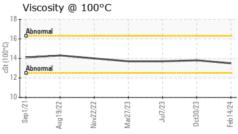


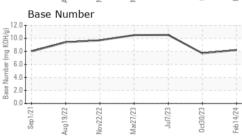














Certificate L2367

Laboratory Sample No.

: PCA0110023 Lab Number : 06096398 Unique Number : 10889251 Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 21 Feb 2024 : 22 Feb 2024 **Tested**

: 22 Feb 2024 - Wes Davis Diagnosed

CONSTRUCTION SERVICES 2420 BOSTON RD WILBRAHAM, MA US 01095

Submitted By: Michael Dupuis

Contact: Michael Dupuis mdupuis@cs-ma.us T: (413)733-6331

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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