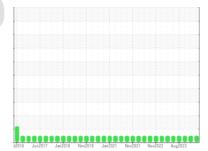


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

KENWORTH T-800 160755

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (12 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

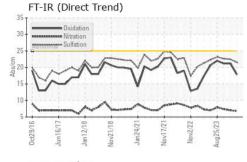
Fluid Condition

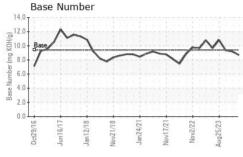
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

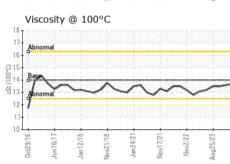
SAMPLE INFORMATION method limit/base current history1 Rw0004908 Sample Number Client Info Q2 Apr 2024 19 Mar 2024 08 Feb 2024 Machine Age mls Client Info 422550 409000 399075 Client Info 01 Age mls Client Info 13550 10086 10000 Clindanged Client Info Changed C	AL)		:t2016 Jun21	017 Jan2018 Nov2018	Jan2021 Nov2021 Nov2022	Aug2023	
Sample Date	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Date	Sample Number		Client Info		RW0004908	RW0004914	RW0004898
Machine Age mls Client Info 422550 409000 399075 Oil Age mls Client Info 13550 10086 10000 Oil Changed Client Info Changed Changed Changed Changed Changed Sample Status method Imilibase current history1 history2 Fuel WC Method >3.0 <1.0 <1.0 <1.0 Water WC Method >0.2 NEG NEG NEG Rigorol WC Method NEG NEG NEG WEAR METALS method limitbase current history2 Iron pam ASTM D5185m >165 8 6 7 Chromium ppm ASTM D5185m >4 1 0 0 Nickel ppm ASTM D5185m >4 1 0 0 Silver ppm ASTM D5185m >2 1 0 0 Copper ppm ASTM D5185m			Client Info		02 Apr 2024	19 Mar 2024	08 Feb 2024
Oil Changed Sample Status Client Info Changed NORMAL NORMAL NORMAL Changed NORMAL NORMAL NORMAL Changed NORMAL NORMAL NORMAL NORMAL NORMAL Changed NoRMAL NO		mls	Client Info		422550	409000	399075
Sample Status	Oil Age	mls	Client Info		13550	10086	10000
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >3.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 NEG	Oil Changed		Client Info		Changed	Changed	Changed
Fuel	Sample Status				NORMAL	NORMAL	NORMAL
Water Glycol WC Method >0.2 NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >165 8 6 7 Chromium ppm ASTM D5185m >5 <1 0 0 Nickel ppm ASTM D5185m >4 <1 0 0 Sliver ppm ASTM D5185m >2 <1 0 0 Sliver ppm ASTM D5185m >2 <1 0 0 Sliver ppm ASTM D5185m >2 <1 0 0 Aluminum ppm ASTM D5185m >20 1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	CONTAMINATIO	N	method	limit/base	current	history1	history2
Second WC Method NEG NEG NEG	Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
WEAR METALS	Water		WC Method	>0.2	NEG	NEG	NEG
Iron	Glycol		WC Method		NEG	NEG	NEG
Chromium ppm ASTM D5185m >5 <1 0 0 Nickel ppm ASTM D5185m >4 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>165	8	6	7
Titanium ppm ASTM D5185m >2 <1 0 0 Silver ppm ASTM D5185m >2 <1 0 0 Aluminum ppm ASTM D5185m >20 1 <1 1 Lead ppm ASTM D5185m >150 1 <1 <1 <1 Copper ppm ASTM D5185m >90 <1 0 0 0 Trin ppm ASTM D5185m >90 <1 0 0 0 Vanadium ppm ASTM D5185m <1 0 0 0 Cadmium ppm ASTM D5185m <1 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 58 53 50 Barium ppm ASTM D5185m 0 2 0 0 Molybdenum ppm ASTM D5185m	Chromium	ppm	ASTM D5185m	>5	<1	0	0
Silver	Nickel	ppm	ASTM D5185m	>4	<1	0	0
Aluminum ppm ASTM D5185m >20 1 <1 1 Lead ppm ASTM D5185m >150 1 <1	Titanium	ppm	ASTM D5185m	>2	<1	0	0
Lead ppm ASTM D5185m >150 1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Silver	ppm	ASTM D5185m	>2	<1	0	0
Copper ppm ASTM D5185m >90 <1 0 0 Tin ppm ASTM D5185m >5 <1	Aluminum	ppm	ASTM D5185m	>20	1	<1	1
Tin ppm ASTM D5185m >5 <1 0 0 Vanadium ppm ASTM D5185m <1 0 0 Cadmium ppm ASTM D5185m <1 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 58 53 50 Barium ppm ASTM D5185m 0 2 0 0 Molybdenum ppm ASTM D5185m 0 45 43 44 Manganese ppm ASTM D5185m <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Lead	ppm	ASTM D5185m	>150	1	<1	<1
Vanadium ppm ASTM D5185m <1 0 0 Cadmium ppm ASTM D5185m <1 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 58 53 50 Barium ppm ASTM D5185m 0 2 0 0 Molybdenum ppm ASTM D5185m 0 45 43 44 Manganese ppm ASTM D5185m 0 559 583 601 Calcium ppm ASTM D5185m 0 559 583 601 Calcium ppm ASTM D5185m 1854 2026 2005 Phosphorus ppm ASTM D5185m 929 872 891 Zinc ppm ASTM D5185m 2968 3279 3389 CONTAMINANTS method limit/base current history1 history2 Silicon	Copper	ppm	ASTM D5185m	>90	<1	0	0
Cadmium ppm ASTM D5185m <1 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 58 53 50 Barium ppm ASTM D5185m 0 2 0 0 Molybdenum ppm ASTM D5185m 0 45 43 44 Manganese ppm ASTM D5185m 0 45 43 44 Magnesium ppm ASTM D5185m 0 559 583 601 Calcium ppm ASTM D5185m 0 559 583 601 Calcium ppm ASTM D5185m 929 872 891 Zinc ppm ASTM D5185m 929 872 891 Zinc ppm ASTM D5185m 2968 3279 3389 CONTAMINANTS method limit/base current history1 history2 Silic	Tin	ppm	ASTM D5185m	>5	<1	0	0
ADDITIVES	Vanadium	ppm	ASTM D5185m		<1	0	0
Boron	Cadmium	ppm	ASTM D5185m		<1	0	0
Barium ppm ASTM D5185m 0 2 0 0 Molybdenum ppm ASTM D5185m 0 45 43 44 Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 0 559 583 601 Calcium ppm ASTM D5185m 0 559 583 601 Calcium ppm ASTM D5185m 0 559 583 601 Calcium ppm ASTM D5185m 1854 2026 2005 Phosphorus ppm ASTM D5185m 929 872 891 Zinc ppm ASTM D5185m 1038 1053 1090 Sulfur ppm ASTM D5185m 2968 3279 3389 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 7 4 6	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 45 43 44 Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 0 559 583 601 Calcium ppm ASTM D5185m 0 559 583 601 Calcium ppm ASTM D5185m 1854 2026 2005 Phosphorus ppm ASTM D5185m 929 872 891 Zinc ppm ASTM D5185m 1038 1053 1090 Sulfur ppm ASTM D5185m 2968 3279 3389 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 7 4 6 Sodium ppm ASTM D5185m >20 2 <1 1 INFRA-RED method limit/base current history1 history2	Boron	ppm				53	50
Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 0 559 583 601 Calcium ppm ASTM D5185m 1854 2026 2005 Phosphorus ppm ASTM D5185m 929 872 891 Zinc ppm ASTM D5185m 1038 1053 1090 Sulfur ppm ASTM D5185m 2968 3279 3389 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 7 4 6 Sodium ppm ASTM D5185m >20 2 <1	Barium	ppm					
Magnesium ppm ASTM D5185m 0 559 583 601 Calcium ppm ASTM D5185m 1854 2026 2005 Phosphorus ppm ASTM D5185m 929 872 891 Zinc ppm ASTM D5185m 1038 1053 1090 Sulfur ppm ASTM D5185m 2968 3279 3389 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 7 4 6 Sodium ppm ASTM D5185m >20 2 <1	-	ppm	ASTM D5185m	0		43	
Calcium ppm ASTM D5185m 1854 2026 2005 Phosphorus ppm ASTM D5185m 929 872 891 Zinc ppm ASTM D5185m 1038 1053 1090 Sulfur ppm ASTM D5185m 2968 3279 3389 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 7 4 6 Sodium ppm ASTM D5185m >20 2 <1	-	ppm	ASTM D5185m				
Phosphorus ppm ASTM D5185m 929 872 891 Zinc ppm ASTM D5185m 1038 1053 1090 Sulfur ppm ASTM D5185m 2968 3279 3389 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 7 4 6 Sodium ppm ASTM D5185m >35 7 4 6 Sodium ppm ASTM D5185m >20 2 <1	-	ppm		0			
Zinc ppm ASTM D5185m 1038 1053 1090 Sulfur ppm ASTM D5185m 2968 3279 3389 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 7 4 6 Sodium ppm ASTM D5185m >20 2 <1		ppm					
Sulfur ppm ASTM D5185m 2968 3279 3389 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 7 4 6 Sodium ppm ASTM D5185m >20 2 <1							
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 7 4 6 Sodium ppm ASTM D5185m 1 2 2 Potassium ppm ASTM D5185m >20 2 <1	-						
Silicon ppm ASTM D5185m >35 7 4 6 Sodium ppm ASTM D5185m 1 2 2 Potassium ppm ASTM D5185m >20 2 <1 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >7.5 0.4 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 6.8 7.0 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 22.5 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.8 21.2 21.2			ASTM D5185m		2968	3279	3389
Sodium ppm ASTM D5185m 1 2 2 Potassium ppm ASTM D5185m >20 2 <1 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >7.5 0.4 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 6.8 7.0 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 22.5 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.8 21.2 21.2		8	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 2 <1 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >7.5 0.4 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 6.8 7.0 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 22.5 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.8 21.2 21.2		ppm		>35	7	4	
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >7.5 0.4 0.3 0.3 Nitration Abs/cm *ASTM D7624 >20 6.8 7.0 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 22.5 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.8 21.2 21.2		ppm	ASTM D5185m		1	2	2
Soot % % *ASTM D7844 > 7.5 0.4 0.3 0.3 Nitration Abs/cm *ASTM D7624 > 20 6.8 7.0 7.4 Sulfation Abs/.1mm *ASTM D7415 > 30 21.5 22.5 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 > 25 17.8 21.2 21.2	Potassium	ppm	ASTM D5185m	>20	2	<1	1
Nitration Abs/cm *ASTM D7624 >20 6.8 7.0 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 22.5 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.8 21.2 21.2	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 21.5 22.5 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.8 21.2 21.2	Soot %	%	*ASTM D7844	>7.5	0.4		
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.8 21.2 21.2	Nitration	Abs/cm	*ASTM D7624	>20	6.8	7.0	7.4
Oxidation Abs/.1mm *ASTM D7414 >25 17.8 21.2 21.2	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	22.5	22.6
	FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 9.4 8.69 9.18 9.34	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	21.2	21.2
	Base Number (BN)	mg KOH/g	ASTM D2896	9.4	8.69	9.18	9.34



OIL ANALYSIS REPORT







VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	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

LLUID PHOPER	THES	method			riistory i	History
Visc @ 100°C	cSt	ASTM D445	14	13.7	13.6	13.5

	RAPH															
10	n (pp	m)							Lea Seve	d (pp	m)					
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Abn	ormal								200 - Abno	ormal						
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Oct29/16	Jun16/17	Jan12/18	Nov21/18	Jan24/21	Nov17/21	Nov2/22	Aug25/23		Oct29/16	Jun16/17	Jan12/18	Nov21/18	Jan24/21	Nov17/21	Nov2/22	Aug25/23
Alu	ıminuı	m (pp	m)						Chr	omiu	m (pį	om)				
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				Jan	Nov	2	Aug					Nov	Jan	Nov	N	Aug
Vis ق	cosity	@ 10	00°C			177777			E O	se Nu	mber					
Abn	ormal							Base Number (mg KOH/g)		~						
Bas Abn								r (mg k	0.0 - Base	_	-/-			_	1	\sim
Alon	ormal	_	_	<u> </u>	<u></u>	~		umpe	5.0							
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0 19	3/17	81/	118	4/21+	1/2/1	122	/23	5	0.0	171/8	18	18	1/21	1/2/1	122	(73
Oct29/16	Jun16/17	Jan12/18	Nov21/18	Jan24/21	Nov17/21	Nov2/22	Aug25/23		Oct29/16	Jun16/17	Jan12/18	Nov21/18	Jan24/21	Nov17/21	Nov2/22	Aug25/23





Certificate 12367

Sample No. : RW0004908 Lab Number : 06196863 Unique Number : 11058986 Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 31 May 2024 **Tested** : 03 Jun 2024

Diagnosed : 03 Jun 2024 - Wes Davis

To discuss this sample report, contact Customer Service at 1-800-237-1369.

US 48444 Contact: DENNIS ONDRAJKA homerconcrete@aol.com T: (810)724-3905

HOMER CONCRETE

205 S CEDAR ST

IMLAY CITY, MI

F: (810)724-0733

* - 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)

Contact/Location: DENNIS ONDRAJKA - HOMIML