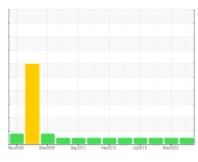


OIL ANALYSIS REPORT

KANSAS/101/EG - OTHER SERVICE 53.99L [KANSAS^101^EG - OTHER SERVICE]

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)



Sample Rating Trend



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

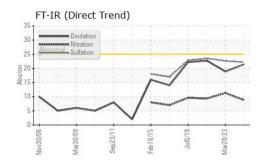
Fluid Condition

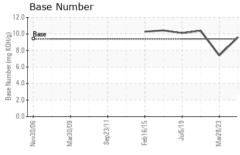
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

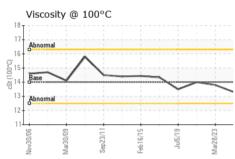
Machine Age hrs Client Info 261 554 0 0 0 0 0 0 0 0 0	L)		Nov2006	Mar2009 Sep2011	Feb2015 Jul2019 N	lar2023	
Client Info	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Client Info	Sample Number		Client Info		WC0901144	WC0741704	WC0511963
Dil Changed	Sample Date		Client Info		04 Jun 2024	28 Mar 2023	29 Oct 2020
Dil Changed		hrs	Client Info		5490	5229	4675
Client Info Changed Changed Changed NORMAL NORMAL NORMAL NORMAL		hrs					
NORMAL NORMAL NORMAL NORMAL	•						Changed
Fuel	-				_	Ü	Ü
Water Glycol WC Method WC Method >0.2 NEG A<	CONTAMINATION	١	method	limit/base	current	history1	history2
Select	Fuel		WC Method	>5	<1.0	<1.0	<1.0
WEAR METALS	Water		WC Method	>0.2	NEG	NEG	NEG
A	Glycol		WC Method		NEG	NEG	NEG
Chromium	WEAR METALS		method	limit/base	current	history1	history2
ASTM D5185m STM D5185m ST	ron	ppm	ASTM D5185m	>250	17	22	16
Silver	Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Silver	Nickel	ppm	ASTM D5185m	>5	<1	<1	1
Aluminum	Titanium	ppm	ASTM D5185m		<1	0	<1
December December	Silver	ppm	ASTM D5185m	>3	0	0	0
Copper	Aluminum	ppm	ASTM D5185m	>35	2	2	2
Tin	_ead	ppm	ASTM D5185m	>100	<1	<1	0
Clin	Copper	ppm	ASTM D5185m	>60	3	5	3
Antimony			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 56 44 46 Barium ppm ASTM D5185m 0 0 0 <1 Molybdenum ppm ASTM D5185m 0 40 15 40 Magnesium ppm ASTM D5185m 0 553 786 566 Calcium ppm ASTM D5185m 0 553 786 566 Calcium ppm ASTM D5185m 1701 1640 1765 Phosphorus ppm ASTM D5185m 809 747 754 Zinc ppm ASTM D5185m 2706 3904 2102 CONTAMINANTS method limit/base current history1 history2 Soliton	Antimony		ASTM D5185m				0
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 56 44 46 Barium ppm ASTM D5185m 0 0 0 <1	Vanadium				0	0	0
Soron ppm ASTM D5185m 0 0 0 0 0 0 0 0	Cadmium		ASTM D5185m		0	0	0
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 40 15 40 Manganese ppm ASTM D5185m 0 1 <1 Magnesium ppm ASTM D5185m 0 553 786 566 Calcium ppm ASTM D5185m 1701 1640 1765 Phosphorus ppm ASTM D5185m 809 747 754 Zinc ppm ASTM D5185m 943 965 852 Sulfur ppm ASTM D5185m 2706 3904 2102 CONTAMINANTS method limit/base current history1 history2 Soliticon ppm ASTM D5185m >35 5 7 5 Sodium ppm ASTM D5185m 20 2 3 3 Potassium ppm ASTM D5185m >20 2 2 0 INFRA-RED method limit/base current history1 history2 Soot % <td>Boron</td> <td>ppm</td> <td>ASTM D5185m</td> <td>0</td> <th>56</th> <td>44</td> <td>46</td>	Boron	ppm	ASTM D5185m	0	56	44	46
Manganese ppm ASTM D5185m 0 1 <1 Magnesium ppm ASTM D5185m 0 553 786 566 Calcium ppm ASTM D5185m 1701 1640 1765 Phosphorus ppm ASTM D5185m 809 747 754 Zinc ppm ASTM D5185m 943 965 852 Sulfur ppm ASTM D5185m 2706 3904 2102 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 5 7 5 Sodium ppm ASTM D5185m 2 3 3 3 Potassium ppm ASTM D5185m >20 2 2 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 0.4 0.4 Nitr	Barium	ppm	ASTM D5185m	0	0	0	<1
Manganese ppm ASTM D5185m 0 1 <1 Magnesium ppm ASTM D5185m 0 553 786 566 Calcium ppm ASTM D5185m 1701 1640 1765 Phosphorus ppm ASTM D5185m 809 747 754 Zinc ppm ASTM D5185m 943 965 852 Sulfur ppm ASTM D5185m 2706 3904 2102 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >35 5 7 5 Sodium ppm ASTM D5185m >20 2 2 0 INFRA-RED method limit/base current history1 history2 Soot % "ASTM D7844 >3 0.3 0.4 0.4 Nitration Abs/cm "ASTM D7845 >30 22.2 22.6 23.5 FLUID DEGRADATION <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185m</td> <td>0</td> <th>40</th> <td>15</td> <td>40</td>	Molybdenum	ppm	ASTM D5185m	0	40	15	40
Magnesium ppm ASTM D5185m 0 553 786 566 Calcium ppm ASTM D5185m 1701 1640 1765 Phosphorus ppm ASTM D5185m 809 747 754 Zinc ppm ASTM D5185m 943 965 852 Sulfur ppm ASTM D5185m 2706 3904 2102 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 5 7 5 Sodium ppm ASTM D5185m 20 2 2 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 0.4 0.4 Nitration Abs/.1mm *ASTM D7415 >30 22.2 22.6 23.5 FLUID DEGRADATION method limit/base current history1 history2			ASTM D5185m		0	1	<1
Calcium ppm ASTM D5185m 1701 1640 1765 Phosphorus ppm ASTM D5185m 809 747 754 Zinc ppm ASTM D5185m 943 965 852 Sulfur ppm ASTM D5185m 2706 3904 2102 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 5 7 5 Sodium ppm ASTM D5185m 2 3 3 3 Potassium ppm ASTM D5185m >20 2 2 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 0.4 0.4 Nitration Abs/.1mm *ASTM D7415 >30 22.2 22.6 23.5 FLUID DEGRADATION method limit/base current history1 <t< td=""><td>-</td><td>ppm</td><td>ASTM D5185m</td><td>0</td><th>553</th><td>786</td><td>566</td></t<>	-	ppm	ASTM D5185m	0	553	786	566
Phosphorus ppm ASTM D5185m 809 747 754 Zinc ppm ASTM D5185m 943 965 852 Sulfur ppm ASTM D5185m 2706 3904 2102 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 5 7 5 Sodium ppm ASTM D5185m 2 3 3 3 Potassium ppm ASTM D5185m >20 2 2 0 INFRA-RED method limit/base current history1 history2 Goot % % *ASTM D7844 >3 0.3 0.4 0.4 Nitration Abs/.1mm *ASTM D7415 >30 22.2 22.6 23.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 21.4	-		ASTM D5185m		1701	1640	1765
Zinc ppm ASTM D5185m 943 965 852 Sulfur ppm ASTM D5185m 2706 3904 2102 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 5 7 5 Sodium ppm ASTM D5185m 2 3 3 Potassium ppm ASTM D5185m >20 2 2 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 0.4 0.4 Nitration Abs/cm *ASTM D7624 >20 8.8 11.3 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.2 22.6 23.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 21.4	Phosphorus				809	747	754
Sulfur ppm ASTM D5185m 2706 3904 2102 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 5 7 5 Sodium ppm ASTM D5185m 2 3 3 Potassium ppm ASTM D5185m >20 2 2 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 0.4 0.4 Nitration Abs/cm *ASTM D7624 >20 8.8 11.3 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.2 22.6 23.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 21.4 18.9 22.7	·		ASTM D5185m			965	852
Silicon ppm ASTM D5185m >35 5 7 5 Sodium ppm ASTM D5185m 2 3 3 Potassium ppm ASTM D5185m >20 2 2 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 0.4 0.4 Nitration Abs/cm *ASTM D7624 >20 8.8 11.3 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.2 22.6 23.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 21.4 18.9 22.7	Sulfur		ASTM D5185m		2706	3904	2102
Sodium ppm ASTM D5185m 2 3 3 Potassium ppm ASTM D5185m >20 2 2 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 0.4 0.4 Nitration Abs/cm *ASTM D7624 >20 8.8 11.3 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.2 22.6 23.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 21.4 18.9 22.7	CONTAMINANTS		method	limit/base	current	history1	history2
Sodium ppm ASTM D5185m 2 3 3 Potassium ppm ASTM D5185m >20 2 2 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 0.4 0.4 Nitration Abs/cm *ASTM D7624 >20 8.8 11.3 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.2 22.6 23.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 21.4 18.9 22.7	Silicon	ppm	ASTM D5185m	>35	5	7	5
Potassium ppm ASTM D5185m >20 2 2 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 0.4 0.4 Nitration Abs/cm *ASTM D7624 >20 8.8 11.3 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.2 22.6 23.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 21.4 18.9 22.7	Sodium		ASTM D5185m			3	3
Soot % % *ASTM D7844 >3 0.3 0.4 0.4 Nitration Abs/cm *ASTM D7624 >20 8.8 11.3 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.2 22.6 23.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 21.4 18.9 22.7	Potassium	ppm	ASTM D5185m	>20	2	2	0
Nitration Abs/cm *ASTM D7624 >20 8.8 11.3 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.2 22.6 23.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 21.4 18.9 22.7	INFRA-RED		method	limit/base	current	history1	history2
Nitration Abs/cm *ASTM D7624 >20 8.8 11.3 9.3 Sulfation Abs/.1mm *ASTM D7415 >30 22.2 22.6 23.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 21.4 18.9 22.7	Soot %	%	*ASTM D7844	>3	0.3	0.4	0.4
Sulfation Abs/.1mm *ASTM D7415 >30 22.2 22.6 23.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 21.4 18.9 22.7	Nitration	Abs/cm	*ASTM D7624	>20		11.3	9.3
Oxidation							
	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	21.4	18.9	22.7
	Base Number (BN)	mg KOH/g	ASTM D2896		9.6	7.4	10.4

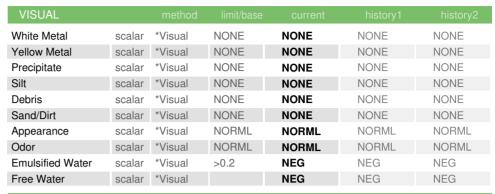


OIL ANALYSIS REPORT



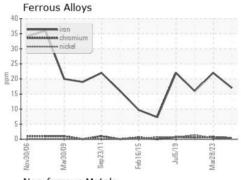


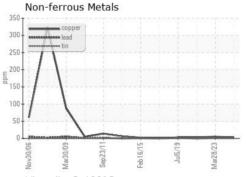


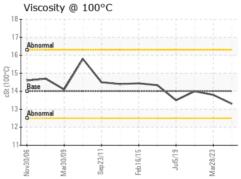


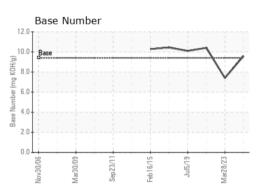
FLUID PROPERTIES		method				history2	
Visc @ 100°C	cSt	ASTM D445	14	13.3	13.8	14.0	

GRAPHS













Certificate 12367

Laboratory Sample No.

: WC0901144 Lab Number : 06208399 Unique Number : 11075860

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

Diagnosed Test Package : CONST (Additional Tests: TBN)

: 13 Jun 2024 : 14 Jun 2024

: 14 Jun 2024 - Wes Davis

SHERWOOD CONSTRUCTION CO INC 3219 WEST MAY ST WICHITA, KS

US 67213 Contact: DOUG KING doug.king@sherwood.net T: (316)617-3161

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)

F: x: