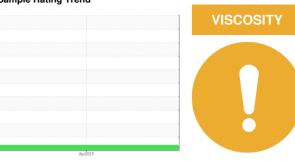


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
08.127 []
Component
Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

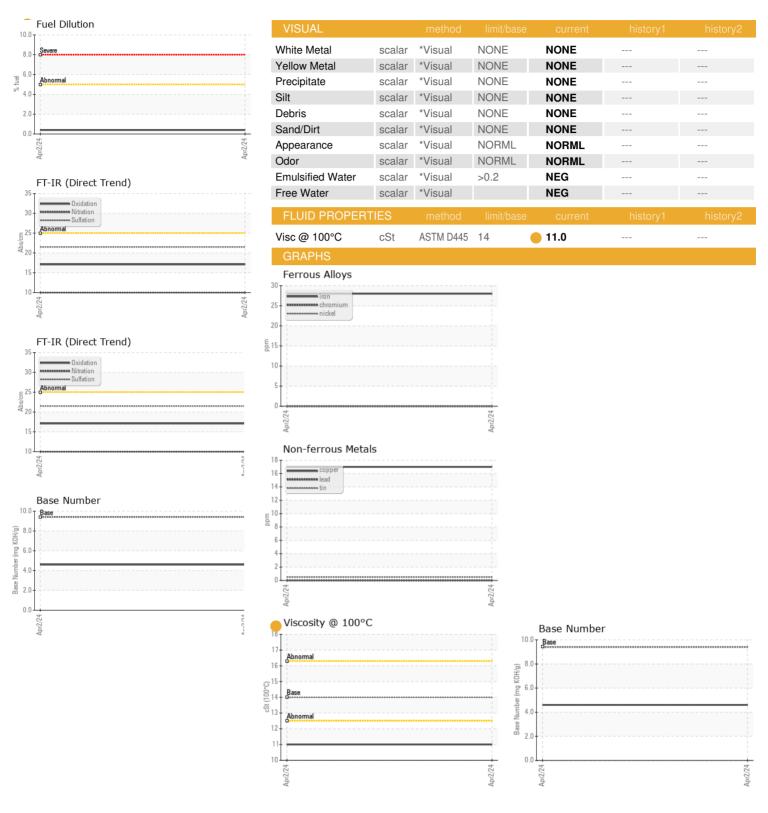
Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION method limit/base current history1 history2 Sample Number Cilient Info 02 Apr 2024	1.\				Apr2024		
Sample Number Client Info WC0914562	L)				Apr2U24		
Client Info	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 595	Sample Number		Client Info		WC0914562		
Dil Age			Client Info		02 Apr 2024		
Client Info	Machine Age	hrs	Client Info		595		
Client Info	Dil Age	hrs	Client Info		595		
CONTAMINATION method limit/base current history1 history2 Mater WC Method vol.2 NEG vol.5 NEG vol.5			Client Info		Changed		
Water WC Method >0.2 NEG Bigool WC Method NEG WEAR METALS method limit/base current history1 history2 Fron ppm ASTM D5185m >100 28 Chromium ppm ASTM D5185m >20 0 Chromium ppm ASTM D5185m >4 0 Siliver ppm ASTM D5185m >3 0 Aluminum ppm ASTM D5185m >30 17 Aluminum ppm ASTM D5185m >40 0 Lead ppm ASTM D5185m >330 17 Aluminum ppm ASTM D5185m >15 <1 Aluminum ppm ASTM D5185m 0 0	-						
WEAR METALS	CONTAMINATIO	N	method	limit/base	current	history1	history2
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 28 Chromium ppm ASTM D5185m >20 0 Nickel ppm ASTM D5185m >4 0 Silver ppm ASTM D5185m >3 0 Aluminum ppm ASTM D5185m >20 7 Lead ppm ASTM D5185m >40 0 Lead ppm ASTM D5185m >40 0 Lead ppm ASTM D5185m >33.0 17 Lead ppm ASTM D5185m >15 <1	Water		WC Method	>0.2	NEG		
Chromium	Glycol		WC Method		NEG		
Description	WEAR METALS		method	limit/base	current	history1	history2
Chromium	ron	ppm	ASTM D5185m	>100	28		
ASTM D5185m ASTM D5185m	Chromium		ASTM D5185m	>20	0		
Description					-		
Silver							
Aluminum				>3			
Lead							
Copper					-		
Tin							
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 31 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 <1 Manganese ppm ASTM D5185m 2 Magnesium ppm ASTM D5185m 1296 Calcium ppm ASTM D5185m 1296 Phosphorus ppm ASTM D5185m 775 Sulfur ppm ASTM D5185m 3066 CONTAMINANTS method limit/base current history1 history2							
ADDITIVES				>15			
ADDITIVES					-		
Boron		ppm	MC81 CU IN1 CA		U		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 <1 Manganese ppm ASTM D5185m 2 Magnesium ppm ASTM D5185m 0 684 Calcium ppm ASTM D5185m 1296 Phosphorus ppm ASTM D5185m 664 Zinc ppm ASTM D5185m 775 Sulfur ppm ASTM D5185m 3066 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 10 Sodium ppm ASTM D5185m >20 23 Fuel % ASTM D3524 >5 0.4 INFRA-RED method limit/base current history1 history2 Soot	Boron	ppm	ASTM D5185m	0	31		
Manganese ppm ASTM D5185m 2 Magnesium ppm ASTM D5185m 0 684 Calcium ppm ASTM D5185m 1296 Phosphorus ppm ASTM D5185m 664 Zinc ppm ASTM D5185m 775 Sulfur ppm ASTM D5185m 3066 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 10 Cotassium ppm ASTM D5185m >20 23 Fuel % ASTM D5185m >20 23 Fuel % ASTM D5185m >20 23 Soot % % *ASTM D7844 >3 0.2 Soot %<	Barium	ppm	ASTM D5185m	0	0		
Magnesium ppm ASTM D5185m 0 684 Calcium ppm ASTM D5185m 1296 Phosphorus ppm ASTM D5185m 664 Zinc ppm ASTM D5185m 775 Sulfur ppm ASTM D5185m 3066 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 10 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 23 Fuel % ASTM D3524 >5 0.4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 10.0 Sulfat	Molybdenum	ppm	ASTM D5185m	0	<1		
Calcium ppm ASTM D5185m 1296 Phosphorus ppm ASTM D5185m 664 Zinc ppm ASTM D5185m 775 Sulfur ppm ASTM D5185m 3066 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 10 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 23 Fuel % ASTM D3524 >5 0.4 Soot % % *ASTM D7844 >3 0.2 Soot % % *ASTM D7624 >20 10.0 Soulfation Abs/.1mm *ASTM D7415 >30 21.5 <t< td=""><td>Manganese</td><td>ppm</td><td>ASTM D5185m</td><td></td><td>2</td><td></td><td></td></t<>	Manganese	ppm	ASTM D5185m		2		
Phosphorus ppm ASTM D5185m 664 Zinc ppm ASTM D5185m 775 Sulfur ppm ASTM D5185m 3066 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 2 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m 20 23 Fuel % ASTM D5185m >20 23 Fuel % ASTM D3524 >5 0.4 Soot % % *ASTM D7844 >3 0.2 Soot % % *ASTM D7624 >20 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 Dxidatio	Magnesium	ppm	ASTM D5185m	0	684		
Phosphorus ppm ASTM D5185m 664 Zinc ppm ASTM D5185m 775 Sulfur ppm ASTM D5185m 3066 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 10 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 23 Fuel % ASTM D3524 >5 0.4 Fuel % ASTM D3524 >5 0.4 Soot % % *ASTM D7844 >3 0.2 Nitration Abs/cm *ASTM D7845 >30 21.5 FLUID DEGRADATION method limit/base current history1 history2	Calcium	ppm	ASTM D5185m		1296		
This column			ASTM D5185m				
Sulfur ppm ASTM D5185m 3066 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 10 Sodium ppm ASTM D5185m 2 Potassium ppm ASTM D5185m >20 23 Fuel % ASTM D3524 >5 0.4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.2 Nitration Abs/cm *ASTM D7624 >20 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >2							
Silicon ppm ASTM D5185m >25 10					-		
Sodium	CONTAMINANTS	S	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 23 Fuel % ASTM D3524 >5 0.4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.2 Nitration Abs/cm *ASTM D7624 >20 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.1	Silicon	ppm	ASTM D5185m	>25	10		
Fuel % ASTM D3524 >5 0.4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.2 Nitration Abs/cm *ASTM D7624 >20 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.1	Sodium	ppm	ASTM D5185m		2		
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.2 Nitration Abs/cm *ASTM D7624 >20 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.1	Potassium	ppm	ASTM D5185m	>20	23		
Soot % % *ASTM D7844 >3 0.2 Nitration Abs/cm *ASTM D7624 >20 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.1	Fuel	%	ASTM D3524	>5	0.4		
Nitration Abs/cm *ASTM D7624 >20 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.1	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.1	Soot %	%	*ASTM D7844	>3	0.2		
Sulfation Abs/.1mm *ASTM D7415 >30 21.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.1	Vitration	Abs/cm	*ASTM D7624	>20	10.0		
Oxidation				>30	21.5		
	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1		
	Base Number (BN)	mg KOH/g	ASTM D2896	9.4	4.6		



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

: WC0914562 Lab Number : 06141092 Unique Number : 10965900

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 08 Apr 2024

Tested Diagnosed

: 15 Apr 2024 : 15 Apr 2024 - Jonathan Hester

Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

SHERWOOD CONSTRUCTION CO INC 3219 WEST MAY ST WICHITA, KS US 67213 Contact: SHAWN SOUTH

shawn.south@sherwood.net

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

Report Id: SHEWIC [WUSCAR] 06141092 (Generated: 04/15/2024 12:23:59) Rev: 1

T: x:

F: x: