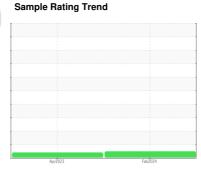


OIL ANALYSIS REPORT

OKLAHOMA/105 Machine Id 08.510 [OKLAHOMA^105]

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- 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

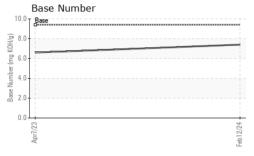
Fluid Condition

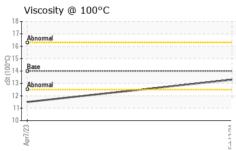
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sample Number Client Info WC0834087 WC0792411	`			Apr2023	Feb2024		
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 1881 651	Sample Number		Client Info		WC0834087	WC0792411	
Oil Age hrs Client Info 1681 651 Oil Changed Client Info Changed Changed Sample Status NORMAL ATTENTION CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0 0.9 Water WC Method >0.2 NEG NEG WEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 34 54 Mickel ppm ASTM D5185m >20 1 2 Chromium ppm ASTM D5185m >4 -1 -1 Mickel ppm ASTM D5185m >3 0 0 Titanium ppm ASTM D5185m >3 0 0	Sample Date		Client Info		12 Feb 2024	07 Apr 2023	
Contained Client Info Changed Changed Changed Changed Changed Changed Changed Changed ATTENTION CONTAMINATION method limit/base current history1 history2 Contained Changed Chan	Machine Age	hrs	Client Info		2332	651	
Contained Client Info Changed Changed Changed Changed Changed Changed Changed Changed ATTENTION Contained Changed Chan	Oil Age	hrs	Client Info		1681	651	
Fuel	-		Client Info		Changed	Changed	
Fuel	Sample Status				NORMAL	ATTENTION	
Water WC Method >0.2 NEG NEG	CONTAMINATIO	N	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>5	<1.0	0.9	
WEAR METALS	Water		WC Method	>0.2	NEG	NEG	
Iron	Glycol		WC Method		NEG	NEG	
Chromium	WEAR METALS		method	limit/base	current	history1	history2
Chromium	Iron	ppm	ASTM D5185m	>100	34	54	
Nickel	Chromium		ASTM D5185m	>20	1	2	
Titanium					<1	<1	
Silver			ASTM D5185m				
Aluminum ppm ASTM D5185m >20 2 <1 Lead ppm ASTM D5185m >40 0 <1				>3	-		
Lead							
Copper ppm ASTM D5185m >330 2 6							
Tin							
Vanadium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 28 52 Barium ppm ASTM D5185m 0 0 2 Molybdenum ppm ASTM D5185m 0 38 8 Manganese ppm ASTM D5185m 1 2 Magnesium ppm ASTM D5185m 1572 1156 Calcium ppm ASTM D5185m 716 629 Phosphorus ppm ASTM D5185m 872 750 Sulfur ppm ASTM D5185m 2312 2597 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 6 13 Sodium ppm <td>• •</td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td>	• •				_		
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Nitration Abs/cm *ASTM D7624 >20 11.4 10.0 Sulfation Abs/.1mm *ASTM D7415 >30 24.4 20.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 24.8 17.4	INFRA-RED		method	limit/base	current	history1	history2
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Sulfation Abs/.1mm *ASTM D7415 >30 24.4 20.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 24.8 17.4							
Oxidation							
	FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	24.8	17.4	
	Base Number (BN)	mg KOH/g	ASTM D2896	9.4	7.4	6.6	



OIL ANALYSIS REPORT

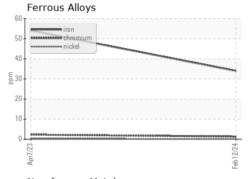


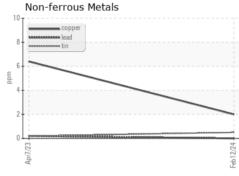


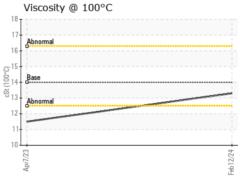
White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG	VISUAL		method	limit/base	current	history1	history2
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	White Metal	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	Yellow Metal	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	Precipitate	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML	Silt	scalar	*Visual	NONE	NONE	NONE	
Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML	Debris	scalar	*Visual	NONE	NONE	NONE	
Odor scalar *Visual NORML NORML NORML	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water scalar *Visual >0.2 NEG NEG	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Free Water scalar *Visual NEG NEG	Free Water	scalar	*Visual		NEG	NEG	

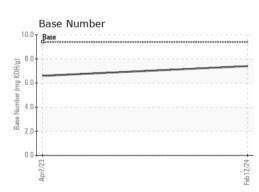
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Visc @ 100°C	cSt	ASTM D445	14	13.3	1 1.5	

GRAPHS













Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0834087 Lab Number : 06098115

Received **Tested** Unique Number : 10896345

: 23 Feb 2024 : 25 Feb 2024 Diagnosed : 25 Feb 2024 - Wes Davis Test Package: CONST (Additional Tests: TBN)

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: