

OIL ANALYSIS REPORT

Sample Rating Trend







666

COLORADO/443/EG - LOADER
45.54L [COLORADO^443^EG - LOADER]

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (5 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

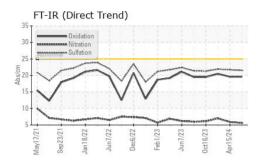
Fluid Condition

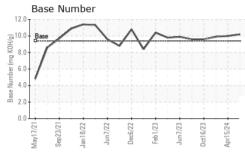
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

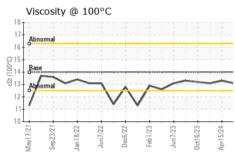
Sample Number Client Info WC0928751 WC0883898 WC0883898 Sample Date Client Info Client Info Client Info O	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Date					WC0928751	WC0883898	
Machine Age hrs Client Info 5115 4980 4800 Oil Age hrs Client Info 0 0 0 0 Oil Changed hrs Client Info Changed Changed Changed Changed Changed Changed Changed Changed NoRMAL 1.0 0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 <td>·</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	·						
Oil Age		hrs			-		
Client Info Changed Changed NORMAL NORMAL NORMAL NORMAL							
NORMAL NORMAL NORMAL NORMAL	-	1110			•	ū.	-
Fuel	-		Oliciti IIIIo			Ü	
Fuel	·	V	method	limit/base			
Water Glycol WC Method WC Method >0.2 NEG NEG NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 4 7 8 Chromium ppm ASTM D5185m >20 <1							
WEAR METALS							
WEAR METALS				>0.2			
Chromium							
Chromium	WEAR METALS		method	limit/base	current	history1	history2
Nickel		ppm	ASTM D5185m	>100	4		
Description	Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >25 2 2 4 Lead ppm ASTM D5185m >40 <1 <1 0 Copper ppm ASTM D5185m >330 <1 <1 <1 Vanadium ppm ASTM D5185m >15 0 <1 <1 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 60 57 44 Boron ppm ASTM D5185m 0 60 57 44 Barium ppm ASTM D5185m 0 37 39 40 Molybdenum ppm ASTM D5185m 0 37 39 40 Magnesium ppm ASTM D5185m 0 458 508 507 Calcium ppm ASTM D5185m 735 813 7	Nickel	ppm	ASTM D5185m	>2	-	0	0
Aluminum ppm ASTM D5185m >25 2 2 4 Lead ppm ASTM D5185m >40 <1	Titanium	ppm	ASTM D5185m	>2	<1	0	0
Lead	Silver	ppm	ASTM D5185m	>2	0	0	0
Copper ppm ASTM D5185m >330 <1 <1 <1 Tin ppm ASTM D5185m >15 0 <1	Aluminum	ppm	ASTM D5185m	>25	2	2	4
Tin	Lead	ppm	ASTM D5185m	>40	<1	<1	0
Standard	Copper	ppm	ASTM D5185m	>330	<1	<1	<1
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 60 57 44 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 37 39 40 Manganese ppm ASTM D5185m 0 458 508 507 Calcium ppm ASTM D5185m 1720 1800 1573 Phosphorus ppm ASTM D5185m 735 813 737 Zinc ppm ASTM D5185m 852 909 914 Sulfur ppm ASTM D5185m 2734 3001 2603 CONTAMINANTS method limit/base current history1 history2 Instraction ppm	Tin	ppm	ASTM D5185m	>15	0	<1	<1
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 60 57 44 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 37 39 40 Manganese ppm ASTM D5185m 0 37 39 40 Magnesium ppm ASTM D5185m <1	Vanadium		ASTM D5185m		0	0	0
Boron ppm ASTM D5185m 0 0 0 0 0 0 0 0	Cadmium		ASTM D5185m				
Barium	ADDITIVES		method	limit/base	current	history1	history2
Barium	Boron	ppm	ASTM D5185m	0	60	57	44
Molybdenum ppm ASTM D5185m 0 37 39 40 Manganese ppm ASTM D5185m <1 <1 0 Magnesium ppm ASTM D5185m 0 458 508 507 Calcium ppm ASTM D5185m 0 458 508 507 Calcium ppm ASTM D5185m 1720 1800 1573 Phosphorus ppm ASTM D5185m 735 813 737 Zinc ppm ASTM D5185m 852 909 914 Sulfur ppm ASTM D5185m 2734 3001 2603 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 4 4 Sodium ppm ASTM D5185m >20 1 <1 2 INFRA-RED method limit/base current history1 history2 Soot % </td <td>Barium</td> <td></td> <td>ASTM D5185m</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	Barium		ASTM D5185m	0	0	0	0
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Calcium ppm ASTM D5185m 1720 1800 1573 Phosphorus ppm ASTM D5185m 735 813 737 Zinc ppm ASTM D5185m 852 909 914 Sulfur ppm ASTM D5185m 2734 3001 2603 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 4 4 Sodium ppm ASTM D5185m 3 2 <1	•			0			
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Sulfur ppm ASTM D5185m 2734 3001 2603 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 4 4 Sodium ppm ASTM D5185m 3 2 <1 Potassium ppm ASTM D5185m >20 1 <1 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.2 0.3 0.4 Nitration Abs/cm *ASTM D7624 >20 5.6 5.9 7.0 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 21.7 21.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.6 19.6 20.5							
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Silicon ppm ASTM D5185m >25 4 4 4 Sodium ppm ASTM D5185m 3 2 <1 Potassium ppm ASTM D5185m >20 1 <1 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.2 0.3 0.4 Nitration Abs/cm *ASTM D7624 >20 5.6 5.9 7.0 Sulfation Abs/.1mm *ASTM D7415 >30 21.5 21.7 21.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.6 19.6 20.5				limit/hase			
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INFRA-RED	Cadium	10 10 100			-3	_	<
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Sulfation Abs/.1mm *ASTM D7415 >30 21.5 21.7 21.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.6 19.6 20.5	Potassium		ASTM D5185m		1		
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.6 19.6 20.5	Potassium INFRA-RED	ppm	ASTM D5185m method	limit/base	1 current	history1	history2
Oxidation Abs/.1mm *ASTM D7414 >25 19.6 19.6 20.5	Potassium INFRA-RED Soot %	ppm %	ASTM D5185m method *ASTM D7844	limit/base	1 current 0.2	history1	history2
	Potassium INFRA-RED Soot % Nitration	ppm % Abs/cm	Method *ASTM D7844 *ASTM D7624	limit/base >3 >20	1 current 0.2 5.6	history1 0.3 5.9	0.4 7.0
	Potassium INFRA-RED Soot % Nitration Sulfation	ppm % Abs/cm Abs/.1mm	ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	limit/base >3 >20 >30	1 current 0.2 5.6 21.5	history1 0.3 5.9 21.7	history2 0.4 7.0 21.9
	Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm % Abs/cm Abs/.1mm	ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415 method	limit/base >3 >20 >30 limit/base	1 current 0.2 5.6 21.5 current	history1 0.3 5.9 21.7 history1	history2 0.4 7.0 21.9 history2



OIL ANALYSIS REPORT



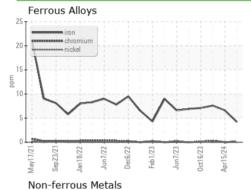


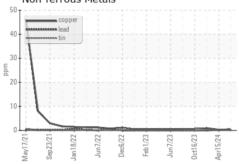


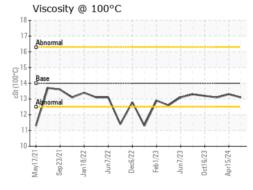
VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	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

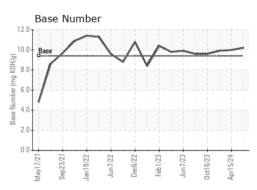
FLUID PROPERTIES		method				history2
Visc @ 100°C	cSt	ASTM D445	14	13.1	13.3	13.1

GRAPHS













Laboratory Sample No.

: WC0928751 Lab Number : 06196139

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

Received **Tested** Diagnosed

: 30 May 2024 : 31 May 2024 : 31 May 2024 - Wes Davis

SHERWOOD CONSTRUCTION CO INC 3219 WEST MAY ST WICHITA, KS US 67213 Contact: BILL ORCUTT

william.orcutt@wildcat.net

Certificate 12367

Unique Number : 11058262 Test Package : CONST (Additional Tests: TBN)

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:

T: