

OIL ANALYSIS REPORT

Sample Rating Trend



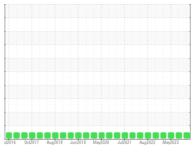


OKLAHOMA/102/EG - LOADER Machine Id 46.84L [OKLAHOMA^102^EG - LOADER]

Component

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Moor

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil

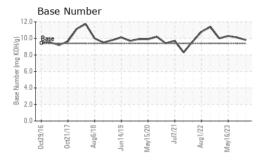
Fluid Condition

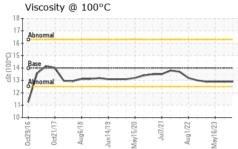
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sample Number Client Info WC0857400 WC0833969	history2
	WC0800781
Sample Date Client Info 20 Jan 2024 15 Aug 2023	16 May 2023
Machine Age hrs Client Info 6934 6712	6475
Oil Age hrs Client Info 222 232	270
Oil Changed Client Info Changed Changed	Changed
Sample Status NORMAL NORMAL	NORMAL
CONTAMINATION method limit/base current history1	history2
Fuel WC Method >5 <1.0 <1.0	<1.0
Water WC Method >0.2 NEG NEG	NEG
Glycol WC Method NEG NEG	NEG
WEAR METALS method limit/base current history1	history2
Iron ppm ASTM D5185m >100 8 12	9
Chromium ppm ASTM D5185m >20 <1 <1	<1
Nickel ppm ASTM D5185m >2 0 0	<1
Titanium ppm ASTM D5185m >2 0 0	<1
Silver ppm ASTM D5185m >2 0 0	0
Aluminum ppm ASTM D5185m >25 6 8	10
Lead ppm ASTM D5185m >40 0 0	1
Copper ppm ASTM D5185m >330 <1 1	1
Tin ppm ASTM D5185m >15 <1 0	<1
Vanadium ppm ASTM D5185m 0 0	<1
Cadmium ppm ASTM D5185m 0 0	<1
ADDITIVES method limit/base current history1	history2
Boron ppm ASTM D5185m 0 55 61	62
Barium ppm ASTM D5185m 0 <1 0	0
Molybdenum ppm ASTM D5185m 0 40 41	38
Manganese ppm ASTM D5185m <1 <1	<1
	539
Magnesium ppm ASTM D5185m 0 499 538	
	1776
Magnesium ppm ASTM D5185m 0 499 538	1776 740
Magnesium ppm ASTM D5185m 0 499 538 Calcium ppm ASTM D5185m 1596 1765	
Magnesium ppm ASTM D5185m 0 499 538 Calcium ppm ASTM D5185m 1596 1765 Phosphorus ppm ASTM D5185m 761 784	740
Magnesium ppm ASTM D5185m 0 499 538 Calcium ppm ASTM D5185m 1596 1765 Phosphorus ppm ASTM D5185m 761 784 Zinc ppm ASTM D5185m 891 939	740 959
Magnesium ppm ASTM D5185m 0 499 538 Calcium ppm ASTM D5185m 1596 1765 Phosphorus ppm ASTM D5185m 761 784 Zinc ppm ASTM D5185m 891 939 Sulfur ppm ASTM D5185m 2450 3083	740 959 2916
Magnesium ppm ASTM D5185m 0 499 538 Calcium ppm ASTM D5185m 1596 1765 Phosphorus ppm ASTM D5185m 761 784 Zinc ppm ASTM D5185m 891 939 Sulfur ppm ASTM D5185m 2450 3083 CONTAMINANTS method limit/base current history1	740 959 2916 history2
Magnesium ppm ASTM D5185m 0 499 538 Calcium ppm ASTM D5185m 1596 1765 Phosphorus ppm ASTM D5185m 761 784 Zinc ppm ASTM D5185m 891 939 Sulfur ppm ASTM D5185m 2450 3083 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >25 6 4	740 959 2916 history2
Magnesium ppm ASTM D5185m 0 499 538 Calcium ppm ASTM D5185m 1596 1765 Phosphorus ppm ASTM D5185m 761 784 Zinc ppm ASTM D5185m 891 939 Sulfur ppm ASTM D5185m 2450 3083 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >25 6 4 Sodium ppm ASTM D5185m <1 2	740 959 2916 history2 6 2
Magnesium ppm ASTM D5185m 0 499 538 Calcium ppm ASTM D5185m 1596 1765 Phosphorus ppm ASTM D5185m 761 784 Zinc ppm ASTM D5185m 891 939 Sulfur ppm ASTM D5185m 2450 3083 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >25 6 4 Sodium ppm ASTM D5185m <1 2 Potassium ppm ASTM D5185m >20 0	740 959 2916 history2 6 2 3
Magnesium ppm ASTM D5185m 0 499 538 Calcium ppm ASTM D5185m 1596 1765 Phosphorus ppm ASTM D5185m 761 784 Zinc ppm ASTM D5185m 891 939 Sulfur ppm ASTM D5185m 2450 3083 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >25 6 4 Sodium ppm ASTM D5185m <1	740 959 2916 history2 6 2 3
Magnesium ppm ASTM D5185m 0 499 538 Calcium ppm ASTM D5185m 1596 1765 Phosphorus ppm ASTM D5185m 761 784 Zinc ppm ASTM D5185m 891 939 Sulfur ppm ASTM D5185m 2450 3083 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >25 6 4 Sodium ppm ASTM D5185m >20 0 0 INFRA-RED method limit/base current history1 Soot % *ASTM D7844 >3 0.2 0.2	740 959 2916 history2 6 2 3 history2 0.3
Magnesium ppm ASTM D5185m 0 499 538 Calcium ppm ASTM D5185m 1596 1765 Phosphorus ppm ASTM D5185m 761 784 Zinc ppm ASTM D5185m 891 939 Sulfur ppm ASTM D5185m 2450 3083 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >25 6 4 Sodium ppm ASTM D5185m >20 0 0 INFRA-RED method limit/base current history1 Soot % % *ASTM D7844 >3 0.2 0.2 Nitration Abs/cm *ASTM D7624 >20 6.6 6.6	740 959 2916 history2 6 2 3 history2 0.3 6.9
Magnesium ppm ASTM D5185m 0 499 538 Calcium ppm ASTM D5185m 1596 1765 Phosphorus ppm ASTM D5185m 761 784 Zinc ppm ASTM D5185m 891 939 Sulfur ppm ASTM D5185m 2450 3083 CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >25 6 4 Sodium ppm ASTM D5185m >20 0 0 INFRA-RED method limit/base current history1 Soot % % *ASTM D7844 >3 0.2 0.2 Nitration Abs/cm *ASTM D7624 >20 6.6 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 21.8 22.0	740 959 2916 history2 6 2 3 history2 0.3 6.9 22.3



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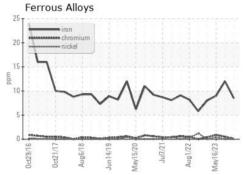


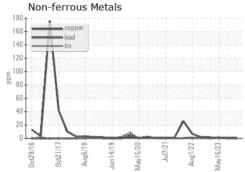


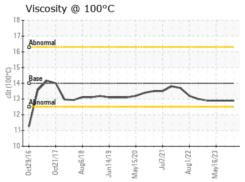
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

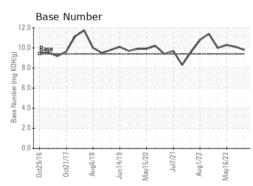
FLUID PROPEF	RTIES	method				history2
Visc @ 100°C	cSt	ASTM D445	14	12.9	12.9	12.9

GRAPHS













Laboratory Sample No. Lab Number : 06076655 Unique Number : 10858746

: WC0857400

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

Received **Tested** Diagnosed Test Package : CONST (Additional Tests: TBN)

: 01 Feb 2024

:01 Feb 2024 : 01 Feb 2024 - Wes Davis

SHERWOOD CONSTRUCTION CO INC 3219 WEST MAY ST

WICHITA, KS US 67213 Contact: DOUG KING

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. doug.king@sherwood.net T: (316)617-3161

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Submitted By: RUSTY RILEY

F: x: