

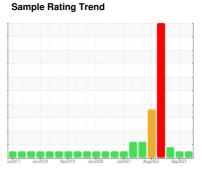
OIL ANALYSIS REPORT



KANSAS/44/EG - OTHER SERVICE 53.130L [KANSAS^44^EG - OTHER SERVICE] Component

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)





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

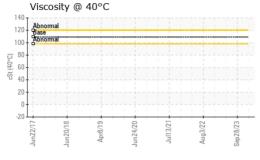
Fluid Condition

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

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0833770	WC0833807	WC0741702
Sample Date		Client Info		09 Nov 2023	28 Sep 2023	08 Mar 2023
Machine Age	hrs	Client Info		0	4741	4401
Oil Age	hrs	Client Info		0	340	4216
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	MARGINAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	△ 3.7
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	7	13	11
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	2	2
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	2	4	9
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
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ADDITIVES	ppi	method	limit/base	current	history1	history2
	ppm		limit/base			
ADDITIVES		method ASTM D5185m		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	0	current 41	history1	history2
ADDITIVES Boron Barium	ppm	method ASTM D5185m ASTM D5185m	0	current 41 0	history1 47	history2 38 2
ADDITIVES Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0	current 41 0 41	history1 47 0 42	history2 38 2 35
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 41 0 41 <1	history1 47 0 42 2	history2 38 2 35 3
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 41 0 41 <1 <1 569	history1 47 0 42 2 633	history2 38 2 35 3 454
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 41 0 41 <1 569 1763	history1 47 0 42 2 633 2063	history2 38 2 35 3 454 1866
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0	current 41 0 41 <1 569 1763 830	history1 47 0 42 2 633 2063 879	history2 38 2 35 3 454 1866 699
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0	current 41 0 41 <1 569 1763 830 1016	history1 47 0 42 2 633 2063 879 1114	history2 38 2 35 3 454 1866 699 908
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0	current 41 0 41 <1 569 1763 830 1016 2598	history1 47 0 42 2 633 2063 879 1114 2695	history2 38 2 35 3 454 1866 699 908 3463
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0	current 41 0 41 <1 569 1763 830 1016 2598 current	history1 47 0 42 2 633 2063 879 1114 2695 history1	history2 38 2 35 3 454 1866 699 908 3463 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 Iimit/base	current 41 0 41 <1 569 1763 830 1016 2598 current 6	history1 47 0 42 2 633 2063 879 1114 2695 history1 7	history2 38 2 35 3 454 1866 699 908 3463 history2 10
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 Iimit/base	current 41 0 41 <1 569 1763 830 1016 2598 current 6 3	history1 47 0 42 2 633 2063 879 1114 2695 history1 7	history2 38 2 35 3 454 1866 699 908 3463 history2 10 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 limit/base >25 >20	current 41 0 41 <1 569 1763 830 1016 2598 current 6 3 0	history1 47 0 42 2 633 2063 879 1114 2695 history1 7 5	history2 38 2 35 3 454 1866 699 908 3463 history2 10 <1 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 0 limit/base >25 >20 limit/base >3	current 41 0 41 <1 569 1763 830 1016 2598 current 6 3 0 current	history1 47 0 42 2 633 2063 879 1114 2695 history1 7 5 2 history1	history2 38 2 35 3 454 1866 699 908 3463 history2 10 <1 0 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 limit/base >25 >20 limit/base >3	current 41 0 41 <1 569 1763 830 1016 2598 current 6 3 0 current	history1 47 0 42 2 633 2063 879 1114 2695 history1 7 5 2 history1 0.2	history2 38 2 35 3 454 1866 699 908 3463 history2 10 <1 0 history2 0.1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 limit/base >25 >20 limit/base >3 >20	current 41 0 41 <1 569 1763 830 1016 2598 current 6 3 0 current 0.2 8.3	history1 47 0 42 2 633 2063 879 1114 2695 history1 7 5 2 history1 0.2 9.6	history2 38 2 35 3 454 1866 699 908 3463 history2 10 <1 0 history2 0.1 7.2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m METHOD *ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20 >30	current 41 0 41 <1 569 1763 830 1016 2598 current 6 3 0 current 0.2 8.3 23.1	history1 47 0 42 2 633 2063 879 1114 2695 history1 7 5 2 history1 0.2 9.6 22.8	history2 38 2 35 3 454 1866 699 908 3463 history2 10 <1 0 history2 0.1 7.2 21.4



OIL ANALYSIS REPORT



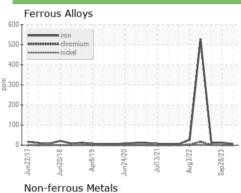
VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance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

13.0

13.1

11.9

8 T :	osity @	100 C				
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6-						
Base 3 Annor	\wedge					
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3 Alenor	mal		<u> </u>			-/
4					~	-
0						
17	18	/19	720	/21	22	73
22	Jun20/	Apr8/19	Jun24,	Jul 3,	Aug3,	2,0
Jun22/	=					



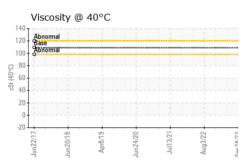
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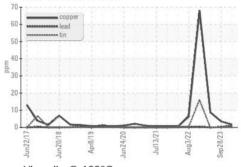
ASTM D445 14

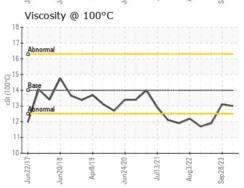
FLUID PROPERTIES

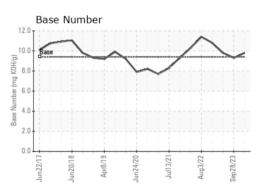
Visc @ 100°C

GRAPHS













Laboratory Sample No. Lab Number **Unique Number**

: 06008155 : 10741917

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0833770

Received : 15 Nov 2023 Diagnosed

: 17 Nov 2023

Diagnostician : Don Baldridge Test Package : CONST (Additional Tests: KV40, 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)

SHERWOOD CONSTRUCTION CO INC

3219 WEST MAY ST WICHITA, KS US 67213

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

F: x: