

OIL ANALYSIS REPORT

KANSAS/44/EG - TRUCK-ON-HWY-HEAVY DUTY 08.10W [KANSAS^44^EG - TRUCK-ON-HWY-HEAVY DUTY] Component

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

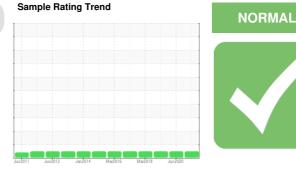
All component wear rates are normal.

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.

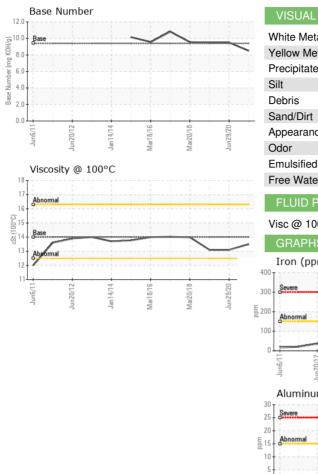


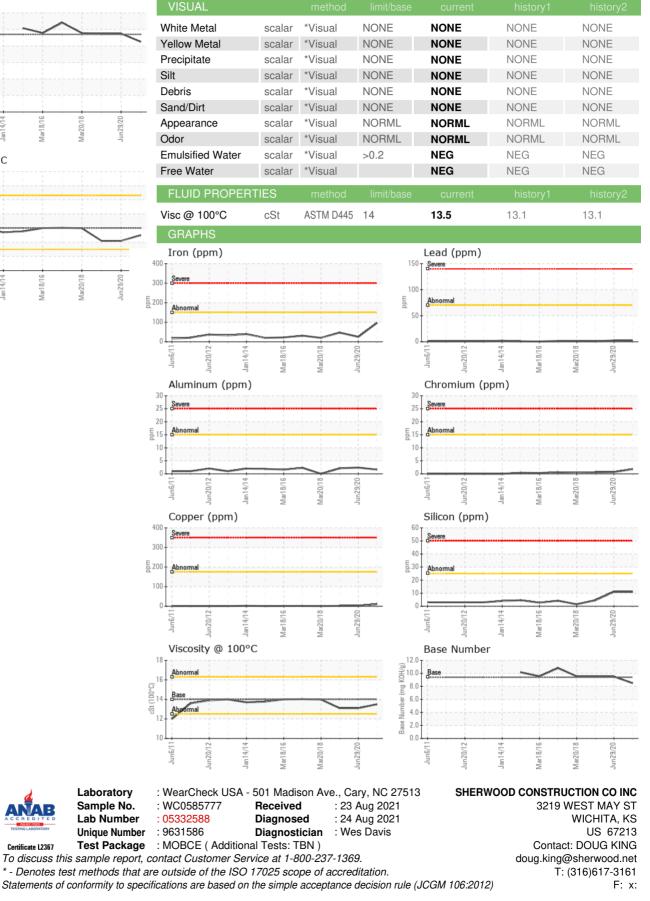


SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0585777	WCCF11243	WCCF11247
Sample Date		Client Info		17 Aug 2021	29 Jun 2020	16 Dec 2019
Machine Age	hrs	Client Info		12108	1162	11473
Oil Age	hrs	Client Info		0	250	345
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method		<1.0	<1.0	<1.0
Glycol		WC Method	20.0	NEG	NEG	NEG
,						
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	96	25	47
Chromium	ppm	ASTM D5185m		2	<1	<1
Nickel	ppm	ASTM D5185m	>4	4	1	1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>15	2	2	2
Lead	ppm	ASTM D5185m	>70	2	2	1
Copper	ppm	ASTM D5185m	>175	11	2	2
Tin	ppm	ASTM D5185m	>5	<1	0	0
Antimony	ppm	ASTM D5185m		0	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	<1	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 0			history2 2
	ppm ppm	ASTM D5185m		current	history1	
Boron Barium		ASTM D5185m	0	current 70	history1 69	2
Boron	ppm	ASTM D5185m ASTM D5185m	0	current 70 0	history1 69 0	2 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	current 70 0 15	history1 69 0 13	2 0 56
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 70 0 15 1	history1 69 0 13 <1	2 0 56 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 70 0 15 1 777	history1 69 0 13 <1 723	2 0 56 <1 935
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	Current 70 0 15 1 777 1386	history1 69 0 13 <1 723 1276	2 0 56 <1 935 984
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	Current 70 0 15 1 777 1386 773	history1 69 0 13 <1 723 1276 734	2 0 56 <1 935 984 901
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 70 0 15 1 777 1386 773 863	history1 69 0 13 <1 723 1276 734 788	2 0 56 <1 935 984 901 1088
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0	Current 70 0 15 1 777 1386 773 863 2441	history1 69 0 13 <1 723 1276 734 788 2300	2 0 56 <1 935 984 901 1088 2339
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	current 70 0 15 1 777 1386 773 863 2441 current	history1 69 0 13 <1 723 1276 734 788 2300 history1	2 0 56 <1 935 984 901 1088 2339 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	current 70 0 15 1 777 1386 773 863 2441 current 11	history1 69 0 13 <1 723 1276 734 788 2300 history1 11	2 0 56 <1 935 984 901 1088 2339 history2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 	current 70 0 15 1 777 1386 773 863 2441 current 11 5	history1 69 0 13 <1 723 1276 734 788 2300 history1 11 5	2 0 56 <1 935 984 901 1088 2339 history2 4 2
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	ASTM D5185m ASTM D5185m	0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	current 70 0 15 1 777 1386 773 863 2441 current 11 5 4 current	history1 69 0 13 <1 723 1276 734 788 2300 history1 11 5 2 history1	2 0 56 <1 935 984 901 1088 2339 history2 4 2 0 history2
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	ASTM D5185m ASTM D5185m	0 0 0 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	current 70 0 15 1 777 1386 773 863 2441 current 11 5 4 current 1.4	history1 69 0 13 <1 723 1276 734 788 2300 history1 11 5 2 history1 0.6	2 0 56 <1 935 984 901 1088 2339 history2 4 2 0 history2 0.9
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	ASTM D5185m ASTM D5185m	0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	current 70 0 15 1 777 1386 773 863 2441 current 11 5 4 current 1.4 9.4	history1 69 0 13 <1 723 1276 734 788 2300 history1 11 5 2 history1 0.6 8.2	2 0 56 <1 935 984 901 1088 2339 history2 4 2 2 0 history2 0.9 6.7
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	ASTM D5185m ASTM D5185m	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	current 70 0 15 1 777 1386 773 863 2441 current 11 5 4 current 1.4 9.4 21.1	history1 69 0 13 <1 723 1276 734 788 2300 history1 11 5 2 history1 0.6 8.2 20.9	2 0 56 <1 935 984 901 1088 2339 history2 4 2 0 history2 0.9 6.7 19.6
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	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	current 70 0 15 1 777 1386 773 863 2441 current 11 5 4 current 1.4 9.4 21.1 current	history1 69 0 13 <1 723 1276 734 788 2300 history1 11 5 2 history1 0.6 8.2 20.9 history1	2 0 56 <1 935 984 901 1088 2339 history2 4 2 2 0 history2 0.9 6.7 19.6 history2
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	ASTM D5185m ASTM D5185m	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	current 70 0 15 1 777 1386 773 863 2441 current 11 5 4 current 1.4 9.4 21.1	history1 69 0 13 <1 723 1276 734 788 2300 history1 11 5 2 history1 0.6 8.2 20.9	2 0 56 <1 935 984 901 1088 2339 history2 4 2 0 history2 0.9 6.7 19.6



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