

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



OKLAHOMA/105/EG - TRUCK-ON-HWY-HEAVY DUTY 08.118 [OKLAHOMA^105^EG - TRUCK-ON-HWY-HEAVY DUTY]

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

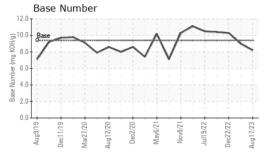
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

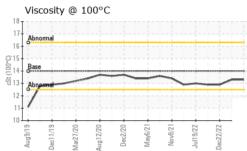


SAMI LE INI OTTI			IIIIII/Dase	Current	•	
Sample Number		Client Info		WC0834004	WC0792404	WC0769718
Sample Date		Client Info		17 Aug 2023	01 May 2023	22 Dec 2022
Machine Age	hrs	Client Info		7476	6773	6120
Oil Age	hrs	Client Info		703	653	418
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
				11011111111111	140111111111	TOT WIN IE
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		ام مالم مما	line it /le e e e		المناهة المناهة	la i a ta mu O
		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	11	11	7
Chromium	ppm	ASTM D5185m	>4	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	1	3
Lead	ppm	ASTM D5185m	>45	0	<1	<1
Copper	ppm	ASTM D5185m	>85	<1	2	<1
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES					HISTOLY	i ii oto i y z
	mag					· ·
Boron	ppm	ASTM D5185m	0	26	30	40
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	26 0	30	40
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	26 0 44	30 0 43	40 0 44
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	26 0 44 <1	30 0 43 <1	40 0 44 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	26 0 44 <1 535	30 0 43 <1 542	40 0 44 <1 526
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	26 0 44 <1 535 1875	30 0 43 <1 542 1734	40 0 44 <1 526 1649
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	26 0 44 <1 535 1875 774	30 0 43 <1 542 1734 792	40 0 44 <1 526 1649 754
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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	26 0 44 <1 535 1875 774	30 0 43 <1 542 1734 792 970	40 0 44 <1 526 1649 754 927
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 ASTM D5185m	0 0 0	26 0 44 <1 535 1875 774	30 0 43 <1 542 1734 792 970 3059	40 0 44 <1 526 1649 754 927 2753
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 ASTM D5185m	0 0 0	26 0 44 <1 535 1875 774	30 0 43 <1 542 1734 792 970	40 0 44 <1 526 1649 754 927
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 ASTM D5185m	0 0 0	26 0 44 <1 535 1875 774 961 2954	30 0 43 <1 542 1734 792 970 3059	40 0 44 <1 526 1649 754 927 2753
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0	26 0 44 <1 535 1875 774 961 2954 current	30 0 43 <1 542 1734 792 970 3059 history1	40 0 44 <1 526 1649 754 927 2753 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0	26 0 44 <1 535 1875 774 961 2954 current	30 0 43 <1 542 1734 792 970 3059 history1	40 0 44 <1 526 1649 754 927 2753 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base >30	26 0 44 <1 535 1875 774 961 2954 current 5 3	30 0 43 <1 542 1734 792 970 3059 history1 4	40 0 44 <1 526 1649 754 927 2753 history2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base >30 >20 limit/base	26 0 44 <1 535 1875 774 961 2954 current 5 3 2	30 0 43 <1 542 1734 792 970 3059 history1 4 4 history1	40 0 44 <1 526 1649 754 927 2753 history2 4 2 <1
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	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 limit/base >30 >20 limit/base >3	26 0 44 <1 535 1875 774 961 2954 current 5 3 2 current 0.3	30 0 43 <1 542 1734 792 970 3059 history1 4 4 history1 0.3	40 0 44 <1 526 1649 754 927 2753 history2 4 2 <1 history2 0.2
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 method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 limit/base >30 >20 limit/base >3 >20	26 0 44 <1 535 1875 774 961 2954 current 5 3 2 current 0.3 9.1	30 0 43 <1 542 1734 792 970 3059 history1 4 4 4 history1 0.3 9.2	40 0 44 <1 526 1649 754 927 2753 history2 4 2 <1 history2 0.2 8.1
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 Method *ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	0 0 0 0 0 limit/base >30 >20 limit/base >3 >20 >30	26 0 44 <1 535 1875 774 961 2954 current 5 3 2 current 0.3 9.1 22.1	30 0 43 <1 542 1734 792 970 3059 history1 4 4 4 history1 0.3 9.2 22.8	40 0 44 <1 526 1649 754 927 2753 history2 4 2 <1 history2 0.2 8.1 23.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415 method	0 0 0 0 0 limit/base >30 >20 limit/base >3 >20 >30 limit/base	26 0 44 <1 535 1875 774 961 2954 current 5 3 2 current 0.3 9.1 22.1 current	30 0 43 <1 542 1734 792 970 3059 history1 4 4 4 history1 0.3 9.2 22.8 history1	40 0 44 <1 526 1649 754 927 2753 history2 4 2 <1 history2 0.2 8.1 23.2 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 Method *ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	0 0 0 0 0 limit/base >30 >20 limit/base >3 >20 >30 >20	26 0 44 <1 535 1875 774 961 2954 current 5 3 2 current 0.3 9.1 22.1	30 0 43 <1 542 1734 792 970 3059 history1 4 4 4 history1 0.3 9.2 22.8	40 0 44 <1 526 1649 754 927 2753 history2 4 2 <1 history2 0.2 8.1 23.2



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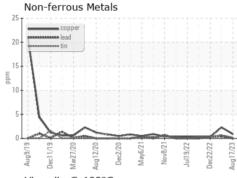


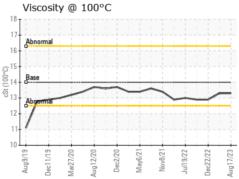
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

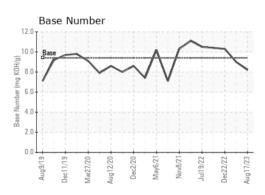
FLUID PROPERTIES		method				history2
Visc @ 100°C	cSt	ASTM D445	14	13.3	13.3	12.9

GRAPHS

Ferrous Alloys











Certificate L2367

Laboratory Sample No. Lab Number

Unique Number : 10619957

: WC0834004 : 05934686

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 25 Aug 2023 Diagnosed

: 28 Aug 2023 Diagnostician : Wes Davis

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)

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