

OIL ANALYSIS REPORT

Sample Rating Trend



Diesel Engine Fluid MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

08.504 [OKLAHOMA^105]

OKLAHOMA/105

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0726224	WC0778394	WC0713215
Sample Date		Client Info		08 Aug 2023	19 Jan 2023	12 Sep 202
Machine Age	hrs	Client Info		3372	2590	2044
Oil Age	hrs	Client Info		782	546	337
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history
Iron	ppm	ASTM D5185m	>90	14	3	7
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	1	2
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m		<1	<1	<1
Tin	ppm	ASTM D5185m		0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	39	59	48
Barium	ppm	ASTM D5185m	0	2	0	2
Molybdenum	ppm	ASTM D5185m	0	48	36	39
Manganese	ppm	ASTM D5185m		<1	<1	<1
				N		
Magnesium	ppm	ASTM D5185m	0	507	446	454
Magnesium Calcium	ppm ppm		0		446 1529	
•		ASTM D5185m	0	507		454
Calcium	ppm	ASTM D5185m ASTM D5185m	0	507 1873	1529	454 1554
Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	507 1873 782	1529 659	454 1554 715
Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 limit/base	507 1873 782 963	1529 659 791	454 1554 715 872 2291
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	507 1873 782 963 2933	1529 659 791 2681	454 1554 715 872 2291
Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	507 1873 782 963 2933 current	1529 659 791 2681 history1	454 1554 715 872 2291 history:
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base	507 1873 782 963 2933 current 3	1529 659 791 2681 history1 3	454 1554 715 872 2291 history2 4
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	507 1873 782 963 2933 current 3 0	1529 659 791 2681 history1 3 2	454 1554 715 872 2291 history 4 1 <1
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base	507 1873 782 963 2933 current 3 0 1	1529 659 791 2681 history1 3 2 0	454 1554 715 872 2291 history 4 1 <1
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	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	limit/base >25 >20 limit/base >6	507 1873 782 963 2933 current 3 0 1 1 current	1529 659 791 2681 history1 3 2 0 history1	454 1554 715 872 2291 history 4 1 <1 <1
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	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	limit/base >25 >20 limit/base >6 >20	507 1873 782 963 2933 current 3 0 1 1 current 0.3	1529 659 791 2681 history1 3 2 0 history1 0.1	454 1554 715 872 2291 history 4 1 <1 kistory 0.2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844	limit/base >25 >20 limit/base >6 >20	507 1873 782 963 2933 current 3 0 1 1 current 0.3 9.2	1529 659 791 2681 history1 3 2 0 history1 0.1 5.7	454 1554 715 872 2291 history2 4 1 <1 <1 history2 0.2 7.9 23.8
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624	limit/base >25 >20 limit/base >6 >20 >30 limit/base	507 1873 782 963 2933 current 3 0 1 1 current 0.3 9.2 22.8	1529 659 791 2681 history1 3 2 0 history1 0.1 5.7 21.8	454 1554 715 872 2291 history2 4 1 <1 <1 history2 0.2 7.9

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Component

Wear

All component wear rates are normal.

Contamination

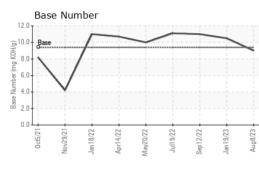
There is no indication of any contamination in the oil.

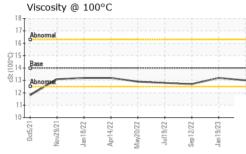
Fluid Condition

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

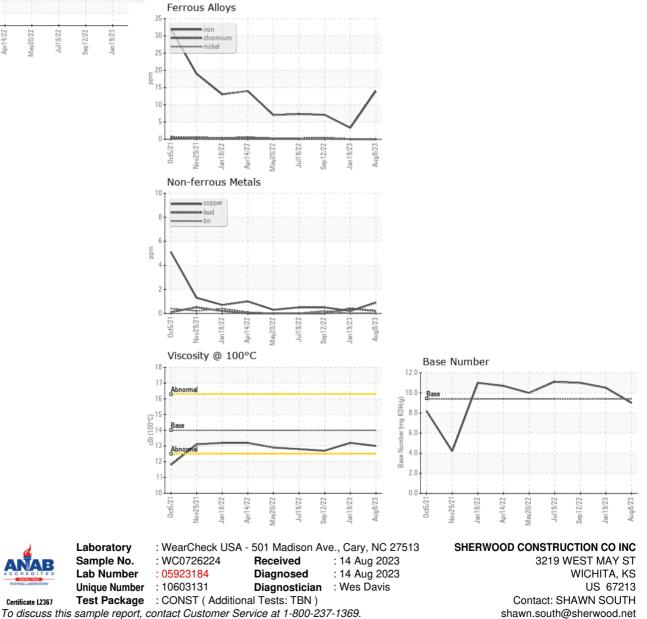


OIL ANALYSIS REPORT





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 PROPERT	ΓIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	13.0	13.2	12.7
GRAPHS						



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* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

T: x:

F: x: