

## **OIL ANALYSIS REPORT**

# OKLAHOMA/102/EG - OTHER SERVICE 87.27 [OKLAHOMA^102^EG - OTHER SERVICE]

Diesel Engine

Fluid MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

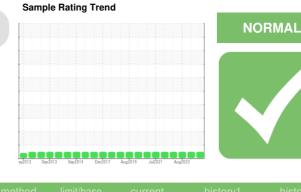
All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

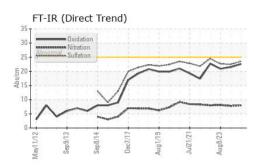
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

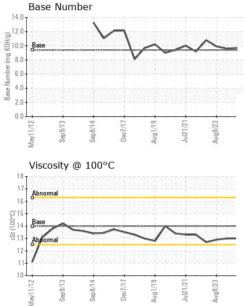


SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0935210	WC0886904	WC0848860
Sample Date		Client Info		26 Apr 2024	14 Mar 2024	08 Aug 2023
Machine Age	days	Client Info		5547	6300	5995
Oil Age	days	Client Info		300	280	300
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	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	11	13	19
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>25	2	2	1
Lead	ppm	ASTM D5185m	>40	2	1	<1
Copper	ppm	ASTM D5185m	>330	1	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	74	77	58
Barium	ppm	ASTM D5185m	0	0	0	2
Molybdenum						
	ppm	ASTM D5185m	0	45	42	46
Manganese	ppm ppm	ASTM D5185m ASTM D5185m	0	45 <1	42 <1	46 <1
Manganese Magnesium			0	-		
	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm ppm	ASTM D5185m ASTM D5185m		<1 529	<1 463	<1 519
Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		<1 529 1853	<1 463 1881	<1 519 1826
Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 529 1853 865	<1 463 1881 823	<1 519 1826 794
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 529 1853 865 1014	<1 463 1881 823 997	<1 519 1826 794 942
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 limit/base	<1 529 1853 865 1014 2909	<1 463 1881 823 997 2832	<1 519 1826 794 942 3028
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>Method</b>	0 limit/base	<1 529 1853 865 1014 2909 current	<1 463 1881 823 997 2832 history1	<1 519 1826 794 942 3028 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 limit/base >25	<1 529 1853 865 1014 2909 current 4	<1 463 1881 823 997 2832 history1 4	<1 519 1826 794 942 3028 history2 4
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m ASTM D5185m	0 limit/base >25	<1 529 1853 865 1014 2909 current 4 1	<1 463 1881 823 997 2832 history1 4 <1	<1 519 1826 794 942 3028 history2 4 3
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	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 limit/base >25 >20	<1 529 1853 865 1014 2909 current 4 1 2	<1 463 1881 823 997 2832 <u>history1</u> 4 <1 2	<1 519 1826 794 942 3028 history2 4 3 0
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	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 limit/base >25 >20 limit/base	<1 529 1853 865 1014 2909 current 4 1 2 2 current	<1 463 1881 823 997 2832 history1 4 <1 2 history1	<1 519 1826 794 942 3028 history2 4 3 0 history2
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 limit/base >25 >20 limit/base >3	<1 529 1853 865 1014 2909 current 4 1 2 current 0.2	<1 463 1881 823 997 2832 history1 4 <1 2 history1 0.2	<1 519 1826 794 942 3028 history2 4 3 0 history2 0.3
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 *ASTM D7844	0 limit/base >25 >20 limit/base >3 >20	<1 529 1853 865 1014 2909 current 4 1 2 current 0.2 8.0	<1 463 1881 823 997 2832 history1 4 <1 2 history1 0.2 7.8	<1 519 1826 794 942 3028 history2 4 3 0 history2 0.3 8.1
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	0 limit/base >25 >20 limit/base >3 >20 >3 >20	<1 529 1853 865 1014 2909 current 4 1 2 current 0.2 8.0 23.5	<1 463 1881 823 997 2832 history1 4 <1 2 history1 0.2 7.8 22.5	<1 519 1826 794 942 3028 history2 4 3 0 history2 0.3 8.1 22.6
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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415	0 1 1 1 2 2 2 3 2 2 1 1 1 1 2 0 3 3 2 0 1 2 0 1 2 0 2 3 2 0 2 3 2 0 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2	<1 529 1853 865 1014 2909 current 4 1 2 current 0.2 8.0 23.5 current	<1 463 1881 823 997 2832 history1 4 <1 2 history1 0.2 7.8 22.5 history1	<1 519 1826 794 942 3028 history2 4 3 0 history2 0.3 8.1 22.6 history2



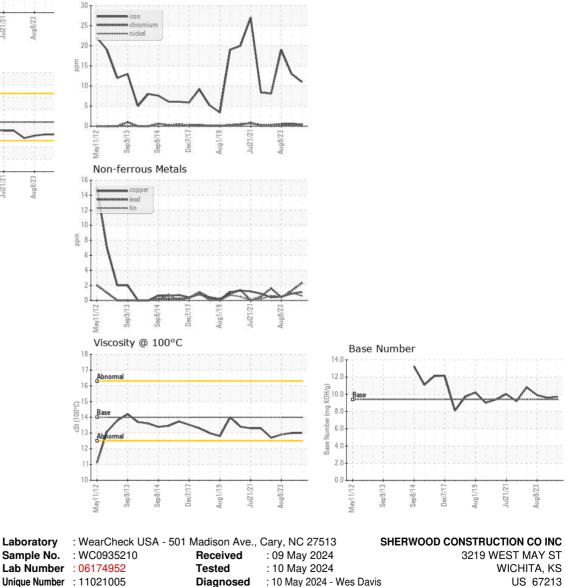
# **OIL ANALYSIS REPORT**





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	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	13.0	13.0	12.9
GRAPHS						

Ferrous Alloys





 Unique Number
 : 11021005
 Diagnosed
 : 10 May 2024 - Wes Davis

 Certificate 12367
 Test Package
 : CONST (Additional Tests: TBN )

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
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 \* - 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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