

# **OIL ANALYSIS REPORT**

# OKLAHOMA/105/EG - TRUCK-ON-HWY-HEAVY DUTY 08.109 [OKLAHOMA^105^EG - TRUCK-ON-HWY-HEAVY DUTY] Component

**Diesel Engine** 

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)





NORMAL

SAMPLE INFORM	ATION	method	limit/base	current	history1	history
Sample Number		Client Info		WC0874025	WC0792407	WC076972
Sample Date		Client Info		09 Jan 2024	01 May 2023	22 Dec 202
Machine Age	hrs	Client Info		11432	10643	10099
Oil Age	hrs	Client Info		789	544	978
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	l	method	limit/base	current	history1	history
Fuel		WC Method	>3.0	<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	history
Iron	ppm	ASTM D5185m	<u>&gt;90</u>	8	5	8
Chromium	ppm	ASTM D5185m		0	<1	<1
Nickel		ASTM D5185m		0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m			0	0
	ppm			0		
Aluminum	ppm	ASTM D5185m		5	<1	4
Lead	ppm	ASTM D5185m		<1	1	0
Copper	ppm	ASTM D5185m		0	0	<1
Tin	ppm	ASTM D5185m	>15	<1	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history
Boron	ppm	ASTM D5185m	0	28	32	26
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	42	40	39
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	529	500	
Calcium	ppm				500	458
	ppin	ASTM D5185m		1725	1817	458 1908
Phosphorus	ppm	ASTM D5185m ASTM D5185m				
Phosphorus Zinc				1725	1817	1908
	ppm	ASTM D5185m		1725 791	1817 814	1908 807
Zinc	ppm ppm	ASTM D5185m ASTM D5185m	limit/base	1725 791 954	1817 814 987	1908 807 1002 3373
Zinc Sulfur	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		1725 791 954 2514	1817 814 987 3423	1908 807 1002 3373
Zinc Sulfur CONTAMINANTS	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method		1725 791 954 2514 current	1817 814 987 3423 history1	1908 807 1002 3373 history
Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	>25	1725 791 954 2514 current 5	1817 814 987 3423 history1 5	1908 807 1002 3373 history 8
Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	>25	1725 791 954 2514 current 5 1	1817 814 987 3423 history1 5 4	1908 807 1002 3373 history 8 4 1
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	>25 >20	1725 791 954 2514 current 5 1 3	1817 814 987 3423 history1 5 4 2	1908 807 1002 3373 history 8 4 1
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	>25 >20 limit/base	1725 791 954 2514 <i>current</i> 5 1 3 <i>current</i> 0.4	1817 814 987 3423 history1 5 4 2 2 history1	1908 807 1002 3373 history 8 4 1 1 history
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> *ASTM D7844	>25 >20 limit/base >6	1725 791 954 2514 current 5 1 3 3 current	1817 814 987 3423 history1 5 4 2 2 history1 0.2	1908 807 1002 3373 history 8 4 1 1 history 0.3
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm % Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> *ASTM D7844 *ASTM D7624	>25 >20 limit/base >6 >20	1725 791 954 2514 <b>current</b> 5 1 3 <b>current</b> 0.4 9.5	1817 814 987 3423 history1 5 4 2 history1 0.2 7.9	1908 807 1002 3373 history 8 4 1 history 0.3 10.6 22
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm % Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7844 *ASTM D7844	>25 >20 limit/base >6 >20 >30	1725 791 954 2514 <b>current</b> 5 1 3 <b>current</b> 0.4 9.5 21.9	1817 814 987 3423 history1 5 4 2 <u>history1</u> 0.2 7.9 21.8	1908 807 1002 3373 history 8 4 1 history 0.3 10.6

## DIAGNOSIS Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

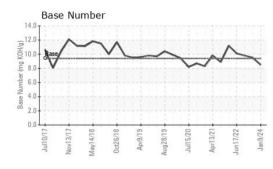
There is no indication of any contamination in the oil.

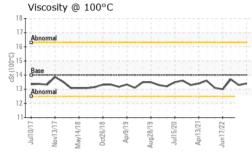
### Fluid Condition

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

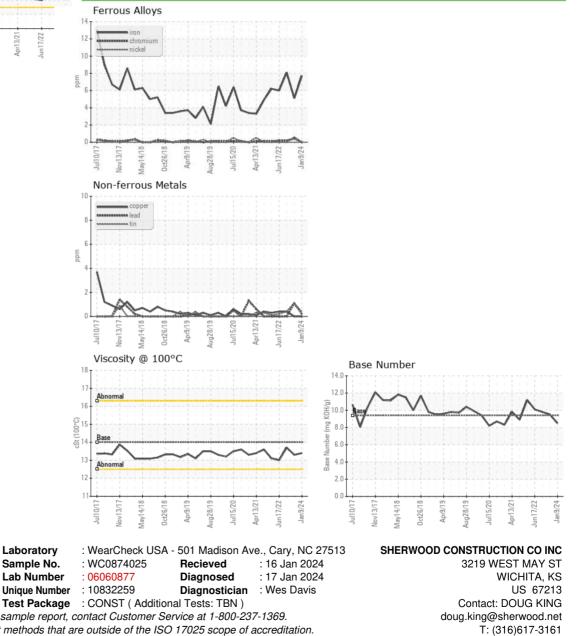


# **OIL ANALYSIS REPORT**





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	13.4	13.3	13.7
GRAPHS						





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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