

# **OIL ANALYSIS REPORT**

## OKLAHOMA/102/EG - OTHER SERVICE 54.25L [OKLAHOMA^102^EG - OTHER SERVICE] Component

**Diesel Engine** 

MOBIL DELVAC 1300 SUPER15W40 (10 QTS)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

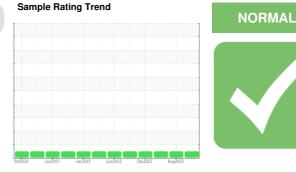
All component wear rates are normal.

#### 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.

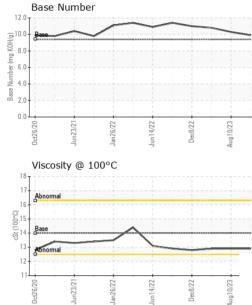




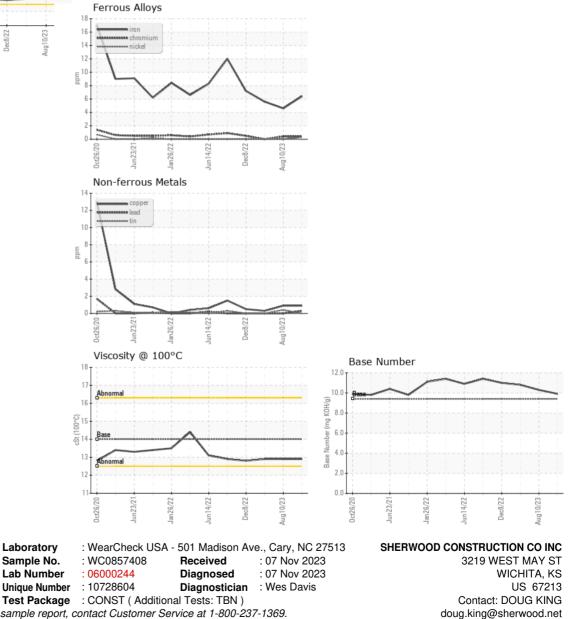
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0857408	WC0819975	WC0746851
Sample Date		Client Info		24 Oct 2023	10 Aug 2023	30 May 2023
Machine Age	hrs	Client Info		2272	2152	2010
Oil Age	hrs	Client Info		120	2475	2475
Oil Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	6	5	6
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>30	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	ASTM D5185m	limit/base 0	current 83	history1 76	history2 61
	ppm ppm	ASTM D5185m				
Boron		ASTM D5185m	0	83	76	61
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	83 5	76 0	61 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	83 5 48	76 0 42	61 0 39
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	83 5 48 <1	76 0 42 <1	61 0 39 0 493 1769
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	83 5 48 <1 563 1803 941	76 0 42 <1 519 1723 748	61 0 39 0 493 1769 733
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	83 5 48 <1 563 1803 941 1017	76 0 42 <1 519 1723 748 890	61 0 39 0 493 1769 733 897
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	83 5 48 <1 563 1803 941	76 0 42 <1 519 1723 748	61 0 39 0 493 1769 733
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	83 5 48 <1 563 1803 941 1017	76 0 42 <1 519 1723 748 890	61 0 39 0 493 1769 733 897
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	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 0 0	83 5 48 <1 563 1803 941 1017 3097	76 0 42 <1 519 1723 748 890 2948	61 0 39 0 493 1769 733 897 3006
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 ASTM D5185m	0 0 0 0 Imit/base	83 5 48 <1 563 1803 941 1017 3097 current	76 0 42 <1 519 1723 748 890 2948 history1	61 0 39 0 493 1769 733 897 3006 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 <b>method</b>	0 0 0 0 Imit/base	83 5 48 <1 563 1803 941 1017 3097 current 6	76 0 42 <1 519 1723 748 890 2948 history1 7	61 0 39 0 493 1769 733 897 3006 history2 8
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 <b>method</b> ASTM D5185m	0 0 0 0 ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	83 5 48 <1 563 1803 941 1017 3097 current 6 1	76 0 42 <1 519 1723 748 890 2948 history1 7 3	61 0 39 0 493 1769 733 897 3006 history2 8 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	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 2 5 2 5 2 0	83 5 48 <1 563 1803 941 1017 3097 current 6 1 2	76 0 42 <1 519 1723 748 890 2948 history1 7 3 <1	61 0 39 0 493 1769 733 897 3006 history2 8 3 3 <1
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 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	83 5 48 <1 563 1803 941 1017 3097 current 6 1 2 2 current	76 0 42 <1 519 1723 748 890 2948 history1 7 3 <1 history1	61 0 39 0 493 1769 733 897 3006 history2 8 3 3 <1 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 limit/base >25 >20 limit/base >3	83 5 48 <1 563 1803 941 1017 3097 current 6 1 2 2 current 0.1	76 0 42 <1 519 1723 748 890 2948 history1 7 3 <1 7 3 <1 0.1	61 0 39 0 493 1769 733 897 3006 history2 8 3 3 <1 history2 0.1
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 0 1 1 1 1 1 1 1 1 1 1 1 1 1	83 5 48 <1 563 1803 941 1017 3097 current 6 1 2 current 0.1 5.7	76 0 42 <1 519 1723 748 890 2948 history1 7 3 <1 7 3 <1 0.1 0.1 5.6	61 0 39 0 493 1769 733 897 3006 history2 8 3 3 <1 history2 0.1 6.5
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	83 5 48 <1 563 1803 941 1017 3097 current 6 1 2 current 0.1 5.7 21.6	76 0 42 <1 519 1723 748 890 2948 history1 7 3 <1 7 3 <1 0.1 5.6 21.4	61 0 39 0 493 1769 733 897 3006 <b>history2</b> 8 3 3 <1 <b>history2</b> 0.1 6.5 22.6



# **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	12.9	12.9	12.9
GRAPHS						



 Certificate L2367
 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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