

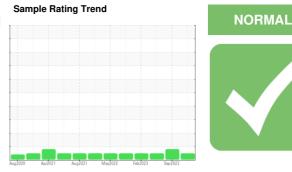
OIL ANALYSIS REPORT

OKLAHOMA/109/EG - PAVING EQUIPMENT 87.93 [OKLAHOMA^109^EG - PAVING EQUIPMENT] Component Diesel Engine

Fluic

MOBIL DELVAC 1300 SUPER15W40 (4 GAL)

SAMPLE INFORMATION method





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.

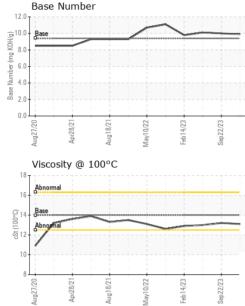
Fluid Condition

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

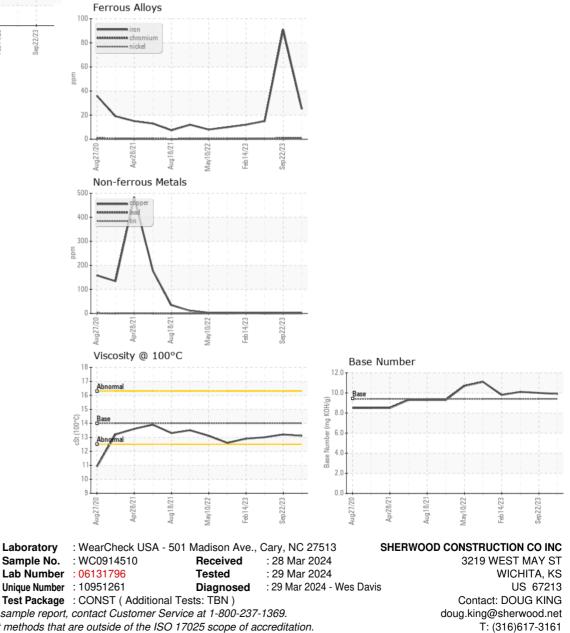
	AHON	methou		Current	TIIStory I	
Sample Number		Client Info		WC0914510	WC0819985	WC0808042
Sample Date		Client Info		21 Mar 2024	22 Sep 2023	11 May 2023
Machine Age	hrs	Client Info		8640	4125	3592
Oil Age	hrs	Client Info		250	4125	540
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	MARGINAL	NORMAL
÷						
CONTAMINATION	١	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	25	4 91	15
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm		>2	<1	0	0
Aluminum	ppm	ASTM D5185m		8	2	6
Lead	ppm		>40	۲ ۲	<1	0
Copper	ppm	ASTM D5185m		2	2	<1
Tin			>15	ے <1	0	<1
Vanadium	ppm	ASTM D5185m	>15	<1	<1	0
	ppm					
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	limit/base	current 45	36	45
	ppm ppm	ASTM D5185m				
Boron		ASTM D5185m	0	45	36	45
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	45 0	36 0	45 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	45 0 44	36 0 42	45 0 42
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	45 0 44 <1	36 0 42 <1	45 0 42 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	45 0 44 <1 501	36 0 42 <1 522	45 0 42 <1 549
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	45 0 44 <1 501 1738	36 0 42 <1 522 1713	45 0 42 <1 549 1765
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	45 0 44 <1 501 1738 778	36 0 42 <1 522 1713 753	45 0 42 <1 549 1765 787
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	0 0 0	45 0 44 <1 501 1738 778 944	36 0 42 <1 522 1713 753 927	45 0 42 <1 549 1765 787 990
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 0 0 limit/base	45 0 44 <1 501 1738 778 944 2622	36 0 42 <1 522 1713 753 927 2572	45 0 42 <1 549 1765 787 990 3256
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 limit/base	45 0 44 <1 501 1738 778 944 2622 current 7	36 0 42 <1 522 1713 753 927 2572 history1	45 0 42 <1 549 1765 787 990 3256 history2
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 limit/base	45 0 44 <1 501 1738 778 944 2622 current	36 0 42 <1 522 1713 753 927 2572 history1 5	45 0 42 <1 549 1765 787 990 3256 history2 6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 0 0 0 ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	45 0 44 <1 501 1738 778 944 2622 current 7 5	36 0 42 <1 522 1713 753 927 2572 history1 5 5	45 0 42 <1 549 1765 787 990 3256 history2 6 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	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	45 0 44 <1 501 1738 778 944 2622 current 7 5 4 X	36 0 42 <1 522 1713 753 927 2572 history1 5 5 5 <1 history1	45 0 42 <1 549 1765 787 990 3256 history2 6 2 2
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 ASTM D5185m	0 0 0 0 limit/base >25 >20 limit/base >3	45 0 44 <1 501 1738 778 944 2622 current 7 5 4 current 0.3	36 0 42 <1 522 1713 753 927 2572 history1 5 5 5 <1 history1 0.3	45 0 42 <1 549 1765 787 990 3256 history2 6 2 2 2 history2 0.3
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	ASTM D5185m ASTM D5185m	0 0 0 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	45 0 44 <1 501 1738 778 944 2622 <i>current</i> 7 5 4 <i>current</i> 0.3 7.4	36 0 42 <1 522 1713 753 927 2572 history1 5 5 5 <1 history1 0.3 7.3	45 0 42 <1 549 1765 787 990 3256 history2 6 2 2 2 history2 0.3 7.7
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	45 0 44 <1 501 1738 778 944 2622 <u>current</u> 7 5 4 <u>current</u> 0.3 7.4 22.0	36 0 42 <1 522 1713 753 927 2572 history1 5 5 5 <1 history1 0.3 7.3 22.1	45 0 42 <1 549 1765 787 990 3256 history2 6 2 2 2 history2 0.3 7.7 22.7
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 D7844 *ASTM D7624 *ASTM D7415	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	45 0 44 <1 501 1738 778 944 2622 current 7 5 4 current 0.3 7.4 22.0 current	36 0 42 <1 522 1713 753 927 2572 history1 5 5 5 <1 history1 0.3 7.3 22.1 history1	45 0 42 <1 549 1765 787 990 3256 history2 6 2 2 history2 0.3 7.7 22.7 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA Oxidation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7624 *ASTM D7415	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	45 0 44 <1 501 1738 778 944 2622 <u>current</u> 7 5 4 <u>current</u> 0.3 7.4 22.0 <u>current</u>	36 0 42 <1 522 1713 753 927 2572 history1 5 5 5 <1 history1 0.3 7.3 22.1 history1 2.9	45 0 42 <1 549 1765 787 990 3256 history2 6 2 2 history2 0.3 7.7 22.7 history2 2
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 D7844 *ASTM D7624 *ASTM D7415	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	45 0 44 <1 501 1738 778 944 2622 current 7 5 4 current 0.3 7.4 22.0 current	36 0 42 <1 522 1713 753 927 2572 history1 5 5 5 <1 history1 0.3 7.3 22.1 history1	45 0 42 <1 549 1765 787 990 3256 history2 6 2 2 history2 0.3 7.7 22.7 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	TIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	13.1	13.2	13.0
GRAPHS						





Test Package : CONST (Additional Tests: TBN) Certificate L2367 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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