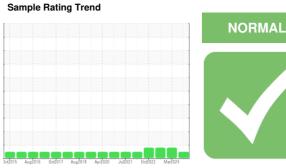


OIL ANALYSIS REPORT

Area OKLAHOMA/102/EG - ROLLER/COMPACTOR 64.24L [OKLAHOMA^102^EG - ROLLER/COMPACTOR] Diesel Engine Fluid

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

SAMPLE INFORMATION method





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: 4546 hours)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

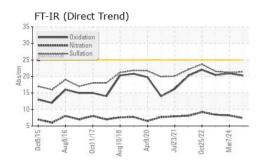
Fluid Condition

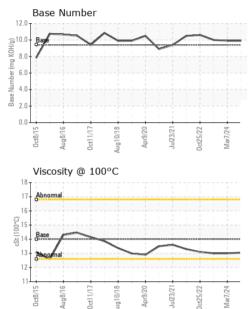
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

			iiiiii/base	Current	Thistory	
Sample Number		Client Info		WC0925166	WC0864376	WC0821817
Sample Date		Client Info		04 Jun 2024	07 Mar 2024	12 Jul 2023
Machine Age	hrs	Client Info		4546	4296	3996
Oil Age	hrs	Client Info		3996	20	286
Oil Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL
			11 1.0			
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	22	36	40
Chromium	ppm	ASTM D5185m	>20	<1	1	2
Nickel	ppm	ASTM D5185m	>2	<1	1	1
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	12	▲ 28	▲ 30
Lead		ASTM D5185m	>40	<1	<1	0
	ppm	ASTM D5185m	>330	2	2	2
Copper Tin	ppm		>330		1	<1
Vanadium	ppm	ASTM D5185m	>10	0 <1		
	ppm	ASTM D5185m			<1	<1
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	Method ASTM D5185m	limit/base	current 49	history1 51	history2 36
	ppm ppm	ASTM D5185m				
Boron		ASTM D5185m	0	49	51	36
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	49 0	51 1	36 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	49 0 44	51 1 46	36 0 42
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	49 0 44 <1	51 1 46 1	36 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	49 0 44 <1 535	51 1 46 1 522	36 0 42 <1 526
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	49 0 44 <1 535 1846	51 1 46 1 522 1875	36 0 42 <1 526 1833
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	49 0 44 <1 535 1846 848	51 1 46 1 522 1875 856	36 0 42 <1 526 1833 766
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	49 0 44 <1 535 1846 848 986	51 1 46 1 522 1875 856 997	36 0 42 <1 526 1833 766 929
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 limit/base	49 0 44 <1 535 1846 848 986 3020 current	51 1 46 1 522 1875 856 997 2992	36 0 42 <1 526 1833 766 929 2991 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	0 0 0 0 0	49 0 44 <1 535 1846 848 986 3020 current 8	51 1 46 1 522 1875 856 997 2992 history1 11	36 0 42 <1 526 1833 766 929 2991 history2 12
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 limit/base	49 0 44 <1 535 1846 848 986 3020 current	51 1 46 1 522 1875 856 997 2992 history1	36 0 42 <1 526 1833 766 929 2991 history2
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 limit/base >25 >20	49 0 44 <1 535 1846 848 986 3020 current 8 3 3 1	51 1 46 1 522 1875 856 997 2992 history1 11 0 3	36 0 42 <1 526 1833 766 929 2991 history2 12 3 0
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	49 0 44 <1 535 1846 848 986 3020 current 8 3 3 1 Current	51 1 46 1 522 1875 856 997 2992 history1 11 0 3 X	36 0 42 <1 526 1833 766 929 2991 history2 12 3 0 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	49 0 44 <1 535 1846 848 986 3020 current 8 3 1 1 current 0.2	51 1 46 1 522 1875 856 997 2992 history1 11 0 3 <u>history1</u> 0.2	36 0 42 <1 526 1833 766 929 2991 history2 12 3 0 history2 0.4
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 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	49 0 44 <1 535 1846 848 986 3020 current 8 3 3 1 current 0.2 7.4	51 1 46 1 522 1875 856 997 2992 history1 11 0 3 <u>history1</u> 0.2 8.2	36 0 42 <1 526 1833 766 929 2991 history2 12 12 3 0 history2 0.4 8.4
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	49 0 44 <1 535 1846 848 986 3020 current 8 3 1 1 current 0.2	51 1 46 1 522 1875 856 997 2992 history1 11 0 3 <u>history1</u> 0.2	36 0 42 <1 526 1833 766 929 2991 history2 12 3 0 history2 0.4
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 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	49 0 44 <1 535 1846 848 986 3020 current 8 3 3 1 current 0.2 7.4	51 1 46 1 522 1875 856 997 2992 history1 11 0 3 <u>history1</u> 0.2 8.2	36 0 42 <1 526 1833 766 929 2991 history2 12 12 3 0 history2 0.4 8.4
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	49 0 44 <1 535 1846 848 986 3020 current 8 3 1 1 current 0.2 7.4 21.4	51 1 46 1 522 1875 856 997 2992 history1 11 0 3 history1 0.2 8.2 21.2	36 0 42 <1 526 1833 766 929 2991 history2 12 3 0 history2 0.4 8.4 21.5
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 D7844 *ASTM D7624 *ASTM D7415	0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	49 0 44 <1 535 1846 848 986 3020 Current 8 3 1 Current 0.2 7.4 21.4 Current	51 1 46 1 522 1875 856 997 2992 history1 11 0 3 history1 0.2 8.2 21.2 history1	36 0 42 <1 526 1833 766 929 2991 history2 12 3 0 history2 0.4 8.4 21.5 history2



OIL ANALYSIS REPORT

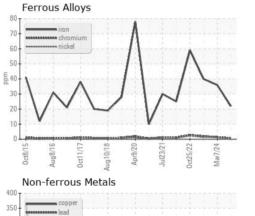


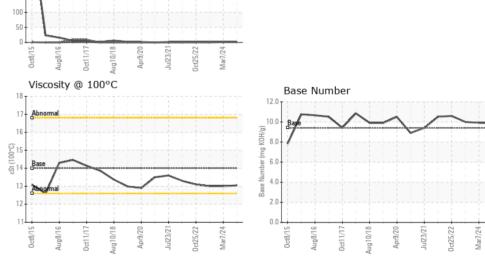


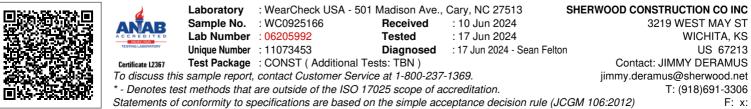
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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	13.05	13.0	13.0

GRAPHS

300 -250 -톰 200 -







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Submitted By: LOUIS BRESHEARS

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