

OIL ANALYSIS REPORT

Sample Rating Trend





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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		WC0819758	WC0819773	WC0756083
Sample Date		Client Info		08 Aug 2023	06 Jul 2023	22 May 2023
Machine Age	mls	Client Info		202785	197562	164867
Oil Age	mls	Client Info		15000	15000	15000
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	٧	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	>100	9	10	9
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	6	10	4
Lead	ppm	ASTM D5185m	>40	1	6	<1
Copper	ppm	ASTM D5185m	>330	<1	6	<1
Tin	ppm	ASTM D5185m	>15	<1	2	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 243	history1 201	history2 243
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	243	201	243
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	243 0	201 0	243 2
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	243 0 120	201 0 115	243 2 126
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	243 0 120 <1	201 0 115 2	243 2 126 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	243 0 120 <1 656	201 0 115 2 697	243 2 126 <1 586
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		243 0 120 <1 656 1582	201 0 115 2 697 1564	243 2 126 <1 586 1486
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	1200	243 0 120 <1 656 1582 688	201 0 115 2 697 1564 759	243 2 126 <1 586 1486 659
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	1200 1300	243 0 120 <1 656 1582 688 845	201 0 115 2 697 1564 759 907	243 2 126 <1 586 1486 659 827
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	1200 1300 3200 limit/base	243 0 120 <1 656 1582 688 845 2847	201 0 115 2 697 1564 759 907 3065	243 2 126 <1 586 1486 659 827 2730
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	1200 1300 3200 limit/base	243 0 120 <1 656 1582 688 845 2847 current	201 0 115 2 697 1564 759 907 3065 history1	243 2 126 <1 586 1486 659 827 2730 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 method ASTM D5185m	1200 1300 3200 limit/base >25	243 0 120 <1 656 1582 688 845 2847 current 8	201 0 115 2 697 1564 759 907 3065 history1 10	243 2 126 <1 586 1486 659 827 2730 history2 7
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 method ASTM D5185m	1200 1300 3200 limit/base >25	243 0 120 <1 656 1582 688 845 2847 current 8 2	201 0 115 2 697 1564 759 907 3065 history1 10 1	243 2 126 <1 586 1486 659 827 2730 history2 7 0
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	1200 1300 3200 limit/base >25 >20	243 0 120 <1 656 1582 688 845 2847 current 8 2 2 11	201 0 115 2 697 1564 759 907 3065 history1 10 1 13	243 2 126 <1 586 1486 659 827 2730 history2 7 0 6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	1200 1300 3200 limit/base >25 >20 limit/base	243 0 120 <1 656 1582 688 845 2847 current 8 2 2 11 current	201 0 115 2 697 1564 759 907 3065 history1 10 1 1 3 305	243 2 126 <1 586 1486 659 827 2730 history2 7 0 6 %
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	1200 1300 3200 limit/base >25 >20 limit/base >3 >20	243 0 120 <1 656 1582 688 845 2847 current 8 2 2 11 current 0.3	201 0 115 2 697 1564 759 907 3065 history1 10 1 13 13 history1 0.4	243 2 126 <1 586 1486 659 827 2730 history2 7 0 6 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 ppm ppm	ASTM D5185m ASTM D5185m	1200 1300 3200 limit/base >25 >20 limit/base >3 >20	243 0 120 <1 656 1582 688 845 2847 current 8 2 11 current 0.3 8.0	201 0 115 2 697 1564 759 907 3065 history1 10 1 13 history1 0.4 8.2	243 2 126 <1 586 1486 659 827 2730 history2 7 0 6 history2 0.3 8.3
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	1200 1300 3200 imit/base >25 >20 imit/base >3 >20 >30 >30	243 0 120 <1 656 1582 688 845 2847 current 8 2 2 11 0.3 8.0 23.8	201 0 115 2 697 1564 759 907 3065 history1 10 1 13 history1 0.4 8.2 24.1	243 2 126 <1 586 1486 659 827 2730 history2 7 0 6 6 history2 0.3 8.3 23.4

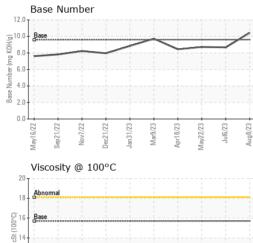


13

/lav16/22

en 21

OIL ANALYSIS REPORT

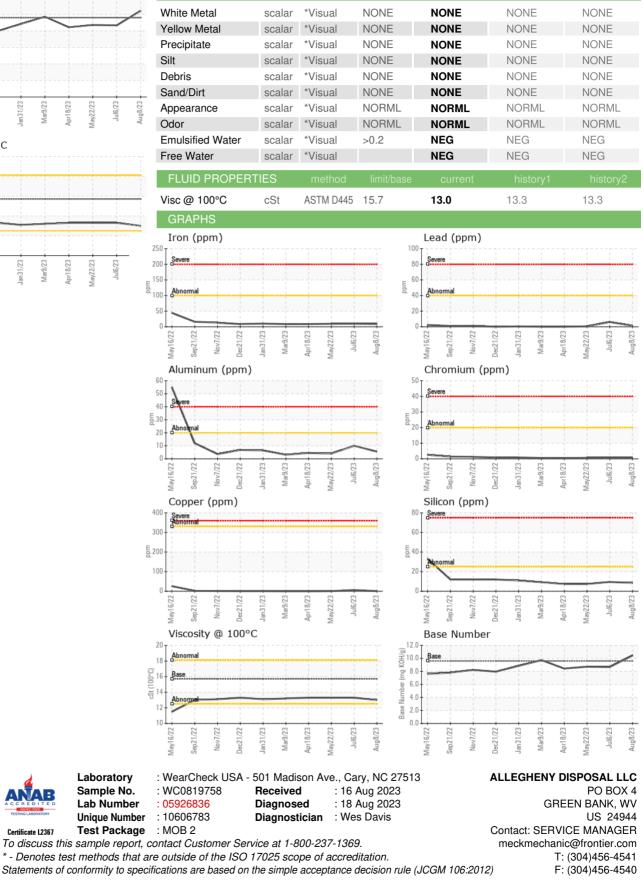


an31/73 Aar9/73

ec21/22

5CICCINEV

nr18/73



Certificate L2367

Contact/Location: SERVICE MANAGER - ALLGRELF