

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **4250L** Component **Diesel Engine** Fluid **MOBIL 15W40 (--- QTS)**

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.

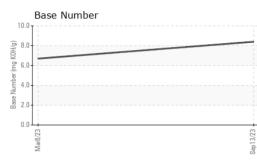
Fluid Condition

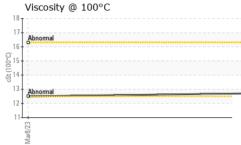
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMA	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		IL0032318	IL0028960	
Sample Date		Client Info		13 Sep 2023	08 Mar 2023	
Machine Age	mls	Client Info		109433	15337	
Oil Age	mls	Client Info		10104	15000	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	20	22	
	ppm	ASTM D5185m	>20	<1	<1	
	ppm	ASTM D5185m	>4	0	0	
	ppm	ASTM D5185m		<1	0	
	ppm	ASTM D5185m	>3	0	0	
	ppm	ASTM D5185m	>20	16	16	
	ppm	ASTM D5185m	>40	0	0	
	ppm	ASTM D5185m	>330	<1	<1	
	ppm	ASTM D5185m	>15	<1	<1	
	ppm	ASTM D5185m	210	0	<1	
	ppm	ASTM D5185m		0	0	
	ррпп			-		
ADDITIVES						
ADDITIVES		method	limit/base	current	history1	history2
_	ppm	ASTM D5185m	limit/base	5	35	nistory2
Boron	ppm ppm		limit/base			
Boron Barium		ASTM D5185m	limit/base	5	35	
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m	limit/base	5 0	35 0 12 1	
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	5 0 56	35 0 12	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	5 0 56 <1	35 0 12 1	
Boron Barium Holybdenum Hanganese Magnesium Calcium Calcium Horon Hanganese Hanganesium Ha	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	5 0 56 <1 999	35 0 12 1 594	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	5 0 56 <1 999 1113	35 0 12 1 594 1279	
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	limit/base	5 0 56 <1 999 1113 1017	35 0 12 1 594 1279 633	
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	limit/base	5 0 56 <1 999 1113 1017 1245	35 0 12 1 594 1279 633 756	
Boron Barium Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	5 0 56 <1 999 1113 1017 1245 3547	35 0 12 1 594 1279 633 756 2714	
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	limit/base	5 0 56 <1 999 1113 1017 1245 3547 current	35 0 12 1 594 1279 633 756 2714 history1	 history2
Boron Barium Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Galaita Angenesi An	ppm 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	limit/base >25 >118	5 0 56 <1 999 1113 1017 1245 3547 current 5	35 0 12 1 594 1279 633 756 2714 history1 8	 history2
Boron Barium Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Silicon Sodium I	ppm 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 ASTM D5185m	limit/base >25 >118	5 0 56 <1 999 1113 1017 1245 3547 <u>current</u> 5 <	35 0 12 1 594 1279 633 756 2714 history1 8 2	 history2
Boron Barium Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Sulfur Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20	5 0 56 <1 999 1113 1017 1245 3547 <i>current</i> 5 <1 5	35 0 12 1 594 1279 633 756 2714 history1 8 2 2 7	 history2
Boron Barium Angenese Angenesium Angenese Angenesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20 limit/base	5 0 56 <1 999 1113 1017 1245 3547 current 5 <1 5 <1	35 0 12 1 594 1279 633 756 2714 history1 8 2 2 7 <i>history1</i>	 history2 history2
Boron Barium Angenesium Angenesium Angenesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Angenesia Ange	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20 limit/base >3 >20	5 0 56 <1 999 1113 1017 1245 3547 <i>current</i> 5 <1 5 < <i>current</i> 0.4	35 0 12 1 594 1279 633 756 2714 history1 8 2 2 7 <i>history1</i> 0.5	 history2 history2 history2
Boron Barium Angenese Angenesium Angenese Angenesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Angenesium Angen	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20 limit/base >3 >20	5 0 56 <1 999 1113 1017 1245 3547 <i>current</i> 5 <1 5 <1 5 <i>current</i> 0.4 10.7	35 0 12 1 594 1279 633 756 2714 history1 8 2 7 history1 0.5 11.2	history2 history2 history2
Boron Barium Anganese Anganese Anganese Anganese Anganese Anganese Anganesium Calcium Phosphorus CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Anganesi Ang	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20 limit/base >3 >20 >30 limit/base	5 0 56 <1 999 1113 1017 1245 3547 current 5 <1 5 <c1 5 current 0.4 10.7 20.8</c1 	35 0 12 1 594 1279 633 756 2714 history1 8 2 2714 8 2 7 history1 0.5 11.2 22.2	



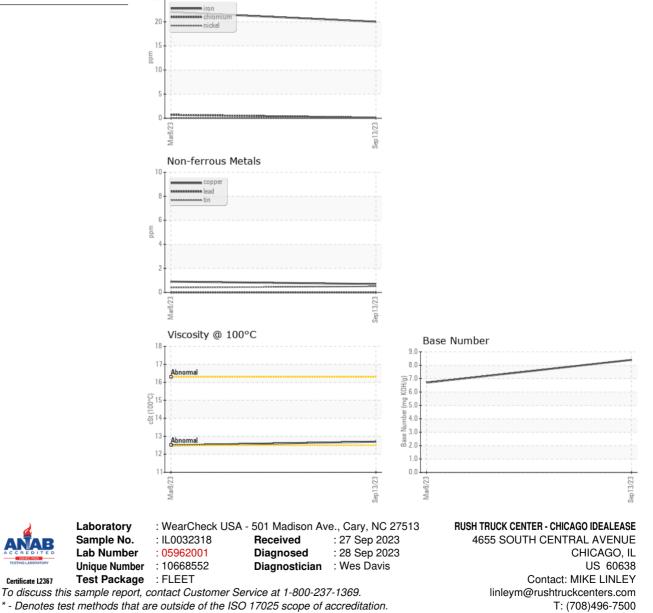
OIL ANALYSIS REPORT





25

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPER	TIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		12.7	12.5	
GRAPHS						
Ferrous Allovs						



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: MIKE LINLEY - IDECHIIL

F: (708)496-8818