

OIL ANALYSIS REPORT

Sample Rating Trend







MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

Machine Id 16827 Component **Diesel Engine**

Recommendation

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

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

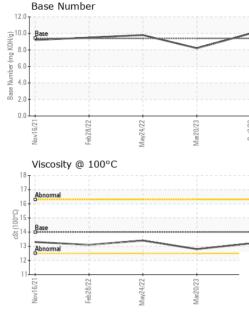
Fluid Condition

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

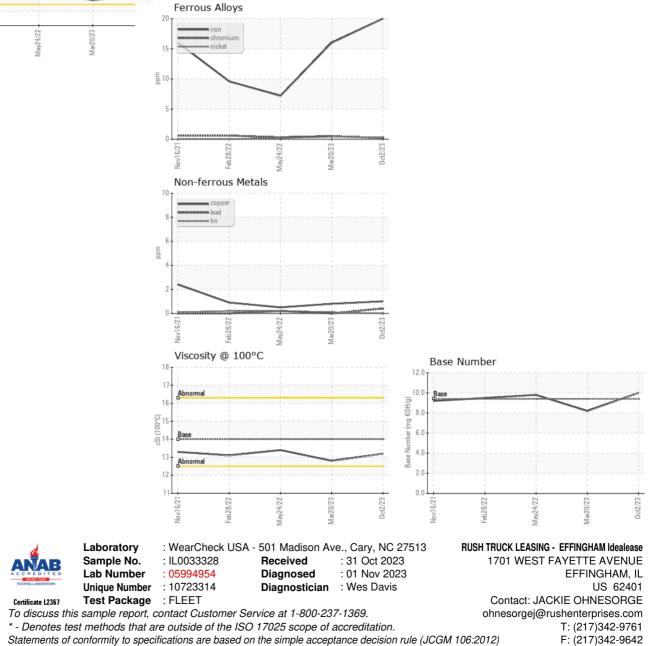
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		IL0033328	IL0027121	IL0015603
Sample Date		Client Info		02 Oct 2023	20 Mar 2023	24 May 2022
Machine Age	mls	Client Info		56576	51866	43304
Oil Age	mls	Client Info		4710	8562	2925
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	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	nom	ASTM D5185m	>100	20	16	7
Chromium	ppm	ASTM D5185m		<1	<1	<1
Nickel	ppm	ASTM D5185m	>20	<1	<1	<1
Titanium	ppm	ASTM D5185m	~7	<1	0	0
Silver	ppm	ASTM D5185m	>3	0 <1	0	0
Aluminum	ppm ppm	ASTM D5185m		7	16	9
Lead	ppm	ASTM D5185m	>20	7 <1	0	<1
Copper	ppm	ASTM D5185m		1	<1	<1
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Antimony	ppm	ASTM D5185m	>15			
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
	1-1-				-	
ADDITIVES		method			history1	history2
	ppm	method ASTM D5185m	limit/base		history1 34	history2 84
ADDITIVES Boron Barium	ppm pom	ASTM D5185m	limit/base 0 0	current 50 4	history1 34 0	history2 84 0
Boron Barium	ppm		0	50 4	34	84 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	0	50	34 0	84
Boron Barium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	50 4 39	34 0 44	84 0 23
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	50 4 39 <1	34 0 44 1	84 0 23 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	50 4 39 <1 626	34 0 44 1 791	84 0 23 <1 608
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	50 4 39 <1 626 1398	34 0 44 1 791 1288	84 0 23 <1 608 1557
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	50 4 39 <1 626 1398 867	34 0 44 1 791 1288 903	84 0 23 <1 608 1557 714
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	50 4 39 <1 626 1398 867 948	34 0 44 1 791 1288 903 1085	84 0 23 <1 608 1557 714 890
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	0 0 0 0 0	50 4 39 <1 626 1398 867 948 2810	34 0 44 1 791 1288 903 1085 3537	84 0 23 <1 608 1557 714 890 3222
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 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	50 4 39 <1 626 1398 867 948 2810 current	34 0 44 1 791 1288 903 1085 3537 history1	84 0 23 <1 608 1557 714 890 3222 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	0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	50 4 39 <1 626 1398 867 948 2810 current 8	34 0 44 1 791 1288 903 1085 3537 history1 5	84 0 23 <1 608 1557 714 890 3222 history2 6
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 ASTM D5185m ASTM D5185m	0 0 0 0 0 	50 4 39 <1 626 1398 867 948 2810 current 8 0	34 0 44 1 791 1288 903 1085 3537 history1 5 2	84 0 23 <1 608 1557 714 890 3222 history2 6 2
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 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	50 4 39 <1 626 1398 867 948 2810 current 8 0 16	34 0 44 1 791 1288 903 1085 3537 history1 5 2 2 33	84 0 23 <1 608 1557 714 890 3222 history2 6 2 2 15
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	0 0 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0 0 0 0	50 4 39 <1 626 1398 867 948 2810 current 8 0 16 current	34 0 44 1 791 1288 903 1085 3537 history1 5 2 333 history1	84 0 23 <1 608 1557 714 890 3222 history2 6 2 15 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 ppm	ASTM D5185m ASTM D5185m	0 0 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0 0 0 0	50 4 39 <1 626 1398 867 948 2810 current 8 0 16 current 0.2	34 0 44 1 791 1288 903 1085 3537 history1 5 2 33 33 history1 0.2	84 0 23 <1 608 1557 714 890 3222 history2 6 2 15 history2 0.2
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 1 1 1 1 1 1 1 1 1 1 1 1 1 1	50 4 39 <1 626 1398 867 948 2810 current 8 0 16 0.2 6.4	34 0 44 1 791 1288 903 1085 3537 history1 5 2 33 33 history1 0.2 6.7	84 0 23 <1 608 1557 714 890 3222 history2 6 2 15 15 history2 0.2 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	50 4 39 <1 626 1398 867 948 2810 current 8 0 16 0.2 6.4 20.4	34 0 44 1 791 1288 903 1085 3537 history1 5 2 333 history1 0.2 6.7 17.8	84 0 23 <1 608 1557 714 890 3222 history2 6 2 15 history2 0.2 6.5 20.2
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 D7844 *ASTM D7844	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50 4 39 <1 626 1398 867 948 2810 Current 8 0 16 Current 0.2 6.4 20.4 Current	34 0 44 1 791 1288 903 1085 3537 history1 5 2 33 33 history1 0.2 6.7 17.8 history1	84 0 23 <1 608 1557 714 890 3222 history2 6 2 15 history2 0.2 6.5 20.2 history2



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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	13.2	12.8	13.4
GRAPHS						



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

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