

OIL ANALYSIS REPORT

Sample Rating Trend





Diesel Engine Fluid NOT GIVEN (--- QTS)

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.

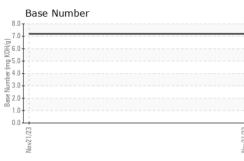
Fluid Condition

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

SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		IL06026250		
Sample Date		Client Info		21 Nov 2023		
Machine Age	mls	Client Info		24290		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	nom	ASTM D5185m	>100	14		
Chromium	ppm ppm		>20	<1		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m	~7	0		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm		>20	6		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm		>330	4		
Tin	ppm		>15	0		
Vanadium	ppm	ASTM D5185m	210	0		
Cadmium	ppm	ASTM D5185m		0		
ouumun	pp			•		
		and the second	Prest le se se		In the term of the	In the terms of
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 153	history1	history2
	ppm ppm		limit/base			
Boron		ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	153		
Boron Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	153 3 121 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	153 3 121 0 596		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	153 3 121 0 596 1488		
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	limit/base	153 3 121 0 596 1488 573		
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	153 3 121 0 596 1488 573 730	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		153 3 121 0 596 1488 573 730 2707		
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	limit/base	153 3 121 0 596 1488 573 730 2707 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method		153 3 121 0 596 1488 573 730 2707 current 8		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	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	153 3 121 0 596 1488 573 730 2707 current 8 0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20	153 3 121 0 596 1488 573 730 2707 current 8	 history1 	 history2
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	limit/base >25 >20 limit/base	153 3 121 0 596 1488 573 730 2707 current 8 0 10 10	 history1	 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	limit/base >25 >20	153 3 121 0 596 1488 573 730 2707 current 8 0 10 10 current 0.4	 history1 	 history2
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	limit/base >25 >20 limit/base	153 3 121 0 596 1488 573 730 2707 current 8 0 10 10	 history1 history1	 history2 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	limit/base >25 >20 limit/base >3	153 3 121 0 596 1488 573 730 2707 current 8 0 10 10 current 0.4	 history1 history1 history1	 history2 history2 history2
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	limit/base >25 >20 limit/base >3 >20	153 3 121 0 596 1488 573 730 2707 current 8 0 10 10 current 0.4 10.3	 history1 history1 history1	history2 history2 history2
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	limit/base >25 >20 limit/base >3 >20 >30	153 3 121 0 596 1488 573 730 2707 current 8 0 10 current 0.4 10.3 23.5	 history1 history1 history1	 history2 history2 history2
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	limit/base >25 >20 limit/base >3 >20 >30 >30	153 3 121 0 596 1488 573 730 2707 <i>current</i> 8 0 10 <i>current</i> 0.4 10.3 23.5	history1 history1 history1 history1 history1	 history2 history2 history2 history2 history2



OIL ANALYSIS REPORT



Viscosity @ 100°C



VISUAL		method	limit/base	current	history1	history
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor Emulsified Water	scalar	*Visual	NORML	NORML		
Free Water	scalar	*Visual	>0.2	NEG		
	scalar	*Visual		NEG		
FLUID PROPER		method	limit/base	current	history1	history
Visc @ 100°C	cSt	ASTM D445		13.3		
GRAPHS						
Ferrous Alloys						
4 iron						
2 - chromium						
0						
8						
6 -						
- L I						
4						
2						
2						
2						
2-			Nov21/23			
2						
Non-ferrous Meta						
Non-ferrous Meta						
2 EZ/IZ/NW Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta						
Non-ferrous Meta			Nov21/23			
Non-ferrous Meta			Nov21/23			
Non-ferrous Meta	ls					
Non-ferrous Meta	ls		Nov21/23	Base Number		
Non-ferrous Meta	ls		Vov21/23	Base Number		
Non-ferrous Meta	ls		EZ/17/00N EZ/17/00N 8.0 7.0			
Non-ferrous Meta	ls		EZ/17/00N EZ/17/00N 8.0 7.0			
Non-ferrous Meta	ls		EZ/17/00N EZ/17/00N 8.0 7.0			
Non-ferrous Meta	ls		EZ/17/00N EZ/17/00N 8.0 7.0			
Non-ferrous Meta	ls		EZ/17/00N EZ/17/00N 8.0 7.0			
Non-ferrous Meta	ls		Vov21/23			
Non-ferrous Meta	ls		EZ/17/00N EZ/17/00N 8.0 7.0			
Non-ferrous Meta	ls		EZ/12/volv (b/HOX bu) aquing 3.0 820 820 820 820 820 820 820 820 820 82			





 Certificate L2367
 Test Package
 : FLEET

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 lin

 * - 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)

: IL06026250

: 06026250

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: 06 Dec 2023

: 07 Dec 2023

Diagnostician : Don Baldridge

Received

Diagnosed

Laboratory Sample No.

Lab Number

Unique Number : 10776041