

OIL ANALYSIS REPORT

Sample Rating Trend



INTERNATIONAL 3154L

Front Diesel Engine Fluid MOBIL 15W40 (18 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	ΛΔΤΙΟΝ	method	limit/base	current	history1	history2
			mmubase			
Sample Number		Client Info		IL0034352 18 Nov 2023	IL0032341	IL0028961 04 Mar 2023
Sample Date Machine Age	mls	Client Info Client Info		189354	05 Aug 2023 176073	165702
Oil Age	mls	Client Info		15000	11003	15000
Oil Changed	1115	Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	M	method	limit/base	-	history1	history2
Fuel	N	WC Method	>2.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	<1.0 NEG	NEG	NEG
Glycol		WC Method	20.2	NEG	NEG	NEG
WEAR METALS			limit/base	-		
		method	limit/base		history1	history2
Iron	ppm	ASTM D5185m	>100	28	28	34
Chromium Nickel	ppm	ASTM D5185m	>20	<1 <1	<1 0	<1 <1
Titanium	ppm ppm	ASTM D5185m ASTM D5185m	>4	<1	<1	< 1
Silver	ppm	ASTM D5185m	>3	< 1 0	0	0
Aluminum	ppm	ASTM D5185m		3	3	7
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	4	0	1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		2	4	7
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		61	62	59
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		983	1001	887
Calcium	ppm	ASTM D5185m		1091	1128	1158
Phosphorus	ppm	ASTM D5185m		1044	1032	912
Zinc	ppm	ASTM D5185m		1281	1301	1196
Sulfur	ppm	ASTM D5185m		2922	4019	3417
CONTAMINANTS	;	method	limit/base		history1	history2
Silicon	ppm	ASTM D5185m		5	4	7
Sodium	ppm	ASTM D5185m		<1	<1	2
Potassium	ppm	ASTM D5185m	>20	4	3	4
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	0.5	1
Nitration	Abs/cm	*ASTM D7624	>20	9.8	10.8	12.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	23.8	25.1
FLUID DEGRADA		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.4	23.9	24.7
Base Number (BN)	mg KOH/g	ASTM D2896		7.7	6.9	6.8



13 12

Apr6/19

en30/1

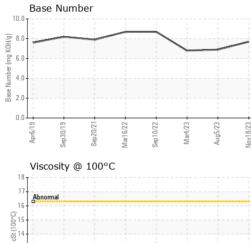
OIL ANALYSIS REPORT

scalar

*Visual

VISUAL

White Metal



Mar16/22

en20/71

Sep10/22

	Wille Melai	scalal VIS	uai NONL	NONE	NONL	NONL		
	Yellow Metal	scalar *Vis	ual NONE	NONE	NONE	NONE		
	Precipitate	scalar *Vis	ual NONE	NONE	NONE	NONE		
	Silt	scalar *Vis	ual NONE	NONE	NONE	NONE		
	Debris	scalar *Vis		NONE	NONE	NONE		
	Sand/Dirt	scalar *Vis		NONE	NONE	NONE		
23 -		scalar Vis		NORML	NORML	NORML		
Mar4/23 Aug5/23 Nov18/23	Appearance							
	Odor	scalar *Vis		NORML	NORML	NORML		
	Emulsified Water	scalar *Vis		NEG	NEG	NEG		
	Free Water	scalar *Vis	ual	NEG	NEG	NEG		
	FLUID PROPER	TIES me	ethod limit/base	e current	history1	history2		
	Visc @ 100°C	cSt AST	M D445	12.8	12.5	12.7		
	GRAPHS							
	Ferrous Alloys							
12 23	40 iron							
Mar4/23 Aug5/23	35 - nickel	\sim						
A A	30	~						
	e ²⁵ -							
	15							
	10							
		(22 · (22 ·	(23 -					
	Apr6/19 Sep30/19 Sep20/21	Mar16/22 Sep10/22 Mar4/23	Aug5/23 Nov18/23					
	Non-ferrous Meta		~					
	10 _T	15						
	copper							
	8 - Bassansen lead							
	6							
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			in the second					
		Aar1 6/22 - iep 1 0/22 - Mar4/23 -	Aug5/23 . Vov18/23 .					
	Apr6/19 Sep30/19 Sep20/21	Mar16/22 Sep10/22 Mar4/23	Aug5/23 Nov18/23					
	Viscosity @ 100°C							
	18 T			Base Number				
	17			8.0				
	Abnormal 16	J		Part -				
:			KoH	7.0				
	()-15- 15- 14-		r (mg	5.0				
	경 14-		nmbe	4.0				
	13 - Abpermal	\sim	Sec.	3.0				
	12							
	11			0.0				
		3/22 - 3/22 - 1/23 -	5/23 -		3/22 -	4/23 - 5/23 -		
	Apr6/19 Sep30/19 Sep20/21	Mar16/22 Sep10/22 Mar4/23	Aug5/23 Nov18/23	Apr6/19 Sep30/19 Sep20/21	Mar16/22 - Sep10/22 -	Mar4/23 - Aug5/23 - Nov18/23 -		
	w/		2	6, 6,	2 07	2		
Laboratory	: WearCheck USA - S	501 Madison A	ve., Cary, NC 275 : 06 Dec 2023			ICAGO IDEALEASE		
Sample No.	: IL0034352	Received		5 SOUTH CEN	TRAL AVENUE			
Lab Number		Diagnosed	: 07 Dec 2023			CHICAGO, IL		
Unique Number		Diagnostician	: Wes Davis		_	US 60638		
Test Package					Contact: MIKE LINI EV			

NONE

NONE

NONE

NONE



Test Package : FLEET Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. * - 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)

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