

WEARNORMALCONTAMINATIONNORMALFLUID CONDITIONNORMAL

Machine Id L90H-407 (S/N L90H624667) Component Diesel Engine

MOBIL 15W40 (--- GAL)

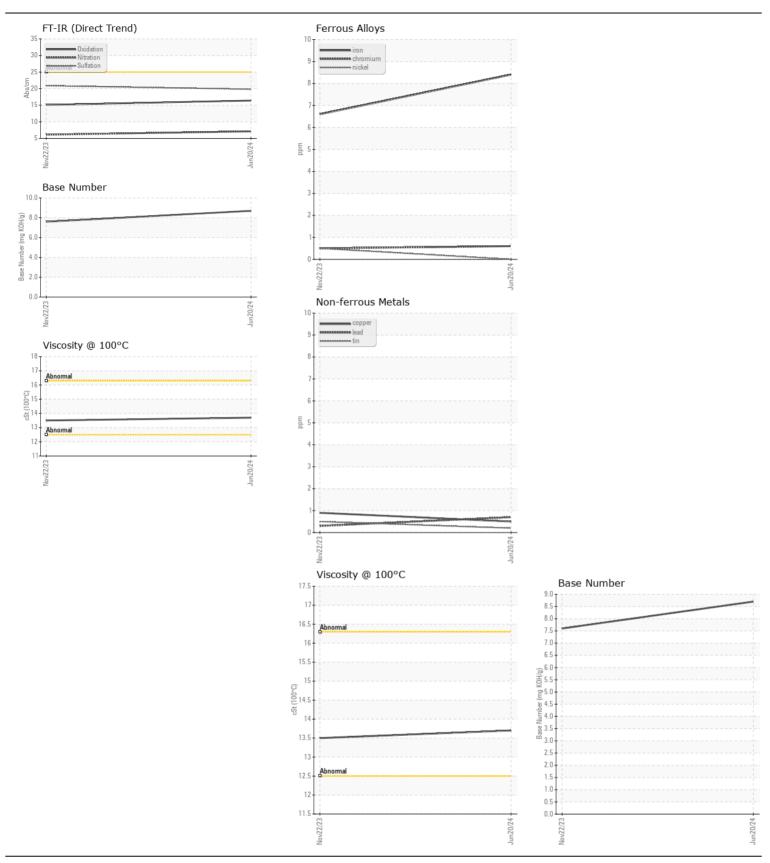
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		TLY0002314	TLY0001925	
	Sample Date		Client Info		20 Jun 2024	22 Nov 2023	
	Machine Age	hrs	Client Info		4023	3492	
	Oil Age	hrs	Client Info		3492	500	
	Filter Age	hrs	Client Info		3492	500	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	8	7	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	<1	
	Nickel	ppm	ASTM D5185m		0	<1	
	Titanium	ppm	ASTM D5185m		<1	1	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m		4	4	
	Lead	ppm	ASTM D5185m		<1	<1	
	Copper	ppm	ASTM D5185m		<1	<1	
	Tin	ppm	ASTM D5185m		<1	<1	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	<u>\</u> 25	5	6	
	Potassium	ppm	ASTM D5185m		2	2	
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method		- <1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.2	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	7.1	6.1	
	Sulfation	Abs/.1mm	*ASTM D7415		19.8	20.9	
	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	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	<u>\118</u>	2	0	
	Boron	ppm	ASTM D5185m	>110	99	454	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium		ASTM D5185m		0	1	
	Molybdenum	ppm ppm	ASTM D5185m		62	86	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		453	380	
	Calcium	ppm	ASTM D5185m		1983	1344	
	Phosphorus	ppm	ASTM D5185m		1049	998	
	Zinc	ppm	ASTM D5185m		1241	1188	
	Sulfur	ppm	ASTM D5185m		3766	3743	
	Oxidation	Abs/.1mm	*ASTM D3185111	>25	16.4	15.1	
	Base Number (BN)			>20	8.7	7.6	
	Dase Multiber (DIN)	ing KON/g	A01101D2030		0.7	7.0	

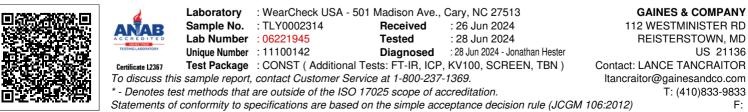
Visc @ 100°C cSt

ASTM D445

13.5

13.7





Submitted By: BRANDY BADING Page 2 of 2