

NORMAL WEAR NORMAL CONTAMINATION FLUID CONDITION NORMAL

Machine Id BELL B50E B93A650EK03408277

Component Diesel Engine

SYNERGY 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		BE0020883	BE0020882	
	Sample Date		Client Info		05 Feb 2024	20 Sep 2023	
	Machine Age	hrs	Client Info		939	422	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	PQ		ASTM D8184	>79	15	16	
	Iron	ppm	ASTM D5185m		20	54	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	1	
	Nickel	ppm	ASTM D5185m		1	1	
	Titanium	ppm	ASTM D5185m	<i>·</i> ·	<1	<1	
	Silver	ppm	ASTM D5185m	>3	<1	<1	
	Aluminum	ppm	ASTM D5185m		5	0	
	Lead	ppm	ASTM D5185m		<1	<1	
	Copper	ppm	ASTM D5185m		380	260	
	Tin	ppm	ASTM D5185m		4	3	
	Vanadium	ppm	ASTM D5185m	210	0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	6	9	
	Potassium	ppm	ASTM D5185m	>20	5	8	
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.2	0.2	
	Nitration	Abs/cm	*ASTM D7624	>20	9.3	9.7	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.3	21.4	
	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	nnm	ASTM D5185m		0	0	
I LOID CONDITION	Boron	ppm ppm	ASTM D5185m		321	16	
The BN result indicates that there is suitable alkalinity remaining in the	Barium	ppm	ASTM D5185m		14	3	
oil. The condition of the oil is suitable for further service.	Molybdenum	ppm	ASTM D5185m		14	1	
	Manganese	ppm	ASTM D5185m		1	4	
	Magnesium	ppm	ASTM D5185m		466	62	
	Calcium	ppm	ASTM D5185m		1601	2120	
	Phosphorus	ppm	ASTM D5185m		965	688	
	Zinc		ASTM D5185m		905 1150	776	
	Sulfur	ppm ppm	ASTM D5185m		2974	2211	
	Oxidation	Abs/.1mm	*ASTM D5165111 *ASTM D7414	>25	2974 19.1	18.6	
			ASTM D7414 ASTM D2896	220	7.0	8.7	
	Base Number (BN) Visc @ 40°C	nig KOH/g cSt	ASTM D2896 ASTM D445		102	70.2	
		001	AGTIVI D443		102	10.2	

Visc @ 100°C cSt ASTM D445

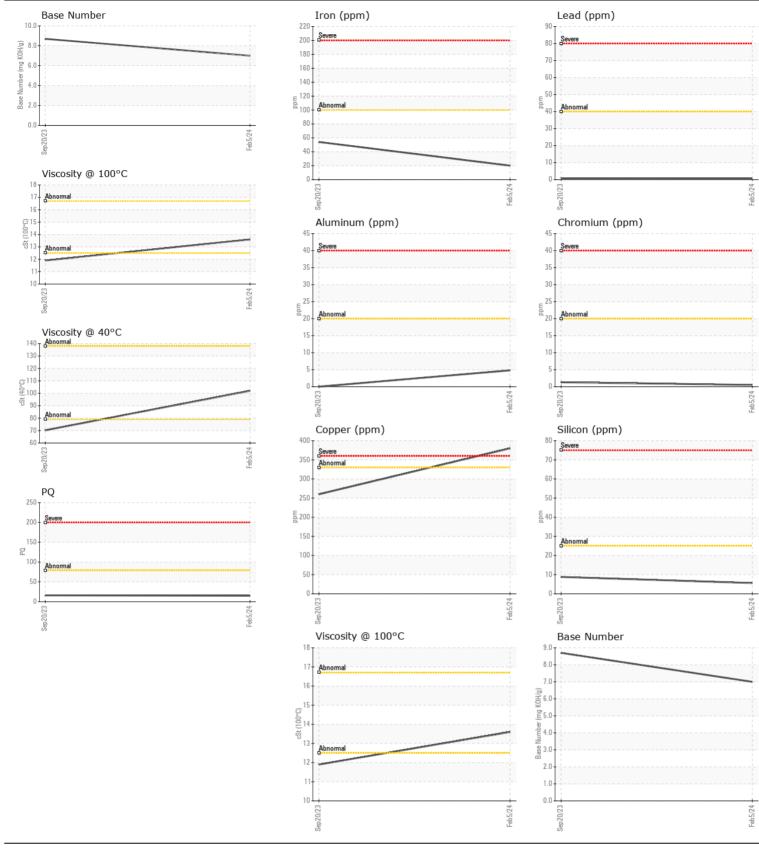
Viscosity Index (VI) Scale ASTM D2270

11.9

166

13.6

133



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **Oak Hills** Sample No. : BE0020883 Received 20245 Ewing Road : 12 Feb 2024 Lab Number : 06086644 : 14 Feb 2024 Ewing, IL Tested Unique Number : 10874089 : 14 Feb 2024 - Jonathan Hester US 62836 Diagnosed Test Package : MOBCE Contact: JOSH Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. joshohc@gmail.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (618)944-4490 F:

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

Page 2 of 2