

WEAR CONTAMINATION FLUID CONDITION

NORMAL SEVERE ABNORMAL

Machine Id

## SHUTTLELIFT 5540F CD1262

Component Diesel Engine							
DIESEL ENGINE OIL 10W40 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.	Sample Number		Client Info		HPL0003793		
	Sample Date		Client Info		29 Dec 2023		
	Machine Age	hrs	Client Info		4040		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				SEVERE		
WEAD			ACTM DE10E	100			
WEAR	Iron	ppm	ASTM D5185m		38		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		2		
	Nickel	ppm	ASTM D5185m	>4	<1		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		9		
	Lead	ppm	ASTM D5185m	-	4		
	Copper	ppm	ASTM D5185m		4		
	Tin	ppm		>15	<1		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	15		
CONTAMINATION	Potassium	ppm	ASTM D5185m		2		
There is a high amount of fuel present in the oil.	Fuel	%	ASTM D3524		15.1		
	Water	,,,	WC Method		NEG		
	Glycol		WC Method	7 U.L	NEG		
	Soot %	%	*ASTM D7844	>3	0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	14.7		
	Sulfation	Abs/.1mm	*ASTM D7415		32.9		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor		*Visual	NORML	NORML		
	<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG		
ELUID CONDITION	C		ACTM DE10E				
FLUID CONDITION	Sodium	ppm	ASTM D5185m	050	6		
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185m		16		
	Barium	ppm	ASTM D5185m		<1		
	Molybdenum	ppm	ASTM D5185m	100	332		
	Manganese	ppm	ASTM D5185m	450	2		
	Magnesium	ppm	ASTM D5185m		764		
	Calcium	ppm	ASTM D5185m	3000	2053		
	Phosphorus	ppm	ASTM D5185m		970		
	Zinc	ppm		1350	1228		
	Sulfur	ppm Abs/dmm	ASTM D5185m		4712		
	Oxidation	Abs/.1mm	*ASTM D7414		31.3		
	Base Number (BN)		ASTM D2896		12.24		
	Visc @ 100°C	cSt	ASTM D445	14.4	9.4		





Laboratory Sample No. Lab Number **Unique Number** 

: HPL0003793 : 06054151 : 10820100

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 08 Jan 2024 Diagnosed : 12 Jan 2024 Diagnostician : Jonathan Hester

**Test Package**: MOB 2 (Additional Tests: FuelDilution, PercentFuel) 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) STEVENSON CRANE

410 STEVENSON DR BOLINGBROOK, IL US 60440 Contact: DAVE KOEHNE

davidk@stevensoncrane.com

T: (630)972-9199

Report Id: STEBOL [WUSCAR] 06054151 (Generated: 01/12/2024 15:32:48) Rev: 1

Contact/Location: DAVE KOEHNE - STEBOL