

WEAR	
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id LSTK60 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		SBP0006174	SBP0001498	
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Date		Client Info		12 Jan 2024	29 Sep 2023	
brand, type, and viscosity of the off off your next sample.	Machine Age	mls	Client Info		12000	0	
	Oil Age	mls	Client Info		12000	0	
	Filter Age	mls	Client Info		0	0	
	Oil Changed		Client Info		Not Changd	N/A	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				NORMAL	NORMAL	
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>100	8	11	
	Chromium	ppm	ASTM D5185m		<1	<1	
	Nickel	ppm	ASTM D5185m		0	0	
	Titanium	ppm	ASTM D5185m	21	<1	0	
	Silver	ppm	ASTM D5185m	-3	0	0	
	Aluminum		ASTM D5185m		4	8	
	Lead	ppm	ASTM D5185m		4	0	
		ppm			2	2	
	Copper	ppm	ASTM D5185m				
	Tin	ppm	ASTM D5185m	>15	2	<1	
	Vanadium	ppm	ASTM D5185m	NONE	0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	4	
	Potassium	ppm	ASTM D5185m	>20	9	22	
There is no indication of any contamination in the oil.	Fuel		WC Method		<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.4	0.3	
	Nitration	Abs/cm	*ASTM D7624		7.1	6.9	
	Sulfation	Abs/.1mm	*ASTM D7415		19.5	19.1	
	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		*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>216	2	1	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m	250	0	<1	
	Barium	ppm	ASTM D5185m	10	0	0	
	Molybdenum	ppm	ASTM D5185m	100	61	58	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m	450	928	992	
	Calcium	ppm	ASTM D5185m	3000	1010	1070	
	Phosphorus	ppm	ASTM D5185m	1150	1034	1038	
	Zinc	ppm	ASTM D5185m	1350	1185	1310	
	Sulfur	ppm	ASTM D5185m	4250	2908	3133	
	Oxidation	Abs/.1mm	*ASTM D7414		14.7	14.6	
	Deer Northern (DNI)	1/01//		0.5		0.7	

Base Number (BN) mg KOH/g ASTM D2896 8.5

ASTM D445 14.4

Visc @ 100°C cSt

8.7

13.8

8.3

13.6



