POLARIS Laboratories

Lubricant Analysis Report

North America: +1-877-808-3750
Latin America: +1-317-808-3750 / +502-3093-6466 (WhatsApp)
Europe: +1-317-808-3750

0	1	2	3	4
NORMAL		ABNORMAL		CRITICAL

Overall report severity based on comments.

Account Information		Component Information		Sample Information	
Account Number:	153995-0002-0000	Component ID:	B&BA3449512 E	Tracking Number:	23325Q25819
Company Name:	BOOM & BUCKET	Secondary ID:	2017 JOHN DEERE	Lab Number:	H-572702
Contact:	KRIS HUFF	Component Type:	UNIDENTIFIED ENGINE	Lab Location:	Houston
Address:	600 CONGRESS AVE	Manufacturer:	Information Requested	Data Analyst:	KDN
	AUSTIN, TX US	Model:	Information Requested	Sampled:	19-Dec-2023
Phone Number:	1888-313-1597/909-846-6495	Application:	UNKNOWN	Received:	02-Jan-2024
		Sump Capacity:		Completed:	04-Jan-2024

Filter Information		Miscellaneous Information	Product Information	
Filter Type:	Information Requested		Product Manufacturer:	Information Requested
Micron Rating:	0		Product Name:	Information Requested
			Viscosity Grade:	Information Requested

Comments Suggest INSPECTING COOLING SYSTEM (head gasket, heads, seals, EGR gaskets, etc.) for leaks. Coolant indicators (Sodium and/or Potassium) are at a SIGNIFICANT LEVEL. LUBRICANT and FILTER CHANGE is suggested if not done at sampling time. FUEL DILUTION is at a MODERATE LEVEL; Suggest taking a coolant sample to help with overall diagnostic assessment. Aluminum is at a MINOR LEVEL; ALUMINUM sources in ENGINES include pistons, block and components (intake manifold, head, bearing caps), thrust bearings, main/rod bearing overlay or backing, alumina silica, or contamination from grease. The fuel dilution test was performed using the diesel method. Please specify if this sample is from a diesel or gasoline engine to ensure the appropriate fuel dilution method is utilized. In order to properly compare data to the correct standards, please provide COMPONENT MANUFACTURER and MODEL, and the FLUID MANUFACTURER, PRODUCT NAME, and VISCOSITY GRADE. Unit and/or lubricant TIME missing. Resample at half interval.

	Wear Metals (ppm)										Contaminant Metals (ppm)			Multi-Source Metals (ppm)						Additive Metals (ppm)				
Sample #	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
1	46	1	1	14	10	7	4	0	0	0	11	304	171	0	70	0	1	0	5	728	1278	0	890	1136

	Sample Information							Contaminants			Fluid Properties					
Sample #	Date Sampled	Date Received	Lube Time h	Unit Time h	Lube Change	Lube Added gal	Filter Change	Fuel Dilution %	Soot %	Water %	Viscosity 40°C cSt	Viscosity 100 °C cSt	Acid Number mg KOH / g	Base No. D4739 mg KOH / g	Oxidation abs / cm	Nitration abs / 0.1mm
1	19-Dec-2023	02-Jan-2024	0	0	Unk	0	Unk	4.0 - GC	0.2 - E2412	<.1 - FTIR		11.8		3.97	12	10

	Particle Count (particles/mL)										Additional Testing
Sample #	ISO Code Based On 4/6/14	> 4 particles / mL	> 6 particles / mL	> 10 particles / mL	> 14 particles / mL	> 21 particles / mL	> 38 particles / mL	> 70 particles / mL	> 100 particles / mL	Test Method	
1	/ /										