

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id ES08 Component Main Hydraulic System Fluid {not provided} (--- LTR)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

				Mar2024		
SAMPLE INFORMA	TION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0914622		
Sample Date		Client Info		11 Mar 2024		
Machine Age	nrs	Client Info		0		
Oil Age	nrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
lron p	opm	ASTM D5185(m)	>20	2		
Chromium p	opm	ASTM D5185(m)	>20	<1		
Nickel p	opm	ASTM D5185(m)	>20	<1		
Titanium p	opm	ASTM D5185(m)		0		
Silver p	opm	ASTM D5185(m)		0		
Aluminum p	opm	ASTM D5185(m)	>20	<1		
Lead p	opm	ASTM D5185(m)	>20	<1		
Copper p	opm	ASTM D5185(m)	>20	5		
Γin p	opm	ASTM D5185(m)	>20	0		
Antimony p	opm	ASTM D5185(m)		0		
/anadium p	opm	ASTM D5185(m)		0		
Beryllium p	opm	ASTM D5185(m)		0		
Cadmium p	opm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
-		methou	IIIIII/Dase	oarront	motory	Thistory 2
_	opm	ASTM D5185(m)	IIIIII/Dase	0		
Boron p	opm opm		iiiiii base			
Boron p Barium p		ASTM D5185(m)	IIIII/Dase	0		
Boron p Barium p Molybdenum p	opm	ASTM D5185(m) ASTM D5185(m)		0 9		
Boron p Barium p Molybdenum p Manganese p	opm opm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0 9 0		
Boron p Barium p Molybdenum p Manganese p Magnesium p	opm opm opm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0 9 0 0		
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p	opm opm opm opm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0 9 0 0 0		
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p	opm opm opm opm opm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0 9 0 0 0 6	 	
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p	opm opm opm opm opm opm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0 9 0 0 0 6 513	 	
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p	opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0 9 0 0 0 6 513 511	 	
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p	opm opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 9 0 0 6 513 511 1169	 	
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p CONTAMINANTS	opm opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0 9 0 0 6 513 511 1169 <1		
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Calcium p Calcium p Lithium p CONTAMINANTS Silicon p	opm opm opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D5185(m)	limit/base	0 9 0 0 6 513 511 1169 <1 current	 history1	 history2
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p	opm opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 9 0 0 6 513 511 1169 <1 current 0	 history1	 history2
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p CONTAMINANTS Silicon p Sodium p	opm opm opm opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D5185(m)	limit/base >15	0 9 0 0 6 513 511 1169 <1 current 0 0 0 <1	 history1	 history2
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p CONTAMINANTS Silicon p Sodium p Potassium p	opm opm opm opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D5185(m)	limit/base >15 >20 limit/base	0 9 0 0 6 513 511 1169 <1 current 0 0 <1 current	 history1 	 history2
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Calcium p Dhosphorus p Zinc p Sulfur p CONTAMINANTS Silicon p CONTAMINANTS Silicon p Potassium p PLUID CLEANLINE Particles >4μm	opm opm opm opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D5185(m)	limit/base >15 >20 limit/base >5000	0 9 0 0 6 513 511 1169 <1 <i>current</i> 0 0 <1 <i>current</i>	 history1 history1	 history2 history2
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Calcium p Dosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p Sodium p Potassium p FLUID CLEANLINE Particles >4µm Particles >6µm	opm opm opm opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D5185(m)	limit/base >15 >20 limit/base >5000 >1300	0 9 0 0 6 513 511 1169 <1 <i>current</i> 0 0 <1 <i>current</i> 0 1 3407 ● 2471	 history1 history1	 history2 history2
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Calcium p Calcium p Calcium p Sulfur p Sulfur p Sulfur p Sulfur p Sodium p FLUID CLEANLINE Particles >4µm p Particles >14µm	opm opm opm opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160	0 9 0 0 6 513 511 1169 <1 current 0 0 <1 current 0 1 4 13407 ● 2471 ● 171	 history1 history1	 history2 history2
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p Lithium p CONTAMINANTS Silicon p Sodium p Potassium p Potassium p Particles >4µm p Particles >14µm Particles >21µm	opm opm opm opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40	0 9 0 0 6 513 511 1169 <1 current 0 0 0 <1 current 0 2471 2471 171 47	 history1 history1 	 history2 history2 history2
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p CONTAMINANTS p Silicon p CONTAMINANTS p Silicon p FLUID CLEANLINE Particles >4µm p Particles >14µm p Particles >21µm p Particles >38µm p	opm opm opm opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	0 9 0 0 6 513 511 1169 <1 0 0 1 0 <1 0 1 2 4 1 3407 0 2471 0 171 4 7 4		
Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Calcium p Phosphorus p Zinc p Sulfur p CONTAMINANTS Silicon p CONTAMINANTS Silicon p CONTAMINANTS Silicon p CONTAMINANTS Silicon p CONTAMINANTS Silicon p CONTAMINANTS Silicon p CONTAMINANTS Silicon p CONTAMINANTS Saticles >14µm Particles >14µm Particles >21µm	opm opm opm opm opm opm opm opm opm opm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40	0 9 0 0 6 513 511 1169 <1 current 0 0 0 <1 current 0 2471 2471 171 47	 history1 history1 history1	 history2 history2 history2

Contact/Location: Sandip Patel - AMCMIS



OIL ANALYSIS REPORT

Acid Number (AN)		method	limit/base	current	history1	history
	mg KOH/g	ASTM D974*		0.57		
VISUAL		method	limit/base	current	history1	history
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.05	NEG		
Free Water	scalar	Visual*		NEG		
FLUID PROPERT	TIES	method	limit/base	current	history1	history
-			limit/base		biotomit	biotony
SAMPLE IMAGE	5	method	Timit/base	current	history I	history
Color			1110		no image	no image
				22.		
Bottom					no image	no image
				(G2)	0.4	
				D- HIL C		
Ferrous Alloys			491,520	Particle Count		
iron						
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copper			120- 120-	1		
E. 5-			30	-		-
			8	+		
74				-		
Mar11,			Mar11.			
Viscosity @ 40°C			— U. 4	Acid Number	14μ 21μ	38µ 71
55			₽0.60	Acia Number		
50 - Abnormal			() 10.60 約0.40 20.40			
0			 			
9 45 45			E 0.20	1		
50 - A 50 - 			2			
45 35 35			00.0 Acid Number (r	Mar11/24		
	Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROPERT Visc @ 40°C SAMPLE IMAGES Color Bottom GRAPHS Ferrous Alloys	Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Free Water scalar FLUID PROPERTIES Visc @ 40°C cSt SAMPLE IMAGES Color Bottom GRAPHS Ferrous Alloys GRAPHS Ferrous Metals	Sand/Dirt scalar Visual* Appearance scalar Visual* Odor scalar Visual* Emulsified Water scalar Visual* Free Water scalar Visual* FLUID PROPERTIES method Visc @ 40°C cSt ASTM D7279(m) SAMPLE IMAGES method Color Bottom GRAPHS Ferrous Alloys 10 10 10 10 10 10 10 10 10 10	Sand/Dirt scalar Visual* NONE Appearance scalar Visual* NORML Odor scalar Visual* NORML Emulsified Water scalar Visual* NORML Emulsified Water scalar Visual* >0.05 Free Water scalar Visual* >0.05 Free Water scalar Visual* > FLUID PROPERTIES method limit/base Visc @ 40°C cSt ASTM D7279(m) SAMPLE IMAGES method limit/base Color	Sand/Dirt scalar Visual* NONE NONE Appearance scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Emulsified Water scalar Visual* >0.05 NEG Free Water scalar Visual* >0.05 NEG FLUID PROPERTIES method limit/base current Visc @ 40°C cSt ASTM D7279(m) 43.3 SAMPLE IMAGES method limit/base current Color Imit/base current Imit/base current Bottom Imit/base Particle Count Imit/base Imit/base GRAPHS Ferrous Alloys Particle Count Imit/base Imit/base Imit/base Imit in mickel Imit in mickel	Sand/Dirt scalar Visual* NONE NONE Appearance scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Emulsified Water scalar Visual* NORML NORML Free Water scalar Visual* >0.05 NEG FLUID PROPERTIES method limit/base current history1 Visc @ 40°C cSt ASTM D7279(m) 43.3 SAMPLE IMAGES method limit/base current history1 Color Image no image no image Bottom Image Particle Count Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image <td< td=""></td<>