

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Auxiliary Hydraulic System {not provided} (--- LTR)

DIAGNOSIS

Machine Id **ES03** Component

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.

		Client Info WC0914592 WC0779649 Client Info 11 Mar 2024 20 Feb 2023 hrs Client Info 0 0 hrs Client Info 0 0 Client Info 0 0 Client Info N/A N/A Client Info N/A N/A Method Imit/base current history1 WC Method >0.05 NEG NEG method limit/base current history1 ppm ASTM D5185(m) >20 2 1				
			Feb2023	Mar2024		
SAMPLE INFORM	MATION	method	limit/base	current	historv1	history2
Sample Number				WC0914592		
Sample Date						
Machine Age	hrs					
Oil Age						
Oil Changed				-		
Sample Status				ABNORMAL	ABNORMAL	
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	historv1	history2
Iron	nnm					
Chromium	ppm	ASTM D5185(m)	>20	<1	0	
Nickel	ppm	ASTM D5185(m)	>20	2	<1	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)		0	0	
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	
Lead	ppm	ASTM D5185(m)	>20	<1	<1	
Copper	ppm	ASTM D5185(m)		8	5	
Tin	ppm	ASTM D5185(m)	>20	0	0	
Antimony	ppm	ASTM D5185(m)		0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		0	<1	
Boron Barium	ppm ppm	ASTM D5185(m) ASTM D5185(m)		0 9	<1 13	
Barium	ppm	ASTM D5185(m)		9	13	
Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m)		9 0	13 0	
Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		9 0 0	13 0 0	
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		9 0 0 <1	13 0 0 0	
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		9 0 0 <1 6	13 0 0 0 7	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		9 0 <1 6 514	13 0 0 0 7 570	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		9 0 <1 6 514 522	13 0 0 0 7 570 581	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	9 0 <1 6 514 522 1151	13 0 0 7 570 581 1202	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	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 >15	9 0 <1 6 514 522 1151 <1	13 0 0 7 570 581 1202 <1	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	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)		9 0 <1 6 514 522 1151 <1 current	13 0 0 7 570 581 1202 <1 history1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)		9 0 (0 <1 6 514 522 1151 <1 (urrent) <1	13 0 0 7 570 581 1202 <1 history1 0	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	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)	>15	9 0 4 5 5 14 5 22 1151 <1 5 22 1151 <1 5 22 1151 5 2 2 1151 5 2 1 0	13 0 0 7 570 581 1202 <1 history1 0 0	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	>15 >20	9 0 2 3 4 5 5 14 5 22 1151 <1 2 2 1151 <1 2 2 1 1 3 1	13 0 0 7 570 581 1202 <1 history1 0 0 <1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	>15 >20 limit/base	9 0 2 3 4 5 5 14 5 22 1151 5 22 1151 <1 2 1 0 1 0 1 1 0 1 1 0 1	13 0 0 7 570 581 1202 <1 history1 0 0 <1 history1	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	>15 >20 limit/base >5000	9 0 0 <1 6 514 522 1151 <1 <1 <1 <1 <1 0 1 0 1 0 1 25227	13 0 0 7 570 581 1202 <1 history1 0 0 0 <1 history1 13940	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	>15 >20 limit/base >5000 >1300 >160	9 0 0 <1 6 514 522 1151 <1 <1 <1 0 1 0 1 25227 ↓ 25227 ▲ 5344	13 0 0 7 570 581 1202 <1 0 0 0 <1 0 1 0 1 0 0 0 1 1 13940 1 1789	 history2 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160	9 0 0 <1 6 514 522 1151 <1 <1 current <1 0 1 25227 ↓ 25227 ▲ 5344 ● 227	13 0 0 7 570 581 1202 <1 history1 0 0 0 <1 history1 ∧ 13940 1789 53	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160 >40 >10	9 0 0 <1 6 514 522 1151 <1 <1 <1 0 1 1 <i>current</i> 25227 ↓ 25227 ↓ 5344 € 227 42	13 0 0 0 7 570 581 1202 <1 history1 0 0 0 <1 history1 ▲ 13940 ■ 1789 53 12	 history2 history2 history2

Contact/Location: Sandip Patel - AMCMIS



OIL ANALYSIS REPORT

istory2	history1 h	current	mit/base	lin	method	ATION	FLUID DEGRADA			Particle Trend
	0.51	0.63		4*	ASTM D974	mg KOH/g	Acid Number (AN)			4μm 6μm 14μm
istory2	history1 h	current	mit/base	lin	method		VISUAL			
	NONE	NONE	NE	NO	Visual*	scalar	White Metal			
	NONE	NONE		NO	Visual*	scalar	Yellow Metal			Abnormal
	NONE	NONE	NE	NO	Visual*	scalar	Precipitate			
	NONE	NONE	NE I	NO	Visual*	scalar	Silt	/24		27
	NONE	NONE	NE	NO	Visual*	scalar	Debris	Mar11/24		Leo 2 U/ 2.3
	NONE	NONE	NE I	NO	Visual*	scalar	Sand/Dirt			
	NORML	NORML	RML	NO	Visual*	scalar	Appearance			Particle Trend
	NORML	NORML	RML	NO	Visual*	scalar	Odor			4μm
	NEG	NEG	.05	>0.0	Visual*	scalar	Emulsified Water			14μm
	NEG	NEG			Visual*	scalar	Free Water			
istory2	history1 h	current	mit/base	lin	method	FIES	FLUID PROPERT			
	42.0	43.0			ASTM D7279(m	cSt	Visc @ 40°C	ARTICLE CONTRACTOR		Abnormal
istory2		current	nit/base	-	method		SAMPLE IMAGES			2
13101 y Z					method	0		Mar11/24		Leo 20/23
image	no						Color		end Per	Acid Number
		-								
			1							
image	no no						Bottom			
			3							
							GRAPHS			
		article Count	A D:				Ferrous Alloys	4.		57
T ²⁶			491,520 T				¹⁰ T	11-11		Leo 20/23
-24			122,880 -				iron chromium	al.		
		vere	Sev				5		°C	viscosity @ 40°
-22		2.	30,720							Abnormal
-20		normal	7,680 Abn	24						
-18		· · · · ·	편 1,920	Mar11/24			Feb 20/23			
10			(m 1,920 - 1,9	Z		-	—			
-20 -18 -16 -14			of part			IS	Non-ferrous Meta			All
-14			120- 				copper			Abnormal
-12			JE 30-				5-	V.C.		
10			8-					12		rep 2.0/ 2.3
			- 01	4				4		-
+0	6		2	ar11/2			b20/2			
714	ι 21μ 38μ	6µ 14		N						
		cid Number	A							
			HO 0.80				Abaamaal			
							46			
			La 0.40				Abnormal			
			N 0.20				10 L			
			1/23 Ac	/24 -						
			Feb 20	Mar11			Feb2(
oa iug L4	gid Plastics North 245 Britannia R Mississa CA Contact: San Sandip.Patel@an	H9 Amcor Ri	⁴ μ (b) (0.00 (b) (0.00) (b) (0.00) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c)	12 Mar 13 Mar	ved : d : losed : 1	Recei Teste Diagn	WearCheck - C8-1179 WC0914592 02621491	Laboratory Sample No. Lab Number Unique Number Test Package	ISO 17025:2017 Accredited Laboratory	

Contact/Location: Sandip Patel - AMCMIS