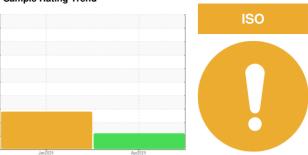


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

CASTER BED

Hydraulic System

KOST ACHIEVAL FRH 46 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of particulates present in the oil.

Fluid Condition

The pH level of this fluid is within the acceptable limits at 11.0. The condition of the oil is acceptable for the time in service.

			Jan 2024	Apr2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0107860	PCA0107862	
Sample Date		Client Info		04 Apr 2024	19 Jan 2024	
Machine Age	days	Client Info		0	0	
Oil Age	days	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				ATTENTION	ABNORMAL	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	6	0	
Chromium	ppm	ASTM D5185m	>20	1	0	
Nickel	ppm	ASTM D5185m	>20	1	<1	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>20	10	<1	
Lead	ppm	ASTM D5185m	>20	0	0	
Copper	ppm	ASTM D5185m	>20	1	<1	
Tin	ppm	ASTM D5185m	>20	<1	<1	
Vanadium	ppm	ASTM D5185m		1	0	
Cadmium	ppm	ASTM D5185m		2	<1	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		1	0	
Barium	ppm	ASTM D5185m		0	<1	
Molybdenum	nnm	ASTM D5185m			0	
	ppm	HO I IVI DO TOOIII		<1	0	
Manganese	ppm	ASTM D5185m		<1 <1	0 <1	
•	• •					
Manganese	ppm	ASTM D5185m		<1	<1	
Manganese Magnesium	ppm	ASTM D5185m ASTM D5185m		<1 1	<1	
Manganese Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		<1 1 4	<1 1	
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 1 4 11	<1 1 1 <1	
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 1 4 11 11	<1 1 1 <1 8	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >15	<1 1 4 11 11	<1 1 1 <1 <1 8	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 1 4 11 11 0 current	<1 1 1 <1 8 0 history1	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m		<1 1 4 11 11 0 current	<1 1 1 <1 8 0 history1	 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>15	<1 1 4 11 11 0 current 3 39	<1 1 1 1 <1 8 0 history1	history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>15 >20	<1 1 4 11 11 0 current 3 39 5	<1 1 1 1 <1 8 0 history1	 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Water	ppm	ASTM D5185m ASTM D5185m	>15 >20 >0.05	<1 1 4 11 11 0 current 3 39 5 39.0	<1 1 1 1 <1 8 0 history1 0 0 <1 36.8	history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Water ppm Water	ppm	ASTM D5185m ASTM D6304 ASTM D6304	>15 >20 >0.05 >500	<1 1 4 11 11 0 current 3 39 5 39.0 390000	<1 1 1 <1 8 0 history1 0 0 <1 36.8 368000	 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Water ppm Water FLUID CLEANI	ppm	ASTM D5185m ASTM D6304 ASTM D6304 Method	>15 >20 >0.05 >500 limit/base	<1 1 4 11 11 0 current 3 39 5 39.0 390000 current	<1 1 1 1 <1 8 0 history1 0 0 <1 36.8 368000 history1	history2 history2 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Water ppm Water FLUID CLEANL Particles >4µm	ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647	>15 >20 >0.05 >500 limit/base >5000	<1 1 4 11 11 0 current 3 39 5 39.0 390000 current 1983	<1 1 1 1 <1 8 0 history1 0 0 <1 36.8 368000 history1 ▲ 5646	history2 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Water ppm Water FLUID CLEANL Particles >4µm Particles >6µm	ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647	>15 >20 >0.05 >500 limit/base >5000 >1300	<1 1 4 11 11 0 current 3 39 5 39.0 390000 current 1983 1080	<1 1 1 1 <1 8 0 history1 0 0 <1 36.8 368000 history1 △ 5646 △ 3076	history2 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Water ppm Water FLUID CLEANI Particles >4µm Particles >14µm	ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 >0.05 >500 limit/base >5000 >1300 >160	<1 1 4 11 11 0 current 3 39 5 39.0 390000 current 1983 1080 184	<1 1 1 1 1 <1 8 0 history1 0 0 <1 36.8 368000 history1 5646 3076 523	history2 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Water ppm Water FLUID CLEANL Particles >4µm Particles >14µm Particles >21µm	ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 >0.05 >500 limit/base >5000 >1300 >160 >40 >10	<1 1 4 11 11 0 current 3 39 5 39.0 390000 current 1983 1080 184 62	<1 1 1 1 <1 8 0 history1 0 0 <1 36.8 368000 history1 △ 5646 △ 3076 △ 523 △ 176	history2 history2



OIL ANALYSIS REPORT





Certificate 12367

Laboratory Sample No.

: PCA0107860 Lab Number : 06156083

Unique Number : 10991506

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 22 Apr 2024 **Tested** : 24 Apr 2024

Diagnosed : 24 Apr 2024 - Jonathan Hester Test Package : IND 2 (Additional Tests: KF, pH)

To discuss this sample report, contact Customer Service at 1-800-237-1369. st - Denotes test methods that are outside of the ISO 17025 scope of accreditation. **NUCOR STEEL KANKAKEE**

ONE NUCOR WAY BOURBONNAIS, IL US 60914

Contact: NATHAN DUNNILL nathan.dunnill@nucor.com T:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: