

OIL ANALYSIS REPORT

Sample Rating Trend

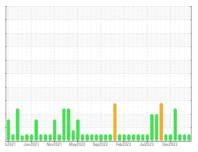
NORMAL

Area

MELT SHOP - HYDRAULIC MELT SHOP TUNDISH FLIPPING STAND

Component Hydraulic System

FIRE-RESISTANT FLUID ISO 46 (275 GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Woor

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

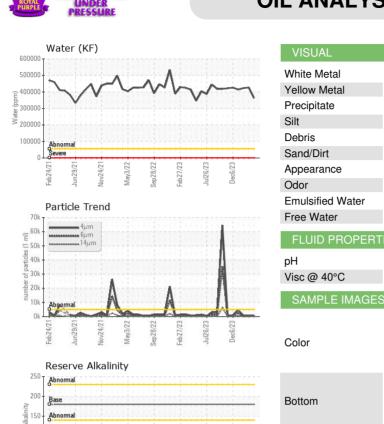
Fluid Condition

The pH level of this fluid is within the acceptable limits at 8.0. The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		RP0035579	RP0042613	RP0039213
Sample Date		Client Info		28 Mar 2024	05 Mar 2024	31 Jan 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	3	5	0
Chromium	ppm	ASTM D5185m	>20	1	<1	0
Nickel	ppm	ASTM D5185m	>20	1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	11	11	<1
Lead	ppm	ASTM D5185m	>20	0	0	2
Copper	ppm	ASTM D5185m	>20	<1	<1	2
Tin	ppm	ASTM D5185m	>20	1	1	1
Vanadium	ppm	ASTM D5185m		1	1	0
Cadmium	ppm	ASTM D5185m		<1	<1	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	2	3	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	0	<1
,						
Manganese	ppm	ASTM D5185m		<1	0	2
Manganese Magnesium		ASTM D5185m	5	<1	<1	1
Manganese Magnesium Calcium	ppm	ASTM D5185m ASTM D5185m	50	<1 6	<1 6	1
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	50 175	<1 6 6	<1 6 3	1 1 3
Manganese Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m	50	<1 6	<1 6	1
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	50 175	<1 6 6	<1 6 3	1 1 3
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 175 62	<1 6 6 3	<1 6 3 2	1 1 3 3
Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	50 175 62 limit/base	<1 6 6 3 current	<1 6 3 2 history1	1 1 3 3 history2
Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	50 175 62 limit/base	<1 6 6 3 current	<1 6 3 2 history1	1
Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	50 175 62 limit/base >15	<1 6 6 3 current 3 32	<1 6 3 2 history1 3 34	1
Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 175 62 limit/base >15	<1 6 6 3 current 3 32 7	<1 6 3 2 history1 3 34 9	1
Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 175 62 limit/base >15 >20 >55	<1 6 6 3 current 3 32 7 36.2	<1 6 3 2 history1 3 34 9 42.7	1 1 3 3 history2 <1 2 4 42.3
Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	50 175 62 limit/base >15 >20 >55 >55000	<1 6 6 3 current 3 32 7 36.2 362000	<1 6 3 2 history1 3 34 9 42.7 427000	1 1 3 3 history2 <1 2 4 42.3 423000
Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method	50 175 62 limit/base >15 >20 >55 >55000 limit/base >5000	<1 6 6 3 current 3 32 7 36.2 362000 current	<1 6 3 2 history1 3 34 9 42.7 427000 history1	1 1 3 3 history2 <1 2 4 42.3 423000 history2
Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304	50 175 62 limit/base >15 >20 >55 >55000 limit/base >5000	<1 6 6 3 current 3 32 7 36.2 362000 current 705	<1 6 3 2 history1 3 34 9 42.7 427000 history1 618	1 1 3 3 history2 <1 2 4 42.3 423000 history2 661
Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D7647 ASTM D7647	50 175 62 limit/base >15 >20 >55 >55000 limit/base >5000 >1300 >160	<1 6 6 3 current 3 32 7 36.2 362000 current 705 384	<1 6 3 2 history1 3 34 9 42.7 427000 history1 618 337	1 1 3 3 3 history2 <1 2 4 42.3 423000 history2 661 360 61 21
Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647	50 175 62 limit/base >15 >20 >55 >55000 limit/base >5000 >1300 >160	<1 6 6 3 current 3 32 7 36.2 362000 current 705 384 65 22 3	<1 6 3 2 history1 3 34 9 42.7 427000 history1 618 337 57	1 1 3 3 history2 <1 2 4 42.3 423000 history2 661 360 61 21 3
Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647	50 175 62 limit/base >15 >20 >55 >55000 limit/base >5000 >1300 >160 >40 >10	<1 6 6 3 current 3 32 7 36.2 362000 current 705 384 65 22	<1 6 3 2 history1 3 34 9 42.7 427000 history1 618 337 57	1 1 3 3 3 history2 <1 2 4 42.3 423000 history2 661 360 61 21

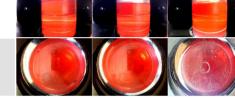


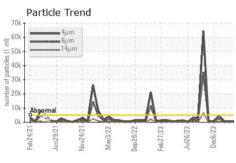
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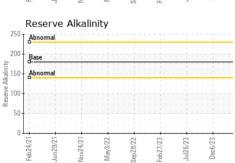


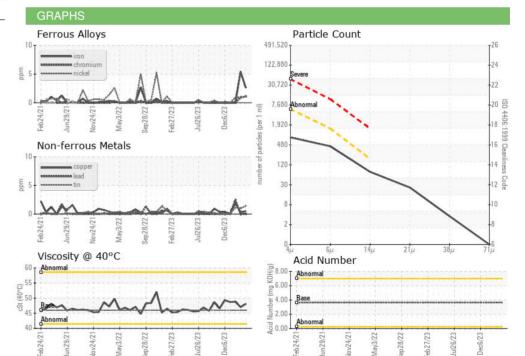
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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>55	0.2%	0.2%	0.2%
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	TES	method	limit/base	current	history1	history2

FLUID PROPERTIES		method			history1	history2	
рН	Scale 0-14	ASTM D1287		8.00	10.0	9.00	
Visc @ 40°C	cSt	ASTM D445	46	48.1	47.0	48.8	











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Report Id: OUTCALAL [WUSCAR] 06134129 (Generated: 04/03/2024 17:50:44) Rev: 1

Laboratory Sample No. Lab Number : 06134129 Unique Number: 10953594

: RP0035579

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested**

: 29 Mar 2024 : 03 Apr 2024

: 03 Apr 2024 - Jonathan Hester Diagnosed

Test Package: IND 2 (Additional Tests: pH, ReserveAlk) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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