

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Horizon Plastics - H01800 Az310145

Component Hydraulic System Fluid AW HYDRAULIC OIL ISO 32 (--- GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

Wear

Copper and iron ppm levels are noted.

Contamination {not applicable}

Fluid Condition {not applicable}

				Oct2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Batch #		Client Info		2023 10 0580		
Machine ID		Client Info		A2310145		
Department		Client Info		Production		
Sample From		Client Info		Machine		
Production Stage		Client Info		Initial		
Sent to WC		Client Info		10/24/2023		
Sample Number		Client Info		E30000594		
Sample Date		Client Info		24 Oct 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		20		
Iron	ppm	ASTM D5185(m)	>20	20		
Chromium	ppm	ASTM D5185(m)	>10	<1		
Nickel	ppm	ASTM D5185(m)	>10	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		<1		
Aluminum	ppm	ASTM D5185(m)	>10	1		
Lead	ppm	ASTM D5185(m)	>20	5		
Copper	ppm	ASTM D5185(m)	>20	22		
Tin	ppm	ASTM D5185(m)	>10	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)				
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	<1		
Barium	ppm	ASTM D5185(m)	5	<1		
Molybdenum	ppm	ASTM D5185(m)	5	0		
Manganese	ppm	ASTM D5185(m)	05	<1		
Magnesium	ppm	ASTM D5185(m)	25	23		
Calcium	ppm	ASTM D5185(m)		77		
Phosphorus Zinc	ppm	ASTM D5185(m) ASTM D5185(m)	300 370	555		
Sulfur	ppm		2500	521 2010		
Lithium	ppm ppm	ASTM D5185(m) ASTM D5185(m)	2000	<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon			>15			
Sodium	ppm	ASTM D5185(m) ASTM D5185(m)	>10	7 2		
Potassium	ppm	()	>20			
Folassium	ppm	ASTM D5185(m)	>20	1		







OIL ANALYSIS REPORT

bpm

bpm



180 180 180 160 160 160 160 160 160 160 160 160 160 160 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 120 </th <th>VISUAL</th> <th></th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar Visual* NONE NONE Sitt scalar Visual* NONE VLITE Sand/Dirt scalar Visual* NONE NONE Appearance scalar Visual* NORML LAYRD SAMPLE IMAGES method imit/base current history1 history2 Color no image no image Bottom no image no image Bottom Perrous Alloys	White Metal	scalar	Visual*	NONE	NONE		
Silt scalar Visual* NONE VLITE Debris scalar Visual* NONE NONE Sand/Dirit scalar Visual* NONE NONE Appearance scalar Visual* NORML LAYRD Codor scalar Visual* NORML NORML SAMPLE IMAGES method imit/base current history1 history2 Color I I I I I I I I I I I I I I I I I I I	Yellow Metal	scalar	Visual*	NONE	NONE		
Debris scalar Visual* NONE Sand/Dirt scalar Visual* NONE NONE Appearance scalar Visual* NORML LAYRD Odor scalar Visual* NORML NORML SAMPLE IMAGES method imit/base current history1 history2 Color Imit/base current history1 history2 Color Imit/base current history1 no image Bottom Imit/base ro image no image no image Non-ferrous Alloys PQ Imit/base Imit/base Imit/base Imit/Distar Imit/base Imit/base Imit/base Imit/base Non-ferrous Metals Imit/base Imit/base Imit/base Imit/base Imit/Distar Imit/base Imit/base Imit/base Imit/base Imit/Dista	Precipitate	scalar	Visual*	NONE	NONE		
Sand/Dirt scalar Visual* NONE NONE Appearance scalar Visual* NORML LAYRD Odor scalar Visual* NORML NORML SAMPLE IMAGES method limit/base current history1 history2 Color I I I I I I I I I I I I I I I I I I I	Silt	scalar	Visual*	NONE	VLITE		
Appearance scalar Visual* NORML LAYRD Odor scalar Visual* NORML NORML SAMPLE IMAGES method imil/base current history1 history2 Color Imil/base current no image no image Bottom Imil/base ro image no image no image Bottom Imil/base PQ Imil/base Imil/base Imil/base Imil/base Non-ferrous Metals Imil/base Imil/base Imil/base	Debris	scalar	Visual*	NONE	NONE		
Odor scalar Visual* NORML NORML SAMPLE IMAGES method imit/base current history1 history2 Color Imit/base current history1 history2 Bottom Imit/base no image no image Bottom Imit/base no image no image Non-ferrous Metals Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/Imit/Imit/Imit/Imit/Imit/Imit/Imit/	Sand/Dirt	scalar	Visual*		NONE		
SAMPLE IMAGES method imit/base current history1 history2 Color Imit/base no image no image no image Bottom Imit/base no image no image no image Ferrous Alloys PQ Imit/base Imit/base PQ Imit/base Imit/base Imit/base Imit/base Imit/base Non-ferrous Metals Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base							
Color no image no image Bottom PQ GRAPHS Ferrous Alloys PQ Mon-ferrous Metals	Odor	scalar	Visual*	NORML	NORML		
Bottom no image no image	SAMPLE IMAGES	5	method	limit/base	current	history1	history2
GRAPHS Ferrous Alloys PQ 200 200 200 200 200 200 200	Color					no image	no image
Ferrous Alloys PQ PQ PQ PQ PQ PQ PQ PQ PQ PQ	Bottom					no image	no image
Non-ferrous Metals	GRAPHS						
Severe iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron iron				220	PQ		
5 200 180 5 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180	iron			220			
Non-ferrous Metals				200 -	Severe		
Non-ferrous Metals	10-			180-			
Non-ferrous Metals							
Non-ferrous Metals	5-			160-			
Non-ferrous Metals				140-			
Non-ferrous Metals	24/23			£2/52 120-			
Non-terrous Metals	Octi			<u>a_</u>	Abnormal		
20 copper 80 5 60 7 7		s		100-	- O		-
5	copper			80-			
	20 - management lead						
	15			60-			
	10-			40 -			
~ U++	5 -	****		20-			
~ U++	0						
0ct2 0ct24 0ct24				-0	/23		/23 +
	Octi			Octź	0ct24		0ct24

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Environmental 360 Solutions Ltd. Laboratory CALA Sample No. : E30000594 Received : 26 Oct 2023 640 Victoria Street Lab Number : 02592302 Diagnosed : 10 Nov 2023 Cobourg, ON ISO 17025:2017 Accredited Laboratory Unique Number : 5669381 Diagnostician : Tatiana Sorkina CA K9A 5H5 Test Package : TEST (Additional Tests: ICP, PQ) Contact: Tatiana Sorkina To discuss this sample report, contact Customer Service at 1-905-372-2251. tsorkina@e360s.ca Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (800)263-3939 Validity of results and interpretation are based on the sample and information as supplied. F: (905)373-4950

Contact/Location: Tatiana Sorkina - CHECOB