

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area ORIN CONTRACTORS Machine for 380 Component

Component Hydraulic System Fluid JOHN DEERE HYDRAU XR (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

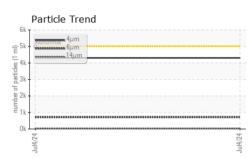
Fluid Condition

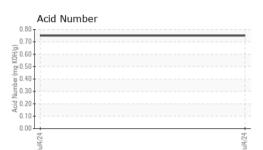
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

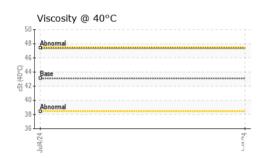
SAMPLE INFORM	/IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0952988		
Sample Date		Client Info		04 Jul 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	8		
Chromium	ppm	ASTM D5185(m)	>10	0		
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)	>10	<1		
Copper	ppm	ASTM D5185(m)	>75	4		
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)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	limit/base	<1	history1 	
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	limit/base	<1 <1		
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	<1 <1 0		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	<1 <1 0 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	<1 <1 0 0 2		
Boron 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) ASTM D5185(m)	limit/base	<1 <1 0 2 109	 	
Boron 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) ASTM D5185(m)	limit/base	<1 <1 0 2 109 653		
Boron 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)	limit/base	<1 <1 0 2 109 653 802	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	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	<1 <1 0 2 109 653 802 1425		
Boron 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)		<1 <1 0 2 109 653 802 1425 <1		
Boron 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) ASTM D5185(m)	limit/base	<1 <1 0 2 109 653 802 1425		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	limit/base	<1 <1 0 0 2 109 653 802 1425 <1 current	 history1 	 history2
Boron 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) ASTM D5185(m)	limit/base	<1 <1 0 0 2 109 653 802 1425 <1 <i>current</i>	 history1	 history2
Boron 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)	limit/base	<1 <1 0 2 109 653 802 1425 <1 <i>current</i> <1 0	 history1	 history2
Boron 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)	limit/base >20 >20	<1 <1 0 0 2 109 653 802 1425 <1 <1 <1<th> history1 </th><th> history2 </th>	 history1 	 history2
Boron 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)	limit/base >20 }20 limit/base	<1 <1 0 0 2 109 653 802 1425 <1 <1 0 <1 current 	 history1 history1	 history2 history2
Boron 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 D76477 ASTM D7647	limit/base >20 >20 limit/base >5000 >1300 >160	<1 <1 0 0 2 109 653 802 1425 <1 0 current <1 0 <1 0 <1 0 4305 707 39	 history1 history1 history1	 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Potassium Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	imit/base >20 >20 >20 >1mit/base >5000 >1300 >160 >40	<1 <1 0 0 2 109 653 802 1425 <1 Current <1 0 <1 0 <1 4305 707 39 10 <	 history1 history1	history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	Iimit/base >20 >20 >20 >10 >100 >100 >160 >40 >10	<1 <1 0 0 0 2 109 653 802 1425 <1 Current <1 0 <1 0 4305 707 39 10 1	 history1 history1	 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	Iimit/base >20 >20 >20 >10 >100 >100 >160 >40 >10	<1 <1 0 0 2 109 653 802 1425 <1 Current <1 0 <1 0 <1 4305 707 39 10 <		

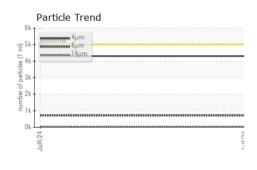


OIL ANALYSIS REPORT









VISUAL method limit/base current history1 history2	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
White Metal scalar Visual* NONE VLITE Velow Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Sitt scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NORML Soldor scalar Visual* NORML NORML Door scalar Visual* NORML NORML Ferrous Alloys method imit/base current history1 history2 Color addmin addmin addmin Sottom addmin addmin for door addmin addmin Sottom addmin </th <th>Acid Number (AN)</th> <th>mg KOH/g</th> <th>ASTM D974*</th> <th></th> <th>0.75</th> <th></th> <th></th>	Acid Number (AN)	mg KOH/g	ASTM D974*		0.75		
reliow Metal scalar Visual* NONE NONE	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar Visual* NONE NONE	Vhite Metal	scalar	Visual*	NONE	VLITE		
Site scalar Visual* NONE NONE		scalar					
bebris scalar Visual* NONE NONE					-		
sand/Dirt scalar Visual* NONE NONE pppearance scalar Visual* NORML NORML							
scalar Visual* NORML bdor scalar Visual* NORML NORML riree scalar Visual* NORML NORML riree scalar Visual* >0.1 NEG FLUID PROPERTIES method limit/base current history1 history2 rise @ 40°C cSt ASTM DIZ79(m) 43.1 47.4 SAMPLE IMAGES method limit/base current history1 history2 color image no image no image no image sottom image no image no image no image sottom image image image image viscosity @ 40°C image image image image viscosity @ 40°C image image image image image image i					-		
bor scalar Visual* NORML NORML scalar Visual* >0.1 NEG ree Water scalar Visual* NEG FLUID PROPERTIES method limit/base current history1 history2 fisc @ 40°C cSt ASTMD7278(m) 43.1 47.4 SAMPLE IMAGES method limit/base current history1 history2 solor imit/base imit/base current history1 solor imit/base imit/base imit/base imit/base solor imit/base imit/base imit/base imit/base solor imit/base imit/base imit/base imit/base solor imit/base imit/base imit/base <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>					-		
Emulsified Water scalar Visual* >0.1 NEG Free Water scalar Visual* NEG FLUID PROPERTIES method limit/base current history1 history2 Kisc @ 40°C cSt ASTM D7279(m) 43.1 47.4 SAMPLE IMAGES method limit/base current history1 history2 Color Image no image no image no image Sottom Image no image no image no image GRAPHS Ferrous Alloys Particle Count Image Image Image Viscosity @ 40°C Image Image Image Image Image Image Image					-		
FLUID PROPERTIES method limit/base current history1 history2 fisc @ 40°C cSt ASTM07278(m) 43.1 47.4 SAMPLE IMAGES method limit/base current history1 history2 Solor imit/base current history1 history2 Solor	Emulsified Water	scalar			NEG		
risc @ 40°C cSt ASTM D7279(m) 43.1 47.4	ree Water	scalar	Visual*		NEG		
SAMPLE IMAGES method limit/base current history1 history2 Solor Imit/base no image no image no image Sotom Imit/base no image no image no image Sotom Imit/base Particle Count Imit/base Imit/base Imit/base GRAPHS Ferrous Alloys Particle Count Imit/base <	FLUID PROPERT	IES	method	limit/base	current	history1	history2
Color Notion Non-ferrous Metals Costsity @ 40°C Costsity @ 40°C	'isc @ 40°C	cSt	ASTM D7279(m)	43.1	47.4		
Rottom no image no image Restormed and the second	SAMPLE IMAGES	\$	method	limit/base	current	history1	history2
CRAPHS Ferrous Alloys Particle Count Particle Count Particl	Color					no image	no image
Ferrous Alloys Particle Count 191,520 122,880 30,720 192,880 192,880 192,880 192,880 192,880 192,880 192,880 192,880 192,880 192,880 192,880 192,880 192,880 192,800 192,880 192,800 192,800 192,800 192,800 192,800 192,000	Bottom					no image	no image
100 491,520 122,880 100 122,880 30,720 122,880 100 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 <td< td=""><td>GRAPHS</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	GRAPHS						
Ion Ion <td>Ferrous Alloys</td> <td></td> <td></td> <td>491 520</td> <td>Particle Count</td> <td></td> <td>-26</td>	Ferrous Alloys			491 520	Particle Count		-26
Non-ferrous Metals Evere 30,720 Ferre 400 Viscosity @ 40°C 40°C 6μ mmal 10	iron						
Non-ferrous Metals 1920 Viscosity @ 40°C 40° Abnormal 600000 Base Abnormal					Severe		
Potential <					· · · · · · · · · · · · · · · · · · ·		
δ δ	1/24			7,680	Abnormal		-20
δ δ	Jul			Jin Jag 1,920		×	-18
δ δ	Non-ferrous Metals	5		apitus 480	1.		-16
δ δ	copper			jo 120			-14
δ ² μη 2μη 2μη 2μη	sessesses lead			30			-12
δ ² μη δ ² μη δ ² μη δ ² μη δ ³ μη				8			-10
Viscosity @ 40°C Abnomal Base Abnomal Abnomal Abnomal	24			5 24			8
Viscosity @ 40°C Abnormal Abn	Jul4,						
Abnormal Base Abnormal	Viscosity @ 40°C			4	μ 6μ Acid Number	14µ 21µ	38µ 71µ
Base V) B 0.60 Abnormal	Abnormal			(BH 0.80			
Abnormal - 00.0 grup at 100 minutes and 100 m	T			¥ 0.60			
Iul4/24				뉼 0.40 트 0.20	1		
1ul4/24 A A A A A A A A A A A A A A A A A A A				2 0.20			
				24 A	24		ι Γ

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 RONI/IRON SHORE EXCAVATING LTD. CALA Sample No. : WC0952988 Received : 10 Jul 2024 100 MACINTOSH BLVD Lab Number : 02647050 Tested : 11 Jul 2024 VAUGHAN, ON ISO 17025:2017 Accredited Laboratory Unique Number : 5812602 CA L4K 4P3 Diagnosed : 12 Jul 2024 - Kevin Marson Test Package : MOBCE (Additional Tests: Bottom) Contact: Service Team To discuss this sample report, contact Customer Service at 1-800-268-2131. service.team@roni.ca Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Т: Validity of results and interpretation are based on the sample and information as supplied. F:

Report Id: RONVAU [WCAMIS] 02647050 (Generated: 07/12/2024 09:11:03) Rev: 1

cSt (40°C)

Contact/Location: Service Team - RONVAU Page 2 of 2