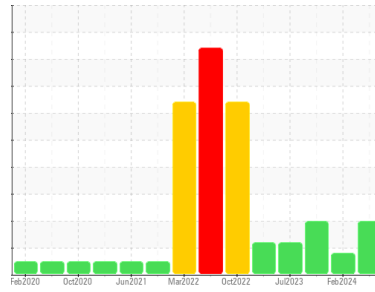




OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL



Machine Id
090-HU-001 Wet End Hydraulics
 Component
Hydraulic System
 Fluid
ESSO NUTO H ISO 68 (400 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Copper ppm levels are noted. All other 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 oil viscosity is higher than typical. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0962285	WC0913387	WC0879782
Sample Date	Client Info		03 Jul 2024	26 Feb 2024	08 Nov 2023
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			ABNORMAL	ATTENTION	ATTENTION

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>20	2	1	1
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>20	2	2	2
Copper	ppm	ASTM D5185(m)	>20	77	84	84
Tin	ppm	ASTM D5185(m)	>20	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		<1	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	<1	0	<1
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	5	91	97	96
Calcium	ppm	ASTM D5185(m)	50	76	79	80
Phosphorus	ppm	ASTM D5185(m)	330	451	445	429
Zinc	ppm	ASTM D5185(m)	420	523	518	526
Sulfur	ppm	ASTM D5185(m)	3100	2034	2238	2083
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

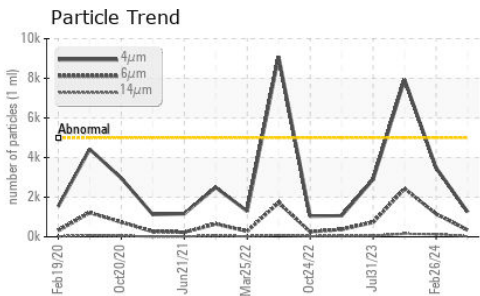
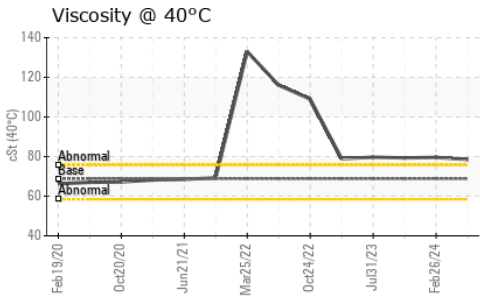
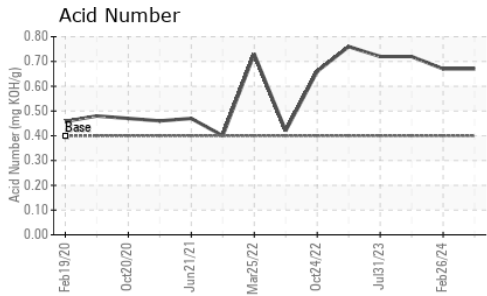
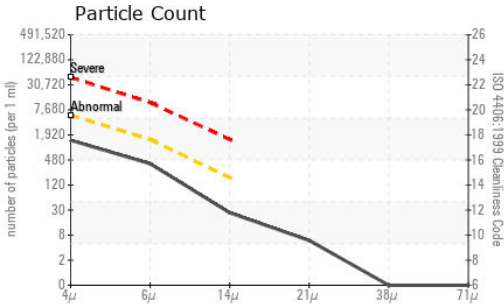
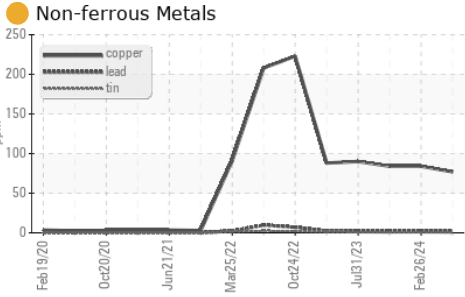
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	2	3	4
Sodium	ppm	ASTM D5185(m)		1	<1	1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	1254	3480	7928
Particles >6µm	ASTM D7647	>1300	343	1158	2433
Particles >14µm	ASTM D7647	>160	23	127	151
Particles >21µm	ASTM D7647	>40	5	41	31
Particles >38µm	ASTM D7647	>10	0	3	2
Particles >71µm	ASTM D7647	>3	0	1	1
Oil Cleanliness	ISO 4406 (c)	>19/17/14	17/16/12	19/17/14	20/18/14



OIL ANALYSIS REPORT



FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	.40	0.67	0.67	0.72

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	▲ VLITE	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*	>0.05	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	68.8	78.5	79.6	79.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color			
Bottom			
PrtFilter	no image	no image	no image



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0962285 **Received** : 04 Jul 2024
Lab Number : **02645637** **Tested** : 05 Jul 2024
Unique Number : 5803176 **Diagnosed** : 08 Jul 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: Bottom, FilterPatch, TAN Man)

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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.