

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

090-HU-002 First Press Component Hydraulic System

ESSO NUTO H ISO 150 (10000 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.

Wear

Component wear rates appear to be normal (unconfirmed).

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 acceptable for the time in service (unconfirmed).

SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0962287	WC0913385	WC0879780
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				NORMAL	NORMAL	NORMAL
CONTAMINATION	١	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	<1	<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	0	<1	0
Copper	ppm	ASTM D5185(m)	>20	4	3	3
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Antimony	ppm	ASTM D5185(m)		0	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
						history?
ADDITIVEO		method	iimi/base	current	nistory i	TIISTOLAS
Boron	ppm	ASTM D5185(m)	iimi/base	current	nistory i 0	<1
Boron Barium	ppm ppm	ASTM D5185(m) ASTM D5185(m)	iinii/base	current <1 <1	0 0	<1 <1
Boron Barium Molybdenum	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	IIIII/base	<1 <1 <1 0	0 0 0 0	<1 <1 0
Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	IIMI/base	<1 <1 0 0	0 0 0 0 0	<1 <1 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		<1 <1 0 0 4	0 0 0 0 0 4	<1 <1 0 0 4
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)		<pre>current <1 <1 0 0 4 101</pre>	0 0 0 0 4 108	<1 <1 0 0 4 105
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)		<1 <1 <1 0 0 4 101 387	0 0 0 0 4 108 409	<1 <1 0 0 4 105 396
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		<1 <1 0 0 4 101 387 489	nistory 1 0 0 0 4 108 409 505	<1 <1 0 0 4 105 396 516
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		<1 <1 <1 0 0 4 101 387 489 8517	Nistory I 0 0 0 0 4 108 409 505 9295	<1 <1 0 0 4 105 396 516 8816
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		<pre>current <1 <1 0 0 4 101 387 489 8517 <1</pre>	nistory 1 0 0 0 0 4 108 409 505 9295 <1	<pre></pre>
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	<pre>current <1 <1 0 0 4 101 387 489 8517 <1 current</pre>	0 0 0 0 0 0 4 108 409 505 9295 <1 history1	<1 <1 <1 0 0 4 105 396 516 8816 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base	<pre>current <1 <1 0 0 4 101 387 489 8517 <1 current 1</pre>	nistory1 0 0 0 0 0 4 108 409 505 9295 <1 history1 2	<pre></pre>
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base	<pre>current <1 <1 0 0 4 101 387 489 8517 <1 current 1 5</pre>	nistory1 0 0 0 0 4 108 409 505 9295 <1 history1 2 2 2	<pre></pre>
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm 1 ppm 2 ppm 2 ppm 2 ppm 2 ppm 2 ppm 2 ppm 3 ppm 4 ppm 4 ppm 4 ppm 2 ppm 4	ASTM D5185(m)	limit/base >15 >20	current <1 <1 0 0 4 101 387 489 8517 <1 current 1 5 <1	nistory1 0 0 0 0 4 108 409 505 9295 <1 history1 2 2 2 2 2 2 2	<pre></pre>
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm 1 ppm 2 ppm 2	ASTM D5185(m)	limit/base >15 >20 limit/base	<1 <1 0 0 4 101 387 489 8517 <1 current 1 5 <1 current	nlstory1 0 0 0 0 4 108 409 505 9295 <1 history1 2 2 2 2 2 2 2 2 2 2 history1	<pre></pre>
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm	ASTM D5185(m)	limit/base >15 >20 limit/base >5000	current <1 <1 0 0 4 101 387 489 8517 <1 current 1 5 <1 1736	nlstory1 0 0 0 0 0 4 108 409 505 9295 <1 history1 2 2 2 2 1 1972	<pre></pre>
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base >15 >20 limit/base >5000 >1300	current <1 <1 0 0 489 8517 <1 current 1 5 <1 5 <1 1736 385	nlstory1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 4 108 409 505 9295 <1 history1 2 2 2 history1 1972 568	<pre></pre>
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D76477 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160	current <1 0 0 4 101 387 489 8517 <1 1 5 <1 current 1 5 <1 22	nlstory1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 4 108 409 505 9295 <1 2 2 2 2 2 2 2 2 2 1972 568 38	<pre></pre>
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 ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40	current <1 0 0 4 101 387 489 8517 <1 current 1 5 <1 current 1 5 <1 22 4	nistory1 0 0 0 0 0 0 0 0 0 0 0 0 0 4 108 409 505 9295 <1 2 2 2 2 2 2 2 2 2 2 2 2 2 38 7	<pre></pre>
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >5µm Particles >21µm Particles >38µm	ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	current <1 0 0 4 101 387 489 8517 <1 current 1 5 <1 current 1 5 <1 22 4 1	nistory1 0 0 0 0 0 0 0 0 0 4 108 409 505 9295 <1 history1 2 2 2 2 2 2 2 2 2 2 568 38 7 0	<pre></pre>
Boron Barium Molybdenum Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >54µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	Imit/base Imit/base >15 >20 Imit/base >5000 >1300 >160 >40 >10 >3	current <1 0 0 4 101 387 489 8517 <1 1 5 <1 1736 385 22 4 1 0	nistory1 0 0 0 0 0 0 0 0 4 108 409 505 9295 <1 2 2 2 2 2 2 1972 568 38 7 0 0 0	<pre></pre>
Boron Barium Molybdenum Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >54µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D	limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10 >3 >19/17/14	current <1 0 0 4 101 387 489 8517 <1 1 5 <1 1736 385 22 4 1 0 18/16/12	nistory1 0 0 0 0 0 0 0 0 4 108 409 505 9295 <1 history1 2 2 2 2 2 2 2 2 2 2 568 38 7 0 0 18/16/12	<pre></pre>



2k Ok

Feb19/20

OIL ANALYSIS REPORT



FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	.40	0.92	0.82	0.87
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	NONE	NONE
ellow 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
Ddor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
/isc @ 40°C	cSt	ASTM D7279(m)	151.3	146	147	146
SAMPLE IMAGES	;	method	limit/base	current	history1	history2
Color						
Bottom						
PrtFilter				no image	no image	no image

TELS COMMONES A.TEL		Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9			
	Accreditation No. 1000218	Sample No.	: WC0962287	Received	: 04 Jul 2024	
	ISO 17025:2017	Lab Number	: 02645620	Tested	: 05 Jul 2024	
	Accredited	Unique Number	: 5803159	Diagnosed	: 05 Jul 2024 - Kevin Marson	
	Laboratory	Test Package	ge : IND 2 (Additional Tests: Bottom, FilterPatch, TAN Man)			
2 - C - C - C - C	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.					
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	Validity of results and interpretation are based on the sample and information as supplied.					

New Forest Paper Mill

333 Progress Avenue Scarborough, ON CA M1P 2Z7 Contact: Nayan Patel nayan_patel@atlantic.ca T: (519)991-8496 F: (416)298-5386

Report Id: NEWSCA [WCAMIS] 02645620 (Generated: 07/05/2024 16:48:09) Rev: 1

Oct24/22 .

Mar25/22

Jul31/23

Feb26/24

Submitted By: Bob Melanson

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