



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Inland Iron & Metal
 Machine Id
Sales AM881
 Component
Hydraulic System
 Fluid
ESSO NUTO H ISO 46 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. 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 INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		E3000060	---	---
Sample Date	Client Info		02 Aug 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
Iron	ppm	ASTM D5185(m) >20	<1	---	---
Chromium	ppm	ASTM D5185(m) >20	0	---	---
Nickel	ppm	ASTM D5185(m) >20	0	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m)	0	---	---
Aluminum	ppm	ASTM D5185(m) >20	<1	---	---
Lead	ppm	ASTM D5185(m) >20	0	---	---
Copper	ppm	ASTM D5185(m) >20	<1	---	---
Tin	ppm	ASTM D5185(m) >20	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) 0	<1	---	---
Barium	ppm	ASTM D5185(m) 0	0	---	---
Molybdenum	ppm	ASTM D5185(m) 0	0	---	---
Manganese	ppm	ASTM D5185(m)	0	---	---
Magnesium	ppm	ASTM D5185(m) 5	<1	---	---
Calcium	ppm	ASTM D5185(m) 50	49	---	---
Phosphorus	ppm	ASTM D5185(m) 330	346	---	---
Zinc	ppm	ASTM D5185(m) 410	421	---	---
Sulfur	ppm	ASTM D5185(m) 2700	763	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

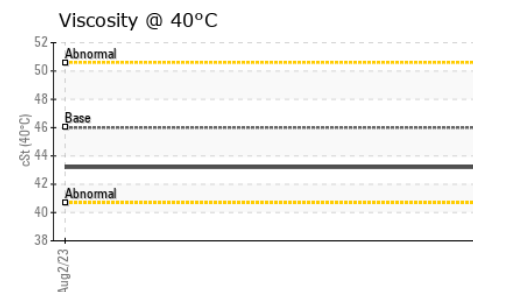
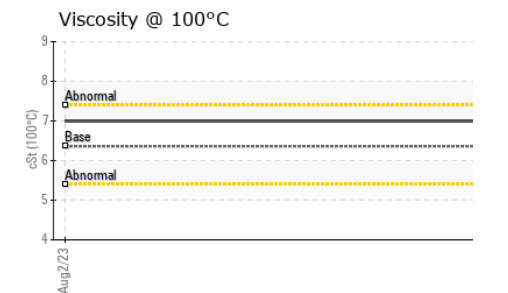
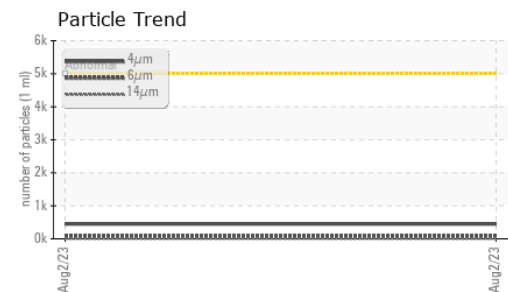
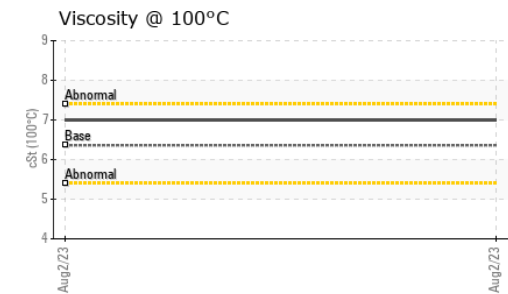
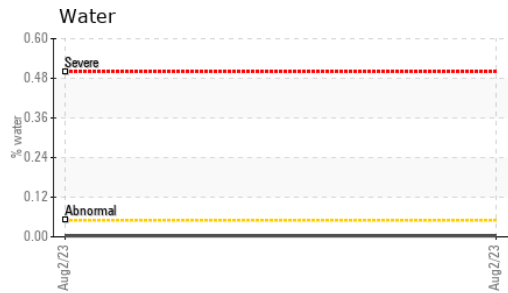
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	0	---	---
Sodium	ppm	ASTM D5185(m)	<1	---	---
Potassium	ppm	ASTM D5185(m) >20	0	---	---
Water	%	ASTM D6304* >0.05	0.003	---	---
ppm Water	ppm	ASTM D6304* >500	25.7	---	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	448	---	---
Particles >6µm	ASTM D7647	>1300	80	---	---
Particles >14µm	ASTM D7647	>160	7	---	---
Particles >21µm	ASTM D7647	>40	2	---	---
Particles >38µm	ASTM D7647	>10	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	16/13/10	---	---

OIL ANALYSIS REPORT



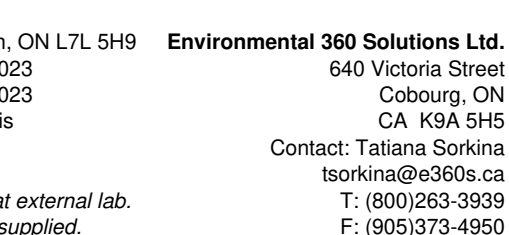
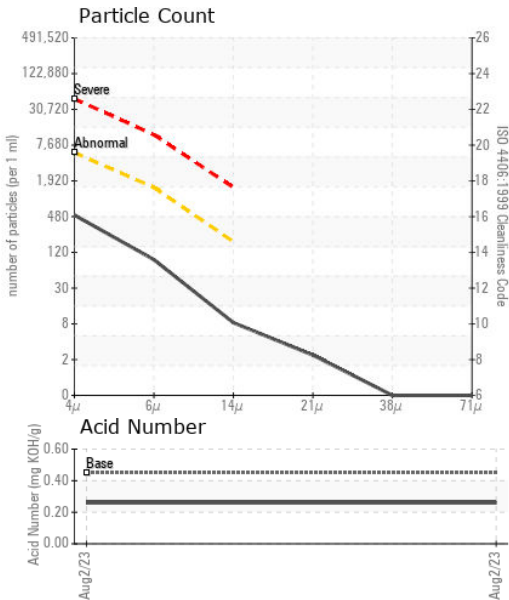
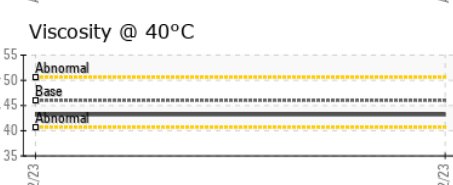
FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.45	0.26	---

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.05	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	43.2	---
Visc @ 100°C	cSt	ASTM D7279(m)	6.36	7	---
Viscosity Index (VI)	Scale	ASTM D2270*		120	---

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

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30000060 **Received** : 16 Aug 2023
Lab Number : **02576355** **Diagnosed** : 18 Aug 2023
Unique Number : 5629415 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: KF, KV100, VI)

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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.