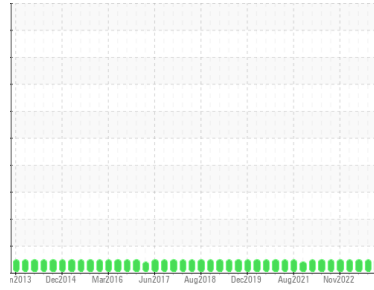


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
TEAM 3
Machine Id
166190
Component
Hydraulic System
Fluid
ESSO NUTO H ISO 46 (150 LTR)

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 INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0069851	PC0074800	PC0070259
Sample Date	Client Info	20 Oct 2023	08 Aug 2023	24 May 2023
Machine Age	mths Client Info	0	0	0
Oil Age	mths Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185(m)	>30	<1	<1	<1
Chromium ppm ASTM D5185(m)	>2	0	0	0
Nickel ppm ASTM D5185(m)	>2	<1	0	0
Titanium ppm ASTM D5185(m)		0	0	0
Silver ppm ASTM D5185(m)		<1	0	0
Aluminum ppm ASTM D5185(m)	>2	0	<1	<1
Lead ppm ASTM D5185(m)	>10	<1	0	<1
Copper ppm ASTM D5185(m)	>25	<1	<1	0
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

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185(m)	0	<1	0	<1
Barium ppm ASTM D5185(m)	0	<1	0	0
Molybdenum ppm ASTM D5185(m)	0	0	0	0
Manganese ppm ASTM D5185(m)		0	0	0
Magnesium ppm ASTM D5185(m)	5	0	<1	0
Calcium ppm ASTM D5185(m)	50	51	52	56
Phosphorus ppm ASTM D5185(m)	330	326	354	373
Zinc ppm ASTM D5185(m)	410	422	427	433
Sulfur ppm ASTM D5185(m)	2700	703	735	778
Lithium ppm ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

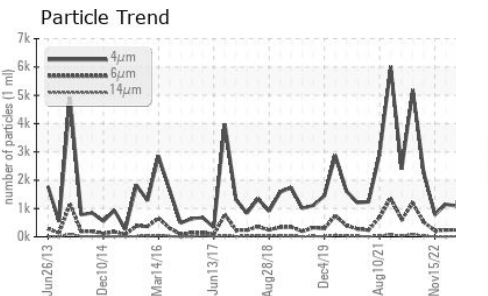
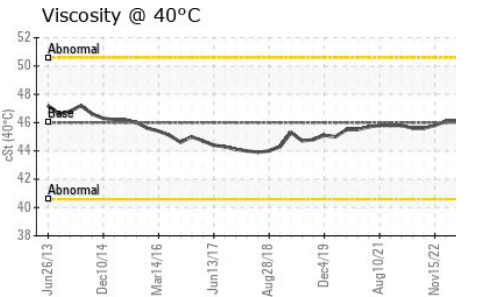
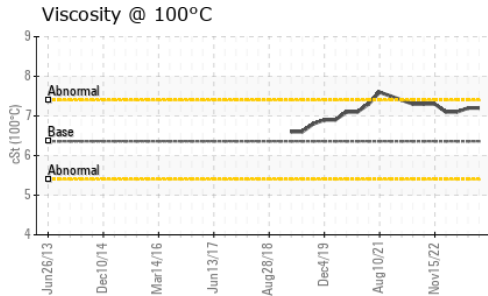
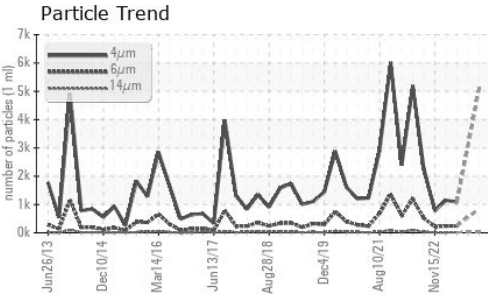
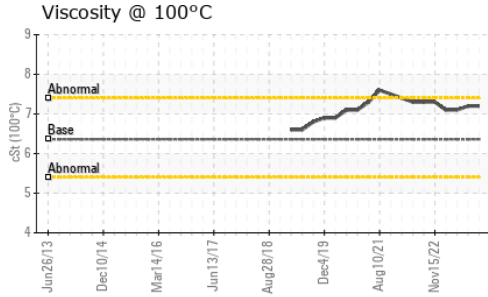
method	limit/base	current	history1	history2
Silicon ppm ASTM D5185(m)	>25	0	<1	0
Sodium ppm ASTM D5185(m)		<1	0	0
Potassium ppm ASTM D5185(m)	>20	0	0	<1

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm ASTM D7647		5073	---	1083
Particles >6µm ASTM D7647	>1300	850	---	245
Particles >14µm ASTM D7647	>160	25	---	20
Particles >21µm ASTM D7647	>40	6	---	5
Particles >38µm ASTM D7647	>10	1	---	1
Particles >71µm ASTM D7647	>3	1	---	0
Oil Cleanliness ISO 4406 (c)	>--/17/14	20/17/12	---	17/15/11

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D974*	0.45	0.42	---	0.44



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	45.9	46.0
Visc @ 100°C	cSt	ASTM D7279(m)	6.36	7.2	7.1
Viscosity Index (VI)	Scale	ASTM D2270*	117	116	112

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

Ferrous Alloys

Non-ferrous Metals

Viscosity @ 40°C

Particle Count

Acid Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0069851 **Received** : 08 Nov 2023
Lab Number : 02595018 **Diagnosed** : 09 Nov 2023
Unique Number : 5672097 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: KV100, VI)

Dryden Fibre
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 Dryden, ON
 CA P8N 2Z7
 Contact: Adebukola Adekanye
 AADEKANYE@DRYDENFIBRE.CA
 T: (807)223-9950
 F: (807)223-9176

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.