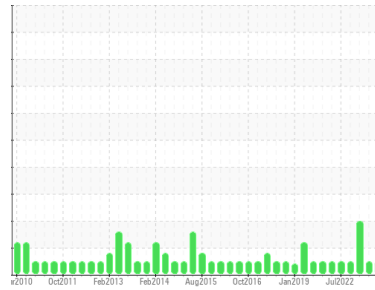




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**Hyd. Shack #1**

Machine Id

**Twin Otter (S/N 7295)**

Component

**Hydraulic System**

Fluid

**ESSO NUTO H ISO 32 (100 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 INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0899846</b>	WC0777388	WC0777380
Sample Date	Client Info		<b>18 Jun 2024</b>	13 Dec 2023	20 May 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	ATTENTION

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185(m) >20	<b>10</b>	11	▲ 20
Tin	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	0
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 5	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m) 50	<b>33</b>	33	39
Phosphorus	ppm	ASTM D5185(m) 330	<b>369</b>	387	376
Zinc	ppm	ASTM D5185(m) 420	<b>427</b>	431	396
Sulfur	ppm	ASTM D5185(m) 2700	<b>2831</b>	2885	2916
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

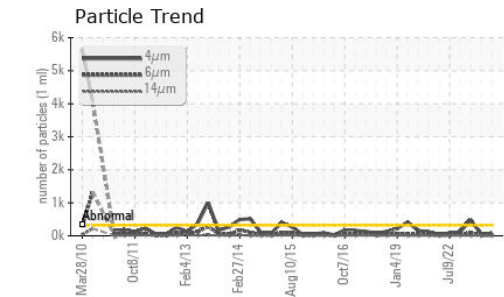
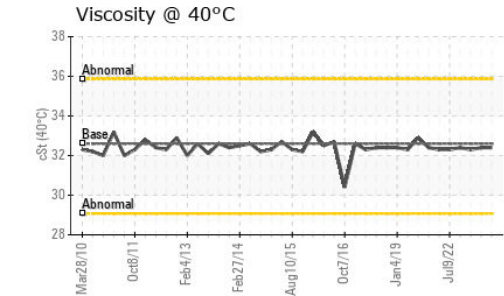
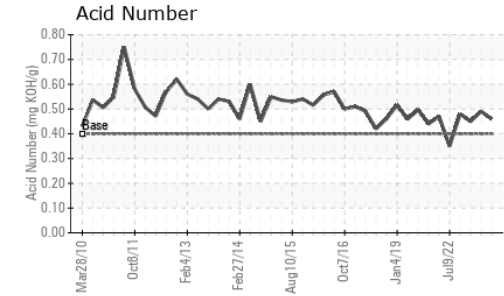
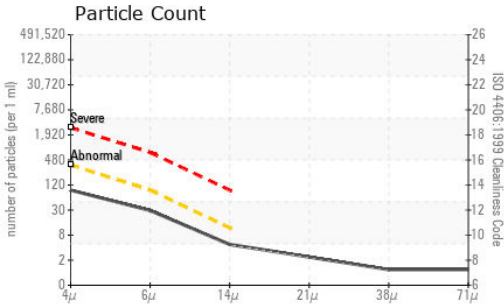
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>0</b>	<1	<1
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>320	<b>80</b>	59	● 478
Particles >6µm	ASTM D7647	>80	<b>26</b>	25	● 90
Particles >14µm	ASTM D7647	>10	<b>4</b>	4	9
Particles >21µm	ASTM D7647	>3	<b>2</b>	1	2
Particles >38µm	ASTM D7647	>3	<b>1</b>	0	1
Particles >71µm	ASTM D7647	>3	<b>1</b>	0	1
Oil Cleanliness	ISO 4406 (c)	>15/13/10	<b>13/12/9</b>	13/12/9	● 16/14/10



# OIL ANALYSIS REPORT



FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	.40	<b>0.46</b>	0.49	0.45

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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	32.6	<b>32.4</b>	32.4	32.3

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



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0899846  
**Lab Number** : **02643404**  
**Unique Number** : 5800943  
**Test Package** : IND 2

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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.