

#### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TES	ST RESULTS			
Sample Status		ATTENTION	ABNORMAL	NORMAL
Particles >6µm	ASTM D7647 >320	<b>410</b>	<u> </u>	994
Oil Cleanliness	ISO 4406 (c) >19/15	5/12 🔺 <b>18/16/12</b>	<b>1</b> 21/17/13	19/17/14

Customer Id: BRUTIV Sample No.: WC0845477 Lab Number: 02591780 Test Package: IND 2



To manage this report scan the QR code

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RECOMMENDED AC	RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description				
Change Filter			?	We recommend you service the filters on this component.				
Information Required			?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.				

### HISTORICAL DIAGNOSIS



# 12 Sep 2022 Diag: Kevin Marson

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Wear particle analysis indicates that the ferrous rolling and ferrous other particles are abnormal. Oil Cleanliness are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high. Particles >14µm are notably high. The water content is negligible. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



view report

# 18 Aug 2021 Diag: Wes Davis





Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

#### 04 Jan 2021 Diag: Wes Davis



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.







# **OIL ANALYSIS REPORT**

Sample Rating Trend

ISO

# Area (ZONE3) BRUCE B/7/34330 Machine Id 7-34330-MV3 Actuator-OIL

Hydraulic System Fluid ESSO NUTO H ISO 46 (--- GAL)

# DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component. 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

There is a light amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

# Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

ON         method           Client Info         Client Info           Mathematical States         Method           n         ASTM D5185(m)	limit/base         >10         >5         5         5	current           WC0845477           11 Oct 2023           0           N/A           ATTENTION           Current           0	history1         WC0711364         12 Sep 2022         0         N/A         ABNORMAL         history1         0	history2         WC0603528         18 Aug 2021         0         N/A         NORMAL         history2         0        <
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	0	0	<1	<1
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n ASTM D5185(m	5	0	<1	<1
m ASTM D5185(m		53	42	44
m ASTM D5185(m		330	352	360
m ASTM D5185(m		431	432	464
m ASTM D5185(m		5777	2540	2600
m ASTM D5185(m)		<1	<1	<1
method	limit/base	current	history1	history2
m ASTM D5185(m)	>5	0	2	2
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ASTM D7647	′ >5000	1533	12326	4016
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		29		~-
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# **OIL ANALYSIS REPORT**

mg KOH/g

scalar

scalar

scalar

scalar

scalar

scalar Visual\*

scalar Visual\*

method

ASTM D974\*

method

Visual\*

Visual\*

Visual\*

Visual\*

Visual\*

limit/base

limit/base

0.45

NONE

NONE

NONE

NONE

NONE

NONE

NORML

current

current

0.50

NONE

NONE

NONE

NONE

NONE

NONE

NORML

history1

history1

NONE

NONE

NONE

NONE

NONE

NONE

NORML

0.60

history2

history2

0.59

NONE

NONE

NONE

NONE

NONE

NONE

NORML

**FLUID DEGRADATION** 

Acid Number (AN)

VISUAL

White Metal

Yellow Metal

Precipitate

Silt

Debris

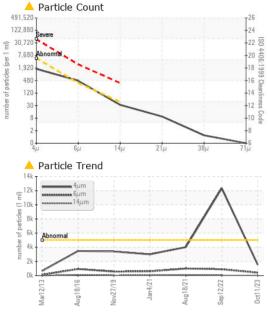
Odor

Sand/Dirt

Appearance

**Emulsified Water** Free Water

FLUID PROPERT



			_			FLUID PROPER		method	limit/base	curr
	10				/	Visc @ 40°C	cSt	ASTM D7279(m)	46	43.2
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	scalar	Visual*	NORML	NORML	NORML	NORML
	scalar	Visual*	>0.005	NEG	NEG	NEG
	scalar	Visual*		NEG	NEG	NEG
Γ	IES	method	limit/base	current	history1	history2
	cSt	ASTM D7279(m)	46	43.2	46.0	46.0
S	;	method	limit/base	current	history1	history2
				no image	1	no image

P.O.Box 1540, 177 Tie Road,, RM-222 U2 Column 2N11 615` Tiverton, ON CA NOG 2T0 Contact: Pierre Adouki pierre.adouki@brucepower.com Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (519)361-2673 Validity of results and interpretation are based on the sample and information as supplied. F:

Bruce Power - Bruce A PdM