

### **OIL ANALYSIS REPORT**

Sample Rating Trend

## Northern Cables - N02200 Az312085

Component Unknown Component Fluid SHELL VITREA 22 (--- GAL)

#### DIAGNOSIS

#### A Recommendation

This is a baseline read-out on the submitted sample.

#### Wear

{not applicable}

### Contamination

Oil Cleanliness are abnormally high. Particles >14 $\mu$ m are abnormally high. Particles >4 $\mu$ m are abnormally high. Particles >6 $\mu$ m are abnormally high. Particles >21 $\mu$ m are abnormally high.

Fluid Condition

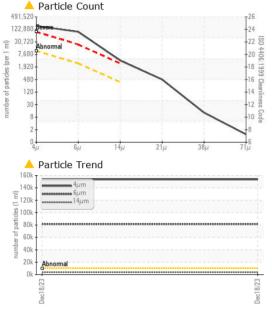
{not applicable}

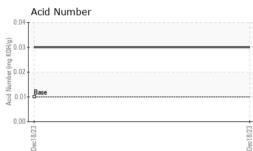
				Dec2023		
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Batch #		Client Info		2023 12 0230		
Department		Client Info		Production		
Sample From		Client Info		Machine		
Production Stage		Client Info		Initial		
Sent to WC		Client Info		12/18/2023		
Sample Number		Client Info		E30001007		
Sample Date		Client Info		18 Dec 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)		2		
Chromium	ppm	ASTM D5185(m)		0		
Nickel	ppm	ASTM D5185(m)		<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)		8		
Lead	ppm	ASTM D5185(m)		<1		
Copper	ppm	ASTM D5185(m)		1		
Tin	ppm	ASTM D5185(m)		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)		<1		
Barium	ppm	ASTM D5185(m)		0		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		<1		
Calcium	ppm	ASTM D5185(m)		1		
Phosphorus	ppm	ASTM D5185(m)		4		
Zinc	ppm	ASTM D5185(m)		2		
Sulfur	ppm	ASTM D5185(m)		3		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		6		
Sodium	ppm	ASTM D5185(m)		<1		
Potassium	ppm	ASTM D5185(m)	>20	<1		
Water	%	ASTM D6304*		0.001		
ppm Water	ppm	ASTM D6304*		5		

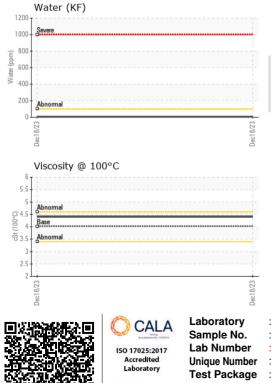
ISO



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FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>A</b> 153565		
Particles >6µm		ASTM D7647	>2500	<u> </u>		
Particles >14µm		ASTM D7647	>320	<b>A</b> 3449		
Particles >21µm		ASTM D7647	>80	<mark>/</mark> 424		
Particles >38µm		ASTM D7647	>20	11		
Particles >71µm		ASTM D7647	>4	1		
Dil Cleanliness		ISO 4406 (c)	>20/18/15	<u> </u>		
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	.01	0.03		
VISUAL		method	limit/base	current	history1	history2
Vhite Metal	scalar	Visual*	NONE	LIGHT		
ellow 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*		NEG		
Free Water	scalar	Visual*		NEG		
FLUID PROPERT	IES	method	limit/base	current	history1	history2
/isc @ 40°C	cSt	ASTM D7279(m)	20.3	21.5		
/isc @ 100°C	cSt	ASTM D7279(m)	4.02	4.4		
/iscosity Index (VI)	Scale	ASTM D2270*	95	114		
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image

