

# **PROBLEM SUMMARY**

### PUMPHOUSE/CASTER SPRAY WATER PUMPS Machine Id C - Caster Spray Water Turbine Pump OB

Lube System

PETRO CANADA HYDREX AW 100 (1 GAL)

COMPONENT CONDITION SUMMARY



No relevant graphs to display

RECOMMENDATION

Technician was unable to draw sample from the machine. Suspect the unit has a very low oil level. We recommend that you check the oil level and top up as required.

PROBLEMATIC TEST RESULTS						
Sample Status				SEVERE	NORMAL	SEVERE
Appearance	scalar	Visual*	NORML	NOOIL	NORML	NORML

Customer Id: LEWBOSC Sample No.: WC0898661 Lab Number: 02608069 Test Package: IND 2



To manage this report scan the QR code

*To discuss the diagnosis or test data:* Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

*To change component or sample information:* Gloria Gonzalez +1 (289)291-4643 x4643 <u>gloria.gonzalez@wearcheck.com</u> There are no recommended actions for this sample.

#### HISTORICAL DIAGNOSIS

#### 16 Aug 2023 Diag: Wes Davis





Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. 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.

#### 31 May 2023 Diag: Bill Quesnel



We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Iron ppm levels are severe. PQ levels are severe. Cylinder or oil pump wear indicated. The very high ferrous density (PQ) index indicates that severe wear is occurring. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal



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and/or severe wear.

Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. 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.



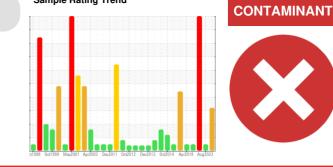


## **OIL ANALYSIS REPORT**

### PUMPHOUSE/CASTER SPRAY WATER PUMPS C - Caster Spray Water Turbine Pump OB Component

Lube System

Fluid PETRO CANADA HYDREX AW 100 (1 GAL)



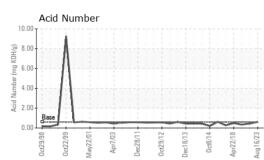
Sample Rating Trend

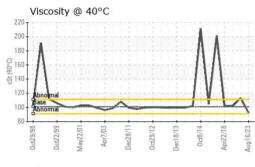
DIAGNOSIS	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Recommendation	Sample Number		Client Info		WC0898661	WC0850124	WC0824407
Technician was unable to draw sample from the	Sample Date		Client Info		10 Jan 2024	16 Aug 2023	31 May 2023
machine. Suspect the unit has a very low oil level.	Machine Age	hrs	Client Info		0	0	0
We recommend that you check the oil level and top	Oil Age	hrs	Client Info		0	0	0
up as required.	Oil Changed		Client Info		N/A	N/A	N/A
Wear	Sample Status				SEVERE	NORMAL	SEVERE
{not applicable}	CONTAMINATIO	N	method	limit/base	current	history1	history2
Contamination {not applicable}	Water		WC Method		NEG	NEG	NEG
Fluid Condition							
{not applicable}	WEAR METALS		method	limit/base	current	history1	history2
	PQ		ASTM D8184*	>DFLT		2	150
	Iron	ppm	ASTM D5185(m)			19	600
	Chromium	ppm	ASTM D5185(m)			<1	4
	Nickel	ppm	ASTM D5185(m)	>20		<1	0
	Titanium	ppm	ASTM D5185(m)			0	0
	Silver	ppm	ASTM D5185(m)			<1	0
	Aluminum	ppm	ASTM D5185(m)			<1	<1
	Lead	ppm	ASTM D5185(m)			0	1
	Copper	ppm	ASTM D5185(m)			<1	7
	Tin	ppm	ASTM D5185(m)	>20		0	0
	Antimony	ppm	ASTM D5185(m)			0	0
	Vanadium	ppm	ASTM D5185(m)			0	0
	Beryllium	ppm	ASTM D5185(m)			0	0
	Cadmium	ppm	ASTM D5185(m)			0	0
	ADDITIVES		method	limit/base	current	history1	history2
	Boron	ppm	ASTM D5185(m)	0		<1	<1
	Barium	ppm	ASTM D5185(m)	0		<1	0
	Molybdenum	ppm	ASTM D5185(m)	0		0	0
	Manganese	ppm	ASTM D5185(m)	0		0	4
	Magnesium	ppm	ASTM D5185(m)	0		<1	<1
	Calcium	ppm	ASTM D5185(m)	50		51	32
	Phosphorus	ppm	ASTM D5185(m)	330		349	336
	Zinc	ppm	ASTM D5185(m)	430		426	291
	Sulfur	ppm	ASTM D5185(m)	760		2535	4024
	Lithium	ppm	ASTM D5185(m)			<1	<1
	CONTAMINANTS	6	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185(m)	>15		4	13
	Sodium	ppm	ASTM D5185(m)			<1	<1
	Potassium	ppm	ASTM D5185(m)	. 00		<1	0

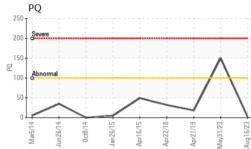
### up as required. Wear



# **OIL ANALYSIS REPORT**







FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647			122415	434002
Particles >6µm		ASTM D7647	>10240000		30156	187379
Particles >14µm		ASTM D7647	>10240000		513	550
Particles >21µm		ASTM D7647	>2560000		116	88
Particles >38µm		ASTM D7647	>640000		4	3
Particles >71µm		ASTM D7647	>160000		0	0
Oil Cleanliness		ISO 4406 (c)	>/30/30		24/22/16	26/25/16
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60		0.61	0.44
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	VLITE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NOOIL	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	TIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	101		92.1	113
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color						
Bottom						

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 STELCO - BOSC - Basic Oxygen Slab Caster Laboratory CALA Sample No. : WC0898661 Recieved : 10 Jan 2024 2330 Regional Road #3, Door: BOSC8 Lab Number : 02608069 Diagnosed : 11 Jan 2024 NANTICOKE, ON ISO 17025:2017 Accredited Laboratory Unique Number : 5709155 Diagnostician : Kevin Marson CA N0A 1L0 Test Package : IND 2 (Additional Tests: PQ) Contact: Tom Walden To discuss this sample report, contact Customer Service at 1-800-268-2131. Thomas.Walden@stelco.com Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (519)587-4541 Validity of results and interpretation are based on the sample and information as supplied. F: (519)587-7702