

OIL ANALYSIS REPORT

Area **PUMPHOUSE/BACKWASH PUMPS** Machine to **C - Backwash Pump 1 - OB**

Lube System

PETRO CANADA HYDREX AW 100 (1 GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition.

Wear

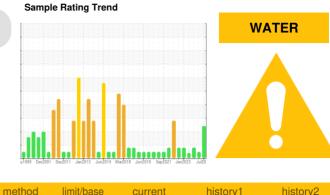
All component wear rates are normal.

Contamination

Free water present. The system cleanliness is acceptable for your target ISO 4406 cleanliness code.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0968465	WC0898674	WC0850112
Sample Date		Client Info		17 Jul 2024	10 Jan 2024	16 Aug 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	ATTENTION
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*	>DFLT	5	0	9
Iron	ppm	ASTM D5185(m)	>20	20	31	54
Chromium	ppm	ASTM D5185(m)	>20	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>20	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>20	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>20	14	2	1
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Antimony	ppm	ASTM D5185(m)	220	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	<1
	ррш			-		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	0	0	<1
Barium	ppm	ASTM D5185(m)		2	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		<1	0	<1
Magnesium	ppm	ASTM D5185(m)	0	<1	<1	<1
Calcium	ppm	ASTM D5185(m)	50	40	45	47
Phosphorus	ppm	ASTM D5185(m)	330	319	335	347
Zinc	ppm	ASTM D5185(m)	430	364	421	426
Sulfur	ppm	ASTM D5185(m)	760	3013	2613	2500
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	3	3	3
Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0
Water	%	ASTM D6304*	>1	0.039		
ppm Water	ppm	ASTM D6304*	>10000	394		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		136404	85566	117973
Particles >6µm		ASTM D7647	>10240000	53251	10784	32885
Particles >14µm		ASTM D7647	>10240000	1701	396	331
Particles >21µm		ASTM D7647	>2560000	327	73	70
Particles >38µm		ASTM D7647	>640000	19	3	2
Particles >71µm		ASTM D7647	>160000	3	0	-
Oil Cleanliness		ISO 4406 (c)	>/30/30	24/23/18	24/21/16	24/22/16 /: Bob Melanson



Particle Trend

Dec14/01 lec28/

Dec14/01 Mav6/99

PQ

800 700 E 600) \$200

> > 110 Bas

100

80

70

60

50

30

250

200

100 50

Aar6/1

문150

cSt (40°C) 90

OIL ANALYSIS REPORT

FLUID DEGRADATION

Acid Number (AN)

VISUAL

Water (Kr 80000 60000 10000 20000 20000 0 0 0 0 0 0 0 0 0	Dec18/13	Jan26/15	Nov7/18	Mar1/20	Aug10/22	Aug16/23	
PQ 250 - 200 - alevere 2150 - 100 - Alnormal							

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	NONE	VLITE
Debris	scalar	Visual*	NONE	LIGHT	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	🔺 WGOIL	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>1	.5%	NEG	NEG
Free Water	scalar	Visual*		<u> </u>	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	101	95.0	93.7	92.9
SAMPLE IMAGES	6	method	limit/base	current	history1	history2

limit/base

limit/base

0.60

current 0.35

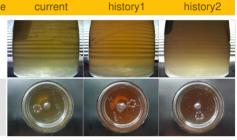
current

method

method

mg KOH/g ASTM D974*

Color



history1

history1

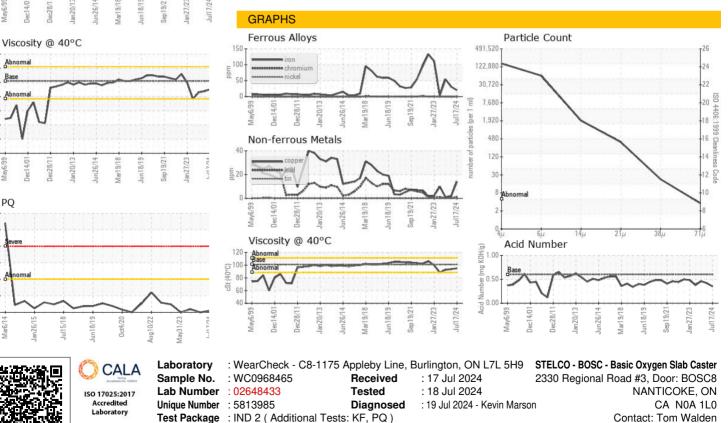
0.42

history2

history2

0.46

Bottom



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.

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Submitted By: Bob Melanson

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