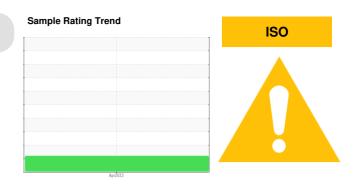


# **PROBLEM SUMMARY**

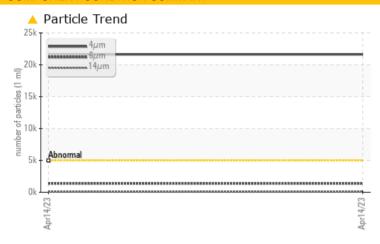
# Buoy Crane **Buoy Crane Hydraulics**

**Hydraulic System** 

PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (2500 LTR)



### **COMPONENT CONDITION SUMMARY**



### RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS							
Sample Status			ABNORMAL				
Particles >4μm	ASTM D7647	>5000	<u> </u>				
Particles >6µm	ASTM D7647	>1300	<b>1378</b>				
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>22/18/13</b>				

**Customer Id: VMASSEY Sample No.:** WC0810860 Lab Number: 02552868 Test Package: MAR 2

To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 gloria.gonzalez@wearcheck.com

RECOMMENDED	O ACTIONS			
Action	Status	Date	Done By	Description
Change Filter			?	We recommend you service the filters on this component.
Resample			?	We recommend an early resample to monitor this condition.

# HISTORICAL DIAGNOSIS

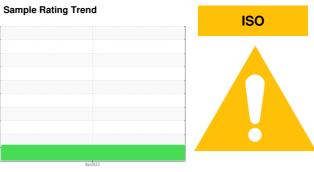


# **OIL ANALYSIS REPORT**

# Buoy Crane **Buoy Crane Hydraulics**

**Hydraulic System** 

PETRO CANADA HYDREX XV ALL SEASON HY



## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

### **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						
	AATIONI			Apr2023	lai atam d	history.0
	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0810860		
Sample Date		Client Info		14 Apr 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
ron	ppm	ASTM D5185(m)	>20	1		
Chromium	ppm	ASTM D5185(m)	>10	0		
Nickel	ppm	ASTM D5185(m)	>10	0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>10	0		
_ead	ppm	ASTM D5185(m)	>20	0		
		ASTM D5185(m)	>20	5		
Copper Fin	ppm	. ,				
	ppm	ASTM D5185(m)	>10	0		
Antimony	ppm	ASTM D5185(m)		0		
/anadium	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)	0	<1		
Barium	ppm	ASTM D5185(m)	0	0		
Molybdenum	ppm	ASTM D5185(m)	0	0		
Manganese	ppm	ASTM D5185(m)	1	0		
Magnesium	ppm	ASTM D5185(m)	0	<1		
Calcium	ppm	ASTM D5185(m)	100	96		
Phosphorus	ppm	ASTM D5185(m)	670	670		
Zinc	ppm	ASTM D5185(m)	850	790		
Sulfur	ppm	ASTM D5185(m)	1600	1585		
_ithium	ppm	ASTM D5185(m)		<1		
-itiliaili						
		method	limit/base	current	history1	history2
CONTAMINANTS					history1	history2
CONTAMINANTS Silicon	ppm	ASTM D5185(m)	limit/base >15	8		
CONTAMINANTS Silicon Sodium						
CONTAMINANTS Silicon Sodium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	>15	8 0		  
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>15 >20	8 0 0	 	 
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	>15 >20 limit/base	8 0 0 current	  history1	  history2
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)  method ASTM D7647 ASTM D7647	>15 >20 limit/base >5000	8 0 0 current ^ 21623	history1	history2
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)  method  ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160	8 0 0 current ▲ 21623 ▲ 1378 74	history1	history2
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)  method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160 >40	8 0 0 current ▲ 21623 ▲ 1378 74 20	  history1	history2
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)  method  ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160 >40 >10	8 0 0 current 21623 1378 74 20 2	history1	history2
CONTAMINANTS Silicon Sodium Potassium  FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)  method  ASTM D7647	>15 >20 limit/base >5000 >1300 >160 >40 >10 >3	8 0 0 current  21623  1378 74 20 2	history1	history2
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)  method  ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160 >40 >10	8 0 0 current 21623 1378 74 20 2	history1	history2

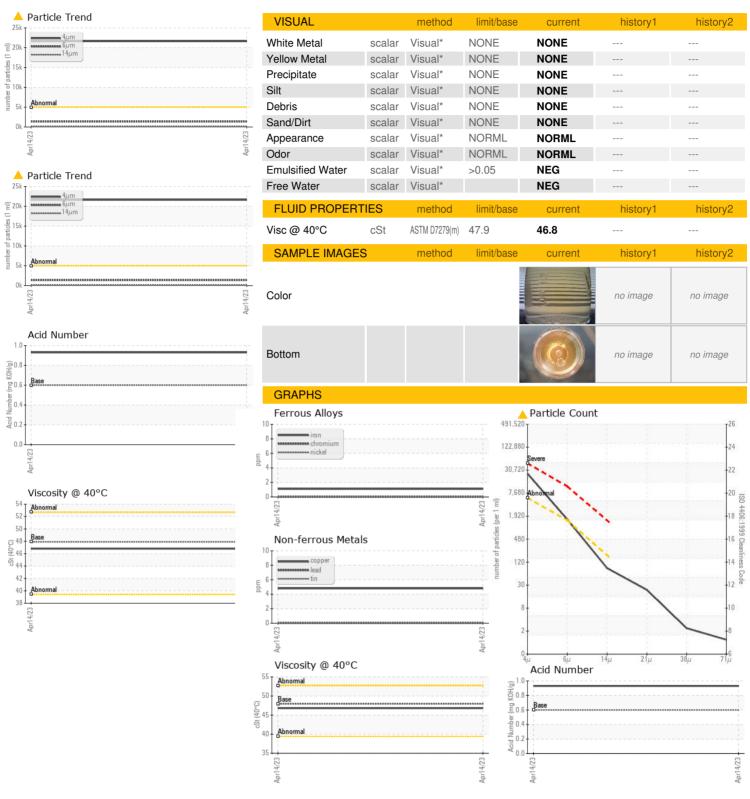
mg KOH/g ASTM D974\* 0.60

Acid Number (AN)

0.93



## **OIL ANALYSIS REPORT**





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number **Unique Number** 

: 02552868

: 5565883

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0810860

Received Diagnosed Diagnostician

: 21 Apr 2023 : 24 Apr 2023 : Wes Davis

**Canadian Coast Guard** CCGS Vincent Massey, 101 Boul. Champlain Quebec, QC

CA G1K 7Y7 Contact: Vincent Massey

Test Package : MAR 2 ( Additional Tests: TAN Man ) To discuss this sample report, contact Customer Service at 1-800-268-2131.

vincentmasseyse@ccgs-ngcc.gc.ca T:

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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