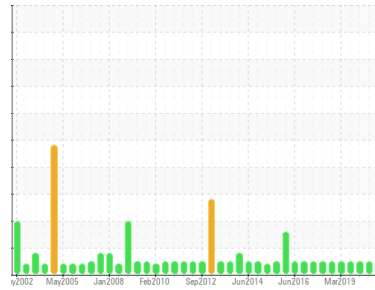




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**Boat Deck**

Machine Id

**G5-8321 Barge Davit Power Pack (S/N 33046)**

Component

**Hydraulic System**

Fluid

**PETRO CANADA HYDREX AW 32 (675 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0603783</b>	WC0380440	WC0490548
Sample Date	Client Info		<b>02 Nov 2021</b>	08 May 2021	26 Nov 2020
Machine Age	mths	Client Info	<b>233</b>	227	221
Oil Age	mths	Client Info	<b>27</b>	21	15
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >20	<b>0</b>	<1	<1
Chromium	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m) >10	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	0	<1
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0	<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185(m) 50	<b>70</b>	67	66
Phosphorus	ppm	ASTM D5185(m) 330	<b>344</b>	304	302
Zinc	ppm	ASTM D5185(m) 430	<b>411</b>	391	401
Sulfur	ppm	ASTM D5185(m) 760	<b>743</b>	717	719
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

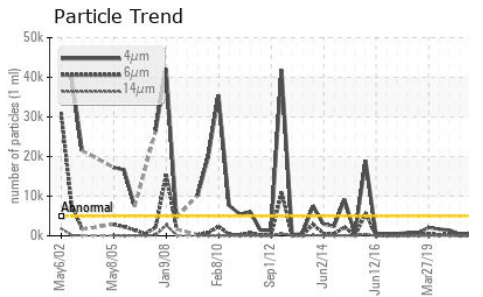
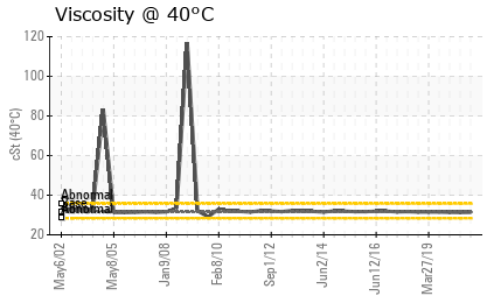
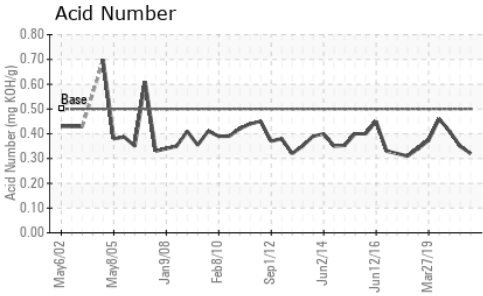
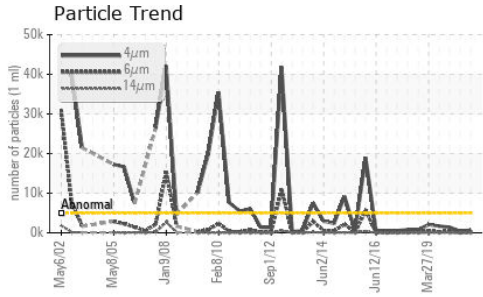
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>680</b>	412	1393
Particles >6µm	ASTM D7647	>1300	<b>175</b>	84	349
Particles >14µm	ASTM D7647	>160	<b>11</b>	7	35
Particles >21µm	ASTM D7647	>40	<b>3</b>	2	9
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>17/15/11</b>	16/14/10	18/16/12

# OIL ANALYSIS REPORT

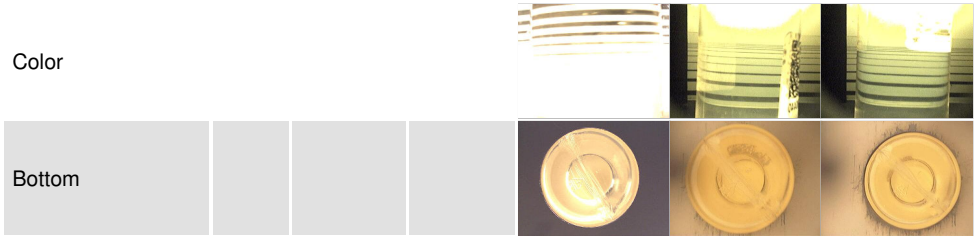


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.50	<b>0.32</b>	0.35	0.41

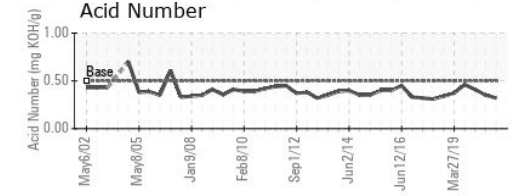
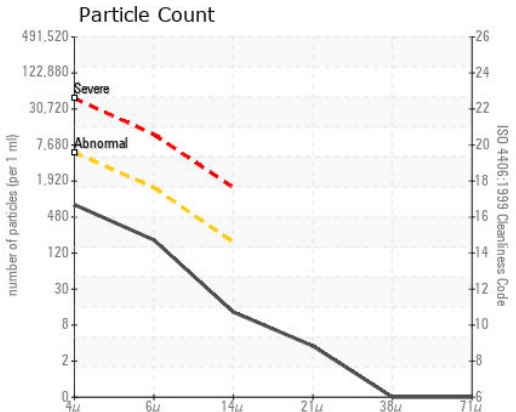
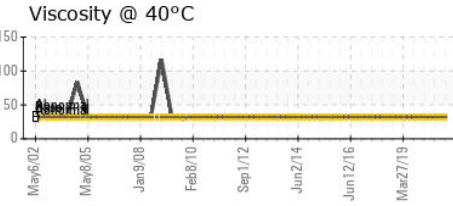
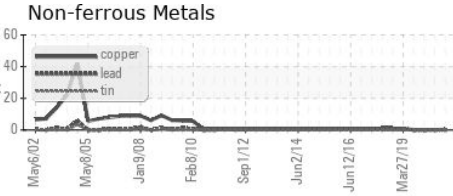
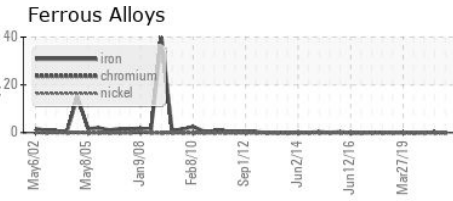
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31.5	<b>31.3</b>	31.2	31.3

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0603783  
**Lab Number** : 02455018  
**Unique Number** : 5306556  
**Test Package** : MAR 2

**CANADIAN COAST GUARD**  
 CCGS GRIFFON, PO BOX 1000, 401 KING ST.W  
 Prescott, ON  
 CA K6V 5T3  
 Contact: Mike Rankin  
 mike.rankin@dfo-mpo.gc.ca  
 T: (289)442-0810  
 F: (519)383-1994

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.