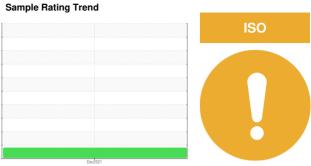


**OIL ANALYSIS REPORT** 

Machine Id **P2B2** 

**Hydraulic System** PETRO CANADA HYDREX AW 68 (20000 LT



#### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.

### Wear

All component wear rates are normal.

## Contamination

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

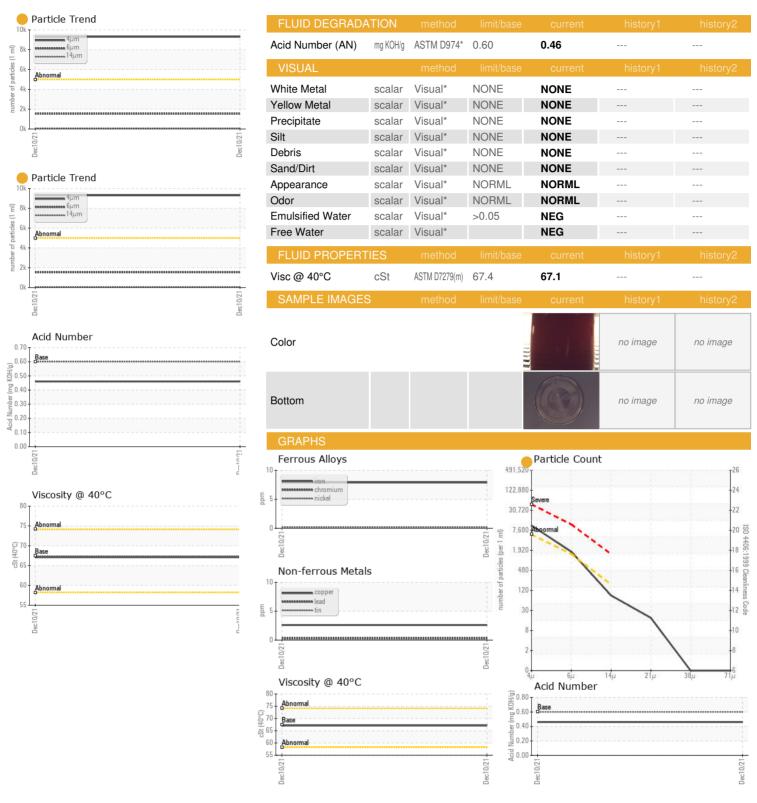
### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service (unconfirmed).

TR)				Dec2021		
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0495637		
Sample Date		Client Info		10 Dec 2021		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ATTENTION		
CONTAMINATIO	NC	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS	;	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	8		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>20	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>20	<1		
Lead	ppm	ASTM D5185(m)	>20	<1		
Copper	ppm	ASTM D5185(m)	>20	3		
Tin	ppm	ASTM D5185(m)	>20	<1		
Antimony	ppm	ASTM D5185(m)		<1		
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
ADDITIVES Boron	ppm	method ASTM D5185(m)	limit/base	current	history1	history2
	ppm		0			
Boron		ASTM D5185(m)	0	<1		
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	0 0 0	<1 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0	<1 0 0		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0	<1 0 0 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0	<1 0 0 0 0		  
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0 0 50	<1 0 0 0 0 0 40		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 0 50 330	<1 0 0 0 0 0 40 312		  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 0 0 50 330 430	<1 0 0 0 0 0 40 312 332		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 0 0 50 330 430	<1 0 0 0 0 0 40 312 332 608		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 0 50 330 430 760	<1 0 0 0 0 40 312 332 608 <1	    	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 0 50 330 430 760	<1 0 0 0 0 40 312 332 608 <1	      history1	      history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)  method ASTM D5185(m)	0 0 0 0 0 50 330 430 760	<1 0 0 0 0 40 312 332 608 <1 current	     history1	      history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium	ppm	ASTM D5185(m)	0 0 0 0 0 50 330 430 760	<1 0 0 0 0 40 312 332 608 <1 current 0	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium Potassium	ppm	ASTM D5185(m)  METHOD ASTM D5185(m)	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base	<1 0 0 0 0 40 312 332 608 <1 current 0 0 <1	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm	ppm	ASTM D5185(m)  METHOD  ASTM D5185(m)	0 0 0 0 0 50 330 430 760 limit/base >15 >20	<1 0 0 0 0 40 312 332 608 <1 current 0 0 <1	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium Potassium FLUID CLEANL Particles >4µm	ppm	ASTM D5185(m)  METHOD  ASTM D5185(m) ASTM D7647 ASTM D7647	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >5000 >1300 >160	<1 0 0 0 0 40 312 332 608 <1 current 0 0 current 9301 1536 75	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm	ppm	ASTM D5185(m)  METHOD ASTM D5185(m)	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >5000 >1300 >160	<1 0 0 0 0 40 312 332 608 <1 current 0 0 <1 current 9301 1536	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium Potassium PtulD CLEANL Particles >4µm Particles >14µm	ppm	ASTM D5185(m)  METHOD  ASTM D5185(m) ASTM D7647 ASTM D7647	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >5000 >1300 >160	<1 0 0 0 0 40 312 332 608 <1 current 0 0 <1 current 9301 1536 75 16 0	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium  CONTAMINANT Silicon Sodium Potassium  FLUID CLEANL Particles >4µm Particles >6µm Particles >14µm Particles >38µm Particles >71µm	ppm	ASTM D5185(m)  METHOD  ASTM D5185(m)  METHOD  ASTM D5185(m)  ASTM D7647  ASTM D7647  ASTM D7647	0 0 0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	<1 0 0 0 0 40 312 332 608 <1 current 0 0 <1 current 9301 1536 75 16	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium  CONTAMINANT Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm	ASTM D5185(m)  METHOD  METHOD  ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	<1 0 0 0 0 40 312 332 608 <1 current 0 0 <1 current 9301 1536 75 16 0 0 20/18/13	history1 history1	history2



# **OIL ANALYSIS REPORT**





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WC0495637 Lab Number : 02461918 Unique Number : 5329576 Test Package : IND 2

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 14 Dec 2021 **Tested** : 15 Dec 2021

Diagnosed

: 15 Dec 2021 - Wes Davis

SPECTRA ALUMINUM PRODUCTS INC. 95 REAGENS INDUSTRIAL PKWY BRADFORD, ON **CA L3Z 2A4** 

Contact: Chris Mayr cmayr@spectraaluminum.com

> T: (905)778-8093 F: (905)778-8054

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.

Contact/Location: Chris Mayr - SPE95BRA