

## **OIL ANALYSIS REPORT**





Component Hydraulic System

PETRO CANADA HYDREX AW 68 (--- GAL)

### DIAGNOSIS

Area [68061] Machine Id WL156

#### A Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: Sampled only )  $% \label{eq:commutative}$ 

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

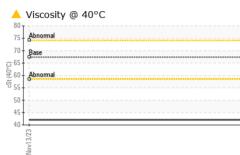
#### Fluid Condition

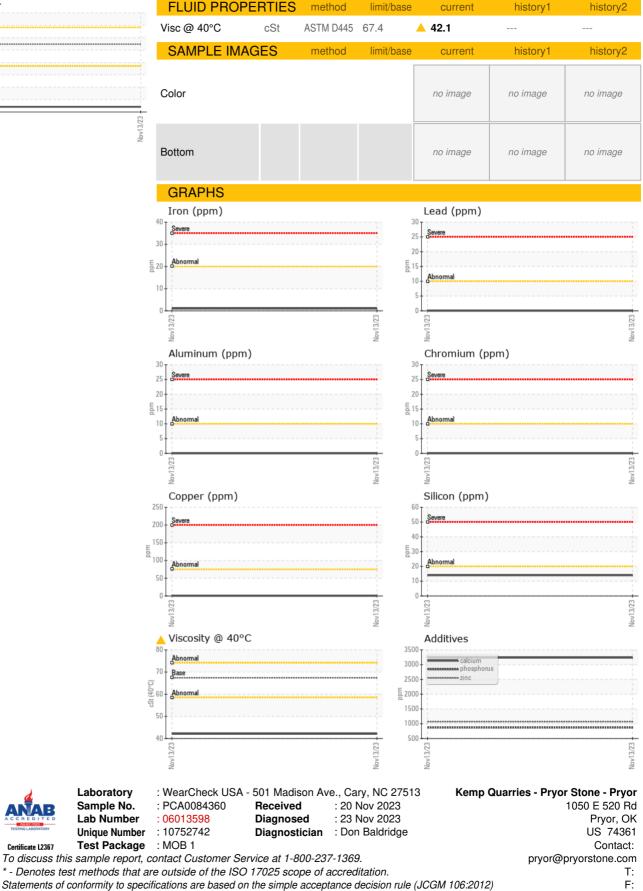
Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type.

	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0084360		
Sample Date		Client Info		13 Nov 2023		
Machine Age	hrs	Client Info		31285		
Oil Age	hrs	Client Info		31285		
Oil Changed		Client Info		N/A		
Sample Status				ATTENTION		
CONTAMINATIO	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS	3	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	1		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
	ppm	ASTM D5185m		0		
	ppm	ASTM D5185m	>10	0		
	ppm	ASTM D5185m	>10	0		
	ppm	ASTM D5185m	>75	۰ <1		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m	210	0		
	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	2		
	ppm	ASTM D5185m	0	0		
	ppm	ASTM D5185m	0	0		
	ppm	ASTM D5185m	0	0		
	ppm	ASTM D5185m	0	13		
•	ppm	ASTM D5185m	50	3235		
	ppm	ASTM D5185m	330	871		
		AOTAL DOTOON	000	0/1		
200	nnm	ASTM D5185m	130	1071		
	ppm	ASTM D5185m	430	1071		
Sulfur	ppm	ASTM D5185m	760	1071 3080		
	ppm					
Sulfur CONTAMINANT	ppm	ASTM D5185m	760	3080		
Sulfur CONTAMINANT Silicon	ppm TS	ASTM D5185m method	760 limit/base	3080 current	 history1	
Sulfur CONTAMINANT Silicon Sodium	ppm FS ppm	ASTM D5185m method ASTM D5185m	760 limit/base	3080 current 14	 history1 	  history2
Sulfur CONTAMINANT Silicon Sodium	ppm FS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	760 limit/base >20	3080 current 14 1	 history1 	 history2 
Sulfur CONTAMINANT Silicon Sodium Potassium VISUAL	ppm FS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	760 limit/base >20 >20	3080 current 14 1 0	 history1  	 history2  
Sulfur CONTAMINANT Silicon Sodium Potassium VISUAL White Metal	ppm FS ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method	760 limit/base >20 >20 limit/base	3080 current 14 1 0 current	 history1   history1	history2
Sulfur CONTAMINANT Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm FS ppm ppm ppm scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	760 limit/base >20 >20 limit/base NONE	3080 current 14 1 0 current NONE	 history1   history1 	 history2   history2 
Sulfur CONTAMINANT Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm FS ppm ppm ppm scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	760 limit/base >20 >20 limit/base NONE NONE	3080 current 14 1 0 current NONE NONE	 history1   history1 	 history2   history2 
Sulfur CONTAMINANT Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm FS ppm ppm ppm scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	760 limit/base >20 >20 limit/base NONE NONE NONE	3080 current 14 1 0 current NONE NONE NONE	 history1   history1  	 history2   history2 
Sulfur CONTAMINANT Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual	760 limit/base >20 >20 limit/base NONE NONE NONE NONE	3080 current 14 1 0 current NONE NONE NONE NONE	 history1   history1  	<ul> <li></li> <li>history2</li> <li></li> <li></li> <li>history2</li> <li></li> <li></li></ul>
Sulfur CONTAMINANT Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	760 limit/base >20 >20 limit/base NONE NONE NONE NONE NONE	3080 current 14 1 0 current NONE NONE NONE NONE NONE NONE	 history1  history1   	history2 history2 history2
Sulfur CONTAMINANT Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	760 limit/base >20 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	3080 current 14 1 0 current NONE NONE NONE NONE NONE NONE NONE NON	 history1   history1    	<ul> <li></li> <li>history2</li> <li></li> <li></li> <li>history2</li> <li></li> <li></li></ul>
Sulfur CONTAMINANT Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	760 limit/base >20 >20 limit/base NONE NONE NONE NONE NONE NONE NORML NORML	3080 current 14 1 0 current NONE NONE NONE NONE NONE NONE NONE NON	 history1   history1    	 history2   history2  history2   
Sulfur CONTAMINANT Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	760 limit/base >20 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	3080 current 14 1 0 current NONE NONE NONE NONE NONE NONE NONE NON	 history1   history1        -	 history2   history2  history2         



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Certificate L2367