

# WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

#### Machine Id **414007** Component **2 Differential** Fluid **PETRO CANADA HYDREX MV 32 (--- GAL)**

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

#### **WEAR**

All component wear rates are normal.

RECOMMENDATION

### CONTAMINATION

There is no indication of any contamination in the oil.

## FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113139		
Sample Date		Client Info		03 Jun 2024		
Machine Age	kms	Client Info		37957		
Oil Age	kms	Client Info		0		
Filter Age	kms	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		N/A		
Sample Status				NORMAL		
Iron	ppm	ASTM D5185(m)	>1200	81		
Chromium	ppm	ASTM D5185(m)	>8	<1		
Nickel	ppm	ASTM D5185(m)	>20	<1		
Titanium	ppm	ASTM D5185(m)	>4	0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>30	<1		
Lead	ppm	ASTM D5185(m)	>25	0		
Copper	ppm	ASTM D5185(m)	>50	<1		
Tin	ppm	ASTM D5185(m)	>5	0		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Silicon	ppm	ASTM D5185(m)	>230	19		
	pp		/ 200			
Potassium	mag	ASTM D5185(m)	>20	1		
Potassium Water	ppm	ASTM D5185(m) WC Method	>20 >.2	-		
Water		WC Method	>.2	NEG		
Water Silt	scalar	WC Method Visual*	>.2 NONE	NEG NONE		
Water Silt Debris	scalar scalar	WC Method Visual* Visual*	>.2 NONE NONE	NEG NONE NONE		
Water Silt Debris Sand/Dirt	scalar scalar scalar	WC Method Visual* Visual* Visual*	>.2 NONE NONE NONE	NEG NONE NONE NONE		
Water Silt Debris Sand/Dirt Appearance	scalar scalar scalar scalar	WC Method Visual* Visual* Visual* Visual*	>.2 NONE NONE NONE NORML	NEG NONE NONE NONE NORML		  
Water Silt Debris Sand/Dirt Appearance Odor	scalar scalar scalar scalar scalar	WC Method Visual* Visual* Visual* Visual* Visual*	>.2 NONE NONE NORML NORML	NEG NONE NONE NORE NORML	  	
Water Silt Debris Sand/Dirt Appearance	scalar scalar scalar scalar	WC Method Visual* Visual* Visual* Visual*	>.2 NONE NONE NONE NORML	NEG NONE NONE NONE NORML	  	
Water Silt Debris Sand/Dirt Appearance Odor	scalar scalar scalar scalar scalar	WC Method Visual* Visual* Visual* Visual* Visual*	>.2 NONE NONE NORML NORML	NEG NONE NONE NORE NORML	  	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar scalar	WC Method Visual* Visual* Visual* Visual* Visual* Visual*	>.2 NONE NONE NORML NORML	NEG NONE NONE NORML NORML NEG		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar scalar scalar scalar	WC Method Visual* Visual* Visual* Visual* Visual* Visual*	>.2 NONE NONE NORML NORML >.2	NEG NONE NONE NORML NORML NEG 8		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar scalar ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>.2 NONE NONE NORML NORML >.2	NEG NONE NONE NORML NORML NEG 8 143		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar scalar scalar ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	>.2 NONE NONE NORML NORML >.2	NEG NONE NONE NORML NORML NEG 8 143 1		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar scalar scalar ppm ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>.2 NONE NONE NORML NORML >.2 0 0	NEG NONE NONE NORML NORML NEG 8 143 1 0		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese	scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>.2 NONE NONE NORML NORML >.2 0 0 0 1	NEG NONE NONE NORML NORML NEG 8 143 1 0 3		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>.2 NONE NONE NORML NORML >.2 0 0 0 1 0	NEG NONE NONE NORML NORML NEG 8 143 1 0 3 4		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>.2 NONE NONE NORML NORML >.2 0 0 0 0 1 0 50	NEG NONE NONE NORML NORML NEG 8 143 1 0 3 4 30		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>.2 NONE NONE NORML NORML >.2 0 0 0 0 1 0 1 0 50 330	NEG NONE NONE NORML NORML NEG 8 143 1 0 3 4 30 1034		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	WC Method Visual* Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	<ul> <li>&gt;.2</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;.2</li> <li>0</li> <li>0</li> <li>1</li> <li>0</li> <li>50</li> <li>330</li> <li>430</li> </ul>	NEG NONE NONE NORML NORML NEG 8 143 1 0 3 4 30 4 30 1034 19		

Contact/Location: GFL Tech - GFL582



