

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id

ACCUPRESS 11840

Compone Brake

Fluid PETRO CANADA HYDREX AW 46 (410 LTR)

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

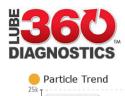
Contamination

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

Fluid Condition

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

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		PC0087506			
Sample Date		Client Info		26 Jun 2024			
Machine Age	hrs	Client Info		16380			
Oil Age	hrs	Client Info		0			
Oil Changed		Client Info		Changed			
Sample Status				ATTENTION			
CONTAMINATI	ON	method	limit/base	current	history1	history2	
Water		WC Method	>0.2	NEG			
WEAR METALS	S	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>350	<1			
Chromium	ppm	ASTM D5185(m)	>5	0			
Nickel	ppm	ASTM D5185(m)	>5	<1			
Titanium	ppm	ASTM D5185(m)		0			
Silver	ppm	ASTM D5185(m)		<1			
Aluminum	ppm	ASTM D5185(m)	>8	<1			
Lead	ppm	ASTM D5185(m)	>10	0			
Copper	ppm	ASTM D5185(m)	>150	9			
Tin	ppm	ASTM D5185(m)	>5	0			
Antimony	ppm	ASTM D5185(m)	>5	0			
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	
Boron	ppm	ASTM D5185(m)	0	<1			
Barium	ppm	ASTM D5185(m)	0	<1			
Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m)	0	<1 0			
		()	0				
Molybdenum	ppm	ASTM D5185(m)	0	0			
Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0	0 0			
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0	0 0 <1			
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 50	0 0 <1 45			
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 50 330	0 0 <1 45 318			
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 50 330 430	0 0 <1 45 318 389	 	 	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 50 330 430	0 0 <1 45 318 389 766	 	 	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 50 330 430 760	0 0 <1 45 318 389 766 <1	 	 	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 50 330 430 760 imit/base	0 0 <1 45 318 389 766 <1 current	 history1	 history2	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 50 330 430 760 imit/base	0 0 <1 45 318 389 766 <1 <1 current 6	 history1	 history2	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 50 330 430 760 Iimit/base >400	0 0 <1 45 318 389 766 <1 current 6 0	 history1 	 history2	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 50 330 430 760 imit/base >400	0 0 <1 45 318 389 766 <1 current 6 0 0	 history1 	 history2	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 50 330 430 760 imit/base >400 >20 imit/base	0 0 <1 45 318 389 766 <1 current 6 0 0 0	 history1 history1	 history2 history2	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 0 50 330 430 760 1 1 1 1 1 1 1 2 2 0 1 1 1 1 1 2 2 0 1 1 1 1	0 0 <1 45 318 389 766 <1 current 6 0 0 0 current 17090	 history1 history1	 history2 history2 history2	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185(m) ASTM D7647	0 0 0 50 330 430 760 760 imit/base >400 >20 imit/base >20000 >20000	0 0 <1 45 318 389 766 <1 current 6 0 0 0 current 17090 5998	 history1 history1 history1	 history2 history2	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4μm Particles >14μm	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647	0 0 0 50 330 430 760 760 imit/base >400 20 20 imit/base >20000 >5000 >640	0 0 <1 45 318 389 766 <1 current 6 0 0 0 current 17090 5998 844	 history1 history1	 history2 history2	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4μm Particles >14μm Particles >21μm	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 0 50 330 430 760 20 1 1 1 1 1 1 1 1 1 1	0 0 <1 45 318 389 766 <1 current 6 0 0 current 17090 5998 844 311	 history1 history1 history1	 history2 history2 history2	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >14µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 0 50 330 430 760 imit/base >400 >20 imit/base >20000 >5000 >5000 >640 >160 >40	0 0 <1 45 318 389 766 <1 <i>current</i> 6 0 0 <i>current</i> 17090 5998 844 311 51 8 21/20/17	 history1 history1 history1 	 history2 history2 history2	



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number of particles (1 n 12 12 k 10 k 2 k

0k Jun26/24

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(100°C) Base

cSt (1

0.80

(b/HO) b(0.50 (b/HO) b(0.50 (b/HO) b(0.50 (b/HO) b(0.50) (b/HO) b(

- 0.20 Vice 0.10 0.00 26/24

cSt (100°C) Base Abnormal

54 52 Abnormal

50 () 48 () 46 46 ts 44 Base

> 42 Abnormal 40 38. Jun26/24

OIL ANALYSIS REPORT

5k -	Particle Trend	FLUID DEGRAD		method	limit/base	current	history1	history2
Ok -	Abnormal. 6μm	Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	0.34		
5k -		VISUAL		method	limit/base	current	history1	history2
Ok -		White Metal	scalar	Visual*	NONE	VLITE		
		Yellow Metal	scalar	Visual*	NONE	NONE		
5K -		Precipitate	scalar	Visual*	NONE	NONE		
0k -	124 -	Silt	scalar	Visual*	NONE	VLITE		
	Jun26/24 Jun26/24	Debris	scalar	Visual*	NONE	NONE		
_	Viscosity @ 100%C	Sand/Dirt	scalar	Visual*	NONE	NONE		
9-	Viscosity @ 100°C	Appearance	scalar	Visual*	NORML	NORML		
8-	Abnormal	Odor	scalar	Visual*	NORML	NORML		
57.	Base	Emulsified Water	scalar	Visual*	>0.2	NEG		
	Abnormal	Free Water	scalar	Visual*		NEG		
50-		FLUID PROPE	RTIES	method	limit/base	current	history1	history2
		Visc @ 40°C	cSt	ASTM D7279(m)	46.4	46.0		
4.	6/24 -	Visc @ 100°C	cSt	ASTM D7279(m)	6.92	6.9		
	Jun26/24	Viscosity Index (VI)	Scale	ASTM D2270*	104	105		
	Acid Number	SAMPLE IMAG	ES	method	limit/base	current	history1	history2
80. 70.	Base					PCoost		
60.		Color					no image	no image
50·								
40 - 30 -								
20.		Bottom					no imago	no imago
10 - 00 -		BOLLOITI					no image	no image
	Jun 26/24 Jun 26/24							
	۲ ۲	GRAPHS						
9-	Viscosity @ 100°C	Ferrous Alloys			491,52	Particle Cour	nt	т26
		E _ iron			122,8	Severe 80 -		-24
8-		E 5 -			30,72	20 Abnormal		-22
7.	Base	54	*****		tz = 7,61	80		-20 8
§ 6 -	Abnomal	un 26/2			Jun26/24	20-		-20 0 4406:1999 -18 :1999 Cla
5.		⊸ Non-ferrous Metal	5			80 -		-16 C
4.					- 12 12	20 -		-14 m
	Jun26/24	E 5-			umber of	30 -		-14 nliness Code
						8-		10
54-	Viscosity @ 40°C	126/24	***********	******	6/24	2-		-8
52.	Abnormal	Jun2			Jun26/2 ⁴	0	14	
50 · 48 ·		Viscosity @ 40°C			(B)	^{4µ} Acid Number	14μ 21μ	38µ 71µ́
46-	Base	S5 Abnormal			24 + Acid Number (mg KOH/g)	Base		
44.		(2) 50 (2) 45 (3) 45 (4) 45 (4) 40 (4) 40			ے م	50		
40 ·	Abnormal		*******			00		
38-	24	Jun 26/24			Jun26/24 Aci	Jun 26/24		Jun26/24
	Jun 26/2	Juni			Jun	Jun		Juni
	Laboratory Sample No. Lab Number Unique Number	: 5802521 : IND 2 (Additional Tes contact Customer Servi of accreditation, (m) mo	Recei Teste Diagr ts: KV10 ce at 1-8 ethod mo	ved : 02 d : 04 iosed : 04 0, VI : 00-268-213 : odified, (e) te :	2 Jul 2024 I Jul 2024 Jul 2024 - Ke 1. sted at exte	vin Marson rnal lab.	duane.swaving T:	WALINGA AY CRESCENT FERGUS, ON CA N1M 2W7 Duane Swaving @walinga.com (519)787-8227 (519)787-8210

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