

OIL ANALYSIS REPORT

Area [93769] PRESS 3 RESERVOIR

Hydraulic System Fluid PETRO CANADA HYDREX AW 68 (--- GAL)

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

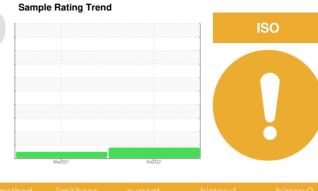
All component wear rates are normal.

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 suitable for further service.



SAMPLE INFORM	NATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0616920	WC0495634	
Sample Date		Client Info		12 Oct 2022	08 Mar 2021	
Machine Age	yrs	Client Info		0	0	
Oil Age	yrs	Client Info		1	0	
Oil Changed		Client Info		Filtered	N/A	
Sample Status				ATTENTION	NORMAL	
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1	<1	
Chromium	ppm	ASTM D5185(m)	>20	0	0	
Nickel	ppm	ASTM D5185(m)	>20	0	0	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)		0	<1	
Aluminum	ppm	ASTM D5185(m)	>20	0	0	
Lead	ppm	ASTM D5185(m)	>20	<1	0	
Copper	ppm	ASTM D5185(m)		6	<1	
Tin	ppm	ASTM D5185(m)	>20	<1	<1	
Antimony	ppm	ASTM D5185(m)		<1	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES	le le	method	limit/base		history1	history2
Boron	ppm	ASTM D5185(m)	0	0	<1	
Barium	ppm	ASTM D5185(m)		0	0	
Molybdenum	ppm	ASTM D5185(m)	0	0	0	
Manganese	ppm	ASTM D5185(m)		0	0	
Magnesium	ppm	ASTM D5185(m)	0	0	<1	
Calcium	ррпп		0	0	< 1	
	nnm	ASTM DE185(m)	50	51	10	
	ppm	ASTM D5185(m)	50	51 346	49	
Phosphorus	ppm	ASTM D5185(m)	330	346	300	
Phosphorus Zinc	ppm ppm	ASTM D5185(m) ASTM D5185(m)	330 430	346 396	300 417	
Phosphorus Zinc Sulfur	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	330	346 396 723	300 417 714	
Phosphorus Zinc	ppm ppm	ASTM D5185(m) ASTM D5185(m)	330 430	346 396	300 417	
Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	330 430 760 limit/base	346 396 723	300 417 714 <1 history1	
Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)	330 430 760	346 396 723 <1 current <1	300 417 714 <1 history1 1	
Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	330 430 760 limit/base	346 396 723 <1 <u>current</u> <1 <1	300 417 714 <1 history1 1 <1	 history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)	330 430 760 limit/base >15	346 396 723 <1 current <1	300 417 714 <1 history1 1	 history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	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)	330 430 760 limit/base >15	346 396 723 <1 current <1 <1 <1 0	300 417 714 <1 history1 1 <1	 history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	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)	330 430 760 limit/base >15 >20	346 396 723 <1 current <1 <1 <1 0	300 417 714 <1 history1 1 <1 <1 <1	 history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	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)	330 430 760 Iimit/base >15 >20 Iimit/base	346 396 723 <1 current <1 <1 0 current	300 417 714 <1 history1 1 <1 <1 <1 <1 history1	 history2 history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	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) ASTM D5185(m)	330 430 760 Iimit/base >15 >20 Iimit/base >5000	346 396 723 <1 current <1 <1 <1 0 current 9822	300 417 714 <1 history1 1 <1 <1 <1 <1 history1 3185	 history2 history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	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) ASTM D7647 ASTM D7647	330 430 760 limit/base >15 >20 limit/base >20 s 5000 >1300 >160	346 396 723 <1 current <1 <1 <1 0 current 9822 524	300 417 714 <1 history1 1 <1 <1 <1 <1 <1 <1 3185 593	 history2 history2 history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	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 D7647 ASTM D7647 ASTM D7647	330 430 760 limit/base >15 >20 limit/base >20 s 5000 >1300 >160	346 396 723 <1 current <1 <1 <1 0 current 9822 524 28	300 417 714 <1 history1 1 <1 <1 <1 <1 <1 <1 3185 593 46	 history2 history2 history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4μm Particles >14μm Particles >21μm	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 D7647 ASTM D7647 ASTM D7647 ASTM D7647	330 430 760 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	346 396 723 <1 current <1 <1 <1 0 current 9822 524 28 7	300 417 714 <1 history1 1 <1 <1 <1 <1 <1 3185 593 46 14	history2 history2 history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm	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) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	330 430 760 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	346 396 723 <1 current <1 <1 <1 0 current 9822 524 28 7 1 0 28 7 1 0 0	300 417 714 <1 history1 1 <1 <1 <1 <1 3185 593 46 14 1	history2 history2

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0.70 0.60 (b/H0) 0.50 Base

Ê 0.40

Viana Acid Number () Acid Number () 0.10

OIL ANALYSIS REPORT

Particle Trend	FLUID DEGRADATION		method	limit/base	current	history1	history2
4μm 6μm 14μm	Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	0.50	0.45	
	VISUAL		method	limit/base	current	history1	history2
Abnormal	White Metal	scalar	Visual*	NONE	NONE	NONE	
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
	Precipitate	scalar	Visual*	NONE	NONE	NONE	
MartiX/21	Silt	scalar	Visual*	NONE	NONE	NONE	
0ct12/22	Debris	scalar	Visual*	NONE	NONE	NONE	
	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
article Trend	Appearance	scalar	Visual*	NORML	NORML	NORML	
4µm	Odor	scalar	Visual*	NORML	NORML	NORML	
5//m 	Emulsified Water	scalar	Visual*	>0.05	NEG	NEG	
bhnormal	Free Water	scalar	Visual*		NEG	NEG	
	FLUID PROPERT	IES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D7279(m)	67.4	66.0	65.5	
0et12/22	SAMPLE IMAGES	3	method	limit/base	current	history1	history2
cid Number	Color						no image
	Bottom						no image
4	GRAPHS						
	Ferrous Alloys		Particle Count			_76	
ć	iron						120
iscosity @ 40°C	5 - nickel			122,880	Severe		-24
······				30,720			-22
lbnormal	0			전 😤 7,680	Abnormal		-20
2004	Mar8/21			0ct12/22 0fer 1 m]] 056'1			-20 -18
388				<u>60</u>			10
	Non-ferrous Metal	S		480			-16
lbnormal	copper			jo 120			-14
c (; c) L (5			30			-12
ć	0			0 		/	10
	Mar8/21			0ct12/22	•		
				0	μ 6μ	14µ 21µ	38µ 71µ
	Viscosity @ 40°C			_	Acid Number		30µ 11µ
	75 Abnormal			(D)H0.80 NO 0.60	Base		
2.	70 Base			¥ 0.60			
17	zz 65 -			5 0.40	1		
	60 - Abnormal			MN 0.20			
				00.0 Acid	8/21		
	Mar8/21			0ct12/22	Mar8/2		
				-			
Iso 17025:2017 Accredited Unique Number :		Recei Teste Diagn	ved : 13 d : 14 losed : 14	gton, ON L7L 3 Oct 2022 4 Oct 2022 • Oct 2022 - We	95 R		

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.

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