

OIL ANALYSIS REPORT

KEMP QUARRIES / BCS - MILL CREEK **TTH033**

Component **Hydraulic System**

PETRO CANADA HYDREX AW 68 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: PM-3 changed filters)

Wear

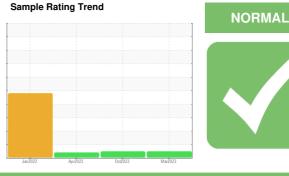
All component wear rates are normal.

Contamination

There is no indication of any contamination in the fluid.

Fluid Condition

The condition of the fluid is acceptable for the time in service.





SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0086082	PCA0070257	PCA0037519
Sample Date		Client Info		23 Mar 2023	21 Oct 2022	22 Apr 2022
Machine Age	hrs	Client Info		16118	15664	15038
Oil Age	hrs	Client Info		16118	15664	15038
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	7	8	6
Chromium	ppm	ASTM D5185m	>10	1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	1	2	1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	<1	<1	<1
Tin	ppm	ASTM D5185m	>10	0	0	<1
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	<1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	2	1	<1
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	0	26	13	14
Calcium	ppm	ASTM D5185m	50	133	187	369
Phosphorus	ppm	ASTM D5185m	330	361	380	413
Zinc	ppm	ASTM D5185m	430	457	467	497
Sulfur	ppm	ASTM D5185m	760	1129	1346	1093
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	4	7	3
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	0	0	0
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE	A MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

NEG

NEG

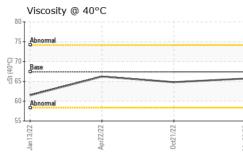
Free Water

scalar *Visual

NEG



OIL ANALYSIS REPORT



		OPERTIES		limit/base	current	history1	history2	
	Visc @ 40°C	cSt	ASTM D445		65.7	64.8	66.2	
	SAMPLE I	MAGES	method	limit/base	current	history1	history2	
	Color				no image	no image	no image	
3	00101				noimage	no image	no image	
0er21,22 Mar23,23	Bottom				no image	no image	no image	
	GRAPHS Iron (ppm)				Lead (ppm)			
	40 Severe	1		30	Saura			
	30-			20				
E	20 - Abnormal			E 15	Abaamaal			
	10-			10	T			
	0	2+	2			2		
	Jan 13/22	Apr22/22	0ct21/22	Mar23/23	Jan 13/22	Apr22/22 0ct21/22		
	Aluminum (p				Chromium (p	pm)		
	30 25 Severe	1	1	30	Sama			
	20 -			20)			
	15 10 - Abnormal			^{Ed} 15	Abnormal			
	10			10				
		22	22	53		22		
	Jan 13/22	Apr22/22	0ct21/22	Mar23/23	Jan 13/22	Apr22/22 0ct21/22		
	Copper (ppn	n)		80	Silicon (ppm)			
	200 - Severe							
_ ¹	150 -			60	Severe			
u da	Abnormal			틆 40	Abnormal			
	50-			20	Abnormal			
	3/22	2/22	1/22	3/23	3/27	2/22 -		
	Jan 13/22	Apr22/22	0ct21/22	Mar23/23	Jan 13/22	Apr22/22 0ct21/22		
	Viscosity @ 40°C Additives							
	75 Abnormal			700	nanananan phosphoru	S		
40°C)	70 Base			500 500	Contraction of the second seco	The State Street Street Street		
) tšs	65			400			*****	
	60 Abnormal	1		200)+			
	55	Apr22/22 -	0ct21/22 -	100 Har23/23	Jan 13/22	Apr22/22 - 0ct21/22 -		
	Jan	Apri	Octí	Marz	Jan	Apri		
Laboratory Sample No. Lab Number Unique Number Test Package cuss this sample report, co	: WearCheck U : PCA0086082 : 05808476 : 10406005 : MOB 1	Receive Diagnos Diagnos	d : 31 sed : 04 / stician : Dou	Mar 2023 Apr 2023 ug Bogart	3 Ke	Contact:	CS-Mill Cre 609 Lazy E Noel, N US 648 TRAVIS ELL pquarries.co	