

OIL ANALYSIS REPORT

KEMP QUARRIES / BCS - GRAVETTE [64799] **TTH032**

Component **Hydraulic System**

PETRO CANADA HYDREX AW 68 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: PM-1 changed filters)

Wear

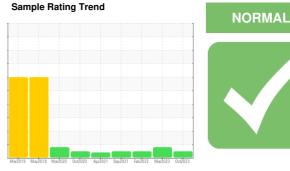
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

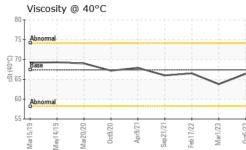
The condition of the oil is acceptable for the time in service.



Mar2019 May2019 Mar2020 0-ccl020 Apr2021 Feb2022 Mar2023 0-ccl023										
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2				
Sample Number		Client Info		PCA0084761	PCA0086765	PCA0034158				
Sample Date		Client Info		05 Oct 2023	01 Mar 2023	17 Feb 2022				
Machine Age	hrs	Client Info		12454	12454	12109				
Oil Age	hrs	Client Info		12945	12454	12109				
Oil Changed		Client Info		N/A	Changed	Not Changd				
Sample Status				NORMAL	ABNORMAL	NORMAL				
WEAR METALS	;	method	limit/base	current	history1	history2				
Iron	ppm	ASTM D5185m	>20	<1	60	1				
Chromium	ppm	ASTM D5185m	>10	3	5	4				
Nickel	ppm	ASTM D5185m	>10	0	0	0				
Titanium	ppm	ASTM D5185m		0	<1	0				
Silver	ppm	ASTM D5185m		0	0	0				
Aluminum	ppm	ASTM D5185m	>10	0	8	<1				
Lead	ppm	ASTM D5185m	>10	0	0	0				
Copper	ppm	ASTM D5185m	>75	<1	<1	<1				
Tin	ppm	ASTM D5185m	>10	0	0	0				
Antimony	ppm	ASTM D5185m				0				
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	2	<1				
Barium	ppm	ASTM D5185m	0	0	0	0				
Molybdenum	ppm	ASTM D5185m	0	2	1	1				
Manganese	ppm	ASTM D5185m	0	0	<1	0				
Magnesium	ppm	ASTM D5185m	0	23	10	10				
Calcium	ppm	ASTM D5185m	50	94	101	81				
Phosphorus	ppm	ASTM D5185m	330	296	326	359				
Zinc	ppm	ASTM D5185m	430	487	424	410				
Sulfur	ppm	ASTM D5185m	760	938	982	824				
CONTAMINANT	S	method	limit/base	current	history1	history2				
Silicon	ppm	ASTM D5185m	>20	<1	3	1				
Sodium	ppm	ASTM D5185m		0	12	0				
Potassium	ppm	ASTM D5185m	>20	1	3	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	NONE	LIGHT				
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				
Free Water	scalar	*Visual		NEG	NEG	NEG				



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	FLUID PROPER	RTIES method	limit/base	current	history1	history2
	Visc @ 40°C	cSt ASTM D445	67.4 6	6.4	63.8	66.5
	SAMPLE IMAGE	ES method	limit/base	current	history1	history2
(21- (21- (22- (23-	Color		n	no image	no image	no image
Apr9/21 Sep21/21 Feb117/2 Mar1/23	Bottom		п	no image	no image	no image
	GRAPHS					
	Iron (ppm)		30 25 20 <u>E</u> 15 10 5 0	normal		
	61/51/02/02/02/02/02/02/02/02/02/02/02/02/02/	Apr/3/21 Sep21/21 Feb17/22	EZ/SP0	romium (pp	() 0ct3/20 Apr/3/21	Feb17/22 Mari/23
	udd 10 5 0 6 10 6 10 10 6 10 10 0 0 0 10 10 0 0 0	Apt9/21 Sep21/21 Feb17/22 Mat1/23	0ct5/23	Mar20/20 Mar20/	0ct9/20 Apr9/21 Sep21/21	Feb17/22
	250 200 150 100 50 0		60 50 40 20 20 40 10	normal		
	61/51/600 61/51/60 Viscosity @ 40°C	Apr9/21. Sep21/21. Feb17/22.	Ad	ditives	0ct9/20.	Feb17/22 Mar1/23
	() 70 () 70 () () () () () () () () () () () () () ((21+		ZITO		22
Laborator Sample No Lab Numb Lab Numb Unique Num Gitate 12367 Test Pack discuss this sample rep	o. : PCA0084761 R per : 05980792 D nber : 10698087 D	eceived : 16 (iagnosed : 18 (iagnostician : Ang	Oct 2023 Oct 2023 ela Borella	-		100 N Hwy 5 ur Springs, Af US 7276 Contact