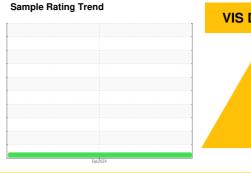


OIL ANALYSIS REPORT

KEMP QUARRIES / RIVER VALLEY BACKBONE Cedar Rapids plant 075

Gear Drive

PETRO CANADA TURBOFLO R&O 150 (15





DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

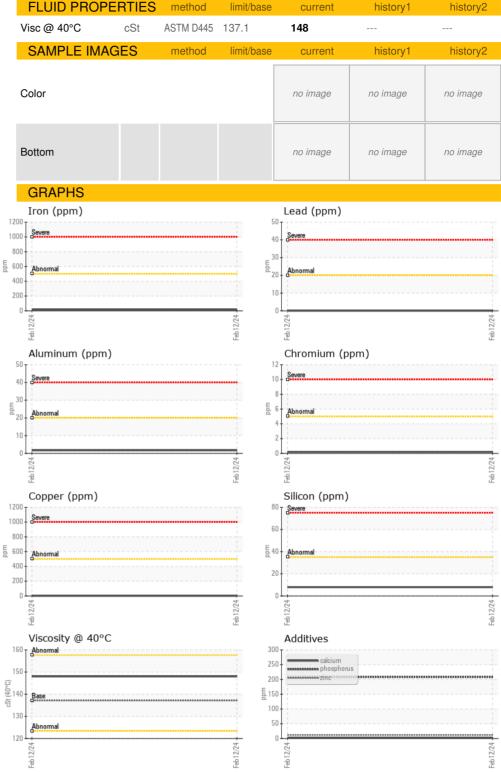
The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION method limit/base current history1 history2 Sample Number Client Info PCA0069961	GAL)				Feb2024		
Sample Number Client Info PCA0069961	CAMPLE INCOR	NANTION	and the second			for the second	la la La viv d
Sample Date		MATION		ilmit/base		nistory i	nistory2
Machine Age hrs Client Info 6550							
Oil Changed	•						
Contamper Client Info Changed Client Info ABNORMAL CONTAMINATION method limit/base current history1 history2 history3 method limit/base current history1 history3 history3 history3 history4 history4 history4 history5							
CONTAMINATION	-	hrs					
CONTAMINATION			Client Info				
Water WC Method >0.2 NEG	· · · · · · · · · · · · · · · · · · ·				ABNORMAL		
WEAR METALS	CONTAMINAT	ION	method	limit/base	current	history1	history2
Chromium	Water		WC Method	>0.2	NEG		
ASTM D5185m SE	WEAR METAL	.S	method	limit/base	current	history1	history2
Nickel	ron	ppm	ASTM D5185m	>500	14		
Description	Chromium	ppm	ASTM D5185m	>5	<1		
Astronometric Astronometri	Nickel	ppm	ASTM D5185m	>8	0		
ASTM D5185m >20 2	Γitanium	ppm	ASTM D5185m		0		
Lead	Silver	ppm	ASTM D5185m		0		
Description	Aluminum	ppm	ASTM D5185m	>20	2		
Tin	_ead	ppm	ASTM D5185m	>20	0		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 0 3 Calcium ppm ASTM D5185m 0 3 Phosphorus ppm ASTM D5185m 0 12 Zinc ppm ASTM D5185m 7565 Contamina ppm ASTM D5185m 35 8 Coldium ppm ASTM D51	Copper	ppm	ASTM D5185m	>500	<1		
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 0 3 Calcium ppm ASTM D5185m 0 3 Phosphorus ppm ASTM D5185m 0 12 Zinc ppm ASTM D5185m 0 12 Zinc ppm ASTM D5185m 7565 CONTAMINANTS method limit/base current history1 history2 Silicon ppm	Γin	ppm	ASTM D5185m	>75	0		
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 14 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 0 3 Calcium ppm ASTM D5185m 0 3 Phosphorus ppm ASTM D5185m 0 12 Zinc ppm ASTM D5185m 7565 Zinc ppm ASTM D5185m 7565 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 0 Potassium ppm ASTM	/anadium	ppm	ASTM D5185m		0		
Boron	Cadmium	ppm	ASTM D5185m		0		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m <1	Boron	ppm	ASTM D5185m		14		
Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m <1	Barium	ppm	ASTM D5185m		0		
Magnesium ppm ASTM D5185m <1 Calcium ppm ASTM D5185m 0 3 Phosphorus ppm ASTM D5185m 4 208 Zinc ppm ASTM D5185m 0 12 Sulfur ppm ASTM D5185m 7565 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 8 Potassium ppm ASTM D5185m >20 <1	Molybdenum	ppm	ASTM D5185m		0		
Calcium ppm ASTM D5185m 0 3 Phosphorus ppm ASTM D5185m 4 208 Zinc ppm ASTM D5185m 0 12 Sulfur ppm ASTM D5185m 7565 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 8 Sodium ppm ASTM D5185m >20 <1	Manganese	ppm	ASTM D5185m		0		
Phosphorus ppm ASTM D5185m 4 208 Zinc ppm ASTM D5185m 0 12 Sulfur ppm ASTM D5185m 7565 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 8 Bodium ppm ASTM D5185m >20 <1 Potassium ppm ASTM D5185m >20 <1 Potassium ppm ASTM D5185m >20 <1 Potassium ppm ASTM D5185m >20 <1 VISUAL method limit/base current history1 history2 Viellow Metal scalar *Visual NONE NONE Potassium scalar *Visual NONE	Magnesium	ppm	ASTM D5185m		<1		
Table Tabl	Calcium	ppm	ASTM D5185m	0	3		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 8 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 <1	Phosphorus	ppm	ASTM D5185m	4	208		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 8 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 <1	Zinc	ppm	ASTM D5185m	0	12		
Silicon	Sulfur	ppm	ASTM D5185m		7565		
Potassium	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE MODER Debris scalar *Visual NONE MODER Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG	Silicon	ppm	ASTM D5185m	>35	8		
VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE MODER Sand/Dirt scalar *Visual NONE NORML Appearance scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG	Sodium	ppm	ASTM D5185m		0		
White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE MODER Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Codor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG	Potassium	ppm	ASTM D5185m	>20	<1		
Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE MODER Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE MODER Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Ddor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG	White Metal	scalar	*Visual	NONE	NONE		
Silt scalar *Visual NONE NONE Debris scalar *Visual NONE MODER Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Ddor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG	Yellow Metal	scalar	*Visual	NONE	NONE		
Debris scalar *Visual NONE MODER Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Ddor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG	Precipitate	scalar	*Visual	NONE	NONE		
Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG	Silt	scalar	*Visual	NONE	NONE		
Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG	Debris	scalar	*Visual	NONE	▲ MODER		
Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG	Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water scalar *Visual >0.2 NEG	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
The a Maken	Emulsified Water	scalar	*Visual	>0.2	NEG		
-ree water scalar *visual NEG	Free Water	scalar	*Visual		NEG		



OIL ANALYSIS REPORT







Certificate L2367

Report Id: KEMHUN [WUSCAR] 06092534 (Generated: 02/20/2024 23:44:27) Rev: 1

Laboratory Sample No.

Lab Number : 06092534

: PCA0069961

Unique Number: 10885387 Test Package : MOB 1

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 16 Feb 2024 **Tested**

: 19 Feb 2024 : 20 Feb 2024 - Sean Felton Diagnosed

Kemp Quarries - River Valley - Backbone

5600 S Hwy 253 Huntington, AR US 72940

Contact: LEE DUCHANOIS LDUCHANOIS@KEMPQUARRIES.COM

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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