

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id CR262 Component Right Final Drive Fluid PETRO CANADA ENDURATEX EP 220 (--- GAL)

DIAGNOSIS

Recommendation

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 no indication of any contamination in the oil.

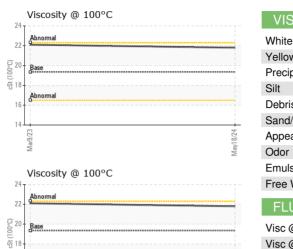
Fluid Condition

Viscosity of sample indicates oil is within ISO 150 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

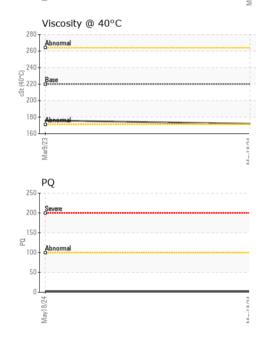
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0087848	PC0072904	
Sample Date		Client Info		18 May 2024	09 Mar 2023	
Machine Age	hrs	Client Info		2948	1175	
Oil Age	hrs	Client Info		0	1000	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
PQ		ASTM D8184*		2		
Iron	ppm	ASTM D5185(m)	>500	11	8	
Chromium	ppm	ASTM D5185(m)	>10	0	0	
Nickel	ppm	ASTM D5185(m)	>10	0	<1	
Titanium	ppm	ASTM D5185(m)		0	<1	
Silver	ppm	ASTM D5185(m)		0	0	
Aluminum	ppm	ASTM D5185(m)	>25	<1	<1	
Lead	ppm	ASTM D5185(m)	>25	0	0	
Copper	ppm	ASTM D5185(m)	>50	2	1	
Tin	ppm	ASTM D5185(m)	>10	0	0	
Antimony	ppm	ASTM D5185(m)	>5	0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	60	77	70	
Barium	ppm	ASTM D5185(m)	0	4	2	
Molybdenum	ppm	ASTM D5185(m)	0	0	<1	
Manganese	ppm	ASTM D5185(m)	0	<1	<1	
Magnesium	ppm	ASTM D5185(m)	0	10	10	
Calcium	ppm	ASTM D5185(m)		13	11	
Phosphorus	ppm	ASTM D5185(m)	270	646	665	
Zinc	ppm	ASTM D5185(m)	0	17	13	
Sulfur	ppm	ASTM D5185(m)	11200	9083	8276	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>75	0	<1	
Sodium	ppm	ASTM D5185(m)		5	4	
Potassium	ppm	ASTM D5185(m)	>20	1	1	
FLUID DEGRAD)ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.40	1.14		



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VISUAL		method				history2
White Metal	coalar	Visual*	NONE	NONE	NONE	
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
	scalar			_	NONE	
Precipitate Silt	scalar	Visual* Visual*	NONE NONE	NONE	NONE	
Debris	scalar scalar	Visual*	NONE	VLITE	NONE	
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
Appearance	scalar	Visual*	NORML	NORML	NORML	
Odor	scalar	Visual*	NORML	NORML	NORML	
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
Free Water	scalar	Visual*	20.2	NEG	NEG	
FLUID PROPE		method	limit/base		history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	172	176	
	cSt			21.8	22.1	
Visc @ 100°C		ASTM D7279(m)	19.35			
Viscosity Index (VI)	Scale	ASTM D2270*	99	151	150	
SAMPLE IMAG	iES	method	limit/base	current	history1	history2
Color						no image
Bottom						no image
GRAPHS						
Ferrous Alloys			2	PQ		
iron				00 Severe		
10-				80		
5-						
0	********			60 -		
Mar9/23			8/2	40		
Ma			May.	20 Abnormal		
Non-ferrous Metal	5			00-0	*********************************	******
10 copper				80		
E 6				60 -		
E 6 4				40		
2			-	20 -		
Mar9/23			8/24	724		
Mar			May18/24	May18/24		
Viscosity @ 40°C				Acid Number	r	
Abnormal			:.11) (0,100 (0,100 (0,100 (0,100) (1,	20 96		
5 250 - Base			Ĕo.	72 -		
5 250 - Base 200 -			۵.0 ڀ ^ل و	48 - Base	*****	
Abnormal			.0 Vin	24		
150 - +			May18/24	Mar9/23		
σ,			v18	ard		

Diagnosed : 30 May 2024 - Kevin Marson

Test Package : IND 2 (Additional Tests: KV100, TAN Man, VI) 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.

> CA L4A 2G8 Contact: Shannon Abbott sabbott@gipi.com T: (905)750-5900 F:

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Contact/Location: Shannon Abbott - GFL286 Page 2 of 2