

OIL ANALYSIS REPORT

Sample Rating Trend





CATERPILLAR R1600G SCP215

Front Differential

PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

	····/			Dec2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history
Sample Number		Client Info		WC0888404		
Sample Date		Client Info		20 Dec 2023		
Machine Age	hrs	Client Info		2899		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history
Water		WC Method	>.2	NEG		
WEAR METALS		method	limit/base	current	history1	history
Iron	ppm	ASTM D5185(m)	>500	139		
Chromium	ppm	ASTM D5185(m)	>3	<1		
Nickel	ppm	ASTM D5185(m)	>3	<1		
Titanium	ppm	ASTM D5185(m)	>2	0		
Silver	ppm	ASTM D5185(m)	>2	0		
Aluminum	ppm	ASTM D5185(m)	>30	3		
Lead	ppm	ASTM D5185(m)	>13	1		
Copper	ppm	ASTM D5185(m)	>103	39		
Tin	ppm	ASTM D5185(m)	>5	<1		
Antimony	ppm	ASTM D5185(m)	>5	0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history
Boron	ppm	ASTM D5185(m)	2	2		
Barium	ppm	ASTM D5185(m)	0	0		
Molybdenum	ppm	ASTM D5185(m)	0	2		
Manganese	ppm	ASTM D5185(m)	0	<1		
Magnesium	ppm	ASTM D5185(m)	9	22		
Calcium	ppm	ASTM D5185(m)	3114	3830		
Phosphorus	ppm	ASTM D5185(m)	1099	859		
Zinc	ppm	ASTM D5185(m)	1245	1010		
Sulfur	ppm	ASTM D5185(m)	7086	8108		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS	3	method	limit/base	current	history1	history
Silicon	ppm	ASTM D5185(m)	>100	27		
Sodium	ppm	ASTM D5185(m)		3		
Potassium	ppm	ASTM D5185(m)	00	1		

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

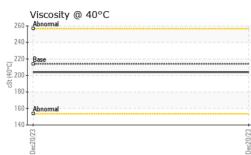
There is no indication of any contamination in the oil.

Fluid Condition

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



OIL ANALYSIS REPORT



с		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	NONE		
		Sand/Dirt	scalar	Visual*	NONE	NONE		
	Dec20/23	Appearance	scalar	Visual*	NORML	NORML		
	De	Odor	scalar	Visual*	NORML	NORML		
		Emulsified Water	scalar	Visual*	>.2	NEG		
		Free Water	scalar	Visual*		NEG		
		FLUID PROPERT	TES	method	limit/base	current	history1	history2
		Visc @ 40°C	cSt	ASTM D7279(m)	213.9	204		
		SAMPLE IMAGES	5	method	limit/base	current	history1	history2
		Color					no image	no image
		Bottom					no image	no image
		GRAPHS						
	10	Iron (ppm)			20	Lead (ppm)		
		Severe			30	Severe		
	udd	500 - Abnormal			²⁰	Abnormal		
		0						~
		Dec20/23			Dec20/23	Dec20/23		Dec20/23
		—			De			De
		Aluminum (ppm)			10-	Chromium (pp	m)	
	E	<u> </u>			ud 5-	Severe		
	d.	40 Abnormal 20 -			d 2	Abnormal		
		0			-0 22	53		23
		Dec20/23			Dec20/23	Dec20/23		Dec20/23
		Copper (ppm)				□ Silicon (ppm)		
	2				200	Sincorr (pprin)		
	틥	Abnormal			튭 100-	Abnormal		
	L.							
		0/23			0/23	0/23		0/23 -
		Dec20/23			Dec20/23	Dec20/23		Dec20/23
		Viscosity @ 40°C				Additives		
		Abnormal			4000	calcium	1	
	cSt (40°C)	Base			<u> </u> 2000	nananananan phosphorus		
		Abnormal						
		Dec20/23			Dec20/23	Dec20/23		Dec20/23
		Dec			Dec	D		Dec
CO CALA Iso 17025:2017 Accredited Laboratory		: 02605363 I : 5698448 I : MOB 1	Recieved Diagnose Diagnost	ician : Kev	Dec 2023 Dec 2023 vin Marson	1350 Gove	rnment Rd. W, MA Kirk Contact: Mito	Eagle Canada CASSA COMPLEX dand Lake, ON CA P2N 3J1 ch Lamontagne
Test denoted ((*) outside scope c	ontact Customer Servi of accreditation, (m) m ion are based on the s	ethod mo	dified, (e) te	sted at extern	nal lab.	T:	ts@agnicoeagle.com (705)567-5208 (705)567-5221