

OIL ANALYSIS REPORT

Sample Rating Trend





CATERPILLAR 980K LDR015

Rear Differential

PETRO CANADA PRODURO TO-4 SAE 30 (--- GAL)

	GAL)		C	ec2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0879731		
Sample Date		Client Info		01 Dec 2023		
Machine Age	hrs	Client Info		15581		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
ron	ppm	ASTM D5185(m)	>500	75		
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	<1		
Aluminum	ppm	ASTM D5185(m)	>30	3		
_ead	ppm	ASTM D5185(m)	>13	4		
Copper	ppm	ASTM D5185(m)	>103	12		
Γin	ppm	ASTM D5185(m)	>5	0		
Antimony	ppm	ASTM D5185(m)	>5	0		
/anadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	3		
Barium	ppm	ASTM D5185(m)	0	<1		
Volybdenum	ppm	ASTM D5185(m)	0	<1		
Vanganese	ppm	ASTM D5185(m)	9	<1		
Vagnesium	ppm	ASTM D5185(m)	1	18		
Calcium	ppm	ASTM D5185(m)	3131	2993		
Phosphorus	ppm	ASTM D5185(m)	1194	1017		
Zinc	ppm	ASTM D5185(m)	1281	1272		
Sulfur	ppm	ASTM D5185(m)	3811	9301		
	ppm	ASTM D5185(m)		<1		
Lithium						
		method	limit/base	current	history1	history2
CONTAMINANTS	5			current	history1	history2
		method ASTM D5185(m) ASTM D5185(m)				history2

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.

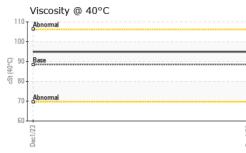
Fluid Condition

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



OIL ANALYSIS REPORT

VISUAL



		VISUAL		method	limit/base	current	nistory i	nistory2
		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		
	Dec1/23 -	Appearance	scalar	Visual*	NORML	NORML		
	Dec	Odor	scalar	Visual*	NORML	NORML		
		Emulsified Water	scalar	Visual*	>.2	NEG		
		Free Water	scalar	Visual*		NEG		
		FLUID PROPER	TIES	method	limit/base	current	history1	history2
		Visc @ 40°C		ASTM D7279(m)	88.5	94.9		
		SAMPLE IMAGE	S	method	limit/base	current	history1	history2
		Color					no image	no image
		Bottom					no image	no image
		GRAPHS				Land (mmm)		
	1	Iron (ppm) ¹⁰⁰⁰ T Severe			3	Lead (ppm)		
	E	7			E 2	Ú.		
	dd	500 - Abnormal	****************		عام 2 ط 1	Abnormal		
		Dec1/23			Dec1/23	Dec1/23		
					_)	
		Aluminum (ppm)			1	Chromium (pp	om)	
	E				E	Severe		
	8	E 40 - Abnormal			ШШ	Abnormal		
		Dec1/23			Dec1/23	Dec1/23		
		Copper (ppm)			20	Silicon (ppm)		
						-		
	udd	100 - Abnormal			E 10	0 - Abnormal		
		0						
		Dec1/23			Dec1/23	Dec1/23		
		Viscosity @ 40°C			400	Additives		
)°C)	Abnormal				calcium		
	cSt (40°C)	80 - Abnormal			E 300	0 - zinc		
		60						
	0	<u>67</u>			Dec1/23	Dec1/23		
	0	lec1/23						
		Dec1/23			De			
CALA Laber of 17025:2017 credited box	Laboratory Sample No. Lab Number Unique Number Test Package	: WearCheck - C8-11 : WC0879731 : <mark>02601309</mark> : 5694394 : MOB 1	Received Diagnose Diagnosti	: 06 d : 06 cian : We	lington, ON I Dec 2023 Dec 2023 s Davis	.7L 5H9 1350 Gove	ernment Rd. W, MA Kirk Contact: Mito	Eagle Canad CASSA COMPLE (land Lake, O CA P2N 3J ch Lamontagn
credited boratory discuss this	Laboratory Sample No. Lab Number Unique Number Test Package s sample report, c	: WearCheck - C8-11 : WC0879731 : <mark>02601309</mark> : 5694394	Received Diagnose Diagnostic	:06 d :06 cian :We 00-268-213	lington, ON I Dec 2023 Dec 2023 s Davis 1.	.7L 5H9 1350 Gove AEM_KL_r	ernment Rd. W, MA Kirk Contact: Mito nacassaoilsampleresul	Eagle Canad CASSA COMPLE (land Lake, O CA P2N 3J ch Lamontagn