

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



G.LOPES CONSTRUCTION INC./Off-Road L33 Component

Transmission (Manual)

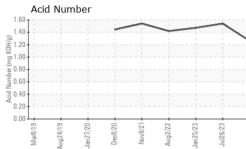
PETRO CANADA PRODURO TO-4 SAE 30 (--- GAL)

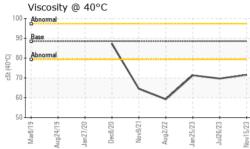
			Mar2019 Aug		Nov2021 Aug2022 Jan2023 Jul20		
DIAGNOSIS	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Recommendation	Sample Number		Client Info		PCA0078195	PCA0098466	PCA0090658
Resample at the next service interval to monitor.	Sample Date		Client Info		15 Nov 2023	26 Jul 2023	25 Jan 2023
Vear	Machine Age	hrs	Client Info		10220	9960	8795
Il component wear rates are normal.	Oil Age	hrs	Client Info		4897	5320	4897
ontamination	Oil Changed		Client Info		N/A	N/A	N/A
here is no indication of any contamination in the	Sample Status				NORMAL	NORMAL	NORMAL
uid. Iuid Condition	CONTAMINAT	ION	method	limit/base	current	history1	history2
he AN level is acceptable for this fluid. The	Water		WC Method	>0.1	NEG	NEG	NEG
ondition of the fluid is suitable for further service.	WEAR METAL	.S	method	limit/base	current	history1	history2
	Iron	ppm	ASTM D5185m	>200	12	9	8
	Chromium	ppm	ASTM D5185m	>5	0	0	<1
	Nickel	ppm	ASTM D5185m	>5	0	0	0
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m	>7	<1	0	0
	Aluminum	ppm	ASTM D5185m	>25	<1	<1	<1
	Lead	ppm	ASTM D5185m	>45	0	<1	1
	Copper	ppm	ASTM D5185m	>225	3	3	2
	Tin	ppm	ASTM D5185m	>10	<1	0	<1
	Vanadium	ppm	ASTM D5185m		0	<1	0
	Cadmium	ppm	ASTM D5185m		<1	0	0
	ADDITIVES		method	limit/base	current	history1	history2
	Boron	ppm	ASTM D5185m	2	6	8	9
	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	0	<1	2	3
	Manganese	ppm	ASTM D5185m	9	<1	<1	<1
	Magnesium	ppm	ASTM D5185m	1	26	29	29
	Calcium	ppm	ASTM D5185m	3131	2651	2738	2918
	Phosphorus	ppm	ASTM D5185m	1194	1021	973	984
	Zinc	ppm	ASTM D5185m	1281	1197	1173	1235
	Sulfur	ppm	ASTM D5185m	3811	5298	5624	5810
	CONTAMINAN	ITS	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185m	>125	5	5	3
	Sodium	ppm	ASTM D5185m		2	2	2
	Potassium	ppm	ASTM D5185m	>20	0	0	0
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045		1.26	1.54	1.47



OIL ANALYSIS REPORT

VISUAL





Denotes tes	st methods that a	: PCA0078195 Received : 17 Nov 2023 : 06011070 Diagnosed : 21 Nov 2023 : 10750214 Diagnostician : Don Baldridge : MOB 2 Diagnostician : Don Baldridge ontact Customer Service at 1-800-237-1369. e outside of the ISO 17025 scope of accreditation. cations are based on the simple acceptance decision rule (J				(ICGM 106-2012	565 WINTHROP ST TAUNTON, MA US 02780 Contact: BUTCH MCGRATH bmcgrath@glopes.com T: 5		
Laboratory	40 + 61/32 + + 02/23 + + 0			ury, NC 2751	Ma Augž Janž				
		a a a a a a a a a a a a a a a a a a a			(2/33 4cid Number (mg K0H/g) 0.0	0 -			
		Viscosity @ 40°C			(^B /HO 2.0	Acid Number			
		Mar6/19 Aug24/19 Jan27/20 Dec8/20	Nov	Aug2/22 Jan25/23 Jul26/23	Nov15/23	Mar8/19 Aug24/19 Jan27/20	Dec8/20 Nov9/21 Aug2/22	Jan 25/23 Jul 26/23 Nov 15/23	
			Nov9/21	5/23 5/23 5/23	5/23	8/19 	8/20 9/21 2/22	5/23	
		200 Abnormal			²⁰ 10	D Abnormal			
		Copper (ppm)	1						
		A D	2	Ar Jar Jul	Nov	Silicon (ppm)	Au N	Jui Nov	
		Mar8/19 - Aug24/19 - Jan27/20 - Dec8/20 -	Nov9/21-	Aug2/22 - Jan25/23 - Jul26/23 -	Nov15/23	Mar8/19	Dec8/20 - Nov9/21 - Aug2/22 -	Jan 25/23 - Jul 26/23 -	
		Abnormal			d	5 - Abnormal			
		40 Severe	1			Severe			
		Aluminum (ppm)				Chromium (p	pm)		
		Mar8/19 Aug24/19 Jan27/20 Dec8/20	Nov9/21	Aug2/22 Jan25/23 Jul26/23	Nov15/23	Mar8/19 Aug24/19 Jan27/20	Dec8/20 Nov9/21 Aug2/22	Jan 25/23 Jul 26/23 Nov 15/23	
		20	Z1	23	- 23	19 	20	23	
		a 200 - Abnormal			- E 5	D- Abnormal			
		Iron (ppm)			10	Lead (ppm)			
		GRAPHS							
						-			
		Bottom				no image	no image	no image	
Aı.	Jar Ju Nov								
Nov9/21	Jan25/23	Color				no image	no image	no image	
\searrow		SAMPLE IMAC	GES	method	limit/base	current	history1	history2	
		Visc @ 40°C	cSt	ASTM D445	88.5	71.5	69.7	71.3	
		FLUID PROPE	RTIES	method	limit/base	current	history1	history2	
		Free Water	scalar	*Visual		NEG	NEG	NEG	
	/ En	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG	
Nov9/21 Aug2/22	Jan 25/23 Jul 26/23 Nov 15/23	Appearance Odor	scalar scalar	*Visual *Visual	NORML NORML	NORML NORML	NORML NORML	NORML NORML	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE		
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE		
		Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE	
		White Metal Yellow Metal	scalar scalar	*Visual *Visual	NONE NONE	NONE NONE	NONE	NONE NONE	

