

OIL ANALYSIS REPORT

Sample Rating Trend



Area G.LOPES CONSTRUCTION INC./Off-Road Machine Id E2703 Component Swing Drive

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

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.

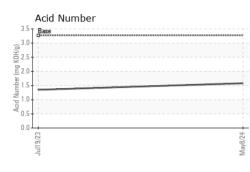
Fluid Condition

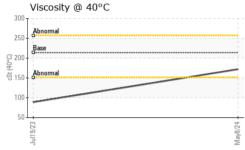
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0122621	PCA0098424	
Sample Date		Client Info		08 May 2024	19 Jul 2023	
Machine Age	hrs	Client Info		1940	1425	
Oil Age	hrs	Client Info		1940	1425	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	ATTENTION	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>400	74	210	
Chromium	ppm	ASTM D5185m	>10	<1	2	
Nickel	ppm	ASTM D5185m	>10	0	0	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	1	2	
Lead	ppm	ASTM D5185m	>50	<1	<1	
Copper	ppm	ASTM D5185m	>200	0	2	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	7	0	
Barium	ppm	ASTM D5185m	0	2	11	
Molybdenum	ppm	ASTM D5185m	0	<1	3	
Manganese	ppm	ASTM D5185m	0	1	3	
Magnesium	ppm	ASTM D5185m	9	9	15	
Calcium	ppm	ASTM D5185m	3114	2786	3566	
Phosphorus	ppm	ASTM D5185m	1099	949	948	
Zinc	ppm	ASTM D5185m	1245	1027	1151	
Sulfur	ppm	ASTM D5185m	7086	8536	11576	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	11	18	
Sodium	ppm	ASTM D5185m		3	0	
Potassium	ppm	ASTM D5185m	>20	1	6	
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	3.27	1.58	1.35	

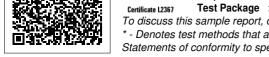


OIL ANALYSIS REPORT





Visc @ 40°C	scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual Method ASTM D445 method	limit/base 20 يو رو	Abnormal	LIGHT NONE NONE NONE NORML NORML NEG NEG history1 • 89.0 history1 no image	history2 history2 history2 history2 history2
Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified W Free Water FLUID PI Visc @ 40°C SAMPLE Color Bottom GRAPHS Iron (ppm)	scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	NONE NONE NONE NORML NORML >0.2 Iimit/base 213.9 Iimit/base	NONE NONE NOR NOR NOR NOR NEG Current 172 current no image	NONE NONE NONE NORML NORML NEG NEG history1 0 89.0 history1	 history2 history2
Silt Debris Sand/Dirt Appearance Odor Emulsified W Free Water FLUID PI Visc @ 40°C SAMPLE Color Bottom GRAPHS Iron (ppm)	scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual *Visual *Visual Method	NONE NONE NORML NORML >0.2 Imit/base 213.9 Imit/base	NONE NONE NORML NORML NEG NEG Current 172 current no image	NONE NONE NORML NORML NEG NEG history1 0 89.0 history1	 history2 history2
Debris Sand/Dirt Appearance Odor Emulsified W Free Water FLUID PI Visc @ 40°C SAMPLE Color Bottom GRAPHS Iron (ppm)	scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual *Visual Method	NONE NORML NORML >0.2 limit/base 5 213.9 limit/base	NONE NORML NORML NEG NEG current 172 current no image	NONE NORML NORML NEG NEG history1 0 89.0 history1	 history2 history2
Sand/Dirt Appearance Odor Emulsified W Free Water FLUID PI Visc @ 40°C SAMPLE Color Bottom GRAPHS Iron (ppm)	scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual Method	NONE NORML NORML >0.2 Limit/base 213.9 Limit/base	NONE NORML NEG NEG Current 172 Current no image	NONE NORML NEG NEG 89.0 history1 no image	 history2 history2
Appearance Odor Emulsified W Free Water FLUID PI Visc @ 40°C SAMPLE Color Bottom GRAPHS	scalar scalar scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual method ASTM D445	NORML NORML >0.2 limit/base 213.9 limit/base	NORML NEG NEG current 172 current no image	NORML NORML NEG NEG 89.0 history1 no image	 history2 history2 no image
Emulsified W Free Water FLUID PI Visc @ 40°C SAMPLE Color Bottom GRAPHS Iron (ppm)	scalar scalar scalar ROPERTIES cSt IMAGES	*Visual *Visual *Visual method ASTM D445	NORML >0.2 limit/base 213.9 limit/base	NORML NEG NEG current 172 current no image no image	NORML NEG NEG 89.0 history1 no image	 history2 history2
Emulsified W Free Water FLUID PI Visc @ 40°C SAMPLE Color Bottom GRAPHS Iron (ppm)	Vater scalar scalar ROPERTIES cSt IMAGES	*Visual *Visual method ASTM D445	>0.2 limit/base 213.9 limit/base	NEG NEG current 172 current no image no image	NEG NEG history1 89.0 history1 no image	 history2 history2 no image
Free Water FLUID PI Visc @ 40°C SAMPLE Color Bottom GRAPHS Iron (ppm)	scalar ROPERTIES cSt IMAGES	*Visual method ASTM D445	limit/base 5 213.9 limit/base	NEG current 172 current no image	NEG history1 89.0 history1 no image	history2 history2 no image
FLUID PI Visc @ 40°C SAMPLE Color Bottom GRAPHS Iron (ppm)	ROPERTIES cSt IMAGES	method ASTM D445	5 213.9 limit/base	current 172 current no image no image	history1 89.0 history1 no image	history2 history2 no image
Visc @ 40°C SAMPLE Color Bottom GRAPHS Iron (ppm)	cSt IMAGES	ASTM D445	5 213.9 limit/base	172 current no image no image	89.0 history1 no image	history2
SAMPLE Color Bottom GRAPHS Iron (ppm)	IMAGES		limit/base 20 يو رو	Current no image no image	history1	no image
Bottom Bottom GRAPHS Iron (ppm)		method	20 ਛੁੱ10	no image	no image	no image
Bottom GRAPHS Iron (ppm)			톱 10	no image		
GRAPHS Iron (ppm)			톱 10	Lead (ppm)	no image	no image
Iron (ppm)			톱 10	0 Abnormal		
Jul			May8/24	Jul19/23		
Aluminum	(ppm)		May	اللہ Chromium (p	(mag	
100 Severe	(PP)			⁰ Severe		
5.50				0 0 Abnormal		
Abnormal						
Jul19/23			May8/24 -	Jul19/23 -		
	om)		2		1	
600 T	,		15	0 T Severe		
E 400 Abnormal			E ¹⁰	Abnormal		
0						
7/61/n/			May8/2	Jul19/2		
) 40°C		(B/H0	Acid Number		
G 200 Base			Dy Bu	Base		
♀ 200 Abnormal 장 100 -			La 2	0		
0				٥		
ul19/2			lay8/2	ul19/2		
No. : PCA0122621 mber : 06175675 umber : 11021728 ckage : MOB 2	Rece Teste Diagi	ived :1 ed :1 nosed :1	0 May 2024 3 May 2024 3 May 2024 - V	Ves Davis	- Contact: BUT	WINTHROP S TAUNTON, M US 0278 CH MCGRAT
	copper (pr def 200 wiscosity (pr Abnomal Copper (pr Abnomal Coppe	Copper (ppm)	Copper (ppm) Copper (ppm) Copper (ppm) Viscosity @ 40°C Copper (ppm) Viscosity @ 40°C Copper (ppm) Viscosity @ 40°C Copper (ppm) Viscosity @ 40°C Copper (ppm) Copper (ppm)	Copper (ppm) Copper (ppm) Copper (ppm) Viscosity @ 40°C Copper (ppm) Viscosity @ 40°C Copper (ppm) Viscosity @ 40°C Copper (ppm) Viscosity @ 40°C Copper (ppm) Copper (ppm)	Copper (ppm) Silicon (ppm)	Copper (ppm) Silicon (ppm) Silicon (ppm) Silicon (ppm) Silicon (ppm) Silicon (ppm) Silicon (ppm)



Report Id: GLOTAU [WUSCAR] 06175675 (Generated: 05/13/2024 09:14:21) Rev: 1

> Submitted By: MATT MANOLI Page 2 of 2