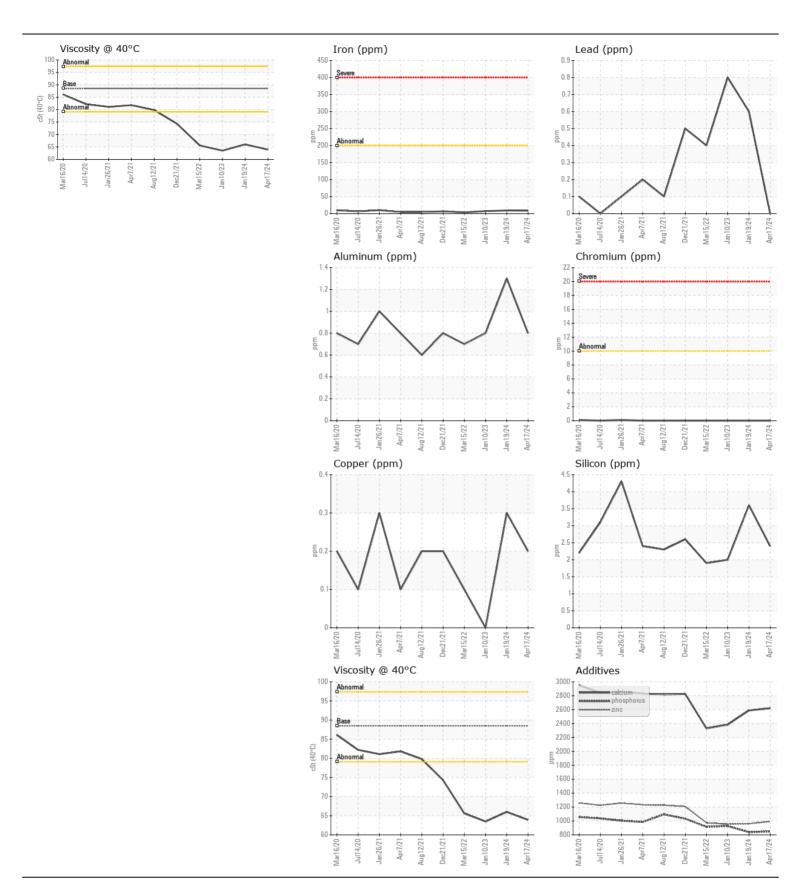


Machine Id **OR962**

Center Transfer Gearbox

PETPO CANADA DRODURO TO-4 SAF 30 (9 I TR)

PETRO CANADA PRODURO T	U-4 SAL 30	(9 L I I	ח <i>)</i>				
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Confirm the source of the lubricant being utilized for top-up/fill.	Sample Number		Client Info		GFL0113334	GFL0092253	GFL0064905
Resample at the next service interval to monitor.	Sample Date		Client Info		17 Apr 2024	19 Jan 2024	10 Jan 2023
	Machine Age	hrs	Client Info		14420	13733	10932
	Oil Age	hrs	Client Info		11619	2144	2500
	Filter Age	hrs	Client Info		500	700	0
	Oil Changed		Client Info		N/A	Not Changd	Changed
	Filter Changed		Client Info		Changed	Changed	N/A
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185(m)	>200	9	9	7
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>10	0	0	0
	Nickel	ppm	ASTM D5185(m)	>10	<1	<1	<1
	Titanium	ppm	ASTM D5185(m)		0	0	<1
	Silver	ppm	ASTM D5185(m)		0	0	0
	Aluminum	ppm	ASTM D5185(m)		<1	1	<1
	Lead	ppm	ASTM D5185(m)		0	<1	<1
	Copper	ppm	ASTM D5185(m)		<1	<1	0
	Tin	ppm	ASTM D5185(m)		0	0	0
	Vanadium	ppm	ASTM D5185(m)		0	0	0
	White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
CONTAMINATION	Ciliana		ACTM DE10E()		•	,	2
	Silicon	ppm	ASTM D5185(m)		2	4	
	Potassium	ppm	ASTM D5185(m) ASTM D5185(m)	>20	2 <1	4 <1	<1
There is no indication of any contamination in the oil.			. ,	>20 >0.2			
	Potassium		ASTM D5185(m)		<1	<1	<1
	Potassium Water	ppm	ASTM D5185(m) WC Method	>0.2	<1 NEG	<1 NEG	<1 NEG
	Potassium Water Silt	ppm scalar scalar	ASTM D5185(m) WC Method Visual*	>0.2 NONE	<1 NEG NONE	<1 NEG NONE	<1 NEG NONE
	Potassium Water Silt Debris	ppm scalar scalar	ASTM D5185(m) WC Method Visual* Visual*	>0.2 NONE NONE	<1 NEG NONE NONE	<1 NEG NONE NONE	<1 NEG NONE NONE
	Potassium Water Silt Debris Sand/Dirt	ppm scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual*	>0.2 NONE NONE NONE	<1 NEG NONE NONE	<1 NEG NONE NONE	<1 NEG NONE NONE
	Potassium Water Silt Debris Sand/Dirt Appearance	scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual*	>0.2 NONE NONE NONE NORML	<1 NEG NONE NONE NONE	<1 NEG NONE NONE NONE	<1 NEG NONE NONE NONE
	Potassium Water Silt Debris Sand/Dirt Appearance Odor	scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual*	>0.2 NONE NONE NONE NORML	<1 NEG NONE NONE NORML NORML	<1 NEG NONE NONE NONE NORML	<1 NEG NONE NONE NORML NORML
There is no indication of any contamination in the oil. FLUID CONDITION	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual*	>0.2 NONE NONE NORML NORML >0.2	<1 NEG NONE NONE NORML NORML	<1 NEG NONE NONE NORML NORML NEG	<1 NEG NONE NONE NORML NORML NEG
There is no indication of any contamination in the oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>0.2 NONE NONE NORML NORML >0.2	<1 NEG NONE NONE NONE NORML NORML NEG	<1 NEG NONE NONE NONE NORML NORML NEG	<1 NEG NONE NONE NORML NORML NEG
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar scalar ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	>0.2 NONE NONE NORML NORML >0.2	<1 NEG NONE NONE NORML NORML NEG <1 25	<1 NEG NONE NONE NONE NORML NORML NEG <1 21	<1 NEG NONE NONE NORML NORML NEG 1 38
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 NONE NONE NORML NORML >0.2 2 0 0	<1 NEG NONE NONE NORML NORML NEG <1 25 0	<1 NEG NONE NONE NONE NORML NORML NEG <1 21 0	<1 NEG NONE NONE NONE NORML NORML NEG 1 38 0
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 NONE NONE NORML NORML >0.2	<1 NEG NONE NONE NORML NORML NEG <1 25 0 2	<1 NEG NONE NONE NORML NORML NEG <1 21 0 3	<1 NEG NONE NONE NONE NORML NORML NEG 1 38 0 2
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 NONE NONE NORML NORML >0.2 2 0 0 9 1	<1 NEG NONE NONE NORML NORML NEG <1 25 0 2 0	<1 NEG NONE NONE NORML NORML NEG <1 21 0 3 0	<1 NEG NONE NONE NORML NORML NEG 1 38 0 2 <1
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 NONE NONE NONE NORML NORML >0.2 2 0 0 9 1 3131	<1 NEG NONE NONE NORML NORML NEG <1 25 0 2 0 47	<1 NEG NONE NONE NORML NORML NEG <1 21 0 3 0 47	<1 NEG NONE NONE NORML NORML NEG 1 38 0 2 <1 38
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>0.2 NONE NONE NONE NORML NORML >0.2 2 0 0 9 1 3131	<1 NEG NONE NONE NORML NORML NEG <1 25 0 2 0 47 2620	<1 NEG NONE NONE NORML NORML NEG <1 21 0 3 0 47 2588	<1 NEG NONE NONE NORML NORML NEG 1 38 0 2 <1 38 2384
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>0.2 NONE NONE NORML NORML >0.2 2 0 0 9 1 3131 1194 1281	<1 NEG NONE NONE NORML NORML NEG <1 25 0 2 0 47 2620 849	<1 NEG NONE NONE NONE NORML NORML NEG <1 21 0 3 0 47 2588 839	<1 NEG NONE NONE NONE NORML NORML NEG 1 38 0 2 <1 38 2384 927
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar scalar scalar scalar scalar scalar scalar sppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>0.2 NONE NONE NORML NORML >0.2 2 0 0 9 1 3131 1194 1281	<1 NEG NONE NONE NORML NORML NEG <1 25 0 2 0 47 2620 849 992 2817 63.9	<1 NEG NONE NONE NONE NORML NORML NEG <1 21 0 3 0 47 2588 839 959	<1 NEG NONE NONE NONE NORML NORML NEG 1 38 0 2 <1 38 2384 927 954 3087 63.5





CALA ISO 17025:2017 Accredited Laboratory

Laboratory

Sample No. Lab Number : 02631034 Unique Number : 5772187

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 720 - Lafleche - Landfill : GFL0113334

Test Package : MOB 1

Received : 23 Apr 2024 **Tested** : 23 Apr 2024 Diagnosed

: 23 Apr 2024 - Wes Davis

17125 Lafleche Road, Moose Creek, ON CA K0C 1W0 Contact: Charles Bergeron cbergeron@gflenv.com T: (613)538-4853 F:

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.