

OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



G.LOPES CONSTRUCTION INC./Off-Road L336

Component **Rear Differential**

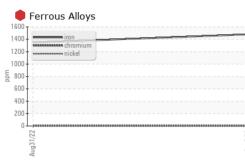
Fluid

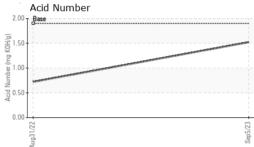
PETRO CANADA TRAXON 80W90 (--- GAL)

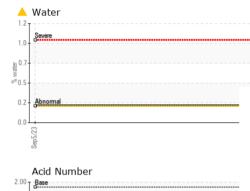
DIAGNOSIS	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Recommendation	Sample Number		Client Info		PCA0104548	PCA0078303	
We advise that you inspect for the source(s) of	Sample Date		Client Info		05 Sep 2023	31 Aug 2022	
wear. We recommend an early resample to monitor	Machine Age	hrs	Client Info		8761	7145	
this condition.	Oil Age	hrs	Client Info		8761	7145	
Wear	Oil Changed		Client Info		N/A	N/A	
Gear wear is indicated.	Sample Status				SEVERE	SEVERE	
Contamination There is a light concentration of water present in the	WEAR METAL	.S	method	limit/base	current	history1	history2
oil.	Iron	ppm	ASTM D5185m	>500	• 1479	1347	
Fluid Condition	Chromium	ppm	ASTM D5185m	>3	3	3	
The oil viscosity is lower than normal. Additive	Nickel	ppm	ASTM D5185m	>3	<1	3	
levels indicate the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.	Titanium	ppm	ASTM D5185m	>2	<1	<1	
	Silver	ppm	ASTM D5185m	>2	0	<1	
	Aluminum	ppm	ASTM D5185m	>30	9	12	
	Lead	ppm	ASTM D5185m	>13	<1	1	
	Copper	ppm	ASTM D5185m	>103	52	100	
	Tin	ppm	ASTM D5185m	>5	0	1	
	Vanadium	ppm	ASTM D5185m		0	<1	
	Cadmium	ppm	ASTM D5185m		<1	<1	
	ADDITIVES		method	limit/base	current	history1	history2
	Boron	ppm	ASTM D5185m	243	7	7	
	Barium	ppm	ASTM D5185m	1	2	1	
	Molybdenum						
	worybacham	ppm	ASTM D5185m		10	<1	
	Manganese	ppm ppm	ASTM D5185m ASTM D5185m		10 13	12	
	,			2		12 12	
	Manganese	ppm	ASTM D5185m		13	12	
	Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m	6	13 38	12 12	
	Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	6 987	13 38 2788	12 12 2061	
	Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	6 987 1	13 38 2788 982	12 12 2061 841	
	Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	6 987 1	13 38 2788 982 1146 6119	12 12 2061 841 1041	
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	6 987 1 21530 limit/base	13 38 2788 982 1146 6119	12 12 2061 841 1041 5455	
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	6 987 1 21530 limit/base	13 38 2788 982 1146 6119 current	12 12 2061 841 1041 5455 history1	 history2
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm JTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	6 987 1 21530 limit/base >100	13 38 2788 982 1146 6119 current 11	12 12 2061 841 1041 5455 history1 16	 history2
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm JTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	6 987 1 21530 limit/base >100 >20	13 38 2788 982 1146 6119 <u>current</u> 11 25	12 12 2061 841 1041 5455 history1 16 4	 history2
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm JTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	6 987 1 21530 limit/base >100 >20 >.2	13 38 2788 982 1146 6119 <u>Current</u> 11 25 2	12 12 2061 841 1041 5455 history1 16 4 <1	 history2
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm JTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	6 987 1 21530 limit/base >100 >20 >.2	13 38 2788 982 1146 6119 Current 11 25 2 ▲ 0.207 ▲ 2070	12 12 2061 841 1041 5455 history1 16 4 <1 	 history2

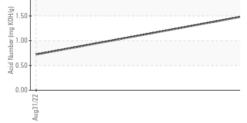


OIL ANALYSIS REPORT









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		VISUAL		method	limit/base	current	history1	history
		White Metal	scalar	*Visual	NONE	NONE	MODER	
		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
		Precipitate	scalar	*Visual	NONE	NONE	NONE	
		Silt	scalar	*Visual	NONE	NONE	NONE	
		Debris	scalar	*Visual	NONE	NONE	NONE	
		Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Sep 5/23 -	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Sep	Odor	scalar	*Visual	NORML	NORML	NORML	
		Emulsified Water	scalar	*Visual	>.2	0.2%	NEG	
		Free Water	scalar	*Visual		NEG	NEG	
		FLUID PROP	FRTIES	method	limit/base	current	history1	history
		Visc @ 40°C	cSt	ASTM D445		▲ 91.8	▲ 73.7	
		SAMPLE IMA	AGES	method	limit/base	current	history1	history
	Sep 5/23 -	Color				no image	no image	no image
	Sep							
		Bottom				no image	no image	no image
		Bottom				no image	nonnage	no image
		GRAPHS						
		Iron (ppm)	<u></u>		3	Lead (ppm)		
	E	Severe 500 - Abnormal				0		
	6	500 - Abnormal			² ط 1	O - Abnormal		
		04				22		
		4ug31/22			Sep5/23	Aug31/		
		⊲ Aluminum (ppm				⊲ Chromium (j	anm)	
		60 T Severe	·) 				эршу	
		E ⁴⁰ 20			Mdd	Severe		
						Abnormai		
		52						
		Aug31/22			Sep5/23	Aug31/22		
		₹ Copper (ppm)				⊲ Silicon (ppm))	
		200 Severe			20	⁰ Severe	,	
					E	Abnormal		
		E 100 - Abnormal			ā10	U + Q		
		E 100 - Abnormal			특 10			
						22 0		
					Sep5/23	22 0		
		Aug31/22	C			Aug31/22		
		Viscosity @ 40°0	C			Water		
		Viscosity @ 40°0	c		Sep5/23	Water		
		200 200 200 200 200 200 200 200	C		Sep5/23	Water		
		Viscosity @ 40°(C		1. 	Water		
		Viscosity @ 40°(C		Sep5/23	Water		
		200 200 200 200 200 200 200 200	C		1. 	Water		
	Laboratory	Viscosity @ 40° Viscosity @ 40° Viscosity @ 40° Viscosity @ 40° Viscosity @ 40° Viscosity @ 40°	- 501 Madis		EZUSSIANS 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	Water	G LOPES CO	
AB	Laboratory Sample No.	Viscosity @ 40° Viscosity @ 40° Viscosity @ 40° Viscosity @ 40° Viscosity @ 40° Viscosity @ 40°	- 501 Madia	1 : 07 \$	ry, NC 2751 Sep 2023	Water	565 V	VINTHROP
	Laboratory Sample No. Lab Number	Viscosity @ 40° Viscosity @ 40° Viscosity @ 40° Viscosity @ 40° Viscosity @ 40° Viscosity @ 40°	- 501 Madia Received Diagnose	d : 07 : ed : 09 :	ry, NC 2751 Sep 2023 Sep 2023	Water	565 V	VINTHROP FAUNTON, I
	Laboratory Sample No.	Viscosity @ 40° Viscosity @ 40° Visc	- 501 Madia Received Diagnost	t : 07 : ed : 09 : ician : Dor	ry, NC 2751 Sep 2023	Water	565 V	VINTHROP FAUNTON, I US 027

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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