**WEAR CONTAMINATION FLUID CONDITION** 

**NORMAL ABNORMAL ABNORMAL** 



## CATERPILLAR 320EL 6914 (S/N CAT0320EEWBK03069)

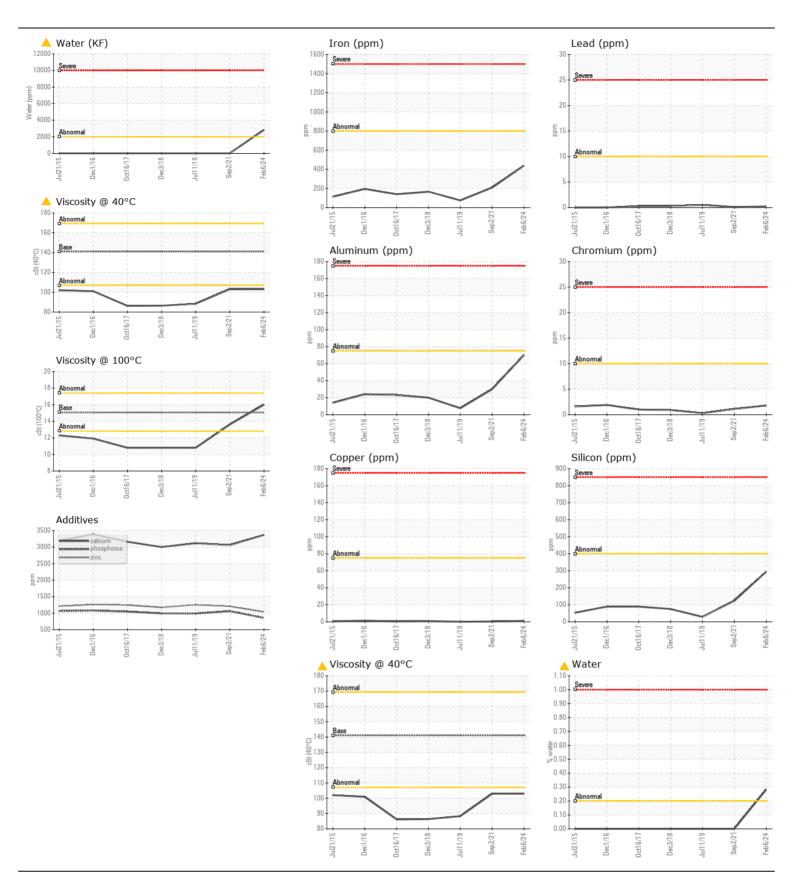
Right Final Drive	/00 /45 L TD						
PETRO CANADA TRAXON 80W	Test	) UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. The fluid was specified as PETRO CANADA TRAXON 80W90, however, a fluid match indicates that this fluid is SAE 5W40 Transmission/Drive Train Oil. Please confirm the oil type and grade on your next sample.	Sample Number	UCIVI	Client Info	LIIIIIUADII	PC0067886	PC0051474	
	Sample Number		Client Info		06 Feb 2024	02 Sep 2021	11 Jul 2019
	Machine Age	bro	Client Info		8184	6463	4974
	•	hrs	Client Info			500	500
	Oil Age Filter Age	hrs	Client Info		0	0	0
	Oil Changed	hrs	Client Info		Not Changd	Not Changd	Not Changd
	Filter Changed		Client Info		_	N/A	N/A
	Sample Status		Ciletti IIIIO		Not Changd ABNORMAL	ABNORMAL	NORMAL
					ADNUNIAL	ADINUNIVIAL	INUNIVIAL
WEAR  All component wear rates are normal.	Iron	ppm	ASTM D5185(m)	>800	439	209	74
	Chromium	ppm	ASTM D5185(m)	>10	2	1	<1
	Nickel	ppm	ASTM D5185(m)	>5	<1	<1	0
	Titanium	ppm	ASTM D5185(m)	>15	4	2	<1
	Silver	ppm	ASTM D5185(m)	>2	0	0	0
	Aluminum	ppm	ASTM D5185(m)	>75	70	<b>3</b> 0	8
	Lead	ppm	ASTM D5185(m)	>10	<1	<1	<1
	Copper	ppm	ASTM D5185(m)	>75	1	<1	0
	Tin	ppm	ASTM D5185(m)	>8	0	<1	0
	Vanadium	ppm	ASTM D5185(m)		0	<1	0
	White Metal	scalar	Visual*	NONE	NONE	NONE	VLITE
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>400	294	▲ 123	29
CONTAMINATION	Silicon	ppm	ASTM D5185(m) ASTM D5185(m)	>400	294 23	▲ 123 11	29
There is a moderate concentration of water present in the oil.	Potassium	ppm	ASTM D5185(m)	>20	23	▲ 123 11 	29
	Potassium Water	ppm %	ASTM D5185(m) ASTM D6304*	>20 >0.2	23 _ 0.282	11	4
	Potassium Water ppm Water	ppm % ppm	ASTM D5185(m) ASTM D6304* ASTM D6304*	>20 >0.2 >2000	23 ^ 0.282 ^ 2822	11  	
	Potassium Water	ppm % ppm scalar	ASTM D5185(m) ASTM D6304*	>20 >0.2 >2000 NONE	23 _ 0.282	11 	4
	Potassium Water ppm Water Silt	ppm % ppm scalar scalar	ASTM D5185(m) ASTM D6304* ASTM D6304* Visual*	>20 >0.2 >2000	23 ▲ 0.282 ▲ 2822 VLITE NONE	11   VLITE	4  NONE
	Potassium Water ppm Water Silt Debris Sand/Dirt	ppm % ppm scalar	ASTM D5185(m) ASTM D6304* ASTM D6304* Visual* Visual*	>20 >0.2 >2000 NONE NONE NONE	23	11 VLITE NONE	4 NONE VLITE
	Potassium Water ppm Water Silt Debris	ppm % ppm scalar scalar scalar	ASTM D5185(m) ASTM D6304* ASTM D6304* Visual* Visual* Visual*	>20 >0.2 >2000 NONE NONE	23 ▲ 0.282 ▲ 2822 VLITE NONE NONE	11 VLITE NONE NONE	4 NONE VLITE NONE
	Potassium Water ppm Water Silt Debris Sand/Dirt Appearance	ppm % ppm scalar scalar scalar scalar scalar	ASTM D5185(m) ASTM D6304* ASTM D6304* Visual* Visual* Visual* Visual*	>20 >0.2 >2000 NONE NONE NONE NORML	23  0.282  2822  VLITE  NONE  NONE  NORML	11 VLITE NONE NONE NORML	4 NONE VLITE NONE NORML
There is a moderate concentration of water present in the oil.	Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm % ppm scalar scalar scalar scalar scalar scalar	ASTM D5185(m) ASTM D6304* ASTM D6304* Visual* Visual* Visual* Visual* Visual* Visual* Visual*	>20 >0.2 >2000 NONE NONE NONE NORML	23  0.282  2822  VLITE  NONE  NONE  NORML  NORML  2%	11 VLITE NONE NONE NORML NORML NEG	4 NONE VLITE NONE NORML NORML NEG
	Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm % ppm scalar scalar scalar scalar scalar ppm	ASTM D5185(m) ASTM D6304* ASTM D6304* Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>20 >0.2 >2000 NONE NONE NORML NORML >0.2	23  0.282  2822  VLITE  NONE  NORML  NORML  17	11 VLITE NONE NONE NORML NORML NEG	4 NONE VLITE NONE NORML NORML NEG
There is a moderate concentration of water present in the oil.  FLUID CONDITION  Viscosity of sample indicates oil is within SAE 5W40 range, advise	Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water  Sodium Boron	ppm % ppm scalar scalar scalar scalar scalar ppm ppm	ASTM D5185(m) ASTM D6304* ASTM D6304* Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	>20 >0.2 >2000 NONE NONE NORML NORML >0.2	23 ▲ 0.282 ✓ 2822 VLITE NONE NORML NORML ▲ .2%	11 VLITE NONE NONE NORML NORML NEG 9 29	4 NONE VLITE NONE NORML NORML NEG 2 <1
There is a moderate concentration of water present in the oil.  FLUID CONDITION  Viscosity of sample indicates oil is within SAE 5W40 range, advise investigate. This plus the additive levels indicates that this is not the	Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water  Sodium Boron Barium	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185(m) ASTM D6304* ASTM D6304* Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 >2000 NONE NONE NORML NORML >0.2	23 ▲ 0.282 ✓ 2822 VLITE NONE NORML NORML ▲ .2%	11 VLITE NONE NONE NORML NORML NEG 9 29 <1	4 NONE VLITE NONE NORML NORML NEG 2 <1 0
There is a moderate concentration of water present in the oil.  FLUID CONDITION  Viscosity of sample indicates oil is within SAE 5W40 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable	Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water  Sodium Boron Barium Molybdenum	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm	ASTM D5185(m) ASTM D6304* ASTM D6304* Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 >2000 NONE NONE NORML NORML >0.2	23  0.282  2822  VLITE  NONE  NORML  NORML  17  3  1  <1	11 VLITE NONE NORML NORML NEG 9 29 <1 <1	4 NONE VLITE NONE NORML NORML NEG 2 <1 0 <1
There is a moderate concentration of water present in the oil.  FLUID CONDITION  Viscosity of sample indicates oil is within SAE 5W40 range, advise investigate. This plus the additive levels indicates that this is not the	Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water  Sodium Boron Barium Molybdenum Manganese	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D6304* Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 >2000 NONE NONE NORML NORML >0.2	23  0.282  2822  VLITE  NONE  NORML  NORML  17  3  1  <1  4	11 VLITE NONE NORML NORML NEG 9 29 <1 <1 2	4 NONE VLITE NONE NORML NORML NEG 2 <1 0 <1 <1
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There is a moderate concentration of water present in the oil.  FLUID CONDITION  Viscosity of sample indicates oil is within SAE 5W40 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable	Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185(m) ASTM D6304* ASTM D6304* Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>20 >0.2 >2000 NONE NONE NONE NORML >0.2  243 1  2 6 987	23	11 VLITE NONE NORML NORML NEG 9 29 <1 <1 2 24 3060 1060	4 NONE VLITE NONE NORML NORML NEG 2 <1 0 <1 -1 -1 4 3118 989
There is a moderate concentration of water present in the oil.  FLUID CONDITION  Viscosity of sample indicates oil is within SAE 5W40 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable	Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water  Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185(m) ASTM D6304* ASTM D6304* Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>20 >0.2 >2000 NONE NONE NONE NORML >0.2  243 1  2 6 987 1	23	11 VLITE NONE NORML NORML NEG  9 29 <1 <1 2 24 3060 1060 1208	4 NONE VLITE NONE NORML NORML NEG 2 <1 0 <1 -1 14 3118 989 1253
There is a moderate concentration of water present in the oil.  FLUID CONDITION  Viscosity of sample indicates oil is within SAE 5W40 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable	Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water  Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185(m) ASTM D6304*  ASTM D6304*  Visual*  Visual*  Visual*  Visual*  Visual*  Visual*  ASTM D5185(m)  ASTM D5185(m)	>20 >0.2 >2000 NONE NONE NONE NORML >0.2  243 1  2 6 987 1 21530	23	11 VLITE NONE NORML NORML NEG  9 29 <1 <1 2 24 3060 1060 1208 4160	4 NONE VLITE NONE NORML NORML NEG  2 <1 0 <1 14 3118 989 1253 3725
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Viscosity Index (VI) Scale ASTM D2270\* 108

131

**166** 

106





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No. **Lab Number** 

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PC0067886

: 02616774 Unique Number : 5733884 Test Package: MOB 1 (Additional Tests: KF, KV100, VI)

Received **Tested** Diagnosed

: 20 Feb 2024 : 21 Feb 2024

: 21 Feb 2024 - Kevin Marson To discuss this sample report, contact Customer Service at 1-800-268-2131.

2 BERTRAM INDUSTRIAL PKWY. MIDHURST, ON CA L9X 1L2 Contact: Julie Holden parts@tesbarrie.com T: (705)792-7620

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.

TRUCK AND EQUIPMENT SOLUTION

F: (705)725-5425