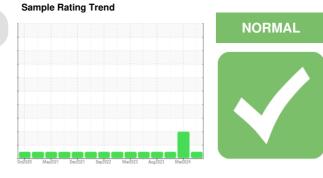


OIL ANALYSIS REPORT





Area KEMP QUARRIES / PRYOR STONE [70706] **OHT110** Component Rear Left Final Drive Fluid

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Pm1 performed. All oil samples taken. Engine oil, engine oil filters, fuel filters, and air filters changed.)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

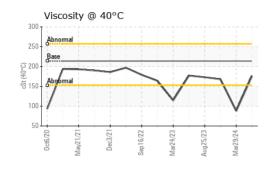
Fluid Condition

The condition of the oil is acceptable for the time in service.

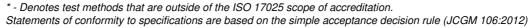
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0108871	PCA0086624	PCA0086251
Sample Date		Client Info		19 Jun 2024	29 Mar 2024	26 Oct 2023
Machine Age	hrs	Client Info		29710	29240	28435
Oil Age	hrs	Client Info		470	2145	1340
Oil Changed		Client Info		Oil Added	Changed	Oil Added
Sample Status				NORMAL	ATTENTION	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>800	13	24	38
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m	>15	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>75	1	3	<1
Lead	ppm	ASTM D5185m	>10	<1	<1	0
Copper	ppm	ASTM D5185m	>75	2	2	<1
Tin	ppm	ASTM D5185m	>8	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	0	0	0
Barium	nnm	ASTM D5185m	0	0	1	0
Danum	ppm	ASTIVI DOTODIII	0	U	I	0
Molybdenum	ppm	ASTM D5185m	0	0 <1	<1	0
			0	-		
Molybdenum	ppm	ASTM D5185m	0	<1	<1	0
Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m	0	<1 <1	<1 <1	0 0
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 9	<1 <1 16	<1 <1 7	0 0 15
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 9 3114	<1 <1 16 3454	<1 <1 7 1290	0 0 15 3147
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 9 3114 1099	<1 <1 16 3454 982	<1 <1 7 1290 589	0 0 15 3147 984
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 9 3114 1099 1245	<1 <1 16 3454 982 1126	<1 <1 7 1290 589 753 2102 history1	0 0 15 3147 984 1212
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 9 3114 1099 1245 7086	<1 <1 16 3454 982 1126 4820	<1 <1 7 1290 589 753 2102	0 0 15 3147 984 1212 3917
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	0 0 9 3114 1099 1245 7086	<1 <1 16 3454 982 1126 4820 current	<1 <1 7 1290 589 753 2102 history1	0 0 15 3147 984 1212 3917 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 0 9 3114 1099 1245 7086 <i>limit/base</i> >400	<1 <1 16 3454 982 1126 4820 current 14	<1 <1 7 1290 589 753 2102 history1 8	0 0 15 3147 984 1212 3917 history2 17
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 0 9 3114 1099 1245 7086 <i>limit/base</i> >400	<1 <1 16 3454 982 1126 4820 current 14 2	<1 <1 7 1290 589 753 2102 history1 8 1	0 0 15 3147 984 1212 3917 history2 17 3
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 9 3114 1099 1245 7086 limit/base >400	<1 <1 16 3454 982 1126 4820 current 14 2 <1	<1 <1 7 1290 589 753 2102 history1 8 1 1	0 0 15 3147 984 1212 3917 history2 17 3 0
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 9 3114 1099 1245 7086 imit/base >400 >20	<1 <1 <1 16 3454 982 1126 4820 current 14 2 <1 current current	<1 <1 7 1290 589 753 2102 history1 8 1 1 1 history1	0 0 15 3147 984 1212 3917 history2 17 3 0 bistory2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm scalar	ASTM D5185m ASTM D5185m	0 0 9 3114 1099 1245 7086 limit/base >400 >20 limit/base NONE	<1 <1 16 3454 982 1126 4820 current 14 2 <1 2 <1 current NONE	<1 <1 7 1290 589 753 2102 history1 8 1 1 1 history1 NONE	0 0 15 3147 984 1212 3917 history2 17 3 0 history2 NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m XW Sual	0 0 9 3114 1099 1245 7086 imit/base >400 \$20 imit/base NONE NONE	<1 <1 16 3454 982 1126 4820 current 14 2 <1 current NONE NONE NONE	<1 <1 7 1290 589 753 2102 history1 8 1 1 1 history1 NONE NONE	0 0 15 3147 984 1212 3917 history2 17 3 0 history2 NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	0 0 9 3114 1099 1245 7086 imit/base >400 \$20 imit/base NONE NONE NONE NONE	<1 <1 16 3454 982 1126 4820 current 14 2 <1 2 <1 current NONE NONE NONE	<1 <1 7 1290 589 753 2102 history1 8 1 1 1 <u>history1</u> NONE NONE NONE NONE	0 0 15 3147 984 1212 3917 history2 17 3 0 history2 NONE NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	0 0 9 3114 1099 1245 7086 imit/base >400 >20 imit/base NONE NONE NONE NONE	<1 <1 16 3454 982 1126 4820 current 14 2 <1 current NONE NONE NONE NONE	<1 <1 7 1290 589 753 2102 history1 8 1 1 1 <u>history1</u> NONE NONE NONE NONE NONE	0 0 15 3147 984 1212 3917 history2 17 3 0 history2 NONE NONE NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual	0 0 9 3114 1099 1245 7086 imit/base >400 imit/base >20 imit/base NONE NONE NONE NONE NONE NONE	<1 <1 16 3454 982 1126 4820 current 14 2 <1 current NONE NONE NONE NONE NONE NONE	<1 <1 7 1290 589 753 2102 history1 8 1 1 1 NONE NONE NONE NONE NONE NONE NON	0 0 15 3147 984 1212 3917 history2 17 3 0 history2 NONE NONE NONE NONE NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Visual *Visual *Visual *Visual *Visual *Visual *Visual	0 0 9 3114 1099 1245 7086 imit/base >400 >20 imit/base NONE NONE NONE NONE NONE NONE NONE NON	<1 <1 16 3454 982 1126 4820 current 14 2 <1 current NONE NONE NONE NONE NONE NONE NONE NON	<1 <1 7 1290 589 753 2102 history1 8 1 1 1 NONE NONE NONE NONE NONE NONE NON	0 0 15 3147 984 1212 3917 history2 17 3 0 history2 NONE NONE NONE NONE NONE NONE NONE NON
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Silicon Sodium Potassium VISUAL VISUAL Vhite Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	0 0 9 3114 1099 1245 7086 imit/base >400 imit/base >20 imit/base NONE NONE NONE NONE NONE NONE NONE NON	<1 <1 16 3454 982 1126 4820 current 14 2 <1 current NONE NONE NONE NONE NONE NONE NONE NON	<1 <1 7 1290 589 753 2102 history1 8 1 1 1 NONE NONE NONE NONE NONE NONE NON	0 0 15 3147 984 1212 3917 history2 17 3 0 history2 NONE NONE NONE NONE NONE NONE NONE NON
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	0 0 3114 1099 1245 7086 imit/base >400 >20 imit/base NONE NONE NONE NONE NONE NONE NONE NON	<1 <1 <1 <1 <1 <1 <16 3454 982 1126 4820 current 14 2 <1 current NONE NORML NORML	<1 <1 7 1290 589 753 2102 history1 8 1 1 1 NONE NORML	0 0 15 3147 984 1212 3917 history2 17 3 0 history2 NONE NONE NONE NONE NONE NONE NONE NON



OIL ANALYSIS REPORT



e @ 40°C AMPLE IMAC	cSt GES	ASTM D4	45 213.9 d limit/b	ase	176 current		88.0 histor	ry1	168 his	story2
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Bottom					no image		no imag	ge	no ii	mage
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normal				읍 15 10-1	Abnormal					
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uminum (ppm)					Chromium	(ppm))			
vere					Severe	-				
				20-		-				
normal					Abnormal					
				5 -						
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May2' Dec	Sep16 Mar24	Aug25	Mar29	0	Uctte May2	Dec	Sep 16	Mar24	Aug25	Mar29/24
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vere				. I.	Severe					
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normal				년 400 - 1	Abnormal					_
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May21, Dec3,	Sep16, Mar24/	Aug25/	Mar29,	, are o	Uctb, May21,	Dec3	Sep 16/	Mar24/	Aug25/	Mar29/24
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			\mathbf{V}	1500 - 1000 -	1334 ⁰⁰					V
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May21/	Sep 16/. Mar24/7	Aug25/	Mar29/	0000	Uctb/ May21/	Dec3/	Sep16/.	Mar24/.	Aug25/.	Mar29/24
)108871 0 <mark>642</mark> 4135	Recei Teste	ved : d :	: 08 Jul 202 : 10 Jul 202	24 24		p Qua	irries -		Stone 050 E Pr US	
	0108871 0642 4135 1 <i>t Customer Serv</i> <i>side of the ISO</i> 3	on (ppm) vere normal (12)(2)(2)(2)(2)(2)(2)(2)(2)(2)(2)(2)(2)(2	on (ppm) vere inormal (12/12/eW uminum (ppm) vere inormal (12/12/eW uminum (ppm) vere (12/12/eW uminum (ppm) vere (12/12/eW (12/1	bin (ppm) were memal (ppm) were (proved)	pon (ppm) vere normal difference normal difference poper (ppm) vere cossity @ 40°C normal difference cossity @ 40°C cossity @ 40°C	check USA - 501 Madison Ave., Cary, NC 27513 Check USA - 501 Madiso	check USA - 501 Madison Ave., Cary, NC 27513 Check USA - 501 Madiso	chi (ppm)	check USA - 501 Madison Ave., Cary, NC 27513 Check USA - 501 Madiso	check USA - 501 Madison Ave., Cary, NC 27513 Check USA - 501 Madiso



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