

FLUID CONDIT

WEAR ABNORMAL CONTAMINATION ABNORMAL FLUID CONDITION ATTENTION

Area [69192] Machine Id MG006 Component Right Drive Chain Case Fluid PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: PM-4 changed fluid new purchase)

WEAR

Gear wear is indicated.

CONTAMINATION

There is a moderate concentration of water present in the oil.

FLUID CONDITION

The oil viscosity is lower than normal. Confirm oil type.

TestUOMMethodLimit/hoCurrentHistory1History2Sample NumberClient InfoVPA0006520Sample DateClient InfoV13191Machine AgehrsClient InfoInf13191Filter AgehrsClient InfoV13191Filter AgeinsClient InfoVN/AFilter AgeClient InfoVN/AFilter ChangedClient InfoN/ASample StatusClient InfoN/ASample StatusNASTM D515m>-200ASTMIronppmASTM D515m>10<1NickelppmASTM D515m>10<1NickelppmASTM D515m<1AluminumppmASTM D515m0NanduiumppmASTM D515m0Yellow Metalscalar*VisualNONEMODERSiliconppmASTM D515m206Yellow Metalscalar*VisualNONEMODERSiliconppmASTM D515m206SiliconppmASTM D515m>206<	-	↓∟)						
Sample DateClient Info01 Feb 2024Machine AgehrsClient Info13191Gil AgehrsClient Info0Filter AgehrsClient InfoChangedGil ChangedClient InfoN/AFilter ChangedClient InfoN/AFilter ChangedClient InfoN/ASample StatusClient InfoN/AIronppmASTM D5185m>10<1NickelppmASTM D5185m>10<1NickelppmASTM D5185m<10<1AluminumppmASTM D5185m<0<1AgandiumppmASTM D5185m<14VanadiumppmASTM D5185m<14Yellow Metalscalar'VisualNONEMODERSiliconppmASTM D5185m206Yellow Metalscalar'VisualNONEMODERSiliconppmASTM D5185m206SiliconppmASTM D5185mASiliconppmASTM D5185m <th></th> <th>Test</th> <th>UOM</th> <th>Method</th> <th>Limit/Abn</th> <th>Current</th> <th>History1</th> <th>History2</th>		Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine AgehrsClient Info13191Oil AgehrsClient Info0Filter AgehrsClient InfoChangedOil ChangedClient InfoN/AFilter ChangedClient InfoN/AFilter ChangedClient InfoN/ASample StatusASTM DS185m>200ASTMIronppmASTM DS185m>10<1NickelppmASTM DS185m>10<1SilverppmASTM DS185m6AuminumppmASTM DS185m4AuminumppmASTM DS185m4VanadiumppmASTM DS185m4YandoiumppmASTM DS185m4YandoiumppmASTM DS185m6YandoiumppmASTM DS185m4YandoiumppmASTM DS185m4YandoiumppmASTM DS185m4YandoiumppmASTM DS185m6YandoiumppmASTM DS185mYandoiumppmAST		Sample Number		Client Info		PCA0086520		
Oil AgehrsClient Info13191Filter AgehrsClient Info0Oil ChangedClient InfoN/AFilter ChangedClient InfoN/ASample StatusASTM D5185n>200A 303IronppmASTM D5185n>10<1NickelppmASTM D5185n>10<1NickelppmASTM D5185n10<1SilverppmASTM D5185n0AuminumppmASTM D5185n4AgeppmASTM D5185n<14VanadiumppmASTM D5185n<14VanadiumppmASTM D5185n<14VanadiumppmASTM D5185n<14VanadiumppmASTM D5185n206VanadiumppmASTM D5185n206VanadiumppmASTM D5185n206VanadiumppmASTM D5185n206SiliconppmASTM D5185n206SiliconppmASTM D5185n206Potassiumpp		Sample Date		Client Info		01 Feb 2024		
Oil AgehrsClient Info13191Filter AgehrsClient Info0Oil ChangedClient InfoN/AFilter ChangedClient InfoN/ASample StatusASTM D5185n>200A 303IronppmASTM D5185n>10<1NickelppmASTM D5185n>10<1NickelppmASTM D5185n10<1SilverppmASTM D5185n0AuminumppmASTM D5185n4AgeppmASTM D5185n<14VanadiumppmASTM D5185n<14VanadiumppmASTM D5185n<14VanadiumppmASTM D5185n<14VanadiumppmASTM D5185n206VanadiumppmASTM D5185n206VanadiumppmASTM D5185n206VanadiumppmASTM D5185n206SiliconppmASTM D5185n206SiliconppmASTM D5185n206Potassiumpp		Machine Age	hrs	Client Info		13191		
Filter AgehrsClient Info0Oil ChangedClient InfoN/AFilter ChangedClient InfoN/ASample StatusASTM D5185m>200A 303IronppmASTM D5185m>10<1NickelppmASTM D5185m>10<1NickelppmASTM D5185m>10<1NickelppmASTM D5185m10<1NickelppmASTM D5185m0AluminumppmASTM D5185m4AuminumppmASTM D5185m4VanadiumppmASTM D5185m4VanadiumppmASTM D5185m0ValadiumppmASTM D5185mAODEValadiumppmASTM D5185m206ValadiumppmASTM D5185m20AO16ValadiumppmASTM D5185m20AO16ValadiumppmASTM D5185m20AO16SiliconppmASTM D5185m20AO16SoliumppmASTM D5185mAODEASTM D5			hrs	Client Info		13191		
Oll ChangedClient InfoChangedFilter ChangedClient InfoN/ASample StatusASTM D5185m>200ABNORIMALIronppmASTM D5185m>10NickelppmASTM D5185m>10NickelppmASTM D5185m>10NickelppmASTM D5185mNickelppmASTM D5185mAluminumppmASTM D5185mAluminumppmASTM D5185mAluminumppmASTM D5185mVanadiumppmASTM D5185mYellow Metalscalar'VisualNONEMODERYellow Metalscalar'VisualNONESiliconppmASTM D5185m206PotassiumppmASTM D5185m206Silitscalar'VisualNONEMODERSodiumppmASTM D5185mASodiumppmASTM D5185mANONESiliconppmASTM D5185mNONESiliconppmASTM D5185mNONESodiumppmASTM D5185mNONESodium		-	hrs	Client Info		0		
Filter ChangedClient InfoN/ASample StatusASTM D5185m>200A 303IronppmASTM D5185m>200-1ChromiumppmASTM D5185m>10<1NickelppmASTM D5185m>10<1SilverppmASTM D5185m<1AluminumppmASTM D5185m0AluminumppmASTM D5185m0AluminumppmASTM D5185m0YanadiumppmASTM D5185m0VanadiumppmASTM D5185m0Yellow Metalscalar*VisualNONEMODERYellow Metalscalar*VisualNONE440SiliconppmASTM D5185m>206PotassiumppmASTM D5185m>206Siliconscalar*VisualNONEMODERSoliconscalar*VisualNONEMODERSoliconscalar*VisualNONEInoreSoliconscalar*VisualNOREInoreSolium<		Oil Changed		Client Info		Changed		
Sample Status ABNORMAL Iron ppm ASTM D5185n >200 A 303 Chromium ppm ASTM D5185n >10 <1 Nickel ppm ASTM D5185n >10 <1 Silver ppm ASTM D5185n <0 Aluminum ppm ASTM D5185n <0 Aluminum ppm ASTM D5185n <4 Copper ppm ASTM D5185n <4 Vanadium ppm ASTM D5185n <0 Vanadum ppm ASTM D5185n >20 6				Client Info		-		
Iron ppm ASTM D5185m >200 ▲ 303 Chromium ppm ASTM D5185m >10 <1 Nickel ppm ASTM D5185m >10 <1 Titanium ppm ASTM D5185m >0 Aluminum ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Lead ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 Yellow Metal scalar *Visual NONE MODER Yellow Metal scalar *Visual NONE 49 Silicon ppm ASTM D6304 >-20 A 160 Po		-				ABNORMAL		
Chromium ppm ASTM D5185m >10 <1	-							
Nickel ppm ASTM D5185m >10 <1		Iron	ppm	ASTM D5185m	>200	A 303		
Titanium ppm ASTM D5185m <1		Chromium	ppm	ASTM D5185m	>10	<1		
Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 4 Lead ppm ASTM D5185m 0 Copper ppm ASTM D5185m 4 Tin ppm ASTM D5185m 4 Vanadium ppm ASTM D5185m 6 1 Vanadium ppm ASTM D5185m 6 1 Vanadium ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 49 Yellow Metal scalar *Visual NONE AGT Silicon ppm ASTM D5185m 20 6 Water % ASTM D5185m 20 4160 Silit scalar *Visual NONE MODER Sodiu/Dirit		Nickel	ppm	ASTM D5185m	>10	<1		
Aluminum ppm ASTM D5185m 4 Lead ppm ASTM D5185m 0 Copper ppm ASTM D5185m 4 Tin ppm ASTM D5185m <1 Vanadium ppm ASTM D5185m <1 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE MODER Yellow Metal scalar *Visual NONE 49 Silicon ppm ASTM D5185m >20 6 Water % ASTM D5185m >20 6 Water % ASTM D5185m >20 4160 Silt scalar *Visual NONE MODER Speny scalar *Visual NONE NORML Appearance scalar *Visual NORML NORML<		Titanium	ppm	ASTM D5185m		<1		
LeadppmASTM D5185m0CopperppmASTM D5185m4TinppmASTM D5185m<1VanadiumppmASTM D5185m0White Metalscalar*VisualNONEMODERYellow Metalscalar*VisualNONEMODESiliconppmASTM D5185m206PotassiumppmASTM D5185m>206Water%ASTM D5185m>206ppm WaterppmASTM D5185m>204 160Silitscalar*VisualNONEMODERDebrisscalar*VisualNONENONEAppearancescalar*VisualNORMNORMOdorscalar*VisualNORMNORMLSodiumppmASTM D5185m269BoronppmASTM D5185m00MolybdenumppmASTM D5185m06MagnesiumppmASTM D5185m06MolybdenumppmASTM D5185m1142566MagnesiumppmASTM D5185m1142566		Silver	ppm	ASTM D5185m		0		
Copper ppm ASTM D5185m 4 Tin ppm ASTM D5185m <1 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE MODER Yellow Metal scalar *Visual NONE MODE Silicon ppm ASTM D5185m 20 6 Potassium ppm ASTM D5185m >20 6 Water % ASTM D5304 >0.2 4.0.416 Silit scalar *Visual NONE MODER Debris scalar *Visual NONE MONE Appearance scalar *Visual NORM NORML Sodium ppm ASTM D5185m 2 69 Boron ppm ASTM D5185m		Aluminum	ppm	ASTM D5185m		4		
TinppmASTM D5185m<1		Lead	ppm	ASTM D5185m		0		
Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE MODER Yellow Metal scalar *Visual NONE NONE Silicon ppm ASTM D5185m 49 Potassium ppm ASTM D5185m >20 6 Water % ASTM D6304 >0.2 A 0.416 ppm Water ppm ASTM D6304 >0.2 A 0.416 Silt scalar *Visual NONE MODER Soldy scalar *Visual NONE MONE Appearance scalar *Visual NORM NORML Gody scalar *Visual NORM NORML Appearance scalar *Visual NORM NORM		Copper	ppm	ASTM D5185m		4		
White Metalscalar*VisualNONEMODERYellow Metalscalar*VisualNONENONESiliconppmASTM D5185m49PotassiumppmASTM D5185m>206Water%ASTM D6304>0.2 4 0.416ppm WaterppmASTM D6304>2000 4 4160Siltscalar*VisualNONEMODERDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNORMNORMLAppearancescalar*VisualNORMLNORMLGdorscalar*VisualNORMLNORMLSodiumppmASTM D5185m269BoronppmASTM D5185m00MaganeseppmASTM D5185m06MagnesiumppmASTM D5185m02PhosphorusppmASTM D5185m11171PhosphorusppmASTM D5185m12451374PhosphorusppmASTM D5185m12451374PhosphorusppmASTM D5185m7266 <tr <tr="">PhosphorusppmASTM D5</tr>		Tin	ppm	ASTM D5185m		<1		
Yellow Metalscalar*VisualNONENONESiliconppmASTM D5185m49PotassiumppmASTM D5185m>206Water%ASTM D6304>0.2▲ 0.416ppm WaterppmASTM D6304>2000▲ 4160Siltscalar*VisualNONEMODERDebrisscalar*VisualNONENONEAppearancescalar*VisualNORMNORMLOdorscalar*VisualNORMNORMLSodiumppmASTM D5185m269BoronppmASTM D5185m06MolybdenumppmASTM D5185m06ManganeseppmASTM D5185m02MagnesiumppmASTM D5185m31142566PhosphorusppmASTM D5185m12451374ZincppmASTM D5185m12451374		Vanadium	ppm	ASTM D5185m		0		
SiliconppmASTM D5185m49PotassiumppmASTM D5185m>206Water%ASTM D6304>.0.2▲ 0.416ppm WaterppmASTM D6304>.000▲ 4160Siltscalar*VisualNONEMODERDebrisscalar*VisualNONEMONESand/Dirtscalar*VisualNONEMONEAppearancescalar*VisualNORMMORMLOdorscalar*VisualNORMMORMLSodiumppmASTM D5185m20.2%BoronppmASTM D5185m269MolybdenumppmASTM D5185m00ManganeseppmASTM D5185m02MagnesiumppmASTM D5185m337PhosphorusppmASTM D5185m1142566ZincppmASTM D5185m12451374ZincppmASTM D5185m12451374		White Metal	scalar	*Visual	NONE	MODER		
Potassium ppm ASTM D5185m >20 6 Water % ASTM D6304 >0.2 ▲ 0.416 ppm Water ppm ASTM D6304 >2000 ▲ 4160 Silt scalar *Visual NONE MODER Debris scalar *Visual NONE MONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML NORML Gor scalar *Visual NORML NORML Appearance scalar *Visual NORML NORML Gor scalar *Visual NORML NORML Boron ppm ASTM D5185m 2 69 Barium <t< th=""><th>Yellow Metal</th><th>scalar</th><th>*Visual</th><th>NONE</th><th>NONE</th><th></th><th></th></t<>	Yellow Metal	scalar	*Visual	NONE	NONE			
Potassium ppm ASTM D5185m >20 6 Water % ASTM D6304 >0.2 ▲ 0.416 ppm Water ppm ASTM D6304 >2000 ▲ 4160 Silt scalar *Visual NONE MODER Debris scalar *Visual NONE MONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML NORML Gor scalar *Visual NORML NORML Appearance scalar *Visual NORML NORML Gor scalar *Visual NORML NORML Boron ppm ASTM D5185m 2 69 Barium <t< th=""><th></th><th colspan="4">Silicon nom ASTM D5195m</th><th>10</th><th></th><th></th></t<>		Silicon nom ASTM D5195m				10		
Water%ASTM D6304>0.2 \checkmark 0.416ppm WaterppmASTM D6304>2000 \checkmark 4160Siltscalar*VisualNONEMODERDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMNORMLOdorscalar*VisualNORMLInoreOdorscalar*VisualNORMLInoreSodiumppmASTM D5185m269BoronppmASTM D5185m06MalganeseppmASTM D5185m06MagnesiumppmASTM D5185m02PhosphorusppmASTM D5185m10991171ZincppmASTM D5185m12451374SulfurppmASTM D5185m70867722					>20	-		
ppm WaterppmASTM D6304>2000▲ 4160Siltscalar*VisualNONEMODERDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLSodiumppmASTM D5185m269BoronppmASTM D5185m06MalganeseppmASTM D5185m06MagnesiumppmASTM D5185m31142566PhosphorusppmASTM D5185m10991171ZincppmASTM D5185m12451374SulfurppmASTM D5185m70867722						-		
NoneModerImage: Secalar indication indicatination indi								
Debrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMNORMLOdorscalar*VisualNORMLNORMLDdorscalar*VisualNORMLInoremEmulsified Waterscalar*Visual>0.20.2%SodiumppmASTM D5185m2699BoronppmASTM D5185m2699BariumppmASTM D5185m06MolybdenumppmASTM D5185m06MagnesiumppmASTM D5185m02MagnesiumppmASTM D5185m31142566PhosphorusppmASTM D5185m10991171ZincppmASTM D5185m12451374SulfurppmASTM D5185m70867722								
Sand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.20.2%SodiumppmASTM D5185m3BoronppmASTM D5185m2699BariumppmASTM D5185m06MalganeseppmASTM D5185m06MagnesiumppmASTM D5185m311425666PhosphorusppmASTM D5185m10991171ZincppmASTM D5185m12451374SulfurppmASTM D5185m70867722								
Appearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.20.2%SodiumppmASTM D5185m3BoronppmASTM D5185m2699BariumppmASTM D5185m00MolybdenumppmASTM D5185m06MagnesiumppmASTM D5185m02MagnesiumppmASTM D5185m037PhosphorusppmASTM D5185m10991171ZincppmASTM D5185m12451374SulfurppmASTM D5185m70867722						-		
NormScalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.20.2%SodiumppmASTM D5185m3BoronppmASTM D5185m2699BariumppmASTM D5185m00MolybdenumppmASTM D5185m066ManganeseppmASTM D5185m02MagnesiumppmASTM D5185m02PhosphorusppmASTM D5185m31142566PhosphorusppmASTM D5185m10991171ZincppmASTM D5185m12451374SulfurppmASTM D5185m70867722						-		
Emulsified Water scalar *Visual >0.2 0.2% Sodium ppm ASTM D5185m 3 Boron ppm ASTM D5185m 2 69 Barium ppm ASTM D5185m 0 6 Molybdenum ppm ASTM D5185m 0 6 Manganese ppm ASTM D5185m 0 6 Magnesium ppm ASTM D5185m 0 2 Phosphorus ppm ASTM D5185m 3114 25666 Zinc ppm ASTM D5185m 1099 1171 Zinc ppm ASTM D5185m 1245 1374 Sulfur ppm ASTM D5185m 7086 7722						-		
Sodium ppm ASTM D5185m 3 Boron ppm ASTM D5185m 2 69 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 6 Maganese ppm ASTM D5185m 0 6 Magnesium ppm ASTM D5185m 0 2 Calcium ppm ASTM D5185m 9 37 Phosphorus ppm ASTM D5185m 1099 1171 Zinc ppm ASTM D5185m 1245 1374 Sulfur ppm ASTM D5185m 7086 7722						-		
Boron ppm ASTM D5185m 2 69 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 6 Molybdenum ppm ASTM D5185m 0 6 Manganese ppm ASTM D5185m 0 2 Magnesium ppm ASTM D5185m 9 37 Calcium ppm ASTM D5185m 3114 2566 Phosphorus ppm ASTM D5185m 1099 1171 Zinc ppm ASTM D5185m 1245 1374 Sulfur ppm ASTM D5185m 7086 7722	-		304141	13001	20.2	0.2 /0		
Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 6 Manganese ppm ASTM D5185m 0 2 Magnesium ppm ASTM D5185m 9 37 Calcium ppm ASTM D5185m 3114 25666 Phosphorus ppm ASTM D5185m 1099 1171 Zinc ppm ASTM D5185m 1245 1374 Sulfur ppm ASTM D5185m 7086 7722		Sodium	ppm	ASTM D5185m		3		
Molybdenum ppm ASTM D5185m 0 6 Manganese ppm ASTM D5185m 0 2 Magnesium ppm ASTM D5185m 0 2 Magnesium ppm ASTM D5185m 9 37 Calcium ppm ASTM D5185m 3114 25666 Phosphorus ppm ASTM D5185m 1099 1171 Zinc ppm ASTM D5185m 1245 1374 Sulfur ppm ASTM D5185m 7086 7722		Boron	ppm	ASTM D5185m	2	69		
Manganese ppm ASTM D5185m 0 2 Magnesium ppm ASTM D5185m 9 37 Calcium ppm ASTM D5185m 3114 2566 Phosphorus ppm ASTM D5185m 1099 1171 Zinc ppm ASTM D5185m 1245 1374 Sulfur ppm ASTM D5185m 7086 7722		Barium	ppm	ASTM D5185m	0	0		
Magnesium ppm ASTM D5185m 9 37 Calcium ppm ASTM D5185m 3114 2566 Phosphorus ppm ASTM D5185m 1099 1171 Zinc ppm ASTM D5185m 1245 1374 Sulfur ppm ASTM D5185m 7086 7722		Molybdenum	ppm	ASTM D5185m	0	6		
Calcium ppm ASTM D5185m 3114 2566 Phosphorus ppm ASTM D5185m 1099 1171 Zinc ppm ASTM D5185m 1245 1374 Sulfur ppm ASTM D5185m 7086 7722		Manganese	ppm	ASTM D5185m	0	2		
Phosphorus ppm ASTM D5185m 1099 1171 Zinc ppm ASTM D5185m 1245 1374 Sulfur ppm ASTM D5185m 7086 7722		Magnesium	ppm	ASTM D5185m	9	37		
Zinc ppm ASTM D5185m 1245 1374 Sulfur ppm ASTM D5185m 7086 7722		Calcium	ppm	ASTM D5185m	3114	2566		
Sulfur ppm ASTM D5185m 7086 7722		Phosphorus	ppm	ASTM D5185m	1099	1171		
		Zinc	ppm	ASTM D5185m	1245	1374		
Visc @ 40°C cSt ASTM D445 213.9 🔺 57.1 /		Sulfur	ppm	ASTM D5185m	7086	7722		
		Visc @ 40°C	cSt	ASTM D445	213.9	5 7.1		



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Kemp Quarries - Pryor Stone - Pryor Sample No. : PCA0086520 Received 1050 E 520 Rd : 13 Feb 2024 Lab Number : 06088384 Tested : 15 Feb 2024 Pryor, OK Unique Number : 10875829 : 15 Feb 2024 - Sean Felton US 74361 Diagnosed Test Package : MOB 1 (Additional Tests: KF) Contact: Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. pryor@pryorstone.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Т: F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)