

## Machine Id 721 Component Diesel Engine Fluid PETRO CANADA DURON SHP 15W40 (--- QTS) RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. Please specify the component make and model with your next sample.

NA.	Λ	
VV	А	п

All component wear rates are normal.

## CONTAMINATION

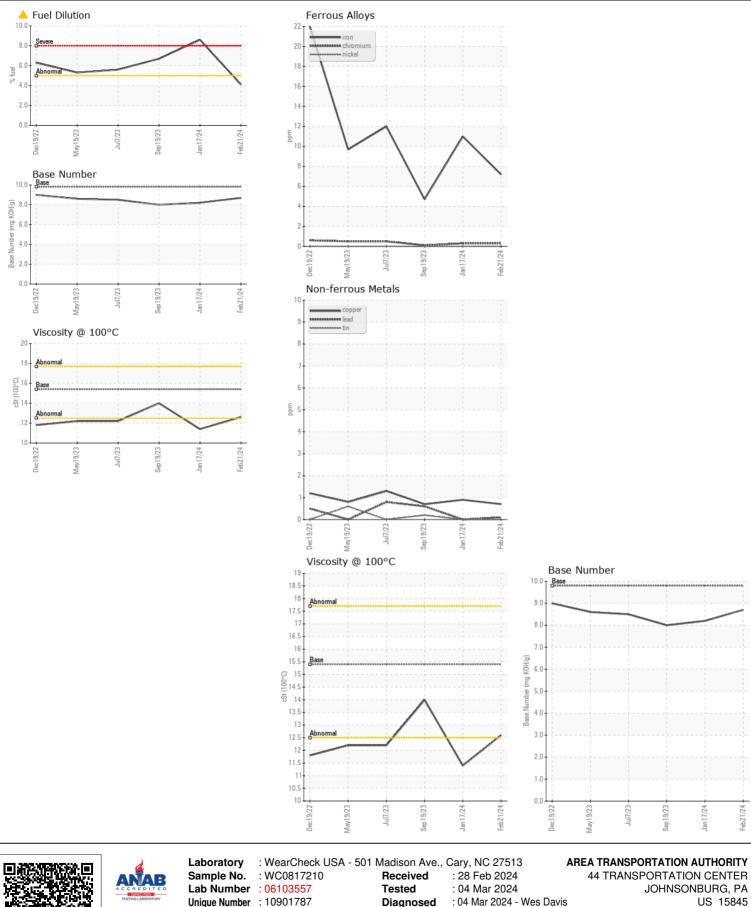
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Light fuel dilution occurring. No other contaminants were detected in the oil.

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sample Date         Client Info         21 Feb 2024         17 Jan 2024         19 Sep 2025           Machine Age         hrs         Client Info         20920         20795         20544           Oil Age         hrs         Client Info         20920         0         0           Filter Age         hrs         Client Info         20920         0         0           Oil Changed         Client Info         20920         0         0         0           Filter Changed         Client Info         Changed         Changed         Changed         Changed           Sample Status         Client Info         Changed         Changed         Changed         Changed           Iron         ppm         ASTM D5185m<>100         7         11         5           Chromium         ppm         ASTM D5185m<>20         <1         <1         <1           Nickel         ppm         ASTM D5185m<>3         0         0         0         1           Silver         ppm         ASTM D5185m<>3         0         0         <1         1         1           Silver         ppm         ASTM D5185m<>3         0         0         <1         1         1         1 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>							
Sample DateClient Info21 Feb 20217 Jan 202419 Sep 2023Machine AgehrsClient Info20920000Oil AgehrsClient Info20920000Filter AgehrsClient Info20920000Oil ChangedClient InfoChangedChangedChangedChangedFilter ChangedClient InfoChangedChangedChangedChangedSample StatusClient InfoMARGINASEVEREABNORMAIIronppmASTM D5185m>1007115NickelppmASTM D5185m>20<	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine AgehrsClient Info209202079520544Oil AgehrsClient Info20920000Filter AgehrsClient InfoChanged <td< th=""><th>Sample Number</th><th></th><th>Client Info</th><th></th><th>WC0817210</th><th>WC0817199</th><th>WC0773735</th></td<>	Sample Number		Client Info		WC0817210	WC0817199	WC0773735
Oil AgehrsClient Info2092000Filter AgehrsClient InfoChangedChangedChangedOil ChangedClient InfoChangedChangedChangedSilter ChangedClient InfoMARGINALSEVEREABNORMALIronppmASTM D5185m>10071115ChromiumppmASTM D5185m>24000NickelppmASTM D5185m>34000TitaniumppmASTM D5185m>34000LeadppmASTM D5185m>33000LeadppmASTM D5185m>330<1<11CopperppmASTM D5185m>330<1<1<1VanadiumppmASTM D5185m>1000<1<10VanadiumppmASTM D5185m>20NONENONENONEYellow MetalscalarYusualNONENONENONENONENONESiliconppmASTM D5185m>20111122<1<1Fuelw%ASTM D5185m>20NEGNEGNEGNEGSolitanppmASTM D5185m>20111122<1<1Fuelw%ASTM D5185m>20NEGNEGNEGNEGSiliconppmASTM D5185m>20NEGNEGNEGNEGSolitanppm	Sample Date		Client Info		21 Feb 2024	17 Jan 2024	19 Sep 2023
Filter Age Oil ChangedhrsClient Info2092000Oil ChangedClient InfoChangedChangedChangedChangedSample StatusClient InfoNARGINALSEVEREABNORMAIIronppmASTM D5185m>1007115ChromiumppmASTM D5185m>20<1<1<1NickelppmASTM D5185m>20<1<1<1SilverppmASTM D5185m>300000TitaniumppmASTM D5185m>30<1<1<10LeadppmASTM D5185m>40<1<1<110<1<110<1<1110<1<1110<1<11	Machine Age	hrs	Client Info		20920	20795	20544
Oil Changed Filter Changed Sample StatusClient Info Client InfoChanged Changed MARGINALChanged Changed SetVERChanged Changed ABNORMANIronppmASTM D5185m ASTM D5185m>10071115ChromiumppmASTM D5185m ASTM D5185m>20<1<1<1NickelppmASTM D5185m ASTM D5185m>30000AluminumppmASTM D5185m ASTM D5185m>201<1<1SilverppmASTM D5185m ASTM D5185m>3000<1CopperppmASTM D5185m ASTM D5185m>30<1<1<1TinppmASTM D5185m ASTM D5185m>300<1<1<1VanadiumppmASTM D5185m ASTM D5185m>201<1<1<1<1Vellow Metalscalar"VisualNONENONENONENONENONESiliconppmASTM D5185m ASTM D5185m>233333PotassiumppmASTM D5185m ASTM D5185m>24A1▲ 8.6&6.7WaterWC Method>0.2NEGNEGNEGNEGSulfationAbs/cm'ASTM D7244 ASTM D7244>30.30.50.5SulfationAbs/cm'ASTM D7244 ASTM D7244NONENONENONENONESulfationAbs/cm'ASTM D7244 ASTM D7244NONENONENONENONE </th <th>Oil Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>20920</th> <th>0</th> <th>0</th>	Oil Age	hrs	Client Info		20920	0	0
Filter Changed Sample StatusCilent IntoChanged MARGINALChanged SEVEREChanged ABNORMALIronppmASTM D5185m>10071115ChromiumppmASTM D5185m>20<1<1<1NickelppmASTM D5185m>20<1<1<1NickelppmASTM D5185m>3000TitaniumppmASTM D5185m>30<1<1SilverppmASTM D5185m>30<1<10LeadppmASTM D5185m>330<1<1<1CopperppmASTM D5185m>1500<1VanadiumppmASTM D5185m>1500<1Vhite Metalscalar"VisualNONENONENONENONEVellow Metalscalar"VisualNONENONENONENONESiliconppmASTM D5185m>253333PotassiumppmASTM D5185m>201112<1Fuel%ASTM D5185m>201112<1Fuel%ASTM D5185m>201112<1Fuel%ASTM D5185m>201112<1Fuel%ASTM D5185m>201112<1Fuel%ASTM D5185m>3019.120.720.4SiliconpperASTM D5185m	Filter Age	hrs	Client Info		20920	0	0
Sample Status         MARGINAL         SEVERE         ABNORMAL           Iron         ppm         ASTM D5185m<>100         7         111         5           Chromium         ppm         ASTM D5185m         20         <1         <1         1           Nickel         ppm         ASTM D5185m         34         0         0         0           Titanium         ppm         ASTM D5185m         >30         0         0         0           Aluminum         ppm         ASTM D5185m         >20         1         <1         0           Lead         ppm         ASTM D5185m         >20         1         <1         1         0           Copper         ppm         ASTM D5185m         >15         0         0         <1         1           Vanadium         ppm         ASTM D5185m         >15         0         0         <1         1           Vellow Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Silicon         ppm         ASTM D5185m         >25         3         3         3           Potassium         ppm         ASTM D5185m         >20         11         1	Oil Changed		Client Info		Changed	Changed	Changed
Iron         ppm         ASTM D5185m         >100         7         111         5           Chromium         ppm         ASTM D5185m         >20         <1         <1         <1           Nickel         ppm         ASTM D5185m         >4         0         0         0           Titanium         ppm         ASTM D5185m         >3         0         0         0           Aluminum         ppm         ASTM D5185m         >30         0         0         0           Lead         ppm         ASTM D5185m         >30         <1         <1         1           Copper         ppm         ASTM D5185m         >30         <1         <1         <1         <1           Vanadium         ppm         ASTM D5185m         >15         0         0         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1<         <1<         <1<         <1<         <1<         <1<         <1<         <1<         <1<         <1<         <1<         <1<         <1<         <1<         <1<         <1<         <1<         <1<         <1<         <1< <td< th=""><th>Filter Changed</th><th></th><th>Client Info</th><th></th><th>Changed</th><th>Changed</th><th>Changed</th></td<>	Filter Changed		Client Info		Changed	Changed	Changed
Chromium         ppm         ASTM D5185m         >20         <1	Sample Status				MARGINAL	SEVERE	ABNORMAL
Chromium         ppm         ASTM D5185m         >20         <1							
Nickel         ppm         ASTM D5185m         >4         0         0         0           Titanium         ppm         ASTM D5185m         >3         0         0         0           Silver         ppm         ASTM D5185m         >20         1         <1         0           Lead         ppm         ASTM D5185m         >20         1         <1         0           Copper         ppm         ASTM D5185m         >40         <1         0         <1           Vanadium         ppm         ASTM D5185m         >5         0         0         <1           Vanadium         ppm         ASTM D5185m         >20         11         <1         <1           Vanadium         ppm         ASTM D5185m         >20         NONE         NONE         NONE           Yellow Metal         scalar         "Visual         NONE         NONE         NONE         NONE           Yellow Metal         scalar         "Visual         NONE         NONE         NONE         NONE           Solitoco         pp         ASTM D5185m         >20         11         12         <1           Fuel         %         ASTM D5185m         >20         <	Iron				-		
Titanium         ppm         ASTM D5185m         O         <1	Chromium	ppm	ASTM D5185m	>20		<1	<1
Silver         pm         ASTM D5185m         >3         0         0         0           Aluminum         ppm         ASTM D5185m         >20         1         <1         0           Lead         ppm         ASTM D5185m         >40         <1         0         <1           Copper         ppm         ASTM D5185m         >330         <1         <1         <1           Tin         ppm         ASTM D5185m         >15         0         0         <1           Vanadium         ppm         ASTM D5185m         >15         0         0         <1           Vanadium         ppm         ASTM D5185m         >25         3         3         3           Vellow Metal         scalar         "Visual         NONE         NONE         NONE         NONE           Silicon         ppm         ASTM D5185m<>25         3         4.1         ■ 8.6         6.7           Fuel         %         ASTM D5185m<>20         11         12         <1         <1           Fuel         %         ASTM D7844<>3         0.3         0.5         0.5            Soti scalar         "Visual         NONE         NONE         NONE </th <th>Nickel</th> <th>ppm</th> <th></th> <th>&gt;4</th> <th>-</th> <th></th> <th></th>	Nickel	ppm		>4	-		
AluminumppmASTM D5185m>201<1	Titanium	ppm	ASTM D5185m		0	<1	<1
Lead         ppm         ASTM D5185m         >40         <1	Silver	ppm	ASTM D5185m	>3	0	0	0
Copper         ppm         ASTM D5185m         >330         <1	Aluminum	ppm	ASTM D5185m	>20	1	<1	0
TinppmASTM D5185m>1500<1	Lead	ppm	ASTM D5185m		<1	0	<1
Vanadium         ppm         ASTM D5185m         0         0         <1	Copper	ppm	ASTM D5185m	>330	<1	<1	<1
White MetalScalar*VisualNONENONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONENONESiliconppmASTM D5185m>201112<1Fuel%ASTM D5185m>201112<1Fuel%ASTM D5185m>201112<1Fuel%ASTM D5185m>20NEGNEGNEGGlycolWC Method>0.2NEGNEGNEGSoot %%*ASTM D7844>30.30.50.5NitrationAbs/cm*ASTM D7624>206.68.68.0SulfationAbs/cm*ASTM D7624>206.68.68.0SulfationAbs/cm*ASTM D7624>206.68.68.0SulfationAbs/cm*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNORMNORMLNORMLNORMLAppearancescalar*VisualNORMNORMLNORMLNORMLBoronppmASTM D5185m0625459ManganeseppmASTM D5185m0625459ManganeseppmASTM D5185m1070108010031090PhosphorusppmASTM D5185m10701080100	Tin	ppm	ASTM D5185m	>15	0	0	<1
Yellow Metalscalar'VisualNONENONENONENONENONESiliconppmASTM D5185m<>201112<1Fuel%ASTM D5185m<>201112<1Fuel%ASTM D5185m<>20▲ 4.1▲ 8.6▲ 6.7WaterWC Method>0.2NEGNEGNEGGlycolWC Method>0.2NEGNEGNEGSoot %%'ASTM D7844>30.30.50.5NitrationAbs/cm'ASTM D7624>206.68.68.0SulfationAbs/1m'ASTM D715>3019.120.720.4Siltscalar'VisualNONENONENONENONEDebrisscalar'VisualNONENONENONENONESand/Dirtscalar'VisualNORENORMLNORMLNORMLAppearancescalar'VisualNORHNORMLNORMLNORMLOdorscalar'VisualNORNORMLNORMLNORMLBoronppmASTM D5185m00000MagnesiumppmASTM D5185m0<410<11BariumppmASTM D5185m10109658801007CalciumppmASTM D5185m11501105933993ZincppmASTM D5185m1270129311161245SulfarppmASTM D5185m <t< th=""><th>Vanadium</th><th>ppm</th><th>ASTM D5185m</th><th></th><th>0</th><th>0</th><th>&lt;1</th></t<>	Vanadium	ppm	ASTM D5185m		0	0	<1
Silicon         ppm         ASTM D5185m< >25         3         3         3           Potassium         ppm         ASTM D5185m         >20         11         12         <1           Fuel         %         ASTM D5185m         >20         11         12         <1           Fuel         %         ASTM D5185m         >20         11         4         8.6         6.7           Water         WC Method         >0.2         NEG         NEG         NEG         S           Glycol         WC Method         >0.2         NEG         NEG         NEG         S           Soot %         %         *ASTM D7624         >20         6.6         8.6         8.0           Sulfation         Abs/.tm         *ASTM D7612         >30         19.1         20.7         20.4           Silt         scalar         *Visual         NONE         NONE         NONE         NONE           Debris         scalar         *Visual         NOR         NOR         NOR         NORM           Appearance         scalar         *Visual         NOR         NORM         NORM         NORM           Gdor         scalar         *Visual         NOR	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Potassium         ppm         ASTM D5185m         >20         11         12         <1	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Potassium         ppm         ASTM D5185m         >20         11         12         <1							
Fuel         %         ASTM D3524         >5         ▲ 4.1         ▲ 8.6         ▲ 6.7           Water         WC Method         >0.2         NEG         NEG         NEG           Glycol         WC Method         NEG         NEG         NEG         NEG           Soot %         %         *ASTM D7844         >3         0.3         0.5         0.5           Nitration         Abs/cm         *ASTM D7624         >20         6.6         8.6         8.0           Sulfation         Abs/tm         *ASTM D7624         >20         6.6         8.0         NONE           Solit         scalar         *Visual         NONE         NONE         NONE         NORM           Appearance         scalar         *Visual         NORM         NORM         NORM         NORM         NORM           Gdor         scalar         *Visual		ppm	ASTM D5185m	>25	-		
Water         WC Method         >0.2         NEG         NEG         NEG           Glycol         WC Method         NEG         NEG         NEG         NEG           Soot %         %         *ASTM D7844         >3         0.3         0.5         0.5           Nitration         Abs/cm         *ASTM D7624         >20         6.6         8.6         8.0           Sulfation         Abs/.tmm         *ASTM D7615         >30         19.1         20.7         20.4           Silt         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Debris         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Sand/Dirt         scalar         *Visual         NOR         NORM         NORM         NORM         NORM           Appearance         scalar         *Visual         NORM         NORML         NORML         NORM           Glycon         scalar         *Visual         NORM         NORML         NORML         NORML           Gor         scalar         *Visual         NORM         NORML         NORML         NORML           Boron		ppm		>20			
GlycolWC MethodNEGNEGNEGSoot %%*ASTM D7844>30.30.50.5NitrationAbs/cm*ASTM D7624>206.68.68.0SulfationAbs/cm*ASTM D7415>3019.120.720.4Siltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNORNORMNONENONEAppearancescalar*VisualNORMNORMLNORMLNORMLOdorscalar*VisualNORMNORMLNORMLNORMLOdorscalar*VisualNORNORMLNORMLNORMLBoronppmASTM D5185m081<1BariumppmASTM D5185m06625459ManganeseppmASTM D5185m10109658801007CalciumppmASTM D5185m11501105933993PhosphorusppmASTM D5185m1270129311161245SulfurppmASTM D5185m2060326928153643OxidationAbs/.1mm*ASTM D744>2515.619.618.5		%					
Soot %         %         *ASTM D7844         >3         0.3         0.5         0.5           Nitration         Abs/cm         *ASTM D7624         >20         6.6         8.6         8.0           Sulfation         Abs/cm         *ASTM D7624         >20         6.6         8.6         8.0           Sulfation         Abs/cm         *ASTM D7624         >30         19.1         20.7         20.4           Silt         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Debris         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Sand/Dirt         scalar         *Visual         NORM         NORML         NORML         NORML         NORML           Appearance         scalar         *Visual         NORM         NORML         NORML         NORML         NORML           Cdor         scalar         *Visual         NOR         NORM         NORML         NORML         NORML           Boron         ppm         ASTM D5185m         0         8         1         <1           Barium         ppm         ASTM D5185m         0         60	Water		WC Method	>0.2	NEG		NEG
NitrationAbs/cm*ASTM D7624>206.68.68.0SulfationAbs/1mm*ASTM D7415>3019.120.720.4Siltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNORNONENONENONEAppearancescalar*VisualNORMNORMLNORMLNORMLOdorscalar*VisualNORMNORMLNORMLNORMLCdorscalar*VisualNORNORMLNORMLNORMLBoronppmASTM D5185m081<1BariumppmASTM D5185m0625459ManganeseppmASTM D5185m0<100<100PhosphorusppmASTM D5185m110010031007CalciumppmASTM D5185m11501105933993ZincppmASTM D5185m1270129311161245SulfurppmASTM D5185m1206326928153643OxidationAbs/1mm*ASTM D744>2515.619.618.5	,						
SulfationAbs/.1mm*ASTM D7415>3019.120.720.4Siltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMNORMLNORMLNORMLOdorscalar*VisualNORMNORMLNORMLNORMLOdorscalar*VisualNORMNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m081<1BariumppmASTM D5185m0625459ManganeseppmASTM D5185m10109658801007CalciumppmASTM D5185m11501105933993ZincppmASTM D5185m1270129311161245SulfurppmASTM D5185m2060326928153643OxidationAbs/.1mm*ASTM D2869.88.78.28.0	Soot %	%	*ASTM D7844	>3	0.3	0.5	0.5
Siltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m081<1BariumppmASTM D5185m0625459ManganeseppmASTM D5185m0<10<10MagnesiumppmASTM D5185m10109658801007CalciumppmASTM D5185m11501105933993ZincppmASTM D5185m1270129311161245SulfurppmASTM D5185m2060326928153643OxidationAbs/.1mm*ASTM D2869.88.78.28.0	Nitration	Abs/cm					
Debrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m081<1BaronppmASTM D5185m0000MolybdenumppmASTM D5185m06225459ManganeseppmASTM D5185m0<100<1MagnesiumppmASTM D5185m10109658801007CalciumppmASTM D5185m1270129311161245SulfurppmASTM D5185m127012933643OxidationAbs/.1mm*ASTM D7141>2515.619.618.5Base Number (BN)mg KOHgASTM D28969.88.78.28.0	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	20.7	20.4
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m081<1BoronppmASTM D5185m0000MolybdenumppmASTM D5185m0625459ManganeseppmASTM D5185m0<10<1MagnesiumppmASTM D5185m10109658801007CalciumppmASTM D5185m1100108010031090PhosphorusppmASTM D5185m1270129311161245SulfurppmASTM D5185m2060326928153643OxidationAbs/.1mm*ASTM D28969.88.78.28.0	Silt	scalar	*Visual	NONE	-	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGNEGSodiumppmASTM D5185m081<1BoronppmASTM D5185m081<1BariumppmASTM D5185m0000MolybdenumppmASTM D5185m60625459ManganeseppmASTM D5185m10109658801007CalciumppmASTM D5185m1070108010031090PhosphorusppmASTM D5185m1270129311161245SulfurppmASTM D5185m2060326928153643OxidationAbs/.1mm*ASTM D28969.88.78.28.0	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m081<1BoronppmASTM D5185m081<1BariumppmASTM D5185m0000MolybdenumppmASTM D5185m0625459ManganeseppmASTM D5185m0<10<1MagnesiumppmASTM D5185m10109658801007CalciumppmASTM D5185m1070108010031090PhosphorusppmASTM D5185m1270129311161245SulfurppmASTM D5185m2060326928153643OxidationAbs/1mm*ASTM D28969.88.78.28.0	Sand/Dirt	scalar	*Visual		NONE	NONE	
Emulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185mG3<1BoronppmASTM D5185m081<1BariumppmASTM D5185m0000MolybdenumppmASTM D5185m60625459ManganeseppmASTM D5185m0<10<1MagnesiumppmASTM D5185m10109658801007CalciumppmASTM D5185m1070108010031090PhosphorusppmASTM D5185m1270129311161245SulfurppmASTM D5185m2060326928153643OxidationAbs/.1mm*ASTM D28969.88.78.28.0	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Sodium         ppm         ASTM D5185m         3         3         <1	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Boron         ppm         ASTM D5185m         0         8         1         <1	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Boron         ppm         ASTM D5185m         0         8         1         <1	Cadium				0	0	4
Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         60         62         54         59           Manganese         ppm         ASTM D5185m         0         <1         0         <1           Magnesium         ppm         ASTM D5185m         0         <1         0         <1           Calcium         ppm         ASTM D5185m         1010         965         880         1007           Phosphorus         ppm         ASTM D5185m         1070         1080         1003         1090           Phosphorus         ppm         ASTM D5185m         1150         1105         933         993           Zinc         ppm         ASTM D5185m         1270         1293         1116         1245           Sulfur         ppm         ASTM D5185m         2060         3269         2815         3643           Oxidation         Abs./1mm         'ASTM D7144         >25         15.6         19.6         18.5           Base Number (BN)         mg KOHg         ASTM D2896         9.8         8.7         8.2         8.0				0	•		
Molybdenum         ppm         ASTM D5185m         60         62         54         59           Manganese         ppm         ASTM D5185m         0         <1         0         <1           Magnesium         ppm         ASTM D5185m         0         <1         0         <1           Calcium         ppm         ASTM D5185m         1010         965         880         1007           Calcium         ppm         ASTM D5185m         1070         1080         1003         1090           Phosphorus         ppm         ASTM D5185m         1150         1105         933         993           Zinc         ppm         ASTM D5185m         1270         1293         1116         1245           Sulfur         ppm         ASTM D5185m         2060         3269         2815         3643           Oxidation         Abs./1mm         *ASTM D7414         >25         15.6         19.6         18.5           Base Number (BN)         mg KOHg         ASTM D2896         9.8         8.7         8.2         8.0							
Manganese         ppm         ASTM D5185m         0         <1							
Magnesium         ppm         ASTM D5185m         1010         965         880         1007           Calcium         ppm         ASTM D5185m         1070         1080         1003         1090           Phosphorus         ppm         ASTM D5185m         1150         1105         933         993           Zinc         ppm         ASTM D5185m         1270         1293         1116         1245           Sulfur         ppm         ASTM D5185m         2060         3269         2815         3643           Oxidation         Abs/.1mm         *ASTM D7141         >25         15.6         19.6         18.5           Base Number (BN)         mg KOHlg         ASTM D2896         9.8         8.7         8.2         8.0	•						
Calcium         ppm         ASTM D5185m         1070         1080         1003         1090           Phosphorus         ppm         ASTM D5185m         1150         1105         933         993           Zinc         ppm         ASTM D5185m         1270         1293         1116         1245           Sulfur         ppm         ASTM D5185m         2060         3269         2815         3643           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.6         19.6         18.5           Base Number (BN)         mg KOHg         ASTM D2896         9.8         8.7         8.2         8.0	-						
Phosphorus         ppm         ASTM D5185m         1150         1105         933         993           Zinc         ppm         ASTM D5185m         1270         1293         1116         1245           Sulfur         ppm         ASTM D5185m         2060         3269         2815         3643           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.6         19.6         18.5           Base Number (BN)         mg KOH/g         ASTM D2896         9.8         8.7         8.2         8.0	•						
Zinc         ppm         ASTM D5185m         1270 <b>1293</b> 1116         1245           Sulfur         ppm         ASTM D5185m         2060 <b>3269</b> 2815         3643           Oxidation         Abs/.1mm         *ASTM D7141         >25 <b>15.6</b> 19.6         18.5           Base Number (BN)         mg KOH/g         ASTM D2896         9.8 <b>8.7</b> 8.2         8.0							
Sulfur         ppm         ASTM D5185m         2060 <b>3269</b> 2815         3643           Oxidation         Abs/.tmm         *ASTM D7414         >25 <b>15.6</b> 19.6         18.5           Base Number (BN)         mg KOH/g         ASTM D2896         9.8 <b>8.7</b> 8.2         8.0	·						
Oxidation         Abs/.1mm         *ASTM D7414         >25         15.6         19.6         18.5           Base Number (BN)         mg KOH/g         ASTM D2896         9.8         8.7         8.2         8.0							
Base Number (BN)         mg KOH/g         ASTM D2896         9.8         8.7         8.2         8.0							
VISC @ 100°C cSt ASTM D445 15.4 12.6 ▲ 11.4 14.0	. ,						
	Visc @ 100°C	cSt	ASTM D445	15.4	12.6	<b>1</b> 1.4	14.0



Unique Number : 10901787 : 04 Mar 2024 - Wes Davis Diagnosed Test Package : FLEET ( Additional Tests: PercentFuel ) Contact: DONALD KNEPP Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - 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)

Contact/Location: DONALD KNEPP - AREJOH

F:

dknepp@rideata.com

T: (814)371-0443