

# WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

#### Machine Id **AUDI AUDI S6** Component **Front Gasoline Engine** Fluid **MOBIL 1 5W30 (--- LTR)**

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.

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### WEAR

All component wear rates are normal.

## CONTAMINATION

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

#### FLUID CONDITION

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

Test         UOM         Method         Limit/Ab         Current         History1         History2           Sample Number         Client Info         06 May 2024             Sample Date         Client Info         219578             Oil Age         kms         Client Info         219578             Oil Changed         Client Info         219578             Oil Changed         Client Info         21977             Oil Changed         Client Info         Changed             Sample Status               Iron         ppm         ASTM D5185(m)         >20         <1             Nickel         ppm         ASTM D5185(m)         >20         <1             Silver         ppm         ASTM D5185(m)         >20         10             Aluminum         ppm         ASTM D5185(m)         >10         <1             Yandoum ppm         ASTM D5185(m)         >20         1 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>							
Sample Date         Client Info         D6 May 2024             Machine Age         kms         Client Info         219578             Oil Age         kms         Client Info         7277             Oil Changed         Client Info         7277             Filter Changed         Client Info         Changed             Filter Changed         Client Info         Changed             Sample Status         VORMAL              Iron         ppm         ASTM05185(m)         >20         <1             Titanium         ppm         ASTM05185(m)         >20         <1             Silver         ppm         ASTM05185(m)         >20         0             Lead         ppm         ASTM05185(m)         >40         10             Yellow Metal         scalar         Yisual*         NONE         0             Yellow Metal         scalar         Yisual*         NONE	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age         kms         Client Info         219578             Oil Age         kms         Client Info         7277             Filter Age         kms         Client Info         Changed             Oil Changed         Client Info         Changed             Sample Status         Client Info         Changed             Iron         ppm         ASTM D5185(m)         >20         <1             Nickel         ppm         ASTM D5185(m)         >20         <1             Nickel         ppm         ASTM D5185(m)         >50         0             Silver         ppm         ASTM D5185(m)         >50         1             Lead         ppm         ASTM D5185(m)         >10         0             Vanadium         ppm         ASTM D5185(m)         >30         17             Yellow Metal         scalar         Visual*         NONE         NONE            Yellow Metal	Sample Number		Client Info		WC0931993		
Oil Age         kms         Client Info         7277             Filter Age         kms         Client Info         7277             Oil Changed         Client Info         Changed             Filter Changed         Client Info         Changed             Sample Status         NORMAL              Nickel         ppm         ASTM D585(m)         >20         <1            Nickel         ppm         ASTM D585(m)         >20             Silver         ppm         ASTM D585(m)         >20             Lead         ppm         ASTM D585(m)         >50         1             Vanadium         ppm         ASTM D585(m)         >50         1             Vanadium         ppm         ASTM D585(m)         >50         1             Vanadium         ppm         ASTM D585(m)         >30         17             Vanadium         ppm         ASTM D585(m)         >20	Sample Date		Client Info		06 May 2024		
Filter Age         kms         Client Info         7277             Oil Changed         Client Info         Changed             Sample Status         Client Info         Changed             Iron         ppm         ASTM D5185(m)         >150         23             Iron         ppm         ASTM D5185(m)         >20         <1             Nickel         ppm         ASTM D5185(m)         >20         <1             Titanium         ppm         ASTM D5185(m)         >20         0             Aluminum         ppm         ASTM D5185(m)         >20         0             Auminum         ppm         ASTM D5185(m)         >10         <1             Auminum         ppm         ASTM D5185(m)         >10         <1             Auminum         ppm         ASTM D5185(m)         >30         17             Vanadium         ppm         ASTM D5185(m)         >20         19.7        <	Machine Age	kms	Client Info		219578		
Oil Changed Filter Changed Sample Status         Client Info         Changed Changed             Iron         ppm         ASTM D5/85(m)         >150         23             Iron         ppm         ASTM D5/85(m)         >20         <1             Nickel         ppm         ASTM D5/85(m)         >20         <1             Nickel         ppm         ASTM D5/85(m)         >20         <1             Nickel         ppm         ASTM D5/85(m)         >20         0             Aluminum         ppm         ASTM D5/85(m)         >20         0             Aluminum         ppm         ASTM D5/85(m)         >50         1             Aluminum         ppm         ASTM D5/85(m)         >50         1             Vanadium         ppm         ASTM D5/85(m)         >10         0             Vanadium         ppm         ASTM D5/85(m)         >20         19             Vatiow         ppm         ASTM D5/85(m)	Oil Age	kms	Client Info		7277		
Filter Changed Sample Status         Client Info         Changed NORMAL             Iron         ppm         ASTM D5185/m         >-150         23             Iron         ppm         ASTM D5185/m         >-20         <1             Nickel         ppm         ASTM D5185/m         >20         <1             Nickel         ppm         ASTM D5185/m         >20         <1             Silver         ppm         ASTM D5185/m         >20         0             Lead         ppm         ASTM D5185/m         >50         1             Vanadium         ppm         ASTM D5185/m         >50         1             Vanadium         ppm         ASTM D5185/m         >10         <1             Vanadium         ppm         ASTM D5185/m         >20         19             Vanadium         ppm         ASTM D5185/m         >20         19             Yellow Metal         scalar         Visual*         NONE	Filter Age	kms	Client Info		7277		
Sample Status         NORMAL             Iron         ppm         ASTM D5185(m)         >20         <1            Chromium         ppm         ASTM D5185(m)         >20         <1            Nickel         ppm         ASTM D5185(m)         >20         <1            Titanium         ppm         ASTM D5185(m)         >2         0             Aluminum         ppm         ASTM D5185(m)         >2         0             Aluminum         ppm         ASTM D5185(m)         >50         1             Lead         ppm         ASTM D5185(m)         >50         1             Vanadium         ppm         ASTM D5185(m)         >10         <1             Vanadium         ppm         ASTM D5185(m)         >20         19             Yellow Metal         scalar         Visual*         NONE         NONE             Silicon         ppm         ASTM D7503*         >4.0         1.7 <td< th=""><th>Oil Changed</th><th></th><th>Client Info</th><th></th><th>Changed</th><th></th><th></th></td<>	Oil Changed		Client Info		Changed		
Iron         ppm         ASTM D5185(m)         >100         23             Chromium         ppm         ASTM D5185(m)         >20         <1             Nickel         ppm         ASTM D5185(m)         >5         0             Titanium         ppm         ASTM D5185(m)         >2         0             Aluminum         ppm         ASTM D5185(m)         >50         1             Lead         ppm         ASTM D5185(m)         >50         1             Copper         ppm         ASTM D5185(m)         >10         <1             Vanadium         ppm         ASTM D5185(m)         >10         <1             Vanadium         ppm         ASTM D5185(m)         >30         17             Valow Metal         scalar         Visual*         NONE         NONE             Silicon         ppm         ASTM D5185(m)         >20         19             Fuel         %	Filter Changed		Client Info		Changed		
Chromium         ppm         ASTM D5185(m)         >20         <1	Sample Status				NORMAL		
Chromium         ppm         ASTM D5185(m)         >20         <1							
Nickal         ppm         ASTM D5155(m)             Titanium         ppm         ASTM D5155(m)             Silver         ppm         ASTM D5155(m)         >-2         0            Aluminum         ppm         ASTM D5155(m)         >-2         0            Aluminum         ppm         ASTM D5155(m)         >-50         1            Lead         ppm         ASTM D5155(m)         >-50         1            Copper         ppm         ASTM D5155(m)         >-10         <-1            Vanadium         ppm         ASTM D5155(m)         >-0             Vanadium         ppm         ASTM D5155(m)         >-0             Vanadium         ppm         ASTM D5155(m)         >-30         17             Vellow Metal         scalar         Visual*         NONE              Fuel         %         ASTM D75155         >-30         17             Soot %         %         ASTM D7522*         0.0	-		( )		-		
Titanium         ppm         ASTM D5185(m)         >2         0             Silver         ppm         ASTM D5185(m)         >2         0             Aluminum         ppm         ASTM D5185(m)         >50         1             Lead         ppm         ASTM D5185(m)         >50         1             Copper         ppm         ASTM D5185(m)         >10         <1             Vanadium         ppm         ASTM D5185(m)         >10         <1             Vanadium         ppm         ASTM D5185(m)         >10              Vanadium         ppm         ASTM D5185(m)         >30         117             Valow Metal         scalar         Visual*         NONE         NONE             Silicon         ppm         ASTM D5185(m)         >20         19             Water         WC Method         >0.2         NEG              Soto %         %<		ppm	( )				
Silver         ppm         ASTM D5185(m)         >2         0             Aluminum         ppm         ASTM D5185(m)         >40         10             Lead         ppm         ASTM D5185(m)         >50         1             Copper         ppm         ASTM D5185(m)         >10         <1             Vanadium         ppm         ASTM D5185(m)         >10         <1             Vanadium         ppm         ASTM D5185(m)         >10         <1             Vanadium         ppm         ASTM D5185(m)         >30         17             White Metal         scalar         Visual*         NONE         NONE             Silicon         ppm         ASTM D5185(m)         >30         17             Fuel         %         ASTM D7533*         >4.0         1.7             Solo %         %         ASTM D7624*         >20         10.9             Solo %         %         <			( )	>5	-		
Aluminum         ppm         ASTM D5185(m)         >40         10             Lead         ppm         ASTM D5185(m)         >50         1             Copper         ppm         ASTM D5185(m)         >155         2             Vanadium         ppm         ASTM D5185(m)         >10         <1             Vanadium         ppm         ASTM D5185(m)         >10         <1             Vanadium         ppm         ASTM D5185(m)         >10         0             Vanadium         ppm         ASTM D5185(m)         >20         19             Yellow Metal         scalar         Visual*         NONE              Fuel         %         ASTM D5185(m)         >20         19             Water         WC Method         >0.2         NEG             Soto %         %         ASTM D7624*         >20         10.0             Sulfation         Abs/:Imm         AST		ppm			-		
Lead         ppm         ASTM D5185(m)         >50         1             Copper         ppm         ASTM D5185(m)         >10         <1             Vanadium         ppm         ASTM D5185(m)         >10         <1             Vanadium         ppm         ASTM D5185(m)         0             White Metal         scalar         Visual*         NONE         NONE             Yellow Metal         scalar         Visual*         NONE         NONE             Silicon         ppm         ASTM D5185(m)         >30         17             Fuel         %         ASTM D5185(m)         >20         19             Water         WC Method         >0.2         NEG             Soot %         %         ASTM D7922'         0.0             Souffation         Abs/:mm         ASTM D7624'         >20         10.9             Sulfation         Abs/:mm         ASTM D71624'         >20			( )		•		
Copper         ppm         ASTM D5185(m)         >155         2             Tin         ppm         ASTM D5185(m)         >10         <1             Vanadium         ppm         ASTM D5185(m)         >10         0             White Metal         scalar         Visual*         NONE         NONE             Yellow Metal         scalar         Visual*         NONE         NONE             Silicon         ppm         ASTM D5185(m)         >30         17             Fuel         %         ASTM D5185(m)         >20         19             Water         WC Method         >0.2         NEG             Soot %         %         ASTM D7924*         >0             Soot %         %         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D7624*         >20         10.9             Sodt %         %         ASTM D7624*         >20         10.9			× /		-		
Tin         ppm         ASTM D5185(m)         >10         <1			( )		-		
Vanadium         ppm         ASTM D5185(m)         O             White Metal         scalar         Visual*         NONE         NONE             Yellow Metal         scalar         Visual*         NONE         NONE             Silicon         ppm         ASTM D5185(m)         >30         17             Potassium         ppm         ASTM D5185(m)         >20         19             Fuel         %         ASTM D5185(m)         >20         19             Water         WC Method         >0.2         NEG             Glycol         %         ASTM D784*         0             Soot %         %         ASTM D7624*<>20         10.9             Sulfation         Abs/Inm         ASTM D7624*<>20         10.9             Sulfation         Abs/Inm         ASTM D7624*<>20         10.9             Solt         scalar         Visual*         NONE <tr< th=""><th></th><th>ppm</th><th></th><th></th><th>-</th><th></th><th></th></tr<>		ppm			-		
White Metal         scalar         Visual*         NONE         NONE             Yellow Metal         scalar         Visual*         NONE         NONE             Silicon         ppm         ASTM D5185(m)         >30         17             Potassium         ppm         ASTM D5185(m)         >20         19             Fuel         %         ASTM D5185(m)         >20         17             Water         WC Method         >0.2         NEG             Soot %         %         ASTM D7844*         0             Soot %         %         ASTM D7624*         >20         10.9             Sulfation         Abs/.mm         ASTM D715*         >30         21.3             Sulfation         Abs/.imm         ASTM D715*         >30         21.3             Sodtium         scalar         Visual*         NONE         NONE             Appearance         scalar         Visual*N			( )	>10			
Yellow Metal         scalar         Visual*         NONE             Silicon         ppm         ASTM D5185(m)         >30         17             Potassium         ppm         ASTM D5185(m)         >20         19             Fuel         %         ASTM D5185(m)         >20         19             Water         WC Method         >0.2         NEG             Glycol         %         ASTM D7922*         0.0             Soot %         %         ASTM D7624*         >20         10.9             Sulfation         Abs/.mm         ASTM D7624*         >20         10.9             Sulfation         Absclar         Visual*         NON			ASTM D5185(m)		-		
Silicon         ppm         ASTM D5185(m)         >30         17             Potassium         ppm         ASTM D5185(m)         >20         19             Fuel         %         ASTM D5185(m)         >20         19             Water         WC Method         >0.2         NEG             Glycol         %         ASTM D7922*         0.0             Soot %         %         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D7145*         >30         21.3             Sand/Dirt         scalar         Visual*         NONE         NONE             Appearance         scalar         Visual*         NORML         NORML             Appearance         scalar         Visual*		scalar	Visual*		-		
Potassium         ppm         ASTM D5185(m)         >20         19             Fuel         %         ASTM D7593*         >4.0         1.7             Water         WC Method         >0.2         NEG             Glycol         %         ASTM D792*         0.0             Soot %         %         ASTM D7844*         0             Nitration         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D7152*         >30         21.3             Sulfation         Abs/cm         NONE         NONE              Sulfation         scalar         Visual*         NONE         NORML         NORML             Appearance         scalar         Visual*	Yellow Metal	scalar	Visual*	NONE	NONE		
Potassium         ppm         ASTM D5185(m)         >20         19             Fuel         %         ASTM D7593*         >4.0         1.7             Water         WC Method         >0.2         NEG             Glycol         %         ASTM D792*         0.0             Soot %         %         ASTM D7844*         0             Nitration         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D7152*         >30         21.3             Sulfation         Abs/cm         NONE         NONE              Sulfation         scalar         Visual*         NONE         NORML         NORML             Appearance         scalar         Visual*	Silicon	nnm	ASTM D5185(m)	<u>\</u> 30	17		
Fuel         %         ASTM D7593*         >4.0         1.7             Water         WC Method         >0.2         NEG             Glycol         %         ASTM D7922*         0.0             Soot %         %         ASTM D7844*         0             Nitration         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D715*         >30         21.3             Sulfation         Abs/cm         ASTM D715*         >30         21.3             Sulfation         scalar         Visual*         NONE         NONE             Debris         scalar         Visual*         NORML         NORML             Appearance         scalar         Visual*         NORML			( )				
Water         WC Method         >0.2         NEG             Glycol         %         ASTM D7922*         0.0             Soot %         %         ASTM D7844*         0             Nitration         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/cm         ASTM D7624*         >30         21.3             Sulfation         Abs/cm         NONE         NONE              Debris         scalar         Visual*         NOR         NORE             Appearance         scalar         Visual*         NORM         NORML             Mappearance         scalar         Visual*         NORM<					-		
Glycol%ASTM D7922'0.0Soot %%ASTM D7844*0NitrationAbs/cmASTM D7624*>2010.9SulfationAbs/tmASTM D7624*>3021.3SulfationAbs/tmASTM D715*>3021.3SulfationAbs/tmASTM D7415*>3021.3SulfationScalarVisual*NONENONEDebrisscalarVisual*NONENONESand/DirtscalarVisual*NORMLNORMLAppearancescalarVisual*NORMLNORMLOdorscalarVisual*NORMLNORMLSodiumppmASTM D5185(m)>400101BoronppmASTM D5185(m)0.00MagnesiumppmASTM D5185(m)0.00MagnesiumppmASTM D5185(m)138859PhosphorusppmASTM D5185(m)720809SulfurppmASTM D5185(m)780933QuidationAbs/.1mASTM D5185(m)7802563SulfurppmASTM D5185(m)7802563		/0					
Soot %         %         ASTM D7844*         0             Nitration         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/.mm         ASTM D7624*         >30         21.3             Sulfation         Abs/.mm         ASTM D7615*         >30         21.3             Silt         scalar         Visual*         NONE         NONE             Debris         scalar         Visual*         NONE         VLITE             Sand/Dirt         scalar         Visual*         NORM         NORME             Appearance         scalar         Visual*         NORM         NORML             Odor         scalar         Visual*         NORM         NORML             Emulsified Water         scalar         Visual*         >0.2         NEG             Boron         ppm         ASTM D5185(m)         9.4         11             Molybdenum         ppm <th></th> <th>0/_</th> <th></th> <th>&gt;0.2</th> <th></th> <th></th> <th></th>		0/_		>0.2			
Nitration         Abs/cm         ASTM D7624*         >20         10.9             Sulfation         Abs/.mm         ASTM D7624*         >30         21.3             Sulfation         Abs/.mm         ASTM D7615*         >30         21.3             Silt         scalar         Visual*         NONE         NONE             Debris         scalar         Visual*         NONE         VLITE             Sand/Dirt         scalar         Visual*         NORE         NORE             Appearance         scalar         Visual*         NORML         NORML             Odor         scalar         Visual*         NORML         NORML             Odor         scalar         Visual*         >0.2         NEG             Boron         ppm         ASTM D5185(m)         >400         101             Barium         ppm         ASTM D5185(m)         0.0         0             Magnaese							
SulfationAbs/.tmmASTM D7415*>3021.3SiltscalarVisual*NONENONEDebrisscalarVisual*NONEVLITESand/DirtscalarVisual*NONENONEAppearancescalarVisual*NORMLNORMLOdorscalarVisual*NORMLNORMLOdorscalarVisual*NORMLNORMLEmulsified WaterscalarVisual*>0.2NEGSodiumppmASTM D5185(m)>400101BoronppmASTM D5185(m)0.00MolybdenumppmASTM D5185(m)0.00MaganeseppmASTM D5185(m)138859PhosphorusppmASTM D5185(m)780933ZincppmASTM D5185(m)780933SulfurppmASTM D5185(m)22402563OxidationAbs/.tmmASTM D5144*>2511.9				>20	-		
SiltscalarVisual*NONENONEDebrisscalarVisual*NONEVLITESand/DirtscalarVisual*NONENONEAppearancescalarVisual*NORMLNORMLOdorscalarVisual*NORMLNORMLOdorscalarVisual*NORMLNORMLEmulsified WaterscalarVisual*>0.2NEGSodiumppmASTM D5185(m)>400101BoronppmASTM D5185(m)0.00MolybdenumppmASTM D5185(m)0.00MagnesiumppmASTM D5185(m)138859PhosphorusppmASTM D5185(m)720809ZincppmASTM D5185(m)780933SulfurppmASTM D5185(m)22402563OxidationAbs/.1mASTM D5185(m)224011.9SulfurppmASTM D5185(m)22402563OxidationAbs/.1mASTM D5185(m)22402563OxidationAbs/.1mASTM D5185(m)22402563							
DebrisscalarVisual*NONEVLITESand/DirtscalarVisual*NONENONEAppearancescalarVisual*NORMLNORMLOdorscalarVisual*NORMLNORMLOdorscalarVisual*NORMLNORMLEmulsified WaterscalarVisual*>0.2NEGSodiumppmASTM D5185(m)>400101BoronppmASTM D5185(m)0.00BariumppmASTM D5185(m)0.0296ManganeseppmASTM D5185(m)138859MagnesiumppmASTM D5185(m)8202663PhosphorusppmASTM D5185(m)720809ZincppmASTM D5185(m)780933SulfurppmASTM D5185(m)22402563OxidationAbs/.1mASTM D5144*>2511.9					-		
Sand/DirtscalarVisual*NONENONEAppearancescalarVisual*NORMLNORMLNORMLOdorscalarVisual*NORMLNORMLNORMLEmulsified WaterscalarVisual*>0.2NEGSodiumppmASTM D5185(m)>400101BoronppmASTM D5185(m)9411BariumppmASTM D5185(m)0.00MolybdenumppmASTM D5185(m)0.0296ManganeseppmASTM D5185(m)138859PhosphorusppmASTM D5185(m)720809ZincppmASTM D5185(m)780933SulfurppmASTM D5185(m)22402563OxidationAbs/.1mmASTM D5144*>2511.9					-		
Appearance         scalar         Visual*         NORML         NORML             Odor         scalar         Visual*         NORML         NORML         NORML             Emulsified Water         scalar         Visual*         >0.2         NEG             Sodium         ppm         ASTM D5185(m)         >400         101             Boron         ppm         ASTM D5185(m)         94         11             Barium         ppm         ASTM D5185(m)         0.0         0             Molybdenum         ppm         ASTM D5185(m)         0.0         296             Manganese         ppm         ASTM D5185(m)         1388         59             Calcium         ppm         ASTM D5185(m)         720         809             Phosphorus         ppm         ASTM D5185(m)         780         933             Sulfur         ppm         ASTM D5185(m)         2240         2563							
Odor         scalar         Visual*         NORML         NORML             Emulsified Water         scalar         Visual*         >0.2         NEG             Sodium         ppm         ASTM D5185(m)         >400         101             Boron         ppm         ASTM D5185(m)         94         11             Barium         ppm         ASTM D5185(m)         0.0         0             Molybdenum         ppm         ASTM D5185(m)         0.0         296             Manganese         ppm         ASTM D5185(m)         0.0         296             Magnesium         ppm         ASTM D5185(m)         1388         59             Calcium         ppm         ASTM D5185(m)         720         809             Phosphorus         ppm         ASTM D5185(m)         780         933             Sulfur         ppm         ASTM D5185(m)         2240         2563             Oxidation <th></th> <th></th> <th></th> <th></th> <th>-</th> <th></th> <th></th>					-		
Emulsified Water         scalar         Visual*         >0.2         NEG             Sodium         ppm         ASTM D5185(m)         >400         101             Boron         ppm         ASTM D5185(m)         94         11             Barium         ppm         ASTM D5185(m)         0.0         0             Molybdenum         ppm         ASTM D5185(m)         0.0         296             Manganese         ppm         ASTM D5185(m)         0.0         296             Magnesium         ppm         ASTM D5185(m)         1388         59             Calcium         ppm         ASTM D5185(m)         820         2663             Phosphorus         ppm         ASTM D5185(m)         720         809             Zinc         ppm         ASTM D5185(m)         780         933             Sulfur         ppm         ASTM D5185(m)         2240         2563             Oxidation         Abs/.1m					-		
Sodium         ppm         ASTM D5185(m)         >400         101             Boron         ppm         ASTM D5185(m)         94         11             Barium         ppm         ASTM D5185(m)         0.0         0             Molybdenum         ppm         ASTM D5185(m)         0.0         296             Manganese         ppm         ASTM D5185(m)         0.0         296             Magnesium         ppm         ASTM D5185(m)         0.0         296             Magnesium         ppm         ASTM D5185(m)         1388         59             Calcium         ppm         ASTM D5185(m)         820         2663             Phosphorus         ppm         ASTM D5185(m)         780         933             Zinc         ppm         ASTM D5185(m)         2240         2563             Oxidation         Abs/.1m         ASTM D5185(m)         225         11.9							
Boron         ppm         ASTM D5185(m)         94         11             Barium         ppm         ASTM D5185(m)         0.0         0             Molybdenum         ppm         ASTM D5185(m)         0.0         296             Manganese         ppm         ASTM D5185(m)         0.0         296             Magnesium         ppm         ASTM D5185(m)         0.0         296             Magnesium         ppm         ASTM D5185(m)         1388         59             Calcium         ppm         ASTM D5185(m)         820         2663             Phosphorus         ppm         ASTM D5185(m)         720         809             Zinc         ppm         ASTM D5185(m)         780         933             Sulfur         ppm         ASTM D5185(m)         2240         2563             Oxidation         Abs/.1mm         ASTM D7414*         >25         11.9							
Barium         ppm         ASTM D5185(m)         0.0         0             Molybdenum         ppm         ASTM D5185(m)         0.0         296             Manganese         ppm         ASTM D5185(m)         0.0         296             Magnesium         ppm         ASTM D5185(m)         1388         59             Calcium         ppm         ASTM D5185(m)         1388         59             Phosphorus         ppm         ASTM D5185(m)         820         2663             Zinc         ppm         ASTM D5185(m)         720         809             Sulfur         ppm         ASTM D5185(m)         780         933             Oxidation         Abs/.1mm         ASTM D5185(m)         2240         2563	Sodium	ppm	ASTM D5185(m)	>400	101		
Molybdenum         ppm         ASTM D5185(m)         0.0         296             Manganese         ppm         ASTM D5185(m)         <         <1             Magnesium         ppm         ASTM D5185(m)         1388         59             Calcium         ppm         ASTM D5185(m)         820         2663             Phosphorus         ppm         ASTM D5185(m)         720         809             Zinc         ppm         ASTM D5185(m)         780         933             Sulfur         ppm         ASTM D5185(m)         2240         2563             Oxidation         Abs/.1mm         ASTM D71414*         >25         11.9	Boron	ppm	ASTM D5185(m)	94	11		
Manganese         ppm         ASTM D5185(m)         <1	Barium	ppm	ASTM D5185(m)	0.0	0		
Magnesium         ppm         ASTM D5185(m)         1388         59             Calcium         ppm         ASTM D5185(m)         820         2663             Phosphorus         ppm         ASTM D5185(m)         720         809             Zinc         ppm         ASTM D5185(m)         780         933             Sulfur         ppm         ASTM D5185(m)         2240         2563             Oxidation         Abs/.1mm         ASTM D7414*         >25         11.9	Molybdenum	ppm	ASTM D5185(m)	0.0	296		
Calcium         ppm         ASTM D5185(m)         820         2663             Phosphorus         ppm         ASTM D5185(m)         720         809             Zinc         ppm         ASTM D5185(m)         780         933             Sulfur         ppm         ASTM D5185(m)         2240         2563             Oxidation         Abs/.1mm         ASTM D71414*         >25         11.9	Manganese	ppm	ASTM D5185(m)		<1		
Phosphorus         ppm         ASTM D5185(m)         720         809             Zinc         ppm         ASTM D5185(m)         780         933             Sulfur         ppm         ASTM D5185(m)         2240         2563             Oxidation         Abs/.1mm         ASTM D7141*         >25         11.9	Magnesium	ppm	ASTM D5185(m)	1388	59		
Zinc         ppm         ASTM D5185(m)         780         933             Sulfur         ppm         ASTM D5185(m)         2240         2563             Oxidation         Abs/.1mm         ASTM D71414*         >25         11.9		ppm	ASTM D5185(m)	820	2663		
Sulfur         ppm         ASTM D5185(m)         2240         2563             Oxidation         Abs/.1mm         ASTM D7414*         >25         11.9	Phosphorus	ppm	ASTM D5185(m)	720	809		
Oxidation Abs/.1mm ASTM D7414* >25 11.9	Zinc	ppm	ASTM D5185(m)	780	933		
	Sulfur	ppm	· · /	2240	2563		
Visc @ 100°C cSt ASTM D7279(m) 11.3 11.6		Abs/.1mm	ASTM D7414*	>25	11.9		
	Visc @ 100°C	cSt	ASTM D7279(m)	11.3	11.6		



