

### **OIL ANALYSIS REPORT**

Sample Rating Trend

FUEL

# CUMMINS 25093

Component **Rear Diesel Engine DIESEL ENGINE OIL SAE 15W40 (6 LTR)** 

#### DIAGNOSIS

#### 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.

#### Wear

Metal levels are typical for a new component breaking in.

#### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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.

SAMPLE INFORMATION         method         Imit/base         current         history1         history2           Sample Number         Client Info         23 Nov 2023             Sample Date         Client Info         34722             Oil Age         kms         Client Info         34722             Oil Changed         Kms         Client Info         5470             Sample Status         Client Info         Changed              CONTAMINATION         method         Imit/base         current         History1         History2           Water         WC Method         >0.2         NEG             Wetar         WC Method         >0.2         NEG             Nokel         ppm         ASTM05186/m         20         2             Nokel         ppm         ASTM05186/m         >2         0             Nokel         ppm         ASTM05186/m         >2         1             Nokel         ppm         ASTM05186/m </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>							
Sample Number         Client Info         PC0083786             Sample Date         I         Client Info         23 Nov 2023             Machine Age         kms         Client Info         04722             Oil Age         kms         Client Info         0             Oil Changed         Client Info         Changed             Sample Status         I         Imathematical Status          Imathematical Status            Water         WC Method         >0.2         NEG             ContraMINATION         method         Imathematical Status             Water         WC Method         >0.2         NEG             Contraum         pm         ASTM 051850         >20         2             Nickel         pm         ASTM 051850         >2         0             Nickel         pm         ASTM 051850         >2         1             Nickel         pm         ASTM 051850					Nov2023		
Sample Number         Client Info         PC0083786             Sample Date         Client Info         23 Nov 2023             Machine Age         kms         Client Info         0             Oil Age         kms         Client Info         0             Oil Changed         Client Info         Changed             Sample Status         Im         Imitibase         current         history1            Water         WC Method         >0.2         NEG             Otromium         ppm         ASTM 0515500         >20         2             Nickel         ppm         ASTM 0515500         >20         2             Nickel         ppm         ASTM 0515500         >2         <1             Nickel         ppm         ASTM 0515500         >2         <1             Nickel         ppm         ASTM 0515500         >2         <1             Nickel         ppm         ASTM 0515500	SAMPLE INFOR		method	limit/base	current	history1	history2
Sample Date         Client Info         23 Nov 2023             Machine Age         kms         Client Info         34722             Oil Age         kms         Client Info         0             Sample Status         Client Info         Changed             Sample Status         Client Info         Changed             CONTAMINATION         method         Imit/base         current         history1         history2           Water         WC Method         >0.2         NEG             Chromium         ppm         ASTM 05/80%         >20         2             Nickel         ppm         ASTM 05/80%         >20         2             Aluminum         ppm         ASTM 05/80%         >20         10             Silver         ppm         ASTM 05/80%         >20         10             Aluminum         ppm         ASTM 05/80%         >15         1             Autiminum         ppm					PC0083786		
Machine Age         kms         Client Info         34722             Oil Age         kms         Client Info         0             Sample Status         Client Info         Changed             Sample Status         method         limit/base         current         history1         history2           Water         WC Method         >0.2         NEG             WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185(m)         >20         2             Nickel         ppm         ASTM D5185(m)         >22         <1	•						
Oil Age         Kms         Client Info         0             Sample Status         Client Info         Changed             CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         >0.2         NEG             WEAR METALS         method         limit/base         current         history1         history2           Wcon         ppm         ASTM D5180m         >20         2             Nickel         ppm         ASTM D5180m         >22         <1	•	kms					
Coli Changed         Client Info         Changed              Sample Status         Image: Status	•				-		
Sample Status         method         Imit/base         current         history1         history2           CONTAMINATION         wC Method         >0.2         NEG             Glycol         WC Method         >0.2         NEG             WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D515(m)         >20         78             Nickel         ppm         ASTM D515(m)         >20         2             Sliver         ppm         ASTM D515(m)         >20         10             Lead         ppm         ASTM D515(m)         >20         10             Copper         ppm         ASTM D515(m)         >20         10             Autimony         ppm         ASTM D515(m)         >20         10             Autimony         ppm         ASTM D515(m)         >40              Copper         ppm         ASTM D515(m)         0	-				-		
CONTAMINATION         method         limil/base         current         history1         history2           Water         WC Method         >0.2         NEG             Glycol         WC Method         NEG             WEAR METALS         method         limil/base         current         history1         history2           Iron         ppm         ASTM D5185(m)         >20         2             Nickel         ppm         ASTM D5185(m)         >2         0             Aluminum         ppm         ASTM D5185(m)         >2         1             Lead         ppm         ASTM D5185(m)         >2         10             Auminum         ppm         ASTM D5185(m)         >40         2             Lead         ppm         ASTM D5185(m)         >40              Auminum         ppm         ASTM D5185(m)         >0              Astimony         ppm         ASTM D5185(m)         0	0				-		
Water         WC Method         >0.2         NEG            Glycol         WC Method         NEG             WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185(m)         >20         2             Chromium         ppm         ASTM D5185(m)         >2         <1             Nickel         ppm         ASTM D5185(m)         >2         <1             Silver         ppm         ASTM D5185(m)         >2         <1             Auminum         ppm         ASTM D5185(m)         >20         10             Lead         ppm         ASTM D5185(m)         >40         2             Antimony         ppm         ASTM D5185(m)         >5         1             Antimony         ppm         ASTM D5185(m)         0              Addium         pm         ASTM D5185(m)         10         5	-	TION	method	limit/base	current	history1	history2
Glycol         WC Method         NEC             WEAR METALS         method         limil/base         current         history1         history2           Iron         ppm         ASTM D5185(m)         >90         78             Chromium         ppm         ASTM D5185(m)         >20         2             Nickel         ppm         ASTM D5185(m)         >2         <1							
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185(m)         >90         78             Chromium         ppm         ASTM D5185(m)         >20         2             Nickel         ppm         ASTM D5185(m)         >2         <1				20.L	-		
Iron         ppm         ASTM D5185(m)         >90         78             Chromium         ppm         ASTM D5185(m)         >20         2             Nickel         ppm         ASTM D5185(m)         >2         <1	,			limit/booo		biotonut	history 0
Chromium         ppm         ASTM D5185(m)         >20         2             Nickel         ppm         ASTM D5185(m)         >2         <1							
Nickel         ppm         ASTM D5/85(m)         >2         <1             Titanium         ppm         ASTM D5/85(m)         >2         0             Silver         ppm         ASTM D5/85(m)         >2         <1			. ,		-		
Titanium       ppm       ASTM D5185(m)       >2       0           Silver       ppm       ASTM D5185(m)       >2       <1							
Silver         ppm         ASTM D5185(m)         >2         <1             Aluminum         ppm         ASTM D5185(m)         >20         10             Lead         ppm         ASTM D5185(m)         >40         2             Copper         ppm         ASTM D5185(m)         >330         46             Tin         ppm         ASTM D5185(m)         >15         1             Antimony         ppm         ASTM D5185(m)         0              Vanadium         ppm         ASTM D5185(m)         0              Cadmium         ppm         ASTM D5185(m)         0              ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         100         <1			. ,				
AluminumppmASTM D5188(m)>2010LeadppmASTM D5188(m)>402CopperppmASTM D5188(m)>33046TinppmASTM D5188(m)>151AntimonyppmASTM D5188(m)0VanadiumppmASTM D5188(m)0BerylliumppmASTM D5188(m)0CadmiumppmASTM D5188(m)0ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5188(m)10<1			. ,		-		
Lead         ppm         ASTM D5185(m)         >40         2             Copper         ppm         ASTM D5185(m)         >330         46             Tin         ppm         ASTM D5185(m)         >15         1             Antimony         ppm         ASTM D5185(m)         >10             Vanadium         ppm         ASTM D5185(m)         0             Beryllium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         10         <1							
Copper         ppm         ASTM D5185(m)         >330         46             Tin         ppm         ASTM D5185(m)         >15         1             Antimony         ppm         ASTM D5185(m)         0             Vanadium         ppm         ASTM D5185(m)         0             Beryllium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         10         <1			. ,				
Tin       ppm       ASTM D5185(m)       >15       1           Antimony       ppm       ASTM D5185(m)       0           Vanadium       ppm       ASTM D5185(m)       0           Beryllium       ppm       ASTM D5185(m)       0           Cadmium       ppm       ASTM D5185(m)       0           ADDITIVES       method       limit/base       current       history1       history2         Boron       ppm       ASTM D5185(m)       250       5           Molybdenum       ppm       ASTM D5185(m)       10       <1					_		
Antimony         ppm         ASTM D5185(m)         0             Vanadium         ppm         ASTM D5185(m)         0             Beryllium         ppm         ASTM D5185(m)         0             Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         250         5             Molybdenum         ppm         ASTM D5185(m)         10         <1		ppm	. ,	>330	46		
Vanadium         ppm         ASTM D5185(m)         0             Beryllium         ppm         ASTM D5185(m)         0             Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         250         5             Barium         ppm         ASTM D5185(m)         10         <1		ppm	. ,	>15	1		
Beryllium         ppm         ASTM D5185(m)         0             Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         250         5             Barium         ppm         ASTM D5185(m)         10         <1	-	ppm			-		
Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         250         5             Barium         ppm         ASTM D5185(m)         10         <1             Molybdenum         ppm         ASTM D5185(m)         100         58             Magnesium         ppm         ASTM D5185(m)         100         58             Magnesium         ppm         ASTM D5185(m)         450         905             Magnesium         ppm         ASTM D5185(m)         3000         1152             Calcium         ppm         ASTM D5185(m)         3000         1152             Sulfur         ppm         ASTM D5185(m)         1350         1166             Sulfur         ppm         ASTM D5185(m)         225         11             Sulfur         ppm         ASTM D5185(m)	Vanadium	ppm	ASTM D5185(m)		0		
ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         250         5             Barium         ppm         ASTM D5185(m)         10         <1	Beryllium	ppm	ASTM D5185(m)		0		
Boron         ppm         ASTM D5185(m)         250         5             Barium         ppm         ASTM D5185(m)         10         <1	Cadmium	ppm	ASTM D5185(m)		0		
Barium       ppm       ASTM D5185(m)       10       <1           Molybdenum       ppm       ASTM D5185(m)       100       58           Manganese       ppm       ASTM D5185(m)       100       58           Magnesium       ppm       ASTM D5185(m)       450       905           Calcium       ppm       ASTM D5185(m)       3000       1152           Calcium       ppm       ASTM D5185(m)       3000       1152           Calcium       ppm       ASTM D5185(m)       1350       1166           Zinc       ppm       ASTM D5185(m)       4250       2250           Sulfur       ppm       ASTM D5185(m)       4250       2250           Lithium       ppm       ASTM D5185(m)       25       11           Sodium       ppm       ASTM D5185(m)       >25       11           Sodium       ppm       ASTM D5185(m)       >20       20	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185(m)         100         58             Manganese         ppm         ASTM D5185(m)         450         905             Magnesium         ppm         ASTM D5185(m)         450         905             Calcium         ppm         ASTM D5185(m)         3000         1152             Calcium         ppm         ASTM D5185(m)         1150         926             Zinc         ppm         ASTM D5185(m)         1350         1166             Sulfur         ppm         ASTM D5185(m)         4250         2250             Lithium         ppm         ASTM D5185(m)         4250         2250             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >25         11             Sodium         ppm         ASTM D5185(m)         >20         20             Fuel         <	Boron	ppm	ASTM D5185(m)	250	5		
Maganese         ppm         ASTM D5185(m)         1             Magnesium         ppm         ASTM D5185(m)         450         905             Calcium         ppm         ASTM D5185(m)         3000         1152             Phosphorus         ppm         ASTM D5185(m)         1150         926             Zinc         ppm         ASTM D5185(m)         1350         1166             Sulfur         ppm         ASTM D5185(m)         4250         2250             Lithium         ppm         ASTM D5185(m)         4250         2250             Solfur         ppm         ASTM D5185(m)         4250         2250             Lithium         ppm         ASTM D5185(m)         >25         11             Solicon         ppm         ASTM D5185(m)         >20         20             Fuel         %         ASTM D7634*         >3.0         2             INFRA-RED         method         limit/base </td <td>Barium</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>10</td> <td>&lt;1</td> <td></td> <td></td>	Barium	ppm	ASTM D5185(m)	10	<1		
Magnesium       ppm       ASTM D5185(m)       450       905           Calcium       ppm       ASTM D5185(m)       3000       1152           Phosphorus       ppm       ASTM D5185(m)       1150       926           Zinc       ppm       ASTM D5185(m)       1350       1166           Sulfur       ppm       ASTM D5185(m)       4250       2250           Lithium       ppm       ASTM D5185(m)       4250       2250           CONTAMINANTS       method       limit/base       current       history1       history2         Silicon       ppm       ASTM D5185(m)       >25       11           Sodium       ppm       ASTM D5185(m)       >20       20           Fuel       %       ASTM D5793*       >3.0       2            INFRA-RED       method       limit/base       current       history1       history2         Soot %       %       ASTM D7844*       >6       1.8           Nitration <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>100</td> <td>58</td> <td></td> <td></td>	Molybdenum	ppm	ASTM D5185(m)	100	58		
Calcium         ppm         ASTM D5185(m)         3000         1152             Phosphorus         ppm         ASTM D5185(m)         1150         926             Zinc         ppm         ASTM D5185(m)         1350         1166             Sulfur         ppm         ASTM D5185(m)         4250         2250             Lithium         ppm         ASTM D5185(m)         4250         2250             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >25         11             Sodium         ppm         ASTM D5185(m)         >25         11             Potassium         ppm         ASTM D5185(m)         >20         20             Fuel         %         ASTM D5185(m)         >3.0         2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7	Manganese	ppm	ASTM D5185(m)		1		
Phosphorus         ppm         ASTM D5185(m)         1150         926             Zinc         ppm         ASTM D5185(m)         1350         1166             Sulfur         ppm         ASTM D5185(m)         4250         2250             Lithium         ppm         ASTM D5185(m)         4250         2250             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >25         11             Sodium         ppm         ASTM D5185(m)         >25         11             Potassium         ppm         ASTM D5185(m)         >20         20             Fuel         %         ASTM D5185(m)         >3.0         2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         >6         1.8             Nitration         Abs/cm         ASTM D7	Magnesium	ppm	ASTM D5185(m)	450	905		
Zinc         ppm         ASTM D5185(m)         1350         1166             Sulfur         ppm         ASTM D5185(m)         4250         2250             Lithium         ppm         ASTM D5185(m)         4250         2250             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >25         11             Sodium         ppm         ASTM D5185(m)         >25         11             Potassium         ppm         ASTM D5185(m)         >20         20             Fuel         %         ASTM D593*         >3.0         ▲ 2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         >6         1.8             Nitration         Abs/cm         ASTM D7624*         >20         13.9	Calcium	ppm	ASTM D5185(m)	3000	1152		
Sulfur         ppm         ASTM D5185(m)         4250         2250             Lithium         ppm         ASTM D5185(m)         4250         <1	Phosphorus	ppm	ASTM D5185(m)	1150	926		
Sulfur         ppm         ASTM D5185(m)         4250         2250             Lithium         ppm         ASTM D5185(m)         4250         <1		ppm	ASTM D5185(m)	1350	1166		
LithiumppmASTM D5185(m)<1CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185(m)>2511SodiumppmASTM D5185(m)>1587PotassiumppmASTM D5185(m)>2020Fuel%ASTM D5085>3.02INFRA-REDmethodlimit/basecurrenthistory1history2Soot %%ASTM D7844*>61.8NitrationAbs/cmASTM D7624*>2013.9	Sulfur						
Silicon         ppm         ASTM D5185(m)         >25         11             Sodium         ppm         ASTM D5185(m)         >158         7             Potassium         ppm         ASTM D5185(m)         >20         20             Fuel         %         ASTM D5085(m)         >3.0         2         20             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         >6         1.8             Nitration         Abs/cm         ASTM D7624*         >20         13.9	Lithium		ASTM D5185(m)		<1		
Sodium         ppm         ASTM D5185(m)         >158         7             Potassium         ppm         ASTM D5185(m)         >20         20             Fuel         %         ASTM D5185(m)         >3.0         2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         >6         1.8             Nitration         Abs/cm         ASTM D7624*         >20         13.9	CONTAMINA	NTS	method	limit/base	current	history1	history2
Sodium         ppm         ASTM D5185(m)         >158         7             Potassium         ppm         ASTM D5185(m)         >20         20             Fuel         %         ASTM D5185(m)         >3.0         2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         >6         1.8             Nitration         Abs/cm         ASTM D7624*         >20         13.9	Silicon	ppm	ASTM D5185(m)	>25	11		
Potassium         ppm         ASTM D5185(m)         >20         20             Fuel         %         ASTM D7593*         >3.0         2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         >6         1.8             Nitration         Abs/cm         ASTM D7624*         >20         13.9			( )				
Fuel         %         ASTM D7593*         >3.0         2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         >6         1.8             Nitration         Abs/cm         ASTM D7624*         >20         13.9							
INFRA-REDmethodlimit/basecurrenthistory1history2Soot %%ASTM D7844*>61.8NitrationAbs/cmASTM D7624*>2013.9			. ,				
Soot %         %         ASTM D7844*         >6         1.8             Nitration         Abs/cm         ASTM D7624*         >20         13.9			method	limit/base	current	history1	history2
Nitration         Abs/cm         ASTM D7624*         >20         13.9		%					
	Canadon	, wa, mini		200	51.5		



140 T Ab normal

130

90 Abnorma 80 Nov23/23

18 17 16 cSt (100°C) Base

13

Abnormal 12

Nov23/23

140 Abnormal 130

120 CSt (<del>1</del>0°C) 110 100 B

> 90 Abnorma 80 Nov23/23

Viscosity @ 40°C

Viscosity @ 100°C

Viscosity @ 40°C

## **OIL ANALYSIS REPORT**

Contaction Abs/Im ASIM D744* >25 29.5 VISUAL method imit/base ourrent history1 histo Emulsified Water scalar Visual* >0.2 NEG Free Water scalar Visual* NEG Visc @ 40°C C.st. ASIM/D723m 11.5 103 Visc @ 40°C C.st. ASIM/D723m 14.4 13.9 Visc @ 100°C C.st. ASIM/D723m 14.4 13.9 GRAPHS Tron (ppm) Auminum (ppm) Auminum (ppm) Auminum (ppm) Copper (ppm) Copper (ppm) Viscosity @ 100°C V		FLUID DEGRA		method	limit/base	current	history1	history2
Enulatified Water scalar Visual* >0.2 NEG Free Water scalar Visual* NEG FLUID PROPERTIES method limitbase current history1 history1 Nisce 2000 Costs ASTM 02270* 126 136 Viscosity Index (VI) Scale ASTM 02270* 126 136 GRAPHS Tron (ppm) Aluminum (ppm) Aluminum (ppm) Copper (ppm) Copper (ppm) Copper (ppm) Copper (ppm) WarCheck - C3-1175 Appleby Line, Burlington, ON L/Z 5H9 No. : PC0083786 Recieved :: 15 Dec 2023 Tron (2203421 Diagnosed :: 19 Dec 2023 TORONTO FIRE SERVE Contact Customer Service at 1-800-268-2131. Contact Customer Service at 1-800-268-2131.					>25	29.5		
Enulatified Water scalar Visual* >0.2 NEG Free Water scalar Visual* NEG FLUID PROPERTIES method limitbase current history1 history1 Nisce 2000 Costs ASTM 02270* 126 136 Viscosity Index (VI) Scale ASTM 02270* 126 136 GRAPHS Tron (ppm) Aluminum (ppm) Aluminum (ppm) Copper (ppm) Copper (ppm) Copper (ppm) Copper (ppm) WarCheck - C3-1175 Appleby Line, Burlington, ON L/Z 5H9 No. : PC0083786 Recieved :: 15 Dec 2023 Tron (2203421 Diagnosed :: 19 Dec 2023 TORONTO FIRE SERVE Contact Customer Service at 1-800-268-2131. Contact Customer Service at 1-800-268-2131.		VISUAI		method	limit/base	current	historv1	history2
Free Water scalar Visual* NEG FLUID PROPERTIES method limit/base current history1 history1 history1 visco 100°C cls1 ASIMD220m 115 103 Visc @ 40°C cls1 ASIMD220m 14.4 13.9 Visc @ 100°C cls1 ASIMD220m 14.4 13.9 GRAPHS GRAPHS Aluminum (ppm) Aluminum (ppm) Aluminum (ppm) Copper (ppm) Goper (ppm) Copper (ppm) Viscosity @ 100°C Viscosity @ 100°C WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 No. : PC0808786 Recleved ::15 Dec 2023 TORONTO FIRE SERV Viscosity I (Additional Test: FUEDLUITON, KV40, PercentFuel, VI) pport, contact Customer Service at 1-300-2862;2131.			scalar					
Visc @ 40°C cst ASIMD228/m 115 103					20.L			
Visc @ 100°C est ASIM D2270° 126 136		FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C C CSt ASTM D2270 126 136 Viscosity Index (VI) Scale ASTM D2270 126 136 GRAPHS Iron (ppm)	ov23/23	Visc @ 40°C	cSt	ASTM D7279(m)	115	103		
GRAPHS Iron (ppm)	2	Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.9		
ron (ppm) Fron (ppm) Aluminum (ppm) Aluminum (ppm) Copper (ppm) Cop		• • • •	Scale	ASTM D2270*	126	136		
Aluminum (ppm) Aluminum (ppm)								
Aluminum (ppm) Aluminum (ppm) Aluminum (ppm)					10			
Aluminum (ppm) Aluminum (ppm) Aluminum (ppm)		200 Severe			8	0 - Severe		
Aluminum (ppm) Aluminum (ppm) Aluminum (ppm) Aluminum (ppm) Aluminum (ppm)	E	150-			6	0-		
Aluminum (ppm) Aluminum (ppm)	DDT	100 - Abnormal			dd 4	0 - Abnormal		
Aluminum (ppm) Aluminum (ppm) Aluminum (ppm) Aluminum (ppm) Copper (ppm) Copper (ppm) Viscosity @ 100°C Viscosity @ 100°C Viscosity @ 100°C Viscosity @ 100°C Copper (ppm) Copper (ppm) Co		50 -			2	0		
Aluminum (ppm) Aluminum (ppm)						-		c
Aluminum (ppm) Aluminum (ppm)		Vov23/1			Vav23/2	Vov23/2		50750/mW
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То 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.

F: (416)338-9207