

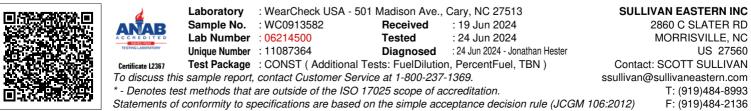
Machine Id

31269 Component Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- QTS)

Test UCM Method utment History 2 History 2 Samole Name Client Into UCM Work 1980		 						
Sample Number Client Info W003382 ··· ··· Sample Number Client Info 500 ··· ··· Machine Age hrs Client Info 500 ··· ··· Di Age hrs Client Info 500 ··· ··· Filter Age hrs Client Info 500 ··· ··· OI Age hrs Client Info Somo ··· ··· OI Changed Client Info Somo ··· ··· ··· Sample Status ··· Time Changed ··· ··· WEAR no no no ··· ··· ··· Nicel pm ////////////////////////////////////	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machano Ago Max Client Info Yar Yar Hei Client Info Yar Hei Hei Di Loanged Client Info Changed Client Info Changed		Sample Number		Client Info		WC0913582		
Oil Age Inter No Sol Sol Inter No Sol Sol Inter No Sol		Sample Date		Client Info		10 Jun 2024		
Filter Age Ins Client Info Some Image		Machine Age	hrs	Client Info		470		
Oil Changed Hitter Changed Sample Status Client Info (Sample Status Changed (Sample Status) Changed (Sampl		Oil Age	hrs	Client Info		500		
Filter Changed Sample Status Client into Changed NTEPTION ··· ··· WEAR Ion pm ASTMD518m >100 12 ··· ··· Nickel ppm ASTMD518m >20 2 ··· ··· Nickel ppm ASTMD518m >40 0 ···< ··· Silver ppm ASTMD518m >30 0 ··· ··· Auminum ppm ASTMD518m >30 0 ···< ··· ··· Quart ppm ASTMD518m >30 0 ···< ··· Quart ppm ASTMD518m >30 0 ···< ··· Vanadum ppm ASTMD518m >30 0 ···< ··· ··· Vanadum ppm ASTMD518m >10 ···< ··· ··· ··· Vanadum ppm ASTMD518m >20 .·· ··· ··· ··· Vanadum ppm ASTMD518m >18 <t< th=""><th></th><th>Filter Age</th><th>hrs</th><th>Client Info</th><th></th><th>500</th><th></th><th></th></t<>		Filter Age	hrs	Client Info		500		
Filter Changed Sample Status Changed (Term In) Changed (Term In) <thchanged (Term In) Changed (Term In)<</thchanged 		Oil Changed		Client Info		Changed		
Sample Status ATTENTO In Interno ppm ATTENTO Interno ppm Iron ppm ASIMOBIS >100 12 Interno Interno Nckel ppm ASIMOBIS 200 20 Interno Interno Nckel ppm ASIMOBIS 200 Interno Interno <th></th> <th>Filter Changed</th> <th></th> <th>Client Info</th> <th></th> <th>-</th> <th></th> <th></th>		Filter Changed		Client Info		-		
WEAR Iron ppn ASTM DB16n >100 12 ··· ··· Chromium ppm ASTM DB16n >20 2 ··· ··· Nickel ppm ASTM DB16n >20 2 ··· ··· Silver ppm ASTM DB16n >40 0 ··· ··· Aluminum ppm ASTM DB16n >40 2 ··· ··· Aluminum ppm ASTM DB16n >0 2 ··· ··· Aumanum ppm ASTM DB16n >0 2 ··· ··· Copper ppm ASTM DB16n >0 0 ··· ··· Waradum ppm ASTM DB16n >0 0 ··· ··· Vanadum ppm ASTM DB16n >0 0 ··· ··· Vanadum ppm ASTM DB16n >0 0 ···< ··· Vanadum ppm ASTM DB16n >0		-				_		
Chromium ppm ASTM D518sm 20 2 Nickel ppm ASTM D518sm Titanium ppm ASTM D518sm Aluminum ppm ASTM D518sm Auminum ppm ASTM D518sm Copper ppm ASTM D518sm -0 Tin ppm ASTM D518sm -00 Vanadium ppm ASTM D518sm -00 Vanadium ppm ASTM D518sm -00 Vanadium ppm ASTM D518sm -50 0 Vanadium ppm ASTM D518sm -50 0 Vanadium ppm ASTM D518sm -20 11.8 Vanadium ppm ASTM D518sm <th></th> <th> </th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>		 						
Nickel ppm ASTM (58)55 -4 0 Titanium ppm ASTM (58)55 -2 -1 Silver ppm ASTM (58)55 -20 5 Aluminum ppm ASTM (58)55 -20 5 Copper ppm ASTM (58)55 -30 173 Vandum ppm ASTM (58)55 -30 173 Vandum ppm ASTM (58)55 -15 2 Vandum ppm ASTM (58)55 -10 Velow Metal scalar Vusual NONE NONE Velow Metal scalar Vusual NONE NONE Silicon ppm ASTM (58)55 -20 6 Fuel % A	WEAR	Iron	ppm	ASTM D5185m	>100	12		
Titanium ppm ASTM 0515m 1 Silver ppm ASTM 0515m 20 Auminum ppm ASTM 0515m 20 Lead ppm ASTM 0515m -40 2 Coppor ppm ASTM 0515m -40 2 Vanadum ppm ASTM 0515m -40 2 Vanadum ppm ASTM 0515m -40 8 Vanadum ppm ASTM 0515m -20 6 Vanadum ppm ASTM 0515m -20 6 Velow Metal scalar Visual NONE NONE NONE Velow Metal scalar Visual NONE Solition scalar Visual NONE NONE <t< th=""><th></th><th>Chromium</th><th>ppm</th><th>ASTM D5185m</th><th>>20</th><th>2</th><th></th><th></th></t<>		Chromium	ppm	ASTM D5185m	>20	2		
Silver ppm ASTM D0165m >30 0 Aluminum ppm ASTM D0185m >20 5 Lead ppm ASTM D0185m >200 5 Copper ppm ASTM D0185m >300 173 Vanadium ppm ASTM D0185m >150 2 Vanadium ppm ASTM D0185m >150 0 Valeow Metal soalar "Visual NONE NONE CONTAMINATION Silicon ppm ASTM D0185m >20 6 Valeow Metal Soalar "Visual NONE Silicon ppm ASTM D16185m >20 NEG Glocol WC Method >0.2 NEG Soot3% %13M D1763 >0		Nickel	ppm	ASTM D5185m	>4	0		
Aluminum ppm ASTM D516m >20 5 Lead ppm ASTM D516m >40 2 Copper MIX D518m >40 2 Tin ppm ASTM D518m >15 2 Vanadium ppm ASTM D518m >15 2 White Metal scalar "Visual NONE NONE CONTAMINATION Silicon ppm ASTM D518m >25 13 Botassium ppm ASTM D524 >5 0.5 Water WC Method 50.2 NEG Sold %6 %6 "ASTM D724 >3 0.1 Sulfation Abs/mm "ASTM D724 >20 11.8 Sand/Dirt scalar "V		Titanium	ppm	ASTM D5185m		<1		
Lead ppm ASTM D5185m >4-0 2 Copper ppm ASTM D5185m >130 173 Vanadium ppm ASTM D5185m 12 Vanadium ppm ASTM D5185m 15 10 Vanadium ppm ASTM D5185m NONE NONE Velow Metal scalar Visual NONE NONE Velow Metal scalar Visual NONE NONE Velow Metal scalar Visual NONE NONE Value % ASTM D5185m<>50 0.5 Water WC Method JO.2 NEG Sol % % % % NONE NONE Sol % % % NONE		Silver	ppm	ASTM D5185m	>3	0		
Copper ppm ASTM D5185m >3.30 17.3 Tin ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 0 White Metal scalar Visual NONE NONE Vellow Metal scalar Visual NONE NONE CONTAMINATION Silicon ppm ASTM D5185m<>-25 13 Potassium ppm ASTM D5185m<>-20 6 Water WG MCMethod -0.2 NEG Giycol WG Method 0.0 Suifation Asim YSBM ASIM D5184 30.1 Suifation Asim YSBM NONE NONE Suifation		Aluminum	ppm	ASTM D5185m	>20	5		
Tin ppm ASTM D5185m >15 2 Vanadium ppm ASTM D5185m C 0 White Metal scalar Visual NONE NONE INONE CONTAMINATION Silicon pm ASTM D5185m >20 6 Potassium ppm ASTM D5185m >20 6 Valor % ASTM D5185m >20 6 Valor % ASTM D5185m >20 6 Water % ASTM D7815 >0.0 S Stott % % MSTM D7814 >0.1 Sulfation Assim % MSTM D7814 > Sulfation Assim NONE NONE NONE Debris scalar		Lead	ppm	ASTM D5185m	>40	2		
Tin ppm ASTM DSIGN >15 2 Vanadium ppm ASTM DSIGN AD		Copper		ASTM D5185m	>330	173		
White Metal Yellow Metal scalar "Visual NONE NONE CONTAMINATION Silicon ppm ASTM D5185m >-25 13 Potassium ppm ASTM D5185m >-26 6 Water 90 ASTM D5185m >-20 NCG Glycol WC Method >-2 NEG Soto % % 'ASTM D7844 > NEG Sulfation Abs/Im 'ASTM D7844 > NEG Sulfation Abs/Im 'ASTM D7844 > NEG Sulfation Abs/Im 'ASTM D7844 > NONE NONE Sulfation Abs/Im 'ASTM D7845 > NONE Sulfation Abs/Im 'ASTM D7845 > </th <th></th> <th>Tin</th> <th>ppm</th> <th>ASTM D5185m</th> <th>>15</th> <th>2</th> <th></th> <th></th>		Tin	ppm	ASTM D5185m	>15	2		
Yellow Metal scalar *Visual NONE NONE		Vanadium	ppm	ASTM D5185m		0		
Silicon ppm ASTM D5185m >25 13 Potassium ppm ASTM D5185m >20 6 Fuel % ASTM D5185m >20 6 Water WC Method >0.2 NEG Glycol WC Method >0.2 NEG Soot % % 'ASTM D784 >3 0.1 Solfation Abs/tm< 'ASTM D784 >3 0.1 Sulfation Abs/tm< 'ASTM D784 >3 0.1 Sulfation Abs/tm< 'ASTM D784 >3 0.1 Sulfation Abs/tm< 'ASTM D784 >30 39.3 Debris scalar 'Visual NONE NONE Sand/Dit scalar 'Visual NORML NORML		White Metal	scalar	*Visual	NONE	NONE		
Potassium ppm ASTM D5185m >20 6 Fuel % ASTM D5185m >20 0.5 Water % ASTM D5185m >20 0.5 Water WC Method >0.2 NEG Glycol WC Method >3 0.1 Soot % % ASTM D784 >3 0.1 Sulfation Abz/tmm Yisual NONE 39.3 Sulfation Abz/tmm Yisual NONE NONE Sulfation Abz/tmm Yisual NONE NONE Appearance scalar Yisual NORML NORML Odor scalar Yisual NORML NORML Boron ppm ASTM05185m 250 79		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium ppm ASTM D5185m >20 6 Fuel % ASTM D5185m >20 0.5 Water % ASTM D5185m >20 0.5 Water WC Method >0.2 NEG Glycol WC Method >3 0.1 Soot % % ASTM D784 >3 0.1 Sulfation Abz/tmm Yisual NONE 39.3 Sulfation Abz/tmm Yisual NONE NONE Sulfation Abz/tmm Yisual NONE NONE Appearance scalar Yisual NORML NORML Odor scalar Yisual NORML NORML Boron ppm ASTM05185m 250 79		 						
Fuel % ASTM D3524 >5 0.5 Water W WC Method >0.2 NEG Glycol WC Method >0.2 NEG Soot % %STM D7624 >20 11.8 Nitration Abs/rm *ASTM D7624 >20 11.8 Sulfation Abs/rm *ASTM D745 >30 39.3 Sulfation Abs/rm *ASTM D745 >30 39.3 Sulfation Abs/rm 'ASTM D745 >30 39.3 Sulfation Abs/rm 'Assal NONE NONE Sand/Dirt scalar 'Visual NORM NORM Appearance scalar 'Visual NORM NORM Boron ppm ASTM D5185m	CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	13		
Water WC Method >0.2. NEG Glycol WC Method S0 NEG NEG Soot %0 % 'ASTM D7844 >30 0.1 Nitration Abs/cm 'ASTM D7624 >30 30.3 Sulfation Abs/fm 'ASTM D7644 >30 NONE Sulfation Abs/fm 'ASTM D7644 >30 30.3 Sulfation Abs/fm 'ASTM D7645 S00 NONE NONE Sulfation Abs/fm 'ASTM D7145 S00 NONE Sulfation scalar 'Visual NORM NONE Sand/DICONDITION Scalar 'Visual NORM NORM Boron pp ASTM D5185m -50 79 Molybdenum pom A			ppm	ASTM D5185m	>20	6		
Glycol WC Method NEG Soot % % 'ASTM D784 >3 0.1 Nitradio Abs: 'ASTM D784 >3 0.1 Nitradio Abs: 'ASTM D784 >3 39.3 Sultation Abs:/tm 'ASTM D7815 >30 39.3 Sultation Abs:/tm 'Visual NONE Sultation scalar 'Visual NONE Sand/Dirt scalar 'Visual NONE Appearance scalar 'Visual NORM Odor scalar 'Visual NORM Boron ppm ASTM D7845 >10 24 Malybdenum pm ASTM D8155 10 44 Malybdenum pm ASTM D8155 10 <		Fuel	%	ASTM D3524	>5	0.5		
Soot % % *ASTM D7844 >3 0.1 Nitration Abs/rm *ASTM D762 >20 11.8 Sulfation Abs/rm *ASTM D762 >30 39.3 Sulfation Abs/rm *ASTM D762 >30 39.3 Sulfation Abs/rm *ASTM D762 >30 39.3 Sulfation Abs/rm *ASTM D762 NONE NONE Sulfation Abs/rm *ASTM D762 NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NORM NORM Appearance scalar *Visual NORM NORM Appearance scalar *Visual NORM 30		Water		WC Method	>0.2	NEG		
NitrationAbs/cm*ASTM D7624>2011.8SulfationAbs/tmm*ASTM D7415>3039.3Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMNORMLOdorscalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLBariumppmASTM D5185m>1024BariumppmASTM D5185m1024MagnesiumppmASTM D5185m101MagnesiumppmASTM D5185m30001369PhosphorusppmASTM D5185m1150697ZincppmASTM D5185m42502407SulfurppmASTM D5185m4510637SulfurppmASTM D5185m4550637Base Number (BN)mpKHASTM D5185m454		Glycol		WC Method		NEG		
Sulfation Abs/Imm 'ASTM D7415 >30 39.3 Silt scalar 'Visual NONE NONE Debris scalar 'Visual NONE NONE Sand/Dirt scalar 'Visual NONE NONE Appearance scalar 'Visual NORM NORM Odor scalar 'Visual NORM NORM Ddor scalar 'Visual NORM NORM Ddor scalar 'Visual NORM NORM Ddor scalar 'Visual NORM NORM Borin scalar 'Visual NOR 3.3 Molybdenum ppm ASTM D5185m 10 2.4 Magnesium ppm AST		Soot %	%	*ASTM D7844	>3	0.1		
Siltscalar*VisualNONEInnoInnoInnoDebrisscalarVisualNONENONEInnoInnoInnoInnoSand/DirtscalarVisualNONENONENONEInnoInnoInnoInnoAppearancescalarVisualNORLNORLNORLInno<		Nitration	Abs/cm	*ASTM D7624	>20	11.8		
Debrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		Sulfation	Abs/.1mm	*ASTM D7415	>30	39.3		
Sand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGSodiumppmASTM D5185m>1583BoronppmASTM D5185m25079BariumppmASTM D5185m1024MolybdenumppmASTM D5185m1024MaganeseppmASTM D5185m101MagnesiumppmASTM D5185m30.001369CalciumppmASTM D5185m30.001369PhosphorusppmASTM D5185m11506977SulfurppmASTM D5185m13508733SulfurppmASTM D5185m13502470SulfurppmASTM D5185m13502470SulfurppmASTM D5185m13508733SulfurppmASTM D5185m14.4SulfurppmASTM D5185m45.550.6SulfurppmKNH p144>2550.6<		Silt	scalar	*Visual	NONE	NONE		
Appearancescalar*VisualNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGSodiumppmASTM D5185m>1583BoronppmASTM D5185m25079BariumppmASTM D5185m100244MolybdenumppmASTM D5185m100444MagnesseeppmASTM D5185m450926MagnesiumppmASTM D5185m450926PhosphorusppmASTM D5185m450926ZincppmASTM D5185m1150697SulfurppmASTM D5185m1350873SulfurppmASTM D5185m1350873SulfurppmASTM D5185m144OxidationAbs/Imm'ASTM D7414>2550.6Base Number (BN)mS KOHASTM D28868.54.4		Debris	scalar	*Visual	NONE	NONE		
Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.2 NEG FLUID CONDITION Sodium ppm ASTM D5185m >158 3 Boron ppm ASTM D5185m 250 79 Barium ppm ASTM D5185m 100 44 Molybdenum ppm ASTM D5185m 100 44 Magnesium ppm ASTM D5185m 100 444 Magnesium ppm ASTM D5185m 450 926 Calcium ppm ASTM D5185m 1150 697 Zinc ppm ASTM D5185m 1500 697 Sulfur ppm ASTM D5185m 1500 697 Oxidation Abs/:1mm 'ASTM D5185m <		Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water scalar *Visual >0.2 NEG FLUID CONDITION Sodium ppm ASTM D5185m >158 3 Boron ppm ASTM D5185m 250 79 Barium ppm ASTM D5185m 10 24 Molybdenum ppm ASTM D5185m 100 44 Manganese ppm ASTM D5185m 100 44 Magnesium ppm ASTM D5185m 450 926 Calcium ppm ASTM D5185m 3000 1369 Phosphorus ppm ASTM D5185m 1150 697 Sulfur ppm ASTM D5185m 1350 873 Oxidation Abs/.1mm 'ASTM D5185m 1350 873		Appearance	scalar		NORML	NORML		
Sodium ppm ASTM D5185m >158 3 Boron ppm ASTM D5185m 250 79 Barium ppm ASTM D5185m 100 244 Molybdenum ppm ASTM D5185m 100 444 Manganese ppm ASTM D5185m 100 444 Magnesium ppm ASTM D5185m 450 926 Calcium ppm ASTM D5185m 3000 1369 Phosphorus ppm ASTM D5185m 1150 697 Zinc ppm ASTM D5185m 1350 873 Sulfur ppm ASTM D5185m 4250 2470 Oxidation Abs/1mm<'ASTM D7141 >25 50.6 Base Number (BN) mg K0Hg ASTM D2896 8.5 4.4		Odor	scalar	*Visual	NORML	NORML		
Boron ppm ASTM D5185m 250 79 Barium ppm ASTM D5185m 10 24 Molybdenum ppm ASTM D5185m 100 444 Manganese ppm ASTM D5185m 100 444 Magnesium ppm ASTM D5185m 450 926 Magnesium ppm ASTM D5185m 3000 1369 Calcium ppm ASTM D5185m 3000 1369 Phosphorus ppm ASTM D5185m 1150 6977 Zinc ppm ASTM D5185m 1150 6977 Sulfur ppm ASTM D5185m 1350 8733 Oxidation Abs.1mm *ASTM D5185m 4250 24700 Base Number (BN) mg KOH2 ASTM D2848 8.5 4.4		Emulsified Water	scalar	*Visual	>0.2	NEG		
Boron ppm ASTM D5185m 250 79 Barium ppm ASTM D5185m 10 24 Molybdenum ppm ASTM D5185m 100 444 Manganese ppm ASTM D5185m 100 444 Magnesium ppm ASTM D5185m 450 926 Magnesium ppm ASTM D5185m 3000 1369 Calcium ppm ASTM D5185m 3000 1369 Phosphorus ppm ASTM D5185m 1150 6977 Zinc ppm ASTM D5185m 1150 6977 Sulfur ppm ASTM D5185m 1350 8733 Oxidation Abs.1mm *ASTM D5185m 4250 24700 Base Number (BN) mg KOH2 ASTM D2848 8.5 4.4		 						
BariumppmASTM D5185m1.024MolybdenumppmASTM D5185m1.00444ManganeseppmASTM D5185m1.001.001.001.00MagnesiumppmASTM D5185m45.0092.60CalciumppmASTM D5185m3.0001.36.90PhosphorusppmASTM D5185m1.1506.97.0ZincppmASTM D5185m1.3508.73.03.00.01.00.0SulfurppmASTM D5185m4.2502.47.00OxidationAbs.11m*ASTM D7141>2.5550.66Base Number (BN)mg KOH2ASTM D28868.54.4.4	FLUID CONDITION	_						
Molybdenum ppm ASTM D5185m 100 44 Manganese ppm ASTM D5185m 1 Magnesium ppm ASTM D5185m 450 926 Calcium ppm ASTM D5185m 3000 1369 Phosphorus ppm ASTM D5185m 1150 6977 Zinc ppm ASTM D5185m 1350 8733 Sulfur ppm ASTM D5185m 4250 2470 Oxidation Abs/.1mm *ASTM D7141 >25 50.66 Base Number (BN) mg KOHz ASTM D2896 8.5 4.4								
Manganeseppm $ASTM D5185m$ 1Magnesiumppm $ASTM D5185m$ 450926aCalciumppm $ASTM D5185m$ 30001369Phosphorusppm $ASTM D5185m$ 11506977Zincppm $ASTM D5185m$ 13508733Sulfurppm $ASTM D5185m$ 425024700Oxidation $Abs.1mm$ *ASTM D7141>2550.66Base Number (BN)mg KOHzASTM D28968.54.4								
Magnesium ppm ASTM D5185m 450 926 Calcium ppm ASTM D5185m 3000 1369 Phosphorus ppm ASTM D5185m 1150 697 Zinc ppm ASTM D5185m 1350 873 Sulfur ppm ASTM D5185m 4250 2470 Oxidation Abs:/1mm *ASTM D7141 >25 50.6 Base Number (BN) mg KOHz ASTM D2896 8.5 4.4					100			
Calcium ppm ASTM D5185m 3000 1369 Phosphorus ppm ASTM D5185m 1150 697 Zinc ppm ASTM D5185m 1350 873 Sulfur ppm ASTM D5185m 4250 2470 Oxidation Abs:.1mm *ASTM D714 >25 50.6 Base Number (BN) mg KOHz ASTM D2896 8.5 4.4		-						
Phosphorus ppm ASTM D5185m 1150 697 Zinc ppm ASTM D5185m 1350 873 Sulfur ppm ASTM D5185m 4250 2470 Oxidation Abs.1mm *ASTM D7414 >25 50.6 Base Number (BN) mg KOHz ASTM D2896 8.5 4.4		•						
Zinc ppm ASTM D5185m 1350 873 Sulfur ppm ASTM D5185m 4250 2470 Oxidation Abs.1mm *ASTM D741 >25 50.6 Base Number (BN) mg K0Hg ASTM D2896 8.5 4.4								
Sulfur ppm ASTM D5185m 4250 2470 Oxidation Abs/.1mm *ASTM D7414 >25 50.66 Base Number (BN) mg KOH/g ASTM D2896 8.5 4.4			ppm					
Oxidation Abs/.1mm *ASTM D7414 >25 50.6 Base Number (BN) mg KOH/g ASTM D2896 8.5 4.4								
Base Number (BN) mg KOH/g ASTM D2896 8.5 4.4								
Visc @ 100°C cSt ASTM D445 14.4 🤚 12.0 /						4.4		
		Visc @ 100°C	cSt	ASTM D445	14.4	12.0		





Contact/Location: SCOTT SULLIVAN - MSCDUR Page 2 of 2