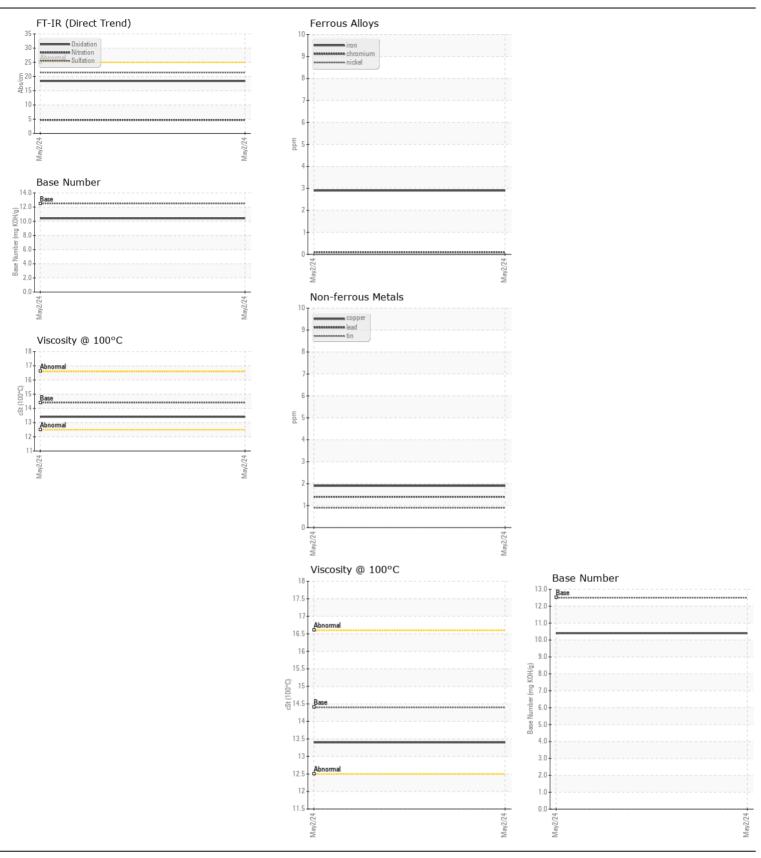
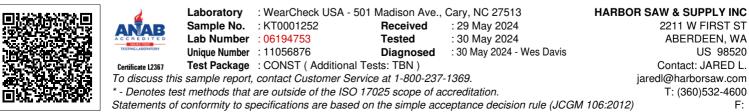


Machine Id KIOTI DK5510 TP8800053 Component **Diesel Engine**

CHEVRON DELO 400 MULTIGRADE 15W40 (--- QTS)

Test UOM Method Unitwork Contract Number Contract Number<	CHEVRON DELO 400 MUL IIGRADE 15W40 (• (415)						
Beample at the next service interval to monitor. Sample Number Sample Dati Client Info KT001282 0 Machine Age hrs Client Info 0 0	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Single Data Distribution Distribution </th <th rowspan="7"></th> <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>KT0001252</th> <th></th> <th></th>		Sample Number		Client Info		KT0001252		
Oil Ago Inter Changed Client Info O Inter Changed Inter Changed Oil Changed Client Info NA Inter Changed NA Inter Changed Inter Changed NA Inter Changed Inter Changed </td <th>Sample Date</th> <td></td> <td>Client Info</td> <td></td> <th>02 May 2024</th> <td></td> <td></td>		Sample Date		Client Info		02 May 2024		
Filter Age Ins Client Info NA Image		Machine Age	hrs	Client Info		0		
Oil Changed Fitter Changed Sample Status Client Info NA Image Sample Status NA Image Sample Status Image Sam		Oil Age	hrs	Client Info		0		
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Sample Status Nome n Nome n N WEAR inon pm All component wear rates are normal. inon inon </td <th>-</th> <td></td> <td>Client Info</td> <td></td> <th>N/A</th> <td></td> <td></td>		-		Client Info		N/A		
Iron ppm ASTM DS16m >100 3 All component wear rates are normal. Promonium ppm ASTM DS16m >20 <1 Nickel ppm ASTM DS16m >20 <1 Nickel ppm ASTM DS16m >3 <1 Silver ppm ASTM DS16m >3 <1 Aluminum ppm ASTM DS16m >3 <1 Auminum ppm ASTM DS16m >0 1 Comper ppm ASTM DS16m >1 Vanadum ppm ASTM DS16m >15 <1 Vanadum ppm ASTM DS16m >50 <12 Vanadum ppm ASTM DS16m >50 <10 Velow Metal scalar Visual </th <th>Filter Changed</th> <th></th> <th>Client Info</th> <th></th> <th>N/A</th> <th></th> <th></th>		Filter Changed		Client Info		N/A		
All component wear rates are normal. Chromium Nickel ppm ASTM DSESS ASTM DSESS A		Sample Status				NORMAL		
All component wear rates are normal. Chromium Nickel ppm ASTM DSESS ASTM DSESS A		Iron	nom	ASTM D5185m	<100	2		
All component wear rates are normal. Nickel ppm ASTM 0518m -4 0 Titanium ppm ASTM 0518m -1 All urinium ppm ASTM 0518m -20 4 All urinium ppm ASTM 0518m -20 4 Copper ppm ASTM 0518m -30 2 Vandium ppm ASTM 0518m -15 -1 Vandium ppm ASTM 0518m -15 -1 Vandium ppm ASTM 0518m -25 12 Vandium ppm ASTM 0518m >25 12 Vandium ppm ASTM 0518m >25 12 Vandium ppm ASTM 0518m >25 12 Vandium ppm ASTM 0518m >20 AST Vanit	WEAN							
Titanium ppm ASTM 05856 s c1 initial Silver ppm ASTM 05856 -3 c1 initial Lead ppm ASTM 05856 -40 1 initial Lead ppm ASTM 05856 -40 1 initial Copper ppm ASTM 05856 -40 1 initial Tin ppm ASTM 05856 -50 1 initial Vanadium ppm ASTM 05856 -10 initial initial Vanadium ppm ASTM 05856 -20 1 initial Vanadium ppm ASTM 05856 -20 1 initial Velow Metal scalar Visual NONE NONE initial Velow Metal scalar Visual NONE NONE initial Velow Metal scalar Visual NONE initial initial Silicor ppm ASTM 05856 -20 1.7	All component wear rates are normal.							
Silver ppm ASTU D3153m >3 <1 Aluminum ppm ASTU D3155m >20 4 Lead ppm ASTU D3155m >20 4 Copper ppm ASTU D3156m >330 2 Vanadium ppm ASTU D3156m >15 <1					24			
Aluminum ppm ASTM D5185m >20 4 Lead ppm ASTM D5185m >40 1 Copper Main D5185m >40 1 Vanadium ppm ASTM D5185m >15 <1					-3			
Lead pp ASTM D5185m >4-0 1 Copper ppm ASTM D5185m >15 <1								
Copper ppm ASTM D515m >330 2 Tin ppm ASTM D515m <1								
Tin ppm ASTM D5185m >15 <1 Vanadium ppm ASTM D5185m <1								
Varadium ppm ASTM D5185n <1								
White Metal Yellow Metal scalar 'Visual NONE NONE CONTAMINATION Silicon ppm ASTM D185m >-25 12 There is no indication of any contamination in the oil. Silicon ppm ASTM D185m >-20 2 Water VC Method >-02 NEG Glycol WC Method >-02 NEG Solidation Abscim 'XSTM D784 >-3 0 Solidation Abscim 'XSTM D784 > 4 Solidation Abscim 'XSTM D784 > 4 <th></th> <th></th> <th></th> <th>10</th> <th></th> <th></th> <th></th>					10			
Yellow Metal scalar *Visual NONE CONTAMINATION Silicon ppm ASTM D5185m<>-25 12 There is no indication of any contamination in the oil. Potassium ppm ASTM D5185m<>-20 2 Water WC Method >5 <1.0					NONE			
CONTAMINATION Silicon ppm ASTM D5185m >225 12 There is no indication of any contamination in the oil. Potassium ppm ASTM D5185m >20 2 Fuel WC Method >5 <1.0								
Potassium ppm ASTM D5185m >20 2 4 Fuel WC Method >5 <1.0 WC WC Method >5.0 2 III IIII IIII IIIII IIIII IIIIIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII								
There is no indication of any contamination in the oil. Fuel WC Method >5 <1.0 Water WC Method >0.2 NEG Glycol WC Method >0.2 NEG Solo % StM D7624 >0 Nitration Abs/cm 'ASTM D7624 >20 4.7 Sulfation Abs/cm 'Assclast<''Visual NONE NONE Sulfation Abs/cm 'Visual NORE NONE Sand/Dirt scalar 'Visual NORM NORM Appearance scalar 'Visual NORM NORM Boron p	CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	12		
Function Normation Normation <th< th=""><th rowspan="12">There is no indication of any contamination in the oil.</th><th></th><th>ppm</th><th>ASTM D5185m</th><th>>20</th><th>2</th><th></th><th></th></th<>	There is no indication of any contamination in the oil.		ppm	ASTM D5185m	>20	2		
Glycol WC Method NEG Soot % % *ASTM D784 >3 0 Nitration Abs/ *ASTM D784 >30 4.7 Nitration Abs/ *ASTM D784 >30 4.7 Sulfation Abs/ *ASTM D7815 >30 4.14 Sulfation Abs/ *Nisual NONE NONE Silt scalar *Visual NONE NONE Appearance scalar *Visual NORE NONE Odor scalar *Visual NORE NORE Mappearance scalar *Visual NORE NORE Odor scalar *Visual NORE NORE Bronn ppm ASTM D7165 104 Molybdenum pm ASTM D5165 151 104 Molybdenum pm ASTM D5165 0 47		Fuel						
Soot % % YASTM D7844 >3 0 Nitration Abs/cm 'ASTM D762 >20 4.7 Sulfation Abs/tm 'ASTM D762 >20 21.4 Sulfation Abs/tm 'ASTM D762 >30 21.4 Sulfation Abs/tm 'ASTM D762 >30 21.4 Sulfation Abs/tm 'ASTM D762 NONE NONE Sulfation Scalar 'Visual NONE NONE Debris scalar 'Visual NOR NORML Appearance scalar 'Visual NORML NORML Odor scalar 'Visual NORL NORML The BN result indicates that there is suitable alkalinity remaining in the oil is suitable for further service. Sodium ppm ASTM D5185m					>0.2			
NitrationAbs/cm'ASTM D7624>204.7SulfationAbs/tm''ASTM D7415>3021.4SiltScalar''VisualNONENONEDebrisScalar''VisualNONENONESand/Dirtscalar''VisualNONENONEAppearancescalar''VisualNORMNORMLOdorscalar''VisualNORMLNORMLDebrisscalar''VisualNORMLNORMLAppearancescalar''VisualNORMLNORMLOdorscalar''VisualNORMLNORMLBroinppmASTM D5185m151104BariumppmASTM D5185m0.40MalganesseppmASTM D5185m0.41707MalganesseppmASTM D5185m0.41707CalciumppmASTM D5185m10431706TincppmASTM D5185m10431707CalciumppmASTM D5185m10431640DisphorusppmASTM D5185m10431640SulfurppmASTM D5185m1043						NEG		
SulfationAbs:1mm'ASTM D7415>-3021.4Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMNORMLOdorscalar*VisualNORMNORMLOdorscalar*VisualNORMNORMLOdorscalar*VisualNORMNORMLBoronppmASTM D5185m1040BariumppmASTM D5185m0.40MaganeseppmASTM D5185m0.40MagnesiumppmASTM D5185m0.40MagnesiumppmASTM D5185m0422MagnesiumppmASTM D5185m0476MagnesiumppmASTM D5185m1043796NordicionASTM D5185m1043796NordicionASTM D5185m1043843896MagnesiumppmASTM D5185m1043796SulfarppmASTM D5185m104384384384384			%	*ASTM D7844	>3			
Siltscalar*VisualNONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORLNORLOdorscalar*VisualNORLNORLNORLEmulsified Watescalar*VisualNORLNORLFLUID CONDITIONSodiumppmASTM D5185m104BoronppmASTM D5185m151104BariumppmASTM D5185m0.40								
Debrisscalar"VisualNONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*VisualNORMLNORMLSodiumppmASTM D5185m511104BoronppmASTM D5185m0.40BariumppmASTM D5185m0.40MagneseppmASTM D5185m2.0442MagnesiumppmASTM D5185m0.4104CalciumppmASTM D5185m0.4104PhosphorusppmASTM D5185m0.41070ZincppmASTM D5185m9.43899SulfurppmASTM D5185m50122860QxiationAbs/Irm*ASTM D714i-2518.4Base Number (BN)mg KOHgASTM D218912.510.4Base Number (BN)mg KOHg								
Sand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGSodiumppmASTM D5185m151104BoronppmASTM D5185m0.40BariumppmASTM D5185m0.40MolybdenumppmASTM D5185m0.40MagnesiumppmASTM D5185m0476MagnesiumppmASTM D5185m0.41707CalciumppmASTM D5185m0.41707MagnesiumppmASTM D5185m0.41707SulfurppmASTM D5185m0.41707SulfurppmASTM D5185m50122860SulfurppmASTM D5185m50122860SulfurppmASTM D5185m501218.4SulfurppmASTM D5185m501218.4SulfurppmASTM D5185m501218.4SulfurppmASTM D5185m5012 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>								
Appearance Odorscalar*VisualNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGFLUID CONDITIONSodiumppmASTM D5185m151104BoronppmASTM D5185m151104BariumppmASTM D5185m0.40MalganeseeppmASTM D5185m0.40MagnesiumppmASTM D5185m042MagnesiumppmASTM D5185m042MagnesiumppmASTM D5185m041MagnesiumppmASTM D5185m041 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>								
Odorscalar*VisualNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m151104BoronppmASTM D5185m151104BariumppmASTM D5185m0.40MolybdenumppmASTM D5185m0.40MaganeseeppmASTM D5185m042MagnesiumppmASTM D5185m0476CalciumppmASTM D5185m0476PhosphorusppmASTM D5185m1043796SulfurppmASTM D5185m50122860OxidationAbs/.1mm'ASTM D5185m50122860Mage Number (BN)mg KOHgASTM D288612.510.4								
Emulsified Waterscalar*Visual>0.2NEGFLUID CONDITIONSodiumppmASTM D5185m151104BoronppmASTM D5185m151104BariumppmASTM D5185m0.40MolybdenumppmASTM D5185m0.40ManganeseppmASTM D5185m042MagnesiumppmASTM D5185m0476CalciumppmASTM D5185m0476PhosphorusppmASTM D5185m1043796SulfurppmASTM D5185m50122860OxidationAbs/1mm*ASTM D7141>2518.4Base Number (BN)mg KOHgASTM D289612.510.4								
Sodium ppm ASTM D5185m 2 Boron ppm ASTM D5185m 151 104 Barium ppm ASTM D5185m 0.4 0 Barium ppm ASTM D5185m 0.4 0 Molybdenum ppm ASTM D5185m 0.4 0 Manganese ppm ASTM D5185m 0 42 Manganesium ppm ASTM D5185m 0 476 Manganesium ppm ASTM D5185m 0 476 Phosphorus ppm ASTM D5185m 1043 796 Zinc ppm ASTM D5185m 943 899 Sulfur ppm ASTM D5185m 5012 28600 Oxidation Abs/Imm *ASTM D7141 >25 18.4 Base Number (BN) mg KOHg ASTM D2896 12.5 10.4								
Boron ppm ASTM D5185m 151 104 Barium ppm ASTM D5185m 0.4 0 Barium ppm ASTM D5185m 0.4 0 Molybdenum ppm ASTM D5185m 250 42 Manganese ppm ASTM D5185m 0 476 Magnesium ppm ASTM D5185m 0 476 Calcium ppm ASTM D5185m 1043 796 Zinc ppm ASTM D5185m 5012 28600 Sulfur ppm ASTM D5185m 5012 28600 Oxidation Abs/.1mm *ASTM D5185m 5012 28600 Base Number (BN) mg KOHg ASTM D2886 12.5 10.4		Emulsified Water	scalar	*Visual	>0.2	NEG		
Boron ppm ASTM D5185m 151 104 Barium ppm ASTM D5185m 0.4 0 Barium ppm ASTM D5185m 0.4 0 Molybdenum ppm ASTM D5185m 250 42 Manganese ppm ASTM D5185m 0 476 Magnesium ppm ASTM D5185m 0 476 Calcium ppm ASTM D5185m 1043 796 Phosphorus ppm ASTM D5185m 5012 28600 Sulfur ppm ASTM D5185m 5012 28600 Oxidation Abs/.1mm *ASTM D5185m 5012 28600 Base Number (BN) mg KOHg ASTM D2886 12.5 10.4	FI UID CONDITION	Sodium	maa	ASTM D5185m		2		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. Barium ppm ASTM D5185m 0.4 0 Molybdenum ppm ASTM D5185m 250 422 Manganese ppm ASTM D5185m 0 476 Magnesium ppm ASTM D5185m 0 476 Calcium ppm ASTM D5185m 0 476 Calcium ppm ASTM D5185m 2046 1707 Phosphorus ppm ASTM D5185m 1043 796 Sulfur ppm ASTM D5185m 943 899 Oxidation Abs/.1mm *ASTM D5185m 5012 28600 Base Number (BN) mg KOHg ASTM D2896 12.5 10.4					151			
Molybdenum ppm ASTM D5185m 250 42 Manganese ppm ASTM D5185m 0 <1								
Manganese ppm ASTM D5185m								
Magnesium ppm ASTM D5185m 0 476 Calcium ppm ASTM D5185m 2046 1707 Phosphorus ppm ASTM D5185m 1043 796 Zinc ppm ASTM D5185m 943 8999 Sulfur ppm ASTM D5185m 5012 28600 Oxidation Abs/.1mm *ASTM D7141 >25 18.4 Base Number (BN) mg KOH/g ASTM D2896 12.5 10.4		-						
Calcium ppm ASTM D5185m 2046 1707 Phosphorus ppm ASTM D5185m 1043 796 Zinc ppm ASTM D5185m 943 899 Sulfur ppm ASTM D5185m 5012 28600 Oxidation Abs/.1mm *ASTM D7141 >25 18.4 Base Number (BN) mg KOH/g ASTM D2896 12.5 10.4		-			0			
Phosphorus ppm ASTM D5185m 1043 796 Zinc ppm ASTM D5185m 943 899 Sulfur ppm ASTM D5185m 5012 28600 Oxidation Abs/.1mm *ASTM D7414 >25 18.4 Base Number (BN) mg KOH/g ASTM D2896 12.5 10.4		0						
Zinc ppm ASTM D5185m 94.3 899 Sulfur ppm ASTM D5185m 5012 2860 Oxidation Abs/.1mm *ASTM D7414 >25 18.4 Base Number (BN) mg KOH/g ASTM D2896 12.5 10.4								
Sulfur ppm ASTM D5185m 5012 2860 Oxidation Abs/.1mm *ASTM D7414 >25 18.4 Base Number (BN) mg KOH/g ASTM D2896 12.5 10.4		Zinc						
Oxidation Abs/.1mm *ASTM D7414 >25 18.4 Base Number (BN) mg KOH/g ASTM D2896 12.5 10.4		Sulfur		ASTM D5185m	5012	2860		
		Oxidation	Abs/.1mm			18.4		
Visc @ 100°C cSt ASTM D445 14.4 (13.4)		Base Number (BN)	mg KOH/g	ASTM D2896	12.5	10.4		
		Visc @ 100°C	cSt	ASTM D445	14.4	13.4		





Contact/Location: JARED L. - HARABEWA Page 2 of 2