

# ACCO-WRIGHT C0004

## Hoisting Gearbox

{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

#### **WEAR**

All component wear rates are normal.

#### CONTAMINATION

There is no indication of any contamination in the oil.

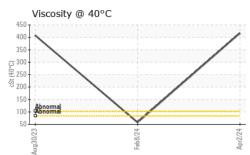
#### FLUID CONDITION

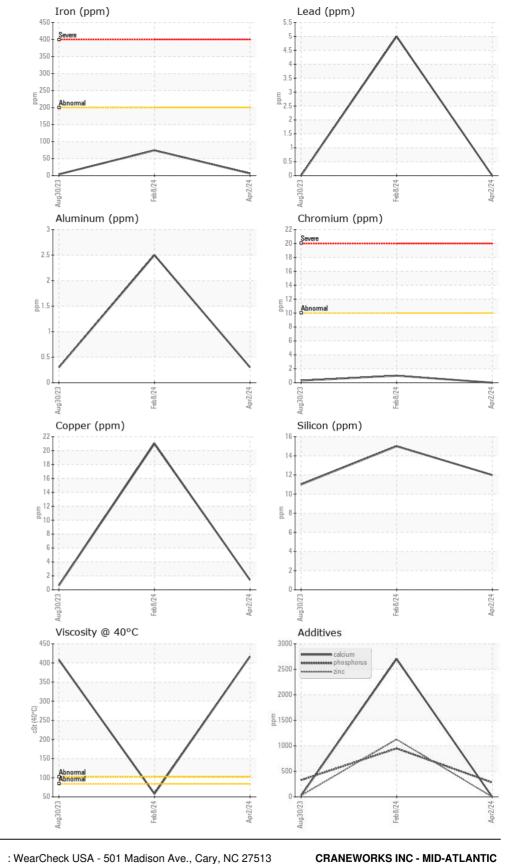
The condition of the oil is acceptable for the time in service.

TestUOMMethodLimit/AnCurrentHistory1History2Sample NumberClient InfoDC0033210DC0033183DC0029158Sample DateClient InfoD2 Apr 202408 Feb 202430 Aug 2023Machine AgehrsClient InfoOOOFilter AgehrsClient InfoOOOOil ChangedClient InfoNot ChangedNot ChangedNot ChangedNot ChangedFilter ChangedClient InfoNot ChangedNot ChangedNot ChangedNot ChangedChromiumppmASTM D5185m>2006744ChromiumppmASTM D5185m>10O1<1NickelppmASTM D5185m>10000AluminumppmASTM D5185mC1<1<1TinppmASTM D5185mO1<1<1VanadiumppmASTM D5185m01<1<1VanadiumppmASTM D5185mI1211<1VanadiumppmASTM D5185mI1211<1VanadiumppmASTM D5185mI2115I1VanadiumppmASTM D5185mI1215I1VanadiumppmASTM D5185mI2115I1VanadiumppmASTM D5185mI2115I1PotassiumppmASTM D5185mI							
Sample DateClient Info02 Apr 202408 Feb 202430 Aug 2023Machine AgehrsClient Info000Oil AgehrsClient Info000Filter AgehrsClient InfoNot ChangdNot ChangdN/AFilter ChangedClient InfoNot ChangdNot ChangdN/ASample StatusClient InfoNot ChangdNot ChangdN/ASample StatusSample StatusSample StatusNot ChangdN/AIronppmASTM D5185m>2006744ChromiumppmASTM D5185m>1001<1NickelppmASTM D5185m>1001<1NickelppmASTM D5185mSample Status000SilverppmASTM D5185mClient Info000AluminumppmASTM D5185mClient Info01<1ItaappmASTM D5185mClient Info001<1VanadiumppmASTM D5185mClient Info01<1<1VanadiumppmASTM D5185mClient InfoNONENONENONENONEVellow Metalscalar"VisualNONENONENONENONENONENONESiliconppmASTM D5185mSample12151111<1PotassiumppmASTM D5185mNONENONE	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine AgehrsClient Info000Oil AgehrsClient Info000Filter AgehrsClient InfoNot ChangdNot ChangdN/AGlient InfoNot ChangdNot ChangdN/ANot ChangdN/AFilter ChangedClient InfoNot ChangdNot ChangdN/ASample StatusClient InfoNot ChangdN/ANORMALNORMALIronppmASTM D5185m>2006744ChromiumppmASTM D5185m>1001<1NickelppmASTM D5185m>1001<1TitaniumppmASTM D5185mI<121<1SilverppmASTM D5185mI<121<1LeadppmASTM D5185mI121<1<1VanadiumppmASTM D5185mIII<1<1VanadiumppmASTM D5185mIII<1<1VanadiumppmASTM D5185mIIII<1<1VanadiumppmASTM D5185mIIII<1<1VanadiumppmASTM D5185mIIII<1<1VanadiumppmASTM D5185mIIII<1<1VanadiumppmASTM D5185mIIIIIII <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>DC0033210</th> <th>DC0033183</th> <th>DC0029158</th>	Sample Number		Client Info		DC0033210	DC0033183	DC0029158
Clink of the section	Sample Date		Client Info		02 Apr 2024	08 Feb 2024	30 Aug 2023
Filter Age Dil Clant InfoClient Info000Oil ChangedClient InfoNot ChangdNot ChangdN/AFilter ChangedClient InfoNot ChangdNot ChangdN/ASample StatusNORMALNORMALNORMALNORMALIronppmASTM D5185m>2006744ChromiumppmASTM D5185m>1001<1NickelppmASTM D5185m>1001<1TitaniumppmASTM D5185m1001<1TitaniumppmASTM D5185m10000AluminumppmASTM D5185m0000AluminumppmASTM D5185m01<1<1LeadppmASTM D5185m01<1<1VanadiumppmASTM D5185m01<1<1VanadiumppmASTM D5185m01<1<1VanadiumppmASTM D5185m101<1<1VanadiumppmASTM D5185m121511<1PotassiumppmASTM D5185m20857WaterWC Method0.2NCNENCNENCNENCNESilticonppmASTM D5185m20857WaterVisualNONENONENONENONENONESilticonppmASTM D5185m	Machine Age	hrs	Client Info		0	0	0
Oil Changed Filter ChangedClient IntoNot ChangdNAC hangdN/ASample StatusClient IntoNot ChangdNAC hangdN/AIronppmASTM D5185m>2006744ChromiumppmASTM D5185m>1001<1NickelppmASTM D5185m>1001<1NickelppmASTM D5185m>1001<1TitaniumppmASTM D5185m<10000AluminumppmASTM D5185m<05000AluminumppmASTM D5185m<01<1<1LeadppmASTM D5185m<01<1<1VanadiumppmASTM D5185m01<1<1VanadiumppmASTM D5185mInNONENONENONEVellow Metalscalar'VisualNONENONENONENONESiliconppmASTM D5185m>20857VatervC Method>08NONENONENONESiliconppmASTM D5185m>20857VatervC Method>0NONENONENONENONESiliconppmASTM D5185m20NONENONENONESoliconppmASTM D5185m>20NONENONENONESoliconppmASTM D5185m<0NONENONE <th>Oil Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>0</th> <th>0</th> <th>0</th>	Oil Age	hrs	Client Info		0	0	0
Filter Changed Sample StatusClient InfoNot Changed NORMALN/AIronppmASTM D5185m>20067.44ChromiumppmASTM D5185m>1001<1NickelppmASTM D5185m>1001<1NickelppmASTM D5185m>1001<1TitaniumppmASTM D5185m0200AluminumppmASTM D5185m0500AluminumppmASTM D5185m0500CopperppmASTM D5185m01<1<1TinppmASTM D5185m01<1<1VanadiumppmASTM D5185m01<1<1VanadiumppmASTM D5185m01<1<1VanadiumppmASTM D5185m01<1<1VanadiumppmASTM D5185m01<1<1PotassiumppmASTM D5185m20857WaterWC Method>0.2NEGNONENONENONESiliconppmASTM D5185m20857WaterWC Method>0.2NEGNONENONENONESoliconppmASTM D5185m20857MaterVisualNONENONENONENONENONESodiumppm	Filter Age	hrs	Client Info		0	0	0
Sample StatusNORMALNORMALNORMALIronppmASTM D5185m>2006744ChromiumppmASTM D5185m>1001<1NickelppmASTM D5185m>1001<1NickelppmASTM D5185m>1001<1TitaniumppmASTM D5185m0000AluminumppmASTM D5185m0500AluminumppmASTM D5185m0121<1LeadppmASTM D5185m01<1<1VanadiumppmASTM D5185m0<100White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONESiliconppmASTM D5185m1215111PotassiumppmASTM D5185m121511PotassiumppmASTM D5185m12NONENONESiliconppmASTM D5185mNONENONENONENONESiliconppmASTM D5185mNONENONENONENONESoliconppmASTM D5185mNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAstm JD5185mscalar*VisualNORENORENOREAppear	Oil Changed		Client Info		Not Changd	Not Changd	N/A
Iron     ppm     ASTM D5185m     >200     6     74     4       Chromium     ppm     ASTM D5185m     >10     0     1     <1       Nickel     ppm     ASTM D5185m     >10     0     1     <1       Titanium     ppm     ASTM D5185m     >10     0     0     0       Aluminum     ppm     ASTM D5185m     0     0     0     0       Aluminum     ppm     ASTM D5185m     0     5     0       Copper     ppm     ASTM D5185m     0     1     <1     1       Vanadium     ppm     ASTM D5185m     0     1     <1     0       Vanadium     ppm     ASTM D5185m     0     1     <1     0       Vanadium     ppm     ASTM D5185m     0     0     <1     0       Vanadium     ppm     ASTM D5185m     20     8     5     7       Vanadium     ppm     ASTM D5185m     >20     8     5     7	Filter Changed		Client Info		Not Changd	Not Changd	N/A
ChromiumppmASTM D5185m>1001<1	Sample Status				NORMAL	NORMAL	NORMAL
ChromiumppmASTM D5185m>1001<1				000	<u>^</u>		
NickelppmASTM D5185m>1001<1	-				-		
Titanium     ppm     ASTM D5185m     <1					-		
Silver     ppm     ASTM D5185m     0     0     0       Aluminum     ppm     ASTM D5185m     0     5     0       Lead     ppm     ASTM D5185m     0     5     0       Copper     ppm     ASTM D5185m     0     1     21     <1       Tin     ppm     ASTM D5185m     0     1     <1     0       Vanadium     ppm     ASTM D5185m     0     1     <1     0       White Metal     scalar     *Visual     NONE     NONE     NONE     NONE     NONE       Yellow Metal     scalar     *Visual     NONE     NONE     NONE     NONE     NONE       Silicon     ppm     ASTM D5185m     >20     8     5     7       Water     WC Method     >0.2     NEG     NEG     NONE     NONE       Sand/Dirt     scalar     *Visual     NONE     NONE     NONE     NORE       Appearance     scalar     *Visual     NORM     NORML				>10	-		
Aluminum     ppm     ASTM D5185m      1     2     <1							
LeadppmASTM D5185m050CopperppmASTM D5185m121<1TinppmASTM D5185m01<1VanadiumppmASTM D5185m0<10White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiliconppmASTM D5185m121511PotassiumppmASTM D5185m>20857WaterWC Method>0.2NEGNEGNONESilitscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORHNORMLNORMLNORMLOdorscalar*VisualNORNORMLNORMLNORMLBoronppmASTM D5185mG167811BariumppmASTM D5185mI617811BariumppmASTM D5185mI3682MolybdenumppmASTM D5185mI61368CalciumppmASTM D5185mI0270324Phosphorusppm<					-	-	
Copper     ppm     ASTM DS185m     1     21     <1							
TinppmASTM D5185m01<1					-	-	
VanadiumppmASTM D5185m0<1					-		
White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONESiliconppmASTM D5185m>20857PotassiumppmASTM D5185m>20857WaterWC Method>0.2NEGNEGNEGSilitscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLOdorscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m372BoronppmASTM D5185m092MolybdenumppmASTM D5185m<1678111BariumppmASTM D5185m<16368CalciumppmASTM D5185m0368CalciumppmASTM D5185m0270324PhosphorusppmASTM D5185m0112723SulfurppmASTM D5185m0112723PuterppmASTM D5185m0112723					-		
Yellow Metalscalar*VisualNONENONENONENONENONESiliconppmASTM D5185m>20857PotassiumppmASTM D5185m>20857WaterWC Method>0.2NEGNEGNEGSilitscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m372BoronppmASTM D5185m092MolybdenumppmASTM D5185m<1678111BariumppmASTM D5185m<113<1MagnesiumppmASTM D5185m<13368CalciumppmASTM D5185m0270324PhosphorusppmASTM D5185m0112723SulfurppmASTM D5185m21332796423655					-		
SiliconppmASTM D5185m121511PotassiumppmASTM D5185m>20857WaterWC Method>0.2NEGNEGNEGSiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m372BoronppmASTM D5185m092MolybdenumppmASTM D5185m092ManganeseppmASTM D5185m0368CalciumppmASTM D5185m0270324PhosphorusppmASTM D5185m0112723ZincppmASTM D5185m0112723SulfurppmASTM D5185m021332796423655						-	
PotassiumppmASTM D5185m>20857WaterWC Method>0.2NEGNEGNEGSiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m372BoronppmASTM D5185m092MolybdenumppmASTM D5185m<1150ManganeseppmASTM D5185m<113<1MagnesiumppmASTM D5185m0270324PhosphorusppmASTM D5185m0112723SulfurppmASTM D5185m021332796423655	Yellow Metal	scalar	^Visual	NONE	NONE	NONE	NONE
WaterWC Method>0.2NEGNEGNEGSiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m372BoronppmASTM D5185m167811BariumppmASTM D5185m092MolybdenumppmASTM D5185m<113<1MagnesiumppmASTM D5185m0270324PhosphorusppmASTM D5185m0112723SulfurppmASTM D5185m021332796423655	Silicon	ppm	ASTM D5185m		12	15	11
Siltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m372BoronppmASTM D5185m092MolybdenumppmASTM D5185m092MagnesiumppmASTM D5185m<113<1MagnesiumppmASTM D5185m0270324PhosphorusppmASTM D5185m0112723SulfurppmASTM D5185m021332796423655	Potassium	ppm	ASTM D5185m	>20	8	5	7
Debrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m372BoronppmASTM D5185m167811BariumppmASTM D5185m092MolybdenumppmASTM D5185m<16368CalciumppmASTM D5185m0270324PhosphorusppmASTM D5185m0112723ZincppmASTM D5185m0112723SulfurppmASTM D5185m021332796423655	Water		WC Method	>0.2	NEG	NEG	NEG
Sand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m372BoronppmASTM D5185m167811BariumppmASTM D5185m092MolybdenumppmASTM D5185m<1150MagnesiumppmASTM D5185m<113<1MagnesiumppmASTM D5185m0270324PhosphorusppmASTM D5185m0112723ZincppmASTM D5185m0112723SulfurppmASTM D5185m021332796423655	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m372BoronppmASTM D5185m167811BariumppmASTM D5185m092MolybdenumppmASTM D5185m<<150ManganeseppmASTM D5185m<<13<1MagnesiumppmASTM D5185m0270324PhosphorusppmASTM D5185m0112723ZincppmASTM D5185m021332796423655	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m372BoronppmASTM D5185m167811BariumppmASTM D5185m092MolybdenumppmASTM D5185m<<150ManganeseppmASTM D5185m<<13<1MagnesiumppmASTM D5185m0270324PhosphorusppmASTM D5185m0270324PhosphorusppmASTM D5185m0112723SulfurppmASTM D5185m021332796423655	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m372BoronppmASTM D5185m167811BariumppmASTM D5185m092MolybdenumppmASTM D5185m<<150ManganeseppmASTM D5185m<<13<1MagnesiumppmASTM D5185m0368CalciumppmASTM D5185m0270324PhosphorusppmASTM D5185m0112723ZincppmASTM D5185m0112723SulfurppmASTM D5185m21332796423655	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Sodium     ppm     ASTM D5185m     3     7     2       Boron     ppm     ASTM D5185m     16     78     11       Barium     ppm     ASTM D5185m     0     9     2       Molybdenum     ppm     ASTM D5185m     0     9     2       Manganese     ppm     ASTM D5185m     <1     5     0       Magnesium     ppm     ASTM D5185m     <1     3     <1       Magnesium     ppm     ASTM D5185m     0     36     8       Calcium     ppm     ASTM D5185m     0     2703     24       Phosphorus     ppm     ASTM D5185m     0     2703     24       Phosphorus     ppm     ASTM D5185m     0     1127     23       Zinc     ppm     ASTM D5185m     0     1127     23       Sulfur     ppm     ASTM D5185m     21332     7964     23655	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Boron     ppm     ASTM D5185m     16     78     11       Barium     ppm     ASTM D5185m     0     9     2       Molybdenum     ppm     ASTM D5185m     0     9     2       Molybdenum     ppm     ASTM D5185m     <1     5     0       Manganese     ppm     ASTM D5185m     <1     3     <1       Magnesium     ppm     ASTM D5185m     0     36     8       Calcium     ppm     ASTM D5185m     0     2703     24       Phosphorus     ppm     ASTM D5185m     0     2703     24       Phosphorus     ppm     ASTM D5185m     0     1127     23       Zinc     ppm     ASTM D5185m     0     1127     23       Sulfur     ppm     ASTM D5185m     21332     7964     23655	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Boron     ppm     ASTM D5185m     16     78     11       Barium     ppm     ASTM D5185m     0     9     2       Molybdenum     ppm     ASTM D5185m     0     9     2       Molybdenum     ppm     ASTM D5185m     <1     5     0       Manganese     ppm     ASTM D5185m     <1     3     <1       Magnesium     ppm     ASTM D5185m     0     36     8       Calcium     ppm     ASTM D5185m     0     2703     24       Phosphorus     ppm     ASTM D5185m     0     2703     24       Phosphorus     ppm     ASTM D5185m     0     1127     23       Zinc     ppm     ASTM D5185m     0     1127     23       Sulfur     ppm     ASTM D5185m     21332     7964     23655	Sodium	maa	ASTM D5185m		3	7	2
Barium     ppm     ASTM D5185m     0     9     2       Molybdenum     ppm     ASTM D5185m     <1	Boron		ASTM D5185m			78	11
Molybdenum     ppm     ASTM D5185m     <1	Barium		ASTM D5185m			9	2
Manganese     ppm     ASTM D5185m     <1	Molybdenum		ASTM D5185m		<1	5	0
Magnesium     ppm     ASTM D5185m     0     36     8       Calcium     ppm     ASTM D5185m     0     2703     24       Phosphorus     ppm     ASTM D5185m     0     282     949     327       Zinc     ppm     ASTM D5185m     0     1127     23       Sulfur     ppm     ASTM D5185m     21332     7964     23655							<1
Calcium     ppm     ASTM D5185m     0     2703     24       Phosphorus     ppm     ASTM D5185m     282     949     327       Zinc     ppm     ASTM D5185m     0     1127     23       Sulfur     ppm     ASTM D5185m     21332     7964     23655		ppm	ASTM D5185m		0	36	8
Phosphorus     ppm     ASTM D5185m     282     949     327       Zinc     ppm     ASTM D5185m     0     1127     23       Sulfur     ppm     ASTM D5185m     21332     7964     23655	-		ASTM D5185m		0		24
Zinc     ppm     ASTM D5185m     0     1127     23       Sulfur     ppm     ASTM D5185m     21332     7964     23655	Phosphorus		ASTM D5185m		282	949	327
Sulfur     ppm     ASTM D5185m     21332     7964     23655			ASTM D5185m			1127	23
	Sulfur		ASTM D5185m		21332	7964	23655
			ASTM D445			57.8	408

Contact/Location: JASON WILDE - CRAASHMA

### WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL







: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

Tested

: 10 May 2024

: 13 May 2024

Laboratory

Sample No.

Lab Number : 06176306

: DC0033210

Contact/Location: JASON WILDE - CRAASHMA Page 2 of 2

11089 LEADBETTER ROAD

ASHLAND, VA

US 23005

Т:

F: