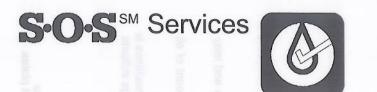


901 WEST 94TH STREET MINNEAPOLIS, MN 55420-4299 (952) 888-4121 (800) 352-2812



Sample For:

SHOP SAMPLE

CORY HELLAND 720 3RD AVE SW

CROOKSTON MN 56716-0538

Serial #:

AGCA0900CCNSL1036

ENGINE

Compartment: Unit #:

R1857

Model #: WO #:

RG900

WC52680

Sample #:

150406342 4/20/15

Date Received: Oil Brand:

CENEX

Oil Blend:

Oil Weight

15W40

CUR	REN	SAN	IPLE IN	FORMATI	ON	1		WEA	R ME	TALS	ANAL'	YSIS				IFRAR			PHYS		_	
Date	Date Changed Quarts Oil Meter Co			Meter	K	CU	NA Sodium	FE	CR	AL	SI Silicon	PB Lead	SN	A	NALY:	SIS	PQ-Ferrous		Anti-	Fuel		
Taken	Oil	Filter	Added	Meter	Oil	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	Soot	Sulfation	Oxidation		Viscosity			Water
4/20/15	N	N		1316		1	1	4	10	0	1	6	1	0	0	17	13	0	13.8	N	N	N

Interpretation

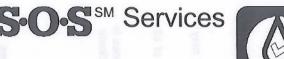
Results of latest sample indicate elements tested didn't exceed normal specifications for this compartment. No excessive wear is indicated at this time. When the MILES/HOURS ON OIL data are unknown, we use the full oil change interval to analyze the sample.

Recommendation

TRI	ENDIN	IG SA	MPLE IN	FORMATIO	N	1 6 9		WE	AR ME	TALS .	ANALY	SIS	E 1			IFRAF			PHYS		L	
Date	Cha	Changed Oil Filter	Quarts	5 0 E	Meter	K Potassium	CU Copper	NA Sodium	FE	CR Chromium	AL	SI Silicon	PB Lead	SN	A	NALY			1/4	STS		
Taken		Filter	Oil Added	Meter	on Oil	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	Soot	Sulfation	Oxidation	PQ-Ferrous Debris	Viscosity	Anti- Freeze	Fuel Dilution	Water
4/20/15	N	N	109	1316		1	1	4	10	0	1	6	1	- 0	0	17	13	0	13.8	N	N	N
7/17/14	Υ	Υ	16	1170	434	3	4	5	26	2	3	4	4	1	6	19	14	8	13.5	N	N	N
7/09/13	Y	Y	18	736	356	2	5	5	29	2	2	7	4	2	0	13	10	10	13.4	N	N	N
\$ 3			SWS.							ğ	100/	MON	ķ i	7		8 8	THE			1		
	CUF	RENT	SAMPLE	IS INCLU	JDED IN	TREND	ING					SEE F	REVERS	SE SIDI	E FOI	R TES	T EXPL	ANATIO	NS			



901 WEST 94TH STREET MINNEAPOLIS,MN 55420-4299 (952) 888-4121 (800) 352-2812





150406345

4/20/15

Sample For:

SHOP SAMPLE

CORY HELLAND 720 3RD AVE SW

CROOKSTON MN 56716-0538

Serial #:

AGCA0900CCNSL1036

PLANETARY REAR LEFT

Unit #:

R1857 RG900

Model #: WO #:

Compartment:

T Date Received: Oil Brand:

Oil Blend: Oil Weight

Sample #:

WC52680

CURRE	CURRENT SAMPLE INFORMATION							WE	AR ME	ETALS	ANAL	YSIS.				PARTIC	LE COL	JNT		PHYSI		
Date Taken	Cha	nged Fltr	Quarts Oil Added	Meter	Meter on Oil	CU copper PPM	FE Iron PPM	CR Chromium PPM	AL Aluminum PPM	SI silicon PPM	PB Lead PPM	NA Sodium PPM	MO Molybdenum PPM	SN Tin PPM	ISO Code	μm 5	ит 15	μm 20	PQ-Ferrous Debris	TEST	Anti	Water
4/20/15	N	8		1316		20	40	1	1	2	0	17	0	0	23/19	43745	2858	517	10	26.3	N	N

Interpretation

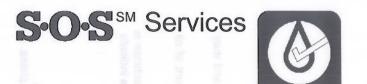
Results of latest sample indicate elements tested didn't exceed normal specifications for this compartment. No excessive wear is indicated at this time. When the MILES/HOURS ON OIL data are unknown, we use the full oil change interval to analyze the sample.

Recommendation

TRENI	DING	SAN	IPLE IN	FORMAT	ION		in la	WE	EAR M	ETALS	ANAL'	YSIS	EF.		BY	PARTIC	LE COU	INT	8 9	PHYSI		
Date	Cha	nged	Quarts	E 23	Meter	CU	FE	CR Chromium	AL Aluminum	SI Silicon	PB Lead	NA Sodium	MO Molybdenum	SN Tin	ISO	um	um	um	PQ-Ferrous	TEST	Anti-	
Taken	Oil	Fltr	Oil Added	Meter	Oil	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	Code	5	um 15	um 20	Debris	Viscosity	Freeze	Water
4/20/15	N	d a		1316		20 20	40	dA YTISOD	TEST TEST	2	DITHE BAS	ж 17 жоза	0	0	23/19	43745	2858	517	to 10 good of smiles	26.3	N	N
		URR	ENT SA	AMPLE IS	INCLU	DED IN	TREN	DING		E Y	K W		SE	E REV	ERSE SII	DE FOR	TEST EX	PLANAT	IONS		9	



901 WEST 94TH STREET MINNEAPOLIS,MN 55420-4299 (952) 888-4121 (800) 352-2812



Sample For:

SHOP SAMPLE CORY HELLAND

720 3RD AVE SW

CROOKSTON MN 56716-0538

Serial #:

AGCA0900CCNSL1036

PLANETARY REAR RIGHT

Compartment: Unit #:

R1857

Model #: WO #: RG900 WC52680 Sample #: Date Received: 150406346

4/20/15

Oil Brand: Oil Blend: Oil Weight

CURRE	NT	SAN	IPLE IN	IFORMAT	ΓΙΟΝ			WE	AR ME	ETALS	ANAL	YSIS				PARTIC	LE COU	INT		PHYSI		
Date Taken	Cha	nged Fltr	Quarts Oil Added	Meter	Meter on Oil	CU Copper PPM	FE Iron PPM	CR Chromium PPM	AL Aluminum PPM	SI silicon PPM	PB Lead PPM	NA Sodium PPM	MO Molybdenum PPM	SN Tin PPM	ISO Code	μm 5	<u>и</u> т 15	um 20	PQ-Ferrous Debris	TES		Water
4/20/15	N			1316	H	5	36	0	1	4	0	1	0	0	23/19	40503	3547	1038	16	24.1	N	N

Interpretation

Results of latest sample indicate elements tested didn't exceed normal specifications for this compartment. No excessive wear is indicated at this time. When the MILES/HOURS ON OIL data are unknown, we use the full oil change interval to analyze the sample.

Recommendation

TREND	DING	SAN	MPLE IN	IFORMAT	ION	19 1	o le	WI	EAR M	ETALS	ANAL	YSIS	Eq.		10 M	PARTIC	LE COU	NT	8 8	PHYSI		
Date	Cha	inged	Quarts	8 8>	Meter	CU	FE Iron	CR Chromium	AL Aluminum	SI Silicon	PB Lead	NA Sodium	MO Molybdenum	SN Tin	ISO	um	um	um	PQ-Ferrous	TES	Anti-	
Taken	Oil	Fltr	Added	Meter	Oil	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	Code	5	um 15	um 20	Debris	Viscosity	Freeze	Wate
4/20/15	N	du du	5 38	1316		5 5 S	36	0	1	4	0	3.81	0	0	23/19	40503	3547	1038	16	24.1	N	N
TASTIN	TARUUG	LIBB	PENT S	MPLE IS	INCLU	DED IN	TDEM	DING	SHARICA	BATK!	MUIGO A	100	SE	E PEV	EDSE SII	DE EOR	TEST EX	DI ANAT	IONS	alvor4		



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Sample For:

SHOP SAMPLE

CORY HELLAND 720 3RD AVE SW

CROOKSTON MN 56716-0538

Serial #:

AGCA0900CCNSL1036

PLANETARY FRONT LEFT

Compartment: Unit #:

R1857

Model #: WO #: RG900 WC52680 Sample #: Date Received: 150406343

4/20/15

Oil Brand: Oil Blend: Oil Weight

CURRE	NT	SAM	PLE IN	FORMAT	TION			WE	AR ME	TALS	ANAL	YSIS				PARTIC	LE COL	JNT		PHYSIC	CAL	
Date Taken	Cha	nged Fltr	Quarts Oil Added	Meter	Meter on Oil	CU copper PPM	FE Iron PPM	CR Chromium PPM	AL Aluminum PPM	SI silicon PPM	PB Lead PPM	NA sodium PPM	MO Molybdenum PPM	SN Tin PPM	ISO Code	μm 5	μm 15	um 20	PQ-Ferrous Debris	TEST		Water
4/20/15	N			1316	E E	7	17	0	0	2	0	12	0	0	21/17	16622	773	262	0	27.3	N	N

Interpretation

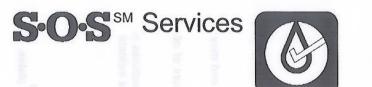
Results of latest sample indicate elements tested didn't exceed normal specifications for this compartment. No excessive wear is indicated at this time. When the MILES/HOURS ON OIL data are unknown, we use the full oil change interval to analyze the sample.

Recommendation

TREN	DING	SAI	MPLE IN	NFORMAT	ION			WI	EAR M	ETALS	ANAL	YSIS	E or S			PARTIC	CLE COL	INT		PHYSI	CAL	
Date	Cha	inged	Quarts	₹ 85	Meter	CU	FE	CR Chromium	AL Aluminum	SI	PB Lead	NA Sodium	MO Molybdenum	SN	ISO	um	um	tım	PQ-Ferrous	TEST	Anti-	T
Taken	Oil	ii Guard	Oil Added	Meter	Oil	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	Code	5	um 15	um 20	Debris	Viscosity	Freeze	Water
4/20/15	N N	2 8	bril work	1316		MULLION 1	17	0	O TRAIL TO	2	3 0	12	0	0	21/17	16622	773	262	0	27.3	N	N
		CURR	RENT SA	AMPLE IS	INCLU	DED IN	TREN	IDING	R	10		Ē	SE	E REV	ERSE SI	DE FOR	TEST EX	(PLANA)	TONS	3	0	



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Sample For:

SHOP SAMPLE

CORY HELLAND 720 3RD AVE SW

CROOKSTON MN 56716-0538

Serial #:

Compartment:

AGCA0900CCNSL1036

PLANETARY FRONT RIGHT

Unit #: R1857

Model #:

WO #: WC52680

RG900

Sample #:

150406344

Date Received: 4/20/15 AGCO

Oil Brand:

Oil Blend:

Oil Weight 75W140

CURRE	NT	SAM	PLE IN	IFORMAT	ION			WE.	AR ME	ETALS	ANAL	YSIS.				PARTIC	LE COL	JNT		PHYSI		
Date	Cha	nged	Quarts	Meter	Meter	CU	FE	CR	AL Aluminum	SI Silicon	PB Lead	NA Sodium	MO Molybdenum	SN	ISO	um	um	um	505	TEST	BAN KIZA	
Taken	Oil	Fltr	Added	Weter	Oil	PPM	PPM	PPM	PPM	PPM	PPM	PPM	РРМ	PPM	Code	μm 5	и т 15	um 20	PQ-Ferrous Debris	Viscosity	Anti- Freeze	Water
4/20/15	N			1316		7	20	0	0	5	0	12	0	0	22/17	25282	970	198	3	28.1	N	N

Interpretation

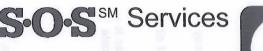
Results of latest sample indicate elements tested didn't exceed normal specifications for this compartment. No excessive wear is indicated at this time. When the MILES/HOURS ON OIL data are unknown, we use the full oil change interval to analyze the sample.

Recommendation

TREND	DING	SAN	IPLE IN	IFORMATI	ION			WE	EAR M	ETALS	ANAL	YSIS	Eg :	18.		PARTIC	LE COL	TAL	2 2	PHYSIC		
Date	Cha	nged	Quarts	₹ 25	Meter	CU	FE	CR Chromium	AL Aluminum	SI Silicon	PB Lead	NA Sodium	MO Molybdenum	SN Tin	ISO	um	um	um	PQ-Ferrous	TEST	Anti-	
Taken	Oil	Fltr	Oil Added	Meter	Oil	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	Code	5	um 15	um 20	Debris	Viscosity	Freeze	Wate
4/20/15	N			1316	CON	7	20	0	0	5	0	12	0	0	22/17	25282	970	198	3	28.1	N	N
7/09/13	Υ			736	526	6	28	0	0	1	0	5	1	1	23/20	54207	5115	928	10	23.6	N	N
	VIION				5	DILL D	Na San	STT'S	60	Sam			Ē		10	9.6			2 2	900		
					977.00	100	MILE	Nacco	HAR	ATION			Ē	00 00 00 00 00 00					8 5	3	5	
	C	URR	ENT SA	MPLE IS	INCLU	DED IN	TREN	DING					SE	E REV	ERSE SI	DE FOR	TEST EX	(PLANAT	IONS			



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ACTION

Sample For:

SHOP SAMPLE CORY HELLAND 720 3RD AVE SW

CROOKSTON MN 56716-0538

Serial #:

AGCA0900CCNSL1036 HYDRAULIC SYSTEM

Compartment: Unit #:

R1857

Model #: WO #:

RG900 WC52680 Sample #: Date Received:

150406347

AGCO

4/20/15

Oil Brand: Oil Blend: Oil Weight

CURRE	NT:	SAM	PLE IN	FORMAT	TION		WE	AR ME	TAL\$	ANAL			INFR	ARED YSIS		PAR	TICLE UNT			IYSICA TESTS		
Date Taken	Cha	nged Fltr	Quarts Oil Added	Meter	Meter on Oil	CU Copper PPM	FE Iron PPM	CR Chromium PPM	AL Aluminum PPM	SI Silicon PPM	PB Lead PPM	NA sodium PPM	Soot	Oxidation	ISO Code	μm 5	µт 10	иm 15	PQ-Ferrous Debris	Viscosity	Anti- Freeze	Wate
4/20/15	N	N		1316		42	38	0	1	12	2	2	0	10	20/12	8542	249	30	13	7.8	N	N

Interpretation

The analysis of the oil sample taken from your Hydraulic System indicates that Iron is high. When the MILES/HOURS ON OIL data are unknown, we use the full oil change interval to analyze the sample.

Recommendation

Due to high readings we suggest cutting oil filter open, pulling out pleats and checking for visible pieces. Your findings should help determine what other actions are necessary.

TREND	ING	SAN	IPLE IN	IFORMATI	ON		WE	AR ME	ETALS	ANALY	/SIS	Y E	INFR	ARED			TICLE			₹YSIC <i>F</i> TESTS		
Date	Cha	inged	Quarts	2 35	Meter	CU	FE	CR Chromium	AL Aluminum	SI Silicon	PB Lead	NA Sodium		Oxidation	ISO	μm	μm 10	μm 15	PQ-Ferrous	Viscosity	Anti-	Wate
Taken	Date Chang Faken Oil		Oil Added	Meter	Oil	PPM	PPM	PPM	PPM	PPM	PPM	PPM	Soot	Oxidation	Code	5	10	15	Debris	Viacosity	Freeze	vvale
4/20/15	N	N	9 11	1316	88	42	38	0	1	12	2	2	0	10	20/12	8542	249	30	13	7.8	N	N
7/09/13	Y	Y		736	736	45	6	0	1	8	5	1	0	0	23/22	69999	52626	31273	4	7.2	N	P
ğ			5	6 15	46	E			18			3	È		日日				8 1	8		
3			1 3	B B		5		8 .	18		E 8	ğ	E 1	8	8 6			£ 5.5	h 5	3		
	01			ADLE 16	INCLUD	ED IN	TOENE	INC					SEE	DEVEDS	E SIDE	EOP TE	ST EXDI	ANATION	15			_