



Sample For: SHOP SAMPLE
 CORY HELLAND
 720 3RD AVE SW
 CROOKSTON MN 56716-0538

Serial #: AGCA0900CCNSL1036
Compartment: ENGINE
Unit #: R1857
Model #: RG900
WO #: WC52680

Sample #: 150406342
Date Received: 4/20/15
Oil Brand: CENEX
Oil Blend:
Oil Weight: 15W40

Used AgChem

CURRENT SAMPLE INFORMATION					WEAR METALS ANALYSIS										INFRARED ANALYSIS			PHYSICAL TESTS				
Date Taken	Changed		Quarts Oil Added	Meter	Meter on Oil	K Potassium PPM	CU Copper PPM	NA Sodium PPM	FE Iron PPM	CR Chromium PPM	AL Aluminum PPM	SI Silicon PPM	PB Lead PPM	SN Tin PPM	Soot	Sulfation	Oxidation	PQ-Ferrous Debris	Viscosity	Anti-Freeze	Fuel Dilution	Water
	Oil	Filter																				
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

Continue to monitor compartment by sampling at recommended intervals.

TRENDING SAMPLE INFORMATION					WEAR METALS ANALYSIS										INFRARED ANALYSIS			PHYSICAL TESTS				
Date Taken	Changed		Quarts Oil Added	Meter	Meter on Oil	K Potassium PPM	CU Copper PPM	NA Sodium PPM	FE Iron PPM	CR Chromium PPM	AL Aluminum PPM	SI Silicon PPM	PB Lead PPM	SN Tin PPM	Soot	Sulfation	Oxidation	PQ-Ferrous Debris	Viscosity	Anti-Freeze	Fuel Dilution	Water
	Oil	Filter																				
4/20/15	N	N		1316		1	1	4	10	0	1	6	1	0	0	17	13	0	13.8	N	N	N
7/17/14	Y	Y		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		736	356	2	5	5	29	2	2	7	4	2	0	13	10	10	13.4	N	N	N
CURRENT SAMPLE IS INCLUDED IN TRENDING										SEE REVERSE SIDE FOR TEST EXPLANATIONS												



Sample For: SHOP SAMPLE
CORY HELLAND
720 3RD AVE SW
CROOKSTON MN 56716-0538

Serial #: AGCA0900CCNSL1036
Compartment: PLANETARY REAR LEFT
Unit #: R1857
Model #: RG900
WO #: WC52680

Sample #: 150406345
Date Received: 4/20/15
Oil Brand:
Oil Blend:
Oil Weight:

CURRENT SAMPLE INFORMATION					WEAR METALS ANALYSIS									PARTICLE COUNT				PHYSICAL TESTS				
Date Taken	Changed		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	µm 20	PQ-Ferrous Debris	Viscosity	Anti-Freeze	Water
	Oil	Filtr																				
4/20/15	N			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

Continue to monitor compartment by sampling at recommended intervals.

TRENDING SAMPLE INFORMATION						WEAR METALS ANALYSIS									PARTICLE COUNT				PHYSICAL TESTS			
Date Taken	Changed		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	um 5	um 15	um 20	PQ-Ferrous Debris	Viscosity	Anti-Freeze	Water
	Oil	Filtr																				
4/20/15	N			1316		20	40	1	1	2	0	17	0	0	23/19	43745	2858	517	10	26.3	N	N
CURRENT SAMPLE IS INCLUDED IN TRENDING										SEE REVERSE SIDE FOR TEST EXPLANATIONS												



Sample For: SHOP SAMPLE
 CORY HELLAND
 720 3RD AVE SW
 CROOKSTON MN 56716-0538

Serial #: AGCA0900CCNSL1036
Compartment: PLANETARY REAR RIGHT
Unit #: R1857
Model #: RG900
WO #: WC52680

Sample #: 150406346
Date Received: 4/20/15
Oil Brand:
Oil Blend:
Oil Weight:

CURRENT SAMPLE INFORMATION					WEAR METALS ANALYSIS									PARTICLE COUNT				PHYSICAL TESTS				
Date Taken	Changed		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	µm 20	PQ-Ferrous Debris	Viscosity	Anti-Freeze	Water
	Oil	Filtr																				
4/20/15	N			1316		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

Continue to monitor compartment by sampling at recommended intervals.

TRENDING SAMPLE INFORMATION						WEAR METALS ANALYSIS										PARTICLE COUNT				PHYSICAL TESTS			
Date Taken	Changed		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	um 5	um 15	um 20	PQ-Ferrous Debris	Viscosity	Anti-Freeze	Water	
	Oil	Filtr																					
4/20/15	N			1316		5	36	0	1	4	0	1	0	0	23/19	40503	3547	1038	16	24.1	N	N	
CURRENT SAMPLE IS INCLUDED IN TRENDING											SEE REVERSE SIDE FOR TEST EXPLANATIONS												



Sample For: SHOP SAMPLE
 CORY HELLAND
 720 3RD AVE SW
 CROOKSTON MN 56716-0538

Serial #: AGCA0900CCNSL1036
Compartment: PLANETARY FRONT LEFT
Unit #: R1857
Model #: RG900
WO #: WC52680

Sample #: 150406343
Date Received: 4/20/15
Oil Brand:
Oil Blend:
Oil Weight

CURRENT SAMPLE INFORMATION					WEAR METALS ANALYSIS									PARTICLE COUNT				PHYSICAL TESTS				
Date Taken	Changed		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	µm 20	PQ-Ferrous Debris	Viscosity	Anti-Freeze	Water
	Oil	Filtr																				
4/20/15	N			1316		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

Continue to monitor compartment by sampling at recommended intervals.

TRENDING SAMPLE INFORMATION						WEAR METALS ANALYSIS									PARTICLE COUNT				PHYSICAL TESTS			
Date Taken	Changed		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	um 5	um 15	um 20	PQ-Ferrous Debris	Viscosity	Anti-Freeze	Water
	Oil	Filtr																				
4/20/15	N			1316		7	17	0	0	2	0	12	0	0	21/17	16622	773	262	0	27.3	N	N
CURRENT SAMPLE IS INCLUDED IN TRENDING										SEE REVERSE SIDE FOR TEST EXPLANATIONS												



Sample For: SHOP SAMPLE
 CORY HELLAND
 720 3RD AVE SW
 CROOKSTON MN 56716-0538

Serial #: AGCA0900CCNSL1036
Compartment: PLANETARY FRONT RIGHT
Unit #: R1857
Model #: RG900
WO #: WC52680

Sample #: 150406344
Date Received: 4/20/15
Oil Brand: AGCO
Oil Blend:
Oil Weight: 75W140

CURRENT SAMPLE INFORMATION					WEAR METALS ANALYSIS									PARTICLE COUNT				PHYSICAL TESTS				
Date Taken	Changed		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	µm 20	PQ-Ferrous Debris	Viscosity	Anti-Freeze	Water
	Oil	Filtr																				
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

Continue to monitor compartment by sampling at recommended intervals.

TRENDING SAMPLE INFORMATION						WEAR METALS ANALYSIS									PARTICLE COUNT				PHYSICAL TESTS			
Date Taken	Changed		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	um 5	um 15	um 20	PQ-Ferrous Debris	Viscosity	Anti-Freeze	Water
	Oil	Filtr																				
4/20/15	N			1316		7	20	0	0	5	0	12	0	0	22/17	25282	970	198	3	28.1	N	N
7/09/13	Y			736	526	6	28	0	0	1	0	5	1	1	23/20	54207	5115	928	10	23.6	N	N
CURRENT SAMPLE IS INCLUDED IN TRENDING										SEE REVERSE SIDE FOR TEST EXPLANATIONS												



ACTION

Sample For: SHOP SAMPLE
CORY HELLAND
720 3RD AVE SW
CROOKSTON MN 56716-0538

Serial #: AGCA0900CCNSL1036
Compartment: HYDRAULIC SYSTEM
Unit #: R1857
Model #: RG900
WO #: WC52680

Sample #: 150406347
Date Received: 4/20/15
Oil Brand: AGCO
Oil Blend:
Oil Weight:

CURRENT SAMPLE INFORMATION						WEAR METALS ANALYSIS							INFRARED ANALYSIS		PARTICLE COUNT				PHYSICAL TESTS			
Date Taken	Changed		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	µm 10	µm 15	PQ-Ferrous Debris	Viscosity	Anti-Freeze	Water
	Oil	Filtr																				
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.

TRENDING SAMPLE INFORMATION						WEAR METALS ANALYSIS							INFRARED ANALYSIS		PARTICLE COUNT				PHYSICAL TESTS			
Date Taken	Changed		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	µm 10	µm 15	PQ-Ferrous Debris	Viscosity
	Oil	Filtr																				
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
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
CURRENT SAMPLE IS INCLUDED IN TRENDING											SEE REVERSE SIDE FOR TEST EXPLANATIONS											