

## NORMAL WEAR NORMAL CONTAMINATION **FLUID CONDITION** NORMAL



## Store 4 - Fairmont **JOHN DEERE 210P 1FF210PAPPF000765** Hydraulic System

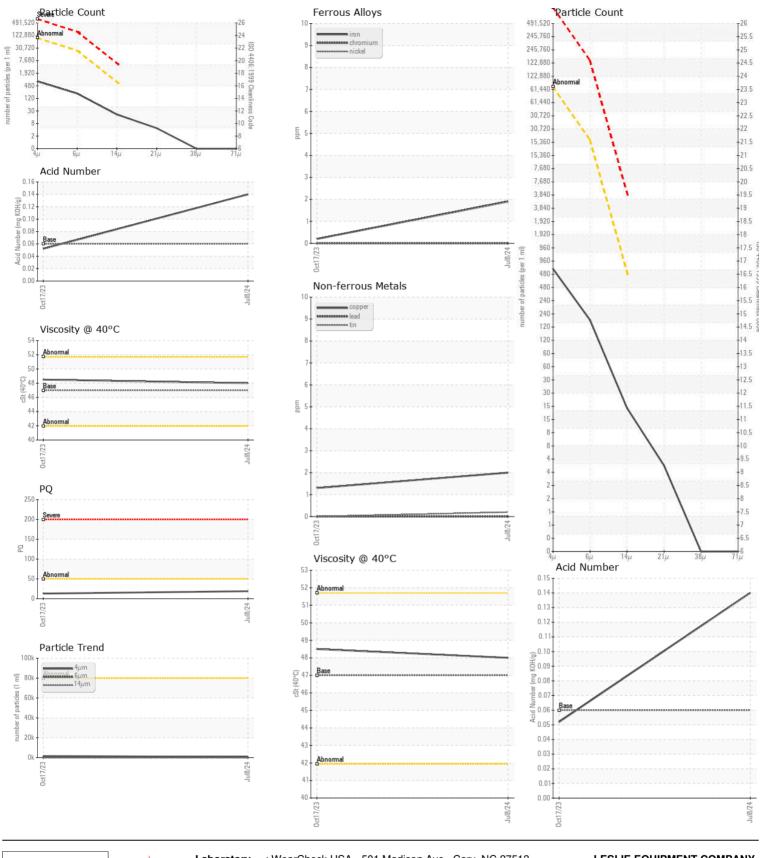
## HITACHI HYDRAULIC SUPER EX 46HN (63 GAL)

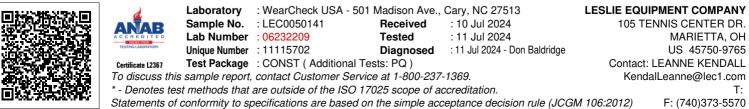
RECOMMENDATION	Test	UOM
RECOMMENDATION	Sample Number	
Resample at the next service interval to monitor.	Sample Date	
	Machine Age	hrs
	Oil Age	hrs
	Filter Age	hrs
	Oil Changed	
	Filter Changed	
	Sample Status	
WEAR	PQ	
	Iron	ppm
All component wear rates are normal.	Chromium	ppm
	Nickel	ppm
	Titanium	ppm
	Silver	ppm
	Aluminum	ppm
	Lead	ppm
	Copper	ppm
	Tin	ppm
	Vanadium	ppm
	White Metal	scalar
	Yellow Metal	scalar
CONTAMINATION	Silicon	ppm
	Potassium	ppm
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.	Water	
	Particles >4µm	
	Particles >6µm	
	Particles >14µm	
	Particles >21µm	
	Particles >38µm	
	Particles >71µm	
	Oil Cleanliness	
	Silt	scalar
	Debris	scalar
	Sand/Dirt	scalar
	Appearance	scalar
	Odor	scalar
	Emulsified Water	scalar
FLUID CONDITION	Sodium	ppm
	ooulum	PPIII

UID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test     UOM     Method     Limit/Abn     Current     History1     Histor	story2
Sample DateClient Info08 Jul 202417 Oct 2023Machine AgehrsClient Info366366Oil AgehrsClient Info325366Filter AgehrsClient Info325366Oil ChangedClient InfoNot ChangdNot ChangdFilter ChangedClient InfoNot ChangdNot ChangdFilter ChangedClient InfoNot ChangdNot ChangdSample StatusNORMALNORMALNORMALPQASTM D8184>501913IronppmASTM D5185m>322<1ChromiumppmASTM D5185m>900NickelppmASTM D5185m>500AluminumppmASTM D5185m>900AluminumppmASTM D5185m>2021TinppmASTM D5185m>5<10VanadiumppmASTM D5185m>5<10White Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>11<1<1<1PotassiumppmASTM D5185m>202<1WaterWC Method>0.075NEGNEG<	
Machine Age Oil AgehrsClient Info366366Oil Age Filter AgehrsClient Info325366Oil ChangedClient InfoNot ChangdNot ChangdFilter ChangedClient InfoNot ChangdNot ChangdFilter ChangedClient InfoNot ChangdNot ChangdSample StatusNot ChangdNot ChangdPQASTM D8184>501913PQASTM D5185m>900NickelppmASTM D5185m>900NickelppmASTM D5185m>900AluminumppmASTM D5185m>900AgadumppmASTM D5185m>211TinppmASTM D5185m>5<100VanadiumppmASTM D5185m>5<10White Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>11<1<1SiliconppmASTM D5185m>202<1<1PotassiumppmASTM D5185m>202<1<1WaterWC Method>0.075NEGNEG	
Oil AgehrsClient Info325366Filter AgehrsClient Info325366Oil ChangedClient InfoNot ChangdNot ChangdFilter ChangedIClient InfoNot ChangdNot ChangdSample StatusIINot ChangdNot ChangdPQASTM D8184>501913PQASTM D8185>322<1IChromiumppmASTM D5185m>322<1INickelppmASTM D5185m>900ISilverppmASTM D5185m>900IAluminumppmASTM D5185m>900ILeadppmASTM D5185m>2800IVanadiumppmASTM D5185m>5021ITinppmASTM D5185m>5021IYellow Metalscalar*VisualNONENONENONEISiliconppmASTM D5185m>11<1<1<1PotassiumppmASTM D5185m>202<1IWaterWC Method>0.075NEGNEGII	
Filter Age Oil ChangedhrsClient Info325366Oil ChangedClient InfoNot ChangdNot ChangdNot ChangdFilter ChangedClient InfoNot ChangdNot ChangdNot ChangdSample StatusClient InfoNot ChangdNot ChangdNot ChangdPQASTM D8184>501913PQASTM D5185m>322<1ChromiumppmASTM D5185m>900NickelppmASTM D5185m>500SilverppmASTM D5185m>900AluminumppmASTM D5185m>900LeadppmASTM D5185m>5021TinppmASTM D5185m>5021VanadiumppmASTM D5185m>5021VanadiumppmASTM D5185m>5<100Vellow Metalscalar*VisualNONENONENONENONESiliconppmASTM D5185m>11<1<1<1<1<1PotassiumppmASTM D5185m>202<1<1<1WaterWC Method>0.075NEGNEG	
Oil ChangedClient InfoNot ChangdNot ChangdFilter ChangedClient InfoNot ChangdNot ChangdSample StatusNORMALNORMALPQASTM D8184>501913PQASTM D5185m>322<1ChromiumppmASTM D5185m>900NickelppmASTM D5185m>500SilverppmASTM D5185m>900AluminumppmASTM D5185m>2800LeadppmASTM D5185m>5021TinppmASTM D5185m>5021VanadiumppmASTM D5185m>5021VanadiumppmASTM D5185m>5021Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>11<1<1-1PotassiumppmASTM D5185m>202<1WaterWC Method>0.075NEGNEG	
Filter Changed Sample StatusClient InfoNot ChangdNot ChangdSample StatusNORMALNORMALNORMALPQASTM D8184>501913IronppmASTM D5185m>322<1ChromiumppmASTM D5185m>900NickelppmASTM D5185m>500SilverppmASTM D5185m>900AluminumppmASTM D5185m>900LeadppmASTM D5185m>2800CopperppmASTM D5185m>5021TinppmASTM D5185m>5021VanadiumppmASTM D5185m>5021Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>11<1<1<1PotassiumppmASTM D5185m>202<1WaterWC Method>0.075NEGNEG	
Sample StatusNORMALNORMALPQASTM D8184>501913IronppmASTM D5185m>322<1ChromiumppmASTM D5185m>900NickelppmASTM D5185m>500TitaniumppmASTM D5185m>500SilverppmASTM D5185m>900AluminumppmASTM D5185m>900LeadppmASTM D5185m>2800CopperppmASTM D5185m>5021TinppmASTM D5185m>5021VanadiumppmASTM D5185m>5<10Vhite Metalscalar*VisualNONENONEYellow Metalscalar*VisualNONENONESiliconppmASTM D5185m>11<1<1PotassiumppmASTM D5185m>202<1WaterWC Method>0.075NEGNEG	
PQ     ASTM D8184     >50     19     13       Iron     ppm     ASTM D5185m     >32     2     <1	
Iron     ppm     ASTM D5185m     >32     2     <1	
Iron     ppm     ASTM D5185m     >32     2     <1	
Chromium     ppm     ASTM D5185m     >9     0     0       Nickel     ppm     ASTM D5185m     >5     0     0       Titanium     ppm     ASTM D5185m     >5     0     0       Silver     ppm     ASTM D5185m     0     0     0       Aluminum     ppm     ASTM D5185m     >9     0     0       Lead     ppm     ASTM D5185m     >28     0     0       Copper     ppm     ASTM D5185m     >50     2     1       Tin     ppm     ASTM D5185m     >50     2     1       Vanadium     ppm     ASTM D5185m     >50     2     1       Vanadium     ppm     ASTM D5185m     >50     2     1       Yellow Metal     scalar     *Visual     NONE     NONE     NONE       Yellow Metal     scalar     *Visual     NONE     NONE     NONE       Silicon     ppm     ASTM D5185m     >11     <1     <1       Potassium	
Nickel     ppm     ASTM D5185m     >5     0     0       Titanium     ppm     ASTM D5185m     0     0     0       Silver     ppm     ASTM D5185m     0     0     0       Aluminum     ppm     ASTM D5185m     >9     0     0       Lead     ppm     ASTM D5185m     >28     0     0       Copper     ppm     ASTM D5185m     >50     2     1       Tin     ppm     ASTM D5185m     >50     2     1       Vanadium     ppm     ASTM D5185m     >50     2     1       Vanadium     ppm     ASTM D5185m     >50     0     0       Vanadium     ppm     ASTM D5185m     >50     0     0       Vellow Metal     scalar     *Visual     NONE     NONE     NONE       Silicon     ppm     ASTM D5185m<>11     <1     <1     <1       Potassium     ppm     ASTM D5185m     >20     2     <1       Water     WC	
Titanium     ppm     ASTM D5185m     0     0       Silver     ppm     ASTM D5185m     0     0     0       Aluminum     ppm     ASTM D5185m     >9     0     0     0       Lead     ppm     ASTM D5185m     >9     0     0     0       Lead     ppm     ASTM D5185m     >28     0     0     0       Copper     ppm     ASTM D5185m     >50     2     1     1       Tin     ppm     ASTM D5185m     >5     <1     0     0       Vanadium     ppm     ASTM D5185m     >5     <1     0     0       White Metal     scalar     *Visual     NONE     NONE     NONE       Yellow Metal     scalar     *Visual     NONE     NONE     NONE       Silicon     ppm     ASTM D5185m     >11     <1     <1       Potassium     ppm     ASTM D5185m     >20     2     <1       Water     WC Method     >0.075     NEG <td></td>	
Silver     ppm     ASTM D5185m     0     0     0       Aluminum     ppm     ASTM D5185m     >9     0     0       Lead     ppm     ASTM D5185m     >28     0     0       Copper     ppm     ASTM D5185m     >50     2     1       Tin     ppm     ASTM D5185m     >5     <1     0       Vanadium     ppm     ASTM D5185m     >5     <1     0       White Metal     scalar     *Visual     NONE     NONE     NONE       Yellow Metal     scalar     *Visual     NONE     NONE     NONE       Silicon     ppm     ASTM D5185m     >11     <1     <1       Potassium     ppm     ASTM D5185m     >20     2     <1       Water     WC Method     >0.075     NEG     NEG	
Aluminum     ppm     ASTM D5185m     >9     0     0       Lead     ppm     ASTM D5185m     >28     0     0       Copper     ppm     ASTM D5185m     >28     0     0       Tin     ppm     ASTM D5185m     >50     2     1       Vanadium     ppm     ASTM D5185m     >5     <1	
Lead     ppm     ASTM D5185m     >28     0     0       Copper     ppm     ASTM D5185m     >50     2     1       Tin     ppm     ASTM D5185m     >5     <1	
Copper     ppm     ASTM D5185m     >50     2     1       Tin     ppm     ASTM D5185m     >5     <1	
TinppmASTM D5185m>5<1	
Vanadium ppm ASTM D5185m 0 0   White Metal scalar *Visual NONE NONE NONE   Yellow Metal scalar *Visual NONE NONE NONE   Silicon ppm ASTM D5185m >11 <1 <1   Potassium ppm ASTM D5185m >20 2 <1   Water WC Method >0.075 NEG NEG	
White Metal scalar *Visual NONE NONE NONE   Yellow Metal scalar *Visual NONE NONE NONE   Silicon ppm ASTM D5185m >11 <1 <1   Potassium ppm ASTM D5185m >20 2 <1   Water WC Method >0.075 NEG NEG	
Yellow Metal     scalar     *Visual     NONE     NONE     NONE       Silicon     ppm     ASTM D5185m     >11     <1     <1       Potassium     ppm     ASTM D5185m     >20     2     <1       Water     WC Method     >0.075     NEG     NEG	
Silicon     ppm     ASTM D5185m     >11     <1	
Potassium     ppm     ASTM D5185m     >20     2     <1	
Potassium     ppm     ASTM D5185m     >20     2     <1	
Water WC Method >0.075 NEG NEG	
Particles >4µm ASIM D/64/ >80000 686 1/03	
Particles >6μm     ASTM D7647     >20000     180     234	
Particles >14µm     ASTM D7647     >640     18     17	
Particles >21µm ASTM D7647 >160 <b>4</b> 6	
Particles >38μm     ASTM D7647     >40     0     0	
Particles >71μm     ASTM D7647     >10     0     0	
Oil Cleanliness     ISO 4406 (c)     >23/21/16     17/15/11     18/15/11	
Silt scalar *Visual NONE NONE NONE	
Debris scalar *Visual NONE NONE NONE	
Sand/Dirt scalar *Visual NONE NONE NONE	
Appearance scalar *Visual NORML NORML NORML	
Odor scalar *Visual NORML NORML NORML	
Emulsified Water scalar *Visual >0.075 NEG NEG	
Sodium ppm ASTM D5185m >21 1 0	
Barium     ppm     ASTM D5185m     0     <1	
•	
Calcium     ppm     ASTM D5185m     15     5       December up     ppm     ASTM D5185m     2027     500     545	
Phosphorus     ppm     ASTM D5185m     827     580     545       Ziac     ASTM D5185m     0     20     41	
Zinc ppm ASTM D5185m 0 39 41	
Sulfur     ppm     ASTM D5185m     13     195     89       AstM D5185m     13     195     89     14     14     14     15 <td< th=""><td></td></td<>	
Acid Number (AN) mg KOH/g ASTM D8045 0.06 0.14 0.052	
Visc @ 40°C cSt ASTM D445 47 48.0 48.5	





Submitted By: STORE 3 - NORTON - BRIAN YOUTZY Page 2 of 2